

Surface Water Supply of the United States, 1966-70

Part 12. Pacific Slope Basins in Washington

Volume 1. Pacific Slope Basins in Washington Except Columbia
River Basin

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*Prepared in cooperation with the State
of Washington and with other agencies*



UNITED STATES DEPARTMENT OF THE INTERIOR

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PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of Washington and with other agencies, by personnel of the Water Resources Division, E. L. Hendricks, chief hydrologist, G. W. Whetstone, assistant chief for Scientific Publications and Data Management, under the general direction of G. W. Billingsley, chief, Reports Section, and B. A. Anderson, chief, Data Reports Unit.

The data were collected and computed under the supervision of L. B. Laird, district chief, Water Resources Division, Tacoma, Wash.

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SURFACE WATER SUPPLY OF PACIFIC SLOPE BASINS IN WASHINGTON
EXCEPT COLUMBIA RIVER BASIN

SCOPE OF WORK

This report is one of a series of 37 reports presenting records of stage and discharge of streams, and of stage and contents of lakes and reservoirs in the United States during the 1966-70 water years; it contains the records for gaging stations and partial-record stations in the Pacific slope basins in Washington except Columbia River basin.

Since 1888, when the U.S. Geological Survey first studied streamflow in relation to problems of irrigation, similar records have been obtained at more than 19,500 gaging stations in the 50 States. On September 30, 1970, the Geological Survey and cooperating organizations were maintaining 10,000 gaging stations. Partial-record stations for low flow or for floodflow have been operated at many other points.

COOPERATION

Many State, municipal, and private organizations have cooperated with the Geological Survey in this work by either furnishing or helping to collect data. Organizations that assisted in the collection of data through cooperative agreements with the Survey are as follows:

Washington State Department of Water Resources (prior to July 1, 1970) and Department of Ecology thereafter; Washington State Department of Fisheries; Washington State Department of Highways; Washington State Department of Game; Municipality of Metropolitan Seattle; City of Seattle, Department of Lighting; City of Tacoma, Departments of Public Utilities and Public Works; Cities of Aberdeen, Bremerton, Enumclaw, Everett, Kent, Olympia and Port Angeles; and Western Washington State College.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records published herein for 17 gaging stations; by the U.S. Department of State for 4 stations; by the Bureau of Reclamation, U.S. Department of the Interior for 2 stations; and by the Forest Service, U.S. Department of Agriculture for 8 crest-stage stations.

The following organizations aided in the collecting of records:

The University of Washington through its Fisheries Research Institute; Inter-county River Improvement District; Public Utilities Districts No. 1 of Skagit County and No. 1 of Snohomish County; Washington Public Power Supply System; King County Water District No. 97; King, Skagit and Whatcom County Engineers; Crown Zellerbach Corporation; Pacific Power and Light Company; Puget Sound Power and Light Company; Rayonier Inc. and Weyerhaeuser Company.

On waters adjacent to the international boundary certain gaging stations are maintained by the United States (or Canada) under agreement with Canada (or the United States) and the records are obtained and compiled in a manner equally acceptable in both countries. These stations are designated as "International gaging station."

DIVISION OF WORK

The stream-gaging work was done by the Water Resources Division of the Geological Survey under the direction of personnel shown in the Preface. The data for stations in Washington were collected and prepared for publication in the district office located at 1305 Tacoma Avenue South, Tacoma, Washington 98402.

DEFINITION OF TERMS AND ABBREVIATIONS

Terms related to streamflow and other hydrologic data, as used in this report, are defined as follows:

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

CFS-DAY 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, or about 646,000 gallons, and represents a runoff of approximately 0.0372 inch from 1 square mile.

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.

CUBIC FEET PER SECOND PER SQUARE MILE (CFSM) 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.

CUBIC FOOT PER SECOND (CFS) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute.

DISCHARGE is the volume of water in a stream which passes a given point in a unit of time.

DRAINAGE AREA of a stream above 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 river above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing area, within the area unless otherwise noted.

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

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

HYDROLOGIC BENCH-MARK STATION is one that provides hydrologic data for a basin in which the hydrologic regimes will likely be governed solely by natural

conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

INTERNATIONAL HYDROLOGICAL DECADE (IHD) RIVER STATIONS provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United States, IHD Stations provide indices of runoff and of the general distribution of water in the principal river basins of the conterminous United States and Alaska.

PARTIAL-RECORD STATION is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

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

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

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

DOWNSTREAM ORDER AND STATION NUMBER

Beginning with the series of reports for the water year ending September 30, 1951, the order of listing gaging-station records is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream 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 on which a gaging station is situated with respect to the stream to which it is immediately tributary is indicated by an indentation in a list of gaging stations. Each indentation represents one rank. This downstream order and system of indentation show which gaging stations are on tributaries between any two stations and the rank of the tributary on which each gaging station is situated.

The order of listing used before the publication of the 1951 report listed first all stations on the main stem from headwaters toward mouth, then all stations on the uppermost tributary to the main stem from the tributary's source to mouth, and then all stations from source to mouth of the uppermost tributary to the tributary.

As an added means of identification, each gaging station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and gaging 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 8-digit number for each station such as 12119000, which appears just to the left of the station name, includes the 2-digit part number "12" plus the 6-digit downstream order number "119000". The part numbers refer to the areas whose boundaries are outlined in Figure 1.

EXPLANATION OF DATA

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of

lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 15-, 30-, or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. 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 computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some 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 the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty 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 on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging stations gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given, usually in tabular form, the maximum instantaneous discharge (or contents) and gage height for the current water years (1966-70); the minimum instantaneous discharge if there is little or no regulation (or minimum contents); the minimum daily discharge if there is extensive regulation (also the minimum instantaneous discharge if it is abnormally low); and the minimum gage height if it is also abnormally low. For stations for which peak discharges are published, all independent peaks above the selected base and the time of occurrence and corresponding gage heights are published in the first table under "EXTREMES." The base discharge, which is given in parentheses in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate table following the table of peaks. In the paragraph following the current data, the data given are for the periods listed in the "PERIOD OF RECORD" paragraph. Reliable information concerning major floods that have occurred outside the period of record is given in the last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a non-recording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge (or contents), it is given separately. Information pertaining to the accuracy of the discharge records, to conditions which affect the natural flow at the gaging station, and to availability of Water-Quality records, is given under "REMARKS." For reservoir stations information on the dam forming

the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The daily table for stream-gaging stations gives the 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 may be 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, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches.

In the yearly summary below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations are given at the end of this report. Data for partial-record stations are presented in two tables. The first is a table of discharge

measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are given in special tables following the tables of partial-record stations.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of streamflow data 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 observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good", within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to 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, for changes in contents of reservoirs, or for 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.

PUBLICATIONS

Through September 30, 1960, the records of discharge and stage of streams and contents and stage of lakes and reservoirs were published in an annual series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Prior to 1951, there were 14 volumes in the series; one for each of the 14 parts whose boundaries coincided with certain natural drainage lines within the conterminous United States. From 1951 to 1960, there were 20 volumes in the series, including one each for the States of Alaska (Part 15) and Hawaii (Part 16).

This report is one of the second series of water-supply papers to be published on a 5-year basis. The first series covered the 5-year period October 1, 1960, to September 30, 1965. This series covers the period October 1, 1965, to September 30, 1970. To meet interim requirements, streamflow and related data have been released by the Geological Survey in annual reports, beginning with the 1961 water year, by State. These reports are entitled, "Water Resources Data for (state), Part 1. Surface Water Records." Distribution of these reports is limited and primarily for local needs. Any revision or corrections found necessary to the records published in these annual State reports have been made and published herein without reference.

These two series of 5-year water supply papers consist of 37 volumes each. The boundaries of the various parts and volumes within the parts are indicated in the following list and on the map in Figure 1.

- Part 1. North Atlantic slope basins, in three volumes:
 - Vol. 1: Basins from Maine to Connecticut
 - Vol. 2: Basins from New York to Delaware
 - Vol. 3: Basins from Maryland to York River
- Part 2. South Atlantic slope and eastern Gulf of Mexico basins, in three volumes:
 - Vol. 1: Basins from James River to Savannah River
 - Vol. 2: Basins from Ogeechee River to Carrabelle River
 - Vol. 3: Basins from Apalachicola River to Pearl River
- Part 3. Ohio River basin, in four volumes:
 - Vol. 1: Ohio River basin above Kanawha River
 - Vol. 2: Ohio River basin from Kanawha River to Louisville, Kentucky
 - Vol. 3: Ohio River basin from Louisville, Kentucky, to Wabash River
 - Vol. 4: Ohio River basin below Wabash River
- Part 4. St. Lawrence River basin, in two volumes:
 - Vol. 1: Basins of streams tributary to Lakes Superior, Michigan, and Huron
 - Vol. 2: St. Lawrence River basin below Lake Huron
- Part 5. Hudson Bay and Upper Mississippi River basins, in three volumes:
 - Vol. 1: Hudson Bay basin
 - Vol. 2: Upper Mississippi River basin above Keokuk, Iowa
 - Vol. 3: Upper Mississippi River basin below Keokuk, Iowa
- Part 6. Missouri River basin, in four volumes:
 - Vol. 1: Missouri River basin above Williston, North Dakota
 - Vol. 2: Missouri River basin from Williston, North Dakota, to Sioux City, Iowa
 - Vol. 3: Missouri River basin from Sioux City, Iowa, to Nebraska City, Nebraska
 - Vol. 4: Missouri River basin below Nebraska City, Nebraska
- Part 7. Lower Mississippi River basin, in two volumes:
 - Vol. 1: Lower Mississippi River basin except Arkansas River basin
 - Vol. 2: Arkansas River basin
- Part 8. Western Gulf of Mexico basins, in two volumes:
 - Vol. 1: Basins from Mermentau River to Colorado River
 - Vol. 2: Basins from Lavaca River to Rio Grande
- Part 9. Colorado River basin in three volumes:
 - Vol. 1: Colorado River basin above Green River
 - Vol. 2: Colorado River basin from Green River to Compact Point
 - Vol. 3: Lower Colorado River basin
- Part 10. The Great Basin
- Part 11. Pacific slope basin in California, in four volumes:
 - Vol. 1: Basins from Tijuana River to Santa Maria River
 - Vol. 2: Basins from Arroyo Grande to Oregon State line except Central Valley
 - Vol. 3: Southern Central Valley basins
 - Vol. 4: Northern Central Valley basins
- Part 12. Pacific slope basins in Washington, in two volumes:
 - Vol. 1: Pacific slope basins in Washington except Columbia River basin
 - Vol. 2: Upper Columbia River basin
- Part 13. Snake River basin
- Part 14. Pacific slope basins in Oregon and Lower Columbia River basin
- Part 15. Alaska
- Part 16. Hawaii and other Pacific areas

Water-supply papers and other publications of the Geological Survey containing data on the water resources of the United States may be purchased or consulted as follows:

1. Copies may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402, who will, on application, furnish lists giving

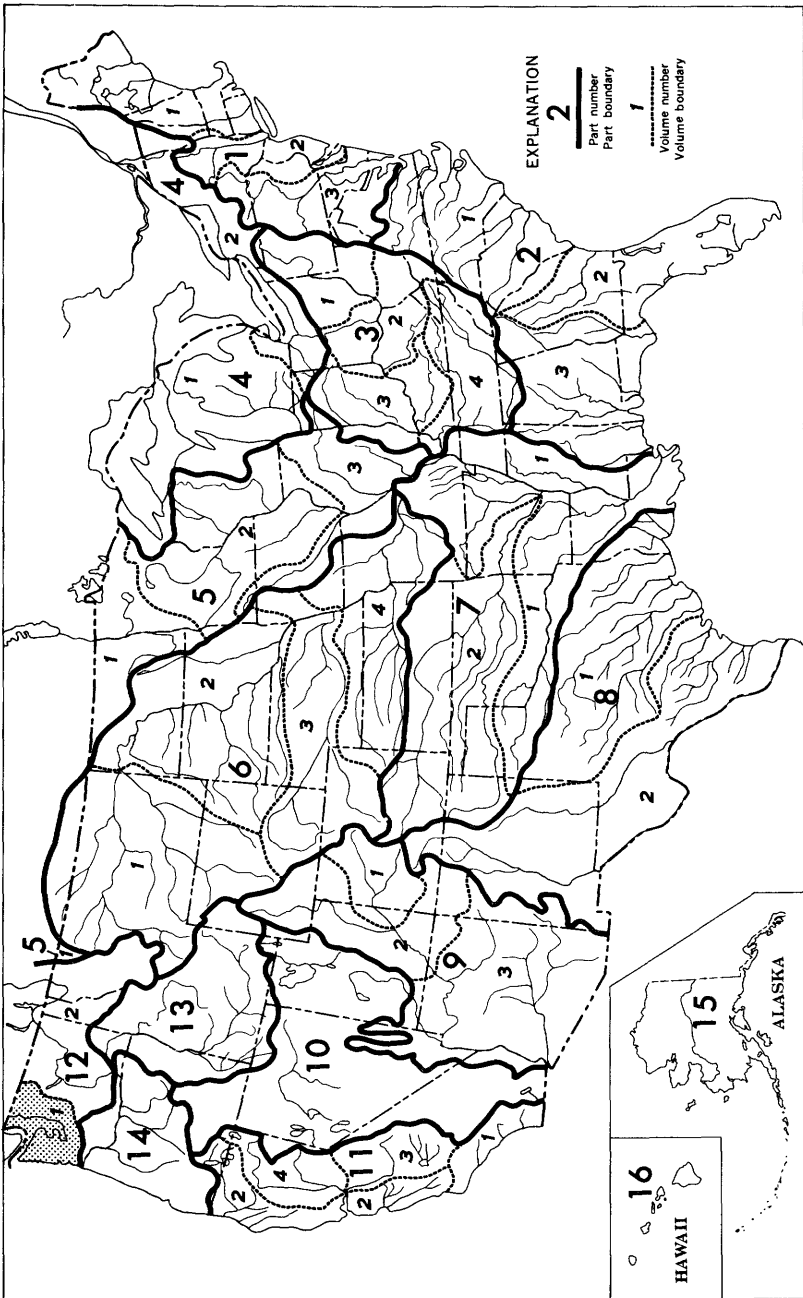


Figure 1.--Map of the United States showing area covered by the volumes in the series on surface-water supply. The area covered by this report is shaded.

prices. A list of Geological Survey publications may also be obtained by applying to the Director, Geological Survey, National Center, Reston, Virginia 22092.

2. Sets of the reports may be consulted in the libraries of the principal cities in the United States.

3. Sets are available for consultation in the offices of the Water Resources Division of the Geological Survey. Addresses of the offices in the area covered by this report are given on page 2.

Early records of the flow of streams in the United States are published in the reports listed below. In many of these reports records for years earlier than those indicated have been included for some streams. Most of these reports are out of print, but may be available for consultation in the district offices and in public libraries.

Streamflow data for the years 1884-1901, in reports of the Geological Survey

(A - Annual Report; B - Bulletin)

Report	Character of data	Year
10th A, pt. 2	Descriptive information only	
11th A, pt. 2	Monthly discharge and descriptive information	1884-90.
12th A, pt. 2 do	1884-91.
13th A, pt. 3 do	1884-92.
14th A, pt. 2	Monthly discharge.	1888-93.
B 131 . . .	Descriptions, measurements, gage heights, and ratings	1893-94.
16th A, pt. 2	Descriptive information only.	
B 140 . . .	Descriptions, measurements, gage heights, ratings and monthly discharge.	1895.
WSP 11 . .	Gage heights.	1896.
18th A, pt. 4	Descriptions, measurements, ratings, and monthly discharge	1895-96.
WSP 15 . .	Descriptions, measurements, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries above Kansas River.	1897.
WSP 16 . .	Descriptions, measurements, and gage heights of streams west of the Mississippi River, except Missouri River and tributaries above Kansas River.	1897.
19th A, pt. 4	Descriptions, measurements, ratings and monthly discharge .	1897.
WSP 27 . .	Measurements, ratings, and gage heights of streams east of the Mississippi River, and Missouri River and tributaries.	1898.
WSP 28 . .	Measurements, ratings, and gage heights of streams west of the Mississippi River, except Missouri River and tribu- taries.	1898.
20th A, pt. 4	Monthly discharge.	1898.
WSP 35 to 39	Descriptions, measurements, gage heights, and ratings	1899.
21st A, pt. 4	Monthly discharge.	1899.
WSP 47 to 52	Descriptions, measurements, gage heights, and ratings	1900.
22nd A, pt. 4	Monthly discharge.	1900.
WSP 65, 66.	Descriptions, measurements, gage heights, and ratings	1901.
WSP 75 . .	Monthly discharge.	1901.

Reports on surface water supply containing records from 1899 to date for drainage basins in this report are listed in the following table. The data for any particular gaging station will, in general, be found in the reports covering the years during which the station was maintained.

Numbers of water-supply papers containing results of stream measurements in
Pacific slope basins in Washington except Columbia River basin, 1899-1965

Year	WSP	Year	WSP	Year	WSP	Year	WSP	Year	WSP
1899.	38	1912. .	332-A	1925. .	612	1937. .	832	1949. .	1152
1900.	51	1913. .	362-A	1926. .	632	1938. .	862	1950. .	1182
1901. . . 66, 75		1914. .	392	1927. .	652	1939. .	882	1951. .	1216
1902.	85	1915. .	412	1928. .	672	1940. .	902	1952. .	1246
1903.	100	1916. .	442	1929. .	692	1941. .	932	1953. .	1286
1904.	135	1917. .	462	1930. .	707	1942. .	962	1954. .	1346
1905.	178	1918. .	482	1931. .	722	1943. .	982	1955. .	1396
1906.	214	1919-20.	512	1932. .	737	1944. .	1012	1956. .	1446
1907-8 . . .	252	1921. .	532	1933. .	752	1945. .	1042	1957. .	1516
1909.	272	1922. .	552	1934. .	767	1946. .	1062	1958. .	1566
1910.	292	1923. .	572	1935. .	792	1947. .	1092	1959. .	1636
1911.	312	1924. .	592	1936. .	812	1948. .	1122	1960. .	1716
								1961-65.	1932

Records for the area covered by this report have been compiled through September 1950 and for the period October 1950 to September 1960 and published in Water-Supply Papers 1316 and 1736, respectively. These reports contain a summary of monthly and annual discharges for all previously published records as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical.

The reports listed in the foregoing tables contain the customary records of discharge collected during the systematic operation of gaging stations. Detailed information on the stage and discharge of many streams during major floods has been included in special reports on these floods published by the Geological Survey. The more recent of these special reports also contain other pertinent hydrologic information and analyses and compilations of data relating to earlier notable floods. The following list gives the numbers and titles of these reports:

<u>WSP</u>	<u>Title</u>
771.	Floods in the United States, magnitude and frequency.
847.	Maximum discharges at stream-measurement stations through Sept. 1938.
968-B	Floods of the Puyallup and Chehalis River basins, Washington.
1227-D. . . .	Summary of floods in the United States during 1951.
1320-E. . . .	Summary of floods in the United States during 1953.
1370-C. . . .	Summary of floods in the United States during 1954.
1527.	Floods in the Skagit River basin in Washington.
1530.	Summary of floods in the United States during 1956.
1652-C. . . .	Summary of floods in the United States during 1957.
1687.	Magnitude and frequency of floods in the United States.
1750-B. . . .	Summary of floods in the United States during 1959.
1820.	Summary of floods in the United States during 1962.
1866-B. . . .	Floods of Dec. 1964 and Jan. 1965 in the Far Western States.

Reports giving records of chemical quality and temperature of surface water and suspended-sediment loads of streams in the area covered by this volume for the water years 1941-70 are listed on the next page.

Numbers of water-supply papers containing water-quality records
in the Pacific slope basins in Washington except Columbia River, 1941-70

Year	WSP	Year	WSP	Year	WSP	Year	WSP	Year	WSP
1941. . . . 942		1947. . . 1102		1953. . . 1293		1959. . . 1645		1965. . . 1966	
1942. . . . 950		1948. . . 1133		1954. . . 1353		1960. . . 1745		1966. . . 1996	
1943. . . . 970		1949. . . 1163		1955. . . 1403		1961. . . 1885		1967. . . 2016	
1944. . . 1022		1950. . . 1189		1956. . . 1453		1962. . . 1945		1968. . . 2100	
1945. . . 1030		1951. . . 1200		1957. . . 1523		1963. . . 1951		1969. . . 2150	
1946. . . 1050		1952. . . 1253		1958. . . 1574		1964. . . 1959		1970. . . 2160	

OTHER DATA AVAILABLE

Information of a more detailed nature than that published for most of the gaging stations such as discharge measurements, gage-height records, and rating tables is on file in the district offices. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Water-quality records also are collected at or near some gaging stations. Data are obtained on the chemical quality of the stream water, on water temperature, and on sediment. Under "Remarks" of the station description, reference is made to water-quality records collected on a regular basis for the station. Results of the data collected are published in annual water-supply papers entitled "Quality of Surface Waters of the United States" and in annual reports issued by States beginning with 1964 water year; the state reports are entitled, "Water Resources Data for (state), Part 2. Water Quality Records."

Information on the availability of unpublished data, statistical analyses, or quality of water records, may be obtained from the district offices listed on page 2.

RECORDS OF DISCHARGE COLLECTED BY AGENCIES OTHER THAN THE GEOLOGICAL SURVEY

Records of discharge not published by the Geological Survey were collected in Washington at three sites during the water years October 1965 to September 1970 by the Forest Service, U.S. Department of Agriculture. The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, National Center, Reston, Virginia 22092, maintains an index of these sites. Information on records at specific sites can be obtained from that office upon request.

BEAR RIVER BASIN

12009500 BEAR BRANCH NEAR NASELLE, WASH.
(Formerly published as Bear River near Naselle)

LOCATION.--Lat 46°19'48", long 123°54'36", on line between secs.21 and 22, T.10 N., R.10 W., Pacific County, on right bank 3.4 miles upstream from bridge on U.S. Highway 101 and 5.3 miles southwest of Naselle.

DRAINAGE AREA.--11.7 sq mi.

PERIOD OF RECORD.--January 1963 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 15 ft (from topographic map). Prior to June 25, 1963, at site on left bank at same datum.

AVERAGE DISCHARGE.--7 years, 79.0 cfs (91.69 inches per year, 57,240 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (700 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 27, 1965	1100	*612	5.36	Feb. 21, 1968	0300	911	4.96	Jan. 4, 1969	2200	*1,060	5.38
				June 2, 1968	0300	*1,020	5.27	Feb. 11, 1969	0600	792	4.62
Dec. 13, 1966	-	*768	4.01	Dec. 24, 1968	0630	1,010	5.23	Dec. 11, 1969	1030	*1,090	5.42
Jan. 20, 1968	2130	852	4.79	Dec. 31, 1968	2330	995	5.20	Jan. 21, 1970	0630	884	4.91
								Jan. 26, 1970	1600	872	4.88

a From high watermark in wall.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 22, 24, 1966	4.4	1.72	1969	Aug. 3, 4, 1969	10	1.33
1967	Aug. 26-28, Sept. 1, 1967	4.4	1.20	1970	Aug. 17, 26, 27, 28, 1970	4.5	1.18
1968	Aug. 13, 1968	5.2	1.46				

a Occurred July 8, 1967.

Period of record: Maximum discharge, 1,150 cfs Jan. 28, 1965 (gage height, 7.50 ft); minimum, 4.4 cfs Aug. 22, 24, 1966, Aug. 26-28, Sept. 1, 1967; minimum gage height, 1.18 ft Aug. 17, 26, 27, 28, 1970.

REMARKS.--Records excellent except those for period of no gage-height record, which are poor. No regulation or diversion above station. Water-quality records for the water year 1966 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	27	93	188	85	94	54	24	17	12	7.6	8.0
2	8.2	42	90	226	76	85	50	23	18	14	7.1	8.0
3	7.8	99	120	178	70	77	45	22	19	19	7.1	7.6
4	16	96	208	155	71	72	41	21	16	18	7.6	7.6
5	42	112	134	332	99	93	38	21	15	15	7.6	7.1
6	44	94	131	325	180	100	35	33	14	15	6.6	6.6
7	28	89	122	245	198	103	33	23	14	15	6.6	6.2
8	19	102	108	201	141	306	32	21	14	13	7.1	6.6
9	18	99	92	150	132	330	43	19	12	12	6.6	6.6
10	14	132	82	150	111	201	40	18	18	11	6.6	8.0
11	12	115	77	152	160	142	96	17	17	11	7.1	13
12	12	147	61	289	152	116	95	18	15	11	6.2	14
13	16	196	57	302	118	118	76	17	14	10	11	9.1
14	70	174	51	215	98	128	84	18	14	10	9.1	7.1
15	84	130	46	163	82	190	74	50	12	9.6	7.6	6.6
16	48	99	42	128	71	163	66	51	12	9.1	6.2	8.0
17	70	83	39	104	63	132	60	36	12	8.6	5.8	13
18	63	74	34	86	57	172	54	31	11	8.6	5.8	21
19	101	79	35	74	55	190	49	28	11	9.3	5.8	11
20	66	120	46	65	70	165	53	26	11	10	5.3	8.6
21	49	106	63	58	56	149	48	28	12	9.6	4.8	7.6
22	44	131	47	53	53	130	44	26	11	9.1	4.8	7.6
23	39	105	69	61	53	113	39	23	12	9.1	4.8	12
24	35	92	108	57	49	98	36	22	11	9.6	4.8	12
25	32	79	100	53	49	85	34	20	9.6	9.6	4.8	15
26	30	127	104	49	52	75	36	22	9.1	9.1	9.6	41
27	39	118	427	78	86	66	32	19	20	8.6	5.2	23
28	39	98	395	67	103	59	29	18	43	8.0	15	17
29	31	84	310	96	-----	54	28	18	18	8.0	12	14
30	32	84	247	114	-----	65	26	18	13	8.0	10	12
31	27	-----	180	100	-----	54	-----	17	-----	7.6	9.1	-----
TOTAL	1,144.6	3,133	3,720	4,514	2,590	3,925	1,470	748	444.7	337.5	272.1	344.9
MEAN	36.9	104	120	146	92.5	127	49.0	24.1	14.8	10.9	8.78	11.5
MAX	101	196	427	332	198	330	96	51	43	19	52	41
MIN	7.8	27	35	49	49	54	26	17	9.1	7.6	4.8	6.2
CFSM	3.15	8.89	10.3	12.5	7.91	10.9	4.19	2.06	1.27	.93	.75	.98
IN.	3.64	9.96	11.83	14.35	8.23	12.48	4.67	2.38	1.41	1.07	.87	1.10
AC-FT	2,270	6,210	7,380	8,950	5,140	7,790	2,920	1,480	882	649	540	684

CAL YR 1965 TOTAL 25,861.6 MEAN 70.9 MAX 873 MIN 5.5 CFSM 6.06 IN 82.23 AC-FT 51,300
WTR YR 1966 TOTAL 22,643.8 MEAN 62.0 MAX 427 MIN 4.8 CFSM 5.30 IN 72.00 AC-FT 44,910

BEAR RIVER BASIN

12009500 BEAR BRANCH NEAR NASELLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	45	540	190	159	87	72	39	16	9.5	5.6	5.0
2	17	41	400	220	140	88	65	36	15	9.0	5.5	7.0
3	13	37	320	280	140	75	56	35	14	8.8	5.5	5.7
4	11	34	520	370	168	68	54	32	14	8.5	5.5	5.2
5	10	36	320	300	150	59	52	30	13	8.5	5.5	4.8
6	10	38	280	290	127	54	48	28	12	8.5	5.5	5.0
7	15	32	240	200	108	48	43	28	12	8.3	5.9	4.8
8	35	30	200	220	93	64	45	26	12	8.0	5.9	4.6
9	22	80	170	190	91	76	56	25	12	8.0	5.5	7.0
10	16	82	260	230	91	85	46	24	12	7.7	5.3	18
11	14	78	260	270	103	98	42	24	13	7.4	5.3	12
12	23	140	400	320	140	96	59	22	12	7.6	5.3	7.8
13	22	320	600	380	281	87	96	21	12	7.4	5.2	6.3
14	16	400	350	260	208	93	108	21	11	7.4	5.2	5.9
15	20	280	210	240	247	147	96	20	11	7.2	5.0	5.5
16	17	200	240	200	189	150	111	19	10	7.2	4.8	5.2
17	20	140	200	160	225	152	95	19	10	7.2	4.8	5.2
18	17	105	170	130	221	158	85	18	10	7.2	4.8	5.0
19	45	100	190	400	168	127	70	17	10	8.3	4.8	5.0
20	110	85	220	310	132	154	60	17	9.7	8.3	4.8	4.8
21	210	93	170	240	106	125	53	16	11	7.4	5.3	4.8
22	400	78	140	230	88	210	48	16	30	7.0	5.2	5.0
23	230	64	135	260	73	204	43	16	16	6.8	5.0	4.8
24	140	58	170	200	68	170	39	15	13	6.5	5.0	4.8
25	95	210	175	180	64	131	41	15	12	6.3	4.8	4.8
26	90	160	140	280	55	113	38	14	11	6.5	4.4	4.8
27	72	150	120	450	49	93	37	14	11	6.3	4.4	4.8
28	58	160	110	389	81	87	41	18	11	6.1	4.4	4.8
29	66	170	130	334	-----	79	48	21	10	5.9	4.8	9.0
30	58	350	110	251	-----	93	42	21	9.7	5.7	5.0	11
31	50	-----	120	187	-----	84	-----	20	-----	5.7	4.8	-----
TOTAL	1,932	3,796	7,610	8,121	3,765	3,355	1,789	687	375.4	230.2	158.8	188.4
MEAN	62.3	127	245	262	134	108	58.6	22.2	12.5	7.43	5.12	6.28
MAX	400	400	600	450	281	210	111	39	30	9.5	5.9	18
MIN	10	110	110	130	49	48	37	14	9.7	5.7	4.4	4.6
CFSM	5.32	10.9	20.9	22.4	11.5	9.23	5.09	1.90	1.07	0.64	0.54	0.54
IN.	6.14	12.07	24.20	25.82	11.97	10.67	5.69	2.18	1.19	0.73	0.50	0.60
AC-FT	3,830	7,530	15,090	16,110	7,470	6,650	3,550	1,360	745	457	315	374

CAL YR 1966 TOTAL 27,984.2 MEAN 76.7 MAX 600 MIN 4.8 CFSM 6.56 IN 88.98 AC-FT 55,516
 WTR YR 1967 TOTAL 32,007.8 MEAN 87.7 MAX 600 MIN 4.4 CFSM 7.50 IN 101.77 AC-FT 63,490

NOTE.--NO GAGE-HEIGHT RECORD OCT. 7 TO JAN. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	82	150	88	78	58	90	45	318	21	9.3	44
2	45	70	350	76	254	51	73	41	341	19	9.3	37
3	91	62	499	68	378	46	62	37	220	18	9.3	32
4	64	55	285	64	389	44	68	36	118	17	9.3	30
5	193	49	205	63	202	53	60	37	87	17	10	27
6	123	46	182	56	133	49	60	36	68	17	8.4	26
7	72	46	198	64	99	49	54	32	57	16	7.9	25
8	50	73	168	63	81	43	50	30	49	16	7.9	24
9	41	164	355	121	68	40	46	28	43	16	6.5	23
10	40	265	338	104	58	40	44	27	39	16	6.5	22
11	50	176	275	88	51	41	42	26	36	18	5.8	27
12	43	116	210	102	46	108	39	26	34	30	5.8	26
13	66	90	147	282	43	105	36	26	38	19	6.5	25
14	69	79	112	498	39	161	61	24	32	28	14	40
15	55	65	93	323	37	178	80	24	28	26	13	56
16	46	56	80	235	36	272	60	22	26	21	17	45
17	42	50	73	182	64	161	53	21	25	18	12	76
18	43	53	67	155	247	112	52	17	24	18	23	104
19	38	48	58	282	425	88	51	23	24	17	56	104
20	36	43	52	607	320	74	50	23	23	16	18	87
21	191	40	102	496	586	63	45	25	22	15	12	68
22	152	38	258	242	494	56	41	30	29	14	14	62
23	132	42	242	157	461	54	46	26	23	14	211	59
24	158	55	200	114	278	52	40	24	20	14	87	50
25	185	47	265	96	170	125	86	30	20	13	57	42
26	129	42	252	81	120	114	78	25	21	12	44	38
27	260	39	188	69	94	522	64	26	24	11	54	36
28	227	52	155	60	77	389	56	25	24	11	129	34
29	156	151	123	56	67	232	49	23	24	11	84	32
30	120	170	102	53	-----	151	53	22	22	10	64	31
31	99	-----	88	73	-----	112	-----	36	-----	9.3	51	-----
TOTAL	3,078	2,364	5,872	5,018	5,395	3,643	1,689	873	2,159	518.3	1,062.7	1,332
MEAN	99.3	78.8	189	162	186	118	56.3	28.2	72.0	16.7	34.3	44.4
MAX	260	265	499	607	586	522	90	45	641	30	211	104
MIN	36	38	52	53	36	40	36	17	20	9.3	5.8	22
CFSM	8.49	6.76	16.2	13.8	15.9	10.1	4.81	2.41	6.15	1.43	2.93	3.79
IN.	7.99	7.52	18.67	15.95	17.15	11.58	5.37	2.78	6.06	1.85	3.38	4.24
AC-FT	6,110	4,690	11,650	9,950	10,700	7,230	3,350	1,730	4,280	1,030	2,110	2,640

CAL YR 1967 TOTAL 29,983.8 MEAN 82.1 MAX 499 MIN 4.4 CFSM 7.02 IN 95.33 AC-FT 59,470
 WTR YR 1968 TOTAL 33,004.0 MEAN 90.2 MAX 641 MIN 5.8 CFSM 7.71 IN 104.94 AC-FT 65,460

12009500 BEAR BRANCH NEAR NASELLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	72	210	516	67	40	40	38	64	56	11	11
2	27	112	238	282	81	40	67	36	51	48	11	11
3	25	91	366	255	149	41	46	48	43	43	10	11
4	45	77	380	539	222	41	50	39	37	44	11	11
5	30	67	228	645	108	104	48	35	33	37	11	11
6	50	59	155	374	131	101	42	32	31	33	11	11
7	40	63	147	449	121	76	38	30	29	30	11	11
8	32	408	190	285	339	63	36	28	26	28	11	11
9	35	268	212	270	299	54	36	26	26	26	11	11
10	47	170	218	245	410	48	33	25	24	32	11	11
11	48	185	242	200	610	42	30	24	23	32	11	11
12	56	172	178	153	305	38	36	23	22	26	11	11
13	63	147	147	131	190	36	57	22	21	24	11	11
14	108	120	228	123	141	33	39	21	20	23	11	11
15	151	99	192	121	135	31	36	20	18	21	11	11
16	116	87	153	137	161	41	33	19	17	20	11	30
17	124	77	139	141	125	62	53	18	16	20	11	120
18	107	96	185	118	104	56	69	18	16	18	11	64
19	134	87	145	97	91	69	94	24	16	18	11	72
20	155	94	114	83	84	58	76	19	16	17	11	81
21	131	133	94	70	74	51	64	16	16	16	11	75
22	121	157	138	60	67	53	56	16	47	16	11	157
23	101	125	389	54	62	46	56	14	108	15	11	154
24	85	109	764	49	58	41	49	15	70	14	11	102
25	85	88	410	44	52	40	42	14	62	14	11	79
26	73	81	245	41	50	35	38	16	51	14	11	59
27	62	80	163	39	46	32	35	36	48	13	11	48
28	56	74	121	35	42	30	36	25	70	13	11	41
29	64	222	97	33	-----	33	37	209	75	12	11	38
30	116	210	81	31	-----	33	32	186	63	11	11	69
31	81	-----	313	90	-----	36	-----	90	-----	11	11	-----
TOTAL	2,997	3,830	6,882	5,710	4,404	1,501	1,404	1,182	1,159	745	340	1,354
MEAN	77.3	128	222	184	157	48.4	46.8	38.1	38.6	24.0	11.0	45.1
MAX	155	408	764	645	610	104	94	209	108	56	11	157
MIN	25	59	31	42	30	30	14	16	11	11	11	11
CFSM	6.61	10.9	19.0	15.7	13.4	4.14	4.00	3.26	3.30	2.05	.94	3.85
IN.	7.62	12.18	21.88	18.15	14.00	4.77	4.46	3.76	3.69	2.37	1.08	4.31
AC-FT	4,750	7,600	13,650	11,330	8,740	2,980	2,780	2,340	2,300	1,480	674	2,690

CAL YR 1968 TOTAL 34,799.0 MEAN 95.1 MAX 764 MIN 5.8 CFSM 8.13 IN 110.64 AC-FT 69,020
WTR YR 1969 TOTAL 30,908.0 MEAN 84.7 MAX 764 MIN 10 CFSM 7.24 IN 98.27 AC-FT 61,310

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	52	33	53	148	35	34	83	16	9.8	7.0	5.0
2	97	45	30	49	124	34	32	71	16	9.4	6.6	5.6
3	72	42	31	48	118	32	29	62	15	8.4	6.6	5.7
4	59	234	31	43	96	31	64	56	15	8.0	6.6	10
5	50	178	27	38	88	29	96	50	14	7.7	6.6	12
6	42	170	29	37	90	79	192	44	14	7.3	6.3	68
7	59	129	27	34	96	68	125	40	14	7.0	6.3	84
8	75	115	30	40	84	52	104	86	13	6.6	5.9	35
9	61	92	46	72	76	46	288	73	14	6.6	5.6	13
10	51	78	58	37	68	40	200	69	16	6.6	5.3	11
11	44	68	637	39	62	58	136	62	15	6.3	5.3	10
12	39	59	310	39	57	68	99	57	14	6.3	5.6	9.0
13	35	51	287	54	69	69	81	54	13	6.3	5.9	9.0
14	31	45	246	357	50	190	69	48	12	5.9	5.6	9.0
15	28	42	195	172	235	141	60	44	13	5.9	5.3	8.0
16	34	43	160	130	278	164	54	40	13	5.6	5.8	8.0
17	29	46	138	129	170	124	47	37	12	5.9	4.8	38
18	25	39	132	300	129	96	72	33	12	5.9	5.0	42
19	23	37	129	519	105	81	84	32	11	5.9	4.8	71
20	22	81	125	301	90	70	65	30	11	5.9	4.8	83
21	22	79	156	536	78	62	58	28	10	5.9	4.8	49
22	20	63	221	325	68	55	52	27	10	5.9	4.8	112
23	23	73	221	256	60	56	56	26	9.8	5.9	4.8	80
24	33	68	168	277	55	51	83	24	9.4	5.9	5.0	50
25	38	59	134	248	50	45	77	22	8.9	6.6	5.0	35
26	28	53	115	456	46	40	73	21	8.4	24	4.8	27
27	99	48	97	399	42	37	71	20	8.9	23	4.5	23
28	158	62	84	238	38	35	71	20	8.4	11	5.0	20
29	91	38	75	166	-----	33	94	25	8.9	8.9	5.3	18
30	72	36	66	130	-----	32	96	20	10	8.0	5.0	16
31	59	-----	60	172	-----	30	-----	18	-----	7.3	5.0	-----
TOTAL	1,627	2,207	4,118	5,728	2,655	1,981	2,633	1,322	372.7	249.7	169.7	997.6
MEAN	52.5	73.4	133	185	94.8	63.9	87.8	42.6	12.4	8.05	5.47	33.3
MAX	158	234	637	536	278	190	268	86	21	24	7.0	112
MIN	20	36	27	34	38	29	29	18	8.4	5.6	4.5	5.0
CFSM	4.49	6.29	11.4	15.8	8.10	5.46	7.50	3.64	1.06	.69	.47	2.85
IN.	5.17	7.02	13.09	18.21	8.44	6.30	8.37	4.20	1.18	.79	.54	3.17
AC-FT	3,230	4,380	8,170	11,360	5,270	3,930	5,220	2,620	739	495	337	1,980

CAL YR 1969 TOTAL 25,751.0 MEAN 70.6 MAX 645 MIN 10 CFSM 6.03 IN 81.87 AC-FT 51,080
WTR YR 1970 TOTAL 24,060.7 MEAN 65.9 MAX 637 MIN 4.5 CFSM 5.63 IN 76.50 AC-FT 47,720

NASELLE RIVER BASIN

12010000 NASELLE RIVER NEAR NASELLE, WASH.

LOCATION.--Lat 46°22'27", long 123°44'32", in SW¼ sec.1, T.10 N., R.9 W., Pacific County, on right bank 0.1 mile upstream from county highway bridge, 2.2 miles upstream from Salmon Creek, 3.4 miles east of Naselle, and at mile 17.4.

DRAINAGE AREA.--54.8 sq mi.

PERIOD OF RECORD.--May 1929 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 24 ft (by barometer). Prior to Jan. 11, 1957, nonrecording gage and crest-stage gage at site 1,350 ft downstream at present datum and Jan. 11, 1957, to Dec. 31, 1961, at site 1,200 ft downstream at present datum.

AVERAGE DISCHARGE.--41 years, 430 cfs (106.56 inches per year, 311,500 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (°) and peak discharges above base (4,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	1130	*3,480	10.45	Jan. 19, 1968	0915	*5,570	13.02	Dec. 24, 1968	0445	*4,570	11.46
Dec. 13, 1966	0630	*7,500	15.00	Dec. 3, 1968	1915	4,100	10.88	Feb. 16, 1970	0300	*5,020	12.03

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 22, 1966	26	3.62	1969	Sept. 11, 12, 16, 1969	26	3.68
1967	Aug. 27-30, 1967	19	3.59	1970	Aug. 30 to Sept. 1, 1970	18	3.57
1968	Aug. 11-13, 1968	31	3.77				

Period of record: Maximum discharge, 11,100 cfs Jan. 22, 1935 (gage height, 15.9 ft, from floodmarks, site then in use), from rating curve extended above 4,000 cfs on basis of slope-area measurement at gage height 15.2 ft; minimum, 18 cfs Aug. 30, 31, Sept. 1, 1970.

REMARKS.--Records excellent. No regulation or diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1216: Drainage area. WSP 1316: 1930(M), 1932-40(M), 1945-46(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	05	599	617	562	576	288	128	75	62	36	35
2	20	160	657	002	490	508	260	122	84	66	35	33
3	27	431	718	675	438	454	236	117	82	91	34	33
4	32	690	1,280	606	418	219	76	101	76	96	35	31
5	163	671	886	1,520	470	504	205	108	72	84	35	30
6	225	511	914	3,090	895	620	192	137	68	79	33	29
7	159	427	867	2,400	1,140	665	181	117	65	76	33	29
8	96	408	733	2,300	860	1,640	174	106	64	69	32	28
9	79	363	521	1,460	030	2,400	176	101	61	65	35	26
10	65	511	533	1,100	765	1,330	176	96	00	61	32	30
11	58	648	446	1,110	060	905	302	92	102	61	33	44
12	54	502	384	1,640	060	705	418	92	92	51	31	44
13	64	644	342	2,390	725	680	330	91	78	56	34	35
14	154	638	306	2,100	658	755	326	92	73	55	37	32
15	259	539	270	1,340	553	1,110	292	145	66	53	32	31
16	170	453	244	945	402	1,080	264	171	62	51	31	34
17	164	385	223	735	430	855	245	128	62	50	30	34
18	172	347	208	602	382	905	224	115	61	48	29	52
19	502	507	194	508	346	1,040	210	106	56	50	28	39
20	290	657	199	434	394	955	216	102	57	48	20	33
21	200	724	237	382	350	835	202	109	50	45	27	31
22	168	871	194	338	312	730	194	113	61	42	27	31
23	143	732	199	342	330	645	181	99	62	41	27	43
24	125	597	211	312	306	598	171	94	58	43	27	39
25	113	488	205	309	292	576	166	90	53	42	28	41
26	103	525	214	281	295	535	169	08	51	41	30	71
27	107	651	1,000	378	517	470	154	86	62	39	117	61
28	115	938	1,320	362	665	414	145	82	109	30	62	48
29	96	463	1,080	760	-----	364	139	79	79	37	42	42
30	95	416	867	765	-----	350	132	76	66	36	48	39
31	88	-----	683	660	-----	309	-----	76	-----	36	30	-----
TOTAL	4,150	15,751	16,832	31,263	15,630	23,933	6,667	3,269	2,097	1,718	1,124	1,130
MEAN	134	502	543	1,008	505	772	222	105	69.9	55.4	36.3	37.7
MAX	502	871	1,320	3,090	1,140	2,400	418	171	109	96	117	71
MIN	27	05	194	281	292	309	132	76	51	36	27	28
CFSM	2.45	9.58	9.91	18.4	10.2	14.1	4.05	1.92	1.20	1.01	.66	.69
IN.	2.82	10.69	11.43	21.22	10.61	16.25	4.53	2.22	1.42	1.17	.76	.77
AC-FT	8,230	31,240	33,390	62,010	31,000	47,470	13,220	6,480	4,160	3,410	2,230	2,240
CAL YR 1965	TOTAL 126,336	MEAN 346	MAX 4,050	MIN 26	CFSM 6.31	IN 85.76	AC-FT 250,600					
WTR YR 1966	TOTAL 123,564	MEAN 339	MAX 3,090	MIN 27	CFSM 6.19	IN 83.88	AC-FT 245,100					

12010000 NASELLE RIVER NEAR NASELLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	200	3,020	879	922	508	460	233	94	47	29	20
2	49	182	2,440	791	797	456	424	220	89	45	28	33
3	40	167	1,960	1,260	843	407	387	210	87	44	27	30
4	94	195	2,860	1,830	941	368	363	199	83	43	27	23
5	34	165	2,370	1,570	821	333	339	188	77	42	27	22
6	34	176	2,090	1,240	686	304	304	179	74	42	30	23
7	42	150	1,640	1,020	578	278	277	170	74	41	34	21
8	67	135	1,120	981	494	299	265	165	77	44	31	20
9	50	203	878	862	453	390	321	160	72	40	28	23
10	42	251	1,220	822	415	370	285	157	71	39	26	45
11	39	211	1,240	970	419	357	256	169	72	38	26	75
12	53	399	3,110	1,330	498	340	274	149	69	37	25	44
13	52	832	5,700	1,880	1,350	344	279	140	65	37	24	31
14	43	1,560	2,390	1,520	996	353	363	134	62	36	24	27
15	42	1,290	1,340	1,310	929	616	379	129	59	36	23	24
16	40	906	1,120	1,100	977	974	458	124	57	36	23	23
17	44	677	946	890	1,290	911	459	119	55	35	22	23
18	40	564	831	757	1,300	881	454	114	54	35	22	26
19	52	907	906	2,100	972	731	437	110	52	47	22	22
20	367	451	1,000	1,960	777	794	395	106	52	52	21	22
21	422	472	822	1,350	639	740	394	102	56	45	23	21
22	1,240	422	682	1,110	536	2,410	324	90	122	38	24	23
23	692	626	626	1,070	462	2,810	297	96	96	35	22	36
24	471	339	851	944	406	1,630	269	95	71	34	21	26
25	340	697	609	921	378	1,120	265	91	63	53	20	26
26	313	627	693	1,210	325	883	248	88	58	34	20	27
27	266	570	595	2,680	292	711	242	86	59	34	20	26
28	227	617	558	2,960	480	617	265	92	56	35	22	36
29	262	659	645	2,160	-----	553	258	122	52	31	20	33
30	252	2,520	565	1,690	-----	544	249	128	50	31	20	55
31	219	-----	559	1,130	-----	505	-----	112	-----	30	20	-----
TOTAL	5,907	16,334	45,506	42,287	19,976	22,529	10,060	4,285	2,073	1,190	749	862
MEAN	191	524	1,468	1,364	713	727	335	138	69.1	38.4	24.7	28.7
MAX	1,240	2,320	5,700	2,960	1,350	2,810	464	239	122	52	34	75
MIN	34	138	558	757	292	278	242	86	50	30	20	20
CFSN	3.49	9.93	26.8	24.9	13.0	13.3	6.11	2.52	1.26	.70	.44	.52
IN.	4.01	11.09	30.89	28.71	13.56	15.29	6.83	2.91	1.41	.81	.51	.59
AC-FT	11,720	32,400	90,260	83,880	39,620	44,690	19,950	8,500	4,110	2,360	1,490	1,710
CAL YR 1966	TOTAL 154,578	MEAN 424	MAX 5,700	MIN 27	CFSN 7.74	IN 104.93	AC-FT 306,600					
WTR YR 1967	TOTAL 171,758	MEAN 471	MAX 5,700	MIN 20	CFSN 8.59	IN 116.59	AC-FT 348,700					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	274	459	649	490	410	382	600	254	936	92	37	184
2	318	383	1,560	388	1,440	338	495	233	2,440	86	37	164
3	411	329	2,320	547	2,240	299	418	216	1,190	82	39	143
4	314	288	1,590	333	2,630	278	390	208	720	79	38	128
5	641	254	1,220	326	1,380	382	366	230	540	76	39	116
6	623	232	986	290	912	320	366	251	426	75	38	108
7	365	220	915	326	690	295	344	222	362	70	35	109
8	252	262	796	343	555	264	309	205	309	69	35	97
9	205	661	1,190	913	460	245	281	192	271	66	34	94
10	182	1,480	1,510	807	398	236	260	181	243	68	33	90
11	245	1,080	1,490	619	346	239	251	171	224	68	32	101
12	291	730	1,030	608	306	530	253	166	210	101	31	99
13	342	566	762	2,140	274	570	216	164	224	75	33	97
14	486	489	603	2,310	248	852	292	190	197	82	50	236
15	370	422	501	1,710	227	1,910	480	143	174	87	52	362
16	290	360	439	1,300	213	2,160	374	134	199	75	68	302
17	241	317	388	1,090	295	1,388	338	130	190	66	50	482
18	227	304	339	1,228	1,360	954	316	124	141	63	58	535
19	205	273	299	4,820	2,590	715	316	141	134	62	122	446
20	180	245	286	4,150	1,600	580	309	174	126	62	81	386
21	555	226	323	3,170	2,380	480	205	171	122	57	65	309
22	786	215	1,120	1,490	2,070	414	264	182	161	94	99	274
23	851	205	1,290	1,060	2,120	398	281	199	122	53	278	267
24	712	254	1,190	774	1,680	382	254	174	112	49	274	293
25	839	227	997	635	1,150	610	374	171	105	48	186	213
26	655	211	875	530	828	435	390	154	103	47	181	194
27	1,380	199	742	434	645	2,160	342	148	112	45	245	181
28	1,530	213	635	382	525	2,020	309	139	112	42	710	166
29	932	576	540	390	438	1,350	278	130	112	40	990	157
30	681	582	468	338	-----	966	205	124	99	48	260	145
31	552	-----	426	362	-----	755	-----	132	-----	38	205	-----
TOTAL	15,895	12,264	27,369	34,169	30,410	22,999	10,010	5,423	10,278	2,819	3,803	6,294
MEAN	511	409	883	1,102	1,049	742	334	175	343	65.1	123	210
MAX	1,530	1,480	2,320	4,820	2,630	2,160	600	294	2,440	101	710	535
MIN	180	199	286	290	213	236	216	124	99	38	31	90
CFSN	9.32	7.46	16.1	20.1	19.1	13.5	6.09	3.19	6.26	1.19	2.24	3.83
IN.	10.75	8.33	16.38	23.30	20.64	15.61	6.80	3.80	6.90	1.37	2.50	4.37
AC-FT	31,410	26,530	54,290	67,770	60,320	45,620	19,850	10,760	20,390	4,000	7,540	12,480
CAL YR 1967	TOTAL 159,479	MEAN 437	MAX 2,960	MIN 20	CFSN 7.97	IN 108.26	AC-FT 316,300					
WTR YR 1968	TOTAL 180,873	MEAN 494	MAX 4,820	MIN 31	CFSN 9.01	IN 122.78	AC-FT 358,800					

12010000 NASELLE RIVER NEAR NASELLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	394	1,080	780	306	322	441	240	260	174	53	32
2	131	438	1,060	816	281	349	695	242	222	154	51	33
3	125	402	2,320	804	470	424	502	238	192	145	51	36
4	179	362	2,520	1,220	640	435	467	220	174	143	51	34
5	139	327	1,460	2,170	590	909	439	206	162	134	55	33
6	270	302	1,030	1,580	490	1,090	398	192	157	122	51	31
7	215	302	834	1,600	455	798	361	179	145	116	48	30
8	186	665	1,030	1,370	1,180	636	327	169	141	110	48	28
9	178	725	1,150	1,300	1,320	526	306	159	130	103	46	27
10	225	625	1,180	1,180	1,580	447	287	154	124	110	46	28
11	222	1,220	1,250	1,030	3,350	393	261	143	120	134	45	27
12	254	1,350	1,040	810	1,910	352	262	137	114	112	44	27
13	305	1,160	882	685	1,160	321	437	130	110	103	46	31
14	374	904	1,010	595	846	297	339	126	103	96	43	30
15	595	725	916	520	762	281	302	120	99	92	43	27
16	545	590	812	480	924	407	275	116	94	89	44	29
17	505	500	726	426	840	1,090	345	110	89	84	40	105
18	450	485	973	378	740	902	515	108	84	81	39	194
19	495	430	817	346	665	783	800	132	84	78	43	304
20	600	520	685	309	615	647	692	116	86	73	42	212
21	525	725	580	281	560	552	558	105	84	72	42	139
22	555	1,010	561	257	502	541	466	97	108	69	39	271
23	465	846	2,170	239	465	519	423	90	169	66	36	625
24	410	700	3,930	224	427	435	380	89	242	65	35	379
25	394	580	2,140	213	394	387	337	89	233	63	41	309
26	338	530	1,310	202	381	354	302	108	192	62	39	245
27	302	570	930	197	357	333	274	208	174	60	47	203
28	274	550	709	184	336	302	262	181	205	59	50	171
29	299	1,030	576	176	-----	278	272	438	236	57	39	157
30	600	1,150	495	171	-----	277	239	615	205	56	36	393
31	460	-----	560	260	-----	332	-----	342	-----	54	34	-----
TOTAL	10,754	20,119	36,756	21,003	22,546	15,721	11,964	5,599	4,538	2,936	1,367	4,190
MEAN	347	671	1,186	678	805	507	399	181	151	94.7	44.1	140
MAX	600	1,350	3,930	2,170	3,350	1,090	800	615	260	174	55	625
MIN	125	302	495	171	281	277	239	89	64	54	27	27
CFSM	6.33	12.2	21.6	14.7	9.25	7.28	3.30	2.17	1.73	1.03	0.48	2.58
IN.	7.30	13.66	24.95	14.26	15.30	10.67	8.12	3.80	3.08	1.99	.93	2.84
AC-FT	21,330	39,910	72,910	41,660	44,720	31,180	23,730	11,110	9,000	5,820	2,710	8,310

CAL YR 1968 TOTAL 193,034 MEAN 527 MAX 4,820 MIN 31 CFSM 9.62 IN 131.04 AC-FT 382,900
WTR YR 1969 TOTAL 157,493 MEAN 431 MAX 3,930 MIN 27 CFSM 7.87 IN 106.91 AC-FT 312,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	627	210	191	328	1,010	233	202	350	90	46	28	19
2	584	196	180	297	834	219	192	320	86	45	28	20
3	413	188	178	286	760	205	176	284	82	41	28	66
4	329	1,070	184	257	636	194	205	264	82	39	26	46
5	274	1,130	164	234	557	186	446	242	70	38	26	31
6	236	1,300	171	219	510	355	870	222	73	37	25	110
7	257	938	165	208	460	490	680	208	72	36	25	281
8	484	731	180	217	414	330	605	239	72	35	26	101
9	514	577	201	228	378	284	1,950	248	87	34	25	63
10	424	476	235	204	346	257	1,670	233	82	34	24	49
11	357	406	2,070	204	316	302	1,030	219	76	33	23	41
12	309	395	2,010	201	288	386	725	224	72	32	21	36
13	269	314	1,670	706	284	442	570	213	66	32	22	33
14	241	281	1,600	2,140	257	816	465	197	65	31	21	31
15	218	261	1,350	1,280	1,170	829	398	184	68	29	21	31
16	206	284	1,050	876	3,260	852	342	174	66	29	21	29
17	186	274	861	784	1,620	720	302	164	62	30	21	47
18	172	245	816	1,460	1,220	597	338	154	58	29	20	159
19	161	227	791	2,400	918	501	410	148	58	29	20	164
20	155	294	803	2,000	720	430	378	141	53	29	20	159
21	145	330	909	2,030	590	378	338	134	50	29	20	112
22	137	288	1,760	1,800	495	334	309	134	49	29	20	455
23	135	235	2,370	1,700	430	330	326	126	46	28	19	366
24	165	317	1,480	1,550	317	334	306	126	46	27	199	206
25	149	291	1,060	1,590	334	285	430	112	46	29	21	145
26	132	269	836	1,840	302	264	495	106	44	38	21	118
27	215	250	866	2,340	274	245	455	105	45	52	20	99
28	325	233	957	2,600	248	233	466	103	46	36	20	106
29	274	217	477	1,150	-----	216	410	126	46	33	21	79
30	290	203	413	850	-----	202	390	112	46	31	19	73
31	227	-----	367	1,020	-----	192	-----	97	-----	29	18	-----
TOTAL	8,630	12,490	25,965	32,129	19,005	11,644	15,819	5,700	1,913	1,048	690	3,249
MEAN	276	416	838	1,036	619	376	527	184	63.8	33.8	22.3	106
MAX	627	1,300	2,370	2,600	3,260	852	1,950	390	90	52	28	455
MIN	132	188	164	201	248	186	176	97	44	27	18	19
CFSM	5.07	7.59	15.3	18.9	12.4	6.86	9.62	3.36	1.16	.62	.41	1.97
IN.	5.86	8.48	17.63	21.81	12.90	7.90	10.74	3.87	1.30	.71	.47	2.21
AC-FT	17,120	24,770	51,590	63,730	37,700	23,100	31,380	11,310	3,790	2,080	1,370	6,440

CAL YR 1969 TOTAL 136,949 MEAN 375 MAX 3,350 MIN 27 CFSM 6.84 IN 92.97 AC-FT 271,400
WTR YR 1970 TOTAL 136,282 MEAN 379 MAX 3,260 MIN 18 CFSM 6.92 IN 93.87 AC-FT 274,300

LOCATION.--Lat 46°20'39", long 123°48'23", in SW¼SW¼ sec.16, T.10 N., R.9 W., Pacific County, on left bank 25 ft downstream from private road bridge, 1,800 ft downstream from Davis Creek, 1.4 miles south of Naselle, and 2.2 miles (revised) upstream from mouth.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Nov. 3, 1964	2100	\$1,740	8.00	Nov. 30, 1966	2350	*1,580	6.76	Dec. 24, 1968	0330	*2,120	7.73
Nov. 24, 1964	2100	\$2,460	8.56	Dec. 4, 1966	0915	1,570	6.74	Dec. 4, 1969	2315	1,710	6.92
Nov. 50, 1964	2200	*1,980	7.54	Jan. 12, 1967	1845	1,520	6.63	Feb. 10, 1969	1930	1,710	6.92
Jan. 23, 1965	1530	*1,520	6.66								
Jan. 28, 1965	1830	2,080	7.84	Jan. 20, 1968	0945	*1,720	6.93	Dec. 11, 1969	1115	1,700	6.91
				Mar. 27, 1968	1430	1,660	6.83	Jan. 19, 1970	1230	*2,050	7.60
Jan. 5, 1966	1630	*1,300	6.03	June 2, 1968	0215	1,620	6.74	Jan. 20, 1970	1715	1,720	6.93

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 2, 3, 4, 1965, Aug. 21, 22,	2.8	a1.17	1968	Aug. 12-13, 1968	5.2	1.71
	23, 24, 1966			1969	Sept. 15, 16, 1969	4.1	1.67
1967	Aug. 27, 28, 29, 1967	1.3	b1.38	1970	Aug. 31, 1970	1.9	1.52

Period of record: Maximum discharge, 2,460 cfs Nov. 24, 1964 (gage height, 8.56 ft), from rating curve extended above 1,100 cfs; minimum, 1.3 cfs Aug. 27, 28, 29, 1967; minimum gage height, 1.09 ft Aug. 11, 1965, result of minor regulation.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	22	155	199	164	185	56	28	16	18	5.8	6.7
2	3.0	39	144	480	130	198	52	26	10	23	5.3	6.2
3	2.8	127	196	345	112	136	46	25	21	30	5.3	6.1
4	6.6	131	376	285	107	125	41	24	17	27	5.4	5.4
5		191	251	714	130	192	38	23	15	22	5.6	4.9
6	33	137	253	666	321	170	36	35	14	22	4.8	4.5
7	24	135	235	474	371	174	34	27	14	21	4.5	4.2
8	14	169	195	414	262	618	33	23	13	18	4.2	4.0
9	13	155	159	299	250	648	38	20	12	17	4.5	4.0
10	11	191	131	316	198	396	41	21	15	15	4.2	4.5
11	9.1	167	107	342	348	230	124	19	28	15	4.2	13
12	8.6	228	90	728	320	168	121	19	19	14	4.0	16
13	10	355	82	710	220	178	91	19	16	14	5.0	8.0
14	61	335	71	443	172	195	115	19	15	13	5.8	6.2
15	74	230	63	290	129	308	99	58	13	13	4.5	5.5
16	40	163	56	205	101	285	87	56	12	12	4.2	6.8
17	78	122	91	152	89	230	77	39	12	12	3.8	9.7
18	62	104	46	121	75	270	68	33	11	10	3.5	19
19	109	126	43	97	72	308	61	29	11	10	3.2	11
20	72	197	55	84	114	282	61	27	10	9.4	3.2	7.7
21	53	173	81	74	86	268	55	30	11	8.5	3.0	6.5
22	43	292	57	66	220	75	80	31	11	8.2	3.0	6.6
23	36	204	74	82	76	176	45	26	13	8.1	2.8	13
24	31	159	162	78	69	140	42	24	12	8.8	3.0	11
25	27	124	155	78	66	112	40	23	9.1	9.0	3.0	12
26	25	220	175	69	72	93	43	22	8.6	8.1	5.4	37
27	31	823	127	182	182	96	37	21	25	7.4	6.5	21
28	40	177	762	122	222	69	34	19	9.3	6.9	21	15
29	27	139	575	202	-----	62	31	18	25	6.7	12	12
30	26	130	483	262	-----	-----	29	17	20	6.2	9.9	10
31	-----	-----	328	218	-----	57	-----	16	-----	5.9	7.9	-----
TOTAL	1,022.1	5,172	6,392	8,892	4,533	1,725	817	495.7	419.2	227.0	297.5	
MEAN	33.0	172	208	278	142	54.0	26.7	15.5	13.5	7.2	9.7	
MAX	109	355	823	720	371	648	124	98	53	30	65	37
MIN	2.8	22	43	66	66	57	29	16	8.6	5.9	2.8	4.0
CFSM	1.84	9.61	11.5	16.0	9.05	11.7	3.21	1.47	.92	.75	.41	.55
IN-	2.12	10.75	13.28	18.48	9.42	13.55	3.58	1.70	1.03	.87	.67	.62
AC-FY	2,030	10,260	12,680	17,640	8,990	12,930	3,420	1,620	983	831	450	590
CAL YR 1966	TOTAL	36,050.3	MEAN	104	MAX	1,						

NASELLE RIVER BASIN

12010700 SOUTH FORK NASELLE RIVER NEAR NASELLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	65	1,160	231	215	122	100	51	17	9.2	3.0	1.8
2	15	58	847	285	184	124	89	47	14	4.9	2.8	4.4
3	10	53	615	495	209	111	81	44	13	4.6	2.7	3.7
4	8.2	48	1,120	763	244	100	79	42	12	4.5	2.7	2.5
5	7.4	52	621	528	207	87	73	38	11	4.6	2.7	2.0
6	7.3	54	477	369	168	77	69	35	9.6	4.6	2.8	2.0
7	14	46	375	258	138	69	59	32	9.6	4.6	3.0	2.0
8	34	42	255	291	113	94	61	31	9.2	4.4	3.0	1.8
9	19	116	195	225	117	117	79	30	8.8	4.4	2.7	3.2
10	14	117	366	300	104	145	65	27	8.4	4.4	2.3	2.3
11	12	114	360	415	124	170	59	27	9.2	4.1	2.3	2.3
12	20	213	721	742	232	158	83	25	8.8	4.1	2.2	14
13	19	659	1,070	776	631	143	131	23	8.1	4.1	2.2	10
14	14	809	486	491	395	136	148	22	7.3	3.9	2.0	6.1
15	17	564	282	435	472	198	133	22	6.7	3.7	1.9	3.8
16	15	326	330	325	355	209	171	20	6.4	3.7	1.9	3.4
17	17	210	275	223	371	223	143	18	6.0	3.4	1.8	3.0
18	15	164	203	179	350	212	128	18	5.7	3.4	1.8	2.8
19	35	146	276	855	240	174	108	16	5.5	3.3	1.5	2.7
20	157	125	303	578	174	226	94	16	5.2	3.1	1.5	2.5
21	244	136	208	336	138	180	81	15	8.0	6.4	1.6	2.5
22	813	114	148	317	113	461	73	14	24	4.9	1.8	2.4
23	356	98	145	361	96	407	63	14	15	4.4	1.6	2.3
24	208	86	198	281	83	284	57	14	9.4	3.9	1.5	2.1
25	158	352	205	256	79	196	61	13	8.0	3.7	1.5	2.0
26	132	238	160	375	67	167	57	12	7.2	3.9	1.4	2.0
27	100	223	124	934	59	133	51	12	7.0	3.9	1.4	2.0
28	83	238	108	713	119	124	55	14	6.6	3.7	1.4	1.9
29	97	256	145	560	-----	115	69	24	6.0	3.4	1.4	5.9
30	86	1,040	111	395	-----	122	57	29	5.6	3.2	1.5	19
31	72	-----	128	251	-----	111	-----	25	-----	3.2	1.5	-----
TOTAL	2,788.3	6,742	2,020	13,543	5,799	5,195	2,577	770	278.3	136.6	63.4	160.0
MEAN	89.9	225	308	437	207	168	85.9	24.8	9.28	4.41	2.05	5.33
MAX	813	1,040	1,160	934	631	461	171	51	24	8.1	3.0	23
MIN	7.3	42	108	179	59	69	51	12	5.2	3.2	1.4	1.8
CFSM	9.52	12.6	21.7	26.4	11.6	9.39	4.80	1.39	5.2	2.5	1.1	3.0
IN	5.79	14.01	24.98	28.15	12.05	10.80	5.36	1.40	2.8	1.3	0.5	3.5
AC-FT	5,530	13,370	23,640	26,860	11,500	10,300	5,110	1,530	952	271	126	317

CAL YR 1966 TOTAL 45,477.7 MEAN 125 MAX 1,160 MIN 2.8 CFSM 6.98 IN 94.51 AC-FT 90,210
 WTR YR 1967 TOTAL 50,072.6 MEAN 137 MAX 1,160 MIN 1.4 CFSM 7.65 IN 104.06 AC-FT 99,320

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	112	286	98	158	78	145	74	594	17	7.3	76
2	69	89	695	78	314	69	115	63	1,040	14	7.0	63
3	130	74	808	69	667	59	93	55	375	14	7.3	51
4	76	61	496	67	713	57	100	51	211	14	7.3	44
5	283	53	338	69	349	76	91	55	142	13	7.7	37
6	189	47	277	59	214	76	98	53	107	12	7.3	32
7	112	44	286	84	150	76	86	46	86	11	6.7	31
8	78	76	246	91	115	63	40	40	71	10	6.0	30
9	59	326	594	249	93	75	67	35	61	9.6	5.7	27
10	61	597	618	203	78	55	63	34	53	9.6	5.5	26
11	98	355	497	158	65	59	59	32	47	11	5.5	34
12	104	208	320	189	57	187	53	31	44	25	5.5	30
13	166	145	208	685	49	179	47	31	61	14	5.7	32
14	153	122	150	892	44	288	107	27	47	25	11	69
15	107	96	115	539	38	355	166	25	38	24	11	98
16	84	78	96	375	35	518	120	24	34	16	16	84
17	69	67	78	306	91	314	100	22	30	14	11	140
18	63	65	61	300	509	208	98	22	26	12	18	181
19	55	59	51	896	828	153	91	25	25	11	51	187
20	47	49	46	1,280	512	122	96	29	23	11	22	150
21	375	44	145	786	1,020	98	74	32	22	9.6	16	120
22	346	40	372	367	808	82	67	49	32	9.2	18	102
23	283	40	352	225	765	86	82	37	24	8.8	32.3	89
24	309	59	1280	158	495	64	57	31	22	8.1	150	76
25	396	51	272	130	274	227	153	42	19	7.7	180	65
26	227	44	241	110	187	227	157	34	19	7.3	80	57
27	578	38	187	89	142	1,230	115	35	22	7.3	107	51
28	515	61	190	74	112	780	112	31	21	7.3	246	46
29	206	208	120	67	95	425	84	29	21	7.3	148	40
30	181	320	108	67	-----	266	89	24	18	7.3	110	37
31	140	-----	89	137	-----	189	-----	46	-----	7.3	86	-----
TOTAL	5,713	3,708	8,644	8,870	8,935	6,741	2,827	1,166	3,335	376.4	1,608.5	2,185
MEAN	184	124	279	286	287	217	94.2	37.4	111	12.1	51.9	70.2
MAX	578	597	808	1,250	1,020	1,230	146	74	1,040	25	323	187
MIN	47	38	44	59	35	55	47	22	18	7.3	5.5	26
CFSM	10.3	6.93	15.4	16.8	17.2	12.1	5.24	2.18	6.20	4.8	2.90	3.92
IN	11.87	7.71	17.96	18.43	18.57	14.01	5.88	2.42	6.93	4.78	3.34	4.37
AC-FT	11,930	7,350	17,150	17,590	17,720	13,370	5,610	2,310	6,610	747	3,190	4,180

CAL YR 1967 TOTAL 46,587.3 MEAN 128 MAX 934 MIN 1.4 CFSM 7.15 IN 96.82 AC-FT 92,410
 WTR YR 1968 TOTAL 54,028.9 MEAN 148 MAX 1,250 MIN 5.3 CFSM 8.27 IN 112.28 AC-FT 107,200

12010700 SOUTH FORK NASELLE RIVER NEAR NASELLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	34	85	377	645	194	60	74	50	94	43	10	5.3		
2	33	160	404	459	197	61	111	48	75	38	9.5	5.4		
3	30	130	849	381	311	68	80	58	62	38	9.5	6.1		
4	61	105	688	705	410	61	85	46	53	38	9.4	5.9		
5	38	95	407	1,010	333	224	81	41	46	34	10	5.7		
6	89	75	264	575	229	215	71	37	42	29	9.4	5.3		
7	65	96	269	702	203	153	65	35	37	27	8.7	4.8		
8	53	537	342	469	531	122	59	32	34	26	8.3	4.6		
9	58	437	436	509	535	102	57	30	31	24	8.1	4.5		
10	107	284	415	466	830	86	54	28	28	35	8.0	4.4		
11	98	376	422	354	1,100	74	47	26	26	43	7.8	4.4		
12	105	350	388	253	498	65	56	25	25	28	7.9	4.4		
13	120	281	210	214	299	58	135	23	24	25	8.4	5.1		
14	260	205	390	207	219	51	81	22	22	23	7.7	4.9		
15	280	162	300	214	210	47	71	21	21	21	8.3	4.4		
16	200	126	225	280	263	70	64	20	19	20	8.9	5.5		
17	210	111	180	279	208	124	115	19	18	19	7.1	135		
18	170	156	339	208	174	102	137	19	17	18	6.8	86		
19	218	134	252	158	150	123	201	28	17	17	7.6	87		
20	265	185	189	125	135	105	157	22	18	17	7.3	102		
21	210	294	146	102	116	91	128	18	17	16	7.5	86		
22	200	375	210	85	101	102	106	17	34	15	7.1	224		
23	160	264	964	74	97	85	99	16	71	14	6.2	291		
24	130	195	1,350	65	88	73	84	16	53	14	5.8	176		
25	105	144	477	58	79	66	71	15	49	13	6.7	148		
26	95	126	283	53	78	59	63	18	41	12	6.9	105		
27	85	130	194	52	72	54	55	65	39	12	11	84		
28	75	115	146	44	65	48	53	36	65	12	11	70		
29	85	364	120	41	-----	44	56	247	64	11	7.8	61		
30	130	395	108	38	-----	47	46	248	51	11	6.4	135		
31	95	-----	300	221	-----	62	-----	130	-----	11	5.7	-----		
TOTAL	3,856	6,492	11,564	9,046	7,685	2,702	2,562	1,456	1,193	704	250.8	1,878.7		
MEAN	124	216	373	292	274	87.2	85.4	47.0	39.8	22.7	8.09	62.4		
MAX	280	537	1,350	1,010	1,100	224	201	248	94	43	11	291		
MIN	30	75	108	38	65	44	46	15	17	11	5.7	4.4		
CFSM	6.93	12.1	20.8	16.3	15.3	4.87	4.77	2.63	2.22	1.27	.45	3.49		
IN-	8.01	13.49	24.03	18.80	15.97	5.62	5.32	3.03	2.48	1.46	.52	3.89		
AC-FT	7,650	12,880	22,940	17,940	15,240	5,360	5,080	2,890	2,370	1,400	497	3,710		
CAL YR 1968	TOTAL	57,875.9	MEAN	158	MAX	1,350	MIN	5.5	CFSM	8.83	IN	120.28	AC-FT	114,800
WTR YR 1969	TOTAL	49,381.5	MEAN	135	MAX	1,350	MIN	4.4	CFSM	7.54	IN	102.63	AC-FT	97,958

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	231	78	41	63	276	41	36	95	19	8.0	4.6	2.2		
2	183	66	37	56	206	37	33	82	16	7.3	4.2	2.5		
3	122	60	38	54	193	35	29	72	16	6.4	4.2	35		
4	88	503	41	48	144	33	56	66	15	5.9	3.8	13		
5	70	407	35	43	131	32	192	62	14	5.9	3.6	8.4		
6	58	354	38	40	131	157	312	58	13	5.6	3.2	68		
7	86	228	37	37	136	129	214	55	13	5.4	3.2	105		
8	139	183	44	48	119	90	209	75	12	5.1	3.2	38		
9	102	131	68	53	105	76	671	90	25	4.6	3.2	26		
10	82	102	82	43	93	66	440	80	19	4.6	4.0	19		
11	70	84	1,040	47	80	112	260	70	15	4.4	4.4	16		
12	61	72	597	47	72	139	160	75	14	4.2	3.4	14		
13	53	61	509	281	66	141	110	80	12	4.0	2.9	12		
14	47	94	488	716	60	388	90	68	11	4.8	2.8	11		
15	41	50	376	365	506	298	75	63	12	3.8	2.6	8.0		
16	47	56	306	267	657	320	65	96	12	3.6	2.5	7.3		
17	40	58	250	287	368	234	60	51	11	3.6	2.3	34		
18	35	50	264	808	248	167	75	47	9.9	3.6	2.2	70		
19	33	44	256	1,340	183	129	95	43	9.1	3.6	2.2	80		
20	30	117	236	671	144	105	80	38	8.7	3.4	2.2	100		
21	28	122	292	976	117	86	70	36	8.4	3.2	2.2	60		
22	27	90	512	667	98	74	60	35	8.0	3.2	2.2	172		
23	27	124	512	479	82	72	63	32	7.7	3.2	2.2	129		
24	45	110	343	554	70	68	60	29	7.3	3.1	2.5	82		
25	53	93	239	527	61	56	95	27	7.0	3.6	2.5	61		
26	37	80	185	888	54	51	130	25	6.7	23	2.3	90		
27	144	68	141	798	50	45	110	23	6.7	19	2.2	41		
28	374	66	114	413	44	43	95	22	6.7	8.4	2.3	35		
29	178	51	98	299	-----	38	110	32	7.0	6.7	2.5	30		
30	126	45	82	178	-----	36	115	25	7.7	6.1	2.3	27		
31	98	-----	70	320	-----	34	-----	21	-----	5.1	2.0	-----		
TOTAL	2,755	3,601	7,371	11,333	4,494	3,332	4,132	1,633	349.9	181.6	89.9	1,356.4		
MEAN	88.9	120	238	366	161	107	138	52.7	11.7	5.86	2.90	42.7		
MAX	374	503	1,040	1,340	657	388	671	95	25	23	4.6	172		
MIN	27	44	35	37	44	32	29	21	6.7	3.1	2.0	2.2		
CFSM	4.97	6.70	13.3	20.4	8.99	5.98	7.71	2.94	.65	.33	.16	2.53		
IN-	5.73	7.48	15.32	23.55	9.34	6.92	8.59	3.39	.73	.38	.19	2.82		
AC-FT	5,460	7,140	14,620	22,480	8,910	6,610	8,200	3,240	694	360	178	2,690		
CAL YR 1969	TOTAL	41,196.5	MEAN	113	MAX	1,100	MIN	4.4	CFSM	6.31	IN	85.62	AC-FT	81,710
WTR YR 1970	TOTAL	40,628.0	MEAN	111	MAX	1,340	MIN	2.0	CFSM	6.20	IN	84.44	AC-FT	80,590

NORTH NEMAH RIVER BASIN

12011000 NORTH NEMAH RIVER NEAR SOUTH BEND, WASH.

LOCATION.--Lat 46°29'27", long 123°50'00", in SE¼ sec.30, T.12 N., R.9 W., Pacific County, on right bank 700 ft downstream from Finn Creek, 5.0 miles upstream from mouth, and 12.2 miles south of South Bend.

DRAINAGE AREA.--18.0 sq mi.

PERIOD OF RECORD.--February 1946 to September 1954. Annual maximums, water years 1955-58, 1960-61. July 1964 to September 1968 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 60 ft (from topographic map). Prior to Oct. 1, 1954, water-stage recorder; Oct. 1, 1954, to Sept. 30, 1958, and Oct. 1, 1959, to Sept. 30, 1961, crest-stage gage; all at site 200 ft upstream at different datum.

AVERAGE DISCHARGE.--12 years (1946-54, 1964-68), 122 cfs (88,320 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (cfs) and peak discharges above base (930 cfs), water years 1966-68

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 5, 1966	1800	*1,080	6.88	Dec. 13, 1966	0600	*1,620	8.67	Jan. 19, 1968	0800	*1,590	7.78
Dec. 1, 1966	0300	1,090	7.47	Dec. 3, 1967	0600	1,420	7.44	Mar. 15, 1968		980	
Dec. 4, 1966	0745	1,380	8.20	Jan. 14, 1968	0830	960	6.40	June 2, 1968	0415	1,140	6.84
										996	6.49

Annual minimum discharge, water years 1966-68

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 21, 1966	8.4	2.77	1968	Aug. 9-13, 1968	12	2.37
1967	Sept. 27, 28, 1967	5.0	2.34				

Period of record: Maximum discharge, 2,000 cfs Jan. 28, 1965 (gage height, 9.00 ft); minimum, 4.7 cfs Sept. 21, 22, 23, 1951; minimum gage height, 1.28 ft Nov. 8, 9, 1952, site and datum then in use.

REMARKS.--Records excellent. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	27	160	250	156	140	82	40	26	18	11	11
2	9.1	51	195	338	136	120	72	38	28	20	11	11
3	8.7	125	200	274	124	105	64	37	27	29	11	11
4	14	163	327	242	138	100	60	35	26	26	12	10
5	14	153	230	577	185	155	56	34	24	23	12	9.5
6	63	122	240	796	407	170	54	50	24	23	11	9.5
7	44	109	228	540	413	190	51	38	23	21	11	9.5
8	30	115	189	500	285	500	50	34	22	19	11	9.2
9	25	109	163	450	255	600	52	33	21	19	11	9.2
10	21	160	139	300	222	350	50	32	26	18	11	11
11	19	167	120	320	282	250	126	31	33	18	11	14
12	19	167	104	470	262	195	121	31	29	18	10	12
13	21	187	97	530	220	192	91	30	25	17	16	10
14	62	178	90	512	188	218	91	31	24	17	14	9.5
15	85	148	80	353	154	377	83	58	22	16	11	9.5
16	61	122	75	262	136	344	76	58	20	16	11	10
17	56	104	67	212	118	262	68	43	20	16	10	13
18	65	103	63	178	106	307	64	39	19	16	9.5	17
19	112	182	61	152	95	329	60	36	19	16	9.5	12
20	79	226	76	134	106	317	68	35	18	15	8.8	10
21	62	240	85	120	90	292	60	40	19	14	8.8	9.5
22	52	304	69	106	83	250	60	38	20	13	8.8	10
23	45	230	80	108	88	212	55	33	20	14	8.8	13
24	40	178	96	95	80	180	53	32	19	14	8.8	14
25	36	140	92	92	80	156	53	31	18	13	8.8	13
26	36	150	100	83	82	136	52	31	17	13	10	25
27	36	153	462	120	160	120	47	29	21	13	40	17
28	36	128	488	108	200	104	45	29	31	12	19	14
29	30	115	399	208	-----	93	42	27	21	12	14	13
30	30	106	327	202	-----	95	41	26	19	12	13	11
31	27	-----	242	180	-----	82	-----	26	-----	12	12	-----
TOTAL	1,244.9	4,462	5,304	8,812	4,851	6,941	1,966	1,105	681	523	374.8	357.4
MEAN	40.2	149	171	284	173	224	65.5	35.6	22.7	16.9	12.1	11.9
MAX	112	304	488	796	413	600	128	58	33	29	40	25
MIN	8.7	27	61	83	80	82	41	26	17	12	8.8	9.2
CFSM	2.23	8.28	9.50	15.8	9.61	12.4	3.64	1.98	1.26	.94	.67	.66
IN-	2.57	9.22	10.96	18.21	10.03	14.34	4.06	2.28	1.41	1.08	.74	.74
AC-FT	2,470	8,850	10,520	17,480	9,620	13,770	3,900	2,190	1,350	1,040	743	709
CAL YR 1965	TOTAL 37,450.2	MEAN 103	MAX 1,280	MIN 7.1	CFSM 5.72	IN 77.40	AC-FT 74,280					
WTR YR 1966	TOTAL 36,622.1	MEAN 100	MAX 796	MIN 8.7	CFSM 5.56	IN 75.69	AC-FT 72,640					

12011000 NORTH NEMAH RIVER NEAR SOUTH BEND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	77	906	258	234	124	124	54	26	15	10	7.2
2	17	73	639	240	204	115	114	52	24	15	9.3	6.7
3	13	69	657	320	207	104	104	98	24	15	9.3	8.5
4	12	66	1,100	504	211	96	99	47	23	15	9.3	7.2
5	11	70	822	412	195	88	91	45	21	15	9.8	6.7
6	11	77	597	338	173	83	83	43	20	15	11	7.2
7	16	67	458	278	151	77	76	40	20	14	12	6.7
8	22	64	320	250	137	98	73	40	20	14	10	6.3
9	14	66	262	215	131	115	84	40	20	14	8.9	8.9
10	13	91	284	220	125	119	70	39	20	13	8.9	20
11	12	84	288	246	128	116	64	40	22	13	8.9	24
12	17	119	661	350	156	110	62	36	20	13	8.5	14
13	15	244	1,210	458	342	104	104	34	20	13	8.0	10
14	13	395	594	362	266	118	121	33	19	13	7.6	8.5
15	12	310	360	308	282	171	115	32	18	13	7.6	8.0
16	12	216	316	260	274	222	135	31	18	12	7.6	7.6
17	12	166	276	260	304	220	127	30	17	12	7.2	7.2
18	11	144	250	193	300	213	121	29	17	12	7.2	7.2
19	34	137	268	562	234	176	110	28	16	18	7.2	7.2
20	130	131	282	456	189	197	97	27	16	16	7.2	7.2
21	152	148	250	300	163	174	88	26	20	15	6.5	7.2
22	341	132	220	280	141	127	82	25	52	13	6.0	7.2
23	189	124	215	330	128	505	75	25	30	13	7.2	6.3
24	135	114	250	278	116	322	69	25	23	12	7.2	5.6
25	110	206	244	250	111	234	69	24	20	12	6.7	6.0
26	107	181	220	262	97	191	64	23	20	12	6.3	6.0
27	168	168	560	252	157	63	23	25	85	12	6.3	5.3
28	84	176	186	558	128	144	64	25	18	12	6.3	5.3
29	96	191	204	468	-----	135	64	31	18	11	6.3	13
30	91	612	184	362	-----	146	57	36	17	11	6.3	16
31	83	-----	198	260	-----	139	-----	31	-----	10	6.3	-----
TOTAL	1,892	4,738	12,885	10,356	5,212	5,225	2,689	1,065	639	413	250.9	268.5
MEAN	61.0	158	416	334	186	169	89.6	34.4	21.3	13.3	8.09	8.95
MAX	341	612	1,210	562	342	505	135	54	52	18	12	24
MIN	11	64	184	193	85	77	57	23	16	10	6.3	5.3
CFSH	3.39	8.78	23.1	18.6	10.3	9.39	4.98	1.91	1.18	.74	.45	.50
IN-	3.91	9.79	26.63	21.41	10.77	10.80	5.56	2.20	1.32	.85	.52	.55
AC-FT	3,750	9,400	25,560	20,350	10,360	10,360	5,330	2,110	1,270	819	498	533
CAL YR 1966	TOTAL 45,126.2	MEAN 124	MAX 1,210	MIN 8.8	CFSH 6.89	IN 93.26	AC-FT 89,510					
WTR YR 1967	TOTAL 45,635.4	MEAN 125	MAX 1,210	MIN 5.3	CFSH 6.94	IN 94.31	AC-FT 90,520					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	113	197	128	193	98	175	79	289	25	14	56
2	103	93	593	110	376	87	146	71	695	24	14	47
3	134	82	1,030	95	548	77	126	65	293	23	14	41
4	107	71	485	93	657	71	121	64	185	22	14	36
5	201	62	335	90	356	89	111	74	140	22	14	34
6	186	55	290	81	252	89	110	75	113	21	14	31
7	118	53	296	96	195	83	99	66	96	20	14	30
8	83	92	235	100	157	72	89	61	82	20	13	28
9	69	230	336	216	134	65	81	56	72	20	13	27
10	64	414	396	187	116	64	78	54	66	19	12	27
11	73	270	368	150	96	73	78	50	61	21	12	37
12	64	181	260	162	87	191	70	49	57	28	12	30
13	96	140	195	658	79	191	65	47	61	21	13	38
14	108	120	152	808	72	293	122	44	54	28	27	69
15	87	101	132	485	66	725	150	44	47	24	20	92
16	74	85	119	353	62	720	121	44	44	20	24	78
17	62	77	108	280	93	383	105	41	42	19	17	113
18	69	77	94	303	310	255	101	61	37	18	19	146
19	57	67	84	1,240	507	193	99	47	37	18	51	142
20	52	60	76	1,100	354	143	96	46	34	18	32	118
21	162	55	115	906	630	136	86	46	34	17	24	98
22	218	51	288	458	535	118	79	50	38	17	24	85
23	206	52	278	305	510	118	85	47	33	16	91	76
24	186	63	242	245	374	112	76	44	30	16	69	65
25	211	53	265	209	262	203	126	46	28	16	52	57
26	162	48	262	183	197	205	120	42	28	16	50	51
27	320	44	222	157	157	855	105	41	32	15	73	47
28	377	59	197	142	132	692	94	40	34	15	156	44
29	228	185	165	130	114	404	84	38	30	15	100	40
30	167	177	143	125	-----	270	94	36	24	14	72	38
31	137	-----	128	181	-----	211	-----	47	-----	14	57	-----
TOTAL	4,356	3,230	8,086	9,776	7,623	7,286	3,092	1,595	2,820	602	1,131	1,821
MEAN	141	108	261	315	263	235	103	51.5	94.0	19.4	36.5	60.7
MAX	377	614	1,030	1,240	657	855	175	79	695	28	156	146
MIN	52	64	76	81	64	64	65	26	14	12	12	27
CFSH	7.83	6.00	14.5	17.5	14.4	13.1	5.72	2.86	5.22	1.08	2.03	3.37
IN-	9.00	6.68	16.71	20.20	15.75	15.06	6.39	3.30	5.03	1.24	2.34	3.76
AC-FT	8,640	6,410	16,040	19,390	15,120	14,450	6,130	3,160	5,590	1,190	2,240	3,610
CAL YR 1967	TOTAL 41,792.4	MEAN 114	MAX 1,030	MIN 5.3	CFSH 6.33	IN 86.37	AC-FT 82,900					
WTR YR 1968	TOTAL 51,418.0	MEAN 140	MAX 1,240	MIN 12	CFSH 7.78	IN 106.26	AC-FT 102,000					

NORTH NEMAH RIVER BASIN

12011200 WILLIAMS CREEK NEAR SOUTH BEND, WASH.

LOCATION.--Lat 46°31'49", long 123°51'39", in NW¼ sec.13, T.12 N., R.10 W., Pacific County, on left bank
- 0.1 mile upstream from unnamed tributary, 1.5 miles upstream from mouth, and 10 miles southwest of South Bend.

DRAINAGE AREA.--9.43 sq mi.

PERIOD OF RECORD.--July 1964 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 60 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 60.9 cfs (87.70 inches per year, 44,120 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (500 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 5, 1966	1730	*345	2.86	Dec. 13, 1966	1000	*566	3.62	Dec. 3, 1968	1830	*476	3.37
Dec. 4, 1966	0945	563	3.61	Jan. 20, 1968	2130	*586	3.73	Feb. 16, 1970	0130	*476	3.42

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1-4, 1965	9.3	1.03	1969	Sept. 15, 1969	10	1.54
1967	Sept. 27, 28, 1967	86.8	-	1970	Aug. 21-23, 25, 26, 1970	8.4	1.30
1968	July 31 to Aug. 10, Aug. 12	814	-				

a Minimum daily.

Period of record: Maximum discharge, 816 cfs Jan. 28, 1965 (gage height, 4.39 ft), from rating curve
extended above 360 cfs on basis of step-backwater computation; minimum daily, 6.8 cfs Sept. 27, 28, 1967.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	18	54	116	60	71	60	32	20	16	12	11
2	9.3	30	53	140	54	62	55	30	22	17	12	10
3	9.3	54	76	121	52	57	52	29	21	21	12	10
4	13	59	128	105	54	55	49	28	20	20	12	10
5	41	54	80	214	74	73	48	28	20	19	12	10
6	42	46	85	265	161	76	46	33	19	19	11	10
7	31	42	81	205	163	76	43	28	18	18	11	9.7
8	22	44	72	190	118	169	42	27	18	17	11	9.7
9	18	44	66	155	112	210	43	26	18	16	11	9.7
10	16	52	59	135	99	140	42	25	20	16	10	10
11	14	52	54	132	126	110	78	25	22	16	10	12
12	15	58	52	171	122	93	78	25	20	15	10	11
13	16	60	50	205	99	91	64	24	19	15	16	10
14	41	62	48	205	89	99	61	24	19	15	12	10
15	52	52	44	158	80	160	54	36	18	14	12	9.7
16	37	46	42	130	71	148	50	35	18	14	10	9.7
17	32	44	42	105	65	120	48	29	18	14	10	12
18	40	47	40	89	60	132	46	27	17	14	10	14
19	56	71	38	80	55	150	43	26	17	14	10	10
20	40	80	40	71	57	145	47	26	17	13	10	10
21	33	83	48	65	53	138	44	28	17	13	9.7	10
22	28	112	42	60	49	125	43	26	17	12	9.7	10
23	29	80	46	57	50	112	41	24	17	12	9.7	12
24	23	66	48	54	48	103	40	24	16	12	9.7	12
25	22	54	46	52	47	97	39	23	16	12	9.7	12
26	21	57	40	48	47	89	38	23	15	12	12	18
27	22	62	158	61	78	80	36	22	18	12	31	14
28	22	52	172	55	83	71	35	22	22	12	15	12
29	20	46	148	89	-----	65	34	21	17	12	13	11
30	20	44	121	82	-----	67	33	21	16	12	12	10
31	18	-----	94	68	-----	62	-----	20	-----	12	12	-----
TOTAL	807.9	1,681	2,183	3,599	2,226	3,248	1,432	817	552	456	367.5	329.5
MEAN	26.1	56.0	70.4	119	79.5	105	47.7	26.4	18.4	14.7	11.9	11.0
MAX	56	112	172	265	163	210	78	36	22	21	31	18
MIN	9.3	18	38	48	47	55	33	20	15	12	9.7	9.7
CFSM	2.77	5.96	7.47	12.6	8.43	11.1	5.06	2.80	1.95	1.56	1.26	1.17
IN-	5.19	6.63	8.61	14.59	8.78	12.81	5.65	3.22	2.18	1.80	1.45	1.30
AC-FT	1,600	3,330	4,370	7,340	4,420	6,440	2,840	1,620	1,090	904	729	654
CAL YR 1965	TOTAL 19,923.3	MEAN 54.6	MAX 594	MIN 8.4	CFSM 5.79	IN 78.59	AC-FT 39,520					
WTR YR 1966	TOTAL 17,798.9	MEAN 48.5	MAX 265	MIN 9.3	CFSM 5.18	IN 70.21	AC-FT 35,300					

12011200 WILLIAMS CREEK NEAR SOUTH BEND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	33	288	127	133	87	79	35	21	14	10	9.6
2	14	31	295	110	117	75	71	33	20	14	10	12
3	10	29	245	179	122	67	65	32	20	14	10	10
4	10	28	454	257	147	62	63	31	19	14	10	9.6
5	10	31	362	204	124	56	58	30	19	14	10	9.6
6	9.7	33	292	179	100	53	55	30	18	13	11	9.6
7	12	29	240	149	85	50	51	28	18	13	12	9.2
8	15	28	192	138	73	60	50	28	18	13	10	8.8
9	11	44	160	122	71	75	53	27	17	12	10	12
10	10	47	172	127	66	71	48	26	17	12	10	16
11	9.7	44	168	146	71	63	45	26	18	12	10	18
12	13	50	270	208	97	58	53	25	17	12	10	10
13	11	91	462	280	242	55	69	24	17	12	10	8.8
14	10	130	258	245	167	63	73	24	16	12	9.6	8.4
15	9.7	87	182	222	167	94	67	23	16	12	9.6	7.6
16	9.7	65	170	182	170	129	75	23	15	12	9.6	7.6
17	9.7	55	138	144	213	117	67	22	15	12	9.6	7.6
18	9.3	49	114	120	227	117	67	22	15	12	9.2	7.6
19	22	47	133	321	168	98	60	21	15	14	9.2	7.6
20	53	44	141	267	141	103	55	21	13	14	9.2	7.6
21	57	50	112	185	119	96	50	21	17	12	10	7.4
22	146	44	96	161	105	213	48	21	35	12	9.6	7.2
23	76	41	87	204	92	263	45	21	21	12	9.6	7.2
24	53	38	102	173	83	188	44	21	19	12	9.2	7.2
25	41	90	104	147	79	149	42	21	17	12	9.2	7.2
26	40	68	85	147	69	129	40	20	17	12	8.8	7.2
27	36	61	73	304	63	107	40	20	17	11	8.8	6.8
28	32	64	66	296	94	100	44	20	15	10	8.8	6.8
29	40	71	77	251	-----	92	41	22	15	10	8.8	12
30	40	209	71	207	-----	94	37	22	14	9.2	10	-----
31	36	-----	86	150	-----	87	-----	22	-----	10	9.2	-----
TOTAL	866.8	1,731	5,655	5,952	3,405	3,071	1,655	762	533	380	300.2	276.2
MEAN	28.0	57.7	182	192	122	99.1	55.2	24.6	17.8	12.3	9.68	9.21
MAX	146	209	462	321	242	263	79	35	35	14	12	18
MIN	9.3	28	66	110	63	50	37	20	14	10	8.8	6.8
CFSM	2.97	6.12	19.3	26.4	12.9	10.5	5.85	2.61	1.89	1.30	1.03	.98
IN	3.42	6.83	22.31	23.48	13.43	12.11	6.53	3.01	2.10	1.50	1.18	1.09
AC-FT	1,720	3,430	11,220	11,810	6,750	3,280	1,510	1,040	754	595	548	548

CAL YR 1966 TOTAL 21,379.8 MEAN 58.6 MAX 462 MIN 9.3 CFSM 6.21 IN 84.34 AC-FT 42,410
WTR YR 1967 TOTAL 26,587.2 MEAN 67.4 MAX 462 MIN 6.8 CFSM 7.15 IN 96.99 AC-FT 48,770

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	56	98	94	85	51	94	41	152	24	14	31
2	51	50	220	79	179	47	79	38	284	23	14	27
3	81	46	323	71	242	44	69	35	121	22	14	25
4	48	38	194	69	281	41	67	37	81	22	14	22
5	152	34	149	67	179	45	62	41	62	22	14	23
6	45	33	136	60	131	44	62	42	53	22	14	22
7	31	31	141	63	107	40	58	40	48	21	14	21
8	21	67	114	67	89	35	51	38	45	21	14	21
9	16	107	118	81	33	48	35	42	21	14	21	21
10	17	194	195	100	69	32	47	34	40	20	14	21
11	18	124	191	81	63	34	45	33	38	21	13	25
12	15	81	141	87	58	69	42	33	38	23	14	23
13	33	69	109	226	55	67	40	33	38	20	13	23
14	38	94	254	30	105	58	32	35	23	20	38	38
15	26	60	81	191	45	242	77	30	34	23	18	44
16	20	56	73	140	42	263	55	30	33	21	19	42
17	16	31	67	141	30	152	50	28	33	20	17	67
18	20	51	60	193	126	98	48	28	32	19	10	81
19	18	45	54	395	218	79	47	31	32	19	24	65
20	15	41	51	419	141	67	45	30	31	19	21	53
21	64	40	68	392	281	58	41	38	30	18	19	45
22	81	40	136	239	223	51	37	32	31	18	20	41
23	83	41	129	274	231	50	37	31	28	17	35	41
24	51	141	121	144	164	34	48	30	27	17	31	37
25	79	45	171	121	124	81	60	30	26	17	25	34
26	51	41	168	105	96	77	50	28	27	17	25	33
27	96	37	147	89	79	320	48	28	30	17	33	32
28	112	46	131	79	67	284	42	27	31	17	83	31
29	77	100	112	71	67	194	41	27	28	17	45	30
30	65	89	98	69	-----	147	45	26	27	17	35	28
31	62	-----	92	85	-----	114	-----	33	-----	14	30	-----
TOTAL	1,589	1,809	4,037	4,463	3,620	3,012	1,587	1,011	1,557	611	702	1,849
MEAN	51.3	60.3	130	144	125	97.2	52.9	32.6	51.9	19.7	22.6	55.0
MAX	152	194	323	419	281	320	94	42	284	20	83	81
MIN	15	31	51	60	42	32	34	26	26	14	14	21
CFSM	5.44	6.39	13.8	15.3	13.3	10.3	5.61	3.46	5.50	2.09	2.40	3.71
IN	6.27	7.14	15.93	17.61	16.28	11.88	6.26	3.99	6.14	2.41	2.77	4.14
AC-FT	3,150	3,590	8,010	8,850	7,180	5,970	3,150	2,010	3,090	1,210	1,390	2,080

CAL YR 1967 TOTAL 23,749.4 MEAN 65.1 MAX 323 MIN 6.8 CFSM 6.90 IN 93.77 AC-FT 47,150
WTR YR 1968 TOTAL 25,047.0 MEAN 68.4 MAX 419 MIN 14 CFSM 7.25 IN 98.81 AC-FT 49,680

NORTH NEMAH RIVER BASIN

12011200 WILLIAMS CREEK NEAR SOUTH BEND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	58	157	147	60	56	62	43	34	45	18	14
2	25	67	149	136	67	55	89	45	31	42	18	14
3	25	56	275	126	94	55	60	44	27	38	18	14
4	34	48	275	178	117	55	55	41	26	37	18	14
5	30	45	177	302	96	81	53	40	25	33	18	14
6	41	41	134	230	79	85	47	38	25	32	17	13
7	32	37	124	284	75	67	45	37	24	31	17	13
8	30	75	134	212	194	60	41	35	23	30	17	12
9	31	85	171	236	177	56	40	35	23	28	17	12
10	35	79	168	209	203	53	37	34	23	30	17	12
11	34	121	165	177	390	51	35	33	23	31	17	12
12	37	152	136	141	236	90	38	32	25	28	17	12
13	38	131	124	126	163	48	53	31	23	26	17	13
14	48	107	149	112	134	47	42	31	23	26	17	12
15	71	94	141	103	124	45	40	30	22	25	17	12
16	58	81	129	98	134	55	37	30	22	24	16	12
17	62	76	121	94	114	85	41	28	22	23	16	20
18	58	75	163	83	100	75	51	27	21	23	15	21
19	58	73	131	77	92	73	100	32	21	22	15	27
20	67	79	109	71	87	65	81	28	21	22	15	19
21	60	100	94	65	79	58	65	27	22	21	16	16
22	63	118	98	65	75	60	94	26	41	21	15	32
23	55	96	257	58	71	55	53	25	70	21	14	56
24	48	92	481	55	67	51	48	25	65	21	14	32
25	48	81	257	53	63	50	45	24	69	20	14	26
26	44	79	182	51	62	48	42	26	55	20	14	22
27	42	92	149	50	60	45	40	34	45	20	14	20
28	40	92	126	47	58	44	42	30	60	20	14	18
29	55	174	107	45	-----	42	44	91	73	19	14	18
30	85	179	94	44	-----	44	40	84	56	19	14	27
31	69	-----	119	73	-----	61	-----	42	-----	18	14	-----
TOTAL	1,449	2,683	5,016	3,748	3,271	1,775	1,522	1,128	1,038	816	494	559
MEAN	46.7	89.4	162	121	117	57.3	50.7	36.4	34.6	26.3	15.9	18.6
MAX	85	179	401	302	390	85	100	91	73	45	18	56
MIN	25	37	94	44	58	42	35	24	21	18	14	12
CFSM	4.95	9.48	17.2	12.8	12.4	6.08	5.38	3.86	3.67	2.79	1.69	1.97
IN	5.72	10.58	19.79	14.79	12.90	7.00	6.40	4.45	4.09	3.22	1.95	2.21
AC-FT	2,870	5,320	9,950	7,430	6,490	3,520	3,020	2,240	2,060	1,620	980	1,110

CAL YR 1968 TOTAL 26,760 MEAN 73.1 MAX 419 MIN 14 CFSM 7.75 IN 105.56 AC-FT 53,080
 WTR YR 1969 TOTAL 23,499 MEAN 64.4 MAX 401 MIN 12 CFSM 6.83 IN 92.70 AC-FT 46,610

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	17	28	69	134	48	44	60	23	14	10	9.2
2	42	17	27	65	117	47	41	55	22	12	10	8.8
3	32	17	27	65	114	45	40	44	22	12	10	27
4	26	93	26	58	98	44	45	41	22	12	9.6	11
5	23	89	24	58	92	42	69	47	21	12	9.6	12
6	21	129	27	56	92	56	154	44	20	12	9.6	51
7	24	92	26	55	87	55	96	41	18	12	10	61
8	41	77	27	51	83	47	75	48	18	12	10	31
9	42	79	27	51	81	44	193	47	21	12	9.6	14
10	33	48	33	50	79	42	152	45	20	12	9.6	13
11	27	42	244	90	75	44	100	42	18	12	9.2	12
12	25	40	179	90	75	55	79	42	18	12	9.2	12
13	22	38	185	101	73	55	67	41	17	12	9.2	11
14	21	37	197	221	73	109	62	38	17	11	9.2	11
15	21	35	141	119	163	96	96	38	18	11	9.2	10
16	20	44	114	98	285	96	53	37	17	12	9.2	10
17	19	42	96	94	152	81	51	34	17	12	8.8	14
18	18	37	87	195	131	71	58	33	16	11	8.8	20
19	18	37	83	299	107	83	62	32	16	11	8.8	30
20	18	45	81	239	89	58	56	31	15	11	8.8	27
21	17	40	107	245	81	55	53	30	14	11	8.8	21
22	17	38	206	194	71	51	50	30	14	10	8.4	82
23	17	38	239	168	65	51	50	30	14	10	8.8	56
24	18	45	165	188	60	55	42	28	14	10	8.4	30
25	17	40	134	209	56	50	45	28	14	11	8.4	22
26	17	37	121	262	53	48	60	27	14	14	8.4	20
27	24	34	105	308	51	47	60	26	14	14	8.8	17
28	27	33	96	218	50	45	56	26	14	12	9.2	16
29	22	32	87	163	-----	44	62	30	14	11	9.2	14
30	28	30	79	131	-----	42	65	26	14	10	8.8	14
31	18	-----	73	149	-----	41	-----	25	-----	10	8.8	-----
TOTAL	748	1,435	3,094	4,271	2,687	1,731	2,136	1,146	516	360	284.8	698.0
MEAN	24.1	47.8	99.8	138	96.0	55.8	71.2	37.0	17.2	11.6	9.19	23.0
MAX	42	129	244	308	285	109	193	60	23	14	10	82
MIN	17	17	26	50	50	41	40	25	14	10	8.4	8.8
CFSM	2.56	5.07	10.6	14.6	10.2	5.92	7.55	3.92	1.82	1.23	.97	2.44
IN	2.95	5.66	12.21	16.85	10.60	6.83	8.43	4.52	2.04	1.42	1.12	2.72
AC-FT	1,480	2,850	6,140	8,478	5,330	3,430	4,240	2,270	1,020	714	569	1,370

CAL YR 1969 TOTAL 19,628.0 MEAN 53.8 MAX 390 MIN 12 CFSM 5.71 IN 77.43 AC-FT 38,930
 WTR YR 1970 TOTAL 19,098.8 MEAN 52.3 MAX 308 MIN 8.4 CFSM 5.55 IN 75.34 AC-FT 37,880

12011500 WILLAPA RIVER AT LEBAM, WASH.

LOCATION.--Lat 46°33'50", long 123°33'49", in SW¼SW¼ sec.33, T.13 N., R.7 W., Pacific County, on left bank 0.1 mile downstream from bridge on State Highway 6, 0.5 mile west of Lebam, 1.0 mile upstream from Walker Creek, and at mile 33.9.

DRAINAGE AREA.--41.4 sq mi.

PERIOD OF RECORD.--June 1948 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 154.0 ft above mean sea level.

AVERAGE DISCHARGE.--22 years, 190 cfs (62.32 inches per year, 137,700 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,600 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	0930	2,830	11.32	Mar. 22, 1967	2115	2,450	10.22	Feb. 11, 1969	0730	1,860	8.40
Mar. 9, 1966	0100	*2,940	11.67								
Dec. 4, 1966	0830	1,800	8.30	Dec. 3, 1967	0645	1,680	7.95	Dec. 11, 1969	2030	2,360	9.91
Dec. 13, 1966	0815	*4,660	16.71	Feb. 3, 1968	2338	*2,510	10.41	Dec. 22, 1969	2100	2,210	9.47
Jan. 19, 1967	1700	3,010	11.68	Dec. 3, 1968	1930	*1,950	8.76	Jan. 14, 1970	0100	*2,460	9.74
Jan. 27, 1967	2130	1,830	8.40					Feb. 16, 1970	0315	2,330	9.37

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 20, 22, 1966	2.4	a2.37	1969	Aug. 24, Sept. 8, 1969	7.0	2.38
1967	Aug. 23, 24, 26-30, Sept. 27, 28	2.8	b2.27	1970	Aug. 16, 19, 1970	2.0	2.25
1968	Aug. 10-12, 1968	7.6	2.39				

a Occurred Aug. 20, 22, Sept. 8, 1966.

b Occurred Sept. 27, 28, 1967.

Period of record: Maximum discharge, 4,930 cfs Feb. 22, 1949 (gage height, 17.53 ft, from high watermark in gage house), from rating curve extended above 2,200 cfs; minimum, 1.4 cfs Sept. 22, 1951; minimum gage height, 2.25 ft Aug. 16, 19, 1970.

REMARKS.--Records excellent. No regulation. Some diversion for irrigation and domestic use. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	10	18	212	475	296	270	145	35	23	16	6.2	5.9		
2	9.1	30	232	708	235	238	132	32	20	6.0	5.6			
3	8.3	115	316	538	232	218	120	50	31	28	5.4	4.3		
4	14	281	558	429	226	212	112	47	20	24	6.1	5.9		
5	60	281	394	1,090	269	278	99	46	25	20	6.5	4.5		
6	58	175	388	2,340	410	287	93	69	25	20	5.5	4.6		
7	39	129	410	1,210	505	293	86	35	24	19	5.4	4.2		
8	25	120	356	1,020	420	1,190	80	49	23	17	5.3	3.4		
9	20	105	299	742	432	1,830	78	46	21	15	5.6	3.7		
10	16	175	258	574	426	800	78	43	23	14	5.5	5.4		
11	14	244	209	498	458	518	201	42	26	13	6.4	15		
12	13	193	183	551	442	400	238	40	26	13	5.3	13		
13	13	180	160	803	372	394	198	39	22	13	5.3	8.2		
14	30	183	145	841	320	475	183	39	21	13	7.5	7.1		
15	60	155	129	627	264	742	160	46	19	12	6.7	7.4		
16	44	132	118	475	229	694	143	52	17	12	6.1	6.8		
17	34	114	107	381	191	541	129	43	17	12	5.0	7.7		
18	34	103	101	320	170	541	118	38	17	12	4.3	13		
19	84	289	93	270	152	564	105	35	17	12	4.4	9.3		
20	68	302	93	241	158	561	105	34	17	11	2.4	6.9		
21	44	278	116	212	143	518	99	36	16	8.2	4.1	6.0		
22	34	413	93	193	132	445	89	39	18	7.9	3.0	6.4		
23	30	326	101	196	132	384	84	35	18	8.2	4.0	11		
24	26	252	118	183	118	332	78	32	18	9.6	5.0	11		
25	22	196	120	172	114	293	76	29	16	11	5.3	11		
26	22	166	127	160	112	261	76	28	14	8.4	4.9	16		
27	21	281	186	191	220	232	68	29	16	7.4	11	13		
28	24	223	946	191	293	209	66	26	24	6.9	8.9	9.7		
29	21	193	742	407	-----	191	61	25	18	6.6	6.1	8.6		
30	20	168	654	413	-----	180	60	25	16	6.8	8.2	7.8		
31	19	-----	468	354	-----	168	-----	24	-----	6.3	6.9	-----		
TOTAL	928.4	5,850	9,092	16,807	7,491	14,259	3,360	1,347	624	403.5	178.3	244.4		
MEAN	29.9	195	293	542	268	460	112	40.2	20.8	13.0	5.75	8.15		
MAX	84	413	946	2,340	505	1,830	238	69	31	28	11	16		
MIN	8.3	18	95	160	112	168	60	24	14	6.3	2.4	3.4		
CFSM	.72	4.71	7.08	13.1	6.47	11.1	2.71	.97	.50	.31	.14	.20		
IN.	.83	5.26	8.17	15.10	6.73	12.81	3.02	1.12	.56	.36	.16	.22		
AC-FT	1,840	11,600	18,038	33,340	14,840	28,280	6,660	2,470	1,240	800	394	485		
CAL YR 1965	TOTAL	54,887.5	MEAN	150	MAX	1,390	MIN	4.4	CFSM	3.62	IN	49.32	AC-FT	108,900
WTR YR 1966	TOTAL	60,484.6	MEAN	166	MAX	2,340	MIN	2.4	CFSM	4.01	IN	54.35	AC-FT	128,000

12011500 WILLAPA RIVER AT LEBAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	35	1,870	338	483	196	224	96	32	12	5.2	3.7
2	10	33	1,040	308	405	180	196	91	31	11	4.8	3.6
3	18	30	786	426	358	184	177	87	30	10	4.5	6.5
4	8.6	29	1,390	322	328	146	146	76	25	9.7	4.9	3.9
5	8.2	31	1,090	762	273	136	146	76	25	9.7	4.9	3.9
6	8.6	35	991	617	241	124	133	70	24	9.7	5.8	4.0
7	9.7	32	822	528	218	115	124	70	24	9.7	7.4	4.2
8	16	29	569	464	199	120	118	66	24	9.0	7.2	3.4
9	12	28	441	392	180	164	127	64	23	9.0	5.5	3.5
10	8.8	31	549	350	164	188	113	63	22	9.0	4.9	7.4
11	8.3	30	637	353	162	196	104	64	23	8.4	4.7	16
12	12	74	1,720	451	183	185	111	58	23	7.8	4.4	8.9
13	16	275	3,320	542	552	175	154	55	20	7.8	4.3	8.0
14	13	658	1,190	458	451	177	162	52	19	7.8	3.8	4.8
15	11	504	667	414	564	320	154	49	17	7.8	3.4	3.8
16	9.9	311	471	374	557	653	199	47	16	7.8	3.4	3.5
17	11	218	362	326	512	582	191	44	16	7.8	3.3	4.3
18	176	388	287	484	515	252	42	15	7.3	3.3	4.5	4.5
19	21	158	329	1,710	374	411	261	40	14	7.8	3.2	4.2
20	93	136	335	1,390	308	414	232	37	14	9.0	3.2	4.2
21	97	134	293	874	255	353	202	36	17	9.7	3.7	4.5
22	260	117	261	677	218	1,240	177	35	43	8.4	3.7	4.2
23	125	186	267	572	188	1,730	157	34	30	7.3	3.0	4.2
24	82	97	389	461	167	1,006	139	34	21	6.7	3.0	3.5
25	61	135	411	461	162	654	134	31	18	6.2	3.3	3.8
26	53	149	347	561	139	483	124	30	16	6.2	3.0	3.5
27	49	153	279	1,170	124	371	115	30	16	6.7	3.0	3.0
28	41	149	241	1,470	183	311	108	31	15	5.7	3.0	2.8
29	41	247	1,107	1,912	167	1,006	164	34	21	5.7	3.0	3.5
30	41	747	218	837	-----	270	108	46	13	5.7	2.8	10
31	37	-----	213	582	-----	250	-----	39	-----	5.2	4.0	-----
TOTAL	1,189.8	4,800	21,453	20,187	8,396	12,102	4,714	1,643	643	251.6	127.1	150.9
MEAN	38.4	160	682	651	300	390	157	53.0	21.4	8.12	4.10	5.03
MAX	240	747	3,320	1,710	564	1,730	261	94	43	12	7.4	16
MIN	7.7	28	213	287	124	115	104	30	13	5.2	2.8	2.8
CFSM	.93	3.86	16.7	15.7	7.25	9.42	3.79	1.28	.52	.20	.10	.12
IN	1.07	4.31	19.28	18.14	7.94	10.87	4.24	1.48	.58	.23	.11	.14
AC-FT	2,360	9,520	42,550	48,040	16,650	24,000	9,350	3,260	1,200	499	252	299
CAL YR 1966	TOTAL 72,057.0	MEAN 197	NAX 3,520	MIN 2.4	CFSM 4.74	IN 64.75	AC-FT 142,900					
WTR YR 1967	TOTAL 75,657.4	MEAN 207	NAX 3,520	MIN 2.8	CFSM 5.00	IN 67.98	AC-FT 150,100					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	164	320	174	288	174	271	90	309	29	9.0	35
2	86	132	861	151	1,878	156	231	83	987	25	10	34
3	161	112	1,438	139	1,470	137	196	77	487	24	10	27
4	102	98	988	130	1,540	130	177	75	311	23	9.9	24
5	146	88	810	125	732	144	164	86	229	23	11	21
6	151	79	647	114	477	146	154	84	179	23	12	20
7	90	73	551	123	356	128	142	77	149	21	10	20
8	69	112	423	139	294	117	128	72	128	20	9.2	19
9	52	326	392	824	243	108	119	66	118	19	8.5	18
10	43	781	430	577	209	104	110	65	100	19	8.0	18
11	60	512	456	386	182	188	110	61	90	19	7.8	20
12	72	355	341	371	159	215	104	60	83	20	8.1	24
13	100	251	277	824	146	245	96	60	90	22	9.5	20
14	142	217	226	990	128	371	132	53	01	22	17	59
15	182	182	193	786	114	844	215	49	68	22	14	85
16	81	156	177	637	186	888	196	47	61	20	18	72
17	66	139	161	525	161	594	174	44	56	18	15	72
18	61	137	144	567	739	423	156	41	52	17	15	143
19	60	125	128	1,270	1,100	326	159	58	50	17	23	112
20	50	112	112	1,260	688	265	146	66	46	17	23	88
21	137	102	137	1,050	919	223	132	60	44	16	25	70
22	254	96	400	630	715	190	121	60	52	15	18	60
23	359	90	512	439	688	182	128	73	44	15	47	53
24	254	90	417	385	597	174	112	84	38	14	52	44
25	309	186	353	285	458	274	112	83	36	13	43	40
26	237	104	311	243	350	274	108	72	34	13	44	36
27	551	90	274	281	280	783	100	60	36	13	46	33
28	633	102	243	174	231	824	94	61	37	12	99	30
29	377	268	212	161	198	567	88	55	34	12	65	28
30	265	314	185	154	-----	411	100	58	32	11	44	26
31	204	-----	164	248	-----	329	-----	52	-----	10	34	-----
TOTAL	5,366	5,429	12,327	14,034	14,638	9,854	4,275	2,024	4,053	572	765.0	1,351
MEAN	175	181	398	453	505	318	143	65.3	135	18.5	24.7	45.0
MAX	633	701	1,438	1,270	1,540	888	271	90	907	29	99	143
MIN	43	73	112	114	186	104	88	41	32	18	7.8	18
CFSM	4.18	4.27	9.43	12.2	7.43	3.63	1.83	3.25	.46	.60	1.09	1.09
IN	4.82	4.88	11.80	12.61	13.15	8.85	3.84	1.82	3.44	.51	.69	1.21
AC-FT	10,640	10,770	24,458	27,840	29,030	19,550	8,480	4,018	8,040	1,130	1,520	2,680
CAL YR 1967	TOTAL 71,334.6	MEAN 195	NAX 1,750	MIN 2.8	CFSM 4.71	IN 64.10	AC-FT 141,500					
WTR YR 1968	TOTAL 74,686.0	MEAN 204	NAX 1,540	MIN 2.8	CFSM 4.93	IN 67.11	AC-FT 148,100					

12011500 WILLAPA RIVER AT LEBAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	170	483	378	174	112	222	103	64	41	10	8.8
2	24	183	405	385	177	114	315	98	55	37	10	8.8
3	23	159	1,020	378	284	128	244	98	47	36	10	11
4	37	139	1,130	399	412	128	236	90	43	34	10	11
5	30	128	790	568	392	227	224	84	46	34	12	10
6	47	117	533	617	305	244	200	77	40	30	11	9.5
7	41	118	460	899	281	216	180	69	37	29	11	8.2
8	34	219	628	693	1,060	185	162	64	34	28	11	7.6
9	34	279	768	747	984	162	147	60	33	25	9.5	7.6
10	56	248	829	797	947	145	135	56	30	24	9.5	7.6
11	56	601	829	671	1,540	133	123	53	30	27	9.5	7.6
12	75	671	650	484	881	121	123	50	30	25	8.8	8.2
13	108	503	547	409	565	114	105	47	29	23	8.8	11
14	154	386	554	375	416	105	147	44	27	21	8.2	12
15	222	306	477	331	368	103	133	43	25	20	8.8	9.5
16	187	251	443	315	402	193	123	41	22	19	11	10
17	169	209	405	293	351	579	145	38	21	18	9.5	24
18	156	185	443	261	299	474	216	38	20	17	8.8	41
19	194	161	354	233	261	371	318	50	20	16	9.5	88
20	182	169	299	206	233	299	299	41	22	15	9.5	47
21	160	274	255	185	208	252	255	36	22	15	11	33
22	164	439	252	164	187	233	219	33	25	15	10	38
23	138	374	671	150	177	216	203	30	37	13	8.8	109
24	122	320	1,140	140	159	187	182	30	47	13	8.2	90
25	114	262	801	133	147	167	164	29	47	13	13	60
26	102	234	561	130	138	152	140	34	40	13	12	47
27	92	245	419	121	128	145	126	73	38	12	13	36
28	83	231	321	112	118	135	118	56	47	13	15	32
29	97	528	261	107	-----	126	121	86	58	13	12	29
30	273	600	222	103	-----	126	107	128	58	11	11	69
31	210	-----	302	198	-----	162	-----	81	-----	11	9.5	-----
TOTAL	3,371	6,709	17,212	10,982	11,594	6,074	5,512	1,662	1,080	661	319.2	891.4
MEAN	109	290	555	354	414	196	184	60.1	36.0	21.3	10.3	29.7
MAX	273	671	1,140	899	1,540	579	318	128	64	41	15	109
MIN	23	117	222	103	118	103	107	29	20	11	8.2	7.6
CFSM	2.43	7.00	15.4	8.55	10.0	4.73	4.44	1.45	0.87	0.51	0.25	0.2
IN.	5.03	7.85	15.47	9.87	10.82	5.46	4.95	1.67	0.97	0.59	0.29	0.80
AC-FT	6,460	17,270	34,140	21,780	23,000	12,050	10,930	3,690	2,140	1,310	633	1,770

CAL YR 1968 TOTAL 80,898.0 MEAN 221 MAX 1,540 MIN 7.8 CFSM 5.34 IN 72.66 AC-FT 160,400
WTR YR 1969 TOTAL 68,267.6 MEAN 187 MAX 1,540 MIN 7.6 CFSM 4.92 IN 61.34 AC-FT 135,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	46	69	157	489	107	77	160	35	16	6.4	4.8
2	128	44	64	142	431	98	73	143	31	16	6.7	9.7
3	98	43	64	140	404	92	68	129	28	14	7.6	11
4	73	516	71	126	330	86	69	117	28	12	6.3	9.9
5	56	544	62	112	285	79	98	109	27	12	6.0	7.8
6	47	592	66	103	249	200	203	98	24	12	5.3	8.8
7	52	392	62	96	220	333	195	90	24	11	5.9	23
8	167	287	75	105	192	229	173	92	24	10	6.5	12
9	222	227	77	103	170	189	605	94	28	10	5.8	8.6
10	150	187	94	92	155	165	590	90	30	10	4.9	7.8
11	112	157	1,180	88	140	173	400	86	30	9.4	4.0	6.9
12	90	135	1,250	86	129	203	298	120	31	9.4	3.5	6.1
13	73	116	957	547	124	214	240	102	24	9.4	3.9	5.6
14	62	103	895	1,650	111	366	200	92	22	8.2	3.6	6.0
15	58	98	642	800	618	360	170	84	23	7.6	3.8	6.3
16	52	123	505	545	1,570	340	148	79	23	6.5	2.9	6.4
17	49	123	405	427	908	304	131	73	22	8.2	3.6	8.0
18	44	114	402	486	668	261	136	68	20	7.6	3.6	22
19	41	105	399	852	493	229	173	64	18	7.0	2.8	28
20	40	118	385	748	380	197	150	60	17	7.6	3.2	20
21	38	123	453	828	301	173	140	57	16	8.2	3.7	16
22	37	109	1,050	920	249	152	129	57	16	8.2	3.4	24
23	37	128	1,280	1,010	211	140	129	52	16	7.6	3.0	32
24	43	121	772	936	161	136	226	16	14	7.0	3.4	18
25	38	112	533	1,020	157	120	261	47	15	7.6	4.1	14
26	34	105	412	1,150	140	111	261	44	14	8.8	4.5	13
27	53	96	324	1,250	127	102	237	42	15	14	3.4	11
28	84	88	269	816	117	98	220	41	16	10	4.3	10
29	81	58	233	556	-----	90	197	16	16	8.8	8.2	9.7
30	53	75	200	410	-----	88	178	42	16	8.2	4.5	18
31	49	-----	177	524	-----	77	-----	39	-----	7.3	4.0	-----
TOTAL	2,232	5,098	13,427	16,825	9,547	5,508	6,175	2,465	667	299.6	139.8	372.4
MEAN	72.0	170	433	543	341	178	206	79.5	22.2	9.66	4.51	12.4
MAX	222	582	1,280	1,650	1,570	366	605	160	35	16	7.6	32
MIN	34	43	62	86	111	77	68	39	14	6.5	2.8	4.8
CFSM	1.74	4.11	10.5	13.1	8.24	4.30	4.98	1.92	0.84	0.23	0.11	0.30
IN.	2.01	4.58	12.06	15.12	8.58	4.95	9.95	2.21	0.60	0.27	0.13	0.33
AC-FT	4,430	10,110	26,630	33,370	18,940	10,930	12,890	4,880	1,320	594	277	739

CAL YR 1969 TOTAL 59,732.6 MEAN 164 MAX 1,540 MIN 7.6 CFSM 3.96 IN 53.67 AC-FT 118,500
WTR YR 1970 TOTAL 62,755.8 MEAN 172 MAX 1,650 MIN 2.8 CFSM 4.15 IN 56.39 AC-FT 124,500

WILLAPA RIVER BASIN

12012000 FORK CREEK NEAR LEBAM, WASH.

LOCATION.--Lat 46°33'19", long 123°55'00", in SW¼NW¼ sec.5, T.12 N., R.7 W., Pacific County, on right bank 0.8 mile upstream from mouth and 1.6 miles southwest of Lebam.

DRAINAGE AREA.--20.4 sq mi.

PERIOD OF RECORD.--June 1953 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 155 ft (from topographic map).

AVERAGE DISCHARGE.--17 years, 143 cfs (95.19 inches per year, 103,600 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,250 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	0730	1,800	5.79	Jan. 27, 1967	1930	1,800	5.90	Feb. 18, 1968	2130	1,510	5.53
Mar. 8, 1966	2030	*2,450	6.63	Mar. 22, 1967	1630	1,560	5.59				
Dec. 13, 1966	0500	*4,160	8.36	Jan. 19, 1968	1200	1,460	5.46	Dec. 3, 1968	1630	*1,670	5.74
Jan. 19, 1967	1500	1,420	5.38	Feb. 3, 1968	2300	*1,660	5.74	Feb. 16, 1970	0100	*1,580	5.47

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 8, 9, 1966	4.0	1.55	1969	Sept. 9, 1969	2.8	1.51
1967	Aug. 22, Sept. 15, 1967	2.3	1.41	1970	Aug. 31, 1970	1.6	1.36
1968	Aug. 10, 11, 12, 13, 1968	7.5	1.59				

a Occurred Aug. 22, 1967.

Period of record: Maximum discharge, 4,400 cfs Nov. 20, 1962 (gage height, 8.58 ft), from rating curve extended above 890 cfs on basis of slope-area measurement of peak flow; minimum, 1.6 cfs Aug. 31, 1970 (gage height, 1.36 ft).

REMARKS.--Records excellent. Each year State fish hatchery diverts about 3 cfs around station October to March, about 1.0 cfs during April and May, and about 1.5 cfs June to September. Possibly some regulation.

REVISIONS (WATER YEARS).--WSP 1636: 1955(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	19	197	256	184	199	104	41	21	23	8.0	6.5
2	4.7	44	205	365	152	158	408	38	25	24	7.5	6.0
3	4.4	217	323	288	135	138	85	37	24	33	7.0	6.0
4	16	302	555	242	140	130	77	36	23	32	7.0	5.2
5	84	256	309	737	172	172	72	35	20	27	7.0	5.2
6	138	148	341	1,470	341	217	67	60	19	24	8.5	4.9
7	56	107	325	902	361	232	64	48	19	23	6.5	4.6
8	34	103	256	841	246	1,170	59	42	18	22	6.5	4.3
9	26	88	208	466	266	1,230	59	38	17	19	6.5	4.3
10	20	190	175	349	235	512	73	35	18	18	6.5	5.5
11	17	214	148	385	331	313	235	33	20	17	6.5	13
12	15	165	130	585	291	238	190	32	20	16	6.0	14
13	15	170	115	858	229	282	140	31	20	16	6.0	9.0
14	60	165	105	705	193	362	133	34	21	16	7.0	7.5
15	88	130	96	412	160	600	113	40	19	15	6.0	7.0
16	51	111	86	288	138	471	102	44	18	14	6.0	7.0
17	45	96	81	220	123	320	92	42	17	15	5.5	8.0
18	71	88	76	181	111	367	87	36	17	13	5.2	17
19	184	210	71	152	103	387	80	33	17	14	5.2	11
20	86	214	74	132	145	327	80	31	17	12	4.9	8.5
21	56	220	86	117	121	271	72	32	17	11	4.6	7.5
22	42	325	105	111	111	226	67	34	18	10	4.9	7.5
23	34	223	78	107	119	202	64	31	19	10	5.2	13
24	29	172	88	99	105	188	58	28	18	10	4.9	10
25	23	138	83	99	99	185	58	27	16	10	5.2	10
26	22	155	84	92	99	178	56	26	16	10	5.2	23
27	24	205	483	135	272	158	50	24	19	9.5	23	17
28	28	158	495	135	274	142	48	23	46	9.0	14	12
29	21	132	390	357	-----	128	47	23	29	8.5	11	10
30	21	117	337	284	-----	128	45	22	23	8.0	9.5	9.0
31	19	-----	252	229	-----	111	-----	22	-----	8.0	7.5	-----
TOTAL	1,340.8	4,882	6,324	11,593	5,276	9,742	2,571	1,058	611	497.0	222.3	273.5
MEAN	43.3	163	204	374	188	314	85.7	34.1	20.4	16.0	7.17	9.12
MAX	184	325	555	1,470	361	1,230	235	60	46	33	23	23
MIN	4.4	19	71	92	99	111	45	22	16	8.0	4.6	4.3
CFSM	2.12	7.99	10.0	18.3	9.22	15.4	4.20	1.67	1.00	.78	.35	.45
IN.	2.44	8.90	11.53	21.14	9.62	17.76	4.69	1.93	1.11	.91	.41	.50
AC-FT	2,660	9,680	12,540	22,990	10,460	19,320	5,100	2,100	1,210	986	441	542
CAL YR 1965	TOTAL 41,176.7	MEAN 113	MAX 1,080	MIN 4.4	CFSM 5.54	IN 75.09	AC-FT 81,670					
WTR YR 1966	TOTAL 44,390.6	MEAN 122	MAX 1,470	MIN 4.3	CFSM 5.98	IN 80.95	AC-FT 88,050					

NOTE.--NO GAGE-HEIGHT RECORD APR. 16 TO MAY 16.

12012000 FORK CREEK NEAR LEBAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	8.5	48	1,000	324	320	188	146	74	29	12	6.5	3.3		
2	9.0	44	700	185	294	152	136	68	27	12	6.0	9.5		
3	8.0	41	750	493	288	128	123	64	26	12	6.0	6.5		
4	7.0	37	1,180	423	288	109	123	60	25	11	5.5	4.3		
5	6.5	40	950	485	238	98	114	56	23	11	6.0	3.6		
6	6.5	41	700	408	197	90	105	51	22	11	6.5	3.6		
7	8.5	36	539	336	166	83	98	48	22	11	7.0	3.3		
8	21	34	370	326	144	100	98	47	22	10	7.0	3.0		
9	13	41	307	272	128	133	136	45	21	10	6.0	3.6		
10	10	49	507	253	116	121	111	46	21	10	5.1	9.0		
11	9.0	48	504	307	111	114	98	51	21	9.5	5.1	23		
12	14	130	1,390	446	209	107	116	45	22	9.5	5.1	10		
13	15	377	2,500	515	520	101	149	42	20	9.0	4.7	7.0		
14	11	615	762	394	313	116	141	41	18	9.0	4.3	5.1		
15	10	400	437	380	330	253	128	39	18	9.0	4.3	4.3		
16	9.5	250	353	330	313	426	166	36	16	9.0	3.9	3.9		
17	10	177	294	272	363	398	155	34	16	9.0	3.9	3.6		
18	9.5	148	250	232	333	360	163	33	15	8.5	3.9	3.3		
19	48	138	287	852	247	281	152	31	14	9.5	3.6	3.3		
20	180	119	313	763	202	320	156	31	14	11	3.6	3.3		
21	161	126	244	527	171	288	123	29	16	10	3.9	3.3		
22	412	115	202	416	149	962	111	28	34	9.0	3.3	3.3		
23	199	105	202	367	128	980	101	27	23	8.5	3.3	3.0		
24	122	95	346	304	116	582	92	26	18	8.0	3.0	2.8		
25	83	240	317	347	116	394	90	26	16	8.0	2.8	2.8		
26	75	180	253	485	101	307	86	26	15	7.5	2.8	2.8		
27	69	160	211	1,170	94	241	83	24	14	8.0	2.5	2.5		
28	56	170	182	1,080	186	208	81	27	14	7.0	2.5	2.5		
29	64	180	232	744	-----	182	81	27	14	7.0	2.5	4.3		
30	62	800	188	546	-----	182	81	27	14	7.0	2.8	19		
31	54	-----	189	374	-----	163	-----	33	-----	6.5	3.0	-----		
TOTAL	1,771.0	4,987	16,629	14,516	6,181	8,167	3,523	1,280	590	289.5	136.4	156.8		
MEAN	57.1	166	536	468	221	263	117	41.3	19.7	9.34	4.40	5.29		
MAX	412	800	2,500	1,170	520	980	166	74	34	12	7.0	23		
MIN	6.5	34	182	185	94	83	81	24	14	6.5	2.5	2.5		
CFSM	2.80	8.14	26.3	22.9	10.8	12.9	5.74	2.02	.97	.46	.22	.26		
IN.	3.23	9.09	30.32	26.47	11.27	14.89	6.42	2.33	1.08	.53	.25	.29		
AC-FT	3,510	9,890	32,880	28,790	12,260	16,200	6,990	2,540	1,170	574	271	315		
CAL YR 1966	TOTAL	55,230.8	MEAN	151	MAX	2,500	MIN	4.3	CFSM	7.40	IN	100.71	AC-FT	109,600
WTR YR 1967	TOTAL	58,228.7	MEAN	160	MAX	2,500	MIN	2.5	CFSM	7.84	IN	106.18	AC-FT	115,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	128	232	107	166	119	185	74	347	24	9.5	47
2	123	107	470	92	706	107	166	66	717	23	10	40
3	244	90	820	84	975	94	136	61	300	21	10	34
4	141	81	475	79	913	90	131	58	200	21	10	29
5	248	70	380	77	430	107	121	66	149	20	10	26
6	220	62	375	68	294	123	121	68	111	19	10	25
7	119	60	360	77	226	105	114	61	94	18	9.5	23
8	75	95	269	88	180	92	101	56	81	18	9.5	22
9	56	260	370	433	149	84	90	54	74	17	9.0	21
10	51	611	520	304	128	79	83	50	67	17	8.5	21
11	103	360	423	217	111	83	81	48	61	18	8.0	24
12	103	241	288	205	98	200	75	46	56	34	8.0	24
13	149	182	220	631	88	223	68	46	67	24	8.5	22
14	182	163	177	570	79	336	151	42	66	27	14	119
15	116	136	146	463	72	621	223	38	52	29	14	133
16	84	111	126	405	66	582	157	34	47	23	16	98
17	67	101	114	360	127	377	126	32	43	21	13	150
18	62	96	101	417	713	275	114	31	40	18	16	188
19	56	84	90	1,190	917	214	111	41	40	18	30	131
20	48	75	79	1,030	474	174	105	54	36	16	22	94
21	170	68	106	711	662	144	94	50	34	16	18	72
22	288	64	509	412	539	123	86	41	39	15	16	61
23	272	61	481	291	578	131	94	68	34	14	104	55
24	224	68	350	226	463	133	84	60	31	14	80	48
25	250	66	272	188	326	232	107	56	28	13	72	45
26	188	60	223	157	250	247	101	51	29	12	64	40
27	598	55	180	128	200	868	88	32	12	12	75	38
28	496	72	155	114	166	614	81	43	32	12	292	34
29	281	235	131	103	138	405	72	39	30	12	116	32
30	200	226	114	96	-----	291	81	35	27	10	70	30
31	157	-----	103	133	-----	229	-----	38	-----	10	52	-----
TOTAL	5,555	4,088	8,659	9,456	10,234	7,502	3,347	1,573	2,944	566	1,204.5	1,728
MEAN	179	136	279	305	353	242	112	50.7	98.8	18.3	38.9	57.5
MAX	598	611	820	1,190	975	868	223	74	717	34	292	188
MIN	48	55	79	68	66	79	68	31	27	10	8.0	21
CFSM	8.77	6.67	13.7	15.0	17.3	11.9	5.49	2.49	4.84	.90	1.91	2.82
IN.	10.13	7.45	15.79	17.24	18.66	13.68	6.10	2.87	5.40	1.03	2.20	3.15
AC-FT	11,020	8,110	17,180	18,760	20,300	14,880	6,640	3,120	5,880	1,120	2,390	3,420

WILLAPA RIVER BASIN

12012000 FORK CREEK NEAR LEBAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	121	304	288	111	86	278	69	75	31	10	5.2
2	27	149	294	297	114	98	320	69	60	29	10	5.2
3	26	126	955	275	229	126	220	67	54	28	9.5	5.2
4	46	103	427	350	269	123	202	60	46	27	10	4.9
5	33	86	430	434	232	302	197	54	43	25	10	4.6
6	96	79	320	374	188	284	174	55	42	23	9.5	4.3
7	64	79	284	448	168	205	146	52	40	23	8.5	3.7
8	51	204	397	370	483	168	128	49	36	22	8.0	3.4
9	50	217	402	402	489	136	121	48	34	21	8.0	3.7
10	75	171	426	412	536	121	109	45	32	22	8.0	3.4
11	79	527	419	360	885	107	103	44	31	28	7.5	3.4
12	114	452	333	281	478	101	114	40	30	23	7.0	3.4
13	149	330	288	244	320	94	226	37	29	21	6.7	4.0
14	194	247	304	211	253	90	137	36	28	19	6.5	4.3
15	278	200	275	185	244	86	128	34	27	19	6.5	3.7
16	194	160	250	174	294	187	116	33	25	18	8.0	4.3
17	155	133	232	160	247	539	163	33	23	17	7.0	3.7
18	126	133	313	144	217	391	253	31	23	16	6.5	4.4
19	151	119	233	128	188	313	362	34	22	16	7.0	115
20	205	160	208	116	174	241	244	31	23	15	7.0	75
21	155	290	180	105	157	200	190	29	23	14	7.0	46
22	180	363	180	96	138	208	138	27	25	14	6.5	97
23	131	278	572	94	126	208	140	25	36	13	4.9	226
24	107	226	772	92	116	166	124	25	44	13	4.6	133
25	101	182	489	90	107	146	111	25	44	12	10	98
26	84	168	358	88	103	141	96	33	36	12	8.0	69
27	75	191	272	85	96	136	86	82	34	12	12	52
28	64	177	217	75	90	123	85	60	41	12	12	42
29	94	313	182	70	-----	116	85	174	42	11	8.0	37
30	311	326	171	65	-----	136	74	188	37	11	7.0	169
31	166	-----	205	150	-----	197	-----	102	-----	10	5.5	-----
TOTAL	3,612	6,270	10,864	6,663	7,054	5,575	4,910	1,693	1,085	577	246.7	1,326.7
MEAN	117	209	350	215	252	180	164	54.6	34.2	18.6	7.96	44.2
MAX	311	527	955	448	885	539	362	188	75	31	12	226
MIN	26	79	171	65	120	86	74	25	22	10	4.6	3.4
CFSM	5.74	10.2	17.2	10.5	12.6	8.82	8.04	2.48	1.77	.91	.39	2.17
IN.	6.59	11.43	19.81	12.15	12.86	10.17	8.95	3.09	1.98	1.05	.45	2.42
AC-FT	7,168	12,440	21,550	13,220	13,990	11,060	9,740	3,360	2,150	1,140	489	2,630

CAL YR 1968 TOTAL 54,318.5 MEAN 167 MAX 1,190 MIN 8.0 CFSM 7.94 IN 108.17 AC-FT 117,700
 WTR YR-1969 TOTAL 49,876.4 MEAN 137 MAX 955 MIN 3.4 CFSM 6.72 IN 90.95 AC-FT 98,930

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	43	43	92	299	69	49	92	25	12	4.9	2.5
2	188	38	41	83	238	62	46	83	24	12	4.9	2.5
3	117	37	42	79	217	59	44	75	23	10	4.9	14
4	85	435	45	74	178	56	59	69	23	9.5	4.3	9.5
5	64	338	41	65	158	55	172	65	22	9.0	4.3	4.9
6	52	375	43	60	148	178	296	59	21	9.0	4.0	25
7	61	244	62	58	136	241	188	56	20	8.5	4.0	76
8	208	180	31	64	122	148	152	69	20	8.0	4.6	23
9	205	140	56	67	109	115	587	79	25	7.5	4.0	14
10	135	113	78	59	98	98	387	74	27	7.0	3.1	10
11	98	96	633	58	88	115	241	74	24	6.5	3.1	8.0
12	79	85	597	56	81	140	180	90	25	6.0	2.8	6.0
13	64	74	516	331	85	152	148	83	22	6.0	2.8	5.2
14	55	67	560	760	74	260	122	70	20	5.5	2.8	4.6
15	48	62	407	367	474	250	109	62	20	5.2	2.8	4.3
16	44	75	313	264	857	247	96	58	20	4.9	2.5	4.0
17	40	70	250	238	930	193	85	54	19	5.2	2.5	14
18	36	64	254	444	375	160	102	49	17	4.9	2.3	69
19	33	56	244	705	282	133	126	46	15	4.6	2.3	58
20	32	77	247	480	220	117	113	43	15	4.9	2.3	44
21	30	83	288	525	178	184	102	41	14	4.6	2.3	31
22	28	70	419	555	152	92	92	40	13	4.6	2.1	95
23	29	83	685	540	131	88	106	37	13	4.6	2.1	70
24	33	77	435	502	113	86	238	35	12	4.3	2.1	42
25	30	69	302	565	100	74	208	33	12	4.6	2.3	29
26	27	62	241	680	90	69	175	30	11	6.8	2.3	23
27	57	58	190	720	83	62	148	29	12	16	2.1	19
28	102	54	152	427	75	59	126	20	12	8.5	2.3	15
29	60	49	131	299	-----	56	113	34	12	7.0	2.5	13
30	54	46	113	223	-----	54	102	31	12	6.0	2.1	12
31	46	-----	100	324	-----	51	-----	28	-----	4.9	1.9	-----
TOTAL	2,352	3,320	7,539	9,764	5,693	3,643	4,712	1,716	550	218.1	93.3	747.5
MEAN	75.9	111	243	315	203	118	157	55.4	18.3	7.04	3.01	24.9
MAX	220	435	685	760	857	260	587	92	27	16	4.9	95
MIN	27	37	41	56	74	51	44	28	11	4.3	1.9	2.5
CFSM	3.72	5.44	11.9	15.4	9.95	5.78	7.70	2.72	.90	.35	.15	1.22
IN.	4.29	6.05	13.75	17.90	10.38	6.44	8.59	3.13	1.00	.40	.17	1.36
AC-FT	4,870	6,590	14,950	19,370	11,290	7,230	9,350	3,400	1,090	433	185	1,480

CAL YR 1969 TOTAL 42,341.4 MEAN 116 MAX 885 MIN 3.4 CFSM 5.69 IN 77.21 AC-FT 83,980
 WTR YR 1970 TOTAL 40,347.9 MEAN 111 MAX 857 MIN 1.9 CFSM 5.44 IN 73.58 AC-FT 80,030

12013500 WILLAPA RIVER NEAR WILLAPA, WASH.

LOCATION.--Lat 46°38'55", long 123°38'40", in NE¼NW¼ sec.2, T.13 N., R.8 W., Pacific County, on right bank 150 f' downstream from Mill Creek, 2.1 miles southeast of Willapa, and at mile 18.2.

DRAINAGE AREA.--130 sq mi.

PERIOD OF RECORD.--August to October 1947, July 1948 to December 1954. Annual maximums, water years 1955-56, 1958-59. April 1961 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 5.69 ft above mean sea level. Aug. 26 to Oct. 16, 1947, at site 60 ft upstream at different datum. Oct. 1, 1954, to Sept. 30, 1956, and Oct. 1, 1957, to Sept. 30, 1959, non-recording gage in stilling well at present site and datum.

AVERAGE DISCHARGE.--15 years (1948-54, 1961-70), 652 cfs (68.11 inches per year, 472,400 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (5,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	1545	6,980	17.26	Jan. 28, 1967	0100	5,840	15.74	Dec. 3, 1968	2300	*5,680	15.47
Mar. 9, 1966	0530	*7,100	17.57	Mar. 23, 1967	0100	7,390	17.99	Feb. 11, 1969	1100	5,610	15.35
Dec. 4, 1966	1345	5,930	15.88	Dec. 3, 1967	1000	5,660	15.43	Dec. 12, 1969	0100	6,080	16.12
Dec. 13, 1966	1330	*11,400	23.26	Jan. 19, 1968	1700	6,500	16.71	Dec. 23, 1969	0100	5,420	15.03
Jan. 19, 1967	2045	7,640	18.35	Feb. 4, 1968	0600	*6,520	16.75	Jan. 14, 1970	0400	5,410	15.01
								Feb. 16, 1970	0600	*6,460	16.66

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 23, 1966	19	2.92	1969	Sept. 11, 12, 1969	25	3.05
1967	Aug. 20, 1967	13	3.13	1970	Aug. 18-21, 23-25, 31, Sept. 1	17	2.87
1968	Aug. 11, 1968	32	3.16				

a Occurred Oct. 6, 1966.

Period of record: Maximum discharge, 11,400 cfs Feb. 22, 1949, Dec. 13, 1966, from rating curve extended above 7,300 cfs; maximum gage height, 24.22 ft Feb. 22, 1949; minimum discharge, 13 cfs Aug. 20, 1967; minimum gage height, 2.87 ft Aug. 18-21, 23-25, 31, Sept. 1, 1970.

REMARKS.--Records excellent. No regulation. Some diversion for domestic use and irrigation above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	67	685	1,320	876	952	510	204	94	66	29	28
2	23	115	850	2,450	754	828	470	193	103	80	29	26
3	22	349	904	1,820	670	748	425	183	116	100	28	26
4	26	942	2,150	1,490	656	692	395	173	105	100	28	25
5	175	907	1,380	2,350	754	868	373	163	96	92	28	23
6	281	600	1,360	6,130	1,380	956	390	239	86	85	27	22
7	195	440	1,340	4,090	1,740	996	331	208	82	81	26	22
8	109	402	1,170	3,470	1,420	2,540	310	173	81	74	26	21
9	85	363	960	2,490	1,400	5,490	305	159	77	68	26	21
10	70	463	814	1,830	1,400	2,630	303	147	84	62	26	23
11	60	766	681	1,660	1,530	1,690	660	144	108	61	26	37
12	95	630	588	1,880	1,570	1,260	776	140	111	57	26	31
13	54	669	519	2,660	1,270	1,240	636	136	92	55	26	40
14	109	681	462	2,980	1,110	1,400	604	138	87	55	27	33
15	252	567	408	2,100	920	2,360	541	173	78	54	28	31
16	168	475	367	1,550	782	2,370	479	254	71	49	26	32
17	133	406	336	1,200	695	1,760	448	187	70	47	24	34
18	121	361	310	988	618	1,710	404	159	69	46	23	47
19	426	839	287	820	558	1,920	370	144	66	46	22	47
20	253	992	280	706	590	1,940	364	140	65	45	21	37
21	171	900	359	628	534	1,790	347	151	65	41	21	33
22	136	1,370	296	958	482	1,528	323	163	73	38	20	31
23	116	1,120	300	555	506	1,290	303	144	71	37	20	41
24	102	856	390	520	467	1,120	285	126	71	39	20	43
25	92	685	388	485	440	1,000	275	117	65	40	21	44
26	84	660	373	446	428	904	275	111	60	38	22	56
27	79	984	1,600	562	790	796	251	111	60	36	45	65
28	93	786	2,730	552	1,120	709	237	105	108	34	56	48
29	81	671	2,130	1,130	-----	639	224	108	90	32	36	41
30	74	594	2,110	1,220	-----	614	213	96	71	31	33	37
31	70	-----	1,490	1,050	-----	558	-----	94	-----	30	31	-----
TOTAL	3,740	19,740	28,015	51,490	25,460	45,290	11,779	4,777	2,477	1,735	847	1,065
MEAN	121	658	904	1,667	909	1,461	393	154	82.6	56.0	27.3	35.5
MAX	426	1,370	2,730	6,130	1,740	5,490	776	256	116	108	94	65
MIN	22	67	208	446	428	558	213	94	60	30	20	21
CFSM	.09	5.06	6.95	12.8	6.96	11.2	3.02	1.19	.64	.43	.21	.27
IN.	1.07	9.65	8.82	14.79	7.29	12.96	3.37	1.37	.71	.50	.24	.30
AC-FT	7,420	39,150	55,570	102,500	50,500	89,830	23,360	9,400	4,910	3,440	1,680	2,110
CAL YR 1965	TOTAL 187,502		MEAN 514	MAX 4,390	MIN 20	CFSM 3.95	IN 53.65	AC-FT 371,900				
WTR YR 1966	TOTAL 196,615		MEAN 539	MAX 6,130	MIN 20	CFSM 4.15	IN 56.26	AC-FT 390,000				

WILLAPA RIVER BASIN

12013500 WILLAPA RIVER NEAR WILLAPA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	157	3,760	1,280	1,690	783	778	355	154	61	28	18
2	40	142	3,640	1,100	1,430	875	706	334	141	57	27	22
3	40	130	2,920	1,650	1,280	598	638	317	137	53	26	27
4	37	122	4,770	2,980	1,250	548	606	299	133	51	26	23
5	35	123	4,250	2,770	1,080	506	566	281	125	49	26	20
6	34	134	3,640	2,220	926	468	508	263	114	48	28	20
7	35	124	3,070	1,830	806	436	465	247	107	48	30	20
8	48	115	2,040	1,600	710	445	634	235	103	47	31	19
9	52	118	1,480	1,320	642	633	501	231	99	46	28	19
10	42	169	1,760	1,170	586	651	451	220	95	46	26	27
11	39	138	1,830	1,360	574	660	408	238	94	44	25	56
12	45	328	4,060	1,670	875	624	414	94	70	43	23	48
13	63	794	10,100	2,340	2,150	586	593	207	91	42	22	34
14	52	2,300	4,790	1,910	1,650	574	609	204	85	42	20	29
15	46	1,850	2,490	1,700	1,840	983	585	190	81	41	20	26
16	42	1,130	1,810	1,520	1,810	1,790	722	180	77	40	20	24
17	42	807	1,170	1,290	1,170	1,740	179	175	73	40	18	23
18	42	660	1,170	1,120	1,320	1,720	187	160	68	39	15	23
19	49	583	1,170	4,330	1,400	1,360	855	155	64	39	15	24
20	431	519	1,330	4,830	1,120	1,350	762	149	62	43	14	23
21	443	517	1,110	2,870	977	1,210	672	142	65	44	16	23
22	1,330	462	958	2,340	835	3,180	610	131	43	16	22	22
23	488	414	894	2,210	710	6,100	538	132	131	40	18	22
24	430	372	1,290	1,750	627	3,580	485	132	97	38	16	21
25	298	630	1,340	1,600	595	2,340	460	128	82	37	16	20
26	246	670	1,160	1,940	526	1,730	430	121	74	35	16	20
27	227	615	990	3,650	478	1,350	403	117	71	35	16	21
28	184	609	860	5,110	808	1,130	384	116	37	30	15	20
29	190	639	950	3,650	-----	986	384	133	66	32	15	22
30	219	2,470	830	3,070	-----	946	404	167	64	31	15	31
31	176	-----	774	2,080	-----	874	-----	171	-----	30	16	-----
TOTAL	5,681	17,881	72,652	70,470	30,440	40,626	16,599	6,157	2,849	1,318	643	747
MEAN	183	595	2,344	2,273	1,087	1,311	565	199	95.0	42.5	20.7	24.9
MAX	1,330	2,470	10,100	5,110	2,150	6,100	877	355	154	61	31	56
MIN	34	115	774	1,100	478	436	384	116	62	30	14	18
CFSM	1.41	4.58	18.9	17.5	8.36	10.1	4.35	1.53	.73	.33	.16	.19
IN-	1.63	5.11	20.79	20.17	8.71	11.63	4.85	1.76	.82	.38	.18	.21
AC-FT	11,270	35,390	144,100	139,800	60,380	80,580	33,640	12,210	5,650	2,610	1,280	1,480

CAL YR 1966 TOTAL 241,294 MEAN 661 MAX 10,100 MIN 20 CFSM 5.08 IN 69.05 AC-FT 478,600
WTR YR 1967 TOTAL 266,383 MEAN 730 MAX 10,100 MIN 14 CFSM 5.62 IN 76.23 AC-FT 528,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	617	988	592	932	652	988	340	1,000	123	44	146
2	399	511	2,670	529	2,460	589	830	320	3,320	114	42	146
3	482	448	4,870	484	3,950	526	700	300	1,710	107	43	119
4	403	394	3,410	457	5,290	496	610	280	1,080	102	42	106
5	635	349	2,600	451	2,650	514	570	320	802	98	43	96
6	698	313	2,000	412	1,700	578	530	310	638	98	44	90
7	348	293	1,790	424	1,250	508	500	300	538	92	42	88
8	222	343	1,390	484	992	466	450	280	475	88	39	85
9	173	1,080	1,430	1,800	827	430	420	265	421	85	37	81
10	143	2,470	1,670	1,680	711	409	400	250	376	82	35	79
11	187	1,880	1,870	1,170	624	403	380	250	349	81	33	83
12	245	1,190	1,350	1,040	554	729	370	230	316	114	33	98
13	333	883	1,060	2,540	502	851	350	230	322	102	36	85
14	618	753	865	3,130	460	1,290	480	215	316	95	57	154
15	396	652	739	2,950	424	2,930	800	200	268	110	64	337
16	278	550	662	2,120	394	3,590	740	192	240	92	88	283
17	215	490	592	1,840	427	2,270	660	182	223	83	85	288
18	189	481	541	1,710	1,700	1,560	580	174	206	78	83	496
19	189	460	481	5,560	3,990	1,180	600	188	196	74	134	412
20	157	409	439	4,970	2,330	944	550	270	184	74	123	331
21	450	373	478	4,560	3,560	795	500	235	176	70	95	265
22	863	352	1,480	2,510	2,650	683	450	240	200	67	85	223
23	1,390	331	1,740	1,680	2,550	638	470	273	180	67	172	204
24	878	364	1,420	1,250	2,340	648	440	265	162	64	263	184
25	1,190	370	1,200	1,040	1,730	900	430	263	148	61	176	166
26	867	355	1,040	900	1,310	944	400	235	142	58	198	152
27	1,600	331	893	790	1,050	2,940	380	215	152	56	208	142
28	2,450	322	795	648	862	3,360	350	202	148	53	554	132
29	1,360	855	701	592	743	2,170	320	186	150	50	340	125
30	952	920	624	564	-----	1,560	360	174	136	48	215	117
31	739	-----	568	802	-----	1,210	-----	176	-----	47	164	-----
TOTAL	19,216	19,139	42,356	49,239	48,572	36,763	15,608	7,560	14,974	2,533	3,617	5,313
MEAN	620	638	1,366	1,588	1,675	1,186	520	244	486	81.7	117	177
MAX	2,450	2,470	4,870	5,560	5,290	3,590	988	340	3,320	123	554	496
MIN	29	293	29	12	136	403	320	174	136	47	33	79
CFSM	4.77	4.91	10.5	12.2	12.9	9.12	4.00	1.88	3.74	.63	.90	1.36
IN-	5.50	5.48	12.12	14.09	13.90	10.52	4.47	2.16	4.17	.72	1.04	1.52
AC-FT	38,110	37,960	84,010	97,670	96,340	72,920	30,960	15,000	28,910	5,020	7,170	10,540

CAL YR 1967 TOTAL 250,920 MEAN 687 MAX 6,100 MIN 14 CFSM 5.28 IN 71.80 AC-FT 497,700
WTR YR 1968 TOTAL 264,490 MEAN 723 MAX 5,560 MIN 33 CFSM 5.56 IN 75.68 AC-FT 524,600

NOTE.--NO GAGE-HEIGHT RECORD APR. 3 TO MAY 15.

12013500 WILLAPA RIVER NEAR WILLAPA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	535	1,630	1,950	693	408	740	373	293	158	42	30
2	107	538	1,380	1,360	646	402	1,140	364	244	138	40	29
3	104	520	2,990	1,310	1,000	454	828	355	211	135	40	29
4	138	454	3,910	1,420	1,350	471	749	325	187	133	41	32
5	132	412	2,410	2,160	1,340	810	728	303	171	129	46	31
6	228	373	1,720	2,040	1,090	1,110	648	283	168	114	45	29
7	204	379	1,410	2,890	927	820	575	265	165	109	42	27
8	168	662	1,830	2,320	2,550	877	519	245	151	105	43	26
9	154	890	2,140	2,620	3,050	881	480	230	140	98	40	26
10	253	757	2,330	2,540	2,540	524	453	220	132	96	39	26
11	265	1,670	2,430	2,210	4,900	479	415	208	126	115	39	25
12	303	2,160	1,940	1,660	3,040	442	404	196	127	104	37	25
13	370	1,660	1,590	1,380	1,930	412	720	186	125	93	38	29
14	463	1,270	1,630	1,270	1,450	387	559	180	116	87	37	32
15	790	1,020	1,450	1,140	1,270	368	489	170	112	81	36	30
16	652	840	1,390	1,090	1,370	452	447	164	104	75	39	30
17	544	717	1,280	1,060	1,210	1,700	497	158	95	72	37	45
18	541	663	1,550	925	1,040	1,480	779	150	89	64	34	179
19	496	586	1,330	923	911	1,200	1,180	182	87	65	36	314
20	655	628	1,130	728	818	969	1,110	168	90	62	37	218
21	554	854	968	643	736	812	908	146	91	59	37	141
22	585	1,420	891	548	665	770	769	134	100	58	38	180
23	502	2,080	1,230	617	703	764	703	125	134	69	34	514
24	445	1,020	3,990	482	572	641	631	121	204	53	32	403
25	409	840	2,820	449	521	567	564	117	207	52	33	270
26	367	759	1,940	428	491	523	504	140	174	50	39	200
27	328	805	1,510	406	460	498	498	288	157	47	37	157
28	298	760	1,190	377	433	463	432	187	147	46	47	131
29	319	1,450	975	344	433	435	442	406	213	45	40	113
30	813	1,830	831	341	434	393	696	193	44	35	270	
31	655	-----	1,020	698	-----	545	-----	398	-----	42	32	-----
TOTAL	11,914	27,702	55,685	37,537	37,620	20,604	19,264	7,571	4,593	2,590	1,192	3,591
MEAN	384	923	1,796	1,211	1,344	665	642	244	153	83.5	38.5	116
MAX	813	2,160	3,990	2,890	4,900	1,700	1,180	696	293	158	47	514
MIN	104	373	831	344	433	368	393	117	87	42	32	25
CFSW	2.95	7.10	13.8	9.32	10.3	5.12	4.94	1.88	1.18	.64	.30	.92
IN.	3.41	7.93	15.93	10.74	10.77	5.90	5.51	2.17	1.31	.74	.34	1.03
AC-FT	23,630	54,950	110,550	74,450	74,620	40,870	38,210	15,020	9,110	5,140	2,360	7,120
CAL YR 1968	TOTAL 279,080	MEAN 763	MAX 5,560	MIN 35	CFSW 5.87	IN 79.86	AC-FT 553,600					
WTR YR 1969	TOTAL 229,863	MEAN 630	MAX 4,900	MIN 25	CFSW 4.85	IN 65.78	AC-FT 455,900					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	466	161	255	556	1,660	375	265	529	127	57	27	18
2	540	151	239	508	1,430	350	258	478	117	56	26	19
3	397	145	239	487	1,330	330	233	430	111	52	28	40
4	284	1,080	272	448	1,120	305	240	388	109	47	26	56
5	223	1,730	238	400	970	285	517	363	104	46	24	36
6	185	1,850	251	373	873	508	970	330	97	45	23	53
7	175	1,290	251	353	786	1,030	870	298	94	43	23	194
8	522	976	278	358	691	663	702	315	92	41	24	90
9	748	767	303	370	614	547	1,930	350	99	39	25	56
10	524	630	320	335	553	484	2,110	327	111	38	22	44
11	389	536	2,360	323	499	514	1,400	322	102	37	21	38
12	312	471	4,270	313	460	607	1,060	419	110	36	20	33
13	260	418	2,810	950	445	695	856	382	94	35	20	30
14	223	376	3,120	4,470	400	1,090	719	337	86	34	20	29
15	198	347	2,220	2,260	1,490	1,140	614	303	88	33	19	28
16	181	396	1,670	1,620	4,850	1,110	538	279	90	30	19	28
17	166	416	1,370	1,370	2,810	986	478	260	85	30	18	29
18	152	377	1,260	1,720	2,120	842	481	237	77	30	17	111
19	143	344	1,200	2,780	1,620	730	632	225	73	28	17	154
20	134	377	1,170	2,450	1,280	639	559	216	69	28	17	134
21	127	449	1,350	2,510	1,030	565	514	205	65	28	18	96
22	122	389	2,340	2,430	859	505	472	204	62	28	19	211
23	120	443	4,150	2,850	747	475	466	191	60	28	18	257
24	133	450	2,500	2,540	635	487	810	178	59	28	17	134
25	127	408	1,740	2,980	556	412	936	167	57	27	18	95
26	114	377	1,400	3,260	499	378	884	158	55	29	19	76
27	142	349	1,140	4,160	451	350	789	152	55	38	18	65
28	319	319	950	2,640	409	330	712	148	56	44	18	57
29	220	296	824	1,860	-----	308	846	163	56	36	19	52
30	192	275	712	1,430	-----	290	593	159	56	32	19	49
31	178	-----	628	1,660	-----	288	-----	137	-----	29	18	-----
TOTAL	8,016	16,593	41,830	50,764	31,187	17,598	22,254	8,650	2,516	1,132	637	2,312
MEAN	259	533	1,349	1,638	1,114	568	742	279	83.9	36.5	20.5	77.1
MAX	748	1,850	4,270	4,470	4,850	1,140	2,110	529	127	57	28	257
MIN	114	145	238	313	400	268	233	137	55	27	17	18
CFSW	1.99	4.25	10.4	12.6	8.57	4.37	5.43	2.15	.65	.38	.16	.59
IN.	2.29	4.75	11.97	14.53	8.92	5.04	6.37	2.48	.72	.32	.18	.66
AC-FT	15,900	32,910	82,970	100,700	61,860	34,910	44,140	17,160	4,990	2,250	1,260	4,590
CAL YR 1969	TOTAL 201,001	MEAN 551	MAX 4,900	MIN 25	CFSW 4.24	IN 57.52	AC-FT 398,700					
WTR YR 1970	TOTAL 203,489	MEAN 558	MAX 4,850	MIN 17	CFSW 4.29	IN 58.23	AC-FT 403,600					

WILLAPA RIVER BASIN

12014500 SOUTH FORK WILLAPA RIVER NEAR RAYMOND, WASH.

LOCATION.--Lat 46°37'47", long 123°42'07", in SWANEX (revised) sec.8, T.13 N., R.8 W., Pacific County, on left bank 200 ft upstream from logging bridge, 0.4 mile downstream from Rue Creek, 4.0 miles southeast of junction of U.S. Highway 101 and State Highway 6 at Raymond, and at mile 9.0.

DRAINAGE AREA.--27.8 sq mi.

PERIOD OF RECORD.--May 1953 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 155 ft (from topographic map). Prior to Aug. 7, 1957, at site 40 ft upstream at same datum.

AVERAGE DISCHARGE.--17 years, 162 cfs (79.14 inches per year, 117,400 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (750 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 5, 1966	1930	*858	4.02	Mar. 23, 1967	0200	844	4.16	Dec. 3, 1968	1930	*972	4.48
Mar. 9, 1966	0200	766	3.79					Dec. 24, 1968	0700	796	4.04
				Dec. 3, 1967	0730	1,130	4.86	Jan. 8, 1969	2330	752	3.92
Dec. 4, 1966	0900	*1,470	5.60	Jan. 20, 1968	2300	*1,560	5.78	Feb. 11, 1969	0230	912	4.33
Dec. 13, 1966	0730	1,460	5.59	Feb. 4, 1968	0200	844	4.16				
Jan. 19, 1967	1500	1,170	4.95	Mar. 15, 1968	1500	824	4.11	Dec. 22, 1969	2030	780	4.03
Jan. 27, 1967	1930	836	4.14	Mar. 27, 1968	2100	1,000	4.55	Jan. 26, 1970	2030	*960	4.48
								Feb. 16, 1970	0230	928	4.37

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 1965, Sept. 6-10;	20	al.29	1968	Oct. 1, 1967	27	cl.33
	13-17, 20-22, 1966			1969	Sept. 11, 12, 15, 16, 1969	29	1.32
1967	Sept. 21, 23-29, 1967	18	bl.25	1970	Aug. 26-28, Aug 30 to Sept. 2	20	cl.25

a Occurred Sept. 7-10, 21, 22, 1966.

b Occurred Sept. 27, 28, 1967.

c Occurred Aug. 13, 1968.

c Occurred Aug. 31, 1970.

Period of record: Maximum discharge, 2,560 cfs Feb. 21, 1961 (gage height, 7.73 ft); minimum, 16 cfs Sept. 27, 1961 (gage height, 0.96 ft).

REMARKS.--Records excellent. Some slight diversion for domestic use. No regulation.

REVISIONS.--MSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	35	165	317	201	231	190	78	50	36	25	22
2	21	61	157	448	187	210	170	76	54	38	25	22
3	20	114	212	385	176	193	160	74	53	42	25	22
4	27	141	390	347	187	187	149	72	50	40	26	21
5	78	118	284	531	228	219	141	70	41	37	25	21
6	84	92	301	782	420	231	130	88	47	34	25	20
7	54	80	278	592	412	228	125	72	45	34	25	20
8	37	78	243	623	358	455	118	68	45	34	25	20
9	36	74	222	493	361	634	118	66	44	34	25	20
10	30	92	198	420	341	451	118	65	50	32	25	21
11	28	99	179	388	406	361	198	63	54	32	25	21
12	28	138	165	416	385	307	195	63	48	31	24	23
13	28	165	154	900	334	297	168	61	45	31	30	21
14	76	149	141	594	307	317	165	61	45	31	26	20
15	86	120	130	458	268	482	144	80	42	30	25	20
16	58	101	123	385	243	482	134	82	42	30	24	20
17	50	90	115	334	222	402	128	66	42	30	23	23
18	52	86	111	294	207	434	123	63	41	30	23	29
19	96	190	106	262	195	479	115	59	41	31	22	22
20	65	204	120	234	195	472	120	59	40	29	22	20
21	54	234	133	216	176	430	113	65	41	28	22	20
22	47	324	111	198	168	385	111	65	41	28	22	21
23	42	243	120	190	173	354	106	59	41	28	22	25
24	40	187	120	181	157	337	99	58	38	29	22	25
25	38	151	118	173	151	310	96	58	37	28	22	25
26	36	160	115	160	146	284	96	56	37	28	23	31
27	37	213	308	187	246	259	90	54	40	27	44	27
28	41	168	402	176	268	237	86	53	45	26	28	23
29	36	146	385	253	-----	219	84	53	37	26	25	23
30	37	130	375	246	-----	213	82	51	36	26	25	22
31	35	-----	297	225	-----	195	-----	51	-----	26	23	-----
TOTAL	1,418	4,175	6,294	10,916	7,118	10,295	5,676	2,009	1,319	970	773	670
MEAN	45.7	139	203	352	254	332	129	64.8	44.0	31.3	24.9	22.3
MAX	96	324	402	702	420	634	198	88	54	42	44	31
MIN	20	35	106	160	146	187	82	51	36	26	22	20
CFSM	1.64	8.00	7.29	12.7	9.14	11.9	4.64	2.33	1.58	1.13	.90	.80
IN.	1.90	5.59	8.42	14.61	9.52	13.78	5.19	2.69	1.76	1.30	1.03	.90
AC-FT	2,810	8,280	12,480	21,650	14,120	20,420	7,490	3,980	2,620	1,920	1,530	1,330
CAL YR 1965	TOTAL 52,980	MEAN 145	MAX 1,300	MIN 20	CFSM 5.22	IN 70.89	AC-FT 105,100					
WTR YR 1966	TOTAL 49,633	MEAN 137	MAX 702	MIN 20	CFSM 4.93	IN 66.68	AC-FT 98,840					

12014500 SOUTH FORK WILLAPA RIVER NEAR RAYMOND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	22	60	595	357	427	234	240	102	50	32	23	21		
2	29	56	612	317	378	206	223	98	50	31	23	26		
3	23	53	595	448	371	190	209	94	49	30	22	22		
4	22	51	1,160	578	388	177	195	90	48	30	22	20		
5	21	54	908	553	347	170	180	86	45	30	22	28		
6	21	54	740	525	311	160	167	83	45	29	23	21		
7	24	49	609	469	281	150	154	81	45	29	25	20		
8	35	46	483	427	254	174	150	79	44	28	23	20		
9	26	69	392	378	240	203	157	78	42	28	22	22		
10	23	74	382	364	225	185	140	76	42	28	21	36		
11	23	64	368	399	228	174	130	72	42	28	21	39		
12	31	96	600	476	306	167	150	71	41	28	21	24		
13	29	157	1,220	620	532	160	177	69	40	28	21	21		
14	25	317	748	584	427	170	185	68	39	27	20	20		
15	24	257	588	546	452	225	177	68	39	27	20	20		
16	23	185	522	466	434	293	198	66	38	27	20	20		
17	25	147	448	402	497	293	180	64	38	27	20	20		
18	23	124	385	357	476	311	195	63	37	27	20	19		
19	49	115	402	788	396	275	177	62	36	28	20	19		
20	138	108	424	754	341	278	164	60	36	29	20	19		
21	104	121	357	584	305	254	154	58	38	28	23	19		
22	400	104	320	528	272	534	145	57	60	26	22	19		
23	187	96	296	556	246	760	133	56	42	26	21	18		
24	119	88	326	486	225	584	126	56	38	26	21	18		
25	84	209	320	444	210	469	124	54	37	26	21	18		
26	78	180	287	444	195	396	117	53	36	26	20	18		
27	68	162	260	693	180	335	113	53	36	25	20	18		
28	60	154	246	716	251	299	124	54	34	24	20	18		
29	78	174	269	679	-----	275	110	62	33	24	20	23		
30	74	463	240	592	-----	281	104	60	32	24	20	25		
31	66	-----	252	480	-----	260	-----	56	-----	23	20	-----		
TOTAL	1,954	3,887	15,354	16,012	9,195	8,642	4,798	2,149	1,232	849	657	643		
MEAN	63.0	130	495	517	328	279	160	69.3	41.1	27.4	21.2	21.4		
MAX	400	463	1,220	788	532	760	240	102	60	32	25	39		
MIN	21	46	240	317	180	150	104	53	32	23	20	18		
CFSM	2.27	4.68	17.8	18.6	11.8	10.0	6.76	2.49	1.48	.99	.76	.77		
IN.	2.61	5.20	20.55	21.43	12.30	11.56	6.42	2.88	1.65	1.14	.88	.86		
AC-FT	3,880	7,710	30,450	31,760	18,240	17,140	9,520	4,260	2,440	1,680	1,300	1,280		
CAL YR 1966	TOTAL	59,141	MEAN	162	MAX	1,220	MIN	20	CFSM	5.83	IN	79.14	AC-FT	117,300
WTR YR 1967	TOTAL	65,372	MEAN	179	MAX	1,220	MIN	18	CFSM	6.44	IN	87.48	AC-FT	129,700

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	74	150	251	205	287	230	317	132	305	58	35	50		
2	98	139	577	182	479	212	278	125	556	57	35	46		
3	142	128	932	170	636	192	245	119	299	56	35	42		
4	102	117	598	168	720	182	230	119	215	56	35	41		
5	264	108	465	163	514	192	215	132	178	54	35	38		
6	150	102	409	148	409	188	212	134	153	52	34	37		
7	84	98	406	156	344	175	198	123	139	51	34	37		
8	62	134	341	163	299	160	180	117	128	50	32	36		
9	56	281	402	284	263	151	168	110	119	50	32	36		
10	51	514	465	254	238	144	160	106	115	50	32	35		
11	66	365	468	220	218	144	156	102	106	51	31	42		
12	57	263	380	218	198	232	144	98	102	58	31	41		
13	116	215	320	423	182	238	134	96	106	48	32	38		
14	160	195	278	490	170	341	195	91	96	60	42	68		
15	115	172	245	430	158	638	251	89	89	54	36	78		
16	92	156	225	398	151	703	202	85	87	48	38	69		
17	70	141	205	374	168	493	180	81	83	47	34	94		
18	70	151	190	396	358	377	172	78	80	46	35	121		
19	65	137	172	1,160	584	317	175	85	78	46	46	94		
20	60	128	160	1,180	430	275	165	83	74	46	38	80		
21	110	119	182	1,120	626	242	151	81	76	44	35	69		
22	180	115	299	682	570	222	141	85	78	42	35	64		
23	260	112	308	668	574	212	141	81	71	42	31	62		
24	180	132	293	420	510	208	134	76	68	42	31	57		
25	240	119	302	374	423	284	180	78	66	41	48	54		
26	170	112	293	329	362	269	180	73	68	41	47	51		
27	300	108	263	290	317	757	160	71	71	39	63	50		
28	460	117	242	260	278	720	146	69	69	38	128	47		
29	310	248	222	242	248	546	137	68	64	38	76	46		
30	230	225	205	232	-----	430	146	66	62	37	58	44		
31	190	-----	195	284	-----	365	-----	78	-----	36	50	-----		
TOTAL	4,584	5,101	10,293	12,083	10,714	9,839	5,493	2,931	3,801	1,478	1,344	1,667		
MEAN	148	170	332	390	369	317	183	94.5	127	47.7	43.4	55.6		
MAX	460	514	932	1,180	720	757	317	134	556	60	128	121		
MIN	51	98	160	148	151	144	134	64	62	36	31	35		
CFSM	5.32	6.12	11.9	14.0	13.3	11.4	6.58	3.40	4.57	1.72	1.56	2.00		
IN.	6.13	6.83	13.77	16.17	14.34	13.17	7.35	3.92	5.09	1.98	1.80	2.23		
AC-FT	9,090	10,120	20,420	23,970	21,250	19,520	10,900	5,810	7,540	2,930	2,670	3,310		
CAL YR 1967	TOTAL	64,155	MEAN	176	MAX	932	MIN	18	CFSM	6.33	IN	85.85	AC-FT	127,300
WTR YR 1968	TOTAL	69,328	MEAN	189	MAX	1,180	MIN	31	CFSM	6.80	IN	92.77	AC-FT	137,500

12014500 SOUTH FORK WILLAPA RIVER NEAR RAYMOND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	123	371	341	170	130	151	104	91	91	42	31
2	49	128	338	326	208	128	198	106	81	83	41	32
3	42	117	589	314	257	128	151	106	76	80	41	32
4	60	108	620	394	311	123	144	98	73	76	42	31
5	47	102	400	552	272	203	139	94	69	73	41	30
6	90	98	360	518	230	212	130	91	71	69	39	30
7	66	98	340	682	218	168	121	87	68	68	38	30
8	58	156	350	614	526	148	117	81	65	66	38	30
9	57	163	410	704	462	137	112	80	63	63	38	30
10	93	148	400	640	563	128	108	78	62	64	38	30
11	89	278	390	549	780	121	102	76	60	71	37	29
12	92	359	360	454	700	117	108	74	60	63	36	30
13	92	305	340	398	450	110	156	73	58	60	36	34
14	100	245	370	356	370	106	123	71	57	58	36	31
15	140	210	360	320	338	104	115	69	57	57	37	29
16	130	182	340	317	341	125	108	64	54	56	36	30
17	128	163	330	290	302	218	123	64	52	54	35	44
18	123	156	440	257	272	198	146	64	51	52	35	57
19	123	139	380	235	245	192	238	73	51	51	35	73
20	148	153	332	212	230	170	198	63	51	50	35	50
21	132	195	290	192	210	156	170	62	51	48	35	41
22	141	238	281	182	195	160	153	58	68	47	34	70
23	123	210	1495	168	185	146	148	58	47	32	128	
24	112	195	748	160	172	134	139	57	115	46	32	78
25	112	170	594	150	163	128	128	56	117	44	35	64
26	100	170	476	139	153	121	121	62	100	44	34	56
27	92	192	389	130	144	117	117	80	89	44	35	48
28	89	182	332	132	137	112	117	71	104	44	34	46
29	104	342	287	120	-----	106	117	161	117	43	32	43
30	188	383	250	120	-----	106	106	182	102	43	31	57
31	141	-----	308	245	-----	121	-----	110	-----	42	31	-----

TOTAL	3,119	5,708	12,270	10,208	8,604	4,373	4,104	2,573	2,234	1,797	1,121	1,344
MEAN	101	190	396	329	307	141	137	83	74.5	58	38.2	44.8
MAX	188	383	748	706	780	218	238	182	117	91	42	128
MIN	42	98	250	120	137	104	102	54	51	42	31	29
CFSM	3.63	6.83	14.2	11.8	11.0	5.07	4.93	2.99	2.68	2.09	1.30	1.61
IN.	4.17	7.64	16.42	13.46	11.51	5.85	5.49	3.45	2.99	2.40	1.50	1.80
AC-FT	6,190	11,320	24,340	20,250	17,070	8,670	8,140	5,110	4,430	3,560	2,220	2,670
CAL YR 1968	TOTAL 70,447	MEAN 192	MAX 1,180	MIN 31	CFSM 6.91	IN 94.27	AC-FT 139,700					
WTR YR 1969	TOTAL 57,457	MEAN 157	MAX 780	MIN 29	CFSM 5.65	IN 76.88	AC-FT 114,000					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	46	80	153	383	134	106	148	60	37	24	20
2	110	44	78	144	344	130	96	139	58	37	24	22
3	85	44	80	139	338	123	92	132	56	36	24	45
4	69	247	83	130	296	119	106	125	56	35	24	28
5	60	235	76	123	266	115	165	121	55	35	24	24
6	56	281	80	115	245	151	341	115	54	35	24	60
7	60	188	78	110	222	153	248	110	52	34	26	95
8	98	170	81	110	205	128	198	123	52	34	26	39
9	128	139	81	108	190	115	457	121	54	33	24	33
10	96	123	92	102	178	110	423	115	54	31	24	29
11	80	110	439	102	163	119	317	108	52	31	24	28
12	73	100	437	98	153	134	254	110	49	30	22	26
13	66	96	409	220	148	141	220	104	48	30	24	24
14	63	92	486	552	139	220	195	100	46	30	22	24
15	60	88	380	338	325	220	178	96	48	29	22	24
16	57	108	308	293	644	230	163	92	46	29	22	24
17	54	98	251	272	454	212	151	88	45	29	22	33
18	52	90	220	454	374	190	168	84	44	29	22	55
19	51	85	205	626	323	170	170	82	42	28	22	54
20	50	104	198	546	281	158	160	78	42	28	22	60
21	48	104	251	549	242	146	148	77	41	28	22	42
22	48	98	436	496	218	137	139	77	41	29	20	134
23	48	117	584	448	200	144	130	73	40	27	20	92
24	50	112	451	482	182	141	200	71	40	26	22	60
25	47	104	359	566	168	132	212	69	39	27	22	48
26	46	98	314	692	158	125	198	68	39	30	22	42
27	57	92	260	792	148	119	180	68	39	31	20	39
28	62	89	228	598	141	115	165	66	39	28	22	37
29	52	85	202	472	-----	110	168	68	39	27	22	35
30	50	81	182	377	-----	106	160	64	39	27	20	34
31	47	-----	168	420	-----	102	-----	61	-----	26	20	-----

TOTAL	2,012	3,468	7,577	10,627	7,128	4,449	5,908	2,955	1,409	945	700	1,310
MEAN	64.9	116	244	343	255	144	197	95.3	47.0	30.5	22.6	43.7
MAX	128	281	584	792	644	230	457	148	60	37	26	134
MIN	46	84	96	98	139	102	61	39	26	20	10	20
CFSM	2.33	4.17	8.78	12.3	9.17	5.18	7.09	3.43	1.69	1.10	.81	1.57
IN.	2.69	4.64	10.14	14.22	9.54	5.95	7.91	3.95	1.89	1.26	.94	1.75
AC-FT	3,990	6,880	15,030	21,080	14,140	8,820	11,720	5,860	2,790	1,870	1,390	2,600
CAL YR 1969	TOTAL 49,417	MEAN 135	MAX 780	MIN 29	CFSM 4.86	IN 66.13	AC-FT 98,020					
WTR YR-1970	TOTAL 48,488	MEAN 133	MAX 792	MIN 20	CFSM 4.78	IN 64.88	AC-FT 96,180					

12015100 CLEARWATER CREEK NEAR RAYMOND, WASH.

LOCATION.--Lat 46°44'59", long 123°45'59", on line between secs.26 and 35, T.15 N., R.9 W., Pacific County, on right bank 40 ft downstream from road crossing, 0.7 mile upstream from mouth, and 4.5 miles northwest of Raymond.

DRAINAGE AREA.--3.98 sq mi.

PERIOD OF RECORD.--July 1964 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 150 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 22.9 cfs (78.14 inches per year, 16,590 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (150 cfs, revised), water years 1966-70											
Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Nov. 19, 1965	0330	172	2.19	Dec. 3, 1967	0400	202	2.38	Jan. 4, 1969	2230	150	2.05
Jan. 5, 1966	1700	*185	2.30	Jan. 19, 1968a	-	*285	2.83				
				Feb. 21, 1968a	-	164	2.14	Jan. 26, 1970a	-	196	b2.35
Dec. 13, 1966	0330	184	2.27	Mar. 27, 1968	1030	166	2.15	Feb. 15, 1970	2330	*220	2.49
Jan. 12, 1967	1830	158	2.10								
Jan. 19, 1967	1130	*230	2.57	Dec. 3, 1968	1500	*174	2.21				

a About.

b From high watermark in well.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 7-9, 21, 22, 1966	3.8	a.45	1969	Aug. 30, 31, Sept. 7-12, 15, 16	4.6	.44
1967	Aug. 13, Sept. 7-9, 24, 25, 1967	3.0	.41	1970	Aug. 30, 31, 1970	3.1	.39
1968	Aug. 11, 12, 13, 1968	4.8	.47				

a Occurred Oct. 1-4, 1965.

Period of record: Maximum discharge, 319 cfs (revised) Jan. 28, 1965 (gage height, 3.00 ft), from rating curve extended above 95 cfs; minimum, 3.0 cfs Aug. 19, 1953 (result of discharge measurement), Aug. 13, Sept. 7-9, 24, 25, 1967.

REVISIONS.--The maximum discharge for the water year 1965 has been revised to 319 cfs Jan. 28, 1965 (gage height, 3.00 ft), superseding figure published in WSP 1932.

REMARKS.--Records excellent. Minor diversion above station by city of Raymond for municipal water supply. No regulation.

REVISIONS (WATER YEARS).--Revised figures of discharge, in cubic feet per second, for the water year 1965, superseding those published in WSP 1932, are given herewith:

Nov. 23, 1964..	38	Dec. 22, 1964..	93	Jan. 8, 1965..	64	Jan. 29, 1965..	212	Feb. 6, 1965..	84
24.....	104	23.....	73	23.....	89	31.....	193	7.....	69
29.....	67	27.....	64	24.....	82	30.....	134	8.....	71
30.....	142	Jan. 1, 1965..	90	25.....	69	Feb. 1.....	90	16.....	83
Dec. 1.....	170	2.....	132	26.....	111	2.....	70	17.....	73
2.....	117	3.....	81	27.....	165	4.....	85	18.....	63
3.....	78	4.....	63	28.....	267	5.....	112		

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff inches	Acres-feet
November 1964.....	890	142	10	29.7	7.46	8.32	1,770
December.....	1,500	170	22	48.4	12.2	14.02	2,980
January 1965.....	2,487	267	34	80.2	20.2	23.24	4,930
February.....	1,682	112	32	60.1	15.1	15.72	3,340
WTR YR 1965.....	8,953.1	267	3.8	24.5	6.16	83.66	17,760

REVISED PEAK DISCHARGE.--1965: Nov. 23 (0330) 208 cfs (2.42 ft); Dec. 1 (0830) 191 cfs (2.32 ft); Jan. 1 (2230) 271 cfs (2.76 ft); Jan. 26 (2330) 263 cfs (2.72 ft); Jan. 28 (1800) 319 cfs (3.00 ft); Jan. 30 (1330) 265 cfs (2.73 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	7.8		42	25	28	22	12	9.6	6.2	4.6	4.3
2	4.3	10	23	51	23	26	20	11	9.2	6.8	4.6	4.0
3	4.3	19	34	41	22	24	19	11	9.2	7.4	4.6	4.0
4	7.6	28	37	37	22	23	18	11	8.5	7.1	4.6	4.0
5	17	35	34	102	25	24	17	11	8.2	6.5	4.6	4.0
6	19	20	40	98	49	26	16	15	8.2	6.2	4.3	4.0
7	9.2	19	37	80	43	27	16	12	7.8	6.2	4.3	3.8
8	7.8	22	31	87	44	72	16	11	7.4	6.2	4.6	3.8
9	7.1	19	30	64	50	91	16	11	7.8	6.2	4.3	3.8
10	6.2	26	26	54	43	58	16	11	8.5	6.2	4.6	4.6
11	5.9	46	23	47	54	44	31	10	9.6	6.2	4.3	4.6
12	6.2	36	21	58	45	38	25	10	8.2	6.2	4.0	4.6
13	6.5	43	20	72	40	40	20	10	6.2	6.2	5.9	4.3
14	21	40	19	46	37	46	22	10	8.2	5.9	4.6	4.3
15	13	32	18	52	31	59	20	16	7.4	5.6	4.6	4.3
16	10	28	16	45	28	52	19	16	7.4	5.3	4.0	4.3
17	8.8	24	16	40	28	46	18	12	7.4	5.3	4.0	5.3
18	27	23	16	26	49	18	11	7.4	5.6	4.6	5.3	
19	27	91	14	31	25	51	16	10	7.4	5.3	4.0	4.6
20	16	46	21	29	29	50	18	10	7.1	5.0	4.0	4.3
21	12	49	18	27	25	47	16	10	7.4	5.0	4.0	4.0
22	11	68	16	25	23	42	16	10	6.8	4.8	4.0	4.8
23	9.6	45	16	23	23	40	16	9.6	6.8	4.8	4.0	4.6
24	8.8	35	18	22	22	35	15	9.2	6.8	4.8	4.3	4.8
25	8.5	30	16	22	22	31	15	8.8	6.5	4.8	4.3	4.6
26	8.2	29	16	20	21	28	14	9.2	6.5	4.6	5.3	5.6
27	8.8	25	44	22	31	26	14	8.8	7.8	4.6	10	4.8
28	8.5	22	46	20	31	24	14	8.5	7.4	4.6	5.3	4.6
29	8.2	20	42	43	-----	23	13	8.5	6.2	4.6	5.0	4.3
30	8.2	19	37	36	-----	26	12	8.2	5.9	4.6	5.0	4.3
31	7.4	-----	31	29	-----	22	-----	11	-----	4.6	4.6	-----
TOTAL	327.4	956.8	815	1,418	887	1,218	528	332.8	231.2	173.4	144.3	132.8
MEAN	10.6	31.9	26.3	45.7	31.7	39.3	17.6	10.7	7.71	5.59	4.65	4.43
MAX	27	91	46	102	54	91	31	16	9.6	7.4	10	5.6
MIN	4.3	7.8	14	20	21	22	12	8.2	5.9	4.6	4.0	3.8
CF5M	2.66	8.02	6.61	11.5	7.96	9.87	4.42	2.69	1.96	1.40	1.17	1.11
IN.	3.06	8.94	7.62	13.25	8.29	11.38	4.94	3.11	2.16	1.62	1.35	1.24
AC-FT	649	1,900	1,620	2,810	1,760	2,420	1,050	660	459	344	286	263
CAL YR 1965	TOTAL 8,795.4	MEAN 24.1	MAX 384	MIN 3.8	CF5M 6.06	IN 82.21	AC-FT 17,450					
WTR YR 1966	TOTAL 7,164.7	MEAN 19.6	MAX 102	MIN 3.8	CF5M 4.92	IN 66.97	AC-FT 14,210					

SMITH CREEK BASIN

12015100 CLEARWATER CREEK NEAR RAYMOND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	4.6	9.5	77	50	54	29	27	15	8.0	4.9	4.0	3.2		
2	4.6	9.1	61	50	47	24	25	15	7.7	4.7	4.0	3.7		
3	4.3	8.7	63	76	55	23	24	13	7.7	4.7	3.7	3.2		
4	4.3	8.4	112	118	61	21	25	13	7.4	4.7	3.7	3.2		
5	4.3	9.1	74	89	49	20	22	12	7.4	4.7	4.0	3.2		
6	4.3	8.7	78	79	42	18	20	12	7.4	4.7	4.0	3.2		
7	5.3	8.4	67	66	36	17	19	12	7.4	4.4	4.0	3.0		
8	7.1	8.0	53	67	32	27	21	12	7.4	4.7	4.0	3.0		
9	4.8	18	43	55	32	26	24	11	7.1	4.4	3.7	4.7		
10	4.6	13	51	60	29	26	20	11	6.8	4.7	3.7	5.2		
11	4.3	12	48	61	31	26	19	10	6.8	4.3	3.7	8.4		
12	5.6	15	100	99	44	23	25	10	6.4	4.4	3.7	4.2		
13	4.8	21	173	112	79	23	26	9.9	6.1	4.2	3.7	3.7		
14	4.6	25	92	98	60	23	26	9.9	6.1	4.0	3.7	3.5		
15	4.6	21	79	104	63	29	22	9.5	6.1	4.0	3.7	3.2		
16	4.6	19	79	79	56	30	35	9.1	6.1	4.0	3.5	3.2		
17	4.6	17	61	66	89	28	29	9.1	6.1	4.0	3.5	3.2		
18	4.3	13	49	58	67	29	33	9.1	6.1	4.0	3.2	3.2		
19	13	14	59	180	54	25	26	9.1	6.1	5.5	3.2	3.2		
20	22	14	54	138	45	25	25	9.1	5.8	4.9	3.2	3.2		
21	28	15	42	182	37	23	22	8.4	6.4	4.2	4.0	3.2		
22	70	13	37	82	33	69	20	8.4	8.7	4.0	3.5	3.2		
23	30	12	36	93	29	79	19	8.4	6.1	4.0	3.2	3.2		
24	19	12	53	76	26	63	17	8.4	5.8	4.0	3.2	3.2		
25	15	32	44	66	25	52	20	8.0	5.5	4.0	3.2	3.2		
26	13	21	36	62	22	49	17	8.0	5.5	4.0	3.2	3.2		
27	12	20	38	112	20	42	17	8.0	5.8	4.2	3.2	3.2		
28	10	24	31	106	37	38	19	8.4	5.5	4.2	3.2	3.2		
29	15	30	42	106	-----	34	17	9.1	5.5	4.2	3.2	5.5		
30	12	77	32	81	-----	34	16	9.9	5.2	4.2	3.2	4.9		
31	11	-----	41	64	-----	32	-----	8.7	-----	4.0	3.2	-----		
TOTAL	355.6	527.9	1,697	2,655	1,254	1,011	677	314.5	196.0	134.9	110.2	110.6		
MEAN	11.5	17.6	61.2	85.6	44.8	32.6	22.6	10.1	6.53	4.35	3.55	3.49		
MAX	70	77	173	180	89	79	35	15	8.7	5.5	4.0	8.4		
MIN	4.3	8.0	30	50	20	17	16	8.0	5.2	4.0	3.2	3.0		
CFSM	2.89	4.42	15.4	21.5	11.3	8.19	5.68	2.54	1.64	1.09	.89	.93		
IN-	3.32	4.93	17.73	24.82	11.72	9.45	6.33	2.94	1.93	1.26	1.03	1.03		
AC-FT	705	1,050	3,760	5,270	2,490	2,010	1,340	624	389	268	219	219		
CAL YR 1966	TOTAL	7,046.0	MEAN	21.5	MAX	173	MIN	3.8	CFSM	5.40	IN	73.33	AC-FT	15,560
WTR YR 1967	TOTAL	9,243.7	MEAN	25.3	MAX	180	MIN	3.0	CFSM	6.36	IN	86.40	AC-FT	18,330

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	22	36	35	45	32	38	16	68	8.5	5.0	7.8
2	18	20	126	29	66	27	33	16	105	8.2	5.3	7.1
3	17	17	190	25	90	25	29	15	43	8.2	5.3	6.2
4	14	16	93	25	130	25	29	16	30	7.8	5.3	5.9
5	25	15	72	22	80	26	25	16	24	7.8	5.6	5.6
6	18	14	58	21	50	26	28	14	21	7.4	5.3	5.6
7	12	13	49	22	40	23	23	14	19	7.1	5.3	5.3
8	9.9	28	42	24	35	20	22	13	18	7.1	5.0	5.3
9	9.1	36	82	43	31	19	20	12	16	7.1	5.0	5.0
10	15	58	85	32	29	18	19	12	15	7.1	5.0	5.0
11	23	40	68	26	24	19	19	12	14	7.8	5.0	5.6
12	17	29	55	35	24	30	18	12	14	9.6	5.0	5.6
13	18	25	45	68	22	28	16	12	17	7.1	5.9	6.5
14	15	23	35	78	20	28	29	11	14	8.5	6.5	10
15	12	21	31	61	19	51	30	11	12	8.2	6.5	12
16	11	20	28	54	21	64	23	11	12	7.4	6.5	9.6
17	9.9	18	25	60	30	44	21	10	11	6.8	5.6	24
18	9.9	23	310	60	110	35	21	10	11	6.5	6.8	18
19	9.1	20	22	220	110	30	20	11	11	6.5	8.2	16
20	8.7	17	20	190	80	26	19	12	10	6.5	7.1	13
21	29	16	32	150	115	23	18	12	11	6.2	5.9	11
22	41	16	53	114	90	22	16	12	11	6.2	7.4	12
23	28	16	51	64	80	23	18	12	10	6.2	16	15
24	25	19	62	65	70	21	16	11	9.6	5.9	10	12
25	24	18	77	56	58	29	28	11	9.2	5.9	7.8	11
26	20	16	67	50	50	28	24	10	10	5.9	7.4	10
27	60	16	56	42	42	141	20	10	11	5.6	12	9.6
28	95	19	49	37	37	98	19	10	9.6	5.6	15	9.2
29	32	29	42	33	35	68	18	9.2	9.2	5.3	9.6	8.8
30	30	26	37	30	-----	51	18	9.2	8.8	5.3	8.2	8.5
31	27	-----	35	35	-----	43	-----	14	-----	5.0	7.1	-----
TOTAL	675.6	666	1,766	1,872	1,590	1,145	677	376.4	584.4	214.3	223.6	286.2
MEAN	21.8	22.2	56.3	60.4	54.8	36.9	22.6	12.1	19.5	6.91	7.21	9.54
MAX	60	50	190	220	130	141	38	16	105	9.6	16	24
MIN	8.7	13	20	21	19	18	16	9.2	8.8	5.0	5.0	5.0
CFSM	5.8	5.58	14.1	15.2	13.8	9.27	5.68	3.04	4.90	1.74	1.81	2.40
IN-	6.31	6.22	16.32	17.50	14.86	10.70	6.33	3.52	5.46	2.00	2.09	2.68
AC-FT	1,340	1,320	3,460	3,710	3,150	2,270	1,340	747	1,160	425	444	568

NOTE.--NO GAGE-HEIGHT RECORD JAN. 17 TO FEB. 12.

12015100 CLEARWATER CREEK NEAR RAYMOND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	16	71	43	22	19	22	14	14	16	6.8	6.8
2	7.8	20	65	39	28	20	26	13	14	14	6.8	5.0
3	7.8	16	126	41	37	20	19	14	12	14	6.5	5.0
4	11	15	94	81	44	19	19	12	12	14	6.5	5.0
5	8.8	16	68	112	38	35	18	12	11	12	6.5	4.8
6	11	14	52	88	30	28	16	12	12	12	6.2	4.8
7	9.6	16	52	108	28	22	15	12	11	12	6.2	4.8
8	8.5	39	49	103	63	20	14	11	10	11	6.2	4.8
9	8.8	29	44	133	57	19	15	11	10	10	6.2	4.8
10	12	28	64	104	71	18	14	11	9.6	11	5.9	4.8
11	12	48	66	82	131	16	14	11	9.6	11	5.9	4.8
12	11	65	53	65	81	16	14	11	9.2	10	5.9	4.8
13	13	46	46	56	60	16	16	10	9.2	10	5.6	5.3
14	12	37	47	48	50	15	14	10	8.8	9.6	5.3	4.8
15	22	30	41	42	46	15	13	10	8.5	9.6	5.6	4.8
16	16	27	44	42	48	20	12	10	8.2	9.2	5.3	5.0
17	16	24	41	38	42	32	15	10	7.8	8.8	5.0	9.2
18	14	24	44	33	38	25	18	9.6	7.8	8.5	5.3	11
19	18	22	38	30	34	26	28	12	8.2	8.5	5.3	12
20	21	24	34	27	32	22	23	10	7.8	8.5	5.6	8.5
21	20	45	30	25	29	20	19	10	8.2	8.2	5.6	7.4
22	21	40	33	23	28	20	18	9.6	14	8.2	5.3	26
23	17	35	77	22	27	19	17	9.2	24	7.8	5.0	23
24	16	33	104	20	25	17	16	8.8	17	7.8	5.0	12
25	19	28	73	19	24	16	16	8.8	18	7.4	5.3	11
26	16	28	57	18	23	16	15	9.2	20	7.4	5.3	9.2
27	14	33	45	18	22	16	14	10	16	7.8	5.3	8.2
28	14	28	39	16	20	15	14	9.6	25	7.4	5.0	7.8
29	16	71	33	16	-----	14	15	45	20	7.4	4.8	7.4
30	24	65	29	15	-----	15	14	28	16	7.1	4.8	11
31	19	-----	40	30	-----	17	-----	17	-----	7.1	4.8	-----
TOTAL	444.5	962	1,719	1,537	1,178	608	503	390.8	378.9	303.3	174.8	241.8
MEAN	14.3	32.1	55.5	49.6	42.1	19.6	16.8	12.6	12.6	9.78	5.64	8.06
MAX	24	71	126	133	131	35	28	45	25	16	6.8	26
MIN	7.8	14	29	15	20	14	12	8.8	7.8	7.1	4.8	4.8
CFSM	3.59	8.07	13.9	12.5	12.6	4.92	4.22	3.17	3.17	2.46	1.42	2.03
IN-	4.15	8.99	16.07	14.37	11.01	5.68	4.70	3.65	3.94	2.83	1.85	2.26
AC-FT	882	1,910	3,410	3,050	2,340	1,210	998	775	752	602	347	480

CAL YR 1968 TOTAL 10,094.4 MEAN 27.6 MAX 223 MIN 5.0 CFSM 6.93 IN 94.35 AC-FT 20,020
WTR YR 1969 TOTAL 8,441.1 MEAN 23.1 MAX 133 MIN 4.8 CFSM 5.86 IN 78.90 AC-FT 16,740

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	8.2	11	22	57	18	12	19	8.5	6.2	4.3	3.3
2	12	7.8	10	20	48	16	12	18	8.5	6.2	4.3	3.6
3	10	7.1	11	21	48	16	12	16	8.2	5.9	4.3	8.9
4	9.6	51	12	19	40	16	16	16	8.2	5.6	4.3	4.3
5	8.8	34	11	18	38	14	27	15	8.2	5.6	4.3	6.4
6	8.2	31	12	17	36	27	50	14	7.8	5.6	4.0	16
7	10	25	12	16	33	22	30	14	7.8	5.3	4.6	13
8	14	25	15	18	30	16	28	18	7.8	5.0	4.3	6.5
9	20	21	14	16	24	15	71	16	8.8	8.0	4.3	5.0
10	13	19	16	15	24	14	49	16	8.2	4.8	4.0	4.8
11	11	16	40	18	24	18	38	15	7.8	4.8	4.0	4.8
12	10	15	34	16	23	19	30	16	7.4	4.8	4.0	4.6
13	9.6	14	50	45	22	18	27	15	7.1	4.8	3.8	4.3
14	9.2	13	49	41	20	34	24	14	7.1	4.6	3.6	4.3
15	8.8	13	40	43	99	30	22	14	7.4	4.6	3.6	4.0
16	9.2	14	38	39	109	34	20	13	7.1	4.6	3.6	4.0
17	8.8	14	33	38	62	28	19	12	6.8	4.6	3.3	8.7
18	8.2	12	30	81	48	24	24	12	6.8	4.3	3.3	9.2
19	7.8	12	28	127	40	22	23	12	6.5	4.6	3.3	9.6
20	7.8	16	28	88	36	20	20	12	6.5	4.6	3.3	7.8
21	7.4	14	40	102	32	19	18	11	6.5	4.3	3.3	5.9
22	7.1	13	59	82	29	18	18	11	6.5	4.3	3.3	32
23	7.8	17	68	66	27	20	20	11	6.5	4.3	3.3	16
24	9.2	14	57	81	25	19	24	10	6.5	4.3	3.3	10
25	7.8	14	45	86	23	16	25	10	6.2	4.8	3.3	8.5
26	7.1	12	39	138	22	16	22	9.6	6.2	7.4	3.3	7.4
27	11	12	33	131	20	15	22	9.6	6.2	5.9	3.3	6.5
28	10	12	29	85	19	14	20	9.2	6.2	5.0	3.3	5.9
29	9.2	11	27	64	-----	14	23	10	6.2	5.0	3.3	5.9
30	9.2	11	25	91	-----	13	20	9.6	6.2	4.6	3.3	5.6
31	8.5	-----	23	68	-----	12	-----	8.8	-----	4.6	3.3	-----
TOTAL	304.3	498.1	939	1,712	1,064	596	766	406.8	215.4	156.2	114.8	234.8
MEAN	9.82	16.6	30.3	55.2	38.0	19.2	25.5	13.1	7.18	5.04	3.70	7.83
MAX	20	51	68	138	109	34	71	19	8.8	7.4	4.6	32
MIN	7.1	7.1	10	15	19	12	12	8.8	5.9	4.3	3.3	3.3
CFSM	2.47	4.17	7.61	13.9	9.55	4.82	6.41	3.29	1.80	1.27	.97	1.97
IN-	2.84	4.66	8.78	16.00	9.94	5.57	7.16	3.80	2.01	1.46	1.09	2.19
AC-FT	604	988	1,860	3,400	2,110	1,180	1,520	807	427	310	228	466

CAL YR 1969 TOTAL 7,057.0 MEAN 19.3 MAX 133 MIN 4.8 CFSM 4.85 IN 65.96 AC-FT 14,000
WTR YR 1970 TOTAL 7,007.4 MEAN 19.2 MAX 138 MIN 3.3 CFSM 4.82 IN 65.50 AC-FT 13,900

SMITH CREEK BASIN

12015200 SMITH CREEK NEAR RAYMOND, WASH.

LOCATION.--Lat 46°45'24", long 123°46'25", in NW¼SW¼ sec.26, T.15 N., R.9 W., Pacific County, on left bank 1.0 mile upstream from Eagle Creek, 1.1 miles downstream from Clearwater Creek, and 5.2 miles northwest of Raymond.

DRAINAGE AREA.--57.7 sq mi.

PERIOD OF RECORD.--June 1963 to September 1966 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 100 ft (from topographic map).

EXTREMES.--Maximum discharge during water year 1966, 1,750 cfs Jan. 6 (gage height, 8.65 ft); minimum, 7.5 cfs Aug. 23-26; minimum gage height, 2.09 ft Oct. 2, 3, Aug. 23-26.
Period of record: Maximum discharge, 3,560 cfs Jan. 25, 1964 (gage height, 12.35 ft), from rating curve extended above 2,500 cfs; minimum, 7.0 cfs Sept. 8, 10, 11, 1965 (gage height, 2.07 ft).

REMARKS.--Records excellent. No regulation. Possibly some diversion for domestic use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	52	249	561	382	439	159	71	51	27	12	17
2	8.0	81	364	1,000	313	386	148	67	47	28	12	15
3	8.0	160	357	812	268	342	133	63	53	40	12	13
4	14	350	878	650	246	299	123	60	49	50	12	12
5	106	497	638	881	272	302	115	57	44	42	12	12
6	163	350	616	1,650	660	313	108	75	40	36	11	11
7	121	278	576	1,250	766	340	102	79	37	32	11	11
8	59	308	477	1,150	638	770	98	62	35	29	11	9.5
9	42	280	394	902	635	1,540	101	56	34	26	11	9.1
10	34	295	338	673	579	987	104	52	37	25	11	10
11	29	763	278	597	673	657	239	49	51	24	12	12
12	26	604	241	622	743	483	296	48	60	24	11	14
13	27	582	215	1,150	576	427	232	46	47	23	13	14
14	108	604	192	1,220	466	466	229	46	41	22	12	12
15	169	497	172	920	362	847	215	73	37	21	12	11
16	120	386	154	644	297	1,010	187	140	34	20	11	10
17	89	306	141	475	258	753	170	102	34	20	11	12
18	110	258	134	369	230	649	154	78	33	20	10	17
19	333	797	125	295	203	713	141	67	32	19	9.0	21
20	195	702	140	248	241	787	138	62	30	19	9.0	17
21	144	628	217	219	221	713	130	62	30	19	8.0	13
22	116	934	166	195	198	641	121	68	30	17	8.0	12
23	95	712	163	184	194	526	112	66	30	16	7.5	15
24	82	497	200	174	189	420	104	57	29	16	7.5	19
25	73	366	205	169	181	337	98	52	27	15	7.5	19
26	65	315	200	153	181	278	96	50	26	15	9.6	22
27	63	322	463	181	312	236	88	48	28	15	26	26
28	70	272	798	181	486	205	83	45	35	15	30	22
29	65	235	832	454	-----	182	78	43	34	13	22	18
30	60	219	826	529	-----	188	74	41	30	13	28	16
31	55	-----	635	461	-----	177	-----	47	-----	13	24	-----
TOTAL	2,657.5	12,650	11,384	18,969	10,770	16,413	4,176	1,932	1,125	714	403.1	441.6
MEAN	85.7	422	367	612	385	529	139	62.3	37.5	23.0	13.0	14.7
MAX	333	934	878	1,650	766	1,540	296	140	60	50	30	26
MIN	8.0	52	125	153	181	177	74	41	26	13	7.5	9.1
CFSM	1.49	7.31	6.36	10.6	6.87	9.17	2.41	1.08	.65	.40	.23	.25
IN.	1.71	8.16	7.34	12.23	6.94	10.58	2.69	1.25	.73	.46	.26	.28
AC-FT	5.270	25.090	22.580	37.630	21.360	32.560	8.280	3.830	2.230	1.420	800	876
CAL YR 1965	TOTAL 88,319.8	MEAN 242	MAX 2,460	MIN 7.0	CFSM 4.19	IN 56.94	AC-FT 175,200					
WTR YR 1966	TOTAL 81,635.2	MEAN 224	MAX 1,650	MIN 7.5	CFSM 3.88	IN 52.63	AC-FT 161,900					

LOCATION.--Lat 46°48'27", long 123°50'58", in SEkSWk sec.6, T.15 N., R.9 W., Grays Harbor County, on left bank 1.2 miles upstream from lower Salmon Creek, 10.0 miles northwest of Raymond, and at mile 6.9.

PERIOD OF RECORD.--August 1927 to September 1970.

AVERAGE DISCHARGE.--43 years. 955 cfs (59.22 inches per year, 691,900 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (5,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 7, 1966	0830	\$5,910	7.33	Jan. 29, 1967	0545	\$5,210	6.90	Dec. 4, 1968	1700	\$5,610	7.15
Jan. 14, 1966	2100	\$5,000	6.77	Mar. 23, 1967	2200	\$5,530	7.10	Jan. 9, 1969	2300	\$5,210	6.90
Mar. 9, 1966	2400	\$5,510	7.09					Feb. 12, 1969	0300	\$5,180	6.88
				Dec. 3, 1967	1400	\$6,540					
Dec. 1, 1966	1200	\$5,320	6.93	Jan. 20, 1968	2200	\$10,900	9.97	Jan. 20, 1970	0400	\$5,910	7.33
Dec. 8, 1966	0830	\$5,260	6.93	Feb. 4, 1968	1800	\$5,710	7.06	Jan. 27, 1970	0900	\$6,120	7.45
Dec. 14, 1966	1515	\$9,190	9.12	Feb. 19, 1968	2400	\$5,310	6.96	Feb. 16, 1970	1800	\$5,710	7.21
Jan. 20, 1967	2145	\$6,940	7.92	Mar. 28, 1968	1400	\$5,470	7.06				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 23-26, 1966	42	1.25	1969	Sept. 11, 12, 14, 15, 1969	44	1.30
1967	Aug. 26 to Sept. 1, 1967	25	1.15	1970	Aug. 11-20, 23, 25-27, Aug. 29 to Sept. 2, 1970	47	1.36
1968	Aug. 11, 12, 1968	58	1.42				

a Occurred Aug. 28 to Sept. 1, 1967.

Period of record: Maximum discharge, 35,000 cfs Dec. 10, 1933 (gage height, 15.8 ft, from floodmarks), from rating curve extended above 9,400 cfs; minimum, 21 cfs Aug. 24, 1951 (gage height, 1.01 ft).

REMARKS.--Records excellent. Some diversion for farm and domestic use. No regulation. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 792: 1934. WSP 832: 1935-36. WSP 1286: 1952.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	155	890	1,980	1,200	1,680	806	329	159	114	68	80
2	46	232	1,110	2,830	1,040	1,500	744	317	163	110	58	70
3	45	391	1,290	3,220	925	1,300	673	302	178	130	57	60
4	55	880	2,460	2,490	890	1,130	626	288	208	212	57	55
5	165	1,590	3,020	2,580	926	1,080	581	273	185	209	56	53
6	477	1,280	2,420	4,870	1,670	1,080	547	299	167	173	56	51
7	469	904	2,310	5,700	2,080	1,180	519	353	153	149	56	48
8	307	888	1,970	4,930	1,930	2,070	494	326	144	134	54	47
9	178	844	1,610	4,090	1,810	4,600	484	273	139	122	52	45
10	132	907	1,350	3,080	1,840	4,630	485	249	141	112	51	47
11	113	2,470	1,130	2,530	1,900	2,810	581	234	149	106	52	54
12	102	2,190	973	2,890	2,360	2,030	978	226	181	102	51	53
13	102	1,570	863	4,310	2,040	1,720	981	218	192	101	54	59
14	240	1,500	779	4,900	1,660	1,780	898	216	161	97	56	61
15	399	1,350	704	4,340	1,390	2,570	898	295	146	94	53	55
16	482	1,090	637	3,010	1,150	3,470	795	351	134	92	56	52
17	359	909	585	2,210	1,030	3,100	720	393	126	92	53	56
18	364	788	550	1,720	945	2,640	657	312	121	91	52	81
19	509	1,020	521	1,390	863	2,720	599	259	121	90	50	79
20	638	1,610	553	1,170	855	2,880	566	235	118	85	47	94
21	437	1,430	679	1,030	865	2,860	559	230	117	83	45	78
22	329	1,740	674	926	785	2,570	525	246	119	80	43	65
23	266	2,070	602	850	774	2,220	492	254	130	77	42	69
24	224	1,530	650	809	765	1,850	462	231	126	72	42	68
25	196	1,170	696	767	742	1,580	439	207	116	71	42	70
26	177	992	682	706	732	1,380	419	197	109	73	44	75
27	174	1,020	1,110	712	899	1,200	400	187	115	73	90	81
28	193	1,020	2,350	758	1,500	1,060	374	181	139	69	82	86
29	185	875	2,870	1,180	-----	945	356	172	134	66	85	83
30	178	805	2,840	1,500	-----	898	340	164	133	63	100	71
31	161	-----	2,430	1,380	-----	911	-----	159	-----	61	89	-----
TOTAL	7,748	35,220	41,788	74,858	35,566	63,444	17,998	2,976	4,324	3,203	1,785	1,966
MEAN	250	1,174	1,348	2,415	1,270	2,047	600	957	144	103	57.6	64.9
MAX	638	2,470	3,020	5,700	2,360	4,630	981	393	208	212	100	94
MIN	45	155	521	706	732	898	340	159	109	61	42	45
CFSN	1.14	5.36	6.16	11.0	5.80	9.35	2.74	1.17	.66	.47	.26	.30
IN-	1.32	5.98	7.10	12.72	6.04	10.78	3.06	1.35	.73	.54	.30	.33
AC-FT	15,370	69,860	82,890	148,500	70,550	125,800	35,700	15,820	8,580	6,350	3,540	3,860
CAL YR 1965	TOTAL	309,622	MEAN 848	NAX 7,940	MIN 43	CFSN 3.67	IN 52.59	AC-FT 614,100				
WTR YR 1966	TOTAL	295,856	MEAN 811	NAX 5,700	MIN 42	CFSN 3.70	IN 50.25	AC-FT 586,800				

12017000 NORTH RIVER NEAR RAYMOND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	487	5,120	1,990	2,528	1,560	1,110	618	215	92	48	25
2	61	352	4,150	2,290	2,200	1,410	986	554	189	88	46	30
3	59	312	3,600	2,760	2,130	1,200	896	521	181	84	44	29
4	59	282	4,410	3,320	2,840	1,060	839	494	186	80	42	29
5	59	270	5,820	4,390	2,220	953	796	467	172	71	40	32
6	57	277	4,430	3,810	1,860	882	728	440	157	69	40	31
7	56	271	4,320	3,240	1,560	786	632	417	147	67	40	29
8	64	246	3,640	3,050	1,320	771	639	398	145	66	41	27
9	62	270	2,700	2,830	1,160	983	750	385	144	65	43	30
10	67	317	2,600	2,400	1,070	1,090	743	376	139	64	43	47
11	67	354	2,930	2,580	1,030	1,040	648	363	136	63	41	80
12	71	376	3,580	2,880	1,200	990	649	354	135	62	38	84
13	77	591	7,680	3,800	2,700	925	829	335	133	60	36	96
14	82	1,230	8,800	3,730	3,720	888	948	320	127	58	34	68
15	96	2,060	6,380	3,340	3,180	1,030	912	306	121	58	33	51
16	85	1,610	4,270	3,230	3,160	1,360	956	294	116	57	32	43
17	80	1,180	3,450	2,870	3,030	1,550	1,070	281	110	55	30	38
18	74	954	2,730	2,350	3,170	1,530	1,240	267	105	55	29	34
19	117	824	2,380	4,060	2,830	1,510	1,710	254	100	68	28	31
20	342	745	2,690	6,520	2,220	1,400	1,670	242	96	78	28	30
21	783	742	2,400	6,090	1,780	1,320	1,210	231	99	84	28	30
22	2,390	688	1,900	4,150	1,460	1,880	1,030	220	143	87	28	30
23	2,300	603	1,620	3,660	1,240	4,790	911	213	233	76	27	29
24	1,320	539	1,900	3,730	1,090	5,030	801	205	198	64	28	28
25	857	835	2,290	2,310	997	3,680	738	202	143	57	27	28
26	623	1,040	2,010	2,760	903	2,740	705	195	119	54	26	28
27	510	1,010	1,620	3,450	804	2,160	654	189	108	53	25	27
28	429	1,130	1,370	4,750	997	1,720	643	198	103	54	25	26
29	429	1,270	1,490	4,920	-----	1,450	633	245	102	54	25	33
30	495	2,810	1,550	4,160	-----	1,340	657	257	96	52	25	69
31	505	-----	1,410	3,270	-----	1,260	-----	234	-----	49	25	-----
TOTAL	12,359	238,595	104,340	108,690	53,893	50,228	26,563	10,075	4,198	2,044	1,045	1,192
MEAN	398	787	3,364	3,506	1,925	1,620	885	325	140	65.9	33.7	39.7
MAX	2,390	2,810	8,800	6,520	3,720	5,030	1,710	618	233	92	48	96
MIN	56	246	1,370	1,990	806	771	633	189	96	49	25	25
CFSM	1.82	3.59	15.4	16.8	8.79	7.40	4.45	1.48	.64	.30	.15	.18
IN.	2.10	4.01	17.73	18.46	9.15	8.33	4.51	1.71	.71	.35	.18	.20
AC-FT	24,470	46,800	207,000	215,600	106,900	99,630	52,690	19,980	6,330	4,050	2,070	2,360

CAL YR 1966 TOTAL 351,394 MEAN 963 MAX 8,800 MIN 42 CFSM 4.40 IN 59.69 AC-FT 697,000
 WTR YR 1967 TOTAL 398,222 MEAN 1,091 MAX 8,800 MIN 25 CFSM 4.98 IN 67.64 AC-FT 789,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	368	1,200	1,440	1,000	1,240	1,060	1,720	595	1,040	223	80	259
2	551	987	2,660	970	1,610	959	1,400	328	3,520	202	78	251
3	516	824	5,950	858	1,200	987	1,170	476	3,880	185	76	252
4	513	713	6,040	785	5,530	827	1,040	452	2,030	172	73	206
5	574	625	4,060	771	4,890	853	1,010	480	1,350	164	74	179
6	732	555	2,860	750	2,910	923	963	544	1,030	158	72	162
7	623	504	2,350	715	2,050	896	910	535	848	153	72	149
8	592	522	2,950	787	2,580	987	1,170	476	3,880	185	76	252
9	338	1,330	2,210	1,380	1,290	713	749	458	649	138	65	138
10	303	2,280	3,160	2,220	1,100	664	692	408	501	135	62	132
11	663	2,900	3,290	1,750	966	657	661	386	531	139	60	133
12	906	2,150	2,760	1,520	863	1,040	828	374	494	187	58	140
13	862	1,490	2,020	2,720	779	1,440	586	372	521	191	61	155
14	918	1,170	1,550	3,460	710	1,480	723	368	506	188	78	241
15	860	1,030	1,270	3,460	650	2,450	1,420	337	452	173	90	532
16	591	891	1,080	2,840	602	4,560	1,400	315	390	193	127	697
17	446	784	978	2,750	616	3,910	1,080	302	357	173	109	724
18	389	716	880	2,670	1,500	2,560	949	284	333	149	116	850
19	383	720	799	6,910	4,520	1,860	888	284	313	135	122	832
20	349	667	722	9,990	4,560	1,450	831	379	295	127	200	658
21	710	597	801	9,580	4,650	1,200	754	315	279	124	208	535
22	1,450	355	1,940	6,990	4,680	1,030	691	477	282	149	149	477
23	2,200	527	2,670	3,620	4,350	951	609	456	309	113	187	540
24	1,860	544	2,820	2,400	3,820	963	679	449	286	110	286	512
25	1,660	616	2,760	1,860	2,900	1,120	681	426	252	106	331	444
26	1,620	594	2,520	1,610	2,230	1,360	705	399	241	102	258	386
27	2,160	540	2,090	1,350	1,750	2,950	367	367	250	98	325	344
28	4,150	535	1,720	1,130	1,420	5,250	400	345	263	94	615	313
29	3,220	1,040	1,420	1,000	1,200	4,310	557	329	259	91	684	288
30	2,050	1,510	1,220	930	-----	2,910	539	299	253	87	450	267
31	1,510	-----	1,070	905	-----	2,180	-----	298	-----	82	310	-----
TOTAL	33,877	29,276	69,340	80,159	68,736	54,174	26,187	12,651	22,224	4,456	5,545	10,937
MEAN	1,093	976	2,237	2,586	2,370	1,768	873	408	741	144	179	365
MAX	4,150	2,990	6,040	9,990	5,530	5,250	1,720	555	3,500	223	684	850
MIN	303	504	722	715	602	457	539	284	241	82	58	132
CFSM	4.99	4.46	10.2	11.8	10.8	7.98	3.99	1.86	3.38	.66	.82	1.67
IN.	5.75	4.97	11.78	13.62	11.68	9.20	4.45	2.15	3.78	.76	.94	1.86
AC-FT	67,200	58,070	137,500	159,000	136,300	107,900	51,940	25,090	44,090	8,840	11,000	21,890

CAL YR 1967 TOTAL 390,421 MEAN 1,070 MAX 6,520 MIN 25 CFSM 4.89 IN 66.32 AC-FT 774,400
 WTR YR 1968 TOTAL 417,564 MEAN 1,141 MAX 9,890 MIN 58 CFSM 5.21 IN 70.93 AC-FT 826,200

CHEHALIS RIVER BASIN

12020000 CHEHALIS RIVER NEAR DOTY, WASH.

LOCATION.--Lat 46°37'03", long 123°16'35", in NE¼NW¼ sec.14, T.13 N., R.5 W., Lewis County, on right bank 1.3 miles south of Doty, 1.6 miles upstream from Elk Creek, 3.4 miles north of Pe Ell, and at mile 101.8.

DRAINAGE AREA.--113 sq mi.

PERIOD OF RECORD.--October 1939 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 302.1 ft above mean sea level (river-profile survey). Prior to Oct. 1, 1961, nonrecording gage and crest-stage gage at site 100 ft downstream at same datum.

AVERAGE DISCHARGE.--31 years, 574 cfs (68.98 inches per year, 415,900 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (6,800 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	0045	7,670	10.43	Jan. 19, 1967	1800	9,150	11.67	Feb. 18, 1968	2315	7,880	10.61
Mar. 9, 1966	0115	*8,950	11.50	Jan. 27, 1967	2145	6,990	9.87	Dec. 3, 1968	2000	*6,620	9.56
Dec. 13, 1966	0715	*13,400	14.97	Feb. 4, 1968	0300	*11,200	13.25	Jan. 14, 1970	0100	*6,410	9.38

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 22, 23, Sept. 9, 10, 1966	26	.95	1969	Sept. 11, 12, 1969	29	.99
1967	Sept. 28, 29, 1967	19	.85	1970	Aug. 31, 1970	21	.92
1968	Aug. 13, 1968	36	sl.08				

a Occurred Oct. 1, 1967, Aug. 13, 1968.

Period of record: Maximum discharge, 18,100 cfs Feb. 7, 1945 (gage height, 17.80 ft, water over gage, discharge based on observer's estimate of maximum gage height); minimum observed, 18 cfs Oct. 14, 1952, Aug. 25-28, 1958; minimum gage height, 0.84 ft Aug. 25-27, Sept. 21, 22, 1951, Aug. 25-28, 1958.

REMARKS.--Records excellent. No regulation or diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1316: 1943(M). WSP 1446: 1946(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	71	560	794	894	1,070	648	184	97	78	38	31
2	27	100	781	1,310	710	838	578	176	108	88	37	30
3	27	332	703	1,020	601	700	500	170	115	144	37	30
4	29	951	1,473	1,810	572	630	457	165	104	147	29	26
5	152	1,070	1,010	2,670	750	724	430	169	97	122	36	28
6	360	695	891	7,030	1,120	826	409	320	90	111	35	27
7	240	469	1,110	4,510	1,280	898	383	280	92	102	35	27
8	124	420	1,070	4,000	1,060	3,450	358	176	86	93	34	27
9	93	389	862	2,560	1,100	6,130	346	157	81	84	34	26
10	75	408	673	1,710	1,160	2,770	361	154	90	79	34	28
11	64	469	549	1,780	1,200	1,660	810	144	122	76	34	55
12	58	442	470	2,290	1,250	1,230	817	144	137	72	33	70
13	59	505	420	3,610	1,010	1,270	638	144	109	68	33	47
14	122	509	375	4,190	880	1,480	586	144	98	66	35	37
15	410	435	338	2,460	730	2,690	519	189	87	66	34	35
16	260	369	308	1,600	630	2,470	464	320	81	65	33	33
17	200	321	285	1,170	565	1,630	418	233	78	62	32	33
18	169	293	266	931	515	1,470	377	169	76	59	31	55
19	356	850	248	760	472	1,420	345	160	73	59	30	48
20	272	877	242	640	635	1,320	336	144	71	57	29	38
21	203	889	292	562	672	1,120	321	176	73	53	28	33
22	160	1,600	246	498	610	988	297	186	73	50	26	32
23	133	1,110	243	494	630	892	276	150	78	48	28	33
24	114	743	255	462	580	892	259	145	77	49	29	34
25	100	549	243	450	535	948	249	127	67	54	28	37
26	88	537	241	437	510	1,060	252	119	64	49	29	50
27	84	934	1,250	555	934	1,020	228	114	67	45	36	55
28	106	722	2,040	619	1,460	893	215	108	116	43	47	42
29	86	574	1,490	1,000	-----	796	203	104	93	41	36	38
30	80	485	1,200	1,280	-----	787	193	100	78	39	36	34
31	75	-----	885	1,140	-----	722	-----	100	-----	38	34	-----
TOTAL	4,353	18,118	20,996	53,362	23,065	44,794	12,273	5,171	2,678	2,207	1,037	1,122
MEAN	140	604	677	1,721	824	1,445	409	167	89.3	71.2	33.5	37.4
MAX	410	1,600	2,040	7,030	1,460	6,130	817	320	137	147	67	70
MIN	27	71	241	437	472	630	193	100	64	38	26	26
CFSM	1.24	5.35	5.99	15.2	7.29	12.8	3.62	1.48	.79	.63	.30	.33
IN.	1.43	5.96	6.91	17.57	7.59	14.75	4.04	1.70	.88	.73	.34	.37
AC-FT	8,630	35,940	41,650	105,800	45,750	88,850	24,340	10,260	5,310	4,380	2,060	2,230
CAL YR 1965	TOTAL 160,432	MEAN 440	MAX 5,100	MIN 26	CFSM 3.89	IN 52.81	AC-FT 318,200					
WTR YR 1966	TOTAL 189,176	MEAN 518	MAX 7,030	MIN 26	CFSM 4.58	IN 62.28	AC-FT 375,200					

12020000 CHEHALIS RIVER NEAR DOTY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	158	1,700	1,360	1,490	671	709	301	107	52	29	23
2	35	141	2,150	1,090	1,290	368	473	289	105	90	28	26
3	35	127	2,300	1,680	1,120	524	634	273	100	47	27	29
4	32	117	3,600	2,430	1,020	476	621	257	93	46	27	25
5	30	121	3,000	2,210	884	433	574	245	87	44	27	24
6	31	131	2,490	1,580	749	398	513	233	83	43	28	24
7	32	116	2,150	1,310	649	368	473	225	83	43	32	23
8	41	106	1,420	1,230	572	370	438	218	82	43	32	23
9	43	103	1,090	1,090	516	496	471	214	79	42	30	23
10	36	132	2,100	966	479	458	427	207	77	42	28	30
11	33	122	2,460	1,200	475	431	390	205	78	40	27	73
12	45	465	5,350	1,490	519	401	384	197	83	39	25	49
13	67	1,150	10,300	2,010	2,110	395	503	190	75	39	25	34
14	50	2,320	4,070	1,530	1,410	401	487	185	72	38	25	29
15	43	1,540	2,200	1,380	1,300	754	452	180	66	38	24	28
16	38	976	1,500	1,350	1,300	1,530	520	164	64	37	24	25
17	38	689	1,160	1,140	1,490	535	147	61	37	26	24	24
18	37	568	960	962	1,760	1,420	685	142	59	36	23	23
19	75	502	924	4,740	1,280	1,090	710	135	56	37	23	22
20	633	450	1,060	5,190	1,020	1,180	645	129	58	42	23	22
21	581	455	876	3,270	833	1,100	575	122	63	40	24	21
22	1,460	429	738	2,110	701	2,530	520	119	128	37	23	21
23	902	382	690	1,580	615	4,140	466	115	109	34	23	21
24	596	339	1,110	1,250	551	2,900	426	114	81	33	22	21
25	398	459	1,190	1,170	525	2,050	398	110	72	32	22	21
26	314	502	996	1,810	477	1,500	390	106	64	32	22	21
27	261	473	816	4,370	438	1,160	357	104	63	31	22	21
28	211	437	705	5,170	571	978	337	107	59	31	21	20
29	202	427	804	3,560	-----	850	333	138	58	30	22	21
30	218	1,400	756	2,880	-----	827	329	140	55	30	22	33
31	181	-----	705	1,840	-----	776	-----	122	-----	30	23	-----
TOTAL	6,730	15,337	61,320	64,948	26,234	32,696	14,969	5,433	2,320	1,195	777	800
MEAN	217	511	1,978	2,095	937	1,035	499	175	77.3	38.5	25.1	26.7
MAX	1,460	2,320	10,300	5,190	2,110	4,140	710	301	128	52	32	73
MIN	30	103	690	962	438	368	329	104	55	30	21	20
CFSM	1.92	4.52	17.5	18.5	8.29	9.34	4.42	1.55	.68	.34	.22	.24
IN-	2.22	5.05	20.19	21.38	8.64	10.76	4.93	1.79	.76	.39	.26	.26
AC-FT	13,350	30,420	121,600	128,800	52,400	64,850	29,690	10,780	4,600	2,370	1,540	1,590

CAL YR 1966 TOTAL 229,096 MEAN 628 MAX 10,300 MIN 20 CFSM 5.56 IN 75.42 AC-FT 454,400
WTR YR 1967 TOTAL 232,759 MEAN 638 MAX 10,300 MIN 20 CFSM 5.65 IN 76.63 AC-FT 461,700

DRAINAGE AREA 113,000 SQ MI

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	347	456	774	527	498	520	792	300	786	116	47	176
2	449	376	1,950	470	2,820	462	670	269	2,630	109	46	160
3	881	326	3,440	423	5,230	417	565	256	1,320	103	46	130
4	404	288	3,070	393	7,150	390	529	253	811	98	46	114
5	476	257	2,660	387	2,750	412	507	280	592	95	47	104
6	480	230	1,830	349	1,610	439	484	290	476	93	47	97
7	323	217	1,490	353	1,150	385	466	273	408	88	44	90
8	235	263	1,130	368	918	353	426	255	362	84	41	84
9	182	860	1,370	2,140	762	325	390	239	326	82	40	80
10	152	2,510	2,360	1,740	655	313	361	225	299	80	38	79
11	328	1,700	2,340	1,060	570	317	345	215	280	80	37	79
12	487	943	1,340	929	507	502	329	210	260	95	37	80
13	615	665	940	2,920	453	595	305	210	276	86	38	77
14	900	589	730	3,790	408	888	408	196	250	93	59	166
15	528	530	605	2,690	373	2,050	840	186	222	104	58	383
16	356	446	531	1,960	349	2,330	635	172	210	93	61	348
17	275	390	476	1,540	448	1,510	525	165	196	80	58	300
18	235	368	424	1,380	3,270	1,070	466	158	182	75	58	491
19	211	338	377	3,140	5,300	822	487	176	172	75	104	42
20	175	303	340	3,680	2,360	680	435	238	162	75	88	339
21	498	283	336	3,330	3,160	575	390	256	156	69	75	272
22	944	275	1,840	1,950	2,690	506	361	272	192	66	69	229
23	1,210	256	2,420	1,300	2,730	480	394	285	165	64	184	207
24	725	282	1,820	985	2,200	493	357	148	148	63	343	179
25	887	301	1,490	813	1,480	705	369	260	138	59	252	163
26	654	288	1,220	685	1,080	780	373	233	132	58	292	147
27	2,150	268	987	572	847	2,470	334	223	139	56	264	135
28	2,620	264	817	500	601	2,620	309	213	138	53	473	123
29	17,200	775	675	457	591	1,780	286	200	138	58	374	116
30	762	804	576	433	-----	1,280	307	189	125	50	264	109
31	563	-----	506	450	-----	972	-----	186	-----	49	203	-----
TOTAL	20,452	15,851	40,864	41,714	53,050	27,441	13,415	7,137	11,691	2,443	3,833	5,475
MEAN	660	528	1,318	1,318	1,829	885	447	230	390	78.8	124	183
MAX	2,620	2,510	3,440	3,790	7,150	2,620	840	300	2,630	116	473	491
MIN	152	217	336	349	349	313	286	158	125	49	37	77
CFSM	5.84	4.67	11.7	11.9	16.2	7.83	3.96	2.04	3.45	.70	1.10	1.62
IN-	6.73	5.22	13.45	13.73	17.46	9.03	4.42	2.35	3.85	.80	1.26	1.80
AC-FT	40,570	31,440	81,050	82,740	105,200	54,430	26,610	14,160	23,190	4,850	7,600	10,860

CAL YR 1967 TOTAL 226,539 MEAN 621 MAX 5,190 MIN 20 CFSM 5.50 IN 74.58 AC-FT 449,300
WTR YR 1968 TOTAL 243,366 MEAN 665 MAX 7,150 MIN 37 CFSM 5.89 IN 80.12 AC-FT 482,700

CHEHALIS RIVER BASIN

12020000 CHEHALIS RIVER NEAR DOTY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	460	1,060	826	360	424	1,240	353	289	155	49	34
2	97	504	976	1,020	317	445	1,430	341	241	137	47	33
3	93	509	3,620	1,030	462	532	1,020	325	211	131	46	36
4	130	444	3,670	1,420	505	600	990	305	189	129	47	34
5	114	391	2,150	2,430	577	1,060	1,050	289	172	120	52	34
6	176	345	1,510	2,160	492	1,350	918	281	169	109	50	33
7	186	341	1,170	2,650	448	1,070	756	269	162	104	47	32
8	147	717	1,810	1,870	1,430	861	645	261	149	102	47	31
9	133	1,150	1,910	1,480	1,830	712	595	245	140	95	44	31
10	218	865	2,390	1,360	1,780	620	560	233	131	90	42	31
11	300	2,290	2,540	1,200	4,020	556	516	218	125	104	42	30
12	468	2,350	1,860	929	2,460	511	540	207	122	97	42	30
13	535	1,620	1,410	780	1,530	485	896	196	117	88	42	31
14	580	1,140	1,240	677	1,110	410	710	184	112	84	40	32
15	1,050	884	1,080	591	969	460	600	175	107	79	39	31
16	868	702	974	534	1,210	754	530	172	102	75	40	32
17	600	586	849	472	1,160	3,410	595	162	95	72	39	63
18	495	551	1,050	424	1,020	2,730	1,000	158	90	70	38	179
19	459	488	923	393	915	1,910	1,400	134	86	68	39	193
20	645	514	767	360	825	1,430	1,250	179	90	64	39	169
21	545	749	649	334	760	1,180	960	155	90	63	39	125
22	590	1,570	593	311	689	1,130	774	143	99	61	38	169
23	497	1,320	1,170	288	659	1,250	690	137	137	59	602	36
24	427	907	2,870	272	589	1,010	605	134	109	58	36	560
25	389	755	2,210	265	561	864	530	128	186	56	38	364
26	338	634	1,480	258	503	864	471	155	165	55	40	260
27	299	676	1,100	247	473	942	430	211	155	55	46	198
28	270	661	858	231	448	852	417	229	156	53	50	165
29	279	909	889	215	426	817	317	204	157	52	42	161
30	699	1,230	584	215	888	677	585	189	52	38	264	264
31	567	-----	601	329	-----	1,130	-----	349	-----	49	36	-----
TOTAL	12,298	26,442	45,765	25,576	28,142	31,316	22,914	7,318	4,467	2,587	1,310	3,947
MEAN	397	881	1,476	825	1,005	1,010	764	236	149	83.5	42.3	112
MAX	1,050	2,350	3,670	2,650	4,020	3,410	5,950	289	155	104	52	602
MIN	93	341	584	215	317	424	377	128	86	49	36	30
CFSM	3.51	7.80	13.1	7.30	8.89	8.94	6.76	2.09	1.32	.74	.37	1.17
IN-	6.05	8.70	15.07	8.42	9.26	10.31	7.54	2.41	1.47	.85	.43	1.30
AC-FT	24,390	52,450	90,770	50,730	55,020	62,120	45,450	14,520	8,860	5,130	2,600	7,830

CAL YR 1968 TOTAL 250,704 MEAN 685 MAX 7,150 MIN 37 CFSM 6.06 IN 82.53 AC-FT 497,300
 WTR YR 1969 TOTAL 212,082 MEAN 581 MAX 6,020 MIN 30 CFSM 5.14 IN 69.82 AC-FT 420,700

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	475	155	182	464	1,520	337	241	438	111	58	32	24
2	569	144	171	426	1,280	309	233	392	105	56	32	24
3	414	137	170	412	1,140	293	218	353	99	53	32	34
4	309	1,180	204	377	936	273	218	322	98	49	31	47
5	242	1,460	175	341	804	261	345	297	94	47	30	34
6	198	2,110	179	317	715	595	590	273	90	46	29	40
7	195	1,270	177	301	690	1,310	585	256	86	45	29	137
8	608	784	206	317	625	792	493	267	86	44	30	71
9	881	562	226	317	555	600	1,870	287	98	42	29	49
10	593	448	244	297	498	498	1,880	266	115	41	28	39
11	415	378	2,340	277	448	516	1,070	261	97	40	26	35
12	324	326	3,630	277	412	605	764	312	92	39	25	32
13	265	290	2,210	1,330	390	726	600	288	84	38	25	30
14	226	262	2,170	5,090	353	1,190	498	264	81	38	25	28
15	197	245	1,700	2,410	1,400	1,210	428	244	83	37	25	28
16	178	287	1,310	1,530	4,100	1,120	377	228	83	35	24	28
17	159	295	1,060	1,600	2,660	954	337	213	80	36	24	28
18	144	281	1,160	2,540	2,040	774	340	199	75	36	24	160
19	133	261	1,140	3,870	1,460	645	469	188	71	35	24	335
20	124	286	1,050	2,970	1,100	560	428	181	68	34	23	220
21	116	350	1,160	2,940	870	493	387	172	65	33	23	133
22	111	305	2,160	2,980	705	439	352	170	63	33	23	145
23	109	325	3,380	3,010	600	416	348	161	61	33	23	203
24	120	323	2,180	2,550	525	412	715	150	59	32	22	131
25	110	295	1,490	3,080	462	365	838	140	58	33	23	102
26	102	271	1,190	3,770	421	341	788	133	56	35	24	86
27	141	249	960	4,610	385	313	664	129	55	44	23	75
28	269	229	798	2,650	365	297	571	127	56	41	23	67
29	199	212	680	1,730	-----	277	519	139	56	37	24	62
30	182	196	590	1,240	-----	261	488	135	57	35	24	58
31	167	-----	520	1,400	-----	245	-----	119	-----	33	23	-----
TOTAL	8,265	13,915	34,812	55,425	27,469	17,427	17,654	7,104	2,382	1,238	802	2,485
MEAN	267	444	1,123	1,788	981	562	588	229	79.4	39.9	25.9	82.8
MAX	881	2,110	3,630	5,090	4,100	1,310	1,880	438	115	58	32	335
MIN	102	137	170	277	353	245	218	119	55	32	22	24
CFSM	2.36	4.31	9.94	15.8	8.08	4.97	5.20	2.05	.70	.35	.23	.75
IN-	2.72	4.58	11.44	18.25	9.04	5.74	5.81	2.34	.78	.41	.24	.82
AC-FT	16,390	27,600	69,050	109,900	54,480	34,570	35,020	14,090	4,720	2,440	1,590	4,930

CAL YR 1969 TOTAL 184,569 MEAN 506 MAX 4,020 MIN 30 CFSM 4.48 IN 60.76 AC-FT 366,100
 WTR YR 1970 TOTAL 188,978 MEAN 518 MAX 5,090 MIN 22 CFSM 4.58 IN 62.21 AC-FT 374,800

12020500 ELK CREEK NEAR DOTY, WASH.

LOCATION.--Lat 46°37'42", long 123°19'50", in SE¼ sec.8, T.13 N., R.5 W., Lewis County, on right bank 0.5 mile upstream from Nine Creek, 1.0 mile upstream from Deer Creek, 2.6 miles west of Doty, and at mile 2.5.

DRAINAGE AREA.--46.7 sq mi.

PERIOD OF RECORD.--July 1942 to October 1943 (fragmentary). Annual maximums, water years 1944-50, 1952-67. September 1967 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 350 ft (from topographic map). Prior to Aug. 15, 1944, non-recording gage; Aug. 15, 1944, to October 1950 water-stage recorder; and Oct. 1, 1951, to Sept. 30, 1967, crest-stage gage; all at site 760 ft upstream at datum 3.305 ft higher.

AVERAGE DISCHARGE.--9 years (1944-50, 1967-70), 163 cfs (47.40 inches per year, 118,100 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (900 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	-	*1,560	6.63	Feb. 4, 1968	0330	*1,270	6.64	Feb. 11, 1969	-	*1,220	6.55
				Mar. 28, 1968	0300	944	5.93				
Dec. 13, 1966	-	*2,250	7.86	Dec. 4, 1968	0300	1,010	6.07	Dec. 12, 1969	1100	966	5.98
Dec. 3, 1967	1915	980	6.01	Jan. 5, 1969	-	-	-	Jan. 27, 1970	0630	*1,190	6.47
Jan. 21, 1968	0400	1,110	6.31	Jan. 10, 1969	-	-	-	Feb. 16, 1970	0700	1,100	6.27

Annual minimum discharge, September 1967 to September 1970

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1967	Sept. 29, 1967	7.6	2.59	1969	Sept. 1, 2, 7-12, 1969	12.0	a2.68
1968	Aug. 11, 12, 1968	13.0	2.71	1970	Aug. 23, 24, 27, 28, 1970	9.4	2.63

a Occurred Sept. 9, 10, 1969.

Period of record: Maximum discharge, 3,400 cfs Nov. 20, 1962 (gage height, 9.60 ft, datum then in use, from high watermark in well), from rating curve extended above 1,600 cfs; minimum recorded, 7.6 cfs Sept. 29, 1967 (gage height, 2.59 ft).

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS.--WSP 1012: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, SEPTEMBER 1967

DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP	DAY	SEP
1	8.0	5	9.6	9	9.8	13	16	17	10	21	10	25	.40
2	12	6	9.4	10	15	14	13	18	9.8	22	10	26	9.2
3	14	7	9.4	11	33	15	11	19	9.8	23	10	27	8.4
4	10	8	9.4	12	24	16	10	20	10	24	9.8	28	8.0

TOTAL.....	342.9
MEAN.....	11.4
MAX.....	33
MIN.....	.40
CFSM.....	.027
IN.....	.12
AC-FT.....	680

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	141	230	192	240	190	239	126	196	41	16	49
2	103	117	410	178	581	173	230	107	628	37	16	53
3	157	98	816	159	1,000	161	202	98	375	35	16	44
4	122	87	728	150	1,110	154	195	96	235	33	16	36
5	140	76	600	154	660	161	210	103	180	32	17	34
6	180	70	488	137	452	170	200	109	145	32	17	31
7	94	66	142	139	394	150	192	98	128	30	16	30
8	62	83	340	161	295	134	170	88	117	29	15	30
9	46	232	358	461	253	124	157	83	107	28	15	28
10	40	336	445	462	222	115	148	80	98	28	14	28
11	46	638	344	313	200	117	145	78	94	28	14	30
12	61	271	392	280	180	168	74	76	87	36	14	37
13	75	202	301	452	166	173	130	76	90	34	14	33
14	134	175	245	540	154	235	150	70	88	31	24	72
15	92	152	212	500	141	488	259	64	74	36	27	103
16	62	132	192	445	134	660	205	61	68	32	28	103
17	50	120	175	631	148	175	98	62	42	29	25	94
18	45	117	164	386	272	321	159	55	60	26	23	178
19	30	120	145	736	544	262	166	58	57	25	32	150
20	44	103	130	812	428	226	166	96	54	26	46	117
21	96	94	126	998	608	200	148	85	53	25	45	94
22	152	98	208	608	588	180	132	76	48	24	35	76
23	277	88	210	431	528	168	134	87	62	24	85	73
24	170	115	195	344	462	175	130	96	54	23	109	67
25	235	130	228	301	375	238	134	87	48	22	67	58
26	182	120	228	280	310	230	150	80	45	22	70	53
27	302	107	218	235	262	784	132	73	45	20	67	49
28	544	105	212	208	230	804	122	68	49	19	195	46
29	334	205	192	192	205	512	111	62	52	18	126	43
30	225	230	175	182	-----	382	124	58	46	17	72	41
31	168	-----	166	208	-----	310	-----	60	-----	17	53	-----
TOTAL	4,340	6,620	9,515	11,075	11,182	8,615	4,974	2,512	3,447	859	1,329	1,886
MEAN	140	154	307	357	363	278	164	81.0	114	27.7	42.9	62.8
MAX	544	536	816	998	1,110	804	259	126	628	41	195	178
MIN	40	66	126	137	134	115	111	55	45	17	14	28
CFSM	3.00	3.30	6.57	7.66	8.20	5.95	3.55	1.73	2.48	.59	.92	1.34
IN	3.46	3.68	7.58	8.82	8.54	4.86	3.96	2.00	2.76	.68	1.06	1.50
AC-FT	8,610	9,160	18,870	21,970	22,020	17,098	9,870	4,980	6,880	1,700	2,640	3,740
MTR YR 1968	TOTAL 64,292	MEAN 176	MAX 1,110	MIN 14	CFSM 3.77	IN 51.21	AC-FT 127,500					

12020500 ELK CREEK NEAR DOTY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	159	459	310	150	168	185	113	70	61	17	14
2	37	148	378	350	140	166	265	113	61	52	17	12
3	36	148	594	400	200	168	200	107	55	50	16	14
4	46	126	867	550	250	168	170	100	50	52	17	14
5	49	122	632	800	230	265	166	92	45	52	20	14
6	75	111	470	750	210	331	148	87	46	45	19	14
7	75	111	382	700	180	259	134	82	49	42	19	12
8	57	246	445	720	320	220	124	75	44	41	18	12
9	52	316	480	750	720	198	115	72	42	37	17	12
10	94	256	592	800	700	180	113	68	40	35	16	12
11	157	403	696	600	1,000	164	107	66	38	43	16	12
12	117	572	560	500	800	152	105	62	38	44	15	12
13	137	448	428	400	700	143	166	60	40	37	15	15
14	157	344	358	350	450	137	143	57	37	33	16	16
15	228	280	304	300	392	132	120	55	34	30	15	15
16	225	232	292	270	406	154	111	54	32	30	15	15
17	180	202	283	250	375	292	124	53	30	28	15	23
18	190	192	347	220	340	280	190	50	28	26	14	52
19	164	168	322	190	310	245	232	66	27	24	14	85
20	198	161	268	180	283	215	232	67	29	24	15	72
21	182	185	238	160	259	195	198	55	30	23	17	41
22	173	268	220	150	245	188	170	50	34	22	15	45
23	154	259	316	130	232	192	168	45	58	21	15	87
24	134	232	524	120	225	166	157	43	78	21	14	72
25	132	202	488	115	208	152	145	42	78	20	14	52
26	126	185	386	110	192	145	130	43	87	19	14	42
27	107	222	340	110	182	139	70	72	19	15	30	30
28	100	250	271	100	178	130	115	87	76	19	19	30
29	103	368	230	95	-----	124	126	87	94	18	17	28
30	229	516	200	90	-----	122	117	161	76	17	15	36
31	198	-----	220	130	-----	137	-----	96	-----	17	14	-----
TOTAL	3,952	7,432	12,556	10,700	9,877	5,727	4,596	2,278	1,518	1,002	495	913
MEAN	127	248	405	345	315	185	145	73.5	50.6	32.3	16.0	30.4
MAX	229	572	867	800	1,000	331	265	161	94	61	20	87
MIN	36	111	200	90	140	122	105	42	27	17	14	12
CFSN	2.72	5.31	8.67	7.39	7.56	3.96	3.28	1.57	1.08	.69	.34	.65
IN.	3.15	5.92	10.00	8.52	7.87	4.56	3.66	1.81	1.21	.80	.39	.73
AC-FT	7,840	14,740	24,900	21,220	19,590	11,360	9,120	4,520	3,010	1,990	982	1,810

CAL YR 1968	TOTAL 69,757	MEAN 191	MAX 1,110	MIN 14	CFSM 4.09	IN 55.57	AC-FT 138,400
WTR YR 1969	TOTAL 61,046	MEAN 167	MAX 1,000	MIN 12	CFSM 3.58	IN 48.63	AC-FT 121,100

NOTE.--NO GAGE-HEIGHT RECORD DEC. 29 TO FEB. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	43	63	156	496	134	88	152	50	24	14	11
2	90	40	60	145	414	127	88	138	46	24	13	12
3	70	39	59	147	389	121	81	127	44	22	14	19
4	51	228	78	140	331	112	81	119	43	21	12	24
5	42	389	72	123	292	106	119	110	41	20	12	23
6	36	283	72	114	259	143	215	102	39	21	12	25
7	36	202	80	108	235	223	210	95	38	20	11	73
8	88	152	91	112	208	156	158	100	37	19	12	40
9	170	129	102	114	190	134	334	114	40	18	12	24
10	121	108	99	102	175	121	445	119	45	17	12	19
11	81	93	342	97	163	125	304	112	44	16	11	16
12	63	84	840	97	152	138	238	165	46	16	10	14
13	52	75	592	190	143	158	198	147	41	15	10	12
14	48	70	616	812	134	223	170	121	36	15	10	12
15	43	67	504	532	388	253	152	104	38	14	10	11
16	41	75	396	368	962	238	136	97	43	12	10	11
17	40	84	328	347	704	220	125	91	39	13	9.8	12
18	37	75	295	403	592	190	132	86	35	12	9.8	23
19	35	67	268	612	448	170	178	81	31	12	9.8	44
20	34	75	271	564	361	154	161	78	30	12	9.8	39
21	33	90	337	532	301	143	138	75	28	12	10	35
22	33	106	452	524	256	129	127	76	26	12	10	62
23	34	108	712	628	229	125	119	73	25	12	9.4	106
24	38	143	592	636	200	156	185	67	24	12	9.4	48
25	36	110	424	820	180	129	262	63	24	13	9.8	31
26	33	95	354	921	163	117	259	59	22	15	10	24
27	42	86	289	1,100	154	108	223	57	22	17	9.8	22
28	70	80	244	760	145	102	192	57	22	17	9.8	19
29	56	73	215	540	-----	99	175	63	22	16	11	10
30	50	67	192	420	-----	93	170	63	23	15	10	17
31	48	-----	172	638	-----	88	-----	55	-----	15	9.8	-----
TOTAL	1,715	3,336	9,211	12,610	8,664	4,535	5,463	2,966	1,044	499	335.2	851
MEAN	55.3	111	297	407	399	146	182	95.7	34.8	16.1	10.7	28.4
MAX	170	389	840	1,100	962	253	445	165	50	24	14	106
MIN	33	39	59	97	134	88	81	55	22	12	9.4	11
CF5M	1.18	2.36	6.36	8.72	6.62	3.13	3.90	2.05	.75	.34	.23	.61
IN.	1.37	2.66	7.34	10.04	6.90	3.61	4.35	2.36	.83	.40	.27	.68
AC-FT	3,400	6,620	18,270	25,010	17,190	9,000	10,840	5,880	2,070	990	661	1,690
CAL YR 1969	TOTAL	51,368.0	MEAN	141	MAX	1,000	MIN	12	CF5M	3.02	IN	40.92

12020900 SOUTH FORK CHEHALIS RIVER NEAR BOISTFORT, WASH.

LOCATION.--Lat 46°31'38", long 123°06'58", in SE¼ sec.13, T.12 N., R.4 W., Lewis County, on left bank 1.0 mile downstream from Nelman Creek, 1.0 mile southeast of Boistfort, and 2.7 miles upstream from Stillman Creek.

DRAINAGE AREA.--44.9 sq mi.

PERIOD OF RECORD.--August 1965 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 280 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 173 cfs (52.32 inches per year, 125,300 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,900 cfs), August 1965 to September 1970

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
1965				Dec. 13, 1966	1400	*4,370	13.78	Feb. 19, 1968	0630	2,460	10.72
				Jan. 19, 1967	2400	2,740	11.23				
Jan. 6, 1966	0300	*2,250	10.48	Jan. 28, 1967	0530	2,100	10.00	Dec. 4, 1968	0200	*2,050	9.88
Mar. 9, 1966	0630	2,150	10.23					Jan. 27, 1970	0330	*2,490	10.68
				Feb. 4, 1968	1000	*3,240	12.07				

Annual minimum discharge, August 1965 to September 1970

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1965	Sept. 9, 10, 1965	2.5	2.60	1968	Oct. 1, 1967	2.3	2.60
1966	Aug. 24, 1966	.60	2.51	1969	Sept. 11, 1969	1.5	2.56
1967	Sept. 1, 2, 1967	.10	2.36	1970	Aug. 16, 1970	.52	2.41

Period of record: Maximum discharge, 4,370 cfs Dec. 13, 1966 (gage height, 13.78 ft); minimum, 0.10 cfs Sept. 1-2, 1967 (gage height, 2.36 ft).

REMARKS.--Records excellent. Many small diversions for irrigation and domestic use above station. No regulation. A discharge measurement of 4.14 cfs was made July 26, 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST TO SEPTEMBER 1965

DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP	
1	3.5	3.5	6	4.1	3.7	11	3.1	3.3	16	6.2	7.3	21	10	4.1	
2	3.3	3.1	7	3.7	3.5	12	4.5	4.3	17	5.0	7.0	22	7.3	4.1	
3	3.1	3.1	8	3.3	3.3	13	15	4.3	18	4.5	5.8	23	6.0	4.3	
4	3.6	3.9	9	2.9	2.5	14	16	4.5	19	4.3	4.5	24	5.8	4.5	
5	4.3	4.3	10	2.9	2.7	15	8.5	5.0	20	7.3	4.5	25	5.8	4.8	
														31	
TOTAL															173.0
MEAN															5.58
MAX															16
MIN															2.9
CFSM															.098
IN															14
AC-FT															343

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	13	107	307	252	378	170	53	21	15	4.5	3.7
2	4.3	14	176	548	218	307	157	51	22	19	4.5	3.1
3	4.3	24	148	436	197	263	144	48	26	32	4.5	3.1
4	4.3	100	266	360	180	231	133	45	26	33	3.7	3.1
5	7.6	128	220	730	166	241	126	41	24	26	3.5	2.9
6	16	100	201	2,060	212	256	118	56	23	21	3.7	2.2
7	40	62	218	1,420	272	279	112	65	20	19	3.7	2.2
8	18	52	216	1,240	252	674	107	49	20	18	3.3	2.5
9	12	58	187	671	261	1,900	104	42	20	16	2.9	2.0
10	9.4	53	165	604	261	998	100	38	19	13	3.1	1.9
11	8.5	57	142	640	296	592	116	38	24	13	3.9	2.4
12	8.2	57	126	719	348	439	135	36	29	13	3.3	2.6
13	8.2	90	116	923	293	395	119	33	23	12	2.7	2.3
14	9.4	96	187	1,220	263	382	114	33	19	11	2.7	2.5
15	42	80	96	610	224	714	107	36	18	11	2.7	5.0
16	34	65	89	368	199	778	100	57	16	12	2.5	5.5
17	23	54	83	430	182	544	94	48	15	10	2.5	5.5
18	20	47	78	340	165	445	88	39	14	9.7	2.5	7.9
19	19	216	73	284	153	390	83	34	13	6.8	2.0	11
20	24	222	70	241	176	445	82	32	12	9.1	1.4	7.9
21	20	187	82	212	172	427	82	33	12	9.4	1.9	6.8
22	18	201	76	191	159	385	77	34	14	7.9	1.3	5.8
23	14	231	74	180	157	348	71	32	14	7.6	1.0	5.5
24	16	168	98	174	149	332	70	30	13	7.6	1.0	5.5
25	13	130	98	163	142	332	68	26	16	7.6	.60	6.5
26	12	118	101	151	140	316	68	25	14	8.5	1.3	8.8
27	12	187	426	159	266	284	64	24	14	7.3	2.0	11
28	14	153	863	161	484	250	58	23	10	6.2	4.5	8.8
29	19	589	178	-----	-----	220	57	22	11	5.8	5.2	7.6
30	14	114	499	268	-----	206	56	21	16	4.8	4.8	6.8
31	14	-----	365	290	-----	187	-----	21	-----	4.5	3.9	-----
TOTAL	481.0	3,287	6,149	16,878	6,279	13,938	2,980	1,165	561	398.8	90.60	165.4
MEAN	15.5	110	198	544	224	450	99.3	37.6	18.7	12.9	2.92	5.51
MAX	42	261	863	2,060	484	1,900	170	65	29	33	5.2	11
MIN	4.3	13	70	151	140	187	56	21	12	4.5	.70	1.9
CFSM	.35	2.45	4.41	12.1	4.99	10.0	2.21	.84	.42	.29	.07	1.2
IN	.40	2.72	5.09	13.98	5.20	11.55	2.47	.97	.46	.33	.08	1.4
AC-FT	954	6,520	12,200	33,480	12,450	27,650	5,910	2,310	1,110	791	180	328

WTR YR 1966 TOTAL 52,372.80 MEAN 143 MAX 2,060 MIN .70 CFSM 3.18 IN 43.39 AC-FT 103,900

CHEHALIS RIVER BASIN

12020900 SOUTH FORK CHEHALIS RIVER NEAR BOISTFORT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	29	535	358	498	159	285	104	35	10	2.1	.10
2	6.0	27	664	332	420	151	258	96	32	9.1	1.9	.46
3	5.8	26	698	504	356	136	235	90	31	8.2	1.8	1.7
4	5.8	25	1,090	673	319	126	218	88	28	7.6	1.8	2.0
5	5.5	24	892	709	279	119	203	83	26	7.3	1.5	2.1
6	5.2	26	647	534	252	114	180	80	24	6.8	1.5	2.0
7	5.5	26	582	432	222	107	166	74	23	6.5	1.8	1.8
8	6.0	24	460	383	204	106	155	71	24	6.5	2.4	1.9
9	6.8	24	365	342	186	136	193	71	24	6.8	2.5	1.3
10	7.0	26	496	300	172	140	142	70	22	7.0	2.3	1.4
11	6.5	29	582	332	166	135	133	66	22	6.8	1.5	4.3
12	6.8	102	1,080	362	163	126	128	62	33	6.2	1.7	7.9
13	8.8	112	3,760	564	511	123	161	60	26	5.8	1.8	5.5
14	10	443	1,600	460	435	135	155	57	22	5.6	1.7	3.9
15	8.5	428	714	410	450	301	146	56	20	5.0	1.1	3.1
16	7.9	268	498	405	412	400	155	54	18	4.8	.58	2.5
17	7.0	191	383	353	392	378	176	51	16	5.0	.34	2.4
18	7.0	197	321	312	412	360	247	48	14	4.3	.50	2.1
19	7.9	136	296	1,180	346	307	250	47	14	3.9	.34	2.1
20	63	130	314	1,880	298	307	220	44	13	4.8	.46	2.4
21	95	128	271	1,060	260	281	193	41	15	5.5	.82	2.3
22	221	131	239	731	231	390	176	39	35	5.2	.34	2.1
23	149	114	227	574	206	679	159	38	36	4.3	.22	1.9
24	109	104	266	468	187	714	144	37	22	3.9	.18	1.8
25	71	118	312	408	172	673	136	37	18	3.5	.22	1.8
26	53	151	281	545	157	388	133	35	15	3.3	1.1	1.8
27	49	138	250	1,030	144	405	123	33	14	2.5	1.8	1.9
28	39	133	222	1,770	144	349	116	33	14	2.7	1.8	1.8
29	34	243	233	1,100	105	305	112	33	12	2.4	1.5	1.9
30	35	399	220	878	-----	307	109	39	11	2.3	.58	2.0
31	32	-----	203	615	-----	319	-----	45	-----	2.3	.26	-----
TOTAL	1,079.6	3,792	18,711	20,004	7,994	8,616	5,162	1,786	659	166.1	38.44	70.26
MEAN	34.8	126	604	645	286	280	172	57.6	22.0	5.36	1.24	2.34
MAX	221	443	3,760	1,880	511	714	285	104	36	10	2.5	7.9
MIN	5.2	24	203	300	144	106	107	33	11	2.3	.18	.10
CFSM	.78	2.81	13.5	14.4	6.37	6.24	3.83	1.28	.49	.12	.03	.05
IN.	.89	3.14	15.50	16.57	6.62	7.19	4.28	1.48	.55	.14	.03	.06
AC-FT	2,140	7,520	37,110	39,680	15,860	17,210	10,240	3,540	1,310	329	76	139

CAL YR 1966 TOTAL 66,038.40 MEAN 181 MAX 3,760 MIN .70 CFSM 4.03 IN 84.71 AC-FT 131,000
WTR YR 1967 TOTAL 68,138.40 MEAN 187 MAX 3,760 MIN .10 CFSM 4.16 IN 56.45 AC-FT 135,200

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	128	290	210	238	210	301	101	154	29	5.9	26
2	40	104	400	190	603	187	256	90	586	26	5.6	26
3	62	90	670	170	1,420	169	216	84	352	23	5.9	22
4	62	79	860	150	2,840	160	194	80	232	22	5.9	20
5	31	70	920	140	914	158	194	84	174	20	6.5	18
6	26	64	659	130	564	151	174	82	142	20	7.1	16
7	21	59	631	140	412	138	163	76	122	18	7.4	15
8	16	59	486	150	321	126	149	72	111	16	6.2	14
9	13	148	424	600	277	117	138	68	100	15	5.9	13
10	11	554	520	500	236	111	129	63	89	15	5.2	13
11	13	489	586	400	204	109	121	62	83	15	4.6	14
12	31	297	421	350	183	169	116	59	76	18	4.2	17
13	35	216	319	600	165	178	109	61	77	21	4.0	16
14	126	185	258	800	151	208	117	57	75	16	7.1	21
15	57	162	220	700	140	454	258	54	65	18	11	84
16	36	138	194	600	129	709	200	52	58	18	10	90
17	26	122	176	540	138	496	178	48	54	16	14	61
18	22	112	163	510	604	354	156	46	50	15	13	108
19	20	104	145	648	1,960	277	153	46	47	15	21	103
20	26	94	133	818	836	232	144	83	46	20	26	94
21	77	86	128	781	990	280	135	75	62	16	19	69
22	154	80	567	558	814	178	122	69	52	14	15	55
23	222	76	853	421	836	172	142	70	49	13	22	49
24	126	75	656	337	697	191	135	90	41	12	77	44
25	191	76	540	293	520	236	126	77	34	12	52	40
26	144	73	450	256	402	252	121	70	32	11	65	35
27	329	68	360	214	328	678	112	62	32	9.9	54	32
28	641	67	300	191	275	951	108	59	32	9.0	59	30
29	315	181	250	174	238	642	101	53	35	8.1	59	28
30	208	225	169	169	478	121	90	32	32	7.8	41	26
31	154	-----	200	187	-----	368	-----	47	-----	6.5	31	-----
TOTAL	3,240.4	4,324	12,999	11,927	17,135	9,056	4,663	2,092	3,072	495.3	670.5	1,199
MEAN	105	144	419	385	591	292	155	67.5	102	16.0	21.6	40.0
MAX	641	554	920	818	2,540	951	301	586	29	77	108	108
MIN	5.4	128	130	129	109	101	66	32	6.5	4.0	1.3	13
CFSM	2.34	3.21	9.33	8.57	13.2	6.50	3.45	1.50	2.27	.36	.48	.89
IN.	2.68	3.58	10.77	9.88	14.20	7.50	3.86	1.73	2.55	.41	.56	.99
AC-FT	6,430	8,580	25,780	23,640	33,990	17,960	9,250	4,150	6,090	982	1,330	2,380

CAL YR 1967 TOTAL 65,110.20 MEAN 178 MAX 1,880 MIN .95 CFSM 3.96 IN 53.95 AC-FT 129,200
WTR YR 1968 TOTAL 70,873.20 MEAN 194 MAX 2,540 MIN 4.0 CFSM 4.32 IN 58.72 AC-FT 140,600

12020900 SOUTH FORK CHEHALIS RIVER NEAR DUNSTFORTH, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	121	368	262	124	187	216	111	52	26	3.9	4.3
2	24	138	332	296	112	195	214	104	45	19	3.7	3.7
3	24	163	904	298	168	214	187	100	38	19	3.7	3.7
4	25	140	1,440	392	204	239	187	95	39	19	3.7	3.5
5	32	128	842	620	212	358	201	89	36	20	3.7	3.7
6	32	116	623	636	189	490	187	84	30	17	8.2	2.9
7	30	117	492	737	182	390	168	80	32	16	6.8	2.9
8	40	203	512	601	421	528	189	76	29	16	5.2	2.9
9	34	439	512	537	676	263	146	73	27	14	4.5	2.5
10	48	323	789	539	585	254	142	70	26	13	3.9	2.4
11	80	748	878	518	898	229	133	69	25	14	3.5	1.9
12	145	768	631	398	691	212	130	64	25	17	3.9	2.4
13	189	538	495	344	488	201	184	60	26	14	4.1	2.5
14	185	404	442	316	381	193	165	57	24	12	4.1	2.9
15	364	317	381	303	332	189	146	54	22	12	3.7	3.1
16	321	258	358	285	356	229	133	52	20	12	3.5	2.7
17	212	216	916	262	360	642	136	51	18	9.7	3.7	5.2
18	183	200	356	229	332	623	189	48	16	8.8	3.3	2.8
19	154	176	123	206	307	902	296	57	14	7.9	3.7	3.4
20	252	169	283	187	285	410	307	60	16	6.5	3.9	3.9
21	216	214	254	172	275	356	254	49	17	7.0	4.3	2.3
22	210	517	235	157	264	330	216	45	18	6.0	4.1	1.9
23	181	449	319	140	254	339	204	40	22	6.5	3.5	6.2
24	158	359	488	133	243	292	182	39	27	5.0	2.9	6.6
25	138	282	460	128	227	262	163	38	24	5.0	2.5	4.1
26	124	236	378	123	212	246	148	40	26	5.2	2.5	3.2
27	111	238	326	118	203	241	136	46	27	4.1	3.9	2.4
28	101	222	273	111	195	229	130	51	27	3.9	4.8	2.1
29	98	284	235	107	-----	212	128	52	28	3.7	5.8	2.0
30	160	361	208	104	-----	210	116	98	35	3.7	5.2	1.9
31	138	-----	206	119	-----	224	-----	66	-----	3.7	4.8	-----
TOTAL	4,054	8,844	14,659	9,378	9,176	9,309	9,299	2,018	799	346.7	129.0	481.2
MEAN	131	295	473	303	328	300	177	65.1	26.6	11.2	4.16	16.0
MAX	364	768	1,440	737	898	642	807	111	52	26	8.2	6.6
MIN	24	116	206	104	112	187	116	38	14	3.7	2.5	1.9
CFSM	2.92	6.57	10.55	6.75	7.31	6.48	3.94	1.45	.59	.25	.09	.36
IN.	3.36	7.33	12.15	7.77	7.60	7.71	4.39	1.67	.66	.29	.11	.40
AC-FT	8,040	17,540	29,080	18,600	18,200	18,460	10,510	4,000	1,580	688	256	954

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	66	35	52	165	466	136	85	155	36	14	4.5	3.1		
2	104	32	50	151	398	125	82	142	32	14	4.8	2.0		
3	71	31	48	146	358	117	78	128	29	12	3.8	3.8		
4	51	136	54	138	302	110	76	119	28	9.7	3.8	8.1		
5	40	340	52	123	271	104	94	110	27	8.5	3.8	10		
6	32	385	52	114	250	179	104	102	26	7.3	3.5	6.9		
7	29	298	56	107	244	425	117	95	24	8.1	3.0	19		
8	60	191	57	105	222	102	92	97	25	6.9	2.4	18		
9	72	144	66	105	203	233	338	100	27	6.0	3.0	10		
10	77	116	66	102	186	197	484	99	32	5.2	3.1	7.3		
11	60	97	258	94	172	199	310	90	28	5.2	2.8	6.2		
12	48	84	991	94	161	233	239	97	28	4.2	1.9	4.8		
13	40	74	541	273	153	278	201	94	24	4.2	1.8	3.5		
14	35	67	529	1,460	140	378	174	84	23	4.0	1.2	3.3		
15	32	64	493	798	402	408	155	76	24	3.8	.90	3.5		
16	30	72	418	619	1,290	378	144	72	24	4.0	.78	4.0		
17	29	78	380	706	928	325	130	66	24	3.1	1.2	4.2		
18	27	67	372	928	748	274	128	62	22	3.6	2.8	6.0		
19	26	62	368	1,570	547	226	180	98	19	3.3	1.9	13		
20	24	60	360	1,260	418	210	159	58	17	3.0	3.0	20		
21	24	82	415	1,050	342	186	146	56	14	3.0	1.7	16		
22	23	73	472	896	280	166	134	55	14	3.1	2.6	12		
23	22	72	893	830	239	153	132	53	13	2.4	1.3	18		
24	23	60	721	757	210	148	199	49	12	3.0	2.4	15		
25	24	72	511	1,060	184	130	280	47	12	2.4	1.1	11		
26	24	69	415	1,500	166	123	285	44	11	3.0	2.6	9.3		
27	24	65	330	2,030	193	114	241	43	10	4.4	1.9	8.1		
28	61	278	61	1,060	151	109	212	42	12	3.8	1.2	7.7		
29	53	98	237	664	-----	102	189	45	12	4.5	1.9	6.9		
30	41	55	205	484	-----	95	172	45	13	4.2	3.0	6.5		
31	39	-----	182	484	-----	90	-----	39	-----	4.5	2.4	-----		
TOTAL	1,318	3,120	9,922	19,861	9,584	6,243	5,370	2,422	642	170.4	77.88	267.2		
MEAN	42.5	104	320	641	342	201	179	78.1	21.4	5.50	2.51	8.51		
MAX	104	385	991	2,030	1,290	425	484	155	36	14	4.8	2.0		
MIN	22	31	48	94	140	90	76	39	10	2.4	.78	2.0		
CFSM	.95	2.32	7.13	14.3	7.62	4.48	3.99	1.74	.48	.12	.06	.20		
IN.	1.09	2.58	8.22	16.45	7.94	5.17	4.45	2.01	.53	.14	.06	.22		
AC-FT	2,610	6,190	19,680	39,390	19,010	12,380	10,650	4,800	1,270	338	154	530		
CAL YR 1969	TOTAL	51,295.90	MEAN	141	MAX	991	MIN	1.9	CFSM	3.14	IN	42.50	AC-FT	101,700
WTR YR 1970	TOTAL	58,997.48	MEAN	162	MAX	2,030	MIN	.78	CFSM	3.61	IN	48.88	AC-FT	117,000

CHEHALIS RIVER BASIN

12024000 SOUTH FORK NEWAUKUM RIVER NEAR ONALASKA, WASH.

LOCATION.--Lat 46°34'34", long 122°40'58", on south line of SE 1/4 sec.28, T.13 N., R.1 E., Lewis County, on right bank on upstream side of county road bridge, 1.0 mile upstream from Lost Creek, 1.7 miles east of Onalaska, and at mile 22.8.

DRAINAGE AREA.--42.4 sq mi.

PERIOD OF RECORD.--July to October 1942, July to October 1943, July 1944 to November 1948, June 1957 to September 1970. October 1943 to September 1958 published as Newaukum River near Onalaska.

GAGE.--Water-stage recorder. Altitude of gage is 540 ft (from topographic map). Prior to Sept. 28, 1944, non-recording gage at same site at datum 0.93 ft higher.

AVERAGE DISCHARGE.--17 years (1944-48, 1957-70), 197 cfs (63.10 inches per year, 142,700 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,200 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Mar. 9, 1966	0930	*1,270	4.74	Feb. 4, 1968	0430	1,580	5.35	Jan. 7, 1969	0230	1,300	4.79
				Feb. 19, 1968	0930	*1,750	5.68				
Dec. 13, 1966	1100	*2,430	6.82					Jan. 14, 1970	0600	*1,770	5.72
Jan. 19, 1967	1830	1,500	5.20	Dec. 3, 1968	2100	*1,440	5.08	Jan. 27, 1970	0130	1,580	5.35
Jan. 28, 1967	0500	1,780	5.74	Jan. 5, 1969	0330	1,390	4.98				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1-4, 1965, Sept. 4-10, 21, 22, 1966	26	al.22	1968	Aug. 10-13, 1968	23	1.16
1967	Aug. 29, Sept. 25, 27-29, 1967	18	bl.06	1969	Sept. 10-12, 1969	27	1.16
				1970	Aug. 31, 1970	20	1.07

a Occurred Sept. 4-10, 1966.

b Occurred Sept. 27, 28, 1967.

Period of record: Maximum discharge, 3,810 cfs Dec. 11, 1946 (gage height, 8.40 ft); minimum, 17.5 cfs Sept. 6, 7, 8, 1958.

REMARKS.--Records excellent. No regulation. Probably some diversions for domestic use.

REVISIONS.--WSP 1736: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	46	150	246	267	318	264	103	61	61	36	27
2	26	51	170	330	228	261	240	103	70	97	36	27
3	26	100	155	258	202	228	213	111	72	315	35	27
4	28	172	277	240	195	205	198	124	67	228	35	27
5	52	155	216	462	202	205	190	133	59	155	35	27
6	78	132	186	928	208	225	192	178	58	124	34	27
7	61	116	225	860	258	225	195	150	58	103	33	27
8	43	106	219	869	243	452	190	124	58	89	33	27
9	40	98	188	653	337	1,050	213	117	54	80	34	27
10	35	102	172	522	312	707	219	107	80	73	33	27
11	34	100	150	570	300	474	304	97	91	69	33	43
12	34	89	134	640	282	382	358	93	91	64	32	43
13	41	87	123	774	246	486	273	89	73	61	35	31
14	106	89	114	941	246	542	261	88	65	59	34	29
15	197	84	108	743	210	510	231	95	59	58	32	29
16	108	78	102	534	195	452	208	105	56	56	31	28
17	93	73	95	421	182	372	192	93	53	52	31	29
18	75	73	91	344	172	340	180	86	50	50	29	56
19	132	110	87	291	168	358	162	82	48	48	28	33
20	108	119	89	255	228	354	178	82	46	47	27	27
21	87	175	110	231	225	334	162	86	46	44	27	27
22	73	345	89	205	219	300	148	84	44	43	27	27
23	66	250	96	208	228	294	138	77	44	43	28	28
24	58	186	148	195	205	294	133	72	46	44	28	27
25	54	152	127	188	202	300	131	70	43	48	29	31
26	52	173	123	178	195	300	126	73	42	43	31	43
27	51	298	438	180	282	288	120	72	43	40	44	35
28	56	238	844	188	404	270	115	65	149	38	36	29
29	50	183	334	258	-----	255	109	62	80	38	30	28
30	50	158	379	315	-----	291	105	59	65	38	29	28
31	47	-----	285	315	-----	285	-----	59	-----	37	28	-----
TOTAL	1,987	4,138	6,224	13,342	6,641	11,357	5,748	2,939	1,871	2,345	993	921
MEAN	64.1	138	201	430	237	366	192	94.8	62.4	75.6	32.0	30.7
MAX	197	345	844	941	404	1,050	358	178	149	315	44	56
MIN	26	46	87	178	168	205	105	59	42	37	27	27
CFSM	1.51	3.25	4.74	10.1	5.59	8.63	4.53	2.24	1.47	1.78	.75	.72
IN-	1.74	3.63	5.46	11.71	5.83	9.96	5.04	2.58	1.64	2.06	.87	.81
AC-FT	3,940	8,210	12,350	26,440	13,178	22,530	11,400	5,830	3,710	4,650	1,970	1,830
CAL YR 1965	TOTAL 53,969	MEAN 148	MAX 2,040	MIN 24	CFSM 3.49	IN 47.35	AC-FT 107,000					
WTR YR 1966	TOTAL 58,506	MEAN 160	MAX 1,050	MIN 26	CFSM 3.77	IN 51.33	AC-FT 116,000					

12024000 SOUTH FORK NEWAUKUM RIVER NEAR ONALASKA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	97	534	560	492	287	201	162	79	47	26	20
2	36	88	570	440	443	284	191	155	91	44	25	24
3	29	80	530	540	404	248	185	148	74	42	24	22
4	28	77	698	612	429	224	190	140	69	40	24	20
5	27	97	644	544	394	203	188	138	64	40	25	20
6	27	103	546	454	344	190	170	138	64	39	27	20
7	31	88	478	398	302	175	162	138	61	39	30	20
8	31	80	390	412	269	190	158	140	58	38	28	20
9	37	86	327	390	251	260	175	138	55	38	26	20
10	33	105	376	401	236	236	162	125	55	37	24	24
11	31	103	470	636	248	218	152	118	55	36	23	40
12	52	200	716	608	236	203	148	112	52	35	22	25
13	53	225	1,700	1,020	384	195	242	110	49	35	22	22
14	39	407	1,060	932	344	185	212	103	49	35	22	20
15	36	486	648	784	359	302	188	101	47	32	22	20
16	35	390	516	648	374	338	188	112	46	32	22	20
17	42	312	450	532	612	341	175	118	44	32	21	20
18	33	249	401	457	689	335	215	114	43	32	21	20
19	40	225	454	906	502	302	236	110	42	35	21	20
20	210	190	540	1,140	404	290	209	107	46	37	21	19
21	198	165	422	806	347	272	200	110	89	36	22	20
22	594	145	356	600	302	311	215	101	248	32	22	19
23	372	142	311	482	275	347	242	94	121	30	21	19
24	128	126	317	398	254	329	206	84	86	30	21	20
25	155	251	374	341	248	317	224	79	72	28	21	19
26	165	243	317	359	224	317	233	74	64	30	20	19
27	162	267	284	916	212	296	218	74	62	30	20	18
28	131	234	281	1,480	251	281	200	77	56	28	20	18
29	126	365	1,060	1,060	269	185	192	54	27	20	20	20
30	124	558	350	846	-----	257	172	110	49	27	20	27
31	105	-----	344	600	-----	230	-----	88	-----	27	20	-----
TOTAL	3,258	6,038	15,769	20,302	9,829	8,232	5,848	3,510	2,034	1,070	703	635
MEAN	105	201	509	655	351	266	195	113	67.8	34.5	22.7	21.2
MAX	594	558	1,700	1,480	689	347	242	162	248	47	30	40
MIN	27	77	281	341	212	175	148	74	42	27	20	18
CFSM	2.48	4.74	12.0	15.4	8.28	6.27	4.60	2.67	1.60	.81	.54	.50
IN.	2.86	5.30	13.84	17.81	8.62	7.22	5.13	3.08	1.78	.94	.62	.56
AC-FT	6,460	11,980	31,280	40,270	19,500	16,330	11,600	6,960	4,030	2,120	1,390	1,260
CAL YR 1966	TOTAL 71,222	MEAN 195	MAX 1,700	MIN 27	CFSM 4.60	IN 62.49	AC-FT 141,300					
WTR YR 1967	TOTAL 77,228	MEAN 212	MAX 1,700	MIN 18	CFSM 5.00	IN 67.76	AC-FT 153,200					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	123	195	308	188	218	239	185	178	52	28	107
2	48	136	243	416	245	195	226	105	632	48	28	92
3	129	92	394	230	712	180	203	140	377	47	28	79
4	84	82	418	212	1,160	178	198	138	248	46	28	70
5	51	76	460	203	608	188	242	148	192	44	30	62
6	47	70	362	178	426	165	239	162	160	43	30	60
7	42	72	329	178	341	155	236	152	142	42	27	56
8	36	79	272	175	287	148	215	142	130	40	27	54
9	32	160	299	432	254	135	195	132	116	39	26	52
10	30	350	432	404	227	125	180	123	105	39	25	52
11	59	305	552	296	206	123	170	116	105	39	24	51
12	62	209	368	287	190	145	152	114	99	49	24	52
13	113	160	275	374	175	138	140	112	94	42	24	49
14	160	148	227	429	160	140	187	103	90	44	40	111
15	94	130	198	492	148	284	302	97	82	47	37	158
16	67	114	180	460	140	454	242	92	77	42	32	162
17	54	103	165	401	158	359	209	86	74	39	30	177
18	57	101	152	347	462	284	195	82	69	37	45	387
19	67	94	140	338	1,520	236	188	86	67	39	90	290
20	51	86	128	436	1,040	206	178	135	66	39	54	227
21	121	82	125	540	864	185	175	125	62	36	42	178
22	132	81	182	404	676	165	158	121	81	35	39	152
23	150	79	218	335	774	178	180	114	67	35	174	175
24	112	148	263	296	616	180	165	107	61	32	209	145
25	182	130	401	266	464	209	180	101	58	32	192	128
26	138	114	450	242	374	209	188	95	55	32	190	114
27	290	105	412	206	314	364	172	90	55	30	209	103
28	432	105	365	185	275	636	162	86	61	30	356	94
29	269	192	305	178	245	443	158	81	66	28	242	90
30	182	206	257	170	-----	335	185	79	56	28	160	84
31	145	-----	244	172	-----	275	-----	77	-----	28	118	-----
TOTAL	3,490	3,897	9,104	9,437	13,420	7,255	5,857	3,581	3,725	1,203	2,608	3,611
MEAN	113	130	294	304	463	234	195	116	124	38.8	84.1	120
MAX	432	350	552	540	1,520	636	302	185	632	52	356	387
MIN	30	70	125	170	140	123	140	77	55	28	24	49
CFSM	2.67	3.07	6.93	7.17	10.9	5.52	4.60	2.74	2.92	.92	1.98	2.83
IN.	3.06	3.42	7.99	8.28	11.77	6.37	5.14	3.16	3.27	1.06	2.29	3.17
AC-FT	6,920	7,730	18,060	18,720	26,620	14,390	11,620	7,100	7,390	2,390	5,170	7,160
CAL YR 1967	TOTAL 68,654	MEAN 188	MAX 1,480	MIN 18	CFSM 4.43	IN 60.23	AC-FT 136,200					
WTR YR 1968	TOTAL 67,188	MEAN 184	MAX 1,520	MIN 24	CFSM 4.34	IN 58.95	AC-FT 133,300					

CHEHALIS RIVER BASIN

12024000 SOUTH FORK NEWAUKUM RIVER NEAR ONALASKA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	152	296	415	103	168	284	168	150	180	46	30
2	76	218	287	422	99	170	323	165	125	155	46	32
3	72	227	794	429	121	198	269	155	107	142	44	32
4	88	195	936	608	162	198	269	145	99	135	44	32
5	74	170	648	1,230	175	310	266	138	94	125	47	32
6	99	152	485	975	148	353	248	140	90	112	44	30
7	99	149	401	1,080	138	290	227	148	88	103	43	28
8	90	278	436	689	347	251	206	160	82	97	43	28
9	88	368	510	564	482	224	198	162	77	92	40	28
10	203	299	828	510	401	203	195	155	76	90	40	28
11	257	781	810	429	680	190	182	145	74	97	39	28
12	360	680	608	350	532	178	198	135	72	90	40	28
13	446	502	474	311	394	172	212	128	69	82	40	32
14	356	398	422	281	329	170	190	118	66	77	38	28
15	509	350	387	254	317	180	170	107	64	72	38	28
16	450	308	368	236	350	217	158	101	61	69	39	30
17	344	269	326	215	335	461	185	97	58	67	37	50
18	290	269	368	195	305	544	272	99	56	64	37	69
19	269	245	320	185	287	492	284	199	56	62	38	209
20	314	227	278	170	269	398	266	155	56	60	37	136
21	272	224	248	158	251	353	230	121	56	60	35	81
22	297	305	236	148	236	335	215	107	98	58	34	116
23	218	308	293	130	224	314	245	101	200	55	32	214
24	195	305	482	125	206	284	215	99	221	54	34	168
25	198	272	394	120	192	266	192	92	254	52	35	121
26	175	254	335	119	182	266	170	90	284	51	34	97
27	198	287	296	116	170	278	160	92	266	51	38	84
28	145	293	254	112	168	266	182	95	278	49	37	76
29	158	311	221	107	-----	257	192	177	260	48	34	70
30	190	308	158	105	-----	266	175	328	218	47	32	158
31	169	-----	250	107	-----	296	-----	195	-----	47	32	-----
TOTAL	6,694	9,100	13,189	10,895	7,603	8,548	6,578	4,317	3,755	2,543	1,197	2,103
MEAN	216	303	425	351	272	276	219	139	125	82.0	38.6	70.1
MAX	509	781	936	1,230	680	544	323	328	284	180	47	214
MIN	72	145	178	105	99	168	158	90	56	47	32	28
CFSM	5.09	7.15	10.0	6.28	6.42	6.51	5.17	3.28	2.95	1.93	0.91	1.65
IN-	5.87	7.98	11.57	9.56	6.67	7.50	5.77	3.79	3.29	2.23	1.05	1.85
AC-FT	13,280	18,050	26,140	21,610	15,080	16,950	13,050	8,560	7,450	5,040	2,370	4,170

CAL YR 1968 TOTAL 79,680 MEAN 218 MAX 1,520 MIN 24 CFSM 5.14 IN 69.91 AC-FT 158,000
 WTA YR 1969 TOTAL 76,522 MEAN 210 MAX 1,230 MIN 28 CFSM 4.95 IN 67.14 AC-FT 151,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	239	76	88	170	648	140	107	200	69	37	26	23
2	224	72	84	156	913	135	103	152	64	36	27	23
3	169	72	88	155	454	125	94	180	62	35	27	35
4	128	227	112	142	377	120	103	170	60	34	26	32
5	105	308	95	128	344	120	152	142	60	33	26	28
6	92	429	95	121	311	180	224	118	58	33	25	55
7	95	275	95	118	305	280	230	130	55	32	27	121
8	324	212	130	128	287	230	190	168	56	31	28	52
9	398	172	168	148	266	195	357	182	64	30	26	39
10	272	145	158	132	245	170	436	198	61	29	24	33
11	206	130	178	123	220	160	308	190	58	29	24	29
12	165	114	326	148	205	170	242	218	56	29	24	27
13	140	103	317	349	190	170	203	200	52	29	23	27
14	121	99	401	1,390	180	265	175	178	52	29	23	26
15	107	99	320	720	400	290	155	158	60	28	23	26
16	97	110	278	548	840	300	145	145	60	28	23	25
17	90	90	251	552	740	250	132	130	55	29	23	27
18	84	92	251	923	640	210	142	116	49	27	23	52
19	81	90	245	1,040	500	180	192	110	46	27	22	67
20	79	121	251	838	420	162	158	103	43	27	22	60
21	74	155	371	743	335	158	150	97	43	27	23	47
22	72	132	408	684	280	142	150	97	42	27	22	112
23	70	152	624	664	240	138	150	94	40	27	22	114
24	72	155	499	664	210	150	242	90	39	26	22	69
25	69	140	384	892	190	128	287	84	38	29	23	52
26	66	125	350	1,090	170	121	263	81	38	34	22	44
27	81	114	287	1,340	155	114	227	79	38	39	22	39
28	125	107	254	838	150	110	198	76	38	29	22	37
29	94	99	227	604	-----	107	206	90	38	28	22	34
30	86	94	203	468	-----	99	221	86	38	27	22	33
31	79	-----	188	492	-----	95	-----	74	-----	26	22	-----
TOTAL	4,102	4,309	7,726	16,510	9,815	5,214	5,942	4,176	1,534	931	736	1,388
MEAN	132	144	249	533	351	168	198	135	51.1	30.0	23.7	46.3
MAX	398	429	624	1,390	840	300	436	218	69	39	28	121
MIN	66	72	84	118	150	95	94	74	38	26	22	23
CFSM	3.11	3.40	5.87	12.6	8.28	3.96	4.67	3.18	1.21	0.71	0.56	1.09
IN-	3.40	3.78	6.78	16.49	8.41	6.57	5.21	3.46	1.35	0.82	0.65	1.22
AC-FT	8,140	8,550	15,320	32,750	19,470	10,340	11,790	8,280	3,040	1,850	1,460	2,750

CAL YR 1969 TOTAL 63,676 MEAN 174 MAX 1,230 MIN 28 CFSM 4.10 IN 55.87 AC-FT 126,300
 WTA YR 1970 TOTAL 62,383 MEAN 171 MAX 1,390 MIN 22 CFSM 4.03 IN 54.73 AC-FT 123,700

NOTE.--NO GAGE-HEIGHT RECORD FEB. 11 TO MAR. 19.

12024500 NORTH FORK NENAUKUM RIVER NEAR FOREST, WASH.

LOCATION.--Lat 46°39'16", long 122°46'44", in NW¼SW¼ sec.35, T.14 N., R.1 W., Lewis County, on left bank 1.4 miles upstream from Lucas Creek, 5.4 miles northeast of Forest, and at mile 6.6.

DRAINAGE AREA.--31.5 sq mi.

PERIOD OF RECORD.--July to November 1944, July 1957 to September 1966 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 380 ft (from topographic map). July 25 to Nov. 6, 1944, at site 150 ft upstream at different datum.

AVERAGE DISCHARGE.--9 years (1957-66), 105 cfs (76,020 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water year 1966 are contained in the following table:

Annual maximum discharge (*), peak discharges above base (600 cfs), and annual minimum discharge

Ntr yr	Date	Maximum Time	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Jan. 5, 1966	2100	*1,000	3.92	Aug. 21, 1966		2.6	.92
	Mar. 9, 1966	1100	850	3.60				

Period of record: Maximum discharge, 2,770 cfs Jan. 25, 1964 (gage height, 6.44 ft); minimum, 1.2 cfs Aug. 20, about 26, 1958.

REMARKS.--Records excellent. Cities of Chehalis and Centralia divert about 8 cfs above station for municipal use. No regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	13	64	137	146	183	131	45	22	20	18	4.7
2	4.3	13	66	220	130	148	118	44	31	37	9.5	5.9
3	4.3	43	60	157	114	140	110	41	30	142	7.7	6.8
4	5.3	90	140	154	114	132	102	39	27	80	6.2	5.4
5	32	75	104	403	127	143	96	37	24	54	6.2	4.4
6	55	55	88	616	132	160	91	60	22	41	7.2	4.4
7	34	43	92	508	157	154	87	48	21	34	6.8	5.0
8	16	48	90	488	154	278	85	39	21	29	6.4	4.4
9	13	43	77	356	201	690	93	37	19	26	7.7	4.1
10	11	42	75	282	195	439	89	34	30	24	6.8	6.4
11	9.0	51	60	300	186	287	133	33	27	23	6.8	18
12	9.0	38	55	332	186	236	178	34	28	22	5.4	12
13	15	36	51	384	157	236	145	33	22	21	5.4	7.2
14	35	37	49	484	146	263	142	33	21	20	7.7	7.7
15	70	36	44	364	124	340	125	41	18	21	6.4	7.7
16	32	32	42	275	117	322	110	32	17	21	5.4	6.8
17	24	27	38	227	109	248	100	41	16	18	5.9	7.7
18	20	27	38	195	102	229	89	35	16	17	4.7	30
19	40	115	37	165	100	248	88	33	16	16	3.8	12
20	30	86	37	146	122	263	89	31	15	16	3.2	8.6
21	22	102	55	132	119	251	88	34	16	13	2.9	14
22	18	183	43	122	114	229	73	33	16	12	2.9	11
23	16	122	48	119	114	218	69	30	16	12	3.8	12
24	15	88	122	109	104	222	64	28	16	15	4.4	8.7
25	13	66	86	109	104	222	68	27	15	18	4.4	9.5
26	13	72	81	104	104	204	58	26	14	14	5.9	18
27	13	135	331	187	157	187	54	26	17	12	14	12
28	18	102	512	107	230	168	52	24	68	11	12	9.0
29	14	79	286	140	-----	150	58	23	26	11	6.8	7.2
30	14	75	208	162	-----	156	48	22	28	11	6.4	6.8
31	13	-----	148	171	-----	142	-----	22	-----	11	5.4	-----
TOTAL	633.6	1,974	3,227	7,555	3,865	7,288	2,803	1,885	647	842	202.1	276.9
MEAN	20.4	65.8	104	244	138	235	93.4	35.6	22.2	27.2	6.32	9.23
MAX	70	183	512	616	230	690	178	68	68	142	14	30
MIN	4.3	13	37	104	100	132	40	22	14	11	2.9	4.1
CF5M	.65	2.09	3.30	7.75	4.38	7.46	2.97	1.11	.70	.88	.21	.29
IN.	.75	2.33	3.81	8.92	4.56	8.61	3.31	1.28	.79	.99	.24	.37
AC-FT	1,260	3,920	6,408	14,990	7,670	14,480	5,560	2,150	1,320	1,678	401	546

CAL YR 1965 TOTAL 29,610.1 MEAN 81.1 MAX 925 MIN 2.3 CF5M 2.57 IN 34.97 AC-FT 58,730

NTR YR 1966 TOTAL 30,418.6 MEAN 83.3 MAX 690 MIN 2.9 CF5M 2.64 IN 35.92 AC-FT 60,340

CHEHALIS RIVER BASIN

12025000 NEWAUKUM RIVER NEAR CHEHALIS, WASH.

LOCATION.--Lat 46°37'13", long 122°56'38", in SW¼SW¼ sec.9, T.13 N., R.2 W., Lewis County, on left bank at highway bridge, 3.0 miles southeast of Chehalis and at mile 4.1.

DRAINAGE AREA.--155 sq mi.

PERIOD OF RECORD.--March 1929 to September 1931, July 1942 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 190 ft (from topographic map). Prior to Oct. 1, 1929, non-recording gage at present site at datum 1.0 ft higher. Oct. 1, 1929, to July 5, 1962, nonrecording gage and crest-stage gage at present site and datum.

AVERAGE DISCHARGE.--30 years, 502 cfs (363,700 acre-ft per year), unadjusted.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (4,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	0330	*4,520	8.79	Feb. 4, 1968	-	-	-	Jan. 7, 1969	1000	4,060	8.07
				Feb. 19, 1968	-	*4,810	9.14				
Dec. 13, 1966	1930	5,440	9.97					Jan. 14, 1970	1200	*5,300	9.80
Jan. 20, 1967	0100	*5,450	9.99	Dec. 4, 1968	0300	*4,300	8.41	Jan. 27, 1970	0130	4,920	9.30
Jan. 28, 1967	1030	4,660	8.93	Dec. 10, 1968	1830	4,020	8.02				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 9, 1966	26	.32	1969	Sept. 12, 1969	27	.39
1967	Aug. 29, 1967	12	.16	1970	Aug. 31, 1970	16	.16
1968	Aug. 13, 1968	28	.34				

Period of record: Maximum discharge, 7,970 cfs Jan. 25, 1964 (gage height, 12.97 ft), from rating curve extended above 4,900 cfs; maximum gage height, 13.62 ft Dec. 9, 1953; minimum discharge, 12 cfs Sept. 13, 14, 1949, Aug. 29, 1967.

REMARKS.--Records excellent. Cities of Chehalis and Centralia divert about 8 cfs from North Fork Newaukum River for municipal use. No regulation. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1012: 1943. WSP 1316: 1929-30(M), 1950(M). WSP 1716: Drainage area. WSP 1932: 1931(M), 1945-49, 1954(M), 1956(P), 1958(M), 1959-60.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	61	321	912	627	960	510	198	102	99	56	36
2	36	61	365	1,940	537	770	430	190	111	112	54	34
3	34	83	321	1,320	470	708	414	190	125	466	51	36
4	35	355	616	1,170	445	640	376	195	117	414	50	32
5	60	305	564	1,750	510	614	355	201	109	261	50	29
6	104	265	465	3,640	510	614	344	288	103	198	47	28
7	146	209	501	2,650	432	614	338	285	102	161	45	28
8	79	216	560	2,270	622	1,070	327	222	100	138	44	28
9	65	209	457	1,860	874	3,260	344	195	98	122	45	27
10	60	189	429	1,410	982	2,210	390	180	109	112	45	28
11	54	223	365	1,410	882	1,390	492	163	130	108	45	48
12	51	186	309	1,480	945	1,050	860	156	145	102	42	73
13	57	174	273	1,770	722	1,120	658	152	122	97	39	54
14	75	189	253	2,250	658	1,280	627	145	112	94	48	46
15	334	180	230	1,850	555	1,710	564	152	106	94	44	46
16	206	165	209	1,340	488	1,600	482	182	99	92	40	45
17	136	146	192	1,050	445	1,160	426	170	95	89	39	44
18	114	139	183	865	405	975	376	149	94	83	36	81
19	154	381	171	708	373	1,070	338	139	91	82	32	77
20	174	429	165	609	445	1,350	376	136	88	81	31	56
21	129	457	234	542	453	1,480	386	138	89	77	33	50
22	106	804	206	492	417	1,200	327	143	89	73	29	49
23	94	686	199	488	437	1,000	299	134	86	71	30	54
24	84	474	660	470	405	910	279	126	87	72	32	52
25	78	397	573	445	385	840	267	122	85	81	35	53
26	73	337	501	409	377	760	252	120	80	76	38	63
27	73	632	1,740	397	576	681	237	122	77	70	50	79
28	88	542	3,410	401	1,110	609	228	115	187	65	68	58
29	78	421	2,090	501	-----	542	216	111	147	62	49	51
30	66	373	1,510	681	-----	573	207	107	109	57	43	55
31	65	-----	1,100	740	-----	591	-----	103	-----	56	40	-----
TOTAL	2,946	9,288	19,172	37,820	16,287	33,351	11,725	5,029	3,194	3,765	1,330	1,440
MEAN	95.0	310	618	1,220	582	1,076	391	162	106	121	42.9	48.0
MAX	334	804	3,410	3,640	1,110	3,260	860	288	187	466	68	81
MIN	34	61	165	397	373	542	207	103	77	56	29	27
AC-FT	5,840	18,420	38,030	75,020	32,310	66,150	23,260	9,980	6,340	7,470	2,640	2,860

CAL YR 1965 TOTAL 136,179 MEAN 373 MAX 5,100 MIN 22 AC-FT 270,100
WTR YR 1966 TOTAL 145,347 MEAN 398 MAX 3,640 MIN 27 AC-FT 288,300

12025000 NEWAUKUM RIVER NEAR CHEHALIS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	152	1,620	1,360	1,360	636	528	321	129	73	33	20
2	47	139	1,960	1,120	1,180	672	465	301	125	67	32	22
3	51	138	1,750	1,400	1,030	582	420	282	125	62	29	25
4	45	122	2,520	2,240	1,020	519	411	271	114	59	28	27
5	40	128	2,230	2,000	940	465	492	253	105	57	27	24
6	40	185	1,680	1,580	820	424	406	242	99	57	32	23
7	45	152	1,560	1,280	715	384	367	239	97	56	38	22
8	80	139	1,330	1,150	645	367	337	236	94	55	42	22
9	60	130	1,000	1,030	573	573	354	239	91	55	36	23
10	50	163	1,010	935	542	681	346	225	89	55	30	29
11	45	156	1,110	1,710	578	609	313	206	89	52	28	53
12	65	419	1,880	1,490	573	546	286	206	87	49	27	61
13	85	490	4,580	2,330	1,360	501	614	194	84	49	26	43
14	60	1,140	3,320	2,230	1,270	519	627	180	81	49	25	36
15	58	1,380	1,900	1,840	1,330	1,000	510	171	78	47	24	32
16	56	1,040	1,390	1,650	1,180	1,140	483	171	74	45	22	30
17	70	820	1,160	1,310	1,440	1,020	460	174	71	45	22	29
18	60	618	1,040	1,120	1,780	1,020	736	171	68	44	20	28
19	57	524	1,100	2,720	1,340	925	860	166	65	48	20	28
20	279	462	1,550	4,600	1,030	815	658	158	65	53	20	27
21	380	390	1,140	2,870	855	700	550	156	84	53	21	27
22	951	334	920	1,990	725	754	510	150	608	48	21	26
23	1,040	302	800	1,530	645	1,010	519	143	298	43	20	25
24	442	276	740	1,220	578	985	447	136	169	41	20	25
25	285	419	1,040	1,020	546	885	438	127	125	40	20	25
26	243	573	895	1,090	492	840	537	118	108	40	18	25
27	279	560	760	2,400	447	770	456	114	101	41	18	25
28	225	542	725	4,320	456	705	429	116	92	40	19	24
29	190	454	890	3,120	-----	672	380	134	84	36	17	24
30	210	1,490	875	2,540	-----	658	350	185	78	34	17	29
31	170	-----	795	1,720	-----	609	-----	150	-----	34	19	-----
TOTAL	5,751	13,837	45,270	58,915	25,450	21,986	14,289	5,935	3,577	1,527	771	859
MEAN	186	461	1,460	1,900	909	709	476	191	119	49.3	24.9	28.6
MAX	1,040	1,490	4,580	4,600	1,780	1,140	860	321	608	73	42	61
MIN	40	122	725	935	447	367	286	114	65	34	17	20
AC-FT	11,410	27,450	89,790	116,900	50,480	43,610	28,340	11,770	7,090	3,030	1,530	1,700
CAL YR 1966	TOTAL 178,799	MEAN 490	MAX 4,580	MIN 27	AC-FT 354,600							
WTR YR 1967	TOTAL 198,167	MEAN 543	MAX 4,600	MIN 17	AC-FT 393,100							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	255	726	740	500	532	626	420	375	118	47	189
2	106	236	1,070	620	1,000	478	590	338	2,280	110	47	184
3	148	203	1,410	540	2,000	428	541	298	1,330	104	47	152
4	110	181	1,580	500	3,200	424	487	276	785	102	50	135
5	70	166	1,700	450	2,000	474	631	283	559	99	48	122
6	67	152	1,400	420	1,300	428	604	310	420	98	42	115
7	63	147	1,150	420	1,000	374	577	298	342	93	37	111
8	60	159	940	410	800	350	514	272	298	90	37	105
9	56	328	1,100	1,400	680	318	460	249	266	87	36	102
10	52	861	1,600	1,100	580	290	410	233	239	87	35	104
11	81	942	1,950	920	500	283	379	217	242	87	31	102
12	90	604	1,150	900	450	514	342	211	226	98	31	108
13	130	438	680	1,000	380	460	314	223	206	98	32	104
14	160	374	572	1,200	350	420	322	206	200	90	55	133
15	125	330	487	1,700	320	780	695	194	181	100	87	242
16	90	280	438	1,650	320	1,550	595	184	168	94	70	298
17	78	245	397	1,490	340	1,190	487	173	159	86	67	247
18	90	233	358	1,160	1,300	885	433	163	150	80	71	900
19	100	223	314	970	4,000	680	424	163	141	86	140	712
20	90	203	283	1,000	2,800	572	402	290	141	85	120	559
21	130	189	276	1,280	2,650	487	384	433	135	77	96	410
22	150	181	473	1,030	1,970	428	380	402	159	72	86	326
23	190	178	568	825	2,150	428	410	370	152	66	181	334
24	140	245	604	703	1,730	482	390	318	135	65	477	314
25	320	294	780	631	1,250	656	420	283	127	63	310	255
26	220	252	960	595	985	662	430	249	118	58	438	226
27	800	229	935	520	815	1,030	360	217	118	56	424	200
28	1,100	217	875	460	690	2,020	322	206	120	52	708	184
29	600	456	726	410	600	1,360	298	189	139	47	541	171
30	350	680	600	400	-----	960	322	176	127	47	314	159
31	300	-----	560	400	-----	750	-----	168	-----	47	223	-----
TOTAL	6,122	9,486	26,662	25,844	36,660	20,693	13,549	8,012	10,038	2,542	4,928	7,303
MEAN	197	316	860	834	1,264	668	452	258	335	82.0	159	243
MAX	1,108	942	1,950	1,700	4,000	2,020	695	433	2,280	118	708	900
MIN	52	147	276	400	320	283	298	163	118	47	31	102
AC-FT	12,140	18,820	52,860	51,260	72,720	41,040	26,870	15,890	19,910	5,040	9,770	14,490
CAL YR 1967	TOTAL 175,579	MEAN 481	MAX 4,600	MIN 17	AC-FT 348,300							
WTR YR 1968	TOTAL 171,839	MEAN 470	MAX 4,000	MIN 31	AC-FT 340,800							

NOTE.--NO GAGE-HEIGHT RECORD JAN. 27 TO FEB. 20.

12025000 NEWAUKUM RIVER NEAR CHEHALIS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
1	152	362	940	1,100	290	388	480	319	274	348	63
2	147	487	815	1,220	283	380	635	305	221	280	61
3	141	595	1,760	1,330	433	420	568	268	188	256	59
4	154	487	3,340	1,530	740	432	536	274	165	242	57
5	166	410	2,200	3,090	995	610	568	249	150	224	64
6	176	358	1,580	2,760	703	870	509	235	145	195	63
7	200	342	1,220	3,560	572	680	448	235	143	176	57
8	178	823	1,360	2,860	1,830	576	404	255	138	162	57
9	163	1,530	1,490	2,040	3,060	488	374	228	127	145	54
10	296	990	3,020	2,220	2,100	460	360	228	120	138	52
11	464	2,580	2,810	2,050	3,020	408	340	218	120	148	51
12	728	2,620	1,960	1,400	2,180	384	340	200	114	145	52
13	1,240	1,660	1,440	1,140	1,480	364	360	191	112	131	54
14	940	1,190	1,210	1,100	1,150	352	333	179	104	124	51
15	1,550	990	1,070	1,020	1,030	352	305	168	100	116	44
16	1,410	915	1,160	940	1,120	412	284	160	95	110	48
17	995	740	965	875	1,060	1,030	305	150	92	104	43
18	975	730	1,120	685	945	1,134	343	84	99	84	41
19	760	649	980	636	810	1,140	612	320	81	94	42
20	1,050	568	790	550	725	945	608	344	81	88	42
21	865	541	676	487	648	790	504	235	81	85	41
22	730	785	622	424	599	705	440	188	108	82	39
23	582	835	880	358	568	662	509	168	330	66	50
24	487	815	1,470	338	518	568	444	158	468	75	36
25	469	770	1,240	310	480	514	392	152	404	74	39
26	442	644	965	290	444	488	344	150	568	71	42
27	379	716	850	298	404	492	316	148	522	67	42
28	330	805	703	280	392	478	335	508	435	66	50
29	342	910	582	260	-----	452	404	177	568	65	43
30	474	1,040	490	264	-----	444	348	683	468	63	38
31	438	-----	530	276	-----	480	-----	388	-----	61	35
TOTAL	17,425	26,887	40,238	35,093	28,539	18,022	12,992	7,304	6,824	4,113	1,496
MEAN	562	866	1,288	1,132	919	581	433	234	227	133	48.3
MAX	1,550	2,620	3,340	3,560	3,060	1,280	635	683	635	348	64
MIN	141	342	490	260	283	352	284	143	81	61	35
AC-FT	34,560	53,330	79,810	69,610	56,610	35,750	25,770	14,490	13,540	8,160	2,970
CAL YR 1968	TOTAL 214,119		MEAN 585	MAX 4,000	MIN 31	AC-FT 424,700					
WTR YR 1969	TOTAL 201,687		MEAN 553	MAX 3,560	MIN 28	AC-FT 400,000					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
1	348	134	176	396	1,540	338	221	448	145	66	34
2	400	127	168	356	1,240	314	236	392	126	65	37
3	270	122	158	348	1,060	306	212	364	122	60	34
4	197	365	210	340	900	282	209	334	116	55	32
5	160	965	204	291	775	266	275	306	112	52	30
6	136	705	191	244	730	445	352	282	107	52	27
7	127	765	249	249	705	775	464	263	106	48	25
8	441	540	322	296	640	548	376	286	106	45	30
9	985	420	514	305	580	440	595	400	108	42	30
10	648	390	460	326	528	376	1,120	484	124	40	25
11	432	298	604	277	484	362	750	544	112	38	22
12	326	256	1,970	288	440	373	568	616	106	37	19
13	252	235	1,250	1,130	432	408	468	540	101	36	18
14	210	210	1,700	4,490	392	731	392	436	98	35	18
15	185	200	1,270	2,480	1,090	755	345	359	102	33	18
16	162	218	1,000	1,880	2,710	805	328	324	112	30	18
17	150	218	995	2,190	2,200	735	296	306	102	34	18
18	136	197	910	2,550	2,200	580	289	272	95	32	19
19	129	182	890	3,180	1,480	500	492	245	90	29	19
20	122	185	895	2,490	1,100	432	380	236	82	29	19
21	118	412	1,340	2,280	875	392	348	218	79	27	19
22	114	322	1,550	1,900	700	359	331	212	76	30	19
23	110	319	2,540	1,920	604	328	317	221	70	30	18
24	110	388	1,870	1,910	524	373	520	67	23	29	18
25	114	326	1,250	3,200	464	314	815	182	67	30	19
26	102	288	1,030	3,540	424	296	790	170	67	42	22
27	108	260	800	4,230	384	272	632	167	66	62	19
28	198	232	671	2,530	359	263	516	155	67	60	57
29	179	210	581	1,660	-----	248	627	161	67	62	57
30	158	194	509	1,240	-----	236	508	191	66	38	18
31	145	-----	444	1,160	-----	221	-----	150	-----	35	16
TOTAL	7,272	9,653	26,721	49,658	25,560	13,070	13,637	9,469	2,864	1,283	698
MEAN	235	322	862	1,602	915	422	495	305	95.3	41.4	22.5
MAX	985	965	2,540	4,490	2,710	805	1,120	616	145	66	64.9
MIN	102	122	158	249	359	221	209	150	66	27	16
AC-FT	14,428	19,150	53,000	98,500	50,700	25,920	27,850	18,780	5,680	2,540	1,380
CAL YR 1969	TOTAL 160,783		MEAN 441	MAX 3,560	MIN 28	AC-FT 318,900					
WTR YR 1970	TOTAL 161,892		MEAN 444	MAX 4,490	MIN 16	AC-FT 321,100					

12025300 SALZER CREEK NEAR CENTRALIA, WASH.

LOCATION.--Lat 46°41'31", long 122°54'26", in NE¼NE¼ sec.22, T.14 N., R.2 W., Lewis County, on right bank at downstream side of highway bridge, 500 ft downstream from unnamed tributary, 2.4 miles east of KEIA Radio Tower in Centralia, and at mile 3.9.

DRAINAGE AREA.--12.6 sq mi.

PERIOD OF RECORD.--April 1968 to September 1970.

GAGE.--Water-stage recorder. Wooden control since July 23, 1968. Altitude of gage is 185 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (230 cfs), April 1968 to September 1970

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
June 2, 1968	1730	*128	5.40	Jan. 7, 1969	1400	246	6.86	Jan. 14, 1970	0630	*297	7.58
				Feb. 9, 1969	0400	256	7.00	Jan. 17, 1970	1130	235	6.70
Dec. 4, 1968	0630	*275	7.27					Jan. 27, 1970	0030	291	7.50
Dec. 10, 1968	2230	266	7.15	Dec. 12, 1969	1100	278	7.31	Feb. 16, 1970	0900	263	7.10

Annual minimum discharge, April 1968 to September 1970

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1968	Aug. 12, 13, 1968	.03	al.12	1970	July 24, 1970	.01	bl.10
1969	Aug. 24, Sept. 8, 1969	.02	1.12				

a Occurred July 22, 1968.

b Result of water withdrawal from gage pool.

Period of record: Maximum discharge, 297 cfs Jan. 14, 1970 (gage height, 7.58 ft); minimum, 0.01 cfs July 24, 1970 (gage height, 1.10 ft), result of temporary regulation.

REMARKS.--Records excellent. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, APRIL TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							35	14	16	1.1	.08	4.0
2							30	11	107	.84	.08	4.3
3							25	8.8	77	.78	.08	3.3
4							22	7.8	35	.67	.08	2.6
5							21	8.0	24	.57	.08	2.1
6							20	7.5	16	.52	.08	1.9
7							18	6.5	12	.48	.08	1.6
8							17	5.2	9.3	.44	.08	1.5
9							16	4.6	6.9	.37	.14	1.5
10							15	4.3	5.4	.37	.08	1.3
11							14	3.7	5.2	.34	.08	1.2
12							13	3.7	4.4	.40	.03	1.5
13							10	4.3	4.2	.37	.03	1.5
14							13	3.6	4.6	.34	.38	2.4
15							24	3.1	3.3	.40	.32	4.8
16							24	2.6	2.6	.37	.32	6.3
17							21	2.4	2.3	.31	.32	8.1
18							19	2.1	2.0	.34	.32	38
19							18	3.0	1.7	.40	.58	30
20							16	15	1.5	.44	.72	18
21							16	23	1.4	.37	.65	12
22							14	32	2.5	.34	.58	7.8
23							20	32	2.2	.32	4.8	6.3
24							22	26	1.7	.32	11	9.0
25							22	23	1.4	.26	10	4.2
26							20	18	1.2	.26	15	3.4
27							17	15	1.0	.20	14	3.0
28							14	12	1.0	.14	19	2.6
29							12	9.8	1.1	.14	16	2.3
30							14	7.3	1.2	.26	8.3	2.1
31								5.6		.08	4.9	
TOTAL							562	324.9	355.1	12.54	108.19	184.6
MEAN							18.7	10.5	11.8	.40	3.49	6.15
MAX							35	32	107	1.1	19	38
MIN							10	2.1	1.0	.08	.03	1.2
CFSM							1.48	.83	.94	.03	.20	.49
IN-							1.66	.96	1.05	.04	.32	.55
AC-FT							1.110	.644	.704	.25	.215	.366

12025300 SALZER CREEK NEAR CENTRALIA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	21	60	45	22	12	8.0	10	3.9	5.2	.05	.04
2	1.8	23	46	58	22	11	17	9.5	2.8	3.4	.06	.04
3	1.7	23	110	80	37	11	15	8.5	2.3	2.7	.06	.04
4	2.2	20	250	111	72	17	17	7.8	2.0	2.5	.06	.04
5	2.2	18	167	194	97	18	22	6.9	1.6	2.6	.06	.04
6	3.3	15	114	192	53	24	20	5.8	1.4	2.1	.05	.04
7	4.0	15	78	235	52	22	18	4.8	1.4	1.9	.05	.06
8	3.6	64	115	152	156	19	16	4.1	1.4	1.6	.05	.04
9	3.1	132	94	118	243	17	14	3.4	1.3	1.4	.05	.04
10	3.8	69	196	160	169	15	14	3.1	1.2	1.2	.05	.04
11	6.3	144	229	187	206	13	12	3.0	1.1	1.2	.05	.04
12	15	144	135	104	151	12	11	2.7	1.0	1.1	.05	.03
13	31	73	81	74	89	10	12	2.5	1.0	1.0	.05	.03
14	29	46	54	75	63	9.5	10	2.3	.93	.93	.05	.03
15	59	35	44	94	51	9.5	8.7	2.1	.85	.85	.05	.03
16	65	30	53	86	47	13	8.0	2.0	.77	.69	.05	.03
17	38	27	58	72	45	44	9.7	1.9	.61	.61	.05	.29
18	45	28	73	56	36	62	15	1.8	.61	.53	.05	.93
19	59	26	67	44	30	48	20	3.9	.53	.53	.05	.61
20	59	24	47	35	26	36	25	6.7	.53	.45	.04	.77
21	47	24	36	29	23	27	23	4.3	.45	.45	.06	1.1
22	32	29	33	24	20	23	18	3.0	.69	.53	.05	1.4
23	34	32	52	20	19	23	23	2.5	2.1	.45	.04	2.2
24	18	32	100	18	18	16	20	2.1	3.2	.37	.04	1.2
25	16	30	85	17	17	14	19	1.9	3.2	.22	.05	1.8
26	14	28	57	16	15	12	16	1.9	4.1	.22	.04	1.4
27	12	34	44	16	13	11	14	2.0	4.1	.15	.05	1.1
28	10	34	34	14	12	9.7	14	1.9	5.8	.09	.06	1.2
29	19	49	27	13	13	9.3	13	3.3	9.3	.06	.06	1.2
30	27	66	22	12	-----	8.3	11	9.0	6.9	.06	.05	1.6
31	28	-----	25	16	-----	7.8	-----	6.2	-----	.05	.05	-----
TOTAL	652.9	1,339	2,586	2,367	1,805	572.8	463.4	130.9	65.07	35.14	1.58	18.49
MEAN	21.1	44.6	83.4	76.4	64.5	18.5	15.4	4.22	2.17	1.13	.051	.52
MAX	65	144	250	235	243	62	25	10	7.3	5.2	.06	2.3
MIN	1.7	15	22	12	12	7.8	8.0	1.8	.45	.05	.04	.03
CFSM	1.67	3.54	6.62	6.06	5.12	1.47	1.22	.33	.17	.09	.004	.05
IN-	1.93	3.95	7.63	6.99	5.33	1.69	1.37	.39	.19	.10	.004	.05
AC-FT	1,300	2,660	5,130	4,690	3,580	1,140	919	260	129	70	3.1	37

WTR YR 1969 TOTAL 10,037.28 MEAN 27.5 MAX 250 MIN .03 CFSM 2.18 IN 29.63 AC-FT 19,910

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	3.4	5.4	14	49	9.9	6.2	18	2.2	.12	.05	.05
2	3.8	3.1	5.0	12	42	9.4	6.0	15	1.8	.15	.05	.05
3	2.9	3.0	4.6	12	39	8.8	5.8	13	1.5	.09	.05	.09
4	2.1	24	5.4	12	32	7.6	5.8	11	1.3	.09	.05	.12
5	1.9	64	5.2	9.9	31	6.9	7.1	8.8	1.4	.07	.03	.15
6	1.3	36	6.6	8.6	30	17	8.6	7.1	1.4	.07	.03	.28
7	1.5	31	9.6	7.8	33	37	6.4	1.0	.07	.03	.03	.34
8	7.2	20	26	10	31	31	7.4	8.8	1.2	.07	.03	.23
9	29	14	39	13	29	25	25	12	1.3	.09	.03	.12
10	26	11	29	12	24	20	59	20	1.4	.09	.03	.09
11	13	8.4	83	11	20	19	35	39	1.2	.07	.02	.07
12	7.4	6.6	260	13	18	18	25	57	1.2	.05	.02	.05
13	4.8	5.6	160	91	16	18	20	45	.92	.05	.02	.05
14	3.5	4.8	174	283	14	52	16	28	.81	.05	.02	.05
15	2.9	4.5	119	190	77	58	13	20	.81	.05	.02	.05
16	2.5	5.0	82	130	249	58	11	16	.78	.37	.02	.05
17	2.2	4.6	66	219	209	54	9.1	14	.71	.07	.02	.05
18	2.0	4.0	57	163	207	39	11	8.8	2.5	.07	.02	.07
19	1.8	3.7	61	202	104	29	22	7.4	1.1	.05	.02	.12
20	1.5	7.8	67	156	58	24	20	6.4	.39	.05	.02	.15
21	1.4	19	101	140	38	19	21	5.4	.33	.05	.02	.12
22	1.4	16	136	123	28	16	18	5.4	.33	.05	.02	.54
23	1.3	19	204	118	23	14	16	4.8	.28	.05	.02	.54
24	1.5	23	118	137	19	17	24	4.0	.23	.05	.03	.28
25	1.5	19	70	231	16	13	59	3.4	.23	.05	.03	.23
26	1.4	14	48	256	14	11	73	3.0	.15	.07	.03	.23
27	1.8	11	32	264	12	10	48	2.8	.15	.09	.03	.19
28	4.1	9.6	26	162	11	9.4	33	2.6	.15	.09	.03	.15
29	4.6	7.6	22	84	-----	8.6	26	3.5	.12	.07	.03	.15
30	4.5	6.4	19	51	-----	7.6	22	3.1	.12	.07	.03	.12
31	4.1	-----	16	44	-----	6.9	-----	2.6	-----	.05	.03	-----
TOTAL	147.8	409.1	2,056.8	3,179.3	1,473	674.1	661.8	402.3	27.01	2.18	.88	4.98
MEAN	4.77	13.6	66.3	103	52.6	21.7	22.1	13.0	.90	.070	.028	.17
MAX	29	64	260	283	249	58	73	57	2.5	.15	.05	.54
MIN	1.3	3.0	4.6	7.8	11	6.9	5.8	2.6	.12	.05	.02	.05
CFSM	.38	1.08	5.26	8.17	4.17	1.72	1.75	1.03	.07	.006	.002	.01
IN-	1.24	1.21	6.07	9.39	4.35	1.99	1.95	1.19	.08	.005	.005	.01
AC-FT	293	811	4,080	6,310	2,920	1,340	1,310	798	54	4.3	1.7	9.9

CAL YR 1969 TOTAL 8,073.08 MEAN 22.1 MAX 260 MIN .03 CFSM 1.75 IN 23.83 AC-FT 16,310

WTR YR 1970 TOTAL 9,039.25 MEAN 24.8 MAX 283 MIN .02 CFSM 1.97 IN 26.69 AC-FT 17,930

12025700 SKOOKUMCHUCK RIVER NEAR VAIL, WASH.

LOCATION---Lat 46°46'22", long 122°35'34", in SW¼ sec.20, T.15 N., R.2 E., Thurston County, on right bank about 150 ft downstream from logging bridge, 0.4 mile downstream from Hospital Creek, 5.8 miles southeast of Vail, and at mile 28.8.

DRAINAGE AREA--40.0 sq mi.

PERIOD OF RECORD---October 1967 to September 1970.

GAGE---Water-stage recorder. Altitude of gage is 710 ft (from topographic map).

EXTREMES---Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,000 cfs), water years 1968-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 9, 1968	1330	1,020	6.14	Dec. 3, 1968	1900	*2,060	7.31	Jan. 14, 1970	0500	*2,100	7.43
Feb. 4, 1968	0245	*2,670	7.81	Dec. 10, 1968	1600	1,320	6.52	Jan. 19, 1970	0100	1,150	6.31
Feb. 19, 1968	0800	1,730	6.99	Jan. 5, 1969	0330	1,180	6.35	Jan. 27, 1970	0100	1,490	6.72
Mar. 27, 1968	2345	1,280	6.48	Jan. 7, 1969	0200	1,250	6.44	Feb. 16, 1970	0500	1,240	6.43
June 2, 1968	0945	1,090	6.24	Feb. 11, 1969	1130	1,110	6.26				
Nov. 11, 1968	1830	1,240	6.42	Dec. 23, 1969	0130	1,240	6.42				

Annual minimum discharge, water years 1968-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1968	Aug. 11, 12, 1968	25	3.07	1970	Aug. 22-24, 26-31, 1970	18	b2.99
1969	Sept. 9-12, 14, 1969	25	a3.04				

a Occurred Sept. 10-12, 1969.

b Occurred Aug. 30, 31, 1970.

Period of record: Maximum discharge, 2,670 cfs Feb. 4, 1968 (gage height, 7.81 ft), from rating curve extended above 1,500 cfs; minimum, 18 cfs part or all of each day Aug. 22-24, 26-31, 1970.

REMARKS---Records excellent. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	159	208	198	163	207	291	162	231	54	30	94
2	70	133	702	172	792	185	263	143	814	50	29	83
3	180	117	836	159	1,320	172	230	131	438	49	29	73
4	100	102	736	148	1,790	167	222	128	291	48	29	65
5	66	94	650	140	778	193	237	130	222	47	29	60
6	54	85	465	129	509	169	227	135	178	46	29	56
7	47	82	370	133	389	156	217	131	156	44	28	52
8	41	104	293	125	330	145	202	126	137	43	27	51
9	38	254	290	654	291	135	188	118	124	43	26	49
10	40	595	451	521	263	126	174	115	115	42	26	48
11	110	421	605	335	237	128	162	110	110	42	26	47
12	88	271	405	302	214	250	150	106	102	55	26	47
13	154	205	305	485	190	217	137	100	97	45	26	46
14	178	185	245	562	174	202	220	94	92	50	34	92
15	110	156	210	625	158	521	330	88	85	49	33	131
16	81	138	185	570	145	778	261	84	80	44	30	133
17	65	122	172	465	162	534	222	82	78	40	29	131
18	74	117	161	388	634	386	200	79	74	39	39	294
19	71	106	136	390	1,500	306	185	82	73	41	60	227
20	59	98	125	574	927	261	174	100	70	39	43	174
21	198	92	131	665	838	227	167	92	68	38	36	141
22	208	87	233	473	630	202	156	84	78	36	33	120
23	202	84	309	374	760	212	176	83	70	36	108	112
24	178	110	352	318	605	214	169	82	65	35	146	97
25	280	96	391	268	449	263	169	83	61	34	168	88
26	208	88	391	234	354	266	169	79	60	34	174	82
27	449	85	328	198	300	751	158	76	59	32	200	75
28	570	100	280	176	261	1,000	154	73	61	31	277	70
29	352	212	234	165	230	610	154	71	61	31	193	68
30	248	210	205	154	-----	431	176	68	56	31	137	64
31	192	-----	181	192	-----	345	-----	70	-----	30	108	-----
TOTAL	4,771	4,708	10,585	10,252	15,393	9,759	5,940	3,105	4,206	1,278	2,208	2,870
MEAN	154	157	341	331	531	315	198	100	140	41.2	71.2	95.7
MAX	570	595	836	665	1,790	1,000	330	162	814	55	277	294
MEAN	38	82	125	145	126	137	68	56	30	26	46	46
CFSM	3.85	3.93	8.53	8.28	13.3	7.88	4.95	2.50	3.50	1.03	1.78	2.39
IN.	4.44	4.38	9.84	9.53	14.32	9.08	5.52	2.89	3.91	1.19	2.05	2.67
AC-FT	9,460	9,340	21,000	20,330	30,530	19,360	11,780	6,160	8,340	2,530	4,380	5,690

WTR YR 1968 TOTAL 75,075 MEAN 205 MAX 1,790 MIN 26 CFSM 5.13 IN 69.82 AC-FT 148,900

12026150 SKOOKUMCHUCK RIVER BELOW BLOODY RUN CREEK, NEAR CENTRALIA, WASH.
(Formerly published as 12026000 Skookumchuck River near Centralia)

LOCATION.--Lat 46°47'25", long 122°44'03", in NW¼ sec.18, T.15 N., R.1 E., Thurston County, on right bank 0.7 mile downstream from Bloody Run Creek, 1.2 miles downstream from Skookumchuck Dam, 12 miles northeast of Centralia, and at mile 20.7.

DRAINAGE AREA.--65.9 sq mi. At site used prior to Aug. 1, 1969, 61.7 sq mi.

PERIOD OF RECORD.--April 1929 to November 1933, October 1939 to September 1970. Monthly discharge only for some periods, published in WSP 1316 and 1736. Prior to Oct. 1, 1965, published as 12026000 Skookumchuck River near Centralia.

GAGE.--Water-stage recorder. Altitude of gage is 310 ft (from topographic map). Apr. 1, 1929, to Sept. 30, 1931, and Feb. 1, 1932, to Dec. 6, 1933, nonrecording gage at site 1.1 miles upstream at different datum. October 1939 to July 31, 1969, nonrecording gage at site 1.3 miles upstream at datum 301.04 ft above mean sea level.

AVERAGE DISCHARGE.--35 years (1929-33, 1939-70), 247 cfs (50.90 inches per year, 179,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 5, 1966	2100	2,610	44.26	Jan. 28, 1967	0800	2,740	44.38	Dec. 10, 1968	1600	2,180	43.67
Mar. 9, 1966	1000	*5,170	44.88					Jan. 7, 1969	0430	2,180	43.67
Dec. 4, 1966	1200	2,210	43.79	Feb. 4, 1968	0530	*3,960	45.73				
Dec. 13, 1966	1300	*4,460	46.24	Feb. 19, 1968	1000	2,370	45.91	Jan. 14, 1970	0730	*2,910	9.41
Jan. 19, 1967	2100	4,190	45.97	Dec. 3, 1968	2100	*2,970	44.63	Jan. 27, 1970	0300	2,220	8.67

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 4, 1965	18	39.25	1969	Sept. 10, 11, 12, 1969	25	3.18
1967	Sept. 29, 1967	18	39.18	1970	May 28, 1970	*12	3.25
1968	Aug. 8-13, 1968	28	39.23				

a Caused by pumping.

Period of record: Maximum discharge, 6,710 cfs Dec. 9, 1953 (gage height, 48.59 ft, site and datum then in use); minimum, 12 cfs May 28, 1970 (caused by pumping).

REMARKS.--Records excellent. During dam construction, contractor diverted up to 8 cfs from gage pool at various times throughout the water year 1970. No regulation.

REVISIONS (WATER YEARS).--WSP 722: 1929-30. WSP 1286: 1930, 1945. WSP 1716: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	34	165	282	356	376	392	115	63	65	34	31
2	19	37	234	396	285	285	348	115	74	83	33	29
3	19	76	203	303	258	254	300	131	60	251	33	29
4	23	215	417	303	244	231	268	148	65	195	32	27
5	58	209	303	956	271	238	261	164	61	138	32	27
6	80	154	247	1,850	322	275	271	209	60	115	32	27
7	63	116	322	1,350	322	282	275	164	65	98	32	27
8	42	97	333	1,410	303	781	271	138	61	87	32	26
9	37	95	261	966	314	2,570	271	134	58	78	32	25
10	34	100	215	662	303	1,270	278	120	79	70	32	26
11	31	123	176	662	344	777	454	106	81	68	32	44
12	28	97	149	782	372	562	580	102	78	63	31	36
13	32	86	133	1,020	296	653	429	100	68	61	31	29
14	84	84	118	1,360	275	817	380	93	63	35	32	31
15	108	78	109	961	241	961	333	104	58	52	31	31
16	102	71	100	662	215	652	310	129	56	32	29	28
17	72	65	95	484	200	621	278	108	53	49	31	31
18	58	67	91	388	182	594	247	100	52	49	29	68
19	91	211	86	314	168	691	215	93	49	47	28	40
20	78	208	86	275	222	630	212	95	49	44	27	34
21	61	264	102	247	241	522	192	100	49	42	27	33
22	53	580	89	222	238	446	178	98	46	39	27	33
23	47	356	91	212	251	429	164	87	46	39	27	34
24	44	238	185	188	234	454	156	79	44	42	27	33
25	40	176	141	188	225	471	148	78	43	50	28	34
26	38	197	121	176	222	501	146	81	42	42	29	40
27	37	314	636	188	310	505	134	78	43	39	39	36
28	46	254	1,160	206	492	458	129	72	44	38	38	33
29	37	197	787	392	-----	621	124	66	85	36	33	31
30	35	168	496	501	-----	454	117	65	66	35	33	28
31	34	-----	333	458	-----	437	-----	63	-----	34	32	-----
TOTAL	1,631	4,965	7,984	18,364	7,706	18,818	7,861	3,335	1,769	2,156	985	981
MEAN	52.6	166	258	592	275	607	262	108	59.0	69.5	31.1	32.7
MAX	188	588	1,160	1,850	492	2,570	588	209	85	251	39	68
MIN	19	34	86	176	168	231	117	63	42	34	27	25
CFSM	.85	2.69	4.18	9.59	4.46	9.84	4.25	1.75	.96	1.13	.50	.53
IN.	.98	2.99	4.81	11.07	4.65	11.35	4.74	2.01	1.07	1.30	.58	.59
AC-FT	3,240	9,850	15,840	36,420	15,280	37,338	15,590	6,610	3,510	4,280	1,910	1,950
CAL YR 1965	TOTAL 65,059	MEAN 178	MAX 2,540	MIN 19	CFSM 2.88	IN 39.23	AC-FT 129,000					
WTR YR 1966	TOTAL 76,535	MEAN 210	MAX 2,570	MIN 19	CFSM 3.40	IN 46.14	AC-FT 131,000					

12026150 SKOOKUMCHUCK RIVER BELOW BLOODY RUN CREEK, NEAR CENTRALIA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	28	87	827	695	635	316	251	170	92	55	28	21		
2	31	79	1,180	526	557	284	230	162	94	54	28	25		
3	28	74	1,020	675	478	251	218	155	92	52	27	24		
4	27	70	1,590	895	478	227	224	152	83	50	26	22		
5	27	74	1,150	775	438	209	233	150	81	47	26	21		
6	26	76	903	588	382	195	212	152	79	46	28	22		
7	27	68	753	502	330	182	198	165	75	44	30	21		
8	40	66	549	522	298	200	195	170	73	43	29	21		
9	34	61	421	466	270	284	212	168	71	43	27	21		
10	28	72	544	442	248	270	203	148	70	43	26	26		
11	27	68	738	695	245	257	190	138	68	40	25	52		
12	40	182	1,300	675	248	236	182	128	64	39	24	34		
13	50	225	3,390	1,100	645	224	306	125	62	38	24	26		
14	36	658	1,770	1,170	526	218	302	120	60	36	23	23		
15	33	802	944	926	474	514	260	120	58	32	23	21		
16	31	514	665	900	438	606	251	132	57	31	23	21		
17	31	388	544	670	620	611	233	150	57	31	23	20		
18	29	300	458	514	785	584	292	145	55	31	24	20		
19	34	251	502	1,660	544	474	320	140	54	35	24	20		
20	303	218	730	2,690	438	442	281	140	57	39	23	20		
21	218	200	544	1,510	362	402	251	145	94	40	23	20		
22	558	167	422	905	312	557	230	132	254	38	23	20		
23	388	148	354	660	281	855	230	118	135	36	22	20		
24	238	134	346	522	254	720	209	106	99	32	21	19		
25	161	203	426	422	248	566	212	99	79	31	20	19		
26	148	244	398	438	227	474	224	94	73	31	19	19		
27	136	300	338	1,100	215	402	221	92	68	31	19	19		
28	117	296	288	2,380	257	366	203	94	64	30	19	19		
29	113	264	378	1,570	-----	326	192	115	60	29	19	19		
30	108	817	378	1,380	-----	302	178	125	58	29	20	27		
31	95	-----	341	840	-----	281	-----	101	-----	28	21	-----		
TOTAL	3,190	7,106	24,191	28,813	11,233	11,835	6,943	4,151	2,386	1,184	737	682		
MEAN	103	237	760	929	401	382	231	134	79.5	38.2	23.8	22.7		
MAX	558	817	3,390	2,690	785	855	320	170	254	55	30	52		
MIN	26	61	288	422	215	182	178	92	54	28	19	19		
CFSM	1.67	3.84	12.6	15.1	6.50	6.19	3.74	2.17	1.29	.62	.39	.37		
IN.	1.92	4.28	14.59	17.37	6.77	7.14	4.19	2.50	1.44	.71	.44	.41		
AC-FT	6,330	14,090	47,980	57,150	22,280	23,470	13,770	8,230	4,730	2,350	1,460	1,350		
CAL YR 1966	TOTAL	96,442	MEAN	264	MAX	3,390	MIN	25	CFSM	4.28	IN	58.15	AC-FT	191,300
WTR YR 1967	TOTAL	102,451	MEAN	281	MAX	3,390	MIN	19	CFSM	4.55	IN	61.77	AC-FT	203,200

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	188	254	248	230	244	352	190	270	63	32	112
2	77	160	817	215	1,020	229	320	168	1,300	62	31	103
3	215	140	1,140	198	1,850	211	285	155	640	58	31	87
4	120	125	1,030	185	2,750	208	271	147	383	56	31	79
5	75	113	992	178	1,110	238	302	150	285	54	31	71
6	58	101	655	168	670	220	292	158	226	54	31	68
7	54	99	522	168	502	199	278	153	190	53	30	65
8	46	111	394	170	418	185	254	142	171	51	30	63
9	40	295	362	1,010	355	171	232	137	158	48	28	60
10	43	740	468	735	320	163	214	132	140	48	28	58
11	132	527	720	446	288	163	196	127	134	48	28	54
12	101	330	466	410	264	310	182	120	127	63	28	56
13	190	251	346	670	244	282	166	120	117	53	30	54
14	190	224	288	735	220	257	214	110	112	53	39	69
15	120	192	254	830	202	590	422	105	105	60	47	150
16	88	170	230	795	190	1,060	327	100	94	51	39	163
17	71	152	206	630	208	725	278	96	87	48	38	153
18	83	145	182	502	727	494	250	94	85	45	47	383
19	88	130	175	478	2,070	376	226	94	87	48	73	285
20	71	125	158	611	1,310	313	211	130	83	48	58	217
21	213	115	158	815	1,170	274	205	134	81	45	51	166
22	236	108	254	580	845	244	193	117	91	44	44	140
23	233	101	338	450	946	244	217	112	87	44	98	134
24	218	128	386	378	820	254	202	107	79	42	190	120
25	323	120	426	316	578	313	199	107	75	41	192	110
26	236	111	446	281	454	316	199	103	73	39	217	103
27	514	106	390	245	362	924	185	96	68	38	241	91
28	710	106	326	215	310	1,500	179	91	68	36	334	87
29	402	236	281	200	274	830	176	85	75	34	238	83
30	281	254	248	192	-----	950	199	83	67	33	160	79
31	221	-----	221	198	-----	430	-----	79	-----	33	130	-----
TOTAL	5,519	5,703	13,133	13,252	20,707	12,517	7,226	3,742	5,558	1,493	2,625	3,483
MEAN	178	190	424	427	714	404	241	121	185	48.2	86.7	116
MAX	710	740	1,140	1,010	2,750	1,500	422	190	1,300	63	334	383
MIN	40	99	158	168	190	163	166	79	67	33	28	54
CFSM	2.88	3.08	6.87	6.92	11.6	6.55	3.91	1.96	3.00	0.78	1.37	1.88
IN.	3.33	3.44	7.92	7.99	12.7	7.55	4.36	2.26	3.35	0.90	1.58	2.10
AC-FT	10,950	11,310	26,050	26,290	41,070	24,830	14,330	7,420	11,020	2,960	5,210	6,910

12026150 SKOOKUMCHUCK RIVER BELOW BLOODY RUN CREEK, NEAR CENTRALIA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	190	355	800	120	168	454	226	176	98	38	32
2	68	223	320	740	122	171	620	211	153	91	39	28
3	68	264	1,270	610	171	202	482	199	137	94	41	28
4	91	229	1,610	746	294	211	414	187	124	91	38	28
5	77	193	940	1,540	330	390	398	176	114	117	41	28
6	107	171	670	1,480	241	462	362	174	110	99	40	28
7	96	153	518	1,780	199	362	320	179	103	87	38	30
8	87	218	715	958	984	292	285	202	96	81	38	30
9	83	372	900	725	1,140	257	235	223	91	75	39	28
10	170	288	1,640	650	730	223	226	211	87	73	38	26
11	211	1,280	1,370	558	1,540	200	244	196	83	77	35	25
12	316	1,180	845	410	1,030	181	260	174	81	77	35	26
13	422	715	605	338	610	174	296	163	77	67	36	28
14	358	498	510	296	454	186	229	153	73	65	34	30
15	538	386	450	271	398	176	226	137	68	62	35	28
16	474	310	450	254	458	284	205	124	63	58	37	28
17	352	271	394	235	414	970	238	117	62	56	35	38
18	299	274	422	211	362	1,000	414	120	60	56	33	88
19	271	254	369	199	327	800	466	196	60	53	32	188
20	316	244	313	182	296	590	462	163	60	51	32	160
21	292	250	282	168	271	478	369	137	60	51	31	85
22	296	490	254	158	250	434	324	130	81	50	30	91
23	260	482	327	145	241	406	344	124	140	47	30	228
24	223	398	790	142	223	348	313	124	153	45	31	172
25	205	327	630	137	202	313	268	112	134	45	31	134
26	182	296	466	137	187	320	235	107	150	44	30	115
27	163	316	380	130	174	366	211	107	127	44	33	93
28	147	313	320	124	168	352	235	114	127	42	34	84
29	166	358	278	120	-----	344	257	180	120	42	30	75
30	238	390	247	117	-----	369	244	406	112	41	30	147
31	220	-----	443	127	-----	462	-----	232	-----	39	32	-----
TOTAL	6,869	11,333	19,083	14,488	11,936	11,471	9,636	5,304	3,082	2,018	1,076	2,149
MEAN	222	378	616	467	426	370	321	171	103	65.1	34.7	71.6
MAX	538	1,280	1,640	1,780	1,540	1,000	620	406	176	117	41	228
MIN	68	153	247	117	120	166	205	107	60	39	30	25
CFSM	3.60	6.13	9.98	7.57	6.90	6.00	5.20	2.77	1.67	1.06	.55	1.09
IN.	4.14	6.83	11.51	8.74	7.20	6.92	5.81	3.20	1.86	1.22	.61	1.21
AC-FT	13,620	22,480	37,850	28,740	23,680	22,750	19,110	10,520	6,110	4,000	2,130	4,260

CAL YR 1968 TOTAL 107,888 MEAN 295 MAX 2,750 MIN 28 CFSM 4.78 IN 65.05 AC-FT 214,000
WTR YR 1969 TOTAL 98,445 MEAN 270 MAX 1,780 MIN 25 CFSM 4.33 IN 59.25 AC-FT 195,300

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	265	63	86	174	810	178	116	238	73	38	26	21
2	268	61	82	160	662	168	115	230	70	38	26	22
3	194	59	86	152	598	160	107	226	68	37	26	25
4	147	314	125	143	447	148	111	214	66	36	26	36
5	122	498	107	129	396	138	148	192	60	34	23	33
6	102	423	107	120	360	208	248	172	61	34	22	31
7	95	438	109	116	351	408	255	156	59	33	22	78
8	329	290	125	118	342	302	206	168	59	33	23	60
9	552	217	152	128	322	242	480	206	61	32	25	40
10	930	178	159	126	292	210	762	218	64	31	23	32
11	228	154	394	116	260	198	478	210	60	30	21	28
12	181	136	1,240	118	232	204	336	235	60	30	21	26
13	146	122	712	502	224	220	272	218	54	29	20	26
14	128	116	890	2,370	202	378	226	192	53	27	19	24
15	111	111	608	1,210	473	435	198	174	53	26	18	23
16	103	112	444	798	1,380	435	182	162	54	26	19	23
17	95	102	390	885	1,200	396	164	146	53	26	20	23
18	85	94	348	1,350	1,060	322	160	132	51	26	18	46
19	82	88	327	1,470	738	272	192	125	48	26	18	73
20	74	97	306	1,240	550	235	174	118	46	25	17	72
21	71	136	441	1,080	432	212	170	111	45	26	18	54
22	66	113	732	985	360	188	162	108	42	25	18	51
23	65	138	1,370	995	310	176	168	107	41	25	19	94
24	69	162	885	1,020	272	180	310	99	41	24	20	78
25	69	141	584	1,400	240	158	458	76	39	26	21	57
26	63	126	444	1,550	218	148	470	57	38	28	21	46
27	67	118	348	1,830	204	138	363	25	39	37	21	42
28	87	108	282	1,110	190	134	290	30	39	36	21	38
29	74	100	240	774	-----	127	265	62	38	31	21	33
30	98	98	211	582	-----	122	252	32	38	29	21	33
31	64	-----	192	622	-----	116	-----	84	-----	27	21	-----
TOTAL	4,380	4,910	12,526	23,373	13,085	6,956	7,838	4,583	1,573	931	655	1,268
MEAN	141	164	404	754	467	224	261	148	52.4	30.0	21.1	42.3
MAX	532	498	1,370	2,370	1,380	435	762	238	73	38	26	94
MIN	53	59	82	116	190	116	107	25	38	24	17	21
CFSM	2.14	2.49	6.13	11.4	7.09	3.40	3.96	2.25	.80	.46	.32	.64
IN.	2.47	2.77	7.07	13.19	7.39	3.93	4.42	2.59	.89	.53	.37	.72
AC-FT	8,690	9,740	24,850	46,360	25,950	13,800	15,550	9,090	3,120	1,850	1,300	2,520

CAL YR 1969 TOTAL 82,976 MEAN 227 MAX 1,780 MIN 25 CFSM 3.58 IN 49.08 AC-FT 164,600
WTR YR 1970 TOTAL 82,078 MEAN 225 MAX 2,370 MIN 17 CFSM 3.41 IN 46.33 AC-FT 162,800

12026400 SKOOKUMCHUCK RIVER NEAR BUCODA, WASH.

LOCATION.--Lat 46°46'20", long 122°55'23", in SW¼NW¼ sec.22, T.15 N., R.2 W., Thurston County, on left bank 100 ft downstream from bridge on State Highway 507, 3.3 miles southwest of Bucoda, and at mile 6.4.

DRAINAGE AREA.--112 sq mi.

PERIOD OF RECORD.--December 1967 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 195 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,750 cfs), December 1967 to September 1970

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Feb. 4, 1968	1600	*4,850	14.21	Dec. 4, 1968	0800	*3,680	12.54	Feb. 9, 1969	0500	3,110	11.61
Feb. 19, 1968	1900	3,360	12.04	Dec. 11, 1968	0230	3,140	11.66	Jan. 14, 1970	1800	*3,810	12.97
Mar. 28, 1968	0845	2,870	11.22	Jan. 7, 1969	1400	3,540	12.34	Jan. 27, 1970	0700	3,670	12.73

Annual minimum discharge, December 1967 to September 1970

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1968	Aug. 13, 1968	32	3.96	1970	Aug. 15, 16, 18-20, 1970	21	3.85
1969	Sept. 9-11, 1969	24	3.93				

Period of record: Maximum discharge, 4,850 cfs Feb. 4, 1968 (gage height, 14.21 ft), from rating curve extended above 2,100 cfs; minimum, 21 cfs Aug. 15, 16, 18, 19, 20, 1970 (gage height, 3.85 ft).

REMARKS.--Records good. Minor diversions for domestic use and irrigation above station. No regulation. Water-quality records for the water years 1968-70 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, DECEMBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				360	480	420	561	279	174	73	38	127
2				354	1,020	381	513	233	1,690	70	38	117
3				318	2,420	351	465	210	1,170	66	38	97
4				288	3,810	333	426	194	630	63	38	86
5				276	2,090	366	492	200	438	61	38	77
6				248	1,220	363	489	207	324	61	38	72
7				235	910	321	450	197	262	60	37	65
8				246	770	291	408	185	227	56	36	63
9				661	664	262	363	175	202	55	33	61
10				1,240	580	248	327	164	180	55	33	58
11				857	516	230	300	157	173	55	33	58
12				661	468	376	270	153	159	61	33	60
13				976	432	429	246	153	148	66	33	58
14				1,180	402	381	248	142	142	60	37	65
15				1,240	378	619	550	133	131	68	47	138
16				1,210	372	1,480	504	127	121	63	46	180
17				1,030	366	1,210	414	119	119	56	41	150
18				822	674	815	360	113	107	53	40	418
19				745	2,720	616	333	111	99	53	60	390
20				800	2,360	513	300	155	99	56	65	279
21				1,200	1,710	441	291	197	96	53	53	212
22				959	1,440	381	270	180	103	50	47	173
23				731	1,420	356	282	180	105	49	55	155
24				605	1,340	360	291	159	94	47	229	140
25				516	932	420	276	146	88	46	161	127
26				462	731	477	276	146	82	46	294	115
27				402	608	865	256	131	79	44	238	105
28			567	525	360	525	2,480	238	123	79	43	381
29			456	336	465	1,440	230	117	86	41	306	92
30			393	330	-----	923	238	109	81	40	200	88
31		-----	345	360	-----	696	-----	105	-----	40	148	-----
TOTAL				20,008	31,823	18,822	10,667	5,000	7,488	1,710	2,914	3,923
MEAN				645	1,097	607	356	161	250	55.2	94.0	131
MAX				1,240	3,810	2,480	561	279	1,690	73	381	418
MIN				235	366	230	230	105	79	40	33	58
CFSM				5.76	9.79	5.42	3.18	1.44	2.23	.49	.84	1.17
IN.				6.65	10.57	6.25	3.54	1.66	2.49	.57	.97	1.30
AC-FT				39,690	63,120	37,330	21,160	9,920	14,850	3,390	5,780	7,780

12026400 SKOOKUMCHUCK RIVER NEAR BUCODA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	297	647	1,080	260	251	510	288	212	111	41	31
2	81	280	558	1,080	250	251	686	273	173	99	41	31
3	75	366	1,030	980	375	270	619	256	148	97	41	26
4	79	324	2,540	1,050	565	276	522	238	131	96	43	26
5	96	280	1,580	1,950	750	402	910	220	119	115	41	26
6	97	240	1,170	2,150	500	574	474	210	111	109	46	26
7	113	220	878	3,050	430	480	420	204	107	99	41	26
8	99	301	1,110	1,840	890	402	372	102	101	92	41	29
9	90	729	1,180	1,320	2,630	342	339	240	96	88	38	26
10	143	560	1,860	1,270	1,550	303	330	243	90	66	40	25
11	227	1,280	2,550	1,300	2,110	270	309	230	88	90	38	26
12	291	1,930	1,580	956	1,860	251	309	207	84	86	35	26
13	525	1,210	1,140	798	1,140	233	348	190	82	79	35	24
14	444	822	910	745	804	220	330	179	76	75	35	29
15	605	636	760	714	668	222	288	161	72	68	32	30
16	703	519	730	682	682	256	254	148	70	65	35	26
17	501	432	660	658	672	600	250	138	68	63	35	32
18	414	414	690	594	598	1,180	448	133	66	61	32	81
19	384	396	640	535	531	1,000	543	102	64	58	29	120
20	471	369	540	485	474	787	608	214	62	56	30	217
21	441	354	480	440	429	626	510	164	62	55	30	111
22	429	647	440	400	399	546	441	150	86	53	27	90
23	380	762	520	350	372	411	456	140	119	52	27	208
24	321	668	1,100	305	345	459	435	138	192	50	27	207
25	285	567	1,000	260	318	414	375	129	144	49	30	146
26	262	480	738	260	294	390	324	123	173	47	29	133
27	227	519	640	260	270	402	285	121	150	47	29	107
28	207	570	762	250	254	438	298	127	146	44	27	94
29	207	584	380	240	-----	417	339	133	136	43	32	84
30	348	686	420	215	-----	432	318	456	129	41	31	96
31	363	-----	474	230	-----	498	-----	297	-----	40	29	-----
TOTAL	9,047	17,442	29,591	26,447	20,420	13,603	12,257	6,153	3,357	2,214	1,075	2,166
MEAN	282	548	923	823	629	409	383	192	112	71.4	34.7	72.2
MAX	703	1,930	2,550	3,050	2,630	1,180	686	456	212	115	46	217
MIN	75	220	420	215	250	220	254	121	62	40	27	25
CFSM	2.61	5.19	8.53	7.62	6.31	3.92	3.65	1.77	1.00	.64	.31	.64
IN.	3.00	5.79	9.83	8.78	6.78	4.52	4.07	2.04	1.12	.74	.36	.72
AC-FT	17,940	34,600	58,690	52,460	40,500	26,980	24,310	12,200	6,660	4,300	2,130	4,300
CAL YR 1968	TOTAL 158,435	MEAN 433	MAX 3,810	MIN 33	CFSM 3.87	IN 52.62	AC-FT 314,320					
WTR YR 1969	TOTAL 143,772	MEAN 394	MAX 3,050	MIN 25	CFSM 3.52	IN 47.75	AC-FT 285,200					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	248	73	113	338	1,040	268	152	324	97	44	29	27
2	330	70	103	311	896	252	154	305	86	44	29	29
3	230	68	101	300	763	236	143	289	80	42	29	31
4	173	137	140	289	640	218	141	273	82	40	28	39
5	138	705	131	273	560	214	177	242	75	39	27	42
6	117	486	127	252	518	255	242	218	75	37	26	41
7	99	540	142	226	500	525	332	201	71	37	26	63
8	240	387	150	211	483	452	265	194	70	37	27	82
9	626	285	202	226	452	374	412	242	70	36	28	52
10	438	225	207	247	410	320	996	260	77	35	27	39
11	300	187	325	221	365	294	679	268	73	34	26	34
12	217	164	1,860	208	335	297	483	278	71	34	25	30
13	178	150	1,240	416	314	341	380	283	66	33	24	28
14	153	138	1,460	3,070	283	442	323	255	64	33	24	29
15	133	129	1,100	2,140	491	588	273	229	64	30	23	28
16	119	133	802	1,190	1,930	581	252	208	64	29	24	27
17	111	125	704	1,240	1,840	574	224	189	64	29	24	28
18	101	115	626	1,640	1,800	480	211	172	61	29	24	30
19	96	111	595	2,070	1,170	401	257	161	59	30	23	63
20	88	111	574	1,740	830	359	242	152	54	29	23	77
21	86	168	721	1,520	665	305	236	143	52	27	24	63
22	81	155	945	1,310	546	268	226	134	52	28	24	56
23	77	157	2,040	1,410	472	242	216	132	48	28	24	78
24	75	222	1,530	1,380	413	252	330	122	47	28	25	87
25	82	192	1,000	2,120	368	218	578	107	47	29	25	68
26	75	168	780	2,260	338	208	700	95	44	31	25	53
27	73	153	630	3,300	314	194	584	54	44	36	26	47
28	92	140	522	1,800	289	187	455	56	44	42	27	41
29	88	129	452	1,150	-----	177	383	61	42	37	27	39
30	82	121	407	833	-----	166	359	111	44	34	26	36
31	77	-----	368	766	-----	156	-----	109	-----	30	27	-----
TOTAL	5,023	5,944	20,117	34,457	19,045	9,844	10,405	5,869	1,887	1,051	796	1,387
MEAN	162	198	649	1,112	680	318	347	189	62.9	33.9	25.7	46.2
MAX	626	705	2,060	3,300	1,930	588	996	326	97	44	29	87
MIN	73	68	101	208	283	156	141	54	42	27	23	27
CFSM	1.45	1.77	5.79	9.93	6.07	2.84	3.10	1.69	.56	.30	.23	.41
IN.	1.67	1.97	6.48	11.64	6.33	3.27	3.46	1.95	.63	.35	.26	.46
AC-FT	9,960	11,790	39,900	68,350	37,780	19,530	20,640	11,640	3,740	2,080	1,580	2,750
CAL YR 1969	TOTAL 116,776	MEAN 325	MAX 3,050	MIN 25	CFSM 2.90	IN 39.45	AC-FT 235,620					
WTR YR 1970	TOTAL 115,825	MEAN 317	MAX 3,300	MIN 23	CFSM 2.83	IN 38.47	AC-FT 229,700					

12027500 CHEHALIS RIVER NEAR GRAND MOUND, WASH.

LOCATION.--Lat 46°46'34", long 123°02'04", in NE¼E¼ sec.22, T.15 N., R.3 W., Thurston County, on left bank at downstream side of highway bridge at Meadows, 1.5 miles southwest of Grand Mound, 7.0 miles (revised) downstream from Skookumchuck River, and at mile 59.9.

DRAINAGE AREA.--895 sq mi.

PERIOD OF RECORD.--October 1928 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 123.27 ft above mean sea level. Prior to Oct. 3, 1934, nonre-stream gage at present site at datum 3.0 ft higher.

AVERAGE DISCHARGE.--42 years, 2,799 cfs (42.47 inches per year, 2,028,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (16,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 7, 1966	1900	*21,900	14.16	Jan. 29, 1967	0800	20,700	13.85	Dec. 11, 1968	1900	16,400	12.56
Mar. 10, 1966	1000	19,800	13.60					Jan. 8, 1969	0100	16,900	12.70
Dec. 5, 1966	0730	16,000	12.34	Feb. 5, 1968	0700	*24,800	14.83	Feb. 12, 1969	0800	*17,500	12.91
Dec. 14, 1966	1400	*34,400	16.48	Feb. 20, 1968	0700	18,200	13.05				
Jan. 21, 1967	0830	25,000	14.88	Dec. 4, 1968	2000	17,000	12.76	Jan. 15, 1968	0800	18,700	13.44
								Jan. 20, 1970	1000	16,000	12.54
								Jan. 28, 1970	0500	*23,300	14.62

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 7, 8, 1966	116	11.27	1969	Sept. 13, 1969	137	bl.36
1967	Aug. 30, 1967	82	al.12	1970	Aug. 18-26, 1970	114	1.28
1968	Oct. 1, 1967	107	1.18				

a Occurred Sept. 29, 1967.

b Occurred Sept. 9-13, 1969.

Period of record: Maximum discharge, 48,400 cfs Dec. 29, 1937 (gage height, 18.39 ft); minimum, 82 cfs Aug. 30, 1967; minimum gage height, 0.83 ft Aug. 27, 1958.

REMARKS.--Records excellent. Many small diversions for irrigation and domestic use above station, including about 8 cfs for municipal water supply for Centralia and Chehalis. No regulation. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1216: Drainage area. WSP 1286: 1929-30(M), 1931, 1932-34(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	297	1,840	6,100	4,150	6,000	3,150	961	478	370	192	155
2	157	293	2,230	8,660	3,510	5,000	2,860	912	488	370	185	140
3	153	346	2,250	9,880	3,010	4,320	2,530	870	578	692	177	126
4	157	1,340	3,520	8,280	2,730	3,990	2,240	863	590	1,290	165	130
5	175	2,220	4,370	7,360	2,880	3,980	2,090	849	538	961	165	130
6	403	2,280	3,520	16,200	3,470	4,240	1,950	905	494	740	162	123
7	822	1,590	3,580	21,300	4,280	4,510	1,890	1,300	461	626	155	120
8	626	1,290	4,150	20,300	4,420	5,330	1,620	1,040	439	538	151	120
9	413	1,280	3,580	18,000	4,370	15,200	1,740	884	428	478	147	120
10	333	1,220	3,020	13,600	5,220	19,500	1,840	800	417	417	147	123
11	284	1,560	2,540	10,000	4,800	15,000	2,270	740	494	390	151	135
12	255	1,520	2,150	9,250	6,100	9,730	4,470	704	549	360	155	181
13	242	1,430	1,860	10,400	5,370	7,390	3,970	680	554	355	151	233
14	259	1,560	1,720	13,100	4,940	7,130	3,330	662	472	320	151	200
15	584	1,520	1,540	13,800	3,890	9,390	3,130	668	428	310	158	169
16	1,130	1,330	1,390	10,500	3,280	12,900	2,670	814	390	320	162	155
17	748	1,120	1,270	7,700	2,900	10,900	2,330	961	360	310	158	162
18	590	983	1,180	5,760	2,620	8,240	2,070	807	345	295	158	185
19	564	1,340	1,100	4,600	2,360	7,510	1,830	710	335	282	151	264
20	685	3,260	1,030	3,800	2,290	8,310	1,740	668	310	277	144	242
21	715	3,010	1,160	3,310	2,580	9,160	1,840	644	295	264	144	196
22	566	4,130	1,270	2,900	2,400	8,510	1,630	686	310	250	137	165
23	470	4,870	1,130	2,680	2,360	7,290	1,490	686	305	237	133	158
24	408	3,370	1,820	2,670	2,340	6,440	1,380	626	310	229	130	162
25	374	2,510	2,340	2,450	2,150	5,920	1,310	584	315	242	137	173
26	342	1,960	2,070	2,300	2,090	5,430	1,260	554	290	259	140	200
27	324	2,730	3,710	2,230	2,290	4,080	1,200	544	282	250	147	237
28	324	3,190	12,000	2,440	5,580	4,410	1,120	532	330	225	165	250
29	346	2,530	13,200	2,690	-----	3,850	1,060	510	596	212	208	221
30	333	2,050	10,400	4,070	-----	3,520	1,010	494	444	200	188	192
31	302	-----	8,310	4,630	-----	3,630	-----	483	-----	192	165	-----
TOTAL	13,446	58,129	105,050	250,960	97,980	231,710	63,220	23,141	12,625	12,241	4,879	5,167
MEAN	434	1,938	3,389	8,095	3,099	7,475	2,107	746	421	395	157	172
MAX	1,130	4,870	13,200	21,300	6,100	19,500	4,470	1,300	596	1,290	208	264
MIN	153	293	1,030	2,230	2,090	3,520	1,010	483	282	192	130	120
CFSM	.48	2.17	3.79	9.04	3.91	8.35	2.35	.83	.47	.44	.18	.19
IN.	.56	2.42	4.37	10.43	4.07	9.63	2.63	.96	.52	.51	.20	.21
AC-FT	26,670	115,300	208,400	497,800	194,300	459,600	125,400	45,900	25,040	24,280	9,680	10,250
CAL YR 1965	TOTAL 793,771	MEAN 2,175	MAX 25,600	MIN 118	CFSM 2.43	IN 32.99	AC-FT 1,574,000					
WTR YR 1966	TOTAL 878,548	MEAN 2,407	MAX 21,300	MIN 120	CFSM 2.69	IN 36.52	AC-FT 1,743,000					

CAL YR 1968	TOTAL 1,258,471	MEAN 3,438	MAX 23,500	MIN 165	CFSM 3.84	IN 52.31	AC-FT 2,496,000
NYR YR 1969	TOTAL 1,104,046	MEAN 3,025	MAX 17,100	MIN 140	CFSM 3.38	IN 45.89	AC-FT 2,190,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	910	615	885	2,470	8,670	1,920	1,140	2,450	607	253	160	135
2	1,600	573	822	2,190	7,800	1,760	1,160	2,160	563	253	160	138
3	1,570	544	779	2,040	6,600	1,660	1,090	1,950	524	249	153	164
4	1,160	627	848	2,020	5,900	1,550	1,190	500	232	153	163	153
5	894	5,370	981	1,790	4,860	1,450	1,160	1,620	492	215	149	257
6	737	4,940	901	1,600	4,410	1,510	1,530	1,490	475	203	146	249
7	637	5,320	1,050	1,480	4,180	4,320	2,400	1,360	465	199	142	324
8	838	3,600	1,150	1,440	3,850	4,140	2,050	1,310	460	195	146	563
9	2,940	2,570	1,700	1,610	3,490	3,110	2,320	1,550	465	187	149	380
10	2,930	1,980	1,750	1,630	3,150	2,560	7,770	1,660	508	176	149	266
11	1,990	1,630	2,560	1,470	2,780	2,260	6,010	1,860	541	168	142	215
12	1,450	1,390	11,900	1,400	2,500	2,410	4,270	2,020	519	168	131	183
13	1,130	1,230	13,000	2,360	2,320	2,840	3,310	2,170	492	164	124	164
14	927	1,090	11,500	13,100	2,130	3,740	2,710	1,870	460	160	121	153
15	805	1,010	10,500	18,200	2,830	5,490	2,280	1,600	455	160	124	146
16	722	1,010	8,230	14,600	12,300	5,180	2,000	1,410	470	153	124	138
17	665	1,110	7,130	12,400	15,400	4,970	1,790	1,270	465	146	121	142
18	612	1,050	6,120	12,200	15,100	4,110	1,630	1,150	430	149	118	149
19	559	972	5,950	14,800	12,100	3,440	2,120	1,060	595	146	118	347
20	528	934	5,850	16,000	8,600	2,920	2,250	995	366	146	118	664
21	506	1,360	6,190	15,100	6,520	2,530	2,050	939	347	138	118	519
22	485	1,460	7,610	13,800	4,970	2,230	1,880	911	319	131	118	410
23	467	1,310	12,600	14,000	3,980	1,980	1,730	883	301	135	121	618
24	473	1,690	13,700	13,000	3,350	2,070	2,090	834	279	131	118	652
25	484	1,580	10,400	14,700	2,870	1,890	4,090	772	266	131	114	460
26	468	1,390	7,740	14,800	2,520	1,880	4,970	700	257	138	118	361
27	452	1,250	6,000	20,500	2,260	1,550	4,450	644	249	160	128	306
28	582	1,130	4,670	22,300	2,080	1,680	3,630	596	244	187	128	270
29	851	1,030	3,840	16,800	-----	1,370	3,020	612	253	187	124	244
30	724	958	3,270	11,400	-----	1,290	2,810	700	249	172	128	228
31	661	-----	2,810	8,150	-----	1,210	-----	676	-----	164	135	-----
TOTAL	29,577	50,723	172,436	291,350	157,500	80,600	80,750	41,014	12,424	5,396	4,098	9,840
MEAN	960	1,691	5,562	9,398	5,625	2,600	2,692	1,323	414	174	132	301
MAX	2,940	5,370	13,700	22,300	15,600	5,490	7,770	2,450	607	253	160	664
MIN	452	544	779	1,400	2,080	1,210	1,040	596	244	131	114	135
CP5M	1.07	1.89	6.21	10.5	6.28	2.91	3.01	1.48	.46	.19	.15	.34
IN.	1.24	2.11	7.17	12.11	6.55	3.35	3.36	1.70	.52	.22	.17	.38
AC-FT	59,020	100,660	342,000	577,900	312,400	159,900	160,200	81,350	24,640	10,700	8,130	17,930
CAL YR 1969	TOTAL 906,436		MEAN 2,483		MAX 17,100		MIN 140		CP5M 2.76		IN 37.68	
WTR YR 1969	TOTAL 933,088		MEAN 2,562		MAX 22,300		MIN 114		CP5M 2.88		IN 38.87	
										AC-FT 1,798,000		
										AC-FT 1,855,000		

12030000 ROCK CREEK AT CEDARVILLE, WASH.

LOCATION.--Lat 46°52'07", long 123°18'23" in SW¼SW¼ sec.15, T.16 N., R.5 W., Grays Harbor County, on left bank 0.2 mile downstream from Williams Creek, 1 mile west of Cedarville, 3.9 miles south of Porter, and at mile 1.2.

DRAINAGE AREA.--24.8 sq mi.

PERIOD OF RECORD.--July to October 1942, July to October 1943, June 1944 to September 1970. Monthly discharge only October 1942, published in WSP 1316.

GAGE.--Water-stage recorder. Altitude of gage is 70 ft (from topographic map). Prior to Aug. 17, 1944, nonrecording gage at railroad bridge 0.6 mile downstream at different datum.

AVERAGE DISCHARGE.--26 years (1944-70), 88.1 cfs (48.24 inches per year, 63,830 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (cfs) and peak discharges above base (700 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	1400	*774	8.96	Jan. 19, 1968	1800	*1,190	11.37	Jan. 14, 1970	0700	807	8.98
				Feb. 4, 1968	0500	846	9.16	Jan. 19, 1970	1500	703	8.33
Dec. 13, 1966	1100	*1,340	12.30					Jan. 27, 1970	0230	*946	9.85
Jan. 4, 1967	1930	703	8.02	Dec. 3, 1968	2300	*750	8.52	Feb. 16, 1970	0630	736	8.54
Jan. 19, 1967	2000	1,180	11.18	Jan. 5, 1969	0430	712	8.27				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 21, 1966	1.0	2.38	1969	Sept. 7-12, 1969	1.5	2.43
1967	Aug. 18-21, 28-31, 1967	.65	2.29	1970	Aug. 9, 21-28, 31, 1970	1.2	2.43
1968	Oct. 1, 1967	2.6	2.51				

a Occurred Aug. 25, 27, 1970.

Period of record: Maximum discharge, 1,430 cfs Feb. 9, 1951 (gage height, 13.77 ft, from high watermark in well), from rating curve extended above 850 cfs; minimum, 0.3 cfs Sept. 25, 1946.

REMARKS.--Records excellent except those for periods of no gage-height record, which are fair. Some diversion for irrigation. No regulation. Water-quality records for the water year 1968 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS)--WSP 982: 1942. WSP 1932: 1945-46(M), 1947-50(P), 1951(M).

CORRECTIONS.--In WSP 1932, the dates of peak discharge are listed incorrectly in the REVISIONS paragraph; they should be Dec. 28, 1945, and Dec. 28, 1949, respectively.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	4.8	83	100	06	156	60	26	11	6.1	1.9	2.0
2	1.8	6.0	136	323	77	130	55	22	12	8.7	1.8	1.8
3	2.2	17	190	200	73	122	52	21	16	10	1.7	1.7
4	3.0	66	386	217	69	100	49	20	12	16	1.7	1.6
5	9.0	93	254	326	79	107	46	19	11	12	1.7	1.4
6	14	54	214	741	95	106	43	26	9.4	11	1.6	1.3
7	8.0	36	206	607	127	100	42	25	8.7	9.0	1.6	1.2
8	5.0	45	101	506	132	240	38	21	14	9.4	1.4	1.1
9	4.5	46	156	302	130	620	40	10	0.4	7.4	1.4	1.1
10	3.7	43	131	279	145	410	38	16	9.4	6.4	1.4	1.2
11	3.4	147	106	251	171	300	70	16	10	6.1	1.3	1.7
12	3.6	122	90	250	213	215	01	15	11	5.6	1.4	2.1
13	4.5	05	02	466	176	215	74	14	14	5.4	1.3	1.9
14	7.4	93	71	579	149	220	78	16	8.7	5.1	1.4	1.7
15	11	83	61	390	117	370	60	17	7.7	5.4	1.8	1.7
16	7.2	69	53	267	98	305	60	27	6.8	5.1	1.8	1.8
17	9.0	56	47	193	07	320	56	17	6.6	4.7	1.7	1.9
18	12	46	44	147	77	300	53	15	6.6	4.5	1.5	3.2
19	40	99	40	120	68	310	50	14	6.4	4.5	1.2	3.3
20	20	114	40	99	69	330	48	13	5.0	4.1	1.1	2.7
21	10	108	40	05	64	290	45	14	6.1	3.5	1.1	1.9
22	13	221	41	75	59	230	42	14	7.7	3.3	1.1	1.7
23	10	190	39	72	50	190	40	13	7.1	3.0	1.1	1.8
24	0.7	130	43	63	55	155	37	12	6.6	3.2	1.1	1.9
25	7.4	100	45	59	53	130	35	12	5.8	3.3	1.3	1.9
26	6.3	92	47	54	53	110	33	11	5.6	3.3	1.4	2.3
27	6.0	94	121	60	90	90	32	11	5.8	3.0	2.3	2.6
28	6.3	80	297	98	175	75	31	9.6	0.0	2.6	3.0	2.4
29	6.3	74	298	65	-----	70	28	9.4	7.4	2.3	2.4	2.1
30	5.6	72	272	79	-----	70	20	9.0	6.1	2.2	2.4	2.0
31	5.0	-----	216	07	-----	65	-----	9.4	-----	2.1	2.2	-----
TOTAL	272.3	2,405.8	3,998	7,368	2,853	6,555	1,453	906.6	250.8	185.3	90.1	97.0
MEAN	8.70	82.9	129	238	102	211	46.4	16.1	8.36	5.98	1.62	1.90
MAX	40	221	386	741	213	620	01	27	16	18	3.0	3.3
MIN	1.6	4.8	39	54	53	65	28	9.0	5.6	2.1	1.1	1.1
CFSM	.35	3.34	5.20	9.40	4.11	8.91	1.99	.65	.34	.24	.07	.08
IN.	.41	3.73	6.00	11.05	4.28	9.03	2.10	.75	.38	.28	.08	.09
AC-FT	540	4,930	7,930	14,610	5,660	13,000	2,880	993	497	360	99	113

CAL YR 1965 TOTAL 26,880.3 MEAN 73.7 MAX 1,010 MIN 1.0 CFSM 2.97 IN 40.33 AC-FT 53,338

WTR YR 1966 TOTAL 26,020.9 MEAN 71.3 MAX 741 MIN 1.1 CFSM 2.88 IN 39.04 AC-FT 51,630

NOTE.--NO GAGE-HEIGHT RECORD MAR. 9 TO APR. 11, APR. 13 TO MAY 23.

12030000 ROCK CREEK AT CEDARVILLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	18	378	199	224	125	90	40	12	4.3	1.7	.79
2	2.1	16	307	189	186	108	82	36	11	3.9	1.6	1.1
3	2.4	14	259	284	178	98	75	34	12	3.6	1.5	1.1
4	2.6	13	334	499	190	88	70	33	11	3.4	1.4	1.0
5	2.2	12	400	506	180	84	66	31	9.1	3.3	1.4	.84
6	2.2	13	403	343	157	77	60	30	8.5	3.0	1.6	.79
7	2.2	12	420	283	134	72	54	28	8.5	3.0	2.1	.79
8	2.6	11	301	262	116	73	52	27	8.5	3.0	2.3	.74
9	2.8	11	235	228	106	86	53	26	8.0	2.7	2.2	.79
10	2.7	16	282	204	95	82	50	25	8.0	2.7	1.4	1.6
11	2.4	15	306	238	92	80	44	25	8.0	2.6	1.3	3.9
12	2.8	27	455	271	113	78	44	22	8.2	2.4	1.2	3.6
13	4.5	57	1,200	374	476	75	63	21	7.7	2.4	1.1	2.3
14	4.3	238	620	314	361	74	63	20	7.4	2.4	.79	1.7
15	3.7	207	427	292	304	85	62	20	6.6	2.3	.74	1.3
16	3.4	135	376	286	310	126	64	18	6.1	2.1	.69	1.2
17	3.4	100	310	246	301	135	62	17	5.8	2.3	.69	1.1
18	3.3	79	238	203	304	143	106	16	5.4	2.3	.69	1.0
19	4.3	67	221	674	244	130	128	16	5.0	2.4	.65	.96
20	34	57	272	828	193	124	111	15	5.2	4.1	.65	.96
21	48	52	218	571	154	111	89	14	6.3	3.9	.65	1.0
22	168	43	176	373	128	260	82	14	17	3.1	.74	1.0
23	84	39	148	294	108	530	72	13	12	2.6	.74	.96
24	93	34	173	250	96	438	66	13	8.2	2.3	.74	.84
25	34	53	204	220	87	344	59	13	6.6	2.2	.69	.84
26	24	66	178	241	78	258	53	12	5.8	2.2	.74	.84
27	20	65	147	416	72	197	50	12	5.8	2.3	.74	.84
28	16	62	126	616	101	157	46	13	5.6	2.2	.69	.84
29	17	63	141	457	-----	129	44	16	5.2	1.9	.85	1.1
30	24	267	125	392	-----	117	42	15	4.7	1.8	.65	2.1
31	20	-----	125	286	-----	105	-----	14	-----	1.9	.69	-----
TOTAL	597.8	1,862	9,505	10,841	5,088	4,589	2,000	649	239.2	84.6	33.42	37.92
MEAN	19.3	62.1	307	350	182	148	66.7	20.9	7.97	2.73	1.08	1.26
MAX	168	267	1,200	828	476	530	128	40	17	4.3	2.3	3.9
MIN	1.9	11	125	189	72	42	12	4.7	1.8	1.8	.65	.74
CFSM	.78	2.50	12.4	14.1	7.34	5.97	2.69	.84	.32	.11	.04	.05
IN-	.90	2.79	14.26	16.26	7.63	6.88	3.00	.97	.36	.13	.05	.06
AC-FT	1,190	3,690	18,950	21,500	10,090	9,100	3,970	1,290	474	168	66	75

CAL YR 1966 TOTAL 31,237.60 MEAN 85.6 MAX 1,200 MIN 1.1 CFSM 3.45 IN 46.86 AC-FT 61,960
WTR YR 1967 TOTAL 35,526.94 MEAN 97.3 MAX 1,200 MIN .65 CFSM 3.92 IN 53.29 AC-FT 70,470

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	81	169	89	110	89	153	40	109	14	3.6	14
2	22	67	250	77	245	81	122	36	398	13	3.6	15
3	22	57	582	69	562	74	100	34	232	12	3.7	12
4	21	50	492	67	726	72	90	34	144	11	3.9	10
5	36	43	341	65	400	74	88	42	102	11	3.9	9.0
6	36	38	262	59	258	77	79	44	81	10	3.9	8.3
7	26	34	226	62	186	70	73	38	64	9.6	3.6	7.8
8	20	41	182	69	145	63	66	35	59	9.0	3.3	7.5
9	15	139	257	196	116	57	62	33	51	8.3	3.3	7.3
10	12	314	355	228	98	54	57	30	45	8.3	3.1	7.0
11	25	301	318	164	86	54	55	30	41	8.6	2.8	7.0
12	33	189	235	148	76	84	51	28	36	12	2.8	8.6
13	33	133	171	309	68	99	47	29	38	11	2.8	8.0
14	51	108	134	345	64	140	57	26	35	9.0	6.5	12
15	28	87	110	304	57	334	123	23	30	11	7.0	38
16	20	74	96	264	54	507	97	23	27	10	6.7	36
17	16	66	84	249	58	330	86	21	24	8.6	6.2	36
18	13	66	75	268	185	223	78	20	23	7.8	6.7	47
19	14	64	66	952	614	165	75	21	21	7.5	17	38
20	12	57	58	903	436	130	68	36	20	7.8	15	32
21	55	52	57	804	502	107	63	34	18	7.3	9.6	27
22	111	48	180	434	440	91	56	34	23	6.5	8.3	23
23	185	46	253	281	444	84	58	35	21	6.5	20	23
24	95	50	251	206	351	81	53	35	18	6.2	27	20
25	125	47	253	163	257	99	53	34	15	5.5	19	17
26	99	43	217	135	193	95	52	30	15	5.5	20	16
27	308	40	174	111	153	430	47	28	17	5.1	18	14
28	409	42	144	96	120	540	43	27	16	4.9	40	14
29	203	146	120	87	101	345	41	25	21	4.3	31	13
30	137	155	100	81	-----	249	41	23	17	4.1	20	12
31	101	-----	90	89	-----	195	-----	22	-----	3.9	15	-----
TOTAL	2,291.3	2,678	6,302	7,374	7,145	5,093	2,134	952	1,765	259.3	337.3	539.5
MEAN	73.9	89.3	203	238	246	164	71.1	30.7	58.8	8.36	10.9	18.0
MAX	409	314	582	952	726	540	153	44	398	14	40	47
MIN	8.3	34	57	59	54	54	41	20	15	3.9	2.8	7.0
CFSM	2.98	3.60	8.19	9.60	9.92	6.61	2.87	1.24	2.37	.34	.44	.73
IN-	3.44	4.02	9.45	11.06	10.72	7.64	3.20	1.43	2.65	.39	.51	.81
AC-FT	4,540	5,310	12,500	14,630	14,170	10,100	4,230	1,890	3,500	514	669	1,070

CAL YR 1967 TOTAL 34,833.44 MEAN 95.4 MAX 828 MIN .65 CFSM 3.85 IN 52.25 AC-FT 69,090
WTR YR 1968 TOTAL 36,870.40 MEAN 101 MAX 952 MIN 2.8 CFSM 4.07 IN 55.31 AC-FT 73,130

12030000 ROCK CREEK AT CEDARVILLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	64	346	134	97	87	80	55	25	10	2.8	2.0
2	12	86	290	166	91	88	122	52	21	9.0	3.0	1.8
3	11	98	460	216	118	96	106	49	18	9.3	2.7	1.8
4	16	87	586	370	166	102	96	46	16	10	2.5	1.9
5	17	75	360	615	201	183	87	43	14	11	2.8	1.9
6	23	64	254	450	169	222	79	41	14	9.3	3.0	1.7
7	23	63	212	624	169	74	38	14	8.0	3.1	1.6	
8	20	152	268	444	208	132	66	36	13	8.0	3.1	1.5
9	18	209	296	339	342	109	62	34	12	7.5	3.0	1.5
10	23	174	353	293	304	97	57	31	12	7.0	2.8	1.5
11	36	320	478	279	480	86	54	30	12	10	2.7	1.5
12	41	489	369	225	420	77	51	28	12	9.3	2.4	1.5
13	59	362	269	184	266	75	76	27	12	7.5	3.0	1.6
14	72	252	205	159	219	69	69	25	11	6.7	3.0	1.8
15	91	188	163	145	179	67	64	23	11	6.7	3.0	1.7
16	88	144	140	134	180	78	57	21	9.3	6.2	3.0	1.8
17	70	126	117	118	163	69	21	8.3	5.5	2.5	3.9	
18	63	108	145	102	174	193	97	19	8.0	5.3	2.1	10
19	63	94	136	95	157	163	183	22	7.8	4.9	2.4	14
20	100	95	122	86	141	135	196	20	8.3	4.7	2.2	12
21	94	137	110	79	134	116	163	18	8.6	4.3	3.1	8.0
22	96	269	103	73	122	106	132	16	9.3	3.6	3.1	12
23	91	262	133	66	111	99	120	15	14	3.6	2.5	34
24	69	216	240	63	108	86	100	15	18	3.4	2.1	22
25	64	162	256	60	99	79	89	15	15	3.4	2.2	16
26	55	144	210	57	98	73	81	15	13	3.3	3.4	12
27	49	152	251	92	166	64	76	21	14	3.1	3.6	10
28	45	159	139	51	88	64	69	20	13	3.3	3.7	8.3
29	43	266	118	49	-----	58	68	37	14	2.8	3.4	7.5
30	83	346	102	46	-----	54	62	55	12	2.8	3.0	8.3
31	73	-----	107	79	-----	62	-----	34	-----	2.8	2.2	-----
TOTAL	1,620	5,357	7,267	5,855	5,106	3,254	2,705	922	389.6	192.6	87.4	205.1
MEAN	52.3	179	234	189	182	105	90.2	29.7	13.0	6.21	2.82	6.84
MAX	100	489	586	624	480	222	196	55	25	11	3.7	34
MIN	11	63	102	46	88	54	51	15	7.8	2.8	2.1	1.5
CFSM	2.11	7.22	9.44	7.62	7.34	4.23	3.64	1.20	.52	.25	.11	.28
IN.	2.43	8.04	10.90	8.78	7.66	4.88	4.06	1.38	.58	.29	.13	.31
AC-FT	3,210	10,630	14,410	11,610	10,130	6,450	5,370	1,830	773	382	173	407
CAL YR 1968	TOTAL 39,843.1	MEAN 109	MAX 952	MIN 2.8	CFSM 4.40	IN 59.76	AC-FT 79,030					
WTR YR 1969	TOTAL 32,960.7	MEAN 90.3	MAX 624	MIN 1.5	CFSM 3.64	IN 49.44	AC-FT 65,380					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	11	31	68	245	51	40	59	18	6.2	2.7	1.4
2	23	10	29	64	206	48	37	56	16	6.4	2.6	1.4
3	18	10	31	62	186	47	34	51	15	6.0	2.6	4.2
4	14	129	36	57	157	43	37	48	15	5.0	2.4	5.2
5	11	166	31	51	137	41	57	44	14	4.8	2.1	3.6
6	9.3	115	31	47	124	70	109	41	15	4.8	2.0	5.4
7	9.0	92	34	47	114	144	120	37	13	4.6	1.8	15
8	31	74	46	48	99	103	97	40	13	4.2	2.1	7.5
9	77	58	56	47	90	83	328	41	14	4.0	2.0	4.8
10	51	47	57	44	83	72	382	42	15	3.8	1.6	4.0
11	32	42	108	42	74	73	230	39	14	3.4	1.4	3.0
12	23	36	317	45	69	75	162	55	14	3.3	1.4	2.7
13	17	32	263	100	64	85	124	59	12	3.3	1.4	2.1
14	15	30	305	661	60	106	99	56	11	3.2	1.6	2.0
15	14	28	258	375	169	134	83	49	12	3.0	1.6	1.8
16	12	31	201	258	604	152	72	46	13	2.8	1.4	1.8
17	12	30	160	247	421	140	66	41	11	2.8	1.4	2.7
18	11	28	142	380	403	119	63	39	10	2.7	1.4	12
19	11	26	133	636	289	101	66	36	9.0	2.4	1.4	19
20	10	30	138	503	205	86	58	33	7.8	2.6	1.4	14
21	9.3	43	208	400	151	75	54	32	7.2	2.4	1.4	9.4
22	9.0	40	260	366	120	69	48	32	7.0	2.2	1.4	18
23	8.6	55	370	386	98	66	48	30	6.7	2.4	1.4	23
24	8.3	74	373	370	83	66	67	27	6.2	2.2	1.2	13
25	8.3	63	253	455	73	58	102	25	6.0	2.6	1.2	9.0
26	7.8	54	187	586	66	55	106	24	5.7	3.6	1.2	6.7
27	9.6	46	137	780	60	51	91	23	5.7	4.4	1.2	5.7
28	12	40	113	443	56	48	79	21	6.0	4.0	1.2	5.0
29	12	38	93	295	-----	45	72	24	5.7	3.4	1.4	4.4
30	11	34	83	210	-----	41	66	23	5.7	3.4	1.4	4.2
31	11	-----	74	215	-----	41	-----	20	-----	3.2	1.2	-----
TOTAL	523.2	1,512	4,558	8,288	4,506	2,388	2,997	1,193	323.7	113.1	50.5	212.0
MEAN	16.9	50.4	147	267	161	77.0	99.9	38.5	10.8	3.65	1.63	7.07
MAX	77	166	373	780	604	152	382	59	18	6.4	2.7	23
MIN	7.8	10	29	42	56	41	34	20	5.7	2.2	1.2	1.4
CFSM	.68	2.03	5.93	10.6	6.49	3.10	4.03	1.55	.44	.15	.07	.29
IN.	.78	2.27	6.84	12.43	6.76	3.58	4.50	1.79	.49	.17	.08	.32
AC-FT	1,040	3,000	9,040	16,440	8,940	4,740	5,940	2,370	642	224	100	421
CAL YR 1969	TOTAL 25,309.9	MEAN 69.3	MAX 624	MIN 1.5	CFSM 2.79	IN 37.96	AC-FT 50,200					
WTR YR 1970	TOTAL 26,664.5	MEAN 73.1	MAX 780	MIN 1.2	CFSM 2.95	IN 40.00	AC-FT 52,890					

CHEHALIS RIVER BASIN

12031000 CHEHALIS RIVER AT PORTER, WASH.

LOCATION.--Lat 46°56'17", long 123°18'45", on north line of NE¼ sec.28, T.17 N., R.5 W., Grays Harbor County, in upstream end of left bank pier of Chehalis River bridge at mouth of Porter Creek, 0.1 mile west of Porter and at mile 33.3.

DRAINAGE AREA.--1,294 sq mi.

PERIOD OF RECORD.--January 1952 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 23.64 ft above mean sea level.

AVERAGE DISCHARGE.--18 years, 4,165 cfs (43.71 inches per year, 3,018,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (20,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 8, 1966	1730	*26,300	20.21	Jan. 30, 1967	0800	25,500	20.08	Jan. 8, 1969	2300	*22,200	19.43
Mar. 11, 1966	1030	21,300	19.26	Feb. 6, 1968	1030	*27,800	20.46	Feb. 12, 1969	2300	20,800	19.16
Dec. 15, 1966	1300	*35,700	21.73	Feb. 21, 1968	1230	22,500	19.50	Jan. 21, 1970	1400	20,400	19.08
Jan. 22, 1967	1000	28,700	20.61	Dec. 12, 1968	1400	20,400	19.07	Jan. 28, 1970	2400	*29,200	20.70

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 8-9, 1966	202	2.42	1969	Sept. 12-14, 1969	253	2.51
1967	Aug. 23-24, 27-31, 1967	185	2.28	1970	Aug. 29, 1970	185	2.30
1968	Oct. 1, 1967	230	2.42				

a Occurred Sept. 28-29, 1967.

Period of record: Maximum discharge, 40,800 cfs Jan. 7, 1954 (gage height, 22.27 ft); minimum, 164 cfs Oct. 17, 1952 (gage height, 2.25 ft).

Flood of Dec. 28, 1937, reached a stage of 24.7 ft, from levels by Grays Harbor County. Flood in December 1933 reached a stage of 23.13 ft, from river profile by Corps of Engineers.

REMARKS.--Records excellent. Cities of Centralia and Chehalis divert about 8 cfs from Newaukum River, a tributary, for municipal use. Other small diversions for irrigation and domestic use. No regulation. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1716: Drainage area. WSP 1932: 1954, 1956, 1960(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	254	455	2,700	9,500	5,840	7,980	4,990	1,640	764	634	332	258
2	251	462	2,860	9,800	5,210	7,250	4,540	1,570	799	654	326	247
3	246	576	3,420	12,900	4,620	6,330	4,140	1,520	860	855	320	237
4	255	1,100	4,910	12,000	4,220	5,820	3,750	1,470	915	1,450	311	223
5	381	2,660	6,310	10,900	4,150	5,620	3,450	1,440	870	1,450	302	218
6	489	2,800	5,530	15,100	4,670	5,930	3,230	1,490	816	1,130	296	214
7	753	2,260	5,070	21,400	5,450	6,180	3,080	1,770	772	935	293	211
8	926	1,860	5,440	25,400	6,000	7,140	2,940	1,740	744	812	290	205
9	656	1,730	5,290	24,600	5,890	14,000	2,850	1,490	731	726	290	202
10	514	1,730	4,590	21,400	6,440	17,900	2,850	1,370	722	650	281	208
11	454	2,320	3,960	16,300	6,690	20,600	3,130	1,280	749	606	281	261
12	413	2,360	3,360	13,900	7,370	16,500	4,910	1,220	845	570	275	259
13	407	2,040	2,940	14,700	7,610	12,200	5,490	1,160	880	534	275	304
14	465	2,080	2,650	16,300	6,620	10,400	4,850	1,130	830	506	275	339
15	565	2,100	2,410	17,300	5,800	11,500	4,580	1,140	762	490	269	315
16	1,140	1,900	2,180	16,400	5,020	14,600	4,110	1,310	718	494	269	296
17	1,070	1,650	1,990	13,200	4,910	15,300	3,670	1,450	686	494	266	294
18	860	1,460	1,850	10,100	4,110	13,100	3,310	1,370	659	480	253	346
19	1,040	1,740	1,740	7,920	3,750	11,100	3,000	1,210	646	462	244	333
20	1,020	3,340	1,650	8,620	3,560	11,200	2,800	1,110	634	438	232	387
21	1,040	3,870	1,690	5,720	3,700	12,200	2,810	1,070	634	434	222	347
22	851	4,510	1,850	5,110	3,620	12,200	2,640	1,050	650	413	217	308
23	723	6,090	1,740	4,660	3,460	11,100	2,440	1,080	622	392	214	297
24	635	5,320	1,910	4,440	3,460	9,710	2,280	1,030	598	388	210	284
25	575	4,180	2,900	4,160	3,280	8,840	2,150	964	582	388	209	290
26	528	3,010	2,790	3,870	3,200	8,100	2,060	915	562	402	214	314
27	499	3,020	3,480	3,710	3,520	7,430	1,980	882	542	413	241	330
28	497	4,090	9,670	3,810	6,010	6,740	1,890	862	562	392	244	354
29	491	3,590	14,500	3,930	-----	6,000	1,800	824	664	371	256	351
30	303	2,990	14,700	8,050	-----	5,530	1,720	792	762	354	297	320
31	472	-----	12,300	5,960	-----	5,360	-----	770	-----	341	277	-----
TOTAL	18,973	77,253	138,380	346,160	137,780	313,860	97,440	38,119	21,580	18,658	8,281	8,552
MEAN	612	2,575	4,464	11,170	4,921	10,120	3,248	1,230	719	602	267	285
MAX	1,140	6,090	14,700	25,400	7,610	20,600	5,490	1,770	915	1,450	332	387
MIN	246	455	1,650	3,710	3,200	5,360	1,720	770	542	341	209	202
CFSM	.47	1.99	3.45	8.63	3.80	7.82	2.51	.95	.56	.47	.21	.22
IN.	.55	2.22	3.98	9.95	3.96	9.02	2.80	1.10	.62	.54	.24	.25
AC-FT	37,630	153,200	274,500	686,600	273,300	622,500	193,300	75,610	42,800	37,010	16,430	16,960
CAL YR 1965	TOTAL	1,155,944	MEAN	3,167	MAX	33,300	MIN	225	CFSM	2.45	IN	33.23
WTR YR 1966	TOTAL	1,225,036	MEAN	3,356	MAX	25,400	MIN	202	CFSM	2.59	IN	35.22
											AC-FT	2,430,000

12031000 CHEHALIS RIVER AT PORTER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295	990	10,000	6,760	19,000	4,660	5,630	2,550	1,070	560	295	189
2	286	895	12,000	8,620	14,300	4,910	5,090	2,370	990	536	267	196
3	276	826	14,000	8,890	11,800	4,610	4,650	2,260	955	516	279	206
4	274	758	15,000	11,500	10,200	4,210	4,320	2,170	936	496	269	209
5	274	731	15,000	15,400	8,890	3,870	4,180	2,070	885	484	261	215
6	265	713	17,700	17,000	7,780	3,580	3,960	1,980	830	470	259	222
7	265	760	17,100	15,400	6,850	3,340	3,580	1,900	793	466	258	216
8	264	744	15,500	13,200	6,120	3,200	3,310	1,830	775	463	259	208
9	266	718	13,000	11,100	5,550	3,390	3,190	1,800	753	459	263	215
10	293	754	10,800	9,250	5,110	4,140	3,180	1,760	735	452	264	231
11	304	772	11,200	8,970	4,820	4,270	3,000	1,710	721	449	251	278
12	304	905	13,000	10,300	4,900	4,020	2,810	1,670	721	435	239	273
13	312	1,780	21,100	11,500	7,140	3,730	3,010	1,600	721	417	229	339
14	345	4,540	26,300	13,500	12,000	3,610	3,930	1,530	712	410	222	331
15	394	8,080	34,000	13,400	12,400	4,120	3,780	1,480	679	400	214	283
16	352	7,700	29,300	12,400	11,800	6,740	3,520	1,430	649	393	207	252
17	330	5,920	20,200	11,500	11,300	8,410	3,730	1,390	620	386	200	237
18	310	4,530	13,800	9,880	11,600	8,470	4,330	1,370	600	379	197	228
19	337	3,650	10,700	11,100	11,700	8,040	6,270	1,320	580	382	196	224
20	634	3,190	10,100	18,000	9,730	7,110	6,280	1,260	572	400	192	221
21	1,630	2,850	9,880	25,300	8,030	6,720	5,380	1,210	608	389	193	218
22	3,090	2,600	8,380	28,300	8,860	6,990	4,700	1,180	840	386	191	212
23	5,080	2,370	7,130	24,200	6,010	11,200	4,180	1,140	1,720	379	189	207
24	3,820	2,120	6,930	17,400	5,390	14,800	3,750	1,100	1,410	358	187	204
25	2,590	2,200	7,730	13,200	4,920	14,800	3,380	1,060	1,010	337	188	203
26	1,890	2,740	8,260	11,200	4,530	12,300	3,260	1,010	825	328	188	202
27	1,500	3,140	7,460	12,500	4,140	10,300	3,170	970	730	322	187	199
28	1,380	3,190	6,500	17,100	4,120	8,270	2,960	955	676	313	186	197
29	1,210	3,140	6,190	23,000	-----	7,060	2,800	975	628	313	187	207
30	1,110	4,460	6,470	25,400	-----	6,330	2,710	1,030	592	307	187	225
31	1,090	-----	6,080	23,800	-----	6,060	-----	1,140	-----	301	186	-----
TOTAL	30,770	77,786	410,810	459,070	236,990	203,760	118,040	47,220	24,335	12,686	6,910	6,847
MEAN	993	2,593	13,250	14,810	8,464	6,573	3,933	1,523	811	409	223	228
MAX	5,080	8,080	34,000	28,300	19,000	14,800	6,280	2,550	1,720	560	295	339
MIN	264	713	6,080	6,760	4,120	3,200	2,710	955	572	301	186	189
CFSM	.77	2.00	10.2	11.4	6.34	5.08	3.04	1.18	.63	.32	.17	.18
IN.	.88	2.24	11.81	13.20	6.81	5.86	3.38	1.36	.70	.36	.20	.20
AC-FT	61,030	154,300	814,600	910,600	470,100	404,200	234,100	93,660	46,270	25,160	13,710	13,580

CAL YR 1967 TOTAL 1,509,796 MEAN 4,136 MAX 34,000 MIN 186 CFSM 3.26 IN 43.40 AC-FT 2,995,000
WTR YR 1968 TOTAL 1,635,224 MEAN 4,480 MAX 34,000 MIN 186 CFSM 3.40 IN 47.01 AC-FT 3,243,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	310	3,660	4,580	4,210	5,660	5,590	7,990	2,550	1,830	941	386	1,410
2	477	2,970	5,210	4,290	7,680	5,020	6,600	2,520	5,420	872	375	1,240
3	1,250	2,470	9,460	3,870	13,500	4,530	5,720	2,290	10,400	813	368	1,130
4	1,650	2,120	13,100	3,500	20,700	4,200	5,110	2,150	8,110	771	365	988
5	1,900	1,860	14,300	3,350	24,100	4,100	4,680	2,130	5,530	737	365	873
6	1,410	1,670	14,900	3,170	26,600	4,140	4,890	2,180	4,160	710	365	790
7	1,460	1,540	13,800	2,970	20,300	3,910	4,620	2,150	3,310	681	361	733
8	1,150	1,510	11,600	3,070	13,200	3,560	4,280	2,040	2,800	655	358	691
9	918	2,070	9,850	4,570	9,150	3,280	3,910	1,930	2,470	629	369	657
10	756	4,750	9,330	10,500	7,230	3,050	3,580	1,830	2,230	613	331	635
11	863	8,590	10,300	12,300	6,070	2,910	3,310	1,740	2,060	604	322	629
12	910	8,190	10,600	9,510	5,310	3,270	3,100	1,690	1,940	632	313	634
13	1,340	5,710	8,160	9,490	4,740	4,290	2,890	1,650	1,900	632	310	635
14	1,480	4,480	8,430	13,000	4,280	4,610	2,810	1,620	1,840	675	379	670
15	2,150	3,860	5,380	14,900	3,870	6,240	3,820	1,540	1,740	666	393	873
16	1,620	3,360	4,700	15,300	3,520	10,700	5,120	1,470	1,590	668	463	1,480
17	1,230	2,880	4,230	14,300	3,360	13,300	4,570	1,390	1,470	658	473	1,810
18	1,010	2,620	3,850	12,600	4,780	11,500	4,030	1,330	1,380	617	484	1,850
19	906	2,450	3,460	13,500	12,200	8,560	3,700	1,300	1,300	591	592	3,060
20	895	2,260	3,090	15,400	17,700	6,700	3,510	1,490	1,220	584	663	2,750
21	1,200	2,050	2,840	17,100	21,700	5,600	3,350	2,000	1,170	588	717	2,300
22	1,920	1,900	3,660	16,800	20,800	4,870	3,110	2,230	1,210	568	636	1,920
23	3,310	1,790	6,730	14,300	19,700	4,370	3,000	2,330	1,290	540	780	1,680
24	3,770	1,790	8,630	10,800	17,400	4,220	3,180	2,370	1,240	524	1,060	1,560
25	3,330	1,890	8,490	8,390	15,500	4,460	3,060	2,300	1,110	500	1,960	1,440
26	3,740	1,950	7,990	7,250	12,300	5,280	2,990	2,170	1,030	480	1,780	1,290
27	4,210	1,840	7,320	6,350	9,300	6,990	2,920	1,970	993	470	2,040	1,170
28	7,460	1,750	6,530	5,460	7,480	12,500	2,710	1,800	959	449	2,180	1,080
29	9,740	2,160	5,770	4,880	6,310	15,700	2,540	1,670	985	435	2,790	670
30	6,920	3,650	5,060	4,540	-----	13,900	2,430	1,530	995	417	2,310	935
31	4,790	-----	4,510	4,540	-----	10,500	-----	1,430	-----	396	1,710	-----
TOTAL	74,075	89,790	234,160	274,210	344,500	201,850	117,730	58,790	73,682	19,116	25,973	37,917
MEAN	2,390	2,993	7,554	8,845	11,880	6,511	3,924	1,896	2,456	617	838	1,284
MAX	9,740	8,590	14,900	17,100	26,600	15,700	7,990	2,550	10,400	941	2,790	3,060
MIN	310	1,510	2,840	2,970	3,360	2,910	2,430	1,300	959	396	310	629
CFSM	1.85	2.31	5.84	6.84	9.18	5.03	3.03	1.47	1.90	.48	.65	.98
IN.	2.13	2.58	6.73	7.88	9.40	5.80	3.08	1.69	2.12	.55	.75	1.09
AC-FT	146,900	178,100	464,500	543,900	683,300	400,400	233,500	116,600	146,100	37,920	51,520	75,210

CAL YR 1967 TOTAL 1,513,883 MEAN 4,148 MAX 28,300 MIN 186 CFSM 3.71 IN 43.52 AC-FT 3,003,000
WTR YR 1968 TOTAL 1,551,793 MEAN 4,240 MAX 26,600 MIN 310 CFSM 3.28 IN 44.61 AC-FT 3,078,000

12031000 CHEHALIS RIVER AT PORTER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	885	3,510	9,660	5,960	3,610	3,970	4,510	2,690	2,000	1,410	369	315		
2	840	3,270	9,160	7,580	3,780	3,820	5,020	2,520	1,600	1,190	363	303		
3	807	3,580	9,470	8,490	4,080	3,860	5,480	2,390	1,410	1,050	367	295		
4	850	3,590	13,900	9,890	5,570	4,050	4,810	2,260	1,250	990	364	291		
5	860	3,220	17,600	13,000	7,310	4,650	4,810	2,130	1,130	987	371	284		
6	1,040	2,900	17,600	15,800	7,540	6,320	4,720	2,010	1,050	962	372	285		
7	1,070	2,700	14,900	18,200	6,480	6,880	4,290	1,900	1,010	898	379	279		
8	1,190	3,330	12,800	20,500	6,810	6,000	3,840	1,830	991	838	377	272		
9	1,090	6,060	13,100	20,400	12,400	5,280	3,480	1,780	947	792	366	267		
10	1,080	7,770	13,900	17,100	16,600	4,720	3,300	1,740	899	750	361	264		
11	1,520	8,050	16,800	16,300	17,700	4,280	3,130	1,680	864	770	357	259		
12	2,100	12,600	19,900	15,600	19,400	3,940	2,950	1,610	842	756	349	255		
13	3,130	14,700	17,800	12,900	19,600	3,660	3,160	1,530	830	746	350	257		
14	3,990	12,400	14,300	10,700	15,600	3,470	3,620	1,450	806	698	344	255		
15	4,330	9,300	11,400	9,950	11,800	3,360	3,260	1,380	780	656	341	263		
16	6,070	7,450	9,530	8,890	9,790	3,420	2,950	1,310	751	621	335	273		
17	5,590	6,240	8,730	8,320	9,370	5,260	2,850	1,250	724	594	339	321		
18	4,730	5,510	8,270	7,520	8,760	9,680	3,350	1,200	693	568	342	428		
19	4,360	5,150	8,570	6,650	7,810	10,600	4,800	1,220	661	543	335	665		
20	4,444	4,740	7,830	5,870	7,030	8,950	5,910	1,530	653	525	330	942		
21	4,950	4,650	6,850	5,240	6,440	7,300	5,620	1,540	648	501	328	1,120		
22	4,900	5,830	6,090	4,710	5,960	6,370	4,880	1,310	677	485	324	924		
23	4,240	7,810	6,130	4,200	5,580	5,930	4,520	1,180	808	470	316	1,080		
24	3,670	7,640	8,300	3,810	5,300	5,600	4,440	1,110	1,130	455	312	1,560		
25	3,240	6,850	11,900	3,560	5,000	5,010	4,000	1,080	1,450	437	320	1,730		
26	2,990	5,980	11,800	3,410	4,690	4,570	3,570	1,080	1,390	423	319	1,300		
27	2,720	5,800	9,620	3,270	4,390	4,390	3,220	1,200	1,530	413	322	1,040		
28	2,450	6,180	7,940	3,090	4,150	4,360	2,970	1,300	1,480	402	337	866		
29	2,260	6,700	6,600	2,890	-----	4,090	2,940	1,400	1,570	392	338	763		
30	2,640	8,390	5,610	2,780	-----	3,930	2,930	2,200	1,540	384	350	718		
31	3,780	-----	5,190	2,950	-----	4,070	-----	2,300	-----	375	331	-----		
TOTAL	87,502	191,900	341,250	279,130	242,550	161,790	119,330	51,110	32,114	21,081	10,708	17,874		
MEAN	2,823	6,397	11,010	9,004	8,663	5,219	3,978	1,649	1,070	680	345	596		
MAX	6,070	14,700	19,900	20,500	19,600	10,600	5,910	2,690	2,000	1,410	379	1,730		
MIN	807	2,700	5,190	2,780	3,610	3,360	2,850	1,080	648	375	312	255		
CFSM	2.18	4.94	8.51	6.96	6.69	4.03	3.07	1.27	83	53	27	46		
IN.	2.52	5.52	9.81	8.02	6.97	4.45	3.43	1.47	92	61	31	51		
AC-FT	173,600	380,600	676,900	553,700	481,100	320,900	236,700	101,400	63,700	41,810	21,240	35,450		
CAL YR 1968	TOTAL	1,774,420	MEAN	4,848	MAX	26,600	MIN	310	CFSM	3.75	IN	51.01	AC-FT	3,520,000
WTR YR 1969	TOTAL	1,556,339	MEAN	4,264	MAX	20,500	MIN	255	CFSM	3.30	IN	44.74	AC-FT	3,087,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	871	820	1,320	4,000	12,900	3,530	2,060	3,810	1,080	483	304	230		
2	1,560	772	1,230	3,580	12,400	3,260	2,010	3,410	1,010	487	295	231		
3	1,860	739	1,170	3,280	10,700	3,050	1,940	3,100	940	476	301	203		
4	1,510	1,280	1,220	3,150	9,200	2,860	1,880	2,840	895	455	286	314		
5	1,190	3,700	1,350	2,890	7,940	2,670	2,130	2,620	860	438	277	321		
6	989	5,660	1,340	2,600	7,150	2,890	2,810	2,360	830	424	268	419		
7	886	5,850	1,390	2,410	6,640	4,670	3,590	2,220	790	410	268	555		
8	1,050	4,900	1,610	2,330	6,210	6,130	3,640	2,160	763	399	271	564		
9	2,450	3,570	1,940	2,410	5,670	5,050	4,390	2,270	772	385	265	646		
10	3,510	2,790	2,260	2,460	5,250	4,330	8,230	2,490	800	376	262	498		
11	2,630	2,300	2,650	2,340	4,830	3,880	9,270	2,630	840	364	265	415		
12	1,980	1,990	8,800	2,220	4,440	3,900	6,990	2,810	820	358	255	365		
13	1,580	1,760	13,500	2,830	4,100	4,200	5,600	3,160	786	355	242	335		
14	1,310	1,590	15,000	10,100	3,820	4,880	4,760	2,900	750	352	235	315		
15	1,130	1,470	13,000	16,300	4,290	6,780	4,100	2,550	736	346	229	300		
16	1,020	1,440	11,300	18,900	11,100	7,110	3,580	2,280	736	343	222	293		
17	929	1,470	9,510	16,700	16,600	6,900	3,220	2,090	741	340	222	299		
18	858	1,480	8,280	15,700	18,800	6,200	2,940	1,920	709	331	222	415		
19	797	1,380	7,780	16,900	17,800	5,380	3,010	1,780	678	328	218	440		
20	752	1,360	7,660	18,600	14,700	4,750	3,460	1,670	637	325	215	674		
21	722	1,570	7,830	19,700	11,000	4,220	3,190	1,590	602	322	219	796		
22	694	1,980	9,290	18,600	8,400	3,780	2,980	1,550	574	310	219	778		
23	668	1,910	11,900	17,600	6,820	3,440	2,770	1,500	550	307	215	742		
24	654	2,090	15,600	17,500	5,830	3,380	2,890	1,440	534	298	219	923		
25	653	2,220	15,200	17,500	5,150	3,280	4,430	1,350	518	301	218	768		
26	654	2,000	11,900	20,400	4,600	2,930	5,820	1,260	506	319	219	613		
27	649	1,810	8,970	27,600	4,170	2,710	5,910	1,180	494	334	219	526		
28	678	1,650	7,060	27,900	3,810	2,540	5,250	1,110	483	334	230	471		
29	914	1,530	5,890	28,200	-----	2,410	4,570	1,120	483	346	230	437		
30	977	1,420	5,120	21,100	-----	2,280	4,180	1,150	480	340	225	409		
31	874	-----	4,510	14,900	-----	2,160	-----	1,180	-----	322	226	-----		
TOTAL	36,999	66,501	215,580	380,700	234,320	125,550	121,620	65,500	21,397	11,308	7,561	14,395		
MEAN	1,194	2,150	6,954	12,280	7,569	4,050	4,054	2,113	713	365	244	480		
MAX	3,510	5,850	15,600	28,200	18,800	7,110	9,270	3,190	1,080	487	304	923		
MIN	649	739	1,170	2,220	3,810	2,160	1,880	1,110	480	298	215	230		
CFSM	.92	1.66	5.37	9.49	6.47	3.13	3.13	1.63	.55	.28	.19	.37		
IN.	1.06	1.85	6.20	10.94	6.74	3.61	3.50	1.88	.62	.33	.22	.41		
AC-FT	73,390	127,900	427,660	755,100	464,800	249,000	241,200	129,900	42,440	22,430	15,000	28,550		
CAL YR 1969	TOTAL	1,252,767	MEAN	3,432	MAX	20,500	MIN	255	CFSM	2.65	IN	36.01	AC-FT	2,485,000
WTR YR 1970	TOTAL	1,299,431	MEAN	3,560	MAX	28,200	MIN	215	CFSM	2.75	IN	37.36	AC-FT	2,577,000

12032500 CLOQUALLUM CREEK AT ELMA, WASH.
(Formerly published as Cloquallum River at Elma)

LOCATION.--Lat 47°00'17", long 123°23'11", in SW¼NW¼ sec.36, T.18 N., R.6 W., Grays Harbor County, on right bank 10 ft downstream from bridge on State Highway 12, 1.7 miles (revised) east of Elma, 1.9 miles downstream from Wildcat Creek, and at mile 1.9.

DRAINAGE AREA.--64.9 sq mi.

PERIOD OF RECORD.--July 1942 to October 1943 (fragmentary), July 1944 to September 1970. Formerly published as Cloquallum River at Elma.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft (from topographic map). Prior to Aug. 7, 1944, nonrecording gage at site 350 ft downstream at datum 0.42 ft lower. Aug. 7, 1944, to Sept. 1, 1953, water-stage recorder at site 200 ft upstream at present datum.

AVERAGE DISCHARGE.--26 years (1944-70), 270 cfs (56.50 inches per year, 195,600 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,500 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	1300	2,340	8.39	Jan. 19, 1967	2030	2,760	8.88	Feb. 19, 1968	0830	2,070	7.92
Jan. 13, 1966	0800	*2,450	8.52	Jan. 28, 1967	0800	1,790	7.57				
Mar. 9, 1966	0700	1,920	7.83					Dec. 3, 1968	2230	1,580	7.13
				Oct. 27, 1967	2200	1,630	7.32	Jan. 5, 1969	0400	*2,100	7.96
Nov. 30, 1966	2030	1,520	7.30	Jan. 19, 1968	1430	*3,820	10.05				
Dec. 13, 1966	1430	*3,510	9.74	Feb. 4, 1968	0445	2,020	7.85	Jan. 27, 1970	0430	*1,710	7.43

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1-4, 1965, Aug. 20-23, 1966	20	a2.90	1969	Sept. 9-11, 1969	24	2.59
1967	Sept. 8-9, 1967	17	b2.85	1970	Aug. 25, 30, 31, 1970	26	c2.87
1968	Aug. 11, 1968	34	2.60				

a Occurred Aug. 20-23, 1966.

b Occurred Sept. 27-29, 1967.

c Occurred Oct. 27, 1969.

Period of record: Maximum discharge, 5,080 cfs Dec. 15, 1959 (gage height, 10.6 ft, from high watermark in well); maximum gage height, 11.04 ft Feb. 9, 1951 (site then in use); minimum discharge, 6.8 cfs Sept. 15, 1945 (gage height, 1.43 ft).

REMARKS.--Records excellent. Several small diversions on minor tributaries above station and some regulation by log pond on Wildcat Creek.

REVISIONS (WATER YEARS).--WSP 1932: 1956(P), 1957(M), 1960(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	39	224	449	360	480	238	110	55	39	24	27
2	20	66	284	756	333	423	222	100	64	54	23	25
3	20	113	354	604	306	375	205	97	68	98	23	25
4	27	248	870	516	321	336	194	93	64	80	24	24
5	105	456	584	664	333	363	184	92	58	62	25	22
6	109	273	580	2,030	360	372	178	110	54	55	23	24
7	69	212	544	1,820	366	402	174	106	53	50	23	23
8	46	224	442	1,410	363	707	168	92	51	45	23	23
9	36	193	385	1,040	375	1,690	174	83	50	44	23	23
10	31	212	356	840	336	1,040	168	80	54	41	24	26
11	27	526	294	825	414	698	225	80	61	41	24	41
12	28	356	263	1,100	435	546	245	78	62	40	24	38
13	35	286	243	2,300	381	958	200	74	53	38	25	30
14	76	263	224	1,940	354	578	230	76	53	37	25	27
15	89	226	207	1,220	309	826	210	86	49	38	24	28
16	56	191	189	855	292	860	192	112	44	36	24	29
17	69	171	176	666	282	702	182	88	44	33	23	32
18	104	163	173	546	270	694	174	77	44	34	22	50
19	173	344	169	474	252	754	162	76	44	33	22	36
20	115	347	171	426	290	786	162	72	42	32	21	29
21	93	336	196	393	292	734	154	74	44	31	20	25
22	74	438	167	360	260	634	148	74	49	30	21	25
23	63	364	169	345	252	538	140	71	42	29	21	31
24	55	305	189	318	252	456	136	68	41	29	21	30
25	50	248	184	306	255	405	130	67	39	29	22	29
26	48	240	180	288	268	354	128	65	39	29	27	31
27	46	253	344	300	369	315	118	64	41	28	45	31
28	54	214	688	280	459	290	116	62	54	26	37	29
29	49	193	674	366	-----	268	112	60	45	26	30	26
30	46	205	652	393	-----	280	112	57	40	25	33	25
31	43	-----	488	396	-----	260	-----	55	-----	24	29	-----
TOTAL	1,876	7,705	10,663	24,226	9,139	17,724	5,181	2,503	1,501	1,236	775	864
MEAN	60.5	257	344	781	326	572	173	80.7	50.0	39.9	25.0	28.8
MAX	173	526	870	2,300	459	1,690	245	112	68	98	45	50
MIN	20	39	167	280	252	260	112	55	39	24	20	22
CFSM	.93	3.96	5.30	12.0	5.02	8.81	2.67	1.24	.77	.61	.39	.44
IN.	1.08	4.42	6.11	13.89	5.24	10.16	2.97	1.43	.86	.71	.44	.50
AC-FT	3,720	15,280	21,150	48,050	18,130	35,160	10,280	4,960	2,980	2,450	1,540	1,710
CAL YR 1965	TOTAL 84,382	MEAN 231	MAX 2,170	MIN 16	CFSM 3.56	IN 48.37	AC-FT 167,400					
WTR YR 1966	TOTAL 83,393	MEAN 228	MAX 2,300	MIN 20	CFSM 3.51	IN 47.80	AC-FT 165,400					

CHEHALIS RIVER BASIN

12032500 CLOQUALLUM CREEK AT ELMA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	95	1,240	737	729	468	297	169	81	44	30	24
2	25	83	885	713	530	435	278	163	78	37	28	20
3	24	77	642	874	924	378	250	161	80	39	28	26
4	23	70	632	1,140	1,070	348	248	152	77	38	28	22
5	23	70	670	1,020	793	306	237	144	70	38	28	21
6	24	70	750	834	633	282	216	138	67	37	29	19
7	28	802	802	713	530	435	278	163	78	37	30	20
8	30	62	618	830	460	270	194	128	64	37	28	18
9	28	77	514	717	426	306	221	126	63	35	26	25
10	27	100	686	677	396	297	199	123	61	35	25	34
11	24	83	730	838	393	264	187	119	60	34	24	54
12	40	124	1,180	843	496	199	114	64	34	24	38	
13	42	220	3,190	920	1,270	242	242	110	61	32	24	29
14	31	456	2,060	793	910	245	234	107	60	32	23	26
15	29	393	1,540	888	861	285	211	103	58	31	23	24
16	27	324	1,260	866	733	384	237	98	56	31	23	23
17	26	985	745	745	351	245	255	95	54	31	22	22
18	28	225	830	614	725	378	351	93	54	31	22	22
19	57	200	933	1,810	597	330	360	90	51	38	23	22
20	164	180	1,080	2,090	506	357	357	87	51	51	23	23
21	156	176	789	1,390	447	330	315	82	64	46	25	23
22	375	160	629	1,040	405	405	276	82	90	39	26	23
23	298	146	555	874	363	1,370	248	81	67	37	23	22
24	232	132	713	721	330	1,080	221	80	58	35	22	21
25	156	294	705	657	321	817	214	80	52	35	22	21
26	126	268	584	805	288	649	204	77	52	36	22	21
27	106	530	502	1,200	264	190	126	52	34	22	19	
28	88	336	478	1,660	428	471	185	95	50	35	21	18
29	114	360	618	1,380	-----	408	197	108	49	32	21	27
30	136	1,080	624	1,110	-----	363	202	95	47	31	23	36
31	104	-----	502	817	-----	327	-----	86	-----	30	24	-----
TOTAL	2,612	6,519	27,928	30,192	16,728	13,490	7,229	3,393	1,858	1,119	762	752
MEAN	84.3	217	901	974	597	435	241	109	61.9	36.1	24.6	25.1
MAX	375	1,080	3,190	2,090	1,270	1,370	360	169	90	51	30	54
MIN	23	62	478	614	264	242	185	75	47	30	21	18
CFSM	1.30	3.34	13.9	15.0	9.20	6.70	3.71	1.68	.95	.56	.38	.39
IN-	1.50	3.74	16.01	17.31	9.59	7.75	4.14	1.94	1.06	.64	.44	.43
AC-FT	5,180	12,930	55,400	59,890	33,180	26,760	14,340	6,730	3,690	2,220	1,310	1,490
CAL YR 1966	TOTAL 100,208	MEAN 275	MAX 3,190	MIN 18	CFSM 4.24	IN 57.44	AC-FT 198,800					
WTR YR 1967	TOTAL 112,582	MEAN 308	MAX 3,190	MIN 18	CFSM 4.75	IN 64.53	AC-FT 223,300					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	297	270	300	387	338	407	166	283	68	40	75
2	123	248	498	267	692	318	362	160	586	64	40	70
3	117	209	1,280	239	1,190	292	318	148	368	63	40	62
4	106	180	956	232	1,710	338	330	146	272	60	40	57
5	98	165	777	226	985	365	330	166	218	60	41	53
6	96	148	604	204	712	347	305	166	182	58	40	52
7	130	140	534	219	558	312	280	150	162	56	40	52
8	98	183	447	239	464	282	258	140	150	53	38	51
9	77	363	720	579	404	245	240	132	138	52	37	50
10	80	748	897	566	356	258	225	126	128	52	36	49
11	262	649	809	454	322	278	215	125	125	54	36	53
12	180	450	594	464	292	478	202	121	114	75	36	59
13	192	348	471	868	270	467	190	125	132	60	40	53
14	190	303	387	970	250	499	291	114	130	64	62	91
15	134	264	330	821	232	741	437	107	110	77	52	146
16	105	237	300	733	225	1,000	335	101	98	70	56	116
17	90	206	270	805	252	740	298	98	94	59	49	212
18	84	202	248	884	778	566	272	94	89	56	52	212
19	84	190	221	3,150	1,900	458	258	105	88	53	64	160
20	75	171	204	2,920	1,230	401	235	152	84	54	63	138
21	284	161	238	2,550	1,270	356	225	146	80	52	50	114
22	421	152	693	1,400	1,180	318	204	150	96	50	52	105
23	496	148	866	951	1,240	310	230	140	89	48	117	126
24	339	165	995	701	948	328	208	132	78	48	88	108
25	399	156	1,050	572	720	371	232	126	72	48	80	94
26	282	142	769	488	586	344	212	116	75	48	89	89
27	951	136	586	414	488	885	198	110	80	46	116	78
28	1,050	144	478	351	422	896	186	107	80	44	208	75
29	562	256	405	321	377	740	176	96	86	43	126	72
30	460	264	351	303	-----	566	170	91	74	42	94	68
31	360	-----	318	372	-----	470	-----	91	-----	40	75	-----
TOTAL	8,036	7,425	17,486	23,543	20,440	14,327	7,829	3,947	4,359	1,717	2,008	2,740
MEAN	259	248	564	759	705	462	261	127	145	55.4	64.8	91.3
MAX	1,050	748	1,200	3,150	1,900	1,000	498	166	586	77	208	212
MIN	75	136	204	204	225	258	170	91	72	40	36	49
CFSM	3.99	3.82	8.69	11.7	10.9	7.12	4.02	1.96	2.23	.85	1.00	1.41
IN-	4.61	4.26	10.02	13.49	11.72	8.21	4.49	2.26	2.50	.98	1.15	1.57
AC-FT	15,940	14,730	34,680	46,780	40,540	28,420	15,530	7,830	8,650	3,410	3,980	5,430
CAL YR 1967	TOTAL 108,470	MEAN 297	MAX 3,150	MIN 18	CFSM 4.58	IN 62.17	AC-FT 215,200					
WTR YR 1968	TOTAL 115,857	MEAN 311	MAX 3,150	MIN 18	CFSM 4.79	IN 65.26	AC-FT 225,800					

12032500 CLOQUALLUM CREEK AT ELMA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	170	558	473	280	272	280	176	108	56	39	26
2	64	295	513	496	285	275	377	168	96	51	40	26
3	62	238	1,030	694	422	278	310	162	91	54	39	26
4	75	210	1,160	1,080	482	272	368	156	81	59	37	26
5	75	194	832	1,760	482	436	312	146	77	72	38	26
6	136	182	618	1,240	416	473	278	138	77	59	37	26
7	110	188	524	1,400	368	389	250	132	77	56	37	25
8	91	461	752	1,030	616	335	232	128	74	56	36	25
9	91	462	760	1,180	776	300	218	123	71	53	36	25
10	152	425	840	1,100	744	268	208	119	70	54	35	25
11	174	700	980	936	1,040	245	194	117	70	63	33	24
12	220	696	792	752	872	228	196	118	70	57	33	25
13	398	524	632	618	672	220	268	105	68	50	33	26
14	174	419	527	580	558	208	228	99	65	48	33	26
15	377	347	458	524	510	210	208	96	64	47	33	26
16	315	295	437	479	516	222	194	94	63	46	32	30
17	288	255	392	449	496	446	238	91	60	45	32	52
18	270	289	476	392	473	449	308	89	59	44	32	75
19	242	312	398	368	448	431	478	91	59	42	33	84
20	419	252	359	335	410	371	425	89	62	41	34	77
21	362	359	328	308	374	330	359	84	60	48	34	63
22	389	740	322	282	353	320	305	80	64	40	33	124
23	312	597	455	258	335	312	325	77	86	39	32	240
24	270	458	597	242	322	268	282	77	83	38	31	235
25	240	359	628	235	310	245	250	77	72	38	33	162
26	212	347	530	238	308	230	230	60	63	38	33	116
27	190	452	461	212	295	210	212	86	63	38	33	89
28	172	434	395	200	282	208	204	88	60	38	34	75
29	172	457	361	194	172	190	208	212	70	38	30	68
30	235	618	300	188	-----	190	188	212	99	37	28	83
31	188	-----	355	280	-----	222	-----	132	-----	38	26	-----
TOTAL	6,810	11,857	17,730	18,514	13,435	9,045	8,066	3,648	2,142	1,473	1,049	1,956
MEAN	220	395	572	597	480	292	265	117	71.4	47.5	33.8	65.2
MAX	419	740	1,160	1,760	1,040	473	479	218	108	72	40	240
MIN	62	170	300	188	280	190	188	77	59	37	26	24
CFSM	3.39	6.09	8.81	9.20	7.40	4.50	4.14	1.80	1.18	.73	.52	1.00
IN.	3.90	6.80	10.16	10.61	7.70	5.18	4.62	2.09	1.23	.84	.60	1.12
AC-FT	13,510	23,520	35,170	36,720	26,650	17,940	16,000	7,220	4,250	2,928	2,080	3,880
CAL YR 1968	TOTAL 117,307	MEAN 321	MAX 3,150	MIN 34	CFSM 4.95	IN 67.24	AC-FT 232,700					
WTR YR 1969	TOTAL 95,717	MEAN 262	MAX 1,760	MIN 24	CFSM 4.04	IN 54.86	AC-FT 189,900					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	71	120	240	693	207	141	223	80	49	33	28
2	147	70	111	225	585	199	125	203	78	48	33	27
3	188	79	111	223	567	195	124	195	70	44	33	51
4	90	299	141	215	490	175	148	175	68	43	32	37
5	80	398	120	203	454	171	320	155	68	42	32	33
6	70	378	120	195	441	349	454	155	66	40	38	55
7	83	320	120	191	458	354	405	152	69	38	32	93
8	173	265	169	205	418	408	382	175	62	37	33	43
9	233	225	173	215	378	333	976	175	68	36	32	34
10	179	195	187	197	351	291	1,000	175	70	36	29	32
11	137	171	280	209	315	295	680	155	66	34	28	30
12	116	155	431	217	299	320	522	191	66	34	27	28
13	100	141	563	308	279	333	428	191	64	34	29	27
14	90	133	636	739	267	400	360	159	62	34	32	27
15	83	128	521	521	490	465	315	155	62	34	36	27
16	80	132	446	455	1,080	459	279	148	62	34	36	28
17	76	123	402	458	955	392	247	148	57	34	32	37
18	68	115	402	622	865	346	271	131	55	34	32	73
19	67	110	375	1,880	662	307	275	124	55	33	30	73
20	64	141	375	915	536	271	235	121	53	34	29	64
21	61	175	458	886	450	247	223	121	51	34	28	51
22	59	149	878	886	382	287	121	84	42	32	28	107
23	58	191	686	965	358	231	215	110	49	33	27	87
24	57	189	650	886	307	235	295	115	49	33	27	51
25	57	179	500	886	283	195	324	98	49	34	26	43
26	55	167	422	1,040	263	187	315	92	48	42	27	37
27	78	153	360	1,480	247	175	315	92	48	44	27	34
28	84	143	325	935	227	167	279	90	48	34	27	34
29	78	132	380	756	-----	155	263	101	46	34	27	34
30	80	126	272	608	-----	152	243	109	48	34	26	34
31	77	-----	255	684	-----	145	-----	98	-----	33	27	-----
TOTAL	2,926	5,254	10,519	17,638	13,073	8,518	10,376	4,453	1,781	1,141	927	1,359
MEAN	94.4	175	339	569	467	275	346	144	59.4	36.8	29.9	45.3
MAX	233	398	686	1,480	1,080	554	1,000	223	80	49	36	107
MIN	55	70	111	191	227	145	124	90	46	33	26	27
CFSM	1.45	2.70	5.22	8.77	7.20	4.24	5.33	2.22	.92	.57	.46	.70
IN.	1.68	3.01	6.03	10.11	7.49	4.88	5.95	2.55	1.02	.65	.53	.78
AC-FT	5,800	10,420	20,868	34,980	25,930	16,900	20,580	8,830	3,530	2,260	1,440	2,700
CAL YR 1969	TOTAL 78,019	MEAN 214	MAX 1,760	MIN 24	CFSM 3.30	IN 44.72	AC-FT 154,800					
WTR YR 1970	TOTAL 77,965	MEAN 214	MAX 1,480	MIN 26	CFSM 3.30	IN 44.69	AC-FT 154,600					

12034200 EAST FORK SATSOP RIVER NEAR ELMA, WASH.

LOCATION.--Lat 47°07'43", long 123°25'03", in SE¼SW¼ sec.15, T.19 N., R.6 W., Mason County, on right bank 1.6 miles downstream from Bingham Creek, 8.6 miles north of Elma, and at mile 15.9.

DRAINAGE AREA.--65.9 sq mi.

PERIOD OF RECORD.--February 1957 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 205 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 370 cfs (76.25 inches per year, 268,100 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,700 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	1100	*3,040	5.98	Mar. 23, 1967	1400	1,730	4.13	Feb. 4, 1968	0630	2,480	4.85
								Feb. 19, 1968	0800	2,290	4.58
Dec. 13, 1966	1100	*3,420	6.56	Jan. 14, 1968	1100	1,840	4.32	Jan. 5, 1969	0430	*1,890	4.01
Jan. 19, 1967	2200	2,190	4.74	Jan. 19, 1968	1400	*5,030	8.00	Apr. 9, 1970	2000	*1,870	4.02

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 21, 29, 1966	64	.91	1969	Sept. 11, 1969	56	.61
1967	Oct. 11, 1966	64	.91	1970	Sept. 13, 15, 1970	75	.68
1968	Oct. 1, 1967	90	a.75				

a Occurred Sept. 9-12, 1968.

Period of record: Maximum discharge, 5,030 cfs Jan. 19, 1968 (gage height, 8.00 ft); minimum, 56 cfs Sept. 11, 1969 (gage height, 0.61 ft).

REMARKS.--Records excellent. Minor regulation and diversion by Simpson State Fish Hatchery 1.7 miles above station.

REVISIONS (WATER YEARS).--WSP 1566: 1957. WSP 1716: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	81	407	478	544	490	402	201	138	112	84	76
2	72	93	473	622	500	462	380	198	142	115	82	76
3	72	126	478	578	478	429	365	194	142	118	82	76
4	76	211	781	512	478	407	345	190	135	123	82	76
5	100	340	682	642	490	446	335	186	135	118	82	76
6	106	272	759	1,360	539	484	326	198	135	115	82	74
7	86	224	748	1,350	561	512	312	194	132	106	82	74
8	76	220	638	1,230	539	876	307	190	132	104	82	74
9	74	199	556	1,020	544	1,570	302	183	129	101	82	72
10	72	220	500	930	500	1,130	297	179	132	101	82	74
11	70	310	434	990	550	852	321	175	135	99	80	76
12	72	262	396	1,760	583	720	316	172	132	99	80	76
13	74	244	355	2,840	528	726	297	168	129	96	80	72
14	88	249	330	2,370	484	774	302	168	126	96	80	70
15	90	220	310	1,550	456	978	293	175	126	96	78	70
16	81	203	280	1,150	429	990	279	183	123	96	78	70
17	88	188	267	936	407	966	266	172	123	94	76	72
18	103	184	267	804	390	900	254	165	123	94	76	74
19	114	258	272	702	375	948	249	161	120	94	76	70
20	103	315	276	632	407	930	245	158	120	92	76	70
21	103	335	305	583	396	852	237	158	120	92	76	68
22	95	446	280	539	370	738	233	155	120	92	76	66
23	90	396	276	506	370	666	225	155	120	89	76	70
24	86	335	276	478	360	605	221	152	118	92	76	70
25	83	290	276	468	355	566	217	148	115	89	76	70
26	81	305	276	446	370	528	217	148	115	89	78	70
27	83	345	365	446	424	490	213	145	115	89	89	70
28	86	305	534	440	473	462	209	145	120	87	80	68
29	83	280	539	528	-----	434	205	142	112	87	78	66
30	81	276	556	588	-----	434	205	138	112	87	78	66
31	78	-----	490	594	-----	424	-----	138	-----	87	76	-----
TOTAL	2,638	7,732	13,382	28,072	12,900	21,789	8,375	5,234	3,776	3,049	2,461	2,154
MEAN	85.1	258	432	906	461	703	279	169	126	98.4	79.4	71.8
MAX	114	446	781	2,840	583	1,570	402	201	142	123	89	78
MIN	70	81	267	440	355	407	205	138	112	87	76	66
CFSN	1.29	3.92	6.56	13.7	7.00	10.7	4.23	2.56	1.91	1.49	1.20	1.09
IN.	1.49	4.36	7.55	15.85	7.28	12.30	4.73	2.95	2.13	1.72	1.39	1.22
AC-FT	5,230	15,340	26,540	55,680	25,590	43,220	16,610	10,380	7,490	6,050	4,880	4,270
CAL YR 1965	TOTAL 114,235	MEAN 313	MAX 2,200	MIN 70	CFSN 4.75	IN 64.48	AC-FT 226,600					
WTR YR 1966	TOTAL 111,562	MEAN 306	MAX 2,840	MIN 66	CFSN 4.64	IN 62.98	AC-FT 221,300					

12034200 EAST FORK SATSOP RIVER NEAR ELMA, WASH. --CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	129	1,340	871	973	613	480	295	185	129	105	85
2	68	120	1,110	823	1,040	564	450	283	182	126	105	92
3	66	118	912	1,070	1,380	510	430	283	182	126	102	88
4	66	112	882	1,090	1,530	470	416	279	178	126	102	85
5	66	112	858	1,000	1,220	445	402	279	174	126	102	84
6	66	106	948	865	991	425	384	271	174	126	102	83
7	68	101	1,020	799	865	407	366	263	174	123	102	82
8	68	96	816	1,100	757	416	362	255	171	123	100	86
9	68	112	720	1,110	690	440	380	248	168	123	100	96
10	66	118	888	955	635	435	358	244	168	123	100	125
11	66	115	1,040	1,060	608	420	340	238	164	120	100	113
12	68	145	1,470	1,060	662	407	344	230	164	120	98	100
13	68	196	3,060	1,130	1,060	394	371	227	160	120	95	90
14	68	326	1,890	979	907	394	366	227	157	120	95	85
15	66	316	1,450	1,040	859	440	353	224	154	118	92	81
16	66	302	1,420	1,060	811	586	376	220	150	118	92	80
17	66	258	1,300	889	793	586	371	216	147	115	92	80
18	66	245	1,230	799	823	574	412	213	144	112	92	80
19	67	237	1,270	1,560	723	525	425	210	144	123	90	80
20	120	225	1,390	1,880	640	564	412	210	141	126	90	80
21	112	233	1,080	1,470	586	536	384	206	150	115	90	80
22	209	217	883	1,250	547	958	362	202	154	115	88	80
23	254	198	781	1,160	515	1,690	344	199	144	112	88	80
24	254	186	961	1,030	495	1,380	335	199	141	110	88	80
25	190	340	949	961	475	1,060	335	196	141	108	82	80
26	158	340	793	1,090	445	883	327	192	138	108	85	80
27	138	402	696	1,240	425	757	315	192	138	108	85	80
28	126	436	657	1,620	536	679	311	199	135	108	85	78
29	429	749	749	1,520	-----	613	307	206	132	108	85	85
30	155	892	690	1,340	-----	564	307	199	129	105	85	90
31	138	-----	657	1,090	-----	515	-----	192	-----	105	85	-----
TOTAL	3,288	7,160	33,930	34,911	21,991	19,250	11,125	7,097	4,683	3,645	2,902	2,588
MEAN	106	239	1,095	1,126	785	621	371	229	156	118	93.6	86.3
MAX	254	892	3,060	1,880	1,530	1,690	480	295	185	129	105	125
MIN	66	96	657	429	425	394	307	192	129	105	82	78
CFSM	1.61	3.63	16.6	17.1	11.9	9.42	5.63	3.48	2.37	1.79	1.42	1.31
IN.	1.86	4.04	19.15	19.71	12.41	10.87	6.28	4.01	2.64	2.06	1.64	1.46
AC-FT	6,520	14,200	67,300	69,250	43,620	38,180	22,070	14,080	9,290	7,230	5,760	5,130

CAL YR 1966 TOTAL 132,188 MEAN 362 MAX 3,060 MIN 66 CFSM 5.49 IN 74.62 AC-FT 262,200
WTR YR 1967 TOTAL 152,570 MEAN 418 MAX 3,060 MIN 66 CFSM 6.34 IN 86.12 AC-FT 302,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	480	402	450	590	575	625	300	287	150	110	113
2	120	440	540	430	838	540	292	404	150	110	110	110
3	118	380	1,220	402	1,450	510	530	287	336	147	110	105
4	118	341	1,040	389	2,170	540	525	282	287	144	110	102
5	120	315	931	380	1,370	565	515	282	260	144	108	100
6	135	295	799	362	1,050	555	485	274	242	140	108	100
7	168	283	316	362	878	515	460	274	238	137	105	100
8	140	311	652	371	766	485	436	256	224	137	105	100
9	144	450	889	624	684	460	418	246	215	134	105	98
10	150	769	1,140	657	620	445	404	242	207	134	105	98
11	230	835	1,150	536	570	460	386	242	203	134	105	100
12	210	602	835	547	530	662	377	238	203	144	105	100
13	220	480	668	1,330	500	750	364	233	224	134	105	102
14	234	440	574	1,770	475	750	418	228	211	134	116	144
15	202	435	505	1,440	455	1,030	505	224	199	137	110	161
16	182	430	470	1,180	436	1,360	440	220	191	131	113	144
17	168	398	435	1,080	455	1,050	400	215	187	128	108	251
18	157	376	412	1,270	856	832	386	211	183	128	113	292
19	147	348	394	4,270	2,070	700	372	220	179	125	122	233
20	144	327	371	3,980	1,440	615	364	228	175	125	116	203
21	279	311	380	3,100	1,420	565	350	228	172	125	105	179
22	455	299	747	1,840	1,400	525	341	228	175	122	110	172
23	574	287	1,350	1,410	1,480	530	359	224	168	122	144	211
24	445	291	1,450	1,120	1,400	550	341	220	164	122	131	199
25	495	279	1,330	950	1,110	615	359	207	161	119	122	179
26	407	263	997	849	914	615	354	203	168	119	122	168
27	795	255	805	750	783	1,040	323	203	168	116	128	161
28	1,040	263	674	673	690	1,120	318	199	161	116	144	154
29	679	323	586	620	620	980	318	195	158	116	125	150
30	586	353	520	585	-----	822	314	187	154	116	116	144
31	530	-----	480	580	-----	712	-----	191	-----	113	113	-----
TOTAL	9,530	11,639	23,626	34,387	28,020	21,473	12,357	7,269	6,294	4,043	3,549	4,473
MEAN	307	388	762	1,109	966	693	412	234	210	130	114	149
MAX	1,040	835	1,450	4,270	2,170	1,360	625	300	404	150	144	292
MIN	118	295	371	362	436	445	314	187	154	113	105	98
CFSM	4.66	5.89	11.6	16.8	14.7	10.5	6.25	3.55	3.19	1.97	1.73	2.26
IN.	5.38	6.57	13.34	19.41	15.82	12.12	6.98	4.10	3.55	2.28	2.00	2.52
AC-FT	18,900	23,090	46,860	68,210	55,580	42,590	24,510	14,420	12,480	8,020	7,040	8,870

CAL YR 1967 TOTAL 152,987 MEAN 419 MAX 4,270 MIN 78 CFSM 6.36 IN 86.36 AC-FT 303,400
WTR YR 1968 TOTAL 166,660 MEAN 455 MAX 4,270 MIN 98 CFSM 6.90 IN 94.08 AC-FT 302,600

12034200 EAST FORK SATSOP RIVER NEAR ELMA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	207	605	500	346	400	530	330	213	131	112	87
2	137	256	600	550	350	404	630	317	201	128	112	87
3	134	251	1,170	651	408	418	555	308	198	128	109	87
4	137	228	1,320	1,120	431	422	591	304	190	134	109	87
5	134	211	944	1,720	422	590	635	294	186	134	109	84
6	158	199	734	1,350	395	678	560	281	183	128	109	84
7	150	215	651	1,390	382	590	500	276	179	125	109	81
8	140	422	822	1,120	500	525	460	263	175	122	106	81
9	140	470	816	1,020	615	480	435	258	172	118	106	84
10	183	426	844	962	640	445	415	254	168	122	103	79
11	224	585	878	872	998	431	390	250	165	125	100	81
12	256	668	739	744	896	413	390	241	161	118	103	81
13	336	550	646	668	712	395	435	237	158	115	103	81
14	364	460	605	625	615	390	405	221	154	115	100	79
15	364	408	575	590	585	395	371	225	148	115	98	79
16	323	368	540	560	595	431	362	217	144	115	98	84
17	292	346	510	520	590	902	385	217	144	115	98	106
18	278	372	575	485	565	1,020	425	213	141	115	98	109
19	300	364	525	460	595	854	613	213	141	112	98	109
20	368	382	475	440	500	718	613	201	137	112	98	106
21	336	475	445	418	470	630	535	201	137	112	98	98
22	368	722	436	395	450	608	475	198	141	112	95	144
23	332	656	610	377	440	602	475	194	144	112	92	241
24	305	545	1,060	360	431	535	450	190	141	112	92	209
25	292	465	1,030	340	422	490	420	190	137	109	95	194
26	269	431	810	330	418	460	390	194	134	109	92	161
27	251	480	684	320	413	440	371	198	134	112	98	144
28	235	455	590	305	404	415	362	198	134	112	92	134
29	228	610	510	290	-----	405	268	194	115	90	128	80
30	238	638	660	280	-----	390	266	190	131	115	90	148
31	215	-----	450	346	-----	435	-----	233	-----	112	87	-----
TOTAL	7,625	12,662	21,659	20,108	14,528	16,311	13,866	7,470	4,725	3,659	3,099	3,357
MEAN	246	429	699	649	519	526	462	241	158	118	100	112
MAX	368	722	1,320	1,720	998	1,020	635	330	213	134	112	241
MIN	134	199	436	280	346	390	190	131	109	87	79	79
CFSM	3.73	6.51	10.6	9.85	7.98	7.98	7.01	3.66	2.40	1.79	1.52	1.70
IN.	4.30	7.26	12.23	11.35	8.20	9.21	7.83	4.22	2.67	2.07	1.75	1.89
AC-FT	15,120	25,510	42,960	39,880	28,820	32,350	27,500	14,820	9,370	7,260	6,150	6,660

CAL YR 1968	TOTAL 164,811	MEAN 448	MAX 4,270	MIN 98	CFSM 6.80	IN 92.58	AC-FT 325,300
WTR YR 1969	TOTAL 129,269	MEAN 354	MAX 1,720	MIN 79	CFSM 5.37	IN 72.97	AC-FT 256,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	186	135	172	322	805	335	268	294	179	126	98	80
2	205	132	165	308	685	322	256	285	175	126	98	83
3	179	132	168	294	655	312	254	272	172	126	98	106
4	198	251	179	281	590	304	281	268	172	123	96	88
5	148	416	168	268	555	294	407	263	168	123	96	85
6	135	448	168	254	540	412	620	250	165	120	96	103
7	145	407	161	250	535	655	550	245	165	120	96	112
8	221	340	194	254	495	510	520	272	161	118	96	90
9	237	299	198	272	456	430	1,350	276	168	118	93	83
10	217	258	213	254	434	394	1,310	272	165	115	93	80
11	194	233	434	272	407	384	832	258	158	115	93	80
12	175	217	705	276	389	412	655	254	158	115	93	80
13	161	209	790	380	384	500	555	245	155	112	93	78
14	155	194	922	844	366	590	480	237	155	112	93	78
15	148	186	735	660	470	585	434	233	155	112	93	78
16	145	186	610	540	952	630	402	225	152	112	90	78
17	138	175	585	565	952	555	376	221	148	109	90	93
18	135	172	570	770	880	480	376	217	148	109	90	106
19	135	168	530	1,350	710	434	376	213	145	106	90	98
20	135	194	520	1,280	610	407	348	213	138	106	90	93
21	135	221	565	1,270	540	384	330	209	135	106	90	93
22	132	198	630	1,250	475	362	317	209	135	106	88	118
23	129	233	868	1,370	443	358	317	205	135	106	88	106
24	129	241	795	1,130	416	358	358	201	132	103	88	93
25	126	221	655	1,060	394	335	371	201	132	109	88	88
26	126	209	555	1,110	371	322	366	198	129	115	88	88
27	148	198	475	1,350	358	317	348	194	129	112	88	85
28	158	190	430	1,010	344	299	326	190	129	106	88	85
29	152	183	398	795	-----	290	322	201	126	103	88	83
30	145	175	366	690	-----	281	308	198	126	103	88	80
31	138	-----	340	775	-----	272	-----	183	-----	101	85	-----
TOTAL	4,866	6,817	14,260	21,484	15,211	12,523	14,015	7,203	4,510	3,493	2,842	2,691
MEAN	157	227	460	693	543	404	467	232	150	113	91.7	89.7
MAX	237	448	922	1,370	952	655	1,350	294	179	126	98	118
MIN	126	132	161	250	344	272	254	183	126	101	85	78
CFSM	2.38	3.44	6.98	10.5	8.24	6.13	7.09	3.52	2.28	1.71	1.39	1.36
IN.	2.75	3.95	8.05	12.13	8.59	7.97	7.91	4.07	2.55	1.97	1.60	1.52
AC-FT	9,650	13,520	28,280	42,610	30,170	24,840	27,800	14,290	8,950	6,930	5,640	5,340

CAL YR 1969	TOTAL 113,066	MEAN 310	MAX 1,720	MIN 79	CFSM 4.70	IN 63.82	AC-FT 224,300
WTR YR 1970	TOTAL 109,915	MEAN 301	MAX 1,370	MIN 78	CFSM 4.57	IN 62.05	AC-FT 218,000

12035000 SATSOP RIVER NEAR SATSOP, WASH.

LOCATION.--Lat 47°00'03", long 123°29'37", in NE¼SE¼ sec.36, T.18 N., R.7 W., Grays Harbor County, in west pier of bridge on old U.S. Highway 410, 0.6 mile west of Satsop and 2.3 miles upstream from mouth.

DRAINAGE AREA.--299 sq mi.

PERIOD OF RECORD.--March 1929 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Mar. 19, 1938, nonrecording gage at site 60 ft upstream at datum 20.9 ft higher.

AVERAGE DISCHARGE.--41 years, 1,991 cfs (90.43 inches per year, 1,442,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, elevation in feet).

Annual maximum discharge (*) and peak discharges above base (13,500 cfs), water years 1966-70

Date	Time	Disch.	Elev.	Date	Time	Disch.	Elev.	Date	Time	Disch.	Elev.
Jan. 13, 1966	1130	*26,700	33.92	Dec. 11, 1967	0030	13,500	30.01	Dec. 3, 1968	2200	*16,200	30.64
				Jan. 14, 1968	1415	15,400	30.64	Jan. 5, 1969	0400	15,400	30.35
Dec. 13, 1966	0745	*29,200	34.54	Jan. 19, 1968	1445	*43,100	36.43				
Jan. 19, 1967	2200	15,800	30.78	Feb. 4, 1968	0530	19,500	31.61	Apr. 9, 1970	1900	*18,200	31.24
May 23, 1967	0245	17,300	31.27	Feb. 19, 1968	0515	19,800	31.70				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	Elev.	Wtr yr	Date	Disch.	Elev.
1966	Sept. 8-10, 1966	203	23.25	1969	Sept. 12, 1969	224	22.55
1967	Aug. 28-29, 1967	204	23.15	1970	Aug. 31, 1970	200	22.49
1968	Aug. 11-13, 1968	294	22.78				

Period of record: Maximum discharge, 46,600 cfs Jan. 22, 1935 (elevation, 38.9 ft, from floodmarks, present datum); minimum, 166 cfs Sept. 21, 1938; minimum elevation, 21.66 ft, present datum, Sept. 3-6, 1934. Flood in November 1909 reached a stage of 37.1 ft (from high watermark), at railroad bridge 300 ft downstream.

REMARKS.--Records excellent. No regulation or diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1286: 1930-35(M), 1937(M). WSP 1716: Drainage area. WSP 1932: 1945, 1949(M), 1951(M), 1956-57(M), 1959(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	606	2,360	2,400	3,220	2,780	2,220	827	512	428	278	235
2	218	1,080	4,370	3,260	2,750	2,480	2,100	803	515	441	272	230
3	214	1,810	3,490	2,930	2,440	2,210	1,660	786	547	510	270	228
4	236	3,540	6,740	2,520	2,400	2,000	1,720	777	515	516	272	222
5	473	3,970	5,350	3,080	3,220	2,230	1,680	762	495	483	271	218
6	2,160	2,730	6,610	9,640	4,300	2,320	1,650	833	473	461	265	216
7	1,300	2,000	5,770	10,100	4,420	2,670	1,610	858	459	443	262	210
8	746	1,910	4,510	9,570	3,590	5,790	1,550	773	453	422	259	209
9	599	1,870	3,620	7,440	3,270	10,000	1,480	731	445	407	256	207
10	497	1,920	3,110	6,010	2,880	6,020	1,430	704	462	395	253	216
11	438	2,790	2,620	4,550	3,340	4,610	1,730	682	482	394	252	255
12	414	2,230	2,260	11,500	3,840	3,790	1,670	662	492	381	248	256
13	452	1,920	2,010	23,400	3,130	4,280	1,480	648	463	371	251	236
14	568	1,930	1,820	16,400	2,720	5,190	1,540	641	465	366	250	218
15	908	1,730	1,640	8,900	2,360	7,560	1,590	721	444	360	244	216
16	734	1,510	1,490	6,160	2,120	6,760	1,500	953	426	354	241	217
17	830	1,350	1,396	4,820	1,940	4,950	1,410	831	423	347	235	230
18	974	1,250	1,360	3,980	1,820	4,900	1,330	747	415	340	233	319
19	1,580	2,480	1,490	3,390	1,720	5,320	1,240	699	412	339	229	304
20	1,400	3,350	1,740	2,960	1,940	4,840	1,200	667	408	331	227	267
21	1,550	3,080	2,810	2,670	2,180	4,180	1,140	660	420	323	221	244
22	1,150	3,440	2,090	2,400	2,040	3,590	1,090	648	416	315	219	230
23	925	2,890	1,830	2,230	2,060	3,160	1,060	619	403	310	220	244
24	785	2,310	1,700	2,060	2,120	2,850	1,020	597	394	308	222	259
25	692	1,890	1,590	2,020	2,000	2,680	998	576	380	307	223	252
26	627	1,790	1,490	1,890	2,040	2,620	966	561	374	304	234	259
27	598	2,040	2,140	2,000	2,590	2,570	930	554	391	298	334	289
28	662	1,850	3,530	2,200	2,880	2,440	899	538	473	293	352	274
29	635	1,740	3,280	3,440	-----	2,350	870	524	490	286	285	252
30	655	1,690	3,150	4,030	-----	2,490	846	509	446	283	267	237
31	626	-----	2,640	3,750	-----	2,500	-----	508	-----	280	248	-----
TOTAL	23,846	64,696	90,000	173,700	75,330	122,930	41,809	21,399	13,493	11,396	7,893	7,249
MEAN	769	2,157	2,903	5,603	2,690	3,965	1,394	690	450	368	255	242
MAX	2,160	3,970	6,740	23,400	4,420	10,000	2,220	953	547	516	352	319
MIN	214	606	1,360	1,890	1,720	2,000	846	508	374	280	219	207
CFSM	2,57	7,21	9,71	18,7	9,00	13,3	4,66	2,31	1,51	1,23	85	61
IN-	2,97	8,05	11,20	21,61	9,37	15,29	5,20	2,66	1,68	1,42	98	90
AC-FT	47,300	128,300	178,500	344,500	149,400	243,800	82,930	42,440	26,760	22,600	15,660	14,380
CAL YR 1965	TOTAL 630,298	MEAN 1,727	MAX 12,600	MIN 214	CFSM 5.78	IN 78.42	AC-FT 1,250,000					
WTR YR 1966	TOTAL 653,741	MEAN 1,791	MAX 23,400	MIN 207	CFSM 5.99	IN 81.34	AC-FT 1,297,000					

CHEHALIS RIVER BASIN

12035000 SATSOP RIVER NEAR SATSOP, WASH. --CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	927	10,400	5,180	4,660	3,230	2,100	1,700	619	381	268	213
2	230	820	7,800	4,490	5,120	2,690	1,920	1,120	595	372	262	255
3	223	734	6,690	7,190	8,360	2,290	1,790	1,140	585	364	259	287
4	223	672	7,730	6,480	9,770	2,020	1,770	1,110	572	359	259	237
5	217	637	6,770	5,460	6,990	1,820	1,680	1,090	552	356	260	222
6	218	603	7,310	4,470	5,010	1,660	1,530	1,070	537	353	263	220
7	240	560	7,200	3,950	3,980	1,520	1,430	1,060	533	351	261	218
8	302	526	4,940	7,480	3,340	1,530	1,390	1,040	526	347	258	211
9	343	548	3,880	7,630	2,890	1,760	1,570	1,010	516	343	251	232
10	296	614	5,200	5,520	2,570	1,710	1,460	964	508	340	246	303
11	274	550	7,570	6,400	2,420	1,640	1,340	917	503	332	243	379
12	296	833	10,500	6,380	2,650	1,600	1,350	880	502	327	241	336
13	281	1,090	25,400	6,960	6,270	1,510	1,650	852	487	325	235	278
14	259	2,280	12,800	5,450	4,700	1,510	1,630	829	478	323	233	249
15	252	2,190	9,050	5,800	4,080	1,900	1,630	812	467	317	230	233
16	244	2,430	10,100	5,980	3,660	3,440	1,720	797	457	315	228	224
17	252	1,990	8,730	4,760	3,650	3,790	1,760	782	449	311	226	218
18	252	1,780	8,590	4,000	4,250	3,410	1,980	762	443	314	225	215
19	667	1,650	8,730	9,070	3,580	2,880	2,130	734	433	351	223	212
20	2,420	1,610	9,470	11,900	3,050	2,980	2,020	707	434	377	222	211
21	1,690	1,720	6,230	8,460	2,650	3,030	1,850	686	448	358	227	260
22	3,080	1,900	4,690	6,250	2,340	7,230	1,700	668	500	329	223	232
23	3,550	1,530	3,870	5,840	2,110	14,700	1,550	650	466	312	217	255
24	3,090	1,300	5,190	4,980	1,930	9,340	1,440	635	436	302	215	249
25	1,840	2,290	5,470	4,280	1,830	6,160	1,380	620	420	297	214	245
26	1,390	2,390	4,290	5,080	1,660	4,680	1,350	607	410	295	211	243
27	1,190	2,360	4,370	5,600	1,930	3,770	1,250	600	404	290	210	251
28	974	4,150	3,180	11,200	1,630	3,280	1,220	623	403	288	209	236
29	1,030	4,050	4,110	9,600	-----	2,980	1,260	709	396	283	208	277
30	1,330	6,640	3,690	8,100	-----	2,670	1,240	729	389	277	210	344
31	1,070	-----	3,310	5,700	-----	2,360	-----	668	-----	273	211	-----
TOTAL	27,953	51,874	226,460	200,720	107,430	105,170	48,090	26,117	14,472	10,166	7,248	7,528
MEAN	902	1,729	7,505	6,497	3,437	3,403	1,603	890	487	328	243	255
MAX	3,550	6,640	25,400	11,900	9,770	14,700	2,130	1,200	619	381	268	379
MIN	217	526	3,180	3,950	1,530	1,510	1,220	596	389	273	208	211
CF5M	3.02	5.78	24.4	21.7	12.8	11.3	5.36	2.82	1.61	1.10	.78	.84
IN.	3.48	6.45	28.17	24.97	13.37	13.08	5.98	3.25	1.80	1.26	.90	.94
AC-FT	55,440	102,900	449,200	398,100	213,100	208,600	95,390	51,800	28,710	20,160	14,380	14,930
CAL YR 1986	TOTAL 781,286 MEAN 2,141 MAX 25,400 MIN 207 CF5M 7.16 IN 97.23 AC-FT 1,550,000											
WTR YR 1967	TOTAL 833,222 MEAN 2,283 MAX 25,400 MIN 208 IN 103.67 AC-FT 1,653,000											

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1,390	3,210	2,210	2,140	2,430	2,590	3,160	1,190	1,150	591	347	692		
2	4,000	2,560	4,670	1,920	4,680	2,360	2,730	1,120	2,560	575	341	642		
3	1,650	2,120	8,490	1,730	9,660	2,130	2,420	1,060	2,170	560	347	592		
4	1,860	1,800	6,430	1,600	14,900	2,260	2,310	1,030	1,610	530	341	558		
5	1,690	1,560	5,460	1,510	7,110	2,670	2,250	1,060	1,340	523	335	531		
6	2,300	1,380	4,380	1,390	4,880	3,090	2,050	1,040	1,170	515	335	508		
7	3,300	1,270	3,910	1,370	3,910	2,730	1,890	970	1,060	500	329	494		
8	2,440	1,380	3,370	1,390	3,350	2,400	1,730	940	980	479	323	480		
9	1,570	3,070	4,800	2,730	2,970	2,140	1,610	893	920	472	314	462		
10	1,280	6,330	8,380	3,350	2,660	2,000	1,520	866	875	405	306	454		
11	2,810	5,920	9,060	2,570	2,420	1,990	1,440	848	839	465	299	471		
12	2,170	3,670	4,950	2,340	2,190	3,670	1,360	839	812	530	297	490		
13	2,230	2,750	3,580	9,650	2,020	4,980	1,300	821	1,030	500	313	458		
14	2,830	2,330	2,860	14,100	1,880	5,060	1,570	794	1,050	493	400	861		
15	1,930	2,280	2,420	9,630	1,740	7,950	2,910	776	920	515	380	1,630		
16	1,470	2,620	2,120	6,760	1,630	9,160	2,330	749	848	493	407	1,220		
17	1,200	2,170	1,900	5,660	1,650	6,090	2,000	732	812	465	369	3,030		
18	1,060	1,920	1,730	6,480	5,320	4,450	1,820	715	776	444	388	3,160		
19	975	1,700	1,550	34,700	15,700	3,570	1,750	732	749	444	531	2,000		
20	879	1,510	1,420	26,700	8,170	3,010	1,610	884	723	437	551	1,540		
21	1,900	1,370	1,440	19,000	8,140	2,630	1,500	866	698	424	474	1,300		
22	3,610	1,270	5,780	9,490	7,930	2,350	1,400	950	723	417	451	1,140		
23	5,040	1,190	10,800	6,600	9,130	2,250	1,440	1,030	698	411	830	1,590		
24	3,040	1,190	9,950	5,240	9,770	2,450	1,400	940	655	398	1,320	1,500		
25	3,420	1,120	8,290	4,380	6,290	2,920	1,530	875	623	398	949	1,310		
26	2,580	1,030	6,170	3,820	4,740	3,010	1,650	821	631	391	809	1,160		
27	5,000	977	4,630	3,300	3,670	7,380	1,480	768	745	388	889	1,040		
28	000	972	3,730	2,990	7,110	7,170	776	698	698	372	1,180	943		
29	4,340	1,670	3,110	2,680	2,890	5,870	1,300	732	664	365	1,000	878		
30	3,900	1,860	2,670	2,500	-----	4,680	1,240	706	615	359	836	821		
31	3,650	-----	2,350	2,470	-----	3,770	-----	706	-----	359	733	-----		
TOTAL	84,114	64,199	142,610	200,340	155,320	118,720	54,070	27,295	29,148	14,275	16,716	31,955		
MEAN	2,715	2,104	4,607	6,461	4,975	3,830	1,802	972	937	480	341	642		
MAX	8,000	6,330	10,800	14,900	15,700	14,700	3,160	1,190	2,560	591	1,320	3,160		
MIN	970	972	1,420	1,370	1,630	1,990	1,240	706	615	359	297	454		
CF5M	8.07	7.16	15.4	21.6	17.9	12.8	6.03	2.94	3.25	1.54	1.80	3.56		
IN.	10.47	7.99	17.77	24.93	19.32	14.77	6.73	3.39	3.63	1.78	2.08	3.98		
AC-FT	166,800	127,300	283,300	397,400	308,100	235,500	107,200	54,060	57,820	28,310	33,160	63,380		
CAL YR 1967	TOTAL	818,064	MEAN	2,241	MAX	14,700	MIN	208	CF5M	7.50	IN	101.78	AC-FT	1,623,000
NTR YR 1968	TOTAL	938,922	MEAN	2,565	MAX	14,700	MIN	297	CF5M	9.58	IN	116.82	AC-FT	1,852,000

12035000 SATSOP RIVER NEAR SATSOP, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	778	1,390	4,180	2,900	1,220	1,770	4,520	1,460	1,190	493	312	282
2	740	1,520	3,740	3,560	1,200	1,810	5,700	1,350	1,030	472	307	277
3	708	1,680	9,260	3,940	1,530	2,010	4,010	1,290	940	479	301	268
4	748	1,470	10,200	7,420	1,860	2,140	3,760	1,220	870	301	268	268
5	729	1,340	6,000	12,400	1,950	3,090	4,240	1,160	825	500	307	263
6	1,160	1,230	4,440	7,560	1,720	4,190	3,700	1,130	798	472	322	260
7	1,110	1,250	3,700	7,400	1,590	3,340	3,040	1,110	780	459	307	253
8	943	2,800	4,740	5,940	2,550	2,780	2,610	1,090	744	452	301	249
9	875	3,510	5,010	5,180	3,760	2,400	2,330	1,080	717	439	291	245
10	1,350	2,910	5,280	4,630	3,580	2,170	2,180	1,030	699	439	284	240
11	1,810	3,670	5,200	4,130	7,590	1,990	1,980	990	690	500	282	239
12	2,490	4,920	4,350	3,480	5,920	1,850	1,950	950	674	486	284	235
13	2,840	3,860	3,750	3,050	4,190	1,740	2,870	920	658	452	296	238
14	2,980	3,070	4,190	2,810	3,330	1,680	2,660	890	634	439	291	235
15	3,120	2,590	4,350	2,050	2,960	1,790	2,170	861	618	427	286	230
16	2,600	2,210	3,940	2,350	3,250	2,180	1,950	843	603	407	282	239
17	2,180	1,950	3,340	2,140	3,310	7,850	2,100	814	588	395	277	352
18	2,140	2,250	3,780	1,940	3,070	7,540	3,010	798	565	389	277	795
19	2,120	2,530	3,370	1,810	2,820	5,220	5,030	789	538	378	282	1,670
20	2,940	2,710	2,900	1,680	2,600	4,220	4,630	771	558	366	291	2,160
21	2,460	3,370	2,550	1,550	2,360	3,560	3,700	744	543	366	317	1,830
22	2,700	5,940	2,360	1,420	2,180	3,340	3,090	724	550	360	307	1,910
23	2,330	4,820	4,300	1,340	2,050	3,630	2,930	708	588	355	282	5,510
24	2,040	3,760	10,800	1,270	2,000	3,090	2,690	699	595	343	273	3,270
25	1,830	3,010	7,710	1,240	1,910	2,720	2,350	690	558	338	291	2,810
26	1,650	2,630	5,240	1,200	1,870	2,540	2,080	708	535	333	301	2,040
27	1,470	2,880	4,120	1,160	1,830	2,600	1,910	753	535	327	301	1,500
28	1,350	2,850	3,340	1,090	1,780	2,450	1,810	930	528	322	343	1,240
29	1,310	3,910	2,810	1,040	1,640	2,280	1,720	1,530	537	349	317	1,050
30	1,720	4,520	2,430	1,040	1,200	1,680	1,580	2,480	507	317	317	1,350
31	1,620	-----	2,450	1,180	-----	3,020	-----	1,550	-----	312	294	-----
TOTAL	54,841	86,550	143,830	100,420	75,980	93,240	88,300	32,064	20,213	12,620	9,242	31,508
MEAN	1,769	2,885	4,640	3,239	2,714	3,008	2,943	1,034	674	407	299	1,050
MAX	3,120	5,940	10,800	12,400	7,590	7,850	5,700	2,180	1,990	300	349	5,510
MIN	708	1,230	2,360	1,040	1,200	1,680	1,580	690	507	312	273	230
CFSM	5.92	9.65	15.5	10.8	9.08	10.1	9.84	3.46	2.23	1.36	1.00	3.51
IN.	6.82	10.77	17.89	12.49	9.45	11.60	10.99	3.99	2.51	1.57	1.15	3.92
AC-FT	108,800	171,700	285,300	199,200	150,700	184,900	175,100	63,600	40,090	25,030	18,370	62,500
CAL YR 1968	TOTAL 933,020	MEAN 2,549	MAX 34,700	MIN 297	CFSM 8.53	IN 116.08	AC-FT 1,851,000					
WTR YR 1969	TOTAL 748,830	MEAN 2,052	MAX 12,400	MIN 230	CFSM 6.84	IN 93.17	AC-FT 1,485,000					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,370	697	883	1,600	5,320	1,310	966	1,330	610	389	289	204
2	2,710	847	842	1,480	4,280	1,240	927	1,243	584	349	284	204
3	1,840	684	824	1,390	3,920	1,190	889	1,100	567	373	302	302
4	1,420	1,480	953	1,290	3,390	1,130	971	1,090	555	359	275	305
5	1,180	3,480	887	1,200	3,000	1,060	2,310	1,030	545	353	268	258
6	1,020	4,550	848	1,130	2,840	1,560	5,830	975	531	349	263	334
7	958	3,690	922	1,070	2,850	4,200	4,100	931	522	343	294	595
8	1,670	2,810	949	1,070	2,710	2,790	3,350	1,020	518	334	280	478
9	2,270	2,200	1,060	1,310	2,450	2,190	11,400	1,110	537	328	245	366
10	1,910	1,790	1,090	1,340	2,210	1,870	9,400	1,070	580	322	254	315
11	1,530	1,530	3,390	1,290	2,000	1,780	5,240	1,010	536	318	247	287
12	1,290	1,350	6,390	1,290	1,630	2,030	3,770	1,040	521	314	241	267
13	1,120	1,210	5,610	1,540	1,830	3,440	3,000	1,030	507	311	240	254
14	1,000	1,110	7,000	7,620	1,770	4,080	2,500	972	497	309	237	244
15	919	1,050	5,110	4,780	2,380	4,480	2,140	935	497	304	233	240
16	858	1,030	3,940	3,380	4,620	4,640	1,890	906	490	298	228	236
17	807	960	3,640	3,140	4,090	5,710	1,690	883	480	299	227	279
18	757	898	3,760	4,550	5,560	2,950	1,620	853	464	295	225	610
19	722	853	3,530	8,880	4,310	2,480	1,490	830	453	288	223	834
20	704	989	3,550	8,550	3,480	2,150	1,490	810	442	284	222	1,080
21	683	1,300	4,350	7,970	2,930	1,900	1,390	791	431	281	221	798
22	654	1,160	5,050	7,490	2,520	1,710	1,280	762	419	277	217	558
23	634	1,370	7,790	8,120	2,220	1,630	1,280	761	417	275	214	1,150
24	637	1,720	5,670	4,350	1,980	1,630	1,840	731	414	272	214	805
25	626	1,480	4,340	5,640	1,790	1,430	2,120	704	405	285	214	648
26	598	1,310	3,550	5,900	1,640	1,320	1,940	681	395	348	215	563
27	701	1,180	2,920	7,550	1,520	1,240	1,800	664	393	408	212	584
28	790	1,080	2,510	5,450	1,410	1,170	1,620	645	387	364	217	444
29	755	1,000	2,210	4,380	-----	1,110	1,540	704	380	328	218	433
30	749	940	1,950	3,620	-----	1,040	1,460	722	379	317	208	407
31	726	-----	1,760	4,380	-----	1,000	-----	644	-----	302	204	-----
TOTAL	34,610	45,578	97,180	124,950	84,850	65,480	81,663	28,063	14,460	10,015	7,413	14,434
MEAN	1,116	1,519	3,135	4,031	3,030	2,112	2,722	905	482	323	239	481
MAX	2,710	4,550	7,790	8,880	4,620	4,640	11,600	1,330	610	408	289	1,150
MIN	598	677	822	1,070	1,410	1,000	889	645	379	272	204	206
CFSM	3.73	5.08	10.5	13.5	10.1	7.06	9.10	3.03	1.61	1.08	.80	1.61
IN.	4.31	5.67	12.00	15.55	10.56	8.15	10.16	3.49	1.80	1.25	.92	1.80
AC-FT	68,650	90,400	192,800	247,800	168,300	129,900	162,000	55,860	28,480	19,860	14,700	28,630
CAL YR 1969	TOTAL 400,977	MEAN 1,754	MAX 12,400	MIN 230	CFSM 5.67	IN 79.73	AC-FT 1,271,000					
WTR YR 1970	TOTAL 608,696	MEAN 1,668	MAX 11,400	MIN 206	CFSM 5.58	IN 75.75	AC-FT 1,207,000					

CHEHALIS RIVER BASIN

12035400 WYNOOCHEE RIVER NEAR GRIDDALE, WASH.

LOCATION.--Lat 47°22'50", long 123°36'31", in NW¼SW¼ sec.20, T.22 N., R.7 W., Grays Harbor County, Olympic National Forest, on right bank 1,800 ft downstream from logging bridge, 1.7 miles downstream from Scatter Creek, 1.7 miles north of Griddale, and at mile 51.3.

DRAINAGE AREA.--41.3 sq mi. At site used prior to Nov. 3, 1967, 41.1 sq mi.

PERIOD OF RECORD.--October 1965 to September 1970.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 630 ft (from topographic map). Prior to Nov. 3, 1967, at site 1,500 ft upstream at different datum.

AVERAGE DISCHARGE.--5 years, 544 cfs (178.87 inches per year, 394,100 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (5,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1965	0300	*5,700	13.60	Oct. 27, 1967	-	6,030	5.98	Dec. 3, 1968	-	*6,800	6.31
Jan. 13, 1966	0400	5,100	13.30	Dec. 22, 1967	1230	5,270	5.60				
				Jan. 14, 1968	0600	7,270	6.50	Apr. 9, 1970	1045	*5,470	5.70
Dec. 12, 1966	2100	*11,800	18.0	Jan. 19, 1968	-	*8,640	7.05				
Mar. 22, 1967	2300	6,520	15.0	Feb. 18, 1968	2100	6,970	6.38				

Annual minimum discharge, water years 1966-70

Ntr yr	Date	Disch.	G.H.	Ntr yr	Date	Disch.	G.H.
1966	Oct. 3, 1965	55	-	1969	Sept. 15, 16, 1969	71	.77
1967	Sept. 27-29, 1967	48	a7.88	1970	June 19, 1970	b41	.73
1968	Aug. 12-13, 1968	86	.87				

a Occurred Oct. 6, 1966.

b May have been less during period of no gage-height record July 29 to Sept. 4, 1970.

Period of record: Maximum discharge, 11,800 cfs Dec. 12, 1966 (gage height, about 18.0 ft, computed from graph based on gage readings, site and datum then in use); minimum recorded, 41 cfs June 19, 1970, result of dam construction 0.3 mile upstream from gage, but may have been less during period of no gage-height record July 29 to Sept. 4, 1970.

REMARKS.--Records excellent except those for periods of no gage-height record which are good. Some regulation since 1969 due to dam construction 0.3 mile upstream. No diversion above station. Water-quality records for the water years 1966-67 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	344	1,940	322	545	380	752	289	260	254	115	74
2	58	1,860	1,400	318	461	336	692	325	294	244	112	73
3	59	1,770	1,940	293	430	303	585	452	276	250	111	71
4	90	1,760	2,170	272	770	279	560	590	257	257	109	70
5	996	1,540	2,040	425	1,150	289	600	704	247	244	106	68
6	2,720	821	2,940	1,870	968	322	692	856	293	232	103	67
7	460	680	1,870	1,770	740	356	752	698	340	226	100	67
8	389	728	1,220	1,910	605	513	722	585	333	227	97	66
9	307	782	968	1,120	530	989	620	626	318	227	96	65
10	244	788	821	1,030	456	746	690	530	329	221	94	67
11	208	740	692	1,110	570	580	1,060	434	348	208	92	79
12	195	580	600	2,580	510	575	668	430	314	192	89	77
13	188	580	540	4,260	430	1,230	540	394	286	190	92	68
14	371	734	480	2,570	280	1,720	535	348	296	185	89	65
15	412	570	434	1,390	340	2,020	565	456	348	178	88	65
16	310	405	394	989	314	1,220	545	456	389	174	87	64
17	438	452	360	800	293	835	510	368	329	165	84	109
18	564	466	389	680	279	849	466	340	286	163	82	163
19	540	1,680	443	585	269	704	430	376	289	159	80	108
20	749	1,430	952	520	333	575	402	425	263	153	79	89
21	588	1,050	785	456	380	495	380	412	254	147	78	80
22	430	989	560	407	376	434	372	356	241	145	77	78
23	348	746	490	376	545	394	372	310	247	145	77	89
24	296	632	434	348	510	389	376	314	235	139	76	83
25	260	545	389	344	456	416	376	398	227	139	76	80
26	232	530	352	333	466	485	352	443	224	134	78	92
27	241	520	438	438	485	550	333	340	337	130	134	93
28	257	553	438	470	438	580	310	310	500	129	100	85
29	289	530	389	996	-----	686	296	296	329	127	87	82
30	283	505	368	814	-----	968	289	300	272	123	82	78
31	247	-----	325	642	-----	891	-----	283	-----	120	77	-----
TOTAL	12,957	24,592	27,553	30,458	13,929	21,109	15,862	13,444	8,963	5,625	2,847	2,415
MEAN	418	820	889	983	497	681	529	434	299	181	91.8	80.5
MAX	2,720	1,770	2,940	4,260	1,150	2,020	1,060	856	500	257	134	163
MIN	55	344	325	272	269	279	289	283	224	120	76	64
CFSM	10.1	19.9	21.5	23.8	12.0	16.5	12.8	10.5	7.24	4.38	2.22	1.95
IN.	11.47	22.15	24.82	27.43	12.95	19.01	14.29	12.13	8.07	5.07	2.56	2.18
AC-FT	25,700	48,780	54,650	68,410	27,630	41,870	31,460	26,710	17,780	11,160	5,650	4,790

MTR YR 1966 TOTAL 179,774 MEAN 493 MAX 4,260 MIN 55 CFSM 11.9 IN 161.93 AC-FT 356,600

12035400 WYNOOCHEE RIVER NEAR GRIDDALE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	329	3,010	852	844	625	420	251	450	272	94	69
2	74	293	2,400	814	1,000	504	400	251	552	275	91	127
3	73	260	1,940	1,420	1,440	442	390	251	482	275	88	82
4	71	235	2,140	900	1,790	400	390	248	450	260	85	66
5	68	227	1,520	700	1,130	364	375	269	502	230	84	65
6	71	213	1,470	593	852	344	340	336	502	210	82	65
7	89	195	1,090	604	695	324	330	392	195	190	80	61
8	130	185	828	1,360	620	336	350	422	390	190	79	54
9	105	200	740	1,030	566	340	372	382	360	175	78	59
10	92	190	1,810	1,060	526	319	340	322	360	168	78	164
11	87	181	3,000	1,280	510	299	300	284	360	168	76	182
12	83	377	5,400	1,050	463	284	310	269	350	168	75	112
13	79	844	7,200	970	928	278	312	260	380	163	72	86
14	77	1,110	2,600	840	655	290	316	254	462	153	70	80
15	76	1,430	3,000	1,310	570	358	305	290	486	149	69	75
16	74	1,070	3,700	942	510	772	319	422	502	167	69	66
17	74	740	2,900	726	562	736	308	539	518	143	68	65
18	72	947	3,200	645	611	620	322	539	514	135	65	63
19	1,060	849	2,900	2,350	526	526	333	548	502	149	65	62
20	1,010	821	1,900	1,870	474	548	319	616	478	182	65	61
21	595	954	1,200	1,270	442	548	305	635	414	167	65	58
22	1,080	752	900	928	418	2,490	294	593	389	131	63	56
23	1,910	595	798	762	392	4,100	293	510	354	125	62	54
24	1,030	515	914	645	372	1,650	290	422	354	123	62	53
25	615	925	732	598	368	970	293	382	375	118	61	52
26	620	656	616	690	347	750	287	372	361	114	61	50
27	510	884	544	1,620	330	645	254	375	316	111	58	49
28	398	2,190	522	2,820	764	610	260	493	299	109	58	48
29	625	1,770	700	2,520	-----	540	257	588	287	184	57	63
30	515	2,730	566	1,640	-----	500	254	466	275	101	57	299
31	389	-----	604	1,050	-----	450	-----	403	-----	97	56	-----
TOTAL	11,828	22,667	60,844	35,863	18,925	22,368	9,640	12,384	12,454	5,087	2,193	2,448
MEAN	382	754	1,963	1,157	676	722	321	399	415	164	70.7	81.6
MAX	1,910	2,730	7,200	2,820	1,790	4,100	420	635	552	275	94	299
CFSH	9.25	18.3	47.5	28.0	16.4	17.5	7.77	9.66	10.0	3.97	1.71	1.98
IN.	10.65	20.42	54.80	32.30	17.05	20.15	8.68	11.15	11.22	4.58	1.90	2.70
AC-FT	23,460	44,960	120,700	71,130	37,540	44,370	19,120	24,560	24,780	10,090	4,350	4,888

CAL YR 1966 TOTAL 210,011 MEAN 575 MAX 7,200 MIN 64 CFSH 13.9 IN 189.16 AC-FT 416,600
WTR YR 1967 TOTAL 216,701 MEAN 594 MAX 7,200 MIN 68 CFSH 14.4 IN 195.19 AC-FT 429,800

DISCHARGE, IN CUBIC FEET PER SECONO, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,700	650	450	550	420	762	554	365	625	205	105	214
2	1,700	720	900	500	1,500	824	481	314	1,190	205	103	194
3	900	610	1,250	450	2,800	682	448	301	634	211	101	177
4	1,000	547	900	400	3,200	931	448	341	460	208	100	167
5	1,100	469	900	370	1,400	1,310	400	323	412	199	98	160
6	1,400	421	750	345	900	1,040	370	297	400	194	94	148
7	1,700	385	650	340	750	779	350	277	370	183	93	144
8	900	550	580	326	650	634	318	269	346	177	93	130
9	630	1,000	900	589	600	538	310	305	314	172	91	131
10	900	2,400	2,500	505	540	474	310	341	305	165	91	127
11	1,250	1,400	2,000	397	480	580	305	365	297	170	90	131
12	900	900	1,000	468	450	1,100	281	355	381	280	88	127
13	1,300	650	620	3,220	410	1,180	269	305	442	170	93	133
14	900	700	520	4,700	380	1,140	355	269	360	170	101	616
15	700	900	440	2,500	370	1,300	355	258	318	180	94	666
16	550	700	391	1,600	360	1,150	314	262	310	178	98	468
17	450	600	355	1,300	452	887	293	323	297	160	185	1,368
18	380	519	330	2,500	3,670	698	293	380	297	155	150	730
19	350	445	299	7,000	3,130	578	281	509	297	150	194	674
20	310	391	282	6,500	1,590	502	265	622	273	140	153	370
21	900	350	330	3,300	2,060	467	248	516	258	135	138	310
22	1,600	326	3,420	1,600	1,780	448	237	682	265	130	160	305
23	1,150	299	3,400	1,450	2,990	592	262	523	251	130	459	355
24	900	290	2,700	1,420	2,300	714	289	418	240	125	301	381
25	1,000	282	2,000	1,070	1,370	722	336	308	248	120	273	265
26	750	254	1,500	867	1,150	819	314	360	323	118	277	240
27	3,500	243	1,200	715	995	1,610	297	346	318	114	408	227
28	1,580	250	1,000	617	851	1,080	336	341	265	112	476	211
29	1,120	450	840	547	779	1,200	412	318	250	110	341	199
30	1,370	480	708	499	-----	869	462	301	218	188	269	191
31	1,140	-----	650	457	-----	682	-----	297	-----	105	234	-----
TOTAL	34,030	18,301	33,757	47,302	38,327	26,292	10,153	11,288	10,864	4,891	5,638	9,271
MEAN	1,098	610	1,089	1,526	1,322	848	338	364	362	158	182	309
MAX	3,500	2,400	3,420	7,000	3,670	1,610	554	682	1,190	211	408	1,368
MIN	310	243	282	326	360	448	237	358	218	105	88	127
CFSH	26.6	14.8	26.4	36.9	32.0	20.5	8.18	8.81	8.77	3.83	4.41	7.48
IN.	30.65	16.48	30.41	42.61	36.52	23.68	9.15	10.17	9.79	4.41	5.08	8.35
AC-FT	67,900	36,300	66,960	93,820	76,020	52,150	28,140	22,390	21,550	9,700	11,180	18,390
CAL YR 1967 TOTAL 207,450 MEAN 568 MAX 4,100 MIN 68 CFSH 13.8 IN 186.86 AC-FT 411,500 WTR YR 1968 TOTAL 250,114 MEAN 683 MAX 7,000 MIN 68 CFSH 16.5 IN 225.28 AC-FT 496,100												

NOTE.--ND GAGE-HEIGHT RECORD JAN. 14-23.

12035400 WYNOOCHEE RIVER NEAR GRIDDALE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	530	618	615	180	223	1,640	432	786	196	107	93
2	175	666	610	730	174	243	1,380	390	837	199	105	90
3	170	602	3,800	846	202	272	909	365	873	193	103	85
4	205	460	1,900	2,130	243	272	936	345	900	193	103	81
5	242	395	1,000	1,730	214	385	954	360	837	199	109	80
6	634	375	746	1,150	193	385	837	456	698	180	102	80
7	350	385	690	945	196	324	690	658	587	172	96	80
8	281	1,000	882	738	304	296	594	882	573	169	93	78
9	289	698	1,280	643	300	268	552	936	650	167	91	77
10	436	570	1,060	559	359	253	524	855	622	185	88	77
11	698	905	828	480	1,370	236	517	846	545	220	84	74
12	887	1,010	658	420	794	226	658	864	474	191	84	74
13	878	690	622	305	517	226	1,060	837	438	172	85	73
14	1,020	546	1,020	350	408	226	762	762	426	159	82	72
15	995	460	1,200	330	402	300	608	643	420	150	81	72
16	690	400	945	310	492	536	545	587	414	147	80	74
17	706	390	730	280	426	2,000	762	573	408	150	78	444
18	662	722	666	270	1,420	1,320	1,760	650	396	145	78	810
19	706	690	538	250	355	891	1,290	622	360	139	78	1,640
20	698	1,150	468	240	336	690	945	580	316	134	102	1,810
21	610	1,460	414	230	312	615	786	615	288	130	109	810
22	762	1,420	426	220	300	643	714	746	276	130	90	1,660
23	610	1,090	1,470	220	284	900	794	296	128	81	1,990	
24	586	833	2,840	217	264	552	810	754	276	126	87	1,150
25	502	650	1,390	202	257	510	658	608	246	124	155	1,020
26	454	610	918	199	253	587	580	706	229	120	120	674
27	395	706	722	193	233	698	552	1,040	217	118	143	531
28	395	610	587	226	226	580	580	1,050	211	116	143	444
29	902	950	492	185	-----	615	545	1,560	208	114	120	375
30	1,180	754	432	174	-----	855	486	1,300	202	114	111	837
31	690	-----	456	185	-----	1,580	-----	855	-----	107	96	-----
TOTAL	17,968	21,727	30,408	15,611	9,979	17,513	23,814	22,671	14,009	4,787	3,084	15,455
MEAN	580	698	981	494	312	565	786	714	454	154	99.5	515
MAX	1,180	1,460	3,800	2,130	1,370	2,000	1,640	1,560	900	220	155	1,990
MIN	170	375	414	174	174	223	486	345	202	107	78	72
CFSM	14.0	17.5	23.8	12.2	8.62	13.7	19.2	17.7	11.3	3.73	2.41	12.5
IN.	16.18	19.57	27.39	14.06	8.99	15.77	21.45	20.42	12.62	4.31	2.78	13.92
AC-FT	35,640	43,100	60,310	30,960	19,790	34,740	47,240	44,970	27,790	9,500	6,120	30,650

CAL YR 1968 TOTAL 234,129 MEAN 640 MAX 7,000 MIN 88 CFSM 15.5 IN 210.89 AC-FT 464,400
WTR YR 1969 TOTAL 197,026 MEAN 540 MAX 3,800 MIN 72 CFSM 13.1 IN 177.47 AC-FT 390,800

NOTE.--NO GAGE-HEIGHT RECORD DEC. 3-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,090	196	208	360	855	260	197	336	250	108	84	60
2	794	188	199	330	682	246	190	345	290	103	82	60
3	559	191	220	310	643	236	184	370	235	101	80	78
4	450	812	296	290	545	225	314	385	218	97	78	75
5	380	810	243	270	486	215	1,340	352	194	95	76	72
6	336	1,570	223	260	456	778	1,520	296	190	93	74	110
7	420	1,130	211	250	552	1,080	746	272	184	91	78	226
8	981	972	240	300	594	545	873	355	169	89	85	128
9	864	650	233	400	552	417	3,220	370	201	87	86	91
10	608	492	246	450	517	350	1,450	314	197	85	76	90
11	474	420	1,230	400	468	336	927	284	172	85	74	81
12	402	365	1,330	350	439	559	706	284	160	83	72	78
13	355	324	2,100	700	587	882	580	272	151	81	70	74
14	324	304	1,500	2,000	462	1,570	498	253	151	80	69	71
15	296	284	1,100	1,300	864	1,180	439	260	148	78	68	69
16	276	272	950	1,000	1,600	999	401	300	142	78	67	67
17	260	246	900	800	1,040	682	365	280	133	76	66	278
18	243	236	1,000	1,300	794	538	380	250	130	76	66	400
19	229	223	900	2,000	643	462	375	236	130	74	65	407
20	226	320	1,100	1,000	552	406	345	225	130	72	65	329
21	214	360	1,300	1,600	492	360	318	215	128	71	64	250
22	185	292	2,000	1,500	439	327	300	218	125	69	64	442
23	180	538	1,500	1,900	401	327	341	215	120	69	63	355
24	202	420	1,200	1,200	365	323	486	211	118	69	63	254
25	188	328	900	999	332	284	434	235	118	74	62	208
26	183	296	800	963	314	264	385	250	115	104	62	177
27	264	268	650	1,100	296	250	345	230	113	117	62	157
28	243	250	550	786	276	236	332	260	108	91	61	139
29	226	236	500	660	-----	222	341	300	105	90	61	123
30	217	214	450	259	-----	211	346	210	105	88	61	115
31	205	-----	400	873	-----	201	-----	260	-----	86	60	-----
TOTAL	11,874	13,207	24,679	26,993	16,246	14,971	18,668	8,693	4,690	2,660	2,158	5,076
MEAN	383	440	796	871	580	483	622	280	156	85.8	69.6	169
MAX	1,090	1,570	2,100	2,000	1,600	1,570	3,220	385	250	117	85	442
MIN	180	188	199	250	276	201	184	211	105	60	60	60
CFSM	9.27	10.7	19.3	21.1	14.0	11.7	15.1	6.78	3.78	2.08	1.69	4.09
IN.	10.70	11.90	22.23	24.31	14.63	13.48	16.81	7.83	4.22	2.40	1.94	4.57
AC-FT	23,550	26,200	48,950	53,540	32,220	29,690	37,030	17,240	9,300	5,280	4,280	10,070

CAL YR 1969 TOTAL 176,683 MEAN 484 MAX 2,130 MIN 72 CFSM 11.7 IN 159.14 AC-FT 350,500
WTR YR 1970 TOTAL 149,915 MEAN 411 MAX 3,220 MIN 60 CFSM 9.95 IN 135.03 AC-FT 297,400

NOTE.--NO GAGE-HEIGHT RECORD DEC. 13 TO JAN. 22, JULY 29 TO SEPT. 4.

12036000 WYNOOCHEE RIVER ABOVE SAVE CREEK, NEAR ABERDEEN, WASH.

LOCATION.--Lat 47°17'57", long 123°39'07", in NE¼NE¼ sec.23, T.21 N., R.8 W., Grays Harbor County, on left bank 0.8 mile upstream from Save Creek, 2.5 miles downstream from Oxbow Dam site, 23.5 miles northeast of city hall in Aberdeen, and at mile 40.6.

DRAINAGE AREA.--74.1 sq mi.

PERIOD OF RECORD.--May 1925 to September 1970. Published as "at Oxbow, near Aberdeen" 1925-52, where drainage area was 70.7 sq mi. Records published for both sites October 1951 to October 1952.

GAGE.--Water-stage recorder. Datum of gage is 401 ft above mean sea level (stadia traverse). Prior to Nov. 7, 1925, nonrecording gage at site 2.3 miles upstream at different datum. Nov. 7, 1925, to Sept. 3, 1947, water-stage recorder at site 1.5 miles upstream at datum 444.0 ft above mean sea level (levels by city of Aberdeen). Sept. 4, 1947, to Oct. 13, 1952, water-stage recorder at site 2.5 miles upstream at datum about 91 ft higher.

AVERAGE DISCHARGE.--45 years, 815 cfs (149.36 inches per year, 590,500 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (6,800 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	0500	*8,910	11.03	Oct. 27, 1967	1600	7,730	10.44	Feb. 18, 1968	2230	11,300	12.31
				Dec. 22, 1967	1500	7,490	10.32				
Dec. 12, 1966	2345	*16,200	14.26	Jan. 14, 1968	0900	9,830	11.49	Dec. 3, 1968	-	*9,770	all.46
Dec. 16, 1966	0545	6,910	10.17	Jan. 19, 1968	1115	*16,600	14.30				
Mar. 22, 1967	2330	9,230	11.19	Feb. 4, 1968	0045	9,950	11.67	Apr. 9, 1970	1230	*9,590	11.37

a From high watermark in well.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 2, 3, 1965	91	4.16	1969	Sept. 14-16, 1969	115	4.49
1967	Sept. 27-29, 1967	100	4.31	1970	Aug. 31, Sept. 1, 2, 1970	100	4.68
1968	Aug. 11-13, 1968	144	4.62				

a Occurred Oct. 5, 6, 1966.

Period of record: Maximum discharge, 23,600 cfs Dec. 9, 1956 (gage height, 16.95 ft), from rating curve extended above 9,000 cfs; minimum, 64 cfs Jan. 27, 1949.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1346: 1952. WSP 1736: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	439	2,080	563	1,010	804	1,070	440	376	356	179	130
2	94	1,320	1,970	590	860	712	1,000	458	410	346	175	124
3	91	2,020	2,190	536	788	649	866	551	393	354	172	123
4	127	2,060	3,020	498	1,130	607	822	677	364	360	169	121
5	896	2,160	2,480	810	1,860	642	846	764	353	343	167	120
6	3,150	1,180	3,950	2,490	1,930	712	914	945	387	332	164	118
7	940	959	2,490	2,410	1,540	852	956	844	434	320	160	117
8	599	1,030	1,710	2,730	1,240	1,310	928	705	428	317	158	114
9	471	1,110	1,430	1,710	1,120	2,000	829	740	410	314	155	114
10	387	1,100	1,220	1,610	961	1,500	866	670	422	309	153	121
11	336	1,080	1,030	1,820	1,280	1,190	1,230	572	446	295	150	131
12	322	855	901	4,070	1,190	1,130	922	558	428	280	147	128
13	328	845	806	7,640	954	1,910	771	537	387	274	150	117
14	576	1,020	725	5,040	852	2,690	804	482	393	270	148	113
15	659	826	663	2,520	756	3,230	804	628	422	261	144	111
16	510	741	611	1,770	705	2,090	764	663	470	253	140	111
17	695	668	567	1,430	663	1,520	719	544	422	244	139	135
18	802	664	633	1,220	640	1,660	670	500	376	239	137	249
19	800	1,940	720	1,050	610	1,450	628	512	376	236	133	166
20	1,080	1,780	1,320	927	700	1,210	600	551	353	228	132	137
21	885	1,440	1,240	828	780	1,020	572	551	348	220	130	126
22	665	1,450	863	754	730	900	551	506	337	216	129	121
23	551	1,090	754	705	1,020	833	544	452	337	215	127	136
24	480	909	676	656	960	807	544	440	326	212	127	129
25	429	777	615	654	840	837	544	500	311	212	127	123
26	391	787	570	635	920	910	524	551	311	203	128	136
27	401	808	759	788	1,040	946	500	476	387	198	230	140
28	430	806	805	828	940	947	476	428	628	194	188	130
29	471	775	699	1,670	-----	1,030	452	410	452	191	161	124
30	469	744	644	1,420	-----	1,300	446	410	380	187	141	119
31	419	-----	570	1,220	-----	1,250	-----	393	-----	183	135	-----
TOTAL	18,548	33,383	38,707	51,596	28,039	38,650	22,162	17,458	11,667	8,162	4,695	3,884
MEAN	598	1,113	1,249	1,664	1,001	1,247	739	563	396	263	151	129
MAX	3,150	2,160	3,950	7,640	1,930	3,230	1,230	945	428	360	230	249
MIN	91	439	567	498	610	607	446	393	311	183	127	111
CP5M	8.07	15.0	16.9	22.5	13.5	16.8	9.97	7.60	5.34	3.55	2.04	1.74
IN.	9.31	16.76	19.43	25.90	14.08	19.40	11.13	8.76	5.94	4.10	2.36	1.95
AC-FT	36,790	66,220	76,780	102,300	55,620	76,660	43,960	34,630	23,540	16,190	9,310	7,700
CAL YR 1965	TOTAL 263,363		MEAN 722		MAX 5,250	MIN 91	CP5M 9.74	IN 132.21	AC-FT 522,400			
WTR YR 1966	TOTAL 277,151		MEAN 759		MAX 7,640	MIN 91	CP5M 10.2	IN 139.14	AC-FT 549,700			

12036000 WYNOOCHEE RIVER ABOVE SAVE CREEK, NEAR ABERDEEN, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	481	4,620	1,740	1,630	1,150	735	473	518	299	143	116
2	115	425	3,450	1,570	2,070	852	690	465	661	298	141	167
3	112	383	3,070	2,700	2,890	708	645	436	591	299	138	131
4	109	350	3,460	1,838	3,350	622	673	436	532	288	137	118
5	107	333	2,440	1,410	2,150	573	622	450	589	266	135	114
6	109	315	2,580	1,140	1,600	525	573	510	606	247	135	114
7	140	291	1,860	1,160	1,320	495	549	589	511	234	132	111
8	206	272	1,370	2,630	1,100	525	557	631	462	226	131	109
9	165	298	1,190	2,030	981	557	589	573	436	218	129	118
10	144	288	2,410	1,790	890	518	533	503	434	208	127	183
11	134	277	3,780	2,250	870	495	495	450	431	205	126	255
12	129	527	7,160	2,030	1,290	450	549	408	418	206	125	167
13	124	931	10,780	1,690	1,960	429	565	394	453	203	123	141
14	119	1,338	4,210	1,560	1,270	458	573	387	521	186	122	129
15	117	1,700	4,030	2,200	1,080	614	585	415	557	199	121	122
16	119	1,530	5,410	1,750	950	1,410	605	557	577	185	120	118
17	119	987	4,250	1,350	1,110	1,410	597	708	581	183	119	116
18	114	1,160	4,690	1,160	1,270	1,190	622	690	582	180	118	113
19	1,160	1,030	4,340	3,640	1,010	940	648	708	569	192	117	111
20	1,490	1,010	3,250	3,500	880	1,030	614	780	549	230	117	110
21	871	1,230	2,200	2,520	780	1,050	581	816	478	196	116	109
22	1,510	1,030	1,740	1,920	708	4,190	565	753	443	179	114	107
23	2,350	797	1,570	1,660	656	6,360	941	665	398	172	114	106
24	1,410	689	2,140	1,370	614	3,060	518	549	387	168	112	105
25	838	1,350	1,690	1,270	605	1,970	518	480	408	165	111	104
26	805	966	1,320	1,620	565	1,500	502	458	405	161	110	102
27	685	1,430	1,110	2,780	525	1,250	466	473	394	158	109	102
28	553	2,840	1,050	4,460	1,270	1,190	495	589	330	154	108	100
29	807	2,110	1,470	3,980	-----	1,050	518	780	522	150	108	103
30	721	3,470	1,120	2,870	-----	910	495	622	308	148	108	280
31	559	-----	1,150	1,920	-----	816	-----	511	-----	144	107	-----
TOTAL	15,999	29,830	94,890	65,950	35,394	30,297	17,218	17,259	14,411	6,349	3,773	3,696
MEAN	516	994	3,059	2,127	1,264	1,235	574	557	480	205	122	130
MAX	2,350	3,470	10,780	4,460	6,360	6,360	735	816	661	299	143	283
MIN	107	272	1,050	1,140	525	429	466	387	166	107	107	105
CFSH	6.96	13.4	41.3	28.7	17.1	16.7	7.75	7.52	6.48	2.77	1.65	1.75
IN-	8.03	14.98	47.61	33.11	17.77	19.23	8.64	8.66	7.23	3.19	1.89	1.96
AC-FT	31.750	59.170	198.100	130.880	70.200	75.960	34.150	34.230	28.580	12.590	7.480	7.730

CAL YR 1966 TOTAL 327,172 MEAN 896 MAX 10,700 MIN 107 CFSH 12.1 IN 164.25 AC-FT 648,900
WTR YR 1967 TOTAL 343,206 MEAN 940 MAX 10,700 MIN 100 CFSH 12.7 IN 172.30 AC-FT 680,700

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,650	1,480	707	900	751	1,170	1,030	606	715	295	167	335
2	2,670	1,170	1,370	807	3,170	1,200	638	527	1,580	290	167	283
3	1,430	972	1,920	731	4,940	1,040	820	475	980	290	164	276
4	1,550	839	1,490	677	5,360	1,240	840	481	706	286	164	254
5	1,600	738	1,490	623	2,300	1,890	751	501	606	281	157	245
6	2,300	651	1,280	573	1,670	1,730	697	481	562	272	157	237
7	1,630	609	1,100	563	1,370	1,290	638	527	263	158	144	221
8	1,480	805	899	533	1,200	1,060	590	425	481	250	151	213
9	979	1,998	1,510	1,100	1,090	920	555	425	443	241	151	209
10	1,300	3,650	3,680	924	1,000	850	541	455	625	237	148	205
11	1,940	2,120	3,200	720	920	960	534	481	408	237	140	209
12	1,370	1,320	1,610	790	850	1,940	507	494	395	281	144	205
13	2,020	999	1,160	4,930	800	2,160	474	449	590	245	157	213
14	1,680	1,038	936	7,310	724	2,220	670	407	534	245	170	950
15	1,070	1,380	803	4,360	662	3,060	920	304	449	258	160	1,050
16	810	1,296	708	2,730	606	2,500	697	368	425	241	167	733
17	668	965	638	2,070	724	1,790	598	407	407	229	167	2,190
18	607	833	577	3,940	5,330	1,390	569	462	401	221	221	1,230
19	541	722	523	14,000	6,040	1,150	562	534	401	213	276	810
20	482	638	479	10,100	2,810	1,000	534	810	379	209	241	622
21	1,370	578	522	5,070	3,360	900	494	638	357	202	213	514
22	2,360	532	4,770	2,890	2,950	844	474	890	368	198	217	507
23	1,930	493	5,330	2,300	4,480	1,020	481	770	344	198	679	679
24	1,290	488	4,410	2,150	4,060	1,160	481	598	335	194	654	541
25	1,500	457	3,300	1,730	2,390	1,240	606	534	330	191	449	462
26	1,040	614	2,530	1,610	1,910	1,650	598	501	390	184	449	419
27	4,100	390	1,920	1,190	1,620	3,100	541	468	455	181	679	379
28	2,860	603	1,590	1,040	1,390	2,040	541	462	178	177	770	351
29	1,690	696	1,330	950	1,250	2,190	614	437	335	177	520	330
30	2,240	617	1,140	840	-----	1,520	622	419	315	174	419	315
31	1,920	-----	998	810	-----	1,210	-----	401	-----	170	368	-----
TOTAL	52,077	29,269	53,832	78,741	65,727	47,450	18,889	15,732	15,023	7,130	8,848	15,199
MEAN	1,680	976	1,737	2,540	2,244	1,531	630	507	501	230	285	507
MAX	4,100	3,650	5,330	14,000	6,040	3,100	1,030	890	1,580	295	770	2,190
MIN	482	390	479	533	606	840	474	368	315	170	144	205
CFSH	22.7	13.2	23.4	34.3	30.6	20.7	8.50	6.04	6.76	3.10	3.85	6.84
IN-	26.16	14.69	27.02	39.53	33.00	23.82	9.48	7.90	7.54	3.58	4.44	7.63
AC-FT	103,300	58,060	106,800	156,200	130,400	94,120	37,470	31,200	29,800	14,140	17,550	30,150

CAL YR 1967 TOTAL 337,725 MEAN 925 MAX 6,360 MIN 100 CFSH 12.5 IN 169.55 AC-FT 669,900
WTR YR 1968 TOTAL 407,917 MEAN 1,115 MAX 14,000 MIN 144 CFSH 15.0 IN 204.78 AC-FT 809,100

12036000 WYNOOCHEE RIVER ABOVE SAVE CREEK, NEAR ABERDEEN, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	295	810	1,060	1,110	356	536	2,670	870	1,000	310	174	154
2	281	920	1,050	1,500	344	552	2,570	797	1,050	300	171	150
3	272	870	6,200	1,430	387	640	1,870	793	1,100	300	168	147
4	330	1,733	3,100	2,790	564	640	1,960	690	1,100	310	164	144
5	335	638	1,820	4,370	592	1,010	1,990	644	1,000	300	171	140
6	1,020	576	1,440	2,150	536	990	1,840	656	830	290	171	137
7	590	598	1,330	1,940	485	779	1,520	788	720	280	168	131
8	462	1,560	1,740	1,630	734	698	1,310	1,000	720	270	164	128
9	462	1,170	2,010	1,430	940	532	1,190	1,140	730	261	160	128
10	751	930	1,900	1,260	833	592	1,130	1,090	750	261	157	124
11	1,000	1,270	1,580	1,110	2,340	576	1,070	1,030	700	310	154	124
12	1,340	1,520	1,390	970	1,810	568	1,060	1,020	600	305	150	118
13	1,360	1,090	1,230	870	1,370	568	1,070	1,020	550	285	150	118
14	1,490	990	1,760	815	1,060	560	1,540	990	530	266	147	118
15	1,530	770	1,930	752	940	680	1,230	800	520	257	147	113
16	1,130	662	1,700	689	1,110	1,060	1,070	720	520	243	144	124
17	1,090	614	1,390	656	1,050	3,600	1,100	720	500	234	140	553
18	1,040	1,060	1,450	600	833	2,490	1,630	740	470	225	140	1,050
19	1,120	1,060	1,270	576	788	1,810	2,310	760	490	221	137	2,300
20	1,210	1,590	1,090	552	752	1,500	1,900	700	420	217	147	2,600
21	960	2,030	960	528	689	1,340	1,660	780	380	213	182	1,420
22	1,250	2,300	880	499	648	1,400	1,450	900	350	205	178	2,200
23	960	1,670	1,870	470	624	1,520	1,420	1,000	380	201	168	3,780
24	560	1,240	5,410	450	592	1,280	1,400	900	307	182	157	1,990
25	860	990	2,760	430	568	1,180	1,220	760	380	197	185	1,670
26	762	910	1,820	410	568	1,200	1,040	900	370	193	205	1,280
27	646	1,120	1,500	390	560	1,350	970	1,200	350	189	217	960
28	646	980	1,280	370	552	1,310	970	1,300	340	185	234	788
29	1,020	1,490	1,100	-----	-----	1,250	970	1,900	320	182	197	656
30	1,750	1,310	990	340	-----	1,310	950	1,900	320	178	182	1,340
31	1,050	-----	900	360	-----	2,280	-----	1,100	-----	174	168	-----
TOTAL	27,952	33,371	55,870	31,807	22,605	35,901	44,660	29,586	17,880	7,559	5,197	25,027
MEAN	902	1,112	1,802	1,026	807	1,158	1,489	954	586	244	168	834
MAX	1,750	2,300	6,200	4,370	2,340	3,600	2,670	1,900	1,100	310	174	1,050
MIN	272	576	880	340	344	536	930	656	320	174	137	115
CFSM	12.2	15.0	24.3	13.8	10.9	15.6	20.1	12.9	8.04	3.29	2.27	11.3
IN.	14.03	16.75	28.05	15.97	11.35	18.02	22.42	14.85	8.98	3.79	2.61	12.56
AC-FT	55,440	66,190	110,800	63,090	44,840	71,210	88,580	56,680	35,460	14,990	10,310	49,640
CAL YR 1968	TOTAL 389,932			MEAN 1,065	MAX 14,000	MIN 144	CFSM 14.4	IN 195.76	AC-FT 773,400			
WTR YR 1969	TOTAL 337,415			MEAN 924	MAX 6,200	MIN 115	CFSM 12.5	IN 169.39	AC-FT 669,300			

NOTE.--NO GAGE-HEIGHT RECORD DEC. 3, 4, MAY 15 TO JULY 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,790	326	394	656	1,840	520	380	568	325	192	150	100
2	1,660	310	380	600	1,460	499	374	556	350	192	147	100
3	1,200	315	374	576	1,360	478	368	563	335	184	144	134
4	980	1,160	513	536	1,160	457	489	577	325	178	141	131
5	806	1,270	478	506	1,030	436	1,760	549	295	174	141	120
6	680	2,600	450	478	950	1,130	2,860	494	285	170	141	174
7	656	1,860	401	450	1,040	1,900	1,460	464	280	167	141	360
8	1,460	1,660	429	485	1,070	990	1,420	488	271	167	144	203
9	1,520	1,290	450	1,110	980	779	6,060	591	310	160	138	164
10	1,180	1,020	464	788	920	656	2,960	535	320	160	134	147
11	970	880	2,270	680	833	624	1,700	494	276	160	131	141
12	815	770	2,420	616	779	930	1,220	476	262	160	128	131
13	698	680	3,160	1,010	990	1,570	970	470	248	157	125	125
14	616	608	2,820	3,940	842	2,280	855	440	244	157	125	122
15	552	544	1,820	1,670	1,380	2,010	783	422	240	154	122	120
16	499	528	1,400	1,160	2,770	1,860	704	440	235	150	120	117
17	457	485	1,490	1,090	2,020	1,280	648	440	235	150	117	274
18	415	457	1,900	1,820	1,660	1,060	656	416	227	150	111	640
19	380	429	1,500	3,530	1,340	930	656	392	223	147	111	640
20	368	528	1,620	2,450	1,100	842	612	375	223	147	111	528
21	344	689	2,060	3,230	960	761	563	360	219	144	111	404
22	332	592	2,700	2,790	900	689	528	355	215	144	111	728
23	315	779	2,760	3,320	833	664	570	350	211	141	111	612
24	326	860	1,850	2,110	743	672	855	335	203	141	108	410
25	300	672	1,490	1,980	680	608	810	350	199	150	106	340
26	290	600	1,270	1,970	632	528	720	360	199	188	106	285
27	408	544	1,070	2,280	592	506	648	340	195	211	106	258
28	415	506	900	1,670	568	478	612	320	192	174	106	235
29	370	464	842	1,370	-----	450	598	350	188	166	106	219
30	368	422	770	1,150	-----	436	584	375	188	166	103	195
31	350	-----	707	1,840	-----	401	-----	350	-----	154	100	-----
TOTAL	21,537	23,848	41,112	47,861	31,432	27,424	33,423	13,570	7,498	5,049	3,796	8,157
MEAN	695	795	1,326	1,544	1,123	885	1,114	438	250	163	122	272
MAX	1,790	2,600	3,160	3,940	2,770	2,280	6,060	591	335	211	108	728
MIN	290	310	374	450	568	401	368	320	188	141	100	100
CFSM	9.30	10.7	17.9	25.8	15.2	11.9	13.0	5.91	3.37	2.20	1.45	3.87
IN.	10.81	11.97	20.64	24.03	15.78	13.77	16.78	6.81	3.76	2.53	1.91	4.10
AC-FT	42,720	47,300	81,550	94,930	62,350	54,400	66,290	26,920	14,870	10,010	7,530	16,180
CAL YR 1969	TOTAL 306,719			MEAN 840	MAX 4,370	MIN 115	CFSM 11.3	IN 153.98	AC-FT 608,400			
WTR YR 1970	TOTAL 264,707			MEAN 725	MAX 8,060	MIN 100	CFSM 9.78	IN 132.89	AC-FT 525,000			

12037400 WYNOOCHEE RIVER ABOVE BLACK CREEK, NEAR MONTESANO, WASH.

LOCATION.--Lat 47°00'42", long 123°39'35", in SE4SE4 sec.27, T.18 N., R.8 W., Grays Harbor County, on left bank 2,000 ft upstream from Black Creek, 3.5 miles northwest of Montesano, and at mile 5.9.

DRAINAGE AREA.--155 sq mi.

PERIOD OF RECORD.--October 1956 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 1,279 cfs (926,600 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (8,900 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	1030	*16,400	16.65	Mar. 23, 1967	0745	11,900	14.21	Feb. 19, 1968	0615	14,900	15.37
Dec. 1, 1966	0645	9,420	12.55	Oct. 27, 1967	2330	9,750	12.87	Dec. 3, 1968	2245	*12,900	14.29
Dec. 13, 1966	0945	*21,500	19.20	Jan. 14, 1968	1645	11,600	14.13	Dec. 24, 1968	1345	9,750	12.30
Dec. 16, 1966	1230	9,150	12.32	Jan. 19, 1968	1345	*25,500	20.19	Jan. 5, 1969	0400	11,200	13.28
Jan. 19, 1967	2230	9,860	12.83	Feb. 4, 1968	0745	13,000	14.34	Apr. 9, 1970	1945	*12,600	14.15

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1-3, 1965	5.0	a2.97	1969	Sept. 15, 16, 1969	21	5.14
1967	Aug. 26-30, 1967	b5.0	2.86	1970	Sept. 2, 1970	6.5	2.90
1968	Oct. 1, 1967	54	c5.48				

a Occurred Oct. 1-3, 1965, Sept. 9, 10, 1966.

b Part or all of each day.

c Occurred Aug. 12, 13, 1968.

Period of record: Maximum discharge, 25,500 cfs Jan. 19, 1968; maximum gage height, 20.54 ft Dec. 10, 1956; minimum, 3.0 cfs for part or all of each day Aug. 26-30, 1967 (gage height, 2.86 ft).

REMARKS.--Records excellent. City of Aberdeen diverted about 110 cfs for municipal supply at intake 2.2 miles upstream. Other small diversions for irrigation and domestic use. No regulation. Water-quality records for the water year 1970 are published in reports of the Geological Survey.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	356	1,780	1,320	1,810	1,560	1,410	420	344	312	88	42
2	5.5	1,020	3,600	1,820	1,520	1,350	1,300	415	336	308	83	34
3	5.5	1,560	2,530	1,530	1,320	1,190	1,150	460	380	340	77	36
4	11	3,060	5,310	1,280	1,380	1,060	1,010	612	348	368	72	40
5	239	3,280	3,870	1,740	2,430	1,160	972	723	316	340	68	45
6	2,950	2,070	5,500	5,010	3,160	1,200	1,020	912	304	312	66	43
7	1,440	1,920	4,200	5,700	2,990	1,490	1,080	1,040	336	292	60	33
8	702	1,480	3,100	5,770	2,330	3,280	1,090	800	376	268	55	22
9	486	1,610	2,420	4,200	2,100	4,760	1,010	730	364	260	54	14
10	356	1,620	2,050	3,400	1,820	3,380	940	709	380	253	51	15
11	284	1,940	1,690	3,690	2,110	2,450	1,380	600	415	250	47	36
12	246	1,520	1,440	6,250	2,350	2,000	1,280	522	430	232	45	42
13	264	1,380	1,260	14,300	1,830	2,430	1,020	504	368	212	47	36
14	352	1,520	1,130	10,100	1,570	3,380	1,020	470	352	212	47	24
15	723	1,370	996	5,130	1,330	5,070	1,040	534	348	200	43	19
16	546	1,170	898	3,460	1,180	4,130	980	765	390	187	39	18
17	642	1,040	821	2,690	1,070	2,930	912	618	410	178	33	23
18	730	940	821	2,210	980	2,920	835	510	348	166	30	99
19	1,080	1,970	964	1,870	905	3,030	765	470	316	169	27	136
20	1,000	2,660	1,210	1,640	1,010	2,570	716	498	308	160	23	84
21	1,240	2,310	2,050	1,440	1,130	2,160	660	528	300	149	20	58
22	863	2,470	1,380	1,270	1,080	1,820	524	526	284	138	17	46
23	654	1,980	1,200	1,190	1,200	1,590	594	454	268	133	15	50
24	528	1,580	1,090	1,080	1,340	1,410	576	410	260	133	15	56
25	440	1,290	1,000	1,060	1,270	1,330	570	413	242	131	15	62
26	376	1,220	926	980	1,280	1,320	558	504	232	126	19	61
27	348	1,360	1,430	1,080	1,580	1,320	516	504	256	114	102	72
28	405	1,240	2,130	1,200	1,670	1,280	486	425	514	107	141	67
29	390	1,240	1,770	2,140	-----	1,300	455	380	504	103	86	54
30	420	1,170	1,660	2,470	-----	1,510	435	368	368	96	70	45
31	380	-----	1,360	2,190	-----	1,670	-----	356	-----	92	54	-----
TOTAL	18,131.5	48,946	61,586	99,210	45,745	68,050	26,404	17,180	10,397	6,341	1,609	1,412
MEAN	585	1,632	1,987	3,200	1,634	2,195	880	554	347	205	51.9	47.1
MAX	2,950	3,280	5,500	14,300	3,160	5,070	1,410	1,040	514	368	141	136
MIN	5.5	356	821	980	905	1,060	435	356	232	92	15	14
AC-FT	35,960	97,080	122,200	196,800	90,740	135,000	52,370	34,080	20,620	12,580	3,190	2,800
CAL YR 1965	TOTAL	400,313.0	MEAN	1,097	MAX	9,640	MIN	5.5	AC-FT	796,000		
WTR YR 1966	TOTAL	405,011.5	MEAN	1,110	MAX	14,300	MIN	5.5	AC-FT	803,300		

CHEHALIS RIVER BASIN

12037400 WYNOOCHEE RIVER ABOVE BLACK CREEK, NEAR MONTESANO, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	402	1,250	2,570	1,780	574	780	3,500	930	1,220	279	77	86
2	370	1,220	2,230	2,210	580	843	3,100	843	1,120	275	77	71
3	342	1,370	4,130	2,380	773	986	2,500	787	1,070	279	73	62
4	388	1,140	6,990	5,200	962	1,060	2,600	731	1,070	324	71	49
5	398	998	3,700	8,400	1,040	2,040	2,700	689	1,060	287	75	41
6	881	883	2,600	4,580	882	1,960	2,450	696	962	259	83	38
7	882	877	2,110	4,250	808	1,500	2,200	801	822	220	71	35
8	660	1,930	2,750	3,320	1,460	1,240	1,800	994	717	202	60	33
9	571	2,230	3,060	3,080	2,110	1,070	1,600	1,160	731	191	62	31
10	897	1,760	3,290	2,640	1,930	962	1,500	1,120	759	191	58	30
11	1,130	2,080	2,800	2,300	4,730	844	1,400	1,030	710	259	56	27
12	1,670	2,870	2,260	1,890	3,750	813	1,400	1,040	634	255	54	27
13	1,920	2,260	1,900	1,620	2,430	759	2,200	1,020	506	213	64	28
14	2,050	1,780	2,400	1,470	1,880	766	2,050	970	538	191	56	27
15	2,240	1,490	2,690	1,320	1,650	986	1,700	858	526	181	54	24
16	1,870	1,270	2,590	1,210	1,850	2,550	1,450	752	508	167	54	25
17	1,500	1,120	2,090	1,090	1,810	3,650	1,450	710	496	155	51	86
18	1,620	1,310	2,380	962	1,590	3,670	2,100	717	478	145	49	75
19	1,480	1,690	1,970	890	1,410	2,500	2,900	773	466	139	52	1,980
20	2,040	1,920	1,630	822	1,260	2,000	2,400	703	425	133	58	2,680
21	1,640	2,370	1,400	759	1,140	1,800	2,010	682	385	127	91	2,160
22	1,890	4,380	1,300	703	1,050	1,850	1,880	758	365	122	91	1,800
23	1,630	3,190	1,160	640	1,000	2,000	1,920	822	395	116	66	4,860
24	1,460	2,360	8,940	604	946	1,750	1,920	882	410	111	56	2,810
25	1,320	1,840	5,610	574	898	1,550	1,640	780	365	105	64	2,430
26	1,180	1,560	3,420	562	858	1,600	1,400	731	324	103	122	1,740
27	1,020	1,760	2,540	538	822	1,800	1,230	930	303	98	111	1,240
28	923	1,750	1,940	502	794	1,750	1,160	1,440	299	93	145	986
29	967	2,470	1,570	478	-----	1,650	1,150	1,900	295	88	139	780
30	2,060	2,870	1,350	460	-----	1,700	1,040	2,590	-----	283	83	1,070
31	1,650	-----	1,410	604	-----	3,000	-----	1,610	-----	81	93	-----
TOTAL	39,051	55,998	90,780	57,836	41,007	53,453	58,350	30,429	18,322	5,472	2,351	26,006
MEAN	1,260	1,667	2,928	1,866	1,465	1,724	1,945	982	611	177	75.8	867
MAX	2,240	4,380	8,940	8,400	4,730	5,650	3,500	2,590	1,220	324	145	4,860
MIN	342	877	1,300	460	574	759	1,040	682	283	81	49	24
AC-FT	77,466	111,100	180,100	114,700	81,346	106,000	115,700	60,366	36,340	10,850	4,660	51,580
CAL YR 1968	TOTAL 589,518		MEAN 1,611		MAX 20,600		MIN 62		AC-FT 1,169,090			
YR 1969	TOTAL 579,057		MEAN 1,312		MAX 8,950		MIN 24		AC-FT 750,200			

NOTE.--NO GAGE-HEIGHT RECORD MAR. 19 TO APR. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,050	390	502	980	3,250	681	465	793	330	121	65	7.2
2	2,240	365	466	902	2,560	633	442	755	324	127	60	6.8
3	1,470	365	445	834	2,330	595	418	740	326	145	57	65
4	1,110	385	604	773	1,990	557	504	739	325	149	49	77
5	890	1,280	568	707	1,730	517	1,510	706	300	129	40	74
6	752	3,330	514	652	1,630	818	4,360	631	276	125	34	174
7	496	2,850	472	611	1,580	2,780	2,730	581	265	102	38	402
8	1,430	2,420	556	601	1,570	1,650	2,100	668	254	85	42	280
9	1,950	1,830	622	1,010	1,450	1,180	7,540	766	271	74	41	166
10	1,520	1,400	640	1,130	1,320	967	6,120	723	323	68	32	117
11	1,160	1,120	2,110	941	1,190	924	3,230	652	285	66	27	88
12	954	954	4,650	859	1,070	1,090	2,330	685	257	62	23	68
13	808	829	3,860	1,050	1,120	2,110	1,860	672	233	58	21	53
14	703	745	5,630	5,440	1,110	2,890	1,530	616	280	56	20	45
15	622	682	3,560	3,190	1,650	3,360	1,300	574	220	71	18	36
16	580	661	2,620	2,180	4,440	3,180	1,130	561	211	51	14	28
17	538	610	2,420	1,980	3,680	2,380	1,000	559	200	52	13	56
18	520	544	2,680	2,900	3,160	1,810	956	516	186	47	12	443
19	425	502	2,440	6,090	2,450	1,460	983	474	176	43	13	608
20	410	604	2,380	5,360	1,980	1,230	893	449	169	40	12	684
21	400	890	3,080	4,950	1,650	1,060	801	426	163	38	13	510
22	370	766	3,630	4,950	1,400	933	740	419	157	37	12	753
23	347	898	5,470	5,670	1,230	890	778	403	152	35	11	1,040
24	356	1,280	3,710	4,040	1,070	901	1,120	382	146	33	11	646
25	347	986	2,790	3,370	954	773	1,260	371	139	44	11	460
26	315	836	2,310	3,410	866	698	1,120	382	130	95	11	357
27	370	738	1,890	4,300	799	638	1,010	369	127	138	9.2	289
28	390	661	1,590	3,180	738	595	905	342	121	120	9.8	245
29	395	598	1,380	2,450	-----	558	893	392	113	88	11	212
30	395	550	1,230	2,020	-----	525	849	432	112	79	8.3	182
31	395	-----	1,080	2,540	-----	489	-----	170	-----	68	7.4	-----
TOTAL	24,908	30,069	65,699	79,070	49,965	38,672	50,877	17,128	6,511	2,446	745.7	8,172.0
MEAN	803	1,002	2,126	2,551	1,784	1,254	1,696	593	217	78.9	24.1	272
MAX	2,240	3,330	5,630	6,090	4,440	3,360	7,540	793	330	149	65	1,040
MIN	315	365	445	601	738	489	418	342	112	33	7.4	6.8
AC-FT	49,410	59,640	130,700	156,800	99,110	77,100	100,900	33,970	12,910	4,850	1,480	16,210
CAL YR 1969	TOTAL 414,104.0											
MEAN	MEAN 1,025											
MAX	MAX 8,400											
MIN	MIN 24											
AC-FT	AC-FT 821,400											
MEAN	MEAN 743,100											
MAX	MAX 7,540											
MIN	MIN 6.8											

12039000 HUMPTULIPS RIVER NEAR HUMPTULIPS, WASH.

LOCATION.--Lat 47°13'42", long 123°56'23", in NEKNEK sec.17, T.20 N., R.10 W., Grays Harbor County, on right bank 1.0 mile southeast of Humptulips, 2.3 miles upstream from Stevens Creek, 3.3 miles downstream from confluence of East and West Forks, and at mile 24.8.

DRAINAGE AREA.--130 sq mi.

PERIOD OF RECORD.--May 1933 to January 1935, July 1942 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 120 ft (from topographic map). Prior to Jan. 14, 1935, and Mar. 1, 1950, to Jan. 16, 1953, water-stage recorder; July 1, 1942, to Feb. 28, 1950, and Jan. 17, 1953, to Sept. 30, 1959, nonrecording gage; all at site 400 ft downstream at different datums.

AVERAGE DISCHARGE.--29 years (1933-34, 1942-70), 1,324 cfs (138.31 inches per year, 959,200 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (10,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	0400	*18,900	11.25	Oct. 27, 1967	1700	11,200	8.47	Feb. 19, 1968	0015	17,100	10.25
Dec. 12, 1966	2400	*21,100	11.37	Dec. 10, 1967	2000	11,800	8.65	Dec. 3, 1968	1500	15,700	9.85
Dec. 16, 1966	0600	11,600	8.60	Dec. 22, 1967	1445	10,900	8.36	Dec. 24, 1968	0100	11,000	8.41
Jan. 19, 1967	1515	12,000	8.75	Jan. 14, 1968	1100	11,400	8.55	Jan. 4, 1969	2250	*16,000	9.93
Mar. 23, 1967	0100	13,300	9.17	Jan. 19, 1968	1830	*27,700	13.03	Apr. 9, 1970	1300	*15,700	9.87
				Feb. 4, 1968	0100	14,400	9.49				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 4, 1965	99	1.44	1969	Sept. 14-16, 1969	135	1.64
1967	Aug. 29, 1967	96	1.48	1970	Aug. 31, Sept. 1, 2, 1970	121	1.50
1968	Aug. 12, 13, 1968	178	1.72				

Period of record: Maximum discharge, 33,000 cfs Jan. 22, 1935 (gage height, 12.7 ft, datum then in use, from floodmarks), from rating curve extended above 16,500 cfs; maximum gage height, 13.03 ft Jan. 19, 1968; minimum discharge observed, 82 cfs Sept. 11, 1944.

REMARKS.--Records excellent. No diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1216: 1934-35, 1943-46. 1947(M), 1949(M). WSP 1246: Drainage area. WSP 1396: 1946(M), 1954(P). WSP 1932: 1960(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	106	605	2,860	1,100	1,510	1,470	1,340	475	337	350	177	157		
2	101	1,680	2,990	1,340	1,280	1,250	1,230	470	345	341	174	146		
3	99	2,940	3,080	1,150	1,140	1,100	1,060	501	354	359	168	143		
4	131	3,040	4,860	1,020	1,380	1,010	986	549	333	368	168	138		
5	760	3,360	3,820	1,060	2,510	1,160	978	618	313	341	160	130		
6	3,740	1,920	5,540	4,950	3,590	1,340	1,000	794	305	325	165	136		
7	1,290	1,470	3,830	4,750	2,880	1,820	1,010	747	313	309	160	133		
8	740	1,660	2,670	5,840	2,210	1,470	970	618	313	297	160	130		
9	599	1,830	2,210	3,840	2,150	4,340	906	593	305	285	157	133		
10	470	1,750	1,860	3,430	1,850	3,090	906	591	325	281	154	149		
11	410	1,750	1,530	3,930	2,630	2,270	1,480	490	376	285	154	165		
12	395	1,370	1,320	8,840	2,480	1,940	1,170	440	400	265	152	157		
13	918	1,330	1,160	14,900	1,860	2,920	978	445	358	250	171	161		
14	836	1,460	1,030	9,190	1,600	4,030	1,100	425	358	251	165	136		
15	1,130	1,250	958	4,720	1,340	5,220	1,090	604	333	244	154	133		
16	803	1,110	858	3,140	1,160	3,730	1,000	818	333	237	149	131		
17	1,130	994	782	2,420	1,070	2,610	914	618	333	230	146	143		
18	1,100	994	914	2,020	1,020	3,490	826	528	309	226	143	297		
19	1,200	2,480	1,180	1,670	962	3,140	761	485	313	234	141	223		
20	1,470	2,320	1,810	1,460	1,200	2,430	719	480	309	223	138	192		
21	1,350	2,150	2,120	1,300	1,300	1,970	677	496	317	216	136	168		
22	986	2,540	1,410	1,150	1,160	1,640	650	501	309	209	136	162		
23	782	1,860	1,180	1,100	1,400	1,440	618	495	297	202	136	180		
24	664	1,460	1,060	1,000	1,370	1,330	599	420	289	202	133	174		
25	587	1,180	978	1,020	1,330	1,310	593	410	269	212	130	168		
26	518	1,210	906	978	1,370	1,360	581	430	265	206	138	195		
27	523	1,370	1,760	1,180	1,780	1,350	545	410	317	198	164	209		
28	618	1,260	1,970	1,230	1,700	1,300	518	381	624	195	262	189		
29	677	1,190	1,350	2,170	-----	1,310	490	358	490	189	195	177		
30	733	1,150	1,380	2,030	-----	1,610	485	345	395	183	186	165		
31	618	-----	1,150	1,850	-----	1,930	-----	390	-----	180	165	-----		
TOTAL	29,084	90,243	60,706	96,008	47,192	68,180	26,180	15,887	10,237	7,900	9,147	4,910		
MEAN	809	1,678	1,958	3,097	1,685	2,199	873	512	341	255	164	164		
MAX	3,740	3,360	5,540	14,900	3,550	5,220	1,480	818	624	368	364	297		
MIN	99	605	782	978	962	1,010	485	345	245	180	130	130		
CFSM	6.22	12.9	15.1	23.8	13.0	16.9	6.72	3.94	2.62	1.96	1.28	1.26		
IN.	7.18	14.38	17.37	27.47	13.50	19.51	7.49	4.55	2.93	2.26	1.47	1.41		
AC-FT	49,750	99,660	120,400	190,400	93,610	135,200	51,930	31,510	20,310	15,690	10,210	9,748		
CAL YR 1965	TOTAL	408,274	MEAN	1,119	MAX	9,540	MIN	99	CFSM	8.61	IN	116.83	AC-FT	809,800
WTR YR 1966	TOTAL	417,682	MEAN	1,144	MAX	14,900	MIN	99	CFSM	8.80	IN	119.52	AC-FT	828,900

HUMPTULIPS RIVER BASIN

12039000 HUMPTULIPS RIVER NEAR HUMPTULIPS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	789	8,280	3,300	2,490	2,150	1,140	743	420	206	138	108
2	162	684	9,890	2,830	3,350	1,600	1,030	708	435	203	135	186
3	157	405	5,610	5,810	6,080	1,310	973	687	435	200	132	153
4	146	545	7,600	3,990	7,180	1,120	937	666	390	197	130	130
5	143	528	5,310	2,950	4,330	1,000	862	645	386	197	128	125
6	146	501	5,470	2,320	2,860	902	774	666	386	192	129	130
7	220	460	4,130	2,210	2,190	890	756	694	366	183	128	123
8	390	435	2,720	5,820	1,780	956	729	346	177	123	111	111
9	309	485	2,150	4,390	1,530	1,130	806	701	326	177	123	132
10	248	506	4,130	3,300	1,380	1,030	715	645	318	174	123	189
11	220	450	6,180	3,970	1,310	991	659	604	310	169	120	350
12	202	780	10,100	4,110	2,020	937	736	568	306	166	120	225
13	195	1,040	15,000	4,170	4,110	886	878	550	299	164	118	183
14	186	1,630	6,250	3,120	2,460	878	878	538	306	164	115	164
15	177	2,250	5,790	4,480	2,110	1,260	846	526	310	161	113	148
16	174	2,780	8,880	3,810	2,010	2,500	937	574	310	158	111	138
17	189	1,720	6,450	2,740	2,430	2,460	910	659	310	155	108	130
18	171	1,540	7,600	2,140	2,950	2,080	982	659	310	155	104	125
19	1,330	1,370	7,100	7,660	2,240	1,730	1,030	631	303	174	106	123
20	2,590	1,420	5,510	6,550	1,820	1,980	928	638	295	228	103	120
21	1,550	1,930	3,370	4,590	1,530	1,970	854	659	288	203	111	118
22	2,080	1,770	2,440	3,260	1,330	6,460	822	604	306	180	108	115
23	4,200	1,320	2,100	2,900	1,180	10,000	766	556	273	166	103	113
24	2,620	1,100	3,260	2,330	1,060	5,490	729	490	259	158	101	111
25	1,500	3,040	2,780	2,070	1,040	3,400	715	445	245	153	101	108
26	1,310	2,200	2,100	2,620	919	2,520	715	415	242	150	101	106
27	1,110	2,960	1,720	4,380	846	2,020	659	400	242	150	99	106
28	882	5,480	7,400	2,100	2,270	1,920	659	425	148	99	103	103
29	1,280	4,030	2,530	4,400	-----	1,720	902	610	219	145	99	125
30	1,250	6,020	1,930	4,690	-----	1,510	790	574	209	145	101	221
31	954	-----	1,880	2,980	-----	1,300	-----	475	-----	142	101	-----
TOTAL	27,051	50,368	155,850	123,290	66,805	65,980	25,132	18,509	9,378	5,340	3,334	4,319
MEAN	773	1,679	5,027	3,877	2,156	2,037	786	567	286	172	114	144
MAX	4,200	6,020	15,000	7,660	7,180	10,000	1,140	743	435	228	138	350
MIN	143	435	1,590	2,070	846	830	659	400	209	142	99	103
CFSM	6.72	12.9	38.7	30.6	18.4	16.4	6.45	4.59	2.41	1.32	.88	1.11
IN.	7.74	14.41	44.66	35.28	19.12	18.88	7.19	5.30	2.68	1.53	1.01	1.24
AC-FT	53,660	99,900	309,100	244,500	132,500	130,900	49,850	36,710	18,600	10,590	7,010	8,570
CAL YR 1966	TOTAL 514,918	MEAN 1,411	MAX 15,000	MIN 130	CFSM 10.9	IN 147.35	AC-FT 1,021,000					
WTR YR 1967	TOTAL 555,556	MEAN 1,522	MAX 15,000	MIN 99	CFSM 11.7	IN 158.97	AC-FT 1,102,000					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,490	2,560	1,610	1,260	1,040	1,330	1,630	782	828	390	203	510
2	3,200	1,920	3,880	1,070	4,190	1,260	1,380	696	1,640	355	200	450
3	1,470	1,520	5,350	964	7,290	1,120	1,210	633	1,160	346	200	410
4	1,660	1,260	3,710	894	8,160	1,260	1,240	633	870	336	200	380
5	1,860	1,060	3,300	830	3,400	1,830	1,180	718	726	328	200	355
6	2,350	919	2,580	750	2,340	2,050	1,120	750	654	314	197	336
7	3,710	854	2,490	790	1,880	1,630	1,040	668	598	301	197	314
8	2,150	985	1,980	774	1,630	1,360	933	626	552	297	192	301
9	1,390	2,820	3,140	1,970	1,440	1,160	854	591	510	285	189	285
10	1,570	5,640	6,270	1,720	1,280	1,110	798	577	488	285	186	273
11	3,040	3,520	5,740	1,270	1,150	1,230	766	564	450	285	184	310
12	2,010	2,180	2,950	1,250	1,050	2,750	710	564	450	355	181	310
13	2,700	1,610	2,070	8,040	960	3,540	675	528	689	305	189	316
14	2,650	1,460	1,600	9,620	870	3,660	1,360	486	661	332	251	1,720
15	1,680	1,950	1,360	6,450	790	5,310	1,900	450	540	346	218	1,860
16	1,230	1,990	1,160	4,110	726	4,110	1,370	440	492	328	262	1,440
17	982	1,490	1,030	3,140	801	2,730	1,120	435	456	297	221	4,840
18	862	1,290	919	6,460	6,860	2,050	1,050	440	435	277	332	2,670
19	790	1,100	822	23,200	10,000	1,660	1,010	492	425	265	410	1,800
20	687	973	736	15,600	4,390	1,420	933	710	400	262	365	1,430
21	1,910	862	862	8,660	5,030	1,260	846	633	395	258	305	1,130
22	3,640	782	7,390	4,510	4,370	1,150	766	897	415	251	308	1,080
23	3,340	722	8,080	3,080	6,180	1,160	806	915	395	248	1,110	1,780
24	2,040	750	7,950	2,540	5,960	1,450	782	718	365	240	1,080	1,340
25	2,360	729	5,750	2,090	3,400	1,660	1,180	626	350	234	718	1,090
26	1,660	645	4,070	1,760	2,490	1,810	1,100	558	458	230	640	924
27	6,050	610	2,980	1,490	1,980	6,010	942	516	619	230	938	790
28	5,010	619	2,340	1,300	1,670	3,880	870	498	510	221	1,320	710
29	2,800	1,470	1,910	1,160	1,460	3,770	854	450	450	218	897	647
30	3,540	1,380	1,600	1,070	-----	2,620	830	435	410	212	696	591
31	3,360	-----	1,390	1,090	-----	1,980	-----	435	-----	209	570	-----
TOTAL	74,191	45,670	97,019	118,912	92,787	69,320	31,255	18,464	17,383	8,840	13,159	30,392
MEAN	2,393	1,522	3,130	3,836	3,200	2,236	1,042	596	579	285	424	1,013
MAX	6,050	5,640	8,080	23,200	10,000	6,010	1,900	915	1,640	490	1,320	4,840
MIN	687	610	736	750	726	1,110	675	350	209	181	103	273
CFSM	18.4	11.7	24.1	25.5	24.6	17.2	8.02	4.58	4.45	2.19	3.26	7.19
IN.	21.23	13.07	27.76	14.03	26.55	19.84	8.94	5.28	4.97	2.53	3.77	8.70
AC-FT	147,200	109,590	192,400	235,900	184,000	137,500	61,990	36,620	34,480	17,530	26,100	60,280
CAL YR 1967	TOTAL 539,167	MEAN 1,477	MAX 10,000	MIN 99	CFSM 11.4	IN 154.28	AC-FT 1,069,000					
WTR YR 1968	TOTAL 617,392	MEAN 1,687	MAX 23,200	MIN 181	CFSM 13.0	IN 176.67	AC-FT 1,225,000					

12039000 HUMPTULIPS RIVER NEAR HUMPTULIPS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	552	1,390	2,330	2,010	509	816	4,030	912	996	307	171	182		
2	510	1,460	2,300	2,490	526	960	4,320	848	896	299	168	173		
3	474	1,410	9,330	2,960	744	1,210	2,660	792	824	299	165	171		
4	640	1,190	5,490	8,400	1,090	1,150	3,070	728	776	303	165	162		
5	546	1,050	3,180	8,070	1,000	2,140	3,150	699	720	303	188	157		
6	1,690	924	2,290	4,470	824	2,290	2,490	713	664	275	173	149		
7	1,100	987	1,970	4,510	784	1,680	1,920	792	601	271	162	147		
8	838	280	2,940	3,000	1,880	1,360	1,560	928	556	264	162	144		
9	806	1,950	3,390	2,650	2,070	1,140	1,380	960	544	245	157	144		
10	1,200	1,580	3,080	2,270	2,010	1,020	1,270	880	538	271	154	142		
11	1,380	1,900	2,420	1,900	6,020	928	1,150	832	514	380	149	140		
12	1,990	2,230	1,930	1,560	3,630	856	1,270	824	482	351	154	138		
13	2,050	1,840	1,740	1,420	2,290	800	2,460	792	454	307	168	147		
14	2,030	1,840	2,630	1,270	1,750	768	1,880	760	426	275	152	135		
15	2,210	1,370	2,740	1,120	1,630	1,090	1,440	671	410	275	152	135		
16	1,740	1,170	2,380	1,040	2,030	1,680	1,250	622	400	253	149	140		
17	1,680	1,090	1,980	944	1,830	6,680	1,440	580	390	239	147	485		
18	1,660	1,650	2,480	868	1,600	4,680	2,160	608	375	236	147	851		
19	1,700	1,680	1,900	784	1,460	3,070	3,870	615	365	229	152	2,260		
20	1,940	2,440	1,660	728	1,320	2,310	2,800	568	360	219	182	3,820		
21	1,610	3,120	1,320	671	1,180	1,900	2,220	556	338	213	261	2,140		
22	1,980	3,580	1,270	636	1,090	2,070	1,800	587	342	206	194	2,930		
23	1,600	2,580	5,120	594	1,040	2,370	1,800	622	416	203	173	6,620		
24	1,520	1,980	9,290	556	987	1,810	1,750	629	421	197	162	2,840		
25	1,410	1,570	4,990	532	936	1,550	1,490	574	370	194	226	2,730		
26	1,230	1,470	3,140	520	904	1,530	1,270	580	346	188	229	1,730		
27	1,080	1,920	2,360	492	872	1,600	1,150	864	333	185	284	1,290		
28	1,040	1,760	1,830	465	824	1,460	1,120	1,170	333	182	279	1,060		
29	1,380	2,800	1,520	454	-----	1,350	1,110	2,150	346	179	268	888		
30	2,500	2,630	1,310	448	-----	1,490	1,010	2,280	320	176	226	1,910		
31	1,780	-----	1,480	538	-----	2,570	-----	1,300	-----	171	197	-----		
TOTAL	43,866	54,641	91,790	58,350	42,830	56,328	60,290	26,436	14,856	7,695	5,716	33,960		
MEAN	1,415	1,821	2,961	1,882	1,530	1,817	2,010	853	495	242	184	1,132		
MAX	2,500	3,580	9,330	6,020	6,680	6,680	4,320	2,280	996	380	284	6,620		
MIN	474	924	1,270	448	509	768	1,010	556	320	171	147	135		
CFSM	10.9	14.0	22.8	14.5	11.8	14.0	15.5	6.56	3.81	1.91	1.42	8.71		
IN.	12.55	15.64	26.27	16.70	12.26	16.12	17.25	7.56	4.25	2.20	1.64	9.72		
AC-FT	87,010	108,400	182,100	115,700	84,950	111,700	119,600	52,440	29,470	15,260	11,340	67,360		
CAL YR 1968	TOTAL	590,809	MEAN	1,614	MAX	25,200	MIN	181	CFSM	12.4	IN	169.06	AC-FT	1,172,000
WTR YR 1969	TOTAL	496,758	MEAN	1,361	MAX	9,330	MIN	135	CFSM	10.5	IN	142.15	AC-FT	985,300

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	2,440	465	526	944	3,270	666	548	816	352	217	177	121		
2	2,220	443	498	872	2,440	630	526	767	335	211	171	125		
3	1,530	482	514	832	2,200	618	505	739	327	202	166	266		
4	1,170	1,590	768	760	1,770	594	632	704	323	193	156	211		
5	978	2,150	636	706	1,570	564	2,910	666	312	190	154	180		
6	848	4,350	574	671	1,440	1,470	4,860	624	297	188	152	416		
7	832	2,930	526	643	1,470	2,440	2,500	576	289	182	161	1,010		
8	1,700	2,560	636	657	1,390	1,310	2,280	672	282	180	182	485		
9	1,790	1,760	685	1,370	1,230	1,010	10,200	781	348	171	166	344		
10	1,340	1,340	728	1,080	1,120	862	5,390	739	425	169	156	282		
11	1,070	1,090	4,020	960	1,010	878	3,020	678	356	166	152	245		
12	912	952	3,850	912	942	1,200	2,060	678	352	166	147	220		
13	784	824	3,890	1,660	1,130	2,000	1,660	672	316	166	144	205		
14	706	744	4,270	6,290	1,010	2,660	1,390	624	293	164	140	193		
15	657	699	3,110	2,670	1,620	3,000	1,180	582	289	161	138	188		
16	615	706	2,290	1,790	3,930	3,210	1,030	564	286	156	136	182		
17	568	657	2,190	1,640	3,120	2,040	926	542	272	159	134	345		
18	526	608	2,380	2,940	2,680	1,540	942	515	258	154	132	870		
19	504	568	2,030	6,320	1,940	1,260	942	485	252	152	129	1,040		
20	514	728	2,070	4,560	1,580	1,100	910	465	249	152	129	974		
21	487	944	3,080	5,080	1,350	982	802	450	236	149	129	718		
22	454	760	4,730	4,300	1,190	886	746	450	229	147	127	1,580		
23	426	1,170	5,440	4,900	1,050	902	838	420	226	144	125	1,330		
24	454	1,230	4,550	3,340	958	926	1,370	410	223	142	127	862		
25	421	952	2,480	2,980	878	781	1,370	392	220	159	127	660		
26	400	808	2,060	3,000	809	718	1,210	378	214	389	127	559		
27	538	720	1,670	3,640	753	684	1,050	269	211	327	123	490		
28	580	657	1,450	2,640	697	648	1,010	205	205	226	125	430		
29	544	608	1,260	1,960	-----	624	926	440	202	211	125	397		
30	532	568	1,130	1,650	-----	588	894	430	199	208	123	369		
31	492	-----	1,030	2,800	-----	564	-----	374	-----	185	121	-----		
TOTAL	27,032	34,063	65,071	74,567	44,547	37,355	54,627	17,267	8,378	5,786	4,401	15,297		
MEAN	872	1,105	2,099	2,405	1,591	1,205	1,821	557	279	187	142	510		
MAX	2,440	4,350	5,440	6,320	3,930	3,210	10,200	816	425	389	182	1,580		
MIN	400	443	498	643	697	564	505	269	199	142	121	121		
CFSM	6.71	8.73	16.1	18.5	12.2	9.27	14.0	4.28	2.5	1.44	1.09	3.92		
IN.	7.74	9.75	18.62	21.34	12.75	10.69	15.63	4.94	2.40	1.66	1.26	4.38		
AC-FT	53,620	67,560	129,100	147,900	88,360	74,090	108,400	34,250	16,620	11,480	8,730	30,340		
CAL YR 1969	TOTAL	432,627	MEAN	1,185	MAX	8,400	MIN	135	CFSM	9.12	IN	123.80	AC-FT	858,100
WTR YR 1970	TOTAL	388,391	MEAN	1,064	MAX	10,200	MIN	121	CFSM	8.18	IN	111.14	AC-FT	770,400

QUINULT RIVER BASIN

12039300 NORTH FORK QUINULT RIVER NEAR AMANDA PARK, WASH.
(Hydrologic bench-mark station)

LOCATION.--Lat 47°35'46", long 123°37'23", in SM $\frac{1}{4}$ sec.6, T.24 N., R.7 W., Jefferson County, Olympic National Park, on right bank 15.5 miles (revised) northeast of Amanda Park and at mile 5.2.

DRAINAGE AREA.--74.1 sq mi.

PERIOD OF RECORD.--November 1964 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 620 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 880 cfs (161.27 inches per year, 637,600 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (6,000 cfs, revised), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1965	0230	*13,600	10.14	Oct. 1, 1967	1830	11,600	9.50	Sept. 17, 1968	0715	6,340	7.40
Nov. 19, 1965	0700	8,190	7.33	Oct. 27, 1967	1230	114,500	10.46				
Dec. 3, 1965	1600	8,760	8.45	Nov. 20, 1967	1100	8,690	8.42	Nov. 21, 1968	1400	7,090	7.74
				Jan. 14, 1968	0600	11,700	9.54	Dec. 3, 1968	1130	*11,800	9.58
Dec. 1, 1966	0030	8,180	8.21	Jan. 20, 1968	1330	11,400	9.43	Jan. 4, 1969	1800	7,330	7.85
Dec. 13, 1966	0430	*16,800	11.14	Feb. 2, 1968	1730	7,350	7.86	Sept. 22, 1969	2330	7,350	7.86
Dec. 16, 1966	0115	8,760	8.45	Feb. 3, 1968	2200	8,500	8.38				
Mar. 22, 1967	2245	6,960	7.68	Feb. 18, 1968	2000	8,380	8.29	Dec. 13, 1969	1600	7,400	7.88
				Feb. 23, 1968	2015	6,760	7.59	Apr. 9, 1970	1000	*7,940	8.11

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 1965	103	1.93	1969	Sept. 15, 16, 1969	149	2.26
1967	Sept. 27, 1967	131	*2.05	1970	Sept. 16, 1970	129	2.11
1968	Sept. 13, 1968	212	2.39				

a Occurred Oct. 16, 1966.

Period of record: Maximum discharge, 16,800 cfs Dec. 13, 1966 (gage height, 11.14 ft), from rating curve extended above 4,200 cfs; minimum, 103 cfs Oct. 3, 1965 (gage height, 1.93 ft).

REMARKS.--Records excellent. No regulation or diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	108	1,270	2,210	380	514	344	996	578	769	916	657	218		
2	108	1,660	1,480	385	460	318	908	769	825	876	699	222		
3	106	2,510	3,490	357	450	298	769	1,050	762	972	706	222		
4	511	2,290	2,140	339	1,030	282	708	1,280	762	1,010	632	222		
5	2,540	1,580	2,190	515	1,120	298	924	1,580	692	908	554	226		
6	4,130	996	2,990	2,420	846	366	1,120	2,100	1,180	924	524	218		
7	644	996	2,210	1,710	671	357	1,220	1,590	1,310	1,000	542	208		
8	1,170	1,380	1,810	572	533	1,140	1,490	1,250	1,080	1,080	514	198		
9	395	1,190	1,170	1,010	514	868	1,000	1,640	1,210	1,100	486	198		
10	298	1,070	996	964	460	608	1,300	1,320	1,380	1,010	455	215		
11	278	860	839	932	514	480	1,380	1,140	1,300	964	420	302		
12	298	720	748	1,700	450	502	940	1,210	1,070	980	415	226		
13	306	790	671	4,110	400	1,090	749	1,080	1,120	996	548	194		
14	886	940	514	2,130	370	1,340	839	968	1,270	932	440	187		
15	670	790	564	1,230	344	1,300	853	876	1,610	932	420	184		
16	455	839	519	964	330	846	839	839	1,680	876	390	177		
17	620	657	492	839	318	632	776	734	1,390	868	362	533		
18	958	790	578	727	306	692	692	734	1,230	804	362	435		
19	678	3,320	706	632	306	564	632	956	1,250	876	348	240		
20	1,150	1,650	1,370	578	357	475	620	1,090	1,090	776	330	208		
21	678	1,290	860	530	370	415	596	1,060	1,020	804	322	198		
22	497	1,090	632	492	385	375	602	868	964	860	310	208		
23	415	860	978	465	564	357	638	790	1,130	811	322	290		
24	362	762	524	435	475	370	671	924	1,030	748	326	215		
25	334	671	486	440	440	415	692	1,300	980	769	294	201		
26	314	644	450	435	430	508	608	1,300	972	720	278	243		
27	348	638	536	584	420	578	578	1,040	1,390	769	572	222		
28	410	727	514	562	385	626	572	948	1,510	811	334	190		
29	560	685	460	825	-----	853	554	996	1,050	790	266	187		
30	460	644	430	706	-----	1,480	554	972	916	734	243	171		
31	348	-----	390	602	-----	1,210	-----	832	-----	657	222	-----		
TOTAL	20,357	34,099	33,179	29,788	13,863	19,382	24,565	33,954	34,232	27,433	13,293	6,958		
MEAN	657	1,117	1,070	961	493	625	819	1,095	1,141	885	429	232		
MAX	4,130	3,320	3,490	4,110	1,120	1,480	1,380	2,100	1,680	1,100	706	533		
MIN	106	638	390	339	306	282	554	578	762	657	222	171		
CFSM	8.87	15.3	16.4	13.0	6.65	8.43	11.1	14.8	15.4	11.9	5.79	3.13		
IN.	10.22	17.12	16.66	14.95	6.93	9.73	12.33	17.05	17.19	13.77	6.67	3.49		
AC-FT	40,380	67,640	65,810	59,080	27,380	38,440	48,720	67,350	67,900	54,410	26,370	13,800		
CAL YR 1965	TOTAL	265,869	MEAN	728	MAX	4,130	MIN	106	CFSM	9.82	IN	133.47	AC-FT	527,400
WTR YR 1966	TOTAL	291,043	MEAN	797	MAX	4,130	MIN	106	CFSM	10.8	IN	146.11	AC-FT	577,300

12039300 NORTH FORK QUINULT RIVER NEAR AMANDA PARK, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	486	4,690	1,120	966	644	405	302	1,590	1,300	524	318
2	180	435	2,500	1,300	1,020	514	395	342	1,750	1,480	514	352
3	156	410	1,910	1,610	1,840	445	410	420	1,490	1,530	524	218
4	150	375	1,880	1,070	2,520	410	420	455	1,370	1,370	475	206
5	150	385	1,350	838	1,350	385	380	578	1,610	1,160	465	203
6	153	352	1,300	720	1,030	380	366	741	1,570	1,030	430	229
7	203	326	1,040	720	870	366	370	878	1,360	990	410	182
8	366	302	853	1,480	776	380	395	934	1,290	902	410	173
9	204	385	790	1,200	720	366	390	755	1,220	854	430	188
10	174	330	1,980	1,460	671	344	357	584	1,260	862	445	586
11	162	338	3,510	1,580	650	322	339	492	1,280	990	455	366
12	159	657	6,740	1,180	786	310	337	465	1,320	1,050	440	220
13	153	1,400	9,940	1,170	926	294	339	514	1,560	974	425	191
14	144	1,520	2,740	1,120	692	310	334	572	1,700	870	405	179
15	138	1,400	3,990	1,840	620	352	322	802	1,820	854	385	176
16	156	1,020	4,880	1,160	566	1,120	322	1,250	1,970	870	390	179
17	159	818	3,950	918	674	838	310	1,420	2,120	762	370	176
18	144	1,080	3,950	798	692	608	314	1,370	2,090	678	344	170
19	2,220	1,780	4,040	2,730	572	497	318	1,480	2,160	830	326	164
20	1,060	1,700	2,500	1,950	519	514	310	1,810	1,990	974	310	167
21	608	1,450	1,710	1,250	475	492	310	1,820	1,700	734	314	164
22	1,590	972	1,420	950	450	2,800	322	1,620	1,580	699	282	158
23	3,380	776	1,280	798	430	3,390	322	1,320	1,540	734	270	147
24	1,440	688	1,290	685	425	1,410	318	1,070	1,660	741	240	142
25	948	1,640	1,080	638	420	958	326	942	1,780	727	222	144
26	1,140	860	942	699	395	755	310	974	1,600	692	222	139
27	755	1,230	838	1,840	380	632	298	1,010	1,420	638	229	133
28	572	2,970	814	3,500	1,010	578	310	1,350	1,410	578	232	133
29	1,330	2,030	1,020	2,670	-----	514	298	1,410	1,360	566	236	202
30	720	4,180	790	1,620	-----	460	290	1,030	1,270	554	232	911
31	554	-----	1,010	1,130	-----	425	-----	990	-----	560	218	-----
TOTAL	19,519	32,295	76,727	41,744	22,445	21,813	10,257	29,720	48,040	27,633	11,174	6,925
MEAN	630	1,077	2,475	1,347	802	704	342	959	1,601	891	360	231
MAX	3,380	4,180	9,940	3,500	2,520	3,390	420	1,820	2,160	1,530	524	911
MIN	138	302	790	638	380	294	290	302	1,220	554	218	133
CFSM	8,550	14,5	33,4	18,2	10,8	9,50	4,62	12,9	21,6	12,0	4,86	3,12
IN	9,80	16,21	38,52	20,96	11,27	10,95	5,15	14,92	24,12	13,87	5,61	3,48
AC-FT	38,720	64,060	152,200	82,800	44,520	43,270	20,340	58,950	95,290	54,810	22,160	13,740

CAL YR 1966 TOTAL 331,949 MEAN 909 MAX 9,940 RIN 138 CFSM 12.3 IN 166.65 AC-FT 658,400
WTR YR 1967 TOTAL 348,292 MEAN 954 MAX 9,940 RIN 133 CFSM 12.9 IN 174.85 AC-FT 690,800

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,590	1,530	514	741	657	1,370	590	713	1,920	910	425	324
2	2,220	1,200	671	657	3,280	1,530	554	566	2,650	1,080	415	298
3	1,740	1,030	822	614	3,470	1,170	548	590	1,339	1,180	395	278
4	1,800	902	632	584	2,800	2,050	542	720	1,160	1,140	370	266
5	1,710	798	664	530	1,390	2,110	497	602	1,200	1,020	344	258
6	3,300	727	548	497	1,080	1,420	465	548	1,220	974	310	250
7	3,010	720	502	492	974	1,120	445	530	1,130	950	298	243
8	1,470	1,110	455	470	942	950	425	578	1,060	934	294	229
9	1,090	1,760	946	655	894	846	440	741	1,030	902	298	222
10	2,300	4,100	3,180	548	854	776	475	910	1,010	783	298	215
11	2,400	1,520	1,750	470	814	870	497	1,020	942	863	290	278
12	1,430	1,170	950	622	790	1,230	430	894	884	958	278	240
13	2,850	998	727	4,480	769	1,210	405	671	1,010	644	290	225
14	1,600	1,550	632	7,020	685	1,120	435	608	838	918	310	1,290
15	1,110	1,650	566	3,900	632	1,160	425	590	846	762	294	1,520
16	902	1,160	519	1,890	590	1,020	390	776	910	644	306	990
17	755	918	470	1,380	798	846	380	1,080	966	572	340	2,740
18	870	830	435	2,110	4,930	706	380	1,320	1,040	560	396	950
19	720	727	405	5,640	3,520	644	370	1,840	1,110	602	352	664
20	669	664	385	6,310	1,890	632	352	1,700	958	560	306	548
21	1,630	614	469	2,890	2,430	620	334	1,290	886	502	278	475
22	2,620	584	3,860	1,910	2,000	614	339	1,250	1,040	475	291	619
23	1,450	554	3,770	1,950	4,820	741	370	1,110	1,010	470	642	710
24	1,290	584	3,600	2,070	2,960	795	366	1,010	1,040	492	517	486
25	1,440	519	3,260	1,450	1,790	713	418	966	1,120	519	397	435
26	974	475	2,400	1,170	1,550	699	415	910	1,660	530	807	410
27	7,290	465	1,680	982	1,360	1,258	455	886	1,250	519	878	375
28	2,420	460	1,290	886	1,210	902	724	958	950	524	590	348
29	1,700	497	1,080	806	1,190	1,110	894	886	769	480	420	330
30	3,120	470	934	727	-----	748	974	806	762	465	362	318
31	2,310	-----	806	706	-----	644	-----	824	-----	425	330	-----
TOTAL	62,780	30,266	38,922	55,157	51,069	31,576	14,326	27,893	33,723	22,347	12,121	16,534
MEAN	2,025	1,010	1,256	1,779	1,661	1,019	478	900	1,124	721	391	551
MAX	7,290	4,100	3,860	7,020	4,930	2,110	974	1,840	2,650	1,180	878	2,740
MIN	669	460	385	470	590	614	334	530	762	425	278	215
CFSM	27.3	13.6	17.0	24.0	23.8	13.8	6.45	12.1	15.2	9.73	5.28	7.44
IN	31.52	15.20	19.34	27.49	25.64	15.85	7.19	14.00	16.93	11.22	6.09	8.30
AC-FT	124,500	60,070	77,200	109,400	101,300	62,630	28,420	59,330	66,890	44,330	24,040	32,800
CAL YR 1967	TOTAL 351,739	MEAN 964	MAX 7,290	RIN 133	CFSM 13.0	IN 176.58	AC-FT 697,700					
WTR YR 1968	TOTAL 396,734	MEAN 1,084	MAX 7,290	RIN 215	CFSM 14.6	IN 199.17	AC-FT 786,900					

QUINLAULT RIVER BASIN

12039300 NORTH FORK QUINLAULT RIVER NEAR AMANDA PARK, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	814	806	693	230	248	1,510	567	2,040	994	396	214
2	290	1,010	806	724	240	255	1,160	530	2,260	1,000	380	217
3	278	830	5,410	1,200	250	267	844	494	2,510	884	345	198
4	419	657	1,720	3,920	279	267	852	500	2,740	900	355	182
5	560	602	1,180	2,400	255	370	860	595	2,710	836	385	179
6	927	560	940	1,380	238	336	780	892	2,260	820	300	174
7	508	590	932	1,070	250	291	620	1,330	1,940	820	287	176
8	400	1,510	1,130	868	320	267	574	1,830	2,200	836	283	185
9	435	966	1,720	756	400	252	574	2,050	2,440	874	308	188
10	620	762	1,210	684	900	238	574	1,880	2,380	976	300	191
11	762	1,710	916	609	1,500	227	602	1,890	2,170	1,010	283	188
12	950	1,440	764	548	1,100	220	844	1,950	2,030	756	304	185
13	878	926	756	512	860	220	1,050	1,940	1,910	614	304	194
14	1,030	741	1,000	478	600	220	780	1,750	1,850	623	300	168
15	1,010	671	1,240	450	470	406	651	1,450	1,890	542	318	154
16	692	608	924	395	600	652	623	1,330	1,940	554	263	210
17	1,130	664	748	360	500	3,400	868	1,410	1,970	554	241	1,140
18	824	1,370	679	340	400	1,070	1,050	1,680	2,000	581	255	1,420
19	1,100	1,000	574	320	360	693	1,050	1,590	1,780	595	259	2,250
20	958	2,230	518	300	340	574	884	1,610	1,520	595	350	2,610
21	852	2,740	489	280	326	536	772	1,830	1,310	554	295	868
22	1,010	2,300	484	270	308	595	756	2,110	1,300	588	244	2,790
23	1,010	1,610	2,060	250	295	554	1,120	2,310	1,450	616	224	2,840
24	1,150	1,140	3,020	240	283	484	949	2,240	1,270	595	252	1,560
25	1,060	918	1,290	230	271	500	756	1,710	1,070	489	508	1,230
26	734	870	908	220	263	716	651	1,810	958	445	279	836
27	614	958	732	220	252	852	700	2,100	924	467	459	772
28	945	798	616	210	248	732	844	1,840	924	450	353	693
29	2,810	1,550	524	200	-----	764	732	2,880	949	406	287	567
30	2,020	974	500	200	-----	1,260	630	2,210	924	401	220	1,390
31	1,060	-----	518	230	-----	2,030	-----	1,720	-----	406	214	-----
TOTAL	27,338	33,519	35,114	20,559	12,338	19,496	24,660	50,028	53,619	20,785	9,551	23,969
MEAN	882	1,117	1,133	663	441	629	822	1,614	1,787	670	308	799
MAX	2,810	2,740	5,410	3,920	1,500	3,400	1,510	2,880	2,740	1,010	508	2,840
MIN	278	560	484	200	230	220	574	494	924	401	214	154
CFSM	11.9	15.1	15.3	8.95	5.95	8.49	11.1	21.8	24.1	9.04	4.16	10.8
IN.	13.72	16.83	17.63	10.32	6.19	9.79	12.38	25.12	26.92	10.43	4.79	12.03
AC-FT	54,220	66,480	69,650	40,780	24,470	38,670	48,910	99,230	106,400	41,230	18,940	47,540
CAL YR 1968	TOTAL 360,717		MEAN 986	MAX 7,020	MIN 154	CFSM 13.3	IN 181.09	AC-FT 715,500				
WTR YR 1969	TOTAL 330,976		MEAN 907	MAX 5,410	MIN 154	CFSM 12.2	IN 166.16	AC-FT 656,500				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,680	279	340	444	932	400	324	514	1,180	472	245	140
2	1,070	267	326	390	780	380	319	628	1,370	598	248	138
3	764	300	401	375	710	365	306	724	1,510	696	252	272
4	623	2,120	456	350	610	350	579	788	1,140	689	245	218
5	548	1,260	385	328	568	335	2,420	654	1,010	580	234	180
6	494	1,910	331	314	574	700	1,740	580	1,180	556	234	505
7	810	1,390	318	310	868	1,200	836	514	1,010	588	256	462
8	1,600	1,270	385	350	967	700	1,020	710	860	560	234	218
9	1,400	844	340	689	916	550	4,520	682	967	538	205	174
10	868	693	322	427	814	460	1,630	532	852	484	202	156
11	672	679	1,270	370	844	438	1,020	466	724	432	202	147
12	588	732	1,320	342	852	674	788	454	724	427	199	140
13	524	644	3,180	705	985	940	654	416	759	410	194	138
14	467	692	1,770	2,240	752	2,030	592	427	828	390	182	136
15	440	623	1,060	820	1,100	1,360	544	634	804	422	174	134
16	406	530	836	604	1,830	1,130	514	868	724	416	177	131
17	385	462	876	661	1,150	773	478	745	745	365	170	1,050
18	350	445	544	1,670	892	634	478	610	812	365	162	1,070
19	345	428	994	3,040	780	574	508	604	940	360	162	932
20	385	949	1,140	1,410	717	526	454	592	1,040	355	164	432
21	350	724	1,260	2,500	654	478	416	604	1,100	314	164	310
22	318	512	1,500	2,560	610	449	400	703	916	278	162	1,080
23	308	1,180	1,400	2,960	568	484	427	731	884	270	159	496
24	304	679	924	1,480	526	472	550	812	788	270	126	124
25	287	548	773	1,200	500	410	466	1,130	804	328	159	374
26	279	484	682	1,120	475	385	410	976	868	490	152	248
27	451	440	586	1,180	450	360	380	738	812	365	149	231
28	336	412	538	876	425	360	385	654	640	282	154	215
29	396	396	520	752	-----	355	416	526	478	314	145	202
30	326	370	478	675	-----	332	460	731	478	298	142	194
31	295	-----	454	967	-----	319	-----	796	-----	256	140	-----
TOTAL	18,028	22,262	25,689	32,089	21,919	18,928	24,034	20,853	26,995	13,168	5,831	10,469
MEAN	582	742	829	1,035	783	611	801	673	900	425	188	349
MAX	1,680	2,120	3,180	3,040	1,830	2,030	4,520	1,130	1,510	896	256	1,080
MIN	279	267	318	310	425	319	306	416	478	256	140	131
CFSM	7.85	10.0	11.2	14.0	10.6	8.25	10.8	9.08	12.1	5.74	2.54	4.71
IN.	9.05	11.18	12.90	16.11	11.00	9.50	12.07	10.47	13.55	6.61	2.93	5.26
AC-FT	35,760	44,160	50,590	63,650	43,480	37,540	47,670	41,360	53,540	26,120	11,570	20,770
CAL YR 1969	TOTAL 300,994		MEAN 825	MAX 3,920	MIN 154	CFSM 11.1	IN 151.10	AC-FT 597,000				
WTR YR 1970	TOTAL 240,265		MEAN 658	MAX 4,520	MIN 131	CFSM 8.88	IN 120.62	AC-FT 476,600				

12039500 QUINAUULT RIVER AT QUINAUULT LAKE, WASH.

LOCATION.--Lat 47°27'28", long 123°53'17", in SW¼Sec. 25, T.23 N., R.10 W., Grays Harbor County, Quinault Indian Reservation, on left bank at outlet of Quinault Lake, 50 ft downstream from Olympic Highway bridge on U.S. Highway 101, 2.0 miles (revised) southwest of Quinault, and at mile 33.4.

DRAINAGE AREA.--264 sq mi.

PERIOD OF RECORD.--October 1911 to September 1970. Monthly discharge only for some periods, published in WSP 1316.

GAGE.--Water-stage recorder. Datum of gage is 184.60 ft above mean sea level (State Highway Department bench mark). Prior to Oct. 1, 1916, nonrecording gages at sites within 4 miles northeast of present site at different datum, Oct. 1, 1916, to May 2, 1935, water-stage recorder at site 300 ft downstream from present site at datum 0.36 ft higher than present datum.

AVERAGE DISCHARGE.--59 years, 2,811 cfs (144.60 inches per year, 2,037,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (12,000 cfs), water years 1966-70

Wtr yr	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 14, 1966	0330	*16,700	11.17	Oct. 28, 1967	0200	15,400	10.25	Dec. 3, 1968	2400	*13,900	9.75
				Dec. 24, 1967	0800	14,900	10.08	Jan. 5, 1969	0600	13,100	9.47
Dec. 1, 1966	1345	18,000	11.13	Jan. 14, 1968	1700	20,300	11.91				
Dec. 13, 1966	0600	*29,300	14.98	Jan. 19, 1968	1900	*27,700	14.38	Apr. 9, 1970	2300	*14,000	9.79
Dec. 16, 1966	0315	19,800	11.73	Feb. 4, 1968	0700	15,800	10.38				
Jan. 29, 1967	2230	12,300	9.16	Feb. 19, 1968	0800	17,400	10.95				
Mar. 23, 1967	1500	15,400	10.26	Feb. 24, 1968	0700	15,700	10.35				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 1965	340	1.98	1969	Sept. 16, 1969	466	2.37
1967	Sept. 29, 1967	122	2.13	1970	Sept. 2, 1970	388	2.10
1968	Aug. 13, 1968	745	2.65				

Period of record: Maximum discharge, 50,200 cfs Nov. 4, 1955 (gage height, 20.51 ft); minimum, 276 cfs Sept. 12, 1944 (gage height, 1.96 ft).

Flood in November 1909 reached a stage of approximately 22 ft, present datum (discharge, 52,600 cfs).

REMARKS.--Records excellent except those for period of no gage-height record, which are fair. Flow affected by natural storage in Quinault Lake. No diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 442: Drainage area. WSP 1286: 1915-16(M), 1934, 1936-39(M). WSP 1316: 1923, 1925, 1933. WSP 1636: 1916 (calendar year only), 1917.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	355	1,520	3,460	2,290	2,760	2,190	3,770	1,750	2,240	2,460	1,600	748
2	350	2,920	6,020	2,340	2,500	2,010	3,560	1,750	2,180	2,330	1,580	718
3	345	4,030	5,970	2,240	2,280	1,850	3,240	1,930	2,130	2,250	1,590	694
4	388	6,560	9,400	2,080	2,390	1,730	2,970	2,290	2,050	2,280	1,580	676
5	879	7,270	8,270	2,110	3,660	1,690	2,840	2,790	1,980	2,290	1,500	658
6	5,530	5,740	10,800	4,060	4,350	1,800	2,960	3,740	2,070	2,240	1,420	646
7	5,310	4,520	10,100	6,590	4,180	2,080	3,200	4,460	2,330	2,200	1,350	634
8	3,620	4,100	8,040	7,780	3,640	2,700	3,410	4,230	2,570	2,220	1,320	616
9	2,710	4,310	6,180	6,940	3,280	3,750	3,360	4,110	2,660	2,290	1,260	604
10	2,120	4,190	5,060	5,850	2,910	4,110	3,340	4,060	2,750	2,340	1,200	610
11	1,730	4,040	4,190	5,870	2,970	3,610	4,070	3,640	2,970	2,290	1,150	634
12	1,490	3,520	3,560	7,180	3,070	3,120	4,060	3,300	2,980	2,200	1,080	666
13	1,390	3,150	3,110	14,000	2,760	3,460	3,540	3,120	2,770	2,170	1,060	646
14	1,510	3,100	2,770	15,200	2,480	4,890	3,240	2,900	2,750	2,160	1,160	622
15	2,040	2,990	2,490	10,400	2,200	6,740	3,100	2,830	2,890	2,100	1,100	598
16	2,030	2,810	2,260	7,060	2,000	6,450	2,980	2,820	3,260	2,060	1,050	580
17	2,100	2,640	2,080	5,260	1,850	5,070	2,840	2,610	3,410	1,990	1,000	598
18	2,190	2,480	2,090	4,230	1,720	4,550	2,680	2,400	3,200	1,960	950	788
19	2,540	4,400	2,340	3,540	1,610	4,450	2,500	2,310	3,050	1,960	916	844
20	2,700	6,400	2,820	3,080	1,610	3,860	2,350	2,440	2,910	1,910	886	802
21	2,900	5,880	3,700	2,750	1,660	3,230	2,230	2,590	2,730	1,820	858	754
22	2,570	5,600	3,320	2,480	1,660	2,770	2,120	2,640	2,530	1,810	830	718
23	2,220	4,730	2,930	2,290	1,800	2,460	2,050	2,500	2,460	1,810	809	730
24	1,930	3,910	2,670	2,120	1,980	2,230	2,020	2,350	2,440	1,780	795	730
25	1,700	3,310	2,450	2,020	2,040	2,100	2,020	2,460	2,360	1,750	788	712
26	1,520	2,930	2,390	1,930	2,080	2,070	2,020	2,770	2,290	1,700	781	718
27	1,420	2,820	2,500	1,960	2,240	2,140	1,950	2,840	2,330	1,670	893	712
28	1,460	2,700	2,800	2,080	2,280	2,200	1,900	2,690	2,820	1,650	956	688
29	1,530	2,690	2,760	2,570	-----	2,360	1,830	2,530	2,900	1,680	924	664
30	1,600	2,610	2,640	2,970	-----	2,970	1,800	2,470	2,650	1,650	858	640
31	1,530	-----	2,420	2,980	-----	3,820	-----	2,380	-----	1,650	802	-----
TOTAL	61,707	117,870	131,590	144,250	69,960	98,460	83,950	87,700	78,660	62,670	34,046	20,446
MEAN	1,991	3,929	4,245	4,653	2,499	3,176	2,798	2,829	2,622	2,022	1,098	682
MAX	5,530	7,270	10,800	15,200	4,350	6,740	4,070	4,460	3,410	2,460	1,600	844
MIN	345	1,520	2,080	1,930	1,610	1,690	1,800	1,750	1,980	1,650	781	580
CFSM	7.54	14.9	16.1	17.6	9.47	12.0	10.6	10.7	9.93	7.66	4.16	2.58
IN	8.70	16.61	18.54	20.33	9.86	13.87	11.83	12.36	11.08	8.83	4.80	2.88
AC-FT	122,400	233,800	261,000	286,100	138,800	195,300	166,500	174,000	156,000	124,300	67,530	40,550
CAL YR 1965	TOTAL 903,536			MEAN 2,475	MAX 11,500	MIN 345	CFSM 9.38	IN 127.32	AC-FT 1,792,000			
WTR YR 1966	TOTAL 991,309			MEAN 2,716	MAX 15,200	MIN 345	CFSM 10.3	IN 139.68	AC-FT 1,966,000			

12039500 QUINULT RIVER AT QUINULT LAKE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	616	2,470	17,300	4,218	5,580	3,050	2,260	1,320	2,860	2,860	1,250	617
2	598	2,140	15,400	4,290	5,180	2,870	2,070	1,290	3,320	2,840	1,220	709
3	580	1,900	12,500	6,640	6,290	2,350	1,930	1,310	3,550	2,990	1,190	742
4	545	1,710	11,900	6,400	8,970	2,180	1,870	1,340	3,510	3,020	1,170	712
5	545	1,570	9,450	5,248	8,290	2,060	1,810	1,400	3,560	2,900	1,148	677
6	540	1,480	8,050	4,250	6,120	1,880	1,720	1,540	3,690	2,680	1,100	664
7	570	1,380	6,640	3,700	4,710	1,750	1,640	1,760	3,580	2,440	1,060	641
8	688	1,510	5,120	5,040	3,080	1,720	1,610	2,010	3,340	2,310	1,020	608
9	718	1,300	4,230	6,020	3,380	1,800	1,670	2,180	3,130	2,180	996	587
10	694	1,300	5,900	5,360	3,030	1,760	1,640	2,150	2,960	2,040	984	617
11	658	1,240	10,500	6,380	2,820	1,690	1,560	2,000	2,900	1,970	983	667
12	634	1,400	18,500	6,250	3,030	1,600	1,560	1,850	2,870	2,000	985	903
13	604	1,670	26,800	5,880	4,480	1,500	1,620	1,730	2,930	2,050	979	845
14	575	1,710	17,400	5,240	4,250	1,460	1,550	1,680	3,200	2,020	970	775
15	555	6,260	15,700	5,920	3,760	1,580	1,630	1,690	3,490	1,960	953	712
16	545	5,100	18,200	6,210	3,340	2,360	1,660	1,920	3,810	1,890	931	661
17	548	4,610	16,200	5,128	3,170	3,510	1,640	2,460	4,120	1,840	915	626
18	604	4,020	16,400	4,370	3,400	3,590	1,600	2,910	4,360	1,770	894	593
19	1,310	4,120	14,900	7,120	3,320	3,230	1,600	3,180	4,440	1,730	870	569
20	3,400	5,240	13,900	10,800	2,970	2,970	1,550	3,540	4,540	1,820	845	571
21	3,490	6,080	9,720	9,070	2,660	2,860	1,500	4,050	4,310	1,830	829	535
22	3,770	5,648	7,010	6,750	2,410	4,420	1,460	4,180	3,970	1,720	804	522
23	4,720	4,490	5,530	5,370	2,210	14,100	1,440	4,020	3,680	1,650	774	507
24	8,070	3,670	5,530	4,360	2,040	12,000	1,400	3,910	3,180	1,610	741	491
25	5,760	4,180	5,240	3,700	1,970	7,880	1,400	3,160	3,540	1,590	709	474
26	4,440	4,290	4,440	3,600	1,860	5,510	1,400	2,830	3,630	1,560	680	460
27	3,770	4,540	3,810	4,330	1,740	4,230	1,360	2,690	3,460	1,520	655	449
28	3,050	7,240	3,400	9,320	2,360	3,590	1,360	2,700	3,240	1,450	639	437
29	3,000	7,760	3,640	12,000	2,170	3,170	1,400	2,120	3,180	1,380	624	431
30	3,380	10,200	3,540	10,700	2,180	2,810	1,360	3,250	3,000	1,330	617	556
31	2,890	-----	3,320	7,730	-----	2,510	-----	2,970	-----	1,290	614	-----
TOTAL	63,810	109,200	320,170	191,050	107,250	108,290	48,360	75,880	105,620	62,220	28,141	18,558
MEAN	2,058	3,460	10,330	6,163	3,453	3,493	1,612	2,488	3,521	2,007	908	619
MAX	8,070	10,200	26,800	12,000	8,970	14,100	2,260	4,180	4,540	3,020	1,250	903
MIN	535	1,240	3,320	3,600	1,760	1,460	1,360	1,290	2,860	1,290	614	437
CFSM	7.80	13.8	39.1	23.3	14.5	13.2	6.11	9.27	13.3	7.60	3.44	2.34
IN-FT	8.99	15.39	45.11	26.92	15.11	15.26	6.81	10.69	14.08	8.77	3.97	2.61
AC-FT	126,660	216,600	635,100	378,900	212,700	214,800	95,920	150,500	209,500	123,400	55,820	36,810

CAL YR 1966 TOTAL 1,173,322 MEAN 3,215 MAX 26,800 MIN 535 CF5M 12.2 IN 165.33 AC-FT 2,327,000
WTR YR 1967 TOTAL 1,236,549 MEAN 3,393 MAX 26,800 MIN 437 CF5M 12.9 IN 174.52 AC-FT 2,457,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,880	7,630	2,210	3,220	2,650	4,010	3,440	2,430	2,620	2,200	1,100	1,100
2	6,640	5,760	2,860	2,890	3,850	4,090	2,960	2,310	4,310	2,190	1,070	1,000
3	5,510	4,560	4,010	2,610	9,550	3,940	2,630	2,130	4,800	2,310	1,040	900
4	5,820	3,780	4,260	2,390	14,600	3,930	2,470	2,100	4,090	2,440	1,010	870
5	5,900	3,250	3,960	2,220	10,000	5,430	2,350	2,160	3,570	2,460	977	850
6	6,640	2,860	3,640	2,060	6,680	6,080	2,220	2,100	3,320	2,400	936	840
7	9,820	2,600	3,460	1,960	4,900	5,190	2,090	1,990	3,170	2,320	893	830
8	8,510	2,540	3,060	1,940	4,000	4,270	1,950	1,890	2,960	2,240	856	830
9	5,900	3,950	3,170	2,210	3,300	3,630	1,830	1,880	2,790	2,190	826	830
10	4,820	7,370	5,760	2,590	3,100	3,200	1,760	2,000	2,650	2,100	803	830
11	6,860	9,070	9,800	2,460	3,000	2,990	1,730	2,200	2,560	2,000	784	830
12	6,770	6,440	7,050	2,320	2,900	3,720	1,700	2,380	2,480	2,110	766	829
13	6,550	4,800	4,940	6,720	2,800	5,130	1,630	2,340	2,630	2,030	767	824
14	7,860	4,100	3,780	17,400	2,600	5,620	1,910	2,180	2,610	1,950	788	1,110
15	5,920	4,490	3,100	19,000	2,350	6,150	2,420	2,030	2,440	2,000	808	2,300
16	4,490	4,680	2,670	13,500	2,190	4,048	2,350	1,940	2,360	1,890	829	2,980
17	3,610	4,020	2,340	9,050	2,150	5,050	2,140	2,030	2,330	1,740	831	5,300
18	3,110	3,510	2,120	6,450	6,210	4,150	2,000	2,310	2,360	1,590	898	5,840
19	2,890	3,110	1,920	23,700	16,400	3,490	1,920	2,780	2,440	1,510	984	4,390
20	2,590	2,760	1,770	25,900	12,100	3,030	1,810	3,790	2,500	1,470	980	3,610
21	3,250	2,400	1,720	21,300	10,000	2,730	1,690	3,860	2,620	1,400	900	2,760
22	4,760	2,270	6,060	11,900	9,220	2,530	1,580	3,770	2,400	1,340	800	2,400
23	6,830	2,100	12,600	6,050	10,600	2,440	1,950	3,630	2,380	1,280	810	2,570
24	5,490	2,020	14,700	7,200	14,800	2,700	1,540	3,310	2,350	1,230	1,100	2,420
25	5,390	1,960	13,300	6,530	10,800	2,870	1,720	3,010	2,390	1,220	1,300	2,160
26	4,750	1,830	11,100	5,300	7,760	3,020	1,780	2,820	2,660	1,220	1,400	1,940
27	8,120	1,740	8,550	4,370	6,020	5,090	1,740	2,650	3,210	1,220	1,700	1,760
28	13,900	1,670	6,500	3,730	4,950	5,870	1,750	2,550	3,030	1,210	1,900	1,610
29	9,570	1,910	5,130	3,280	4,310	5,910	1,990	2,480	2,690	1,210	1,900	1,480
30	8,900	2,070	4,250	2,970	-----	5,170	2,270	2,390	2,370	1,180	1,500	1,370
31	9,120	-----	3,610	2,820	-----	4,160	-----	2,300	-----	1,150	1,300	-----
TOTAL	192,170	110,930	163,400	230,040	193,790	131,630	60,920	77,740	84,890	54,800	32,556	57,163
MEAN	6,199	3,498	5,271	7,421	6,682	4,246	2,031	2,508	2,830	1,768	1,050	1,905
MAX	13,900	9,870	14,700	25,900	16,400	6,150	3,440	3,860	4,800	2,460	1,900	5,840
MIN	1,880	1,670	1,720	1,940	2,150	2,440	1,540	1,880	2,330	1,150	766	824
CF5M	12.5	16.1	20.0	18.3	16.1	18.3	7.99	9.50	10.7	6.30	3.98	7.22
IN-FT	27.08	15.63	23.02	32.41	27.31	18.95	8.58	10.95	11.96	7.72	4.59	6.05
AC-FT	381,200	220,800	324,100	456,300	384,400	261,100	120,800	154,200	168,400	108,700	64,570	113,400

CAL YR 1967 TOTAL 1,211,869 MEAN 3,320 MAX 14,700 MIN 437 CF5M 12.6 IN 170.76 AC-FT 2,404,000
WTR YR 1968 TOTAL 1,390,029 MEAN 3,798 MAX 25,900 MIN 766 CF5M 14.4 IN 195.87 AC-FT 2,757,000

QUINULT RIVER BASIN

105

12039500 QUINULT RIVER AT QUINULT LAKE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,280	4,600	4,400	2,900	1,130	1,350	6,290	2,570	5,420	2,160	1,050	745
2	1,200	3,920	3,950	3,350	1,140	1,310	7,200	2,990	5,260	2,200	1,020	697
3	1,140	3,740	8,930	3,650	1,210	1,430	8,790	3,350	5,440	2,200	962	671
4	1,200	3,310	12,100	7,130	1,330	1,450	4,970	2,110	5,840	2,150	944	645
5	1,250	2,920	6,260	12,400	1,430	1,690	4,820	2,020	6,220	2,110	952	406
6	1,780	2,610	5,840	9,360	1,380	2,000	4,460	2,090	6,070	2,020	944	587
7	2,050	2,430	4,370	1,330	1,970	3,870	2,420	5,420	1,970	906	968	
8	1,910	3,070	6,650	5,600	1,460	1,950	3,160	4,910	1,970	906	938	
9	1,750	3,590	5,470	4,660	2,070	1,700	2,980	4,180	5,080	1,900	822	932
10	1,800	3,400	6,260	3,990	2,100	1,570	2,760	4,780	5,250	1,980	808	526
11	2,010	3,380	5,380	3,480	3,960	1,450	2,600	4,860	5,180	2,180	773	520
12	2,050	4,520	4,410	3,040	5,220	1,360	2,600	4,960	4,920	2,190	773	520
13	3,260	4,360	3,800	2,730	4,230	1,280	3,200	5,010	4,610	2,030	773	520
14	3,550	3,770	4,110	2,550	3,360	1,220	3,800	4,960	4,310	1,850	759	514
15	4,090	3,300	4,770	2,340	2,860	1,340	3,300	4,580	4,170	1,700	759	496
16	3,930	2,920	5,060	2,190	2,810	1,650	2,900	4,130	4,110	1,590	759	496
17	3,610	2,620	4,420	2,040	2,710	4,390	2,950	3,620	4,120	1,510	738	745
18	3,850	2,880	4,160	1,870	2,500	3,380	3,460	3,810	4,150	1,440	717	1,490
19	3,570	3,350	3,640	1,750	2,310	5,280	4,600	3,990	4,130	1,450	697	3,400
20	3,870	4,200	3,150	1,650	2,140	4,180	4,870	3,930	3,850	1,450	731	5,850
21	3,570	5,230	2,780	1,550	2,000	3,450	4,390	4,000	3,470	1,440	773	5,790
22	3,720	7,760	2,560	1,460	1,870	3,130	3,870	4,910	3,180	1,400	766	5,220
23	3,540	7,390	3,480	1,390	1,770	3,190	3,760	4,780	3,080	1,410	738	9,270
24	3,580	5,940	9,770	1,320	1,680	2,910	3,910	5,290	3,100	1,420	697	8,180
25	3,910	4,750	9,750	1,260	1,600	2,650	3,650	5,040	2,900	1,400	745	6,610
26	3,310	3,970	6,800	1,220	1,540	2,560	3,270	4,680	2,670	1,330	829	5,000
27	3,610	3,870	5,010	1,180	1,470	2,770	2,970	4,680	2,480	1,260	913	3,910
28	3,720	3,770	3,950	1,140	1,400	2,800	2,800	4,150	1,440	1,220	966	3,390
29	3,390	4,130	3,270	1,110	-----	2,850	2,860	6,120	2,270	1,190	934	2,840
30	6,350	4,700	2,800	1,080	-----	2,990	2,750	7,670	2,200	1,120	878	3,050
31	5,920	-----	2,700	1,110	-----	4,510	-----	6,490	-----	1,080	608	-----
TOTAL	92,320	120,420	159,880	97,710	60,210	78,760	114,760	130,740	126,140	52,280	25,834	73,946
MEAN	2,978	4,014	5,157	3,152	2,150	2,341	3,822	4,217	4,208	1,646	823	2,465
MAX	6,350	7,760	12,100	12,400	5,220	6,380	7,200	7,670	6,220	2,200	1,050	9,270
MIN	1,140	2,430	2,560	1,080	1,130	1,220	2,500	2,020	2,200	1,080	697	496
CFSM	11.3	15.2	19.3	11.9	8.14	9.63	14.5	16.0	15.9	6.39	3.16	9.34
AC-FT	13.01	16.97	22.53	13.77	8.48	11.10	16.17	18.42	17.77	7.37	3.64	10.42
IN	183,100	238,900	317,100	193,800	119,400	156,200	227,600	259,300	250,200	103,700	51,240	146,700
CAL YR 1968	TOTAL 1,296,149	MEAN 3,541	MAX 25,900	MIN 766	CFSM 13.4	IN 182.64	AC-FT 2,571,000					
WTR YR 1969	TOTAL 1,133,000	MEAN 3,104	MAX 12,400	MIN 496	CFSM 11.8	IN 159.65	AC-FT 2,247,000					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,110	1,150	1,520	2,200	4,500	1,400	1,180	1,620	3,300	1,360	812	400
2	4,830	1,100	1,430	2,200	3,800	1,500	1,140	1,840	3,500	1,290	776	400
3	4,130	1,090	1,400	1,900	3,500	1,400	1,110	1,940	3,400	1,290	748	478
4	3,400	1,610	1,590	1,800	3,100	1,300	1,200	2,080	2,900	1,380	729	544
5	2,870	3,220	1,590	1,700	2,800	1,350	2,370	2,150	2,720	1,420	708	562
6	2,480	5,520	1,510	1,600	2,700	1,470	6,430	2,080	2,580	1,390	691	661
7	2,240	6,200	1,410	1,900	3,000	3,000	5,840	1,970	2,570	1,340	689	963
8	2,830	6,230	1,390	1,600	3,508	2,940	4,530	1,960	2,420	1,310	693	1,020
9	3,780	5,130	1,400	1,900	4,000	2,520	9,650	2,140	2,300	1,290	678	933
10	3,910	4,070	1,390	2,500	3,800	2,170	12,200	2,110	2,340	1,250	657	845
11	3,390	3,370	2,130	2,200	3,600	1,940	8,040	1,980	2,160	1,190	632	766
12	2,910	2,970	4,290	2,108	3,400	1,920	5,910	1,890	2,030	1,130	613	695
13	2,940	2,690	5,750	3,900	3,200	2,460	4,190	1,800	1,910	1,080	600	630
14	2,250	2,500	9,750	10,080	4,000	3,620	3,400	1,680	1,860	1,050	580	586
15	2,020	2,370	7,760	5,560	5,000	5,610	2,900	1,630	1,860	1,020	568	552
16	1,840	2,280	5,590	4,130	8,000	5,630	2,550	1,780	1,820	1,010	550	527
17	1,700	2,120	4,560	3,420	8,000	4,620	2,290	1,990	1,740	996	532	700
18	1,590	1,940	4,580	4,150	6,500	3,640	2,170	1,990	1,700	965	520	1,350
19	1,480	1,800	4,900	7,170	4,500	5,000	2,130	1,910	1,740	941	502	2,020
20	1,430	1,850	4,340	8,500	3,500	2,560	2,060	1,830	1,870	917	490	2,150
21	1,380	2,190	4,850	8,130	2,800	2,250	1,930	1,900	2,000	891	478	1,900
22	1,310	2,120	5,760	8,580	2,600	2,010	1,820	2,000	2,100	862	472	2,020
23	1,250	2,330	7,620	10,800	2,400	1,860	1,820	2,200	2,060	823	460	2,350
24	1,230	2,700	6,380	8,900	2,200	1,850	2,070	2,300	1,990	794	460	2,060
25	1,190	2,910	4,950	8,720	2,000	1,730	2,300	2,500	1,880	807	455	1,580
26	1,140	2,280	4,070	5,500	1,900	1,600	2,260	2,400	1,840	895	444	1,200
27	1,200	2,070	3,460	5,300	1,800	1,500	2,120	2,400	1,840	989	438	1,100
28	1,280	1,890	3,000	4,500	1,700	1,410	1,970	2,300	1,780	927	438	1,080
29	1,260	1,750	2,700	4,080	-----	1,350	1,890	2,500	1,650	871	433	800
30	1,250	1,630	2,500	3,580	-----	1,290	1,840	2,700	1,480	802	422	800
31	1,200	-----	2,500	4,080	-----	1,230	-----	3,000	-----	859	411	-----
TOTAL	69,420	80,660	115,470	139,700	181,800	72,330	100,910	64,770	65,340	33,339	17,675	31,552
MEAN	2,239	2,689	3,725	4,506	3,636	2,333	3,384	2,089	2,178	1,075	570	1,052
MAX	4,830	6,230	9,750	10,800	8,000	5,630	12,200	3,080	3,560	1,820	812	2,350
MIN	1,140	1,090	1,100	1,230	1,110	1,110	1,110	1,800	1,780	1,010	411	400
CFSM	8.68	10.2	14.1	17.1	13.8	8.64	12.7	7.91	8.25	4.07	2.16	3.98
IN	9.78	11.37	16.27	19.69	14.34	10.19	14.22	9.13	9.21	4.70	2.49	4.45
AC-FT	137,700	160,000	229,000	277,100	201,900	143,500	200,200	128,500	129,600	66,130	35,060	62,580
CAL YR 1969	TOTAL 1,029,950	MEAN 2,811	MAX 12,400	MIN 496	CFSM 10.6	IN 144.57	AC-FT 2,039,000					
WTR YR 1970	TOTAL 892,986	MEAN 2,447	MAX 12,200	MIN 400	CFSM 9.27	IN 129.83	AC-FT 1,771,080					

NOTE.--NO GAGE-HEIGHT RECORD JAN. 26 TO MAR. 5.

12041200 HOH RIVER AT U.S. HIGHWAY 101, NEAR FORKS, WASH.

LOCATION.--Lat 47°48'25", long 124°14'59", in NE¼NE¼ sec.33, T.27 N., R.12 W., Jefferson County, on left bank 250 ft downstream from U.S. Highway 101, 1.0 mile downstream from Hell Roaring Creek, 11.5 miles southeast of Forks, and at mile 15.4.

DRAINAGE AREA.--253 sq mi.

PERIOD OF RECORD.--October 1960 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 163.64 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 2,531 cfs (135.85 inches per year, 1,834,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (16,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1965	0645	16,500	10.62	Mar. 23, 1967	0115	19,300	11.55	Feb. 18, 1968	2330	21,400	12.18
Jan. 13, 1966	-	*19,900	11.61								
				Oct. 27, 1967	1745	26,100	13.49	Dec. 3, 1968	1545	20,800	11.99
Dec. 1, 1966	0530	16,200	10.60	Dec. 22, 1967	1230	17,000	10.85	Jan. 4, 1969	2000	*22,200	12.39
Dec. 13, 1966	1045	*30,100	14.55	Jan. 14, 1968	1015	28,800	14.22				
Dec. 16, 1966	0415	22,700	12.54	Jan. 19, 1968	0930	*31,700	14.96	Apr. 9, 1970	1230	*19,800	11.72
Jan. 19, 1967	1415	18,000	11.15	Feb. 4, 1968	0030	18,400	11.28				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1, 1965	422	2.82	1969	Sept.16, 1969	621	3.63
1967	Oct. 18, 1966	430	3.04	1970	Sept.16, 1970	555	3.67
1968	Sept.10, 1968	812	3.61				

Period of record: Maximum discharge, 46,000 cfs Jan. 15, 1961 (gage height, 17.74 ft); minimum. 410 cfs Sept. 30, 1965; minimum gage height, 2.40 ft Sept. 27, 1961.

REMARKS.--Records excellent. No regulation or diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	449	3,860	5,300	1,450	1,990	1,540	2,720	1,110	1,380	1,740	1,420	759
2	513	8,040	5,300	1,450	1,760	1,390	2,480	1,160	1,430	1,760	1,500	796
3	514	6,900	9,000	1,400	1,840	1,200	2,120	1,410	1,340	1,800	1,640	849
4	1,200	7,030	10,200	1,380	2,800	1,180	1,950	1,700	1,280	1,890	1,670	858
5	3,660	5,910	7,000	2,200	4,110	1,530	2,070	2,050	1,270	1,960	1,440	890
6	9,880	3,730	12,000	9,200	3,370	2,070	2,230	3,040	1,560	1,750	1,300	874
7	3,110	3,230	8,200	7,800	2,720	2,550	2,340	2,820	1,870	1,720	1,290	793
8	2,240	3,580	5,800	8,000	2,500	3,640	2,320	2,350	1,930	1,840	1,300	723
9	1,860	3,300	4,300	6,200	2,470	3,860	2,120	2,360	1,890	1,960	1,290	750
10	1,380	2,770	3,470	6,400	2,070	3,060	2,640	2,190	2,000	1,980	1,260	825
11	1,160	2,470	2,890	6,500	3,230	2,400	3,400	1,830	2,360	1,790	1,170	952
12	1,150	2,070	2,480	9,000	2,680	2,100	2,550	1,790	2,140	1,760	1,080	835
13	1,310	2,090	2,220	18,000	2,050	3,240	2,120	1,820	1,830	1,840	1,400	677
14	2,220	2,610	1,990	11,000	1,890	4,710	2,470	1,590	2,070	1,820	1,440	662
15	2,680	2,400	1,820	5,700	1,700	5,950	2,350	1,880	2,240	1,690	1,280	693
16	1,790	2,550	1,670	4,000	1,550	4,290	2,130	1,890	2,890	1,720	1,200	653
17	1,080	2,190	1,550	3,300	1,400	3,060	1,920	1,560	2,770	1,700	1,080	1,250
18	1,910	1,960	1,870	2,900	1,340	3,800	1,740	1,390	2,290	1,820	1,030	2,270
19	1,840	6,170	2,300	2,580	1,270	3,420	1,590	1,420	2,400	1,950	1,020	1,310
20	2,440	4,570	4,090	2,280	1,340	2,760	1,540	1,620	2,170	1,660	997	1,060
21	2,260	3,800	3,420	2,050	1,330	2,240	1,460	1,790	1,950	1,520	980	1,020
22	1,720	3,600	2,400	1,860	1,320	1,950	1,360	1,780	1,760	1,590	992	1,130
23	1,520	3,200	2,360	1,840	1,660	1,750	1,350	1,520	1,820	1,640	1,010	1,380
24	1,360	2,700	2,000	1,710	1,670	1,650	1,330	1,420	1,820	1,530	1,120	1,160
25	1,260	2,400	1,700	1,660	1,600	1,670	1,360	1,690	1,660	1,580	1,130	1,040
26	1,210	2,300	1,550	1,580	1,690	1,790	1,330	2,140	1,610	1,500	1,010	1,020
27	1,190	2,250	1,800	2,140	1,910	1,890	1,230	1,950	1,910	1,500	1,730	983
28	1,520	2,500	1,800	1,990	1,760	1,890	1,170	1,650	3,190	1,590	1,470	946
29	1,880	2,700	1,700	2,960	-----	2,170	1,130	1,560	2,440	1,670	1,080	1,030
30	1,980	2,600	1,600	2,700	-----	3,370	1,120	1,580	1,890	1,640	901	908
31	1,420	-----	1,500	2,360	-----	3,330	-----	1,500	-----	1,520	803	-----
TOTAL	60,526	105,570	115,280	133,590	57,020	81,540	57,640	55,560	59,160	53,430	38,033	29,096
MEAN	1,952	3,319	3,719	4,309	2,036	2,630	1,921	1,792	1,724	1,227	970	970
MAX	9,880	8,040	12,000	18,000	4,110	5,950	3,400	3,040	3,190	1,980	1,730	2,270
MIN	449	1,960	1,500	1,380	1,270	1,180	1,120	1,110	1,270	1,500	803	653
CFSM	7.72	13.9	14.7	17.0	8.05	10.4	7.59	7.08	7.79	6.81	4.85	3.83
IN	8.90	15.52	16.95	19.64	8.38	11.99	8.48	8.17	8.70	7.86	5.59	4.28
AC-FT	120,100	209,400	228,700	265,000	113,100	161,700	114,300	110,200	117,300	106,000	75,440	57,710
CAL YR 1965	TOTAL 827,996											
WTR YR 1966	TOTAL 846,445											

NOTE.--NO GAGE-HEIGHT RECORD DEC. 24 TO JAN. 18.

12041200 HOH RIVER AT U.S. HIGHWAY 101, NEAR FORKS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	864	1,640	14,300	3,960	3,500	3,200	1,720	1,120	1,940	1,660	1,250	1,170		
2	950	1,450	9,590	4,460	3,700	2,500	1,590	1,090	2,760	2,100	1,170	1,830		
3	777	1,280	7,390	6,840	5,600	2,200	1,520	1,090	2,490	2,390	1,200	1,240		
4	724	1,180	7,840	4,830	8,800	2,000	1,520	1,100	2,420	2,350	1,250	1,080		
5	738	1,190	6,540	3,570	4,900	1,750	1,430	1,160	2,470	2,100	1,150	1,050		
6	742	1,230	6,310	2,930	3,800	1,650	1,320	1,320	2,570	1,850	1,160	1,160		
7	1,010	1,050	4,670	3,120	3,200	1,600	1,260	1,470	2,320	1,600	1,060	917		
8	1,480	961	3,600	6,270	2,800	1,700	1,280	1,720	2,190	1,590	1,060	766		
9	904	1,060	3,050	4,700	2,600	1,840	1,440	1,730	1,990	1,490	1,070	735		
10	717	1,090	5,520	4,160	2,500	1,640	1,280	1,480	1,890	1,420	1,250	1,850		
11	658	938	9,990	5,220	2,400	1,500	1,190	1,310	1,900	1,490	1,330	1,900		
12	645	1,560	14,600	4,740	3,300	1,380	1,350	1,190	1,910	1,730	1,360	1,110		
13	573	1,990	24,700	4,640	3,850	1,300	1,390	1,130	2,040	1,790	1,380	844		
14	502	4,000	11,100	4,110	2,750	1,260	1,360	1,140	2,310	1,640	1,370	751		
15	462	4,580	12,100	6,100	2,500	1,450	1,250	1,230	2,370	1,490	1,310	760		
16	457	3,770	16,700	4,790	2,300	2,960	1,430	1,750	2,660	1,490	1,330	844		
17	478	2,600	11,400	3,640	2,700	3,170	1,310	2,230	2,910	1,590	1,380	696		
18	451	2,490	11,800	3,110	2,900	2,800	1,180	2,270	3,000	1,380	1,300	841		
19	3,620	3,350	10,600	12,500	2,350	2,300	1,180	2,210	2,990	1,340	1,200	828		
20	4,130	4,030	8,000	9,820	2,150	2,280	1,120	2,470	3,120	1,710	1,190	897		
21	2,580	4,160	5,400	6,660	2,000	2,370	1,090	2,830	2,710	1,620	1,180	910		
22	4,120	2,960	4,230	4,980	1,850	7,520	1,110	2,650	2,400	1,450	1,130	853		
23	8,130	2,310	4,400	4,420	1,750	14,400	1,080	2,280	2,410	1,440	1,070	683		
24	5,190	1,980	5,310	3,400	1,650	6,760	1,040	1,940	2,400	1,500	947	686		
25	3,320	4,750	4,080	2,890	1,600	4,320	1,080	1,660	2,620	1,470	832	697		
26	3,300	3,250	3,240	3,260	1,550	3,550	1,100	1,550	2,670	1,500	815	636		
27	2,570	5,150	2,780	5,110	1,500	2,930	1,040	1,610	2,310	1,390	888	641		
28	1,950	9,160	2,650	9,780	4,500	2,760	1,500	1,790	2,160	1,290	959	705		
29	3,100	6,010	3,650	8,600	-----	2,450	1,340	2,590	2,130	1,210	1,070	940		
30	2,520	9,170	2,810	6,000	-----	2,180	1,170	2,090	1,950	1,250	1,190	1,990		
31	1,870	-----	3,000	4,350	-----	1,910	-----	1,690	-----	1,260	1,190	-----		
TOTAL	59,532	90,339	241,190	162,960	85,000	91,630	38,670	52,890	71,970	49,780	36,041	30,210		
MEAN	1,920	3,011	7,780	5,257	3,036	2,956	1,289	1,706	2,399	1,606	1,163	1,007		
MAX	8,130	9,170	24,700	12,500	8,800	14,400	1,720	2,830	3,120	2,390	1,380	1,990		
MIN	451	938	2,650	2,890	1,500	1,260	1,040	1,090	1,890	1,210	815	636		
CFSM	7.59	11.9	30.8	20.8	12.0	11.7	5.09	6.74	9.48	6.35	4.60	3.98		
IN.	8.75	13.28	35.46	23.96	12.50	13.67	5.69	7.78	10.58	7.32	5.30	4.44		
AC-FT	116,100	179,200	476,400	323,200	168,600	181,700	76,700	104,900	142,800	98,740	71,490	59,920		
CAL YR 1966	TOTAL	956,130	MEAN	2,620	MAX	24,700	MIN	451	CFSM	10.4	IN	140.59	AC-FT	1,896,000
MTR YR 1967	TOTAL	1,010,212	MEAN	2,768	MAX	24,700	MIN	451	CFSM	10.9	IN	148.54	AC-FT	2,004,000
NOTE.--NO GAGE-HEIGHT RECORD JAN. 27 TO MAR. 9.														

NOTE.--NO GAGE-HEIGHT RECORD JAN. 27 TO MAR. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	5,860	5,990	2,380	2,680	2,200	2,850	2,370	1,980	2,470	1,740	1,460	1,260		
2	7,510	4,910	4,940	2,320	8,310	3,420	2,070	1,640	5,170	1,980	1,480	1,190		
3	3,560	3,470	5,600	2,160	10,500	2,770	1,870	1,480	3,420	2,340	1,490	1,040		
4	4,450	2,960	4,090	2,050	11,400	3,420	1,860	1,660	2,530	2,500	1,460	1,010		
5	3,680	2,560	3,650	1,920	5,470	5,280	1,780	1,950	2,290	2,380	1,310	1,060		
6	6,450	2,310	3,040	1,760	3,960	4,430	1,840	1,920	2,220	2,120	1,200	1,100		
7	10,300	2,280	3,140	1,890	3,260	3,310	1,710	1,660	2,140	2,090	1,050	1,040		
8	5,750	2,760	2,520	1,920	2,890	2,720	1,530	1,540	1,980	2,000	946	937		
9	3,790	3,920	4,630	3,940	2,610	2,370	1,400	1,590	1,920	2,140	937	901		
10	5,380	7,890	9,530	2,970	2,400	2,160	1,390	1,750	1,840	2,000	991	856		
11	8,190	5,130	7,790	2,370	2,300	2,230	1,490	1,980	1,840	2,070	1,040	1,320		
12	5,070	3,620	4,350	2,870	2,200	3,490	1,350	1,990	1,730	2,910	973	1,220		
13	5,660	3,080	3,250	14,900	2,000	4,650	1,260	1,690	1,980	2,020	973	964		
14	5,280	3,620	2,680	21,300	1,800	4,130	2,970	1,480	1,690	2,070	1,060	2,370		
15	3,460	4,510	2,340	13,000	1,690	4,550	2,770	1,370	1,520	2,200	1,110	5,490		
16	2,760	3,790	2,090	7,890	1,580	3,770	2,090	1,390	1,590	1,880	1,110	4,570		
17	2,320	2,890	1,890	6,280	1,660	3,080	1,760	1,580	1,580	1,660	1,060	10,200		
18	2,400	2,710	1,750	12,800	9,880	2,580	1,750	1,920	1,710	1,930	1,270	4,400		
19	2,290	2,380	1,610	27,100	12,100	2,230	1,690	2,440	1,830	1,590	1,240	3,280		
20	1,920	2,090	1,470	19,300	5,860	2,030	1,550	3,620	1,860	1,690	1,110	2,490		
21	4,030	1,890	2,100	11,500	6,510	1,880	1,420	2,640	1,640	1,530	964	2,020		
22	5,950	1,780	12,800	6,800	5,240	1,790	1,310	2,800	2,430	1,740	2,070	2,000		
23	5,450	1,670	10,700	5,340	8,640	1,960	1,370	2,290	1,830	1,330	1,560	2,910		
24	3,600	1,880	11,800	5,240	9,240	2,290	2,060	1,840	1,210	1,830	2,100	2,100		
25	5,050	1,740	10,500	4,190	5,490	2,230	1,980	1,880	1,920	1,370	1,380	1,860		
26	3,380	1,550	8,590	3,440	4,390	2,890	1,710	1,760	2,820	1,460	1,700	1,740		
27	14,400	1,460	6,320	2,920	3,550	6,690	1,520	1,700	3,300	1,520	1,790	1,580		
28	11,200	1,520	4,670	2,600	3,080	4,470	1,640	1,760	2,660	1,600	1,870	1,390		
29	6,240	2,500	3,770	2,350	2,760	5,340	1,950	1,660	2,140	1,620	1,520	1,310		
30	9,720	2,310	3,210	2,170	-----	3,560	2,160	1,540	1,760	1,500	1,320	1,270		
31	8,560	-----	2,840	2,230	-----	2,800	-----	1,500	-----	1,440	1,230	-----		
TOTAL	173,660	90,570	190,040	200,200	142,970	101,370	52,950	57,950	64,980	56,890	39,326	65,448		
MEAN	5,602	3,019	4,840	6,458	4,930	3,270	1,765	1,869	2,166	1,834	1,269	2,182		
MAX	14,400	7,890	12,800	27,100	12,100	6,690	2,970	3,620	3,170	2,910	1,790	10,200		
MIN	1,920	1,460	1,470	1,760	1,580	1,290	1,260	1,370	1,520	1,210	892	856		
CFSM	22.1	11.9	19.1	25.5	19.5	17.9	6.98	7.39	8.56	7.25	5.02	8.62		
IN.	25.53	13.32	22.06	29.44	21.02	14.90	7.79	8.52	9.55	8.36	5.78	9.62		
AC-FT	344,500	179,600	297,600	397,100	283,600	201,100	105,000	114,900	128,900	112,800	78,000	129,800		
CAL YR 1967	TOTAL	1,033,421	MEAN	2,831	MAX	14,400	MIN	451	CFSM	11.2	IN	151.95	AC-FT	2,050,000
MTR YR 1968	TOTAL	1,196,314	MEAN	3,269	MAX	27,100	MIN	636	CFSM	12.9	IN	175.90	AC-FT	2,373,000

HOH RIVER BASIN

12041200 HOH RIVER AT U.S. HIGHWAY 101, NEAR FORKS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,180	3,460	4,070	3,860	980	1,050	6,700	1,750	2,840	1,780	1,150	822
2	1,060	3,190	3,730	4,050	1,050	1,020	5,580	1,680	3,280	1,890	1,110	902
3	982	3,080	13,300	5,320	1,150	1,100	3,630	1,590	3,330	1,770	1,030	848
4	1,440	2,470	7,910	14,200	1,250	1,150	3,770	1,480	3,770	1,680	1,010	758
5	1,490	2,170	5,150	11,400	1,100	1,450	3,730	1,430	3,940	1,660	1,100	694
6	3,960	1,950	3,920	6,400	1,020	1,900	3,190	1,610	3,600	1,570	965	649
7	2,460	1,880	3,510	5,200	980	1,800	2,570	1,950	3,150	1,620	911	694
8	1,830	3,770	4,710	4,400	1,900	1,600	2,230	2,640	3,100	1,600	866	750
9	1,670	3,020	8,260	3,700	1,800	1,450	2,040	3,200	3,690	1,690	929	848
10	2,120	2,460	5,620	3,200	2,000	1,350	1,920	3,220	3,650	1,890	974	929
11	2,340	3,180	4,210	2,800	7,000	1,200	1,820	2,970	3,620	2,200	938	974
12	3,010	4,110	3,210	2,900	5,000	1,140	2,080	2,920	3,350	1,910	938	947
13	2,870	3,140	3,140	2,200	3,500	1,090	3,370	2,900	3,060	1,590	1,060	952
14	2,710	2,600	4,450	2,000	2,500	1,060	2,540	2,810	2,790	1,380	1,110	806
15	2,850	2,380	4,330	1,900	2,100	2,670	2,090	2,400	2,720	1,280	1,190	678
16	2,380	2,090	3,860	1,800	2,000	3,410	1,890	2,200	2,830	1,240	1,110	663
17	3,180	1,910	3,350	1,680	1,800	8,310	2,090	2,110	2,950	1,250	947	2,000
18	3,280	3,280	3,690	1,560	1,700	5,630	2,970	2,350	3,040	1,270	974	2,970
19	3,210	3,020	2,870	1,490	1,600	3,820	4,390	2,510	3,040	1,320	1,050	5,800
20	3,950	5,690	2,470	1,420	1,500	2,920	3,410	2,430	2,640	1,380	1,140	5,390
21	2,890	5,640	2,220	1,350	1,450	2,480	2,950	2,590	2,240	1,310	1,460	3,010
22	3,600	7,060	2,230	1,300	1,400	2,650	2,520	2,920	2,070	1,320	1,140	5,440
23	3,960	5,710	8,360	1,250	1,350	2,620	2,620	3,290	2,320	1,530	983	9,570
24	2,940	4,130	12,900	1,200	1,300	2,180	2,620	3,580	2,570	1,600	992	5,460
25	3,330	3,280	6,780	1,150	1,250	2,000	2,260	3,080	2,330	1,510	1,710	4,030
26	2,680	3,040	4,650	1,100	1,200	2,090	1,960	2,790	1,930	1,300	1,320	2,770
27	2,190	4,130	3,670	1,050	1,150	2,360	1,830	3,330	1,780	1,270	1,390	2,210
28	2,690	3,310	3,080	1,000	1,100	2,180	1,930	3,100	1,840	1,310	1,220	1,950
29	7,200	5,660	2,690	980	-----	2,110	2,020	4,810	1,770	1,220	1,000	1,710
30	7,890	4,820	2,430	950	-----	2,520	1,880	4,930	1,770	1,130	866	2,720
31	4,710	-----	3,620	940	-----	5,180	-----	3,240	-----	1,140	822	-----
TOTAL	91,752	105,630	146,390	93,350	52,130	73,490	84,600	83,810	84,910	46,610	33,405	67,984
MEAN	2,960	3,521	4,722	3,011	1,862	2,371	2,620	2,704	2,830	1,504	1,078	2,266
MAX	7,890	7,060	13,300	14,200	5,000	8,310	6,700	4,930	3,940	2,200	1,710	9,570
MIN	982	1,880	2,230	940	-----	1,020	1,430	1,370	1,770	1,130	822	649
CFSH	11.7	13.9	18.7	11.9	7.36	9.37	11.1	10.7	11.2	5.94	4.26	8.96
IN	13.49	15.53	21.52	13.73	7.66	10.81	12.44	12.32	12.48	6.85	4.91	10.00
AC-FT	182,000	209,500	290,400	185,200	103,400	145,800	167,800	166,200	168,400	92,450	66,260	134,800

CAL YR 1968 TOTAL 1,125,816 MEAN 3,076 MAX 27,100 MIN 856 CFSH 12.2 IN 165.54 AC-FT 2,233,000
WTR YR 1969 TOTAL 964,061 MEAN 2,641 MAX 14,200 MIN 649 CFSH 10.4 IN 141.75 AC-FT 1,912,000

NOTE.--NO GAGE-HEIGHT RECORD JAN. 21 TO MAR. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,010	912	1,050	1,440	4,070	1,140	912	1,560	1,730	1,140	1,040	864
2	3,610	896	992	1,350	3,190	1,080	888	1,600	2,240	1,240	1,050	816
3	2,480	1,040	1,240	1,310	3,070	1,040	824	1,710	2,690	1,600	1,100	1,200
4	1,990	3,590	1,890	1,220	2,560	976	1,560	1,830	2,500	1,870	1,140	1,250
5	1,710	3,770	1,330	1,140	2,230	928	4,980	1,810	1,980	1,690	1,140	1,040
6	1,550	5,320	1,160	1,070	2,050	1,680	7,460	1,630	2,020	1,460	1,160	1,540
7	1,630	4,230	1,070	1,020	2,130	3,400	5,530	1,500	2,050	1,410	1,230	2,020
8	3,950	3,690	1,140	1,040	2,300	1,910	3,030	1,630	1,730	1,560	1,130	1,280
9	3,000	2,630	1,140	1,620	2,170	1,510	13,200	1,980	1,660	1,530	992	1,040
10	2,330	2,140	1,070	1,340	2,000	1,310	7,220	1,710	1,770	1,440	976	914
11	1,690	1,930	3,050	1,380	1,660	1,220	4,270	1,510	1,470	1,300	1,090	863
12	1,630	2,100	4,480	1,310	1,740	1,470	3,180	1,500	1,370	1,250	1,090	770
13	1,460	1,740	7,220	1,690	1,930	2,060	2,620	1,410	1,400	1,250	1,040	704
14	1,330	1,630	7,670	4,910	1,710	3,420	2,230	1,310	1,420	1,220	960	662
15	1,230	1,590	4,590	2,710	2,410	3,690	1,910	1,320	1,550	1,300	936	627
16	1,150	1,620	3,250	2,050	4,610	3,480	1,800	1,650	1,490	1,480	968	620
17	1,120	1,420	2,950	1,990	3,990	2,540	1,660	1,760	1,400	1,340	896	2,050
18	1,030	1,790	3,000	4,010	3,610	2,030	1,720	1,530	1,480	1,280	824	3,190
19	968	1,230	2,570	7,380	2,710	1,740	1,950	1,440	1,610	1,360	824	2,890
20	1,050	1,690	2,590	5,190	2,300	1,550	1,870	1,380	1,850	1,360	832	1,850
21	1,050	2,130	3,750	6,170	2,030	1,420	1,650	1,360	2,050	1,280	888	1,410
22	1,030	1,610	6,170	5,370	1,850	1,310	1,540	1,440	2,020	1,130	920	2,270
23	1,000	2,530	5,990	6,840	1,670	1,540	1,690	1,590	1,770	1,060	968	3,300
24	1,010	2,270	3,830	4,320	1,540	1,570	2,600	1,530	1,690	1,040	1,020	1,690
25	920	1,780	2,910	3,910	1,420	1,300	2,420	1,730	1,570	1,110	992	1,380
26	864	1,560	2,600	3,420	1,330	1,190	2,060	2,030	1,820	1,490	896	1,310
27	1,230	1,390	2,240	3,670	1,280	1,120	1,780	1,650	2,000	1,680	872	1,250
28	1,050	1,280	1,980	3,000	1,200	1,060	1,620	1,450	1,670	1,280	888	1,160
29	984	1,200	1,820	2,540	-----	1,000	1,620	1,450	1,400	1,200	856	1,100
30	968	1,130	1,680	2,230	-----	944	1,620	1,480	1,240	1,200	816	1,040
31	936	-----	1,950	3,630	-----	896	-----	1,400	-----	1,060	848	-----
TOTAL	49,760	61,338	87,972	90,270	64,960	51,524	85,414	48,880	52,640	41,610	30,342	42,330
MEAN	1,605	2,005	2,838	2,912	2,320	1,662	2,847	1,577	1,755	1,342	979	1,411
MAX	4,010	5,320	7,670	7,380	4,610	3,690	13,200	2,030	2,690	1,870	1,230	3,270
MIN	864	896	992	1,020	1,200	896	824	1,310	1,240	1,040	816	620
CFSH	6.34	8.08	11.2	11.5	9.17	6.57	11.3	6.23	6.94	5.30	3.87	5.56
IN	7.32	9.02	12.94	13.27	9.55	7.58	12.36	7.19	7.74	6.12	4.46	6.22
AC-FT	98,700	121,700	174,500	179,100	128,800	102,200	169,400	96,950	104,400	82,530	60,180	83,960

CAL YR 1969 TOTAL 819,359 MEAN 2,245 MAX 14,200 MIN 649 CFSH 8.87 IN 120.47 AC-FT 1,625,000
WTR YR 1970 TOTAL 707,040 MEAN 1,937 MAX 13,200 MIN 620 CFSH 7.66 IN 103.96 AC-FT 1,402,000

12041500 SOLEDUCK RIVER NEAR FAIRHOLM, WASH.

LOCATION.--Lat 48°02'40", long 123°57'28", in lot 4, SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.35, T.30 N., R.10 W., Clallum County, Olympic National Park, on right bank 0.1 mile downstream from South Fork, 2.6 miles southwest of Fairholm, and at mile 54.9.

DRAINAGE AREA.--83.8 sq mi.

PERIOD OF RECORD.--October 1917 to September 1921, October 1933 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,060 ft (from topographic map). October 1917 to September 1921, water-stage recorder and Oct. 4 to Nov. 4, 1933, nonrecording gage, at same site at datum 1.2 ft higher.

AVERAGE DISCHARGE.--41 years, 629 cfs (101.93 inches per year, 455,700 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (6,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	0600	*5,980	7.57	Oct. 27, 1967	1700	8,640	9.23	Dec. 3, 1968	1200	*7,650	8.61
Dec. 13, 1966	0615	*10,400	10.29	Dec. 10, 1967	1700	6,090	7.64	Jan. 4, 1969	1900	6,590	7.95
Dec. 16, 1966	0230	7,450	8.49	Dec. 22, 1967	1200	6,320	7.78	Apr. 9, 1970	0900	*7,410	8.46
Jan. 19, 1967	1330	7,050	8.24	Jan. 14, 1968	0700	*9,690	9.86				
Mar. 22, 1967	2400	6,030	7.60	Jan. 19, 1968	0800	8,970	9.44				
				Feb. 3, 1968	2300	7,230	8.35				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 1965	63	.83	1969	Sept. 11, 12, 15, 16, 1969	86	1.03
1967	Sept. 27-29, 1967	70	.85	1970	Sept. 1, 2, 1970	72	.85
1968	Sept. 9, 10, 1968	101	1.19				

Period of record: Maximum discharge, 23,500 cfs Nov. 26, 1949 (gage height, 16.42 ft, from high watermark in well), from rating curve extended above 13,000 cfs on basis of slope-area measurement of peak flow; minimum, 51 cfs Sept. 11, 12, 1944; minimum gage height, 0.79 ft Oct. 17-20, 1952.

REMARKS.--Records excellent except those for periods of no gage-height record, which are good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1182: 1918-19, 1920(M), 1921, 1934-39, 1940(M), 1941-42, 1943(M), 1944-46, 1947-48(M). WSP 1216: Drainage area. WSP 1286: 1939, 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	895	1,700	372	581	339	1,150	405	438	457	274	130
2	65	1,890	1,680	371	510	314	1,030	455	428	540	275	125
3	64	1,630	2,450	345	471	292	827	598	413	563	277	122
4	136	1,980	2,660	328	794	277	742	778	405	562	274	118
5	644	1,810	1,640	496	1,180	292	846	1,060	423	541	252	115
6	2,310	995	3,040	2,720	892	329	1,060	1,540	544	493	235	113
7	484	725	2,230	2,120	718	334	1,150	1,170	683	495	229	110
8	309	675	1,530	2,370	608	478	1,130	1,020	687	503	224	107
9	262	619	1,190	1,380	544	752	988	1,020	646	519	219	105
10	212	547	952	1,450	479	636	1,280	839	721	503	210	113
11	186	501	790	1,490	642	502	1,500	689	773	466	201	141
12	177	439	680	2,040	543	452	990	712	652	453	192	127
13	175	419	604	5,500	467	680	774	669	576	469	214	111
14	343	444	536	3,480	425	1,080	970	558	659	439	212	105
15	497	512	491	1,720	380	1,350	952	604	790	412	192	102
16	314	559	453	1,210	354	944	840	607	966	405	186	99
17	362	472	423	987	340	682	728	513	796	396	173	143
18	463	435	554	829	324	765	632	478	679	401	166	246
19	439	1,830	654	706	313	684	561	520	708	418	161	156
20	475	1,430	1,300	617	328	555	534	629	610	361	158	128
21	402	1,210	1,030	556	339	466	506	718	546	342	153	114
22	312	1,190	713	507	349	408	485	622	523	348	150	109
23	269	847	611	475	469	374	484	529	573	350	147	116
24	240	669	534	436	435	355	475	507	549	335	145	109
25	219	559	474	436	404	357	484	670	500	347	143	106
26	205	513	429	429	396	422	458	868	491	325	140	112
27	201	495	481	616	396	535	431	699	557	317	198	106
28	214	602	479	578	365	641	173	550	755	324	183	100
29	287	638	432	900	-----	956	399	514	557	321	160	96
30	354	558	409	806	-----	1,830	397	511	469	308	147	93
31	249	-----	378	685	-----	1,520	-----	472	-----	289	137	-----
TOTAL	10,935	26,088	31,527	36,955	14,046	19,601	22,976	21,524	18,137	13,002	6,027	3,577
MEAN	353	870	1,017	1,192	502	632	766	694	605	419	194	119
MAX	2,310	1,980	3,040	5,500	1,180	1,830	1,500	1,540	966	563	277	246
MIN	64	419	378	328	313	277	173	405	405	289	137	93
CFSM	4.21	10.4	12.1	14.2	5.99	7.54	9.14	8.28	7.22	5.00	2.32	1.42
IN.	4.85	11.58	14.00	16.40	6.24	8.70	10.20	9.55	8.05	5.77	2.68	1.59
AC-FT	21,690	51,750	62,530	73,300	27,860	38,880	45,570	42,690	35,970	25,790	11,950	7,090
CAL YR 1965	TOTAL	205,132	MEAN	562	MAX	3,940	MIN	64	CFSM	6.71	IN	91.06
WTR YR 1966	TOTAL	224,395	MEAN	615	MAX	5,500	MIN	64	CFSM	7.34	IN	99.61
									AC-FT	406,900		
										445,100		

QUILLAYUTE RIVER BASIN

12041500 SOLEDUCK RIVER NEAR FAIRHOLM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	343	3,070	1,050	1,020	1,010	396	305	852	472	206	102
2	97	309	2,050	1,280	1,050	715	376	319	1,120	513	198	156
3	80	284	1,600	2,000	1,780	580	370	345	983	542	194	114
4	87	264	1,550	1,330	2,730	508	376	356	915	521	109	109
5	85	278	1,320	984	1,560	458	358	419	908	464	183	106
6	86	268	1,370	797	1,120	423	341	532	925	423	179	115
7	88	241	1,040	766	897	398	334	647	838	382	173	99
8	171	225	796	1,510	764	418	337	758	758	386	168	93
9	122	238	669	1,350	692	352	352	681	676	356	63	90
10	104	238	1,720	1,390	650	370	330	527	657	343	162	229
11	98	217	3,810	1,760	628	346	318	450	666	357	160	250
12	109	391	5,550	1,430	904	329	327	403	647	385	156	151
13	107	546	7,780	1,320	1,510	323	319	379	750	352	152	129
14	102	1,230	3,120	1,210	775	307	309	393	745	344	148	107
15	97	1,430	3,970	1,800	663	317	295	483	782	321	143	99
16	94	1,150	4,930	1,320	592	673	298	778	869	317	140	94
17	106	760	3,400	1,070	717	678	273	1,020	933	324	137	90
18	101	662	3,400	666	799	595	281	990	900	297	134	87
19	1,090	757	3,400	4,300	503	503	284	996	899	294	129	85
20	1,030	889	2,340	2,960	574	522	276	1,210	874	350	127	83
21	510	883	1,590	1,700	521	520	275	1,320	724	310	127	82
22	1,100	1,270	1,180	1,180	480	2,090	280	1,150	661	280	124	82
23	2,880	549	1,130	936	448	4,030	291	881	652	274	118	79
24	1,200	480	1,300	761	424	1,730	294	719	636	277	113	77
25	686	1,170	1,090	656	412	1,100	305	604	693	269	109	75
26	567	759	907	655	387	828	299	572	670	262	106	73
27	464	1,640	781	1,420	387	662	292	607	587	248	103	72
28	377	2,680	735	3,090	1,400	584	312	727	559	235	102	70
29	658	1,750	986	2,680	-----	522	304	889	538	225	100	105
30	509	2,620	770	1,810	-----	470	299	666	486	223	105	241
31	393	-----	829	1,230	-----	428	-----	583	-----	216	97	-----
TOTAL	12,811	23,931	68,473	46,631	24,074	22,806	9,511	20,719	22,861	10,594	4,448	3,336
MEAN	413	798	2,209	1,504	860	736	317	668	762	342	143	111
MAX	2,880	2,680	7,780	4,300	2,730	4,030	396	1,320	1,120	547	206	250
MIN	85	217	669	655	387	307	275	305	466	216	79	77
CF5M	4,93	9,42	26,4	11,7	8,7	8,7	7,7	9,9	9,9	4,9	1,7	1,3
IN	5,69	10,62	30,40	20,70	10,69	10,42	4,22	9,20	10,15	4,70	1,97	1,48
AC-FT	25,410	47,470	135,800	92,490	47,750	45,240	18,870	41,100	45,340	21,010	8,820	6,620

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,030	1,340	430	705	565	834	620	590	640	378	170	148
2	1,640	1,000	816	620	2,440	882	542	482	1,310	414	165	139
3	713	822	993	565	3,520	720	498	442	762	442	161	129
4	1,110	700	745	530	3,560	937	490	494	580	442	156	121
5	666	620	670	494	1,600	1,240	466	490	542	394	152	117
6	1,510	560	575	458	1,140	974	446	474	538	354	145	111
7	2,200	538	538	454	937	798	418	438	534	345	139	110
8	1,140	585	470	434	834	685	390	426	506	333	135	107
9	661	804	1,230	745	780	615	372	474	486	339	131	105
10	1,020	2,380	3,980	625	735	565	381	555	466	315	127	105
11	1,860	1,430	2,370	518	700	575	394	635	466	318	125	173
12	1,330	951	1,190	900	660	786	366	605	430	381	121	148
13	1,810	768	840	5,290	625	918	348	490	446	303	129	123
14	1,530	864	685	6,810	575	852	450	430	410	357	152	458
15	892	1,120	590	3,630	530	958	450	402	387	381	141	1,170
16	649	930	526	2,060	498	882	398	414	414	336	148	710
17	526	740	478	1,450	522	734	375	402	143	280	142	1,600
18	537	695	438	3,320	2,770	635	369	650	434	267	154	750
19	503	610	402	7,770	3,070	560	360	816	450	264	159	510
20	441	546	375	6,080	1,620	526	342	924	422	264	177	398
21	1,040	502	502	3,200	1,610	506	324	630	378	244	148	342
22	2,090	470	4,560	1,930	1,610	518	348	426	353	135	135	356
23	1,560	438	3,870	1,640	2,870	530	333	538	426	221	168	418
24	1,110	450	3,920	1,700	2,750	565	336	526	402	216	192	327
25	1,690	414	3,370	1,250	1,530	538	375	474	426	210	175	291
26	1,070	381	2,570	1,030	1,210	610	378	458	645	201	261	267
27	5,220	372	1,920	858	993	1,490	381	450	620	203	221	250
28	3,150	375	1,390	878	879	1,110	498	592	570	208	238	208
29	1,670	470	1,080	685	792	1,370	645	446	442	192	175	219
30	2,390	414	900	635	-----	930	700	418	378	182	154	208
31	1,990	-----	774	610	-----	725	-----	398	-----	175	141	-----
TOTAL	44,748	22,289	43,177	58,156	41,666	24,546	12,763	16,131	15,338	9,193	4,908	10,142
MEAN	5,423	2,743	3,193	4,187	5,025	3,025	1,582	2,000	1,875	1,115	604	1,236
MAX	22,280	2,380	4,540	7,770	3,560	1,490	700	924	1,310	422	267	1,600
MIN	441	372	375	434	498	490	318	398	378	175	121	105
CF5M	17.2	8.87	16.6	22.4	17.1	9.45	5.07	6.21	6.10	3.54	1.89	4.03
IN.	19.86	9.89	19.17	25.82	18.50	10.90	5.67	7.16	6.81	4.08	2.18	4.50
AC-FT	88,760	44,210	85,640	115,400	82,640	48,690	25,320	32,000	30,420	18,230	9,740	20,120
CAL YR 1967	TOTAL	275,194	MEAN	754	MAX	5,220	MIN	70	CF5M	9.00	IN	122.16
WTR YR 1968	TOTAL	303,057	MEAN	828	MAX	7,770	MIN	105	CF5M	9.88	IN	134.53
									AC-FT	545,800		
									AC-FT	601,100		

12041500 SOLEDDUCK RIVER NEAR FAIRHOLM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	840	906	816	210	235	1,720	500	979	411	163	108
2	190	745	876	870	220	235	1,450	469	1,140	418	159	114
3	180	695	4,480	1,110	240	238	993	444	1,190	391	154	108
4	273	575	2,080	4,130	264	238	925	422	1,310	369	154	103
5	267	518	1,270	3,140	233	381	889	435	1,240	354	168	100
6	852	474	937	1,630	213	381	802	540	1,090	340	156	96
7	538	458	894	1,270	205	339	690	759	948	339	148	94
8	390	740	1,140	972	418	312	612	1,160	959	325	143	93
9	398	685	1,830	846	394	290	568	1,470	1,050	326	137	91
10	522	590	1,500	735	381	273	557	1,390	1,050	376	133	89
11	570	745	1,060	650	1,520	258	563	1,280	1,010	407	129	88
12	705	1,130	846	570	972	247	729	1,230	927	351	131	88
13	780	846	822	530	665	239	1,000	1,200	829	302	135	101
14	715	685	1,140	498	526	233	808	1,140	748	277	129	93
15	780	620	1,040	458	458	844	671	918	738	264	129	88
16	630	542	876	434	434	1,040	607	841	757	252	125	94
17	828	530	750	410	390	2,610	699	828	753	245	119	198
18	822	888	730	381	369	1,670	873	930	736	239	119	285
19	958	750	625	369	348	1,030	1,010	1,020	690	236	125	767
20	1,030	1,470	550	345	333	773	862	960	615	235	129	691
21	804	1,790	510	318	318	652	766	1,040	541	224	143	403
22	924	2,340	510	300	309	649	707	1,190	525	217	121	873
23	756	1,680	2,840	280	297	632	785	1,370	592	220	112	1,550
24	986	1,150	3,630	260	282	561	753	1,370	579	215	110	943
25	846	876	1,710	250	273	525	647	1,030	532	206	187	636
26	680	828	1,120	240	261	608	570	896	487	193	150	471
27	565	1,040	858	240	250	799	555	997	450	187	152	383
28	585	864	690	230	244	776	621	1,020	441	185	163	341
29	1,400	1,500	600	220	-----	766	601	1,570	438	177	137	302
30	1,870	1,130	580	210	-----	1,000	542	1,540	429	168	123	472
31	1,150	-----	640	230	-----	1,870	-----	1,020	-----	169	114	-----
TOTAL	22,191	27,724	38,040	22,942	11,027	20,704	23,575	31,029	23,773	8,614	4,297	9,863
MEAN	716	924	1,227	740	394	668	786	1,001	792	278	139	329
MAX	1,870	2,340	4,480	4,130	1,520	2,610	1,720	1,590	1,310	418	187	1,550
MIN	180	458	510	210	205	233	542	422	429	165	110	88
CFSM	8.54	11.0	14.6	8.83	4.70	7.97	9.38	11.9	9.45	3.32	1.66	3.93
IN.	9.85	12.31	16.89	10.18	4.90	9.19	10.47	13.77	10.55	3.82	1.91	4.38
AC-FT	44,020	54,990	75,450	45,510	21,870	41,070	46,760	61,550	47,150	17,090	8,520	19,560

CAL YR 1968 TOTAL 280,798 MEAN 767 MAX 7,770 MIN 105 CFSM 9.15 IN 124.65 AC-FT 557,000
WTR YR 1969 TOTAL 243,779 MEAN 668 MAX 4,480 MIN 88 CFSM 7.97 IN 108.22 AC-FT 483,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	779	170	318	450	1,250	360	284	430	450	235	124	73
2	733	164	301	425	1,000	340	278	460	550	246	121	72
3	522	174	348	400	900	330	262	500	650	287	117	118
4	421	993	430	375	800	320	414	500	600	302	114	151
5	364	901	351	350	700	309	1,730	450	500	269	111	108
6	329	1,370	322	330	600	573	1,730	420	500	241	109	138
7	333	926	303	310	620	1,070	885	400	500	232	114	266
8	659	791	328	300	650	608	914	450	450	238	112	147
9	716	615	320	450	620	501	4,730	500	420	226	105	114
10	573	516	297	375	580	444	2,060	400	450	214	101	99
11	460	461	998	400	540	408	1,180	380	370	196	98	90
12	393	465	1,640	375	500	501	873	360	348	189	97	84
13	353	408	3,080	1,000	550	722	706	340	359	184	97	81
14	322	380	2,280	1,500	500	1,050	602	320	363	178	94	79
15	299	381	1,260	800	800	1,070	522	360	385	176	91	77
16	278	364	934	650	1,500	989	486	410	361	181	89	77
17	262	336	872	550	1,100	714	452	450	335	170	88	311
18	245	326	911	1,250	1,200	593	444	400	350	163	86	592
19	234	333	760	2,500	900	522	490	350	370	162	85	507
20	229	602	726	1,700	800	473	463	350	393	158	84	278
21	221	668	974	2,000	700	434	430	360	426	152	82	196
22	214	498	1,590	1,800	640	398	408	380	393	144	81	611
23	209	989	1,760	2,300	580	440	417	400	358	139	80	431
24	204	740	1,110	1,250	520	439	509	400	345	135	79	268
25	194	569	830	1,100	480	377	465	450	322	142	79	210
26	185	489	704	1,000	440	355	395	500	349	160	78	180
27	209	434	596	1,100	410	337	399	430	362	178	78	161
28	194	390	532	1,000	390	324	560	380	313	146	83	148
29	199	363	521	850	-----	310	577	380	275	146	78	138
30	190	340	497	700	-----	295	483	380	250	145	75	129
31	179	-----	475	900	-----	282	-----	350	-----	131	74	-----
TOTAL	10,702	16,156	26,368	28,490	20,270	15,888	24,148	12,640	12,095	5,865	2,904	5,936
MEAN	345	539	851	919	724	513	805	408	403	189	93.7	198
MAX	779	1,370	3,080	2,500	1,500	1,070	4,730	500	650	302	124	611
MIN	179	164	297	300	390	282	377	320	250	131	74	72
CFSM	4.12	6.43	10.2	11.0	8.64	6.12	9.61	4.87	4.81	2.26	1.12	2.36
IN.	4.75	7.17	11.71	12.65	9.00	7.05	10.72	5.61	5.37	2.60	1.29	2.63
AC-FT	21,230	32,050	52,300	56,510	40,210	31,510	47,900	25,070	23,990	11,630	5,760	11,770

CAL YR 1969 TOTAL 209,050 MEAN 573 MAX 4,130 MIN 88 CFSM 6.84 IN 92.80 AC-FT 414,700
WTR YR 1970 TOTAL 181,460 MEAN 497 MAX 4,730 MIN 72 CFSM 5.93 IN 80.55 AC-FT 359,900

NOTE.--NO GAGE-HEIGHT RECORD DEC. 31 TO MAR. 4, MAY 1 TO JUNE 11.

12043080 EAST FORK DICKEY RIVER NEAR LA PUSH, WASH.

LOCATION.--Lat 47°59'10", long 124°32'46", in SE¼SE¼ sec.30, T.29 N., R.14 W., Clallum County, on left bank at crossing of logging road, 0.2 mile upstream from confluence with West Fork and 6.5 miles northeast of La Push.

DRAINAGE AREA.--39.8 sq mi.

PERIOD OF RECORD.--August to October 1962, March 1963 to September 1968 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 70 ft (from topographic map).

AVERAGE DISCHARGE.--5 years (1963-68), 281 cfs (203,400 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (3,000 cfs), water years 1966-68

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	0130	*5,430	9.89	Feb. 4, 1967	0700	*3,340	7.48	Jan. 19, 1968	0800	*8,880	16.32
Jan. 19, 1967	1045	3,020	7.03	Dec. 22, 1967	0930	5,090	9.80	Feb. 18, 1968	2300	4,170	8.65
								Sept. 17, 1968	0600	3,540	7.77

Annual minimum discharge, water years 1966-68

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 21-26, Sept. 7-9, 1966	10	1.22	1968	Aug. 10-13, 1968	12	1.28
1967	Aug. 11-20, 1967	5.6	1.18				

Period of record: Maximum discharge, 8,880 cfs Jan. 19, 1968 (gage height, 16.32 ft), from rating curve extended above 3,700 cfs on basis of slope-area measurements at gage heights 10.19 and 16.32 ft; minimum, 5.6 cfs Aug. 11-20, 1967 (gage height, 1.18 ft).

REMARKS.--Records excellent. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	772	950	376	171	243	159	46	49	46	18	16
2	18	815	676	570	143	226	157	45	43	62	17	15
3	18	610	902	350	130	204	120	42	43	70	16	14
4	40	1,080	1,210	268	311	165	102	40	42	66	16	13
5	155	730	767	656	575	173	96	38	35	54	16	12
6	838	370	1,490	1,410	395	268	87	48	32	48	16	11
7	217	383	740	1,150	296	502	79	60	31	42	14	10
8	133	570	502	1,620	328	1,280	73	46	29	39	14	10
9	120	387	625	718	399	1,040	72	38	29	36	14	11
10	81	346	429	1,260	268	585	119	35	31	35	15	13
11	62	338	342	990	880	374	192	33	33	38	15	16
12	75	236	293	1,880	521	282	130	32	38	35	14	43
13	130	226	233	2,800	311	429	123	31	36	31	19	24
14	355	416	194	1,350	233	694	238	33	43	29	24	18
15	285	289	162	700	185	828	182	175	35	28	18	16
16	168	323	135	460	159	550	133	182	30	26	16	16
17	220	254	120	330	157	421	111	107	29	25	15	92
18	339	207	146	260	146	744	96	75	31	26	13	207
19	260	624	346	198	130	779	85	60	43	31	12	77
20	246	465	1,160	165	171	585	89	56	40	29	11	49
21	204	470	644	148	146	395	85	75	36	24	11	38
22	138	640	342	130	123	296	81	87	36	22	10	30
23	109	350	387	188	125	243	77	68	32	20	10	40
24	92	274	383	173	120	207	68	86	30	20	10	38
25	79	220	331	168	165	173	66	48	28	28	10	31
26	68	204	271	154	240	146	66	49	26	30	12	30
27	75	250	667	300	327	128	59	51	46	24	73	29
28	167	217	592	217	271	114	54	43	130	21	46	26
29	801	198	404	311	-----	104	51	39	77	20	26	26
30	468	213	387	264	-----	204	49	36	54	19	19	25
31	246	-----	282	220	-----	162	-----	43	-----	19	17	-----
TOTAL	6,245	12,477	16,112	19,784	7,436	12,544	3,099	1,817	1,216	1,043	557	996
MEAN	201	416	520	638	266	405	103	58.6	40.5	33.6	18.0	33.2
MAX	838	1,080	1,490	2,800	880	1,280	238	182	130	70	73	207
MIN	18	198	120	130	120	104	49	31	26	19	10	10
CFSM	5.05	10.5	13.1	16.0	6.68	10.2	2.59	1.47	1.02	.84	.45	.83
IN.	5.84	11.66	15.06	18.49	6.95	11.72	2.90	1.70	1.14	.97	.52	.93
AC-FT	12,390	24,750	31,960	39,240	14,750	24,880	6,150	3,600	2,410	2,070	1,100	1,980
CAL YR 1965	TOTAL 89,544	MEAN 245	MAX 2,680	MIN 12	CFSM 6.16	IN 83.69	AC-FT 177,600					
WTR YR 1966	TOTAL 83,326	MEAN 228	MAX 2,800	MIN 10	CFSM 5.73	IN 77.88	AC-FT 165,300					

12043080 EAST FORK DICKEY RIVER NEAR LA PUSH, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	159	2,040	645	352	740	167	154	40	13	6.5	12
2	36	133	1,150	978	1,070	412	141	129	48	12	6.5	38
3	29	116	976	1,200	2,220	282	121	115	43	11	6.0	19
4	25	102	816	705	2,040	221	121	100	40	11	6.0	13
5	24	111	1,150	501	690	179	117	94	34	9.7	6.0	9.7
6	32	171	1,370	400	452	151	100	82	31	9.7	6.5	18
7	94	120	822	587	336	133	92	80	30	8.7	6.5	16
8	240	100	510	1,630	242	221	94	82	30	8.7	6.5	11
9	98	159	447	882	234	300	141	84	30	8.7	6.5	12
10	68	157	903	700	230	276	113	76	28	9.7	6.0	119
11	52	118	926	740	300	254	92	76	27	8.7	6.0	96
12	69	207	1,210	710	972	200	156	74	27	7.9	5.6	43
13	104	252	1,550	400	882	167	218	64	26	7.9	5.6	28
14	68	799	720	546	532	148	227	60	23	7.1	5.6	19
15	54	585	1,330	1,330	685	182	167	68	22	7.1	5.6	16
16	51	452	1,520	760	573	368	234	62	20	7.1	5.6	14
17	57	302	1,440	564	722	352	264	19	19	7.9	5.6	13
18	56	260	2,200	356	735	352	170	49	18	7.1	5.6	12
19	1,070	250	1,440	1,780	429	293	197	46	18	14	5.6	11
20	1,010	315	800	1,030	308	348	148	43	16	18	6.0	11
21	665	429	510	1,000	251	368	126	42	16	15	7.1	9.7
22	779	308	316	816	203	1,300	129	38	18	13	7.1	11
23	1,070	233	345	932	170	1,900	115	38	18	9.7	7.1	11
24	605	202	806	610	151	833	98	42	16	7.9	6.5	9.7
25	416	1,020	528	416	170	506	98	37	16	7.9	6.0	9.7
26	522	521	344	730	138	429	100	52	15	7.1	6.0	8.7
27	770	1,730	262	1,090	212	94	30	17	14	6.0	8.7	8.7
28	246	2,010	278	1,340	1,600	465	391	37	16	7.1	6.0	8.7
29	371	850	610	954	-----	348	328	131	15	7.1	6.5	22
30	296	1,230	364	568	-----	262	203	108	13	6.5	6.0	176
31	204	-----	500	388	-----	203	-----	76	-----	6.5	6.5	-----
TOTAL	8,821	13,439	28,231	25,389	16,919	12,787	4,722	2,205	749	289.1	190.6	805.9
MEAN	285	448	911	819	604	412	157	71.1	25.0	9.33	6.15	26.9
MAX	1,070	2,010	2,200	1,870	2,220	1,900	391	154	60	18	7.1	176
MIN	24	100	262	356	138	133	92	30	13	6.5	5.6	8.7
CFSM	7.16	11.3	22.9	20.6	15.2	10.4	3.94	1.79	.63	.23	.15	.68
IN-	8.24	12.56	26.39	23.73	15.81	11.95	4.41	2.06	.70	.27	.19	.75
AC-FT	17,500	26,660	56,000	50,360	33,560	23,360	9,370	4,370	1,490	573	378	1,600
CAL YR 1966	TOTAL	98,983.0	MEAN 271	MAX 2,800	MIN 10	CFSM 6.81	IN 92.52	AC-FT 196,300				
WTR YR 1967	TOTAL	114,547.6	MEAN 314	MAX 2,220	MIN 5.6	CFSM 7.89	IN 107.06	AC-FT 227,200				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	828	605	368	212	350	162	221	133	107	50	15	38
2	770	564	1,290	170	1,370	178	178	111	269	40	15	37
3	308	251	1,510	1,480	191	150	150	91	180	37	14	23
4	265	191	811	143	1,170	276	192	121	98	34	14	28
5	465	154	635	151	532	541	203	292	78	33	14	25
6	1,020	129	496	119	345	482	215	266	70	29	14	24
7	1,480	129	720	155	260	341	182	182	83	26	14	23
8	790	214	550	207	140	150	135	60	25	14	14	23
9	447	456	1,100	795	175	191	121	113	54	24	13	22
10	738	1,270	1,020	442	148	171	116	100	55	24	13	22
11	850	730	740	300	128	180	158	87	52	26	12	58
12	564	384	434	498	111	373	128	83	56	53	12	52
13	550	262	296	1,860	100	475	111	80	96	35	26	40
14	408	272	224	1,730	87	610	1,020	68	70	41	50	88
15	254	436	185	932	80	815	765	62	53	78	37	233
16	191	420	156	795	72	546	420	55	47	65	34	399
17	146	254	136	735	84	370	275	52	41	42	25	2,030
18	185	262	117	3,700	1,550	303	303	48	38	34	25	448
19	212	227	102	7,180	1,940	236	266	50	40	32	31	251
20	154	170	92	2,810	600	191	200	83	37	32	53	145
21	488	141	374	1,050	1,020	160	162	72	35	29	35	128
22	120	129	3,460	526	640	140	87	46	26	18	30	189
23	452	126	1,480	366	1,110	165	133	80	53	25	86	500
24	308	191	1,540	320	720	242	169	68	40	23	93	242
25	519	179	1,240	260	444	342	404	72	35	22	55	160
26	293	153	730	224	345	639	260	56	87	21	68	128
27	1,110	133	178	197	1,660	182	53	125	20	20	85	104
28	811	137	308	150	197	705	150	53	93	18	85	87
29	548	596	284	128	165	800	128	47	78	17	56	78
30	1,770	368	221	113	-----	416	140	42	58	16	44	68
31	1,310	-----	194	215	-----	284	-----	41	-----	16	37	-----
TOTAL	18,942	9,295	21,416	26,635	15,697	12,602	7,230	2,883	2,184	993	1,118	5,701
MEAN	611	310	691	859	541	407	241	93.0	72.9	32.0	36.1	190
MAX	1,770	1,270	3,460	7,180	1,940	1,660	1,020	292	269	78	93	2,830
MIN	146	115	92	113	72	138	111	41	35	16	12	22
CFSM	15.4	7.79	17.4	21.6	13.6	10.2	6.06	2.34	1.83	.88	.91	4.77
IN-	17.70	8.69	20.02	24.90	14.87	11.78	6.76	2.69	2.04	.93	1.04	5.33
AC-FT	37,570	18,440	42,480	52,830	31,140	25,000	14,340	5,720	4,340	1,970	2,220	11,510
CAL YR 1967	TOTAL	113,709.6	MEAN 312	MAX 3,460	MIN 5.6	CFSM 7.84	IN 106.28	AC-FT 225,900				
WTR YR 1968	TOTAL	124,608.0	MEAN 341	MAX 7,180	MIN 12	CFSM 8.57	IN 116.55	AC-FT 247,300				

QUILLAYUTE RIVER BASIN

12043100 DICKEY RIVER NEAR LA PUSH, WASH.

LOCATION.--Lat 47°57'53", long 124°32'53", in NEKNEK sec.6, T.28 N., R.14 W., Clallam County, on left bank 1.0 mile upstream from Colby Creek, 5.5 miles northeast of La Push, and at mile 6.0.

DRAINAGE AREA.--86.3 sq mi.

PERIOD OF RECORD.--August 1962 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 565 cfs (88.91 inches per year, 409,300 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (5,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	0230	*9,310	14.79	Feb. 4, 1967	0715	*6,420	12.00	Dec. 3, 1968	-	5,610	b10.86
Nov. 27, 1966	1645	5,940	11.40	Mar. 22, 1967	2400	5,790	11.21	Dec. 23, 1968	2345	5,260	10.43
Dec. 16, 1966	0230	5,090	10.23	Dec. 22, 1967	1015	8,900	14.38	Jan. 4, 1969	-	*6,480	b11.84
Dec. 18, 1966	1515	5,720	11.12	Jan. 19, 1968	-	*17,300	a22.15	Feb. 11, 1969	-	5,430	b10.64
Jan. 2, 1967	2400	5,110	10.26	Feb. 18, 1968	2330	7,390	12.86	Apr. 9, 1970	1100	*7,260	12.70
Jan. 19, 1967	1200	5,820	11.25	Sept. 17, 1968	0700	6,380	11.73				

a From high watermark in well.

b From peak stage indicator.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 24-26, 1966		.98	1969	Aug. 11, 12, 1969	17	1.11
1967	Aug. 29, 30, 31, 1967	8.9	.79	1970	Aug. 23-27, 30, 31, Sept. 1, 2, 1970	12	a1.02
1968	Aug. 12, 13, 1968	20	1.14				

a Occurred Aug. 27, 30, 31, Sept. 1, 2, 1970.

Period of record: Maximum discharge, 17,300 cfs Jan. 19, 1968 (gage height, 22.15 ft, from high watermark in well), from rating curve extended above 4,900 cfs on basis of slope-area measurement of peak flow; minimum, 8.9 cfs Aug. 29, 30, 31, 1967 (gage height, 0.79 ft).

REMARKS.--Records excellent. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	1,700	2,100	814	395	541	350	96	107	110	32	34
2	33	1,800	1,550	1,300	336	515	340	87	93	126	31	32
3	33	1,450	2,000	787	303	470	260	81	90	150	30	31
4	95	2,300	2,700	617	665	387	220	76	86	150	29	29
5	400	1,500	1,800	1,440	1,310	397	210	71	78	123	28	28
6	1,700	850	3,200	3,110	863	607	190	89	70	109	26	26
7	450	850	1,500	2,500	666	1,150	170	118	64	98	26	25
8	300	1,250	1,150	3,340	717	2,750	160	91	60	87	24	23
9	250	900	1,400	1,700	839	2,170	150	76	57	81	24	24
10	180	800	1,070	2,940	589	1,290	200	68	64	77	24	27
11	150	750	783	2,310	1,980	848	400	63	73	83	25	31
12	170	540	671	3,800	1,170	644	280	61	77	75	24	70
13	280	530	520	6,210	698	944	240	58	72	67	35	48
14	750	900	436	3,330	530	1,460	520	61	84	62	46	36
15	630	660	365	1,640	423	1,920	371	367	74	59	35	31
16	400	720	315	1,040	366	1,280	278	394	62	55	31	31
17	500	570	277	762	363	936	236	245	57	52	27	201
18	730	470	322	616	339	1,650	205	175	64	55	24	447
19	590	1,350	775	483	308	1,700	181	143	102	62	22	183
20	540	1,050	2,550	403	383	1,350	187	128	92	54	21	118
21	440	1,050	1,490	356	340	950	176	167	89	48	20	92
22	300	1,350	791	312	290	700	167	197	95	43	20	79
23	240	800	874	416	301	550	158	156	81	40	19	101
24	200	600	901	387	295	470	143	129	72	39	19	96
25	170	500	770	371	385	390	140	114	65	52	19	81
26	160	460	655	350	521	340	136	112	62	59	21	78
27	180	560	1,510	672	702	300	121	119	96	48	170	74
28	400	490	1,450	495	602	270	111	100	279	41	116	67
29	1,750	450	916	661	-----	240	103	89	181	38	64	64
30	1,050	480	915	590	-----	450	100	82	126	36	47	59
31	650	-----	666	487	-----	360	-----	94	-----	35	39	-----
TOTAL	13,754	27,680	36,422	44,239	16,679	28,031	6,503	3,907	2,672	2,224	1,118	2,266
MEAN	444	923	1,175	1,427	596	904	217	126	89.1	71.7	36.1	75.5
MAX	1,750	2,300	3,200	6,210	1,980	2,750	520	394	279	150	170	447
MIN	33	450	277	312	290	240	100	58	57	35	19	23
CFSM	5.14	10.7	13.6	16.5	6.91	10.5	2.51	1.46	1.03	.83	.42	.87
IN	8.93	11.93	15.70	19.07	7.19	12.08	2.90	1.48	1.15	.94	.48	.98
AC-FT	27,280	54,900	72,240	87,750	33,080	55,600	12,900	7,750	5,300	4,410	2,220	4,490

CAL YR	1965	TOTAL	192,997	MEAN	529	MAX	4,840	MIN	14	CFSM	6.13	IN	83.19	AC-FT	382,800
WTR YR	1966	TOTAL	185,495	MEAN	508	MAX	6,210	MIN	19	CFSM	5.89	IN	79.96	AC-FT	367,900

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1 TO DEC. 9.

12043100 DICKEY RIVER NEAR LA PUSH, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	367	4,550	1,440	770	1,660	407	328	140	25	14	20
2	77	309	2,850	1,870	2,220	945	340	283	110	24	14	76
3	68	266	2,340	2,750	4,740	666	290	250	94	22	13	39
4	56	235	1,980	1,530	4,460	513	290	223	84	21	13	25
5	51	248	2,710	1,110	1,800	423	280	199	74	21	13	21
6	68	360	2,980	878	1,420	351	240	180	68	20	14	28
7	202	266	1,900	1,300	842	304	220	174	66	20	15	25
8	537	222	1,220	3,630	648	471	230	183	65	19	16	20
9	235	333	1,040	2,050	554	649	330	188	62	20	14	20
10	163	345	1,900	1,570	527	608	280	167	57	19	13	235
11	134	260	1,990	1,620	689	567	220	164	55	19	13	217
12	195	427	2,610	1,540	2,030	439	340	159	54	18	12	87
13	232	513	3,410	1,340	1,940	367	490	141	51	17	12	53
14	158	1,730	1,710	1,180	1,200	332	540	132	47	17	11	39
15	131	1,220	2,790	2,970	1,510	363	390	150	44	16	11	32
16	125	926	3,440	1,690	1,230	738	560	140	42	16	11	27
17	139	632	3,130	1,070	1,500	792	540	120	39	16	11	25
18	131	564	4,760	810	1,580	824	420	110	37	16	11	23
19	2,090	549	3,400	3,620	955	689	460	101	35	25	10	21
20	2,170	680	1,960	2,280	693	797	360	95	33	31	11	20
21	1,420	912	1,240	2,170	554	801	304	92	34	30	13	20
22	1,710	677	864	1,930	455	3,080	300	86	36	24	13	20
23	2,230	503	770	2,100	383	4,220	265	86	36	20	12	19
24	1,400	453	1,600	1,440	328	2,090	235	92	33	18	11	18
25	1,030	2,240	1,140	950	367	1,300	241	84	30	17	11	18
26	1,100	1,160	747	1,510	304	1,080	250	72	30	17	10	17
27	808	3,850	581	2,320	479	873	226	68	32	17	9.6	17
28	551	4,470	585	2,860	3,470	1,120	796	82	31	16	9.6	16
29	774	2,090	1,320	2,170	-----	814	684	270	29	16	9.6	34
30	644	2,700	765	1,330	-----	634	423	220	27	16	9.6	303
31	455	-----	990	882	-----	504	-----	160	-----	15	9.6	-----
TOTAL	19,140	29,507	63,272	55,910	37,398	29,014	10,951	4,799	1,575	608	370.0	1,535
MEAN	617	984	2,041	1,804	1,336	936	365	155	52.5	19.6	11.9	51.2
MAX	2,230	4,470	4,760	3,630	4,740	4,220	796	328	140	31	16	303
MIN	51	222	581	810	304	304	220	68	27	15	9.6	16
CFSM	7.15	11.4	23.7	20.9	15.5	10.8	4.23	1.40	0.61	0.23	0.14	0.59
IN.	8.25	12.72	27.27	24.10	16.12	12.51	4.72	2.07	0.68	0.26	0.16	0.66
AC-FT	37,960	58,530	125,500	110,900	74,180	57,550	21,720	9,520	3,120	1,210	734	3,040

CAL YR 1966 TOTAL 219,558.0 MEAN 692 MAX 6,210 MIN 19 CFSM 6.98 IN 94.64 AC-FT 435,500
WTR YR 1967 TOTAL 254,079.0 MEAN 696 MAX 4,760 MIN 9.6 CFSM 8.06 IN 109.52 AC-FT 504,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,840	1,430	775	474	645	380	524	294	237	120	31	102
2	1,730	873	2,740	396	2,410	408	428	255	548	103	30	122
3	753	625	3,430	328	2,620	358	328	232	336	91	28	87
4	657	475	1,840	324	2,520	588	428	267	231	83	27	77
5	1,120	378	1,430	345	1,290	1,220	432	584	186	77	27	69
6	2,250	311	1,100	281	850	1,110	456	520	160	71	26	63
7	3,330	300	1,470	348	620	790	396	380	145	65	25	59
8	2,030	452	1,190	507	490	1,080	308	300	135	54	23	54
9	1,200	990	2,390	1,690	412	456	270	261	125	55	23	51
10	1,500	2,650	2,100	1,010	344	412	255	231	120	53	22	50
11	1,900	1,640	1,650	725	294	412	320	207	110	63	21	137
12	1,300	901	949	1,100	284	800	270	192	123	133	20	130
13	1,250	640	676	4,010	237	1,370	243	180	231	89	43	96
14	960	642	520	3,870	213	1,310	1,970	163	173	101	121	204
15	590	1,100	423	2,240	192	1,880	1,590	148	135	213	93	496
16	460	1,030	357	1,830	178	1,240	905	135	115	189	82	709
17	340	644	305	1,690	192	825	604	125	103	120	62	4,040
18	410	633	264	6,650	2,720	665	1,680	115	95	95	58	1,200
19	470	560	231	13,500	3,980	532	592	120	95	83	75	708
20	363	428	203	6,300	1,460	432	448	186	87	81	151	500
21	1,060	351	676	2,500	2,300	364	372	165	79	73	93	386
22	1,530	115	6,480	1,500	312	1,120	312	101	110	76	67	452
23	995	293	3,240	1,020	2,380	2,380	294	120	125	60	178	1,210
24	698	399	3,480	820	1,660	552	360	168	95	55	224	609
25	1,110	381	2,870	645	1,070	785	875	178	79	50	140	438
26	667	299	1,810	552	825	1,360	580	143	165	47	166	347
27	2,420	258	1,240	444	604	3,310	420	128	264	44	221	288
28	1,800	277	956	372	484	1,560	344	178	215	42	230	251
29	1,220	704	316	404	1,720	291	115	180	38	155	219	193
30	3,910	743	550	282	-----	980	312	108	143	35	122	193
31	2,930	-----	470	436	-----	680	-----	101	-----	33	102	-----
TOTAL	42,793	21,268	46,321	56,511	33,254	27,749	15,635	6,524	4,934	2,489	2,695	13,328
MEAN	1,380	709	1,494	1,823	1,147	895	521	210	164	80.3	86.9	444
MAX	3,910	2,650	6,480	13,500	3,980	3,310	1,970	584	548	213	230	4,040
MIN	340	258	203	281	178	312	243	101	79	33	20	50
CFSM	16.0	8.22	17.3	21.1	13.3	10.4	6.04	2.43	1.90	0.93	1.01	5.14
IN.	18.45	9.17	19.97	24.36	14.33	11.96	6.74	2.81	2.13	1.07	1.16	5.75
AC-FT	84,880	42,190	91,880	112,100	65,980	55,040	31,010	12,940	9,790	4,940	5,350	26,440

CAL YR 1967 TOTAL 252,542.0 MEAN 692 MAX 6,480 MIN 9.6 CFSM 8.02 IN 108.86 AC-FT 500,900
WTR YR 1968 TOTAL 273,507.0 MEAN 747 MAX 13,500 MIN 20 CFSM 8.66 IN 117.90 AC-FT 542,500

NOTE.--NO GAGE-HEIGHT RECORD JAN.-19.21.

QUILLAYUTE RIVER BASIN

12043100 DICKEY RIVER NEAR LA PUSH, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	786	1,500	1,000	200	270	2,220	247	308	72	21	32
2	158	683	1,200	1,300	284	350	2,070	229	241	65	20	33
3	146	608	4,500	2,500	820	430	1,060	220	203	64	20	34
4	463	480	2,500	5,000	1,730	400	1,030	198	175	69	22	32
5	444	443	1,500	3,000	1,100	1,300	910	177	150	62	22	28
6	1,230	385	1,000	2,000	650	800	690	162	135	56	21	24
7	608	370	900	2,200	450	512	508	150	126	52	20	23
8	419	1,230	1,300	1,400	2,500	404	412	135	113	49	20	22
9	441	811	2,200	1,700	1,600	332	348	124	102	46	19	21
10	645	595	1,800	1,200	1,500	280	308	117	92	71	18	20
11	814	589	1,100	1,000	4,500	247	265	111	89	133	17	19
12	1,000	728	710	800	1,500	220	247	102	83	100	18	21
13	1,790	643	620	700	1,000	200	436	94	77	72	20	36
14	1,350	523	1,270	600	750	190	336	89	74	61	20	35
15	925	549	1,390	540	750	1,920	259	81	67	53	23	29
16	465	456	1,140	490	900	1,280	229	77	62	49	22	30
17	1,010	400	909	436	800	2,300	304	72	58	43	20	271
18	879	1,290	1,270	372	660	1,320	695	67	53	41	20	448
19	705	951	804	332	540	910	1,980	62	50	39	22	572
20	730	2,490	599	292	450	645	1,080	59	47	36	37	815
21	597	1,720	524	259	400	496	1,040	55	47	35	50	540
22	851	1,570	660	226	370	568	905	52	52	33	34	1,240
23	1,010	1,220	2,900	226	350	592	670	49	87	32	26	2,580
24	2,850	885	3,780	200	320	412	560	47	119	30	22	1,220
25	1,330	750	1,650	190	310	336	492	50	100	28	32	1,100
26	895	800	1,110	180	290	284	396	85	89	27	41	680
27	634	1,100	843	170	270	250	332	187	81	26	111	476
28	889	900	650	170	260	223	300	217	106	26	113	372
29	3,380	2,100	500	160	-----	203	284	1,440	111	24	65	296
30	2,110	1,800	400	150	-----	212	268	965	89	23	46	460
31	1,170	-----	700	180	-----	552	-----	448	-----	22	37	-----
TOTAL	30,311	27,855	41,959	28,973	25,254	18,438	20,634	6,168	3,186	1,539	999	11,509
MEAN	978	929	1,354	935	902	595	688	199	106	49.6	32.2	384
MAX	3,380	2,490	4,500	5,000	4,500	2,300	2,220	1,440	308	133	113	2,580
MIN	146	370	430	150	200	190	47	22	47	22	17	19
CFSM	11.3	10.8	15.7	10.8	10.5	6.89	7.87	2.31	1.23	.57	.37	4.45
IN.	13.07	12.01	18.09	12.49	10.89	7.95	6.89	2.66	1.37	.66	.43	4.96
AC-FT	60,120	55,250	83,230	57,470	50,090	36,570	40,930	12,230	6,320	3,050	1,980	22,830

CAL YR 1968 TOTAL 263,250 MEAN 719 MAX 13,500 MIN 20 CFSM 8.33 IN 113.48 AC-FT 522,200
WTR YR 1969 TOTAL 216,825 MEAN 594 MAX 5,000 MIN 17 CFSM 6.88 IN 93.46 AC-FT 430,100

NOTE.--NO GAGE-HEIGHT RECORD DEC. 28 TO JAN. 16, FEB. 6 TO MAR. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,010	274	185	299	1,500	158	192	288	73	23	43	12
2	915	247	172	265	970	147	200	251	66	22	36	12
3	504	268	304	261	1,090	138	167	223	61	22	32	44
4	372	1,160	630	236	770	129	908	203	59	22	29	49
5	292	1,590	356	211	605	121	2,910	192	57	22	26	53
6	244	1,920	274	195	565	395	3,510	173	53	22	25	253
7	217	1,190	235	182	536	771	1,440	157	49	21	24	394
8	444	790	312	196	449	356	1,260	226	46	21	23	163
9	830	568	396	484	374	263	4,510	409	53	20	21	109
10	635	460	344	341	319	223	1,840	338	74	19	20	84
11	404	384	683	308	275	208	1,090	245	56	19	19	69
12	312	328	1,170	482	247	320	772	233	49	18	17	57
13	256	280	1,320	688	325	695	580	236	45	17	17	47
14	220	250	1,700	1,410	307	1,030	459	193	45	17	17	41
15	192	247	1,380	675	715	1,050	356	172	43	17	15	38
16	172	388	851	488	1,600	1,400	311	159	41	16	15	36
17	157	316	906	425	1,150	814	244	171	37	16	14	149
18	142	262	746	1,430	1,260	554	313	149	36	15	14	520
19	133	232	587	3,120	756	433	505	134	34	15	13	395
20	185	340	641	1,660	553	355	442	126	30	14	13	311
21	372	484	1,510	2,360	447	300	393	116	27	14	13	212
22	241	380	2,930	1,540	369	259	275	125	27	14	13	1,090
23	241	780	2,400	1,420	313	674	340	128	26	14	13	620
24	564	620	1,400	1,150	269	744	836	111	27	14	12	331
25	532	436	946	1,360	237	439	758	100	27	23	12	238
26	388	356	802	1,110	212	352	464	93	29	79	12	192
27	1,090	296	633	1,370	192	290	468	87	29	83	12	162
28	640	256	515	999	173	259	374	83	27	46	13	139
29	488	226	459	718	-----	228	367	87	25	49	13	120
30	396	203	395	548	-----	202	354	94	24	87	12	106
31	328	-----	346	1,580	-----	182	-----	81	-----	59	12	-----
TOTAL	12,916	15,531	25,528	27,621	16,778	13,489	26,820	5,383	1,275	860	570	6,046
MEAN	417	518	823	891	599	435	894	174	42.5	27.7	18.4	202
MAX	1,090	1,920	2,930	3,120	1,600	1,400	4,510	409	74	87	43	1,090
MIN	133	203	172	182	173	121	167	81	24	14	12	12
CFSM	4.83	6.00	9.54	10.3	6.96	5.04	10.4	2.02	.49	.32	.21	2.34
IN.	5.57	6.69	11.00	11.91	7.23	5.81	11.56	2.32	.55	.37	.25	2.61
AC-FT	25,620	30,810	50,630	54,790	33,280	26,760	53,200	10,680	2,530	1,710	1,130	11,990

CAL YR 1969 TOTAL 170,675 MEAN 468 MAX 5,000 MIN 17 CFSM 5.42 IN 73.57 AC-FT 336,500
WTR YR 1970 TOTAL 152,817 MEAN 419 MAX 4,510 MIN 12 CFSM 4.86 IN 65.87 AC-FT 303,100

12045300 HOKO RIVER NEAR SEKIU, WASH.

LOCATION.--Lat 48°14'30", long 124°22'57", in NE&SW¼ sec.28, T.32 N., R.13 W., Clallam County, on right bank (corrected) 2.2 miles (revised) upstream from Little Hoko River and 4.0 miles southwest of Sekiu.

DRAINAGE AREA.--51.2 sq mi.

PERIOD OF RECORD.--July 1962 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 384 cfs (101.85 inches per year, 278,200 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (3,500 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 8, 1966	0515	4,390	7.70	Feb. 4, 1967	0630	*4,820	8.04	Feb. 18, 1968	2300	4,580	8.04
Jan. 13, 1966	0245	*7,060	9.64	Mar. 23, 1967	0115	4,730	7.97	Sept. 17, 1968	0645	5,120	8.48
Nov. 28, 1966	1030	3,720	7.14	Nov. 10, 1967	1400	4,130	7.48	Dec. 3, 1968	-	4,640	a8.09
Dec. 12, 1966	2145	4,020	7.39	Dec. 22, 1967	1100	5,460	8.53	Dec. 23, 1968	2130	3,800	7.36
Dec. 18, 1966	1330	4,090	7.45	Jan. 14, 1968	0930	4,050	7.59	Jan. 4, 1969	1845	*5,860	9.04
Jan. 2, 1967	2315	3,890	7.28	Jan. 19, 1968	0815	*11,500	12.71	Feb. 11, 1969	0615	4,330	7.83
Jan. 19, 1967	1115	4,260	7.59	Feb. 2, 1968	1630	3,690	7.26	Apr. 9, 1970	1115	*4,710	8.15

a From peak stage indicator.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 4, 1965	19	1.26	1969	Aug. 24, Sept. 9-12, 1969	20	a1.07
1967	Aug. 30, 1967	12	1.06	1970	Aug. 29-31, Sept. 1, 2, 1970	17	b1.03
1968	Aug. 12, 13, 1968	22	1.17				

a Occurred Sept. 10-12, 1969.

b Occurred Aug. 31, 1970.

Period of record: Maximum discharge, 11,500 cfs Jan. 19, 1968 (gage height, 12.71 ft), from rating curve extended above 2,100 cfs on basis of slope-area measurement at gage height 12.49 ft; minimum, 12 cfs Aug. 30, 1967; minimum gage height, 1.03 ft Aug. 31, 1970.

REMARKS.--Records excellent. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	761	991	416	326	281	272	87	86	90	35	33
2	19	930	855	638	278	275	254	82	80	105	34	33
3	19	873	1,390	490	251	251	220	76	80	115	33	31
4	75	1,470	1,820	368	445	230	198	74	76	115	32	29
5	241	1,050	1,110	275	776	269	180	69	66	105	32	28
6	1,090	623	1,890	2,920	570	490	166	96	62	100	30	27
7	335	509	1,200	2,280	450	842	156	99	58	90	30	26
8	259	576	842	2,860	515	1,760	146	77	55	82	29	26
9	211	478	806	1,300	590	1,480	142	69	53	77	29	25
10	152	454	610	1,840	445	927	222	64	58	74	30	28
11	121	433	505	1,720	1,160	615	284	60	64	78	31	44
12	135	348	416	2,500	818	470	225	62	70	68	28	62
13	160	335	348	5,360	930	595	212	58	66	62	50	44
14	385	481	299	2,500	396	890	340	64	74	59	44	36
15	354	432	263	1,200	316	1,330	284	178	64	56	36	34
16	246	475	232	758	278	1,020	240	208	56	53	34	34
17	256	409	212	955	278	740	212	156	53	53	31	114
18	364	346	225	435	257	1,140	186	124	62	54	29	205
19	333	982	368	352	238	1,150	168	106	80	62	28	110
20	332	790	1,360	302	266	830	164	99	74	52	26	80
21	290	787	969	269	240	600	152	126	68	46	25	64
22	225	946	570	240	220	480	146	128	68	44	25	55
23	183	611	555	287	215	400	138	108	64	42	25	69
24	155	464	490	254	200	356	128	97	60	43	24	63
25	134	377	412	269	228	316	124	89	55	56	24	58
26	119	376	352	263	269	287	120	87	52	54	26	56
27	114	402	510	416	322	254	108	85	70	44	26	53
28	359	362	615	356	305	228	103	76	180	41	50	50
29	612	337	480	460	-----	205	96	72	140	38	47	48
30	531	329	430	440	-----	326	94	68	110	37	41	45
31	345	-----	348	392	-----	269	-----	78	-----	36	36	-----
TOTAL	7,994	17,746	21,433	32,675	11,182	19,306	5,482	2,924	2,224	2,031	1,078	1,630
MEAN	258	592	691	1,054	399	623	183	94.3	74.1	65.5	34.8	54.3
MAX	1,090	1,470	1,890	5,360	1,160	1,760	340	208	180	115	94	205
MIN	19	329	212	240	200	205	94	58	52	36	24	25
CFSM	5.04	11.6	13.5	20.6	7.79	12.2	3.57	1.84	1.45	1.28	.68	1.06
IN.	5.81	12.89	15.57	23.74	8.12	14.03	3.98	2.12	1.62	1.48	.78	1.18
AC-FT	15,860	35,200	42,510	64,810	22,180	38,290	10,870	5,800	4,410	4,030	2,140	3,230
CAL YR 1965	TOTAL 126,954	MEAN 348	MAX 2,980	MIN 16	CFSM 6.80	IN 92.24	AC-FT 251,800					
WTR YR 1966	TOTAL 125,705	MEAN 344	MAX 5,360	MIN 19	CFSM 6.72	IN 91.33	AC-FT 249,300					

NOTE.--NO GAGE-HEIGHT RECORD MAY 28 TO JULY 6.

HOKO RIVER BASIN

12043300 HOKO RIVER NEAR SEKIU, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	245	2,470	857	574	1,150	300	228	105	28	16	17
2	59	213	1,620	1,350	1,500	674	263	202	96	27	16	39
3	47	186	1,380	1,970	3,910	472	235	182	85	26	16	24
4	43	167	1,220	1,130	3,120	367	225	165	76	25	16	17
5	41	174	1,670	784	1,260	302	209	152	69	24	16	17
6	66	211	1,910	601	802	260	184	141	65	24	16	28
7	134	165	1,320	791	574	230	167	138	63	24	18	22
8	260	148	846	2,400	444	362	169	145	61	24	18	17
9	148	204	683	1,540	386	384	222	139	59	24	16	17
10	114	197	1,590	1,070	346	345	185	129	56	23	15	106
11	96	169	1,790	1,030	407	316	162	137	55	22	15	119
12	118	263	2,290	1,040	1,350	279	214	129	54	21	15	54
13	122	394	2,790	976	1,510	251	270	116	50	21	14	37
14	96	1,000	1,380	941	894	233	295	113	48	20	14	29
15	84	829	1,720	1,990	877	256	263	129	46	20	14	24
16	84	649	2,320	1,320	867	625	309	113	44	20	14	22
17	89	468	1,970	822	1,160	598	292	104	42	19	13	21
18	90	409	3,150	606	1,170	577	256	97	40	20	13	19
19	990	388	2,120	2,420	762	471	278	90	38	26	13	19
20	1,220	458	1,340	1,880	546	550	236	85	38	30	14	18
21	860	519	876	1,550	423	604	215	80	40	27	17	18
22	976	423	623	1,210	343	1,850	208	76	41	22	16	19
23	1,460	344	529	1,180	292	3,290	185	74	38	20	14	17
24	948	305	915	901	257	1,600	167	77	36	19	14	17
25	638	1,150	746	669	266	967	164	72	33	19	13	16
26	590	735	542	997	224	768	160	65	33	19	13	16
27	460	1,880	424	1,530	298	597	151	61	36	19	13	16
28	340	2,630	420	2,020	1,990	608	318	72	34	18	13	16
29	435	1,390	811	1,650	-----	523	322	164	32	18	13	29
30	368	1,690	553	1,050	-----	432	263	165	30	17	13	164
31	290	-----	651	705	-----	354	-----	126	-----	17	13	-----
TOTAL	11,311	18,003	42,669	38,980	26,552	20,295	6,887	3,766	1,543	683	454	994
MEAN	365	600	1,376	1,257	948	655	230	121	51.4	22.0	14.6	33.1
MAX	1,460	2,630	3,150	2,420	3,910	3,290	322	228	105	30	18	164
MIN	41	148	420	601	224	230	151	61	30	17	13	16
CFSM	7.13	11.7	26.9	24.6	18.5	12.8	4.49	2.36	1.00	.43	.29	.65
IN.	8.22	13.08	31.00	28.32	19.29	14.75	5.00	2.74	1.12	.50	.33	.72
AC-FT	22,440	35,710	84,630	77,320	52,670	40,260	13,660	7,470	3,060	1,350	901	1,970
CAL YR 1966	TOTAL 150,515											
WTR YR 1967	TOTAL 172,137											
			MEAN 412	MAX 5,360	MIN 24	CFSM 8.05	IN 109.36	AC-FT 298,500				
			MEAN 472	MAX 3,910	MIN 13	CFSM 9.22	IN 125.07	AC-FT 341,400				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	749	1,080	458	337	362	261	375	179	102	81	32	67
2	1,020	655	1,490	267	2,040	250	305	161	232	72	31	62
3	490	458	1,980	253	2,790	213	256	167	161	66	30	56
4	417	347	1,320	253	1,990	327	261	181	123	61	29	52
5	503	284	1,040	245	938	580	250	299	105	59	29	48
6	1,240	242	766	217	605	650	259	281	94	54	29	46
7	2,100	232	793	275	438	466	227	232	88	51	27	43
8	1,320	299	324	369	292	362	199	189	161	66	30	56
9	771	525	1,700	1,160	290	296	181	179	78	47	25	40
10	863	2,160	1,820	788	248	270	173	159	75	46	23	42
11	1,210	1,280	1,310	525	217	264	194	145	72	49	23	97
12	938	700	744	700	196	410	167	136	79	76	23	74
13	834	478	509	3,110	177	725	159	127	109	55	32	59
14	645	463	384	2,970	163	695	1,120	116	95	70	83	147
15	436	790	313	1,570	149	1,060	1,030	107	76	137	52	290
16	330	712	270	1,260	137	806	620	99	70	118	48	490
17	265	486	237	1,200	147	560	422	92	66	86	41	2,910
18	294	476	213	3,880	1,570	442	400	86	62	75	42	830
19	300	385	187	8,490	2,440	356	346	88	65	67	59	430
20	246	312	169	3,730	956	296	284	103	59	67	53	400
21	502	268	426	1,730	1,090	253	245	94	55	61	46	300
22	244	247	3,840	944	908	255	215	98	62	53	27	350
23	776	225	1,930	645	1,610	243	199	100	62	53	91	900
24	569	264	2,390	515	1,290	314	220	91	54	49	107	500
25	739	235	1,750	414	776	486	426	89	51	46	85	350
26	508	206	1,110	362	555	800	327	79	121	44	102	280
27	1,730	190	774	296	410	2,080	261	76	143	42	127	230
28	1,420	199	610	259	333	1,160	225	75	134	39	118	200
29	955	517	466	227	281	1,180	199	69	112	37	92	180
30	2,880	395	382	208	-----	720	199	65	92	35	78	150
31	2,090	-----	340	259	-----	495	-----	63	-----	33	67	-----
TOTAL	28,127	15,101	30,392	37,433	22,955	17,245	9,744	4,016	2,807	1,880	1,696	9,664
MEAN	907	503	980	1,208	792	556	325	130	93.6	60.6	54.7	322
MAX	2,880	2,160	3,840	8,490	2,440	2,080	1,120	299	232	137	127	2,910
MIN	244	190	169	208	137	213	159	63	51	33	23	40
CFSM	17.7	9.82	19.1	23.6	15.5	10.9	6.35	2.54	1.83	1.18	1.07	6.29
IN.	20.44	10.97	22.08	27.20	16.68	12.53	7.08	2.92	2.04	1.37	1.23	7.02
AC-FT	55,790	29,950	60,280	74,250	45,930	34,210	19,330	7,970	5,570	3,730	3,360	19,170
CAL YR 1967	TOTAL 173,774											
WTR YR 1968	TOTAL 181,060											
			MEAN 476	MAX 8,490	MIN 13	CFSM 9.30	IN 126.26	AC-FT 344,700				
			MEAN 495	MAX 8,490	MIN 23	CFSM 9.67	IN 131.55	AC-FT 359,100				

12043300 HOKO RIVER NEAR SEKIU, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	500	1,100	639	143	217	1,420	210	179	55	25	27
2	110	450	850	808	178	277	1,340	195	148	51	24	29
3	102	400	3,000	1,430	534	333	724	183	129	52	24	30
4	220	300	1,500	3,660	1,050	309	560	166	114	58	25	26
5	199	280	800	2,020	650	990	483	153	103	50	26	24
6	600	250	700	1,300	420	741	409	142	97	47	26	23
7	346	240	650	1,420	371	472	334	131	92	44	24	22
8	253	700	900	858	1,660	358	287	121	85	43	23	21
9	240	500	1,500	1,060	1,180	297	253	114	78	41	22	20
10	290	400	1,300	800	1,120	256	227	109	73	51	22	20
11	396	400	800	615	3,080	226	204	103	71	83	21	20
12	555	470	508	474	1,230	204	189	97	68	65	22	21
13	926	460	444	409	745	187	247	91	66	53	26	32
14	800	396	811	374	560	179	207	86	63	48	23	28
15	575	375	801	318	570	978	180	82	59	45	23	23
16	414	311	687	294	705	870	167	78	55	42	24	28
17	515	284	584	258	610	1,620	203	74	51	40	21	128
18	466	700	732	229	514	1,090	389	70	48	38	23	191
19	418	615	515	212	434	732	1,180	67	47	36	25	300
20	454	1,330	402	194	374	519	769	65	47	35	30	357
21	610	1,140	334	175	333	403	734	62	47	34	36	241
22	520	1,070	418	161	303	433	590	58	55	33	26	707
23	854	818	2,220	153	283	423	455	55	77	32	22	1,500
24	1,830	595	2,400	143	268	329	392	55	82	30	21	767
25	1,000	446	1,120	133	253	281	340	56	78	30	28	569
26	600	478	706	128	240	250	286	72	68	29	29	383
27	400	670	511	121	224	226	254	112	63	28	74	285
28	600	510	384	121	214	206	241	119	82	28	64	223
29	2,000	1,340	311	118	-----	188	241	515	73	27	42	185
30	1,400	1,090	263	109	-----	192	232	406	63	24	34	276
31	800	-----	352	149	-----	364	-----	236	-----	25	30	-----
TOTAL	18,414	17,518	27,603	18,883	18,246	14,150	13,537	4,083	2,361	1,299	887	6,506
MEAN	594	584	890	609	652	456	451	132	78.7	41.9	28.6	217
MAX	2,000	1,340	3,000	3,660	3,080	1,620	1,420	515	179	83	74	1,500
MIN	102	240	263	109	143	179	167	55	47	25	21	20
CFSM	11.6	11.4	17.4	11.9	12.7	8.91	8.81	2.58	1.54	.82	.56	4.24
IN-	13.38	12.73	20.06	13.72	13.26	10.28	9.84	2.87	1.72	.94	.64	4.73
AC-FT	36,520	34,750	54,750	37,450	36,190	28,070	26,850	8,100	4,680	2,580	1,760	12,900

CAL YR 1968 TOTAL 170,975 MEAN 467 MAX 8,490 MIN 23 CFSM 9.12 IN 124.22 AC-FT 339,100
WTR YR 1969 TOTAL 143,487 MEAN 393 MAX 3,660 MIN 20 CFSM 7.68 IN 104.25 AC-FT 284,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	624	193	139	238	1,060	135	153	230	64	33	47	17
2	526	175	129	215	745	127	147	205	60	34	40	19
3	347	180	175	200	760	120	131	185	59	32	37	48
4	268	656	292	180	588	113	486	169	60	29	34	40
5	218	902	198	167	486	108	1,750	159	55	28	32	43
6	183	1,130	169	155	442	238	2,420	145	52	27	32	161
7	175	735	155	145	407	438	1,030	137	50	27	33	228
8	379	510	175	151	351	253	730	193	49	25	31	110
9	454	386	183	307	307	208	2,820	218	60	25	29	77
10	351	322	173	240	268	180	1,340	203	79	24	27	60
11	271	271	365	340	238	167	795	193	63	23	26	51
12	223	240	750	403	215	243	575	173	54	23	25	44
13	190	213	1,140	509	245	450	442	163	50	22	26	40
14	165	190	1,280	908	228	647	334	149	48	22	24	38
15	147	185	968	550	403	695	298	139	47	21	23	36
16	135	223	642	396	1,030	800	256	132	47	20	22	36
17	126	190	638	340	790	526	228	130	45	20	21	173
18	114	173	588	740	750	389	240	117	42	20	20	319
19	109	161	486	1,710	530	310	414	111	40	20	20	286
20	203	198	462	1,080	407	262	347	105	39	20	20	222
21	286	248	840	1,560	331	225	283	100	37	19	20	157
22	193	215	1,740	1,150	280	200	248	110	36	19	19	750
23	225	375	1,740	1,100	240	458	298	103	35	19	19	470
24	450	365	998	855	215	458	633	92	34	19	19	271
25	316	289	680	896	190	322	588	87	33	27	19	198
26	250	243	579	795	173	271	498	82	32	76	19	155
27	506	213	470	914	159	233	386	79	34	68	18	131
28	375	185	393	755	145	208	316	78	33	45	19	113
29	307	167	340	575	-----	185	292	88	33	73	19	100
30	256	301	454	544	-----	165	262	81	32	99	17	91
31	220	-----	268	926	-----	151	-----	71	-----	61	17	-----
TOTAL	8,592	9,686	17,456	18,954	11,983	9,285	18,740	4,227	1,402	1,020	774	4,484
MEAN	277	323	563	611	428	300	625	136	46.7	32.9	25.0	149
MAX	624	1,130	1,740	1,710	1,060	800	2,820	230	79	99	67	750
MIN	109	153	129	145	145	108	131	71	32	19	17	17
CFSM	5.41	6.31	11.0	11.9	8.36	5.86	12.2	2.66	.91	.64	.49	2.91
IN-	6.24	7.04	12.68	13.77	8.71	6.75	13.62	3.07	1.02	.74	.56	3.26
AC-FT	17,040	19,210	34,620	37,600	23,770	18,420	37,170	8,380	2,780	2,020	1,540	8,890

CAL YR 1969 TOTAL 115,686 MEAN 317 MAX 3,660 MIN 20 CFSM 6.19 IN 84.05 AC-FT 229,500
WTR YR 1970 TOTAL 106,603 MEAN 292 MAX 2,820 MIN 17 CFSM 5.70 IN 77.45 AC-FT 211,400

EAST TWIN RIVER BASIN

12043430 EAST TWIN RIVER NEAR PYSHT, WASH.

LOCATION.--Lat 48°09'49", long 123°56'33", in NW1/4 sec.24, T.31 N., R.10 W., Clallam County, on right bank on downstream side of bridge on State Highway 112, 1,300 ft upstream from mouth and 8.4 miles southeast of Pysht.

DRAINAGE AREA.--14.0 sq mi.

PERIOD OF RECORD.--August 1962 to September 1970.

AVERAGE DISCHARGE.--8 years, 61.9 cfs (60.04 inches per year, 44,850 acre-ft per year).

GAGE.--Water-stage recorder. Altitude of gage is 10 ft (from topographic map). Prior to June 10, 1964, at site 120 ft upstream at same datum.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (550 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 3, 1965	2300	644	4.04	Jan. 19, 1967	1130	*1,060	5.18	Dec. 3, 1968	1330	578	3.76
Jan. 6, 1966	0700	612	3.95	Mar. 23, 1967	0030	763	4.38	Dec. 23, 1968	2000	725	4.24
Jan. 8, 1966	0400	*970	4.95					Jan. 4, 1969	1800	*901	4.76
Jan. 12, 1966	2330	875	4.70	Oct. 27, 1967	1700	*866	4.66	Mar. 17, 1969	0300	554	3.68
Jan. 13, 1966	2000	854	4.64	Jan. 14, 1968	0730	772	4.39				
				Jan. 18, 1968	1900	731	4.27	Apr. 9, 1970	1130	*550	3.50
Dec. 13, 1966	0630	954	4.91	Feb. 3, 1968	2230	581	3.77				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 19-24, 1966	3.5	-	1969	Sept. 10, 11, 1969	2.9	.80
1967	Aug. 14-17, 1967	2.3	a.68	1970	Aug. 31, Sept. 1, 1970	2.8	.73
1968	Aug. 10, 1968	3.6	.79				

a Occurred Aug. 25, 26, 27, 1967.

Period of record: Maximum discharge, 1,220 cfs Nov. 19, 1962 (gage height, 6.62 ft, site then in use), from rating curve extended above 200 cfs on basis of slope-area measurements at gage heights 4.95 and 6.62 ft; minimum, 2.3 cfs Aug. 14-17, 1967; minimum gage height, 0.68 ft Aug. 25, 26, 27, 1967.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	4.0	46	116	79	72	47	95	29	16	11	5.3	4.9		
2	4.0	112	153	110	61	45	88	29	15	16	4.9	4.9		
3	4.0	116	227	78	56	48	73	31	15	17	4.9	4.5		
4	7.4	170	335	65	104	39	63	33	15	16	4.9	4.1		
5	18	175	168	87	196	48	62	36	15	13	4.9	4.1		
6	46	85	288	510	122	94	63	42	15	12	4.9	4.1		
7	14	62	242	353	97	124	63	36	13	11	4.9	3.8		
8	9.4	59	170	590	86	214	62	30	13	10	4.9	3.8		
9	7.3	51	131	225	80	250	57	29	13	9.5	4.9	3.8		
10	6.0	47	118	288	67	169	84	28	14	9.5	4.9	4.1		
11	5.4	44	96	302	206	115	143	25	14	10	4.9	6.3		
12	5.8	39	80	351	147	90	98	25	14	8.3	4.9	5.3		
13	6.0	38	73	707	98	115	82	24	15	7.8	5.3	4.9		
14	18	47	65	550	79	209	111	24	14	7.8	4.9	4.9		
15	30	47	59	255	63	335	95	26	14	7.8	4.9	4.5		
16	14	47	55	175	54	232	77	33	13	7.3	4.5	4.9		
17	10	45	49	133	50	143	64	28	12	7.3	4.1	7.3		
18	20	42	57	106	44	199	57	23	12	7.8	3.8	12		
19	28	127	58	87	43	183	51	22	11	8.3	3.5	7.3		
20	20	118	94	75	40	136	48	22	12	7.3	3.5	5.8		
21	16	127	101	66	40	108	44	26	12	6.8	3.5	5.3		
22	12	232	76	60	40	89	42	25	12	6.8	3.5	5.3		
23	11	112	74	57	56	82	39	22	12	6.8	3.5	5.3		
24	9.4	83	73	51	50	79	38	20	11	6.8	3.8	4.9		
25	8.1	69	65	47	46	80	37	19	12	6.3	3.8	5.3		
26	7.3	62	59	47	47	84	35	20	12	6.3	4.1	6.8		
27	7.3	62	65	70	54	83	33	19	12	5.8	7.3	4.9		
28	9.0	57	68	66	53	82	31	18	11	5.3	5.8	4.5		
29	9.4	55	63	89	-----	89	30	17	10	5.3	5.3	4.5		
30	12	52	59	90	-----	122	30	16	10	5.3	5.8	4.1		
31	9.4	-----	52	84	-----	108	-----	16	-----	5.3	5.3	-----		
TOTAL	388.2	2,424	3,389	5,821	2,153	3,833	1,897	793	389	271.5	145.4	156.2		
MEAN	12.5	80.8	109	188	76.9	124	63.2	25.6	13.0	8.76	4.69	5.21		
MAX	46	232	335	707	206	335	143	42	16	17	7.3	12		
MIN	4.0	38	49	67	40	39	30	16	10	5.3	3.5	3.8		
CFSM	.89	5.77	7.79	13.4	5.49	8.86	4.51	1.83	.99	.63	.34	.37		
IN-	1.03	6.44	9.01	15.47	5.72	10.18	5.04	2.11	1.03	.72	.39	.42		
AC-FT	778	4,810	6,720	11,590	4,270	7,600	3,760	1,570	772	539	288	310		
CAL YR 1965	TOTAL	19,598.5	MEAN	53.7	MAX	524	MIN	3.8	CFSM	3.84	IN	52.08	AC-FT	38,870
WTR YR 1966	TOTAL	21,660.3	MEAN	59.3	MAX	707	MIN	3.5	CFSM	4.24	IN	57.55	AC-FT	42,960

12043430 EAST TWIN RIVER NEAR PYSHT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	4.1	26	348	129	138	183	48	52	20	6.6	3.9	3.6		
2	4.5	22	239	175	142	118	44	49	23	6.6	3.9	4.9		
3	4.1	20	225	285	194	92	42	46	21	5.0	3.9	3.6		
4	3.8	19	248	209	237	76	41	44	19	5.0	3.9	3.3		
5	3.8	21	302	153	167	65	40	44	18	5.0	3.9	3.6		
6	4.5	26	407	120	127	56	38	45	18	5.0	3.9	5.5		
7	5.3	22	258	111	106	50	36	48	16	5.0	3.9	3.8		
8	8.3	20	159	187	92	62	36	48	14	5.8	3.9	3.3		
9	5.8	21	120	161	84	73	36	45	14	5.0	3.0	3.3		
10	4.9	20	184	147	79	65	34	41	13	5.0	3.0	24		
11	4.9	20	382	149	80	58	33	38	13	5.0	3.8	15		
12	10	44	586	165	238	53	34	37	13	5.0	3.0	7.5		
13	11	68	727	157	292	47	34	36	11	5.0	3.0	5.8		
14	6.8	197	340	140	151	44	34	33	13	3.9	2.3	4.9		
15	5.8	275	320	209	122	57	34	34	11	3.9	2.3	4.4		
16	5.3	207	392	183	105	132	36	38	11	3.9	2.3	4.1		
17	5.8	118	272	138	128	143	37	40	10	3.9	3.0	3.8		
18	5.3	84	239	125	140	138	36	38	10	3.9	3.9	3.8		
19	119	72	250	703	111	106	41	37	8.8	3.9	3.0	3.8		
20	124	70	234	560	90	97	41	40	8.8	6.6	3.0	3.6		
21	67	77	163	348	77	94	40	40	8.8	5.0	3.9	3.6		
22	76	67	129	225	67	260	38	34	8.8	5.0	3.9	3.8		
23	144	56	115	200	60	592	38	29	6.6	5.0	3.4	3.6		
24	76	48	217	147	54	300	36	27	6.6	5.0	3.0	3.3		
25	48	115	165	113	50	165	37	23	6.6	5.0	2.8	3.3		
26	38	89	124	124	44	117	37	21	6.6	3.9	2.8	3.3		
27	32	123	101	243	45	91	38	20	6.6	3.9	2.8	3.3		
28	28	199	92	392	270	78	79	26	6.6	3.9	2.8	3.0		
29	34	181	106	348	-----	69	72	26	6.6	3.9	3.8	8.5		
30	34	344	89	248	-----	61	56	23	6.6	3.9	3.0	11		
31	28	-----	97	167	-----	92	-----	22	-----	3.9	3.3	-----		
TOTAL	952.0	2,671	7,630	6,781	3,490	3,594	1,226	1,124	356.0	146.6	100.7	162.3		
MEAN	30.7	89.0	246	219	125	116	40.9	36.3	11.9	4.73	3.25	5.41		
MAX	144	344	727	703	292	592	78	52	23	6.6	3.9	24		
MIN	3.8	19	89	111	44	33	20	6.6	3.9	2.3	3.0	-----		
CFSM	2.19	6.36	17.6	15.6	8.93	8.29	2.92	2.59	.85	.34	.23	.39		
IN.	2.53	7.10	20.27	18.02	9.27	9.55	3.26	2.99	.95	.39	.27	.43		
AC-FT	1,890	5,300	15,130	13,450	6,920	7,130	2,430	2,230	706	291	200	322		
CAL YR 1966	TOTAL	26,712.1	MEAN	73.2	MAX	727	MIN	3.5	CFSM	5.23	IN	70.98	AC-FT	52,988
WTR YR 1967	TOTAL	28,233.6	MEAN	77.4	MAX	727	MIN	2.3	CFSM	5.53	IN	75.02	AC-FT	56,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	35	98	50	71	53	57	88	32	19	9.5	4.6	7.2		
2	51	66	292	62	249	92	71	29	59	8.8	4.6	6.9		
3	42	49	386	59	322	46	60	28	38	8.5	4.6	5.8		
4	54	39	230	55	339	59	56	31	28	8.5	4.9	4.9		
5	29	32	181	51	162	109	51	41	22	8.2	4.6	4.6		
6	46	29	136	45	118	116	48	41	20	8.2	4.4	4.4		
7	100	28	131	51	95	88	45	37	17	7.9	4.4	4.4		
8	52	38	98	52	80	71	41	33	16	6.9	4.1	4.4		
9	34	65	218	146	71	62	38	31	15	6.3	3.8	4.4		
10	48	238	306	109	62	56	38	29	15	6.6	3.8	4.6		
11	111	164	236	87	57	55	39	28	15	7.9	3.8	9.8		
12	79	93	138	116	53	87	34	26	14	9.5	3.8	7.6		
13	90	66	102	458	49	156	32	23	14	7.2	4.9	6.9		
14	76	68	87	587	45	121	103	22	14	9.5	11	16		
15	49	93	79	330	40	144	121	20	13	9.2	7.2	41		
16	38	95	71	238	38	133	85	19	12	8.8	6.9	34		
17	33	72	65	219	43	105	68	18	12	7.2	6.0	79		
18	35	79	62	467	187	87	60	17	12	6.6	6.3	30		
19	34	71	59	546	267	74	53	17	11	6.6	6.9	22		
20	30	56	56	350	142	64	46	19	10	6.9	6.3	17		
21	58	51	78	235	129	57	41	18	11	6.3	6.8	14		
22	174	46	384	162	114	52	38	17	12	6.0	5.8	14		
23	123	40	325	129	192	48	37	18	11	6.8	7.9	15		
24	114	40	288	111	203	52	34	20	9.8	6.8	9.8	13		
25	134	37	248	92	133	51	38	17	9.2	5.8	7.9	12		
26	88	32	192	79	104	65	37	15	11	5.5	11	11		
27	523	30	146	66	84	410	34	15	12	5.5	9.2	11		
28	332	28	118	58	72	230	33	16	13	5.8	8.2	10		
29	166	51	98	53	64	270	34	14	12	6.0	7.2	9.5		
30	225	44	87	48	-----	154	35	14	10	5.2	6.6	9.5		
31	150	-----	77	91	-----	112	-----	14	-----	4.6	6.3	-----		
TOTAL	3,193	1,930	5,024	5,183	3,963	3,239	1,938	719	407.0	221.5	192.8	441.9		
MEAN	102	64.3	162	167	123	104	51.3	23.2	16.2	7.15	6.22	14.7		
MAX	523	238	386	587	339	410	121	41	59	9.5	11	79		
MIN	29	28	50	45	38	46	32	14	9.2	6.6	3.8	4.4		
CFSM	7.29	4.59	11.6	11.9	8.79	7.43	3.66	1.66	1.16	.51	.44	1.85		
IN.	8.38	5.13	13.35	13.77	9.47	8.61	4.09	1.91	1.29	.59	.51	1.17		
AC-FT	6,250	3,830	9,970	10,280	7,070	6,420	3,050	1,438	966	439	382	877		
CAL YR 1967	TOTAL	27,087.6	MEAN	74.2	MAX	703	MIN	2.3	CFSM	5.30	IN	71.98	AC-FT	53,730
WTR YR 1968	TOTAL	25,692.2	MEAN	70.2	MAX	587	MIN	3.8	CFSM	5.01	IN	68.27	AC-FT	50,960

12043430 EAST TWIN RIVER NEAR PYSHT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	75	160	88	27	48	236	48	25	8.8	4.4	3.3
2	7.9	65	133	129	34	55	250	41	23	8.5	4.1	3.6
3	7.9	55	386	168	62	62	144	39	22	8.2	4.1	3.3
4	11	52	266	569	88	65	121	37	21	8.5	4.1	3.1
5	10	48	170	400	79	199	112	34	19	8.2	4.1	3.3
6	25	45	127	262	60	142	98	35	18	7.9	4.1	3.3
7	23	42	111	282	53	97	85	40	16	7.6	4.1	3.3
8	20	70	156	148	237	79	74	49	15	7.2	4.1	3.3
9	20	64	304	154	196	68	68	55	14	7.2	4.1	3.1
10	35	56	278	129	142	59	64	51	14	7.9	4.1	3.1
11	60	80	189	104	385	55	60	40	14	8.8	4.1	3.1
12	68	140	138	85	194	51	65	46	13	7.6	3.8	3.3
13	72	130	121	74	125	49	85	45	13	7.2	4.1	3.6
14	65	98	160	68	97	49	74	45	13	6.9	4.1	3.6
15	95	90	142	59	84	238	64	39	12	6.6	4.4	3.3
16	59	74	120	55	82	226	58	35	12	6.0	4.1	4.4
17	60	66	107	49	80	482	64	33	11	5.8	3.8	6.9
18	62	71	136	45	74	299	77	33	10	5.5	4.4	8.7
19	88	129	105	44	70	170	135	33	10	5.5	4.4	18
20	104	100	88	41	65	125	125	32	10	5.2	4.4	22
21	74	123	77	38	64	105	109	31	10	5.2	4.4	12
22	85	232	74	34	59	102	92	31	11	5.2	3.8	21
23	70	177	467	32	56	98	84	31	13	5.2	3.6	50
24	97	129	433	31	53	82	76	31	12	5.2	3.3	25
25	75	100	245	30	52	74	68	28	10	5.2	4.9	18
26	60	100	170	30	49	71	59	25	10	4.9	4.1	14
27	44	138	133	29	48	77	55	28	10	4.9	5.2	12
28	50	116	114	28	46	76	55	28	10	4.9	4.9	10
29	95	216	100	28	-----	71	53	42	10	4.6	4.1	9.2
30	170	194	90	27	-----	80	49	50	9.2	4.6	3.8	14
31	100	-----	82	27	-----	162	-----	31	-----	4.4	3.6	-----
TOTAL	1,821.0	3,016	5,382	3,307	2,661	3,616	2,763	1,164	410.2	199.4	128.6	294.8
MEAN	58.7	101	174	107	95.0	117	92.1	37.5	13.7	6.43	4.15	9.83
MAX	170	232	467	569	385	482	250	55	25	8.8	5.2	50
MIN	7.9	42	74	27	48	45	25	9.2	6.4	3.3	3.1	-----
CFSM	4.19	7.21	12.4	7.64	6.79	8.34	6.58	2.68	.98	.44	.30	.70
IN.	4.84	8.01	14.30	8.79	7.07	9.61	7.34	3.09	1.09	.53	.34	.78
AC-FT	3,610	5,980	10,680	6,560	5,280	7,170	5,480	2,310	814	396	255	585

CAL YR 1968 TOTAL 25,804.2 MEAN 70.5 MAX 587 MIN 3.8 CFSM 5.04 IN 48.57 AC-FT 51,180
WTR YR 1969 TOTAL 24,763.0 MEAN 67.8 MAX 569 MIN 3.1 CFSM 4.84 IN 65.80 AC-FT 49,120

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	7.8	23	44	205	33	24	39	13	6.7	3.7	3.0
2	22	7.8	22	40	137	31	22	37	12	7.0	3.7	3.2
3	18	8.6	26	39	165	29	21	34	11	6.4	3.5	5.9
4	14	71	49	37	119	28	44	35	11	6.2	3.7	5.1
5	12	83	35	34	92	26	135	33	11	6.1	3.7	3.7
6	10	131	30	32	80	41	286	30	10	5.8	3.7	5.5
7	11	78	28	40	52	39	95	29	10	5.6	3.8	16
8	23	64	28	30	71	54	90	30	10	5.6	4.0	6.7
9	39	49	27	35	68	45	379	35	11	5.4	3.8	4.8
10	29	40	26	33	62	40	235	34	12	5.2	3.7	4.3
11	21	35	77	39	56	36	139	32	10	5.0	3.5	3.8
12	17	31	210	40	52	39	95	29	10	4.9	3.5	3.7
13	15	28	208	52	50	46	77	28	9.3	4.8	3.5	3.5
14	14	26	331	119	46	68	62	27	9.3	4.7	3.3	3.3
15	12	26	212	78	71	83	52	25	9.3	4.6	3.2	3.3
16	12	28	127	60	179	76	45	24	9.7	4.5	3.2	3.5
17	11	24	113	53	202	64	42	23	8.9	4.5	3.0	11
18	10	22	103	109	182	52	39	22	8.4	4.3	3.2	18
19	10	22	88	242	109	44	43	21	8.4	3.7	3.2	16
20	10	27	74	172	84	42	42	20	8.9	3.7	3.2	10
21	9.7	33	105	198	71	38	37	19	8.4	3.7	3.2	7.8
22	10	31	231	190	59	34	35	21	8.6	3.5	3.0	34
23	9.7	49	310	272	52	37	34	20	8.4	3.5	3.0	26
24	9.7	49	192	162	46	37	68	18	8.4	3.5	3.0	15
25	8.9	40	121	155	43	34	68	17	8.0	3.8	3.2	11
26	8.9	35	92	165	40	32	60	16	8.0	5.1	3.2	8.9
27	8.4	32	76	170	37	30	52	14	7.4	5.6	3.2	8.2
28	8.2	28	65	125	35	28	45	15	7.2	4.3	3.3	7.8
29	8.2	26	58	92	-----	27	44	17	6.9	5.1	3.2	7.1
30	7.8	25	52	76	-----	26	43	15	6.5	4.8	3.0	6.7
31	7.8	-----	46	185	-----	24	-----	14	-----	3.8	3.0	-----
TOTAL	427.5	1,155.2	3,267	3,108	2,488	1,317	2,487	774	282.0	151.4	104.4	266.8
MEAN	13.8	38.5	105	100	88.9	42.5	82.9	25.0	9.40	4.88	3.37	8.89
MAX	39	131	331	272	205	89	379	39	13	7.0	4.0	34
MIN	7.8	7.8	22	30	35	24	21	14	6.5	3.5	3.0	3.0
CFSM	.99	2.75	7.50	7.14	6.35	3.04	5.92	1.79	.67	.35	.24	.64
IN.	1.14	3.07	8.68	8.28	8.61	3.50	6.61	2.06	.75	.40	.28	.71
AC-FT	848	2,290	6,480	6,160	4,930	2,610	4,930	1,540	559	300	207	529

CAL YR 1969 TOTAL 19,393.7 MEAN 53.1 MAX 569 MIN 3.1 CFSM 3.79 IN 51.53 AC-FT 38,470
WTR YR 1970 TOTAL 15,828.3 MEAN 43.4 MAX 379 MIN 3.0 CFSM 3.10 IN 42.06 AC-FT 31,400

12045000 LAKE MILLS AT GLINES CANYON, NEAR PORT ANGELES, WASH.

LOCATION.--Lat 48°00'08", long 123°35'55", in SW 1/4 sec. 17, T.29 N., R.7 W., Clallam County, Olympic National Park, at Glines Canyon Dam on Elwha River, 2 miles upstream from Griff Creek, 4.1 miles south of Elwha, and 11 miles southwest of Port Angeles.

DRAINAGE AREA.--245 sq mi.

PERIOD OF RECORD.--April 1927 to September 1970. Prior to October 1950 monthly change in contents, published in WSP 1316.

GAGE.--Nonrecording gage. Datum of gage is 19.67 ft below mean sea level.

EXTREMES.--Maximums and minimums (contents in acre-feet, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum observed Contents	G.H.	Date	Minimum observed Contents	G.H.
1966	Nov. 2, 1965	39,170	612.2	Oct. 4, 1965	36,320	604.5
1967	May 5-7, 1967	39,040	610.9	Oct. 17, 1966	35,940	603.6
1968	Feb. 6, 1968	39,170	611.2	May 9, 1968	29,350	587.4
1969	Dec. 28, 1968	39,170	611.2	Mar. 15, 1969	34,120	599.2
1970	July 17, 1970	39,170	611.2	Jan. 4, 1970	35,350	602.2

Period of record: Maximum contents observed, 39,940 acre-ft Dec. 22, 1936 (gage height, 613.0 ft); minimum observed since reservoir first filled in May 1927, 24,290 acre-ft Nov. 14, 1929 (gage height, 574.4 ft).

REMARKS.--Reservoir is formed by concrete dam, completed in 1927; storage began Apr. 1, 1927. Total capacity, 37,790 acre-ft at gage height 608 ft (top of gates). Dead storage below gage height 579 ft, 26,000 acre-ft. Figures given herein represent total contents. Water is used for power by Crown Zellerbach Corp.

COOPERATION.--Gage-height record furnished by Crown Zellerbach Corp.

MONTHEND GAGE HEIGHT AND CONTENTS, WATER YEARS OCTOBER 1965 TO SEPTEMBER 1970

DATE	GAGE HEIGHT (FEET)†	CONTENTS (ACRE-Feet)	CHANGE IN CONTENTS (ACRE-Feet)	DATE	GAGE HEIGHT (FEET)†	CONTENTS (ACRE-Feet)	CHANGE IN CONTENTS (ACRE-Feet)
OCT. 31, 1965.....	607.8	37,710	+1,180	OCT. 31, 1968.....	610.1	38,690	+1,400
NOV. 30.....	607.7	37,660	-50	NOV. 30.....	609.1	38,260	-430
DEC. 31.....	606.8	37,290	-370	DEC. 31.....	610.6	38,910	+650
CAL YR 1965.....	-	-	-210	CAL YR 1968.....	-	-	+430
JAN. 31, 1966.....	606.5	37,160	-130	JAN. 31, 1969.....	608.7	38,090	-820
FEB. 28.....	606.0	36,950	-210	FEB. 28.....	600.5	34,660	-3,430
MAR. 31.....	610.3	38,780	+1,830	MAR. 31.....	609.5	38,440	+3,780
APR. 30.....	605.9	36,910	-1,870	APR. 30.....	608.5	38,000	-440
MAY 31.....	610.3	38,780	+1,870	MAY 31.....	609.4	38,390	+390
JUNE 30.....	609.7	38,520	-260	JUNE 30.....	608.8	38,130	-260
JULY 31.....	609.4	38,390	-130	JULY 31.....	609.0	38,220	+90
AUG. 31.....	607.6	37,620	-770	AUG. 31.....	606.6	37,200	-1,020
SEPT.30.....	607.3	37,500	-120	SEPT.30.....	608.6	38,050	+850
WTR YR 1966.....	-	-	+970	WTR YR 1969.....	-	-	+760
OCT. 31.....	608.6	38,050	+550	OCT. 31.....	605.8	36,870	-1,180
NOV. 30.....	608.4	37,960	-90	NOV. 30.....	606.5	37,160	+290
DEC. 31.....	610.2	38,740	+780	DEC. 31.....	607.4	37,540	+380
CAL YR 1966.....	-	-	+1,450	CAL YR 1969.....	-	-	-1,370
JAN. 31, 1967.....	609.8	38,560	-180	JAN. 31, 1970.....	609.7	38,520	+980
FEB. 28.....	609.9	38,610	+50	FEB. 28.....	608.8	38,130	-390
MAR. 31.....	610.8	38,990	+380	MAR. 31.....	607.1	37,410	-720
APR. 30.....	609.7	38,520	-470	APR. 30.....	606.2	37,030	-380
MAY 31.....	608.5	38,000	-520	MAY 31.....	610.0	38,650	+1,620
JUNE 30.....	607.7	37,660	-340	JUNE 30.....	609.1	38,260	+390
JULY 31.....	610.2	38,740	+1,080	JULY 31.....	606.6	37,200	-1,040
AUG. 31.....	609.4	38,390	-350	AUG. 31.....	607.1	37,410	+210
SEPT.30.....	609.4	38,390	0	SEPT.30.....	606.0	36,950	-460
WTR YR 1967.....	-	-	+890	WTR YR 1970.....	-	-	-1,100
OCT. 31.....	605.5	36,740	-1,650	† GAGE HEIGHT AT 2400 HOURS BASED ON TWICE-DAILY STAFF-GAGE READINGS.			
NOV. 30.....	608.6	38,050	+1,310				
DEC. 31.....	609.6	38,480	+430				
CAL YR 1967.....	-	-	-260				
JAN. 31, 1968.....	609.8	38,560	+80				
FEB. 29.....	609.4	38,390	-170				
MAR. 31.....	610.6	38,910	+520				
APR. 30.....	599.0	34,000	-4,910				
MAY 31.....	609.7	38,520	+4,520				
JUNE 30.....	608.0	37,790	-730				
JULY 31.....	610.1	38,690	+900				
AUG. 31.....	606.7	37,240	-1,450				
SEPT.30.....	606.8	37,290	+50				
WTR YR 1968.....	-	-	-1,100				

12045500 ELMHA RIVER AT McDONALD BRIDGE, NEAR PORT ANGELES, WASH.

LOCATION.--Lat 48°03'18", long 123°34'55", in NE1/4 sec. 33, T.30 N., R.7 W., Clallam County, Olympic National Forest, on right bank 300 ft upstream from site of McDonald Bridge (now removed), 0.7 mile upstream from Little River, 8 miles southwest of Port Angeles, and at mile 8.6.

DRAINAGE AREA.--269 sq mi.

PERIOD OF RECORD.--October 1897 to December 1901, October 1918 to September 1970. Published as "at McDonald" 1897-1901.

GAGE.--Water-stage recorder. Datum of gage is 200.00 ft above mean sea level. Oct. 1, 1897, to Dec. 31, 1901, nonrecording gage at McDonald Bridge at different datum. Dec. 9, 1918, to May 1, 1936, water-stage recorder under McDonald bridge at datum 7.4 ft higher.

AVERAGE DISCHARGE.--56 years, 1,500 cfs (75.72 inches per year, 1,087,000 acre-ft per year), adjusted for storage since April 1927.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum			Date	Minimum			Date	Minimum daily		
		Disch.	G.H.	Disch.		Disch.	G.H.	Disch.		Disch.	G.H.	Disch.
1966	Jan. 13, 1966	1,125	11.85	1,125	Oct. 14, 1965	184	8.36	184	Oct. 2, 1965	306		306
1967	Dec. 11, 1966	16,500	18.86	16,500	Oct. 17, 18, 1966	128	8.24	128	Oct. 17, 1966	196		196
1968	Oct. 27, 1967	17,300	19.24	17,300	Sept. 2, 1968	188	8.37	188	Sept. 2, 1968	271		271
1969	Jan. 4, 1969	10,300	16.04	10,300	Aug. 1, 1969	160	8.30	160	Sept. 1, 1969	259		259
1970	Dec. 13, 1969	8,070	14.93	8,070	Oct. 14, 1969	146	8.32	146	Sept. 7, 1970	301		301

a From high watermark in well.

Period of record: Maximum discharge, 41,600 cfs Nov. 18, 1897 (gage height, 14.5 ft, from graph based on gage readings, site and datum then in use), from rating curve extended above 3,300 cfs on basis of two determinations of flow over dam at discharge 26,700 and 30,100 cfs, referred to 1897 datum; minimum daily, 10 cfs Oct. 3, 1938.

REMARKS.--Records excellent. Water is diverted through Glines Canyon powerhouse and returned to river above gage. Flow partly regulated by Little Elms 9 miles upstream (see station 12045000). Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1246: Drainage area. WSP 1286: 1898, 1899(M), 1900-1902, 1919, 1920-31(M), 1932, 1933(M). WSP 1566: 1957(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	417	783	1,470	840	1,120	720	2,020	1,280	1,880	1,910	1,390	570
2	306	1,700	1,800	900	1,060	750	1,950	1,300	1,830	1,910	1,290	606
3	364	2,650	2,700	840	834	680	1,800	1,360	1,720	1,940	1,550	622
4	398	2,650	3,800	780	1,170	666	1,700	1,940	1,650	1,720	1,500	607
5	758	2,490	2,700	660	1,400	664	1,730	2,150	1,540	2,110	1,360	315
6	3,460	1,710	3,750	1,900	1,490	718	1,970	4,190	2,090	1,990	1,250	612
7	1,140	1,970	3,700	2,000	1,330	776	2,330	3,480	2,420	1,890	1,250	833
8	796	1,710	3,800	2,700	1,270	1,030	2,450	3,140	2,710	2,060	1,040	642
9	765	1,400	2,800	1,800	1,180	1,160	2,440	3,310	2,720	2,280	1,170	949
10	659	1,380	2,060	1,700	1,220	1,040	2,450	3,310	2,670	2,080	1,170	589
11	517	1,310	1,660	1,700	1,210	960	2,460	2,870	2,620	1,940	1,170	707
12	515	1,160	1,470	3,000	1,140	843	1,960	2,570	2,440	1,930	1,070	615
13	590	1,180	1,340	5,400	974	966	1,850	2,800	2,060	1,940	1,150	571
14	563	1,230	1,380	4,500	943	1,220	1,950	2,110	2,170	2,000	1,170	534
15	969	1,230	1,280	3,000	895	1,530	1,840	2,000	2,730	2,030	998	458
16	733	1,210	1,100	1,700	850	1,400	1,780	1,890	3,610	2,050	999	481
17	622	1,220	1,100	1,900	880	1,370	1,890	1,790	3,680	2,050	779	905
18	797	1,130	1,200	1,700	900	1,460	1,670	1,750	2,700	1,640	683	779
19	825	2,870	1,200	1,650	800	1,420	1,630	1,740	2,680	1,770	781	545
20	1,030	2,240	1,300	1,500	700	1,260	1,780	1,740	2,590	1,758	835	508
21	1,130	1,820	1,400	1,370	740	1,170	1,470	2,160	2,170	1,450	750	470
22	826	1,790	1,200	1,330	820	1,020	1,350	1,990	1,870	1,490	746	379
23	688	1,500	1,200	1,910	720	893	1,340	1,840	2,370	1,700	825	586
24	438	1,310	700	1,150	680	866	1,410	1,800	1,910	1,680	701	563
25	593	1,360	360	1,060	770	865	1,130	2,160	1,960	1,450	731	591
26	563	1,250	700	1,000	800	934	1,480	2,820	1,960	1,420	620	601
27	613	1,200	1,000	1,210	780	1,050	1,450	2,430	2,080	1,460	934	522
28	409	1,140	1,200	1,210	760	1,160	1,310	2,170	2,710	1,540	815	493
29	676	1,130	1,100	1,200	800	1,300	2,090	2,260	1,640	1,020	487	
30	675	1,130	950	1,310	-----	1,850	1,270	2,090	1,910	1,600	793	514
31	630	-----	900	1,250	-----	2,910	-----	2,010	-----	1,450	578	-----
TOTAL	23,637	46,633	51,320	53,830	27,556	34,611	53,160	70,000	69,710	55,850	31,110	16,874
MEAN	762	1,554	1,655	1,734	964	1,116	1,772	2,261	2,324	1,802	1,004	562
MAX	3,460	2,970	3,800	5,400	1,490	2,910	2,460	4,190	3,680	2,280	1,550	833
MIN	306	783	360	760	700	664	1,130	1,280	1,540	1,420	578	315
AC-FT	46,800	92,500	101,800	106,800	54,660	66,650	105,400	139,000	138,300	110,800	61,710	33,470
(+)	+1,880	-50	-370	-130	-210	+1,830	-1,870	+1,870	-260	-130	-770	-120
MEAN#	782	1,554	1,649	1,735	980	1,146	1,739	2,292	2,319	1,800	991	560
CFS#	491	578	613	649	364	426	636	852	862	649	368	268
IN#	3.35	8.44	7.07	7.44	3.80	4.91	7.21	9.82	8.62	7.72	4.25	2.32
AC-FT#	46,060	92,450	101,400	106,700	54,450	70,480	103,500	140,900	138,000	110,700	60,940	33,350

OBSERVED

CAL YR 1965 TOTAL 476,948 MEAN 1,307 MAX 5,570 MIN 282 AC-FT 946,000
WTR YR 1966 TOTAL 524,371 MEAN 1,464 MAX 5,400 MIN 306 AC-FT 1,060,000

ADJUSTED *

CAL YR 1965 MEAN 1,307 CFS# 4.86 IN 65.93 AC-FT 945,900
WTR YR 1966 MEAN 1,466 CFS# 5.45 IN 73.95 AC-FT 1,061,000

† CHANGE IN CONTENTS, IN ACRE-FEET, IN LAKE MILLS.

* ADJUSTED FOR CHANGE IN CONTENTS.

NOTE.--NO GAGE-HEIGHT RECORD DEC. 16 TO JAN. 20.

12045500 ELMHA RIVER AT McDONALD BRIDGE, NEAR PORT ANGELES, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	440	919	6,800	1,960	2,480	1,060	1,140	592	2,220	2,390	1,320	900
2	446	814	5,100	1,720	2,250	1,100	1,070	712	3,230	2,660	1,200	980
3	370	712	3,080	2,750	2,030	1,070	1,190	706	3,420	3,190	1,250	819
4	390	712	3,600	2,070	3,140	1,110	954	912	3,640	2,640	1,250	466
5	451	712	3,000	1,860	2,620	940	877	1,040	3,700	2,920	1,230	473
6	462	682	2,240	1,710	2,120	884	954	1,270	3,150	2,650	1,280	557
7	440	634	2,000	1,610	1,690	1,040	1,000	1,580	3,040	2,230	963	762
8	604	628	1,820	1,740	1,760	933	982	1,810	3,500	2,320	1,030	833
9	457	604	1,720	1,780	1,720	968	919	1,750	3,290	1,890	995	644
10	360	604	2,180	1,890	1,630	926	779	1,480	2,890	1,620	1,080	748
11	462	556	4,400	2,550	1,560	870	772	1,280	2,810	1,940	1,160	944
12	451	622	6,700	2,200	1,720	821	772	1,190	2,830	2,300	1,130	799
13	473	835	14,000	2,000	2,100	814	863	1,150	2,870	2,320	1,110	647
14	385	1,520	6,800	1,800	1,700	842	891	1,260	3,350	2,160	1,110	513
15	415	1,640	6,000	2,350	1,550	1,030	779	1,350	3,240	1,640	1,090	496
16	400	1,700	9,410	2,150	1,280	1,240	884	1,910	3,830	1,820	1,070	495
17	196	1,200	6,770	1,750	1,290	1,310	628	2,680	4,120	2,050	1,100	558
18	227	1,150	6,350	1,700	1,290	1,310	670	2,710	4,440	1,940	1,010	562
19	912	1,620	6,100	5,500	1,310	1,340	688	2,710	4,300	1,590	1,100	511
20	1,070	2,520	5,090	4,800	1,040	1,130	598	3,100	4,440	1,620	987	507
21	989	1,850	3,730	3,400	1,150	849	765	3,870	4,080	1,480	981	569
22	1,070	1,540	3,470	2,500	1,230	1,340	856	3,670	3,620	1,580	832	552
23	3,370	1,450	2,850	2,200	1,270	5,320	765	3,030	3,720	1,500	836	512
24	2,270	1,300	2,600	1,900	1,090	3,040	610	2,370	3,510	1,700	806	460
25	1,270	1,700	2,420	1,730	1,030	2,070	556	2,200	3,630	1,610	795	428
26	1,380	1,540	2,030	1,590	940	1,970	744	2,130	3,710	1,590	702	454
27	1,250	1,550	1,980	2,020	905	1,400	772	2,160	3,240	1,610	527	462
28	1,060	2,700	1,890	4,080	1,030	1,270	772	2,280	3,060	1,440	704	429
29	1,210	2,380	1,930	4,390	-----	1,280	658	2,890	3,330	1,270	631	446
30	1,230	4,400	1,660	3,310	-----	1,260	670	2,400	2,990	1,360	771	433
31	1,030	-----	1,670	2,810	-----	1,150	-----	2,060	-----	1,480	876	-----
TOTAL	25,540	40,794	129,390	75,820	44,925	41,687	24,578	60,252	183,180	60,530	30,926	17,919
MEAN	824	1,360	4,174	2,446	1,604	1,345	819	1,944	3,439	1,953	998	597
MAX	3,370	4,400	14,000	5,500	3,140	5,320	1,190	3,870	4,440	3,190	1,320	980
MIN	196	556	1,660	1,590	905	814	556	592	2,220	1,270	527	428
AC-FT	50,860	80,910	256,000	150,400	89,110	82,690	48,750	119,500	204,700	120,100	61,340	35,540
(+)	+550	-90	+780	-180	+50	+380	-470	-520	-340	+1,080	-350	0
MEAN*	833	1,358	4,186	2,443	1,605	1,351	811	1,935	3,435	1,971	992	597
CFSM*	3.10	5.05	15.6	9.08	5.97	5.02	3.01	7.19	12.8	7.33	3.69	2.22
IN*	3.57	5.63	17.94	10.47	6.21	5.79	3.37	8.29	14.25	8.45	4.25	2.48
AC-FT*	51,210	80,820	257,400	150,200	89,160	83,060	48,280	119,000	204,400	121,200	60,990	35,540

OBSERVED

CAL YR 1966	TOTAL 608,505	MEAN 1,667	MAX 14,000	MIN 196	AC-FT 1,207,000
WTR YR 1967	TOTAL 655,541	MEAN 1,794	MAX 14,000	MIN 196	AC-FT 1,300,000

ADJUSTED *

CAL YR 1966	MEAN 1,669	CFSM 6.20	IN 84.20	AC-FT 1,208,000
WTR YR 1967	MEAN 1,797	CFSM 6.68	IN 90.68	AC-FT 1,301,000

+ CHANGE IN CONTENTS, IN ACRE-Feet, IN LAKE MILLS.

* ADJUSTED FOR CHANGE IN CONTENTS.

NOTE.--NO GAGE-HEIGHT RECORD NOV. 14 TO DEC. 15.

12045500 ELMHA RIVER AT MCDONALD BRIDGE, NEAR PORT ANGELES, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,210	2,740	1,120	2,040	1,830	2,530	1,450	1,530	2,060	1,610	1,090	551
2	2,910	2,040	1,320	1,720	3,100	2,510	1,270	1,630	4,000	1,800	1,090	271
3	1,760	2,360	1,430	1,720	4,460	2,540	1,370	1,360	2,810	2,190	1,040	336
4	2,160	2,020	1,550	1,570	5,250	2,860	1,350	1,500	2,320	2,070	1,050	731
5	1,460	1,870	1,230	1,580	2,460	3,720	1,310	1,410	2,160	2,000	977	770
6	2,960	1,610	1,220	1,400	2,530	2,830	1,060	1,210	2,030	2,030	934	820
7	4,100	1,680	1,060	1,340	2,590	2,550	842	1,220	2,270	1,940	999	836
8	2,400	1,860	1,280	1,370	2,140	1,670	1,040	1,220	2,270	1,850	943	581
9	1,840	2,170	1,290	1,650	2,010	1,930	1,150	1,130	2,240	1,920	821	545
10	2,610	4,190	3,100	1,300	1,930	1,890	1,190	1,190	2,180	1,830	767	508
11	3,400	3,040	2,460	1,360	1,850	1,860	1,020	1,210	1,970	1,820	747	702
12	2,250	2,460	1,840	2,070	1,700	2,300	863	1,160	1,900	2,000	762	658
13	2,980	2,160	1,590	5,000	1,690	1,990	921	1,170	1,660	1,980	789	553
14	2,710	2,610	1,460	11,200	1,590	1,770	842	1,190	1,800	1,530	1,000	655
15	1,860	2,820	1,360	7,460	1,540	2,100	1,100	1,250	1,890	1,540	754	1,670
16	1,650	2,420	1,290	5,440	1,360	2,140	1,020	1,250	1,740	1,400	752	1,140
17	1,440	2,080	1,210	4,270	1,480	1,750	1,040	1,220	1,850	1,210	602	2,050
18	1,460	2,010	1,030	4,790	3,700	1,530	1,140	1,770	1,830	1,250	559	1,340
19	1,440	1,580	1,200	9,400	5,560	1,300	821	1,740	1,560	1,250	568	1,250
20	1,170	1,550	1,270	10,100	3,510	1,310	1,030	2,070	1,730	1,310	408	1,220
21	2,010	1,490	1,250	7,490	3,580	1,470	1,040	2,470	2,060	1,250	757	919
22	2,780	1,450	4,310	5,010	3,030	1,640	978	2,190	2,040	1,110	993	784
23	2,350	1,460	4,580	4,280	4,510	1,200	1,050	1,990	1,850	1,110	1,010	789
24	2,250	1,380	6,170	4,920	5,060	1,380	1,090	1,720	1,930	958	851	757
25	2,360	1,330	7,000	3,530	3,760	1,310	1,060	1,700	2,130	1,140	629	694
26	1,970	1,220	6,260	3,270	2,610	1,170	1,010	1,740	2,690	1,190	795	739
27	9,170	1,340	5,300	2,700	2,490	1,810	1,130	1,670	2,730	1,150	643	651
28	5,850	1,030	3,650	2,700	2,610	1,660	1,180	1,710	2,060	1,160	843	679
29	3,730	916	2,930	2,210	2,500	2,060	1,060	1,720	1,750	1,230	790	530
30	4,890	1,230	2,520	2,100	-----	1,650	1,050	1,740	1,680	1,070	793	501
31	4,670	-----	2,000	2,200	-----	1,490	-----	1,700	-----	1,110	678	-----
TOTAL	86,800	58,116	75,280	117,380	82,450	59,920	32,477	47,780	63,190	46,608	25,434	24,230
MEAN	2,800	1,937	2,428	3,786	2,843	1,933	1,083	1,541	2,106	1,503	820	808
MAX	9,170	4,190	7,000	11,200	5,560	3,720	1,450	2,470	4,000	2,190	2,050	2,050
MIN	1,170	916	1,030	1,300	1,360	1,170	821	1,130	1,560	958	408	271
AC-FT	172,200	115,300	149,300	232,800	163,500	118,900	64,420	94,770	125,300	92,450	50,450	48,060
(†)	-1,650	+1,310	+430	+80	-170	+520	-4,910	+4,520	-730	+900	-1,450	+50
MEAN*	2,775	1,960	2,435	3,788	2,839	1,940	1,000	1,625	2,094	1,518	797	809
CFSM*	10.3	7.29	9.05	14.1	10.6	7.21	3.72	6.00	7.78	5.64	2.96	3.01
IN*	11.89	8.13	10.43	16.23	11.38	8.32	4.15	6.92	8.68	6.51	3.42	3.35
AC-FT*	170,600	116,600	149,700	232,900	163,300	119,300	59,510	99,290	124,600	93,350	49,000	48,110

OBSERVED

CAL YR 1967	TOTAL 680,013	MEAN 1,863	MAX 9,170	MIN 428	CFSM 6.93	IN 94.04	AC-FT 1,349,000
WTR YR 1968	TOTAL 719,669	MEAN 1,966	MAX 11,200	MIN 271	CFSM 7.31	IN 99.52	AC-FT 1,427,000

ADJUSTED *

CAL YR 1967	MEAN 1,863	CFSM 6.93	IN 94.03	AC-FT 1,349,000
WTR YR 1968	MEAN 1,964	CFSM 7.30	IN 99.40	AC-FT 1,426,000

† CHANGE IN CONTENTS, IN ACRE-FEET, IN LAKE MILLS.

* ADJUSTED FOR CHANGE IN CONTENTS.

12045500 ELMHA RIVER AT MCDONALD BRIDGE, NEAR PORT ANGELES, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	438	1,520	1,710	1,520	1,080	824	2,500	1,520	3,200	1,720	815	259
2	479	1,680	1,620	1,510	954	715	2,280	974	4,040	1,760	1,010	459
3	525	1,470	4,520	1,520	933	693	1,870	1,350	4,460	1,970	957	786
4	613	1,280	3,370	5,000	824	694	1,700	1,390	4,920	1,440	811	532
5	708	1,200	2,020	5,190	783	735	1,810	1,320	5,440	1,650	979	472
6	744	952	2,100	3,180	682	759	1,490	1,300	5,180	1,820	955	486
7	824	1,220	2,160	2,740	768	887	1,390	1,330	4,450	1,680	970	486
8	955	1,700	2,470	2,360	841	878	1,440	2,130	3,770	1,590	883	486
9	890	1,750	2,840	2,130	1,100	677	1,540	3,380	4,600	1,680	719	487
10	969	1,230	2,510	1,560	998	623	1,400	4,100	4,630	1,780	859	538
11	984	1,650	2,240	1,500	1,120	678	1,460	3,520	4,560	1,800	730	556
12	937	1,010	1,270	1,500	1,570	676	1,600	3,400	4,570	1,500	707	504
13	873	1,680	2,000	1,450	1,400	671	1,250	3,920	4,020	1,390	788	759
14	814	1,530	2,070	1,370	1,270	704	1,160	3,730	3,900	1,420	741	506
15	969	1,350	1,640	1,390	1,290	918	1,350	3,640	3,790	1,110	1,020	408
16	891	1,340	1,730	1,200	1,230	1,200	1,450	2,900	3,610	1,060	782	484
17	984	1,280	1,750	1,090	1,210	1,380	1,620	2,800	3,520	1,200	669	789
18	972	1,480	1,360	1,190	1,210	1,860	1,560	2,890	3,540	1,080	631	1,230
19	1,210	1,760	1,160	1,030	1,020	1,770	1,690	3,430	3,480	1,310	692	2,060
20	1,160	2,640	1,310	1,130	925	1,410	1,520	3,590	3,160	1,350	628	1,620
21	1,090	2,810	1,210	969	969	1,080	1,190	3,550	2,900	1,280	867	1,480
22	1,190	3,520	1,220	1,070	882	1,460	1,500	3,870	2,760	1,110	635	952
23	1,250	2,780	2,520	919	879	1,320	1,720	4,410	2,520	1,270	723	2,830
24	1,100	2,150	4,560	713	877	1,180	1,750	5,140	2,650	1,260	616	2,060
25	1,460	1,840	2,780	908	880	1,310	1,510	4,340	2,160	1,190	658	1,380
26	1,350	1,610	2,160	754	886	990	1,460	3,730	1,980	1,130	797	997
27	1,190	1,800	1,880	785	787	1,270	1,560	3,520	1,940	1,250	579	1,250
28	1,210	1,470	1,800	864	841	1,390	1,580	3,010	1,590	1,170	754	1,190
29	3,150	3,000	1,570	670	-----	1,240	1,440	3,610	1,800	1,130	605	1,080
30	3,360	2,010	1,290	644	-----	2,060	1,530	4,460	1,770	1,140	686	760
31	1,710	-----	1,440	749	-----	2,990	-----	3,390	-----	874	572	-----
TOTAL	34,999	52,712	64,280	48,625	28,209	35,092	47,320	95,604	104,910	43,114	23,838	27,886
MEAN	1,129	1,757	2,074	1,569	1,007	1,132	1,577	3,084	3,497	1,391	769	930
MAX	3,360	3,520	4,560	5,190	1,570	2,990	2,500	5,140	5,440	1,970	1,020	2,830
MIN	438	952	1,160	644	682	623	1,160	974	1,590	874	572	259
AC-FT	69,420	104,600	127,500	96,450	55,950	69,600	93,860	189,600	208,100	85,520	47,280	55,310
(†)	+1,400	-430	+650	-820	-3,430	+3,780	-440	+390	-260	+90	-1,020	+850
MEAN*	1,152	1,752	2,085	1,555	946	1,193	1,570	3,089	3,493	1,392	752	944
CFSM*	4.28	6.51	7.75	5.78	3.52	4.43	5.84	11.5	13.0	5.17	2.80	3.51
IN*	4.94	7.26	8.94	6.67	3.66	5.11	6.51	13.24	14.48	5.97	3.22	3.91
AC-FT*	70,820	104,200	128,200	95,630	52,520	73,380	93,420	190,000	207,800	85,610	46,260	56,160

OBSERVED

CAL YR 1968	TITAK 651,460	MEAN 1,780	MAX 11,200	MIN 271	AC-FT 1,292,000
WTR YR 1969	TOTAL 606,589	MEAN 1,662	MAX 5,440	MIN 259	AC-FT 1,203,000

ADJUSTED *

CAL YR 1968	MEAN 1,780	CFSM 6.62	IN 90.05	AC-FT 1,292,000
WTR YR 1969	MEAN 1,663	CFSM 6.18	IN 83.92	AC-FT 1,204,000

† CHANGE IN CONTENTS, IN ACRE-FEET, IN LAKE MILLS.

* ADJUSTED FOR CHANGE IN CONTENTS.

12045500 ELMHA RIVER AT McDONALD BRIDGE, NEAR PORT ANGELES, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,470	581	824	1,660	1,910	954	1,010	1,070	1,930	1,420	640	446
2	1,550	544	826	1,050	1,470	977	715	780	2,970	1,360	741	432
3	1,070	544	608	1,210	1,390	1,030	483	1,040	3,280	1,290	741	650
4	1,050	1,360	892	1,180	1,420	896	546	1,250	3,600	1,480	740	612
5	1,070	1,520	809	521	1,370	902	1,130	1,180	2,340	1,610	610	511
6	892	1,940	774	508	1,180	892	2,570	1,120	2,380	1,400	668	625
7	846	1,450	721	503	1,140	1,840	1,020	1,310	2,740	1,460	701	301
8	1,340	1,490	578	653	1,270	1,320	1,240	1,080	2,420	1,470	726	423
9	1,460	1,390	668	679	1,600	1,200	4,830	1,180	2,110	1,430	760	640
10	1,300	1,030	668	871	1,690	1,040	2,960	1,060	2,060	1,370	655	539
11	1,060	1,070	1,020	904	1,650	1,090	2,050	661	1,800	1,300	604	574
12	943	1,180	2,000	871	1,710	1,010	1,920	1,180	1,460	1,210	564	473
13	898	1,220	3,730	835	1,760	1,460	1,550	1,100	1,650	1,170	593	390
14	579	1,120	3,770	1,740	1,650	1,870	1,520	1,140	1,940	1,080	547	390
15	829	1,310	1,970	1,130	1,740	2,070	1,320	1,070	1,880	1,150	529	360
16	803	1,180	1,800	1,170	2,680	1,570	1,330	1,090	1,830	1,040	397	365
17	730	1,160	1,780	1,220	2,430	1,910	1,020	1,450	1,900	1,020	422	746
18	731	1,030	1,970	1,830	2,120	1,350	1,100	1,500	1,870	1,180	684	989
19	721	1,110	2,020	3,100	1,630	870	1,070	1,350	1,800	1,120	637	982
20	629	936	2,020	2,390	1,700	858	977	1,140	2,160	1,110	587	706
21	639	993	1,940	3,490	1,570	1,120	1,020	1,490	2,290	1,080	427	462
22	672	1,070	1,710	3,500	1,460	1,110	928	1,550	2,570	1,030	587	694
23	685	1,110	3,070	4,590	1,480	1,250	868	1,620	2,340	1,040	599	790
24	698	883	1,640	3,240	1,410	1,240	983	1,620	1,370	908	583	700
25	652	1,070	1,320	1,860	1,330	898	902	2,080	1,800	975	589	652
26	591	1,030	1,440	1,750	1,210	797	1,020	2,580	1,960	975	516	610
27	534	1,130	1,360	2,110	1,100	736	1,060	1,870	2,320	1,010	384	544
28	577	831	1,220	1,830	1,160	1,010	1,060	1,640	1,990	850	613	462
29	581	948	1,130	1,580	-----	1,040	1,090	1,640	1,470	840	597	440
30	682	951	1,180	1,290	-----	867	964	1,680	1,200	792	480	451
31	635	-----	1,330	1,860	-----	907	-----	1,620	-----	752	452	-----
TOTAL	26,917	33,181	46,808	51,125	44,230	36,084	40,256	41,941	63,430	35,922	18,373	16,959
MEAN	868	1,106	1,510	1,649	1,580	1,164	1,342	1,353	2,114	1,159	593	565
MAX	1,550	1,940	3,770	4,590	2,680	2,070	4,830	2,580	3,600	1,610	760	989
MIN	534	544	578	503	1,100	736	483	661	1,200	752	384	301
AC-FT	53,390	65,810	92,440	101,400	87,730	71,570	79,850	83,190	125,800	71,250	36,440	33,640
(±)	-1,180	+290	+380	+980	-390	-720	-380	+1,620	-390	-1,060	+210	-460
MEAN*	849	1,121	1,516	1,665	1,573	1,152	1,336	1,379	2,108	1,141	596	558
CFSM*	3.16	4.23	5.64	6.19	5.85	4.28	4.97	5.13	7.84	4.24	2.22	2.07
IN*	3.64	4.61	6.50	7.14	6.09	4.94	5.54	5.91	8.74	4.89	2.55	2.31
AC-FT*	52,210	66,100	93,220	102,400	87,340	70,850	79,470	84,810	125,400	70,190	36,650	33,180

OBSERVED

CAL YR 1969 TOTAL 562,504 MEAN 1,538 MAX 5,440 MIN 259 CFSM 5.72 AC-FT 1,114,000
WTR YR 1970 TOTAL 455,226 MEAN 1,247 MAX 4,830 MIN 301 CFSM 4.64 AC-FT 902,900

ADJUSTED *

CAL YR 1969 MEAN 1,537 CFSM 5.72 IN 77.58 AC-FT 1,113,000
WTR YR 1970 MEAN 1,245 CFSM 4.63 IN 62.86 AC-FT 901,800

† CHANGE IN CONTENTS, IN ACRE-FEET, IN LAKE MILLS.

* ADJUSTED FOR CHANGE IN CONTENTS.

12047300 MORSE CREEK NEAR PORT ANGELES, WASH.

LOCATION.--Lat 48°02'16", long 123°20'57", in SW¼NE¼ sec.5, T.29 N., R.5 W., Clallam County, on right bank at steel footbridge, 1,000 ft downstream from Port Angeles diversion dam, 6.4 miles upstream from mouth, and 6.8 miles southeast of ferry terminal in Port Angeles.

DRAINAGE AREA.--46.6 sq mi.

PERIOD OF RECORD.--July 1966 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 630 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (800 cfs), July 1966 to September 1970

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
July 30, 1966	0100	88	2.49	Dec. 22, 1967	1000	806	4.81	Dec. 3, 1968	1400	*760	4.72
				Jan. 14, 1968	0700	*1,470	5.74				
Dec. 13, 1966	0600	1,560	5.85	Jan. 18, 1968	1945	1,370	5.63	Dec. 13, 1969	1800	842	4.87
Jan. 19, 1967	1300	*1,910	6.19	Feb. 3, 1968	2200	884	4.94	Apr. 9, 1970	1045	*854	4.89

Annual minimum discharge, July 1966 to September 1970

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 27, 1966	15	1.66	1969	Sept. 8, 1969	17	1.56
1967	Oct. 8, 13, 1966	5.0	1.22	1970	Sept. 30, 1970	11	1.37
1968	Sept. 27, 1968	19	1.59				

a Occurred Sept. 22, 1967.

Period of record: Maximum discharge, 1,910 cfs Jan. 19, 1967 (gage height, 6.19 ft); minimum, 5.0 cfs Oct. 8, 13, 1966; minimum gage height, 1.22 ft Sept. 22, 1967.

REMARKS.--Records excellent except those for period of no gage-height record, which are good. Some regulation by city of Port Angeles diversion dam 1,000 ft upstream. Monthly and yearly mean diversions, in cubic feet per second, furnished by city of Port Angeles, are as follows:

WTR YR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1966	-	-	-	-	-	-	-	-	-	-	11.0	6.2	-
1967	6.8	5.2	8.0	5.0	6.0	4.9	4.8	6.0	10.2	11.6	12.4	7.4	8.0
1968	4.8	5.6	5.5	6.4	5.5	5.0	4.5	6.1	7.3	11.8	8.6	5.0	6.0
1969	5.1	5.0	5.4	7.5	5.2	4.7	4.6	7.7	9.7	11.2	10.1	6.4	7.0
1970	4.7	4.7	4.5	4.6	4.6	3.7	5.7	6.0	11.6	13.1	8.9	6.1	6.4

DISCHARGE, IN CUBIC FEET PER SECOND, JULY TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											74	31
2											66	32
3											67	30
4											75	28
5											69	28
6											62	28
7											61	27
8											59	24
9											60	23
10											58	32
11											54	47
12											52	39
13											56	33
14											54	33
15											53	32
16											49	31
17											46	34
18											43	42
19											40	33
20											35	31
21											34	28
22											34	28
23											33	39
24											35	31
25											40	30
26											41	33
27											45	31
28											42	27
29											40	25
30										81	36	25
31										81	35	
TOTAL											1,548	935
MEAN											49.9	31.2
MAX											75	47
MIN											33	23
AC-FT											3,070	1,890
MEAN†											80.9	37.4
AC-FT†											3,740	2,230

† ADJUSTED FOR DIVERSION. AMOUNT OF DIVERSION FURNISHED BY CITY OF PORT ANGELES.

12047300 MORSE CREEK NEAR PORT ANGELES, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	54	466	137	210	105	98	84	245	169	69	34
2	24	51	300	139	183	97	95	89	310	164	65	34
3	22	49	219	250	172	91	93	92	331	169	63	26
4	22	45	197	184	232	87	93	95	325	172	63	28
5	21	49	157	151	204	84	90	106	316	165	63	27
6	21	50	157	136	176	82	86	139	322	149	64	36
7	21	45	141	126	158	78	85	186	313	136	62	32
8	21	41	114	128	147	80	84	206	286	132	57	30
9	20	42	102	128	141	71	84	198	260	126	53	31
10	20	39	160	157	133	73	81	160	242	117	52	48
11	20	38	376	219	128	70	78	141	235	113	53	42
12	22	73	784	176	144	68	78	127	226	114	53	34
13	23	114	1,240	153	167	66	77	120	238	116	52	30
14	23	205	613	139	144	65	73	120	260	113	50	29
15	21	178	474	210	132	65	70	142	272	106	47	26
16	21	146	622	168	121	116	70	200	295	104	45	25
17	20	109	478	142	120	101	67	280	316	104	43	26
18	16	99	410	134	114	93	73	292	319	102	45	25
19	148	114	388	960	106	87	78	295	313	98	45	30
20	114	131	358	600	101	83	76	355	313	102	45	26
21	66	132	295	376	97	78	75	385	301	97	44	20
22	134	104	245	260	93	208	77	367	301	91	43	26
23	162	90	208	194	91	559	80	316	268	89	42	19
24	134	85	188	169	89	334	78	255	245	86	39	22
25	106	95	174	150	86	212	77	212	248	85	36	22
26	88	82	155	142	83	167	74	198	248	85	34	21
27	74	95	142	149	81	145	77	194	226	83	33	20
28	68	121	137	424	119	134	89	214	210	80	30	20
29	69	135	136	435	-----	123	87	238	202	75	28	24
30	61	338	128	358	-----	111	84	218	185	74	31	26
31	58	-----	123	265	-----	106	-----	210	-----	71	31	-----
TOTAL	1,664	2,949	9,687	7,409	3,772	3,839	2,427	6,234	8,171	3,487	1,480	839
MEAN	53.7	96.3	312	239	135	124	80.9	201	272	112	47.7	28.0
MAX	162	338	1,240	960	232	559	98	385	331	172	69	48
MIN	16	38	102	126	81	65	67	84	185	71	28	19
AC-FT	3,300	5,850	19,210	14,700	7,480	7,610	4,810	12,370	16,210	6,920	2,940	1,660
MEAN†	66.1	104	329	244	141	129	85.7	207	262	124	60.1	35.4
AC-FT†	3,720	6,160	19,680	15,000	7,830	7,930	5,100	12,730	16,790	7,600	3,700	2,110

MTR YR 1967 TOTAL 51,958 MEAN 142 MAX 1,240 MIN 16 AC-FT 103,100 MEAN † 150 AC-FT † 108,400

† ADJUSTED FOR DIVERSION. AMOUNT OF DIVERSION FURNISHED BY CITY OF PORT ANGELES.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	165	73	183	152	198	110	97	140	88	38	38
2	202	141	90	160	192	106	92	92	238	90	36	36
3	113	127	130	147	551	180	100	88	194	100	40	33
4	126	114	107	136	602	226	96	94	162	107	42	31
5	89	106	100	127	379	301	91	88	145	110	41	31
6	93	98	92	120	285	252	88	83	142	100	39	31
7	93	92	89	117	245	218	85	79	139	92	36	29
8	83	100	81	111	216	190	83	79	137	88	33	29
9	76	104	109	197	200	171	82	82	137	87	29	29
10	75	202	188	152	188	159	83	92	137	86	28	29
11	111	177	191	132	178	154	85	110	135	90	30	36
12	96	144	134	200	169	164	79	116	128	94	29	33
13	150	132	116	618	162	164	76	106	122	87	27	31
14	133	128	104	1,010	155	150	79	99	114	83	58	51
15	105	132	95	640	145	154	75	94	106	77	46	64
16	89	126	91	466	140	160	72	91	106	72	49	48
17	80	117	86	337	147	160	71	110	107	64	42	62
18	80	113	83	625	293	148	71	131	114	59	43	53
19	70	105	78	1,010	392	137	68	170	131	64	42	47
20	61	100	74	680	298	132	65	216	131	62	51	43
21	86	93	84	518	282	128	64	176	123	58	45	39
22	151	91	599	413	255	124	62	154	122	53	41	39
23	141	87	506	358	344	122	63	143	117	50	43	37
24	124	85	486	370	438	117	61	137	113	48	46	34
25	212	81	650	316	331	114	61	128	114	46	43	34
26	145	80	636	275	265	110	60	122	139	48	56	32
27	349	78	486	230	230	120	62	118	150	47	55	31
28	394	76	382	208	212	118	71	122	123	46	45	29
29	260	75	292	188	196	139	85	122	104	46	41	28
30	216	73	232	171	-----	123	101	117	95	43	37	28
31	183	-----	206	164	-----	116	-----	114	-----	40	36	-----
TOTAL	4,308	3,342	6,630	10,379	7,791	4,943	2,355	3,569	3,965	2,225	1,277	1,115
MEAN	139	111	214	335	269	159	78.5	115	132	71.8	41.2	37.2
MAX	394	202	650	1,010	602	301	110	216	238	110	58	64
MIN	61	73	73	111	140	110	60	79	95	40	28	28
AC-FT	8,540	6,630	13,150	20,500	15,450	9,000	4,670	7,080	7,860	4,420	2,530	2,530
MEAN†	144	117	220	341	274	164	83.0	121	139	83.6	49.8	42.2
AC-FT†	8,840	6,940	13,500	20,990	15,790	10,080	4,940	7,450	8,290	5,140	3,060	2,510

CAL YR 1967 TOTAL 51,938 MEAN 142 MAX 960 MIN 19 AC-FT 103,000 MEAN † 149 AC-FT † 108,100

MTR YR 1968 TOTAL 51,899 MEAN 142 MAX 1,010 MIN 28 AC-FT 102,900 MEAN † 148 AC-FT † 107,900

† ADJUSTED FOR DIVERSION. AMOUNT OF DIVERSION FURNISHED BY CITY OF PORT ANGELES.

12047300 MORSE CREEK NEAR PORT ANGELES, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	92	150	110	64	70	250	114	259	117	50	28
2	28	85	127	120	62	70	237	110	287	128	51	31
3	27	75	435	140	62	71	184	104	315	123	50	31
4	30	67	382	319	60	71	160	100	346	121	50	31
5	30	62	238	462	60	86	147	104	351	113	50	30
6	55	57	176	340	58	91	137	117	330	107	47	28
7	45	50	160	268	56	85	128	140	297	102	47	26
8	40	73	200	210	90	80	119	206	281	99	43	23
9	38	94	352	184	76	75	114	312	297	97	43	24
10	40	78	310	166	84	72	113	358	294	101	42	24
11	39	100	212	145	300	68	111	335	284	102	42	25
12	42	130	164	132	150	65	126	325	269	96	44	26
13	39	101	155	128	102	64	137	319	254	90	41	31
14	40	91	176	122	107	62	128	311	231	83	39	28
15	41	83	155	114	126	110	117	276	215	77	43	26
16	40	75	139	110	118	167	114	252	206	73	41	32
17	44	72	125	103	110	403	120	238	199	71	40	44
18	46	81	117	96	104	295	123	241	196	69	41	49
19	51	77	107	94	99	189	125	263	190	67	40	61
20	54	100	96	88	95	152	114	277	179	68	41	83
21	50	212	92	82	91	135	111	291	166	66	40	47
22	67	326	91	80	89	129	116	323	163	64	36	49
23	54	229	340	77	87	121	182	371	168	63	33	83
24	55	164	502	76	83	113	157	403	157	64	34	63
25	60	133	334	74	80	108	140	341	155	65	38	52
26	56	119	233	72	75	119	131	288	142	62	38	45
27	52	103	184	70	72	147	129	252	135	58	39	44
28	53	101	140	68	71	153	132	223	134	57	37	44
29	103	282	130	66	-----	157	126	271	132	55	36	40
30	166	204	115	66	-----	195	120	311	122	51	34	43
31	111	-----	110	66	-----	288	-----	264	-----	49	32	-----
TOTAL	1,624	3,516	6,247	4,248	2,631	4,011	4,148	7,840	6,754	2,558	1,282	1,191
MEAN	52.4	117	202	137	94.0	129	138	253	225	82.5	41.4	36.8
MAX	166	326	502	462	300	403	250	403	351	128	51	83
MIN	27	50	91	66	56	62	111	100	122	49	32	23
AC-FT	3,220	6,970	12,390	8,430	5,220	7,960	8,230	15,550	13,400	5,070	2,540	2,360
MEAN†	57.5	132	207	144	99.2	134	143	261	235	93.7	51.5	46.1
AC-FT†	3,540	7,260	12,750	8,890	5,510	8,220	8,490	16,030	13,970	5,760	3,170	2,740

CAL YR 1968 TOTAL 49,006 MEAN 134 MAX 1,010 MIN 27 AC-FT 97,200 MEAN † 140 AC-FT † 101,800
MTR YR 1969 TOTAL 46,050 MEAN 126 MAX 502 MIN 23 AC-FT 91,340 MEAN † 133 AC-FT † 96,330

† ADJUSTED FOR DIVERSION. AMOUNT OF DIVERSION FURNISHED BY CITY OF PORT ANGELES.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	30	41	81	144	81	59	72	164	85	45	27
2	46	28	41	77	128	86	59	79	238	81	45	28
3	41	29	43	76	126	82	58	86	295	81	42	33
4	37	100	44	73	115	79	57	183	270	86	41	30
5	38	200	41	69	108	77	79	112	216	88	40	30
6	34	300	40	66	99	118	110	102	210	81	40	33
7	36	250	40	64	104	196	99	102	212	77	42	30
8	53	200	40	66	120	134	76	97	186	76	42	32
9	56	170	38	79	129	114	508	99	164	74	40	28
10	47	110	36	68	132	102	337	98	144	72	38	26
11	41	90	179	65	132	99	198	93	132	69	33	25
12	40	100	243	62	134	102	148	96	123	65	33	23
13	37	95	468	75	136	105	126	110	117	62	33	22
14	36	100	437	142	128	120	111	110	123	59	32	22
15	35	95	233	110	136	115	102	123	131	56	31	22
16	34	80	168	96	273	108	93	152	131	55	31	22
17	33	70	139	90	216	99	87	164	126	56	29	32
18	31	60	140	120	178	92	87	144	123	56	27	35
19	34	55	126	230	150	88	82	136	126	53	26	37
20	31	60	117	220	136	85	77	128	129	53	26	32
21	31	65	115	307	126	80	74	124	138	52	26	28
22	30	55	162	328	118	78	71	134	141	51	25	42
23	30	65	212	405	110	76	70	144	127	46	25	33
24	29	62	154	283	104	74	75	147	118	45	28	28
25	28	60	128	216	99	71	71	182	112	54	27	26
26	27	55	114	178	96	69	70	206	113	55	26	26
27	40	50	99	158	93	68	68	174	122	55	27	24
28	36	45	93	134	87	66	66	148	114	54	31	23
29	34	43	92	121	-----	66	69	154	99	55	27	22
30	32	42	90	112	-----	62	69	140	90	51	24	16
31	31	-----	87	148	-----	61	-----	137	-----	46	25	-----
TOTAL	1,132	2,764	4,000	4,319	3,657	2,855	3,233	3,892	4,531	1,949	1,004	840
MEAN	36.5	92.1	129	139	131	92.1	108	126	151	62.9	32.4	28.0
MAX	56	300	468	405	273	196	508	206	295	88	45	42
MIN	27	28	36	62	87	61	56	72	90	45	24	16
AC-FT	2,250	5,480	7,990	8,570	7,250	5,660	6,410	7,720	8,990	3,870	1,990	1,670
MEAN†	41.2	96.8	134	144	136	95.8	114	132	165	76.0	41.3	34.1
AC-FT†	2,530	5,760	8,210	8,830	7,530	5,890	6,770	8,120	9,680	4,670	2,540	2,030

CAL YR 1969 TOTAL 42,559 MEAN 117 MAX 468 MIN 23 AC-FT 84,420 MEAN † 123 AC-FT † 89,280
MTR YR 1970 TOTAL 34,176 MEAN 93.6 MAX 508 MIN 16 AC-FT 67,790 MEAN † 100 AC-FT † 72,560

† ADJUSTED FOR DIVERSION. AMOUNT OF DIVERSION FURNISHED BY CITY OF PORT ANGELES.

NOTE.--NO GAGE-HEIGHT RECORD OCT. 22 TO DEC. 2.

12047500 SIEBERT CREEK NEAR PORT ANGELES, WASH.

LOCATION.--Lat 48°04'58", long 123°16'52", in SW¼NE¼ sec. 23, T.30 N., R.5 W., Clallam County, on right bank 300 ft downstream from Emery Creek, 3.2 miles upstream from mouth, and 7.4 miles (revised) southeast of ferry terminal in Port Angeles.

DRAINAGE AREA.--15.5 sq mi.

PERIOD OF RECORD.--June 1952 to September 1969 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 280 ft (from topographic map). Prior to Apr. 22, 1960, at sites within 0.7 mile downstream at different datums.

AVERAGE DISCHARGE.--17 years, 17.1 cfs (14.98 inches per year, 12,390 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (100 cfs), water years 1966-69

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	1000	153	2.29	Jan. 19, 1967	1600	*756	4.46	Dec. 3, 1968	1630	172	1.88
Jan. 8, 1966	1030	145	2.24					Dec. 9, 1968	1500	*206	2.07
Jan. 14, 1966	0230	*336	3.15	Jan. 14, 1968	0900	335	2.71	Jan. 5, 1969	0130	110	1.51
				Jan. 18, 1968	2030	*385	2.92				
Dec. 12, 1966	2215	329	3.12	Feb. 3, 1968	2300	344	2.75	Feb. 11, 1969	1330	*114	1.54
								Mar. 17, 1969	2230	*122	1.59

Annual minimum discharge, water years 1966-69

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	(a)	2.5	b.80	1968	Aug. 2, 3, 1968	2.2	d.22
1967	(c)	2.4	.19	1969	Sept. 2, 6-12, 1969	2.2	e.27

a Oct. 25-29, 1965, Aug. 20-22, Sept. 7-10, 1966.

b Occurred Oct. 1-4, 1965.

c Aug. 19, 20, Sept. 23-25, 27-29, 1967.

d Occurred Oct. 1, 1967.

e Occurred Oct. 1-3, 1968.

Period of record: Maximum discharge, 1,620 cfs Nov. 3, 1955 (gage height, 9.50 ft, site and datum then in use), from rating curve extended above 260 cfs on basis of computations of peak flow through culvert at gage heights, 4.25 and 8.12 ft; minimum, 2.0 cfs Sept. 3-5, 1952, Aug. 19-26, 1958, Aug. 25, 26, 1959, Feb. 25, 1962, probably Dec. 16, 1964, Aug. 1, 2, 1965.

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1346: 1953(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.7	4.2	7.9	20	12	23	6.2	5.8	4.2	3.0	2.6
2	2.6	8.4	12	12	17	11	19	6.2	6.2	5.8	3.0	2.6
3	2.6	8.9	13	8.9	15	9.4	16	6.2	7.0	12	3.0	2.8
4	2.8	13	36	7.9	16	8.9	13	6.2	6.6	13	3.0	2.6
5	4.2	8.4	16	12	20	8.9	13	6.2	5.8	11	3.0	2.6
6	4.5	5.1	16	123	28	11	14	13	5.5	11	2.8	2.6
7	3.9	4.5	20	92	20	13	13	13	5.5	12	2.8	2.6
8	3.2	3.9	10	124	18	21	13	11	5.5	9.4	2.8	2.5
9	3.4	3.7	13	81	16	94	12	9.4	5.5	7.5	2.8	2.5
10	3.2	3.4	15	53	15	52	12	8.4	5.5	6.2	2.8	3.0
11	2.8	3.4	12	48	16	36	15	7.9	5.5	5.8	2.8	5.1
12	3.0	3.2	10	49	17	29	14	7.5	5.8	5.1	2.8	4.5
13	3.0	3.2	8.9	112	15	28	13	7.0	5.5	4.8	2.8	3.2
14	3.2	3.2	7.8	216	13	38	13	7.0	5.1	4.8	2.8	3.0
15	3.4	3.8	6.2	93	12	75	13	7.5	4.8	4.5	2.8	3.0
16	3.8	3.0	5.5	61	11	62	12	7.5	4.8	4.5	2.8	2.8
17	2.8	3.0	5.1	45	11	42	11	7.8	4.5	4.2	2.8	3.0
18	2.8	3.0	5.1	36	10	35	9.4	6.6	4.5	3.9	2.6	3.7
19	3.8	16	5.8	29	10	31	8.4	6.2	4.5	4.2	2.6	3.2
20	2.8	13	8.4	24	9.4	27	9.4	6.6	4.5	3.9	2.6	3.0
21	2.6	6.6	14	21	10	24	8.4	7.0	4.5	3.7	2.5	2.8
22	2.6	5.5	11	18	12	21	7.9	6.2	5.1	3.7	2.6	3.0
23	2.6	4.5	9.4	16	16	18	7.5	6.2	5.5	3.4	2.6	5.8
24	2.6	4.2	8.4	13	14	18	7.5	6.2	7.0	3.7	2.6	3.9
25	2.5	4.2	7.8	12	13	17	7.5	6.2	5.1	3.7	2.6	3.9
26	2.5	3.9	6.2	12	13	18	7.8	6.2	4.8	3.4	2.8	5.8
27	2.5	3.9	6.6	12	13	23	6.6	6.2	4.8	3.2	3.0	5.5
28	2.5	3.7	11	12	13	26	6.6	5.8	4.5	3.2	3.8	3.9
29	2.6	3.4	9.4	20	30	30	6.2	5.8	4.2	3.2	2.8	3.7
30	2.6	3.4	7.9	25	33	33	6.2	5.8	4.2	3.2	2.8	3.4
31	2.8	7.8	24	24	28	28	6.2	6.2	3.2	3.2	2.8	2.6
TOTAL	91.2	160.3	335.1	1,419.7	405.4	862.2	337.6	224.4	158.1	175.4	86.5	102.6
MEAN	2.94	5.34	10.8	45.8	14.5	27.8	11.3	7.24	5.27	5.66	2.79	3.42
MAX	4.5	16	36	216	28	75	23	13	7.0	13	3.0	5.8
MIN	2.5	3.0	4.2	7.9	9.4	8.9	6.2	5.8	4.2	3.2	2.5	2.5
CFSM	-1.9	.34	.70	2.95	.94	1.79	.73	.47	.34	.37	.18	.22
IN-	.22	.30	.60	3.41	.97	2.07	.81	.54	.38	.42	.21	.25
AC-FT	1.01	318	665	2,820	804	1,710	670	443	314	348	172	204

CAL YR 1965 TOTAL 4,268.3 MEAN 11.7 MAX 188 MIN 2.1 CFSM .75 IN 18.24 AC-FT 8,478

WTR YR 1966 TOTAL 4,358.5 MEAN 11.9 MAX 216 MIN 2.5 CFSM .77 IN 10.44 AC-FT 8,650

12047500 SIEBERT CREEK NEAR PORT ANGELES, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	3.7	68	24	35	12	17	32	9.5	4.6	2.9	2.6
2	3.4	3.7	37	22	29	12	15	28	8.7	4.4	2.9	2.6
3	3.2	3.7	25	30	26	11	14	29	8.7	4.2	2.7	2.6
4	3.2	3.7	21	47	25	10	13	22	8.3	4.1	2.7	2.5
5	3.2	4.2	18	39	23	9.0	13	19	8.0	3.9	2.7	2.6
6	3.0	5.1	19	31	21	8.7	14	18	8.0	3.9	2.9	2.7
7	3.0	5.5	23	22	19	8.3	14	17	8.0	3.9	2.9	2.6
8	3.0	5.1	17	28	17	8.3	12	16	7.6	3.9	2.5	2.5
9	3.0	4.8	13	30	18	8.3	12	16	7.4	3.9	2.9	2.5
10	3.0	4.5	14	35	17	8.0	12	14	7.1	3.9	2.7	3.0
11	3.0	4.5	42	52	16	7.6	11	13	7.1	3.7	2.6	3.6
12	3.7	8.4	134	41	20	8.0	11	12	6.8	3.6	2.6	2.9
13	4.8	11	218	35	49	7.6	11	11	6.8	3.4	2.6	2.7
14	3.7	30	96	29	39	7.6	11	10	6.5	3.4	2.6	2.6
15	3.4	22	59	32	31	8.7	11	9.9	6.3	3.4	2.6	2.5
16	3.4	18	98	30	26	14	11	10	6.0	3.3	2.6	2.5
17	3.4	13	47	26	21	15	11	11	6.0	3.3	2.6	2.5
18	3.2	11	38	23	20	14	13	10	5.8	3.4	2.5	2.5
19	14	8.4	33	454	18	13	30	9.9	5.6	3.6	2.5	2.5
20	22	7.9	33	350	16	12	27	9.9	5.6	3.9	2.5	2.5
21	16	9.4	28	161	15	11	24	9.9	5.8	3.7	2.6	2.5
22	12	8.9	25	92	14	12	22	9.5	6.3	3.4	2.6	2.5
23	10	7.5	22	59	13	70	20	9.1	6.3	3.3	2.6	2.5
24	6.6	6.6	20	46	12	55	19	9.1	5.6	3.1	2.6	2.4
25	5.5	7.0	23	37	11	40	19	8.3	5.4	3.1	2.5	2.4
26	4.8	6.6	22	32	10	32	18	8.0	5.2	3.1	2.5	2.5
27	4.5	6.2	19	32	10	28	26	7.4	5.2	3.3	2.5	2.5
28	4.2	7.5	18	60	11	26	58	8.0	5.0	3.3	2.5	2.4
29	4.2	13	18	70	-----	25	56	9.1	5.0	3.1	2.5	2.6
30	4.2	37	16	54	-----	22	41	12	4.6	3.0	2.5	2.7
31	3.9	-----	16	43	-----	19	-----	-----	2.9	2.5	-----	-----
TOTAL	171.9	287.9	1,237	2,080	584	543.1	585	414.3	200.2	111.1	81.4	78.0
MEAN	5.55	9.60	39.9	67.1	20.9	17.5	19.5	13.4	6.67	3.58	2.63	2.60
MAX	22	37	218	454	49	70	58	32	9.5	4.6	2.9	3.6
MIN	3.0	3.7	13	22	10	7.6	10	7.6	4.6	2.9	2.5	2.4
CFSM	.36	.62	2.57	4.33	1.35	1.13	1.26	.86	.43	.23	.17	.17
IN-	.41	.69	2.97	4.99	1.40	1.30	1.40	.99	.48	.27	.20	.19
AC-FT	341	571	2,450	4,130	1,160	1,080	1,160	822	397	220	161	195
CAL YR 1966	TOTAL 5,468.7		MEAN 15.0	MAX 218	MIN 2.5	CFSM .97	IN 13.12	AC-FT 10,850				
WTR YR 1967	TOTAL 6,373.9		MEAN 17.5	MAX 454	MIN 2.4	CFSM 1.13	IN 15.30	AC-FT 12,640				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	4.6	17	14	22	15	5.4	5.4	3.4	2.4	3.9
2	18	9.1	6.3	14	40	14	11	5.4	11	3.4	2.4	3.6
3	11	7.4	25	12	145	18	12	5.2	10	3.2	2.4	3.6
4	8.3	6.5	23	12	198	29	12	5.2	8.4	3.0	2.4	3.0
5	5.0	5.8	22	11	84	62	11	5.4	7.2	3.0	2.6	3.0
6	4.2	5.4	17	9.5	37	46	11	6.2	6.6	3.0	2.7	3.0
7	5.9	5.2	14	9.9	43	37	9.8	5.6	6.0	2.8	2.7	3.0
8	3.6	6.0	12	8.7	35	10	9.5	5.2	5.6	2.7	2.6	2.8
9	3.3	6.3	11	30	30	26	9.2	5.2	5.4	2.7	2.6	2.8
10	3.4	8.6	14	31	27	23	8.8	4.9	5.4	2.8	2.4	2.8
11	5.2	15	18	22	24	21	8.4	4.6	5.4	3.0	2.4	3.4
12	5.4	11	13	30	22	23	8.1	4.6	5.6	3.4	2.4	4.2
13	6.0	8.3	9.9	132	21	27	7.8	4.6	6.0	3.2	3.0	3.4
14	6.5	7.4	8.3	232	18	24	8.1	4.6	6.0	3.4	5.4	4.2
15	4.8	7.4	7.4	116	17	26	8.4	4.4	5.2	3.2	4.4	5.2
16	4.2	7.6	7.4	71	16	35	7.4	4.4	4.9	3.0	6.2	4.2
17	5.7	6.8	6.8	48	16	43	7.2	4.4	4.6	3.0	4.4	6.0
18	3.9	6.8	6.5	111	26	36	7.4	4.2	4.4	2.8	4.2	5.6
19	4.1	6.5	6.0	207	47	29	7.8	4.4	4.6	3.0	4.2	4.6
20	3.7	6.0	5.4	103	39	24	7.4	7.2	4.4	3.2	7.2	3.9
21	3.9	5.8	5.4	70	35	22	7.2	6.8	4.2	3.0	5.2	3.4
22	6.3	9.4	27	90	32	18	6.8	6.0	4.6	2.8	4.2	3.2
23	9.5	5.4	36	39	44	16	6.8	6.6	4.4	2.7	4.4	3.2
24	6.0	5.4	41	33	84	15	6.6	8.1	4.2	2.7	5.2	3.2
25	17	5.2	62	28	57	15	6.6	7.2	4.2	2.7	4.9	3.0
26	12	5.0	53	25	41	14	6.6	6.8	4.2	2.6	8.1	3.0
27	31	4.8	39	21	34	16	6.2	6.2	4.2	2.6	6.8	2.8
28	43	4.8	30	18	29	18	6.0	5.6	3.9	2.6	5.4	2.8
29	21	4.8	25	18	25	19	5.6	5.4	3.9	2.6	4.6	2.8
30	15	4.8	20	16	-----	17	6.0	5.2	3.6	2.4	3.9	2.8
31	12	-----	18	15	-----	15	-----	4.9	-----	2.4	3.4	-----
TOTAL	296.9	206.7	594.0	1,560.1	1,308	786	254.7	169.7	163.5	90.3	125.1	106.2
MEAN	9.58	6.89	19.2	50.3	45.1	25.4	8.49	5.47	5.45	2.91	4.04	3.36
MAX	43	15	62	232	198	42	15	8.1	11	3.4	8.1	6.0
MIN	3.3	4.8	4.6	8.7	14	14	5.6	4.2	3.6	2.4	2.4	2.8
CFSM	.62	.44	1.24	3.25	2.91	1.64	.55	.35	.35	.19	.26	.23
IN-	.71	.50	1.43	3.74	3.14	1.89	.61	.41	.39	.22	.30	.25
AC-FT	589	410	1,180	3,090	2,590	1,560	505	337	324	179	248	211
CAL YR 1967	TOTAL 5,774.7		MEAN 15.8	MAX 454	MIN 2.4	CFSM 1.02	IN 13.86	AC-FT 11,450				
WTR YR 1968	TOTAL 5,661.2		MEAN 15.5	MAX 232	MIN 2.4	CFSM 1.00	IN 13.59	AC-FT 11,230				

12047500 SIEBERT CREEK NEAR PORT ANGELES, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	5.2	23	16	6.5	14	48	16	7.8	7.4	3.0	2.4
2	2.8	4.6	16	18	7.9	14	50	17	7.4	7.2	3.0	2.2
3	2.8	4.4	76	22	8.5	16	41	17	7.2	6.8	3.0	2.4
4	3.2	4.2	67	51	9.5	18	32	16	6.8	7.4	3.2	2.4
5	3.2	3.9	37	95	8.0	25	29	15	6.6	6.6	3.0	2.4
6	4.4	3.9	26	71	8.5	32	29	14	6.2	5.6	3.0	2.4
7	3.9	3.9	22	76	10	29	26	13	6.2	5.4	3.0	2.2
8	3.6	5.2	39	53	13	25	22	13	6.2	4.9	2.8	2.2
9	3.6	9.2	121	41	24	23	20	13	6.0	4.6	2.7	2.2
10	3.6	7.4	100	33	21	20	19	12	6.0	4.4	2.7	2.2
11	3.6	7.4	58	28	76	18	17	12	5.6	4.4	2.7	2.2
12	3.6	12	38	23	73	16	18	11	5.6	4.4	2.7	2.2
13	3.6	9.5	31	21	47	15	20	11	5.6	4.4	2.7	2.6
14	3.4	7.4	28	18	36	14	17	11	5.4	4.2	2.7	2.4
15	3.4	6.6	27	16	29	16	15	10	5.2	4.2	2.7	2.4
16	3.2	5.6	23	15	27	23	14	9.8	4.6	3.9	2.7	2.7
17	3.4	5.2	20	14	26	78	14	9.5	4.6	3.9	2.7	3.0
18	3.4	4.9	18	11	24	92	16	9.2	4.6	3.6	2.7	3.9
19	3.6	4.9	16	10	23	57	17	9.2	4.6	3.4	2.7	4.6
20	3.6	7.2	14	9.5	21	45	15	8.8	4.9	3.4	2.7	8.1
21	3.6	21	13	9.0	19	37	14	8.8	5.2	3.4	2.7	5.6
22	3.6	43	12	8.5	18	34	14	8.8	5.6	3.4	2.7	3.9
23	3.6	31	27	8.0	17	33	31	8.4	7.4	3.2	2.6	4.2
24	3.6	22	69	7.5	16	28	27	8.4	7.2	3.2	2.6	3.9
25	3.9	16	76	7.5	16	25	22	8.4	14	3.2	2.4	3.4
26	3.9	13	49	7.5	19	24	18	8.1	25	3.2	2.6	3.2
27	3.9	12	36	7.2	14	32	16	8.1	14	3.2	2.6	3.2
28	3.6	10	23	6.8	14	32	17	8.1	11	3.0	2.6	3.4
29	4.4	33	18	6.5	-----	30	18	9.6	10	3.2	2.6	3.2
30	8.8	36	14	6.0	-----	33	16	15	8.8	3.0	2.6	3.2
31	6.8	-----	13	6.0	-----	43	-----	9.2	-----	3.0	2.4	-----
TOTAL	118.4	359.6	1,150	722.0	627.5	941	672	348.4	225.3	135.1	84.8	94.3
MEAN	3.82	12.0	37.1	23.3	22.4	30.4	22.4	11.2	7.51	4.36	2.74	3.14
MAX	8.8	43	121	95	76	92	90	17	25	7.4	3.2	8.1
MIN	2.8	3.9	12	6.0	6.5	14	14	8.1	4.6	3.0	2.4	2.2
CFSM	.25	.77	2.39	1.50	1.45	1.96	1.45	.72	.48	.28	.18	.20
IN.	.28	.86	2.76	1.73	1.51	2.26	1.61	.84	.54	.32	.20	.23
AC-FT	235	713	2,280	1,430	1,240	1,870	1,330	691	447	268	168	187
CAL YR 1968	TOTAL 6,191.6	MEAN 16.9	MAX 232	MIN 2.4	CFSM 1.09	IN 14.86	AC-FT 12,280					
WTR YR 1969	TOTAL 5,478.6	MEAN 15.0	MAX 121	MIN 2.2	CFSM .97	IN 13.15	AC-FT 10,870					

12048000 DUNGNESS RIVER NEAR SEQUIM, WASH.

LOCATION.--Lat 48°00'52", long 123°07'53", in NW¼NE¼ sec.13, T.29 N., R.4 W., Clallam County, on right bank 1.0 mile upstream from Canyon Creek, 4.8 miles southwest of Sequim, and at mile 11.8.

DRAINAGE AREA.--156 sq mi.

PERIOD OF RECORD.--June 1923 to September 1930, June 1937 to September 1970. July 1897 to July 1898 at site below Canyon Creek, published as "near Sequim", records not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 569.3 ft above mean sea level (river-profile survey). June 8, 1923, to Sept. 30, 1930, nonrecording gage just above fish-hatchery diversion 0.5 mile downstream at different datum. June 19 to Aug. 12, 1937, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--40 years, 378 cfs (32.91 inches per year, 273,900 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,700 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1945	*1,370	4.82	Jan. 19, 1967	1630	2,020	5.51	Jan. 19, 1968	1200	3,260	6.49
Dec. 1, 1966	0400	2,160	5.63	Oct. 27, 1967	2000	2,340	5.78	Feb. 3, 1968	2400	2,110	5.61
Dec. 13, 1966	1245	*2,960	6.28	Dec. 26, 1967	0900	2,040	5.53	May 24, 1969	0900	*1,660	5.23
Dec. 16, 1966	0830	2,180	5.65	Jan. 14, 1968	1200	*3,920	6.94	Dec. 13, 1969	1900	*1,850	5.39

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1, 3, 4, 1965	102	2.54	1969	Oct. 3, 4, 1968	127	2.76
1967	Oct. 18, 19, 1966	117	2.62	1970	Sept. 30, 1970	117	2.68
1968	Sept. 30, 1968	137	2.81				

Period of record: Maximum discharge, 6,820 cfs Nov. 27, 1949, from rating curve extended above 2,000 cfs on basis of slope-area measurement of peak flow; maximum gage height, 7.65 ft Jan. 15, 1961; minimum discharge observed, 77 cfs Sept. 10, 1928.

REMARKS.--Record excellent. No regulation or diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1316: 1924-25(M), 1927(M). WSP 1332: 1957, 1958-59(M), 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	135	229	166	190	146	338	312	521	600	458	195
2	105	289	262	166	179	144	473	351	489	600	458	200
3	103	490	336	166	174	138	422	438	493	680	468	206
4	128	598	588	199	208	135	401	521	436	700	463	198
5	212	418	418	187	264	136	417	652	448	755	413	198
6	439	316	594	512	239	146	470	1,130	591	700	389	198
7	254	300	632	448	220	144	595	1,090	747	679	375	190
8	193	389	518	529	201	162	612	913	811	728	384	185
9	177	344	413	397	191	254	596	972	835	758	362	182
10	196	296	353	308	177	229	547	975	790	728	362	193
11	146	264	308	273	175	199	493	800	720	658	344	242
12	139	238	278	273	168	191	423	758	640	646	312	215
13	137	238	258	577	160	213	372	742	600	652	340	185
14	154	261	238	768	157	299	375	646	690	620	349	175
15	161	254	226	485	150	370	396	564	760	613	328	172
16	144	254	218	366	151	318	409	506	1,000	639	316	170
17	139	245	209	310	147	252	396	458	930	628	289	180
18	137	245	209	275	145	233	369	442	850	626	271	223
19	139	564	206	248	144	215	343	474	770	600	264	190
20	175	448	212	230	142	200	337	570	700	518	261	175
21	206	340	212	217	142	187	321	632	630	495	254	168
22	175	293	190	206	151	174	312	564	560	518	254	175
23	156	258	187	197	169	170	323	518	600	534	254	218
24	146	245	187	186	162	169	330	547	600	523	261	193
25	141	226	177	181	158	178	335	709	600	468	261	185
26	135	215	172	176	155	204	323	916	590	458	254	185
27	133	203	187	177	154	250	314	842	700	463	271	175
28	135	198	198	173	150	284	316	713	830	479	258	168
29	129	195	182	210	-----	410	310	660	740	518	229	170
30	135	190	177	213	-----	636	307	653	650	523	212	161
31	129	-----	166	203	-----	652	-----	592	-----	501	200	-----
TOTAL	4,961	8,909	8,760	8,982	4,823	7,400	12,135	20,660	20,243	18,606	9,914	5,670
MEAN	160	297	283	290	172	239	405	666	675	600	320	189
MAX	439	564	632	768	264	692	612	1,130	1,000	758	468	242
MIN	103	135	166	159	142	135	307	312	436	458	200	161
CFSM	1.03	1.90	1.81	1.86	1.10	1.53	2.60	4.27	4.33	3.85	2.05	1.21
IN.	1.18	2.12	2.09	2.14	1.19	1.76	2.99	4.93	4.93	4.44	2.36	1.35
AC-FT	9,840	17,670	17,380	17,820	9,570	14,680	24,070	40,980	40,150	36,910	19,660	11,290
CAL YR 1965	TOTAL 118,984	MEAN 326	MAX 1,210	CFSM 2.09	IN 28.37	AC-FT 236,000						
WTR YR 1966	TOTAL 131,063	MEAN 359	MAX 1,130	CFSM 2.30	IN 31.25	AC-FT 260,000						

DUNGENESS RIVER BASIN

12048000 DUNGENESS RIVER NEAR SEQUIM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	206	1,760	372	490	242	240	253	807	942	500	276
2	154	193	1,020	345	425	230	249	272	1,120	990	455	300
3	148	183	751	415	390	199	234	266	1,200	1,120	455	268
4	141	175	821	381	430	209	256	318	1,200	1,120	470	254
5	139	174	600	345	415	206	245	359	1,160	1,060	445	260
6	137	170	501	323	386	203	234	440	1,180	918	420	258
7	141	161	437	309	363	199	230	570	1,120	807	400	250
8	144	155	366	309	345	199	234	636	1,140	814	385	216
9	137	155	332	318	332	199	230	618	1,030	765	380	216
10	133	149	349	345	314	199	223	525	964	702	390	280
11	131	142	758	460	300	196	216	455	990	730	410	305
12	133	184	1,500	400	305	184	216	918	1,360	807	420	238
13	131	248	2,430	348	345	183	213	377	974	807	415	209
14	129	425	1,580	341	309	192	203	390	1,090	779	405	192
15	125	339	1,330	354	292	209	196	475	1,130	723	395	192
16	123	291	1,940	332	276	612	192	688	1,240	716	390	196
17	121	244	1,490	309	245	445	184	918	1,360	765	395	206
18	119	234	1,240	292	254	354	199	942	1,420	654	377	209
19	332	438	1,130	1,270	242	296	203	910	1,430	600	354	203
20	308	628	998	1,250	230	268	196	1,030	1,540	618	345	213
21	218	578	821	814	223	249	196	1,200	1,440	618	345	209
22	210	702	564	220	410	196	1,140	1,390	974	576	318	203
23	485	333	624	445	213	1,400	192	1,030	1,320	576	318	183
24	525	290	564	395	209	849	196	878	1,230	600	292	170
25	375	304	515	354	206	582	206	758	1,260	612	264	167
26	307	281	465	336	199	465	199	716	1,280	594	249	161
27	271	289	430	309	199	392	192	702	1,170	594	254	158
28	234	340	415	709	230	359	294	737	1,140	544	268	161
29	264	358	395	854	-----	327	284	870	1,160	505	274	174
30	259	772	368	737	-----	300	253	793	1,010	510	284	189
31	223	-----	359	576	-----	280	-----	695	-----	510	288	-----
TOTAL	4,516	8,849	27,251	15,030	8,409	10,479	6,671	20,396	35,435	22,621	11,382	6,502
MEAN	210	295	879	485	300	344	222	658	1,181	730	367	217
MAX	525	772	2,630	1,270	490	1,400	296	1,200	1,540	1,120	500	305
MIN	119	142	332	292	196	183	186	253	807	505	249	158
CFSM	1.35	1.89	5.63	3.11	1.92	2.21	1.42	4.22	7.57	4.68	2.35	1.39
INL	1.95	2.11	6.50	3.58	2.01	2.55	1.59	4.86	8.45	5.39	2.71	1.55
AC-FT	12,902	17,550	54,050	29,810	16,680	21,180	13,230	40,460	70,290	44,870	22,580	12,900
CAL YR 1966	TOTAL 151,049	MEAN 416	MAX 2,630	MIN 119	CFSM 2.65	IN 36.02	AC-FT 299,600					
WTR YR 1967	TOTAL 179,741	MEAN 492	MAX 2,630	MIN 119	CFSM 3.15	IN 42.06	AC-FT 354,500					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	564	674	216	515	485	516	284	308	604	458	330	213
2	723	520	223	450	721	528	276	288	1,210	590	330	216
3	460	450	272	415	1,080	516	272	280	958	676	334	196
4	440	400	242	390	1,610	644	272	288	721	721	334	186
5	395	372	242	359	993	1,070	264	280	658	721	314	189
6	405	345	227	336	763	786	248	268	652	634	294	189
7	647	336	223	332	644	637	240	252	616	598	286	192
8	695	415	203	323	570	552	236	252	592	580	272	180
9	485	435	234	430	522	490	233	260	610	622	247	173
10	564	570	327	386	485	450	240	288	604	586	251	168
11	758	535	390	336	460	425	252	347	616	586	254	183
12	530	470	300	372	435	460	236	401	540	604	251	195
13	530	455	293	1,420	415	465	229	356	476	500	251	175
14	505	530	238	3,160	392	425	222	316	435	458	275	231
15	410	552	230	2,980	370	410	214	304	431	422	258	307
16	363	495	216	1,820	352	406	214	325	480	378	251	258
17	332	430	206	1,230	365	392	210	397	505	354	228	296
18	323	395	199	1,310	637	365	207	490	598	346	244	296
19	305	359	189	2,930	1,120	343	200	721	749	382	234	240
20	280	336	180	2,650	842	329	196	1,240	714	382	225	213
21	359	309	180	2,140	742	325	189	810	610	346	219	186
22	450	300	660	1,450	644	316	186	628	610	334	210	173
23	480	288	779	1,190	786	312	186	565	610	330	219	168
24	415	276	856	1,240	1,000	308	179	525	628	334	244	163
25	520	256	1,470	1,070	802	308	179	515	646	342	225	158
26	415	245	1,960	914	679	300	176	490	864	346	251	155
27	1,290	245	1,460	763	600	300	179	467	882	354	248	153
28	1,360	234	1,020	686	546	296	207	480	616	366	240	147
29	793	230	800	630	516	300	264	490	490	374	222	143
30	737	223	660	576	-----	292	316	467	431	354	210	139
31	835	-----	570	534	-----	288	-----	444	-----	338	201	-----
TOTAL	17,388	11,680	15,225	33,337	19,576	13,554	6,806	13,542	19,158	14,376	7,974	5,883
MEAN	561	389	491	1,075	675	437	227	437	639	464	257	196
MAX	1,360	674	1,960	3,160	1,610	1,070	316	1,240	1,210	721	334	307
MIN	280	223	180	323	352	288	176	252	431	330	201	139
CFSM	3.60	2.49	3.15	6.49	4.33	2.80	1.46	2.80	4.10	2.97	1.65	1.26
INL	4.15	2.79	3.63	7.95	4.67	3.23	1.62	3.23	4.57	3.43	1.90	1.40
AC-FT	34,490	23,170	30,200	66,120	38,830	26,880	13,500	26,860	38,000	28,510	15,820	11,670
CAL YR 1967	TOTAL 181,418	MEAN 497	MAX 1,960	MIN 158	CFSM 3.19	IN 43.26	AC-FT 359,800					
WTR YR 1968	TOTAL 178,499	MEAN 488	MAX 1,368	MIN 139	CFSM 3.13	IN 42.57	AC-FT 354,100					

12050500 SNOW CREEK NEAR MAYNARD, WASH.

LOCATION.--Lat 47°56'25", long 122°53'12", in NE¼NE¼ sec.11, T.28 N., R.2 W., Jefferson County, on right bank 1,800 ft upstream from Andrews Creek, 3.2 miles south of Uncas, and 4.0 miles south of Maynard.

DRAINAGE AREA.--11.2 sq mi.

PERIOD OF RECORD.--May 1952 to September 1970.

GAGE.--Water-stage recorder and wooden control for high stages. Altitude of gage is 220 ft (from topographic map). Prior to Apr. 20, 1961, at site 1,200 ft downstream at different datum, with wooden control.

AVERAGE DISCHARGE.--18 years, 15.8 cfs (19.16 inches per year, 11,450 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (100 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Mar. 15, 1966	1130	*154	2.64	Mar. 23, 1967	1130	211	2.87	Dec. 25, 1968	0030	123	2.60
								(c)	-	*485	3.55
Dec. 1, 1966	0300	119	2.53	Dec. 25, 1967	1900	114	2.51				
Dec. 4, 1966	0500	*425	3.43	Jan. 14, 1968	0930	*434	b3.58	Dec. 11, 1969	2000	190	2.85
Dec. 12, 1966	2100	306	3.13	Feb. 3, 1968	2300	141	2.70	Dec. 15, 1969	1430	*240	3.00
Jan. 19, 1967	1700	153	2.63					Dec. 22, 1969	2000	111	2.53
Mar. 16, 1967	0800	306	a3.14	Dec. 9, 1968	0900	171	2.78	Jan. 22, 1970	2100	150	2.70

a Occurred Mar. 16, 1967.

b Occurred Jan. 14, 1968.

c Feb. 10 or 11, 1969.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 20-22, 1966	1.8	1.48	1969	Aug. 23, 24, 1969	2.1	1.50
1967	Aug. 28, 29, 30, 1967	1.5	a1.50	1970	Oct. 15, 16, 17, 18, 19, 1969	1.9	1.53
1968	(b)	2.1	c1.54				

a Occurred for many days Aug. 28 to Sept. 27, 1967.

b July 30, 31, Aug. 1, 2, Sept. 7, 23, 1968.

c Occurred Oct. 1, 1967.

Period of record: Maximum discharge, 733 cfs about Jan. 8, 1959 (gage height, 4.07 ft, from high water-mark, site and datum then in use), from rating curve extended above 130 cfs on basis of slope-area measurement of peak flow; minimum, 1.1 cfs Aug. 7-11, 1959.

REMARKS.--Records good. No diversion above station. No regulation.

REVISIONS (WATER YEARS).--WSP 1636: 1958. WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.6	3.9	6.4	20	10	35	12	6.4	8.6	3.6	2.3
2	3.0	4.6	3.9	6.1	16	9.5	29	12	6.4	15	3.3	2.6
3	3.0	16	4.6	5.7	15	8.6	24	12	8.1	28	3.1	2.6
4	3.0	11	7.7	5.7	20	8.1	22	13	8.1	33	3.1	2.3
5	3.8	8.4	6.1	13	36	9.5	22	13	7.2	28	3.1	2.0
6	4.2	7.5	9.0	50	50	18	22	27	6.4	25	3.3	2.3
7	7.5	19	6.1	39	20	23	26	6.1	21	3.1	2.3	
8	3.0	7.0	13	71	31	24	23	28	6.1	18	3.1	2.3
9	3.4	7.5	8.6	44	26	41	21	18	6.1	15	3.1	2.0
10	3.0	7.9	8.1	30	21	39	20	15	9.0	13	3.1	3.1
11	3.0	7.9	6.8	26	20	29	22	13	11	12	3.1	7.2
12	3.0	7.9	6.1	27	18	26	20	13	14	10	2.8	6.4
13	3.4	7.5	5.7	51	16	28	19	13	13	9.0	3.1	4.6
14	3.4	7.5	5.3	75	14	44	19	12	12	8.6	3.3	3.9
15	3.4	7.5	4.6	50	13	114	20	12	9.5	8.1	3.1	3.9
16	2.4	7.0	4.6	36	12	95	19	14	8.6	8.1	2.8	3.6
17	2.4	7.0	3.9	27	11	62	17	14	8.1	7.7	2.6	3.6
18	2.7	8.4	3.9	24	11	86	15	12	8.1	7.2	2.3	6.8
19	2.4	31	3.9	20	10	71	14	11	8.1	7.7	2.0	4.6
20	2.4	12	4.3	18	9.5	51	13	11	10	7.7	2.0	3.3
21	2.4	6.8	5.7	16	9.0	41	13	11	14	6.1	1.8	3.1
22	2.4	5.7	5.0	14	12	33	12	9.5	19	5.3	1.8	2.9
23	2.4	4.6	5.0	13	16	28	13	8.6	18	5.0	2.3	7.0
24	2.4	5.0	4.6	11	14	26	13	8.6	20	6.1	2.3	5.0
25	2.4	4.6	4.6	11	13	26	14	8.1	16	6.8	2.3	4.0
26	2.4	4.3	4.3	10	13	27	13	7.7	13	6.1	2.6	4.5
27	2.1	3.9	7.5	10	12	31	12	7.7	12	5.3	5.3	3.9
28	2.4	3.9	14	10	11	33	12	6.8	11	4.6	5.3	2.6
29	2.6	3.9	9.5	20	-----	39	13	6.4	9.5	4.3	3.3	2.6
30	3.0	3.9	8.0	23	-----	46	12	6.4	8.6	3.9	3.1	2.6
31	3.4	-----	6.8	23	-----	41	-----	6.8	-----	3.6	2.8	-----
TOTAL	90.0	231.5	208.0	792.9	508.5	1,164.7	546	380.6	315.4	347.8	91.9	109.9
MEAN	2.90	7.72	6.71	25.6	16.2	37.6	18.2	12.3	10.5	11.2	2.96	3.66
MAX	4.2	31	19	75	50	114	35	27	20	33	5.3	7.2
MIN	2.1	3.8	3.9	5.7	9.0	8.1	12	6.4	6.1	3.6	1.8	2.0
CFSM	.26	.69	.60	2.29	1.63	3.36	1.63	1.10	.94	1.00	.26	.33
IN.	.30	.77	.69	2.63	1.69	3.87	1.81	1.26	1.05	1.16	.31	.37
AC-FT	179	459	413	1,570	1,010	2,310	1,080	755	626	690	182	218
CAL YR 1965	TOTAL	4,366.6	MEAN	12.0	MAX	125	MIN	1.8	CFSM	1.07	IN	14.50
WTR YR 1966	TOTAL	4,787.2	MEAN	13.1	MAX	114	MIN	1.8	CFSM	1.17	IN	15.90
									AC-FT	6,660		9,500

12050500 SNOW CREEK NEAR MAYNARD, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	6.4	87	21	47	15	28	44	12	4.5	2.9	1.7
2	2.8	6.4	63	17	39	14	25	41	12	4.2	2.6	1.9
3	2.6	6.4	56	18	34	12	23	37	11	4.2	2.4	1.9
4	2.6	6.4	240	21	31	12	23	33	11	3.9	2.4	1.7
5	2.8	7.2	104	21	28	11	23	33	9.6	3.9	2.6	1.7
6	3.1	8.6	75	19	24	11	21	35	9.1	3.9	2.9	1.9
7	3.6	7.7	59	18	22	10	20	36	8.6	3.9	2.9	1.9
8	3.6	7.7	32	18	20	10	19	33	8.6	4.2	2.9	1.9
9	3.9	7.2	23	18	20	11	20	31	8.1	3.9	2.6	2.2
10	3.9	7.2	18	20	18	11	20	27	8.1	3.6	2.6	2.9
11	3.9	7.2	58	27	17	11	20	27	8.1	3.4	2.4	3.1
12	5.7	9.0	173	25	18	10	20	28	7.6	3.6	2.2	2.4
13	6.1	22	206	25	26	9.8	23	25	7.2	3.6	2.2	2.2
14	5.3	21	125	26	21	14	24	23	6.8	3.4	1.9	1.9
15	5.3	15	85	25	19	42	22	23	6.4	3.4	1.9	1.7
16	5.0	12	68	23	18	210	21	24	6.4	3.4	1.9	1.7
17	5.0	11	56	21	17	117	20	27	6.0	3.4	1.9	1.7
18	5.0	9.5	43	19	16	84	20	25	5.6	3.4	1.9	1.9
19	7.7	15	34	89	15	62	26	23	5.2	3.9	1.9	1.9
20	12	26	30	114	14	56	25	22	5.2	3.9	1.9	1.9
21	11	26	27	82	13	47	24	21	6.4	3.6	1.9	1.9
22	11	20	24	64	12	62	23	20	11	3.4	2.2	1.9
23	9.0	15	21	52	12	184	22	17	7.6	3.1	1.9	1.9
24	6.8	13	19	42	11	112	21	17	6.4	3.1	1.9	1.9
25	6.1	12	18	36	12	82	24	14	6.0	3.1	1.9	1.9
26	6.1	11	17	40	12	67	23	13	5.6	3.1	1.7	1.9
27	7.7	10	15	42	12	57	31	12	5.6	3.1	1.7	1.9
28	6.8	10	14	49	13	50	54	11	5.2	3.1	1.7	1.9
29	6.8	11	14	76	-----	44	56	14	5.2	3.1	1.7	2.6
30	6.8	36	14	75	-----	39	47	17	4.8	2.9	1.7	3.1
31	6.4	-----	13	60	-----	33	-----	15	-----	2.9	1.7	-----
TOTAL	177.0	382.9	1,831	1,203	561	1,509.8	768	768	226.4	110.1	66.9	61.0
MEAN	5.71	12.8	59.1	38.8	20.0	48.7	25.6	24.8	7.55	3.55	2.16	2.03
MAX	12	36	240	114	47	210	56	44	12	4.5	2.9	3.1
MIN	2.6	6.4	13	17	11	9.8	19	11	4.8	2.9	1.7	1.7
CFSM	5.1	1.14	5.28	3.46	1.9	4.35	2.29	2.21	.67	.32	.19	.18
IN.	.59	1.27	6.08	4.00	1.86	5.01	2.55	2.55	.75	.37	.22	.20
AC-FT	351	759	3,630	2,390	1,110	2,990	1,520	1,520	449	218	133	121

CAL YR 1966 TOTAL 6,648.6 MEAN 18.2 MAX 240 MIN 1.8 CFSM 1.63 IN 22.08 AC-FT 13,190
WTR YR 1967 TOTAL 7,665.1 MEAN 21.0 MAX 240 MIN 1.7 CFSM 1.88 IN 25.46 AC-FT 15,200

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	3.6	4.8	24	14	19	27	10	11	4.2	2.1	3.0
2	10	3.4	12	19	34	16	23	10	14	3.8	2.1	3.0
3	9.1	3.4	40	17	64	15	20	8.8	14	3.8	2.4	3.0
4	5.2	3.6	17	16	100	16	19	9.4	12	3.8	2.7	2.7
5	4.2	3.6	26	15	64	20	20	11	11	3.4	2.7	2.7
6	3.4	3.6	24	12	46	20	18	12	9.4	3.4	3.0	2.4
7	3.1	3.6	25	12	36	19	16	11	9.4	3.4	2.7	2.1
8	3.1	6.4	17	11	30	18	15	11	8.8	3.0	2.7	2.4
9	2.9	6.8	17	94	26	17	14	9.4	8.2	3.0	2.7	2.4
10	2.9	6.8	27	48	22	16	14	8.8	8.2	3.0	2.7	2.4
11	3.1	6.8	27	31	20	16	14	8.2	7.6	3.4	2.7	2.7
12	3.1	6.0	19	33	18	32	13	9.4	8.2	4.2	2.7	2.7
13	3.9	5.6	14	127	16	47	12	9.4	7.6	4.6	3.4	2.4
14	3.9	5.2	11	335	14	39	12	9.4	8.8	4.2	3.4	2.7
15	3.4	5.2	9.6	298	14	36	12	8.2	7.6	6.1	3.8	2.7
16	3.1	5.6	9.1	135	13	40	12	7.6	7.1	5.6	3.4	2.7
17	3.1	5.6	8.1	76	14	46	11	7.6	6.6	4.2	3.0	3.4
18	3.6	6.0	7.2	66	17	46	11	7.1	6.6	3.8	3.4	3.4
19	3.9	6.0	6.8	79	19	37	11	6.6	6.1	3.6	3.4	3.0
20	3.4	5.2	6.4	72	18	31	11	9.4	5.6	4.2	3.8	2.7
21	7.2	4.8	6.4	64	25	27	11	8.2	5.6	3.8	2.7	2.4
22	8.6	4.8	7.2	48	24	23	10	8.8	5.6	3.8	2.7	2.4
23	8.1	4.8	9.6	40	29	20	10	9.4	5.1	3.4	3.0	2.1
24	5.2	4.5	18	46	18	46	18	12	5.6	3.0	2.4	2.4
25	5.6	4.5	79	30	37	24	10	11	4.6	3.0	3.8	2.4
26	4.8	4.2	97	26	31	19	9.4	11	4.6	3.0	3.0	2.4
27	5.2	4.2	82	27	20	20	8.8	11	4.6	3.0	3.4	2.7
28	7.2	4.2	59	19	22	29	8.8	11	5.6	2.7	3.0	3.4
29	5.6	4.2	46	17	20	37	8.8	13	5.6	3.0	2.7	3.0
30	5.2	4.2	33	16	-----	37	10	11	4.6	2.8	2.7	3.4
31	4.2	-----	27	15	-----	31	-----	11	-----	2.1	3.0	-----
TOTAL	163.9	146.4	792.2	1,813	862	831	401.8	301.7	228.8	112.1	90.6	81.1
MEAN	5.27	4.88	25.6	58.5	29.7	26.8	13.4	9.73	7.63	3.62	2.92	2.70
MAX	18	6.8	97	335	100	47	27	13	14	6.1	3.8	3.4
MIN	2.9	3.4	4.8	11	13	15	8.8	6.6	4.6	2.1	2.1	2.1
CFSM	.47	.44	2.29	5.22	2.65	2.39	1.20	.87	.68	.32	.26	.24
IN.	.54	.49	2.63	6.02	2.86	2.76	1.33	1.00	.76	.37	.30	.27
AC-FT	324	290	1,570	3,600	1,710	1,650	797	598	454	222	180	161

CAL YR 1967 TOTAL 6,376.1 MEAN 17.5 MAX 210 MIN 1.7 CFSM 1.56 IN 21.18 AC-FT 12,650
WTR YR 1968 TOTAL 5,824.0 MEAN 15.9 MAX 335 MIN 2.1 CFSM 1.42 IN 19.34 AC-FT 11,950

SNOW CREEK BASIN

12050500 SNOW CREEK NEAR MAYNARD, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	4.2	11	12	7.0	14	26	19	5.8	6.6	3.3	2.6
2	3.8	3.4	9.6	14	8.0	14	33	20	5.5	11	3.6	2.6
3	3.8	3.4	16	16	9.0	15	28	25	5.2	18	3.6	3.0
4	5.1	2.7	16	19	8.5	16	30	23	6.5	23	4.2	3.0
5	4.6	2.7	13	27	8.0	16	33	21	4.2	18	5.8	3.0
6	4.6	2.7	11	34	8.5	16	34	19	4.2	14	4.2	3.0
7	4.2	2.7	11	40	15	16	28	18	4.5	12	3.9	2.8
8	3.8	3.4	19	31	35	15	24	17	9.6	9.6	3.6	2.8
9	3.8	9.4	111	26	30	14	22	18	3.9	8.2	3.3	2.6
10	3.4	8.8	80	23	40	13	21	18	3.9	7.8	3.3	2.6
11	3.4	8.8	50	19	90	12	20	16	3.6	10	3.6	2.6
12	3.8	11	31	17	75	12	22	15	4.2	16	3.6	2.6
13	3.0	10	30	16	67	12	30	13	4.2	14	3.6	3.3
14	3.8	9.4	54	14	67	11	35	13	3.9	12	3.3	3.0
15	4.2	8.0	77	13	45	11	28	12	3.3	10	3.6	3.0
16	3.4	8.8	58	12	46	14	26	11	3.0	8.2	3.6	2.8
17	3.4	8.2	37	11	38	23	25	9.6	3.0	7.4	3.3	3.6
18	3.8	7.6	27	10	33	23	23	9.2	3.0	6.6	3.0	4.2
19	4.2	7.6	22	9.6	28	22	23	9.2	3.0	5.8	3.0	4.8
20	4.2	7.1	17	9.5	24	22	23	8.2	3.3	5.5	3.0	7.0
21	4.2	12	15	9.0	23	20	21	7.4	3.6	5.5	2.8	5.2
22	4.2	20	13	8.5	21	19	20	7.0	5.4	4.8	2.8	4.2
23	3.8	24	25	8.2	19	18	39	6.6	7.9	4.5	2.6	3.9
24	3.0	19	87	8.0	17	16	36	6.6	7.4	4.2	2.3	3.6
25	3.4	18	93	8.0	17	16	32	6.2	10	4.5	3.3	3.6
26	3.4	16	54	8.0	16	16	25	5.8	10	4.2	3.6	3.3
27	3.4	16	38	7.6	14	12	22	5.8	8.7	3.9	3.6	3.0
28	3.4	14	29	7.2	14	13	23	5.5	9.2	3.9	3.6	3.9
29	3.8	20	17	6.8	-----	19	22	6.8	8.7	3.9	3.3	3.3
30	5.1	14	13	6.6	-----	22	19	9.2	8.2	3.9	3.0	3.3
31	5.1	-----	12	6.7	-----	26	-----	7.0	-----	3.6	2.8	-----
TOTAL	120.5	303.7	1,092.6	457.7	803.0	508	793	388.1	159.5	270.6	107.1	102.2
MEAN	3.8	10.1	35.2	14.8	28.7	16.4	26.4	12.5	6.73	3.61	3.41	3.41
MAX	5.1	24	111	40	90	26	39	25	10	23	5.8	7.0
MIN	3.0	2.7	9.6	6.6	7.0	11	19	5.5	3.0	3.6	2.3	2.6
CFSM	.35	.90	3.14	1.32	2.56	1.46	2.36	1.12	.48	.78	.31	.30
IN-	.40	1.01	3.63	1.52	2.67	1.69	2.63	1.29	.53	.90	.36	.34
AC-FT	239	602	2,170	908	1,590	1,010	1,570	770	316	537	212	203

CAL YR 1968 TOTAL 4,238.9 MEAN 17.0 MAX 335 MIN 2.1 CFSM 1.52 IN 20.72 AC-FT 12,370
 WTR YR 1969 TOTAL 5,106.0 MEAN 14.0 MAX 111 MIN 2.3 CFSM 1.25 IN 16.96 AC-FT 10,130

NOTE.--NO GAGE-HEIGHT RECORD JAN. 23 TO FEB. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	2.3	3.0	18	22	9.5	7.6	21	9.0	5.2	2.8	3.0
2	3.0	2.3	3.0	16	22	9.0	7.6	20	8.0	4.8	3.6	3.0
3	2.8	2.3	3.0	15	21	9.0	7.2	17	7.6	4.5	3.3	2.8
4	2.6	6.6	3.0	14	20	9.0	7.2	17	7.2	4.2	3.0	4.2
5	2.6	19	3.0	13	18	8.5	6.8	16	7.2	4.2	3.0	3.0
6	2.3	34	3.0	12	17	9.5	11	15	6.8	3.9	2.5	3.0
7	2.3	13	3.0	12	16	10	9.5	14	6.8	3.9	2.8	3.6
8	3.0	17	3.0	12	17	9.5	8.5	13	6.4	3.6	2.8	3.3
9	2.8	14	3.0	14	17	8.5	17	38	9.3	3.3	2.8	3.0
10	2.8	9.5	3.3	13	16	8.5	22	67	14	3.3	2.5	2.8
11	2.8	7.2	82	13	15	8.0	21	70	10	3.0	2.5	3.0
12	2.3	6.4	109	12	15	8.5	20	52	8.5	2.7	2.3	3.3
13	2.3	5.6	135	14	15	9.5	18	62	7.6	2.7	2.5	3.3
14	2.1	5.2	119	20	14	17	15	48	7.2	3.0	2.5	3.6
15	2.1	5.2	76	18	16	18	14	40	7.2	3.8	2.3	3.6
16	1.9	4.8	46	17	37	18	13	34	8.0	3.0	2.1	3.9
17	1.9	4.5	33	16	28	15	12	27	7.6	3.0	2.1	4.2
18	1.9	4.5	27	15	23	14	12	22	7.2	2.7	2.1	4.5
19	1.9	4.2	24	32	20	13	8	20	6.8	2.7	2.1	4.8
20	2.1	3.9	22	33	18	12	13	17	6.4	2.7	2.1	5.2
21	2.1	3.9	24	66	17	11	13	15	5.6	2.7	2.1	5.2
22	2.3	3.6	47	92	15	10	14	15	5.2	2.7	2.1	5.2
23	2.3	3.6	84	113	14	10	18	13	5.2	2.7	2.1	5.2
24	2.3	3.6	52	72	13	9.5	22	12	4.8	2.7	2.1	4.8
25	2.3	3.3	36	50	12	9.0	23	12	4.8	3.0	2.3	4.8
26	2.3	3.3	28	44	11	9.0	27	11	4.5	3.3	2.5	4.8
27	2.3	3.0	23	40	10	9.0	28	10	5.2	4.8	2.5	4.8
28	2.3	3.0	20	37	18	8.0	26	18	6.8	3.9	2.3	4.8
29	2.3	3.0	19	29	-----	8.0	24	10	6.4	3.6	2.3	4.8
30	2.3	3.0	19	24	-----	7.6	22	10	6.0	3.3	2.3	4.8
31	2.3	-----	19	24	-----	7.2	-----	10	-----	3.0	2.3	-----
TOTAL	73.9	204.8	1,074.3	927	489	322.3	473.4	759	213.3	105.1	76.6	120.3
MEAN	2.38	6.83	34.1	29.9	17.5	10.4	15.8	24.5	7.11	3.39	2.47	4.01
MAX	3.8	14	135	113	37	18	28	70	17	5.2	3.6	5.2
MIN	1.9	2.3	3.0	12	10	7.2	6.8	10	4.5	2.7	2.1	2.8
CFSM	.21	.61	3.10	2.67	1.96	.93	1.41	2.19	.63	.80	.22	.36
IN-	.25	.68	3.57	3.00	1.62	1.07	1.57	2.52	.71	.35	.25	.40
AC-FT	147	406	2,130	1,808	970	639	939	1,510	423	208	152	239

CAL YR 1969 TOTAL 4,942.2 MEAN 13.5 MAX 135 MIN 1.9 CFSM 1.21 IN 16.42 AC-FT 9,800
 WTR YR 1970 TOTAL 4,839.0 MEAN 13.3 MAX 135 MIN 1.9 CFSM 1.19 IN 16.07 AC-FT 9,600

12054000 DUCKABUSH RIVER NEAR BRINNON, WASH.

LOCATION.--Lat 47°41'03", long 123°00'37", in NW¼SW¼ sec.1, T.25 N., R.3 W., Jefferson County, Olympic National Forest, on left bank 5.2 miles west of Brinnon and at mile 4.5.

DRAINAGE AREA.--66.5 sq mi.

PERIOD OF RECORD.--August to December 1910 (gage heights only), December 1910 to December 1911, June 1938 to September 1970. Published as "near Duckabush" 1910-11.

GAGE.--Water-stage recorder. Datum of gage is 241.49 ft above mean sea level. Aug. 19, 1910, to Dec. 31, 1911, nonrecording gage at same site at different datum.

AVERAGE DISCHARGE.--32 years (1938-70), 417 cfs (85.16 inches per year, 302,100 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,500 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Nov. 19, 1965	0545	2,540	5.71	Dec. 13, 1966	0800	5,160	7.69	Jan. 14, 1968	0600	*6,750	8.83
Dec. 7, 1965	0800	*2,570	5.74	Dec. 16, 1966	0615	3,000	6.08	Jan. 19, 1968	0800	2,970	6.06
				Mar. 23, 1967	0100	4,090	6.92				
Nov. 19, 1966	1645	3,050	6.12					Dec. 24, 1968	1100	*2,920	5.99
Dec. 1, 1966	0230	*6,920	8.95	Oct. 1, 1967	1800	3,000	6.08				
Dec. 4, 1966	0500	3,110	6.17	Oct. 27, 1967	1700	3,440	6.42	Dec. 13, 1969	1600	*3,830	6.72

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 4, 1965	52	1.48	1969	Oct. 3, 4, 1968	88	1.63
1967	Oct. 18, 1966	60	1.55	1970	Sept. 16, 1970	58	1.50
1968	Sept. 10, 11, 13, 1968	93	1.73				

a Occurred Sept. 16, 1969.

Period of record: Maximum discharge, 8,960 cfs Nov. 26, 1949 (gage height, 10.06 ft), from rating curve extended above 4,800 cfs on basis of slope-area measurement of peak flow; minimum, 45 cfs Oct. 26, 28, 29, 1942; minimum gage height, 1.32 ft Sept. 30, 1939.

REMARKS.--Records excellent except those for periods of no gage-height record, which are good.

REVISIONS.--WSP 1216: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	92	578	177	345	203	680	356	445	419	312	113
2	53	271	603	175	297	190	640	419	436	419	317	113
3	52	1,020	785	177	271	175	540	585	419	476	322	113
4	84	905	1,110	165	685	165	520	742	419	490	313	111
5	293	805	845	182	886	173	540	954	424	508	282	112
6	683	478	1,960	415	695	230	640	1,440	555	485	260	110
7	266	601	1,880	490	498	256	740	1,120	695	485	294	106
8	166	687	1,030	766	387	391	800	940	742	512	292	100
9	139	551	724	526	324	635	740	1,070	712	531	236	98
10	114	523	590	411	281	450	720	954	695	512	228	99
11	100	464	490	391	268	340	700	748	630	467	213	138
12	91	366	415	508	253	330	600	736	545	441	200	138
13	89	361	368	1,650	230	640	520	706	531	472	218	114
14	199	547	328	1,340	213	900	480	595	615	479	212	105
15	207	464	297	760	197	1,100	500	522	724	458	200	101
16	145	397	274	555	185	700	480	472	898	456	192	95
17	142	344	256	458	177	450	660	428	820	431	179	129
18	143	439	250	387	168	440	440	411	685	436	172	185
19	151	2,050	244	338	163	370	400	476	650	427	167	132
20	211	1,330	268	303	168	310	380	600	585	383	158	110
21	196	799	268	277	180	270	344	645	498	372	155	102
22	148	594	233	253	200	230	356	550	462	395	182	102
23	126	465	224	238	303	220	371	485	494	399	150	118
24	113	402	210	221	281	230	391	512	494	369	154	105
25	104	354	200	208	256	240	415	680	485	348	152	99
26	98	324	190	205	244	310	391	820	485	336	143	97
27	93	300	200	250	238	360	368	695	550	334	141	95
28	102	293	221	268	221	410	356	590	460	356	148	90
29	99	291	208	541	-----	500	345	565	522	375	134	90
30	110	296	200	522	-----	780	345	570	445	362	125	85
31	92	-----	187	424	-----	740	-----	508	-----	335	117	-----
TOTAL	4,642	16,613	15,636	13,581	8,614	12,738	15,222	20,894	17,320	13,268	6,278	3,305
MEAN	150	540	504	438	308	411	507	674	577	428	203	110
MAX	683	2,050	1,960	1,650	886	1,100	800	1,440	898	531	322	185
MIN	52	92	187	165	163	165	345	356	419	334	117	85
CFSM	2.26	8.42	7.58	6.59	4.63	6.18	7.62	10.1	8.68	4.44	3.05	1.65
IN.	2.60	9.41	8.75	7.60	4.82	7.13	8.52	11.60	9.40	7.42	3.51	1.85
AC-FT	9,210	33,350	31,010	26,940	17,090	25,270	30,190	41,440	34,350	26,320	12,450	6,360
CAL YR 1965	TOTAL 124,645	MEAN 341	MAX 2,050	MIN 52	CFSM 5.13	IN 49.73	AC-FT 247,200					
MYR YR 1966	TOTAL 148,311	MEAN 406	MAX 2,050	MIN 52	CFSM 6.11	IN 82.96	AC-FT 294,200					

NOTE.--NO GAGE-HEIGHT RECORD MAR. 10 TO APR. 20.

12054000 DUCKABUSH RIVER NEAR BRINNON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	152	4,900	478	660	302	264	200	725	766	341	175
2	81	139	3,120	419	560	239	257	220	1,030	806	321	144
3	77	129	2,100	620	600	226	270	251	998	884	322	144
4	74	121	2,390	499	760	212	295	288	950	854	316	132
5	71	117	1,260	424	720	200	278	354	968	746	299	125
6	70	113	1,090	374	600	192	260	491	1,000	660	291	125
7	75	107	806	346	520	186	264	615	962	605	267	117
8	89	102	595	378	450	184	274	660	860	600	252	110
9	77	102	509	394	420	181	274	610	752	554	253	113
10	71	105	635	432	380	176	257	500	740	514	263	261
11	68	98	1,670	635	370	170	244	410	758	550	271	260
12	68	187	2,900	500	380	160	251	366	740	595	268	165
13	68	740	4,400	455	470	156	244	354	824	595	266	133
14	65	1,110	1,960	419	430	170	232	378	950	559	260	117
15	63	1,020	1,740	509	380	248	217	482	1,030	536	247	109
16	62	713	2,580	464	330	1,020	220	722	1,120	545	240	108
17	65	528	1,880	394	320	764	209	956	1,190	536	239	107
18	61	714	1,720	358	310	554	217	944	1,200	455	223	104
19	240	1,690	1,620	884	300	406	226	956	1,190	419	212	102
20	292	2,290	1,360	944	280	382	223	1,100	1,170	451	206	103
21	194	1,680	968	685	260	350	223	1,210	1,040	428	199	102
22	335	893	764	522	240	1,330	226	1,080	992	406	191	101
23	859	593	680	460	220	2,730	226	944	950	415	181	93
24	576	465	680	390	206	1,170	232	764	950	433	168	88
25	357	555	600	350	206	727	241	653	998	442	154	87
26	288	449	527	380	197	558	229	625	998	432	147	84
27	236	490	473	640	189	446	220	640	884	406	146	81
28	190	672	432	1,250	295	394	217	715	854	373	148	81
29	242	906	428	1,800	-----	350	209	836	854	353	149	89
30	214	2,640	390	1,150	-----	312	200	675	776	352	150	126
31	172	-----	378	700	-----	284	-----	590	-----	356	148	-----
TOTAL	5,481	19,620	45,555	18,253	11,053	14,794	7,199	19,591	28,463	16,606	7,135	3,686
MEAN	177	654	1,470	589	395	477	240	632	949	536	230	123
MAX	859	2,640	4,900	1,800	760	2,730	295	1,210	1,200	884	341	261
MIN	61	98	378	346	189	156	200	200	725	352	146	81
CFSM	2,66	9.83	22.1	8.86	5.94	7.17	3.61	9.50	14.3	8.06	3.46	1.85
IN-	3.07	19.8	35.40	10.21	6.20	8.08	4.03	10.96	15.92	9.29	3.99	2.64
AC-FT	10,870	38,920	90,360	36,200	21,920	29,340	14,280	38,860	56,460	32,940	14,150	7,310

CAL YR 1966 TOTAL 181,876 MEAN 498 MAX 4,900 CFSM 7.49 IN 101.74 AC-FT 360,800
 WTR YR 1967 TOTAL 197,436 MEAN 541 MAX 4,900 MIN 61 CFSM 8.14 IN 110.45 AC-FT 391,600

NOTE.--NO GAGE-HEIGHT RECORD JAN. 26 TO FEB. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,940	590	228	439	398	649	324	419	686	416	203	143
2	1,610	477	351	385	865	706	306	327	1,280	503	203	137
3	1,010	512	366	346	1,250	644	306	758	306	578	197	123
4	1,290	365	208	320	1,440	785	289	345	629	407	192	115
5	1,190	330	430	292	840	1,170	278	322	604	589	176	112
6	1,210	306	354	270	634	852	259	284	652	547	163	110
7	1,230	397	328	259	543	662	247	264	621	539	151	109
8	779	511	266	569	567	567	236	281	580	578	144	103
9	562	705	203	304	471	499	231	338	549	510	141	99
10	573	1,090	752	283	441	433	252	436	544	449	141	95
11	710	811	842	251	421	503	275	536	529	436	141	100
12	569	613	521	283	409	1,060	253	543	469	471	137	105
13	749	530	403	1,820	389	977	232	427	461	375	96	-----
14	675	696	351	4,990	358	815	226	370	411	371	156	186
15	491	701	310	4,010	330	774	218	345	406	345	153	320
16	401	594	279	1,500	310	710	201	366	450	304	147	248
17	347	487	252	1,000	344	598	189	492	478	278	133	429
18	320	426	234	1,180	1,190	491	184	627	566	266	151	330
19	299	380	217	2,550	1,460	408	176	817	608	280	161	247
20	269	346	201	2,200	989	376	170	1,160	583	272	157	201
21	444	320	202	1,640	1,280	367	164	735	514	247	145	168
22	654	302	975	1,110	1,040	369	160	603	536	237	130	150
23	262	1,200	1,520	1,520	1,520	380	166	552	538	221	190	164
24	509	267	1,420	1,360	1,390	395	168	512	545	226	258	141
25	615	251	1,510	1,000	942	409	166	490	569	241	194	129
26	476	234	1,470	789	791	380	171	501	713	248	202	121
27	1,800	225	1,130	658	702	484	170	468	703	245	235	114
28	1,160	217	876	578	637	459	229	471	524	251	215	108
29	724	219	697	528	614	506	374	471	421	248	176	103
30	766	211	584	474	-----	415	485	440	377	229	155	98
31	759	-----	506	441	-----	359	-----	426	-----	212	141	-----
TOTAL	24,880	13,195	18,148	32,606	22,520	18,202	7,095	14,676	17,315	11,266	5,225	4,712
MEAN	803	440	585	1,052	777	587	237	473	577	363	169	137
MAX	1,940	1,090	1,510	4,990	1,520	1,170	485	1,280	607	558	258	429
MIN	269	211	201	246	310	359	160	264	377	212	130	95
CFSM	12.1	6.62	8.80	15.8	11.7	8.83	3.56	7.11	8.48	5.46	2.54	2.36
IN-	13.92	7.38	10.15	18.24	12.60	10.18	3.97	8.21	9.69	6.30	2.92	2.64
AC-FT	49,350	26,170	36,000	64,670	44,670	36,100	14,070	29,110	34,340	22,350	10,360	9,350

CAL YR 1967 TOTAL 185,003 MEAN 501 MAX 2,730 MIN 81 CFSM 7.53 IN 102.37 AC-FT 363,000
 WTR YR 1968 TOTAL 189,840 MEAN 519 MAX 4,990 MIN 95 CFSM 7.80 IN 106.20 AC-FT 376,500

12054000 DUCKABUSH RIVER NEAR BRINNON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	96	407	441	320	147	177	914	398	968	497	238	117		
2	93	477	384	317	143	187	860	383	1,190	575	231	117		
3	90	440	1,250	345	141	206	630	366	1,310	515	218	116		
4	100	358	1,010	914	152	209	660	348	1,450	458	210	110		
5	96	311	652	1,260	145	241	635	366	1,520	458	213	106		
6	160	278	508	836	138	250	551	479	1,360	430	197	102		
7	130	270	448	660	141	229	470	726	1,180	434	188	100		
8	112	593	608	542	292	209	422	1,090	1,220	422	179	101		
9	108	550	1,080	466	269	195	406	1,330	1,350	450	179	104		
10	143	450	872	422	331	185	414	1,310	1,310	484	182	106		
11	297	723	659	376	1,690	174	410	1,190	1,260	454	177	106		
12	409	766	505	338	788	169	502	1,230	1,170	402	172	106		
13	312	543	464	320	502	167	671	1,230	1,080	362	176	105		
14	532	438	710	306	383	167	591	1,190	986	331	172	100		
15	515	374	1,010	282	369	215	454	1,000	950	320	176	95		
16	348	324	741	263	438	383	426	908	962	310	170	93		
17	339	296	514	247	369	866	484	866	980	307	158	353		
18	410	370	404	232	327	677	565	938	998	315	153	697		
19	391	375	337	215	303	484	547	1,040	956	326	152	980		
20	434	483	292	205	279	402	475	1,020	854	339	150	755		
21	334	752	263	190	259	373	430	1,090	748	329	152	496		
22	386	836	248	180	244	366	442	1,200	682	323	145	504		
23	351	662	566	170	229	352	704	1,330	693	342	137	890		
24	513	535	2,120	179	215	327	625	1,470	650	344	136	647		
25	452	452	1,210	179	203	317	515	1,150	585	321	172	460		
26	356	402	737	174	195	390	438	1,020	560	278	147	355		
27	286	376	547	169	187	551	434	974	511	273	146	313		
28	328	334	438	164	179	533	502	908	470	278	144	297		
29	807	603	362	159	-----	529	470	1,050	484	261	133	259		
30	890	546	327	152	-----	682	426	1,780	470	242	125	323		
31	536	-----	324	150	-----	992	-----	956	-----	238	120	-----		
TOTAL	10,354	14,324	20,031	10,732	9,058	11,204	16,033	29,836	28,907	11,418	5,248	9,013		
MEAN	334	477	646	346	324	361	534	962	964	368	169	300		
MAX	890	836	2,120	1,260	1,690	992	914	1,470	1,520	575	238	980		
MIN	90	270	248	150	138	167	406	348	470	238	120	93		
CFSM	5.02	7.17	9.71	5.20	4.87	5.43	8.03	14.5	14.5	5.53	2.54	4.51		
IN.	5.79	8.01	11.21	6.00	5.07	6.27	8.97	16.69	16.17	6.39	2.94	5.04		
AC-FT	20,540	28,410	39,730	21,290	17,970	22,220	31,800	59,180	57,340	22,650	10,410	17,880		
CAL YR 1968	TOTAL 178,326		MEAN 487		MAX 4,990		MIN 90		CFSM 7.32		IN 99.76		AC-FT 353,700	
WTR YR 1969	TOTAL 176,158		MEAN 483		MAX 2,120		MIN 90		CFSM 7.26		IN 98.54		AC-FT 349,400	

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	386	148	184	248	428	217	178	195	612	299	137	78		
2	357	140	176	232	368	207	174	227	840	330	141	77		
3	286	143	178	220	337	197	169	281	1,010	419	141	90		
4	249	650	192	203	303	187	175	367	866	482	139	88		
5	223	1,160	171	195	279	179	331	408	690	442	135	80		
6	205	1,560	163	189	259	292	613	342	740	390	128	85		
7	271	1,080	156	181	292	617	375	301	735	370	128	120		
8	671	944	161	178	362	390	308	301	610	386	122	95		
9	503	670	156	264	395	316	1,210	328	536	370	112	83		
10	380	509	156	232	411	276	839	305	496	338	110	76		
11	315	446	842	206	414	256	553	284	451	299	112	71		
12	276	514	1,070	189	433	359	427	269	424	278	112	68		
13	247	469	2,130	288	440	541	359	264	451	264	110	66		
14	224	514	1,690	788	394	1,370	311	245	505	254	104	63		
15	208	487	974	514	473	840	279	297	518	257	101	61		
16	197	390	665	386	845	618	253	507	482	267	101	59		
17	190	327	605	323	643	481	236	555	455	245	97	119		
18	177	288	1,010	487	521	394	229	437	482	229	93	159		
19	168	260	830	1,230	428	344	224	399	599	226	90	143		
20	166	306	878	932	378	310	208	370	625	223	88	111		
21	161	309	992	1,430	341	283	198	370	690	212	88	104		
22	153	260	920	1,230	313	261	193	442	660	192	88	158		
23	149	330	842	1,460	293	247	190	496	590	181	88	147		
24	146	309	635	962	274	240	199	517	545	176	88	106		
25	141	267	527	752	258	225	194	672	523	181	86	91		
26	136	241	442	645	247	213	188	725	568	192	83	82		
27	203	223	382	620	242	204	180	534	577	197	82	76		
28	178	212	334	505	231	198	176	446	473	168	85	72		
29	168	203	306	419	-----	195	180	435	374	158	82	69		
30	163	195	285	370	-----	187	185	438	323	151	80	66		
31	157	-----	267	462	-----	181	-----	448	-----	141	77	-----		
TOTAL	7,454	13,554	18,319	16,340	10,602	10,825	9,334	12,205	17,410	8,317	3,228	2,763		
MEAN	240	452	591	527	379	349	311	394	580	268	104	92.1		
MAX	671	1,560	2,130	1,460	845	1,370	1,210	725	1,010	482	141	159		
MIN	136	140	156	178	231	179	169	195	323	141	77	59		
CFSM	3.61	6.80	8.89	7.92	5.70	5.25	4.68	5.92	8.72	4.03	1.56	1.39		
IN.	4.17	7.58	10.25	9.14	5.93	6.06	5.22	6.83	9.74	4.65	1.81	1.55		
AC-FT	14,790	26,880	36,340	32,410	21,030	21,470	18,510	24,210	34,530	16,500	6,400	5,480		
CAL YR 1969	TOTAL 170,776		MEAN 468		MAX 2,130		MIN 53		CFSM 7.04		IN 95.53		AC-FT 338,700	
WTR YR 1970	TOTAL 130,351		MEAN 357		MAX 2,130		MIN 59		CFSM 5.37		IN 72.92		AC-FT 258,600	

HAMMA HAMMA RIVER BASIN

12054500 HAMMA HAMMA RIVER NEAR ELTON, WASH.

LOCATION.--Lat 47°35'18", long 123°06'57", in SE¼NW¼ sec.7, T.24 N., R.3 W., Mason County, Olympic National Forest, on left bank 0.3 mile downstream from Watson Creek, 4.6 miles northwest of Eldon, and at mile 6.2.

DRAINAGE AREA.--51.3 sq mi.

PERIOD OF RECORD.--June 1951 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 510 ft (from topographic map).

AVERAGE DISCHARGE.--19 years, 364 cfs (96.36 inches per year, 263,700 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,700 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Nov. 19, 1965	0500	1,810	3.39	Dec. 16, 1966	0730	2,130	3.71	Feb. 4, 1968	0130	1,930	3.40
Dec. 7, 1965	-	*1,950	3.53	Jan. 29, 1967	1500	1,940	3.52	Feb. 23, 1968	2200	1,780	3.25
Jan. 13, 1966	2100	1,730	3.31	Mar. 23, 1967	0130	3,180	4.67	Dec. 24, 1968	0930	*2,570	3.99
Nov. 19, 1966	1800	1,730	3.31	Oct. 1, 1967	2015	2,330	3.91	Nov. 6, 1969	0130	2,090	3.55
Dec. 1, 1966	0500	*5,160	6.15	Oct. 27, 1967	1700	1,110	3.50	Dec. 13, 1969	1630	*3,310	4.65
Dec. 4, 1966	0530	2,520	4.08	Jan. 14, 1968	0645	*6,010	6.69				
Dec. 13, 1966	0800	4,650	5.80	Jan. 19, 1968	1130	2,960	4.36				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1-4, 1965	39	.40	1969	Sept. 15, 16, 1969	60	.31
1967	Oct. 18, 1966	48	.43	1970	Sept. 16, 1970	43	.26
1968	Sept. 13, 1968	82	.47				

Period of record: Maximum discharge, 6,010 cfs Jan. 14, 1968 (gage height, 6.69 ft); minimum, 39 cfs Sept. 30, Oct. 1-4, 1965, minimum gage height, 0.26 ft Sept. 16, 1970.

REMARKS.--Records excellent except those for period of no gage-height record, which are good.

REVISIONS (WATER YEARS).--WSP 1716: 1956(M), 1958-59(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	71	540	173	332	206	619	290	370	306	195	85
2	39	133	600	163	282	189	583	332	360	302	192	82
3	39	609	760	160	258	173	504	440	346	319	192	80
4	41	601	1,000	154	435	166	472	560	337	319	192	80
5	92	619	950	169	734	166	494	692	332	324	182	78
6	330	395	1,600	298	631	189	565	980	385	319	173	76
7	176	430	1,500	405	460	209	655	825	460	314	166	76
8	127	460	1,100	613	360	294	673	755	488	319	163	73
9	108	415	720	482	302	494	419	825	482	332	160	71
10	95	435	600	375	262	415	601	769	482	328	154	73
11	88	430	499	360	250	328	589	619	455	314	148	88
12	78	346	440	430	234	319	510	583	420	298	142	90
13	73	346	390	1,440	223	601	440	565	400	306	139	82
14	102	504	346	1,220	206	867	415	488	425	306	139	78
15	119	420	319	679	189	980	420	440	482	286	136	73
16	102	360	294	494	182	631	415	410	560	278	130	71
17	95	314	270	415	173	435	480	375	538	262	127	76
18	98	387	258	365	166	430	375	355	477	262	122	102
19	119	1,540	246	332	160	390	350	390	460	258	119	92
20	127	1,050	246	298	163	310	337	460	425	242	113	82
21	139	680	250	270	176	262	328	488	380	230	111	80
22	119	500	230	250	189	234	319	440	355	234	108	76
23	108	415	220	254	254	220	324	400	350	258	105	78
24	100	360	209	220	274	216	324	405	346	230	102	76
25	92	335	202	206	258	234	337	488	332	220	102	73
26	88	315	189	198	246	294	328	565	332	209	100	71
27	85	310	195	223	234	365	319	516	360	206	100	69
28	85	305	202	246	223	415	302	460	425	212	102	69
29	80	300	195	440	-----	532	294	440	370	220	98	67
30	76	300	185	494	-----	720	286	435	328	216	92	65
31	73	-----	176	415	-----	706	-----	405	-----	209	88	-----
TOTAL	3,124	13,685	14,831	12,221	7,856	11,980	13,197	16,195	12,262	8,418	4,192	2,332
MEAN	101	436	478	394	281	386	440	522	409	272	135	77.7
MAX	310	1,940	1,600	1,440	734	980	673	980	860	332	195	102
MIN	39	71	176	154	160	166	286	290	328	206	88	65
CFSM	1.97	8.89	9.32	7.68	5.48	7.52	8.58	10.2	7.97	5.30	2.63	1.51
IN.	2.27	9.92	10.75	8.66	5.70	8.69	9.57	11.74	8.89	6.10	3.04	1.69
AC-FT	6,200	27,140	29,420	24,240	15,580	23,760	26,180	32,120	24,320	16,700	8,310	4,630
CAL YR 1965	TOTAL 104,187	MEAN 285	MAX 1,600	MIN 39	CFSM 5.56	IN 75.55	AC-FT 206,700					
WTR YR 1966	TOTAL 120,293	MEAN 330	MAX 1,600	MIN 39	CFSM 6.43	IN 87.23	AC-FT 238,600					

NOTE.--NO GAGE-HEIGHT RECORD NOV. 20 TO DEC. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,200	482	195	410	363	576	310	280	461	273	134	129
2	1,330	415	270	375	758	600	293	260	931	293	132	126
3	818	375	350	342	1,160	359	291	254	636	314	129	117
4	958	342	314	314	1,410	636	271	277	514	323	126	116
5	965	314	350	294	791	917	266	273	471	319	123	106
6	1,030	290	290	274	594	777	254	250	487	306	120	104
7	1,040	278	254	242	503	606	239	235	454	298	112	98
8	755	377	220	246	466	509	228	235	420	293	106	92
9	565	565	234	266	448	456	221	273	396	285	104	88
10	504	988	499	254	420	420	232	323	391	266	101	85
11	571	797	661	234	406	435	246	377	382	258	98	87
12	510	577	430	248	391	819	235	386	358	269	95	85
13	613	477	342	1,530	372	903	220	327	372	239	93	85
14	601	526	294	4,500	350	784	210	298	340	232	101	134
15	477	538	262	3,920	323	750	205	285	319	221	98	210
16	410	494	238	1,570	302	686	195	295	327	207	95	187
17	360	430	220	966	314	559	185	350	332	197	93	246
18	328	385	206	928	906	456	180	425	350	184	98	242
19	298	346	195	2,490	1,280	396	170	557	382	188	109	214
20	278	319	182	2,450	868	358	165	712	398	177	109	194
21	355	294	179	1,890	1,240	354	162	536	340	168	104	177
22	494	274	556	1,190	1,110	354	158	471	350	158	98	158
23	521	258	923	1,040	1,510	358	160	435	340	155	143	155
24	450	242	1,080	1,180	1,420	372	158	406	327	149	187	143
25	526	230	1,180	924	945	386	155	382	340	149	162	134
26	435	216	1,090	712	750	368	165	382	391	149	152	129
27	1,110	206	881	582	661	446	162	363	401	146	168	125
28	1,020	198	741	509	594	430	190	363	340	144	171	117
29	667	195	619	456	559	440	250	358	302	143	158	112
30	619	189	526	415	-----	391	320	340	273	140	143	186
31	948	-----	455	396	-----	340	-----	327	-----	137	134	-----
TOTAL	20,356	11,617	14,234	31,167	21,212	16,441	8,488	11,093	12,087	6,774	3,796	4,095
MEAN	657	387	459	1,805	731	530	216	356	403	219	122	137
MAX	1,330	988	1,180	4,500	1,510	917	320	712	931	323	187	246
MIN	278	189	179	234	302	340	155	235	273	137	93	85
CF5M	12.8	7.54	8.95	19.4	14.2	10.3	4.21	6.94	7.86	4.27	2.38	2.67
IN-	14.76	8.42	10.32	22.60	15.38	11.92	4.70	8.00	8.76	4.91	2.75	2.97
AC-FT	40,380	25,040	28,240	61,820	42,070	32,610	12,870	21,880	25,970	13,440	7,530	8,120
CAL YR 1967	TOTAL 143,347		MEAN 493		MAX 2,250		MIN 56		CF5M 7.66		IN 103.95	
WTR YR 1968	TOTAL 159,302		MEAN 495		MAX 4,500		MIN 85		CF5M 9.68		IN 115.52	
									AC-FT 284,300		AC-FT 316,000	

HAMMA HAMMA RIVER BASIN

12054500 HAMMA HAMMA RIVER NEAR ELDON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	401	406	280	135	165	764	354	770	360	155	78
2	98	482	358	281	137	171	738	336	875	390	152	78
3	96	466	960	289	134	184	548	323	959	360	146	75
4	105	401	945	614	140	194	571	310	1,070	340	143	72
5	100	354	612	1,040	137	217	548	523	1,110	320	140	70
6	210	314	476	699	134	232	476	382	1,000	310	134	68
7	150	306	435	571	134	221	420	559	880	300	132	65
8	120	565	536	476	190	200	382	798	900	290	126	65
9	125	531	916	420	197	187	358	966	980	130	120	65
10	200	461	819	377	217	174	358	1,010	970	330	120	65
11	380	686	636	340	1,190	165	358	980	920	300	117	65
12	460	731	487	310	750	162	415	1,010	860	270	114	65
13	400	559	466	289	461	158	556	1,010	820	65	114	65
14	650	504	606	258	358	158	476	980	718	218	112	63
15	590	401	854	289	336	180	406	833	740	210	112	63
16	425	354	680	239	372	288	372	744	740	210	109	63
17	377	327	482	224	332	724	410	718	760	207	104	168
18	398	368	396	219	298	612	757	707	602	203	101	471
19	372	358	340	203	264	435	498	826	700	207	98	731
20	406	430	302	194	250	354	440	798	600	207	98	630
21	350	600	273	184	235	327	396	854	500	207	98	460
22	791	254	177	217	391	391	591	410	810	203	95	420
23	358	630	535	171	210	319	542	1,050	490	207	93	718
24	406	520	1,990	168	200	298	514	1,130	450	207	90	509
25	382	451	1,040	165	194	289	440	924	420	200	98	406
26	340	406	448	165	180	340	391	833	380	187	93	340
27	302	382	487	162	174	451	382	805	360	177	93	302
28	314	345	401	155	168	446	420	764	340	177	93	277
29	482	476	340	150	-----	440	406	861	360	174	88	294
30	655	476	300	145	-----	531	377	1,000	350	165	85	273
31	482	-----	275	135	-----	770	-----	798	-----	160	80	-----
TOTAL	10,226	14,021	18,235	9,368	7,753	9,719	13,844	23,974	21,344	7,623	3,453	6,999
MEAN	330	467	588	302	277	314	461	773	711	246	111	233
MAX	655	784	1,990	1,040	1,190	770	764	1,130	1,110	390	155	731
MIN	96	306	254	135	134	158	358	310	340	160	80	63
CFSN	6.43	9.10	11.5	5.89	5.40	6.12	5.99	15.1	13.9	4.98	2.46	4.6
IN.	7.42	10.17	13.22	6.79	6.62	7.05	10.04	17.38	15.48	5.53	2.50	5.08
AC-F	20,280	27,810	36,170	18,580	15,380	19,280	27,460	47,550	42,340	15,120	6,850	13,080

NOTE.--NO GAGE-HEIGHT RECORD JUNE 6 TO JULY 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	321	131	184	273	455	237	188	183	382	229	98	49
2	321	128	174	265	405	225	188	197	489	229	96	47
3	281	125	177	245	366	213	180	225	567	245	96	49
4	253	427	180	233	339	202	184	261	533	257	93	49
5	229	914	167	217	312	194	294	285	478	249	90	47
6	213	1,400	164	205	290	273	520	269	484	237	88	49
7	238	925	158	194	312	515	366	241	478	225	86	55
8	525	790	158	202	366	390	326	249	430	225	83	55
9	460	604	158	273	395	330	1,040	257	390	222	80	51
10	366	475	158	257	405	290	753	241	364	211	78	49
11	321	415	694	237	400	273	494	225	346	197	73	49
12	277	400	1,050	221	400	330	390	218	328	186	73	47
13	250	375	1,890	281	400	500	341	208	328	176	73	47
14	225	375	1,430	742	370	1,230	301	200	341	169	73	45
15	215	375	862	525	435	827	277	222	332	166	69	45
16	201	344	634	405	808	592	257	314	314	169	69	43
17	191	312	616	339	476	475	237	364	305	162	66	40
18	181	285	995	405	520	410	225	318	314	152	64	88
19	170	265	876	1,020	445	370	222	301	328	146	64	80
20	164	277	953	862	395	339	208	289	350	143	62	78
21	158	273	1,130	1,230	362	308	200	281	382	140	62	80
22	152	249	953	1,186	290	186	186	301	382	134	60	88
23	146	273	848	1,210	312	273	183	323	354	128	60	98
24	140	269	640	876	290	265	190	334	336	125	60	93
25	137	249	525	700	277	249	186	400	323	122	58	73
26	131	237	470	622	261	237	180	440	323	122	55	69
27	125	215	415	634	257	225	174	364	328	122	55	62
28	149	209	370	520	245	221	172	332	297	111	55	60
29	143	202	344	455	-----	209	172	318	249	109	51	58
30	143	191	316	405	-----	205	180	323	245	106	49	55
31	140	-----	294	455	-----	194	-----	318	-----	101	49	-----
TOTAL	6,996	11,715	17,983	15,618	10,807	10,891	8,816	8,807	11,120	5,317	2,184	1,808
MEAN	224	391	578	504	346	349	284	284	371	172	70.5	60.3
MAX	525	1,400	1,890	1,230	808	1,230	1,040	440	567	257	98	98
MIN	131	125	158	194	245	194	172	183	245	101	49	43
CFSM	4.41	7.62	11.3	9.82	7.52	6.84	5.73	5.54	7.23	3.35	1.37	1.18
IN.	5.07	8.50	13.04	11.33	7.84	7.90	6.39	6.39	8.06	3.86	1.59	1.31

12054600 JEFFERSON CREEK NEAR ELDON, WASH.

LOCATION.--Lat 47°35'00", long 123°06'18", in SESEK sec.7, T.24 N., R.3 W., Mason County, Olympic National Forest, on right bank 0.2 mile upstream from mouth and 4.0 miles northwest of Eldon.

DRAINAGE AREA.--21.6 sq mi.

PERIOD OF RECORD.--October 1957 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 500 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 152 cfs (95.56 inches per year, 110,100 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,400 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 6, 1965	0415	*1,360	6.68	Oct. 1, 1967	1830	2,030	7.55	Feb. 11, 1969	0730	1,440	6.76
				Jan. 14, 1968	0730	*3,030	8.80				
Dec. 2, 1966	1830	1,770	7.22	Jan. 19, 1968	0900	2,280	7.86	Nov. 6, 1969	0230	1,850	7.32
Dec. 4, 1966	0530	2,200	7.76	Feb. 3, 1968	2230	2,020	7.54	Dec. 11, 1969	1800	2,050	7.57
Dec. 13, 1966	0515	*3,160	8.96					Dec. 13, 1969	1530	*2,330	7.92
Mar. 22, 1967	0315	2,500	8.14	Dec. 24, 1968	0845	*2,390	8.00	Apr. 9, 1970	1130	1,620	7.01

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 1965	8.8	2.65	1969	Sept. 14-16, 1969		
1967	Oct. 16-19, 1966, Sept. 27-29, 1967	13	a2.73	1970	Sept. 1-3, 6, 10-17, 1970	12	d2.49
1968	Aug. 10, 13, 1968	18	b2.72				

a Occurred Sept. 29, 1967.

b Occurred Aug. 13, 1968.

c Occurred Sept. 15, 16, 1969.

d Occurred Sept. 15, 16, 1970.

Period of record: Maximum discharge, 3,160 cfs Dec. 13, 1966 (gage height, 8.96 ft), from rating curve extended above 1,600 cfs on basis of slope-area measurements at gage heights 7.84 and 8.35 ft; minimum, 8.8 cfs Oct. 3, 1965; minimum gage height, 2.49 ft Sept. 15, 16, 1970.

REMARKS.--Records excellent except those for period of no gage-height record, which are poor. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	27	416	63	183	103	329	96	90	70	39	19
2	9.2	37	361	61	148	89	314	105	85	70	38	18
3	8.9	370	370	98	129	78	254	135	83	71	38	18
4	9.7	307	302	56	306	71	239	170	81	70	36	17
5	18	351	454	61	527	72	255	209	77	67	36	18
6	77	198	958	325	403	87	282	290	75	65	36	17
7	64	166	704	338	263	114	299	270	75	64	35	17
8	40	169	426	504	189	237	295	230	76	63	34	17
9	37	169	354	282	154	480	266	240	80	62	33	16
10	33	204	309	209	128	263	250	220	83	62	32	17
11	32	223	270	238	118	177	256	180	84	61	31	22
12	30	169	235	440	115	199	220	170	83	61	30	29
13	28	157	207	1,140	102	488	190	160	85	60	29	23
14	51	228	185	701	92	764	186	140	84	59	28	21
15	64	187	170	344	83	782	187	120	82	59	28	20
16	44	160	154	273	75	412	182	115	84	57	27	19
17	40	140	138	231	70	269	172	105	85	57	26	20
18	41	147	124	205	65	276	157	95	87	56	24	25
19	50	775	110	180	63	244	143	100	86	54	25	24
20	58	620	110	161	74	179	133	115	86	53	24	22
21	70	349	117	143	95	144	126	120	86	50	23	21
22	61	268	101	124	112	121	121	110	84	48	22	20
23	46	222	94	110	169	108	118	100	81	47	22	21
24	41	198	83	97	169	188	117	100	77	46	22	20
25	38	181	79	88	147	132	117	115	73	46	21	19
26	35	172	73	86	145	190	113	135	71	44	21	19
27	33	166	78	138	144	235	105	120	69	43	21	19
28	32	173	82	157	122	269	100	109	69	41	21	18
29	30	169	76	490	-----	332	96	105	69	41	20	18
30	28	160	72	376	-----	404	95	105	69	39	20	18
31	27	-----	66	252	-----	351	-----	95	-----	39	19	-----
TOTAL	1,187.1	6,905	7,456	7,952	4,390	7,796	5,717	4,471	2,401	1,725	863	592
MEAN	38.3	230	241	237	157	231	191	144	80.0	55.6	27.8	19.7
MAX	77	775	958	1,140	527	782	329	290	90	71	39	29
MIN	8.9	27	66	56	63	71	95	95	69	39	19	16
CFSM	1.77	18.6	11.2	11.9	7.27	11.6	8.8	6.67	3.70	2.57	1.29	.91
IN.	2.04	11.89	12.84	13.70	7.56	13.43	9.85	7.70	4.14	2.97	1.49	1.02
AC-FT	2,350	13,700	14,790	15,770	8,710	15,460	11,540	8,870	4,768	3,420	1,710	1,170
CAL YR 1965	TOTAL 43,657.0	MEAN 120	MAX 958	MIN 8.9	CFSM 5.56	IN 75.19	AC-FT 86,590					
WTR YR 1966	TOTAL 51,459.1	MEAN 141	MAX 1,140	MIN 8.9	CFSM 6.53	IN 88.62	AC-FT 102,100					

NOTE.--NO GAGE-HEIGHT RECORD MAY 2 TO JUNE 3.

12054600 JEFFERSON CREEK NEAR ELDON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	56	1,260	236	260	154	132	71	137	110	41	19
2	17	49	1,440	219	251	125	124	72	140	105	40	20
3	17	43	1,210	320	305	108	128	75	138	102	39	19
4	17	40	1,430	245	356	97	137	79	138	100	37	19
5	16	38	589	206	302	86	127	90	142	97	36	18
6	16	37	555	176	245	80	113	115	142	94	35	17
7	15	35	395	161	213	75	110	131	142	91	34	16
8	15	32	301	165	190	72	115	135	140	87	33	16
9	15	30	256	172	176	70	115	131	138	82	32	16
10	15	29	441	193	165	67	107	120	135	78	31	23
11	14	29	876	302	156	63	97	112	133	74	30	28
12	14	52	1,560	233	181	61	97	107	129	70	29	25
13	15	329	2,050	222	293	60	97	104	125	67	29	23
14	14	610	755	193	203	71	93	102	125	66	28	21
15	14	762	583	206	165	294	84	107	125	63	28	20
16	13	445	650	193	144	320	87	127	127	62	27	19
17	13	287	524	169	135	275	81	144	129	61	26	18
18	13	375	480	154	136	185	88	144	131	59	26	17
19	39	374	529	645	122	161	102	150	133	57	25	17
20	90	405	500	512	112	178	99	165	135	56	24	16
21	85	480	391	326	102	508	100	172	137	55	24	16
22	155	366	335	239	94	1,670	102	169	138	53	23	15
23	144	272	311	203	88	552	100	163	135	52	23	15
24	118	221	374	172	84	329	97	157	133	50	22	15
25	90	207	320	156	82	260	97	150	129	48	22	15
26	78	189	269	176	79	222	93	146	127	47	22	14
27	73	289	239	422	94	200	85	144	124	46	21	13
28	67	391	222	766	219	190	79	148	120	45	21	13
29	64	436	213	958	-----	174	76	148	117	44	20	13
30	65	1,050	200	484	-----	156	72	140	113	43	20	16
31	62	-----	193	388	-----	138	-----	135	-----	42	19	-----
TOTAL	1,401	7,958	19,451	9,132	4,952	4,961	3,034	3,953	3,957	2,106	867	532
MEAN	45.2	265	627	295	177	225	101	128	132	67.9	28.0	17.7
MAX	155	1,050	2,050	958	356	1,670	137	172	142	110	41	28
MIN	13	29	193	154	76	60	72	71	113	62	19	13
CFSM	2,009	12.3	29.0	13.7	8.19	10.4	4.68	5.93	6.11	3.14	1.30	.82
IN.	2.41	13.71	33.50	15.73	8.53	11.99	5.23	6.81	6.81	3.63	1.49	.92
AC-FT	2,780	15,780	38,580	18,110	9,820	13,810	6,020	7,840	7,850	4,180	1,720	1,060

CAL YR 1966 TOTAL 64,717 MEAN 177 MAX 2,050 MIN 13 CFSM 8.19 IN 111.46 AC-FT 128,400
 MTR YR 1967 TOTAL 64,304 MEAN 176 MAX 2,050 MIN 13 CFSM 8.15 IN 110.75 AC-FT 127,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	826	169	72	198	172	243	139	64	90	64	24	54
2	690	154	146	174	780	233	129	63	233	62	23	47
3	363	142	236	157	700	162	116	63	166	59	23	42
4	423	231	161	192	885	220	110	64	183	58	22	39
5	395	119	195	129	381	360	103	64	134	57	22	37
6	645	107	131	115	294	327	97	62	125	56	21	35
7	468	99	100	105	252	246	89	62	116	56	21	32
8	317	124	82	96	230	210	86	61	110	56	20	31
9	260	260	104	129	225	188	77	60	105	55	19	29
10	233	472	293	127	215	172	74	64	100	55	19	27
11	248	311	311	102	206	204	73	68	92	54	20	27
12	216	216	188	110	192	700	70	71	90	54	19	26
13	308	181	144	1,160	180	564	66	71	95	53	19	26
14	284	174	120	1,980	164	514	64	70	89	52	21	49
15	219	176	107	1,220	148	591	65	69	83	51	22	77
16	188	179	96	675	134	474	60	68	78	48	21	75
17	167	199	87	482	141	333	57	69	73	45	20	73
18	154	142	79	720	618	240	55	71	71	43	21	96
19	140	129	72	1,600	618	194	53	80	70	40	29	91
20	127	115	67	1,200	348	172	52	95	69	38	34	79
21	193	107	66	850	665	162	51	102	69	36	29	72
22	320	97	588	604	530	158	49	105	69	33	27	66
23	278	90	645	510	810	156	49	105	68	34	28	59
24	213	82	590	514	720	166	90	102	66	30	95	51
25	266	76	444	409	413	192	50	98	65	29	78	45
26	198	71	412	339	345	199	49	94	64	28	73	42
27	464	66	291	468	327	480	90	90	65	27	38	38
28	377	64	252	252	276	235	48	86	64	26	83	36
29	248	67	293	223	255	215	51	83	60	26	77	34
30	208	47	291	201	-----	182	59	77	65	25	70	32
31	185	-----	219	190	-----	156	-----	74	-----	25	63	-----
TOTAL	9,621	4,346	4,911	15,084	11,404	8,543	2,136	2,374	2,797	1,373	1,158	1,447
MEAN	310	145	223	487	393	276	71.2	76.6	93.2	44.3	37.4	48.9
MAX	826	472	645	1,980	900	700	139	105	233	64	95	96
MIN	127	64	66	96	134	156	48	60	64	25	19	26
CFSM	16.4	6.71	10.3	22.5	18.2	12.8	3.30	3.95	4.31	2.05	1.73	2.26
IN.	16.57	7.48	11.90	25.98	19.64	14.71	3.68	4.09	4.82	2.36	1.99	2.53
AC-FT	19,080	8,620	13,710	29,920	22,620	16,950	4,240	4,710	5,550	2,720	2,300	2,910

CAL YR 1967 TOTAL 94,372 MEAN 154 MAX 1,670 MIN 13 CFSM 7.13 IN 97.09 AC-FT 111,800
 MTR YR 1968 TOTAL 67,216 MEAN 184 MAX 1,980 MIN 19 CFSM 8.52 IN 115.76 AC-FT 133,300

12054600 JEFFERSON CREEK NEAR ELDON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	154	216	205	47	66	643	127	225	82	34	19
2	29	208	179	210	46	70	613	125	213	77	33	18
3	27	214	493	220	45	85	324	120	204	72	32	18
4	29	172	462	446	45	91	374	114	201	70	31	18
5	29	146	279	577	50	129	367	113	199	68	30	17
6	47	126	218	360	47	147	282	129	194	66	29	17
7	45	119	201	303	46	111	230	162	188	65	29	17
8	38	275	354	249	80	96	199	201	184	62	27	17
9	37	258	640	210	100	85	184	228	180	61	27	17
10	64	207	526	190	114	79	182	223	178	59	26	16
11	210	398	374	168	985	75	178	215	176	58	26	16
12	351	430	267	145	392	72	220	220	172	57	25	16
13	277	281	258	130	235	71	357	218	168	57	24	16
14	417	215	573	120	180	71	258	215	162	56	24	15
15	395	184	609	105	170	91	199	201	160	54	23	15
16	240	161	371	96	243	261	178	192	154	51	23	15
17	196	144	252	87	194	900	230	188	148	49	23	44
18	199	144	201	80	158	482	279	188	145	47	22	261
19	206	140	168	75	138	285	303	188	139	45	22	438
20	248	183	143	71	125	228	243	182	136	43	22	342
21	191	451	121	67	113	208	201	182	130	43	21	261
22	230	527	110	62	103	213	190	184	127	42	21	228
23	183	369	595	58	94	215	249	188	125	41	20	423
24	153	294	1,710	56	85	182	223	190	116	41	20	249
25	135	247	660	54	79	166	178	182	113	40	21	190
26	120	216	385	52	73	210	156	186	110	40	21	158
27	110	200	297	52	68	303	152	218	102	38	21	138
28	104	177	243	51	66	267	162	225	97	38	20	120
29	115	312	215	50	-----	264	152	264	99	37	20	105
30	240	302	205	48	-----	351	138	312	91	36	19	120
31	183	-----	190	48	-----	518	-----	252	-----	34	19	-----
TOTAL	4,878	7,254	11,715	4,645	4,121	6,392	7,644	5,932	4,638	1,629	755	3,344
MEAN	157	242	378	150	147	206	235	191	155	52.5	24.4	111
MAX	417	527	1,710	577	985	900	643	312	225	82	34	438
MIN	27	119	110	48	45	66	138	113	91	34	19	15
CFSM	7.27	11.2	17.5	6.94	6.81	9.54	11.8	8.84	7.18	2.43	1.13	5.14
IN-	8.40	12.48	20.18	8.00	7.10	11.01	13.16	10.22	7.99	2.81	1.30	5.76
AC-FT	9,680	14,390	23,240	9,210	8,170	12,680	15,160	11,770	9,200	3,230	1,500	6,630
CAL YR 1968	TOTAL	70,185	MEAN 192	MAX 1,980	MIN 15	CFSM 8.89	IN 120.87	AC-FT 139,200				
NTR YR 1969	TOTAL	62,947	MEAN 172	MAX 1,710	MIN 15	CFSM 7.96	IN 108.41	AC-FT 124,900				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	38	63	143	314	74	55	59	65	51	21	12
2	174	37	60	125	243	70	53	56	65	48	20	12
3	129	35	59	112	215	65	51	54	68	46	20	13
4	105	206	59	100	185	61	48	54	73	45	19	13
5	91	490	56	88	161	59	67	54	79	44	19	13
6	81	1,130	54	80	143	127	278	54	80	43	18	13
7	91	483	52	74	149	375	157	54	81	42	18	13
8	318	417	52	74	165	200	137	55	81	41	17	13
9	206	332	55	183	159	145	875	56	81	40	17	13
10	156	263	57	153	147	120	406	57	79	38	17	13
11	129	220	800	117	133	111	253	59	78	38	17	12
12	110	185	970	100	125	213	205	59	75	36	16	12
13	97	165	1,210	228	119	392	175	57	71	35	16	12
14	87	147	740	825	112	750	155	55	68	34	16	12
15	79	129	466	335	185	410	137	54	65	33	16	12
16	72	117	332	238	668	275	122	52	64	32	15	12
17	70	106	375	190	410	220	109	52	62	31	15	12
18	66	97	642	243	299	188	99	54	61	30	15	17
19	61	91	452	820	233	163	93	55	59	29	15	17
20	56	91	459	483	195	145	83	57	58	28	14	16
21	50	91	558	736	167	129	76	57	57	27	14	17
22	46	84	677	582	145	115	71	56	57	27	14	17
23	44	91	622	700	125	103	70	56	58	26	14	20
24	41	99	592	448	112	94	72	57	59	25	14	19
25	38	91	308	368	102	86	72	57	60	25	13	18
26	36	86	281	338	93	79	70	61	61	24	13	17
27	43	79	230	406	86	72	67	65	60	24	13	17
28	45	74	220	308	80	67	65	66	58	24	13	17
29	43	70	195	255	-----	63	62	68	56	23	13	16
30	42	66	173	223	-----	60	61	68	54	23	13	16
31	40	-----	157	332	-----	57	-----	66	-----	21	13	-----
TOTAL	2,818	5,610	10,846	9,407	5,270	5,088	4,244	1,784	1,993	1,033	488	438
MEAN	90.9	187	350	303	188	164	141	57.5	66.4	33.3	15.7	14.6
MAX	318	1,130	1,210	825	668	750	875	68	81	51	31	20
MIN	36	35	52	74	80	57	48	52	54	21	13	12
CFSM	4.21	8.66	16.2	14.0	8.70	7.59	6.53	2.66	3.07	1.54	.73	.68
IN-	4.85	9.66	18.68	16.20	9.08	8.76	7.31	3.07	3.43	1.78	.84	.75
AC-FT	5,590	11,130	21,510	18,660	10,450	10,090	8,420	3,540	3,950	2,050	968	869
CAL YR 1969	TOTAL	58,374	MEAN 160	MAX 1,210	MIN 15	CFSM 7.41	IN 100.53	AC-FT 115,800				
NTR YR 1970	TOTAL	49,019	MEAN 134	MAX 1,210	MIN 12	CFSM 6.20	IN 84.42	AC-FT 97,230				

12056500 NORTH FORK SKOKOMISH RIVER BELOW STAIRCASE RAPIDS, NEAR HOODSPORT, WASH.

LOCATION.--Lat 47°30'52", long 123°19'43", in NW¼ sec.4, T.23 N., R.5 W., Mason County, Olympic National Park, on left bank 1.2 miles upstream from Lake Cushman, 2.8 miles (revised) upstream from Dry Creek, 11.3 miles northwest of Hoodsport, and at mile 29.2.

DRAINAGE AREA.--57.2 sq mi.

PERIOD OF RECORD.--July 1924 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 762.26 ft above mean sea level. Prior to Nov. 1, 1934, water-stage recorder and Nov. 1, 1934, to Nov. 10, 1941, nonrecording gages, on right bank at same datum.

AVERAGE DISCHARGE.--46 years, 497 cfs (117.99 inches per year, 360,100 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (3,200 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 6, 1965	0330	*3,490	5.98	Oct. 1, 1967	1745	4,180	6.34	Feb. 18, 1968	2045	3,340	5.80
				Oct. 27, 1967	1300	4,700	6.64				
Dec. 1, 1966	0030	6,510	7.60	Nov. 10, 1967	1200	3,750	6.07	Dec. 3, 1968	1130	*3,640	6.00
Dec. 13, 1966	0330	*7,580	8.03	Jan. 14, 1968	0430	*8,120	8.25	Dec. 24, 1968	0730	3,200	5.71
Dec. 16, 1966	0200	3,560	5.95	Jan. 20, 1968	1400	4,830	6.71				
Mar. 22, 1967	2300	4,610	6.59	Feb. 3, 1968	2230	3,770	6.08	Dec. 13, 1969	1530	*5,170	6.90
								Apr. 9, 1970	1130	3,460	5.88

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 2, 3, 1965	48	1.36	1969	Sept. 15, 16, 1969	74	1.46
1967	Oct. 18, 1966	53	1.41	1970	Sept. 14-16, 1970	58	1.40
1968	Sept. 10, 11, 13, 1968	93	1.66				

Period of record: Maximum discharge, 27,000 cfs Nov. 5, 1934 (gage height, 14.4 ft, from high watermark), from rating curve extended above 9,800 cfs on basis of slope-area measurement at gage height 12.2 ft; minimum recorded, 16 cfs Sept. 23, 1930 (gage height, 1.12 ft).

REMARKS.--Records excellent. No regulation or diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1286: 1932, 1935, 1937(M), 1942(M), 1945(M), 1947(P), 1948(M). WSP 1636: 1940(M). WSP 1736: 1927. WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	145	1,210	232	422	281	846	432	490	436	268	106
2	49	650	1,020	239	366	261	766	515	520	432	268	104
3	48	1,600	1,660	223	347	235	676	706	495	495	271	104
4	160	1,250	1,600	248	644	223	640	895	665	465	261	102
5	828	1,120	1,530	242	895	220	694	1,130	485	480	245	102
6	1,430	640	2,560	746	682	245	839	1,540	610	455	226	100
7	358	724	1,900	797	520	251	1,000	1,180	754	455	220	96
8	239	825	1,210	979	432	288	1,010	1,040	760	565	436	93
9	182	754	965	670	387	590	930	1,170	736	515	208	87
10	153	818	790	545	343	480	944	1,000	724	485	199	87
11	131	700	682	530	366	374	1,040	804	676	441	185	135
12	119	540	585	903	335	409	784	832	590	413	174	106
13	115	560	325	2,390	309	358	628	760	565	436	188	93
14	265	790	470	1,640	285	1,200	610	640	652	436	185	87
15	229	590	427	937	264	1,210	610	595	804	413	174	86
16	174	530	392	694	251	797	622	560	944	400	168	84
17	188	460	370	590	242	575	590	505	825	383	155	183
18	291	567	370	915	229	515	545	495	700	383	148	188
19	248	2,180	362	455	226	455	515	585	664	370	145	113
20	392	1,520	474	413	239	383	490	718	580	335	143	98
21	288	1,040	422	383	248	331	475	736	525	331	138	91
22	226	839	362	354	268	302	480	610	490	350	135	93
23	181	658	367	335	396	285	505	545	505	350	133	108
24	166	570	327	313	383	281	525	585	495	324	135	91
25	153	490	306	302	350	302	530	778	490	306	133	82
26	140	455	288	292	331	362	490	860	490	299	123	87
27	145	427	292	335	327	460	465	694	622	299	166	82
28	150	455	295	367	309	515	641	605	742	309	135	77
29	165	436	268	622	-----	712	427	595	545	317	119	76
30	160	427	261	622	-----	1,030	418	595	460	302	113	74
31	135	-----	245	500	-----	986	-----	545	-----	281	108	-----
TOTAL	7,567	22,560	22,515	18,393	10,396	14,916	19,535	23,250	18,403	12,146	5,489	3,013
MEAN	244	732	726	593	371	481	591	750	613	392	177	100
MAX	1,430	2,180	2,560	2,390	895	1,210	1,040	1,540	944	515	271	188
MIN	48	145	245	223	226	220	418	432	460	281	108	74
CFSM	4.27	13.1	12.7	10.4	6.49	8.41	11.4	13.1	10.7	6.85	3.09	1.75
IN.	4.92	14.67	14.64	11.96	6.76	9.70	12.70	15.12	11.97	7.90	3.57	1.96
AC-FT	19,010	44,750	44,660	36,480	20,620	29,590	38,750	46,120	36,500	24,090	10,890	5,980
CAL YR 1965	TOTAL 156,593	MEAN 429	MAX 2,560	MIN 48	CFSM 7.50	IN 101.84	AC-FT 310,600					
WTR YR 1966	TOTAL 178,183	MEAN 488	MAX 2,560	MIN 48	CFSM 8.53	IN 115.88	AC-FT 353,400					

12056500 NORTH FORK SKOKOMISH RIVER BELOW STAIRCASE RAPIDS, NEAR HOODSPORT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	217	4,580	700	736	460	320	245	832	706	251	126
2	71	199	2,590	677	676	370	313	268	1,070	754	239	150
3	66	177	1,960	965	804	327	320	302	1,000	790	239	113
4	61	161	1,910	730	1,150	298	331	331	979	742	229	91
5	65	158	1,280	585	895	275	317	387	1,040	634	220	100
6	63	153	1,060	510	718	271	306	510	1,080	560	214	100
7	68	140	860	465	610	261	306	646	965	525	202	95
8	82	133	700	590	545	261	317	688	846	505	193	89
9	66	145	622	590	515	258	313	595	772	445	193	91
10	63	133	951	696	480	251	295	475	772	441	196	317
11	60	128	2,260	951	465	239	288	413	778	465	196	214
12	60	229	3,840	742	530	223	299	392	778	495	191	133
13	59	923	5,190	694	646	214	288	387	909	475	188	115
14	58	1,290	2,150	634	525	220	281	418	1,050	441	185	102
15	56	1,250	2,370	846	460	242	268	535	1,140	427	177	98
16	56	923	2,870	700	409	785	264	772	1,190	427	171	96
17	58	718	2,420	570	413	694	248	965	1,230	413	168	95
18	55	1,040	2,300	530	413	530	258	958	1,240	366	161	93
19	57	1,530	2,370	1,380	370	427	261	1,020	1,270	343	158	91
20	460	1,640	1,836	1,290	347	400	251	1,200	1,150	374	153	89
21	258	1,380	1,270	888	324	379	255	1,230	1,020	343	145	87
22	530	895	1,020	664	309	1,770	258	1,150	930	331	138	86
23	1,320	658	902	555	295	2,650	261	979	867	331	133	79
24	446	718	835	465	281	1,180	271	688	979	327	119	74
25	383	560	646	422	268	610	261	676	937	320	115	72
26	306	658	580	900	255	520	248	682	811	295	115	69
27	248	1,440	545	2,000	543	470	251	853	790	275	115	67
28	409	1,460	580	2,150	370	242	261	772	937	264	115	84
29	309	1,100	510	1,350	-----	379	235	736	730	261	115	245
30	245	-----	540	916	-----	347	-----	652	-----	261	110	-----
TOTAL	7,308	22,733	52,287	25,577	14,263	16,520	8,390	20,887	28,781	13,691	5,267	3,352
MEAN	236	758	1,687	825	509	533	280	674	959	442	170	112
MAX	1,320	3,100	5,190	2,150	1,150	2,450	331	1,230	1,240	790	275	317
MIN	55	128	510	422	255	214	235	245	730	261	110	69
CF5M	4.13	13.3	29.5	14.4	8.90	9.32	4.90	11.8	16.8	7.73	2.97	1.96
IN.	4.75	14.78	34.00	16.63	9.28	10.74	5.46	13.58	18.72	8.90	3.43	2.18
AC-FT	14,500	45,090	103,700	50,730	28,290	32,770	16,640	41,430	57,090	27,160	10,450	6,650

CAL YR 1966 TOTAL 207,869 MEAN 570 MAX 5,190 MIN 55 CFSM 9.97 IN 135.19 AC-FT 412,300
 MTR YR 1967 TOTAL 219,056 MEAN 600 MAX 5,190 MIN 55 CFSM 10.5 IN 142.46 AC-FT 434,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,230	754	278	520	545	951	413	475	867	392	168	161
2	1,710	628	313	465	1,600	1,070	441	379	1,540	455	166	145
3	1,140	354	428	2,004	923	404	374	324	845	500	123	106
4	1,350	505	339	396	2,120	1,170	400	422	676	505	158	121
5	1,340	451	354	362	1,150	1,580	374	383	658	465	145	117
6	1,980	413	317	343	888	1,170	350	335	706	436	138	113
7	1,610	400	288	331	760	916	331	320	658	427	128	108
8	944	258	258	354	694	766	343	320	658	427	123	106
9	676	1,040	346	350	652	688	317	432	550	387	123	100
10	835	2,130	1,090	317	616	605	347	535	540	350	121	95
11	993	1,140	1,010	295	600	676	358	624	530	358	119	108
12	778	790	990	313	590	1,010	324	580	515	396	117	102
13	1,240	652	465	2,410	570	1,080	295	455	610	309	117	100
14	965	874	392	5,460	530	963	306	404	505	327	131	480
15	670	937	350	3,500	495	958	288	374	490	299	128	545
16	540	766	324	1,760	460	846	268	418	510	264	128	350
17	460	634	299	1,190	525	712	251	565	525	251	119	708
18	436	560	285	1,370	2,040	990	248	730	730	239	143	432
19	396	485	264	3,560	2,060	525	232	974	610	242	171	317
20	379	441	248	3,560	1,340	500	223	1,050	550	239	140	261
21	802	409	268	2,250	1,870	490	211	778	500	217	121	226
22	1,240	383	1,510	1,870	1,640	485	211	736	515	211	111	220
23	986	354	1,020	1,540	2,520	160	226	634	500	199	317	239
24	760	343	1,900	1,670	2,130	595	223	545	520	199	260	202
25	930	313	1,930	1,250	1,360	600	229	525	540	202	191	179
26	670	295	1,590	1,020	1,150	595	235	515	670	205	199	168
27	2,520	288	1,170	940	1,04	909	242	505	585	199	339	155
28	1,550	281	930	754	937	724	343	500	460	199	281	145
29	993	295	760	682	916	748	500	490	392	196	214	140
30	1,130	278	658	616	-----	585	565	465	362	182	179	133
31	958	-----	575	580	-----	495	-----	446	-----	171	158	-----
TOTAL	35,231	18,094	21,275	40,029	33,798	24,485	9,472	16,311	18,074	9,430	5,120	6,407
MEAN	1,136	603	686	1,291	1,165	790	316	526	602	304	165	214
MAX	4,230	2,130	1,930	5,460	2,520	1,580	565	1,050	1,540	505	339	708
MIN	379	278	248	295	460	485	211	320	362	171	117	95
CF5M	19.9	10.5	12.0	22.6	20.4	13.8	5.52	9.20	10.5	5.31	2.08	3.74
IN.	22.91	11.77	13.84	26.03	21.98	15.92	6.16	10.61	11.75	6.13	3.33	4.17
AC-FT	69,880	35,890	42,200	79,408	67,404	48,570	18,790	32,350	35,850	18,700	10,160	12,710

CAL YR 1967 TOTAL 211,328 MEAN 579 MAX 4,230 MIN 69 CFSM 10.1 IN 137.44 AC-FT 419,200
 MTR YR 1968 TOTAL 237,726 MEAN 650 MAX 5,460 MIN 95 CFSM 11.4 IN 154.61 AC-FT 471,500

12056500 NORTH FORK SKOKOMISH RIVER BELOW STAIRCASE RAPIDS, NEAR HOODSPORT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	525	525	455	178	178	1,200	475	1,200	475	195	103
2	121	676	510	455	170	186	1,030	445	1,420	535	189	103
3	117	570	2,158	520	176	195	748	422	1,570	470	176	99
4	145	470	1,210	1,290	189	195	688	408	1,740	445	173	94
5	138	413	818	1,440	173	245	670	450	1,700	431	181	90
6	324	370	650	932	168	259	600	595	1,450	395	163	85
7	202	400	600	772	165	235	535	862	1,240	395	158	85
8	166	909	698	646	192	215	490	1,250	1,300	395	148	90
9	187	664	1,200	575	195	198	465	1,530	1,440	413	153	92
10	285	580	939	515	250	186	470	1,440	1,410	431	153	90
11	589	1,080	724	470	1,500	181	480	1,370	1,300	400	148	92
12	670	993	580	413	664	173	605	1,420	1,200	335	144	90
13	610	694	560	391	445	170	862	1,420	1,100	298	144	88
14	888	575	742	367	367	170	694	1,320	1,050	280	144	80
15	760	495	1,870	347	335	218	585	1,090	1,090	262	146	77
16	520	432	794	315	359	343	540	1,000	1,090	259	137	83
17	598	413	608	304	323	1,050	644	1,000	1,090	270	131	598
18	530	652	535	284	301	802	827	1,100	1,090	276	129	940
19	560	565	455	276	280	555	848	1,120	960	290	126	1,440
20	560	867	404	259	262	450	712	1,080	808	290	135	1,280
21	900	1,310	367	248	248	413	635	1,190	712	273	131	640
22	585	1,290	355	233	242	422	625	1,350	682	276	118	1,110
23	530	972	1,020	224	233	413	808	1,510	682	284	112	1,450
24	585	760	2,440	221	215	383	748	1,900	605	280	120	848
25	520	616	1,190	215	212	383	625	1,160	540	256	181	670
26	432	565	808	212	198	460	550	1,180	510	230	129	505
27	370	560	640	203	186	600	555	1,370	480	227	151	431
28	413	505	530	192	183	605	595	1,260	455	230	137	391
29	1,200	758	460	189	-----	605	570	1,750	450	212	118	327
30	1,130	640	405	183	-----	820	525	1,550	455	200	108	530
31	670	-----	400	183	-----	1,370	-----	1,180	-----	198	105	-----
TOTAL	15,031	28,319	24,338	13,329	8,409	12,676	19,949	34,797	30,839	10,011	4,483	12,601
MEAN	485	677	785	430	300	409	645	1,122	1,028	323	145	420
MAX	1,200	1,310	2,440	1,440	1,500	1,370	1,200	1,750	1,740	535	195	1,450
MIN	117	370	355	183	165	170	465	408	450	198	105	77
CFSM	8.48	11.8	7.52	3.24	7.15	11.6	19.6	18.0	5.65	2.56	7.34	13.3
IN.	9.78	13.21	15.83	8.67	5.47	8.24	12.97	22.63	20.06	6.51	2.92	8.20
AC-FT	29,810	40,300	48,270	26,440	16,680	25,140	39,570	69,020	61,170	19,860	8,890	24,990

CAL YR 1968 TOTAL 222,814 MEAN 607 MAX 5,440 MIN 95 CFSM 10.6 IN 144.91 AC-FT 442,000
WTR YR 1969 TOTAL 206,782 MEAN 569 MAX 2,440 MIN 77 CFSM 9.91 IN 134.48 AC-FT 410,200

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	727	181	233	351	670	339	294	304	580	259	120	71
2	580	168	215	327	580	323	290	351	736	270	126	70
3	436	170	239	315	550	304	276	413	820	304	124	92
4	367	954	270	294	490	290	335	495	694	312	120	82
5	323	1,070	224	280	450	284	978	475	590	290	116	72
6	294	1,570	209	270	431	691	1,170	400	615	270	112	107
7	496	1,180	206	256	525	937	630	355	590	262	114	137
8	953	1,110	227	259	615	580	615	418	490	262	114	90
9	772	708	212	395	646	480	2,430	456	490	256	105	76
10	555	575	209	319	658	413	1,290	351	445	236	101	68
11	455	525	790	290	646	400	841	312	395	218	101	63
12	387	530	1,290	273	658	550	658	290	383	209	99	61
13	347	485	2,610	298	694	814	565	273	387	206	97	60
14	308	490	1,820	1,270	615	1,810	500	273	418	195	95	58
15	204	465	1,950	664	841	1,200	460	367	422	198	95	58
16	273	391	778	505	1,390	890	418	535	379	192	94	59
17	259	351	808	450	967	682	383	525	347	178	88	245
18	239	315	1,460	736	766	575	383	418	567	176	85	228
19	224	301	1,110	1,870	640	515	367	395	426	176	83	203
20	218	404	1,260	1,200	570	485	335	371	465	168	80	163
21	212	367	1,370	1,850	520	436	315	375	495	158	80	137
22	195	312	1,230	1,840	490	413	298	404	465	155	78	245
23	186	460	1,100	2,120	495	413	312	431	422	146	78	183
24	186	828	1,300	1,300	422	391	335	465	387	164	80	133
25	178	331	682	1,000	404	367	315	610	367	151	77	112
26	170	304	595	883	387	339	304	610	379	155	74	101
27	287	276	520	862	379	335	284	480	387	153	72	95
28	224	270	470	712	359	331	280	408	327	135	74	87
29	215	252	431	615	-----	323	284	455	284	133	72	82
30	209	239	404	550	-----	298	290	455	262	131	72	77
31	192	-----	375	676	-----	298	-----	431	-----	124	72	-----
TOTAL	10,751	15,129	23,217	23,030	16,818	16,506	16,235	12,881	13,814	6,222	2,898	3,315
MEAN	347	506	749	743	801	532	541	416	460	201	93.5	111
MAX	953	1,570	2,610	2,120	1,390	1,810	2,430	610	820	312	126	245
MIN	170	168	206	256	359	284	276	273	262	124	72	58
CFSM	6.07	8.81	13.1	13.0	10.5	9.30	9.46	7.27	8.04	3.51	1.63	1.94
IN.	6.99	9.84	15.10	14.98	10.94	10.73	10.46	8.38	8.98	4.05	1.88	2.16
AC-FT	21,320	30,010	46,050	45,680	33,360	32,740	32,200	25,550	27,400	12,340	5,750	6,580

CAL YR 1969 TOTAL 196,191 MEAN 538 MAX 2,610 MIN 77 CFSM 9.41 IN 127.59 AC-FT 389,100
WTR YR 1970 TOTAL 160,816 MEAN 441 MAX 2,610 MIN 58 CFSM 7.71 IN 104.59 AC-FT 319,000

12057500 NORTH FORK SKOKOMISH RIVER NEAR HOODSPORT, WASH.

LOCATION.--Lat 47°25'24", long 123°13'16", in NE¼SW¼ (corrected) sec.5, T.22 N., R.4 W., Mason County, on Lake Cushman at city of Tacoma dam, 4 miles northwest of Hoodport.

DRAINAGE AREA.--93.7 sq mi.

PERIOD OF RECORD.--August 1910 to September 1911 (fragmentary) and February 1913 to September 1970 (monthly discharge only). October 1911 to January 1913 (estimated monthly discharge only) in files of Tacoma district office.

GAGE.--Discharge determined from record of power output and Lake Cushman elevations, plus spillway discharge when present. Prior to Sept. 23, 1911, nonrecording gage and February 1913 to September 1923 water-stage recorder, at approximately same site (at datum 486.4 ft above mean sea level prior to Sept. 2, 1918, and at datum 5.00 ft higher Sept. 2, 1918, to September 1923, levels by city of Tacoma). October 1923 to September 1930 water-stage recorder 1 mile downstream at different datum.

AVERAGE DISCHARGE.--59 years (1911-70), 751 cfs (108.82 inches per year, 544,100 acre-ft per year), adjusted for storage.

EXTREMES.--Not determined since regulation began in Lake Cushman.

REMARKS.--Records fair. No diversion of consequence. Flow regulated in Lake Cushman since October 1925 for power by city of Tacoma.

COOPERATION.--Records of power output and elevations of Lake Cushman furnished by city of Tacoma.

REVISIONS.--MSP 1216: Drainage area.

MONTHLY DISCHARGE, WATER YEARS OCTOBER 1965 TO SEPTEMBER 1970

MONTH	OBSERVED				CHANGE IN CONTENTS IN LAKE CUSHMAN (ACRE-FOOT)		ADJUSTED FOR CHANGE IN RESERVOIR CONTENTS		
	MAXIMUM (CFS)	MINIMUM (CFS)	MEAN (CFS)	RUNOFF IN ACRE-FOOT	MEAN (CFS)	PER SQUARE MILE	RUNOFF IN INCHES	RUNOFF IN ACRE-FOOT	
OCTOBER 1965.....	1,780	0	1,047	64,400	-42,750	352	3.76	4.33	
NOVEMBER.....	2,020	516	1,662	98,910	-29,920	1,157	12.4	13.81	
DECEMBER.....	2,160	1,270	1,939	119,200	-45,900	1,192	12.7	14.67	
CAL YR 1965.....	2,160	0	766	554,600	-83,420	651	6.95	94.28	
JANUARY 1966.....	1,880	0	783	48,130	+26,970	1,221	13.0	15.03	
FEBRUARY.....	762	0	486	27,020	+14,610	750	8.00	8.33	
MARCH.....	1,990	111	891	54,810	+7,920	1,020	10.9	12.55	
APRIL.....	747	0	230	13,690	+39,280	890	9.50	10.60	
MAY.....	794	0	255	15,680	+41,720	934	9.97	11.49	
JUNE.....	1,217	0	677	40,310	+2,750	724	7.73	8.82	
JULY.....	1,020	0	437	26,840	+1,470	460	4.91	5.67	
AUGUST.....	621	0	199	12,260	-40	199	2.12	2.45	
SEPTEMBER.....	1,490	0	907	53,970	-50,500	58.3	.622	.69	
WTR YR 1966.....	2,160	0	795	575,200	-34,390	747	7.97	108.24	
OCTOBER.....	2,080	412	1,683	103,500	-79,760	386	4.12	4.75	
NOVEMBER.....	2,070	0	1,129	67,210	+6,800	1,244	13.3	14.81	
DECEMBER.....	2,110	119	1,270	78,100	+98,500	2,672	30.7	35.34	
CAL YR 1966.....	2,110	0	748	541,500	+109,700	899	9.99	130.31	
JANUARY 1967.....	2,060	287	1,410	86,700	-7,040	1,525	16.3	18.76	
FEBRUARY.....	1,610	0	1,105	61,390	-17,440	1,021	10.3	12.66	
MARCH.....	2,150	259	1,472	90,490	-27,200	1,799	11.0	12.66	
APRIL.....	1,590	0	693	41,210	-13,260	470	5.02	5.59	
MAY.....	372	0	45.0	2,760	+51,060	875	9.34	10.77	
JUNE.....	1,610	0	680	40,440	+24,340	1,089	11.6	12.96	
JULY.....	972	0	491	30,180	+340	496	5.29	6.11	
AUGUST.....	580	0	196	12,070	+120	198	2.11	2.44	
SEPTEMBER.....	1,320	0	368	21,920	-13,440	142	1.52	1.69	
WTR YR 1967.....	2,150	0	878	635,900	-37,100	930	9.93	134.67	
OCTOBER.....	2,230	774	1,773	109,000	-5,010	1,691	18.0	20.81	
NOVEMBER.....	2,100	497	1,372	81,630	-28,660	890	9.50	10.60	
DECEMBER.....	2,120	477	1,468	90,270	-14,750	1,228	13.1	15.11	
CAL YR 1967.....	2,230	0	923	668,100	-36,860	872	9.31	126.31	
JANUARY 1968.....	2,280	197	1,489	91,570	+41,700	2,148	23.1	26.67	
FEBRUARY.....	2,290	747	1,756	101,000	-1,860	1,905	20.3	21.93	
MARCH.....	2,280	305	1,223	75,180	+4,100	1,289	13.8	15.86	
APRIL.....	1,800	0	954	56,740	-35,320	360	3.84	4.29	
MAY.....	988	0	236	14,510	+35,240	809	8.63	9.75	
JUNE.....	1,180	0	672	39,990	+6,280	778	9.24	10.46	
JULY.....	645	0	363	22,310	+1,550	388	4.14	4.77	
AUGUST.....	1,170	0	307	18,870	-3,900	243	2.59	3.00	
SEPTEMBER.....	1,010	0	532	31,660	-13,030	313	3.34	3.73	
WTR YR 1968.....	2,290	0	1,009	732,700	-3,240	1,005	10.7	145.98	
OCTOBER.....	2,160	0	1,101	67,710	-22,630	733	7.82	9.02	
NOVEMBER.....	1,770	81	940	55,910	+6,710	1,052	11.2	12.93	
DECEMBER.....	2,160	318	1,393	85,630	+3,900	1,456	15.5	17.92	
CAL YR 1968.....	2,290	0	911	661,100	+33,160	956	10.2	138.93	
JANUARY 1969.....	2,150	403	1,522	93,590	-51,480	685	7.31	8.43	
FEBRUARY.....	1,350	0	658	36,520	-2,880	606	6.47	6.73	
MARCH.....	1,990	0	345	21,220	+24,440	775	8.27	9.54	
APRIL.....	1,990	0	999	59,440	+3,800	1,063	11.3	12.65	
MAY.....	1,600	0	636	39,120	+50,930	1,465	15.6	18.02	
JUNE.....	2,150	0	1,146	68,210	-1,930	1,179	12.6	14.04	
JULY.....	1,250	0	369	22,690	+300	374	3.99	4.60	
AUGUST.....	831	0	295	18,140	-8,740	193	1.63	1.88	
SEPTEMBER.....	2,280	0	987	58,760	-22,600	608	6.49	7.24	
WTR YR 1969.....	2,280	0	866	626,900	-14,320	846	9.03	122.59	
OCTOBER.....	2,210	0	963	59,230	-11,230	455	4.86	5.60	
NOVEMBER.....	1,840	761	1,435	85,390	-37,750	801	8.55	9.53	
DECEMBER.....	2,030	1,530	1,788	110,000	-30,320	1,296	13.8	15.94	
CAL YR 1969.....	2,280	0	929	672,300	-101,600	788	8.41	114.20	
JANUARY 1970.....	2,130	366	1,446	101,200	-20,430	1,313	14.0	16.16	
FEBRUARY.....	1,760	0	677	37,600	+10,230	861	9.19	9.37	
MARCH.....	1,540	0	382	23,460	+31,000	886	9.46	10.90	
APRIL.....	1,040	0	180	10,700	+38,390	825	8.80	9.82	
MAY.....	1,100	0	252	15,810	+15,430	906	9.40	10.40	
JUNE.....	122	0	8.93	532	+32,000	547	5.84	6.51	
JULY.....	47	0	1.52	93	+13,720	225	2.40	2.76	
AUGUST.....	1,990	0	603	37,080	-30,330	110	1.17	1.35	
SEPTEMBER.....	1,920	0	1,109	66,000	-64,160	31	.33	.37	
WTR YR 1970.....	2,210	0	755	546,800	-73,250	654	6.98	94.77	

SKOKOMISH RIVER BASIN

12058000 DEER MEADOW CREEK NEAR HOODSPORT, WASH.

LOCATION.--Lat 47°24'56", long 123°13'36", in NW¼NW¼ sec.8, T.22 N., R.4 W., Mason County, on left bank 0.5 mile upstream from mouth and 4.1 miles west of Hoodsport.

DRAINAGE AREA.--1.83 sq mi (includes 1.35 sq mi in McTaggart Creek basin).

PERIOD OF RECORD.--August 1950 to August 1951, October 1952 to September 1970.

GAGE.--Water-stage recorder. Concrete control since September 1956. Datum of gage is 688.28 ft above mean sea level (levels by city of Tacoma). Prior to Oct. 1, 1952, at datum 0.48 ft higher.

AVERAGE DISCHARGE.--18 years, 7.25 cfs (5,250 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Jan. 13, 1966		82	1.77	July 27, 28, 1966		.26	.57
1967	Dec. 13, 1966		163	2.06	Oct. 15-18, 1966		.25	.56
1968	Jan. 19, 1968		175	2.10	Sept. 6, 7, 11, 1968		.61	a.63
1969	Dec. 24, 1968		80	1.72	Sept. 9, 10, 1969		.45	b.62
1970	Dec. 22, 1969		64	1.63	Sept.16, 1970		.32	.59

a Occurred Aug. 2, Sept. 6, 7, 11, 12, 13, 1968.

b Occurred Sept. 9, 10, 12, 1969.

Period of record: Maximum discharge, 445 cfs Jan. 15, 1961 (gage height, 2.85 ft), from rating curve extended above 190 cfs; maximum gage height, 3.28 ft Jan. 15, 1961 (caused in part by failure of large beaver dam); minimum discharge, 0.2 cfs Oct. 8-11, 1952, Oct. 2, 4, 6, 7, 1958, Aug. 14, 1963, Sept. 29, Oct. 24, 25, 29, 1964.

REMARKS.--Records good. Since October 1953, records include nearly all of flow of McTaggart Creek, from which water is diverted at city of Tacoma diversion dam in NW¼ sec.7, T.22 N., R.4 W. The city allows some flow through an 8-inch pipe in dam to continue in McTaggart Creek, not to exceed the natural flow of stream and probably less than 0.5 cfs most of time. No regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	.61	9.6	5.1	14	7.6	9.8	2.1	1.4	1.2	.80	.70
2	.80	.84	11	5.1	12	6.8	9.4	1.9	2.1	1.4	.80	.70
3	.80	1.6	13	4.8	11	6.1	8.9	1.8	1.3	1.8	.80	.70
4	1.0	2.5	19	4.2	12	5.8	8.0	1.9	1.6	1.0	.80	.61
5	1.8	2.9	20	7.9	17	6.4	7.6	1.9	1.4	1.2	.80	.61
6	1.9	2.1	29	24	30	6.8	7.2	2.3	1.3	3.6	.91	.61
7	.91	1.9	30	26	26	10	6.8	1.9	1.8	.53	.80	.53
8	.91	1.9	25	29	22	25	6.1	1.9	1.3	.53	.70	.61
9	.80	1.4	21	25	18	35	5.8	1.8	1.3	.70	.80	.61
10	.80	2.1	18	23	16	27	5.8	1.3	1.8	.70	.70	.80
11	.70	2.3	15	24	17	21	5.8	1.6	1.8	.70	.70	1.0
12	.70	2.3	13	40	15	19	5.1	1.6	1.4	.80	.80	.80
13	.80	2.7	12	72	14	22	4.5	1.8	1.4	.80	.80	.70
14	1.3	2.5	10	69	12	30	5.1	1.4	1.0	.80	.70	.61
15	1.0	2.3	9.4	49	11	41	4.5	2.1	1.2	.70	.70	.53
16	.80	2.3	8.4	37	9.8	37	3.9	1.8	1.3	1.0	.70	.61
17	.80	2.3	7.6	30	8.9	30	5.1	1.2	1.3	.91	.70	.70
18	.91	2.7	6.8	25	8.0	30	3.9	1.3	1.0	1.0	.70	.70
19	.80	5.4	6.4	20	7.6	29	1.9	1.2	1.3	.91	.80	.61
20	1.0	11	7.6	18	7.6	25	2.5	1.2	1.2	.80	.91	.53
21	.91	10	6.4	15	7.2	20	2.9	1.3	1.0	.91	.80	.53
22	.70	8.4	5.8	13	6.8	18	2.5	1.9	1.0	.61	.61	.53
23	.61	6.4	6.1	12	7.6	16	2.7	1.2	1.2	.61	.61	.61
24	.61	5.8	5.1	11	7.2	15	2.3	1.4	1.0	.61	.70	.53
25	.61	5.1	4.8	9.8	7.2	14	2.5	1.3	.91	.61	.61	.53
26	.53	5.4	4.8	9.8	7.2	13	2.7	1.3	.91	3.1	.70	.45
27	.53	5.1	7.2	8.9	8.0	13	2.3	1.3	1.4	.32	1.0	.45
28	.61	5.1	6.8	9.4	8.0	12	2.3	1.8	1.2	.38	.80	.45
29	.61	4.8	6.1	16	-----	11	2.3	1.6	1.0	.45	.70	.45
30	.53	5.1	5.8	18	-----	11	2.1	1.4	1.0	.53	.61	.38
31	.53	-----	4.8	16	-----	11	-----	1.6	-----	.61	.70	-----
TOTAL	26.11	114.85	355.5	677.0	348.1	574.5	142.3	50.1	38.82	29.82	23.37	18.18
MEAN	.84	3.83	11.5	21.8	12.4	18.5	4.74	1.62	1.29	.96	.75	.61
MAX	1.9	11	30	72	30	41	9.8	2.3	2.1	3.6	1.0	1.0
MIN	.53	.61	4.8	4.2	6.8	5.8	1.9	1.2	.91	.32	.61	.38
AC-FT	52	228	705	1,340	690	1,140	282	99	77	59	46	36

CAL YR 1965 TOTAL 1,928.86 MEAN 5.28 MAX 45 MIN .50 AC-FT 3,830
WTR YR 1966 TOTAL 2,398.65 MEAN 6.57 MAX 72 MIN .32 AC-FT 4,760

12058000 DEER MEADOW CREEK NEAR HOODSPORT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.58	46	14	32	6.7	12	2.7	1.5	1.1	.97	.86
2	.36	.58	36	19	30	5.9	10	2.3	1.3	1.1	1.1	.97
3	.36	.50	34	19	30	5.6	8.6	2.1	1.5	.97	.97	.86
4	.30	.50	41	19	29	5.2	8.1	2.3	1.2	1.1	.86	.86
5	.30	.58	36	15	25	4.9	7.0	2.3	1.2	.86	.76	.86
6	.30	.58	45	14	22	4.3	6.3	2.3	1.2	.76	.86	.76
7	.36	.50	40	12	19	4.3	5.6	2.3	1.2	.86	.86	.76
8	.36	.50	27	14	17	4.0	4.9	2.1	1.1	.86	.86	.76
9	.30	.58	23	14	15	4.3	5.2	2.1	1.3	.86	.97	.86
10	.30	.58	30	15	13	4.6	4.3	2.3	1.2	.86	.76	1.2
11	.30	.58	38	17	12	4.3	4.6	2.1	1.2	.86	.67	.97
12	.30	.76	68	18	14	4.0	4.0	2.1	1.2	.67	.76	.76
13	.30	1.2	129	18	17	4.0	3.7	2.1	1.2	.67	.86	.76
14	.38	1.6	68	17	15	4.3	3.7	2.1	1.2	.67	.86	.67
15	.25	1.9	54	17	13	7.4	3.2	2.0	1.2	.97	.76	.58
16	.30	1.8	47	15	12	17	3.4	1.6	1.2	.86	.76	.58
17	.25	1.6	41	14	11	17	3.2	1.6	1.2	.76	.67	.67
18	.25	1.6	36	14	10	15	3.0	2.0	1.2	.86	.67	.67
19	.58	2.1	38	42	10	13	3.2	1.6	1.2	.86	.76	.67
20	.76	2.1	37	54	9.1	14	3.2	1.5	1.2	.90	.67	.67
21	.76	2.5	30	47	8.2	13	2.7	1.6	1.3	.67	.76	.67
22	.97	2.3	25	37	7.8	40	2.3	1.5	1.2	.97	.86	.67
23	.97	2.3	24	33	7.0	48	2.7	1.3	1.2	.97	.76	.67
24	.86	2.1	31	27	7.0	49	2.7	1.5	1.1	.86	1.2	.67
25	.76	2.5	27	24	6.7	36	3.0	1.3	1.1	.97	.97	.67
26	.67	2.1	22	29	5.9	28	3.0	1.3	.97	.86	.76	.67
27	.58	3.2	20	39	5.6	22	2.5	1.3	.97	.86	.67	.58
28	.50	4.3	18	59	7.8	20	2.7	1.8	1.3	.97	.76	.67
29	.67	6.2	14	59	-----	17	2.7	1.8	1.2	.97	.67	.76
30	.67	28	14	47	-----	15	2.5	1.6	1.2	.86	.67	1.1
31	.58	-----	13	37	-----	13	-----	1.6	-----	.97	.76	-----
TOTAL	14.88	76.22	1,154	815	411.1	470.8	134.0	58.1	36.24	27.34	25.25	22.88
MEAN	.48	2.54	37.2	26.3	14.7	15.2	4.47	1.87	1.21	.88	.81	.76
MAX	.97	28	129	59	32	60	12	2.7	1.5	1.1	1.2	1.2
MIN	.25	.50	13	12	5.6	4.0	2.3	1.3	.97	.87	.67	.58
AC-FT	30	151	2,290	1,628	815	934	266	115	72	54	50	45
CAL YR 1966	TOTAL	3,147.29	MEAN	8.62	MAX	129	MIN	.25	AC-FT	6,240		
MTR YR 1967	TOTAL	3,245.81	MEAN	8.89	MAX	129	MIN	.25	AC-FT	6,440		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	10	7.1	13	10	14	13	2.0	2.6	1.2	1.0	.91
2	2.1	9.1	13	12	28	13	11	2.2	2.4	1.2	.91	.91
3	2.0	8.2	36	10	59	11	10	2.2	1.5	1.1	.91	.80
4	2.0	7.4	32	9.1	82	12	9.6	2.0	1.8	1.1	1.0	.80
5	2.0	6.7	29	8.6	39	12	8.4	2.2	1.7	1.1	1.0	.80
6	3.0	5.9	26	7.8	30	11	7.6	2.2	1.7	1.4	1.0	.80
7	3.2	5.6	21	8.2	24	10	7.2	2.0	1.8	1.2	1.0	.80
8	2.7	7.0	18	7.0	20	9.2	6.5	2.0	1.2	1.1	.91	.80
9	2.3	11	20	12	17	8.4	6.2	1.8	1.4	1.2	1.0	.80
10	2.5	19	31	10	15	8.0	5.8	2.0	1.6	1.0	1.0	.80
11	2.5	18	39	8.6	13	9.2	5.5	1.8	1.5	1.1	1.0	.80
12	2.5	14	28	10	12	17	5.2	1.8	2.0	1.2	.91	.80
13	3.7	12	22	57	10	18	4.9	1.8	2.2	1.2	1.0	.91
14	3.2	11	18	110	9.6	23	6.2	2.0	1.5	1.2	1.1	1.7
15	3.0	12	17	73	8.4	39	5.2	2.0	1.5	1.1	1.0	1.1
16	2.7	10	15	50	7.6	42	4.6	2.0	1.5	1.1	1.0	1.0
17	2.5	9.6	13	39	9.6	32	4.3	2.0	1.5	1.1	1.0	1.4
18	2.5	8.6	11	55	22	24	4.0	1.8	1.5	1.0	1.1	2.0
19	2.3	8.2	9.6	142	32	20	3.8	2.2	1.5	1.0	1.2	1.5
20	2.8	7.0	9.1	127	22	18	3.8	2.2	1.5	1.0	1.2	1.1
21	3.7	6.3	9.6	84	30	15	3.8	2.0	1.7	1.1	1.1	1.0
22	6.2	5.9	33	55	30	13	3.5	1.8	1.5	1.0	1.1	.92
23	7.8	5.6	45	38	38	13	3.8	1.8	1.8	1.1	1.5	.90
24	8.2	5.2	41	30	45	12	3.3	1.5	1.5	1.1	1.0	.90
25	8.2	4.6	35	24	34	13	2.8	1.7	1.4	1.0	.91	.90
26	7.0	4.3	29	20	27	14	2.6	1.5	1.4	1.0	.91	.98
27	21	4.0	24	18	22	21	2.2	1.5	1.5	1.1	1.0	.90
28	25	4.6	22	15	18	19	2.0	1.5	1.5	1.2	.91	.90
29	18	5.2	18	14	16	18	2.0	1.2	1.4	1.1	.80	.90
30	15	5.2	17	12	-----	-----	1.6	1.1	1.4	1.0	.80	.90
31	12	-----	15	12	-----	14	-----	1.8	-----	1.0	.80	-----
TOTAL	185.0	251.2	703.4	1,091.3	730.2	518.8	160.6	57.6	49.0	34.3	31.07	29.65
MEAN	5.97	8.37	22.7	35.2	25.2	16.7	5.35	1.86	1.63	1.11	1.00	.99
MAX	25	19	45	142	82	42	13	2.2	2.6	1.4	1.5	2.0
MIN	2.0	4.0	7.1	7.0	7.6	8.0	1.8	1.1	1.2	1.0	.80	.80
AC-FT	367	498	1,400	2,160	1,450	1,030	319	114	97	68	62	59
CAL YR 1967	TOTAL	3,140.31	MEAN	8.60	MAX	68	MIN	.58	AC-FT	6,230		
MTR YR 1968	TOTAL	3,842.12	MEAN	10.5	MAX	142	MIN	.80	AC-FT	7,620		

12058000 DEER MEADOW CREEK NEAR HOODSPOT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	2.2	9.6	14	2.8	5.5	25	5.5	2.0	1.2	.80	.80
2	.90	3.3	9.2	14	3.3	5.5	27	5.2	2.0	1.1	.80	.61
3	.90	2.6	28	15	3.8	5.8	21	4.6	1.8	1.2	.80	.70
4	.90	2.6	28	21	3.5	6.2	26	4.3	1.8	1.1	.80	.70
5	1.1	2.4	20	29	3.0	10	25	3.8	1.8	1.5	1.0	.70
6	1.5	2.4	16	25	2.8	12	20	3.5	1.9	1.4	.91	.80
7	1.2	2.6	17	22	3.0	10	18	3.3	1.8	1.1	.91	.70
8	1.0	4.3	19	20	5.2	9.2	15	3.0	1.8	.91	.80	.61
9	1.0	4.0	22	18	5.8	8.4	14	2.8	1.8	1.0	.91	.53
10	1.3	4.6	23	17	9.1	7.6	12	2.8	1.7	1.2	.80	.53
11	1.8	8.0	22	15	28	7.2	11	2.8	1.7	1.1	.80	.65
12	2.5	10	18	12	20	6.5	11	2.8	1.7	1.1	.91	.61
13	2.6	8.0	19	11	15	6.2	12	2.6	1.7	1.1	.80	.70
14	2.6	6.5	27	11	12	6.2	10	2.4	1.6	1.1	.80	.70
15	2.7	5.5	24	10	11	6.5	8.8	2.6	1.6	1.1	.70	.70
16	2.1	4.9	20	9.2	12	12	8.4	2.8	1.6	1.0	.70	.70
17	2.4	4.9	19	8.0	11	37	9.2	2.6	1.7	.95	.70	1.7
18	2.2	5.2	17	7.2	10	33	10	2.6	2.0	1.0	.70	1.5
19	2.4	4.6	15	6.5	10	23	15	2.4	1.7	1.1	.70	1.7
20	2.4	5.2	13	6.2	9.2	19	14	2.4	1.7	.91	.70	1.7
21	2.8	11	12	5.5	8.4	16	12	2.4	1.7	.91	.70	1.4
22	2.8	14	12	4.9	8.0	16	10	2.2	1.8	1.0	.80	2.0
23	2.8	12	27	4.5	8.0	15	10	2.0	1.7	1.1	.80	2.6
24	2.8	10	69	4.0	6.8	14	9.2	2.2	1.7	.91	.80	2.0
25	2.4	8.0	51	3.7	6.5	12	8.0	2.0	1.8	.91	.80	1.8
26	2.2	8.0	34	3.5	6.2	12	7.6	2.2	1.4	.91	.80	1.5
27	2.0	7.2	27	3.2	5.8	12	6.5	2.6	1.5	1.0	.80	1.5
28	2.0	6.5	22	3.0	5.5	12	6.5	2.4	1.5	.91	.80	1.5
29	2.8	11	19	2.9	-----	11	5.8	3.0	1.4	1.0	.70	1.5
30	2.8	11	15	2.8	-----	12	5.5	2.6	1.4	1.0	.70	1.8
31	2.2	-----	13	3.0	-----	16	-----	2.2	-----	.91	.70	-----
TOTAL	61.80	192.5	686.8	332.1	235.7	384.8	393.5	90.6	51.3	32.73	24.44	34.94
MEAN	1.99	6.42	22.2	10.7	8.42	12.4	13.1	2.92	1.71	1.06	.79	1.16
MAX	2.8	14	69	29	28	37	27	5.5	2.0	1.5	1.0	2.6
MIN	.90	2.2	9.2	2.8	2.8	5.5	5.5	2.0	1.4	.91	.70	.53
AC-FT	123	382	1,360	699	468	763	781	180	102	65	48	69

CAL YR 1968 TOTAL 3,643.62 MEAN 9.96 MAX 16.2 MIN .80 AC-FT 7,230
 WTR YR 1969 TOTAL 2,521.21 MEAN 6.91 MAX 69 MIN .53 AC-FT 5,800

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	1.4	1.8	8.0	19	4.6	4.0	2.6	1.1	1.0	.70	.45
2	2.0	1.5	1.7	7.2	16	4.6	3.5	3.3	1.1	.91	.80	.53
3	1.8	1.2	1.8	6.5	15	4.3	3.3	2.8	1.1	1.0	.61	.70
4	1.7	4.1	1.8	6.2	13	4.0	3.0	3.0	1.0	1.1	.70	.61
5	1.5	3.8	1.8	5.2	12	3.8	5.5	3.0	1.1	.91	.80	.45
6	1.4	6.2	1.7	4.9	10	8.2	6.5	2.8	1.1	.70	.70	.53
7	2.2	5.8	1.7	4.6	9.6	10	5.8	2.6	1.2	.80	.91	.53
8	3.0	4.6	1.8	5.5	8.8	7.2	6.2	2.8	1.0	.80	.91	.45
9	3.3	4.0	1.7	5.8	8.0	5.8	27	2.6	1.4	.70	.91	.45
10	2.8	3.8	1.8	4.6	7.2	5.5	19	2.6	1.2	.61	.80	.45
11	2.6	3.5	17	4.3	6.5	5.5	13	2.8	1.2	.61	.80	.45
12	2.4	3.0	20	4.0	5.8	8.4	10	2.8	1.1	.81	.80	.45
13	2.2	3.0	25	8.3	5.8	11	8.4	2.4	1.2	.53	.61	.53
14	2.0	2.8	27	22	5.5	16	6.8	2.2	1.1	.70	.70	.45
15	1.8	2.8	18	14	8.4	15	6.5	2.2	1.1	.70	.70	.38
16	1.8	2.6	16	11	19	13	5.8	2.2	1.0	.70	.70	.38
17	1.8	2.4	16	10	17	11	5.5	1.7	1.4	.61	.61	.61
18	1.8	2.4	17	12	15	10	5.5	2.0	.91	.80	.70	.70
19	1.8	2.4	18	32	13	9.6	5.2	1.5	1.1	.91	.70	.80
20	1.8	2.8	18	28	11	8.4	4.9	1.5	.91	.70	.61	.70
21	1.8	2.6	19	35	9.6	8.0	4.9	1.7	1.0	.80	.70	.61
22	1.8	2.2	36	36	8.8	7.2	4.3	1.7	.91	.70	.70	.80
23	1.5	2.8	49	40	8.0	6.5	4.3	1.5	.91	.70	.61	.70
24	1.5	2.4	34	33	6.8	6.2	4.9	1.7	.80	.61	.61	.61
25	1.5	2.2	27	32	6.2	5.8	4.6	1.5	.61	.80	.70	.61
26	1.5	2.0	28	34	5.8	5.5	4.0	1.2	.80	.91	.70	.53
27	1.8	2.0	18	37	5.5	5.2	4.0	1.1	.80	.80	.61	.53
28	1.8	2.0	14	29	4.9	4.9	4.0	1.5	.80	.80	.53	.53
29	1.7	2.0	13	23	-----	4.6	3.5	2.2	.70	.70	.53	.53
30	1.5	1.8	10	19	-----	4.3	2.8	2.0	.80	.70	.53	.45
31	1.5	-----	9.2	22	-----	4.0	-----	1.7	-----	.80	.53	-----
TOTAL	59.8	85.9	458.8	544.1	281.2	228.1	197.7	67.2	30.45	23.72	21.52	16.50
MEAN	1.93	2.86	14.8	17.6	10.0	7.36	8.99	2.37	1.02	.77	.69	.55
MAX	3.3	6.2	49	40	19	16	27	3.3	1.4	1.1	.91	.80
MIN	1.4	1.2	1.7	4.0	4.9	3.8	2.8	1.1	.61	.53	.53	.38
AC-FT	119	170	910	1,080	550	452	392	133	60	47	43	33

CAL YR 1969 TOTAL 2,184.61 MEAN 5.99 MAX 49 MIN .53 AC-FT 4,338
 WTR YR 1970 TOTAL 2,014.99 MEAN 5.52 MAX 49 MIN .38 AC-FT 4,000

12059500 NORTH FORK SKOKOMISH RIVER NEAR POTLATCH, WASH.

LOCATION.--Lat 47°19'42" N, long 123°14'33" W, in NE 1/4 sec. 7, T.21 N., R.4 W., Mason County, on left bank 1.0 mile upstream from mouth, 5.4 miles southwest of Potlatch, and 7.2 miles downstream from city of Tacoma's Cushman Dam No. 2.

DRAINAGE AREA.--117 sq mi, includes 99 sq mi above Cushman Dam No. 2 which is normally noncontributing.

PERIOD OF RECORD.--March 1944 to November 1949, March 1950 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 63.49 ft above mean sea level (levels by city of Tacoma). Prior to Nov. 27, 1949 (destroyed by flood of Nov. 27, 1949), and Mar. 18 to May 9, 1950, at site 200 ft downstream at present datum.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum Discharge	G.H.	Date	Minimum Discharge	G.H.
1966	Jan. 13, 1966	1,590	5.47	Sept. 6, 1966	5.6	2.13
1967	Dec. 13, 1966	1,740	5.66	Oct. 6, 1966, Aug. 22, 26, 27, 1967	6.7	2.13
1968	Jan. 19, 1968	1,780	5.70	Aug. 10-13, 1968	10	2.23
1969	June 10, 1969	2,780	6.76	Sept. 11, 12, 1969	9.6	2.22
1970	Apr. 9, 1970	713	4.23	Aug. 22-25, 1970	6.8	2.20

a Occurred Aug. 22, 26, 27, 1967.

Period of record: Maximum discharge, 7,740 cfs Nov. 4, 1955 (gage height, 10.45 ft); minimum recorded, 1.3 cfs Sept. 5, 14, 16, 1951 (gage height, 2.02 ft).

REMARKS.--Records excellent except those for period of no gage-height record which are good. Entire flow of river normally diverted at Cushman Dam No. 2 to supply powerplant which discharges directly into sea (Hood Canal). Main portion of McTaggart Creek is diverted (through Deer Meadow Creek, station 12058000) into Cushman Reservoir No. 2 and may bypass this station. Flow regulated by Lake Cushman (see station 12057500) and by pondage in Cushman Reservoir No. 2, from which spill and releases are infrequent. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	18	148	97	150	104	81	30	20	14	9.4	7.8
2	7.8	24	212	112	133	95	77	30	24	16	9.4	7.2
3	7.8	46	233	102	122	88	71	28	23	18	9.4	7.8
4	8.9	83	328	90	130	81	69	27	21	16	8.9	7.2
5	21	117	276	103	162	102	67	27	20	14	8.9	7.2
6	41	77	408	531	297	109	63	31	18	13	8.9	6.7
7	18	56	354	500	284	136	59	28	18	13	8.9	7.2
8	13	59	260	475	216	380	56	27	18	13	8.9	7.8
9	11	52	208	364	175	470	54	26	17	12	8.9	7.8
10	10	63	172	328	147	305	56	26	17	12	8.9	7.8
11	8.9	83	142	359	169	222	56	26	17	12	8.9	13
12	8.4	73	122	853	150	188	52	25	16	12	8.3	12
13	8.4	71	109	1,290	136	198	51	24	16	13	8.3	9.4
14	14	77	97	768	122	237	52	24	16	12	7.8	8.9
15	16	67	88	431	109	350	47	30	15	12	7.8	8.4
16	13	59	79	301	99	314	46	30	14	11	7.8	8.4
17	14	54	73	234	92	237	43	26	14	11	7.8	8.9
18	21	58	71	191	88	272	41	25	15	12	7.8	11
19	24	145	65	162	86	272	40	24	14	12	7.8	9.4
20	30	202	79	144	95	234	38	23	16	11	7.8	7.8
21	27	172	83	130	90	194	38	23	14	10	7.2	8.4
22	22	144	73	117	83	165	37	23	14	10	7.2	7.9
23	20	114	75	109	86	150	35	22	14	9.4	7.8	8.4
24	17	102	69	99	83	136	35	21	15	9.4	7.8	8.4
25	16	83	67	97	83	122	35	21	14	9.4	7.2	7.8
26	15	92	67	92	88	114	34	21	14	9.4	7.8	8.4
27	17	88	97	104	107	187	32	21	16	9.4	9.4	7.8
28	18	83	125	107	112	99	32	20	17	9.4	8.9	7.8
29	17	77	144	185	-----	92	31	20	15	9.4	8.4	7.8
30	18	77	109	205	-----	92	31	20	14	9.4	7.8	7.8
31	18	-----	92	175	-----	86	-----	20	-----	9.4	7.8	-----
TOTAL	509.0	2,516	4,525	8,855	3,694	5,751	1,459	769	496	363.6	257.9	252.2
MEAN	16.4	83.9	146	286	132	186	48.6	24.8	16.5	11.7	8.32	8.41
MAX	41	202	408	1,290	297	470	81	31	24	18	9.4	13
MIN	7.8	18	65	90	83	81	31	20	14	9.4	7.2	6.7
AC-FT	1,010	4,990	8,980	17,560	7,330	11,410	2,890	1,930	984	721	512	500
CAL YR 1965	TOTAL 25,944.3	MEAN 70.0	MAX 550	MIN 6.7	AC-FT 50,670							
WTR YR 1966	TOTAL 29,447.7	MEAN 80.7	MAX 1,290	MIN 6.7	AC-FT 58,410							

12059500 NORTH FORK SKOKOMISH RIVER NEAR POTLATCH, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	18	667	162	237	88	102	46	24	14	8.9	11
2	8.4	18	480	175	260	79	95	44	23	13	8.9	8.9
3	7.8	17	400	264	293	75	86	43	23	13	8.9	8.4
4	7.2	17	422	226	272	71	81	41	22	13	8.9	7.8
5	7.2	16	400	188	226	69	77	40	21	12	8.9	10
6	7.2	15	495	159	188	65	79	38	20	12	8.9	10
7	7.8	14	413	150	162	63	71	38	20	12	8.9	9.4
8	8.4	14	268	191	144	63	69	38	20	12	8.9	9.4
9	8.9	15	212	175	130	61	67	38	18	12	8.4	11
10	8.9	16	332	178	120	63	65	38	18	12	8.4	16
11	8.4	16	400	219	114	65	59	37	18	11	8.4	11
12	8.9	32	858	237	150	63	65	35	20	11	8.4	10
13	8.9	60	1,270	234	202	59	65	34	20	11	8.4	8.9
14	8.4	92	549	191	165	63	67	34	18	11	8.4	8.9
15	8.4	88	413	198	150	109	63	32	17	11	7.8	8.9
16	8.4	83	377	175	136	188	79	31	16	11	7.8	8.4
17	8.9	69	323	156	133	185	73	30	15	11	7.8	8.4
18	8.4	67	301	147	127	162	75	30	15	12	7.8	8.4
19	24	67	354	633	117	139	75	27	14	13	7.8	8.4
20	31	67	364	628	109	150	71	26	15	12	7.8	8.4
21	26	83	253	470	97	142	69	26	18	11	7.2	8.9
22	54	79	202	364	92	448	65	25	21	10	7.8	8.9
23	46	67	191	318	86	711	59	25	18	9.4	8.4	8.9
24	37	59	314	272	83	495	58	25	16	9.4	7.8	8.4
25	25	69	268	245	79	305	56	24	15	9.4	7.8	7.8
26	23	59	205	310	73	226	54	24	14	10	7.2	7.8
27	21	115	175	426	69	178	51	24	14	10	7.8	7.8
28	18	139	153	570	95	169	52	27	14	10	7.8	8.4
29	20	164	150	490	-----	144	49	28	14	9.4	10	12
30	23	513	133	377	-----	127	47	26	14	9.4	11	24
31	21	-----	136	276	-----	114	-----	25	-----	9.4	11	-----
TOTAL	517.9	2,148	11,478	8,804	4,109	4,899	2,044	999	535	346.4	262.2	294.5
MEAN	16.7	71.6	370	284	147	158	68.1	32.2	17.8	11.2	8.46	9.82
MAX	54	513	1,270	633	293	711	102	46	24	14	11	24
MIN	7.2	14	133	147	69	59	47	24	14	9.4	7.2	7.8
AC-FT	1,030	4,260	22,770	17,460	8,150	9,720	4,050	1,980	1,060	687	520	584
CAL YR 1966	TOTAL	36,041.6	MEAN	98.7	MAX	1,290	MIN	6.7	AC-FT	71,490		
WTR YR 1967	TOTAL	36,437.0	MEAN	99.8	MAX	1,270	MIN	7.2	AC-FT	72,270		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	122	150	109	112	125	136	44	43	20	12	13
2	37	107	395	102	334	114	125	44	78	18	12	13
3	38	92	618	92	695	104	114	46	49	18	12	12
4	37	83	450	86	840	122	109	57	40	18	13	12
5	83	75	372	79	413	127	102	44	37	18	13	11
6	122	69	328	75	280	125	92	40	34	18	12	11
7	99	67	284	79	205	117	86	38	31	17	13	12
8	69	81	219	73	172	107	81	38	30	17	13	13
9	56	169	272	161	147	97	77	38	30	16	13	18
10	83	354	386	147	133	90	73	35	28	16	11	15
11	88	280	359	120	122	98	69	34	27	17	11	15
12	95	194	249	134	109	191	67	32	30	18	11	14
13	150	150	191	645	102	230	65	32	38	17	12	14
14	107	136	159	827	95	245	79	32	32	17	13	32
15	86	136	159	580	88	413	79	31	28	17	13	30
16	71	136	125	418	86	422	69	30	26	16	13	23
17	61	125	114	350	104	284	65	28	27	16	12	32
18	56	112	104	489	317	205	63	27	26	15	16	31
19	49	97	95	1,390	440	169	63	28	26	15	21	26
20	62	90	95	1,010	276	142	59	32	25	15	18	24
21	120	83	92	590	354	125	58	32	25	14	16	21
22	256	77	578	368	350	114	52	32	25	14	15	18
23	188	71	711	272	450	109	59	30	24	14	30	18
24	169	67	495	219	517	109	54	28	23	13	24	18
25	181	63	350	185	336	136	54	27	23	13	20	17
26	139	61	264	159	245	163	54	26	23	13	18	16
27	394	58	205	139	188	323	51	26	22	13	24	16
28	377	59	172	125	156	249	49	26	22	13	20	16
29	226	86	150	117	136	219	47	26	22	13	17	15
30	181	95	133	107	-----	181	46	25	21	13	14	15
31	144	-----	120	109	-----	156	-----	25	-----	13	13	-----
TOTAL	3,898	3,395	8,374	9,358	7,802	5,411	2,197	1,033	915	485	475	542
MEAN	126	113	270	302	269	175	73.2	33.3	30.5	15.6	15.3	18.1
MAX	394	354	711	1,390	840	422	136	57	78	20	30	32
MIN	37	58	92	73	86	90	46	25	21	13	11	11
AC-FT	7,730	4,730	16,610	18,560	15,480	10,730	4,360	2,050	1,810	962	942	1,080
CAL YR 1967	TOTAL	37,960.1	MEAN	104	MAX	711	MIN	7.2	AC-FT	75,290		
WTR YR 1968	TOTAL	43,885.0	MEAN	120	MAX	1,390	MIN	11	AC-FT	87,050		

12059500 NORTH FORK SKOKOMISH RIVER NEAR POTLATCH, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	52	187	138	50	90	190	67	36	18	14	14
2	16	72	171	141	51	94	223	67	32	17	14	14
3	16	72	168	148	58	104	174	61	31	17	14	14
4	19	65	435	267	63	110	235	56	343	18	14	14
5	20	61	287	323	63	171	223	56	890	18	17	14
6	32	58	208	275	59	198	177	52	1,060	18	14	11
7	26	63	187	247	61	171	147	51	1,010	18	15	11
8	23	147	203	204	122	147	126	50	465	18	14	14
9	24	141	275	184	147	132	115	48	68	16	14	14
10	45	132	283	171	174	128	104	45	490	18	15	11
11	51	194	259	147	380	115	94	44	742	17	16	10
12	70	231	204	126	279	104	94	42	468	16	15	10
13	74	171	194	117	201	99	110	40	1,110	16	14	11
14	76	134	279	142	92	92	39	1,140	16	13	11	11
15	79	115	255	104	147	107	83	39	668	16	12	12
16	67	97	208	97	162	156	79	38	113	16	12	14
17	65	90	184	87	153	490	94	36	35	15	12	33
18	59	107	180	81	138	385	104	36	27	14	12	31
19	70	99	156	76	129	279	168	35	25	14	12	36
20	83	107	132	72	117	219	153	35	23	15	13	44
21	74	198	120	67	112	184	129	32	22	15	13	31
22	79	287	120	63	107	174	112	31	22	14	12	53
23	76	223	353	61	104	162	115	30	23	14	11	110
24	70	177	749	59	144	99	99	27	14	12	72	72
25	63	141	470	58	97	135	90	29	20	14	13	65
26	58	129	311	56	94	123	83	31	21	14	12	50
27	54	120	227	54	92	115	79	38	21	14	16	44
28	51	180	180	52	92	112	79	36	21	14	15	40
29	56	177	153	52	-----	104	70	54	20	14	14	38
30	67	194	129	50	-----	107	67	51	19	14	13	67
31	56	-----	120	54	-----	132	-----	40	-----	14	12	-----
TOTAL	1,641	3,965	7,767	3,763	3,511	4,875	3,703	1,343	9,007	486	419	912
MEAN	52.9	132	251	121	125	157	123	43.3	300	15.7	13.5	30.4
MAX	87	287	749	323	380	490	235	67	1,140	18	17	110
MIN	16	52	120	50	50	98	67	29	19	14	11	10
AC-FT	3,250	7,860	15,410	7,460	6,960	9,670	7,340	2,660	17,870	964	831	1,810
CAL YR 1968	TOTAL 41,991		MEAN 114		MAX 1,390		MIN 11		AC-FT 82,500			
WTR YR 1969	TOTAL 41,392		MEAN 113		MAX 1,140		MIN 10		AC-FT 82,100			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	34	40	85	235	66	54	51	25	15	9.6	8.0
2	87	32	39	79	215	63	52	50	23	15	10	7.4
3	67	40	74	60	190	60	46	23	15	10	12	12
4	58	110	40	70	170	58	63	45	22	16	9.6	11
5	51	129	36	65	150	56	94	44	21	17	9.6	11
6	46	165	35	63	120	149	129	44	20	19	9.6	13
7	52	141	34	61	130	212	97	44	19	18	13	16
8	110	117	70	44	140	147	112	90	19	15	12	13
9	112	99	40	76	130	120	486	45	21	14	10	12
10	92	83	42	67	120	102	348	44	20	12	8.8	10
11	76	74	303	65	110	102	215	42	20	12	8.0	9.6
12	65	67	395	61	105	138	162	39	19	12	8.0	10
13	39	61	366	131	110	177	129	38	19	12	8.0	10
14	52	58	371	366	105	219	112	34	19	13	8.0	14
15	50	56	259	219	150	194	99	35	19	14	8.0	10
16	46	52	208	165	330	174	85	32	19	14	8.0	10
17	50	50	212	156	290	147	79	32	18	12	8.0	16
18	45	46	223	201	250	124	81	31	17	11	8.0	18
19	40	46	208	475	200	112	79	30	16	11	8.0	22
20	39	56	219	380	175	99	68	30	16	11	8.0	21
21	38	54	239	445	150	90	61	30	15	12	8.0	17
22	36	48	395	450	130	83	59	29	15	11	6.8	19
23	35	520	460	110	79	79	61	29	14	10	6.8	16
24	34	56	311	344	100	72	83	27	14	10	6.8	14
25	32	52	251	327	90	67	76	29	14	11	7.4	12
26	32	51	190	371	80	63	70	30	14	12	8.8	11
27	42	48	156	445	75	63	45	29	15	11	8.0	19
28	42	46	129	303	70	61	61	27	14	9.6	8.0	11
29	38	45	112	235	-----	58	59	34	14	9.6	11	10
30	36	44	102	219	-----	54	54	32	14	9.6	8.8	10
31	34	-----	92	279	-----	54	-----	27	-----	8.8	8.0	-----
TOTAL	1,688	2,011	5,611	6,807	4,250	3,265	3,243	1,133	538	392.6	270.6	385.0
MEAN	54.5	67.0	181	220	152	105	108	36.5	17.9	12.7	8.73	12.8
MAX	112	165	520	475	330	219	486	51	25	19	13	22
MIN	32	32	34	61	70	54	50	27	14	8.8	6.8	7.4
AC-FT	3,350	3,990	11,130	13,500	8,430	6,480	6,430	2,250	1,070	779	537	764
CAL YR 1969	TOTAL 37,329.0		MEAN 102		MAX 1,140		MIN 10		AC-FT 74,048			
WTR YR 1970	TOTAL 29,594.2		MEAN 81.1		MAX 520		MIN 10.8		AC-FT 58,700			

NOTE.--NO GAGE-HEIGHT RECORD FEB. 3 TO MAR. 5.

12059800 SOUTH FORK SKOKOMISH RIVER NEAR HOODSPORT, NASH.

LOCATION.--Lat 47°26'45", long 123°24'54", in NW¼ sec.35, T.23 N., R.6 W., Mason County, Olympic National Forest, -on left bank 100 ft downstream from Pine Creek and 13.1 miles west of Hoodsport.

DRAINAGE AREA.--26.0 sq mi.

PERIOD OF RECORD.--October 1963 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 305 cfs (159.30 inches per year, 221,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,500 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1965	0430	2,710	5.21	Dec. 12, 1966	2100	*5,100	7.25	Feb. 18, 1968	1930	2,810	5.43
Dec. 6, 1965	0400	2,500	5.03	Mar. 22, 1967	2130	3,310	5.87				
Jan. 13, 1966	0530	*2,800	5.28					Dec. 3, 1968	1230	*3,390	5.93
				Jan. 14, 1968	0600	3,490	6.02				
Dec. 1, 1966	0130	2,930	5.54	Jan. 20, 1968	1400	*3,580	6.09	Dec. 13, 1969	1600	*2,960	5.56
				Feb. 3, 1968	2200	3,020	5.62	Apr. 9, 1970	0930	2,720	5.35

Annual minimum discharge, water years 1966-70

Mtr yr	Date	Disch.	G.H.	Mtr yr	Date	Disch.	G.H.
1966	Oct. 2-3, 1965	28	1.19	1969	Sept. 9-16, 1969	42	1.28
1967	Oct. 18, 1966, Sept. 27-29, 1967	33	al.23	1970	Aug. 26, 27, 1970	28	1.22
1968	Aug. 12, 13, 1968	52	1.34				

a Occurred Sept. 27-29, 1967.

Period of record: Maximum discharge, 5,100 cfs Dec. 12, 1966 (gage height, 7.25 ft), from rating curve extended above 1,500 cfs on basis of slope-area measurement of peak flow; minimum, 28 cfs Sept. 28-30, Oct. 2, 3, 1965, Aug. 26, 27, 1970; minimum gage height, 1.19 ft Sept. 28-30, Oct. 2, 3, 1965.

REMARKS.--Records excellent. No regulation or diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	100	937	158	322	217	500	206	193	168	81	45
2	28	250	776	155	272	193	445	238	210	164	78	44
3	28	700	1,150	149	242	171	388	326	200	168	76	42
4	45	907	1,310	141	405	158	370	420	190	168	74	42
5	490	805	1,170	171	636	152	388	505	190	161	72	42
6	1,250	440	1,790	798	485	161	460	442	217	158	68	42
7	313	357	1,130	820	326	174	526	531	253	155	66	42
8	196	393	720	904	313	203	520	455	253	155	66	41
9	145	406	575	575	268	490	455	480	245	155	54	39
10	110	470	475	445	235	402	510	411	249	152	64	41
11	90	430	402	475	288	309	666	368	245	143	63	47
12	80	339	352	1,100	276	309	480	344	220	135	61	44
13	75	322	309	2,420	235	634	384	317	206	132	59	39
14	105	420	276	1,460	286	971	357	272	217	132	59	39
15	155	322	253	732	187	1,810	357	305	245	127	57	39
16	125	288	227	526	171	619	357	309	276	121	57	30
17	150	249	213	416	161	445	334	268	245	116	55	64
18	195	286	217	357	155	366	309	249	217	114	53	83
19	240	1,190	227	309	149	305	280	272	206	114	52	59
20	315	855	460	272	171	261	265	309	190	108	50	50
21	300	608	384	245	196	224	257	309	177	104	50	45
22	215	531	288	224	203	200	249	265	171	101	49	44
23	170	406	257	206	292	187	257	242	174	101	49	45
24	145	344	227	193	288	180	265	242	168	98	47	45
25	150	284	203	190	265	193	268	292	161	96	47	44
26	115	261	190	187	257	242	249	317	161	92	47	47
27	110	249	193	242	261	309	231	268	221	89	70	47
28	108	272	183	257	245	348	228	235	301	89	59	45
29	106	265	174	542	-----	455	210	224	210	87	50	41
30	104	257	168	505	-----	636	203	220	177	87	49	39
31	95	-----	158	398	-----	586	-----	206	-----	85	45	-----
TOTAL	5,752	13,006	15,394	15,532	7,510	11,110	10,780	10,027	6,388	3,875	1,837	1,364
MEAN	186	434	497	501	268	358	359	323	213	125	59.3	45.5
MAX	1,250	1,190	1,790	2,420	636	1,810	666	642	301	168	81	83
MIN	28	100	158	141	149	152	203	206	161	85	45	38
CFSM	7.15	16.7	19.1	19.3	10.3	13.8	13.8	12.4	8.19	4.81	2.28	1.75
IN.	8.23	18.61	22.03	22.22	10.75	15.90	15.42	14.33	9.14	5.34	2.63	1.95
AC-FT	11,418	25,800	30,530	30,810	14,900	22,840	21,380	19,890	12,670	7,690	3,640	2,710
CAL YR 1965	TOTAL 93,599	MEAN 256	MAX 7 20	MIN 28	CFSM 9.85	IN 133.86	AC-FT 185,600					
MTR YR 1966	TOTAL 102,575	MEAN 281	MAX 420	MIN 28	CFSM 10.8	IN 146.76	AC-FT 203,500					

12059800 SOUTH FORK SKOKOMISH RIVER NEAR HOODSPORT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	160	2,380	520	505	365	200	154	324	196	74	46
2	38	142	1,590	518	560	296	193	157	396	196	72	70
3	37	126	1,280	794	836	252	196	163	356	200	70	50
4	37	115	1,320	550	1,010	222	210	169	342	189	70	44
5	35	108	799	410	674	203	196	193	370	172	67	42
6	34	102	672	338	510	189	186	256	370	160	65	42
7	40	93	520	324	420	176	183	312	316	147	63	38
8	56	86	411	662	370	183	189	329	292	144	63	38
9	44	86	362	596	338	179	193	296	272	132	61	41
10	40	84	822	574	312	172	183	244	272	130	59	104
11	38	86	1,600	722	308	166	176	218	168	127	59	100
12	37	167	2,660	602	545	156	183	196	264	127	57	67
13	35	426	3,240	550	590	150	183	193	296	127	57	55
14	34	608	1,270	480	415	150	179	196	338	121	57	52
15	34	764	1,230	698	362	160	169	236	365	118	55	48
16	34	614	1,590	530	300	414	169	334	370	116	55	44
17	34	455	1,420	415	312	425	160	410	378	110	54	41
18	34	553	1,500	365	324	360	166	410	374	109	54	41
19	451	561	1,440	1,160	196	296	169	430	370	108	50	39
20	418	602	1,070	1,090	266	296	169	495	352	121	48	39
21	243	690	704	722	240	306	166	510	306	105	48	38
22	425	548	545	510	225	1,380	166	470	280	100	48	38
23	250	384	475	210	1,810	166	396	256	92	46	36	36
24	490	330	460	338	196	818	163	320	252	92	44	36
25	298	460	420	300	193	530	169	284	268	90	44	36
26	270	357	365	296	183	401	163	272	260	88	42	34
27	213	445	320	763	176	329	154	276	229	85	42	33
28	170	988	308	1,510	416	300	154	370	218	81	41	39
29	277	867	410	1,530	-----	264	154	415	210	76	41	39
30	228	1,440	338	971	-----	240	154	338	207	76	41	142
31	189	-----	396	638	-----	218	-----	288	-----	74	41	-----
TOTAL	5,201	12,470	31,915	19,840	11,070	11,402	5,261	9,330	9,169	3,807	1,688	1,907
MEAN	168	416	1,028	640	395	368	175	301	306	123	54.5	50.2
MAX	850	1,440	3,240	1,530	1,010	1,810	210	510	396	200	74	142
MIN	34	84	308	296	176	150	154	154	207	74	41	33
CFSH	6.46	16.0	39.6	26.6	15.2	16.2	6.73	11.6	11.8	4.73	2.10	1.93
IN	7.44	17.84	45.66	28.39	15.84	16.31	7.53	13.35	13.12	5.45	2.42	2.16
AC-FT	10,320	24,730	63,300	39,350	21,960	22,620	10,440	18,510	18,190	7,550	3,350	2,990

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1,270	460	166	312	264	470	316	260	374	135	65	121		
2	1,150	374	176	204	1,210	505	280	214	716	141	63	110		
3	658	324	200	256	1,570	435	264	207	396	147	63	98		
4	758	280	207	233	1,540	571	260	229	316	141	63	90		
5	758	248	244	218	740	806	240	210	292	135	61	85		
6	1,140	222	218	207	520	656	225	189	280	130	59	81		
7	1,020	207	186	200	425	490	210	179	260	124	37	78		
8	620	278	166	189	374	406	200	179	236	121	55	76		
9	420	710	385	244	347	347	193	203	214	116	55	74		
10	511	1,360	1,060	233	329	308	200	240	207	113	54	72		
11	722	862	782	207	316	368	203	264	200	113	54	72		
12	555	525	445	222	308	662	186	254	203	132	54	70		
13	815	388	329	1,640	300	722	179	214	296	108	54	72		
14	692	401	276	2,400	280	656	207	193	248	116	55	320		
15	455	530	236	1,690	256	650	210	183	214	113	54	347		
16	347	480	210	937	233	584	189	106	210	105	55	252		
17	292	378	193	656	292	470	176	233	207	98	57	395		
18	272	320	179	878	1,800	378	169	316	210	92	78	374		
19	244	288	163	2,710	1,510	324	160	357	210	90	180	268		
20	225	256	194	2,520	842	292	150	392	193	88	83	214		
21	532	233	169	1,240	1,160	284	141	342	183	83	72	179		
22	925	214	1,650	979	1,040	284	138	388	183	81	70	166		
23	752	196	1,740	636	1,810	347	147	320	172	78	225	186		
24	525	193	1,390	867	1,400	410	147	272	172	76	196	157		
25	578	179	1,170	644	842	406	169	248	176	76	141	141		
26	420	169	951	510	674	415	169	236	210	76	138	132		
27	1,360	160	714	420	566	464	214	203	203	74	262	124		
28	1,060	160	566	370	580	614	214	222	169	74	236	116		
29	596	169	470	324	475	674	272	210	150	72	183	110		
30	662	169	396	296	-----	470	296	196	138	78	154	105		
31	566	-----	342	280	-----	374	-----	193	-----	67	130	-----		
TOTAL	20,880	18,733	15,535	23,202	21,923	15,286	6,876	7,556	7,238	3,185	3,826	4,885		
MEAN	674	598	501	748	756	493	203	244	241	103	97.6	163		
NAX	1,360	1,360	1,740	2,718	1,810	316	392	716	147	242	595	595		
MIN	225	160	194	189	233	284	138	179	138	67	54	70		
CFSH	25.9	13.8	19.3	28.8	29.1	19.0	7.81	9.38	9.27	3.96	3.73	6.27		
IN.	29.87	15.36	22.23	39.20	31.37	21.87	8.69	18.81	10.36	4.56	4.33	6.99		
AC-FT	41,420	21,290	30,818	46,020	43,480	30,320	12,050	14,990	14,360	6,320	6,800	9,690		
CAL YR 1967	TOTAL	120,222	MEAN	329	MAX	1,810	MIN	33	CFSH	12.7	IN	172.01	AC-FT	236,500
WTR YR 1968	TOTAL	139,525	MEAN	381	MAX	2,710	MIN	34	CFSH	14.7	IN	199.63	AC-FT	276,700

12059800 SOUTH FORK SKOKOMISH RIVER NEAR HOODSPORT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	98	304	356	308	95	110	916	280	566	150	70	54		
2	95	392	346	360	95	116	788	260	602	157	67	52		
3	90	356	1,790	424	110	127	535	244	638	144	67	50		
4	110	296	968	1,040	124	130	470	233	662	147	65	48		
5	131	256	596	965	118	179	475	248	620	141	67	48		
6	288	225	440	620	108	186	430	316	530	132	63	46		
7	186	240	392	520	105	163	370	460	450	127	61	46		
8	154	520	465	420	113	144	320	644	440	124	61	44		
9	162	406	790	356	110	135	304	740	490	124	59	44		
10	268	352	650	308	142	127	304	680	470	138	57	42		
11	462	593	500	272	644	121	304	650	425	147	57	42		
12	530	644	396	240	431	116	391	668	383	132	55	42		
13	540	440	365	225	288	116	626	644	342	124	55	42		
14	710	356	525	210	236	116	470	602	329	113	54	42		
15	632	300	722	193	218	157	383	500	320	108	54	42		
16	435	264	545	179	240	273	342	455	320	102	54	48		
17	425	248	415	172	225	1,040	456	450	316	100	52	265		
18	374	405	374	160	203	733	602	495	312	98	52	461		
19	392	374	312	154	186	480	674	485	284	98	52	895		
20	388	588	276	144	176	374	540	455	252	95	61	909		
21	356	835	244	141	163	324	465	495	225	92	63	495		
22	401	944	233	135	154	329	435	555	218	90	55	931		
23	338	680	722	130	144	329	530	614	222	88	52	1,180		
24	320	510	1,620	124	135	294	490	590	203	85	54	680		
25	292	406	818	121	130	272	406	475	189	83	85	550		
26	252	360	525	118	124	312	352	505	179	81	67	388		
27	222	396	401	116	118	392	338	784	149	78	90	312		
28	229	352	324	105	116	392	360	698	160	76	81	264		
29	467	494	280	102	-----	392	338	1,000	157	74	67	225		
30	560	425	240	100	-----	521	312	842	154	72	61	428		
31	378	-----	244	100	-----	888	-----	596	-----	70	55	-----		
TOTAL	10,265	12,961	16,874	8,562	5,051	9,390	13,726	16,583	10,627	3,390	1,913	8,715		
MEAN	331	432	544	276	180	303	458	535	354	109	61.7	291		
MAX	710	944	1,790	1,040	644	1,040	916	1,000	662	157	90	1,180		
MIN	90	225	233	100	95	110	304	233	154	70	52	42		
CFSM	12.7	16.6	20.9	10.6	6.92	11.7	17.6	20.6	13.6	4.19	2.37	11.2		
IN.	14.69	18.54	24.14	12.25	7.23	13.43	19.44	23.73	15.20	4.85	2.74	12.47		
AC-FT	20,360	25,710	33,470	16,980	10,020	18,630	27,230	32,890	21,080	6,720	3,790	17,290		
CAL YR 1968	TOTAL	132,477	MEAN	362	MAX	2,710	MIN	54	CFSM	13.9	IN	189.54	AC-FT	262,800
WTR YR 1969	TOTAL	116,057	MEAN	323	MAX	1,790	MIN	42	CFSM	12.4	IN	168.91	AC-FT	234,200

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	622	116	127	207	515	189	144	193	157	67	39	30		
2	470	110	121	193	425	179	141	210	172	65	38	30		
3	338	110	138	179	401	169	135	229	183	63	38	44		
4	276	554	176	169	342	163	235	244	163	63	36	41		
5	233	704	147	157	308	154	831	218	147	61	36	38		
6	207	1,220	135	147	292	490	867	193	138	59	34	55		
7	275	881	127	141	370	680	480	176	135	59	36	90		
8	602	680	141	147	406	596	546	222	121	59	38	59		
9	550	460	138	304	396	312	1,800	233	135	57	38	48		
10	396	360	138	244	378	264	888	196	130	57	36	44		
11	312	300	578	207	356	244	614	172	116	55	34	41		
12	264	264	902	186	342	392	420	163	108	54	34	38		
13	225	233	1,700	401	410	614	342	150	102	54	34	36		
14	200	214	1,190	1,240	352	1,150	296	141	100	54	34	36		
15	186	200	722	545	555	806	260	157	98	52	33	34		
16	169	183	525	378	1,040	632	236	200	95	50	31	34		
17	160	166	560	338	698	465	214	186	90	50	31	134		
18	147	154	881	668	535	374	218	163	88	50	31	203		
19	138	147	674	1,270	440	320	203	154	88	48	31	186		
20	132	214	782	812	374	284	186	147	88	48	31	166		
21	127	214	842	1,230	329	256	179	141	90	48	31	121		
22	124	179	888	1,140	300	236	169	144	88	46	30	183		
23	118	288	818	1,310	276	225	186	147	83	46	30	166		
24	118	244	572	830	252	218	248	150	78	44	30	121		
25	113	207	460	644	233	200	236	172	76	44	30	105		
26	108	189	392	566	222	189	214	183	74	54	30	90		
27	157	169	329	644	214	176	193	150	74	59	26	81		
28	150	157	292	495	203	172	189	135	72	48	31	72		
29	138	144	264	410	-----	166	189	179	70	44	31	65		
30	130	135	240	360	-----	157	193	169	67	44	30	61		
31	124	-----	222	480	-----	150	-----	150	-----	41	30	-----		
TOTAL	7,309	9,196	15,221	16,042	10,964	10,422	11,052	9,467	3,226	1,643	1,024	2,449		
MEAN	236	307	491	517	392	336	368	176	108	53.0	33.0	81.6		
MAX	622	1,220	1,700	1,310	1,040	1,150	1,800	244	183	67	39	203		
MIN	108	110	121	141	203	150	135	135	67	41	28	30		
CFSM	9.08	11.8	18.9	22.9	15.1	12.9	14.2	6.77	4.15	2.04	1.27	3.14		
IN.	10.46	13.16	21.78	22.95	15.69	14.91	15.81	7.82	4.62	2.35	1.47	3.50		
AC-FT	14,500	18,240	30,190	31,820	21,750	20,670	21,920	10,440	6,400	3,260	2,030	4,860		
CAL YR 1969	TOTAL	109,683	MEAN	301	MAX	1,700	MIN	42	CFSM	11.6	IN	156.93	AC-FT	217,600
WTR YR 1970	TOTAL	94,015	MEAN	250	MAX	1,800	MIN	28	CFSM	9.92	IN	134.51	AC-FT	186,500

12060500 SOUTH FORK SKOKOMISH RIVER NEAR UNION, WASH.

LOCATION.--Lat 47°20'26", long 123°16'44", in SW¼NE¼ sec.2, T.21 N., R.5 W., Mason County, on right bank 3.0 miles upstream from Vance Creek, 3.2 miles upstream from confluence with North Fork, and 8.5 miles west of Union.

DRAINAGE AREA.--76.3 sq mi.

PERIOD OF RECORD.--August 1931 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 110 ft (by barometer).

AVERAGE DISCHARGE.--39 years, 729 cfs (129.75 inches per year, 528,200 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (6,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 6, 1966	0700	6,360	4.83	Oct. 1, 1967	2230	7,530	5.36	Feb. 18, 1968	2230	8,280	5.87
Jan. 13, 1966	0430	*9,220	5.58	Oct. 27, 1967	1630	7,970	5.47	Feb. 24, 1968	0015	6,950	5.50
				Nov. 10, 1967	1400	6,080	4.97				
Dec. 1, 1966	0300	8,740	5.61	Dec. 22, 1967	1430	8,090	5.50	Dec. 3, 1968	1530	*9,840	6.26
Dec. 12, 1966	2300	*15,600	7.25					Dec. 24, 1968	1030	7,160	5.56
Dec. 16, 1966	0630	6,190	5.00	Jan. 14, 1968	0900	10,900	6.52				
Jan. 19, 1967	1400	8,500	5.60	Jan. 19, 1968	1340	*11,200	6.58	Dec. 13, 1969	1730	7,300	5.60
Mar. 22, 1967	2400	11,600	6.28	Feb. 4, 1968	0100	10,700	6.47	Apr. 9, 1970	1300	*7,680	5.71

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 1965	68	1.06	1969	Sept. 8-12, 1969	97	1.44
1967	Oct. 15-18, 1966	78	1.14	1970	Sept. 15-17, 1970	78	1.55
1968	Aug. 11-13, 1968	122	1.84				

Period of record: Maximum discharge, 21,600 cfs Jan. 22, 1935, Nov. 26, 1949 (gage height, 11.0 ft), from rating curve extended above 11,000 cfs; minimum, 62 cfs Sept. 18, 1938; minimum gage height, 1.06 ft Oct. 3, 1965.

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1216: 1950. WSP 1316: 1934(M), 1938(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	70	224	1,880	454	1,060	730	1,290	410	319	256	142	95		
2	70	720	2,010	449	890	635	1,170	431	356	265	138	92		
3	68	1,720	2,070	439	791	573	989	532	343	267	135	90		
4	70	2,050	3,480	417	1,040	524	912	644	325	262	135	87		
5	377	2,110	2,670	560	2,000	532	945	760	300	256	135	85		
6	2,460	1,110	4,830	2,460	2,010	565	1,050	956	325	245	132	85		
7	680	868	3,080	2,520	1,460	710	1,160	835	350	240	126	85		
8	396	868	2,010	2,600	1,160	1,180	1,120	700	369	240	124	85		
9	306	668	1,520	1,870	978	2,110	978	730	356	240	124	82		
10	245	1,000	1,280	1,480	857	1,560	989	662	362	235	121	87		
11	211	1,110	1,070	1,700	1,040	1,160	1,260	548	356	231	118	106		
12	185	824	923	3,700	1,010	1,020	978	532	331	221	115	104		
13	176	770	813	8,180	846	1,830	791	507	312	211	112	95		
14	272	967	730	5,250	760	2,680	780	454	312	207	112	92		
15	369	791	653	2,500	671	3,580	770	484	325	202	112	90		
16	284	680	599	1,750	608	2,240	760	532	369	197	109	90		
17	343	590	557	1,400	565	1,320	720	454	356	189	109	95		
18	462	582	548	1,200	540	1,420	671	417	319	185	106	160		
19	573	2,450	540	1,020	532	1,280	608	431	312	185	106	124		
20	756	2,540	954	890	590	1,040	573	461	294	181	104	109		
21	700	1,680	1,000	813	700	857	548	484	278	172	101	101		
22	492	1,460	770	740	730	750	524	431	267	168	101	95		
23	396	1,110	680	680	846	690	532	390	267	168	101	101		
24	337	923	590	635	890	700	532	383	262	164	101	98		
25	294	760	540	617	802	730	524	410	245	160	98	95		
26	267	720	507	599	802	879	507	469	245	156	98	98		
27	254	700	548	780	868	1,060	477	417	278	152	128	101		
28	256	720	557	857	835	1,110	446	376	410	149	124	95		
29	250	700	524	1,810	-----	1,290	424	362	325	149	109	92		
30	245	671	499	1,700	-----	1,600	410	356	272	146	104	90		
31	226	-----	454	1,310	-----	1,480	-----	337	-----	142	101	-----		
TOTAL	12,092	32,497	38,886	51,600	25,901	38,035	23,438	15,895	9,540	6,238	3,583	2,904		
MEAN	390	1,083	1,254	1,665	825	1,227	781	513	318	201	116	96.8		
MAX	2,460	2,650	4,830	8,180	2,010	3,580	1,290	956	410	267	142	160		
MIN	68	226	454	417	532	524	410	337	245	142	98	82		
CFSM	5.11	14.2	16.4	21.8	12.1	16.1	10.2	6.72	4.17	2.63	1.52	1.27		
IN.	5.90	15.84	18.96	25.16	12.63	18.54	11.43	7.75	4.65	3.04	1.75	1.42		
AC-FT	23,980	64,460	77,130	102,300	51,370	75,440	46,490	31,530	18,920	12,370	7,110	5,760		
CAL YR 1965	TOTAL	232,008	MEAN	636	MAX	5,040	MIN	68	CFSM	8.34	IN	113.12	AC-FT	460,200
WTR YR 1966	TOTAL	260,609	MEAN	714	MAX	8,180	MIN	68	CFSM	9.36	IN	127.06	AC-FT	516,900

12060500 SOUTH FORK SKOKOMISH RIVER NEAR UNION, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	343	6,740	1,540	1,660	914	678	379	471	277	135	100
2	87	306	4,620	1,340	1,810	678	638	372	587	267	132	126
3	85	272	3,980	2,610	2,550	577	607	379	550	272	129	107
4	85	250	4,740	1,700	2,930	514	638	386	496	257	126	100
5	82	235	3,100	1,240	2,050	471	587	415	523	246	126	90
6	80	226	3,080	1,010	1,510	447	550	496	550	226	126	90
7	85	207	2,300	941	1,230	423	523	597	496	222	123	90
8	106	197	1,700	1,840	1,060	423	523	617	439	217	120	88
9	98	193	1,460	1,730	968	431	541	568	423	209	117	92
10	90	193	2,480	1,510	877	423	496	479	415	196	114	129
11	82	193	4,400	2,150	840	407	455	423	407	192	114	165
12	85	350	8,060	1,820	1,020	379	471	393	393	192	112	120
13	82	812	11,600	1,700	1,860	365	463	386	415	187	110	107
14	80	1,500	4,640	1,400	1,200	386	463	372	455	183	110	102
15	78	1,650	4,070	1,750	968	532	447	407	487	179	110	94
16	78	1,540	5,170	1,550	840	1,440	479	523	505	176	110	92
17	78	1,010	4,100	1,200	815	1,410	463	700	496	172	107	90
18	78	1,240	4,150	1,010	877	1,120	487	668	496	169	107	88
19	537	1,180	4,180	4,750	768	877	523	668	479	169	104	88
20	940	1,280	3,400	4,390	689	914	505	790	471	176	104	90
21	557	1,500	2,150	2,770	617	928	479	815	431	172	102	88
22	970	1,220	1,680	1,940	568	4,880	455	734	407	161	102	88
23	1,950	901	1,480	1,560	532	7,340	455	638	365	161	102	88
24	1,120	710	1,790	1,280	487	3,360	439	514	351	158	100	86
25	635	923	1,580	1,100	487	1,970	439	455	358	154	100	86
26	507	791	1,240	1,280	455	1,490	423	439	358	151	97	84
27	439	1,090	1,050	2,460	439	1,200	400	447	337	147	97	84
28	362	2,100	968	5,370	897	1,100	400	505	307	147	94	84
29	478	2,050	1,180	5,170	-----	968	393	689	301	144	94	86
30	484	4,440	1,020	3,300	-----	864	386	580	289	135	92	84
31	396	-----	996	2,110	-----	768	-----	463	-----	135	92	-----
TOTAL	10,504	28,882	105,224	65,501	31,004	37,999	14,806	16,267	13,058	5,852	3,408	3,000
MEAN	339	963	3,330	2,113	1,107	1,226	494	525	435	189	110	100
MAX	1,550	4,440	11,600	5,370	2,930	7,340	678	815	587	277	135	176
MIN	78	193	968	841	430	365	372	372	289	135	92	84
CFSM	4.44	12.6	43.6	27.7	14.5	16.1	6.47	6.88	5.70	2.48	1.44	1.31
IN.	5.12	14.08	50.33	31.93	15.12	18.53	7.22	7.93	6.37	2.85	1.66	1.46
AC-FT	20,830	57,290	204,700	129,900	61,500	75,370	29,370	32,270	25,900	11,610	6,760	5,950

CAL YR 1966 TOTAL 319,744 MEAN 874 MAX 11,600 MIN 78 CFSM 11.5 IN 155.89 AC-FT 634,200
WTR YR 1967 TOTAL 335,505 MEAN 914 MAX 11,600 MIN 78 CFSM 12.0 IN 162.60 AC-FT 661,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,270	1,160	505	712	660	1,230	972	516	543	240	131	225
2	3,580	955	677	607	3,170	1,220	864	448	1,340	240	131	206
3	1,730	827	1,580	532	4,780	1,080	782	400	852	235	131	188
4	1,990	712	1,160	487	5,880	1,220	769	432	620	235	131	172
5	1,860	628	1,220	447	2,530	1,820	714	416	516	225	134	164
6	2,860	559	914	415	1,790	1,680	660	386	480	220	131	161
7	2,820	794	407	736	1,470	1,260	610	365	456	211	131	158
8	1,460	685	617	379	1,290	1,030	561	358	400	202	128	154
9	1,200	1,720	880	652	1,210	912	594	365	379	198	125	147
10	1,060	3,580	3,100	638	1,110	804	525	400	358	193	125	144
11	1,680	2,100	2,780	487	1,060	912	507	440	344	188	122	147
12	1,280	1,320	1,410	511	996	2,120	448	337	225	122	144	140
13	1,820	1,010	1,020	4,950	960	2,350	448	393	498	198	125	144
14	1,540	996	802	6,150	888	2,170	570	358	448	202	128	527
15	1,110	1,230	678	5,560	816	2,730	630	337	379	206	125	780
16	864	1,220	607	3,380	736	2,470	534	330	372	184	128	498
17	700	955	2,410	804	1,750	480	372	358	180	125	144	1,090
18	607	790	505	3,270	436	1,350	444	424	344	172	144	828
19	559	678	471	9,560	4,910	1,100	432	480	344	168	180	561
20	514	597	447	8,280	2,550	948	408	670	330	164	168	424
21	1,140	541	463	4,940	3,200	900	400	561	306	161	130	365
22	2,190	505	4,800	2,810	852	372	610	366	310	144	131	314
23	1,940	463	5,640	2,290	4,800	912	406	561	306	158	337	344
24	1,300	455	3,000	2,230	4,620	1,140	393	464	300	154	440	312
25	1,460	415	3,200	1,650	2,550	1,280	424	416	294	150	282	282
26	1,050	393	2,530	1,290	2,030	1,340	424	386	324	144	250	265
27	1,970	379	1,820	1,100	1,470	1,400	400	372	344	140	344	245
28	2,980	372	1,450	936	1,440	1,970	432	365	294	137	448	235
29	1,680	463	1,140	840	1,300	1,910	552	351	265	134	344	225
30	1,680	455	955	747	-----	1,460	570	330	250	131	276	211
31	1,430	-----	882	736	-----	1,150	-----	318	-----	131	240	-----
TOTAL	53,524	26,704	47,766	71,403	66,400	45,880	16,321	13,138	12,687	5,684	5,920	9,660
MEAN	1,727	890	1,541	2,303	2,200	1,480	544	424	423	183	191	322
MAX	3,970	3,580	5,640	9,560	5,880	2,810	972	670	1,340	240	448	1,090
MIN	514	372	447	379	640	884	372	318	230	131	122	140
CFSM	22.16	11.7	20.2	30.2	30.0	19.4	7.13	5.54	5.54	2.40	2.50	4.22
IN.	26.18	13.02	23.29	36.81	32.37	22.37	7.96	6.41	6.19	2.77	2.89	4.71
AC-FT	106,200	52,970	94,760	141,600	131,700	91,000	32,370	26,060	25,160	11,270	11,740	19,160

CAL YR 1967 TOTAL 318,889 MEAN 874 MAX 7,340 MIN 84 CFSM 11.5 IN 155.47 AC-FT 632,500
WTR YR 1968 TOTAL 375,087 MEAN 1,025 MAX 9,560 MIN 122 CFSM 13.4 IN 182.87 AC-FT 744,000

12060500 SOUTH FORK SKOKOMISH RIVER NEAR UNION, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	703	924	1,040	307	421	2,740	660	934	260	143	112
2	193	862	864	1,300	302	442	2,570	622	934	265	140	109
3	188	886	4,900	1,330	346	486	1,700	586	946	255	140	106
4	216	747	2,960	2,890	435	518	1,760	550	958	245	136	106
5	220	640	1,670	3,030	428	740	1,720	550	934	260	146	106
6	516	552	1,190	1,980	370	874	1,490	640	817	245	136	100
7	386	561	1,030	1,770	370	700	1,210	850	690	235	132	108
8	318	1,400	1,490	1,420	518	604	1,020	1,120	640	235	129	100
9	312	1,150	2,140	1,190	595	526	958	1,260	690	230	126	97
10	580	936	1,900	1,050	677	502	910	1,160	680	235	122	97
11	960	1,460	1,500	874	2,620	470	862	1,090	631	265	118	97
12	1,420	1,820	1,150	751	1,660	463	1,040	1,090	660	240	118	100
13	1,410	1,210	1,080	690	1,080	456	1,660	1,050	526	226	118	103
14	1,670	924	1,880	650	828	456	1,250	1,020	494	212	118	103
15	1,650	780	2,090	586	773	550	982	839	478	204	115	103
16	1,140	670	1,560	590	922	1,010	874	762	470	194	115	106
17	972	1,150	1,190	862	3,630	1,090	1,860	720	470	190	112	992
18	936	840	1,020	470	730	2,660	1,500	762	463	186	112	771
19	912	888	864	449	690	1,680	1,960	795	449	182	112	1,800
20	1,120	1,140	736	421	631	1,360	1,560	720	394	178	115	1,830
21	900	1,790	640	400	604	1,160	1,300	740	370	178	136	1,100
22	1,050	2,610	590	382	550	1,190	1,180	839	346	174	115	1,480
23	876	1,810	2,130	376	526	1,220	1,300	886	346	170	109	2,990
24	780	1,300	5,560	370	510	1,080	1,190	922	334	166	109	1,590
25	703	1,010	2,970	358	470	958	1,020	730	318	162	143	1,320
26	630	888	1,910	352	456	1,030	862	794	292	158	140	922
27	552	900	1,470	349	449	1,230	946	940	306	150	146	710
28	516	828	1,170	329	435	1,220	850	1,180	285	150	162	595
29	717	1,280	1,020	324	-----	1,140	817	1,690	275	146	136	526
30	1,280	1,210	874	318	-----	1,360	730	1,640	270	146	122	864
31	876	-----	910	318	-----	2,320	-----	1,080	-----	143	115	-----
TOTAL	24,205	32,437	51,322	26,772	19,144	32,456	39,051	28,287	16,302	6,285	3,936	18,535
MEAN	781	1,081	1,656	864	684	1,047	1,302	912	543	203	127	618
MAX	1,670	2,610	5,560	3,030	2,620	3,630	2,740	1,690	958	265	162	2,990
MIN	188	552	590	318	302	421	730	550	270	143	109	97
CFSM	10.2	14.2	21.7	11.3	8.96	13.7	17.1	12.0	7.12	2.66	1.66	8.10
IN-	11.80	19.81	25.02	13.05	9.33	15.82	19.04	13.79	7.95	3.06	1.92	9.04
AC-FT	48,010	64,340	101,800	53,100	37,970	64,380	77,460	56,110	32,340	12,470	7,810	36,760

CAL YR 1968 TOTAL 355,057 MEAN 970 MAX 9,560 MIN 122 CFSM 12.7 IN 173.11 AC-FT 704,300
WTR YR 1969 TOTAL 298,732 MEAN 810 MAX 5,560 MIN 97 CFSM 10.7 IN 145.65 AC-FT 592,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,280	285	307	534	1,400	470	364	428	304	148	114	85
2	1,130	265	285	494	1,170	449	352	399	311	148	111	85
3	773	265	307	470	1,070	442	340	413	330	143	111	94
4	622	1,100	398	449	1,040	414	407	406	311	138	111	100
5	534	1,560	346	414	817	400	1,300	406	285	134	108	82
6	463	3,010	324	400	751	984	2,150	385	273	125	108	82
7	518	1,930	302	382	828	1,760	1,170	371	261	125	108	148
8	1,300	1,560	340	394	934	1,050	1,140	413	243	125	108	122
9	1,320	1,090	340	751	886	784	4,640	476	255	122	104	108
10	958	850	346	631	817	650	2,490	436	261	122	100	94
11	720	680	2,150	534	751	622	1,400	428	225	122	97	88
12	595	595	2,810	478	710	930	1,010	413	220	118	94	80
13	526	534	4,140	890	784	1,640	845	399	220	118	90	80
14	463	486	3,430	3,570	710	2,390	690	385	214	114	90	80
15	421	456	2,150	1,680	1,090	2,010	630	385	214	118	90	78
16	394	428	1,580	1,190	2,550	1,560	581	392	208	118	90	78
17	370	388	1,600	1,030	1,930	1,170	518	406	203	122	90	114
18	352	364	2,270	1,680	1,540	946	500	378	142	125	90	330
19	340	340	1,780	3,310	1,180	795	500	357	181	125	90	318
20	324	428	1,880	2,610	1,010	700	460	344	181	125	90	298
21	307	470	2,220	3,210	874	631	428	330	181	125	90	243
22	296	407	2,660	2,870	773	577	420	330	181	122	90	285
23	285	559	2,870	3,530	690	542	436	318	176	122	90	311
24	285	595	1,830	2,280	631	526	650	318	170	118	90	225
25	275	494	1,370	1,850	595	494	650	337	170	118	90	192
26	255	428	1,140	1,780	550	463	572	344	166	122	90	166
27	329	400	958	2,040	526	518	509	324	164	130	90	156
28	340	364	817	1,500	502	421	492	292	161	125	90	138
29	312	340	710	1,180	-----	400	460	350	154	122	90	130
30	307	329	631	1,020	-----	382	436	371	148	118	88	122
31	296	-----	577	1,390	-----	376	-----	318	-----	118	85	-----
TOTAL	16,490	21,000	42,858	44,501	27,109	25,496	26,540	11,652	6,567	3,875	2,977	4,512
MEAN	538	700	1,383	1,436	968	822	885	376	219	125	96.0	150
MAX	1,320	3,010	4,140	3,570	2,550	2,390	4,640	476	330	148	114	330
MIN	255	265	285	382	502	376	340	292	148	114	85	78
CFSM	7.05	9.17	18.1	16.8	12.7	10.8	11.6	4.93	2.87	1.64	1.26	1.97
IN-	8.14	10.24	20.90	21.70	13.22	12.43	12.94	5.48	3.28	1.89	1.45	2.20
AC-FT	33,100	41,650	85,010	88,270	53,770	50,570	52,640	23,110	13,030	7,690	5,900	8,950

CAL YR 1969 TOTAL 271,316 MEAN 743 MAX 4,140 MIN 97 CFSM 9.74 IN 132.28 AC-FT 538,200
WTR YR 1970 TOTAL 233,777 MEAN 640 MAX 4,640 MIN 78 CFSM 8.39 IN 113.98 AC-FT 463,700

SKOKOMISH RIVER BASIN

12061500 SKOKOMISH RIVER NEAR POTLATCH, WASH.

LOCATION.--Lat 47°18'36", long 123°10'33", in SE 1/4 sec.15, T.21 N., R.4 W., Mason County, on upstream side of right pier of bridge on U.S. Highway 101, 3.7 miles downstream from confluence of North and South Forks, 4.7 miles southwest of Potlatch, and at mile 5.3.

DRAINAGE AREA.--227 sq. mi.

PERIOD OF RECORD.--July 1943 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 10 ft (from topographic map). Prior to May 27, 1964, water-stage recorders or nonrecording gage at several sites about 0.6 mile upstream at different datums. Supplementary water-stage recorder on right bank at site 0.6 mile upstream at datum 16.47 ft above mean sea level, used Nov. 16 to Dec. 10, 1964, June 11 to July 7, and Nov. 2-24, 1965.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

		Maximum						Minimum		
Wtr yr	Date	Discharge	G.H.	Date	Discharge	G.H.	Discharge	G.H.	Discharge	G.H.
1966	Jan. 13, 1966	14,800	14.87	Oct. 1, 1965	150	6.37				
1967	Dec. 13, 1966	17,700	15.44	Oct. 18, 19, 1966	156	6.47				
1968	Jan. 19, 1968	12,500	15.28	Aug. 9-13, 1968	230	6.72				
1969	Dec. 3, 1968	11,200	14.64	Sept. 15, 16, 1969	181	6.83				
1970	Apr. 9, 1970	10,700	14.43	Aug. 30 to Sept. 2, 1970	153	6.73				

Period of record: Maximum discharge, 27,000 cfs Nov. 3, 1955 (gage height, 12.6 ft, site and datum then in use); minimum, 125 cfs Sept. 14-17, 1944.

Flood in December 1933 reached an elevation of 30.8 ft above mean sea level, at site on left bank 150 ft upstream from old highway bridge (discharge, 18,600 cfs).

REMARKS.--Records excellent. Flow partly regulated by Lake Cushman and Cushman Reservoir No. 2. In normal years practically entire flow of North Fork is diverted at Cushman dam No. 2 and is discharged into Puget Sound through Cushman powerplant No. 2. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1716: 1950(M), 1956. WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	358	2,070	770	1,620	1,220	1,670	616	460	384	216	178
2	154	790	2,980	846	1,360	1,060	1,550	624	502	384	211	174
3	154	1,860	2,620	778	1,220	958	1,320	704	509	397	207	169
4	158	2,600	4,700	722	1,360	877	1,240	823	488	397	202	169
5	322	2,900	3,540	900	2,430	913	1,230	922	460	377	197	169
6	2,510	1,720	5,830	3,610	2,840	958	1,310	1,100	460	352	192	169
7	927	1,300	4,220	4,080	2,370	1,130	1,390	1,070	488	345	192	169
8	570	1,220	2,990	4,320	1,870	2,100	1,400	904	516	339	192	169
9	444	1,200	2,320	3,100	1,550	3,710	1,260	895	502	339	188	165
10	388	1,280	1,910	2,420	1,340	2,680	1,260	859	495	339	178	169
11	340	1,610	1,620	2,690	1,600	1,940	1,560	736	488	332	178	188
12	304	1,240	1,410	5,900	1,650	1,700	1,290	696	467	332	178	183
13	282	1,140	1,260	13,000	1,380	2,540	1,090	688	453	326	178	178
14	366	1,350	1,120	8,500	1,230	3,720	1,060	640	439	320	183	169
15	493	1,180	990	4,060	1,100	5,190	1,040	680	446	314	188	169
16	424	1,020	900	2,740	1,000	3,680	1,010	736	467	303	188	169
17	458	898	819	2,150	931	2,440	976	656	467	297	188	169
18	570	850	778	1,780	877	2,280	913	624	446	291	188	211
19	810	3,010	776	1,540	832	2,160	841	593	425	291	183	216
20	918	3,340	1,050	1,370	922	1,840	796	624	418	285	183	192
21	945	2,440	1,400	1,240	1,050	1,530	778	640	404	280	183	183
22	730	2,170	1,080	1,120	1,060	1,340	752	600	390	274	183	169
23	594	1,720	990	1,050	1,170	1,230	744	558	371	263	183	169
24	521	1,400	882	967	1,270	1,170	736	523	364	263	183	169
25	458	1,150	819	949	1,190	1,170	728	537	371	263	174	169
26	418	1,110	762	895	1,190	1,280	712	608	358	258	174	169
27	394	1,080	855	1,070	1,360	1,460	688	586	377	247	197	174
28	388	1,050	918	1,210	1,350	1,500	664	530	523	242	207	169
29	394	1,040	864	2,340	-----	1,630	648	502	481	237	192	169
30	382	1,010	628	2,500	-----	1,990	624	495	418	232	188	165
31	364	-----	762	2,000	-----	1,930	-----	474	-----	221	183	-----
TOTAL	16,314	45,036	54,065	80,617	39,122	59,326	31,280	21,243	13,453	9,524	5,857	5,249
MEAN	526	1,501	1,744	2,601	1,397	1,914	1,043	685	448	307	189	175
MAX	2,510	3,340	5,830	13,000	2,840	5,190	1,670	1,100	523	397	216	216
MIN	154	358	762	722	832	877	624	474	358	221	174	165
AC-FT	32,360	89,330	107,200	159,900	77,600	117,700	62,040	42,140	26,680	18,890	11,620	10,410
CAL YR 1965	TOTAL 353,628	MEAN 989	MAX 7,190	MIN 150	AC-FT 701,800							
WTR YR 1966	TOTAL 381,086	MEAN 1,044	MAX 13,000	MIN 154	AC-FT 755,900							

12061500 SKOKOMISH RIVER NEAR POTLATCH, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	169	565	9,000	2,230	2,900	1,510	1,110	692	660	414	236	172
2	169	502	6,120	1,930	3,200	1,190	1,040	684	763	400	230	198
3	169	460	5,130	3,620	4,300	1,030	1,010	676	754	400	225	198
4	169	425	6,100	2,670	4,800	930	1,020	676	692	400	219	193
5	165	397	4,260	2,030	3,200	853	980	692	676	394	219	183
6	165	377	4,320	1,660	2,600	799	920	772	718	374	219	177
7	169	352	3,390	1,520	2,100	763	871	862	684	361	219	177
8	183	332	2,360	2,720	1,800	745	862	910	628	354	219	172
9	188	339	1,870	2,730	1,600	763	920	871	604	362	214	188
10	178	332	2,980	2,230	1,500	754	862	772	588	335	209	203
11	169	332	5,280	3,120	1,450	736	826	709	580	323	203	293
12	169	530	9,160	2,830	1,800	736	844	668	572	323	203	241
13	169	852	16,300	2,720	3,000	676	880	652	572	317	203	214
14	169	2,040	6,870	2,200	2,100	692	880	644	604	311	203	198
15	169	2,140	4,960	2,550	1,700	960	844	676	636	305	198	188
16	169	2,130	6,000	2,390	1,430	1,950	930	772	652	299	198	183
17	165	1,490	4,960	1,900	1,380	2,130	920	940	644	293	193	177
18	160	1,570	5,280	1,650	1,510	1,900	940	960	644	293	193	177
19	457	1,540	5,320	5,830	1,330	1,550	900	960	636	287	188	177
20	1,240	1,670	4,940	5,400	1,190	1,590	950	1,010	628	299	188	172
21	886	1,920	3,150	4,000	1,110	1,650	920	1,070	596	293	188	172
22	1,430	1,700	2,390	3,000	1,020	4,910	871	1,020	580	275	188	167
23	2,060	1,310	2,120	2,400	940	10,900	826	930	526	269	188	167
24	1,800	1,080	2,790	2,000	880	5,020	799	817	498	269	183	167
25	1,080	1,290	2,500	1,800	871	3,140	781	727	498	264	183	167
26	850	1,160	1,960	2,100	826	2,310	763	676	505	264	183	167
27	728	1,500	1,650	4,000	781	1,860	727	676	484	264	177	167
28	616	2,690	1,480	6,500	1,260	1,700	727	709	449	258	177	167
29	680	2,630	1,740	6,000	-----	1,520	718	910	442	253	172	177
30	787	5,280	1,550	4,300	-----	1,360	700	808	428	247	172	219
31	648	-----	1,470	3,300	-----	1,210	-----	700	-----	241	172	-----
TOTAL	16,325	38,935	137,400	93,330	52,578	57,837	26,431	24,641	17,941	9,721	6,162	5,618
MEAN	527	1,298	4,432	3,011	1,878	1,866	881	795	598	314	199	187
MAX	2,060	5,280	16,300	6,500	4,800	10,900	1,110	1,070	763	414	236	293
MIN	160	332	1,470	1,520	781	676	700	644	428	241	172	167
AC-FT	32,380	77,230	272,500	185,100	104,300	114,700	52,430	48,880	35,590	19,280	12,220	11,140
CAL YR 1966	TOTAL	458,331	MEAN	1,254	MAX	16,300	MIN	160	AC-FT	909,100		
WTR YR 1967	TOTAL	486,919	MEAN	1,334	MAX	16,300	MIN	160	AC-FT	965,800		

NOTE.--NO GAGE-HEIGHT RECORD JAN. 19 TO FEB. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,220	1,680	950	1,380	1,260	1,620	1,590	826	700	400	258	380
2	4,090	1,370	1,888	1,220	3,920	1,560	1,390	745	1,660	394	253	361
3	1,780	1,170	3,130	1,120	6,660	1,400	700	1,220	394	253	335	335
4	2,230	1,040	2,540	1,030	8,660	1,550	1,210	709	920	394	247	317
5	2,010	910	2,410	970	3,910	2,110	1,140	709	799	387	241	311
6	3,020	817	1,920	890	2,680	2,200	1,060	668	745	380	241	299
7	3,620	745	1,640	900	2,110	1,730	990	644	684	374	241	287
8	2,190	844	1,340	862	1,780	1,470	930	620	644	361	236	281
9	1,430	2,180	1,730	1,380	1,610	1,270	880	628	588	354	236	275
10	1,250	4,780	4,730	1,460	1,490	1,130	862	680	564	362	230	269
11	2,180	3,380	4,790	1,170	1,370	1,190	835	692	540	335	230	264
12	1,760	2,050	2,490	1,170	1,270	2,550	808	692	540	387	230	269
13	2,180	1,560	1,800	6,550	1,200	3,300	772	660	692	361	236	275
14	2,380	1,430	1,460	10,200	1,090	3,100	930	612	668	335	241	588
15	1,580	1,680	1,220	7,330	1,000	4,400	1,150	572	620	342	247	1,010
16	1,190	1,770	1,080	4,620	940	4,130	980	544	580	329	247	772
17	990	1,440	970	3,340	980	2,840	880	580	564	317	247	1,320
18	844	1,220	890	3,930	4,800	2,130	835	628	540	311	258	1,250
19	763	1,070	826	11,600	7,450	1,740	799	692	540	305	311	880
20	700	960	745	11,200	3,700	1,510	754	853	526	299	305	700
21	1,450	862	763	7,550	4,430	1,360	736	781	491	293	293	604
22	2,178	799	5,660	4,390	4,130	1,260	709	835	491	287	269	540
23	3,090	736	7,990	3,390	6,040	1,270	736	790	477	281	412	548
24	1,950	700	6,200	3,170	6,860	1,520	727	692	470	281	644	512
25	2,270	652	4,720	2,500	3,760	1,750	772	638	463	281	491	470
26	1,656	612	3,770	2,070	2,790	1,900	772	612	484	281	428	442
27	4,420	580	2,870	1,730	2,290	4,410	754	580	526	275	498	407
28	4,650	580	2,370	1,910	1,950	3,210	745	564	470	275	628	394
29	2,440	790	2,010	1,360	1,740	2,928	826	540	435	269	520	374
30	2,260	808	1,730	1,220	-----	2,300	844	526	407	264	463	354
31	2,080	-----	1,540	1,210	-----	1,848	-----	498	-----	258	407	-----
TOTAL	67,947	39,215	78,164	102,422	91,870	66,670	27,676	20,908	19,048	10,146	10,047	15,088
MEAN	2,172	1,307	2,521	3,304	3,168	2,151	923	662	635	327	324	503
MAX	4,650	4,780	7,990	11,600	8,660	4,410	1,890	893	1,660	400	644	1,320
MIN	700	580	745	862	940	1,130	709	498	407	258	230	264
AC-FT	133,600	77,780	155,000	203,200	182,200	152,200	54,900	48,880	37,780	20,120	19,930	29,930
CAL YR 1967	TOTAL	478,985	MEAN	1,312	MAX	10,900	MIN	167	AC-FT	950,100		
WTR YR 1968	TOTAL	548,201	MEAN	1,498	MAX	11,600	MIN	230	AC-FT	1,087,000		

12061500 SKOKOMISH RIVER NEAR POTLATCH, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	335	1,020	1,718	1,370	587	784	3,860	1,160	1,330	429	250	201
2	329	1,170	1,580	1,690	580	800	4,080	1,110	1,290	422	245	196
3	323	1,270	1,370	1,790	690	880	2,590	1,070	1,280	415	240	196
4	354	1,070	5,040	3,460	734	925	2,570	1,030	1,410	408	240	201
5	348	940	2,690	4,910	752	1,280	2,490	1,020	1,980	415	255	205
6	606	826	1,940	3,030	692	1,560	2,280	1,070	2,040	394	245	205
7	612	844	1,670	2,690	678	1,310	1,900	1,210	1,990	380	240	201
8	512	1,190	2,270	2,140	889	1,130	1,660	1,440	1,410	374	235	201
9	498	1,740	2,860	1,860	1,110	1,020	1,540	1,600	990	368	225	201
10	790	1,480	2,930	1,430	1,150	961	1,440	1,370	1,220	368	220	196
11	1,160	2,010	2,440	1,430	3,520	898	1,400	1,440	1,680	387	219	191
12	1,850	2,770	1,950	1,240	2,560	856	1,500	1,450	1,560	368	210	191
13	1,060	1,930	1,730	1,130	1,700	832	2,260	1,420	1,700	356	210	191
14	2,070	1,520	2,720	1,080	1,380	824	1,900	1,370	1,830	350	210	186
15	2,190	1,270	3,030	1,010	1,250	925	1,570	1,230	1,340	332	285	186
16	1,630	1,080	2,400	952	1,380	1,300	1,430	1,130	890	326	205	191
17	1,360	1,000	1,690	880	1,360	5,820	1,590	1,090	736	320	205	380
18	1,340	1,240	1,800	824	1,500	4,520	2,260	1,190	960	314	201	851
19	1,290	1,390	1,530	792	1,150	2,800	3,120	1,120	644	309	201	2,140
20	1,610	1,640	1,340	744	1,060	2,180	2,550	1,080	624	304	201	2,300
21	1,290	2,430	1,210	713	1,010	1,870	2,090	1,070	592	298	215	1,580
22	1,510	3,810	1,140	671	961	1,830	1,870	1,110	560	287	210	1,960
23	1,290	2,770	2,670	690	925	1,890	1,950	1,190	960	282	205	4,520
24	1,160	2,090	8,410	643	880	1,650	1,860	1,230	544	282	201	2,340
25	1,060	1,690	4,580	629	848	1,500	1,610	1,100	520	276	215	1,920
26	950	1,490	2,760	622	824	1,490	1,440	1,070	499	270	230	1,370
27	864	1,480	2,078	608	808	1,730	1,350	1,220	492	270	230	1,070
28	790	1,400	1,878	587	807	1,730	1,350	1,190	465	265	205	900
29	871	1,940	1,430	580	-----	1,330	1,320	1,910	437	260	230	797
30	1,560	2,000	1,300	580	-----	1,790	1,220	2,190	443	255	215	1,240
31	1,220	-----	1,270	587	-----	2,930	-----	1,550	-----	250	210	-----
TOTAL	33,692	49,100	78,400	41,682	31,480	51,645	60,150	39,920	31,721	10,334	6,874	26,507
MEAN	1,087	1,637	2,529	1,345	1,124	1,666	2,005	1,288	1,057	333	222	844
MAX	2,190	3,810	8,410	4,910	3,520	5,820	4,060	2,190	2,040	429	255	4,520
MIN	323	826	1,140	580	580	784	1,220	1,020	443	250	201	186
AC-FT	66,830	97,390	155,500	82,680	62,440	102,400	119,300	79,180	62,920	20,500	13,630	52,580
CAL YR 1968 TOTAL	524,667								1,041,000			
WTR YR 1969 TOTAL	461,905								915,400			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,620	449	503	933	2,260	724	552	708	404	278	209	153
2	1,590	536	615	860	692	645	552	700	410	273	209	156
3	1,150	410	489	816	1,710	676	538	700	410	264	205	169
4	942	1,150	582	772	1,500	652	620	700	410	260	202	183
5	816	1,910	531	724	1,340	620	1,350	676	386	260	194	172
6	740	3,540	503	692	1,250	1,170	3,200	628	368	260	194	183
7	748	2,410	482	676	1,330	2,700	1,830	598	356	255	198	242
8	1,480	1,990	538	692	1,400	1,600	1,640	640	350	251	198	230
9	1,650	1,490	545	1,060	1,330	1,210	6,850	692	374	247	194	205
10	1,310	1,180	552	967	1,220	1,030	4,040	620	386	238	186	179
11	1,090	1,000	2,890	879	1,140	969	2,320	582	350	234	186	172
12	897	879	4,090	807	1,090	1,270	1,750	552	340	217	183	169
13	798	789	5,000	1,110	1,130	2,200	1,470	538	330	217	183	169
14	732	740	5,110	5,280	1,070	3,200	1,240	517	320	213	179	162
15	692	700	2,900	2,400	1,480	2,850	1,100	489	320	213	175	159
16	652	684	2,110	1,740	3,600	2,370	1,000	510	315	226	172	156
17	620	620	2,100	1,520	2,830	1,790	906	524	310	234	172	175
18	582	598	2,720	2,300	2,390	1,450	879	482	305	231	169	380
19	545	560	2,380	5,110	1,860	1,230	852	468	300	230	165	468
20	524	652	2,480	3,930	1,580	1,100	789	442	300	226	165	517
21	496	708	3,000	4,720	1,360	1,000	716	436	305	221	165	404
22	475	652	3,890	4,300	1,180	897	700	423	305	217	165	449
23	468	748	4,880	5,380	1,080	861	748	423	305	213	165	496
24	449	861	2,970	3,450	996	825	1,130	410	300	213	165	392
25	436	740	2,260	2,890	906	756	1,130	623	300	213	165	330
26	416	684	1,880	2,870	843	708	1,010	430	291	221	165	296
27	475	628	1,600	3,420	807	692	906	416	296	238	162	268
28	545	598	1,400	2,480	756	660	825	404	291	230	162	251
29	503	552	1,230	2,000	-----	628	780	436	286	217	162	238
30	496	538	1,110	1,690	-----	612	756	475	273	213	159	234
31	475	-----	1,020	2,110	-----	598	-----	416	-----	209	153	-----
TOTAL	24,372	28,896	62,220	68,599	41,278	37,740	42,392	16,478	9,996	7,235	5,526	7,757
MEAN	786	963	2,007	2,213	1,474	1,217	1,413	532	333	233	178	259
MAX	1,650	3,540	5,110	5,380	3,600	3,200	6,850	708	410	278	209	517
MIN	416	410	475	676	756	598	538	404	273	209	153	153
AC-FT	48,340	57,320	123,400	136,100	81,870	74,860	86,080	32,680	19,830	14,350	10,960	15,390
CAL YR 1969 TOTAL	415,801								824,700			
WTR YR 1970 TOTAL	352,489								699,200			

12065500 GOLD CREEK NEAR BREMERTON, WASH.

LOCATION.--Lat 47°33'20", long 122°48'35", in NE¼SW¼ sec.21, T.24 N., R.1 W., Kitsap County, on right bank 1.2 miles upstream from mouth and 8.4 miles west of Olympic College in Bremerton.

DRAINAGE AREA.--1.51 sq mi.

PERIOD OF RECORD.--October 1945 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Concrete control since June 22, 1962. Datum of gage is 750.9 ft above mean sea level (closed stadia traverse).

AVERAGE DISCHARGE.--25 years, 5.83 cfs (52.43 inches per year, 4,220 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (40 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	-	*156	3.82	Mar. 22, 1967	2200	76	3.38	Mar. 16, 1968	-	47	3.14
Mar. 9, 1966	-	94	3.50								
Dec. 1, 1966	1645	51	3.18	Dec. 3, 1967	0115	75	3.37	Dec. 24, 1968	0245	*96	3.51
Dec. 13, 1966	0515	*198	3.99	Dec. 22, 1967	1900	61	3.27	Feb. 11, 1969	-	55	3.22
Jan. 19, 1967	1745	75	3.37	Jan. 14, 1968	0915	82	3.42				
Jan. 28, 1967	0815	60	3.26	Jan. 19, 1968	1745	85	3.44	Jan. 19, 1970	1645	*42	3.09
				Feb. 3, 1968	2400	*130	3.70				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 20, 1966	.20	a1.41	1969	Sept. 2, 9, 1969	.37	1.43
1967	Aug. 17, 21, 29, 30, 1967	.19	b1.38	1970	Sept. 11, 1970	.14	1.36
1968	Aug. 5, 1968	.32	1.44				

a Occurred Aug. 20, Sept. 5, 1966.

b Occurred Aug. 29, 30, 1967.

Period of record: Maximum discharge, 203 cfs Feb. 22, 1949, from rating curve extended above 60 cfs; maximum gage height, 3.99 ft Dec. 13, 1966; minimum discharge, 0.1 cfs July 29, Sept. 9, 1958.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1286: 1947-1949(M), 1950(P). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	1.4	4.8	10	9.6	6.2	4.5	1.6	1.1	.90	.40	.30
2	.40	1.0	8.6	12	8.8	6.0	4.3	1.6	1.2	1.0	.50	.40
3	.50	2.0	7.6	10	7.8	5.6	4.1	1.6	1.2	1.2	.40	.40
4	.70	3.2	9.0	9.2	8.3	5.4	3.9	1.5	1.2	1.0	.50	.30
5	1.8	3.8	11	21	8.5	7.8	3.7	1.5	1.1	1.0	.40	.30
6	2.3	2.5	18	43	10	8.6	3.6	1.8	1.1	.90	.40	.40
7	1.3	2.0	16	38	13	12	3.6	1.6	1.0	.90	.30	.40
8	.90	1.9	12	32	12	26	3.3	1.5	1.0	.80	.40	.30
9	.90	2.1	10	23	9.9	70	3.7	1.6	1.0	.80	.40	.30
10	.70	2.2	8.4	18	8.7	30	3.7	1.4	1.0	.80	.40	.60
11	.60	2.3	8.0	21	8.5	13	3.3	1.6	.90	1.7	.40	.90
12	.60	2.2	7.0	60	7.7	9.8	3.8	1.5	1.0	1.1	.40	.80
13	.60	2.7	6.0	130	7.0	10	2.7	1.5	.90	.90	.40	.50
14	1.4	2.9	5.6	74	6.8	12	3.1	1.4	.90	.80	.40	.40
15	1.1	2.5	5.0	35	6.6	21	2.8	1.5	.90	.80	.40	.40
16	.90	2.5	4.6	22	6.2	23	2.4	1.4	.90	.80	.40	.40
17	1.0	2.3	4.2	18	6.0	18	2.3	1.4	.80	.70	.30	.60
18	1.0	2.8	3.8	15	5.8	16	2.2	1.2	.80	.88	.30	.60
19	1.0	4.6	3.6	13	5.6	15	2.1	1.2	.80	.70	.30	.50
20	1.2	8.1	3.4	11	5.6	15	2.2	1.2	.80	.70	.30	.40
21	1.0	9.3	3.8	10	5.2	12	2.1	1.3	.80	.60	.30	.40
22	.90	7.1	3.5	9.2	5.0	10	2.1	1.3	.80	.60	.30	.30
23	.80	5.4	3.6	8.6	5.0	9.2	2.0	1.3	.80	.60	.30	.30
24	.80	4.6	3.6	8.0	4.8	8.6	2.0	1.3	.90	.70	.30	.50
25	.70	4.0	3.5	7.8	5.0	8.1	2.0	1.2	.80	.60	.30	.50
26	.70	4.7	3.5	7.6	5.2	7.3	2.1	1.3	.80	.60	.40	.50
27	.80	5.0	5.2	8.0	6.0	6.6	1.9	1.2	1.0	.60	.50	.60
28	.90	4.7	8.7	8.6	6.4	6.0	1.9	1.1	1.1	.50	.40	.50
29	.80	4.2	9.9	10	-----	5.6	1.9	1.1	1.0	.50	.40	.50
30	.70	4.0	10	12	-----	5.1	1.6	1.1	1.0	.50	.40	.50
31	1.5	-----	9.4	11	-----	4.8	-----	1.1	-----	.50	.40	-----
TOTAL	28.90	108.0	221.3	716.0	205.0	413.7	86.7	42.9	20.60	26.60	11.70	14.20
MEAN	.93	3.60	7.14	23.1	7.32	13.3	2.82	1.38	.95	.79	.38	.47
MAX	2.3	9.3	18	130	13	70	4.5	1.8	1.2	1.7	.50	.90
MIN	.40	1.0	3.4	7.6	4.8	4.8	1.6	1.1	.80	.50	.30	.30
CFSM	.62	2.38	4.73	15.3	4.85	8.81	1.87	.91	.63	.52	.25	.31
IN.	.71	2.66	5.45	17.64	5.05	10.19	2.09	1.06	.70	.61	.29	.35
AC-FT	57	214	439	1,420	407	821	148	85	57	44	23	28

CAL YR 1965 TOTAL 1,442.20 MEAN 3.95 MAX 39 MIN .40 CFSM 2.62 IN 35.53 AC-PT 2,860
WTR YR 1966 TOTAL 1,899.60 MEAN 5.20 MAX 130 MIN .30 CFSM 3.44 IN 46.80 AC-PT 3,770

NOTE.--NO GAGE-HEIGHT RECORD DEC. 30 TO FEB. 3, FEB. 13 TO MAR. 18.

TAJUVA RIVER BASIN

12065500 GOLD CREEK NEAR BREMERTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	1.3	46	7.8	15	4.8	6.2	3.1	1.3	.72	.40	.26
2	.46	1.2	34	8.3	13	4.4	5.8	3.0	1.3	.72	.37	.29
3	.23	1.1	20	13	13	4.1	5.4	3.0	1.3	.63	.35	.27
4	.32	1.1	20	15	12	3.8	5.2	2.9	1.3	.68	.37	.24
5	.32	1.1	28	12	11	3.8	4.7	2.7	1.2	.68	.35	.25
6	.32	1.1	27	9.9	10	3.6	4.5	2.7	1.1	.66	.36	.23
7	.37	1.1	21	9.8	9.1	3.5	4.2	2.6	1.1	.66	.37	.22
8	.40	1.0	14	12	8.3	3.4	4.0	2.5	1.1	.70	.35	.23
9	.40	1.1	11	13	7.4	3.3	3.9	2.5	1.1	.71	.30	.33
10	.40	1.1	21	13	7.0	3.5	3.7	2.3	1.2	.68	.34	.63
11	.46	1.1	31	15	6.5	3.5	3.5	2.3	1.2	.66	.29	.46
12	.60	2.0	72	15	7.0	3.3	3.5	2.4	1.1	.53	.33	.41
13	.55	4.5	130	16	8.4	3.2	3.5	2.3	1.1	.57	.26	.33
14	.45	5.8	35	14	7.3	3.6	3.5	2.2	1.0	.57	.26	.32
15	.40	8.5	21	12	8.4	5.1	3.3	2.1	.96	.62	.24	.28
16	.40	7.2	18	9.7	7.8	10	4.4	1.9	.89	.56	.24	.28
17	.50	5.6	16	8.5	7.8	12	3.9	1.9	.86	.52	.22	.25
18	.60	4.7	15	8.1	7.6	10	3.7	1.9	.78	.50	.20	.30
19	1.0	4.7	15	40	7.1	8.5	3.5	1.8	.73	.47	.23	.31
20	2.2	4.5	17	49	6.7	9.0	3.3	1.8	.77	.55	.24	.30
21	1.9	4.2	15	38	6.1	8.2	3.3	1.8	1.2	.54	.24	.29
22	5.4	3.7	12	26	5.8	28	3.1	1.7	1.5	.51	.25	.30
23	5.4	3.4	11	21	5.5	58	3.1	1.6	1.1	.44	.27	.26
24	3.4	3.1	12	18	5.2	29	2.9	1.6	1.0	.41	.30	.24
25	2.2	3.5	12	15	4.9	17	2.9	1.6	.91	.45	.27	.24
26	1.8	3.2	11	18	4.6	12	2.9	1.4	.81	.44	.26	.28
27	1.5	5.3	9.5	28	4.3	10	3.3	1.3	.81	.43	.26	.25
28	1.3	7.1	54	8.5	5.2	9.3	3.7	1.5	.85	.42	.25	.25
29	1.4	8.8	8.0	40	-----	-----	8.6	1.7	.81	.42	.27	.47
30	1.7	21	7.2	28	-----	7.7	3.1	1.4	.77	.44	.22	.43
31	1.4	-----	7.0	19	-----	6.9	-----	1.3	-----	.39	.23	-----
TOTAL	38.04	122.3	725.2	606.1	222.0	301.1	115.5	64.8	31.15	17.27	8.91	9.13
MEAN	1.23	4.00	23.4	19.6	7.93	9.71	3.85	2.09	1.04	.56	.40	.30
MAX	5.4	21	130	54	15	58	3.2	3.1	1.5	.72	.40	.43
MIN	.23	1.0	7.0	7.8	4.3	3.2	2.9	1.3	.73	.39	.22	.22
CFSM	.81	2.70	15.5	13.0	5.25	6.43	2.55	1.38	.69	.37	.19	.20
IN.	.94	3.01	17.87	14.93	5.47	7.42	2.85	1.60	.77	.43	.22	.22
AC-FT	75	243	1,440	1,200	440	597	229	129	62	34	18	18

CAL YR 1966 TOTAL 2,426.94 MEAN 6.65 MAX 130 MIN .23 CFSM 4.40 IN 59.79 AC-FT 4,810
 WTR YR 1967 TOTAL 2,261.50 MEAN 6.20 MAX 130 MIN .22 CFSM 4.11 IN 55.71 AC-FT 4,490

NOTE.--NO GAGE-HEIGHT RECORD OCT. 13 TO NOV. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	5.5	7.5	6.1	7.3	7.4	8.4	2.4	2.8	1.1	.40	.67
2	1.7	4.6	36	5.6	34	6.6	7.3	2.8	4.4	.90	.37	.63
3	1.7	6.0	59	6.2	58	6.0	7.2	2.2	4.8	.80	.40	.60
4	1.7	3.6	31	4.9	70	6.8	6.3	2.1	2.6	.91	.53	.56
5	1.7	3.2	24	4.9	24	7.4	5.9	2.0	2.3	.91	.40	.53
6	1.8	3.0	20	4.6	16	6.4	5.6	2.0	2.2	.87	.43	.53
7	1.6	2.7	21	4.5	12	6.2	5.3	1.9	2.2	.87	.43	.53
8	1.3	3.3	16	4.3	10	5.1	5.0	1.9	2.1	.79	.43	.49
9	1.1	5.3	14	12	9.0	5.5	5.0	1.8	2.0	.79	.40	.49
10	1.2	12	12	16	8.1	6.0	4.8	1.8	2.0	.75	.37	.46
11	1.6	14	11	12	7.3	7.8	4.7	1.7	1.8	.79	.37	.71
12	1.3	11	9.1	11	6.6	11	4.6	1.7	1.9	.91	.37	.75
13	1.7	7.7	7.8	52	6.1	14	4.6	1.6	1.9	.87	.43	.75
14	1.5	6.8	6.9	86	5.7	17	5.2	1.6	1.8	.87	1.1	1.5
15	1.5	6.2	6.2	35	5.3	28	5.0	1.6	1.7	.79	.79	1.3
16	1.4	5.5	5.7	23	4.9	38	4.5	1.6	1.6	.79	.63	1.0
17	1.4	5.0	5.3	19	5.9	23	3.8	1.6	1.6	.75	.56	1.3
18	1.3	4.6	4.9	21	16	16	4.6	1.6	1.6	.71	.67	2.5
19	1.3	4.2	4.5	69	21	11	3.4	1.8	1.5	.79	.87	1.7
20	1.3	3.9	4.3	69	16	9.2	3.2	1.9	1.5	.75	.75	1.4
21	3.2	3.7	4.5	36	18	8.2	3.2	2.0	1.4	.71	.60	1.3
22	5.2	3.5	38	18	7.4	7.4	3.1	1.8	1.5	.75	.56	1.2
23	6.2	3.3	33	15	27	7.2	3.1	1.8	1.5	.71	1.3	1.3
24	6.0	3.1	29	12	32	7.6	3.1	1.8	1.4	.71	1.1	1.1
25	7.1	2.9	17	10	19	8.8	3.0	1.7	1.3	.63	1.2	1.1
26	5.0	2.8	13	9.3	14	11	3.1	1.7	1.3	.63	1.4	1.1
27	1.7	10	8.3	11	27	16	4.0	1.6	1.6	.60	1.5	1.0
28	18	2.8	8.8	7.7	9.2	19	3.0	1.7	1.4	.53	1.1	1.0
29	11	3.9	7.7	7.2	8.1	15	3.0	1.7	1.3	.46	.83	.98
30	7.8	5.4	7.0	6.7	-----	12	3.0	1.7	1.2	.46	.67	.96
31	6.3	-----	6.7	6.7	-----	9.6	-----	1.6	-----	.43	.63	-----
TOTAL	120.7	150.0	497.9	586.0	495.5	372.0	133.6	56.7	56.2	23.58	21.59	29.44
MEAN	3.89	5.00	16.1	18.8	17.1	12.0	4.45	1.83	1.87	.76	.70	.98
MAX	18	14	59	60	70	38	8.4	2.8	4.4	1.1	1.5	2.5
MIN	1.1	2.7	4.3	4.3	4.9	3.5	3.0	1.6	1.2	.43	.37	.46
CFSM	2.58	3.31	10.7	12.5	11.3	7.95	2.95	1.21	1.24	.50	.46	.65
IN.	2.97	3.70	12.27	14.39	12.21	9.16	3.29	1.40	1.38	.58	.53	.73
AC-FT	239	298	988	1,160	983	738	265	112	111	47	43	58

CAL YR 1967 TOTAL 2,144.56 MEAN 5.88 MAX 59 MIN .22 CFSM 3.89 IN 52.83 AC-FT 4,250
 WTR YR 1968 TOTAL 2,541.21 MEAN 6.94 MAX 70 MIN .37 CFSM 4.60 IN 62.60 AC-FT 5,040

NOTE.--NO GAGE-HEIGHT RECORD MAR. 10 TO APR. 22.

12065500 GOLD CREEK NEAR BREMERTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.95	3.5	12	9.0	3.1	7.2	6.0	3.9	2.0	1.2	.59	.53
2	.91	4.0	11	9.0	3.2	7.4	7.5	3.7	1.9	1.1	.62	.44
3	.91	4.5	15	8.5	4.0	8.2	7.0	3.5	1.8	1.1	.65	.44
4	1.4	3.7	22	15	5.0	8.8	9.0	3.3	1.7	1.1	.62	.50
5	1.2	3.5	16	16	5.4	13	11	3.1	1.6	.93	.59	.47
6	1.7	3.4	12	18	5.1	15	9.8	2.9	1.6	.93	.62	.50
7	1.3	3.4	11	15	5.0	12	8.5	2.8	1.6	.89	.62	.47
8	1.1	6.0	18	12	14	9.0	7.6	2.7	1.5	.93	.65	.44
9	1.3	7.0	19	12	33	6.5	6.8	2.6	1.4	.89	.59	.41
10	1.9	9.5	22	11	31	5.0	6.2	2.6	1.4	.97	.62	.44
11	1.9	13	23	9.8	45	4.5	5.7	2.4	1.4	1.0	.65	.44
12	2.2	14	17	8.4	35	4.0	5.3	2.4	1.4	.97	.56	.44
13	2.4	11	14	7.7	16	3.6	5.0	2.3	1.4	.93	.59	.50
14	2.9	8.4	15	7.5	12	3.5	4.8	2.2	1.3	.89	.53	.50
15	3.2	6.8	15	6.8	11	4.0	4.5	2.1	1.3	.89	.53	.47
16	3.0	5.8	12	6.3	12	4.5	4.3	2.1	1.1	.85	.56	.50
17	3.5	5.1	11	5.8	13	19	4.4	2.0	1.1	.81	.53	2.3
18	4.7	5.1	10	5.4	12	17	5.0	2.0	1.1	.77	.56	2.7
19	5.5	4.6	8.6	5.1	11	12	6.1	2.0	1.1	.74	.50	2.4
20	6.2	4.7	7.7	4.8	10	10	5.8	1.9	1.1	.71	.53	2.6
21	5.9	7.3	7.1	4.5	9.4	8.5	5.8	1.9	1.1	.77	.56	1.7
22	5.9	14	7.0	4.2	8.7	7.5	5.5	1.7	1.1	.71	.56	2.5
23	5.0	13	26	4.1	8.2	6.5	5.9	1.6	1.4	.71	.53	5.0
24	4.7	11	80	3.9	7.6	6.0	5.4	1.6	1.6	.65	.53	4.0
25	4.1	8.6	34	3.8	7.2	5.5	4.8	1.6	1.7	.62	.53	3.8
26	3.6	7.4	19	3.6	7.7	5.2	4.6	1.8	1.7	.65	.53	3.5
27	3.5	6.6	13	3.5	7.3	4.9	4.4	2.1	1.4	.62	.59	3.1
28	3.4	5.8	11	3.4	7.1	4.7	4.1	2.0	1.6	.59	.62	2.8
29	3.4	8.5	9.0	3.3	-----	4.5	3.9	3.2	1.4	.62	.56	2.7
30	4.0	12	8.5	3.3	-----	4.5	3.7	3.4	1.4	.62	.53	4.0
31	3.6	-----	8.0	3.2	-----	4.6	-----	2.4	-----	.56	.53	-----
TOTAL	95.27	221.2	513.9	235.9	349.0	236.6	178.4	75.8	43.2	25.72	17.78	50.59
MEAN	3.07	7.37	16.6	7.55	12.5	7.63	5.95	2.45	1.44	.83	.57	1.69
MAX	6.2	14	80	18	45	19	11	3.9	2.0	1.2	.65	5.0
MIN	.91	3.4	7.0	3.2	3.1	3.5	3.7	1.6	1.1	.56	.50	.41
CFSM	2.03	4.88	11.0	5.00	8.88	5.05	3.94	1.62	.95	.55	.38	1.12
IN-	2.35	5.45	12.66	5.76	8.60	5.83	4.40	1.87	1.06	.63	.44	1.25
AC-FT	189	439	1,020	464	692	469	354	150	86	51	35	100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	3.5	1.9	2.2	5.1	11	4.0	2.6	3.2	1.6	.74	.45	.35		
2	3.0	1.8	2.2	4.7	9.5	3.9	2.6	3.1	1.6	.77	.50	.35		
3	2.5	1.6	2.3	4.4	8.7	3.9	2.4	2.9	1.5	.74	.55	.39		
4	2.2	5.4	2.3	4.1	7.8	3.7	2.6	2.8	1.5	.65	.55	.39		
5	2.0	9.7	2.1	3.9	7.5	3.5	3.8	2.7	1.4	.62	.40	.50		
6	1.8	8.9	2.1	3.7	7.4	8.1	3.9	2.6	1.4	.65	.40	.50		
7	2.0	7.2	2.1	3.6	6.9	15	3.1	2.5	1.3	.59	.45	1.5		
8	3.0	6.4	2.2	3.8	6.3	12	4.0	2.7	1.4	.62	.50	.65		
9	5.0	5.6	2.1	4.1	5.9	9.2	18	2.6	1.3	.56	.40	.50		
10	4.5	5.0	2.1	3.6	5.6	7.5	20	2.7	1.3	.53	.40	.47		
11	4.0	4.5	6.8	3.4	5.3	6.8	14	2.5	1.3	.56	.40	.23		
12	3.8	4.2	16	3.3	5.1	7.3	11	2.4	1.3	.56	.35	.25		
13	3.5	3.8	21	6.1	5.2	7.9	8.3	2.3	1.1	.56	.45	.35		
14	3.3	3.5	25	18	4.8	11	6.4	2.2	1.1	.56	.42	.35		
15	3.0	3.4	16	15	6.8	12	5.5	2.1	1.1	.53	.39	.35		
16	2.8	3.1	13	12	16	11	4.8	2.1	1.2	.47	.37	.35		
17	2.7	2.8	12	9.7	19	8.7	4.4	2.0	1.1	.44	.40	.62		
18	2.5	2.7	12	11	16	7.5	4.1	1.9	.97	.50	.37	.65		
19	2.3	2.6	13	29	13	6.6	4.2	1.8	.97	.47	.41	.59		
20	2.2	3.0	13	29	10	5.9	3.8	1.9	.97	.41	.45	.59		
21	2.2	2.9	14	27	8.6	5.2	3.5	1.9	.93	.39	.37	.56		
22	2.1	2.6	21	25	7.4	4.8	3.3	1.9	.97	.56	.37	.56		
23	2.0	3.0	32	28	6.6	4.4	3.3	1.9	.81	.44	.37	.56		
24	2.0	2.8	19	22	5.9	4.2	3.9	1.8	.74	.44	.37	.50		
25	1.9	2.6	14	24	5.4	3.9	3.4	1.9	.81	.50	.37	.44		
26	1.9	2.5	11	26	5.0	3.7	3.3	1.7	.71	.50	.37	.39		
27	2.2	2.4	9.1	32	4.5	3.5	3.6	1.7	.77	.47	.39	.41		
28	2.1	2.3	7.7	20	4.3	3.1	3.5	1.6	.85	.50	.39	.39		
29	2.1	2.3	6.8	15	-----	3.1	3.5	2.0	.93	.47	.39	.37		
30	2.1	2.2	6.1	12	-----	2.8	3.4	1.9	.85	.47	.39	.39		
31	2.0	-----	5.5	12	-----	2.7	-----	1.7	-----	.40	.35	-----		
TOTAL	82.2	112.9	315.7	420.5	225.5	196.9	164.2	69.0	33.78	16.67	12.64	14.90		
MEAN	2.65	3.76	10.2	13.6	8.05	6.35	5.47	2.23	1.13	.54	.41	.50		
MAX	5.0	9.7	32	32	19	15	20	3.2	1.6	.77	.35	1.5		
MIN	1.8	1.6	2.1	3.3	4.3	2.7	2.4	1.6	.71	.39	.35	.23		
CFSM	1.76	2.49	6.76	9.01	5.33	4.21	3.62	1.48	.75	.36	.27	.33		
IN-	2.03	2.78	7.78	10.36	5.56	4.85	4.05	1.70	.83	.41	.31	.37		
AC-FT	163	224	626	834	447	391	326	137	67	33	25	30		
CAL YR 1969	TOTAL	1,721.79	MEAN	4.72	MAX	45	MIN	.41	CFSM	3.13	IN	42.42	AC-FT	3,420
WTR YR 1970	TOTAL	1,644.89	MEAN	4.56	MAX	32	MIN	.23	CFSM	3.02	IN	41.02	AC-FT	3,300

DEWATTO RIVER BASIN

12068500 DEWATTO RIVER NEAR DEWATTO, WASH.

LOCATION.--Lat 47°28'10", long 123°01'53", in NE¼SW¼ sec.23, T.23 N., R.3 W., Mason County, on right bank 400 ft downstream from highway bridge, 2.0 miles upstream from mouth, and 2.2 miles northeast of Dewatto.

DRAINAGE AREA.--18.4 sq mi.

PERIOD OF RECORD.--July 1947 to October 1954. Annual maximums, water years 1955-57. May 1958 to September 1970. Prior to October 1961, published as Dewatto Creek near Dewatto.

GAGE.--Water-stage recorder. Altitude of gage is 55 ft (from topographic map). Prior to Oct. 15, 1954, water-stage recorder; August 1955 to May 1958, crest-stage gage only; and May 22, 1958, to Jan. 15, 1961, water-stage recorder; all at sites 500 ft upstream at different datums. Gage washed out Jan. 15, 1961, reestablished Mar. 24, 1961, at present site and datum.

AVERAGE DISCHARGE.--19 years, 69.3 cfs (51.15 inches per year, 50,210 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (450 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	1900	654	5.41	Jan. 28, 1967	0600	554	3.01	Mar. 16, 1968	0200	586	3.16
Jan. 13, 1966	0630	*1,350	4.77	Mar. 23, 1967	0430	802	3.68	Dec. 24, 1968	0800	*965	4.07
Mar. 19, 1966	0830	608	2.94					Feb. 11, 1969	1330	548	3.05
Dec. 1, 1966	1130	505	2.70	Dec. 3, 1967	1000	738	3.52	Dec. 23, 1969	0330	*587	3.18
Dec. 13, 1966	0400	*1,260	4.59	Dec. 23, 1967	1200	582	3.15	Jan. 19, 1970	1900	510	2.97
Jan. 19, 1967	2130	690	3.27	Jan. 13, 1968	1700	747	3.58	Apr. 9, 1970	1800	488	2.91
				Jan. 19, 1968	1330	*1,170	4.48				
				Feb. 4, 1968	0400	995	4.13				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 2-3, 1965	a10	-	1969	Aug. 22-24, Sept. 2, 3, 6-16	12	d.28
1967	Sept. 15-20, 1967	12	b.18	1970	Aug. 31, 1970	11	d.26
1968	July 30, 31, Aug. 1, 2, 8-13, 1968	14	c.29				

- a Minimum daily.
- b Occurred Oct. 3-6, 10, 11, 1966.
- c Occurred July 31, Aug. 1, 2, 11, 12, 1968.
- d Occurred Sept. 10-12, 1969.

Period of record: Maximum discharge, 2,160 cfs Jan. 15, 1961 (gage height, 5.88 ft, from floodmarks, present site and datum), result of slope-area measurement; minimum, 9.0 cfs Sept. 26-27, 1962.

REMARKS.--Records excellent. Minor diversion above station for domestic use and irrigation of hay meadow. Water-quality records for the water years 1968-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--NSP 1716: 1959. NSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	15	78	104	108	65	56	31	22	18	14	13
2	10	17	125	121	91	62	53	31	24	21	14	13
3	10	30	104	107	80	58	51	31	23	24	14	13
4	12	40	156	97	93	56	49	31	23	21	14	13
5	25	48	156	136	112	82	48	30	22	19	14	12
6	30	30	224	496	176	89	47	34	22	19	14	13
7	16	26	220	433	180	97	45	32	21	18	14	13
8	14	24	159	352	143	268	45	30	21	17	14	13
9	12	25	117	253	113	540	44	30	21	17	14	12
10	12	50	101	218	94	299	43	29	20	17	13	13
11	12	34	83	266	99	185	43	29	20	18	14	20
12	13	28	70	565	89	143	42	29	20	17	14	16
13	14	30	83	1,160	79	152	40	28	20	16	14	14
14	20	34	57	662	75	173	43	27	20	17	14	14
15	18	29	50	336	68	326	41	30	19	16	13	14
16	17	26	46	227	64	350	38	30	19	19	14	13
17	16	24	43	171	62	215	42	28	19	17	13	14
18	18	26	48	137	58	217	40	27	19	16	13	15
19	19	59	37	113	57	222	37	27	19	16	13	14
20	21	104	41	97	61	222	36	26	18	16	13	13
21	18	90	46	86	55	182	35	26	18	15	13	13
22	15	70	41	79	52	145	34	26	19	15	13	13
23	14	55	42	73	52	121	35	24	20	15	13	13
24	14	47	44	68	50	103	34	24	20	15	13	13
25	13	41	45	69	51	89	34	23	19	15	13	13
26	13	48	45	65	53	79	34	23	18	15	14	13
27	14	53	78	70	64	73	33	23	20	15	14	13
28	17	46	134	73	67	68	32	22	20	14	13	13
29	15	40	137	140	-----	64	32	22	19	14	13	13
30	14	42	148	167	-----	62	31	22	18	14	13	13
31	13	-----	119	133	-----	58	-----	23	-----	14	13	-----
TOTAL	481	1,211	2,846	7,081	2,346	4,865	1,217	848	603	520	421	405
MEAN	15.5	48.4	91.8	228	83.8	157	48.6	27.4	20.1	16.8	13.6	13.5
MAX	30	104	224	1,160	180	540	56	34	24	24	15	20
MIN	10	15	37	45	50	56	31	22	18	14	13	12
CFSM	.84	2.20	4.99	12.4	4.55	8.53	2.21	1.49	1.09	.91	.74	.73
IN.	.97	2.45	5.75	14.32	4.74	9.84	2.46	1.71	1.22	1.05	.85	.82
AC-FT	.954	2,480	5,650	14,050	4,650	9,650	2,410	1,680	1,200	1,030	835	803
CAL YR 1965	TOTAL 17,392	MEAN 47.6	MAX 424	MIN 10	CFSM 2.59	IN 35.16	AC-FT 34,500					
WTR YR 1966	TOTAL 22,844	MEAN 62.6	MAX 1,160	MIN 10	CFSM 3.40	IN 46.18	AC-FT 45,310					

12068500 DEWATTO RIVER NEAR DEWATTO, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	16	475	81	162	66	77	40	26	18	16	14
2	13	16	390	86	147	61	71	40	28	17	15	14
3	13	15	310	140	149	57	66	40	25	17	15	14
4	13	15	312	143	145	54	62	39	24	17	15	14
5	13	15	348	130	113	52	60	38	24	17	16	13
6	13	16	362	104	99	50	57	37	23	18	16	14
7	13	15	328	99	88	49	54	36	23	18	16	14
8	13	15	221	111	82	48	52	35	23	20	16	14
9	13	15	174	105	77	47	52	35	23	19	15	14
10	13	15	279	108	72	50	50	34	23	18	14	20
11	13	16	330	162	70	52	48	34	23	17	14	17
12	13	27	369	154	87	51	49	33	23	16	14	14
13	13	45	986	157	118	48	48	33	22	16	14	14
14	13	70	442	123	96	53	52	32	22	16	14	14
15	13	65	280	114	100	91	50	31	21	16	14	13
16	13	62	253	95	94	176	63	30	20	16	14	12
17	13	48	199	83	86	157	61	30	21	16	14	12
18	13	45	167	82	82	129	59	30	20	16	14	13
19	35	45	183	436	77	103	56	29	19	17	14	12
20	37	47	227	585	73	111	51	28	19	18	13	13
21	24	49	162	488	70	97	50	28	24	17	14	14
22	42	44	124	318	66	288	48	27	28	16	14	14
23	26	38	116	260	63	722	46	27	25	16	14	14
24	21	34	185	196	61	393	44	26	20	16	14	14
25	18	37	169	159	59	218	44	26	20	16	14	14
26	17	32	129	220	57	155	44	26	20	16	14	14
27	16	54	104	300	54	123	44	25	20	16	14	14
28	16	63	90	462	74	117	46	33	19	16	14	14
29	18	72	86	386	-----	107	44	34	19	14	14	14
30	19	270	74	305	-----	92	41	30	18	16	14	18
31	17	-----	73	196	-----	83	-----	28	-----	16	14	-----
TOTAL	540	1,316	8,147	6,410	2,504	3,900	1,589	994	660	520	447	424
MEAN	17.4	43.3	263	207	89.4	126	53.0	32.1	22.0	16.8	14.4	14.1
MAX	42	270	986	545	162	722	77	40	28	20	16	20
MIN	13	15	73	81	54	47	41	25	18	16	13	12
CFSM	.95	2.39	14.3	11.3	4.86	6.85	2.88	1.74	1.20	.91	.78	.77
IN.	1.09	2.66	16.47	12.96	5.06	7.88	3.21	2.01	1.33	1.05	.90	.86
AC-FT	1,070	2,610	16,160	12,710	4,970	7,740	3,150	1,970	1,310	1,030	887	841
CAL YR 1966	TOTAL 26,309	MEAN 77.6	MAX 1,160	MIN 12	CFSM 4.22	IN 57.23	AC-FT 56,150					
WTR YR 1967	TOTAL 27,451	MEAN 75.2	MAX 986	MIN 12	CFSM 4.09	IN 55.50	AC-FT 54,450					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	61	108	79	107	96	103	40	43	21	14	18
2	50	54	392	73	336	88	96	39	66	21	15	18
3	32	47	654	67	581	81	88	38	40	21	15	17
4	34	42	402	64	759	100	86	39	34	20	15	17
5	38	39	310	65	360	118	81	38	31	20	15	16
6	60	35	242	60	214	107	75	37	29	20	15	17
7	50	33	276	60	162	96	70	36	29	19	15	16
8	32	44	208	59	133	86	66	35	29	19	15	16
9	24	88	184	162	114	78	64	34	28	18	15	16
10	24	206	169	184	103	74	61	33	28	18	15	16
11	41	204	146	135	93	81	58	33	26	19	14	16
12	29	126	118	131	85	173	56	33	27	22	14	16
13	43	90	99	579	79	202	55	33	29	20	15	17
14	40	80	84	695	74	218	58	33	27	20	18	28
15	31	80	76	467	70	420	58	32	25	19	18	22
16	26	77	70	322	68	501	53	32	25	18	18	18
17	22	68	66	269	84	290	50	31	24	18	16	20
18	23	61	61	309	209	190	49	30	24	18	17	31
19	22	55	57	1,010	345	145	48	34	25	18	21	22
20	22	52	53	840	214	120	47	36	25	18	18	21
21	57	47	58	527	337	104	46	35	24	18	16	18
22	91	45	331	312	312	94	45	36	25	18	17	18
23	101	41	551	212	369	94	50	33	24	17	25	17
24	83	42	386	166	394	100	46	31	24	16	22	17
25	117	38	237	136	248	122	45	31	22	16	21	16
26	83	36	171	120	181	125	43	31	24	16	24	16
27	184	35	136	104	141	257	42	30	24	16	29	17
28	241	37	113	93	119	212	41	29	23	15	21	17
29	124	60	99	86	106	173	40	29	24	15	18	16
30	87	73	88	84	-----	135	40	28	22	15	17	16
31	69	-----	81	96	-----	114	-----	28	-----	14	17	-----
TOTAL	1,934	1,996	6,026	7,566	6,397	4,794	1,760	1,037	850	563	545	546
MEAN	62.4	66.5	194	244	221	155	58.7	33.5	28.3	18.2	17.6	18.2
MAX	241	206	654	1,010	759	501	103	40	66	22	29	31
MIN	22	33	53	55	68	74	40	28	24	14	14	16
CFSM	3.39	3.61	10.5	13.5	12.0	8.42	3.19	1.82	1.50	.99	.96	.99
IN.	3.91	4.04	12.18	15.30	12.93	9.49	3.56	2.10	1.72	1.14	1.10	1.10
AC-FT	3,840	3,960	11,950	15,010	12,690	9,510	3,490	2,060	1,490	1,120	1,080	1,080
CAL YR 1967	TOTAL 27,404	MEAN 75.1	MAX 722	MIN 12	CFSM 4.08	IN 55.40	AC-FT 54,360					
WTR YR 1968	TOTAL 34,014	MEAN 92.9	MAX 1,010	MIN 14	CFSM 5.05	IN 68.77	AC-FT 67,470					

12068500 DEWATTO RIVER NEAR DEWATTO, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	33	153	80	48	83	95	53	31	21	14	13
2	16	49	118	82	50	82	120	52	29	21	14	13
3	16	50	244	86	61	81	110	49	28	20	14	13
4	21	44	340	160	65	110	115	47	27	21	13	13
5	20	40	212	250	65	160	125	45	25	20	14	13
6	27	38	136	230	58	190	110	41	25	20	14	13
7	19	40	124	194	59	150	95	42	25	19	14	12
8	17	72	235	159	175	120	82	40	24	20	14	12
9	19	79	244	155	271	100	77	40	24	18	14	12
10	28	70	280	162	250	90	74	40	23	18	14	12
11	31	118	264	160	498	80	74	39	23	18	14	12
12	42	168	184	133	344	77	72	38	23	18	14	12
13	38	116	146	119	208	74	70	36	23	18	14	12
14	35	84	196	120	157	72	64	36	22	18	14	12
15	37	68	192	114	143	95	58	34	21	17	14	12
16	31	58	150	106	171	140	60	33	21	16	14	14
17	30	52	120	94	169	260	64	32	20	16	14	38
18	34	58	114	85	143	180	70	32	20	16	14	35
19	40	52	97	79	130	140	114	32	19	16	14	26
20	48	57	85	73	120	115	92	32	20	16	13	33
21	42	108	78	68	110	100	78	30	21	16	13	22
22	50	225	75	63	105	90	70	28	21	15	13	34
23	42	175	318	59	100	90	83	28	22	15	13	54
24	39	127	849	57	95	85	72	28	23	14	13	31
25	35	97	468	55	92	80	66	28	24	14	13	28
26	33	81	278	55	92	75	60	30	24	14	13	22
27	31	73	192	53	87	68	58	33	24	14	16	21
28	29	64	145	51	84	64	57	33	24	15	15	21
29	33	111	114	50	60	53	47	34	24	15	22	22
30	45	165	95	49	58	52	47	24	16	13	40	40
31	38	-----	86	51	-----	70	-----	36	-----	14	13	-----
TOTAL	982	2,552	6,350	3,252	3,950	3,239	2,450	1,163	705	529	427	626
MEAN	31.7	85.1	205	105	141	104	81.7	37.5	23.5	17.1	13.8	20.9
MAX	50	225	849	250	498	260	114	53	31	21	15	54
MIN	16	33	75	49	48	58	52	28	20	14	13	12
CFSM	1.72	4.63	11.1	5.71	7.66	5.65	4.44	2.04	1.28	.93	.75	1.14
IN.	1.99	5.16	12.84	6.57	7.99	6.55	4.95	2.35	1.43	1.07	.86	1.27
AC-FT	1,950	5,060	12,600	6,450	7,830	6,420	4,860	2,310	1,400	1,050	847	1,240
CAL YR 1968	TOTAL 33,942	MEAN 92.7	MAX 1,010	MIN 14	CFSM 5.04	IN 48.62	AC-FT 67,320					
WTR YR 1969	TOTAL 26,225	MEAN 71.8	MAX 849	MIN 12	CFSM 3.90	IN 53.02	AC-FT 52,020					

NOTE.--NO GAGE-HEIGHT RECORD FEB. 19 TO APR. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	20	24	61	172	56	45	41	25	20	15	14
2	36	21	24	56	138	55	43	40	25	20	16	14
3	28	20	26	53	122	55	42	39	24	19	16	15
4	24	86	27	50	103	52	47	38	24	18	14	14
5	23	86	24	46	99	49	60	38	24	18	15	14
6	21	76	23	44	96	113	68	37	24	18	14	16
7	27	65	22	42	92	194	53	37	23	18	14	17
8	51	62	26	48	84	134	49	39	24	18	14	14
9	45	57	24	41	78	103	356	38	25	17	14	14
10	37	49	27	51	73	85	298	38	25	17	14	13
11	32	43	210	46	68	80	159	36	27	17	14	13
12	28	40	358	44	66	99	113	36	24	17	14	12
13	26	36	343	87	66	123	91	36	24	16	14	13
14	24	33	364	266	61	162	79	32	24	16	14	15
15	23	33	216	190	90	156	70	32	23	16	14	13
16	22	29	162	130	266	128	65	31	24	16	14	14
17	23	28	177	113	270	103	59	30	23	16	14	18
18	21	27	138	206	88	60	29	16	22	16	14	20
19	21	26	186	375	150	80	61	29	21	15	14	18
20	20	34	198	342	120	74	54	29	20	15	14	19
21	20	33	220	369	102	68	51	28	20	14	14	17
22	20	28	299	356	88	66	49	28	20	15	13	17
23	20	35	499	405	80	62	49	28	19	14	16	16
24	19	33	285	310	74	59	62	28	19	14	13	14
25	18	30	188	325	68	57	54	27	19	15	14	14
26	18	28	144	330	65	54	50	27	20	16	14	14
27	23	27	112	390	61	52	48	28	22	16	13	13
28	24	26	93	242	58	51	46	28	22	15	14	24
29	23	25	81	172	-----	48	44	32	21	14	13	15
30	21	24	74	138	-----	47	43	31	20	14	12	16
31	21	-----	67	184	-----	48	-----	28	-----	14	13	-----
TOTAL	797	1,140	4,721	5,444	3,016	2,601	2,389	1,017	679	504	432	450
MEAN	25.7	38.0	152	176	108	83.9	79.4	32.8	22.6	16.3	13.9	15.8
MAX	51	86	499	405	270	194	356	41	27	20	16	20
MIN	18	20	22	42	58	47	42	27	19	14	12	12
CFSM	1.40	2.07	8.26	9.57	5.87	4.56	4.33	1.78	1.23	.89	.76	.82
IN.	1.61	2.30	9.54	11.01	6.10	5.26	4.83	2.06	1.37	1.02	.87	.91
AC-FT	1,580	2,260	9,360	10,800	5,980	5,160	4,740	2,020	1,350	1,000	857	893
CAL YR 1969	TOTAL 22,999	MEAN 63.0	MAX 499	MIN 12	CFSM 3.42	IN 46.50	AC-FT 45,620					
WTR YR 1970	TOTAL 23,190	MEAN 63.5	MAX 499	MIN 12	CFSM 3.45	IN 46.88	AC-FT 46,000					

12069550 BIG BEEF CREEK NEAR SEABECK, WASH.

LOCATION.--Lat 47°38'27", long 122°47'02", in NW¼Sec.22, T.25 N., R.1 W., Kitsap County, on left bank 1.1 miles upstream from county road bridge across Big Beef Harbor and 1.9 miles east of Seabeck.

DRAINAGE AREA.--13.8 sq mi.

PERIOD OF RECORD.--August 1969 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for August 1969 to September 1970 are contained in the following table:

		Annual maximum discharge (*), peak discharges above base (275 cfs), and annual minimum discharge					
		Maximum			Minimum		
Wtr yr	Date	Time	Discharge	G.H.	Date	Discharge	G.H.
1969	Sept. 20, 23, 1969	-	21	2.12	Aug. 31, Sept. 1, 7-12, 1969	3.5	1.80
1970	Dec. 22, 1969	2200	384	3.88	Aug. 30, 31, 1970	2.3	1.80
	Jan. 23, 1970	0900	288	3.55			
	Jan. 27, 1970	0500	286	3.62			

Period of record: Maximum discharge, 384 cfs Dec. 22, 1969 (gage height, 3.88 ft); minimum, 2.3 cfs Aug. 30, 31, 1970 (gage height, 1.80 ft).

REMARKS.--Records excellent. Water is diverted by the University of Washington research station to fill fish tanks and is returned to creek above the gage. Flow may be partly regulated by Lake Symington 4.6 miles upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST TO SEPTEMBER 1969

DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP
1	4.6	3.8	6	4.9	4.2	11	4.9	3.8	16	4.2	4.2	21	4.9	13
2	5.2	4.2	7	4.9	3.8	12	4.2	3.8	17	4.9	12	22	4.9	12
3	5.2	4.6	8	4.6	3.8	13	3.8	4.6	18	5.2	12	23	4.6	19
4	5.2	4.6	9	4.6	3.5	14	3.8	4.2	19	5.2	11	24	4.6	15
5	4.9	4.6	10	5.2	3.8	15	3.8	3.8	20	5.2	15	25	4.2	13
												31	3.8	12
														-
TOTAL													142.5	233.8
MEAN													4.60	7.19
MAX													5.2	12
MIN													3.8	3.5
CFSM													.33	.56
IN													.38	.63
AC-FT													283	464

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	9.5	11	52	101	28	21	20	10	5.8	3.5	3.5
2	14	9.5	11	46	82	28	21	20	9.1	5.4	4.2	3.5
3	12	9.0	12	39	71	38	20	18	8.7	5.1	4.2	3.8
4	10	28	13	35	66	27	20	18	8.3	5.1	3.8	3.8
5	9.5	54	12	32	59	26	24	17	7.9	4.8	3.5	3.8
6	9.0	50	11	29	57	51	32	17	7.9	4.8	3.5	3.8
7	9.5	39	10	29	52	103	28	16	7.9	4.8	3.5	4.8
8	18	36	12	39	47	80	36	16	7.4	4.8	3.8	4.5
9	21	34	11	44	44	62	111	16	7.9	4.8	3.5	4.2
10	18	28	13	40	41	51	133	17	7.4	4.8	3.5	3.8
11	14	24	80	35	38	46	92	18	7.9	4.5	3.5	3.8
12	12	22	169	32	37	55	69	17	7.4	4.5	3.2	3.5
13	10	19	175	63	36	68	55	15	7.4	4.5	3.5	3.2
14	10	18	193	171	34	92	47	14	7.0	4.2	3.5	3.5
15	9.5	17	141	141	48	91	42	14	7.0	3.8	3.2	3.5
16	9.0	15	109	105	150	75	36	13	7.0	3.8	3.2	3.5
17	9.0	13	115	89	158	64	33	12	7.4	3.5	3.2	4.5
18	8.5	12	121	93	121	50	32	12	7.4	3.5	3.2	5.1
19	7.0	12	115	201	91	49	32	11	7.0	3.5	3.2	4.8
20	7.5	14	127	228	74	44	30	11	6.6	3.5	3.5	5.1
21	8.5	16	139	238	63	42	27	11	6.2	3.8	3.2	5.8
22	8.5	14	209	232	56	38	25	12	5.8	3.8	3.2	5.4
23	8.0	15	318	214	49	36	24	12	5.4	3.8	3.2	5.1
24	8.0	16	209	215	44	34	31	11	5.1	4.2	3.2	5.1
25	8.0	15	153	230	41	32	28	11	4.8	4.2	3.2	4.8
26	7.5	13	125	217	38	29	26	11	4.8	4.2	3.2	4.5
27	9.0	12	99	259	36	28	26	11	5.8	4.5	3.2	4.2
28	9.5	12	84	170	33	27	23	11	5.8	4.2	3.2	4.2
29	9.5	11	73	121	-----	25	22	13	5.8	3.8	3.2	4.2
30	10	11	64	94	-----	24	22	13	5.8	3.8	3.2	4.2
31	10	-----	58	105	-----	22	-----	11	-----	3.5	2.9	-----
TOTAL	330.0	598.0	2,992	3,632	1,767	1,455	1,162	439	209.5	133.3	104.5	127.5
MEAN	10.6	19.9	96.5	117	63.1	46.9	38.7	14.2	6.98	4.30	3.37	4.25
MAX	21	54	318	259	158	103	133	20	10	5.8	4.2	5.8
MIN	7.0	9.0	10	29	33	22	20	11	4.8	3.5	2.6	3.2
CFSM	.77	1.44	6.99	8.48	4.57	3.40	2.80	1.03	.51	.31	.24	.31
IN	.89	1.61	8.07	9.79	4.76	3.92	3.13	1.18	.56	.36	.28	.34
AC-FT	655	1,190	5,930	7,200	3,500	2,890	2,300	871	416	264	207	253

WTR YR 1970 TOTAL 12,949.8 MEAN 35.5 MAX 318 MIN 2.6 CFSM 2.57 IN 34.91 AC-FT 25,690

12070000 DOGFISH CREEK NEAR POULSBO, WASH.

LOCATION---Lat 47°45'11", long 122°38'36", in SE¼SW¼ sec.11, T.26 N., R.1 E., Kitsap County, on right bank (corrected) 0.5 mile upstream from mouth and 1.3 miles north of Poulsbo.

DRAINAGE AREA--5.01 sq. mi.

PERIOD OF RECORD---July 1947 to September 1970.

GAGE---Water-stage recorder. Concrete control since Aug. 11, 1964. Altitude of gage is 20 ft (from topographic map). Prior to Nov. 2, 1950, at site 100 ft downstream at datum 1.75 ft lower. Nov. 2, 1950, to Aug. 11, 1964, at site 100 ft upstream at present datum.

AVERAGE DISCHARGE--23 years, 8.92 cfs (24.18 inches per year, 6,460 acre-ft per year).

EXTREMES---Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (80 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 5, 1966	1800	*137	3.98	Mar. 23, 1967	0500	92	3.03	Dec. 8, 1968	0230	88	2.97
Jan. 6, 1966	0730	125	3.70					Dec. 23, 1968	2300	*170	4.85
Mar. 9, 1966	0115	134	3.89	Dec. 3, 1967	0630	86	2.97	Feb. 8, 1969	1300	126	3.84
				Jan. 9, 1968	1015	110	3.41	Feb. 11, 1969	0330	110	3.65
Dec. 12, 1966	2015	*198	5.80	Jan. 14, 1968	0815	*189	5.19				
Jan. 19, 1967	1345	157	4.38	Feb. 3, 1968	2215	165	4.56	Dec. 22, 1969	1845	*120	3.61
Jan. 29, 1967	1345	93	2.96	Mar. 15, 1968	1015	68	2.48	Jan. 15, 1970	2030	84	2.89
								Feb. 16, 1970	0430	81	2.82

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	July 22, Aug. 31, Sept. 9, 1966	1.8	.78	1969	July 27, 1969	2.0	a.94
1967	Aug. 15, 1967	1.8	.75	1970	July 15, 1970	2.1	1.00
1968	July 31, 1968	2.1	.82				

a Occurred Oct. 1-4, 27, 28, 1968.

Period of record: Maximum discharge, 333 cfs Feb. 22, 1949 (gage height, 8.07 ft, present datum, from high watermark on gage house), from rating curve extended above 50 cfs on basis of contracted-opening measurement of peak flow; minimum, 0.7 cfs Aug. 6, 1959.

REMARKS---Records good. Small diversions for irrigation. Slight regulation at times from unknown source.

REVISIONS (WATER YEARS)---WSP 1122: 1947(M). WSP 1346: 1948-50(P), 1953(M). WSP 1396: 1950(P). WSP 1636: 1951-54, 1955(M), 1956-57, 1958(P). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	4.9	13	27	8.3	8.3	8.3	5.9	4.5	3.6	3.1	2.9
2	4.4	4.6	9.1	31	7.7	7.4	8.0	5.7	5.2	4.3	3.1	3.3
3	4.5	11	9.1	20	7.7	7.1	7.4	5.4	5.2	7.4	3.1	3.1
4	4.7	10	10	18	12	7.1	7.7	5.2	5.2	6.4	3.1	3.1
5	6.8	9.5	11	62	16	18	6.9	4.9	4.7	5.4	3.1	3.1
6	7.8	6.9	20	95	17	12	6.6	6.8	4.3	4.5	3.1	3.3
12	6.6	6.7	17	52	12	11	6.4	6.9	3.9	4.1	3.0	3.3
8	3.9	5.7	9.4	48	10	56	6.4	5.7	4.1	3.9	3.0	3.1
9	3.6	5.2	8.0	26	9.4	66	6.6	5.4	4.1	4.1	3.0	2.9
10	3.9	8.2	12	21	8.6	27	6.4	5.4	4.1	4.1	3.1	3.1
11	5.0	7.5	8.6	19	9.1	17	8.8	5.2	4.1	4.1	3.0	4.5
12	5.6	6.5	7.7	28	8.6	16	11	5.4	4.3	3.7	3.0	3.9
13	5.2	7.6	10	30	8.0	28	7.7	5.4	4.1	3.7	3.2	3.5
14	7.6	7.6	9.1	23	7.7	29	10	6.1	4.0	3.7	3.1	3.7
15	5.5	6.7	7.7	16	7.1	45	7.1	5.7	3.8	3.7	3.0	3.7
16	5.0	6.2	7.4	14	7.7	30	6.6	5.4	3.7	5.4	3.0	3.5
17	4.8	6.0	6.9	13	7.4	19	6.6	5.2	3.7	4.1	3.0	4.1
18	4.8	7.4	6.6	12	7.1	41	5.9	4.9	3.6	3.7	3.0	4.9
19	5.0	18	6.6	11	6.9	31	5.9	4.7	3.6	3.9	3.0	3.7
20	5.3	16	6.4	10	6.9	29	5.9	4.9	3.5	3.7	2.9	3.5
21	5.2	9.1	6.9	9.7	6.6	19	5.9	5.7	3.5	3.5	2.9	3.3
22	4.6	7.7	6.4	8.8	6.6	15	5.9	5.9	3.5	3.1	2.9	3.3
23	4.9	6.9	8.3	8.3	8.0	14	6.1	5.2	3.8	3.1	3.0	4.3
24	5.0	7.1	11	8.0	6.9	12	6.1	4.7	3.8	3.1	3.1	3.9
25	5.1	6.6	10	8.0	7.1	11	9.4	4.7	3.6	3.1	3.2	3.9
26	5.2	8.3	12	7.4	7.1	10	8.6	4.7	3.6	3.1	3.5	3.9
27	5.4	8.0	40	8.6	11	10	6.6	5.4	3.8	3.2	3.5	3.9
28	6.0	6.6	36	8.3	9.4	9.4	6.6	4.5	5.0	3.6	3.3	3.9
29	5.4	6.4	29	15	-----	9.1	7.4	4.3	3.9	3.4	3.3	3.9
30	5.2	6.4	32	12	-----	8.6	6.1	4.3	4.1	3.4	3.3	3.7
31	5.2	-----	18	9.1	-----	8.6	-----	4.7	-----	3.2	2.9	-----
TOTAL	199.5	235.3	405.2	679.2	247.9	631.8	214.4	66.3	122.3	123.3	95.8	108.2
MEAN	5.15	7.84	13.1	21.9	8.85	20.4	7.15	5.36	4.08	3.98	3.09	3.61
MAX	7.8	18	40	95	17	66	11	8.8	5.2	7.4	3.5	4.9
MIN	3.6	4.6	6.4	7.4	6.6	7.1	5.9	4.3	3.5	3.1	2.9	2.9
CFSM	1.03	1.58	2.61	4.37	1.77	4.07	1.43	1.07	.81	.79	.62	.72
IN	1.18	1.75	3.01	5.04	1.84	4.69	1.59	1.23	.91	.92	.71	.80
AC-FT	316	467	804	1,350	492	1,250	425	330	243	245	190	215
CAL YR 1965	TOTAL	2,635.8	MEAN	7.22	MAX	52	MIN	2.1	CFSM	1.44	IN	19.57
WTA YR 1966	TOTAL	3,189.2	MEAN	8.74	MAX	95	MIN	2.9	CFSM	1.74	IN	23.68
									AC-FT	5,230		
									AC-FT	6,330		

NOTE---NO GAGE-HEIGHT RECORD JULY 23 TO AUG. 25.

12070000 DOGFISH CREEK NEAR POULSB0, WASH.---CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	4.5	40	8.6	29	11	10	6.8	4.7	3.1	2.9	3.3
2	4.1	4.7	31	8.3	21	9.9	9.4	4.6	4.7	2.9	2.9	3.1
3	3.9	4.8	16	8.0	18	9.3	9.1	6.4	4.7	2.7	2.9	3.1
4	3.7	4.9	33	21	16	9.0	8.8	6.2	4.5	2.9	3.1	2.9
5	3.7	5.1	31	18	15	8.9	8.6	5.9	4.1	2.9	3.1	2.9
6	3.8	5.8	36	13	14	8.7	8.3	5.8	3.9	3.1	3.3	3.0
7	4.0	4.9	22	19	14	8.7	8.0	5.7	3.9	3.1	3.3	3.0
8	4.2	4.8	15	17	13	8.7	7.7	5.8	4.1	3.7	3.1	2.9
9	4.0	4.8	13	13	12	8.5	7.4	6.0	4.1	3.5	2.9	3.4
10	4.0	5.4	25	12	12	10	7.1	5.8	4.1	3.3	2.9	4.8
11	4.0	6.4	29	13	12	9.3	6.7	7.0	4.1	3.1	2.9	5.4
12	5.5	12	104	13	16	9.0	6.8	6.8	3.9	2.9	2.9	4.3
13	4.8	26	104	13	31	9.5	6.8	5.9	3.9	3.1	2.7	3.6
14	4.4	26	33	11	18	12	6.9	5.7	3.9	2.9	2.7	3.4
15	4.1	15	23	9.7	20	23	6.6	5.2	3.7	2.7	2.7	3.2
16	4.0	12	18	8.7	15	33	8.6	4.9	3.5	2.9	2.7	3.2
17	4.3	9.0	14	8.3	14	23	7.5	9.0	3.5	2.9	2.7	3.3
18	4.2	8.8	12	8.3	13	17	7.8	4.7	3.3	3.1	2.9	3.7
19	8.0	10	11	85	12	15	8.9	4.5	3.3	3.1	3.1	3.3
20	8.3	11	15	67	11	19	7.6	4.5	3.9	3.5	3.1	3.3
21	5.9	8.4	12	37	11	14	7.5	4.5	6.9	3.3	3.1	3.3
22	9.2	7.1	10	27	10	51	7.0	4.7	8.0	2.9	3.7	3.2
23	5.5	6.6	11	23	9.8	71	6.8	4.7	4.7	2.7	3.4	3.1
24	4.6	6.3	15	19	9.7	30	6.6	5.2	4.1	2.9	3.3	3.2
25	4.5	6.8	11	20	9.4	20	6.5	5.2	3.7	3.1	3.1	3.2
26	4.3	6.4	9.7	31	9.1	15	6.5	4.7	3.7	3.1	2.9	3.2
27	4.2	9.2	9.7	39	9.0	13	16	4.5	3.9	3.1	2.7	3.2
28	4.1	8.1	9.4	57	14	17	17	5.2	3.7	3.1	2.9	3.3
29	4.2	14	9.1	64	-----	15	8.8	5.4	3.3	2.9	2.7	3.6
30	4.3	34	8.8	37	-----	12	7.5	5.2	3.1	2.9	2.9	3.6
31	4.7	-----	8.6	25	-----	11	-----	6.9	-----	3.1	3.2	-----
TOTAL	146.4	292.8	739.3	753.9	408.0	531.5	248.8	169.4	124.9	94.5	92.7	102.0
MEAN	4.72	9.76	23.8	24.3	14.6	17.1	8.29	5.46	4.16	3.05	2.99	3.40
MAX	9.2	34	104	85	31	71	17	7.0	8.0	3.7	3.7	5.4
MIN	3.7	4.5	8.6	8.0	9.0	8.5	6.5	4.5	3.1	2.7	2.7	2.9
CFSM	9.4	1.95	4.75	4.85	2.91	3.41	1.65	1.09	.83	.61	.60	.68
IN-	1.09	2.17	5.49	5.40	3.03	3.95	1.85	1.26	.93	.70	.69	.76
AC-FT	290	581	1,470	1,500	809	1,050	493	336	248	187	184	202

CAL YR 1966 TOTAL 3,567.7 MEAN 9.77 MAX 104 MIN 2.9 CFSM 1.95 IN 26.49 AC-FT 7,080
WTR YR 1967 TOTAL 3,704.2 MEAN 10.1 MAX 104 MIN 2.7 CFSM 2.02 IN 27.50 AC-FT 7,350

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	6.3	15	8.2	15	12	18	7.4	11	4.1	3.1	5.4
2	8.3	5.7	42	8.0	40	12	16	7.1	16	3.5	3.5	5.2
3	7.9	5.5	62	7.8	64	12	15	6.9	7.4	3.5	3.5	4.7
4	7.0	5.3	34	7.6	63	17	13	6.9	6.1	3.5	3.7	4.5
5	6.9	5.2	23	8.6	28	21	12	7.1	5.7	3.3	3.7	4.3
6	6.3	5.2	20	7.7	20	13	11	7.1	5.4	3.3	3.7	4.5
7	5.7	5.3	23	8.8	16	13	10	7.1	5.4	3.1	3.5	4.5
8	5.1	7.8	12	8.6	14	12	9.0	6.9	5.4	3.1	3.3	4.5
9	4.9	10	10	50	13	10	8.2	6.6	5.4	3.3	3.3	4.5
10	5.0	10	8.8	21	12	9.7	7.8	6.4	5.4	3.3	3.3	4.5
11	5.1	7.1	8.0	14	12	14	7.2	6.6	5.7	3.5	3.3	5.2
12	4.6	6.2	7.4	25	12	31	7.0	6.9	5.4	3.9	3.5	9.2
13	6.5	5.7	6.9	95	11	21	7.0	6.9	5.2	3.7	3.9	5.2
14	5.5	6.8	6.6	121	11	20	7.4	6.6	4.9	3.5	3.3	6.1
15	4.9	6.6	6.4	65	11	38	7.8	6.4	4.7	3.5	5.2	5.4
16	4.8	6.2	6.6	34	10	43	8.6	6.4	4.9	3.5	4.9	4.9
17	5.4	5.9	8.9	23	16	39	7.7	6.1	4.5	3.3	4.7	6.6
18	6.5	5.7	6.6	21	28	35	8.8	5.7	4.5	3.3	4.7	14
19	5.8	5.4	6.4	26	21	28	8.8	5.9	4.9	3.9	4.7	8.0
20	5.1	5.4	6.4	27	16	22	8.0	7.7	4.9	3.7	4.7	6.6
21	9.0	5.4	8.6	20	26	18	7.4	6.9	4.7	3.7	4.7	5.9
22	10	5.4	41	16	23	17	7.4	6.6	4.9	3.5	4.7	5.7
23	6.9	5.4	20	14	40	16	8.6	7.1	4.7	3.5	6.4	5.7
24	7.5	5.4	18	13	30	17	7.7	7.1	4.5	3.5	5.9	5.4
25	7.7	5.3	22	11	20	20	7.4	7.1	4.3	3.5	7.4	5.2
26	5.9	5.5	20	11	16	18	8.0	7.1	4.3	3.5	8.8	5.2
27	10	5.4	16	9.4	14	33	7.4	7.1	4.5	3.3	9.1	9.2
28	7.6	5.6	12	8.8	12	30	7.1	7.1	5.2	3.3	5.7	4.9
29	6.1	7.6	10	8.8	12	26	7.1	7.1	4.5	3.5	5.9	5.4
30	9.8	9.3	9.2	9.1	-----	22	7.4	7.1	4.3	3.3	4.7	4.9
31	6.7	-----	8.6	21	-----	20	-----	6.9	-----	3.1	4.7	-----
TOTAL	209.5	187.8	499.4	729.4	626	659.7	273.6	212.2	168.5	107.3	147.3	166.8
MEAN	6.76	6.26	16.1	23.5	21.6	21.3	9.12	6.85	5.62	3.46	4.75	5.56
MAX	15	10	62	121	64	63	18	7.7	16	4.1	9.1	14
MIN	4.6	5.2	6.4	7.6	10	9.7	7.0	6.7	4.3	3.1	3.1	4.3
CFSM	1.35	1.25	3.21	4.69	4.31	4.25	1.82	1.37	1.12	.69	.95	1.11
IN-	1.56	1.39	3.71	5.42	4.65	4.90	2.03	1.58	1.25	.80	1.09	1.24
AC-FT	416	373	991	1,450	1,240	1,310	543	421	334	213	292	331

CAL YR 1967 TOTAL 3,422.4 MEAN 9.38 MAX 85 MIN 2.7 CFSM 1.67 IN 25.41 AC-FT 6,790
WTR YR 1968 TOTAL 3,987.5 MEAN 10.9 MAX 121 MIN 3.1 CFSM 2.18 IN 29.61 AC-FT 7,910

NOTE---NO GAGE-HEIGHT RECORD MAR. 16 TO APR. 15.

12070000 DOGFISH CREEK NEAR POULSB, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	6.9	19	18	9.4	9.4	21	11	4.3	3.5	3.1	2.4
2	5.2	10	14	21	10	9.1	25	10	4.1	3.9	3.1	2.4
3	5.2	7.7	23	19	19	9.7	21	11	3.9	3.9	3.1	2.9
4	6.9	6.4	19	24	18	9.7	29	9.1	3.7	4.1	3.1	2.9
5	5.9	6.2	16	25	14	10	22	8.3	3.7	3.7	3.1	2.7
6	7.4	5.9	13	24	11	9.4	18	8.0	3.9	3.7	3.1	2.7
7	6.1	5.9	20	26	12	8.8	17	7.1	3.7	3.7	3.1	2.6
8	5.7	8.4	45	20	73	8.8	16	6.9	3.7	3.5	3.1	2.4
9	5.9	8.8	39	16	44	8.6	16	6.6	3.5	3.3	2.9	2.4
10	6.4	7.1	47	26	46	8.6	15	6.6	3.5	3.7	2.9	2.6
11	6.9	21	30	22	77	8.6	15	6.1	3.5	3.7	2.9	2.6
12	8.0	14	21	17	34	8.3	14	5.9	3.5	4.1	2.9	2.7
13	6.6	8.7	20	18	26	8.3	14	5.7	3.5	3.9	2.7	3.7
14	7.1	7.6	29	20	22	8.8	13	5.7	3.5	3.7	2.7	2.9
15	6.6	7.1	26	20	20	9.1	13	5.4	3.3	3.5	2.9	2.9
16	5.9	6.7	24	17	20	15	12	5.2	3.1	3.3	2.7	3.1
17	11	6.6	16	15	16	28	14	5.2	3.1	3.3	2.7	14
18	10	6.8	18	13	14	21	13	4.7	3.1	3.3	2.9	16
19	8.1	8.2	16	12	12	19	17	4.7	3.1	3.3	2.7	12
20	7.6	9.7	13	11	11	20	13	4.7	3.3	3.3	2.7	7.7
21	7.1	21	12	10	11	19	12	4.3	3.5	3.3	2.6	4.3
22	8.1	17	14	9.1	10	18	11	4.1	3.7	3.1	2.6	4.9
23	6.8	16	80	8.6	11	18	16	3.9	5.4	2.9	2.6	9.1
24	6.4	14	118	8.6	11	18	12	4.1	4.9	2.9	2.6	4.5
25	6.3	13	50	8.6	10	18	11	3.9	7.4	3.1	2.6	4.3
26	6.1	12	31	8.8	10	18	11	3.9	4.5	3.1	2.7	3.9
27	5.9	12	23	9.1	9.7	10	10	5.7	4.1	2.7	2.7	4.5
28	5.8	11	17	8.8	9.4	18	14	4.7	4.1	3.1	2.6	4.9
29	8.0	32	14	8.8	-----	18	14	9.1	3.9	3.1	2.4	6.4
30	12	28	11	8.8	-----	18	10	8.0	3.7	2.9	2.4	6.4
31	8.8	-----	12	9.4	-----	18	-----	4.9	-----	2.7	2.4	-----
TOTAL	219.0	345.7	850	482.6	590.5	437.2	459	194.5	116.2	105.3	86.6	146.8
MEAN	7.06	11.5	27.4	15.6	21.1	14.1	15.3	6.27	3.87	3.40	2.79	4.89
MAX	12	32	118	26	77	28	29	11	7.4	4.1	3.1	16
MIN	5.2	5.9	11	8.6	9.4	8.3	10	3.9	3.1	2.7	2.4	2.4
CFSM	1.41	2.30	5.47	3.11	4.21	2.81	3.05	1.25	.77	.68	.56	.98
IN	1.63	2.57	6.31	3.58	4.38	3.25	3.41	1.44	.86	.78	.64	1.09
AC-FT	434	686	1,690	957	1,170	667	910	386	230	209	172	291
CAL YR 1968	TOTAL 4,505.5		MEAN 12.3	MAX 121	MIN 3.1	CFSM 2.46	IN 33.45	AC-FT 8,940				
WTR YR 1969	TOTAL 4,033.4		MEAN 11.1	MAX 118	MIN 2.4	CFSM 2.22	IN 29.95	AC-FT 8,000				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	6.1	5.5	7.0	15	8.1	8.1	6.7	4.4	3.5	3.2	4.1
2	6.1	6.1	5.5	6.7	12	7.8	8.4	6.2	4.1	3.4	3.8	4.2
3	5.2	6.2	6.0	6.5	12	8.1	7.6	6.0	3.7	3.2	3.6	4.3
4	4.9	19	5.6	6.2	11	7.8	7.3	5.5	3.7	3.0	3.4	9.8
5	4.7	10	5.4	6.0	11	7.8	8.6	5.5	3.5	3.0	3.3	4.9
6	4.9	9.0	5.4	5.7	10	19	11	5.3	3.5	3.0	3.2	4.8
7	5.8	8.5	5.3	5.7	9.5	16	8.1	5.3	3.5	3.0	3.1	5.4
8	9.3	8.0	6.1	7.6	9.2	11	7.8	5.5	3.7	3.0	3.2	5.0
9	6.5	7.6	5.7	9.2	8.9	9.2	20	6.2	3.9	2.8	3.1	4.4
10	5.7	7.2	6.0	7.0	8.6	8.6	10	8.4	3.7	2.8	2.9	4.0
11	5.4	6.8	36	6.7	8.6	8.9	8.9	7.4	3.9	2.8	2.8	3.7
12	5.3	6.5	20	6.2	8.4	13	8.6	6.6	3.7	2.8	2.9	3.6
13	5.4	6.3	24	28	9.5	14	7.3	6.6	3.5	2.8	3.0	3.6
14	5.4	6.1	19	29	8.9	20	6.5	5.8	3.5	2.8	3.0	3.7
15	5.4	6.0	11	15	16	12	6.5	5.3	3.7	2.6	2.9	3.7
16	5.6	5.9	14	12	42	12	6.2	5.1	3.9	2.8	3.0	3.8
17	5.9	5.8	15	12	19	9.9	6.0	4.9	3.7	3.0	3.1	5.7
18	5.7	5.7	18	12	14	9.2	6.2	4.6	3.4	2.8	3.0	4.8
19	5.7	5.6	15	35	12	8.6	8.1	4.6	3.4	2.6	2.9	4.4
20	5.8	6.5	16	25	11	8.4	9.5	4.9	3.4	2.8	2.9	9.5
21	5.7	6.0	22	35	11	8.1	7.3	4.9	3.2	2.9	3.1	4.8
22	5.7	6.0	49	34	9.9	7.8	7.3	5.1	3.2	2.9	2.9	4.7
23	5.7	7.0	32	30	9.5	7.8	6.5	5.1	3.2	2.8	2.9	4.8
24	5.4	6.7	16	26	9.2	8.1	9.2	4.6	3.2	3.0	3.1	4.5
25	5.4	6.4	12	28	8.9	7.3	7.6	4.4	3.2	3.4	3.2	4.4
26	5.4	6.1	13	34	8.6	7.0	13	4.6	3.4	3.4	3.2	4.2
27	7.1	5.9	11	39	8.4	7.0	12	4.9	4.1	3.9	3.3	4.2
28	6.1	5.7	8.9	20	8.1	7.3	8.4	4.9	3.9	3.4	3.7	4.1
29	6.9	5.6	8.4	16	-----	7.0	7.8	6.8	3.7	3.4	3.5	4.1
30	6.4	5.5	7.6	14	-----	6.7	7.6	5.8	3.7	3.3	3.3	4.2
31	6.2	-----	7.6	21	-----	7.0	-----	4.9	-----	3.1	3.4	-----
TOTAL	180.8	209.8	432.0	545.5	330.2	300.5	257.6	172.4	108.6	94.0	97.9	137.4
MEAN	5.83	6.99	13.9	17.6	11.8	9.69	8.59	5.56	3.62	3.03	3.16	4.58
MAX	9.3	19	49	39	42	20	20	4.4	4.4	3.9	3.8	9.8
MIN	4.7	5.5	5.3	5.7	8.1	6.7	6.0	4.4	3.2	2.6	2.8	3.6
CFSM	1.16	1.40	2.77	3.51	2.36	1.93	1.71	1.11	.72	.60	.63	.91
IN	1.34	1.56	3.21	4.05	2.45	2.23	1.91	1.28	.81	.70	.73	1.02
AC-FT	359	416	857	1,080	655	596	511	342	215	186	194	273
CAL YR 1969	TOTAL 3,441.3		MEAN 9.43	MAX 77	MIN 2.4	CFSM 1.88	IN 25.55	AC-FT 6,830				
WTR YR 1970	TOTAL 2,866.7		MEAN 7.85	MAX 49	MIN 2.6	CFSM 1.57	IN 21.29	AC-FT 5,490				

12072000 CHICO CREEK NEAR BREMERTON, WASH.

LOCATION.--Lat 47°35'28", long 122°42'29", in NE1/4 sec. 8, T. 24 N., R. 1 E., Kitsap County, on left bank at highway crossing, 0.5 mile downstream from Dickerson Creek and 3.7 miles northwest of Olympic College in Bremerton.

DRAINAGE AREA.--15.3 sq mi.

PERIOD OF RECORD.--July 1947 to September 1950, March 1961 to September 1970.

GAGE.--Water-stage recorder. Concrete control since July 24, 1961. Altitude of gage is 50 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 34.3 cfs (30.44 inches per year, 24,850 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (200 cfs, revised), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	1130	380	3.48	Mar. 23, 1967	1300	340	3.30	Mar. 16, 1968	0230	305	3.16
Jan. 13, 1966	0300	*639	4.66	Dec. 3, 1967	0100	347	3.33	Dec. 24, 1968	0900	*373	3.45
Mar. 9, 1966	0130	397	3.56	Dec. 22, 1967	1500	278	3.02	Feb. 9, 1969	0730	200	2.66
Dec. 5, 1966	0800	219	2.75	Jan. 14, 1968	0800	413	3.63	Feb. 11, 1969	0930	309	3.16
Dec. 13, 1966	0500	*723	5.04	Jan. 20, 1968	1430	432	3.72				
Jan. 19, 1967	1430	437	4.08	Feb. 3, 1968	2300	*512	4.08	Dec. 22, 1969	2330	234	2.82
Jan. 28, 1967	0830	360	3.49	Feb. 24, 1968	0030	241	2.87	Jan. 23, 1970	1130	215	2.73
								Jan. 27, 1970	0100	*281	3.03

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 10, 1966	.05	.75	1969	Sept. 10, 11, 14-16, 1969	.75	B.92
1967	Sept. 8, 1967	.22	a.87	1970	Aug. 30, 31, 1970	.50	.90
1968	Aug. 10-13, 1968	1.2	1.00				

a Occurred Oct. 11, 1966.

b Occurred Sept. 11, 15, 1969.

Period of record: Maximum discharge, 1,640 cfs Feb. 22, 1949 (gage height, 5.40 ft), from rating curve extended above 170 cfs; no flow Aug. 31 to Sept. 6, 1947.

REMARKS.--Records excellent. Several small diversions for irrigation and domestic use above station. Flow regulated by 5-foot high dam at Kitsap Lake 1.0 mile upstream. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1182: 1948-49. WSP 1316: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	2.8	25	68	45	32	35	13	5.9	3.8	2.0	.28
2	.93	3.4	30	89	42	31	33	12	5.9	5.1	2.2	.33
3	.84	9.0	30	74	39	30	31	12	5.9	5.3	2.0	.28
4	1.2	13	37	63	40	30	30	12	6.2	5.1	2.3	.24
5	3.9	17	38	112	46	36	29	11	5.9	4.6	2.2	.17
6	6.7	12	68	331	66	39	26	12	5.6	4.3	1.7	.20
7	4.1	11	66	294	70	44	25	12	5.3	4.1	1.6	.20
8	3.4	11	52	292	62	156	25	12	5.1	4.1	1.9	.12
9	3.2	10	38	206	55	290	24	11	4.8	3.8	1.7	.07
10	3.4	11	40	184	47	162	24	11	4.6	3.6	1.6	.18
11	2.6	12	36	194	50	115	23	10	4.3	3.3	1.3	1.7
12	2.6	11	31	351	45	96	22	10	4.1	3.1	1.2	.90
13	2.6	11	28	567	40	100	21	10	3.8	3.1	1.1	.44
14	4.4	12	25	391	37	102	22	9.9	3.6	3.1	1.90	.44
15	4.1	11	23	267	35	150	21	9.4	3.3	3.1	1.0	.38
16	3.6	10	21	192	32	156	20	9.0	3.6	5.1	.90	.33
17	3.6	9.4	19	142	31	122	19	8.6	3.3	3.6	.90	.38
18	3.9	11	17	115	30	130	18	8.2	3.1	2.9	.64	.90
19	4.4	21	16	89	30	130	17	7.8	3.2	2.7	.64	.64
20	4.9	36	16	76	29	128	17	7.8	3.6	2.9	.57	.64
21	4.6	31	17	64	27	111	17	7.8	3.8	3.1	.44	.64
22	4.4	25	16	59	26	93	16	7.5	3.8	2.3	.64	.64
23	4.1	20	17	52	26	82	16	7.2	4.0	2.5	.64	1.0
24	3.9	18	19	49	25	71	16	7.2	3.8	2.7	.50	.81
25	3.6	16	19	46	25	64	16	6.8	3.3	4.3	.44	.90
26	3.6	28	20	45	25	56	16	6.8	3.1	3.8	.57	.81
27	3.6	22	36	44	31	51	15	6.9	3.8	3.1	.81	.64
28	3.6	20	62	43	33	47	15	6.5	4.6	2.7	.64	.64
29	3.2	17	64	52	-----	43	14	6.2	4.1	2.5	.50	.64
30	3.0	16	77	54	-----	40	14	5.9	4.1	2.5	.50	.50
31	3.0	-----	64	49	-----	37	-----	5.6	-----	2.0	.38	-----
TOTAL	105.90	449.8	1,067	4,656	1,089	2,774	637	282.7	129.5	108.2	34.41	16.04
MEAN	3.42	15.0	34.4	150	38.9	89.5	21.2	9.12	4.32	3.49	1.11	.53
MAX	6.7	36	77	567	70	290	35	13	6.2	5.3	2.3	1.7
MIN	.84	2.8	16	43	25	30	14	9.6	3.1	2.0	.38	.87
CFSM	.22	.98	2.25	9.80	2.54	5.85	1.39	.60	.28	.23	.07	.03
IN.	.26	1.09	2.59	11.32	2.63	6.74	1.55	.69	.31	.26	.08	.04
AC-FT	210	B92	2,120	9,240	2,160	9,500	1,260	561	257	215	68	.04

CAL YR 1965 TOTAL 8,273.50 MEAN 22.7 MAX 196 MIN .80 CFSM 1.48 IN 20.12 AC-FT 16,410
WTR YR 1966 TOTAL 11,349.55 MEAN 31.1 MAX 567 MIN .07 CFSM 2.03 IN 27.99 AC-FT 22,910

12072000 CHICO CREEK NEAR BREMERTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	4.6	176	54	156	37	42	22	8.2	3.9	.90	.84
2	.64	4.3	162	56	130	34	56	21	8.2	3.2	.93	.84
3	.57	3.8	122	74	117	32	49	20	8.2	2.8	1.1	.66
4	.72	3.6	148	76	103	30	46	20	7.8	2.8	.93	.58
5	.50	4.6	192	70	90	29	42	19	7.4	2.6	.96	.58
6	.44	4.8	192	62	80	28	38	18	7.1	2.6	.84	.50
7	.57	4.3	158	62	72	28	36	17	7.1	2.6	.84	.43
8	.57	4.1	115	71	64	26	34	17	7.1	2.8	.84	.43
9	.44	2.5	91	71	60	24	33	16	7.1	2.8	.84	.58
10	.38	2.2	126	71	55	25	31	16	6.7	2.6	.93	1.3
11	.50	2.6	154	81	51	23	29	15	6.4	2.2	.93	1.4
12	1.0	5.1	344	88	57	23	29	15	6.4	2.2	1.1	1.3
13	.81	18	571	93	75	23	29	15	6.4	2.1	1.2	1.0
14	.64	38	307	76	66	26	29	14	6.1	2.1	1.2	.84
15	.64	44	254	68	72	38	26	14	5.8	1.9	1.3	.75
16	.90	31	212	60	64	66	29	14	5.8	1.8	1.5	.74
17	.50	26	172	54	63	68	29	13	5.5	1.7	1.5	.66
18	.90	24	146	52	57	63	28	12	5.2	1.5	1.4	.66
19	3.8	22	132	277	53	55	26	12	4.9	1.4	1.3	.58
20	9.4	21	132	362	49	57	26	12	4.9	1.4	1.3	.66
21	8.8	20	103	309	45	53	25	12	6.4	1.3	1.3	.66
22	12	17	82	259	43	161	24	11	8.2	1.2	1.3	.58
23	9.4	16	81	219	41	305	23	11	7.1	1.1	1.3	.50
24	7.8	15	105	176	38	223	22	10	6.1	1.0	1.3	.50
25	6.8	16	93	150	37	156	21	10	5.5	1.0	1.2	.50
26	6.2	15	76	172	35	121	21	9.8	5.2	.93	1.0	.43
27	4.2	32	66	213	33	97	23	9.4	5.2	1.0	1.0	.43
28	5.9	33	60	322	41	89	25	9.4	4.9	1.3	.93	.36
29	5.1	35	56	300	-----	87	24	9.4	4.6	.93	.93	.66
30	4.8	106	51	254	-----	77	23	9.0	4.4	.93	.93	1.0
31	4.8	-----	51	186	-----	69	-----	8.6	-----	.93	.93	-----
TOTAL	101.76	575.5	4,730	4,440	1,847	2,173	938	431.6	189.9	58.62	33.96	20.95
MEAN	3.28	19.2	153	143	66.0	70.1	31.3	13.9	6.33	1.89	1.10	.70
MAX	12	106	571	362	196	305	62	22	8.2	3.9	1.5	1.4
MIN	.38	22	51	52	33	23	21	8.6	4.4	.93	.84	.36
CFSM	.25	1.25	10.0	9.35	4.31	4.58	2.05	.91	.41	.12	.07	.05
IN-	1.40	11.50	10.80	4.49	5.28	2.28	1.05	.46	.14	.08	.05	.05
AC-FT	202	1,140	9,380	8,810	3,660	4,310	1,860	856	377	116	67	42

CAL YR 1966 TOTAL 15,134.11 MEAN 41.5 MAX 571 MIN .07 CFSM 2.71 IN 36.80 AC-FT 30,020
WTR YR 1967 TOTAL 15,940.29 MEAN 42.6 MAX 571 MIN .36 CFSM 2.78 IN 37.78 AC-FT 30,820

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	17	43	41	63	62	63	17	18	6.4	2.2	6.7
2	5.8	14	194	36	205	55	59	16	30	6.1	2.2	8.1
3	6.6	14	322	34	293	51	62	16	23	5.8	2.2	5.5
4	7.4	12	259	33	369	53	49	15	20	5.5	1.9	4.9
5	8.2	11	208	32	237	62	43	14	17	5.2	1.7	4.6
6	10	10	164	29	164	55	38	14	16	4.9	1.5	4.4
7	9.4	9.8	177	29	132	53	35	14	15	4.6	1.8	4.1
8	7.8	11	128	29	108	51	32	14	14	4.4	1.5	3.9
9	6.7	21	105	95	92	46	30	13	14	3.9	1.4	3.6
10	7.1	50	88	97	78	42	28	13	13	3.6	1.3	3.4
11	7.1	45	74	78	68	46	26	12	12	3.9	1.3	3.9
12	4.9	35	57	75	62	80	24	12	12	4.4	1.3	3.9
13	6.7	28	46	240	55	87	24	12	11	4.1	1.4	4.1
14	6.1	26	38	353	48	108	28	12	9.8	3.9	3.4	6.4
15	5.7	26	33	287	42	237	31	12	9.4	3.4	3.0	5.8
16	4.9	23	28	226	38	274	28	12	9.0	3.4	2.6	4.9
17	4.6	20	25	186	44	188	26	12	8.6	3.2	2.2	5.5
18	4.6	18	22	186	91	138	25	11	7.8	3.0	2.4	12
19	4.1	16	19	366	126	112	24	11	8.2	3.6	2.6	10
20	4.1	15	17	393	97	94	23	12	7.8	3.4	2.4	9.0
21	10	15	19	300	119	80	23	12	7.4	3.2	2.2	7.8
22	19	14	196	208	121	68	22	12	7.8	3.2	2.2	7.1
23	18	14	159	164	182	66	24	12	7.8	3.0	4.1	6.4
24	17	13	162	121	200	64	22	12	7.4	3.0	4.4	6.1
25	21	12	114	99	140	75	21	14	6.7	2.8	5.5	5.5
26	17	12	90	84	115	74	20	14	6.7	2.8	6.1	5.5
27	50	11	74	70	94	128	16	14	7.1	2.6	7.8	8.2
28	56	12	60	64	80	110	19	14	7.4	2.6	6.1	4.6
29	37	19	49	59	69	96	18	13	7.4	2.4	5.5	4.4
30	28	28	42	53	-----	82	17	12	6.7	2.6	6.0	4.1
31	20	-----	41	59	-----	70	-----	12	-----	2.2	6.4	-----
TOTAL	433.4	571.8	3,135	4,124	3,540	2,807	894	405	340.0	117.3	96.6	169.4
MEAN	13.7	19.1	101	133	122	90.5	29.8	13.1	11.6	3.78	3.12	5.65
MAX	56	50	322	393	369	274	63	17	30	6.4	7.8	12
MIN	4.1	9.8	17	29	38	42	17	11	6.7	2.2	1.3	3.4
CFSM	.90	1.23	6.60	8.69	7.97	5.92	1.95	.86	.76	.25	.20	.37
IN-	1.03	1.39	7.62	10.03	8.61	6.82	2.17	.98	.85	.29	.23	.41
AC-FT	848	1,130	6,220	8,180	7,020	5,570	1,770	803	690	233	192	336

CAL YR 1967 TOTAL 14,263.23 MEAN 39.1 MAX 362 MIN .36 CFSM 2.56 IN 34.68 AC-FT 28,290
WTR YR 1968 TOTAL 16,631.50 MEAN 45.4 MAX 393 MIN 1.3 CFSM 2.97 IN 40.44 AC-FT 32,990

12072000 CHICO CREEK NEAR BREMERTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	3.6	12	68	68	30	40	43	25	12	6.7	1.9	1.3		
2	3.4	17	59	69	31	38	53	25	10	6.1	1.9	1.3		
3	3.4	17	79	66	44	40	46	25	9.4	5.8	1.8	1.3		
4	4.6	16	105	85	51	41	72	23	6.6	5.8	1.8	1.4		
5	4.6	13	87	97	51	60	78	21	7.8	5.5	1.9	1.4		
6	6.4	12	69	99	44	63	69	20	7.8	4.9	1.8	1.3		
7	5.5	12	68	96	44	55	57	17	7.1	4.9	1.9	1.2		
8	4.6	19	128	87	131	46	51	17	6.7	4.6	1.9	1.1		
9	6.1	23	130	96	186	41	45	16	6.7	4.4	1.9	1.1		
10	6.2	23	160	108	166	34	41	14	6.1	4.6	2.2	1.0		
11	9.0	50	174	114	287	28	38	14	8.4	4.9	2.2	1.0		
12	11	56	130	97	217	26	36	14	11	4.6	2.2	1.1		
13	13	40	105	92	158	23	35	13	9.8	4.4	2.2	1.2		
14	15	32	121	92	126	22	32	12	9.0	4.1	1.9	1.0		
15	14	28	115	85	108	20	30	12	8.2	3.9	2.2	.84		
16	13	22	96	80	110	28	28	11	7.4	3.9	2.1	.93		
17	15	20	77	72	96	110	33	11	6.4	3.4	2.1	6.3		
18	23	19	69	64	94	108	35	10	5.8	3.6	2.1	7.8		
19	21	17	59	60	85	78	55	9.8	5.2	3.4	2.1	12		
20	23	18	49	52	75	66	45	9.8	4.9	3.4	1.9	12		
21	21	39	43	46	68	56	40	9.4	4.6	3.2	1.8	9.5		
22	22	74	43	42	62	51	35	9.0	4.6	3.0	1.8	14		
23	17	75	122	38	59	45	38	8.6	6.9	2.8	1.7	32		
24	16	63	344	38	53	41	34	8.6	8.2	2.8	1.7	23		
25	14	52	230	37	49	37	30	8.2	9.4	2.6	1.4	22		
26	13	43	154	36	46	34	28	8.2	9.8	2.4	1.5	17		
27	11	37	121	36	44	31	26	9.0	9.0	2.4	1.6	14		
28	9.8	32	96	34	42	29	26	9.0	9.0	2.4	1.7	14		
29	11	57	75	32	-----	28	23	15	8.2	2.4	1.5	13		
30	14	69	64	31	-----	28	23	12	7.4	2.1	1.4	20		
31	12	-----	62	32	-----	30	-----	13	-----	2.1	1.3	-----		
TOTAL	368.2	1,007	3,302	2,081	2,557	1,377	1,225	430.4	235.4	121.1	57.4	235.07		
MEAN	11.9	33.6	107	67.1	91.3	44.4	40.8	13.9	7.85	3.91	1.85	7.84		
MAX	23	75	344	114	287	110	78	25	12	6.7	2.2	32		
MIN	3.4	12	43	31	30	20	23	8.2	4.6	2.1	1.3	.84		
CFSM	.78	2.20	6.99	4.39	5.97	2.90	2.67	.91	.51	.26	.12	.51		
IN.	.90	2.45	8.03	5.06	6.22	3.35	2.98	1.05	.57	.29	.14	.57		
AC-FT	730	2,000	6,550	4,130	5,070	2,730	2,430	854	467	240	114	466		
CAL YR 1968	TOTAL	17,178.50	MEAN	46.9	MAX	393	MIN	1.3	CFSM	3.07	IN	41.77	AC-FT	34,070
WTR YR 1969	TOTAL	12,996.57	MEAN	35.6	MAX	344	MIN	.84	CFSM	2.33	IN	31.60	AC-FT	25,780

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	26	7.4	8.6	31	101	29	20	23	9.8	3.6	1.2	.84		
2	22	7.1	8.2	26	87	29	20	23	9.4	3.6	1.9	.84		
3	17	6.4	8.7	23	77	28	18	21	9.0	3.4	1.7	1.4		
4	15	28	9.0	20	68	28	18	19	8.2	3.2	1.3	1.2		
5	13	41	8.2	17	63	26	24	19	7.8	3.0	1.3	1.2		
6	12	33	8.2	14	57	63	29	18	7.1	3.0	1.2	1.2		
7	12	30	7.8	14	52	106	24	17	6.7	2.8	1.3	1.8		
8	24	28	9.0	14	46	77	28	19	7.8	2.8	1.5	1.5		
9	23	25	9.0	15	43	63	95	18	8.6	2.6	1.5	1.3		
10	20	21	9.0	14	37	53	96	19	7.8	2.2	1.4	1.1		
11	17	18	43	12	32	49	85	20	7.4	2.1	1.2	1.0		
12	14	17	89	11	30	53	70	22	7.1	1.9	1.1	.95		
13	13	15	108	26	29	66	59	20	6.7	1.8	1.1	.90		
14	12	14	114	101	26	89	48	18	6.4	1.5	1.1	.95		
15	10	14	82	78	38	87	41	17	5.2	1.5	1.0	.95		
16	9.8	12	64	62	112	78	36	16	5.2	1.4	1.0	1.0		
17	9.0	11	62	53	121	68	31	15	5.2	1.4	1.1	1.3		
18	8.6	10	64	57	108	59	30	14	4.6	1.3	1.0	1.6		
19	8.2	9.8	66	141	89	53	31	13	4.4	1.2	.93	1.3		
20	7.8	11	70	150	74	46	29	13	4.1	1.2	.93	1.4		
21	7.1	11	77	164	63	42	28	12	4.1	1.2	.93	1.5		
22	7.1	9.8	120	164	55	40	26	12	3.9	1.0	.84	1.4		
23	6.7	12	206	204	48	35	26	12	3.9	1.0	.84	1.3		
24	6.4	12	160	172	42	31	35	11	3.6	1.0	.84	1.3		
25	6.1	10	126	200	35	29	30	10	3.4	1.3	.84	1.2		
26	6.1	10	101	204	31	28	28	9.8	3.2	1.5	.75	1.1		
27	7.4	9.4	78	250	30	26	28	9.8	3.4	1.9	.84	1.0		
28	7.1	9.4	63	176	30	25	28	9.8	3.9	1.3	.93	1.0		
29	7.4	9.0	52	138	-----	23	26	12	3.9	1.2	.84	1.0		
30	8.2	8.6	44	110	-----	22	26	12	3.9	1.1	.66	1.1		
31	8.2	-----	36	114	-----	21	-----	11	-----	1.1	.75	-----		
TOTAL	371.2	459.9	1,910.7	2,775	1,624	1,472	1,113	485.4	175.9	59.1	33.82	35.63		
MEAN	12.0	15.3	61.6	89.5	58.0	47.5	37.1	15.7	5.86	1.91	1.09	1.19		
MAX	26	41	206	250	121	106	96	23	9.8	3.6	1.9	1.8		
MIN	6.1	6.4	7.8	11	26	21	18	9.8	3.2	1.0	.66	.84		
CFSM	.78	1.00	4.03	5.85	3.79	3.10	2.42	1.03	.38	.12	.07	.08		
IN.	.90	1.12	4.65	6.75	3.95	3.58	2.71	1.18	.43	.14	.08	.09		
AC-FT	736	912	3,790	5,300	3,220	2,920	2,210	963	349	117	67	71		
CAL YR 1969	TOTAL	11,061.17	MEAN	30.3	MAX	287	MIN	.84	CFSM	1.98	IN	26.89	AC-FT	21,940
WTR YR 1970	TOTAL	10,515.65	MEAN	28.8	MAX	250	MIN	.66	CFSM	1.88	IN	25.57	AC-FT	20,860

12073500 HUGE CREEK NEAR WAUNA, WASH.

LOCATION.--Lat 47°23'20", long 122°41'52", in NE¼NE¼ sec.20, T.22 N., R.1 E., Pierce County, on right bank at downstream side of bridge, 0.1 mile upstream from mouth and 2.7 miles west of Wauna.

DRAINAGE AREA.--6.47 sq mi.

PERIOD OF RECORD.--July 1947 to September 1969 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 100 ft (from topographic map). Prior to June 26, 1951, at same site at datum 0.86 ft higher.

AVERAGE DISCHARGE.--22 years, 11.6 cfs (24.35 inches per year, 8,400 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (70 cfs), water years 1966-69

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	1000	306	2.89	Jan. 20, 1967	1700	129	2.39	Feb. 4, 1968	0100	115	2.37
Jan. 13, 1966	0730	*373	5.12	Jan. 28, 1967	0530	115	2.25	Feb. 18, 1968	2200	78	1.98
Mar. 9, 1966	1130	102	2.13								
Dec. 13, 1966	1430	*189	2.99	Jan. 20, 1968	1830	*138	2.65	Dec. 24, 1968	1930	*62	1.79

Annual minimum discharge, water years 1966-69

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1-4, 9-14, 1965	3.6	a.54	1968	Oct. 19, 1967	4.2	.72
1967	Oct. 4, 1966, July 30, Aug. 28, Sept. 5, 1967	3.6	b.55	1969	Aug. 13, 30, 31, Sept. 1, 2, 6-11, 1969	3.8	.82

a Occurred Aug. 31, Sept. 1, 3-6, 8, 9, 1966.

b Occurred Oct. 1, 4, 1966.

Period of record: Maximum discharge, 391 cfs Feb. 9, 1951 (gage height, 4.50 ft, present datum); minimum, 3.2 cfs Sept. 1, 1950; minimum gage height, 0.49 ft May 18, 20, 21, 1956.

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1636: 1953-54, 1956, 1957(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	4.7	6.6	17	11	11	11	6.4	5.5	4.5	4.4	4.2
2	3.6	4.9	6.8	27	11	10	10	6.4	5.8	5.5	4.2	4.2
3	3.6	6.8	6.4	24	10	9.7	9.7	6.2	5.8	5.5	4.2	4.2
4	4.1	8.4	9.1	22	11	9.1	9.4	6.2	5.8	5.1	4.4	4.2
5	5.3	8.9	8.4	40	11	11	8.8	6.2	5.7	4.7	4.4	4.2
6	6.0	5.1	13	218	12	11	8.6	7.6	5.8	4.7	4.2	4.2
7	4.4	4.9	11	121	12	12	8.6	6.8	5.8	4.5	4.2	4.2
8	3.9	4.8	8.4	78	11	28	8.6	6.2	6.0	4.4	4.2	4.2
9	3.7	4.9	7.3	50	11	89	8.4	6.2	6.0	4.4	4.4	4.1
10	3.6	5.5	7.6	40	10	48	8.4	6.2	6.0	4.4	4.4	4.2
11	3.6	5.8	6.6	43	12	30	9.4	6.0	6.2	4.7	4.2	4.9
12	3.7	4.9	6.4	90	11	24	8.9	6.0	6.2	4.7	4.2	4.4
13	3.7	4.9	6.0	264	10	28	8.1	6.0	6.0	4.5	4.2	4.2
14	4.7	5.3	6.0	111	9.7	28	8.6	6.2	6.0	4.7	4.2	4.2
15	4.4	4.7	5.5	50	9.1	35	8.1	6.2	5.5	4.7	4.1	4.2
16	3.9	4.7	5.3	35	8.9	32	7.8	6.2	6.0	5.1	4.1	4.1
17	4.2	4.5	5.3	28	8.9	24	7.6	6.0	6.0	4.7	4.1	4.4
18	4.5	4.9	5.3	24	8.6	27	7.6	5.8	5.8	4.5	4.1	4.9
19	5.3	7.8	5.3	20	8.6	26	7.6	5.8	5.8	4.5	3.9	4.4
20	4.4	8.4	5.4	18	9.4	29	7.6	5.8	5.8	4.5	3.9	4.2
21	4.1	6.0	5.8	14	8.6	26	7.3	6.0	5.8	4.4	3.9	4.1
22	3.9	6.2	5.5	14	8.4	21	7.3	5.8	5.8	4.2	3.9	4.1
23	3.7	5.1	5.8	14	8.4	18	7.1	5.8	5.9	4.4	4.1	4.4
24	3.9	4.9	6.6	13	8.1	17	7.1	5.5	5.8	4.4	4.2	4.2
25	4.1	4.7	6.4	12	8.6	19	6.9	5.5	4.9	4.5	4.2	4.2
26	4.1	6.4	6.6	11	8.9	14	6.8	5.5	4.9	4.7	4.4	4.2
27	4.4	6.4	16	11	11	12	6.8	5.5	5.3	4.5	4.7	4.2
28	4.7	5.3	22	12	11	12	6.8	5.3	5.3	4.4	4.4	4.2
29	4.5	4.9	26	13	-----	11	6.6	5.3	4.5	4.4	4.4	4.2
30	4.7	5.1	28	13	-----	12	6.6	5.3	4.5	4.5	4.4	4.1
31	4.7	-----	19	11	-----	11	-----	5.5	-----	4.4	4.2	-----
TOTAL	131.0	169.8	287.4	1,460	279.2	690.8	242.1	185.4	170.2	143.1	130.8	127.7
MEAN	4.23	5.66	9.27	47.1	9.97	22.3	8.07	5.98	5.67	4.62	4.22	4.26
MAX	6.0	8.9	26	264	12	89	11	7.6	6.2	5.5	4.7	4.9
MIN	3.6	4.5	5.3	11	8.1	9.1	6.6	5.3	4.5	4.2	3.9	4.1
CFSM	.65	.87	1.43	7.28	1.54	3.45	1.25	.92	.88	.71	.65	.66
IN.	.75	.98	1.65	8.39	1.61	3.97	1.39	1.07	.98	.82	.75	.73
AC-FT	260	337	570	2,900	554	1,370	480	368	338	284	259	253
CAL YR 1965	TOTAL 2,912.6				MAX 7.98			CFSM 1.23	IN 16.75	AC-FT 5,780		
WTR YR 1966	TOTAL 4,017.5			MEAN 11.0	MAX 264	MIN 3.6	CFSM 1.70	IN 23.10	AC-FT 7,970			

12073500 HUGE CREEK NEAR WAUNA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	4.4	14	16	28	12	11	8.0	6.6	4.5	4.8	4.2
2	3.9	4.4	12	16	24	11	11	7.3	6.6	4.5	4.8	4.5
3	3.7	4.4	9.7	22	23	10	10	7.6	6.6	4.5	4.8	4.2
4	3.7	4.4	13	28	22	10	10	7.6	6.3	4.8	4.8	3.9
5	3.7	4.5	15	27	19	10	10	7.6	6.0	4.8	4.8	3.9
6	3.7	4.4	15	22	17	9.8	9.4	7.3	5.7	5.1	4.8	3.9
7	3.9	4.4	15	20	16	9.4	9.2	7.3	5.7	5.1	4.8	4.2
8	4.1	4.4	13	21	15	10	9.0	7.3	6.0	5.1	4.5	4.2
9	3.9	4.5	11	19	14	9.8	10	7.6	6.0	5.4	4.5	5.1
10	3.9	4.5	13	19	13	10	9.2	7.3	6.0	5.1	4.5	6.0
11	3.9	4.7	15	23	12	9.8	8.8	7.3	6.0	5.7	4.8	5.7
12	4.2	5.8	45	27	19	9.4	9.2	7.6	6.0	4.8	4.5	5.1
13	4.2	9.8	158	27	30	9.8	9.4	7.6	6.0	5.1	4.5	4.5
14	4.2	13	85	22	22	11	9.0	7.6	5.7	5.1	4.2	4.5
15	4.1	8.6	52	20	23	13	8.7	7.3	5.7	4.8	4.5	4.2
16	4.1	6.8	41	17	18	13	9.4	7.3	5.4	5.1	4.2	4.2
17	4.1	5.8	30	15	19	13	9.0	7.6	5.4	4.8	4.2	4.2
18	4.1	5.5	26	13	17	13	9.8	7.6	5.4	5.1	4.2	4.2
19	5.5	5.5	29	41	15	12	9.0	7.3	5.4	5.4	4.2	4.5
20	7.1	5.5	30	116	14	15	8.4	7.3	5.4	5.4	4.2	4.5
21	5.5	5.3	22	78	13	13	9.0	7.3	8.0	5.4	4.5	4.5
22	7.6	5.1	18	44	12	26	8.7	7.6	8.4	5.1	4.2	4.2
23	6.2	4.9	17	34	12	32	8.4	7.0	6.0	5.1	4.2	4.2
24	4.9	4.7	20	28	12	28	8.4	7.0	5.7	5.1	4.2	4.2
25	4.5	5.5	19	25	11	23	8.4	7.0	5.4	5.1	4.2	4.2
26	4.5	5.1	16	30	11	19	8.4	7.0	5.1	5.1	3.9	4.2
27	4.4	7.0	13	50	10	16	9.0	6.6	5.1	5.1	3.9	4.2
28	4.4	6.2	12	99	13	15	8.7	7.0	5.1	4.8	3.9	4.5
29	4.7	6.7	12	70	-----	15	8.4	7.3	5.1	5.4	3.9	5.1
30	4.7	16	11	48	-----	13	8.0	7.0	4.8	5.1	4.2	5.1
31	4.4	-----	11	33	-----	12	-----	6.6	-----	5.1	4.2	-----
TOTAL	139.9	181.8	812.7	1,090	474	433.0	274.9	226.8	176.6	156.6	135.9	134.1
MEAN	4.51	6.06	26.2	35.2	16.9	14.0	9.16	7.32	5.89	5.05	4.38	4.47
MAX	7.6	16	158	116	30	32	11	8.0	8.4	5.7	4.8	6.0
MIN	3.7	4.4	9.7	13	10	9.4	8.0	6.6	4.8	4.5	3.9	3.9
CFSM	.70	.94	4.05	5.44	2.61	2.16	1.42	1.13	.91	.78	.68	.69
1IN.	1.80	1.95	4.67	6.27	2.73	2.49	1.58	1.30	1.02	.90	.78	.77
AC-FT	277	361	1,610	2,160	940	859	545	450	350	311	270	266
CAL YR 1966	TOTAL	4,563.7	MEAN 12.5	MAX 264	MIN 3.7	CFSM 1.93	IN 26.24	AC-FT 9,050				
WTR YR 1967	TOTAL	4,236.3	MEAN 11.6	MAX 158	MIN 3.7	CFSM 1.79	IN 24.36	AC-FT 8,400				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	5.7	7.3	9.4	28	16	17	9.3	14	6.7	5.4	5.6
2	7.0	5.4	12	8.7	44	15	18	9.3	16	6.4	5.4	5.6
3	7.6	5.1	14	8.0	62	14	16	8.9	9.7	6.4	5.4	5.4
4	7.0	5.1	14	8.0	98	17	15	8.9	8.9	6.4	5.4	5.4
5	6.0	5.1	16	7.6	56	21	15	9.3	8.5	6.4	5.4	5.4
6	5.7	4.8	14	7.3	37	18	14	9.3	8.1	6.4	5.4	5.4
7	6.6	4.8	14	8.0	30	16	14	8.9	7.8	6.0	5.4	5.4
8	5.4	5.7	11	7.6	25	15	13	8.9	7.8	6.0	5.4	5.4
9	5.1	8.7	11	14	21	13	12	8.5	7.8	5.6	5.0	5.4
10	5.7	12	12	13	19	12	12	8.5	7.4	5.6	5.0	5.4
11	7.6	7.3	12	12	17	15	12	8.5	7.4	6.0	5.0	5.6
12	5.7	5.7	10	13	16	30	11	8.5	7.4	6.4	5.4	5.6
13	6.6	5.4	8.7	34	15	24	11	8.5	7.8	5.6	5.6	5.6
14	5.7	6.0	8.0	53	14	26	15	8.1	7.4	6.0	7.4	7.0
15	4.8	6.3	7.6	48	13	36	16	8.1	7.0	5.6	6.4	6.4
16	4.5	6.8	7.6	35	12	50	12	7.8	7.0	5.6	6.0	6.0
17	4.5	6.0	7.3	36	14	39	12	7.8	7.0	5.6	5.6	7.0
18	4.5	5.7	6.6	33	46	28	12	7.8	7.0	5.6	6.7	11
19	4.5	5.4	6.4	84	68	23	11	8.5	7.0	6.0	7.0	6.7
20	4.8	5.4	6.3	123	46	20	11	9.7	7.0	5.6	6.4	6.0
21	11	5.4	7.3	91	52	18	11	8.9	7.0	5.6	6.0	5.6
22	9.5	5.4	29	56	49	16	10	8.5	8.1	5.6	6.0	5.4
23	6.2	5.7	42	41	63	16	12	8.1	7.4	5.6	11	5.4
24	6.3	5.4	41	34	51	16	11	8.1	7.0	5.4	8.1	5.0
25	7.6	5.1	27	30	36	21	11	8.9	6.7	5.4	8.5	5.0
26	5.4	5.1	20	27	29	20	10	8.5	7.4	5.6	7.4	5.0
27	12	5.1	16	23	24	38	10	9.3	7.4	5.6	7.4	5.0
28	8.4	5.7	13	20	20	33	10	8.5	7.4	5.4	6.0	5.0
29	6.3	8.0	12	20	18	28	9.7	8.1	7.0	5.4	5.6	5.0
30	6.0	7.6	11	19	-----	23	9.7	8.1	7.0	5.4	5.4	4.8
31	6.0	-----	10	24	-----	19	-----	8.1	-----	5.4	5.4	-----
TOTAL	202.4	180.9	434.3	947.6	1,023	696	373.4	266.2	240.4	180.3	191.5	172.5
MEAN	6.53	6.03	14.0	30.6	35.3	22.5	12.4	8.59	8.01	5.82	6.18	5.75
MAX	12	12	42	123	98	50	18	9.7	16	6.7	11	11
MIN	4.5	4.8	6.3	7.3	12	12	9.7	7.8	6.7	5.4	5.0	4.8
CFSM	1.01	.93	2.16	4.73	5.46	3.48	1.92	1.33	1.24	.90	.96	.89
1IN.	1.16	1.04	2.50	5.45	5.88	4.00	2.15	1.53	1.38	1.04	1.10	.99
AC-FT	401	359	861	1,880	2,030	1,380	741	520	477	358	380	342
CAL YR 1967	TOTAL	3,919.5	MEAN 10.7	MAX 116	MIN 3.9	CFSM 1.65	IN 22.54	AC-FT 7,770				
WTR YR 1968	TOTAL	4,908.5	MEAN 13.4	MAX 123	MIN 4.5	CFSM 2.07	IN 28.22	AC-FT 9,740				

MINTER CREEK BASIN

12073500 HUGE CREEK NEAR WAUNA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	6.4	8.5	17	11	12	13	8.5	6.4	5.4	4.6	4.1
2	5.0	9.3	8.5	18	13	12	14	8.2	6.4	5.4	4.6	4.1
3	5.0	6.7	22	19	19	11	12	8.2	6.4	5.4	4.6	4.4
4	6.0	6.0	27	33	21	11	17	7.4	6.0	5.7	4.6	4.1
5	5.4	5.6	23	38	18	15	17	7.4	6.0	5.7	5.2	4.4
6	6.0	5.6	16	41	16	13	14	7.4	6.0	5.7	4.9	4.1
7	5.0	6.0	17	39	18	12	12	7.4	6.0	5.7	4.6	4.1
8	5.0	11	34	30	39	11	11	7.1	6.0	5.7	4.6	4.1
9	5.4	8.9	32	39	53	10	10	7.1	5.7	5.2	4.6	4.1
10	6.4	7.8	38	43	49	10	9.6	7.1	5.7	5.7	4.6	4.1
11	6.2	18	41	45	58	9.6	9.6	7.1	5.7	6.0	4.4	4.1
12	7.0	12	29	36	49	9.6	9.6	7.1	5.7	5.4	4.4	4.4
13	8.1	8.1	21	32	35	9.6	9.6	6.7	5.7	5.4	4.4	4.4
14	6.4	7.0	20	34	30	9.6	8.9	6.7	5.7	5.4	4.1	4.4
15	6.7	6.7	17	34	27	9.6	8.5	6.7	5.4	5.4	4.4	4.4
16	5.6	6.0	14	32	28	12	8.9	6.7	5.4	5.4	4.4	4.4
17	6.4	6.0	11	28	25	21	10	6.7	5.4	5.4	4.4	7.8
18	6.7	6.7	12	23	23	19	10	6.7	5.4	5.2	4.4	8.2
19	7.4	6.4	9.7	21	21	16	12	6.7	5.4	5.2	4.4	8.2
20	7.0	6.0	8.1	18	19	13	11	6.7	5.7	5.2	4.4	7.8
21	6.0	8.5	7.4	16	17	12	9.6	6.4	5.7	5.2	4.4	5.7
22	7.0	11	7.8	14	16	12	9.6	6.4	5.7	5.2	4.4	9.6
23	6.0	8.1	18	13	16	11	11	6.4	7.4	5.2	4.4	11
24	5.4	7.8	51	12	15	10	9.2	6.4	7.4	5.2	4.4	6.0
25	5.8	7.4	50	12	14	9.6	8.9	6.7	6.7	5.2	4.4	5.7
26	6.0	6.7	32	12	14	9.6	8.5	6.7	6.7	4.9	4.4	4.6
27	5.6	6.4	24	12	13	9.6	8.5	8.2	6.0	4.6	4.4	4.6
28	6.0	5.6	18	11	12	9.2	8.2	7.4	5.7	4.6	4.4	4.6
29	6.4	10	15	11	-----	9.2	8.2	12	5.7	4.6	4.4	4.6
30	9.3	9.7	14	10	-----	8.9	7.8	10	5.7	4.6	4.1	6.7
31	6.7	-----	13	11	-----	10	-----	7.4	-----	4.6	4.1	-----
TOTAL	191.9	237.4	659.0	754	689	357.1	317.2	227.6	178.8	163.5	137.6	163.1
MEAN	6.19	7.91	21.3	24.3	24.6	11.5	10.6	7.34	5.96	5.27	4.44	5.44
MAX	9.3	18	51	45	58	21	17	12	7.4	6.0	5.2	11
MIN	5.0	5.6	7.4	10	11	8.9	7.8	6.4	5.4	4.6	4.1	4.1
CFSM	.96	1.22	3.29	3.76	3.80	1.78	1.64	1.13	.92	.81	.69	.84
IN.	1.10	1.36	3.79	4.34	3.96	2.05	1.82	1.31	1.03	.94	.79	.94
AC-FT	381	471	1,310	1,500	1,370	708	629	451	355	324	273	324

CAL YR 1968 TOTAL 5,179.2 MEAN 14.2 MAX 123 MIN 4.8 CFSM 2.19 IN 29.78 AC-FT 10,270
 WTR YR 1969 TOTAL 4,076.2 MEAN 11.2 MAX 58 MIN 4.1 CFSM 1.73 IN 23.44 AC-FT 8,090

12074500 MASON LAKE NEAR UNION, WASH.

LOCATION.--Lat 47°20'48", long 122°56'21", at line between SE& and SW¼ sec.33, T.22 N., R.2 W., Mason County, on south shore 7.6 miles east of Union.

DRAINAGE AREA.--20.2 sq mi.

PERIOD OF RECORD.--July 1951 to January 1962 (fragmentary), February 1962 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 190 ft (from topographic map). Prior to Aug. 8, 1961, nonrecording gage and Aug. 8, 1961, to Aug. 18, 1967, water-stage recorder, at site 2 miles uplake at same datum.

EXTREMES.--Maximum and minimum gage heights, in feet, for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Gage height	Date	Minimum	Gage height
1966	Jan. 14, 1966		4.20	Oct. 1-4, 1965		.40
1967	Dec. 15, 1966		3.45	Sept. 8, 9, 1967		.62
1968	Jan. 21, 1968		4.07	Aug. 13, 1968		.51
1969	Jan. 11, 1969		1.97	Sept. 14-16, 1969		.42
1970	Jan. 27, 1970		2.62	Sept. 1, 2, 1970		.30

Period of record: Maximum gage height observed, 5.02 ft Feb. 2, 1953; minimum, 0.30 ft Sept. 1, 2, 1970. High water during period Mar. 25 to Apr. 1, 1951, reached a stage of 7.5 ft, from high watermarks.

REMARKS.--No diversion above station. Logs and debris at outlet cause some minor regulation.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	JCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.65	1.05	1.49	1.73	1.32	1.59	1.03	.81	.96	1.14	.81
2	.40	.67	1.09	1.55	1.67	1.31	1.55	1.02	.82	1.23	1.16	.79
3	.40	.73	1.10	1.62	1.62	1.29	1.52	1.02	.83	1.06	1.14	.78
4	.41	.82	1.68	1.62	1.61	1.28	1.48	1.01	.83	1.09	1.14	.77
5	.50	.90	1.20	1.70	1.59	1.30	1.44	1.00	.83	1.13	1.16	.77
6	.57	.89	1.31	2.01	1.98	1.31	1.41	1.03	.83	1.10	1.14	.77
7	.57	.89	1.37	2.29	1.56	1.32	1.40	1.03	.82	1.11	1.14	.77
8	.58	.90	1.38	2.48	1.53	1.46	1.36	1.03	.82	1.12	1.13	.76
9	.57	.89	1.37	2.57	1.50	1.82	1.34	1.02	.82	1.12	1.13	.75
10	.57	.90	1.37	2.62	1.47	1.98	1.31	1.00	.82	1.11	1.13	.77
11	.56	.93	1.35	2.67	1.48	2.03	1.31	.98	.81	1.11	1.13	.86
12	.56	.93	1.32	2.92	1.47	2.04	1.29	.97	.80	1.11	1.13	.80
13	.55	.92	1.28	3.64	1.44	2.07	1.26	.96	.80	1.11	1.13	.80
14	.60	.93	1.25	4.14	1.41	2.08	1.28	.94	.80	1.12	1.12	.88
15	.62	.92	1.22	4.13	1.38	2.13	1.27	.93	.81	1.13	1.12	.88
16	.61	.91	1.18	3.87	1.36	2.15	1.25	.93	.81	1.15	1.12	.80
17	.63	.90	1.16	3.57	1.33	2.13	1.23	.93	.81	1.15	1.12	.90
18	.67	.89	1.14	3.30	1.31	2.14	1.21	.93	.81	1.16	1.12	.92
19	.71	1.00	1.12	3.06	1.30	2.12	1.17	.92	.81	1.16	1.12	.93
20	.72	1.04	1.12	2.85	1.31	2.14	1.16	.91	.81	1.16	1.11	.93
21	.72	1.05	1.10	2.65	1.30	2.12	1.14	.90	.82	1.16	1.10	.93
22	.71	1.06	1.07	2.50	1.28	2.07	1.13	.89	.84	1.16	1.07	.94
23	.70	1.05	1.08	2.35	1.27	2.02	1.12	.87	.85	1.16	1.03	.95
24	.69	1.03	1.10	2.23	1.26	1.96	1.11	.87	.87	1.15	.98	.95
25	.68	1.00	1.08	2.13	1.26	1.91	1.18	.86	.87	1.14	.94	.96
26	.67	1.04	1.07	2.03	1.26	1.86	1.08	.86	.88	1.14	.92	.97
27	.67	1.04	1.23	1.96	1.30	1.81	1.07	.85	.90	1.15	.92	.98
28	.68	1.02	1.36	1.89	1.31	1.75	1.06	.84	.94	1.15	.90	.98
29	.68	1.00	1.43	1.87	-----	1.70	1.05	.83	.94	1.15	.87	.98
30	.67	1.00	1.47	1.83	-----	1.67	1.04	.82	.95	1.15	.85	.99
31	.66	-----	1.48	1.78	-----	1.63	-----	.81	-----	1.14	.83	-----
MEAN	.60	.93	1.24	2.49	1.42	1.80	1.26	.94	.84	1.12	1.06	.88
MAX	.72	1.06	1.68	4.14	1.73	2.15	1.59	1.03	.95	1.16	1.14	.99
MIN	.40	.65	1.05	1.49	1.26	1.28	1.04	.81	.80	.96	.83	.75

CAL YR 1965 MEAN 1.05 MAX 2.68 MIN .40
WTR YR 1966 MEAN 1.22 MAX 4.14 MIN .40

12074500 MASON LAKE NEAR UNION, WASH.---CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.98	1.34			2.81			1.28	.93	.74	.71	.69
2	.98	1.33			2.72			1.26	.92	.73	.70	.70
3	.98	1.32			2.66			1.24	.92	.73	.70	.69
4	.97	1.31			2.61			1.23	.91	.73	.69	.68
5	.97	1.30			2.52			1.21	.90	.72	.68	.67
6	.97	1.30			2.43			1.20	.88	.71	.67	.65
7	.97	1.29			2.36		1.68	1.17	.87	.72	.67	.63
8	.98	1.28			2.28		1.66	1.15	.86	.73	.68	.63
9	.98	1.29			2.20		1.65	1.14	.85	.73	.69	.64
10	.98	1.29			2.14		1.63	1.13	.84	.73	.69	.69
11	.97	1.29			2.08		1.60	1.12	.83	.73	.69	.72
12	.98	1.34			2.10		1.58	1.11	.82	.73	.69	.72
13	.98	1.42			2.18		1.56	1.10	.82	.73	.70	.72
14	.98	1.56			2.18		1.52	1.10	.81	.74	.71	.72
15	.98	1.58			2.19		1.50	1.09	.81	.75	.71	.72
16	.97	1.59		2.14	2.19		1.49	1.08	.81	.75	.71	.73
17	.98	1.58		2.10			1.48	1.07	.81	.73	.71	.73
18	.97	1.57		2.06			1.47	1.06	.79	.72	.71	.73
19	1.03			2.32			1.47	1.04	.77	.73	.70	.73
20	1.14			2.75			1.44	1.03	.76	.75	.70	.73
21	1.17			2.95			1.42	1.01	.78	.76		.73
22	1.31			2.97			1.40	.99	.83	.77		.73
23	1.38			2.90			1.38	.97	.83	.77		.73
24	1.39			2.80			1.36	.96	.83	.76		.73
25	1.38			2.70			1.34	.94	.82	.75	.68	.73
26	1.38			2.67			1.34	.93	.79	.73	.69	.73
27	1.36			2.68			1.32	.91	.78	.73	.68	.73
28	1.35			2.82			1.31	.92	.77	.72	.69	.73
29	1.35			2.91	-----		1.30	.94	.76	.72	.69	.75
30	1.36			2.94	-----		1.28	.94	.75	.71	.69	.77
31	1.35	-----		2.87	-----			.93	-----	.71	.69	-----
MEAN	1.11							1.07	.83	.73		.71
MAX	1.39							1.28	.93	.77		.77
MIN	.97							.91	.75	.71		.63

NOTE.--NO GAGE-HEIGHT RECORD NOV. 18 TO JAN. 16, FEB. 16 TO APR. 7.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.87	1.28	.92	1.69	2.13	2.03	1.76	1.15	1.04	.78	.62	.74
2	.93	1.27	1.00	1.61	2.17	1.94	1.72	1.13	1.13	.77	.61	.73
3	.97	1.18	1.15	1.53	2.32	1.87	1.68	1.12	1.11	.77	.60	.71
4	.99	1.13	1.25	1.47	2.67	1.85	1.67	1.11	1.89	.76	.58	.79
5	1.02	1.10	1.36	1.41	2.79	1.84	1.66	1.08	1.07	.75	.56	.68
6	1.05	1.06	1.37	1.36	2.75	1.78	1.62	1.07	1.04	.74	.55	.67
7	1.09	1.03	1.42	1.32	2.65	1.72	1.58	1.05	1.01	.73	.55	.66
8	1.10	1.05	1.41	1.28	2.52	1.67	1.53	1.04	.98	.72	.55	.65
9	1.10	1.08	1.45	1.38	2.40	1.61	1.49	1.03	.96	.72	.54	.64
10	1.11	1.17	1.51	1.43	2.27	1.57	1.46	1.02	.95	.69	.54	.62
11	1.20	1.18	1.53	1.43	2.16	1.54	1.43	1.02	.93	.68	.54	.62
12	1.21	1.18	1.52	1.40	2.06	1.63	1.39	1.01	.92	.68	.52	.63
13	1.24	1.15	1.50	1.58	1.96	1.64	1.37	.99	.94	.68	.52	.63
14	1.23	1.15	1.45	1.82	1.87	1.66	1.38	.98	.93	.69	.57	.68
15	1.22	1.15	1.41	2.05	1.79	1.76	1.42	.97	.92	.70	.59	.70
16	1.20	1.14	1.37	2.18	1.71	1.90	1.38	.96	.91	.68	.59	.70
17	1.19	1.12	1.34	2.28	1.67	1.95	1.36	.95	.90	.68	.59	.72
18	1.18	1.08	1.30	2.32	1.81	1.94	1.33	.94	.88	.68	.61	.76
19	1.17	1.05	1.26	2.78	2.14	1.91	1.32	.95	.87	.69	.66	.74
20	1.15	1.02	1.24	3.60	2.24	1.86	1.29	.99	.86	.67	.66	.73
21	1.27	.99	1.24	4.05	2.36	1.80	1.27	1.04	.85	.67	.66	.71
22	1.32	.97	1.53	3.98	2.43	1.75	1.24	1.07	.87	.66	.66	.70
23	1.29	.95	1.85	3.73	2.52	1.72	1.27	1.07	.86	.66	.69	.69
24	1.28	.93	2.13	3.44	2.53	1.70	1.28	1.05	.85	.66	.71	.68
25	1.28	.89	2.21	3.17	2.47	1.71	1.24	1.04	.83	.65	.74	.66
26	1.23	.87	2.21	2.93	2.39	1.71	1.22	1.01	.84	.65	.76	.65
27	1.35	.85	2.15	2.73	2.30	1.81	1.20	1.02	.83	.65	.79	.64
28	1.40	.84	2.07	2.54	2.21	1.85	1.19	1.01	.81	.65	.79	.62
29	1.38	.88	1.96	2.39	2.11	1.86	1.17	.99	.81	.65	.77	.61
30	1.35	.91	1.86	2.27	-----	1.83	1.16	.97	.80	.63	.76	.61
31	1.33	-----	1.77	2.20	-----	1.79	-----	.96	-----	.62	.74	-----
MEAN	1.18	1.06	1.54	2.24	2.26	1.78	1.40	1.03	.93	.69	.63	.68
MAX	1.40	1.28	2.21	4.05	2.79	2.03	1.76	1.15	1.13	.78	.79	.74
MIN	.97	.84	.92	1.28	1.67	1.54	1.16	.94	.80	.62	.52	.61

WTR YR 1968 MEAN 1.28 MAX 4.05 MIN .11

12074500 MASON LAKE NEAR UNION, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60		1.07	1.54	1.32	1.36	1.25	1.09	.95	.71	.48	.46
2	.58		1.10	1.51	1.32	1.34	1.29	1.09	.94	.71	.48	.46
3	.57		1.27	1.51	1.34	1.32	1.28	1.08	.92	.70	.47	.45
4	.60		1.39	1.57	1.32	1.30	1.33	1.06	.91	.67	.46	.44
5	.59		1.44	1.63	1.31	1.34	1.36	1.04	.89	.67	.47	.44
6	.61		1.45	1.70	1.28	1.37	1.35	1.03	.88	.66	.46	.44
7	.58		1.48	1.75	1.29	1.36	1.33	1.01	.84	.65	.46	.44
8	.57		1.60	1.79	1.37	1.35	1.30	1.00	.83	.65	.46	.45
9	.58		1.66	1.86	1.44	1.33	1.28	.99	.83	.65	.45	.45
10	.62		1.75	1.91	1.49	1.31	1.26	.97	.81	.66	.45	.45
11	.64		1.85	1.95	1.60	1.29	1.24	.96	.80	.68	.45	.45
12	.68		1.86	1.94	1.66	1.27	1.22	.95	.78	.65	.45	.44
13	.71		1.84	1.90	1.70	1.25	1.23	.94	.77	.65	.45	.44
14	.74		1.80	1.90	1.70	1.23	1.20	.93	.76	.64	.45	.43
15	.76		1.75	1.87	1.70	1.22	1.18	.90	.75	.63	.44	.42
16			1.69	1.85	1.70	1.23	1.16	.89	.74	.63	.44	.43
17			1.63	1.81	1.67	1.35	1.19	.88	.74	.62	.43	.44
18			1.62	1.75	1.64	1.40	1.20	.87	.73	.61	.44	.65
19			1.56	1.69	1.63	1.40	1.25	.86	.72	.60	.43	.73
20			1.49	1.64	1.60	1.39	1.25	.85	.69	.63	.43	.80
21			1.44	1.57	1.57	1.36	1.24	.84	.68	.59	.43	.80
22			1.42	1.51	1.53	1.38	1.22	.84	.67	.58	.43	.86
23			1.48	1.46	1.50	1.35	1.25	.84	.68	.58	.43	1.00
24			1.58	1.42	1.48	1.32	1.22	.84	.67	.57	.43	1.01
25			1.64	1.38	1.45	1.29	1.20	.82	.66	.55	.43	1.01
26			1.65	1.36	1.43	1.27	1.18	.83	.66	.54	.43	.98
27		1.02	1.62	1.35	1.41	1.24	1.16	.85	.68	.53	.44	.95
28		1.00	1.58	1.34	1.38	1.22	1.15	.85	.72	.52	.46	.94
29		1.05	1.53	1.33	-----	1.19	1.13	.93	.72	.51	.46	.92
30		1.07	1.47	1.32	-----	1.19	1.09	.98	.72	.50	.46	.94
31		-----	1.50	1.35	-----	1.21	-----	.96	-----	.49	.46	-----
MEAN			1.56	1.63	1.49	1.30	1.23	.93	.77	.61	.45	.64
MAX			1.86	1.95	1.70	1.40	1.36	1.09	.95	.71	.48	1.31
MIN			1.07	1.32	1.28	1.19	1.09	.82	.66	.49	.43	.42

NOTE.--NO GAGE-HEIGHT RECORD OCT. 16 TO NOV.26.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	.66	.62	1.22	2.27	1.16	.94	1.00	.83	.51		.30
2	.94	.65	.61	1.17	2.15	1.14	.92	.99	.82	.51		.30
3	.91	.65	.62	1.14	2.05	1.13	.91	.96	.81	.51		.36
4	.89	.60	.62	1.11	1.94	1.10	.94	.95	.78	.51		.35
5	.86	.65	.61	1.07	1.86	1.08	1.05	.93	.76	.50		.36
6	.83	.67	.60	1.02	1.79	1.20	1.09	.93	.75	.49		.38
7	.83	.67	.60	1.00	1.72	1.32	1.07	.91	.75	.48		.41
8	.90	.66	.63	.98	1.65	1.32	1.08	.92	.72	.47		.42
9	.90	.65	.63	.98	1.57	1.29	1.26	.94	.70	.47		.42
10	.89	.63	.64	.96	1.51	1.24	1.36	.92	.70	.46		.42
11	.87	.62	.60	.95	1.45	1.24	1.37	.90	.69	.44		.42
12	.85	.60	.94	.94	1.40	1.25	1.36	.90	.68	.43		.42
13	.81	.79	1.08	1.00	1.37	1.30	1.34	.88	.67	.42		.40
14	.79	.76	1.20	1.15	1.32	1.34	1.30	.87	.64	.41		.39
15	.76	.75	1.24	1.18	1.37	1.35	1.28	.86	.65	.40		.39
16	.75	.72	1.26	1.19	1.48	1.34	1.24	.85	.63	.40		.39
17	.74	.70	1.29	1.23	1.56	1.32	1.21	.84	.63	.38		.43
18	.73	.68	1.31	1.31	1.58	1.28	1.20	.83	.63	.37		.48
19	.71	.67	1.33	1.55	1.56	1.24	1.19	.82	.62	.36		.51
20	.70	.69	1.35	1.73	1.52	1.22	1.16	.81	.61	.36		.54
21	.69	.70	1.38	1.90	1.49	1.19	1.14	.80	.61	.35		.55
22	.68	.70	1.40	2.03	1.49	1.16	1.11	.80	.60	.34		.57
23	.67	.71	1.45	2.19	1.40	1.14	1.10	.80	.59	.34		.57
24	.66	.71	1.48	2.29	1.36	1.11	1.18	.79	.57	.34		.56
25	.65	.70	1.47	2.38	1.32	1.09	1.12	.80	.55	.35		.54
26	.64	.68	1.45	2.45	1.28	1.07	1.10	.79	.54	.36		.55
27	.65	.67	1.48	2.60	1.24	1.03	1.07	.79	.54	.38		.55
28	.67	.66	1.38	2.60	1.20	1.01	1.06	.77	.53	.37		.55
29	.68	.64	1.34	2.53	-----	.99	1.04	.83	.53	.37		.55
30	.68	.63	1.30	2.42	-----	.97	1.02	.86	.51	.36		.55
31	.67	-----	1.25	2.37	-----	.96	-----	.85	-----	.36		-----
MEAN	.77	.74	1.07	1.57	1.57	1.18	1.14	.87	.65	.41		.45
MAX	.97	.67	1.48	2.60	2.27	1.35	1.37	1.00	.83	.51		.57
MIN	.64	.63	.60	.94	1.20	.96	.91	.77	.51	.34		.30

NOTE.--NO GAGE-HEIGHT RECORD AUG. 1-31.

12076500 GOLDSBOROUGH CREEK NEAR SHELTON, WASH.

LOCATION.--Lat 47°12'56", long 123°10'52", in NW¼ sec. 22, T.20 N., R.4 W., Mason County, on right bank 100 ft upstream from road bridge, 3.8 miles west of Shelton, and 5.5 miles upstream from mouth.

DRAINAGE AREA.--39.3 sq mi.

PERIOD OF RECORD.--June 1951 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 205 ft (from topographic map).

AVERAGE DISCHARGE.--19 years, 115 cfs (39.74 inches per year, 83,320 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (480 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	2030	*861	5.85	Jan. 20, 1967	1000	691	5.18	Feb. 4, 1968	0830	798	5.33
Jan. 14, 1966	0100	*861	5.85	Jan. 29, 1967	2100	526	4.48	Feb. 19, 1968	1300	752	5.15
Mar. 9, 1966	1530	563	4.66	Mar. 23, 1967	2000	658	5.04				
Dec. 1, 1966	1630	511	4.44	Jan. 14, 1968	1800	536	4.52	Jan. 5, 1969	1530	*458	3.97
Dec. 13, 1966	1300	*1,070	6.60	Jan. 19, 1968	2130	*1,430	7.49	Jan. 20, 1970	0230	*498	4.13

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 19-22, 1966	18	1.85	1968	Aug. 11, 1968	23	1.62
1967	Aug. 25-29, Sept. 9, 25-29, 1967	18	1.79	1969	Sept. 14, 1969	18	1.57
				1970	Aug. 22, 1970	17	1.59

a Occurred Sept. 28-29, 1967.

Period of record: Maximum discharge, 1,430 cfs Jan. 19, 1968 (gage height, 7.49 ft); maximum gage height, 8.51 ft Dec. 10, 1956 (backwater from bridge construction); minimum discharge, 16 cfs part or all of each day Sept. 23, 1951, Sept. 22-25, 1952, Aug. 25, 27, Sept. 8, 9, 12-14, 1958.

REMARKS.--Records excellent except those for periods of no gage-height record, which are good. No regulation or diversion above station.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	27	100	144	142	157	124	56	34	30	22	21
2	19	34	126	231	128	142	119	55	42	34	22	21
3	19	49	115	204	126	128	111	53	42	57	22	21
4	22	85	222	174	134	121	106	52	38	44	21	21
5	41	115	189	217	140	138	101	50	36	36	21	21
6	50	82	216	695	144	155	97	60	36	36	21	21
7	38	70	212	695	145	163	94	61	34	32	21	21
8	30	77	178	520	142	257	90	53	34	30	21	21
9	28	70	158	427	140	518	88	50	34	29	20	21
10	26	76	146	353	126	441	87	47	34	28	21	22
11	25	126	120	335	149	318	101	47	36	28	20	29
12	26	97	106	364	155	228	102	45	36	27	20	25
13	26	88	97	732	132	230	90	44	34	26	19	25
14	37	93	88	742	126	232	97	44	34	26	19	25
15	38	77	82	478	119	291	97	50	32	26	20	23
16	31	68	74	349	111	311	85	56	30	26	20	23
17	38	64	71	263	108	268	80	47	30	26	19	24
18	42	62	74	209	104	278	77	45	30	25	19	26
19	58	117	77	183	99	291	72	44	32	25	19	24
20	45	134	72	165	119	307	72	43	30	25	19	23
21	37	126	77	153	113	289	71	44	30	25	18	22
22	33	164	66	144	102	249	68	43	32	25	18	22
23	31	134	65	136	101	221	65	40	38	24	20	23
24	30	117	72	130	99	197	65	40	30	24	19	22
25	28	98	74	130	99	183	64	38	29	24	20	21
26	27	104	71	123	110	169	62	38	28	24	21	23
27	28	119	83	124	132	159	61	36	30	24	25	22
28	33	93	61	121	157	147	60	36	36	25	22	21
29	30	85	76	145	-----	140	58	34	32	25	22	21
30	28	90	189	161	-----	140	57	36	34	25	22	21
31	27	-----	156	159	-----	140	-----	34	-----	23	21	-----
TOTAL	992	2,741	3,513	9,006	3,502	7,008	2,521	1,423	999	886	634	676
MEAN	32.0	91.4	113	291	125	226	84.0	45.9	33.3	28.6	20.3	22.5
MAX	58	164	222	742	157	518	124	61	42	57	25	29
MIN	19	27	61	121	99	121	57	34	28	23	18	21
CFSM	.81	2.33	2.80	7.40	3.18	5.75	2.14	1.17	.85	.73	.52	.57
IN.	.94	2.59	3.33	8.52	3.31	6.63	2.39	1.35	.95	.84	.60	.64
AC-FT	1,978	5,440	6,970	17,860	6,950	13,900	5,000	2,820	1,980	1,760	1,260	1,340
CAL YR 1965	TOTAL	36,698	MEAN	95.1	MAX	688	MIN	19	CFSM	2.42	IN	32.84
WTR YR 1966	TOTAL	33,901	MEAN	92.9	MAX	742	MIN	18	CFSM	2.36	IN	32.09
									AC-FT	68,820		67,240

12076500 GOLDSBOROUGH CREEK NEAR SHELTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	43	492	247	359	240	173	90	50	31	24	21
2	21	40	416	221	345	207	163	88	48	33	23	24
3	21	38	311	285	376	185	154	84	48	30	23	21
4	21	36	251	298	425	175	148	82	45	29	22	23
5	21	36	238	298	392	167	144	80	44	29	23	20
6	20	36	244	247	343	157	135	77	42	28	24	21
7	21	36	280	221	303	152	129	74	42	28	23	20
8	22	34	240	251	273	159	123	73	42	28	23	20
9	21	38	193	244	246	175	136	71	40	26	22	23
10	20	40	244	226	231	165	125	70	40	28	24	28
11	20	38	270	274	225	156	114	69	40	27	21	29
12	22	58	366	259	248	148	118	67	40	28	21	24
13	22	78	935	278	387	142	136	64	38	27	21	22
14	22	153	654	249	370	144	127	63	38	27	21	22
15	21	142	469	280	345	168	127	62	37	26	21	21
16	21	121	409	298	317	219	127	60	36	25	21	21
17	23	95	338	255	298	195	127	58	35	25	21	20
18	22	88	287	221	301	193	138	56	35	26	21	20
19	32	82	283	322	271	177	146	56	34	30	20	20
20	71	78	313	656	240	203	127	55	35	35	20	20
21	65	78	255	515	223	187	122	54	38	30	20	20
22	128	71	205	414	209	282	120	53	46	28	20	19
23	128	62	187	365	197	501	123	51	40	27	20	19
24	104	57	325	187	320	187	113	50	37	19	19	19
25	70	109	244	292	185	394	107	49	34	26	18	18
26	56	101	199	348	173	320	109	49	33	26	18	18
27	50	121	175	392	165	267	102	46	33	26	18	18
28	44	126	171	474	208	244	99	54	32	25	18	18
29	52	124	205	508	-----	-----	97	62	31	24	19	20
30	56	304	169	487	-----	203	95	56	31	24	20	23
31	46	-----	167	405	-----	185	-----	54	-----	24	20	-----
TOTAL	1,285	2,465	9,465	10,218	7,842	6,813	3,804	1,977	1,162	855	649	629
41.5	82.2	305	330	280	220	220	127	63.7	38.7	27.6	20.9	21.0
MAX	128	304	935	656	425	501	173	90	50	35	23	29
MIN	20	34	167	221	165	142	95	46	31	24	18	18
CFSM	1.06	2.09	7.76	8.40	7.12	5.60	3.23	1.62	.98	.70	.53	.53
IN.	1.22	2.33	9.67	9.67	7.42	6.45	3.60	1.87	1.10	.81	.61	.60
AC-FT	2,550	4,890	18,770	20,270	15,550	13,510	7,550	3,920	2,300	1,700	1,290	1,250
CAL YR 1966	TOTAL 39,870	MEAN 109	MAX 935	MIN 18	CFSM 2.77	IN 37.74	AC-FT 79,080					
WTR YR 1967	TOTAL 47,164	MEAN 129	MAX 935	MIN 18	CFSM 3.28	IN 44.64	AC-FT 93,550					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	122	102	123	252	228	234	93	100	38	26	32
2	54	102	160	114	322	214	218	91	160	34	26	30
3	49	90	309	106	518	200	200	86	103	35	26	28
4	48	82	328	102	752	210	204	84	82	35	26	27
5	48	73	303	102	550	226	204	85	73	35	26	26
6	55	67	256	94	422	214	186	84	66	34	26	26
7	66	66	223	99	350	192	175	79	62	33	26	26
8	53	80	185	116	304	176	162	76	58	32	25	26
9	40	146	246	213	268	169	153	72	57	31	24	25
10	39	236	292	244	242	162	146	71	55	32	24	25
11	77	273	278	191	222	171	139	70	53	31	24	26
12	98	193	209	181	206	256	135	67	51	37	24	26
13	56	146	165	361	192	268	128	67	58	33	25	26
14	56	127	140	510	178	262	159	63	56	35	32	44
15	45	125	123	467	169	312	206	62	51	35	28	59
16	42	116	113	389	162	395	157	61	47	33	29	44
17	44	97	102	370	171	362	140	59	47	32	27	70
18	40	89	97	378	318	310	135	57	46	39	31	64
19	38	84	89	1,110	695	264	133	57	46	32	38	50
20	34	78	86	1,360	568	236	128	72	44	31	32	47
21	108	72	86	1,110	532	218	128	70	43	30	29	41
22	136	69	261	708	520	202	117	73	47	29	29	41
23	169	66	378	528	540	198	133	67	46	29	49	49
24	125	70	422	435	490	208	124	63	42	28	43	43
25	159	63	394	370	408	230	126	61	40	27	38	42
26	111	60	311	324	348	226	119	58	42	27	40	40
27	227	58	223	296	308	328	106	57	48	27	63	37
28	348	60	179	260	272	375	101	54	42	26	61	34
29	261	90	157	234	246	345	98	52	42	26	42	33
30	179	99	138	224	-----	300	93	51	40	26	35	32
31	140	-----	131	240	-----	262	-----	50	-----	26	32	-----
TOTAL	2,943	3,099	6,486	11,359	10,525	7,719	4,487	2,114	1,747	980	1,006	1,119
MEAN	94.9	103	209	366	363	249	150	68.2	58.2	31.6	32.5	37.3
MAX	348	273	422	1,360	752	395	234	93	160	39	63	70
MIN	34	58	86	94	162	162	93	50	40	24	24	25
CFSM	2.41	2.62	9.32	9.31	9.24	6.34	3.82	1.74	1.48	.80	.83	.85
IN.	2.79	2.93	6.14	10.75	9.96	7.31	4.25	2.00	1.65	.93	.95	1.06
AC-FT	5,840	6,150	12,860	22,530	20,880	15,310	8,900	4,190	3,470	1,940	2,000	2,220
CAL YR 1967	TOTAL 46,477	MEAN 127	MAX 656	MIN 18	CFSM 3.23	IN 43.99	AC-FT 92,190					
WTR YR 1968	TOTAL 53,584	MEAN 146	MAX 1,360	MIN 24	CFSM 3.72	IN 50.72	AC-FT 106,300					

12076500 GOLDSBOROUGH CREEK NEAR SHELTON, WASH.---CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	39	164	161	124	117	167	88	60	35	23	21
2	32	76	160	183	119	121	199	85	54	33	24	21
3	31	60	288	195	163	122	155	82	30	33	24	21
4	35	66	36.8	299	159	129	199	74	46	35	24	20
5	34	63	309	438	157	169	225	72	45	38	24	20
6	42	61	235	415	137	203	179	68	44	34	24	20
7	37	68	193	420	128	167	153	66	44	33	24	20
8	33	151	281	361	191	149	139	64	43	32	24	21
9	35	171	277	349	247	136	126	60	42	32	24	20
10	55	146	279	339	237	126	122	58	42	32	23	20
11	67	214	287	321	325	119	113	61	42	36	23	20
12	76	224	245	273	319	112	110	58	40	33	23	21
13	113	171	199	229	249	108	136	58	40	31	24	22
14	117	140	177	217	207	103	127	56	39	31	23	19
15	108	122	163	207	193	106	105	57	37	30	23	20
16	88	106	153	193	201	115	100	56	37	29	22	22
17	79	98	139	189	187	219	112	54	36	29	21	35
18	80	113	157	165	175	207	130	52	36	29	21	44
19	105	135	151	165	165	179	129	52	35	28	22	46
20	119	100	121	143	155	159	171	52	37	27	22	42
21	96	121	112	134	143	143	151	51	36	27	21	36
22	112	204	108	122	137	149	134	49	36	27	20	54
23	94	186	167	113	132	153	149	46	41	26	20	94
24	149	129	110	130	129	139	67	40	25	19	70	70
25	78	126	251	108	128	121	122	48	39	24	21	57
26	73	117	211	105	126	115	113	50	42	24	21	44
27	66	144	187	101	122	108	100	54	46	24	23	38
28	62	131	155	98	121	105	94	54	34	23	36	44
29	66	167	94	91	-----	100	91	106	37	24	22	34
30	76	175	119	91	-----	101	90	113	36	24	21	41
31	64	-----	113	112	-----	130	-----	75	-----	23	21	-----
TOTAL	2,167	3,852	6,123	6,436	4,877	4,236	4,120	1,970	1,241	912	694	999
MEAN	69.9	126	198	208	137	137	137	63.5	41.4	29.4	22.3	33.3
MAX	119	224	368	438	325	219	225	113	60	38	24	94
MIN	31	59	108	91	119	100	90	46	35	23	19	19
CFSM	1.78	3.26	5.04	5.29	4.43	3.49	3.49	1.62	1.05	.75	.57	.85
IN-	2.05	3.65	5.80	6.09	4.62	4.01	3.90	1.86	1.17	.86	.66	.95
AC-FT	4,300	7,640	12,140	12,770	9,670	8,400	8,170	3,910	2,460	1,810	1,360	1,980
CAL YR 1968	TOTAL 53,198	MEAN 145	MAX 1,360	MIN 24	CFSM 3.69	IN 50.36	AC-FT 105,500					
WTR YR 1969	TOTAL 37,627	MEAN 103	MAX 438	MIN 19	CFSM 2.62	IN 35.62	AC-FT 74,630					

NOTE.--NO GAGE-HEIGHT RECORD APR. 25 TO JUNE 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	36	46	81	250	88	75	82	43	28	24	20
2	47	34	44	76	220	86	74	81	41	28	24	20
3	38	35	64	76	200	84	69	78	38	27	25	20
4	36	50	53	70	180	82	86	75	38	26	24	25
5	33	167	47	66	170	78	167	74	38	26	24	24
6	32	141	48	63	160	200	199	69	37	26	24	28
7	36	115	48	60	150	240	167	68	36	26	24	46
8	65	92	148	169	140	190	151	81	36	27	24	31
9	65	81	59	78	130	160	287	81	38	24	24	26
10	52	69	62	70	120	130	372	80	41	24	24	24
11	46	62	149	84	110	120	275	72	37	24	23	22
12	41	55	221	86	100	160	187	68	37	24	22	22
13	39	53	271	124	95	190	157	68	35	23	22	21
14	37	49	313	301	90	210	137	64	35	24	21	20
15	36	48	267	251	150	230	125	59	35	25	20	20
16	35	48	203	185	250	200	113	58	35	25	20	20
17	34	46	191	205	300	167	105	56	35	27	20	26
18	34	43	187	261	250	147	111	54	35	27	20	41
19	33	42	169	404	190	131	119	52	34	27	19	40
20	34	55	169	450	160	125	100	52	31	27	19	36
21	34	64	189	418	150	115	96	50	30	26	19	34
22	32	165	182	140	105	92	102	50	30	26	19	43
23	32	66	245	450	130	104	93	50	31	25	19	41
24	31	69	241	380	120	109	125	48	29	24	20	33
25	30	58	189	400	110	96	127	47	28	28	20	28
26	30	54	161	410	100	90	117	46	28	33	20	26
27	41	133	450	410	87	100	107	46	28	32	19	24
28	47	50	117	400	90	82	93	46	27	27	20	23
29	41	48	102	300	-----	82	92	54	26	26	20	23
30	40	47	93	220	-----	78	88	58	27	26	19	22
31	38	-----	87	270	-----	76	-----	47	-----	25	19	-----
TOTAL	1,220	1,921	4,394	7,157	4,350	4,042	4,113	1,914	1,019	810	661	838
MEAN	39.4	64.0	142	231	155	130	137	61.7	34.0	26.1	21.3	27.9
MAX	65	167	313	450	300	240	372	82	43	33	25	46
MIN	30	34	44	60	90	76	69	46	26	23	19	20
CFSM	1.00	1.63	3.61	5.88	3.94	3.31	3.49	1.57	.87	.66	.54	.71
IN-	1.15	1.82	4.16	6.77	4.12	3.83	3.89	1.81	.96	.77	.63	.79
AC-FT	2,420	3,810	8,720	14,200	8,630	8,020	8,160	3,800	2,020	1,610	1,310	1,660
CAL YR 1969	TOTAL 33,020	MEAN 90.5	MAX 438	MIN 19	CFSM 2.30	IN 31.26	AC-FT 65,500					
WTR YR 1970	TOTAL 32,439	MEAN 88.9	MAX 450	MIN 19	CFSM 2.26	IN 30.71	AC-FT 64,340					

NOTE.--NO GAGE-HEIGHT RECORD JAN. 23 TO MAR. 16.

12078400 KENNEDY CREEK NEAR KAMILCHE, WASH.

LOCATION.--Lat 47°04'37", long 123°07'33", in SW¼ sec.1, T.18 N., R.4 W., Mason County, on left bank 100 ft upstream from Kennedy Falls, 2.2 miles upstream from mouth at Oyster Bay, and 3.9 miles south of Kamilche.

DRAINAGE AREA.--17.4 sq mi.

PERIOD OF RECORD.--February 1960 to September 1970.

GAGE.--Water-stage recorder. Concrete control since July 13, 1961. Altitude of gage is 110 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 59.6 cfs (43,180 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (400 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	2330	418	4.82	Jan. 19, 1967	1900	648	3.58	Jan. 4, 1969	2330	404	3.76
Jan. 15, 1966	2130	460	5.08					Jan. 7, 1969	0600	*507	3.26
Mar. 9, 1966	0430	*545	5.58	Jan. 20, 1968	2100	444	3.11				
				Feb. 4, 1968	0400	*560	3.47	Jan. 19, 1970	1230	420	3.10
Dec. 13, 1966	1045	*820	3.80	Feb. 19, 1968	0100	400	3.00	Jan. 27, 1970	0130	*487	3.26

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 22, 1966	1.9	a.76	1969	Sept. 9, 10, 14, 1969	2.6	.82
1967	Aug. 27, 1967	1.6	.77	1970	Aug. 22-24, 1970	1.6	.79
1968	Aug. 11-13, 1968	3.4	b.86				

a Occurred Oct. 2, 1965.

b Occurred Oct. 1, 1967.

Period of record: Maximum discharge, 1,110 cfs Nov. 20, 1962 (gage height, 4.19 ft), from rating curve extended above 400 cfs on basis of slope-area measurement at gage height 4.16 ft; maximum gage height, 5.58 ft (backwater from log) Mar. 9, 1966; minimum discharge, 1.6 cfs Aug. 27, 1967, Jan. 22, 23, 24, 1970; minimum gage height, 0.76 ft Oct. 2, 1965.

REMARKS.--Records excellent. Slight regulation from fishway at Summit Lake 5.5 miles upstream. No diversion above station.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	5.4	51	125	72	112	67	21	10	5.4	3.2	3.2
2	2.5	6.0	59	185	64	96	62	20	10	6.9	3.0	3.2
3	2.5	13	69	150	61	86	57	20	10	13	3.0	3.0
4	3.2	34	151	137	61	80	52	19	8.8	10	3.0	3.0
5	10	42	113	206	67	86	47	18	8.3	8.8	3.0	2.8
6	14	27	118	392	82	88	44	22	9.8	7.8	3.0	2.8
7	9.0	22	117	367	83	85	42	20	9.8	7.4	3.0	2.8
8	6.0	25	104	372	82	205	38	17	8.3	6.5	3.0	2.8
9	4.8	22	91	297	85	451	35	14	6.9	6.1	3.0	3.0
10	4.2	26	84	238	75	260	34	13	7.8	5.7	3.0	3.2
11	3.8	69	74	223	91	185	53	13	8.8	5.7	3.0	4.4
12	3.6	47	66	231	99	146	53	12	8.3	5.4	2.8	4.6
13	3.6	42	60	404	87	149	47	11	8.3	5.0	3.0	4.4
14	7.7	39	56	398	82	145	51	11	7.8	5.0	3.0	3.8
15	12	36	51	287	71	252	47	14	5.7	5.0	2.8	3.8
16	7.7	33	49	220	62	283	44	18	5.4	5.0	2.8	3.8
17	7.0	29	46	174	60	216	42	14	5.0	5.0	3.0	4.4
18	8.5	27	44	143	60	214	39	13	5.0	4.6	3.0	5.4
19	20	59	43	120	59	211	36	11	5.0	4.6	2.8	4.6
20	12	64	43	100	58	223	36	11	5.0	4.4	2.8	4.0
21	9.4	65	44	89	57	198	34	11	4.6	4.0	2.5	3.5
22	7.7	98	40	81	56	172	32	11	5.7	4.0	2.3	3.2
23	6.4	81	40	78	56	152	30	10	5.4	3.8	2.5	4.0
24	6.2	70	44	73	52	142	28	10	5.4	3.5	2.8	4.0
25	5.6	58	43	69	53	126	27	12	5.0	3.5	3.0	4.0
26	5.4	61	42	64	54	114	26	11	4.6	3.5	3.2	4.6
27	5.4	68	84	63	88	106	24	9.8	5.0	3.5	3.8	4.4
28	6.4	59	171	60	117	94	23	12	6.5	3.5	3.2	4.0
29	6.0	53	184	65	-----	77	22	13	5.7	3.2	3.2	3.8
30	5.6	52	192	82	-----	79	21	12	5.4	3.2	3.5	3.2
31	5.4	-----	136	85	-----	74	-----	11	-----	3.2	3.5	-----
TOTAL	214.5	1,332.4	2,509	5,578	1,994	4,907	1,193	434.8	207.3	166.2	92.7	111.7
MEAN	6.92	44.4	80.9	180	71.2	158	39.8	14.0	6.91	5.36	2.89	3.72
MAX	20	98	192	404	117	451	67	22	10	13	3.8	5.4
MIN	2.5	5.4	40	60	52	74	21	9.8	4.6	3.2	2.3	2.8
AC-FT	425	2,640	4,980	11,060	3,960	9,730	2,370	862	411	330	184	222
CAL YR 1965	TOTAL	17,922.2	MEAN	49.1	MAX	587	MIN	2.4	AC-FT	35,550		
WTR YR 1966	TOTAL	18,740.6	MEAN	51.3	MAX	451	MIN	2.3	AC-FT	37,170		

KENNEDY CREEK BASIN

12078400 KENNEDY CREEK NEAR KAMILCHE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	11	250	143	186	79	73	34	9.3	3.7	2.7	2.2
2	9.2	9.8	207	126	160	73	55	32	9.8	3.4	2.7	2.2
3	3.0	9.3	163	175	175	89	90	31	10	3.4	2.7	2.2
4	3.0	8.8	234	200	179	62	49	29	8.8	3.2	2.7	2.0
5	3.0	8.8	280	188	153	57	44	27	7.9	3.2	2.7	2.0
6	3.0	8.8	250	182	134	50	42	25	7.4	3.1	2.7	2.0
7	3.0	8.3	227	164	114	47	40	24	7.0	3.4	2.7	2.0
8	3.2	7.8	174	172	99	52	38	23	7.0	3.4	2.7	2.0
9	3.2	7.8	145	153	89	59	39	22	6.6	3.4	2.7	2.7
10	3.2	8.8	154	143	81	52	35	21	6.2	3.2	2.4	3.2
11	3.2	8.8	160	170	81	48	32	20	5.9	3.2	2.4	3.7
12	4.0	15	268	172	105	46	33	19	5.9	3.0	2.4	2.7
13	4.4	36	617	182	263	43	45	18	6.2	3.0	2.4	2.4
14	4.0	104	380	172	203	44	41	18	6.2	3.0	2.4	2.2
15	4.0	85	298	191	203	79	38	17	5.9	3.0	2.2	2.0
16	3.8	66	257	198	175	112	45	16	5.9	2.7	2.2	2.2
17	3.8	51	206	164	177	106	55	16	5.6	2.7	2.2	2.2
18	3.8	44	175	141	175	106	73	15	4.9	2.7	2.2	2.2
19	5.4	40	177	372	147	90	77	14	4.9	3.2	2.2	2.2
20	22	36	175	452	125	101	69	14	5.2	3.7	2.2	2.2
21	19	36	147	337	106	101	63	12	6.6	3.7	2.2	2.4
22	45	32	126	260	93	204	55	12	9.8	3.4	2.2	2.7
23	47	28	116	213	83	369	52	11	6.6	3.2	2.0	2.7
24	32	26	149	175	76	312	49	11	5.9	3.0	2.0	2.7
25	20	43	145	193	72	248	45	11	4.9	3.0	2.0	2.7
26	16	44	123	188	65	198	43	10	4.6	3.0	2.0	2.7
27	14	50	106	245	58	160	41	9.8	4.6	3.0	1.8	2.7
28	11	50	95	330	74	140	39	10	4.3	3.0	1.8	2.7
29	12	58	112	319	-----	116	37	10	4.3	2.7	1.8	3.7
30	14	129	93	269	-----	101	37	10	4.0	2.7	2.2	3.7
31	12	-----	97	208	-----	90	-----	10	-----	2.7	2.2	-----
TOTAL	331.4	1,871.0	6,106	6,557	3,651	3,410	1,434	551.8	192.2	97.3	71.7	75.2
MEAN	10.7	35.7	197	212	130	110	47.8	17.8	6.41	3.14	2.31	2.51
MAX	47	129	617	452	263	369	77	34	10	3.7	2.7	3.7
MIN	3.0	7.8	93	126	58	43	32	9.8	4.0	2.7	1.8	2.0
AC-FT	657	2,120	12,110	13,010	7,240	6,760	2,840	1,090	381	193	142	149

CAL YR 1966 TOTAL 22,193.1 MEAN 60.8 MAX 617 MIN 2.3 AC-FT 44,020

WTR YR 1967 TOTAL 23,548.6 MEAN 64.5 MAX 617 MIN 1.8 AC-FT 46,710

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	46	65	76	97	89	91	34	37	10	4.1	9.6
2	12	38	110	68	210	82	79	32	95	9.6	4.1	9.1
3	11	36	254	62	342	72	68	30	68	9.1	4.1	8.0
4	10	29	255	62	434	76	67	28	55	8.6	4.5	7.2
5	9.8	25	232	58	270	81	66	34	46	8.0	4.5	6.6
6	9.3	22	195	54	192	72	63	35	38	7.6	4.1	6.2
7	11	20	195	56	150	67	57	29	35	7.2	4.1	6.0
8	9.3	26	158	66	123	62	51	27	30	6.8	4.1	6.0
9	6.6	73	170	177	105	57	47	26	28	6.4	3.9	5.9
10	7.0	118	185	172	91	55	46	23	26	6.4	3.4	5.8
11	19	143	188	131	82	56	42	22	23	6.4	3.4	5.8
12	17	99	152	127	75	104	41	21	21	8.6	3.4	5.9
13	15	74	123	218	68	102	39	21	24	7.2	3.6	6.0
14	17	66	105	261	63	116	55	19	21	7.6	6.4	8.5
15	12	68	91	235	58	190	99	18	18	8.6	5.3	19
16	9.8	82	79	200	55	240	76	17	17	7.2	5.3	15
17	8.4	74	72	195	58	190	67	16	16	6.8	4.9	28
18	7.9	68	67	182	144	147	62	16	15	6.4	4.9	23
19	9.8	63	62	312	348	118	57	16	14	6.4	9.1	20
20	8.8	56	56	351	258	102	54	20	13	6.4	8.6	16
21	34	51	57	348	321	89	52	24	12	6.4	6.0	14
22	58	47	121	246	315	81	47	24	16	6.4	6.0	13
23	84	44	156	188	309	76	54	23	14	6.0	12	16
24	62	47	185	150	249	78	50	20	12	5.7	16	15
25	68	42	190	119	202	92	48	20	11	5.3	14	13
26	49	40	158	109	163	89	47	19	12	5.3	16	12
27	138	37	131	94	133	113	43	19	12	5.3	14	11
28	186	37	110	82	112	276	40	19	12	4.9	22	10
29	98	60	95	76	99	215	37	17	12	4.5	16	9.5
30	72	65	89	71	-----	152	36	16	11	4.5	12	9.0
31	57	-----	81	85	-----	109	-----	16	-----	4.1	9.6	-----
TOTAL	1,124.1	1,696	4,187	4,631	5,126	3,448	1,681	705	764	209.7	239.6	340.1
MEAN	36.3	56.5	135	149	177	111	56.0	22.7	25.5	6.76	7.73	11.3
MAX	186	143	255	351	434	276	99	35	95	10	22	28
MIN	6.6	20	56	54	55	55	36	16	11	4.1	3.4	5.8
AC-FT	2,230	3,360	8,300	9,190	10,170	6,840	3,330	1,400	1,520	416	675	475

CAL YR 1967 TOTAL 23,047.3 MEAN 63.1 MAX 452 MIN 1.8 AC-FT 45,710

WTR YR 1968 TOTAL 24,151.5 MEAN 66.0 MAX 434 MIN 3.4 AC-FT 47,900

12078400 KENNEDY CREEK NEAR KAMILCHE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	41	141	95	72	54	54	36	17	7.0	4.3	3.2
2	8.6	52	135	114	80	53	75	34	14	6.6	4.3	3.2
3	8.0	55	249	174	110	54	59	32	13	7.0	4.3	3.2
4	10	49	291	264	130	53	29	12	8.8	4.3	2.9	2.9
5	13	46	222	324	130	82	82	27	10	16	4.3	2.9
6	21	42	168	291	105	90	68	25	10	9.9	4.3	2.9
7	19	44	153	432	103	77	59	23	10	8.4	4.3	2.9
8	16	82	232	309	294	67	52	22	9.9	7.4	4.0	2.9
9	14	97	235	324	264	60	47	20	9.9	6.6	4.0	2.9
10	25	91	279	294	232	56	44	19	9.9	7.0	3.7	2.9
11	38	156	321	240	340	52	40	19	9.9	8.8	3.4	2.9
12	45	188	255	195	270	47	40	17	9.9	7.4	3.4	2.9
13	76	139	208	162	202	45	56	17	9.9	6.6	3.4	3.2
14	72	114	165	153	158	36	45	16	8.8	6.2	3.2	2.9
15	74	97	143	136	137	36	42	14	8.4	5.9	3.2	2.9
16	66	82	123	123	134	44	38	14	7.4	5.6	2.9	3.4
17	62	74	92	109	121	106	44	13	7.0	5.6	2.9	5.6
18	56	71	123	98	111	112	56	13	7.0	5.6	3.2	9.9
19	62	63	100	68	103	109	87	13	7.0	5.6	3.2	12
20	80	62	89	80	95	93	82	12	7.4	5.2	3.4	9.4
21	64	77	83	74	87	78	71	12	7.0	5.2	3.7	8.4
22	68	145	79	67	81	77	63	11	7.4	4.9	3.4	15
23	68	133	114	60	78	74	70	10	11	4.6	3.2	30
24	54	110	152	56	12	63	59	10	11	4.6	3.2	24
25	50	91	150	53	70	56	53	10	11	4.6	3.4	16
26	47	88	127	51	65	51	49	11	9.4	4.3	3.4	12
27	41	109	116	50	62	47	45	13	8.8	4.3	4.0	9.4
28	39	103	94	48	59	45	43	13	9.9	4.3	4.3	8.4
29	38	135	68	42	40	42	27	9.4	4.3	4.0	7.4	9.4
30	52	143	71	44	44	40	38	10	7.9	4.3	3.7	8.8
31	44	-----	79	74	-----	46	-----	19	-----	4.3	3.2	-----
TOTAL	1,331.2	2,779	4,871	4,628	3,765	1,945	1,685	581	290.2	196.5	113.5	224.4
MEAN	42.9	92.6	157	149	134	62.7	56.2	18.7	9.67	6.34	3.66	7.46
MAX	80	188	321	432	340	112	87	36	17	16	4.3	30
MIN	8.0	41	71	44	59	36	36	10	7.0	4.3	2.9	2.9
AC-FT	2,640	5,510	9,660	9,180	7,470	3,860	3,340	1,150	576	390	225	445

CAL YR 1968 TOTAL 26,125.6 MEAN 71.4 MAX 432 MIN 3.4 AC-FT 51,820
WTR YR 1969 TOTAL 22,409.8 MEAN 61.4 MAX 434 MIN 2.9 AC-FT 44,450

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	12	21	58	162	46	27	44	14	4.9	3.2	2.0
2	21	12	20	54	128	44	26	40	12	4.9	3.2	2.2
3	24	12	21	49	126	41	24	37	11	4.6	3.2	4.6
4	22	57	25	45	107	39	36	36	11	4.0	3.2	4.0
5	21	70	23	43	98	36	49	34	11	4.0	3.0	3.2
6	19	58	23	40	90	65	74	32	9.8	4.0	2.7	5.9
7	20	47	24	39	93	99	76	30	9.3	4.0	3.0	11
8	39	40	27	40	82	76	65	33	8.8	3.7	3.2	9.2
9	49	36	29	42	74	59	152	35	10	3.4	3.0	3.7
10	36	32	30	38	67	50	191	38	10	3.4	2.7	3.4
11	31	29	79	40	59	50	141	32	9.3	3.4	2.4	3.0
12	26	26	170	41	54	59	107	32	8.8	3.4	2.4	2.7
13	24	25	157	83	48	64	68	32	8.8	3.4	2.7	2.4
14	21	24	164	301	44	85	76	27	8.8	3.4	2.4	2.4
15	20	22	140	184	96	90	64	26	8.8	3.4	2.2	2.4
16	19	23	116	145	287	95	56	24	8.4	3.7	2.0	2.7
17	18	21	101	149	275	82	50	23	7.9	3.7	2.0	4.3
18	17	20	99	226	251	72	49	21	7.0	3.4	2.0	12
19	16	20	95	355	188	64	47	20	6.6	3.4	1.8	11
20	16	24	95	266	151	57	42	19	6.2	3.4	1.8	9.8
21	15	29	116	263	126	50	39	19	5.9	3.4	2.0	7.9
22	14	25	156	254	104	44	36	19	5.4	3.4	1.8	11
23	14	30	279	245	90	45	37	18	5.2	3.4	1.6	11
24	14	32	234	237	49	48	38	18	5.2	3.4	1.8	7.0
25	12	29	166	263	69	41	73	17	4.9	4.8	2.0	6.2
26	12	27	134	311	63	38	67	16	4.9	4.9	2.8	4.9
27	13	26	104	411	57	36	67	16	4.9	5.2	1.8	4.6
28	14	24	90	275	52	33	57	15	4.9	4.3	2.0	4.6
29	14	24	79	205	-----	32	53	17	4.6	4.0	2.0	4.0
30	13	22	72	155	-----	30	48	17	4.9	4.0	1.8	4.0
31	12	-----	63	164	-----	28	-----	15	-----	3.7	1.8	-----
TOTAL	620	878	2,952	5,021	3,120	1,698	1,963	799	238.5	119.5	72.7	162.2
MEAN	20.0	28.3	95.2	162	111	54.8	63.4	25.8	7.95	3.85	2.35	5.41
MAX	49	70	279	411	287	99	191	46	14	5.2	3.2	12
MIN	12	12	28	38	44	28	24	15	4.6	3.4	1.6	2.8
AC-FT	1,230	1,740	5,640	9,960	6,190	3,370	3,890	1,580	473	237	144	322

CAL YR 1969 TOTAL 17,878.6 MEAN 49.0 MAX 432 MIN 2.9 AC-FT 35,460
WTR YR 1970 TOTAL 17,643.9 MEAN 48.3 MAX 411 MIN 1.6 AC-FT 35,080

DESCHUTES RIVER BASIN

12079000 DESCHUTES RIVER NEAR RAINIER, WASH.

LOCATION.--Lat 46°51'08", long 122°40'03", in SE&SW sec.22, T.16 N., R.1 E., Thurston County, on right bank 75 ft upstream from county road crossing, 0.4 mile downstream from outlet of Reichel Lake, 2.7 miles southeast of Rainier, and at mile 25.9.

DRAINAGE AREA.--89.8 sq mi.

PERIOD OF RECORD.--June 1949 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 350 ft (from topographic map).

AVERAGE DISCHARGE.--21 years, 261 cfs (39.47 inches per year, 189,100 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	0200	*3,110	10.22	Jan. 28, 1967	0915	2,540	9.08	Feb. 8, 1969	2200	2,180	8.41
Mar. 9, 1966	1415	2,820	9.64								
Dec. 4, 1966	1615	2,380	8.77	Feb. 4, 1968	0930	*3,200	10.43	Dec. 23, 1969	0215	2,420	8.87
Dec. 13, 1966	1745	*3,940	11.87	Dec. 4, 1968	0115	*2,480	8.99	Jan. 14, 1970	1100	*5,060	10.16
Jan. 19, 1967	2345	3,900	11.79	Jan. 7, 1969	0800	2,080	8.20	Jan. 27, 1970	0500	2,240	8.53
								Feb. 16, 1970	1015	2,400	8.11

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1-3, 1965	a25		1969	Sept. 11-16, 1969	31	2.96
1967	Sept. 20-21, 1967	25	b2.73	1970	Aug. 22-23, 1970	23	c3.13
1968	Aug. 10-11, 1968	35	3.00				

a Minimum daily.

b Occurred Oct. 19, 1966.

c Occurred June 20-21, 1970.

Period of record: Maximum discharge, 5,620 cfs Dec. 12, 1955 (gage height, 13.06 ft); minimum, 16 cfs Sept. 7, 1963 (gage height, 2.60 ft).

REMARKS.--Records good. Probably some small diversion for irrigation and domestic use above station. No regulation. Water-quality records for the water years 1968-70 are published in reports of the Geological Survey.

REVISIONS.--WSP 1246: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	25	31	117	267	369	354	411	122	73	67	38	30		
2	25	31	206	447	300	279	369	124	85	74	37	30		
3	25	45	188	400	255	246	318	138	79	149	37	30		
4	27	211	372	336	232	222	279	155	74	155	37	29		
5	37	166	294	870	255	232	261	174	70	117	37	29		
6	60	136	224	2,290	384	279	267	214	67	99	36	28		
7	50	101	345	1,380	348	336	285	191	69	86	35	28		
8	38	82	422	1,500	306	613	288	157	69	79	35	28		
9	35	73	294	1,040	291	2,540	273	149	67	73	36	27		
10	33	69	227	667	279	1,360	267	140	74	67	36	29		
11	31	88	178	586	294	746	404	128	82	65	36	42		
12	29	78	146	619	357	526	756	118	80	62	34	42		
13	30	70	128	830	291	558	540	113	73	59	34	34		
14	45	67	115	1,380	261	789	426	113	69	57	35	32		
15	130	65	104	957	232	918	369	109	65	56	34	34		
16	85	59	96	637	217	888	330	118	63	35	34	32		
17	60	55	90	477	201	608	291	113	62	52	34	33		
18	50	54	85	384	188	575	252	104	59	50	33	53		
19	51	124	80	327	178	846	224	99	58	49	32	46		
20	59	157	79	285	193	736	222	98	56	47	31	36		
21	51	176	88	255	209	636	206	101	55	46	31	32		
22	45	411	82	232	209	526	188	102	59	45	31	31		
23	41	303	79	217	217	473	178	94	54	44	31	33		
24	38	196	153	206	209	473	178	90	54	44	31	34		
25	36	146	146	188	204	478	160	85	51	48	31	33		
26	34	128	118	176	201	541	155	86	50	45	32	38		
27	33	264	571	183	243	580	149	86	50	43	34	38		
28	34	217	1,370	196	430	523	140	82	108	41	38	33		
29	34	157	948	360	-----	471	132	79	91	40	34	31		
30	32	130	517	459	-----	463	126	74	72	39	33	31		
31	32	-----	330	456	-----	462	-----	73	-----	38	32	-----		
TOTAL	1,335	3,890	8,192	18,807	7,353	19,277	8,444	3,629	2,038	1,991	1,059	1,006		
MEAN	43.1	130	264	607	263	622	281	117	67.9	64.2	34.2	33.5		
MAX	130	411	1,370	2,290	430	2,540	756	214	108	155	38	53		
MIN	25	31	79	176	178	222	126	73	50	38	31	27		
CFSM	.48	1.45	2.94	6.76	2.93	6.91	3.13	1.30	.76	.71	.38	.37		
IN-	.25	1.61	3.39	7.79	3.05	7.99	3.50	1.50	.84	.82	.44	.42		
AC-FT	2,650	7,720	16,250	37,300	14,580	38,240	16,750	7,280	4,040	3,950	2,100	2,000		
CAL YR 1965	TOTAL	69,448	MEAN	190	MAX	2,070	MIN	25	CFSM	2.12	IN	28.77	AC-FT	137,800
WTR YR 1966	TOTAL	77,021	MEAN	211	MAX	2,540	MIN	25	CFSM	2.35	IN	31.91	AC-FT	152,800

12079000 DESCHUTES RIVER NEAR RAINIER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	30	67	897	499	656	303	267	176	99	58	40	32		
2	31	63	1,130	439	569	279	237	166	99	56	39	36		
3	31	59	1,010	527	495	252	222	159	99	54	37	38		
4	29	56	1,620	694	460	227	219	154	94	52	37	37		
5	29	56	1,210	724	425	209	224	149	89	51	37	36		
6	28	61	877	565	375	196	206	151	86	50	37	36		
7	28	56	845	492	336	186	201	159	83	49	40	35		
8	30	52	543	485	309	186	196	171	80	49	41	33		
9	31	49	390	446	285	291	204	176	77	49	38	33		
10	30	49	453	397	264	294	198	160	74	47	38	39		
11	28	47	713	551	252	264	186	149	73	46	38	59		
12	30	106	1,430	541	243	235	178	145	71	45	37	48		
13	39	173	3,390	776	620	222	237	134	69	44	35	35		
14	40	635	1,940	852	565	211	267	128	67	43	34	31		
15	33	990	932	732	481	492	230	126	65	43	33	30		
16	31	534	632	760	432	660	222	139	64	42	33	28		
17	30	369	506	586	464	672	219	160	62	41	33	27		
18	29	264	439	467	608	656	279	158	61	41	33	26		
19	29	210	415	1,650	481	548	348	154	59	42	32	26		
20	134	182	586	2,800	390	495	291	150	60	45	31	25		
21	215	159	481	1,420	339	470	252	154	75	46	32	26		
22	290	138	387	860	303	740	255	148	230	43	32	26		
23	310	122	393	640	276	1,310	230	133	138	42	33	27		
24	197	111	315	520	255	968	209	120	100	42	34	27		
25	136	129	384	439	240	700	206	109	84	42	34	27		
26	108	168	394	453	227	548	222	101	75	43	34	26		
27	107	188	339	996	214	450	227	98	70	42	34	27		
28	94	234	300	2,270	227	387	219	98	66	42	33	27		
29	83	195	324	1,570	-----	348	198	107	63	41	32	29		
30	81	823	327	1,400	-----	321	188	120	61	41	31	35		
31	73	-----	297	852	-----	297	-----	111	-----	40	32	-----		
TOTAL	2,414	6,345	23,839	26,405	10,791	13,417	6,837	4,363	2,493	1,411	1,084	967		
MEAN	77.9	212	769	852	385	433	228	141	83.1	45.5	35.0	32.2		
MAX	310	990	3,390	2,800	656	1,310	348	176	230	58	41	59		
MIN	28	47	297	397	214	186	178	98	59	40	31	25		
CFSM	.87	2.36	8.56	9.49	4.29	4.82	2.54	1.57	.93	.51	.39	.36		
IN.	1.00	2.63	9.88	10.94	4.47	5.56	2.83	1.81	1.03	.58	.45	.40		
AC-FT	4,790	12,590	47,280	52,370	21,400	26,610	13,560	8,650	4,940	2,800	2,150	1,920		
CAL YR 1966	TOTAL	96,202	MEAN	264	MAX	3,390	MIN	29	CFSM	2.94	IN	39.85	AC-FT	190,800
WTR YR 1967	TOTAL	100,366	MEAN	275	MAX	3,390	MIN	25	CFSM	3.06	IN	41.58	AC-FT	199,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	58	181	206	213	238	240	338	158	157	69	42	88		
2	82	151	924	203	935	221	308	142	1,100	67	42	82		
3	131	134	1,280	185	1,870	203	281	133	671	65	42	73		
4	132	120	1,040	173	2,510	195	254	129	376	63	42	66		
5	78	115	904	163	1,130	221	275	133	274	61	42	62		
6	67	106	578	151	634	224	269	131	218	60	41	59		
7	62	101	445	149	459	203	246	127	186	58	41	56		
8	56	102	347	158	383	190	227	123	165	57	39	55		
9	53	258	299	854	341	170	208	118	149	56	39	53		
10	50	648	323	895	305	161	195	114	136	56	38	52		
11	84	636	477	449	278	154	185	110	129	55	37	51		
12	117	345	377	362	252	232	173	108	122	59	36	52		
13	122	246	302	845	229	254	161	106	114	59	37	50		
14	211	206	254	850	210	229	168	102	109	57	42	59		
15	138	191	224	899	193	494	314	98	102	59	46	105		
16	102	164	203	845	183	1,080	293	94	96	57	44	113		
17	85	146	190	634	185	724	243	91	92	54	43	99		
18	76	136	178	477	505	463	213	89	89	53	43	254		
19	87	126	166	480	1,690	350	195	89	88	53	60	230		
20	75	117	151	630	1,110	293	180	112	86	55	59	172		
21	171	109	147	872	967	254	183	106	82	52	52	134		
22	261	104	243	598	751	227	170	96	86	51	48	112		
23	276	99	392	438	805	213	173	92	85	51	57	100		
24	209	102	407	368	751	227	168	97	81	49	152	90		
25	318	102	410	317	529	269	161	98	76	48	133	82		
26	264	96	431	284	407	305	158	99	73	48	196	76		
27	300	91	377	249	344	540	151	92	73	46	166	72		
28	840	91	323	224	299	1,390	145	90	74	45	239	68		
29	429	164	278	208	266	805	145	88	79	44	176	65		
30	279	204	240	203	-----	515	151	83	73	43	125	62		
31	209	-----	216	213	-----	398	-----	80	-----	43	99	-----		
TOTAL	5,422	5,391	12,332	13,589	18,759	11,444	6,331	3,328	5,241	1,693	2,298	2,692		
MEAN	175	180	398	438	647	369	211	107	175	54.6	74.1	89.7		
MAX	840	648	1,280	899	2,510	1,390	338	158	1,100	69	239	254		
MIN	50	91	147	149	183	154	145	80	73	43	36	50		
CFSM	1.95	2.00	4.43	4.88	7.20	4.11	2.35	1.19	1.95	.61	.83	1.00		
IN.	2.25	2.23	5.11	5.63	7.77	4.74	2.62	1.38	2.17	.70	.95	1.12		
AC-FT	10,750	10,690	24,460	26,950	37,210	22,700	12,560	6,600	10,400	3,360	4,560	5,340		
CAL YR 1967	TOTAL	90,913	MEAN	249	MAX	2,800	MIN	25	CFSM	2.77	IN	37.66	AC-FT	180,300
WTR YR 1968	TOTAL	88,520	MEAN	242	MAX	2,510	MIN	36	CFSM	2.69	IN	36.67	AC-FT	175,600

12079000 DESCHUTES RIVER NEAR RAINIER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	60	162	347	1,020	150	204	415	220	162	78	45	34		
2	59	179	285	796	150	206	573	210	138	74	45	34		
3	57	285	787	638	230	225	491	200	123	73	44	33		
4	62	234	1,690	655	321	245	400	190	112	74	44	33		
5	65	191	975	1,180	423	336	376	180	105	125	46	34		
6	70	162	671	1,360	313	438	340	173	100	107	46	33		
7	77	143	479	1,760	258	371	300	175	98	91	44	33		
8	67	162	690	999	1,070	315	269	195	93	82	43	33		
9	63	462	970	736	1,530	271	249	221	88	75	42	33		
10	105	319	1,580	682	859	241	243	223	85	72	42	32		
11	144	1,140	1,390	652	1,660	219	230	211	83	72	41	31		
12	191	1,250	849	484	1,190	202	237	192	81	70	40	31		
13	301	662	601	414	709	190	276	178	79	66	41	31		
14	270	438	494	379	526	182	258	165	76	64	40	32		
15	400	342	424	346	446	183	227	150	73	61	39	31		
16	395	280	414	322	479	220	207	137	70	59	39	32		
17	278	238	367	303	456	877	216	128	68	58	39	38		
18	233	228	370	270	401	925	359	127	67	56	38	81		
19	196	216	345	250	370	688	433	168	65	55	38	126		
20	221	208	303	230	339	509	452	169	65	53	38	156		
21	211	224	271	210	312	404	365	141	64	53	37	87		
22	216	662	252	200	290	369	315	131	72	52	36	74		
23	194	582	297	180	276	362	336	126	96	51	36	149		
24	170	423	860	175	258	323	317	124	126	50	35	146		
25	153	330	709	170	241	291	270	117	100	49	35	109		
26	138	277	483	170	226	290	230	114	99	48	36	95		
27	124	268	398	160	214	345	210	107	102	48	38	81		
28	114	258	333	155	206	350	230	115	101	47	38	76		
29	128	341	280	150	250	339	250	128	92	47	36	70		
30	191	441	242	150	-----	362	240	294	85	46	35	84		
31	193	-----	445	160	-----	423	-----	208	-----	45	34	-----		
TOTAL	5,146	11,107	18,601	15,356	13,903	10,905	9,314	5,217	2,768	2,001	1,230	1,692		
MEAN	166	370	600	495	497	352	310	168	92.3	64.5	39.7	63.1		
MAX	400	1,250	1,690	1,760	1,660	925	573	294	162	125	46	156		
MIN	57	143	242	150	150	182	207	107	64	45	34	31		
CFSM	1.85	4.12	6.68	5.51	5.93	3.92	3.45	1.87	1.03	.72	.44	.70		
IN.	2.13	4.60	7.71	6.36	5.76	4.52	3.86	2.16	1.15	.83	.51	.78		
AC-FT	10,210	22,030	36,900	30,460	27,580	21,630	18,470	10,350	5,490	3,970	2,440	3,750		
CAL YR 1968	TOTAL	100,229	MEAN	274	MAX	2,910	MIN	36	CFSM	3.05	IN	41.52	AC-FT	198,800
WTR YR 1969	TOTAL	97,440	MEAN	267	MAX	1,760	MIN	31	CFSM	2.97	IN	40.36	AC-FT	193,300

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	182	59	79	205	764	195	127	200	83	48	35	30		
2	214	57	76	188	606	190	127	195	78	48	38	31		
3	172	56	76	178	498	185	118	198	76	45	38	35		
4	132	366	99	168	417	173	118	193	75	40	35	45		
5	107	778	90	154	371	163	125	180	73	41	35	49		
6	91	487	88	145	347	195	166	166	72	39	33	44		
7	83	445	93	138	335	515	200	151	70	36	33	64		
8	226	308	95	135	326	389	170	147	69	36	35	98		
9	437	227	106	142	314	305	302	163	70	35	33	44		
10	292	183	106	142	296	257	682	178	75	35	31	38		
11	201	156	380	129	269	229	431	173	70	34	29	34		
12	155	135	1,390	127	249	221	329	183	67	33	27	31		
13	126	120	845	293	232	249	266	178	66	33	27	29		
14	109	112	1,140	2,560	213	386	227	161	66	33	27	28		
15	96	106	690	1,260	347	456	198	149	66	32	27	26		
16	87	108	459	606	1,530	401	180	140	66	33	28	26		
17	81	101	424	791	1,240	368	163	129	64	34	28	27		
18	75	93	383	1,180	1,000	317	154	125	61	34	28	36		
19	71	88	374	1,480	678	275	178	118	60	34	27	64		
20	67	88	359	1,330	494	246	166	112	58	35	26	92		
21	65	116	463	1,070	404	221	154	108	57	36	27	40		
22	62	104	814	976	393	200	147	106	53	35	26	39		
23	60	106	1,960	1,220	314	188	142	103	49	36	24	63		
24	60	129	1,090	995	281	183	263	97	49	36	25	49		
25	60	118	630	1,400	254	168	431	95	48	38	26	40		
26	57	108	463	1,440	235	158	383	91	48	42	27	35		
27	59	101	360	1,950	221	151	320	88	48	45	27	35		
28	73	93	314	1,100	208	147	260	88	47	45	29	32		
29	70	88	275	715	-----	140	229	90	47	40	28	31		
30	64	85	243	540	-----	135	210	95	48	38	27	30		
31	61	-----	229	529	-----	129	-----	86	-----	36	28	-----		
TOTAL	3,695	9,121	14,201	23,446	12,796	7,535	6,966	4,286	1,879	1,165	914	1,183		
MEAN	119	171	458	756	457	243	232	138	62.6	37.6	29.5	39.4		
MAX	437	778	1,960	2,560	1,530	515	682	280	83	48	38	64		
MIN	57	56	76	127	208	129	118	86	47	32	24	26		
CFSM	1.33	1.90	5.10	8.42	5.09	2.71	2.58	1.54	.70	.42	.33	.44		
IN.	1.93	2.12	5.88	9.71	5.30	3.12	2.89	1.78	.78	.48	.38	.49		
AC-FT	7,330	18,160	28,170	46,310	25,580	14,950	13,820	8,900	3,730	2,310	1,810	2,390		
CAL YR 1969	TOTAL	85,403	MEAN	235	MAX	1,960	MIN	31	CFSM	2.62	IN	35.46	AC-FT	169,800
WTR YR 1970	TOTAL	83,187	MEAN	228	MAX	2,560	MIN	24	CFSM	2.54	IN	34.46	AC-FT	165,000

12081000 WOODLAND CREEK NEAR OLYMPIA, WASH.

LOCATION.--Lat 47°04'18", long 122°48'58", in SE¼SW¼ sec.4, T.18 N., R.1 W., Thurston County, on left bank 20 ft upstream from road crossing, 1.5 miles upstream from mouth, and 4.8 miles (revised) northeast of State Capitol Building in Olympia.

DRAINAGE AREA.--24.6 sq mi.

PERIOD OF RECORD.--June 1949 to April 1959, May to October 1959 (monthly discharge only), November 1959 to September 1969 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 25 ft (from topographic map). June 29, 1949, to Apr. 28, 1959, at site 15 ft upstream at datum 0.75 ft higher.

AVERAGE DISCHARGE.--20 years, 26.9 cfs (19,490 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-69 are contained in the following table:

Mtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Jan. 5, 1966		70	2.71	Oct. 4, 27, 1965		9.1	al.13
1967	Jan. 19, 1967	114	3.52		Nov. 28, 1966		6.1	.99
1968	Feb. 4, 1968	76	2.87		Oct. 9, 1967		9.8	1.16
1969	Feb. 8, 1969	85	3.02		Oct. 2, 3, 1968, Sept. 8-16, 1969		13.0	bl.25

a Occurred Sept. 24, 29, 30, 1966.

b Occurred Sept. 8, 1969.

Period of record: Maximum discharge, 204 cfs Feb. 9, 1951 (gage height, 4.46 ft, datum then in use); minimum, 6.1 cfs Nov. 28, 1966 (gage height, 0.99 ft).

REMARKS.--Records excellent. Considerable regulation in upstream lakes. Some diversions for irrigation and domestic use.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	13	23	25	24	29	21	18	13	12	12
2	11	11	14	33	24	23	29	20	20	16	11	13
3	11	13	15	29	24	25	28	20	19	16	10	12
4	9.8	14	20	28	25	26	28	21	18	15	11	12
5	11	13	15	47	25	26	27	21	18	14	11	12
6	11	12	17	50	25	26	27	22	17	12	11	12
7	10	11	17	41	24	24	26	24	17	12	11	16
8	9.8	9.8	15	39	24	34	26	26	17	13	11	15
9	9.8	9.8	14	35	24	46	26	22	16	12	10	10
10	10	9.8	14	32	24	34	26	20	17	13	11	10
11	11	11	13	31	26	31	30	20	16	13	10	12
12	11	9.8	13	33	25	30	30	20	16	13	10	11
13	11	10	13	39	24	32	28	20	16	13	10	10
14	11	12	13	39	24	30	29	20	16	14	10	10
15	11	11	12	33	24	32	27	21	17	14	10	10
16	11	10	12	32	23	34	26	21	16	14	10	10
17	11	10	12	31	23	35	25	20	16	13	10	11
18	12	12	12	31	22	38	24	20	16	12	10	12
19	12	15	12	30	22	34	24	20	15	12	10	11
20	11	15	12	29	22	39	24	25	15	12	10	10
21	9.8	14	12	28	22	42	22	19	15	12	10	11
22	9.6	16	12	27	22	38	22	19	15	12	9.8	11
23	9.3	14	13	27	21	35	23	20	15	11	10	10
24	9.3	13	16	26	21	34	25	19	15	12	10	9.8
25	9.3	12	15	26	21	33	23	18	14	12	10	10
26	9.6	13	15	25	21	32	22	19	14	12	10	10
27	9.6	13	32	26	25	31	22	21	14	11	10	9.8
28	9.6	12	41	25	25	31	22	19	14	11	10	10
29	9.3	12	32	26	-----	30	22	19	13	11	11	9.6
30	9.6	12	26	26	-----	31	22	19	13	11	11	9.6
31	11	-----	23	26	-----	30	-----	18	-----	11	11	-----
TOTAL	322.4	361.2	515	973	657	990	764	634	478	392	321.8	331.8
MEAN	10.4	12.0	16.6	31.4	23.5	31.9	25.5	20.5	15.9	12.6	10.4	11.1
MAX	12	16	41	50	26	46	30	26	20	16	12	16
MIN	9.3	9.8	12	23	21	23	22	18	13	11	9.8	9.6
AC-FT	639	716	1,020	1,930	1,300	1,960	1,520	1,260	948	778	638	658

CAL YR 1965 TOTAL 8,226.6 MEAN 22.5 MAX 70 MIN 9.3 AC-FT 16,320

WTR YR 1966 TOTAL 6,740.2 MEAN 18.5 MAX 50 MIN 9.3 AC-FT 13,370

12081000 WOODLAND CREEK NEAR OLYMPIA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	9.3	25	30	52	41	35	28	22	16	13	10
2	9.1	9.3	20	27	50	39	34	28	22	16	12	11
3	9.3	9.1	17	32	30	38	34	28	22	16	12	11
4	9.1	9.1	24	44	46	37	34	28	22	16	12	11
5	9.1	9.3	34	41	45	37	34	26	21	16	12	12
6	9.3	9.6	26	37	44	36	33	26	20	17	13	12
7	9.1	9.1	24	35	42	36	32	26	20	17	12	11
8	9.1	9.1	23	35	42	36	32	26	19	18	12	11
9	9.1	9.1	20	33	41	36	33	26	19	17	12	12
10	9.3	9.1	22	31	40	36	32	26	19	17	12	13
11	9.6	9.6	22	35	41	34	31	26	19	17	12	14
12	10	10	44	34	44	34	32	26	18	16	12	14
13	9.8	16	74	40	60	34	34	26	18	14	12	13
14	9.3	19	49	36	35	32	24	18	14	12	13	13
15	9.8	14	45	36	49	38	32	24	17	14	12	12
16	8.7	13	40	33	46	39	32	24	17	15	12	12
17	9.3	12	35	33	47	38	31	24	17	14	12	11
18	9.8	11	32	31	46	41	34	24	17	14	11	12
19	10	11	73	44	44	33	23	16	14	13	12	13
20	13	11	31	90	43	39	32	23	16	14	14	11
21	13	11	30	72	43	37	31	22	18	14	12	11
22	13	10	29	62	42	42	31	21	20	14	11	11
23	11	10	28	54	41	44	30	22	18	14	11	11
24	10	11	28	49	40	43	28	23	17	14	11	11
25	9.8	14	29	46	40	42	31	22	17	14	11	11
26	9.3	11	28	49	40	40	31	22	16	14	10	10
27	9.6	12	27	63	39	39	30	22	16	14	10	10
28	9.1	11	27	68	41	38	30	22	16	13	10	10
29	9.1	12	27	67	-----	37	29	22	24	13	10	11
30	10	28	25	62	-----	37	28	22	20	13	10	11
31	9.3	-----	25	54	-----	36	-----	21	-----	13	10	-----
TOTAL	303.6	348.7	944	1,432	1,249	1,179	955	753	561	462	360	347
MEAN	9.79	11.6	30.5	46.2	44.6	38.0	31.8	24.3	18.7	14.9	11.6	11.6
MAX	13	28	74	90	60	44	35	28	24	18	14	14
MIN	8.6	9.1	17	27	39	34	28	21	16	13	10	10
AC-FT	602	692	1,870	2,840	2,480	2,340	1,890	1,490	1,110	916	714	688

CAL YR 1966 TOTAL 7,137.9 MEAN 19.6 MAX 74 MIN 8.6 AC-FT 14,160
WTR YR 1967 TOTAL 8,894.3 MEAN 24.4 MAX 90 MIN 8.6 AC-FT 17,640

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	11	14	18	36	37	37	27	27	16	15	16
2	13	11	18	17	45	34	39	27	32	16	15	15
3	14	11	19	17	53	33	36	33	25	16	15	15
4	12	12	19	17	62	34	37	31	22	16	15	15
5	12	11	23	17	47	36	35	27	21	16	14	15
6	11	11	19	17	41	34	34	26	21	15	15	15
7	12	11	18	18	39	33	33	26	20	15	14	15
8	10	11	16	18	37	32	32	26	21	16	14	14
9	10	15	16	30	35	31	33	25	20	16	14	14
10	10	19	17	27	34	31	31	25	22	16	14	14
11	12	16	17	24	32	32	31	24	20	16	14	14
12	14	15	16	24	31	38	31	24	20	17	14	14
13	12	14	16	31	31	34	30	24	19	16	14	14
14	14	13	16	34	30	34	33	25	19	16	15	15
15	13	13	16	34	30	39	34	24	18	16	14	16
16	12	12	16	31	29	50	31	23	18	16	15	15
17	11	12	16	31	31	40	31	23	18	16	14	16
18	11	13	16	29	44	36	30	23	18	16	14	18
19	12	13	16	36	52	35	29	24	19	16	16	16
20	11	13	16	41	42	34	28	27	18	16	15	15
21	14	13	18	42	46	34	29	26	18	16	15	15
22	16	13	28	34	46	33	28	24	18	16	14	15
23	18	13	24	32	49	35	31	24	18	16	17	15
24	13	22	31	44	44	34	28	23	17	16	16	14
25	17	12	21	30	41	38	28	24	17	16	17	14
26	13	12	19	30	39	35	28	23	17	16	18	14
27	17	12	19	27	38	51	28	22	17	16	23	14
28	20	18	24	24	37	46	27	22	21	21	18	14
29	14	14	18	24	36	42	26	21	26	17	16	14
30	14	14	18	27	-----	40	27	21	17	16	16	14
31	12	-----	18	32	-----	38	-----	21	-----	15	15	-----
TOTAL	411	387	563	844	1,157	1,133	935	765	604	500	475	444
MEAN	13.3	12.9	18.2	27.2	39.9	36.5	31.2	24.7	20.1	16.1	15.3	14.8
MAX	21	19	28	42	62	51	39	32	21	21	23	18
MIN	10	11	14	17	29	31	26	21	17	15	14	14
AC-FT	815	768	1,120	1,670	2,290	2,250	1,850	1,520	1,200	992	942	881

CAL YR 1967 TOTAL 8,659 MEAN 23.7 MAX 90 MIN 10 AC-FT 17,180
WTR YR 1968 TOTAL 8,218 MEAN 22.5 MAX 62 MIN 10 AC-FT 16,300

12081000 WOODLAND CREEK NEAR OLYMPIA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	16	26	43	50	45	34	34	26	20	18	15
2	14	18	27	43	52	45	36	33	26	20	17	14
3	14	17	44	48	57	45	34	32	25	20	17	14
4	15	16	48	54	63	44	37	32	24	21	17	14
5	14	16	40	58	62	48	37	33	24	21	17	14
6	15	16	37	63	55	45	36	32	24	20	17	14
7	14	17	38	70	54	44	34	31	24	20	16	14
8	14	23	47	62	70	43	34	31	24	20	16	13
9	14	22	45	64	78	43	34	31	23	20	16	13
10	16	20	58	70	70	43	33	30	23	19	16	14
11	16	42	60	69	76	42	32	30	22	19	16	14
12	16	29	51	64	71	42	32	29	24	19	16	14
13	18	24	47	64	66	41	32	29	24	19	16	14
14	17	23	43	63	64	41	32	28	22	19	16	14
15	19	22	42	64	63	41	31	28	22	19	16	14
16	17	21	40	64	61	43	31	30	23	18	16	14
17	18	21	38	64	58	48	33	28	21	18	16	17
18	17	22	39	60	57	45	40	28	21	18	16	17
19	18	22	37	58	56	43	39	27	21	18	16	18
20	17	21	36	56	54	41	37	27	20	19	15	16
21	17	24	36	54	53	41	36	27	20	19	15	15
22	17	30	36	52	52	41	36	30	20	19	15	17
23	17	27	41	50	52	40	38	26	22	19	15	20
24	16	24	48	49	50	39	36	26	21	18	15	18
25	16	23	43	48	50	38	35	26	21	18	15	16
26	16	24	40	49	49	37	34	26	21	18	15	16
27	16	27	39	48	48	37	34	26	21	18	15	16
28	16	25	37	47	46	37	34	26	21	18	16	16
29	16	28	36	47	-----	36	34	29	21	18	15	16
30	19	27	35	47	-----	36	33	29	21	17	15	16
31	16	-----	39	52	-----	37	-----	27	-----	17	15	-----
TOTAL	499	687	1,273	1,744	1,637	1,291	1,038	901	672	586	492	457
MEAN	16.1	22.9	41.1	56.3	58.5	41.6	34.6	29.1	22.4	18.9	15.9	15.2
MAX	19	42	60	70	78	48	40	34	26	21	18	20
MIN	14	16	26	43	46	36	31	26	20	17	15	13
AC-FT	990	1,360	2,530	3,460	3,250	2,560	2,060	1,790	1,350	1,160	976	906
CAL YR 1968	TOTAL	9,316	MEAN 25.5	MAX 62	MIN 14	AC-FT 18,480						
WTR YR 1969	TOTAL	11,277	MEAN 30.9	MAX 78	MIN 13	AC-FT 22,370						

NISQUALLY RIVER BASIN

12082500 NISQUALLY RIVER NEAR NATIONAL, WASH.

LOCATION (REVISED).--Lat 46°45'10", long 122°04'57", in SW¼SW¼ sec.29, T.15 N., R.6 E., Pierce County, on right bank 100 ft downstream from old railroad bridge, 1.2 miles west of National, 3.3 miles upstream from Mineral Creek, and at mile 57.8.

DRAINAGE AREA.--133 sq mi.

PERIOD OF RECORD.--May 1942 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,450 ft (from river-profile map).

AVERAGE DISCHARGE.--28 years, 772 cfs (78.83 inches per year, 559,300 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,600 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	
May 6, 1966	1330	*3,080	6.19	Oct. 27, 1967	2100	4,370	7.34	Nov. 11, 1968	1700	3,760	7.34	
				Dec. 25, 1967	1500	*6,830	9.36		(a)	-	*5,850	8.77
Dec. 13, 1966	1300	*5,870	8.18	Jan. 21, 1968	0300	4,240	7.69	May 30, 1969	0430	2,910	6.66	
Jan. 28, 1967	0630	2,900	6.04	Feb. 4, 1968	0630	2,780	6.55					
May 21, 1967	2400	2,650	5.82	Feb. 19, 1968	0930	5,080	8.27	Jan. 20, 1970	0100	4,330	7.76	
				June 2, 1968	0630	5,530	8.57	Jan. 23, 1970	0300	*4,350	7.77	

a Jan. 4 or 5, 1969.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 13, 1966	173	2.52	1969	Sept. 15, 1969	241	3.29
1967	Oct. 18, 1966	112	2.34	1970	Sept. 14, 1970	230	3.33
1968	Oct. 2, 20, 21, 1967	267	e2.83				

a Occurred Oct. 2, 1967.

Period of record: Maximum discharge, 11,000 cfs Jan. 29, 1965; maximum gage height, 11.77 ft Nov. 23, 1959; minimum discharge, 108 cfs Dec. 1, 3, 1952.

REMARKS.--Records good. No gage-height record Dec. 29, 1968, to Feb. 12, 1969. Small diversions for domestic use. Slight regulation at low water by powerplant of Mount Rainier National Park on Paradise River. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--NSP 1716: 1943(M), 1947(P), 1950-51, 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	259	195	365	251	408	300	1,310	636	708	786	589	304		
2	302	243	553	275	382	279	1,338	770	696	774	600	380		
3	306	380	520	302	366	268	1,130	1,060	606	994	600	440		
4	271	646	915	288	358	255	1,030	1,470	584	994	584	501		
5	267	660	796	424	386	261	1,040	1,950	578	980	528	534		
6	300	548	744	872	378	279	1,150	2,840	696	917	512	485		
7	410	470	867	854	370	275	1,340	2,170	882	903	534	425		
8	330	425	828	1,030	346	478	1,390	1,710	952	931	550	395		
9	316	375	708	830	350	1,220	1,420	1,780	980	980	501	400		
10	271	334	619	705	323	964	1,450	1,600	1,120	966	556	385		
11	280	324	531	655	334	722	1,620	1,240	1,100	952	501	326		
12	284	293	465	650	308	650	1,420	1,070	931	882	475	241		
13	306	347	430	848	293	806	1,100	959	924	828	584	205		
14	316	455	380	1,080	290	999	944	828	917	910	594	345		
15	356	455	358	896	268	1,020	902	756	1,120	828	562	355		
16	251	430	320	752	265	842	908	708	1,350	720	556	281		
17	347	370	306	660	261	705	902	636	1,290	684	528	236		
18	293	375	288	595	258	635	818	618	1,070	660	528	355		
19	342	450	275	520	248	595	739	678	1,040	648	501	290		
20	311	420	267	479	265	551	720	834	924	562	490	336		
21	306	498	267	452	275	506	666	1,000	822	606	470	465		
22	306	592	247	416	293	456	624	896	720	642	470	578		
23	288	509	243	404	315	438	602	774	702	648	501	637		
24	284	460	271	378	304	443	660	774	696	612	567	336		
25	288	410	239	354	300	470	738	952	600	518	584	264		
26	288	300	225	342	297	546	702	1,250	636	523	512	304		
27	263	380	320	338	319	670	636	1,190	786	572	528	290		
28	255	334	420	346	334	770	608	1,020	1,290	600	410	395		
29	219	311	334	386	-----	902	597	959	1,110	624	322	523		
30	231	293	260	443	-----	1,160	608	910	847	650	250	470		
31	207	-----	259	443	-----	1,320	-----	786	-----	618	259	-----		
TOTAL	9,141	12,344	13,626	17,268	8,894	19,785	29,104	34,624	26,677	23,492	15,746	11,481		
MEAN	295	411	440	557	318	638	970	1,123	889	758	508	383		
MAX	410	660	915	1,080	408	1,320	1,620	2,840	1,350	994	600	637		
MIN	207	195	225	251	248	255	597	618	578	518	250	205		
CFSM	2.22	3.09	3.31	4.19	2.39	4.80	7.39	8.44	6.48	5.70	3.82	2.88		
IN.	2.56	3.45	3.81	4.83	2.49	5.53	8.14	9.74	7.46	6.57	4.40	3.21		
AC-FT	18,130	24,460	27,030	34,250	17,640	39,240	57,730	69,070	52,910	46,600	31,230	22,770		
CAL YR 1965	TOTAL	252,842	MEAN	693	MAX	9,200	MIN	195	CFSM	5.21	IN	76.72	AC-FT	501,900
WTR YR 1966	TOTAL	222,382	MEAN	609	MAX	2,840	MIN	195	CFSM	4.58	IN	62.20	AC-FT	441,100

12082500 NISQUALLY RIVER NEAR NATIONAL, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	430	360	1,500	776	1,200	608	490	356	999	1,140	558	558
2	496	340	1,250	684	1,010	564	430	360	1,330	1,250	972	498
3	313	308	1,040	854	1,020	509	430	390	1,370	1,270	575	438
4	336	286	1,110	1,010	1,390	465	490	465	1,340	1,270	608	465
5	355	295	1,040	936	1,350	445	435	492	1,410	1,140	598	504
6	336	286	896	808	1,150	430	415	630	1,510	971	514	435
7	300	236	768	714	1,010	410	430	802	1,440	887	482	395
8	326	210	672	720	887	425	455	999	1,230	860	470	425
9	232	236	606	702	854	445	440	1,060	1,080	762	575	347
10	259	282	762	732	789	410	415	922	1,010	789	614	399
11	268	259	945	1,030	770	375	405	822	992	880	608	445
12	197	480	1,400	950	714	352	435	776	1,030	1,020	608	560
13	158	550	5,030	1,480	822	329	440	744	1,040	957	584	275
14	140	938	3,310	1,700	708	329	400	770	1,230	854	584	320
15	130	1,080	1,940	1,650	678	395	365	860	1,410	808	608	400
16	130	980	1,590	1,540	624	465	360	1,190	1,630	815	614	476
17	127	804	1,460	1,250	720	498	320	2,350	2,070	640	514	435
18	115	780	1,350	1,030	834	504	380	1,720	1,770	732	690	425
19	127	750	1,380	1,510	720	450	360	1,700	1,920	672	630	465
20	360	726	1,580	1,460	654	476	329	1,990	1,960	636	580	476
21	254	654	1,290	1,140	614	455	324	2,430	1,890	636	531	498
22	572	556	1,060	929	575	955	320	2,350	2,070	640	514	435
23	828	518	908	789	548	1,370	334	1,960	1,540	720	524	375
24	702	470	841	708	520	1,110	365	1,510	1,410	763	455	400
25	589	976	756	654	526	929	400	1,240	1,420	714	492	395
26	672	856	666	690	498	796	395	1,150	1,440	684	509	385
27	600	774	597	1,310	470	696	420	1,140	1,390	642	520	445
28	455	702	597	2,690	570	862	390	1,210	1,260	636	526	425
29	465	672	666	2,240	-----	540	370	1,390	1,280	630	558	352
30	490	1,370	602	1,820	-----	526	365	1,180	1,170	630	642	296
31	390	-----	614	1,390	-----	482	-----	992	-----	614	654	-----
TOTAL	11,152	17,732	38,426	35,916	22,225	17,425	11,621	35,260	42,281	25,870	17,565	12,508
MEAN	360	591	1,240	1,159	794	562	394	1,137	1,409	858	567	417
MAX	828	1,370	5,030	2,690	1,990	1,370	455	2,430	2,070	1,270	690	558
MIN	115	210	597	654	470	329	320	354	992	614	455	275
CFSM	2.71	4.44	9.32	8.71	5.97	4.23	2.96	8.55	10.6	6.28	4.26	3.14
IN.	3.12	4.96	10.75	10.05	6.22	4.67	3.31	9.86	11.83	7.24	6.92	3.50
AC-FT	22,120	35,170	76,220	71,240	44,080	34,560	23,450	69,900	83,860	51,510	34,800	24,610

CAL YR 1966 TOTAL 254,581 MEAN 697 MAX 5,030 MIN 115 CFSM 5.24 IN 71.21 AC-FT 505,000
WTR YR 1967 TOTAL 286,161 MEAN 790 MAX 5,030 MIN 115 CFSM 5.94 IN 80.60 AC-FT 571,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	342	1100	370	803	748	941	730	736	1,480	535	582	760
2	320	724	480	706	983	888	676	654	4,570	632	593	680
3	455	615	490	642	1,390	848	604	626	2,400	730	576	604
4	390	540	490	632	2,380	862	582	676	1,660	855	564	590
5	329	490	475	604	1,700	948	604	648	1,340	934	505	620
6	302	451	415	582	1,330	842	508	626	1,160	983	475	648
7	380	475	392	582	1,140	760	560	568	997	900	465	610
8	395	485	366	571	1,030	694	535	566	934	796	400	588
9	356	654	460	724	941	642	530	620	881	772	505	582
10	334	1,440	593	664	894	598	550	700	086	694	550	571
11	564	1,380	778	610	842	545	604	778	836	682	555	566
12	470	1,080	637	654	803	510	560	010	748	712	530	505
13	517	894	540	1,170	766	495	530	706	682	615	490	495
14	672	881	485	1,710	724	495	530	642	624	593	500	550
15	509	748	451	2,200	682	588	540	598	615	525	515	724
16	420	642	428	1,750	652	676	495	593	659	475	402	694
17	375	560	392	1,430	682	632	470	642	724	456	379	976
18	370	525	370	1,220	1,740	545	440	836	772	475	392	1,560
19	334	475	342	1,260	4,670	505	446	1,060	803	545	410	1,120
20	280	438	316	2,060	3,410	485	433	1,350	760	560	384	680
21	522	406	314	3,210	2,580	475	420	1,070	718	525	330	748
22	713	392	451	1,970	2,270	465	406	868	990	500	326	676
23	922	379	620	1,590	2,600	480	424	796	888	510	510	764
24	696	525	1,160	1,620	2,410	490	420	742	010	538	730	786
25	756	446	4,360	1,480	1,760	535	485	742	836	586	622	699
26	608	402	3,680	1,260	1,400	540	515	694	895	615	994	626
27	1,850	392	2,420	1,000	1,190	676	480	659	616	646	895	576
28	2,280	384	1,790	955	1,070	1,120	510	694	676	676	1,320	590
29	1,260	438	1,400	888	990	1,050	632	706	566	654	1,020	595
30	1,450	308	1,150	842	-----	914	778	654	508	598	874	566
31	1,200	-----	955	796	-----	796	-----	626	-----	576	764	-----
TOTAL	20,451	18,749	27,572	36,225	43,797	21,040	16,097	22,746	31,468	19,894	10,367	20,775
MEAN	660	625	889	1,169	1,510	679	537	734	1,049	642	592	693
MAX	2,280	1,440	4,360	3,210	4,670	1,120	778	1,358	4,570	983	1,320	1,560
MIN	280	379	314	571	652	465	406	566	500	456	326	495
CFSM	4.96	4.70	6.66	6.79	11.4	5.11	4.06	5.52	7.89	4.03	6.48	5.21
IN.	5.72	6.26	7.71	10.13	12.28	5.88	4.30	6.36	8.80	5.56	5.16	5.01
AC-FT	40,560	37,190	54,690	71,850	86,870	41,730	31,930	45,120	62,420	39,440	36,430	41,210

CAL YR 1967 TOTAL 287,643 MEAN 788 MAX 4,360 MIN 275 CFSM 5.92 IN 80.45 AC-FT 570,508
WTR YR 1968 TOTAL 297,181 MEAN 812 MAX 4,670 MIN 200 CFSM 6.11 IN 83.12 AC-FT 599,508

12082500 NISQUALLY RIVER NEAR NATIONAL. WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	555	560	874	800	330	286	991	732	1,940	680	581	520
2	515	624	822	650	330	283	935	668	1,940	765	553	515
3	495	654	1,490	1,500	330	290	798	623	1,560	700	536	380
4	445	588	1,830	3,000	320	290	726	587	1,690	680	520	312
5	442	555	1,370	5,000	310	384	700	623	1,650	674	445	293
6	505	520	1,070	3,000	300	359	687	746	1,470	593	375	331
7	465	505	962	2,000	290	331	642	791	1,370	605	393	440
8	424	1,050	997	1,500	330	316	617	1,420	1,510	642	411	553
9	410	1,460	1,020	1,200	400	297	635	1,870	1,450	732	510	553
10	525	1,140	1,250	1,100	600	290	680	2,090	1,420	798	480	553
11	560	2,600	1,230	950	750	286	680	1,980	1,420	694	510	611
12	700	2,410	1,120	850	550	279	798	1,840	1,270	564	495	558
13	766	1,660	927	750	440	275	914	1,790	1,170	520	564	475
14	742	1,300	836	700	402	279	804	1,660	1,080	505	635	308
15	976	1,110	810	650	393	290	720	1,500	1,040	495	635	268
16	914	941	766	580	393	351	674	1,300	1,040	505	505	286
17	816	868	682	540	380	536	758	1,210	1,100	510	485	485
18	796	1,100	670	500	367	599	914	1,450	1,110	553	510	782
19	748	1,070	610	480	363	520	900	1,890	1,080	635	480	642
20	894	1,090	566	460	351	490	798	1,690	970	694	490	564
21	862	1,150	545	440	343	480	765	1,590	830	661	548	425
22	836	1,540	540	430	335	526	893	1,450	844	635	599	564
23	790	1,440	610	410	327	520	1,260	1,770	1,120	713	605	784
24	784	1,230	900	400	312	480	1,190	1,880	1,250	732	648	668
25	778	1,090	836	390	305	475	984	1,540	942	661	510	648
26	718	990	760	380	297	531	830	1,290	824	531	455	531
27	648	983	712	370	293	648	791	1,150	765	587	380	490
28	907	642	642	320	290	713	830	1,000	720	575	312	542
29	664	997	580	350	-----	752	844	1,520	680	558	598	598
30	730	948	550	340	-----	865	765	2,460	661	570	363	850
31	620	-----	700	340	-----	1,040	-----	1,710	-----	381	440	-----

TOTAL	20,765	33,077	27,277	30,420	10,431	14,061	24,523	44,220	35,066	19,348	15,286	15,535		
AWO	470	1,107	1,000	281	313	917	1,426	3,149	624	624	518	518		
MAX	976	2,600	1,830	5,000	750	1,040	1,260	2,440	1,690	798	608	650		
MIN	410	500	540	340	290	275	617	587	661	495	308	268		
CFSM	5.04	8.29	6.62	7.38	2.80	3.41	6.14	10.7	8.79	4.69	3.71	3.89		
IN	8.1	8.1	7.63	6.12	3.12	3.93	6.12	8.79	8.93	4.1	4.25	4.1		
AC-FT	41,190	65,610	54,100	60,340	20,690	27,890	48,640	87,710	69,550	38,380	30,320	30,810		
CAL YR 1968	TOTAL	311,928	MEAN	551	MAX	4,670	MIN	326	CFSM	6.40	IN	87.13	AC-FT	617,900
WTR YR 1969	TOTAL	239,008	MEAN	191	MAX	990	MIN	120	CFSM	6.40	IN	87.13	AC-FT	400,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	914	316	301	435	998	505	425	529	1,020	445	475	465
2	837	316	293	420	843	481	415	607	1,360	523	425	430
3	668	312	290	411	774	460	390	703	1,680	780	487	601
4	542	772	331	384	703	425	405	850	1,950	1,050	589	455
5	480	928	305	355	643	410	541	962	1,310	1,010	595	355
6	445	765	297	343	623	576	643	850	1,410	836	547	583
7	445	668	286	335	709	976	613	722	1,340	829	805	455
8	635	305	335	825	767	553	754	1,060	913	110	440	421
9	752	515	297	371	902	673	1,070	808	948	906	395	347
10	661	480	290	343	955	595	1,510	679	800	822	470	355
11	575	450	510	316	976	547	1,150	619	679	760	553	375
12	505	445	661	335	983	553	920	589	625	697	571	311
13	450	430	739	357	1,010	565	760	529	643	631	529	263
14	416	416	1,100	1,790	913	748	649	487	649	637	455	255
15	388	416	970	1,460	1,110	850	589	565	709	703	493	267
16	359	393	844	1,120	1,960	976	529	857	685	801	517	295
17	335	355	752	1,080	1,700	850	487	1,150	734	748	455	327
18	320	339	798	2,160	1,340	741	475	990	892	691	455	460
19	312	327	830	3,680	1,110	667	505	899	1,030	728	481	395
20	320	335	858	3,530	976	619	455	774	1,090	679	511	319
21	331	384	1,110	2,850	864	565	420	734	1,280	595	535	267
22	343	343	1,190	2,710	801	529	400	843	1,290	499	530	641
23	351	384	1,340	3,550	715	511	395	892	1,110	511	570	631
24	320	388	1,070	2,470	667	505	475	899	1,100	529	580	390
25	290	375	879	1,940	631	465	460	1,110	1,100	637	505	343
26	272	355	772	1,780	595	445	430	1,280	1,150	734	455	371
27	393	339	680	2,140	571	440	400	969	1,050	697	455	380
28	328	327	581	1,580	541	470	774	801	541	541	450	390
29	308	320	542	1,230	-----	445	425	780	637	430	440	400
30	316	312	510	1,020	-----	425	511	857	529	415	435	385
31	316	-----	470	990	-----	395	-----	808	-----	440	505	-----

TOTAL	13,807	13,000	20,201	42,020	25,441	18,179	17,385	2,489	30,261	21,217	15,378	12,307	
MIN	445	436	432	1,350	390	380	380	302	1,009	684	496	410	
MAX	914	928	1,340	3,680	1,960	976	1,510	1,280	1,680	1,050	595	801	
MIN	272	312	286	316	54	395	385	487	529	415	395	255	
CF5M	3,335	3,228	4,900	10,2	6.83	441	4,365	6,073	7,508	5,114	3,733	3,038	
CF10M	3,186	3,186	11,459	5,712	6.86	616	6,076	6,076	8,042	5,983	4,330	3,444	
AC-FT	27,390	25,940	40,070	83,350	50,460	36,460	34,480	49,330	42,280	30,000	30,500	24,410	
CAL YR 1969	TOTAL	255,978	MEAN	501	MAX	5,000	RIN	268	CF5M 5-27	IN	71-60	AC-FT	507,700
WTR YR 1970	TOTAL	253,195	MEAN	598	MAX	3,680	RIN	233	CF5M 5-23	IN	71-08	AC-FT	504,100

12083000 MINERAL CREEK NEAR MINERAL, WASH.

LOCATION.--Lat 46°44'19", long 122°08'33", in NE¼SW¼ sec.35, T.15 N., R.5 E., Lewis County, on right bank 0.5 mile downstream from Chicago, Milwaukee, St. Paul and Pacific Railroad bridge, 2.3 miles northeast of Mineral, and at mile 1.1.

DRAINAGE AREA.--75.2 sq mi.

PERIOD OF RECORD.--June 1942 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,340 ft (from topographic map).

AVERAGE DISCHARGE.--28 years, 375 cfs (67.72 inches per year, 271,700 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,700 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Mar. 9, 1966	1000	*2,070	6.18	Jan. 20, 1968	-	2,850	6.93	(a)	-	-	-
				Feb. 4, 1968	0400	3,900	7.50				
Dec. 13, 1966	0800	*6,500	8.60	Feb. 19, 1968	0730	*4,460	7.78	Jan. 20, 1970	0500	*5,680	8.27
Jan. 19, 1967	1800	2,930	6.98					Jan. 23, 1970	0230	4,160	7.63
Jan. 28, 1967	0430	3,880	7.49	Dec. 3, 1968	1930	*5,480	8.19	Jan. 27, 1970	0300	2,940	6.99
								Feb. 16, 1970	0900	2,780	6.89

a Jan. 4 or 5, 1969.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 4, 1965, Aug. 21, 22, 1966	26	a2.02	1969	Sept. 10, 12, 1969	29	2.97
1967	Sept. 25-29, 1967	19	b2.06	1970	Aug. 30, 31, 1970	16	2.19
1968	Oct. 10, 1967	30	3.40				

a Occurred Oct. 4, 1965.

b Occurred Oct. 7, 1966.

Period of record: Maximum discharge, 8,310 cfs Dec. 22, 1964, from rating curve extended above 4,300 cfs; maximum gage height, 9.02 ft Dec. 9, 1953; minimum discharge, 16 cfs Aug. 30, 31, 1970; minimum gage height, 1.40 ft Sept. 22, 23, 1950.

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	44	309	234	391	304	858	380	169	122	42	33
2	27	62	566	266	346	264	834	444	175	132	41	32
3	27	131	464	228	314	235	725	552	161	304	39	31
4	28	400	780	215	307	220	680	660	158	314	39	31
5	42	384	625	708	342	222	690	780	140	243	40	30
6	64	291	507	1,290	342	240	762	918	146	210	39	30
7	68	218	625	1,130	328	246	840	700	167	182	38	30
8	48	168	600	1,290	300	818	840	596	161	161	38	30
9	43	139	480	858	300	1,690	840	588	150	140	38	29
10	38	129	404	680	264	1,030	870	524	186	129	38	29
11	36	141	346	675	294	720	1,250	426	177	122	37	35
12	36	122	294	792	279	630	1,130	377	202	114	35	36
13	38	122	260	1,130	255	846	834	342	169	110	35	34
14	69	133	234	1,490	243	1,060	715	300	154	105	37	36
15	178	126	209	993	222	1,010	690	294	146	100	34	34
16	99	122	192	715	210	798	690	328	146	95	34	34
17	79	114	172	564	202	625	665	297	138	93	32	34
18	69	122	161	480	192	561	592	270	122	86	30	50
19	94	165	150	412	190	540	528	270	115	83	29	40
20	86	163	143	377	261	488	496	294	109	88	28	35
21	73	272	148	346	273	436	440	332	105	76	28	34
22	65	585	129	314	297	384	416	300	104	75	28	32
23	60	408	131	297	314	377	412	258	104	69	28	36
24	56	317	152	267	291	388	444	243	109	70	28	34
25	52	263	129	252	279	426	480	238	95	70	28	34
26	50	260	122	238	270	520	452	297	88	66	34	41
27	49	294	312	252	335	592	402	270	92	63	40	40
28	54	237	525	297	374	625	398	230	258	59	39	35
29	49	212	392	398	-----	680	374	205	165	49	36	34
30	46	166	291	472	-----	810	360	195	133	46	34	31
31	44	-----	237	456	-----	864	-----	175	-----	44	34	-----
TOTAL	1,794	6,330	10,089	18,116	8,015	18,656	19,727	12,063	4,344	3,620	1,080	1,024
MEAN	57.9	211	325	584	266	602	658	390	145	117	34.8	34.1
MAX	178	585	780	1,490	391	1,690	1,250	918	258	314	42	50
MIN	27	46	122	215	190	220	374	175	88	64	28	29
CFSM	1.77	2.81	4.32	7.77	3.80	6.01	8.75	5.19	1.93	1.56	0.66	0.45
IN.	.69	3.13	4.99	8.96	3.96	9.23	9.76	5.98	2.15	1.79	.53	.51
AC-FT	3,560	12,560	20,010	35,930	15,900	37,000	39,130	23,970	8,620	7,180	2,140	2,030
CAL YR 1965	TOTAL	99,789	MEAN	273	MAX	3,210	MIN	25	CFSM	3.63	IN	49.36
WTR YR 1966	TOTAL	104,878	MEAN	287	MAX	1,690	MIN	27	CFSM	3.82	IN	51.88
									AC-FT	197,900		
										208,000		

NISQUALLY RIVER BASIN

12083000 MINERAL CREEK NEAR MINERAL, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	114	745	681	928	463	300	272	260	97	40	20
2	36	105	720	546	800	420	290	280	300	94	37	23
3	34	98	625	936	702	370	280	298	290	90	36	24
4	31	93	816	996	786	330	290	330	270	83	36	23
5	30	105	798	872	744	308	310	360	250	78	35	21
6	30	115	675	674	636	294	280	468	250	76	35	20
7	30	100	580	540	546	276	285	564	240	72	38	20
8	33	93	472	507	490	312	298	600	220	70	38	20
9	33	92	422	463	468	375	308	640	210	66	36	20
10	31	95	670	502	436	321	285	540	200	66	34	25
11	31	98	888	920	420	285	272	420	190	63	34	45
12	35	318	1,830	824	420	262	280	380	185	61	32	36
13	39	349	5,200	1,130	800	249	321	370	175	59	31	28
14	35	660	2,430	1,220	576	240	290	400	172	59	30	26
15	34	912	1,520	1,260	496	335	267	450	176	57	30	24
16	33	690	1,100	1,110	463	452	262	680	172	54	29	22
17	33	544	904	848	570	490	244	760	168	52	28	21
18	33	492	793	709	730	480	280	700	160	52	27	21
19	33	419	840	1,660	588	415	276	630	150	51	27	21
20	222	370	1,030	1,810	512	458	272	660	147	56	26	21
21	171	328	800	1,130	463	446	258	720	192	56	26	21
22	532	273	648	772	420	987	254	660	321	51	26	21
23	504	240	529	576	385	1,280	258	550	208	48	25	20
24	386	220	496	458	365	978	267	460	164	46	25	20
25	249	285	430	380	355	786	294	380	147	45	24	19
26	228	294	335	428	330	648	294	320	134	44	24	19
27	212	370	272	1,500	321	540	294	300	130	44	23	19
28	171	360	254	3,060	400	470	272	300	116	44	23	19
29	154	352	405	2,090	-----	410	258	350	110	42	22	20
30	146	786	335	1,580	-----	360	262	300	102	41	21	27
31	126	-----	515	1,110	-----	320	-----	250	-----	40	20	-----
TOTAL	3,706	9,370	27,877	31,284	15,150	14,360	8,401	14,392	5,809	1,857	918	686
MEAN	120	312	899	1,009	541	463	280	464	194	59.9	29.6	22.9
MAX	532	912	5,200	3,060	928	1,280	321	760	321	97	40	45
MIN	30	92	254	380	321	240	244	250	102	40	20	19
CFSM	1,460	4,150	12.0	13.4	7.19	3.72	4.17	2.58	1.16	.39	.40	.30
IN.	1.83	4.64	13.79	15.48	7.49	7.10	4.16	7.12	2.87	.92	.45	.34
AC-FT	7,350	16,590	55,290	62,050	30,050	28,480	16,660	28,550	11,520	3,680	1,820	1,360

CAL YR 1966 TOTAL 127,618 MEAN 350 MAX 5,200 MIN 28 CFSM 4.65 IN 63.13 AC-FT 253,100
WTR YR 1967 TOTAL 133,810 MEAN 367 MAX 5,200 MIN 19 CFSM 4.86 IN 66.19 AC-FT 265,400

NOTE.--NO GAGE-HEIGHT RECORD MAY 8 TO JUNE 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	360	200	468	245	514	606	245	935	100	43	151
2	76	303	316	300	792	459	534	236	2,040	92	42	136
3	212	262	425	316	1,520	417	453	216	1,270	88	43	117
4	137	228	463	267	2,750	381	411	216	826	80	42	92
5	88	196	420	240	1,410	441	411	221	969	76	44	74
6	74	172	326	208	939	387	399	226	477	72	44	70
7	57	166	294	204	737	331	381	231	399	69	42	67
8	45	172	249	196	612	292	353	216	348	67	40	63
9	37	538	285	438	521	255	320	207	304	67	37	58
10	32	1,420	468	375	465	236	304	212	265	65	37	54
11	74	1,030	674	276	411	216	309	207	255	65	36	54
12	94	681	474	200	364	216	287	203	231	82	35	50
13	236	502	360	880	326	207	260	194	216	72	35	49
14	312	458	300	1,140	287	207	292	177	207	74	46	78
15	164	375	280	1,400	265	421	393	169	182	72	61	231
16	116	321	258	1,090	256	453	320	162	173	67	50	231
17	92	285	236	800	276	514	282	154	162	63	49	186
18	88	262	216	630	1,570	429	265	154	151	61	46	429
19	85	240	196	950	3,980	364	250	158	143	61	45	342
20	70	224	176	2,500	2,520	320	236	216	136	65	60	276
21	251	200	168	2,100	1,960	287	216	203	124	61	50	231
22	390	192	571	1,200	1,760	270	207	177	147	58	45	194
23	507	100	872	950	2,180	270	221	177	130	56	79	190
24	326	200	1,070	810	2,080	309	212	162	117	56	182	158
25	446	188	1,630	688	1,440	358	226	173	108	54	212	140
26	321	164	1,690	573	1,060	364	240	169	108	52	265	127
27	962	153	1,230	471	834	941	226	154	108	50	236	114
28	1,350	157	944	399	674	1,810	226	162	117	48	348	105
29	793	272	757	362	580	1,240	240	154	124	46	265	98
30	566	244	594	298	-----	914	265	143	108	45	203	92
31	430	-----	502	265	-----	732	-----	136	-----	44	166	-----
TOTAL	8,473	10,147	16,632	21,134	32,614	14,755	9,345	5,870	10,510	2,028	2,928	4,257
MEAN	273	330	537	682	1,125	476	312	189	350	65.4	94.5	142
MAX	1,350	1,620	1,690	2,500	3,980	1,810	606	265	2,040	100	348	429
MIN	32	153	168	196	245	207	136	108	64	45	35	49
CFSM	3.63	4.49	7.14	9.07	15.0	6.33	4.15	2.51	4.65	.87	1.26	1.89
IN.	4.19	5.02	8.23	10.45	16.13	7.30	4.62	2.90	5.20	1.00	1.45	2.11
AC-FT	16,810	20,130	32,990	41,920	64,690	29,270	18,540	11,640	20,850	4,020	5,810	8,440

CAL YR 1967 TOTAL 128,109 MEAN 351 MAX 3,060 MIN 19 CFSM 4.67 IN 63.37 AC-FT 254,100
WTR YR 1968 TOTAL 138,693 MEAN 379 MAX 3,980 MIN 32 CFSM 5.04 IN 68.61 AC-FT 275,100

12083000 MINERAL CREEK NEAR MINERAL, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	268	435	584	205	240	832	450	425	145	54	32
2	80	336	415	608	200	230	797	450	360	135	54	31
3	76	358	2,420	600	260	260	657	420	336	130	53	32
4	100	328	2,260	1,000	220	268	578	400	309	135	53	33
5	85	308	1,320	2,900	250	400	554	410	284	166	65	33
6	143	284	932	2,000	240	395	548	460	260	140	58	32
7	147	264	776	1,900	230	348	515	562	240	123	53	31
8	120	340	892	1,400	260	320	490	685	214	123	50	30
9	119	500	940	1,200	350	300	490	811	196	112	48	30
10	292	440	1,250	1,000	320	284	515	832	185	106	47	30
11	326	1,310	1,170	850	500	272	520	748	174	112	46	30
12	489	1,340	924	750	450	260	578	684	160	102	46	29
13	632	980	762	850	400	252	664	614	147	98	46	32
14	560	755	650	600	340	248	554	560	140	91	45	32
15	872	596	608	550	330	260	495	500	130	87	44	30
16	839	500	560	500	370	344	475	450	123	80	44	31
17	620	465	520	360	350	320	485	420	115	79	43	48
18	505	435	500	400	350	664	741	440	110	76	40	91
19	455	410	435	375	340	554	839	584	106	73	39	115
20	515	435	390	350	330	495	727	500	100	70	39	131
21	480	558	368	330	320	475	650	440	100	70	39	76
22	1,040	352	310	300	505	685	1120	420	110	76	40	91
23	445	653	465	290	280	500	876	415	150	65	37	199
24	405	664	900	280	270	455	797	405	174	65	37	205
25	372	542	734	260	260	445	638	360	174	65	36	158
26	340	480	596	250	250	500	536	344	158	65	35	126
27	320	465	520	240	402	540	532	332	140	61	36	100
28	296	430	450	230	240	608	542	320	196	59	37	92
29	288	480	410	220	-----	620	530	582	176	59	35	84
30	328	470	370	215	-----	699	475	868	163	58	33	310
31	296	-----	425	210	-----	876	-----	536	-----	56	33	-----
TOTAL	11,133	16,610	23,759	21,162	8,405	13,319	18,338	15,962	5,679	2,878	1,363	2,324
MEAN	359	554	766	683	300	430	611	515	189	92.8	44.0	77.5
MAX	872	1,340	2,420	2,500	500	876	876	868	425	166	65	310
MIN	76	264	352	210	200	240	475	320	100	56	33	29
CFSH	4.77	7.37	10.2	9.08	3.99	5.72	8.13	6.85	2.51	1.23	.59	1.03
IN-	5.51	8.22	11.75	10.47	4.16	6.59	9.07	7.90	2.81	1.42	.67	1.15
AC-FT	22,080	32,950	47,130	41,970	16,670	26,420	36,370	31,660	11,260	5,710	2,700	4,610
CAL YR 1968	TOTAL 154,943	MEAN 423	MAX 3,980	MIN 35	CFSH 5.63	IN 76.65	AC-FT 307,300					
WTR YR 1969	TOTAL 140,932	MEAN 386	MAX 2,500	MIN 29	CFSH 5.13	IN 69.72	AC-FT 279,500					

NOTE.--NO GAGE-HEIGHT RECORD JAN. 3 TO MAR. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	395	92	123	280	804	485	204	315	151	56	33	17
2	376	84	114	260	678	450	204	362	148	54	33	17
3	312	82	119	602	402	422	190	374	146	48	32	36
4	240	512	155	224	505	402	188	386	138	45	30	39
5	190	632	126	205	475	370	220	390	128	45	30	34
6	163	465	123	193	455	506	294	350	120	45	28	30
7	147	400	126	185	485	860	276	315	114	45	28	65
8	346	158	182	536	612	109	194	306	107	413	28	45
9	505	292	137	205	554	520	841	334	113	40	27	36
10	376	252	130	190	536	450	1,300	312	113	39	26	29
11	304	220	239	166	536	422	892	294	105	39	25	28
12	252	202	405	176	505	430	660	279	97	38	24	25
13	208	182	420	427	510	430	515	260	93	38	24	23
14	182	168	664	2,230	475	570	414	245	92	36	23	22
15	163	168	520	1,570	868	666	362	240	90	34	23	21
16	145	168	440	1,010	2,310	660	324	262	90	34	22	20
17	132	142	400	884	1,920	575	294	270	83	34	22	22
18	137	137	430	2,740	1,420	495	279	252	79	33	21	26
19	108	130	425	4,650	1,110	446	297	232	77	33	20	56
20	104	153	425	4,320	956	406	270	218	72	33	21	46
21	96	185	614	2,610	853	378	252	202	70	33	21	39
22	163	870	2,120	776	350	245	206	69	33	21	43	31
23	92	185	1,480	696	324	248	210	67	33	20	36	56
24	87	202	1,020	1,980	648	324	374	196	64	33	20	43
25	87	182	720	1,620	600	297	370	194	60	36	20	36
26	77	171	560	1,680	565	268	338	192	58	40	20	35
27	104	158	455	2,440	54	290	306	173	56	45	20	30
28	150	147	385	1,480	515	250	285	159	58	40	18	29
29	121	137	352	1,040	-----	232	297	178	60	36	18	27
30	106	130	332	790	-----	216	303	184	58	35	17	25
31	96	-----	300	846	-----	204	-----	160	-----	32	16	-----
TOTAL	5,864	6,494	12,767	40,377	21,433	13,288	11,300	8,053	2,776	1,205	731	1,022
MEAN	189	216	412	1,302	765	428	377	260	92.5	38.9	23.6	34.1
MAX	505	632	1,480	4,650	2,310	860	1,300	390	151	56	33	65
MIN	77	82	114	166	455	204	188	159	56	32	16	17
CFSH	2.51	2.87	5.48	17.3	10.2	5.69	5.01	3.46	1.23	.52	.31	.45
IN-	2.90	3.21	6.32	19.97	10.60	6.57	5.59	3.98	1.37	.60	.36	.51
AC-FT	11,630	12,880	25,320	80,090	42,510	26,340	22,410	15,970	5,510	2,990	1,450	2,030
CAL YR 1969	TOTAL 114,555	MEAN 314	MAX 2,500	MIN 29	CFSH 4.18	IN 56.67	AC-FT 227,200					
WTR YR 1970	TOTAL 125,302	MEAN 343	MAX 4,450	MIN 16	CFSH 4.56	IN 61.98	AC-FT 248,500					

NOTE.--NO GAGE-HEIGHT RECORD JULY 3 TO AUG. 27.

NISQUALLY RIVER BASIN

12085000 ALDER RESERVOIR AT ALDER, WASH.

LOCATION.--Lat 46°48'09", long 122°18'37", in SE¼ sec. 9, T.15 N., R.4 E., Thurston County, near left end of Alder Dam on Nisqually River, 1.0 mile west of Alder, 1.7 miles upstream from La Grande Dam, 4.6 miles upstream from Mashel River, and at mile 44.2.

DRAINAGE AREA.--286 sq mi.

PERIOD OF RECORD.--November 1944 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 7.61 ft below mean sea level (levels by city of Tacoma). Prior to July 8, 1946, nonrecording gage at present site and datum.

EXTREMES.--Maximums and minimums (contents in acre-feet, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum		G.H.	Date	Minimum		G.H.
		Contents				Contents		
1966	Aug. 17, 1966	232,400	1,207.17		Mar. 7, 8, 1966	95,250	a1,148.41	
	Sept. 1, 1967	232,400	1,207.23		Nov. 11, 12, 1966	106,800	b1,155.10	
1967	July 6, 1968	233,000	1,207.36		Dec. 21, 22, 1967	141,500	c1,172.73	
1968	Aug. 13, 1969	232,700	1,207.27		Mar. 26, 1969	86,710	1,142.77	
1969	Jan. 27, 1970	231,900	1,207.06		Jan. 13, 1970	129,400	1,166.90	

a Occurred Mar. 8, 1966.

b Occurred Nov. 12, 1966.

c Occurred Dec. 21, 1967.

Period of record: Maximum contents, 233,000 acre-ft July 6, 1968 (gage height, 1,207.36 ft); minimum since reservoir first filled, 86,710 acre-ft Mar. 26, 1969 (gage height, 1,142.77 ft).

REMARKS.--Reservoir is formed by a concrete-arch dam; storage began Nov. 7, 1944; dam completed in 1945. Capacity, 99,170 acre-ft between gage heights 1,114 (lower limit of operating range) and 1,177 ft (gage height of spillway). Water can be controlled by spillway gates to gage height 1,207 ft (usable capacity, 179,600 acre-ft). Dead storage below gage height 1,114 ft, 52,110 acre-ft. Figures given herein represent total contents. Water is used by city of Tacoma for power production.

Capacity table, water years 1966-70 (gage height, in feet, and contents, in acre-feet)

1,142	85,520	1,160	115,700	1,190	183,300
1,150	97,910	1,170	135,800	1,207.4	233,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	218,400	173,300	136,600	114,700	119,600	101,900	143,100	182,000	214,600	228,000	231,400	229,000
2	216,900	170,800	136,800	113,800	117,400	101,600	145,800	182,200	214,300	227,700	231,100	228,300
3	215,800	168,700	136,200	111,700	115,900	99,640	149,200	184,300	213,700	229,300	231,100	228,000
4	214,600	167,700	138,700	110,100	113,400	96,240	150,800	187,300	213,700	230,500	231,100	227,700
5	213,400	166,500	141,100	112,300	111,400	96,400	152,700	192,900	214,300	231,400	231,100	227,700
6	212,600	165,000	143,400	117,100	109,400	96,570	155,000	199,800	214,000	230,800	231,100	227,400
7	212,000	163,300	144,600	120,800	106,800	95,250	157,800	205,600	215,200	229,900	230,500	226,800
8	210,800	160,800	144,000	125,600	104,200	96,770	160,400	210,000	216,400	229,600	230,500	226,200
9	210,300	158,300	146,500	127,200	101,700	108,700	164,000	213,400	217,500	229,300	230,500	225,600
10	209,700	155,900	146,200	127,800	101,400		169,000	215,500	219,300	229,600	230,500	225,000
11	208,500	152,900	145,800	128,000	101,400	109,600	173,600	216,600	221,100	229,600	230,500	224,400
12	207,100	150,100	145,300	128,400	101,200		177,600	216,900	222,300	229,300	230,800	223,500
13	206,200	148,500	143,700	131,700	101,000		180,000	216,600	222,900	229,900	231,100	222,300
14	205,600	146,100	142,200	136,400	101,900		181,500	216,900	228,100	230,500	231,400	221,700
15	204,200	146,900	140,200	138,900	100,300		183,000	217,200	229,300	230,500	231,700	220,800
16	203,000	146,000	138,300	140,000	99,980		185,100	216,100	226,800	230,500	231,700	219,900
17	202,100	144,600	137,500	140,000	99,640		187,100	215,200	227,400	230,500	231,700	219,000
18	200,700	143,500	135,400	139,400	99,460		188,100	214,900	227,400	230,500	231,400	218,400
19	199,500	143,400	133,500	138,500	98,940		189,400	214,300	227,400	230,500	231,700	217,500
20	198,600	141,500	131,700	137,000	98,290		190,500	214,000	227,100	230,500	231,100	216,900
21	197,800	141,300	129,600	135,600	96,640		190,500	215,200	226,500	230,500	231,100	216,400
22	196,900	141,500	127,600	134,100	100,200		189,200	216,600	225,600	230,800	231,100	216,100
23	195,200	140,900	125,600	132,700	100,500	135,000	188,400	216,100	225,000	231,100	231,100	216,100
24	193,900	141,100	124,200	130,400	100,300	133,100	188,400	215,200	224,700	231,100	231,100	215,500
25	191,800	141,300	122,400	128,000	100,700	131,700	187,600	215,200	224,400	231,100	231,400	214,900
26	189,200	141,100	120,400	125,800	100,700	131,200	186,600	216,400	224,700	230,800	231,400	214,600
27	186,600	141,100	119,600	123,400	101,400	132,300	185,300	216,400	225,000	230,800	231,400	214,000
28	184,000	141,300	120,600	122,400	101,700	135,100	184,000	216,400	226,800	230,800	231,100	213,400
29	181,200	139,600	121,000	121,800	-----	135,000	182,200	215,800	228,000	231,100	231,100	212,900
30	178,400	137,900	119,400	121,600	-----	137,200	181,500	215,500	228,300	231,100	230,800	211,700
31	176,100	-----	116,500	121,400	-----	140,400	-----	214,900	-----	231,700	230,500	-----
MAX	218,400	173,300	146,500	140,000	119,600		190,500	217,200	228,300	231,700	231,700	229,000
MIN	176,100	137,900	116,500	110,100	98,940		143,100	182,000	213,700	227,700	230,500	211,700
(†)	1,187.15	1,171.03	1,160.45	1,162.94	1,152.25	1,172.17	1,189.33	1,201.35	1,205.90	1,206.95	1,206.59	1,200.34
(*)	-43,500	-38,200	-21,400	+4,900	-19,700	+38,700	+41,100	+33,400	+13,400	+3,400	-1,200	-18,800

CAL YR 1965 * -100,700

WTR YR 1966 * -7,900

† GAGE HEIGHT, IN FEET, AT END OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-FEET.

12085500 LA GRANDE RESERVOIR AT LA GRANDE, WASH.

LOCATION.--Lat 46°49'23", long 122°18'13", in SW¼Sec. 33, T.16 N., R.4 E., Thurston County, at left end of gate control structure, 1.1 miles southeast of La Grande, 1.7 miles downstream from Alder Dam, and at mile 42.5.

DRAINAGE AREA.--289 sq mi.

PERIOD OF RECORD.--January 1945 to September 1970. January 1945 to September 1951 included in combined adjustment to monthly flow of Nisqually River at La Grande. Monthend contents January 1945 to September 1950, published in WSP 1316.

GAGE.--Water-stage recorder. Datum of gage is 7.61 ft below mean sea level (levels by city of Tacoma). Prior to June 12, 1947, monthend gage heights furnished by city of Tacoma from temporary gages in pool above dam.

EXTREMES.--Maximums and minimums (contents in acre-feet, gage height in feet) for the water years 1966-70 are contained in the following table:

Maximum			Minimum			
Mtr yr	Date	Contents	G.H.	Date	Contents	G.H.
1966	(a)	2,670	934.8	Sept. 29, 1966	1,660	911.0
1967	(c)	2,680	934.9	Apr. 22, 1967	1,720	913.2
1968	Apr. 14, 1968	2,693	935.2	Aug. 20, 1968	1,613	909.5
1969	Mar. 17, 1969	2,688	935.1	Feb. 24, 1969	1,676	911.6
1970	Jan. 30, 1970	2,638	934.2	July 15, Aug. 9, 1970	1,808	915.7

a Nov. 7, 1965, Sept. 23, 1966.

b Occurred Sept. 23, 1966.

c May 16, 23, June 4, 6, July 26, 1967.

Period of record: Maximum contents, 2,760 acre-ft May 14, 1950 (gage height, 936.4 ft); minimum observed since reservoir first filled, 1,370 acre-ft Aug. 24, 1956 (gage height, 900.0 ft).

REMARKS.--Reservoir is formed by concrete-gravity dam completed in 1944; storage began in February 1945. Usable storage, 1,053 acre-ft between gage heights 910 (minimum practical head) and 935 ft (normal reservoir level). Dead storage below elevation 910 ft, 1,629 acre-ft. Figures given herein represent total contents. Water used by city of Tacoma for power production.

MONTHEND GAGE HEIGHT AND CONTENTS, WATER YEARS OCTOBER 1965 TO SEPTEMBER 1970

DATE	GAGE HEIGHT (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)	DATE	GAGE HEIGHT (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
OCT. 31, 1965....	933.4	2,595	-32	OCT. 31, 1968....	933.5	2,600	-11
NOV. 30.....	933.0	2,573	-22	NOV. 30.....	931.2	2,478	-122
DEC. 31.....	931.3	2,484	-89	DEC. 31.....	929.5	2,392	-86
CAL YR 1965....	-	-	-132	CAL YR 1968....	-	-	-149
JAN. 31, 1966....	932.7	2,557	+73	JAN. 31, 1969....	926.1	2,228	-164
FEB. 28.....	933.2	2,584	+27	FEB. 28.....	933.8	2,616	+88
MAR. 31.....	932.6	2,552	-32	MAR. 31.....	930.1	2,422	-194
APR. 30.....	933.2	2,584	+32	APR. 30.....	933.4	2,595	+173
MAY 31.....	933.1	2,578	-6	MAY 31.....	931.0	2,468	-127
JUNE 30.....	933.1	2,578	0	JUNE 30.....	932.8	2,562	+94
JULY 31.....	932.8	2,552	-26	JULY 31.....	932.1	2,525	-37
AUG. 31.....	922.1	2,053	-499	AUG. 31.....	928.5	2,342	-183
SEPT.30.....	931.0	2,468	+415	SEPT.30.....	929.6	2,397	+55
MTR YR 1966....	-	-	-159	MTR YR 1969....	-	-	-214
OCT. 31.....	933.1	2,578	+110	OCT. 31.....	931.0	2,468	+71
NOV. 30.....	931.7	2,504	-74	NOV. 30.....	930.5	2,442	-26
DEC. 31.....	933.0	2,573	+69	DEC. 31.....	933.7	2,611	+169
CAL YR 1966....	-	-	+89	CAL YR 1969....	-	-	+219
JAN. 31, 1967....	933.6	2,605	+32	JAN. 31, 1970....	933.0	2,573	-38
FEB. 28.....	933.8	2,616	+11	FEB. 28.....	929.4	2,387	-186
MAR. 31.....	929.5	2,392	-224	MAR. 31.....	932.2	2,531	+144
APR. 30.....	930.7	2,453	+61	APR. 30.....	928.8	2,357	-174
MAY 31.....	932.4	2,541	+88	MAY 31.....	932.0	2,520	+163
JUNE 30.....	929.0	2,367	-174	JUNE 30.....	929.3	2,382	-138
JULY 31.....	933.1	2,578	+211	JULY 31.....	926.1	2,228	-154
AUG. 31.....	929.4	2,387	-191	AUG. 31.....	928.2	2,328	+100
SEPT.30.....	933.0	2,573	+186	SEPT.30.....	931.2	2,478	+150
MTR YR 1967....	-	-	+105	MTR YR 1970....	-	-	+81
OCT. 31.....	934.0	2,627	+54	† GAGE HEIGHT AT 2400 HOURS.			
NOV. 30.....	932.2	2,531	-96				
DEC. 31.....	932.4	2,541	+10				
CAL YR 1967....	-	-	-32				
JAN. 31, 1968....	931.7	2,504	-37				
FEB. 29.....	932.7	2,557	+53				
MAR. 31.....	932.8	2,562	+5				
APR. 30.....	930.8	2,458	-104				
MAY 31.....	930.3	2,432	-26				
JUNE 30.....	931.5	2,494	+62				
JULY 31.....	932.7	2,557	+63				
AUG. 31.....	932.3	2,536	-21				
SEPT.30.....	933.7	2,611	+75				
MTR YR 1968....	-	-	+38				

12086500 NISQUALLY RIVER AT LA GRANDE, WASH.

LOCATION.--Lat 46°50'23", long 122°19'38", in NW¼SE¼ sec.29, T.16 N., R.4 E., Pierce County, on right bank 0.4 mile downstream from city of Tacoma powerplant, 0.6 mile northwest of La Grande, 0.8 mile upstream from Mashel River, and at mile 40.4.

DRAINAGE AREA.--292 sq mi.

PERIOD OF RECORD.--September 1906 to October 1911, November to December 1911 (gate heights only), October 1919 to September 1931, October 1943 to September 1970. Monthly discharge only for some periods, published in WSP 1316. Published as "below Little Nisqually River, near La Grande" 1906-10 and as "near La Grande" 1912, 1919-31.

GAGE.--Water-stage recorder. Altitude of gage is 490 ft (from river-profile map). See WSP 1932 for history of changes prior to Feb. 9, 1945.

AVERAGE DISCHARGE.--44 years, 1,402 cfs (65.20 inches per year, 1,016,000 acre-ft per year), adjusted for storage.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Maximum			Minimum			Minimum daily		
Wtr yr	Date	Disch.	G.H.	Date	Disch.	G.H.	Date	Disch.
1966	Apr. 22, 1966	2,650	4.80	Feb. 22, 1966	291	2.71	Aug. 15, 1966	505
1967	Jan. 28, 1967	12,300	7.90	July 13, 1967	273	2.73	July 11-16, 1967	328
1968	Feb. 20, 1968	8,940	7.04	June 26, 1968	430	2.95	Aug. 22, 1968	514
1969	Dec. 9, 1968	7,470	6.62	Aug. 3, 6, 1969	437	a2.95	Aug. 7, 1969	473
1970	Jan. 27, 1970	8,520	6.92	July 27, 29, 1970	416	2.93	July 30, 1970	442

a Occurred Apr. 9, 1969.

Period of record: Maximum discharge, 20,700 cfs Nov. 23, 1959 (gate height, 9.63 ft); practically no flow on many occasions at site near La Grande as result of regulation.

REMARKS.--Records excellent. Flow regulated by city of Tacoma powerplant at La Grande since December 1943, by Alder Reservoir (see station 12085800) since November 1944, and by La Grande Reservoir (see station 12085500) since February 1945. All diversions returned to river above gage. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1216: Drainage area. WSP 1316: 1927-28(M), 1949-50.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,150	1,720	1,630	1,860	2,160	963	1,630	990	1,160	1,160	776	835
2	1,080	1,670	1,550	1,600	2,160	900	1,500	1,380	1,160	1,190	850	842
3	1,030	1,790	1,600	1,750	1,370	1,680	963	990	1,160	783	800	767
4	982	1,600	1,020	1,640	2,080	1,960	1,320	960		837	866	807
5	1,070	1,960	751	1,850	1,960	774	1,310	783	603	997	624	662
6	920	1,880	1,000	2,110	2,050	747	1,280	1,110	963	1,500	727	778
7	920	1,780	1,040	1,990	2,150	1,540	1,350	627	644	1,650	923	784
8	1,000	1,910	1,320	1,970	2,060	747	1,640	644	669	1,420	650	808
9	820	1,940	1,350	2,180	2,020	1,580	1,400	1,020	660	1,340	666	801
10	760	1,940	1,320	2,030	1,020	2,090	603	1,400	603	1,000	643	788
11	920	1,940	1,340	2,030	972	1,540	1,680	1,380	611	1,130	541	764
12	1,080	2,050	1,190	2,050	981	756	1,620	1,440	765	1,180	513	649
13	880	1,380	1,550	1,780	891	686	1,530	1,620	801	718	535	834
14	930	1,050	1,520	1,800	954	738	1,440	1,240	703	1,010	571	830
15	1,500	1,190	1,680	1,790	855	747	1,410	1,090	774	835	505	640
16	971	1,200	1,500	1,760	846	864	1,030	1,710	918	949	585	838
17	971	1,310	1,250	2,000	819	1,000	981	1,620	1,170	790	697	842
18	1,260	1,310	1,640	1,900	747	1,630	1,400	1,270	1,340	825	676	813
19	1,070	1,360	1,600	1,870	891	1,710	1,050	1,310	1,380	854	635	835
20	993	1,200	1,650	1,950	644	1,920	954	1,340	1,210	748	691	838
21	920	1,180	1,560	1,850	652	2,020	1,580	1,020	1,480	705	627	811
22	950	1,630	1,640	1,580	660	2,140	1,930	703	1,290	659	603	837
23	1,350	1,600	1,690	1,660	747	2,140	1,740	1,430	1,320	667	535	829
24	1,140	870	1,430	2,020	981	2,200	1,410	1,460	945	712	570	767
25	1,470	715	1,430	1,910	738	2,120	1,900	1,360	1,020	761	562	808
26	1,710	1,050	1,620	1,820	900	1,920	2,060	1,100	660	762	661	827
27	1,820	1,040	1,850	1,790	686	1,410	1,980	1,600	855	774	636	810
28	1,840	679	1,710	1,490	927	1,730	1,980	1,440	837	675	615	809
29	1,690	1,520	1,420	1,480	-----	1,310	2,070	1,490	882	693	571	784
30	1,750	1,590	1,810	1,640	-----	1,530	1,640	1,400	918	625	698	843
31	1,550	-----	2,270	1,520	-----	1,490	-----	1,460	-----	550	592	-----
TOTAL	36,497	44,274	46,141	56,740	33,921	44,582	44,081	38,327	28,338	28,548	19,982	24,060
MEAN	1,177	1,476	1,488	1,830	1,121	1,438	1,396	1,236	945	923	645	802
MAX	1,840	2,050	2,270	2,180	2,160	2,200	2,070	1,710	1,480	1,650	923	849
MIN	760	679	751	1,480	644	686	603	627	603	550	505	587
AC-FT	72,390	87,820	91,520	112,500	67,280	88,430	87,430	76,020	56,210	56,620	39,630	47,720
(+)	-43,530	-38,220	-21,490	+4,970	-19,670	+38,670	+41,130	+33,390	+13,400	+3,370	-1,700	-18,380
MEAN*	469	834	1,139	1,911	857	2,067	2,161	1,779	1,270	976	617	493
CFSM*	1.61	2.86	3.90	6.34	2.93	7.08	7.40	6.09	4.01	3.34	2.11	1.69
IN*	1.35	3.18	4.50	7.54	3.06	8.16	8.46	7.02	4.47	3.85	2.44	1.88
AC-FT*	28,860	49,600	70,030	117,500	47,610	127,100	128,600	109,400	69,610	59,990	37,930	29,340

OBSERVED

CAL YR	TOTAL	MEAN	MAX	MIN	AC-FT
1965	502,197	1,376	16,900	357	996,100
1966	445,491	1,221	MAX 2,270	505	883,600

ADJUSTED *

CAL YR	MEAN	CFSM	IN	AC-FT
1965	1,237	4.24	57.49	895,300
1966	1,209	4.14	56.22	875,500

† CHANGE IN CONTENTS, IN ACRE-Feet, IN ALDER AND LA GRANDE RESERVOIRS.

* ADJUSTED FOR CHANGE IN RESERVOIR CONTENTS.

12086500 NISQUALLY RIVER AT LA GRANDE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,040	2,120	1,630	1,850	2,030	2,030	2,040	990	970	1,250	690	699
2	882	2,090	1,860	2,030	2,110	2,040	1,910	1,110	614	1,180	717	573
3	1,300	2,130	1,860	1,930	2,080	2,030	1,790	1,160	789	1,280	690	573
4	1,320	1,700	1,680	1,970	2,110	2,030	1,940	1,000	807	960	614	581
5	1,390	1,020	1,780	2,070	2,140	2,000	2,060	910	780	1,000	581	557
6	1,490	1,060	2,160	1,980	2,140	2,040	2,040	900	771	682	581	533
7	1,810	1,180	1,880	1,990	2,160	2,040	2,040	900	753	665	581	541
8	1,910	1,130	1,790	2,000	1,970	2,040	2,000	920	825	401	589	597
9	1,910	1,180	1,850	2,090	1,870	2,060	1,980	1,020	834	394	581	622
10	1,840	1,180	1,730	2,090	1,890	2,060	2,080	1,070	789	354	581	726
11	1,980	1,240	1,520	1,970	1,910	2,040	2,060	1,070	780	328	656	798
12	2,190	971	1,600	2,010	1,970	2,030	2,060	1,060	843	328	726	780
13	2,120	978	1,990	2,030	1,980	1,050	2,060	1,060	816	328	726	780
14	2,170	856	2,130	2,040	1,900	1,070	2,040	1,060	780	328	690	717
15	2,190	1,560	2,140	1,940	1,690	2,040	1,950	1,070	771	328	673	682
16	2,170	1,700	2,150	2,110	1,540	2,060	1,800	1,060	762	328	673	699
17	2,170	1,890	2,130	1,960	1,970	2,040	1,820	1,060	771	639	673	690
18	2,180	1,600	2,050	1,970	1,820	1,940	1,940	798	780	900	673	690
19	2,190	1,080	2,110	1,340	1,500	1,070	1,770	816	880	890	665	646
20	2,200	1,070	2,120	1,480	1,980	2,040	1,860	798	930	870	665	649
21	2,170	1,180	2,110	2,530	1,940	2,040	1,920	798	1,150	780	673	597
22	2,050	1,260	1,820	2,090	1,940	2,080	1,600	798	1,240	699	605	563
23	1,810	1,200	1,890	2,110	2,000	1,860	1,510	1,160	1,740	656	581	564
24	1,730	1,100	1,580	2,120	2,010	1,940	1,800	890	1,540	789	565	564
25	1,970	972	1,510	2,110	2,000	1,800	1,890	852	1,540	843	525	570
26	2,070	1,090	1,900	2,090	1,980	1,850	1,760	807	1,300	780	503	794
27	2,120	979	2,040	4,680	2,000	2,030	1,880	852	1,260	780	503	910
28	2,150	1,130	2,180	11,800	2,010	2,060	1,500	834	1,280	717	450	914
29	2,110	1,160	2,180	8,860	-----	2,080	852	1,130	1,300	726	387	998
30	2,090	1,060	2,020	3,960	-----	2,070	843	834	1,310	518	394	1,020
31	2,110	-----	2,100	1,970	-----	2,080	-----	1,110	-----	541	465	-----
TOTAL	58,832	38,866	59,570	91,170	54,640	59,640	54,795	29,897	29,705	21,062	18,676	20,627
MEAN	1,898	1,296	1,922	2,941	1,951	1,924	1,827	964	990	679	602	688
MAX	2,200	2,130	2,180	11,800	2,160	2,080	2,080	1,160	1,740	1,280	726	1,020
MIN	882	856	1,510	1,850	1,500	1,050	843	798	614	328	387	533
AC-FT	116,700	77,090	118,200	180,800	108,400	118,300	108,700	59,300	58,920	41,780	37,040	40,910
(†)	-81,790	-4,670	+73,770	+17,530	-16,290	-30,320	-60,540	+62,190	+44,930	+14,710	+409	-12,810
MEAN*	568	1,217	3,123	3,225	1,659	1,431	809	1,976	1,744	919	609	472
CFSM*	1.95	4.17	10.7	11.0	5.68	4.90	2.77	6.77	5.97	3.15	2.09	1.62
IN*	2.24	4.65	12.33	12.73	5.91	5.65	3.09	7.80	6.67	3.63	2.40	1.80
AC-FT*	34,910	72,420	192,000	198,300	92,110	87,980	48,160	121,500	103,800	56,490	37,450	28,100

OBSERVED

CAL YR 1966 TOTAL 475,847 MEAN 1,304 MAX 2,200 MIN 505 AC-FT 943,800
WTR YR 1967 TOTAL 537,480 MEAN 1,473 MAX 11,800 MIN 328 AC-FT 1,066,000

ADJUSTED *

CAL YR 1966 MEAN 1,417 CFSM 4.85 IN 65.88 AC-FT 1,026,000
WTR YR 1967 MEAN 1,482 CFSM 5.08 IN 68.90 AC-FT 1,073,000

† CHANGE IN CONTENTS, IN ACRE-FEET, IN ALDER AND LA GRANDE RESERVOIRS.

* ADJUSTED FOR CHANGE IN RESERVOIR CONTENTS.

12086500 NISQUALLY RIVER AT LA GRANDE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
1	1,090	2,110	2,140	1,710	2,140	1,620	1,900	930	890	843	930
2	778	2,110	2,050	2,030	1,920	1,660	1,750	930	2,030	666	940
3	790	2,120	2,120	1,970	1,780	1,280	1,470	930	5,250	717	1,090
4	836	2,130	2,140	2,050	1,970	2,410	2,080	930	2,850	726	930
5	881	2,090	2,150	2,080	2,040	1,660	2,130	920	2,570	834	910
6	990	2,110	2,150	2,080	2,140	1,840	2,140	920	2,130	940	852
7	880	2,110	2,150	2,100	2,130	1,750	2,080	920	2,080	1,290	798
8	835	2,120	2,140	2,120	2,050	1,180	2,160	930	1,400	1,300	762
9	1,090	2,150	1,500	2,130	2,140	960	2,160	930	1,100	940	726
10	1,090	1,570	1,200	2,110	2,050	920	2,050	930	1,810	910	595
11	1,030	1,100	1,160	2,120	2,100	1,340	2,130	930	1,680	843	690
12	1,000	1,540	1,390	2,120	2,130	1,150	2,140	920	1,690	825	690
13	1,020	2,110	1,510	1,900	2,050	1,180	2,160	920	1,780	910	666
14	929	2,110	1,760	1,610	2,120	1,170	2,130	920	930	789	650
15	932	2,130	1,870	1,820	2,130	1,240	1,690	920	930	726	753
16	930	2,120	1,780	1,900	2,140	1,000	1,390	920	930	682	880
17	1,110	2,120	1,780	1,980	2,140	1,250	1,190	890	930	603	970
18	2,410	2,130	1,850	1,960	1,890	2,010	1,630	816	870	650	1,680
19	1,100	2,120	2,100	1,570	5,220	1,950	1,770	890	920	558	2,170
20	1,280	2,110	2,120	1,690	8,200	2,000	1,180	852	930	658	2,140
21	1,090	2,100	1,820	1,740	6,000	1,950	1,060	798	920	708	1,770
22	1,040	2,090	1,390	1,710	9,130	1,970	1,110	798	910	642	1,800
23	1,060	1,950	1,570	1,760	6,240	1,860	1,090	798	910	626	1,900
24	1,090	1,980	1,550	1,800	6,630	1,330	1,000	852	910	580	1,900
25	1,850	2,090	1,660	1,920	3,610	1,350	880	920	940	550	1,500
26	1,910	1,990	1,780	1,840	2,610	1,230	852	920	807	550	960
27	1,750	2,090	1,830	2,060	2,140	1,190	950	920	910	550	950
28	1,930	2,080	1,680	2,100	2,160	1,620	910	852	910	666	910
29	1,640	2,090	1,910	2,050	1,510	1,810	880	816	950	880	900
30	1,840	2,140	1,730	2,030	-----	2,230	843	910	910	920	890
31	2,110	-----	1,750	2,150	-----	1,980	-----	890	-----	816	-----
TOTAL	37,419	60,810	55,930	60,230	86,580	48,100	46,885	27,722	42,777	23,898	33,388
MEAN	1,207	2,027	1,804	1,943	2,986	1,552	1,563	894	1,426	771	1,113
MAX	2,110	2,150	2,150	2,150	8,200	2,410	2,160	930	5,250	1,300	2,170
MIN	778	1,100	1,160	1,570	1,510	920	843	798	807	550	650
AC-FT	74,220	120,600	110,900	119,500	171,700	95,410	93,000	54,990	84,850	47,400	66,230
(T)	+2,750	-49,000	+7,710	+23,360	+28,150	+705	-30,900	+12,070	+17,160	+663	-7,820
MEAN#	1,252	1,203	1,929	2,324	3,474	1,563	1,043	1,091	1,714	782	981
CFSM#	4.25	4.12	6.61	7.95	11.9	5.35	3.57	3.74	5.87	2.66	3.36
IN#	4.94	4.60	7.62	9.18	12.83	6.17	3.99	4.31	6.55	3.09	3.75
AC-FT#	76,970	71,600	118,600	142,900	199,800	96,100	62,090	67,060	102,000	48,060	58,400

OBSERVED

CAL YR 1967 TOTAL 534,371 MEAN 1,464 MAX 11,800 MIN 328 AC-FT 1,060,000
WTR YR 1968 TOTAL 550,642 MEAN 1,504 MAX 8,200 MIN 514 AC-FT 1,092,000

ADJUSTED *

CAL YR 1967 MEAN 1,438 CFSM 4.92 IN 66.84 AC-FT 1,041,000
WTR YR 1968 MEAN 1,507 CFSM 5.16 IN 70.25 AC-FT 1,094,000

* CHANGE IN CONTENTS, IN ACRE-FEET, IN ALDER AND LA GRANDE RESERVOIRS.

* ADJUSTED FOR CHANGE IN RESERVOIR CONTENTS.

12086500 NISQUALLY RIVER AT LA GRANDE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	890	1,330	1,830	2,010	2,170	1,180	1,200	1,710	762	905	685	591
2	900	1,170	1,990	2,030	2,170	1,070	1,230	1,280	808	799	637	827
3	910	1,190	3,500	2,190	2,170	1,740	1,040	920	1,310	740	561	628
4	910	1,280	5,350	2,190	2,170	1,840	1,040	1,290	1,060	718	590	780
5	1,020	1,330	2,820	4,000	2,170	1,690	1,010	843	811	716	656	620
6	1,030	1,460	2,160	6,570	2,170	1,700	980	852	810	720	506	620
7	1,040	1,170	2,100	6,720	2,170	1,740	1,380	930	810	873	673	619
8	1,140	1,350	2,100	3,470	2,210	1,780	1,250	807	809	942	485	622
9	1,180	1,640	4,700	2,190	2,230	1,580	1,150	1,180	1,070	884	486	621
10	1,280	1,810	5,610	2,750	2,210	1,350	1,740	708	1,140	848	487	619
11	1,560	1,970	3,850	2,890	2,210	1,300	1,560	708	1,160	927	504	707
12	1,650	2,070	2,190	2,230	2,210	1,110	1,020	834	893	971	603	801
13	1,340	2,080	2,170	2,170	2,170	1,260	970	1,350	1,750	1,000	746	725
14	1,920	1,770	2,170	2,170	2,190	1,290	1,680	1,430	1,650	889	816	738
15	2,130	2,080	2,140	2,170	2,190	1,010	1,650	1,450	984	826	817	739
16	2,130	2,140	2,170	2,160	2,190	1,030	1,370	1,660	1,210	702	818	866
17	2,140	1,880	2,140	2,160	2,190	1,700	1,250	1,410	982	612	820	1,160
18	2,140	2,120	2,170	2,170	2,170	2,080	1,330	953	1,540	587	816	1,290
19	2,140	2,150	2,110	2,170	2,170	2,140	1,500	1,460	1,620	584	816	1,100
20	2,150	1,950	2,190	2,170	2,170	1,930	1,500	1,580	1,630	585	725	1,200
21	2,160	1,630	2,170	2,190	2,030	1,950	1,630	1,440	1,040	586	681	1,090
22	2,110	1,780	2,110	2,190	1,920	1,930	1,650	1,420	991	749	681	980
23	2,040	2,040	2,170	2,190	1,810	1,630	1,540	1,020	1,370	786	682	1,260
24	2,080	1,930	1,900	2,190	1,780	1,780	1,840	842	1,990	833	681	1,260
25	2,060	2,010	2,090	2,170	2,060	1,690	1,970	858	1,030	983	679	1,500
26	2,060	1,250	2,140	2,170	2,010	1,630	1,570	928	1,250	779	656	1,180
27	1,710	1,960	2,140	2,170	2,000	1,600	900	932	1,200	872	629	1,070
28	2,010	1,440	2,140	2,170	1,630	1,110	1,430	860	1,130	782	627	1,070
29	1,920	1,530	2,190	2,170	-----	990	1,660	833	991	788	627	1,330
30	2,090	1,740	2,170	2,160	-----	950	1,680	798	966	701	626	1,190
31	1,790	-----	2,140	2,160	-----	1,010	-----	773	-----	673	630	-----
TOTAL	51,710	51,890	78,780	80,510	98,940	46,790	41,700	34,039	34,777	24,356	20,246	27,603
MEAN	1,668	1,730	2,541	2,597	2,105	1,509	1,390	1,098	1,159	786	653	920
MAX	2,160	2,150	5,610	6,720	2,230	2,140	1,970	1,710	1,990	1,000	820	1,500
MIN	890	1,170	1,830	2,010	1,630	950	900	708	762	584	473	591
AC-FT	102,600	102,900	156,300	159,700	116,900	92,810	82,710	67,520	68,980	48,310	40,160	54,750
(+)	-27,210	+23,180	-15,190	-25,360	-62,510	-16,110	+34,590	+75,570	+20,490	+1,860	-3,280	-15,040
MEAN *	1,226	2,120	2,294	2,184	980	1,247	1,972	2,327	1,504	816	600	668
CFSH*	4.20	7.26	7.06	7.48	3.36	4.27	6.75	7.97	5.15	2.79	2.05	2.29
IN*	4.84	8.10	9.06	8.62	3.49	4.92	7.53	9.19	5.74	3.22	2.37	2.55
AC-FT*	75,390	126,100	141,100	134,300	54,390	76,700	117,300	143,100	89,470	50,170	36,880	39,710

OBSERVED

CAL YR 1968 TOTAL 578,863 MEAN 1,582 MAX 8,200 MIN 514 AC-FT 1,148,000
WTR YR 1969 TOTAL 551,341 MEAN 1,511 MAX 6,720 MIN 473 AC-FT 1,094,000

ADJUSTED *

CAL YR 1968 MEAN 1,611 CFSH 5.52 IN 75.13 AC-FT 1,170,000
WTR YR 1969 MEAN 1,498 CFSH 5.13 IN 69.67 AC-FT 1,085,000

† CHANGE IN CONTENTS, IN ACRE-FEET, IN ALDER AND LA GRANDE RESERVOIRS.

* ADJUSTED FOR CHANGE IN RESERVOIR CONTENTS.

NISQUALLY RIVER BASIN

12086500 NISQUALLY RIVER AT LA GRANDE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,160	957	1,500	2,120	2,430	2,130	1,100	1,300	634	499	513	808
2	1,780	960	1,550	2,140	2,210	2,130	1,040	1,400	638	496	531	858
3	1,700	956	1,480	2,070	2,130	2,140	1,130	1,130	641	510	529	861
4	1,510	1,130	1,440	1,740	1,740	2,140	1,120	1,520	636	505	568	857
5	1,280	1,130	1,420	1,820	1,820	2,130	1,100	1,380	643	505	635	957
6	1,760	1,340	1,180	1,780	1,940	2,130	1,410	1,370	641	504	663	883
7	1,750	1,430	1,050	1,740	1,830	1,870	1,640	1,450	639	509	691	950
8	1,250	1,250	1,360	1,790	1,890	2,140	1,760	1,500	637	505	684	912
9	1,290	1,190	1,370	1,760	2,090	2,130	1,270	1,250	639	504	691	936
10	1,340	1,390	1,340	1,780	2,110	2,130	1,900	1,080	638	503	686	936
11	1,510	1,090	1,130	1,690	2,110	2,120	2,140	1,410	639	502	692	925
12	1,470	1,120	1,030	1,760	2,050	2,130	2,130	1,710	645	500	691	913
13	1,600	1,080	961	1,590	2,110	2,140	2,000	1,840	641	503	680	908
14	1,570	1,160	1,120	2,190	2,110	2,130	1,620	1,370	643	503	693	918
15	1,920	991	1,300	2,160	2,130	2,120	1,520	953	607	506	682	936
16	1,600	1,310	1,420	2,160	3,590	2,130	1,500	823	585	503	689	960
17	1,430	1,410	962	2,180	5,990	2,160	1,450	860	584	505	685	957
18	1,420	1,380	1,180	2,150	3,590	2,090	1,350	822	588	503	682	942
19	1,170	1,270	1,300	2,070	2,140	2,090	1,540	844	589	502	682	911
20	1,620	1,140	1,500	2,170	2,160	2,140	1,780	787	591	504	685	906
21	1,290	1,420	1,790	2,170	2,140	2,130	1,490	737	589	502	674	912
22	1,220	1,150	1,990	2,160	2,130	2,140	1,330	740	542	501	677	908
23	1,140	1,090	2,170	2,300	2,110	2,130	1,720	743	512	486	677	910
24	1,070	1,480	2,150	2,980	2,120	2,130	2,000	739	502	444	681	905
25	1,170	1,880	2,130	4,300	2,120	2,150	1,990	689	494	443	680	902
26	1,000	1,850	2,160	3,440	2,140	2,020	1,550	636	499	445	674	904
27	1,140	1,980	2,140	5,540	2,120	2,050	1,920	637	497	458	732	903
28	954	1,740	2,130	4,600	2,130	2,090	1,840	638	497	455	758	900
29	958	1,410	2,150	2,680	-----	2,080	1,500	633	503	444	762	925
30	955	1,240	2,150	3,250	-----	1,500	1,500	639	501	442	759	899
31	1,050	-----	2,140	2,160	-----	953	-----	637	-----	445	764	-----
TOTAL	42,077	38,926	46,713	74,440	65,180	63,683	47,340	32,267	17,634	15,136	20,910	27,302
MEAN	1,357	1,298	1,571	2,401	2,328	2,054	1,578	1,041	588	488	675	910
MAX	1,920	1,980	2,170	5,540	5,990	2,160	2,140	1,840	645	510	764	960
MIN	954	957	961	1,590	1,740	953	1,040	633	494	442	513	808
AC-FT	83,460	77,210	96,620	147,700	129,300	126,300	93,900	64,000	34,900	30,020	41,470	54,150
(+)	-35,730	-24,630	+5,070	+73,660	-12,290	-48,760	-19,770	+14,660	+37,960	+21,250	-6,000	-24,150
MEAN*	776	884	1,654	3,600	2,107	1,261	1,246	1,279	1,226	834	577	504
CFSM	2.66	3.03	5.66	12.3	7.22	4.32	4.27	4.38	4.20	2.86	1.98	1.73
IN*	3.06	3.38	6.53	14.22	7.51	4.98	4.76	5.05	4.68	3.29	2.28	1.93
AC-FT	47,730	52,580	101,700	221,400	117,000	77,540	74,130	78,660	72,940	51,270	35,470	30,000

OBSERVED

CAL YR 1969 TOTAL 498,677 MEAN 1,366 MAX 6,720 MIN 473 AC-FT 989,100
WTR YR 1970 TOTAL 493,608 MEAN 1,352 MAX 5,990 MIN 442 AC-FT 979,100

ADJUSTED *

CAL YR 1969 MEAN 1,304 CFSM 4.47 IN 60.61 AC-FT 944,000
WTR YR 1970 MEAN 1,326 CFSM 4.54 IN 61.67 AC-FT 960,400

† CHANGE IN CONTENTS, IN ACRE-FEET, IN ALDER AND LA GRANDE RESERVOIRS.

* ADJUSTED FOR CHANGE IN RESERVOIR CONTENTS.

12087400 OHOP LAKE NEAR EATONVILLE, WASH.

LOCATION.--Lat 46°54'03", long 122°16'48", in SE¼NE¼ sec.3, T.16 N., R.4 E., Pierce County, on west shore of lake, 1.2 miles north of outlet, 2.4 miles northwest of Eatonville, and at mile 7.5.

DRAINAGE AREA.--17.5 sq mi.

PERIOD OF RECORD.--August 1960 to September 1970.

GAGE.--Nonrecording gage. Altitude of gage is 525 ft (from topographic map). Prior to Feb. 20, 1963, at site about 60 ft downlake at present datum.

EXTREMES.--Maximum and minimum gage heights, in feet, for the water years 1966-70 are contained in the following table:

Maximum observed			Minimum observed		
Wtr yr	Date	Gage height	Date		Gage height
1966	Jan. 9, 1966	6.70	Oct. 4, 1965		3.67
1967	Jan. 20, 1967	6.00	Aug. 28 to Sept. 2, 1967		3.65
1968	Feb. 20, 1968	5.69	Aug. 9-13, 1968		3.75
1969	Jan. 7, 1969	6.89	Sept. 7, 8, 9, 16, 1969		3.78
1970	Jan. 19, 1970	6.22	Sept. 1, 2, 1970		3.67

Period of record: Maximum gage height observed, 9.59 ft Jan. 30, 1965; minimum observed, 3.35 ft Aug. 19-23, 25, 30, 1961.

REMARKS.--No regulation or diversion above station. Gage read at various times in the morning. Water-quality records for the water year 1970 are published in reports of the Geological Survey.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.69	4.26	4.96	5.60	5.05	5.13	5.68	4.55	4.00	4.56	3.79	3.97
2	3.68	4.22	4.86	5.62	5.02	5.18	5.61	4.50	4.08	4.53	3.78	3.95
3	3.68	4.26	4.82	5.68	4.96	5.18	5.50	4.46	4.15	4.76	3.77	3.91
4	3.67	4.28	4.88	5.67	4.92	5.16	5.40	4.41	4.21	5.20	3.76	3.88
5	3.75	4.37	5.00	5.66	4.89	5.11	5.30	4.37	4.20	5.38	3.75	3.85
6	3.79	4.40	5.02	6.09	4.89	5.08	5.18	4.41	4.19	5.34	3.72	3.82
7	3.89	4.42	5.02	6.52	4.99	5.08	5.09	4.52	4.18	5.24	3.70	3.80
8	3.96	4.46	5.00	6.66	4.88	5.07	5.00	4.36	4.16	5.13	3.69	3.78
9	3.98	4.46	4.98	6.70	4.87	5.23	4.92	4.52	4.12	4.99	3.69	3.79
10	3.99	4.44	4.94	6.56	4.89	5.76	4.99	4.47	4.12	4.87	3.69	3.80
11	3.98	4.47	4.92	6.31	4.90	5.92	5.02	4.43	4.15	4.76	3.71	3.82
12	3.97	4.48	4.90	6.19	4.96	5.86	5.42	4.40	4.24	4.65	3.72	3.83
13	4.00	4.48	4.89	6.13	5.02	5.78	5.79	4.37	4.29	4.55	3.75	3.83
14	4.02	4.50	4.79	6.25	5.05	5.78	5.92	4.35	4.32	4.49	3.76	3.84
15	4.12	4.50	4.70	6.50	5.06	5.86	5.94	4.32	4.29	4.41	3.77	3.85
16	4.25	4.54	4.66	6.42	5.04	5.90	5.87	4.33	4.25	4.36	3.78	3.86
17	4.32	4.53	4.60	6.26	5.00	5.89	5.72	4.42	4.21	4.30	3.80	3.96
18	4.38	4.53	4.55	6.07	4.97	5.80	5.60	4.43	4.17	4.24	3.81	4.01
19	4.38	4.54	4.50	5.89	4.93	5.88	5.45	4.42	4.13	4.20	3.83	4.01
20	4.42	4.54	4.47	5.73	4.90	5.90	5.34	4.38	4.09	4.16	3.84	4.10
21	4.46	4.61	4.49	5.59	4.88	5.98	5.26	4.35	4.06	4.08	3.86	4.06
22	4.47	4.80	4.33	5.46	4.87	5.98	5.18	4.35	4.03	4.05	3.87	4.22
23	4.46	4.88	4.55	5.36	4.86	5.95	5.10	4.31	4.01	4.01	3.88	4.04
24	4.42	5.00	4.62	5.28	4.83	5.91	5.00	4.28	4.00	3.97	3.89	4.01
25	4.38	5.00	4.70	5.19	4.80	5.90	4.93	4.24	3.99	3.93	3.91	3.99
26	4.36	4.99	4.72	5.12	4.79	5.88	4.85	4.19	3.97	3.90	3.91	3.97
27	4.32	4.97	4.80	5.08	4.78	5.86	4.78	4.16	3.96	3.87	3.92	3.96
28	4.33	4.97	5.22	5.04	4.96	5.83	4.71	4.12	4.17	3.85	3.94	3.95
29	4.36	4.98	5.55	5.03	-----	5.76	4.66	4.09	4.54	3.84	3.95	3.92
30	4.37	4.94	5.66	5.00	-----	5.68	4.59	4.06	4.59	3.82	3.96	3.90
31	4.30	-----	5.65	5.04	-----	5.72	-----	4.03	-----	3.80	3.96	-----
MEAN	4.13	4.59	4.87	5.80	4.92	5.65	5.26	4.35	4.16	4.43	3.81	3.92
MAX	4.47	5.00	5.66	6.70	5.06	5.98	5.94	4.36	4.59	5.38	3.96	4.10
MIN	3.67	4.22	4.47	5.00	4.78	5.07	4.59	4.03	3.96	3.80	3.69	3.78

CAL YR 1965 MEAN 4.78 MAX 9.54 MIN 3.44
WTR YR 1966 MEAN 4.66 MAX 6.70 MIN 3.67

NOTE.--NO GAGE-HEIGHT RECORD DEC. 26 TO JAN. 25, FEB. 26 TO MAR. 25.

NISOUALLY RIVER BASIN

12087400 OHOP LAKE NEAR EATONVILLE, NASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.89	4.13	4.65	4.66	4.88	4.50	4.38	4.44	3.97	3.98	3.75	3.65
2	3.89	4.18	4.62	4.71	4.90	4.56	4.38	4.42	3.97	3.89	3.75	3.65
3	3.88	4.06	4.57	4.80	4.79	4.55	4.32	4.37	3.97	3.88	3.75	3.66
4	3.87	4.83	4.58	4.92	4.77	4.49	4.28	4.32	3.96	3.87	3.74	3.66
5	3.86	4.03	4.70	5.03	4.77	4.43	4.23	4.28	3.95	3.85	3.74	3.66
6	3.85	4.04	4.69	4.96	4.73	4.39	4.23	4.24	3.94	3.82	3.73	3.66
7	3.86	4.04	4.68	4.98	4.66	4.35	4.21	4.20	3.92	3.86	3.72	3.66
8	3.88	4.04	4.64	4.96	4.57	4.31	4.19	4.17	3.90	3.79	3.72	3.66
9	3.88	4.83	4.54	4.97	4.54	4.38	4.18	4.17	3.88	3.78	3.72	3.66
10	3.88	4.03	4.68	4.91	4.52	4.46	4.18	4.16	3.87	3.78	3.72	3.66
11	3.88	4.04	4.47	5.05	4.51	4.45	4.17	4.15	3.87	3.77	3.71	3.69
12	3.90	4.11	4.68	5.22	4.58	4.40	4.16	4.10	3.86	3.77	3.71	3.70
13	3.92	4.16	4.63	5.18	4.62	4.57	4.20	4.26	3.86	3.77	3.71	3.72
14	3.95	4.33	5.88	5.48	4.79	4.34	4.38	4.24	3.86	3.76	3.70	3.72
15	3.96	4.52	5.06	5.42	4.78	4.36	4.38	4.21	3.85	3.76	3.78	3.75
16	3.92	4.62	4.88	5.36	4.76	4.46	4.29	4.18	3.85	3.75	3.70	3.72
17	3.91	4.68	4.77	5.20	4.77	4.51	4.26	4.15	3.84	3.75	3.78	3.71
18	3.90	4.61	4.81	5.06	4.99	4.54	4.27	4.11	3.83	3.75	3.69	3.74
19	3.90	4.49	4.78	5.24	5.00	4.54	4.35	4.09	3.82	3.74	3.69	3.72
20	4.00	4.38	4.92	6.00	4.86	4.52	4.34	4.07	3.81	3.75	3.68	3.72
21	4.24	4.31	4.97	5.92	4.74	4.48	4.34	4.06	3.88	3.76	3.68	3.72
22	4.42	4.25	4.85	5.59	4.64	4.45	4.34	4.04	3.19	3.76	3.68	3.71
23	4.41	4.19	4.72	5.38	4.56	4.58	4.33	4.02	4.32	3.76	3.67	3.72
24	4.38	4.15	4.68	5.83	4.50	4.54	4.38	4.88	4.26	3.77	3.67	3.72
25	4.27	4.16	4.62	4.88	4.46	4.54	4.27	3.90	4.16	3.77	3.66	3.73
26	4.22	4.20	4.66	4.77	4.63	4.54	4.24	3.95	4.09	3.77	3.66	3.73
27	4.26	4.29	4.62	4.75	4.60	4.53	4.25	3.95	3.68	3.75	3.67	3.71
28	4.25	4.34	4.56	5.82	4.37	4.51	4.31	3.95	3.99	3.77	3.65	3.71
29	4.24	4.35	4.56	5.38	-----	4.40	4.61	3.95	3.97	3.76	3.65	3.72
30	4.21	4.44	4.57	5.31	-----	4.46	4.49	4.00	3.95	3.76	3.65	3.74
31	4.17	-----	4.55	5.15	-----	4.42	-----	3.99	-----	3.76	3.65	-----
MEAN	4.03	4.24	4.60	5.14	4.68	4.42	4.28	4.14	3.95	3.79	3.70	3.78
MAX	4.42	4.68	5.88	6.00	5.00	4.54	4.49	4.48	4.32	3.90	3.75	3.75
MIN	3.85	4.03	4.47	4.64	4.37	4.31	4.16	3.92	3.80	3.74	3.65	3.65</

NOTE.--NO GAGE-HEIGHT RECORD DEC. 24 TO FEB. 20.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.78	4.46	4.12	4.44	4.38	4.40	4.78	4.32	4.44	4.14	3.81	4.56
2	3.78	4.48	4.16	4.42	4.40	4.38	4.68	4.31	5.02	4.12	3.60	4.60
3	3.89	4.32	4.28	4.48	4.68	4.35	4.56	4.29	5.68	4.18	3.80	4.39
4	4.00	4.26	4.37	4.37	5.00	4.34	4.59	4.27	5.50	4.08	3.79	4.38
5	4.83	4.22	4.46	4.32	5.28	4.38	4.68	4.27	5.21	4.06	3.78	4.23
6	4.81	4.17	4.50	4.28	5.06	4.39	4.74	4.29	5.00	4.83	3.78	4.19
7	4.80	4.18	4.46	4.25	4.90	4.48	4.76	4.32	4.82	4.88	3.77	4.16
8	3.90	4.13	4.40	4.25	4.74	4.38	4.70	4.32	4.70	3.98	3.76	4.78
9	3.96	4.17	4.36	4.30	4.64	4.36	4.62	4.30	4.46	3.96	3.75	4.06
10	3.94	4.25	4.33	4.89	4.56	4.33	4.54	4.28	4.57	3.94	3.75	4.05
11	3.99	4.35	4.32	4.75	4.48	4.38	4.49	4.27	4.49	3.93	3.75	4.02
12	4.04	4.48	4.29	4.78	4.44	4.27	4.44	4.25	4.45	3.93	3.75	4.82
13	4.08	4.37	4.26	4.65	4.38	4.25	4.38	4.26	4.43	3.91	3.75	4.80
14	4.18	4.32	4.21	4.86	4.34	4.24	4.35	4.23	4.39	3.92	3.81	4.33
15	4.10	4.28	4.16	4.84	4.29	4.23	4.38	4.21	4.37	3.92	3.90	4.20
16	4.09	4.24	4.15	4.68	4.24	4.38	4.47	4.19	4.35	3.92	3.92	4.36
17	4.06	4.21	4.13	4.57	4.28	4.37	4.48	4.18	4.31	3.92	3.94	4.42
18	4.85	4.19	4.12	4.52	4.26	4.39	4.46	4.18	4.28	3.91	3.96	4.75
19	4.03	4.16	4.09	4.48	4.78	4.38	4.62	4.17	4.26	3.91	4.06	5.28
20	4.04	4.14	4.08	4.44	5.49	4.34	4.41	4.38	4.25	3.91	4.87	5.23
21	4.09	4.12	4.08	4.62	5.68	4.38	4.40	4.46	4.23	3.91	4.10	5.05
22	4.14	4.10	4.87	4.74	5.38	4.27	4.38	4.49	4.22	3.90	4.09	4.88
23	4.24	4.09	4.18	4.68	5.09	4.25	4.37	4.48	4.22	3.88	4.88	4.72
24	4.28	4.09	4.18	4.59	4.97	4.23	4.38	4.58	4.22	3.88	4.36	4.68
25	4.26	4.14	4.28	4.51	4.79	4.22	4.36	4.52	4.28	3.87	4.56	4.52
26	4.28	4.17	4.54	4.48	4.72	4.24	4.36	4.54	4.18	3.87	4.88	4.42
27	4.38	4.16	4.84	4.43	4.62	4.26	4.36	4.54	4.16	3.86	4.89	4.36
28	4.68	4.14	4.68	4.39	4.55	4.75	4.35	4.53	4.14	3.86	4.98	4.20
29	4.79	4.16	4.62	4.36	4.48	5.40	4.33	4.50	4.18	3.85	5.88	4.28
30	4.65	4.13	4.54	4.34	4.44	5.20	4.32	4.46	4.14	3.84	4.84	4.18
31	4.54	-----	4.48	4.32	-----	4.95	-----	4.41	-----	3.82	4.48	-----
MEAN	4.13	4.22	4.31	4.49	4.71	4.42	4.48	4.35	4.50	3.94	4.18	4.48
MAX	4.79	4.46	4.68	4.75	5.69	5.48	4.78	4.54	5.68	4.14	5.88	5.28
MIN	3.78	4.89	4.07	4.25	4.28	4.22	4.52	4.17	4.14	3.82	3.75	4.00
CAL YR 1967	MEAN	4.21	MAX	6.00	MIN	3.65						
MYR YR 1968	MEAN	4.33	MAX	5.69	MIN	3.75						

12087400 OHOP LAKE NEAR EATONVILLE, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.17	4.26	4.82	4.88	4.30	4.29	4.25	4.39	4.90	4.46	3.92	3.84
2	4.12	4.24	4.74	5.07	4.29	4.28	4.31	4.45	4.26	4.38	3.99	3.82
3	4.11	4.22	4.74	5.08	4.30	4.28	4.31	4.48	4.58	4.35	3.96	3.82
4	4.09	4.20	5.04	5.20	4.36	4.34	4.42	4.46	4.50	4.38	3.91	3.88
5	4.08	4.19	5.22	5.58	4.48	4.40	4.44	4.40	4.38	4.28	3.91	3.79
6	4.09	4.17	5.24	6.28	4.50	4.58	4.41	4.36	4.32	4.26	3.92	3.79
7	4.12	4.16	5.14	6.89	4.48	4.40	4.38	4.30	4.26	4.20	3.98	3.78
8	4.14	4.17	5.06	6.52	4.50	4.62	4.34	4.26	4.22	4.17	4.09	3.78
9	4.12	4.40	5.10	6.02	5.00	4.58	4.30	4.21	4.20	4.12	4.09	3.78
10	4.12	4.53	5.38	5.66	5.09	4.58	4.29	4.17	4.18	4.11	4.12	3.79
11	4.16	4.79	5.68	5.49	5.20	4.44	4.28	4.16	4.15	4.10	4.15	3.79
12	4.19	5.28	5.80	5.39	5.38	4.38	4.26	4.10	4.13	4.08	4.18	3.88
13	4.26	5.32	5.72	5.14	5.48	4.35	4.24	4.08	4.09	4.08	4.22	3.82
14	4.29	5.18	5.42	5.03	5.43	4.31	4.23	4.08	4.09	4.04	4.24	3.80
15	4.36	4.94	5.18	4.93	4.92	4.30	4.19	4.08	4.08	4.02	4.25	3.88
16	4.43	4.88	5.16	4.84	4.86	4.28	4.16	4.06	4.07	3.99	4.27	3.78
17	4.45	4.78	5.10	4.76	4.81	4.28	4.12	4.06	4.05	3.97	4.28	3.88
18	4.44	4.69	5.02	4.70	4.76	4.49	4.24	4.02	4.03	3.94	4.23	3.98
19	4.40	4.67	4.99	4.66	4.68	4.71	4.36	4.10	4.01	4.08	4.38	4.08
20	4.47	4.62	4.90	4.60	4.62	4.73	4.50	4.26	3.99	3.95	4.32	4.14
21	4.52	4.57	4.80	4.37	4.56	4.66	4.56	4.27	3.97	3.92	4.35	4.18
22	4.56	4.58	4.74	4.57	4.52	4.60	4.51	4.22	4.02	3.90	4.34	4.19
23	4.53	4.68	4.70	4.55	4.57	4.52	4.51	4.17	4.18	3.89	4.30	4.24
24	4.48	4.70	4.70	4.51	4.45	4.46	4.39	4.14	4.21	3.88	4.22	4.25
25	4.43	4.70	4.68	4.48	4.42	4.40	4.38	4.09	4.44	3.86	4.08	4.24
26	4.38	4.66	4.65		4.38	4.36	4.49	4.08	4.46	3.86	3.99	4.21
27	4.34	4.66	4.60		4.33	4.32	4.45	4.07	4.34	3.86	3.96	4.17
28	4.31	4.68	4.57		4.30	4.28	4.40	4.04	4.36	3.86	3.92	4.14
29	4.28	4.71	4.50		4.28	4.38	4.08	4.53	3.85	3.90	4.09	4.09
30	4.26	4.78	4.48	4.29	4.26	4.36	4.66	4.50	3.87	3.88	4.10	4.10
31	4.27		4.58	4.30	4.25		5.08		3.89	3.86		
MEAN	4.29	4.61	4.98		4.42	4.37	4.24	4.28	4.05	4.18	3.95	
MAX	4.56	5.32	5.80		4.73	4.73	5.08	4.90	4.46	4.34	4.25	
MIN	4.08	4.16	4.48		4.25	4.12	4.02	3.97	3.85	3.86	3.78	

CAL YR 1968 MEAN 4.44 MAX 5.80 MIN 3.75

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.12	3.99	4.15	4.48	5.14	4.40	4.13	4.66	4.08	3.78	3.75	3.67
2	4.17	3.98	4.13	4.42	5.05	4.38	4.14	4.60	4.07	3.80	3.75	3.67
3	4.16	3.98	4.10	4.39	4.96	4.34	4.15	4.54	4.04	3.88	3.76	3.78
4	4.14	4.00	4.10	4.36	4.88	4.35	4.14	4.48	4.02	3.88	3.76	3.71
5	4.11	4.38	4.10	4.32	6.80	4.31	4.14	4.40	4.00	3.86	3.76	3.73
6	4.08	4.60	4.11	4.28	4.75	4.29	4.20	4.35	3.98	3.86	3.76	3.73
7	4.05	4.58	4.12	4.23	4.71	4.34	4.36	4.30	3.97	3.84	3.76	3.77
8	4.09	4.47	4.14	4.23	4.68	4.33	4.40	4.27	3.98	3.84	3.78	3.80
9	4.34	4.40	4.16	4.23	4.81	4.31	4.41	4.38	3.94	3.84	3.78	3.78
10	4.34	4.34	4.17	4.30	4.56	4.29	4.48	4.38	3.96	3.86	3.78	3.78
11	4.50	4.29	4.22	4.33	4.52	4.28	4.80	4.40	3.99	3.86	3.77	3.78
12	4.42	4.23	4.42	4.32	4.48	4.26	4.76	4.44	4.01	3.86	3.77	3.76
13	4.35	4.19	4.58	4.38	4.46	4.26	4.65	4.45	4.05	3.87	3.77	3.72
14	4.28	4.15	4.91	5.02	4.84	4.27	4.55	4.40	4.08	3.87	3.77	3.74
15	4.20	4.12	5.14	6.10	4.42	4.29	4.48	4.36	4.09	3.85	3.76	3.72
16	4.16	4.10	5.04	5.96	4.68	4.34	4.39	4.34	3.98	3.83	3.77	3.74
17	4.12	4.09	4.94	5.85	4.96	4.38	4.34	4.28	3.90	3.80	3.77	3.72
18	4.08	4.08	4.88	6.00	5.20	4.40	4.28	4.20	3.86	3.78	3.76	3.83
19	4.05	4.07	4.77	6.22	5.42	4.41	4.34	4.18	3.82	3.77	3.76	3.88
20	4.03	4.06	4.70	6.18	5.19	4.37	4.48	4.16	3.80	3.77	3.76	3.92
21	4.00	4.17	4.76	6.00	4.90	4.34	4.48	4.12	3.80	3.76	3.75	3.91
22	4.00	4.27	5.10	5.69	4.85	4.29	4.45	4.12	3.78	3.74	3.75	3.93
23	4.01	4.32	5.30	5.59	4.74	4.27	4.41	4.10	3.76	3.71	3.75	3.94
24	3.98	4.38	5.39	5.50	4.78	4.25	4.41	4.10	3.78	3.70	3.75	3.93
25	3.98	4.38	5.20	5.58	4.60	4.23	4.50	4.08	3.74	3.71	3.74	3.90
26	3.96	4.35	5.08	6.09	4.54	4.20	4.69	4.04	3.72	3.72	3.74	3.88
27	3.98	4.31	4.98	6.16	4.48	4.18	4.81	4.02	3.74	3.74	3.74	3.86
28	3.99	4.26	4.86	5.96	4.46	4.18	4.08	4.08	3.74	3.76	3.72	3.88
29	3.98	4.20	4.78	5.67	4.46	4.16	4.78	4.02	3.73	3.76	3.69	3.86
30	4.00	4.17	4.66	5.40	4.46	4.15	4.71	4.06	3.73	3.75	3.68	3.83
31	4.00		4.56	5.20	4.43	4.13		4.08		3.75	3.68	
MEAN	4.13	4.23	4.63	5.18	4.75	4.29	4.46	4.27	3.90	3.79	3.75	3.80
MAX	4.54	4.60	5.39	6.22	5.24	4.41	4.81	4.68	4.09	3.87	3.78	3.94
MIN	3.98	3.98	4.10	4.23	4.42	4.13	4.13	4.00	3.72	3.78	3.60	3.67

WTR YR 1970 MEAN 4.26 MAX 6.22 MIN 3.67

LOCATION.--Lat 46°52'52", long 122°16'42", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.10, T.16 N., R.4 E., Pierce County, on right bank 150 ft (revised) downstream from Lynch Creek, 0.2 mile downstream from outlet of Ohop Lake, 0.8 mile northwest of Eatonville, and at mile 6.1.

PERIOD OF RECORD.--June 1927 to September 1932. September 1941 to September 1970.

GAGE.--Water-stage recorder. Concrete control June 21, 1948, to June 15, 1964. Datum of gage is 517.76 ft above mean sea level (stadia traverse). June 1, 1927, to Sept. 30, 1932, water-stage recorder at datum 4.83 ft higher; Sept. 6, 1941, to Mar. 17, 1942, nonrecording gage and Mar. 18, 1942, to June 15, 1964, water-stage recorder, at datum 2.04 ft higher; all at site 250 ft downstream. June 15, 1964, to Aug. 26, 1966, water-stage recorder at site on left bank at datum 2.04 ft higher.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (400 cfs, revised), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 5, 1966	2130	*552	7.33	Sept. 2, 1968	1200	530	4.13	Nov. 4, 1969	2000	489	4.13
				Sept. 18, 1968	0815	530	4.13				
Dec. 13, 1966	1330	414	4.03	Nov. 11, 1968	1730	445	3.85	Jan. 14, 1970	0600	*748	4.92
Jan. 19, 1967	1800	*700	4.95	Jan. 7, 1969	0215	*884	5.26	Jan. 17, 1970	0500	501	4.17
Feb. 19, 1968	1115	*534	4.14	Feb. 8, 1969	1915	513	4.21	Jan. 19, 1970	0400	540	4.30
Mar. 28, 1968	0645	534	4.14	Feb. 11, 1969	0530	489	4.13	Jan. 27, 1970	0600	501	4.17

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 4, 1965	8.8		1969	Aug. 18, 19, 1969	4.6	1.55
1967	Aug. 29, 30, 31, 1967	3.8	1.25	1970	July 13, 1970	4.3	
1968	Aug. 11, 12, 13, 1968	5.5	al.33				

a Occurred Oct. 1, 1967.

Period of record: Maximum discharge, 1,740 cfs Dec. 9, 1953; maximum gage height, 9.46 ft, present datum, Jan. 29, 1965; minimum discharge, 2.3 cfs Aug. 22, 23, 1944.

REMARKS.--Records good. No gage-height record Aug. 19 to Sept. 26, 1966. Possible small diversions for domestic use. Flow affected by natural storage in Ohop Lake. Water-quality records for the water year 1968 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1286: 1946. WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	17	37	71	54	66	98	37	18	33	13	12
2	9.4	16	37	101	50	59	91	36	29	45	13	12
3	9.2	18	34	83	47	57	80	35	27	189	13	12
4	9.3	35	76	80	45	54	72	33	27	109	13	12
5	13	30	55	199	47	56	67	32	25	75	13	12
6	22	28	47	332	50	68	63	49	22	63	13	11
7	22	25	54	270	47	69	60	44	22	53	13	11
8	16	23	55	256	46	80	57	35	20	47	12	11
9	18	22	46	189	52	217	60	30	20	42	11	11
10	16	22	44	146	53	185	68	28	24	38	11	11
11	14	26	40	130	57	124	95	27	30	35	11	21
12	14	25	36	129	67	103	162	27	38	32	11	21
13	17	26	34	159	60	116	150	27	30	30	11	14
14	22	29	32	277	58	147	147	26	27	29	12	13
15	50	30	30	197	56	140	120	28	25	27	11	12
16	30	32	29	145	52	130	101	36	24	26	11	12
17	28	29	27	114	49	111	87	37	22	25	11	13
18	25	29	26	98	47	108	77	32	22	24	10	30
19	53	36	26	85	46	133	68	30	20	2,22	10	16
20	36	38	25	75	52	127	67	27	20	22	10	13
21	30	77	32	67	52	124	64	27	20	20	10	12
22	24	103	61	41	49	124	61	21	20	20	10	12
23	26	66	29	57	50	138	54	26	19	18	10	12
24	22	50	42	55	46	149	50	24	20	18	10	12
25	21	45	40	53	44	144	48	22	18	18	10	13
26	20	42	34	50	43	130	46	22	17	17	13	19
27	18	164	54	46	46	115	43	22	17	17	17	16
28	19	50	198	51	70	105	41	20	101	16	21	16
29	18	43	139	54	-----	101	40	20	48	15	13	13
30	18	39	97	58	-----	112	38	18	37	14	12	12
31	17	-----	80	59	-----	109	-----	18	-----	14	12	-----
TOTAL	666.5	1,106	1,675	3,752	1,495	3,502	2,272	903	810	1,153	971	422
MEAN	21.5	36.9	54.0	117	51.3	111	75.7	29.1	27.0	37.2	30.0	14.1
MAX	53	103	198	332	70	217	162	49	101	189	21	30
MIN	9.2	16	25	49	43	54	38	18	17	14	10	11
CF5M	.62	1.07	1.57	3.51	1.49	3.28	2.19	.84	.78	1.08	.35	.41
IN.	.72	1.19	1.81	4.05	1.55	3.78	2.45	.97	.87	1.24	.40	.46
AC-FT	1,320	2,190	3,320	7,440	2,850	6,950	4,510	1,790	1,610	2,290	736	837
CAL YR 1965	TOTAL 20,898.0	MEAN 57.3	MAX 1,180	NIN 8.5	CF5M 1.66	IN 22.53	AC-FT 41,450					
WTR YR 1966	TOTAL 18,067.5	MEAN 59.5	MAX 132	NIN 9.2	CF5M 1.63	IN 19.58	AC-FT 35,040					

12088000 OHOP CREEK NEAR EATONVILLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	36	124	206	193	115	64	87	21	15	7.5	4.3
2	12	32	120	169	138	107	59	73	21	14	7.1	6.0
3	12	28	111	162	130	92	54	65	20	13	6.8	5.3
4	9.8	25	179	204	156	79	53	58	19	12	6.6	4.6
5	8.4	31	195	195	148	70	52	52	18	11	6.5	4.3
6	7.8	40	124	166	124	62	47	48	17	11	6.7	4.2
7	8.8	33	118	169	107	58	44	44	16	11	6.6	4.3
8	22	30	94	219	94	55	41	42	15	10	6.6	4.3
9	16	32	80	195	87	78	41	44	15	10	6.4	4.6
10	13	53	103	170	85	79	40	40	15	9.7	6.1	5.5
11	12	41	97	200	86	76	38	41	15	9.4	6.2	12
12	17	86	118	200	88	67	36	83	14	9.3	5.9	9.5
13	29	289	250	250	135	61	56	70	14	9.0	5.7	7.0
14	21	195	265	245	135	56	67	56	13	8.8	5.4	6.3
15	18	168	189	220	132	95	56	48	13	8.6	5.3	5.9
16	14	175	151	230	136	111	52	42	12	8.4	5.3	6.4
17	13	133	135	210	104	47	37	12	12	8.2	5.2	5.7
18	12	97	136	190	245	107	71	33	11	8.1	5.7	5.1
19	12	78	153	550	180	99	94	31	11	8.4	5.2	4.9
20	98	66	219	475	139	92	73	29	11	11	4.5	5.0
21	91	53	172	321	115	90	70	26	52	13	4.4	4.9
22	134	46	139	233	99	112	70	25	143	10	4.4	4.9
23	99	39	117	180	87	162	62	23	66	9.4	4.4	4.8
24	70	35	103	145	79	139	55	22	43	8.9	4.5	4.8
25	55	93	123	120	76	115	51	21	31	8.6	4.2	4.7
26	63	92	123	111	71	112	51	20	25	8.4	4.1	4.8
27	82	86	107	161	66	105	66	20	24	8.4	4.3	4.8
28	62	78	104	327	79	95	82	20	20	8.3	4.2	4.8
29	52	67	124	279	-----	91	124	22	18	7.9	4.0	5.2
30	50	151	118	239	-----	82	101	24	16	7.8	4.2	6.1
31	41	-----	116	185	-----	73	-----	23	-----	7.6	4.1	-----
TOTAL	1,165.8	2,162	4,308	6,926	3,415	2,839	1,817	1,269	741	304.2	169.1	165.0
MEAN	37.6	72.1	139	223	122	91.6	60.6	40.9	24.7	9.81	5.45	5.50
MAX	134	175	289	550	245	162	124	87	143	15	7.5	12
MIN	7.8	25	80	111	66	55	36	20	11	7.6	4.0	4.2
CFSM	1.09	2.09	4.03	6.46	3.54	2.66	1.76	1.19	.72	.28	.16	.16
IN-	1.26	2.33	4.65	7.47	3.68	3.06	1.96	1.37	.80	.33	.18	.18
AC-FT	2,310	4,290	8,540	13,740	6,770	5,630	3,600	2,520	1,470	603	335	327

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	7.6	70	25	71	44	51	103	46	88	20	7.3	62		
2	8.8	50	100	70	195	47	96	40	397	18	7.3	56		
3	31	40	109	58	258	44	81	35	273	17	7.3	45		
4	23	33	99	50	300	44	73	34	178	16	7.3	38		
5	16	29	92	49	197	60	117	44	124	15	7.3	33		
6	15	25	74	43	139	59	152	57	90	15	7.3	29		
7	14	24	66	40	106	52	132	51	71	13	6.9	26		
8	13	25	54	39	84	52	106	44	59	13	6.2	24		
9	12	58	61	177	69	47	90	39	50	12	6.1	22		
10	11	67	69	159	59	42	74	35	44	11	6.0	21		
11	20	71	66	105	52	38	68	33	41	11	5.8	20		
12	22	55	53	94	47	37	59	31	40	12	5.8	21		
13	26	45	43	168	43	35	52	32	36	13	6.0	20		
14	30	39	37	132	39	35	50	29	35	13	21	33		
15	23	36	33	119	36	47	63	28	31	15	49	75		
16	18	32	31	108	34	97	71	25	29	13	25	67		
17	16	28	28	87	34	87	67	22	27	12	20	96		
18	16	27	26	71	77	74	60	21	25	11	25	394		
19	23	25	24	64	442	62	56	22	24	12	46	237		
20	18	23	23	72	379	52	56	77	23	12	83	206		
21	37	22	22	152	265	46	54	64	22	11	39	130		
22	44	21	29	112	189	41	50	59	26	11	29	95		
23	50	25	35	88	157	38	48	59	25	11	86	78		
24	34	39	53	74	136	36	46	54	22	10	174	63		
25	61	37	137	63	111	42	50	57	21	10	192	52		
26	45	31	168	58	91	49	62	62	20	9.5	214	45		
27	91	28	135	51	77	99	52	51	19	9.0	173	40		
28	164	26	125	46	65	424	47	47	20	8.5	252	36		
29	104	28	97	42	57	268	42	42	26	8.1	155	33		
30	73	27	77	41	-----	180	42	36	22	8.1	103	30		
31	59	-----	66	40	-----	131	-----	33	-----	7.7	74	-----		
TOTAL	1,125.4	1,086	2,057	2,543	3,782	2,416	2,119	1,309	1,908	377.9	1,846.6	2,127		
MEAN	36.3	36.2	66.4	82.0	130	77.9	70.6	42.2	63.6	12.2	59.6	70.9		
MAX	164	71	168	177	442	424	152	77	397	20	252	394		
HIN	7.6	21	22	39	34	35	42	21	19	7.7	5.8	20		
CFSM	1.05	1.05	1.92	2.38	3.77	2.26	2.05	1.22	1.84	.35	1.73	2.06		
IN-	1.21	1.17	2.22	2.74	4.08	2.61	2.28	1.41	2.06	.41	1.99	2.39		
AC-FT	2,230	2,150	4,080	5,040	7,500	4,790	4,200	2,600	3,780	750	3,660	4,220		
CAL YR 1967	TOTAL	21,913.7	MEAN	60.0	MAX	550	MIN	4.0	CFSM	1.74	IN	23.63	AC-FT	43,470
WTR YR 1968	TOTAL	22,696.9	MEAN	62.0	MAX	442	MIN	5.8	CFSM	1.80	IN	24.47	AC-FT	45,020

12088000 OHOP CREEK NEAR EATONVILLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	28	40	113	222	42	43	59	119	100	70	5.2	8.3		
2	26	39	94	202	41	43	94	97	70	60	5.0	7.5		
3	25	44	157	204	47	49	98	78	55	55	5.2	6.9		
4	26	39	255	268	71	52	84	65	45	50	5.2	6.9		
5	26	36	204	591	84	97	80	56	38	44	9.0	6.9		
6	30	33	169	612	70	101	74	49	34	42	8.0	6.9		
7	32	33	141	696	61	91	65	44	31	36	6.7	6.6		
8	28	56	191	435	275	87	57	40	29	32	6.2	6.2		
9	26	137	232	313	298	74	53	35	27	28	6.0	6.2		
10	31	90	343	250	236	64	56	32	25	25	5.6	6.0		
11	37	263	343	212	459	56	49	30	24	24	5.3	5.7		
12	41	258	298	173	293	51	48	28	22	23	5.3	5.2		
13	57	193	216	146	200	47	48	25	21	21	5.5	6.1		
14	48	144	175	127	159	45	43	24	20	20	5.3	6.9		
15	90	113	148	112	141	48	40	22	19	18	5.2	6.4		
16	78	92	166	100	144	65	37	22	17	17	5.2	6.6		
17	62	78	136	91	124	132	45	25	16	16	4.9	8.9		
18	64	85	134	81	106	168	75	40	16	15	4.8	23		
19	60	78	119	76	95	155	92	80	15	14	4.8	36		
20	90	67	100	71	84	119	100	65	15	14	4.9	49		
21	86	63	85	66	75	101	83	53	14	14	5.1	37		
22	75	110	79	60	69	88	76	42	17	13	15	36		
23	63	112	92	52	63	78	121	34	50	12	21	43		
24	54	95	119	49	58	67	100	31	120	11	17	44		
25	51	88	103	48	53	63	83	28	100	10	15	38		
26	48	78	85	48	50	60	71	27	90	8.8	13	34		
27	43	90	80	47	46	60	61	28	95	7.4	12	28		
28	40	92	70	44	44	57	74	28	100	6.6	12	27		
29	38	155	58	42	-----	53	70	100	90	5.8	11	26		
30	47	157	51	41	-----	52	78	300	80	9.8	9.7	37		
31	46	-----	119	42	-----	65	-----	170	-----	5.5	8.9	-----		
TOTAL	1,496	2,958	4,675	5,521	3,488	2,331	2,114	1,817	1,395	723.9	252.8	572.2		
MEAN	48.3	96.4	151	178	125	75.2	70.5	58.6	46.5	23.4	8.15	19.1		
MAX	90	263	343	696	459	168	121	300	120	70	21	49		
MIN	25	33	31	41	41	43	37	22	14	5.5	4.8	5.2		
CFSH	1.40	2.86	4.38	5.16	3.62	2.18	2.04	1.70	1.35	.68	.24	.55		
IN.	1.61	3.19	5.04	5.95	3.76	2.51	2.28	1.96	1.50	.78	.27	.62		
AC-FT	2,970	5,870	9,270	10,950	6,920	4,620	4,190	3,600	2,770	1,440	501	1,130		
CAL YR 1968	TOTAL	27,557.5	MEAN	75.3	MAX	442	MIN	5.8	CFSM	2.18	IN	29.71	AC-FT	54,660
WTR YR 1969	TOTAL	27,343.9	MEAN	74.5	MAX	696	MIN	4.8	CFSM	2.17	IN	29.48	AC-FT	54,240

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	49	16	25	53	143	46	37	88	23	6.8	5.8	5.4		
2	39	16	24	47	121	44	44	74	21	6.7	6.1	5.4		
3	33	16	45	45	112	46	38	64	19	8.7	6.1	7.1		
4	28	140	25	42	97	42	36	56	18	6.5	6.1	9.6		
5	25	178	25	37	88	39	43	48	17	6.1	5.8	8.7		
6	22	95	25	34	81	42	74	44	17	5.8	5.4	9.0		
7	20	72	27	33	81	61	94	40	16	5.6	5.6	25		
8	62	54	27	34	74	52	71	41	16	5.6	6.8	16		
9	129	45	32	42	67	46	109	49	17	5.2	6.3	12		
10	78	38	30	49	63	42	193	57	18	5.0	5.8	11		
11	57	34	89	43	57	39	139	64	14	5.0	5.4	9.3		
12	44	30	200	42	53	38	101	64	13	4.7	5.0	8.7		
13	36	28	151	122	51	41	79	61	13	4.5	5.0	7.4		
14	31	25	287	619	48	45	65	52	13	8.1	5.0	7.1		
15	27	25	166	452	67	56	56	46	13	8.1	5.0	6.8		
16	24	27	123	302	189	83	47	41	13	7.1	4.7	6.5		
17	22	25	104	413	182	85	43	36	12	6.3	5.0	6.8		
18	20	24	90	421	208	69	40	32	12	5.6	5.0	18		
19	19	22	81	487	164	58	85	30	12	5.4	4.7	41		
20	18	26	80	432	127	50	80	28	11	5.2	4.5	26		
21	17	61	243	325	106	48	65	27	11	6.5	4.7	19		
22	17	45	256	263	88	45	60	26	11	6.8	4.5	32		
23	18	49	307	284	76	41	52	25	11	6.1	4.5	42		
24	18	60	224	308	67	44	67	24	10	5.6	4.5	24		
25	19	48	162	420	59	40	106	22	10	5.6	6.1	19		
26	17	41	135	402	53	38	141	21	8.1	6.1	6.8	16		
27	17	36	112	445	51	35	127	20	7.7	7.7	6.1	14		
28	19	33	92	303	49	38	98	20	7.4	7.7	5.8	12		
29	19	30	78	216	76	38	97	22	7.1	6.8	5.8	11		
30	17	28	69	166	-----	35	104	32	7.4	6.1	5.6	10		
31	17	-----	60	139	-----	32	-----	19	-----	5.8	5.4	-----		
TOTAL	978	1,367	3,372	7,020	2,622	1,456	2,391	1,273	398.7	193.6	168.9	445.8		
MEAN	31.5	45.6	109	226	93.6	47.0	79.7	41.1	13.3	6.25	5.45	14.9		
MAX	129	178	307	619	208	85	193	88	23	8.7	4.8	42		
MIN	17	16	23	33	48	32	36	19	7.1	4.5	4.5	5.4		
CFSM	.91	1.32	3.16	6.55	2.71	1.36	2.31	1.19	.39	.18	.16	.43		
IN.	1.05	1.47	3.64	7.57	2.83	1.57	2.58	1.37	.43	.21	.18	.48		
AC-FT	1,940	2,710	6,690	13,920	5,200	2,890	4,740	2,530	791	384	335	884		
CAL YR 1969	TOTAL	23,931.9	MEAN	65.6	MAX	696	MIN	4.8	CFSM	1.90	IN	25.80	AC-FT	47,470
WTR YR 1970	TOTAL	21,686.0	MEAN	59.4	MAX	619	MIN	4.5	CFSM	1.72	IN	23.38	AC-FT	43,010

NISQUALLY RIVER BASIN

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12088400 (REVISED) NISQUALLY RIVER ABOVE POWELL CREEK, NEAR MCKENNA, WASH.
(Formerly published as 12-0885 Nisqually River near McKenna)

LOCATION.--Lat 46°51'03", long 122°26'06", in SE¼SW¼ sec.21, T.16 N., R.3 E., Thurston County, on left bank 400 ft downstream from logging bridge, 1.8 miles upstream from Tanwax Creek, and 10 miles southeast of Yelm.

DRAINAGE AREA.--431 sq mi. Area at site used 1941-63, 445 sq mi.

PERIOD OF RECORD.--August 1941 to July 1963 (published as 12-0885 Nisqually River near McKenna), March 1969 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 390 ft (from topographic map). Prior to July 3, 1963, at site 1 mile downstream at different datum.

AVERAGE DISCHARGE.--22 years, 1,787 cfs (1,295,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for March 1969 to September 1970 are contained in the following table:

Wtr yr	Date	Maximum			Date	Minimum		
		Discharge	G.H.			Discharge	G.H.	
1969	Mar. 18, 1969	3,240	4.79		Aug. 7, 1969	392	2.32	
1970	Jan. 27, 1970	10,400	7.82		July 24, 25, 1970	418	2.22	

Period of record: Maximum discharge, 20,800 cfs Dec. 12, 1955 (gage height, 12.06 ft, site and datum then in use); minimum, 85 cfs Oct. 19, 1945 (gage height, 2.57 ft, site and datum then in use); minimum daily, 176 cfs Jan. 30, 1945.

REMARKS.--Records excellent. No diversion above station. Major portion of flow regulated since Nov. 7, 1944, by Alder Reservoir (see station 12085000) and by city of Tacoma powerplant at La Grande.

REVISIONS (WATER YEARS).--WSP 1286: 1947.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						1,370	1,620	2,070	1,130	1,140	700	594
2						1,280	1,830	1,780	1,090	1,010	660	622
3						1,830	1,600	1,310	1,440	917	800	622
4						2,190	1,460	1,620	1,360	908	560	794
5						2,200	1,380	1,180	980	899	620	629
6						2,220	1,330	1,140	962	874	450	622
7						2,140	1,760	1,250	953	1,020	434	615
8						2,200	1,530	1,170	944	1,040	440	622
9						1,940	1,420	1,530	1,170	996	440	615
10						1,590	2,030	1,050	1,260	944	440	615
11						1,630	1,830	1,010	1,280	1,030	447	714
12						1,310	1,330	1,090	1,020	1,070	573	810
13						1,590	1,310	1,550	1,730	1,090	730	698
14						1,500	1,870	1,650	1,850	980	834	738
15						1,190	1,850	1,620	1,060	908	834	730
16						1,300	1,610	1,810	1,260	740	834	874
17						2,550	1,490	1,590	1,110	680	834	1,160
18						3,060	1,740	1,160	1,530	640	834	1,370
19						2,920	1,890	1,930	1,730	600	834	1,210
20						2,600	1,940	2,110	1,710	600	754	1,370
21						2,570	2,010	1,740	1,130	610	682	1,240
22						2,320	1,970	1,680	1,090	640	682	1,060
23						2,100	2,160	1,300	1,610	800	698	1,370
24						2,080	2,340	1,070	2,460	860	690	1,370
25						2,010	2,410	1,040	1,460	1,080	682	1,600
26						1,970	1,960	1,080	1,710	820	658	1,260
27						2,010	1,220	1,130	1,610	900	615	1,170
28						1,600	1,710	1,050	1,660	800	615	1,190
29						1,350	2,010	1,070	1,390	800	615	1,370
30						1,360	2,030	1,650	1,280	800	622	1,300
31						1,530	-----	1,340	-----	700	622	-----
TOTAL						59,470	52,640	43,770	40,969	26,898	20,033	28,914
MEAN						1,918	1,755	1,412	1,368	868	646	964
MAX						3,060	2,410	2,110	2,460	1,140	834	1,600
MIN						1,190	1,220	1,010	944	600	434	594
AC-FT						118,000	104,400	86,820	81,260	53,350	39,740	57,350

NISQUALLY RIVER BASIN

12088400 NISQUALLY RIVER ABOVE POWELL CREEK, NEAR MCKENNA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NDV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,260	1,020	1,600	2,700	3,410	2,350	1,260	1,830	738	505	486	777
2	1,870	1,020	1,660	2,700	3,110	2,320	1,300	1,830	723	506	519	841
3	1,850	1,020	1,550	2,700	2,920	2,340	1,310	1,590	723	513	518	846
4	1,720	1,540	1,570	2,200	2,490	2,340	1,310	1,860	709	505	569	859
5	1,490	2,070	1,990	2,300	2,320	2,310	1,360	1,770	709	501	622	966
6	1,850	1,850	1,310	2,300	2,540	2,340	1,770	1,650	702	501	634	947
7	1,970	1,780	1,190	2,200	2,500	2,44	2,100	1,650	688	504	672	988
8	1,840	1,540	1,490	2,250	2,470	2,54	2,130	1,760	681	498	665	941
9	1,830	1,400	1,510	2,250	2,710	2,440	1,870	1,570	675	488	647	945
10	1,690	1,570	1,500	2,250	2,710	2,380	3,190	1,440	695	492	664	941
11	1,780	1,260	1,620	2,200	2,660	2,340	3,010	1,670	681	489	672	923
12	1,710	1,270	2,130	2,200	2,570	2,340	2,740	2,000	681	488	668	906
13	1,760	1,200	1,710	2,000	2,580	2,410	2,700	2,100	678	489	658	908
14	1,710	1,180	2,570	2,570	2,310	2,700	2,000	1,630	671	487	647	908
15	2,060	1,100	2,160	3,600	2,700	2,600	1,810	1,220	648	495	659	922
16	1,900	1,380	2,010	3,350	4,840	2,680	1,770	1,030	636	492	664	947
17	1,470	1,570	1,570	3,610	6,970	2,680	1,650	1,060	624	492	659	948
18	1,710	1,300	1,500	3,640	4,840	1,570	1,700	1,610	618	488	658	949
19	1,230	1,380	3,700	4,160	2,920	2,410	1,920	989	614	487	657	1,010
20	1,780	1,250	2,000	4,180	2,790	2,430	2,130	935	610	489	656	969
21	1,360	1,610	2,200	3,730	2,680	2,410	1,780	866	603	487	645	946
22	1,290	1,350	2,500	3,350	2,600	2,170	1,620	865	587	487	646	973
23	2,210	2,280	2,750	3,920	2,320	2,930	1,940	874	526	477	647	940
24	1,150	1,680	2,750	4,260	2,460	2,380	2,380	858	512	434	651	997
25	1,240	2,040	2,750	6,030	2,410	2,370	2,550	802	505	434	648	955
26	1,070	2,000	2,750	5,170	2,400	2,220	2,170	738	508	438	647	947
27	2,110	2,150	2,750	7,650	2,380	2,200	2,380	738	502	438	642	932
28	1,030	1,960	2,750	6,100	2,370	2,310	2,260	716	504	454	730	925
29	1,030	1,530	2,750	3,660	-----	2,290	1,920	716	509	442	732	943
30	1,030	1,360	2,750	3,950	-----	1,780	2,080	818	507	438	731	916
31	1,100	-----	2,750	3,090	-----	1,150	-----	762	-----	434	734	-----
TOTAL	46,580	44,920	63,130	106,510	82,430	72,550	59,750	39,313	18,757	14,895	20,136	28,089
MEAN	1,503	1,497	2,036	3,436	2,944	2,340	1,992	1,268	625	480	650	936
MAX	2,060	2,110	2,750	7,650	6,970	2,680	3,190	2,100	738	513	734	1,120
MIN	1,030	1,020	1,190	2,000	2,320	1,150	1,260	716	502	434	486	777
AC-FT	92,390	89,100	125,200	211,300	163,500	143,900	118,500	77,980	37,200	29,540	39,940	55,710
WTR YR 1970 TOTAL 597,060 MEAN 1,636 MAX 7,650 MIN 434 AC-FT 1,185,000												

12088900 TANWAX LAKE NEAR KAPOWSIN, WASH.

LOCATION.--Lat 46°56'43", long 122°16'23", in SW¼NW¼ sec.23, T.17 N., R.4 E., Pierce County, on west shore 0.1 mile from outlet and 3.7 miles (revised) southwest of Kapowsin.

DRAINAGE AREA.--4.08 sq mi.

PERIOD OF RECORD.--July 1962 to September 1970.

GAGE.--Nonrecording gage. Altitude of gage is 600 ft (from topographic map).

EXTREMES.--Maximum and minimum gage heights, in feet, for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Gage height	Date	Minimum	Gage height
1966	Jan. 29, 1966		3.12	Sept. 3, 6, 10, 1966		1.60
1967	Jan. 19, 1967		3.01	Sept. 27, 1967		1.18
1968	Feb. 22, 1968		2.90	Oct. 1, 1967		1.20
1969	Jan. 8, 1969		3.40	Sept. 15, 1969		1.39
1970	Jan. 27, 1970		3.24	Sept. 15, 1970		1.28

Period of record: Maximum gage height observed, 3.84 ft Jan. 29, 1965; minimum observed, 1.18 ft Sept. 27, 1967.

REMARKS.--Lake level controlled by concrete dam at lake outlet. Some diversion for domestic use. Gage readings are generally made in the afternoon. Water-quality records for the water year 1970 are published in reports of the Geological Survey.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.02			2.22		2.30	2.62	2.20				1.66
2		2.10	2.16	2.24	2.60		2.60		2.02	2.12	1.84	
3	2.00					2.30	2.58	2.17		2.18		1.60
4		2.14	2.14	2.24	2.80				2.04		1.80	1.62
5	2.10		2.12			2.32	2.45	2.14	2.06	2.20		
6		2.10		2.26	2.70	2.38					1.80	1.60
7	2.20	2.06	2.14				2.32	2.20	2.06	2.18	1.80	
8				2.26	2.50	2.44		2.22				1.62
9	2.16	2.06	2.14	2.44			2.30		2.02	2.16	1.78	
10	2.14				2.44	2.52	2.34	2.18		2.12		1.60
11		2.08	2.16	2.64					2.00		1.76	1.62
12	2.08		2.16		2.40	2.60	2.50	2.20	2.02	2.08		
13		2.12		2.80	2.42	2.50				2.07	1.74	1.64
14	2.06	2.10	2.16				2.60	2.18	2.04	2.06	1.72	
15				2.82	2.40	2.60		2.22				1.68
16	2.10	2.10	2.18	2.84			2.60		2.00	2.08	1.73	
17	2.10				2.42	2.62	2.54	2.16			1.73	1.64
18		2.12	2.18	2.86					2.00	2.04	1.72	1.70
19	2.14		2.16		2.42	2.68	2.44	2.18				
20		2.12		2.90	2.46	2.70			1.98	2.02	1.70	1.84
21	2.16	2.12	2.16				2.40	2.20				
22				2.94	2.46	2.72		2.10	1.96	1.96	1.69	1.84
23	2.20	2.14	2.18	3.10			2.42					
24	2.10				2.46	2.74	2.36	2.08	1.96	1.94	1.68	1.80
25		2.16	2.20	3.06						1.66		1.78
26	2.06		2.16		2.48	2.72	2.28	2.08	1.98	1.90		
27		2.16		3.08	2.40	2.68					1.78	1.81
28	2.08	2.14	2.16				2.24	2.06	2.08	1.90	1.74	
29				3.12	-----	2.64		2.06				1.78
30	2.08	2.14	2.18		-----		2.22		2.10	1.90	1.70	
31	2.08	-----		2.22	-----	2.62	-----	2.08	-----	1.88	-----	

NISQUALLY RIVER BASIN

12088900 TANMAX LAKE NEAR KAPOWSIN, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.80	2.08	2.36				2.32	2.22	1.99	1.90	1.58	1.27
2	1.80				2.83	2.39	2.30					
3		2.06	2.40	2.81		2.40		2.18	2.00	1.97	1.56	1.26
4	1.82			2.80	2.76	2.37	2.28		2.01		1.57	
5		2.06	2.48	2.79			2.26	2.16		1.96		1.25
6					2.68	2.34			2.00		1.53	
7	1.82	2.06		2.78			2.24	2.11	1.98	1.90		1.24
8	1.80	2.08	2.54	2.77	2.65	2.31	2.20	1.99			1.52	
9	1.84		2.50				2.20	2.10		1.85		1.23
10		2.00		2.72	2.66	2.29			1.98		1.50	
11	1.82		2.52	2.80			2.22	2.12		1.83		1.24
12		1.96			2.62	2.28			1.94		1.49	
13	1.80	1.94	2.68	2.85	2.78	2.36	2.26	2.13		1.76		1.25
14									1.89		1.48	
15	1.80	2.08	2.76	2.83			2.30	2.10		1.70		1.25
16	1.82				2.74	2.40		2.08	1.87		1.47	
17		2.15	2.75	2.84			2.22	2.06	1.85	1.69		1.24
18	1.84	2.16			2.70	2.46		2.06			1.45	
19		2.16	2.76	3.01	2.68		2.30		1.85	1.69		1.23
20	1.92	2.14			2.60	2.50		2.04	1.82		1.42	
21	1.95		2.74	3.00			2.32	2.00		1.68		1.22
22	2.00	2.10			2.54	2.48			1.87	1.68	1.40	
23	2.02		2.70	2.91	2.48	2.50	2.30	1.98				1.21
24		2.14							1.96	1.68	1.36	
25	2.00			2.72		2.48	2.26	1.98	1.89			1.20
26		2.14	2.68		2.42					1.68	1.34	
27	2.02	2.16		2.72		2.44	2.28	1.97	1.90			1.18
28			2.62		2.42					1.67	1.30	
29	2.06	2.24		2.84	-----	2.40	2.26	2.00	1.92			1.19
30	2.06		2.58		-----					1.63	1.28	
31		-----		2.85	-----		-----		-----	1.61		-----

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.20	1.97	2.09	2.21					2.50		1.79	2.12
2					2.45	2.40	2.38	2.15	2.60	1.94		
3	1.28	1.96	2.10	2.23						1.78		2.10
4	1.34				2.51	2.44	2.46	2.17	2.58	1.92		
5		1.96	2.15	2.24							1.78	2.06
6					2.50	2.50	2.40	2.14	2.57	1.90		
7	1.38			2.25							1.76	2.05
8	1.40	1.98	2.19		2.47	2.46		2.10	2.51	1.89		
9		2.02	2.20	2.30							1.71	2.04
10	1.44				2.42	2.38	2.31	2.08	2.32	1.88		
11		2.06	2.21	2.34							1.69	1.96
12	1.48	2.05	2.20	2.38	2.38	2.31	2.29	2.06	2.20	1.87	1.68	2.00
13												
14	1.50				2.36	2.33	2.30	2.05	2.16	1.92		
15		2.04	2.19	2.41							1.71	2.04
16	1.51				2.35	2.38	2.32	2.02	2.12	1.89		
17		2.05	2.17	2.37							1.75	2.14
18	1.48			2.36	2.51	2.36	2.38	2.00	2.10			
19		2.06	2.15							1.85	1.78	2.18
20	1.50				2.89	2.32	2.30	2.08	2.08			
21		2.07	2.16	2.40							1.80	2.22
22	1.53		2.17	2.41	2.90	2.26	2.21	2.14	2.04	1.82	1.88	
23		2.08									1.96	2.18
24	1.55		2.19	2.42	2.87	2.21	2.20	2.26	1.96	1.86	1.98	
25		2.07									2.08	2.15
26	1.74				2.80	2.32	2.18	2.30	1.90	1.86	2.10	
27		2.05	2.21	2.38								2.10
28	1.84		2.23	2.35	2.60	2.52	2.17	2.35	1.88	1.82	2.14	
29		2.07					2.11					2.07
30	1.98				-----	2.58	2.12	2.40	1.87	1.80	2.14	2.04
31		-----	2.26	2.40	-----	2.60	-----		-----			-----

12088900 TANWAX LAKE NEAR KAPOWSIN, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

CAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.06	2.11		2.54			2.25	2.29		1.95		1.49
2			2.41		2.19	2.16			1.91		1.68	
3	2.01	2.10		2.60			2.23	2.25		1.95		1.40
4			2.61		2.25	2.20			1.97		1.68	
5	1.96	2.09		2.84			2.20	2.19		1.94		1.46
6			2.72	3.11	2.35	2.23			2.00		1.66	
7	2.00	2.11		3.40	2.49	2.27	2.17	2.17		1.92		1.45
8	1.95		2.69						2.01		1.64	
9	2.04	2.14					2.12	2.14		1.90		1.44
10			2.76	3.36	2.61	2.25	2.12		1.99		1.63	
11	2.03	2.42					2.10	2.10		1.88		1.42
12			2.78	3.09	2.70	2.21			1.97		1.62	
13	2.02	2.61					2.08	2.06		1.87		1.40
14			2.76	2.77	2.68	2.20			1.95	1.82	1.60	
15	2.09	2.60					2.07	2.02		1.82		1.39
16			2.75	2.61	2.55	2.18			1.90		1.58	
17	2.12	2.52		2.64			2.04	1.96		1.80		1.41
18		2.46	2.71	2.52	2.49	2.17			1.88		1.58	
19	2.19	2.46		2.50	2.45		2.11	2.00		1.78		1.48
20	2.18		2.68		2.40	2.18			1.87		1.56	
21		2.43		2.40			2.21	1.98		1.77		1.61
22	2.19		2.65		2.31	2.26			1.86		1.56	
23		2.40		2.39			2.30	1.95		1.74		1.65
24	2.16		2.59		2.24	2.21			1.88		1.55	
25		2.44		2.38			2.31	1.92		1.72		1.70
26	2.15		2.48		2.21	2.19			1.90		1.52	
27		2.40		2.38			2.29	1.90		1.70		1.72
28	2.12		2.43		2.18	2.15			1.94		1.51	
29		2.38		2.30	-----		2.35	1.92		1.69		1.79
30	2.10		2.36		-----				1.95		1.50	
31		-----		2.26	-----	2.10	-----	1.94	-----	1.68		-----

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.76			2.51					1.90	1.70		1.30
2		1.84	1.98		2.62	2.25	2.10	2.20			1.50	
3	1.78			2.44					1.88	1.69		1.29
4		1.90	1.96		2.51	2.23	2.11	2.17			1.49	
5	1.79			2.22					1.84	1.68		1.30
6		2.04	1.96		2.48	2.20	2.08	2.15			1.48	
7	1.83			2.24					1.82	1.67		1.31
8		2.00	2.00		2.41	2.16	2.15	2.12			1.47	
9	1.85			2.20					1.80	1.66		1.31
10		1.99	2.06		2.34	2.14	2.23	2.10			1.46	
11	1.90			2.18					1.82	1.65		1.30
12		1.98	2.16		2.32	2.10	2.29	2.12			1.44	
13	1.92			2.49					1.88	1.63		1.29
14		1.97	2.18		2.30	2.09	2.30	2.14	1.79		1.40	
15	1.90			2.81		2.16				1.60		1.28
16		1.96	2.32		2.44		2.25	2.15	1.78		1.38	
17	1.88			3.09		2.18				1.58		1.29
18		1.95	2.60		2.60		2.21	2.11	1.77		1.37	
19	1.85			3.19		2.14			1.78	1.54		1.30
20		1.96	2.66		2.54		2.28	2.08	1.76		1.36	
21	1.81			3.10		2.10				1.52		1.3
22		1.98	2.70		2.52		2.19	2.05	1.75		1.35	
23	1.80			3.00		2.08				1.50		1.36
24		2.02	2.74		2.48		2.21	1.99	1.74		1.34	
25	1.79			3.11		2.06				1.48		1.40
26		2.01	2.70		2.40		2.23	2.01	1.73		1.33	
27	1.79			3.24	2.28	2.05				1.48		1.42
28		2.00	2.61				2.24	1.97	1.70		1.32	
29	1.82			3.00	-----	2.01				1.49		1.40
30		1.98			-----		2.21	1.98	1.68		1.31	
31	1.83	-----	2.64	2.89	-----	2.04	-----		1.68	1.50		-----

LOCATION.--Lat 48°56'01", long 122°33'37", in SEKNNW sec.28, T.17 N., R.2 E., Thurston County, on left bank 100 ft downstream from highway bridge at McKenna, 9.0 miles downstream from Tanwax Creek, and at mile 21.8.

PERIOD OF RECORD.--October 1947 to September 1968 (discontinued).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-68 are contained in the following table:

Period of record: Maximum discharge, 25,700 cfs Jan. 29, 1965 (gage height, 13.00 ft); minimum discharge, 20 cfs Sept. 10, 11, 1965, Aug. 13, 1966; minimum gage height, 0.75 ft Aug. 13, 1966.

REMARKS.--Records excellent. Flow regulated since Nov. 7, 1944, by Alder Reservoir (see station 12085000) and since February 1945 by La Grande Reservoir (see station 12085500). Centralia power canal diverts 4.4 miles above station; water is returned to river at powerplant 4.5 miles below station. Minor amount of diversion for irrigation above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	484	1,080	1,150	1,450	1,670	671	1,520	685	698	712	144	190
2	520	1,100	1,120	1,570	1,700	581	1,490	894	733	664	282	275
3	449	1,190	1,170	1,500	1,150	1,070	953	644	823	299	278	145
4	432	1,430	941	1,350	1,400	1,000	515	369	886	193	145	145
5	460	1,470	671	2,000	1,560	645	1,070	492	317	815	149	125
6	438	1,420	642	3,300	1,700	654	1,030	831	423	1,140	127	191
7	433	1,310	690	2,720	1,740	903	1,100	521	394	1,370	306	223
8	484	1,390	1,440	2,300	1,600	1,320	319	231	1,126	319	231	231
9	328	1,880	1,040	2,500	1,680	3,040	911	599	231	988	141	233
10	323	1,390	1,080	2,250	928	2,960	733	823	194	664	127	240
11	390	1,410	976	2,000	638	2,080	1,260	988	253	705	103	223
12	502	1,500	851	2,080	692	846	2,080	945	366	724	57	289
13	355	988	1,060	2,000	612	870	1,740	1,080	465	384	35	273
14	422	699	1,050	2,800	618	1,100	1,510	886	317	510	83	272
15	879	757	1,200	2,600	515	1,100	1,400	521	305	392	55	276
16	736	637	1,030	2,050	487	1,100	953	1,180	366	400	76	275
17	505	811	481	2,100	439	945	854	1,190	527	332	233	278
18	785	894	997	1,900	428	1,520	1,170	936	615	364	159	291
19	698	929	935	1,800	504	1,860	770	770	770	314	136	308
20	615	812	1,050	1,850	321	1,860	658	846	712	263	102	289
21	530	898	937	1,300	313	2,020	1,050	618	823	196	142	263
22	468	1,250	1,020	1,220	399	2,120	1,460	330	719	168	103	278
23	718	1,440	1,070	1,250	389	2,090	1,340	846	719	313	61	311
24	617	751	909	1,560	575	2,200	1,110	997	444	283	57	247
25	858	414	908	1,490	470	2,100	1,360	928	492	220	90	216
26	1,040	418	951	1,410	423	1,970	1,590	527	224	232	108	341
27	1,230	840	1,600	1,390	465	1,480	1,440	1,060	269	229	181	286
28	1,280	403	2,110	1,080	527	1,740	1,430	920	527	189	224	275
29	1,120	806	1,700	1,230	-----	1,270	1,490	997	575	163	196	258
30	1,040	1,040	1,300	-----	-----	1,490	1,210	1,192	-----	286	-----	-----
31	1,030	-----	1,840	1,210	-----	1,640	-----	953	-----	82	117	-----
TOTAL	20,359	30,877	33,899	56,660	24,253	46,201	24,763	14,360	15,783	4,490	7,639	2,599
MEAN	657	1,029	1,094	1,828	866	1,490	1,235	769	479	509	145	255
MAX	1,280	1,500	2,110	3,300	1,700	3,040	2,080	1,190	823	1,370	306	341
MIN	323	403	442	1,080	313	454	658	330	194	82	35	

CAL YR 1965	TOTAL 414,355	MEAN 1,135	MAX 21,800	MIN 22	AC-FT 821,900
WTR YR 1966	TOTAL 316,326	MEAN 867	MAX 3,300	MIN 35	AC-FT 627,400

12089500 NISQUALLY RIVER AT MCKENNA, WASH. - CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	413	1,550	1,630	2,140	2,430	2,110	1,770	838	514	1,330	225	202
2	345	1,510	1,920	2,180	2,380	2,020	1,660	886	294	1,240	233	198
3	575	1,550	1,950	2,130	2,240	1,920	1,500	878	395	1,370	213	181
4	773	1,300	1,980	2,410	2,480	1,850	1,550	802	365	1,100	202	170
5	797	566	2,100	2,640	2,450	1,770	1,740	648	365	1,060	217	184
6	809	595	2,240	2,290	2,240	1,770	1,710	655	340	802	209	167
7	1,180	692	2,160	2,210	2,120	1,750	1,670	655	317	578	209	177
8	1,360	630	1,670	2,290	1,860	1,750	1,630	704	360	448	209	191
9	1,350	664	1,680	2,420	1,740	1,840	1,600	774	345	436	195	184
10	1,270	725	1,750	2,300	1,720	1,860	1,680	795	330	420	191	195
11	1,300	752	1,490	2,780	1,730	1,800	1,660	767	285	385	205	299
12	1,630	700	1,910	2,600	1,790	1,770	1,630	878	370	380	229	261
13	1,500	840	3,810	2,960	2,040	846	1,710	878	345	375	209	233
14	1,520	1,020	3,850	3,570	2,010	838	1,730	830	308	375	205	213
15	1,530	1,680	2,890	2,040	1,750	1,890	1,610	809	326	370	205	188
16	1,510	1,890	2,470	1,010	1,630	2,080	1,470	823	277	365	209	195
17	1,510	1,930	2,260	2,540	2,130	2,060	1,410	862	277	514	202	195
18	1,510	1,600	2,140	2,310	2,410	2,060	1,660	655	273	886	198	191
19	1,540	872	2,140	4,730	1,800	990	1,590	585	308	870	198	170
20	1,800	772	2,510	9,030	2,050	1,960	1,570	557	361	711	198	174
21	1,830	819	2,350	4,360	1,930	1,970	1,610	592	538	697	202	174
22	1,970	825	1,950	3,000	1,870	2,260	1,380	557	1,310	718	188	167
23	1,870	748	1,770	2,650	1,880	2,740	1,240	781	1,330	335	191	168
24	1,310	702	1,500	2,410	1,860	2,370	1,450	571	1,140	205	191	168
25	1,520	724	1,490	2,250	1,830	1,970	1,490	496	1,050	326	202	165
26	1,600	1,020	1,760	2,170	1,790	1,920	1,450	415	918	317	205	211
27	1,710	771	1,910	3,830	1,770	1,990	1,510	425	732	345	205	355
28	1,660	821	1,900	11,600	1,830	1,950	1,370	415	774	294	198	360
29	1,630	798	2,060	10,000	-----	1,920	926	683	725	290	177	432
30	1,570	1,130	1,940	5,400	-----	1,880	746	520	802	249	174	487
31	1,560	-----	1,970	2,620	-----	1,840	-----	711	-----	213	181	-----
TOTAL	42,452	30,196	65,150	109,770	55,760	57,744	45,722	21,445	16,074	18,004	6,275	6,655
MEAN	1,369	1,007	2,102	3,541	1,991	1,863	1,524	692	536	581	202	222
MAX	1,970	1,930	3,850	11,600	2,480	2,740	1,770	886	1,330	1,370	233	487
MIN	345	566	1,490	2,130	1,630	838	746	415	273	205	174	165
AC-FT	84,200	59,890	129,200	217,700	110,600	114,500	90,690	42,540	31,880	35,710	12,450	13,200

CAL YR 1966 TOTAL 368,989 MEAN 1,011 MAX 3,850 MIN 35 AC-FT 731,900
WTR YR 1967 TOTAL 475,247 MEAN 1,302 MAX 11,600 MIN 165 AC-FT 942,700

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	571	2,000	1,880	1,550	1,890	1,380	1,910	620	585	400	253	856
2	385	1,920	2,180	1,850	2,260	1,420	1,950	613	2,550	249	233	800
3	350	1,890	2,440	1,700	2,980	1,210	1,390	592	4,810	249	217	760
4	430	1,860	2,380	1,720	3,670	1,900	1,910	564	3,260	249	202	599
5	390	1,800	2,230	1,760	2,980	1,530	2,130	592	2,560	294	167	490
6	508	1,790	2,130	1,710	2,580	1,650	2,290	620	1,960	395	160	436
7	615	1,790	2,160	1,720	2,310	1,640	2,290	634	1,880	676	140	360
8	355	1,820	1,920	1,760	2,190	1,090	2,130	620	1,250	753	134	317
9	550	1,960	1,330	2,390	2,090	690	2,100	613	739	508	134	299
10	538	1,770	1,090	2,700	1,940	683	1,940	620	1,360	390	150	249
11	578	1,070	1,080	2,190	1,920	968	2,010	592	1,280	345	137	245
12	564	1,330	1,100	2,050	1,910	832	1,950	571	1,230	321	144	249
13	571	1,830	1,200	2,470	1,800	856	1,910	564	1,290	375	137	241
14	532	1,890	1,350	2,120	1,860	856	1,880	571	768	317	154	225
15	526	1,880	1,520	2,270	1,830	1,060	1,640	557	520	245	308	350
16	478	1,860	1,400	2,250	1,800	1,280	1,150	532	502	209	321	520
17	599	1,840	1,400	2,120	1,820	1,200	1,050	520	484	160	265	538
18	904	1,830	1,470	2,090	1,780	2,050	1,130	415	442	163	253	2,080
19	697	1,820	1,680	1,390	5,000	1,780	1,420	460	442	195	184	2,590
20	848	1,790	1,710	1,610	8,760	1,790	1,060	697	466	202	430	2,360
21	655	1,770	1,480	2,080	6,900	1,710	800	599	454	217	335	1,830
22	732	1,740	944	1,910	5,120	1,680	800	520	454	191	191	1,560
23	800	1,600	1,160	1,740	5,900	1,590	753	508	466	181	209	1,680
24	840	1,700	1,300	1,700	6,820	1,210	711	520	448	184	1,330	1,660
25	1,450	1,860	1,950	1,760	4,030	1,180	606	606	436	150	1,230	1,360
26	1,740	1,720	2,250	1,680	2,970	1,070	662	627	360	119	1,900	648
27	1,660	1,770	2,100	1,840	2,220	1,170	676	585	415	131	1,680	592
28	2,270	1,760	2,050	1,840	2,120	2,580	620	532	436	163	2,430	532
29	1,890	1,800	1,900	1,770	1,560	2,620	606	460	448	299	2,340	496
30	1,600	1,890	1,600	1,740	-----	2,590	564	496	484	460	1,970	484
31	1,920	-----	1,550	1,850	-----	2,270	-----	508	-----	326	1,080	-----
TOTAL	26,346	53,350	51,804	59,330	91,100	45,435	41,728	17,528	33,779	9,116	18,868	25,406
MEAN	850	1,778	1,671	1,914	3,141	1,464	1,391	565	1,126	294	609	847
MAX	2,270	2,000	2,440	2,700	8,760	2,620	2,290	697	5,810	753	2,430	2,590
MIN	350	1,070	944	1,390	1,560	683	564	415	360	119	134	225
AC-FT	52,260	105,800	102,800	117,700	180,700	90,120	82,770	34,770	67,000	18,080	37,420	50,390

CAL YR 1967 TOTAL 468,949 MEAN 1,285 MAX 11,600 MIN 165 AC-FT 930,200
WTR YR 1968 TOTAL 473,790 MEAN 1,295 MAX 8,760 MIN 119 AC-FT 939,800

12090200 MUCK CREEK AT ROY, WASH.

LOCATION.--Lat 47°00'20", long 122°32'32", in SW¼ sec.34, T.18 N., R.2 E., Pierce County, on right bank 0.3 mile downstream from Muck Lake at north edge of Roy.

DRAINAGE AREA.--86.8 sq mi.

PERIOD OF RECORD.--May 1956 to September 1970.

GAGE.--Nonrecording gage and crest-stage gage since Aug. 7, 1967. Altitude of gage is 310 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 63.1 cfs (45,720 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following tables:

Maximum				Minimum daily			
Wtr yr	Date	Discharge	G.H.	Date	Discharge		
1966	Mar. 22, 23, 24, 1966	a193	3.10	Oct. 1 to Nov. 11, 1965	0		
1967	Jan. 30, 1967	a453	3.76	Oct. 2-13, 1966, Sept. 1-30, 1967	0		
1968	Feb. 24, 1968	a325	3.50	Oct. 1 to Nov. 7, 1967	0		
1969	Jan. 9, 1969b	551	4.82	Sept. 4-13, 1969	0		
1970	Jan. 28, 1970b	569	4.91	Sept. 11, 13-22, 26-30, 1970	0		

a Maximum observed.

b About.

Period of record: Maximum discharge observed, 584 cfs Feb. 1, 1965 (gage height, 5.00 ft); no flow at times in most years.

REMARKS.--Records good. Some regulation in lakes above station. Small amount of diversion above station for domestic use.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.9	61	95	90	116	62	31	14	3.9	1.1	
2	0	1.5	76	93	90	113	60	31	15	3.9	1.1	
3	0	1.5	93	90	106	59	31	16	3.9	.90		
4	0	3.2	104	87	100	57	31	20	3.9	.78		
5	0	4.1	117	82	82	93	52	31	16	3.9	.66	
6	0	4.1	139	81	77	87	62	31	15	3.9	.66	
7	0	4.1	186	77	74	85	64	31	14	3.9	.55	
8	0	6.2	190	78	77	82	64	31	13	3.9	.55	
9	0	5.4	186	85	99	82	60	27	12	3.9	.55	
10	0	5.0	170	80	113	87	57	23	11	3.9	.66	
11	0	5.4	160	77	122	102	52	25	11	3.4	.78	
12	.26	4.7	154	77	116	127	52	25	9.6	3.2	.78	
13	.96	4.1	154	80	119	137	49	23	9.6	2.9	.78	
14	.96	4.1	157	77	124	145	49	23	9.6	2.5	.66	
15	.96	3.6	160	74	124	139	48	21	9.6	2.1	.60	
16	.96	3.6	154	72	127	127	48	21	9.1	2.1	.60	
17	.96	3.6	142	67	127	116	48	20	9.1	2.5	.55	
18	.96	3.6	130	64	127	108	48	20	10	2.5	.78	
19	.96	3.6	124	63	122	108	45	18	11	2.1	.78	
20	2.1	3.6	116	63	122	100	43	18	10	1.8	.66	
21	2.1	4.1	113	63	148	100	41	18	10	1.6	.55	
22	2.1	5.0	110	63	193	98	39	16	9.1	1.5	.45	
23	3.6	5.0	106	72	193	87	37	16	9.1	1.4	.35	
24	2.4	8.7	103	77	193	82	35	15	7.6	1.3	.35	
25	2.1	12	98	74	184	77	35	15	6.5	1.3	.27	
26	1.9	15	96	64	176	74	33	15	6.5	1.3	.27	
27	1.7	21	94	69	160	72	31	14	5.8	1.3	.27	
28	1.5	36	94	77	136	69	31	15	5.0	1.3	.66	
29	1.7	47	91	-----	116	67	31	15	5.0	1.3	.60	
30	1.7	56	91	-----	116	64	31	14	4.3	1.3	.35	
31	-----	51	95	-----	116	-----	31	-----	3.9	1.3	-----	
TOTAL	0	29.88	335.3	3,868	2,121	3,840	2,970	1,454	665	317.4	79.0	16.60
MEAN	0	1.00	10.8	125	75.8	124	99.0	46.9	22.2	10.2	2.55	.62
MAX	0	3.6	96	190	95	193	157	64	31	20	3.9	1.1
MIN	0	0	1.5	61	63	74	64	31	14	3.9	1.3	.27
AC-FT	0	59	665	7,670	4,210	7,620	5,890	2,880	1,320	630	157	37

CAL YR 1965 TOTAL 23,708.98 MEAN 65.0 MAX 560
WTR YR 1966 TOTAL 15,698.18 MEAN 43.0 MAX 193

NIN 0 AC-FT 47,030
NIN 0 AC-FT 31,140

12090200 MUCK CREEK AT ROY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	.40	21	184	388	162	97	70	29	16	3.1	
2	0	.15	39	195	361	166	93	67	29	16	2.7	
3	0	.03	45	206	335	162	90	63	29	16	2.7	
4	0	.03	50	230	320	162	86	62	26	12	2.7	
5	0	.15	53	283	294	142	86	56	23	9.0	2.4	
6	0	.23	53	314	268	130	83	54	21	9.9	2.2	
7	0	.40	56	314	244	115	80	51	21	9.8	2.4	
8	0	.40	67	304	230	115	76	46	21	8.6	2.4	
9	0	.31	77	291	211	126	73	44	21	7.6	3.1	
10	0	.23	81	278	202	138	73	44	21	7.6	2.0	
11	0	.40	89	291	202	146	73	42	20	8.2	1.9	
12	0	.60	93	304	202	138	73	40	19	7.6	1.8	
13	0	.98	100	320	220	130	80	42	19	7.6	1.6	
14	.03	2.5	139	320	268	122	93	40	17	7.6	.80	
15	.03	3.4	193	304	330	118	100	40	16	7.6	1.4	
16	.03	4.1	197	291	301	130	91	39	15	7.6	1.6	
17	.03	3.0	188	278	294	130	83	37	12	5.7	1.4	
18	.03	2.5	193	278	268	142	83	35	9.5	5.7	1.4	
19	.03	2.1	206	291	259	142	91	34	7.6	5.7	1.4	
20	.15	1.6	225	320	244	142	97	33	12	5.7	1.4	
21	1.6	1.6	240	394	220	138	90	31	14	5.7	1.2	
22	3.0	1.4	230	437	206	126	86	29	18	5.7	1.1	
23	3.4	1.2	216	410	188	126	80	29	21	5.4	.98	
24	2.5	1.2	206	383	166	126	80	29	18	5.1	.89	
25	1.6	1.2	206	330	166	126	76	28	16	5.4	.72	
26	.98	1.4	211	304	154	122	70	28	16	4.5	.56	
27	.98	1.6	216	304	146	118	70	28	13	4.2	.19	
28	.84	2.1	206	343	146	115	70	28	13	4.2	.19	
29	.50	2.1	193	413	-----	109	76	29	17	4.5	.19	
30	.50	4.1	184	453	-----	108	73	29	16	4.5	.19	
31	.50	-----	173	426	-----	100	-----	29	-----	3.1	.12	-----
TOTAL	16.96	41.41	4,446	9,793	6,833	4,072	2,472	1,256	550.1	233.8	46.73	0
MEAN	.55	1.38	143	316	244	131	82.4	40.5	18.3	7.54	1.51	0
MAX	3.4	4.1	240	453	388	166	100	70	29	16	3.1	0
MIN	0	.03	21	184	146	100	70	28	16	3.1	.12	0
AC-FT	34	82	8,820	19,420	13,550	8,080	4,900	2,490	1,090	464	93	0

CAL YR 1966 TOTAL 19,837.37 MEAN 54.3 MAX 240 AC-FT 39,350
WTR YR 1967 TOTAL 29,761.00 MEAN 81.5 MAX 453 MIN 0 AC-FT 59,030

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.4	16	80	215	171	136	29	15	2.2	2.2	
2	0	1.8	17	92	195	157	140	59	15	2.2	1.8	
3	0	2.4	19	123	189	152	140	88	13	2.0	1.8	
4	0	3.3	14	146	185	139	138	108	12	1.8	1.6	
5	0	5.7	15	165	165	139	138	95	10	1.8	1.6	
6	0	7.2	15	175	165	130	138	80	10	1.8	1.5	
7	0	6.3	15	175	165	130	138	66	9.6	1.8	2.2	
8	2.2	6.3	16	156	165	130	138	59	9.6	1.8	2.5	
9	2.5	5.7	17	146	156	123	135	52	8.5	1.0	2.2	
10	3.3	5.7	33	132	146	113	113	35	39	8.5	.86	2.2
11	3.9	4.8	38	111	137	111	111	33	41	7.5	.74	1.8
12	3.3	4.8	42	111	137	106	106	33	39	6.5	.60	2.2
13	2.9	3.3	44	95	128	98	98	29	36	6.5	.40	2.5
14	2.9	6.3	44	88	120	92	92	29	33	7.0	.56	2.5
15	2.9	6.3	56	88	120	92	92	29	33	7.3	.74	3.1
16	2.4	6.3	86	80	111	106	106	27	30	7.3	1.0	3.1
17	1.6	6.3	86	95	156	98	98	27	27	7.3	1.0	3.1
18	1.4	6.3	78	103	150	95	95	26	23	5.3	1.5	4.5
19	1.2	6.3	78	125	137	90	90	26	23	6.5	1.5	6.9
20	1.2	6.3	84	201	128	83	83	26	23	5.7	1.5	8.5
21	1.2	6.3	99	235	120	83	83	29	21	5.0	1.2	7.7
22	1.2	8.6	100	275	111	83	83	36	25	4.5	1.8	5.7
23	1.1	9.4	99	321	111	54	54	29	20	4.5	2.5	5.3
24	1.4	11	92	325	103	65	65	29	20	4.5	3.8	3.3
25	1.4	11	89	309	103	61	61	29	20	3.8	5.7	2.7
26	1.4	14	88	295	183	61	61	30	20	3.1	5.7	2.0
27	1.4	14	80	265	108	59	59	30	18	2.5	4.5	1.8
28	1.4	17	80	245	137	55	55	29	18	2.5	6.5	1.2
29	1.6	17	73	225	185	52	52	15	15	2.5	4.5	1.1
30	1.6	17	66	-----	205	48	48	27	14	2.5	3.8	1.0
31	-----	17	66	-----	205	-----	-----	26	-----	2.4	2.2	-----
TOTAL	0	45.4	245.1	1,745	4,982	4,561	2,976	984	1,174	215.9	69.00	89.6
MEAN	0	1.51	7.91	56.3	172	147	99.2	31.7	39.1	6.96	2.23	2.99
MAX	0	3.9	17	100	325	215	171	40	108	15	6.5	8.5
MIN	0	0	1.4	80	103	60	48	26	14	2.4	.40	1.0
AC-FT	0	90	486	3,460	9,880	9,050	5,908	1,950	2,330	428	137	178

CAL YR 1967 TOTAL 25,547.13 MEAN 70.0 MAX 453 AC-FT 90,870
WTR YR 1968 TOTAL 17,087.00 MEAN 46.7 MAX 325 MIN 0 AC-FT 33,890

12090200 MUCK CREEK AT ROY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	15	154	193	153	113	48	61	23	3.2	.78	.03
2	.93	15	142	193	161	108	44	61	23	2.8	.49	.02
3	.86	17	146	242	161	105	51	57	19	2.4	.39	.01
4	.86	18	181	285	195	105	64	57	13	2.0	.22	0
5	.69	20	247	338	204	96	64	46	13	1.7	.62	0
6	.69	23	275	374	217	108	64	46	12	1.7	.78	0
7	.74	21	275	430	201	118	64	43	10	1.7	.97	0
8	.69	26	275	517	217	118	59	38	9.6	1.4	.78	0
9	.69	30	277	527	251	108	51	38	9.1	1.4	.78	0
10	.69	41	281	478	276	105	51	36	9.1	1.4	.78	0
11	.80	73	291	468	285	101	44	34	7.6	1.2	.62	0
12	1.8	135	325	430	285	96	44	33	6.8	3.7	.62	0
13	2.7	181	327	392	276	87	44	28	6.8	3.7	.62	0
14	4.5	203	320	365	251	83	43	26	6.0	3.2	.62	.10
15	6.9	193	302	347	242	77	43	24	5.4	2.6	.62	.33
16	8.5	189	294	329	217	77	41	23	5.1	2.6	.49	.49
17	8.5	163	276	306	209	83	41	22	5.1	1.7	.49	.62
18	8.5	144	265	285	185	87	44	22	4.8	1.4	.49	.97
19	9.6	154	251	276	177	87	77	19	4.2	.97	.43	1.1
20	12	126	244	251	169	91	77	19	3.7	.62	.43	1.1
21	13	113	226	217	161	91	77	9.6	3.7	.49	.43	1.1
22	15	116	217	209	153	94	67	9.6	4.2	.49	.33	1.2
23	15	173	201	193	150	91	67	9.6	4.2	.17	.17	1.4
24	16	173	201	177	137	87	83	9.6	5.1	.19	.11	1.7
25	13	185	185	177	134	83	87	8.6	5.1	.16	.11	1.7
26	13	183	185	169	129	67	83	8.6	4.5	1.7	.11	1.4
27	13	183	182	153	129	67	71	8.6	4.5	1.7	.11	1.2
28	13	183	174	153	118	64	67	8.6	4.2	1.4	.11	1.2
29	13	173	169	153	-----	51	67	9.6	4.2	1.3	.10	1.1
30	15	163	166	140	-----	51	67	23	3.7	1.1	.07	1.3
31	15	-----	201	129	-----	51	-----	23	-----	.87	.05	-----
TOTAL	225.44	3,432	7,255	8,896	5,443	2,750	1,794	861.4	239.7	50.96	13.66	18.07
MEAN	7.27	114	234	287	194	88.7	59.8	27.8	7.99	1.64	.44	.60
MAX	16	203	327	527	285	118	87	61	23	3.7	.97	1.7
MIN	.69	15	142	129	118	51	41	8.6	3.7	.16	.05	0
AC-FT	447	6,810	14,390	17,650	10,800	5,450	3,560	1,710	475	101	27	36
CAL YR 1968	TOTAL	22,708.94	MEAN	75.7	MAX	327	MIN	0	AC-FT	54,960		
WTR YR 1969	TOTAL	30,979.23	MEAN	84.9	MAX	527	MIN	0	AC-FT	61,450		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	1.4	5.1	102	427	151	25	65	3.6	1.8	2.1	.50
2	3.7	1.4	5.1	96	187	143	28	65	3.2	1.8	2.1	.73
3	3.7	1.1	4.5	89	367	140	28	55	2.1	1.8	2.1	.91
4	3.2	1.9	5.1	85	337	135	30	49	2.1	2.6	1.4	.91
5	2.8	4.2	5.4	82	317	127	32	43	2.1	2.6	1.4	.73
6	2.8	4.2	5.7	79	287	130	38	38	2.4	3.6	5.5	.82
7	2.8	4.8	6.4	76	127	127	48	36	4.9	1.0	2.1	.91
8	2.8	4.2	7.2	76	248	127	50	32	4.9	1.0	2.1	1.9
9	3.7	3.4	7.6	74	238	127	54	38	6.4	1.0	2.1	.44
10	4.2	3.0	8.1	82	220	119	75	38	4.1	.73	1.4	.19
11	4.2	2.8	6.1	82	193	111	89	38	4.9	.57	1.4	0
12	4.0	2.8	14	82	193	104	82	38	4.9	.57	5.5	.19
13	3.7	2.6	43	85	176	99	79	40	4.1	.57	4.1	0
14	3.7	2.6	67	119	168	104	74	40	4.1	1.0	4.9	0
15	3.4	2.4	105	169	176	111	65	38	3.6	1.4	4.3	0
16	3.4	2.6	119	202	220	108	55	32	3.6	1.1	4.1	0
17	3.2	2.6	113	238	287	108	50	32	2.6	1.6	3.4	0
18	2.8	2.4	115	267	317	106	49	28	2.6	1.4	4.1	0
19	2.6	2.4	119	303	317	93	55	28	2.6	1.0	4.1	0
20	2.8	2.4	127	327	307	82	65	23	2.6	.91	3.6	0
21	2.6	3.0	137	365	277	82	68	22	2.6	.91	3.8	0
22	2.6	4.5	159	377	248	79	62	22	2.6	1.2	3.8	0
23	2.4	4.5	175	367	229	75	55	16	2.6	1.1	3.0	.17
24	1.6	4.5	191	387	211	75	56	13	2.6	.91	3.0	.17
25	1.9	5.1	201	427	193	72	68	13	2.6	1.1	2.6	.17
26	1.6	5.4	188	467	186	68	82	7.1	2.6	.91	2.2	0
27	1.4	5.4	173	487	176	65	94	6.1	2.6	.91	2.1	0
28	2.0	5.1	148	557	168	65	89	4.9	2.6	.91	1.8	0
29	2.2	4.8	133	551	-----	62	82	3.6	2.6	1.1	1.5	0
30	2.2	4.8	124	523	-----	62	71	5.2	2.6	2.1	1.4	0
31	2.2	-----	108	467	-----	49	-----	4.9	-----	2.1	.44	-----
TOTAL	89.9	102.3	2,627.3	7,690	7,147	3,106	1,800	913.8	97.4	41.30	87.44	8.74
MEAN	2.90	3.41	84.8	248	255	100	60.0	29.5	3.25	1.33	2.82	.29
MAX	4.2	5.4	201	557	427	151	96	65	6.4	3.6	5.5	1.9
MIN	1.4	1.1	4.5	74	168	49	25	3.6	2.1	.57	.44	0
AC-F7	178	203	5,210	15,250	14,180	6,160	3,570	1,810	193	82	173	17
CAL YR 1969	TOTAL	22,886.29	MEAN	62.7	MAX	527	MIN	0	AC-FT	45,390		
WTR YR 1970	TOTAL	23,711.18	MEAN	65.0	MAX	557	MIN	0	AC-FT	47,030		

12091040 CHAMBERS CREEK ABOVE FLETT CREEK, NEAR STEILACOOM, WASH.

LOCATION.--Lat 47°11'28", long 122°31'37", in NE&SE& sec.27, T.20 N., R.2 E., Pierce County, on left bank at downstream side of bridge, 0.4 mile upstream from Flett Creek, 1.0 mile downstream from Steilacoom Lake, and 3.6 miles northeast of Steilacoom.

DRAINAGE AREA.--90.4 sq mi.

PERIOD OF RECORD.--October 1965 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 140 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Jan. 16, 17, 1966	175	1.52		Sept. 14, 19-23, 1966	a17	b.76	
1967	Jan. 19, 1967	271	c1.92		(d)	19	e.86	
1968	Feb. 24, 1968	222	1.59		Oct. 30, 1967, July 31, 1968	20	f.85	
1969	Jan. 14, 1969	326	1.89		Aug. 8, 1969	19	g.67	
1970	Feb. 5, 1970	429	2.30		Sept. 30, 1970	20	1.12	

a Part of each day.

b Occurred Nov. 17-19, 1965.

c Occurred Feb. 19, 1967.

d Oct. 13, 1966, Aug. 10, 11, Sept. 6, 1967.

e Occurred Oct. 17, Nov. 10, 11, 1966.

f Occurred Sept. 28-30, 1968.

g Occurred June 16, 1969.

Period of record: Maximum discharge, 429 cfs Feb. 5, 1970 (gage height, 2.30 ft); minimum discharge, 17 cfs for part of each day Sept. 14, 19-23, 1966; minimum gage height, 0.67 ft June 16, 1969.

REMARKS.--Records good. Minor diversions for domestic use. Some regulation by gates and/or debris at outlet in outlet structure of Steilacoom Lake. A discharge measurement of 40 cfs was made Oct. 8, 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		45	31	61	119	86	124	88	55	47	24	21
2		43	31	70	116	84	124	88	57	49	25	21
3		43	33	73	107	86	124	84	55	49	26	19
4		43	37	80	105	84	119	78	55	49	25	18
5		40	35	93	107	84	113	78	55	49	26	18
6		38	37	108	113	84	107	82	55	49	28	19
7		37	37	117	110	82	99	73	54	49	26	19
8		35	38	128	107	91	99	69	54	50	26	19
9		35	38	135	105	102	99	71	54	57	26	19
10		35	38	138	102	105	102	71	52	60	25	20
11		34	38	135	105	99	113	73	49	34	24	20
12		34	37	138	102	99	110	73	50	24	25	19
13		33	37	150	99	105	93	73	52	25	26	19
14		33	37	154	97	107	93	71	54	26	25	19
15		32	37	157	95	107	86	73	50	33	25	19
16		32	37	165	93	105	84	74	52	41	26	19
17		31	37	170	93	102	86	80	50	49	25	21
18		30	37	161	91	110	88	76	50	49	24	19
19		31	37	161	91	113	93	76	50	50	25	18
20		31	37	154	91	113	95	74	50	52	24	18
21		31	37	146	91	121	97	73	50	52	24	18
22		32	37	146	88	113	99	69	50	49	22	19
23	37	31	38	146	86	116	99	69	50	30	22	18
24	38	31	39	138	84	116	99	67	54	27	22	18
25	39	31	39	135	84	119	102	69	58	27	22	19
26	38	31	39	131	84	121	97	67	52	27	22	19
27	37	31	45	131	86	121	95	65	49	28	22	19
28	35	30	50	127	88	119	93	64	49	28	21	21
29	34	30	54	121	-----	121	91	58	47	30	20	22
30	38	30	55	121	-----	124	88	55	47	27	20	22
31	46	-----	57	121	-----	124	-----	55	-----	22	21	-----
TOTAL		1,023	1,216	4,011	2,739	3,263	3,011	2,236	1,559	1,238	744	579
MEAN		34.1	39.2	129	97.8	105	100	72.1	52.0	39.9	24.0	19.3
MAX		45	57	170	119	124	124	88	58	60	28	22
MIN		30	31	61	84	82	84	55	47	22	20	18
AC-FT		2,030	2,410	7,960	5,430	6,470	5,970	4,440	3,090	2,460	1,480	1,150

CHAMBERS CREEK BASIN

12091040 CHAMBERS CREEK ABOVE FLETT CREEK. NEAR STEILACOOM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	34	33	165	158	187	136	104	69	55	32	21
2	24	35	30	157	158	182	131	102	69	52	46	20
3	24	33	30	154	142	176	121	104	67	46	49	20
4	23	32	33	195	149	174	125	102	67	41	46	20
5	24	32	40	200	138	168	123	102	69	35	48	20
6	24	30	60	215	132	163	123	100	70	34	40	20
7	25	29	71	234	127	163	123	97	69	34	34	20
8	25	28	65	236	121	163	123	94	67	33	34	20
9	24	27	85	236	116	163	121	92	66	33	34	20
10	24	26	67	229	112	133	118	86	64	32	21	20
11	22	27	69	205	109	142	114	80	63	31	20	21
12	24	27	82	200	109	154	114	76	63	31	24	21
13	28	32	102	200	120	133	116	78	66	30	24	21
14	34	35	102	200	116	131	114	79	38	29	25	21
15	31	35	110	200	121	131	107	80	56	28	25	21
16	27	35	119	200	129	151	107	78	60	27	25	21
17	30	33	135	190	139	147	109	76	63	26	24	21
18	37	32	142	180	197	147	111	82	63	25	22	21
19	41	32	150	215	213	145	111	92	61	24	22	21
20	41	32	154	138	206	142	111	76	60	26	22	21
21	40	32	154	154	203	140	111	69	64	27	22	21
22	41	30	154	100	206	143	112	67	64	25	21	21
23	37	30	154	127	200	142	112	69	64	27	21	21
24	35	30	157	123	193	147	111	69	64	34	24	22
25	35	30	161	120	187	147	111	69	67	39	22	24
26	33	29	161	114	187	149	109	70	67	35	21	24
27	32	38	154	116	184	147	109	70	66	34	21	24
28	30	28	157	116	187	142	107	70	62	34	21	24
29	29	29	137	132	-----	140	106	69	58	30	21	24
30	33	37	154	150	-----	138	104	70	56	30	21	24
31	37	-----	157	134	-----	136	-----	-----	30	21	-----	-----
TOTAL	940	933	3,379	5,417	4,379	4,746	3,450	2,542	1,922	1,017	853	640
MEAN	30.3	31.1	109	175	156	153	113	82.0	64.1	32.8	27.5	21.3
MAX	41	37	161	236	213	187	136	104	70	55	49	24
MIN	22	26	38	114	109	136	104	67	56	24	20	20
AC-FT	1,860	1,850	6,700	10,740	8,690	9,410	6,840	5,040	3,810	2,020	1,690	1,270
CAL YR 1966	TOTAL	24,632	MEAN	67.5	MAX	170	MIN	18	AC-FT	48,860		
WTR YR 1967	TOTAL	30,218	MEAN	82.8	MAX	236	MIN	20	AC-FT	59,940		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	42	31	38	95	174	148	92	85	51	23	37
2	24	40	38	40	107	165	145	85	107	51	23	37
3	28	39	38	42	116	153	139	85	119	51	23	37
4	26	37	38	44	128	193	139	82	109	49	23	37
5	26	36	42	44	153	150	139	82	100	46	23	37
6	26	35	42	44	168	145	136	85	85	44	23	37
7	26	36	40	46	174	142	133	85	80	44	23	37
8	24	38	38	46	185	136	130	82	75	44	23	37
9	28	42	40	55	180	133	128	82	73	44	23	37
10	42	46	40	50	175	130	125	85	70	44	23	37
11	54	47	38	50	170	128	122	82	68	44	23	37
12	70	47	38	52	160	130	119	80	64	43	23	38
13	00	45	37	55	155	128	119	78	63	41	23	38
14	72	42	35	59	150	125	116	78	62	40	28	38
15	48	40	35	60	148	130	116	75	60	40	28	38
16	44	39	33	61	148	142	114	75	58	40	28	38
17	42	38	33	63	145	139	114	75	55	38	28	40
18	40	37	33	66	130	139	111	78	55	38	29	40
19	38	37	33	72	160	136	108	80	55	38	31	40
20	38	35	35	82	165	132	98	85	55	38	33	38
21	42	35	35	85	174	119	90	85	55	40	36	38
22	42	35	35	88	180	125	84	82	55	40	39	38
23	33	33	35	90	198	125	75	80	55	40	43	38
24	29	33	35	92	216	125	82	78	55	39	47	41
25	26	33	35	92	216	130	87	80	55	35	55	38
26	24	33	35	95	207	128	90	78	55	33	55	37
27	26	33	35	92	204	139	92	78	53	28	46	37
28	23	33	35	90	195	142	92	75	51	26	38	36
29	22	33	35	90	183	148	90	73	51	23	37	36
30	42	31	37	92	-----	148	90	73	51	23	37	36
31	42	-----	37	95	-----	148	-----	73	-----	23	37	-----
TOTAL	1,141	1,130	1,126	2,070	4,805	4,287	3,371	2,484	2,028	1,218	974	1,130
MEAN	36.8	37.7	36.3	66.8	166	138	112	80.1	67.6	39.3	31.4	37.7
MAX	80	47	42	95	216	174	148	92	119	51	55	41
MIN	22	31	31	38	95	119	75	71	51	23	23	36
AC-FT	2,260	2,240	2,230	4,110	9,530	8,500	6,690	4,930	4,020	2,420	1,930	2,240
CAL YR 1967	TOTAL 28,363		MEAN 77.7		MAX 236		MIN 20		AC-FT 56,260			
WYR 1968	TOTAL 25,764		MEAN 70.4		MAX 216		MIN 22		AC-FT 51,100			

CHAMBERS CREEK BASIN

12091060 FLETT CREEK AT MOUNTAIN VIEW MEMORIAL PARK, AT TACOMA, WASH.

LOCATION.--Lat 47°11'06", long 122°29'17", in NW¼NE¼ sec.36, T.20 N., R.2 E., Pierce County, on right bank 0.4 mile downstream from 74th Street crossing in Tacoma and 2.7 miles upstream from mouth.

DRAINAGE AREA.--5.91 sq mi (excludes 0.68 sq mi storm drainage diverted to Leach Creek basin but does not include some urban storm drainage diverted into the basin).

PERIOD OF RECORD.--July 1967 to September 1970.

GAGE.--Water-stage recorder and wooden control. Altitude of gage is 235 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for July 1967 to September 1970 are contained in the following table:

		Maximum		G.H.	Minimum daily		Discharge
Wtr yr	Date		Discharge				
1967	(a)		-		Entire period		0
1968	Feb. 21, 1968		23	3.15	Many days		0
1969	Dec. 10, 1968		32	3.54	do.		0
1970	Jan. 27, 1970		28	3.38	do.		0

a No flow for entire period July to September 1967.

Period of record: Maximum discharge, 32 cfs Dec. 10, 1968 (gage height, 3.54 ft); no flow for many days in each year.

REMARKS.--Records good. No regulation. Storm sewer drainage above station. Several diversions for irrigation and industrial use above station. No flow for July to September 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0		0	0	2.2	5.1	.04	2.3		0	0	
2	0		0	.02	1.2	3.4	.03	6.9		0	0	
3	0		0	.59	.65	2.6	.03	7.1		0	0	
4	0		0	3.9	1.2	2.6	.02	4.0		0	0	
5	0		0	3.4	1.8	3.4	.03	1.4		0	0	
6	0		0	1.1	.75	2.8	.02	.43		0	0	
7	0		0	.23	.90	4.0	.01	.18		0	0	
8	0		0	.03	.65	4.4	0	.04		0	0	
9	0		.07	0	.53	2.6	0	0		0	0	
10	0		0	1.2	.43	2.0	0	0		0	0	
11	0		0	1.4	.71	1.4	0	0		0	0	
12	0		0	.74	1.6	.90	0	0		0	0	
13	0		0	.44	.46	.58	0	0		0	0	
14	0		0	.28	.43	2.5	0	0		0	0	
15	0		0	.12	2.6	2.4	0	0		0	0	
16	0		0	.02	5.9	2.2	0	0		0	0	
17	0		0	.07	4.0	1.6	0	0		0	0	
18	0		0	6.3	4.4	.75	0	0		0	.02	
19	0		0	16	3.4	.53	0	0		0	.06	
20	0		.25	19	2.8	.46	.33	0		0	.09	
21	1.1		.07	21	2.4	.37	.01	0		0	0	
22	0		0	19	1.8	.34	0	0		0	0	
23	0		0	19	1.6	.43	0	0		.31	0	
24	0		0	17	1.0	.25	0	0		0	0	
25	0		0	15	4.2	.20	0	0		0	0	
26	0		0	11	1.8	.13	0	0		.55	0	
27	.59		0	7.6	9.5	.12	0	0		1.8	0	
28	.06		0	5.4	20	.11	0	0		3.4	0	
29	0		0	3.4	20	.06	0	0		1.1	0	
30	0		0	-----	13	.05	0	0		.32	0	
31	0	-----	0	0	7.6	-----	0	-----		.04	-----	
TOTAL	1.75	0	0	.39	173.44	119.51	.52	22.35	0	7.52	.17	
MEAN	.057	0	0	.013	5.98	3.86	1.61	.017	.75	0	.24	.006
MAX	1.1	0	0	.25	21	20	.33	7.1	0	3.4	.09	0
MIN	0	0	0	0	0	.43	.05	0	0	0	0	0
AC-FT	3.5	0	0	.8	344	237	96	1.0	44	0	15	.3

WTR YR 1968 TOTAL 373.93 MEAN 1.02 MAX 21 MIN 0 AC-FT 742

12091060 FLETT CREEK AT MOUNTAIN VIEW MEMORIAL PARK, AT TACOMA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	9.4	8.8	4.4	2.6	.29	.90	.09			
2	0	.36	8.2	12	6.6	2.3	1.5	.86	0			
3	0	.07	14	18	13	2.4	1.0	.59	0			
4	0	.05	21	21	20	2.2	2.9	.33	0			
5	0	2.5	25	24	23	5.4	2.5	.29	0			
6	0	1.9	24	28	24	1.9	2.1	.16	0			
7	0	.45	23	29	21	1.1	1.8	.08	0			
8	0	2.9	24	28	20	.69	1.5	.02	0			
9	0	2.8	27	28	23	.59	1.2	0	0			
10	0	6.1	30	28	26	.59	1.1	0	0			
11	.09	12	30	28	28	.64	.80	0	0			
12	.32	17	29	27	27	.64	.91	0	0			
13	.32	19	29	27	26	.64	.69	0	0			
14	1.2	17	26	25	23	.55	.53	0	0			
15	7.3	11	22	22	18	.64	.28	0	0			
16	5.0	7.4	19	21	14	2.0	.19	0	0			
17	2.0	5.7	16	20	11	3.2	1.5	0	0			
18	6.2	4.8	9.4	19	11	3.8	2.4	0	0			
19	8.3	3.4	6.6	16	7.3	3.8	2.8	0	0			
20	6.7	2.2	6.0	14	3.6	3.8	2.4	0	0			
21	2.9	3.9	5.4	11	2.6	2.8	2.2	0	0			
22	.72	9.0	6.0	8.4	2.8	2.4	1.8	0	0			
23	.13	13	13	6.2	3.4	1.7	4.6	0	0			
24	.09	15	22	3.2	3.4	1.4	4.1	0	0			
25	.01	13	22	1.7	3.4	1.0	3.8	0	0			
26	0	14	19	1.4	3.2	.80	2.8	0	0			
27	0	11	14	2.5	3.0	.69	1.8	0	0			
28	0	7.4	11	7.3	2.8	.46	1.5	0	0			
29	0	8.9	7.4	7.0	-----	.21	1.0	.05	0			
30	.02	9.5	5.7	3.4	-----	.10	.74	.16	0			
31	0	-----	5.6	4.8	-----	.15	-----	.64	-----			-----
TOTAL	41.30	221.33	529.7	500.7	374.5	51.19	52.73	4.08	.09	0	0	0
MEAN	1.33	7.38	17.1	16.2	13.4	1.65	1.76	.13	.003	0	0	0
MAX	8.3	19	30	29	28	5.4	4.6	.90	.09	0	0	0
MIN	0	0	5.4	1.4	2.6	.10	.19	0	0	0	0	0
AC-FT	82	439	1,050	993	743	102	105	8.1	.2	0	0	0
CAL YR 1968	TOTAL	1,164.51	MEAN	3.18	MAX	30	MIN	0	AC-FT	2,310		
WTR YR 1969	TOTAL	1,775.62	MEAN	4.86	MAX	30	MIN	0	AC-FT	3,520		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	2.0	22	2.2	.42	.75				0
2	0	0	0	1.4	19	2.0	.32	.58				0
3	0	0	0	1.6	14	2.0	.24	.62				0
4	0	.90	0	1.1	11	1.6	.22	.62				0
5	0	.02	0	.86	9.0	1.4	.62	.17				0
6	0	1.5	0	.66	7.6	6.2	1.9	.08				0
7	0	2.4	0	.48	7.1	8.2	1.3	.01				0
8	0	1.1	0	.79	6.0	9.5	1.7	.40				0
9	0	.23	0	1.1	4.8	8.8	7.4	.32				0
10	.07	0	0	1.6	4.1	6.4	7.4	.66				0
11	.18	0	1.1	2.6	3.4	4.6	7.9	.14				0
12	.01	0	6.1	2.8	3.0	4.6	7.3	.40				0
13	0	0	12	8.6	3.0	3.8	4.9	.09				0
14	0	0	14	19	2.6	8.0	3.0	.06				0
15	0	0	15	21	8.5	8.3	2.0	.04				0
16	0	0	19	22	16	9.0	1.3	.01				0
17	0	0	15	22	21	7.3	.86	0				0
18	0	0	13	22	21	6.2	1.3	0				.04
19	0	0	12	24	21	4.6	2.6	0				0
20	0	0	12	23	18	3.6	2.0	0				0
21	0	0	12	24	14	2.8	2.0	0				0
22	0	0	12	24	10	2.5	1.7	0				0
23	0	0	18	23	7.7	2.2	1.4	0				0
24	0	0	19	25	6.0	1.7	3.0	0				0
25	0	0	18	25	4.8	1.4	2.5	0				0
26	0	0	15	26	3.8	1.1	3.0	0				0
27	0	0	11	26	3.2	1.1	2.6	0				0
28	0	0	7.4	24	2.6	.93	2.0	0				0
29	0	0	5.1	24	-----	.80	1.7	0				0
30	0	0	3.6	24	-----	.66	1.1	0				0
31	0	-----	2.8	24	-----	.54	-----	0	-----			-----
TOTAL	.26	6.15	243.1	447.59	274.2	124.03	75.68	4.95	0	0	0	.04
MEAN	.008	.21	7.84	14.4	9.79	4.00	2.52	.16	0	0	0	.001
MAX	.18	2.4	19	26	22	9.5	7.9	.75	0	0	0	.04
MIN	0	0	0	.48	2.6	.54	.22	0	0	0	0	0
AC-FT	.5	12	482	888	544	246	150	9.8	0	0	0	.08
CAL YR 1969	TOTAL	1,232.80	MEAN	3.38	MAX	29	MIN	0	AC-FT	2,450		
WTR YR 1970	TOTAL	1,176.00	MEAN	3.22	MAX	26	MIN	0	AC-FT	2,330		

CHAMBERS CREEK BASIN

12091100 FLETT CREEK AT TACOMA, WASH.

LOCATION.--Lat 47°11'23", long 122°31'08", in NE¼ sec.26, T.20 N., R.2 E., Pierce County, on right bank at 75th Street, 0.6 mile upstream from mouth and 0.7 mile west of city limits of Tacoma.

DRAINAGE AREA.--7.33 sq mi (excludes 0.68 sq mi storm drainage diverted to Leach Creek basin but does not include some urban storm drainage diverted into the basin). Area used prior to July 1967, 8.01 sq mi.

PERIOD OF RECORD.--June 1959 to September 1970.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 200 ft (from topographic map).

AVERAGE DISCHARGE.--11 years, 7.55 cfs (5,470 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum			Date	Minimum		
		Discharge	G.H.			Discharge	G.H.	
1966	Jan. 5, 1966	27	a2.48		Aug. 23, 1966	.64	1.39	
1967	Jan. 19, 1967	39	2.58		Aug. 27, 1967	.29	1.33	
1968	Feb. 21, 1968	33	b2.65		July 31, Aug. 1, 2, 9, 10, 12, 13, 1968	.56	c1.36	
1969	Jan. 7, 1969	47	2.63		Sept. 8, 10, 12, 16, 1969	.35	1.32	
1970	Jan. 27, 1970	60	d2.82		Aug. 29, 30, 1970	.37	1.34	

a Occurred June 6, 1966, backwater from plank on control.

b Occurred Mar. 25, 26, 1968, backwater from plank on control.

c Occurred Aug. 9, 10, 12, 13, 1968.

d Occurred Jan. 15, 1970, backwater from debris on control.

Period of record: Maximum discharge, 86 cfs Jan. 25, 1964 (gage height, 2.82 ft, from high watermark in well), from rating curve extended above 33 cfs on basis of computation of peak flow over weir; minimum, 0.29 cfs Aug. 27, 1967; minimum gage height, 1.32 ft Sept. 8, 10, 12, 16, 1969.

REMARKS.--Records good. No gage-height record Dec. 20, 1968, to Jan. 7, 1969. Storm sewer drainage above station. Several diversions for irrigation and industrial use. At times during winter periods, 1,000 gpm is pumped into creek for short intervals from Mountain View Memorial Park.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.0	2.3	9.7	12	8.8	9.4	5.4	3.0	2.4	1.4	.71
2	1.4	1.0	2.4	15	12	7.9	5.5	5.4	3.5	2.6	1.2	.71
3	1.5	2.0	3.1	16	11	7.4	7.7	5.2	3.9	3.0	1.2	.85
4	1.9	2.4	5.4	14	11	6.5	7.2	5.2	3.9	2.9	1.1	1.1
5	2.7	1.9	3.3	19	11	6.0	7.8	5.0	3.6	2.6	1.1	1.2
6	2.4	1.0	3.2	21	11	6.0	6.7	6.5	3.7	2.6	1.1	1.2
7	2.3	.99	3.0	17	11	5.8	6.5	5.8	3.5	2.4	1.1	.92
8	2.2	.85	2.4	10	11	8.5	6.3	5.0	3.3	2.3	1.1	.99
9	2.2	.78	2.2	17	18	10	6.0	4.6	3.2	2.4	.99	.99
10	2.2	.92	2.4	17	9.7	7.4	5.8	4.5	3.4	2.3	.99	1.1
11	2.2	1.3	2.6	17	10	6.5	7.4	4.1	3.5	2.2	1.1	1.5
12	2.2	1.4	3.0	10	10	6.0	7.2	3.9	3.5	1.8	1.1	1.3
13	2.3	1.5	3.2	21	9.7	6.5	6.3	3.8	3.3	1.9	.92	1.2
14	2.6	1.6	3.3	20	9.4	6.5	6.5	3.8	3.0	1.6	.92	1.3
15	2.5	1.5	3.5	18	9.1	6.7	6.5	4.1	2.6	2.0	.99	1.4
16	2.2	1.5	3.8	16	8.8	7.0	6.5	4.3	2.3	2.4	.92	1.6
17	2.2	1.5	3.9	16	8.8	6.5	6.5	3.9	2.1	2.4	.92	1.6
18	2.3	1.8	4.1	16	8.8	7.0	6.5	3.9	2.2	2.4	.88	2.0
19	2.9	2.2	4.1	16	8.5	7.4	6.3	3.9	2.9	2.3	.78	1.6
20	2.4	2.2	4.8	16	8.5	7.9	6.7	4.1	2.9	2.2	.71	1.5
21	2.1	2.2	4.3	15	8.2	11	6.5	4.3	2.7	2.8	.71	1.4
22	2.0	2.4	4.3	15	8.2	9.7	6.5	4.3	2.7	2.0	.75	1.5
23	1.9	2.8	4.6	15	8.2	9.7	6.5	3.9	2.6	2.0	.71	1.5
24	1.9	2.3	5.6	14	7.9	9.7	6.3	3.9	2.4	2.1	.71	1.5
25	1.8	2.2	5.2	14	8.2	9.7	5.8	3.9	2.4	2.0	.71	1.5
26	1.8	2.4	5.2	14	8.2	10	5.8	3.7	2.7	1.5	.78	1.6
27	1.9	2.6	12	13	8.5	10	5.8	3.8	9.9	1.3	.92	1.6
28	1.9	2.3	15	13	9.7	10	5.6	3.8	3.0	1.3	1.2	1.5
29	1.8	2.2	12	13	-----	10	5.6	3.9	2.6	1.5	1.1	1.5
30	1.8	2.3	10	13	-----	11	5.6	3.5	2.4	1.3	.85	1.5
31	1.8	-----	9.1	13	-----	10	-----	3.3	-----	1.3	.78	-----
TOTAL	64.5	54.84	152.5	489.7	268.4	253.1	195.1	134.7	96.7	65.0	29.74	39.87
MEAN	2.08	1.83	4.92	15.8	9.59	8.16	6.50	4.35	3.22	2.10	.96	1.33
MAX	2.9	2.8	15	21	12	11	9.4	6.8	9.9	3.0	1.4	2.0
MIN	1.4	.78	2.2	9.7	7.9	5.8	5.3	3.4	2.1	1.3	.71	.71
AC-FT	120	109	302	971	532	502	387	267	192	129	59	79

CAL YR 1965 TOTAL 2,015.04 MEAN 5.52 MAX 27 MIN .50 AC-FT 4,000
WTR YR 1966 TOTAL 1,844.15 MEAN 5.05 MAX 21 MIN .71 AC-FT 3,660

12091100 FLETT CREEK AT TACOMA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.0	8.2	18	24	17	11	8.1	3.7	2.6	.92	.40
2	1.6	2.0	7.0	16	25	16	10	8.1	3.7	2.6	.95	.45
3	1.6	2.0	6.5	17	24	15	10	8.1	3.7	2.2	.76	.50
4	1.6	2.0	7.4	28	24	14	10	7.9	3.7	2.0	.76	.62
5	1.6	2.1	10	22	23	14	10	7.7	3.9	2.0	.76	.69
6	1.6	2.0	9.4	19	22	14	9.8	7.5	3.9	1.8	1.0	.62
7	1.6	2.0	10	18	21	14	9.8	7.5	3.7	1.8	.92	.62
8	1.6	2.0	9.7	18	20	14	9.6	7.5	3.6	2.4	.84	.50
9	1.6	2.0	9.4	18	20	14	9.6	7.3	3.7	2.6	.84	.62
10	1.6	2.0	9.7	20	20	14	9.6	6.3	3.7	2.0	.84	1.1
11	1.6	2.0	11	23	20	12	9.4	6.5	3.9	2.0	.76	1.2
12	2.0	2.2	18	21	20	12	9.6	7.1	3.3	1.6	.84	1.1
13	2.0	3.2	29	21	28	12	11	6.9	3.0	1.3	.69	1.1
14	1.8	5.4	18	18	22	12	9.6	6.7	2.9	1.1	.56	1.0
15	1.8	4.8	19	19	22	13	9.2	6.7	2.6	1.3	.62	1.0
16	1.8	3.9	19	17	20	12	9.2	6.9	2.5	1.8	.45	.92
17	1.6	3.5	18	17	20	12	9.0	6.7	2.6	1.8	.45	1.0
18	1.8	3.0	18	16	19	12	9.6	5.7	2.7	1.3	.62	1.0
19	2.0	3.0	18	30	18	12	9.4	4.8	3.0	1.4	.50	.92
20	2.4	3.0	17	30	18	12	8.8	4.2	2.7	1.2	.69	.84
21	2.3	3.0	16	22	17	12	9.0	4.2	3.9	1.2	.76	.84
22	3.0	2.9	16	20	18	13	9.4	4.3	5.2	1.4	.50	.92
23	2.6	3.2	16	20	18	13	9.8	3.7	3.6	1.8	.45	.92
24	2.3	3.0	16	20	17	13	9.0	3.4	3.6	1.8	.45	1.1
25	2.2	3.5	18	21	17	12	9.0	2.6	3.6	1.0	.40	1.0
26	2.2	3.3	17	24	16	12	9.0	2.7	3.3	1.3	.40	1.0
27	2.2	4.3	17	31	16	12	9.2	3.0	2.9	1.0	.36	1.1
28	2.0	4.1	16	31	17	12	8.8	3.6	2.7	.92	.36	1.0
29	2.1	4.1	16	28	-----	11	8.5	3.9	2.6	1.0	.36	1.0
30	2.1	9.9	16	25	-----	11	8.1	4.0	2.6	1.1	.36	1.3
31	2.0	-----	16	24	-----	11	-----	4.2	-----	1.1	.36	-----
TOTAL	59.8	95.4	452.3	672	566	399	284.2	177.8	100.5	50.42	19.53	26.38
MEAN	1.93	3.18	14.6	21.7	20.2	12.9	9.47	5.74	3.35	1.63	.63	.88
MAX	3.0	9.9	29	31	28	17	11	8.1	5.2	2.6	1.0	1.3
MIN	1.6	2.0	6.5	16	16	11	8.1	2.6	2.5	.92	.36	.40
AC-FT	119	189	897	1,330	1,120	791	564	353	199	100	39	52

CAL YR 1966 TOTAL 2,179.81

MEAN 5.97

MAX 29

MIN .71

AC-FT 4,320

WTR YR 1967 TOTAL 2,903.33

MEAN 7.95

MAX 31

MIN .36

AC-FT 5,760

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.4	4.0	3.2	12	13	15	7.6	9.0	3.5	.62	3.2
2	1.6	2.4	5.4	3.0	12	13	13	7.3	18	3.0	.69	3.0
3	2.4	2.4	5.0	3.0	12	12	13	7.0	18	2.5	1.1	3.0
4	1.8	2.3	5.2	3.1	15	13	13	7.0	14	2.6	1.0	3.0
5	1.8	2.2	5.4	3.2	13	14	13	7.0	8.3	2.5	.76	3.0
6	1.6	2.3	4.6	3.4	12	13	12	6.8	6.2	2.3	.69	2.8
7	1.8	2.4	4.6	3.6	11	13	13	6.6	5.4	2.2	.69	2.8
8	1.8	2.7	4.4	3.6	12	12	13	6.4	5.2	2.5	.84	2.8
9	1.6	3.4	4.6	6.2	12	12	12	6.4	5.4	1.8	.62	2.8
10	1.8	4.3	4.6	5.2	13	11	12	6.0	5.2	1.6	.56	2.7
11	2.4	3.5	4.6	5.0	13	11	11	6.2	5.4	1.6	.69	2.8
12	2.0	3.1	4.3	5.2	13	13	10	6.4	5.4	1.8	.69	3.0
13	2.2	3.2	4.0	6.6	12	12	10	6.0	5.2	2.2	.62	3.0
14	2.0	3.6	3.6	6.8	12	11	11	5.6	5.0	2.4	1.3	3.1
15	1.8	3.6	3.6	6.6	11	13	13	5.6	4.8	2.5	1.8	3.0
16	1.8	3.8	3.8	6.2	10	19	12	5.0	4.8	2.3	1.8	2.8
17	1.8	3.8	4.1	6.0	10	14	11	4.6	4.6	2.3	1.8	3.0
18	2.0	4.0	4.3	6.4	14	14	10	4.4	4.4	1.8	2.0	3.5
19	2.0	4.0	4.3	8.0	23	13	10	5.0	4.4	1.8	2.4	2.8
20	2.0	4.0	4.3	9.5	28	13	9.5	6.4	4.3	2.0	2.2	2.6
21	4.4	4.1	4.3	9.2	32	12	9.2	5.4	4.1	2.0	2.0	2.2
22	3.4	4.1	4.8	8.3	30	12	8.9	5.4	4.4	1.8	2.3	2.0
23	3.0	4.1	5.0	7.8	31	11	9.5	5.4	4.3	1.6	3.1	1.8
24	2.8	4.3	5.0	8.0	26	12	9.5	5.2	4.1	1.6	2.8	1.6
25	3.0	4.3	4.8	8.3	24	14	8.6	5.8	3.8	1.3	3.1	1.6
26	2.8	4.1	4.6	8.3	21	13	8.0	5.5	3.5	1.4	3.0	1.8
27	4.6	4.0	4.3	8.3	18	18	7.8	5.4	3.4	1.8	4.3	2.0
28	4.8	4.1	3.8	8.0	16	26	7.8	5.2	3.5	1.8	5.2	2.0
29	3.5	4.1	3.5	8.6	14	29	7.6	5.2	3.6	1.4	5.0	2.2
30	3.1	4.0	3.2	9.5	-----	23	7.8	5.0	3.8	.76	4.1	2.2
31	3.0	-----	3.2	11	-----	18	-----	5.0	-----	.62	3.5	-----
TOTAL	76.2	104.6	135.2	199.1	482	447	321.2	181.8	181.5	61.28	61.27	78.1
MEAN	2.46	3.49	4.36	6.42	16.6	14.4	10.7	5.86	6.05	1.98	1.98	2.60
MAX	4.8	4.3	5.4	11	32	29	15	7.6	18	3.5	5.2	3.5
MIN	1.6	2.2	3.2	3.0	10	11	7.6	4.4	3.4	.62	.56	1.6
AC-FT	151	207	268	395	956	887	637	361	360	122	122	155

CAL YR 1967 TOTAL 2,611.83

MEAN 7.16

MAX 31

MIN .36

AC-FT 5,180

WTR YR 1968 TOTAL 2,329.25

MEAN 6.36

MAX 32

MIN .56

AC-FT 4,620

CHAMBERS CREEK BASIN

12091100 FLETT CREEK AT TACOMA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	4.4	13	17	18	13	7.4	5.8	2.0	1.1	.62	.45
2	2.4	5.2	13	18	19	13	7.6	6.0	1.8	1.1	.56	.50
3	2.3	5.0	16	22	24	13	7.0	5.8	1.6	1.1	.56	.50
4	2.4	4.4	28	27	30	13	8.6	5.6	1.6	1.1	.56	.50
5	2.3	5.0	29	32	34	15	9.5	5.6	2.0	1.3	.56	.50
6	2.4	7.0	28	40	35	13	8.9	5.4	2.0	1.4	.56	.50
7	2.3	6.2	27	45	33	12	8.3	5.2	2.2	1.4	.56	.45
8	2.3	6.8	32	40	36	11	8.3	5.0	2.4	1.2	.56	.45
9	2.4	8.9	32	40	37	10	8.0	4.4	2.5	1.2	.56	.45
10	2.8	9.2	41	40	38	10	8.0	3.8	2.0	1.3	.56	.45
11	3.0	18	44	40	44	9.5	7.8	3.5	1.8	1.4	.56	.45
12	3.1	19	41	40	43	9.0	7.8	3.2	1.4	1.4	.56	.40
13	4.0	24	40	39	41	8.8	7.6	2.8	1.4	1.4	.56	.45
14	3.5	25	38	39	38	8.6	7.3	2.4	1.3	1.3	.50	.45
15	6.3	21	32	34	32	9.2	6.6	2.3	1.4	1.1	.56	.45
16	7.8	15	26	31	26	10	6.2	2.2	1.8	1.0	.45	.50
17	6.4	13	22	30	23	11	7.0	2.0	1.4	.92	.50	.76
18	7.6	12	20	28	22	12	8.3	2.2	1.4	.84	.62	1.1
19	8.9	11	17	26	20	12	7.8	2.3	1.4	.84	.56	1.0
20	10	9.8	16	24	17	12	7.0	2.2	1.4	.76	.56	.84
21	9.2	9.8	15	22	16	11	6.8	2.0	1.3	.62	.50	.76
22	7.6	13	16	21	16	10	7.3	2.1	1.4	.62	.50	1.1
23	6.2	14	20	19	16	9.5	10	2.0	1.6	.56	.45	1.4
24	5.4	14	31	17	15	9.0	8.9	2.0	1.6	.69	.45	1.4
25	5.2	14	30	16	15	8.5	8.0	2.0	1.6	.62	.45	1.1
26	4.8	14	28	16	15	8.0	6.6	2.0	1.6	.56	.45	1.1
27	4.6	14	24	15	14	7.5	5.8	2.0	1.4	.56	.50	1.1
28	4.4	13	21	18	14	7.2	6.0	2.0	1.4	.56	.45	1.1
29	4.8	13	19	19	-----	7.0	6.0	2.7	1.3	.62	.50	1.2
30	4.6	13	18	18	-----	7.0	5.8	2.7	1.3	.69	.50	1.4
31	4.4	-----	17	18	-----	7.2	-----	2.2	-----	.69	.50	-----
TOTAL	145.6	361.7	794	451	731	317.0	226.2	101.4	49.3	29.95	16.39	22.91
MEAN	4.70	12.1	25.6	27.5	26.1	10.2	7.54	3.27	1.63	.97	.53	.76
MAX	10	25	44	45	44	15	10	6.0	2.5	1.4	.62	1.4
MIN	2.2	4.4	13	15	14	7.0	5.8	2.0	1.3	.56	.45	.40
AC-FT	289	717	1,570	1,690	1,450	629	449	201	98	59	33	45
CAL YR 1968	TOTAL	3,314.55	MEAN	9.06	MAX	44	MIN	.56	AC-FT	6,570		
WTR YR 1969	TOTAL	3,646.45	MEAN	9.09	MAX	45	MIN	.40	AC-FT	7,230		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.7	2.3	12	42	12	7.4	6.5	2.9	1.1	.54	.45
2	1.3	1.8	2.3	10	38	12	7.4	6.3	2.7	1.0	.59	.48
3	1.8	1.8	2.6	10	32	12	6.6	6.0	2.2	.88	.64	.59
4	1.1	3.6	2.6	9.7	26	11	6.9	5.0	2.1	.95	.59	.56
5	1.1	3.3	2.5	9.4	22	10	7.1	5.8	2.3	.82	.64	.64
6	1.1	2.5	2.6	8.9	20	14	8.3	5.6	2.3	.76	.64	.76
7	1.5	3.3	2.6	7.9	20	18	7.8	4.7	3.1	.76	.59	1.1
8	1.9	3.4	3.0	8.3	17	17	7.8	4.7	3.3	.64	.59	.95
9	2.2	2.9	2.9	8.6	16	17	12	5.1	3.4	.59	.59	.88
10	1.9	2.7	2.7	8.6	15	16	15	5.6	3.3	.59	.59	.88
11	1.8	2.6	3.5	9.7	14	14	13	5.4	3.0	.59	.59	.88
12	1.9	2.5	7.8	10	14	14	13	5.4	2.9	.59	.59	.88
13	1.9	2.3	12	14	13	14	11	5.2	2.7	.59	.59	.88
14	1.9	2.3	17	22	12	17	8.6	5.1	3.0	.64	.54	.88
15	1.9	2.3	17	29	16	16	7.6	4.9	3.0	.59	.54	.88
16	1.8	2.2	20	32	25	17	7.1	4.9	2.9	.54	.59	.95
17	1.8	2.1	22	33	31	16	6.9	4.9	2.9	.59	.54	1.0
18	1.7	2.1	20	36	37	15	7.1	4.5	2.5	.49	.54	2.0
19	1.7	2.1	16	41	34	13	8.6	3.8	1.9	.49	.49	1.5
20	1.7	2.5	15	39	32	12	7.6	3.4	1.5	.54	.45	1.3
21	1.7	2.6	16	37	27	11	7.6	3.0	1.3	.64	.49	1.2
22	1.7	2.3	15	38	22	10	7.4	3.3	1.7	.64	.49	1.2
23	1.7	2.9	22	41	19	10	7.1	3.5	1.6	.64	.49	1.3
24	1.7	2.6	32	42	17	10	8.6	3.7	1.2	.64	.49	1.3
25	1.7	2.6	34	45	16	9.2	8.3	3.7	1.2	.70	.49	1.2
26	1.7	2.5	32	45	14	8.6	8.3	3.3	1.5	.76	.45	1.2
27	2.0	2.5	26	52	14	8.3	8.1	3.0	1.0	.76	.41	1.2
28	1.9	2.5	22	43	19	8.3	7.4	2.9	1.1	.76	.49	1.3
29	1.8	2.5	18	42	-----	8.1	7.4	3.3	1.3	.70	.41	1.2
30	1.8	2.5	14	42	-----	7.8	6.7	3.1	1.3	.70	.41	1.2
31	1.8	-----	13	44	-----	7.6	-----	2.9	-----	.49	.45	-----
TOTAL	52.2	75.5	420.4	830.1	618	385.9	254.0	139.5	67.1	21.17	16.45	30.77
MEAN	1.68	2.52	13.6	26.0	22.1	12.4	8.47	4.50	2.24	.68	.53	1.03
MAX	2.2	3.6	34	52	42	18	15	6.5	3.4	1.1	.64	2.0
MIN	1.1	1.7	2.3	7.9	12	7.6	6.7	2.9	1.0	.49	.41	.45
AC-FT	104	150	834	1,650	1,230	765	504	277	133	42	33	61
CAL YR 1969	TOTAL	2,893.25	MEAN	7.93	MAX	45	MIN	.40	AC-FT	5,740		
WTR YR 1970	TOTAL	2,911.09	MEAN	7.98	MAX	52	MIN	.41	AC-FT	5,770		

12091180 LEACH CREEK AT HOLDING POND, AT FIRCREST, WASH.

LOCATION.--Lat 47°13'29", long 122°30'32", in NEKNEK sec.14, T.20 N., R.2 E., Pierce County, on right bank at holding pond dam, 0.8 mile south of Fircrest and 2.5 miles upstream from mouth.

DRAINAGE AREA.--4.59 sq mi (includes 0.68 sq mi storm drainage from Flett Creek basin).

PERIOD OF RECORD.--August 1967 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 200 ft above mean sea level (levels by city of Tacoma).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for August 1967 to September 1970 are contained in the following table:

Maximum			Minimum		
Wtr yr	Date	Discharge	G.H.	Date	Discharge
1967	Sept. 10, 1967	a2.5	-	Aug. 9, 1967	b.75
1968	Oct. 21, 1967	49	10.05	Aug. 10, Sept. 10, 1968	.76
1969	Dec. 6, 1968	54	10.09	Mar. 1, 2, 1969	.34
1970	Jan. 27, 1970	46	9.89	Aug. 5, 6, 7, 1970	.55

a Maximum daily.

b Minimum daily.

c Occurred Sept. 10, 1968.

d Occurred Nov. 27-29, 1969.

Period of record: Maximum discharge, 54 cfs Dec. 6, 1968 (gage height, 10.09 ft); minimum, 0.34 cfs Mar. 1, 2, 1969 (gage height, 7.63 ft).

REMARKS.--Records excellent except those for periods below 2 cfs, which are fair. No gage-height record Aug. 21 to Sept. 18, 1967. Drainage into upper end of basin influenced by urbanizing of area. Flow can be regulated by manually operated gage in flood-control dam. Storage is not retained and observed annual runoff closely represents natural runoff of basin. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, AUGUST TO SEPTEMBER 1967

DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP	DAY	AUG	SEP
1	.95	1.0	6	.80	.80	11	.80	1.6	16	.90	.85	21	.80	.95	26	.80	.85
2	.90	.95	7	.80	.80	12	.80	1.0	17	.90	.85	22	.80	.90	27	.80	.85
3	.85	.80	8	.80	.80	13	.80	.85	18	.90	.85	23	.80	.95	28	.80	.85
4	.85	.80	9	.75	1.1	14	.80	.85	19	.85	.95	24	.80	.90	29	.80	1.8
5	.80	.80	10	.80	2.5	15	.90	.85	20	.85	.95	25	.80	.90	30	.90	1.2
															31	.95	
TOTAL.....															25.85	30.10	
MEAN.....															.83	1.00	
MIN.....															.75	.80	
AC-FT.....															51	60	

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	1.7	2.7	1.8	4.4	1.8	1.6	1.3	20	1.1	1.1	1.8
2	4.5	1.3	22	1.1	16	1.8	3.1	1.4	12	1.0	1.0	1.0
3	13	1.2	5.2	1.1	16	1.7	1.8	1.5	1.5	.97	1.0	.97
4	1.8	1.2	10	1.8	33	5.7	4.5	1.5	1.3	1.0	1.0	.97
5	2.7	1.2	7.1	2.4	4.7	7.9	1.8	1.5	1.3	1.0	1.0	.97
6	2.3	1.2	2.1	1.6	3.1	2.0	1.5	1.5	1.3	1.0	1.0	1.0
7	5.3	2.2	3.3	3.5	2.4	2.7	1.4	1.4	1.3	1.0	.97	1.0
8	1.0	6.3	1.6	3.4	2.0	1.8	1.6	1.3	1.3	1.0	.86	1.0
9	.95	9.4	2.2	22	1.8	1.7	1.4	1.3	1.3	.97	.86	1.0
10	1.9	10	4.4	4.3	1.5	1.6	1.4	1.3	1.5	1.0	.81	1.0
11	19	1.8	1.8	3.3	1.6	4.7	1.3	1.3	1.4	1.5	.86	3.2
12	1.8	1.8	1.4	7.0	1.4	8.5	1.3	1.3	1.3	4.2	.86	1.3
13	7.0	1.3	1.2	11	1.5	2.2	1.3	1.3	2.4	1.1	1.6	1.3
14	1.5	2.7	1.2	11	1.3	3.9	7.4	1.3	1.5	1.3	9.1	11
15	1.2	2.2	1.2	7.9	1.3	15	1.8	1.3	1.3	1.2	1.2	3.9
16	1.1	1.4	1.2	4.1	1.3	21	1.3	1.3	1.3	1.1	1.2	1.3
17	1.1	1.3	1.5	4.1	5.1	3.5	1.2	1.3	1.3	1.0	1.1	6.7
18	2.1	1.4	1.2	6.5	25	2.5	1.2	1.2	1.4	1.3	2.7	13
19	1.2	1.2	1.1	28	36	2.1	2.9	4.9	1.8	3.0	3.4	4.7
20	3.0	1.2	1.2	26	7.3	2.0	1.5	13	1.4	1.0	1.1	1.5
21	37	1.3	4.3	18	15	2.0	1.3	2.2	2.5	.91	.91	1.2
22	9.0	1.3	12	3.5	14	1.9	1.2	1.5	2.0	.97	1.9	1.1
23	1.9	1.2	7.2	2.2	14	3.9	4.1	1.3	1.3	.97	22	1.0
24	6.9	1.2	4.7	1.7	4.5	2.2	1.4	1.3	1.3	1.0	7.8	1.0
25	4.3	1.2	2.4	1.5	2.9	15	1.4	3.1	1.3	1.0	13	1.0
26	1.5	1.2	2.3	2.9	2.4	3.1	2.0	1.3	4.4	1.1	7.2	1.1
27	27	1.4	3.3	1.2	2.1	18	2.1	1.5	1.5	1.1	15	1.0
28	4.9	5.6	1.6	1.0	1.9	4.7	1.7	1.3	2.3	1.0	4.0	1.0
29	1.5	4.4	1.3	1.3	1.8	3.4	1.5	1.2	1.3	1.0	1.2	1.0
30	1.4	3.9	1.2	2.8	-----	2.2	1.3	1.2	1.2	1.0	1.0	1.0
31	4.3	-----	2.2	8.9	-----	1.8	-----	4.4	-----	1.0	.97	-----
TOTAL	179.65	74.6	116.1	197.9	225.3	152.3	59.3	62.5	77.0	37.79	107.70	69.01
MEAN	5.80	2.49	3.75	6.38	7.77	4.91	1.98	2.02	2.57	1.22	3.47	2.30
MAX	37	10	22	28	36	21	7.4	13	20	4.2	22	13
MIN	.95	1.2	1.1	1.0	1.3	1.6	1.2	1.2	.91	.81	.97	
AC-FT	356	148	230	393	447	302	118	124	153	75	214	137

WTR YR 1968 TOTAL 1,359.15 MEAN 3.71 MAX 37 MIN .81 AC-FT 2,700

12091180 LEACH CREEK AT HOLDING POND, AT FIRCREST, WASH---CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.6	3.2	13	4.5	.49	4.2	3.4	1.1	.86	1.3	.58
2	1.0	7.5	3.0	9.9	9.0	.37	7.7	1.3	1.0	.86	1.3	.78
3	1.0	3.4	10	13	15	15	1.8	1.4	1.0	.95	1.3	.78
4	1.4	1.6	11	14	23	9.6	9.6	1.3	1.1	1.1	1.3	.82
5	1.4	1.8	8.1	11	6.4	9.0	2.8	1.3	1.4	.95	1.3	.82
6	3.9	1.4	21	25	3.6	1.6	1.7	1.3	1.0	.90	1.2	.82
7	1.2	2.5	24	19	8.1	1.3	1.6	1.4	.90	.90	1.2	.78
8	1.2	7.8	22	5.1	27	1.5	1.6	1.3	.90	.95	1.2	.74
9	4.6	7.9	8.8	8.9	21	1.9	2.5	1.3	.90	.95	1.1	.74
10	7.5	6.6	25	11	12	1.9	1.7	1.2	1.0	5.1	.74	.74
11	4.0	15	15	6.2	11	1.8	1.6	1.2	.95	2.6	.90	.62
12	8.4	11	3.5	3.8	4.8	1.8	3.2	1.2	.90	1.1	.86	.74
13	14	8.2	2.9	6.4	3.4	1.9	1.7	1.1	.90	1.0	.90	1.6
14	4.9	7.6	2.7	7.3	3.2	1.6	1.3	1.1	.87	1.1	1.5	1.6
15	5.8	6.9	6.5	6.1	3.1	1.9	1.6	1.1	.86	1.1	1.0	.78
16	1.3	6.0	3.0	7.2	2.9	7.3	2.0	1.1	.95	1.2	.66	2.4
17	6.5	3.8	2.5	4.5	1.8	5.7	8.3	1.1	1.3	1.2	.66	11
18	6.5	3.5	3.6	2.8	.46	3.7	4.3	1.1	1.1	1.1	.70	16
19	9.0	1.9	2.2	2.7	.50	1.3	4.4	1.1	1.1	1.0	.58	22
20	14	2.4	1.8	2.3	.50	1.6	2.8	1.1	1.1	1.1	.62	7.5
21	2.2	2.7	1.8	2.2	.54	1.5	1.6	1.1	1.0	1.6	.62	1.0
22	3.7	4.4	3.7	1.9	.58	2.6	1.9	1.1	1.8	1.2	.58	17
23	1.3	4.2	14	1.8	.58	1.5	8.3	1.1	4.0	1.1	.58	22
24	1.4	3.9	12	1.7	.62	1.5	2.1	1.1	1.1	1.1	.58	20
25	2.4	3.7	3.0	1.7	.62	1.5	1.5	1.1	1.0	1.2	.58	5.1
26	1.8	3.6	3.0	1.6	.66	1.6	1.4	4.0	1.2	1.1	.66	.95
27	1.7	3.5	2.0	1.6	.70	1.6	1.7	2.4	1.1	1.3	.70	.97
28	1.8	3.4	1.8	1.6	.62	1.6	1.7	1.2	1.2	1.3	.66	1.9
29	4.8	3.8	1.7	1.7	.62	1.6	1.2	1.2	.90	1.3	.62	4.1
30	3.9	3.4	1.6	1.6	-----	1.6	1.3	1.2	.86	1.3	.58	4.9
31	1.7	-----	1.9	4.9	-----	2.5	-----	1.3	-----	1.2	.58	-----
TOTAL	130.3	145.0	226.3	201.7	166.18	90.06	89.2	69.3	34.49	40.22	27.42	143.76
MEAN	4.20	4.83	7.30	6.51	5.96	2.93	2.97	2.24	1.13	1.30	.88	4.79
MAX	14	15	25	25	27	15	9.6	16	4.0	5.1	1.5	22
MIN	1.0	1.4	1.6	1.6	.46	.37	1.2	1.1	.86	.86	.58	.58
AC-FT	258	288	449	400	330	179	177	137	68	80	54	285

CAL YR 1968 TOTAL 1,490.40 MEAN 4.07 MAX 36 MIN .37 AC-FT 2,960
WTR YR 1969 TOTAL 1,363.93 MEAN 3.74 MAX 27 MIN .37 AC-FT 2,710

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	1.4	1.6	1.5	2.2	1.8	1.4	1.1	1.0	1.2	.70	.83
2	1.1	1.4	.95	1.5	2.0	2.2	1.4	1.7	.99	1.2	2.6	.83
3	.99	1.9	3.8	2.8	1.9	1.4	1.6	.99	.99	1.2	.66	5.1
4	.95	16	2.1	1.7	1.9	1.8	1.5	1.2	1.1	1.1	.61	.95
5	.95	18	1.0	1.4	4.3	2.1	3.3	1.2	1.1	1.1	.58	.83
6	.95	6.8	1.2	1.4	2.2	18	7.3	1.2	.99	1.1	.58	2.6
7	4.0	1.4	1.0	1.4	3.0	9.1	1.6	1.2	1.0	1.1	.58	8.7
8	13	1.5	6.5	3.5	1.7	1.8	2.0	4.1	1.2	1.1	.61	1.1
9	12	1.3	2.9	3.0	1.6	1.6	13	2.7	2.6	1.0	.61	.95
10	1.8	1.6	1.8	1.6	1.6	1.5	5.3	2.9	1.1	.99	.58	.91
11	1.2	1.2	10	1.9	1.6	2.5	1.3	1.4	1.0	.99	.61	.87
12	1.1	1.1	15	3.0	1.6	6.8	1.2	2.6	.99	.95	.64	.83
13	1.1	1.1	15	11	3.0	3.0	1.2	1.3	.99	1.0	.70	.83
14	1.1	1.2	17	21	1.6	16	1.2	1.2	.99	1.0	.70	.95
15	1.2	1.2	14	15	19	2.3	1.1	1.2	1.5	1.0	.74	.83
16	1.3	1.2	9.6	13	18	2.9	1.1	1.1	1.0	1.0	.78	.83
17	1.4	1.1	4.8	12	22	1.8	1.1	1.1	.99	1.0	.78	4.1
18	1.4	1.1	10	13	12	1.5	3.3	1.1	.99	1.0	.78	10
19	1.4	1.1	7.7	15	2.6	1.5	5.1	1.2	.99	.99	.78	9.2
20	1.5	7.4	5.6	14	2.3	1.5	1.2	1.2	1.0	.99	.83	2.9
21	1.4	3.2	9.4	13	2.2	1.4	1.2	1.2	1.0	.95	.83	1.0
22	1.5	7.1	7.1	13	2.0	1.4	1.5	1.4	.99	.87	.78	.99
23	1.5	6.4	14	20	1.7	1.4	1.4	1.1	.99	1.0	.78	.78
24	1.5	1.5	14	28	1.9	1.5	4.2	1.1	1.1	.74	.87	.70
25	1.5	.99	8.1	24	1.8	1.6	2.2	1.1	1.1	2.2	.83	.78
26	1.6	.95	2.7	20	1.8	1.5	1.4	1.1	1.1	2.2	.87	.67
27	.95	.95	1.8	37	2.9	1.9	1.2	1.1	1.1	.99	.83	.67
28	1.7	.95	1.6	7.7	2.2	1.6	1.2	1.1	1.1	.87	.83	.64
29	1.7	.95	1.5	2.9	-----	1.4	1.6	3.9	1.2	.87	.83	.67
30	1.4	1.6	1.5	2.5	-----	1.4	1.2	2.5	1.2	.70	.78	.70
31	1.3	-----	1.5	6.1	-----	1.5	-----	1.1	-----	.67	.91	-----
TOTAL	71.24	87.49	194.25	312.9	123.5	98.5	73.1	49.0	33.39	32.65	24.57	61.66
MEAN	2.30	2.92	6.27	10.1	4.41	3.18	2.44	1.58	1.11	1.06	.79	2.06
MAX	13	18	17	37	22	18	13	4.1	2.6	2.2	2.6	10
MIN	.95	.95	.95	1.4	1.6	1.4	1.1	1.1	.99	.67	.58	.64
AC-FT	141	174	385	621	245	195	145	97	66	65	49	122

CAL YR 1969 TOTAL 1,215.31 MEAN 3.33 MAX 37 MIN .58 AC-FT 2,410
WTR YR 1970 TOTAL 1,162.45 MEAN 3.18 MAX 37 MIN .58 AC-FT 2,310

12091200 LEACH CREEK NEAR FIRCREST, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.8	8.2	13	6.9	5.4	2.4	2.4	2.0	1.5	1.5	1.6
2	1.8	1.8	4.4	4.0	3.8	3.2	2.2	2.4	3.8	1.5	1.5	1.5
3	1.6	1.8	2.8	11	3.5	2.4	2.2	2.4	2.0	1.5	1.5	1.3
4	1.5	1.8	10	29	3.8	2.2	2.6	2.4	1.8	1.5	1.5	1.2
5	1.6	2.6	18	13	2.8	2.2	2.4	2.2	1.8	1.6	1.5	1.2
6	1.6	2.0	5.8	7.7	2.8	2.0	2.2	2.2	1.8	1.6	1.5	1.2
7	2.2	1.8	11	5.0	2.6	2.0	2.2	2.4	1.8	1.6	1.5	1.2
8	2.4	1.8	4.0	4.0	2.6	6.2	2.0	2.2	1.6	1.6	1.5	1.2
9	1.8	1.8	3.2	3.5	3.5	2.8	2.8	2.6	1.6	1.6	1.3	1.6
10	1.8	1.8	4.4	11	2.8	2.8	2.4	2.8	1.6	1.5	1.3	4.6
11	1.8	2.8	10	8.6	3.5	2.4	2.2	3.2	1.6	1.5	1.5	2.4
12	2.2	1.8	24	7.7	2.2	4.5	3.0	3.0	1.6	1.5	1.5	1.3
13	2.2	18	33	6.2	17	4.1	5.8	2.2	1.6	1.5	1.3	1.3
14	1.8	25	7.7	4.4	3.8	2.6	2.6	2.0	1.8	1.5	1.5	1.2
15	1.8	5.4	15	10	4.7	6.2	2.4	2.2	1.8	1.5	1.5	1.2
16	1.8	8.0	11	3.8	2.8	6.2	2.6	2.2	1.6	1.5	1.5	1.2
17	1.6	2.6	7.2	3.2	4.7	7.2	2.4	2.2	1.6	1.5	1.5	1.2
18	1.6	2.2	6.2	4.8	2.8	3.2	5.3	2.2	1.5	1.5	1.5	1.2
19	6.7	2.8	13	37	2.6	2.8	2.6	2.2	1.5	1.8	1.5	1.2
20	10	2.4	6.7	40	2.4	5.9	2.8	2.2	2.4	1.6	1.5	1.2
21	3.8	2.2	4.0	16	2.2	4.4	3.5	2.0	12	1.5	1.3	1.3
22	1.8	1.8	3.5	6.2	2.2	9.5	6.7	2.2	15	1.3	1.3	1.2
23	3.8	1.8	4.4	5.8	2.2	5.8	4.0	2.2	2.0	1.3	1.3	1.3
24	2.0	1.8	5.0	4.0	2.2	5.0	2.6	2.0	1.8	1.6	1.3	1.3
25	1.8	4.1	6.7	5.0	2.2	4.1	6.3	2.0	1.6	1.5	1.3	1.2
26	3.2	2.0	3.5	10	2.2	3.8	3.2	2.0	1.8	1.5	1.3	1.3
27	2.0	10	3.0	30	2.0	3.0	4.4	1.8	1.6	1.5	1.3	1.3
28	1.8	3.2	3.8	24	8.4	3.2	2.6	2.0	1.6	1.5	1.3	1.3
29	3.0	5.6	3.2	16	-----	3.0	2.4	3.4	1.6	1.5	1.3	2.0
30	2.0	28	2.8	6.2	-----	2.6	2.4	2.4	1.6	1.5	1.5	2.0
31	1.8	-----	6.4	4.4	-----	2.4	-----	2.2	-----	1.5	1.5	-----
TOTAL	91.0	155.2	251.9	354.5	114.0	120.8	94.7	71.8	77.4	47.1	44.1	44.2
MEAN	2.94	5.17	8.13	11.4	4.07	3.90	3.16	2.32	2.58	1.52	1.42	1.47
MAX	13	28	33	40	17	9.5	6.7	3.4	15	1.8	1.5	4.6
MIN	1.5	1.8	2.8	3.2	2.0	2.0	2.0	1.8	1.5	1.3	1.3	1.2
AC-FT	181	308	500	703	226	240	188	142	154	93	87	88
CAL YR 1966	TOTAL 1,296.7			MEAN 3.55	MAX 33	MIN 1.2	AC-FT 2,570					
WTR YR 1967	TOTAL 1,466.7			MEAN 4.02	MAX 40	MIN 1.2	AC-FT 2,910					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	2.4	2.8	2.4	5.4	2.4	2.0	1.8	20	1.5	1.5	2.3
2	4.4	2.0	20	2.0	17	2.4	3.0	1.6	13	1.5	1.2	1.6
3	12	2.0	5.0	1.8	20	2.4	2.0	1.6	2.4	1.5	1.5	1.5
4	2.4	1.8	9.3	2.3	31	6.2	4.6	2.2	1.5	1.3	1.3	1.5
5	3.0	1.8	6.7	3.5	5.0	8.9	2.0	1.6	2.0	1.5	1.3	1.5
6	3.0	1.8	2.4	1.8	3.5	2.8	2.0	1.6	1.8	1.3	1.3	1.5
7	5.5	2.6	3.6	2.7	3.0	3.2	1.8	1.6	1.8	1.3	1.3	1.5
8	1.8	6.5	2.2	3.0	2.6	2.4	2.0	1.8	1.8	1.3	1.3	1.5
9	1.6	9.0	2.4	21	2.4	2.4	1.8	1.8	1.8	1.3	1.2	1.5
10	3.0	11	4.8	4.1	2.4	2.0	1.6	1.8	2.0	1.3	1.2	1.5
11	18	2.6	2.4	2.4	2.4	5.3	1.6	1.8	2.0	1.6	1.2	3.5
12	2.2	2.4	2.0	6.3	2.4	9.2	1.6	1.8	1.8	4.0	1.2	1.8
13	6.8	2.2	2.0	11	2.2	2.8	1.5	1.8	2.8	1.5	1.6	2.0
14	1.8	3.0	2.0	11	2.2	4.3	6.3	1.8	2.0	1.6	1.8	9.0
15	1.6	2.6	2.0	8.6	2.2	16	2.6	1.8	1.8	1.6	1.8	4.7
16	1.5	2.4	2.0	5.0	2.2	22	1.6	1.8	1.8	1.6	1.6	1.8
17	1.5	2.0	2.2	5.2	6.2	3.8	1.6	2.0	1.8	1.6	1.5	6.8
18	2.2	2.2	2.0	7.4	27	3.0	1.6	1.8	1.6	1.8	2.9	13
19	1.8	2.0	1.8	30	38	2.8	3.1	5.2	2.0	3.2	3.7	5.3
20	3.3	1.8	1.8	28	8.6	2.2	2.0	13	1.8	1.5	1.6	2.4
21	31	1.8	4.0	20	16	2.0	1.8	2.8	2.6	1.5	1.5	1.8
22	9.1	2.0	11	5.0	16	2.0	1.8	2.0	2.4	1.5	2.1	1.8
23	2.4	2.0	7.2	3.5	16	3.8	4.5	2.0	1.8	1.5	1.7	1.8
24	7.2	1.8	5.7	3.0	5.0	2.4	2.0	1.8	1.6	1.5	7.8	1.6
25	3.4	1.8	3.0	2.8	3.5	15	1.8	3.7	1.5	1.5	12	1.6
26	2.0	1.8	2.8	4.5	3.2	3.2	2.2	1.8	4.0	1.5	6.6	1.8
27	25	2.0	4.0	2.4	3.0	14	2.4	2.0	1.6	1.5	13	1.8
28	5.4	2.4	2.4	2.4	2.8	5.0	6.2	2.0	2.4	1.5	4.5	1.6
29	2.2	4.0	2.2	2.4	2.6	3.5	2.2	1.8	1.6	1.5	1.6	1.6
30	2.0	3.8	2.0	3.7	-----	2.6	2.0	1.8	1.6	1.5	1.5	1.6
31	4.2	-----	2.4	11	-----	2.2	-----	3.4	-----	1.3	1.5	-----
TOTAL	178.8	90.5	126.1	220.2	253.8	162.2	69.2	74.7	89.3	50.3	106.9	83.2
MEAN	5.77	3.02	4.07	7.10	8.15	5.23	2.31	2.41	2.98	1.62	3.43	2.77
MAX	31	11	20	30	38	22	6.3	13	20	4.0	17	13
MIN	1.5	1.8	1.8	1.8	2.2	2.0	1.5	1.6	1.5	1.3	1.2	1.5
AC-FT	355	180	250	437	503	322	137	148	177	100	212	165
CAL YR 1967	TOTAL 1,364.0			MEAN 3.74	MAX 40	MIN 1.2	AC-FT 2,710					
WTR YR 1968	TOTAL 1,505.2			MEAN 4.11	MAX 38	MIN 1.2	AC-FT 2,990					

12091200 LEACH CREEK NEAR FIRECREST, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.0	3.8	12	5.0	1.1	4.5	3.8	1.6	1.1	1.1	1.0
2	1.5	7.2	3.8	11	7.2	1.1	9.0	2.1	1.5	1.1	1.1	1.0
3	1.5	3.5	9.0	15	16	15	2.5	1.9	1.5	1.1	1.1	1.1
4	4.5	2.0	11	16	21	9.4	11	1.8	1.4	1.4	1.1	1.1
5	2.2	2.6	10	12	8.2	10	3.0	1.6	1.6	1.1	1.1	1.1
6	4.0	2.0	18	27	4.4	2.7	1.9	1.6	1.3	1.1	1.1	1.0
7	1.6	3.0	24	21	6.7	2.5	1.6	1.6	1.2	1.1	1.1	1.0
8	1.6	8.8	23	5.8	26	2.3	1.6	1.6	1.3	1.2	1.1	1.0
9	4.1	8.8	11	10	22	2.3	2.3	1.6	1.3	1.2	1.1	1.0
10	6.8	8.2	25	13	13	2.3	1.6	1.6	1.3	4.1	1.1	1.1
11	4.1	16	16	7.2	13	2.3	1.4	1.6	1.3	2.5	.98	1.1
12	7.8	11	4.1	4.4	5.8	2.1	2.5	1.6	1.2	1.3	1.1	1.1
13	12	8.2	3.5	7.1	4.4	2.1	1.6	1.6	1.2	1.2	1.1	1.7
14	6.6	7.2	3.2	8.2	3.8	2.3	1.6	1.5	1.2	1.2	1.5	1.7
15	5.2	6.7	7.0	7.2	3.8	2.5	1.8	1.5	1.2	1.2	1.3	1.1
16	1.8	5.8	3.5	7.7	4.1	8.5	2.1	1.5	1.2	1.2	1.1	2.3
17	6.3	4.7	3.0	5.4	2.3	7.2	7.2	1.4	1.4	1.2	1.1	9.1
18	6.2	3.5	3.5	3.8	1.3	5.0	5.0	1.4	1.3	1.2	1.1	14
19	9.0	2.6	2.3	3.2	1.3	2.7	5.0	1.4	1.3	1.2	1.3	14
20	6.0	2.6	2.3	2.7	1.3	2.7	3.5	1.4	1.3	1.2	1.1	6.7
21	3.1	3.0	2.3	2.7	1.3	2.5	2.3	1.4	1.2	1.4	1.1	1.5
22	3.2	5.4	3.4	2.3	1.4	3.2	2.5	1.4	1.6	1.3	1.1	15
23	2.0	5.0	14	2.3	1.2	2.5	8.8	1.4	3.8	1.2	1.1	20
24	2.0	4.4	14	2.3	1.2	2.4	2.5	1.9	1.4	1.2	1.0	17
25	2.6	4.4	3.5	2.1	1.2	2.4	1.9	1.5	1.3	1.2	1.0	4.9
26	2.0	4.4	3.5	2.1	1.2	2.3	1.9	4.4	1.3	1.2	1.1	1.6
27	2.0	4.4	2.5	2.1	1.2	2.3	1.9	2.7	1.2	1.2	1.2	1.6
28	2.0	3.8	2.3	2.1	1.1	2.3	2.5	1.6	1.3	1.2	1.1	2.2
29	5.0	4.4	2.1	2.1	-----	2.3	1.9	15	1.1	1.2	1.1	3.8
30	3.5	3.8	2.0	2.1	-----	2.3	1.9	13	1.1	1.2	1.1	4.6
31	2.2	-----	2.0	4.7	-----	3.5	-----	1.8	-----	1.1	1.0	-----
TOTAL	123.9	159.4	238.8	226.6	180.4	114.1	98.8	80.2	41.9	41.3	34.58	135.4
MEAN	4.00	5.31	7.70	7.31	6.44	3.68	3.29	2.59	1.40	1.33	1.12	4.51
MAX	12	16	25	27	26	15	11	15	3.8	4.1	1.5	20
MIN	1.5	2.0	2.0	2.1	1.1	1.1	1.4	1.4	1.1	1.1	.98	1.0
AC-FT	246	316	474	449	358	226	196	159	83	82	69	269

CAL YR 1968 TOTAL 1,631.90 MEAN 4.46 MAX 38 MIN 1.2 AC-FT 3,240
WTR YR 1969 TOTAL 1,475.38 MEAN 4.04 MAX 27 MIN .98 AC-FT 2,930

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	1.5	2.1	1.6	2.7	2.1	1.8	2.2	1.6	1.4	.98	1.2
2	1.5	1.5	1.5	1.6	2.3	2.5	1.8	3.2	1.6	1.4	3.2	1.2
3	1.5	1.8	4.4	3.0	3.0	2.1	1.8	3.1	1.6	1.4	1.2	5.4
4	1.4	13	2.7	1.9	2.3	1.9	2.0	2.3	1.8	1.4	1.1	1.2
5	1.4	16	1.5	1.6	5.1	2.1	4.4	2.3	1.6	1.4	.98	1.2
6	1.4	6.3	1.8	1.6	2.7	18	9.0	2.3	1.6	1.4	.98	2.7
7	4.0	1.5	1.6	1.6	3.8	11	2.4	2.3	1.5	1.4	.98	7.7
8	13	1.5	7.2	3.8	2.3	2.3	2.9	6.7	1.8	1.4	1.1	1.3
9	11	1.5	2.7	3.5	2.1	2.1	14	4.9	3.2	1.4	1.1	1.2
10	2.1	1.6	2.1	1.9	1.9	2.1	7.4	5.0	1.6	1.4	1.1	1.3
11	1.6	1.5	11	2.3	1.8	3.2	2.2	2.6	1.5	1.4	.98	1.2
12	1.5	1.4	15	3.2	1.9	8.2	2.1	4.4	1.5	1.2	.98	1.2
13	1.5	1.4	15	12	3.2	4.1	1.9	2.1	1.5	1.3	.98	1.2
14	1.5	1.4	15	25	1.8	18	1.9	1.9	1.5	1.3	.98	1.4
15	1.5	1.4	13	15	17	3.0	1.9	1.9	2.1	1.3	.98	1.3
16	1.5	1.4	9.4	13	17	4.1	1.9	1.9	1.5	1.3	.98	1.3
17	1.5	1.4	5.1	13	20	2.3	1.9	1.9	1.5	1.2	.98	4.4
18	1.4	1.4	11	14	10	2.1	4.8	1.9	1.5	1.2	.98	10
19	1.4	1.4	8.2	16	3.2	2.1	7.0	1.9	1.4	1.1	.98	9.4
20	1.5	7.2	6.3	15	2.7	1.9	2.1	1.9	1.4	1.1	1.1	3.5
21	1.4	3.5	10	14	2.5	1.9	1.9	1.9	1.4	1.1	1.1	1.5
22	1.4	1.5	8.2	15	2.3	1.9	2.4	2.1	1.4	1.2	1.1	1.5
23	1.5	7.7	15	19	2.1	2.3	2.3	1.9	1.4	1.2	1.1	1.3
24	1.5	2.1	13	26	2.1	1.9	6.0	1.8	1.4	1.1	1.1	1.3
25	1.5	1.6	7.2	23	1.9	2.1	3.4	1.8	1.4	2.7	1.1	1.3
26	1.5	1.5	2.7	20	1.9	1.9	2.5	1.6	1.4	2.5	1.1	1.3
27	3.5	1.5	1.9	32	3.2	2.3	2.5	1.6	1.5	1.4	1.1	1.3
28	1.8	1.5	1.8	7.7	2.5	2.1	2.3	1.6	1.5	1.3	1.1	1.3
29	1.8	1.5	1.8	3.5	-----	1.8	3.0	4.7	1.5	1.3	1.2	1.3
30	1.5	2.1	1.6	3.2	-----	1.8	2.3	3.5	1.5	.98	1.1	1.3
31	1.5	-----	1.6	6.7	-----	1.8	-----	1.8	-----	.98	1.2	-----
TOTAL	74.2	90.6	201.4	320.7	125.3	117.0	103.8	81.0	47.7	62.16	34.94	72.7
MEAN	2.39	3.02	6.50	10.3	4.48	3.77	3.46	2.61	1.59	1.36	1.13	2.42
MAX	13	16	15	32	20	18	14	6.7	3.2	2.7	3.2	10
MIN	1.4	1.4	1.5	1.6	1.8	1.8	1.8	1.6	1.4	.98	.98	1.2
AC-FT	147	180	399	636	249	232	206	161	95	84	69	144

CAL YR 1969 TOTAL 1,319.48 MEAN 3.62 MAX 27 MIN .98 AC-FT 2,620
WTR YR 1970 TOTAL 1,311.50 MEAN 3.59 MAX 32 MIN .98 AC-FT 2,600

CHAMBERS CREEK BASIN

12091300 LEACH CREEK NEAR STEILACOOM, WASH.

LOCATION.--Lat 47°11'54", long 122°31'17", in NW¼NW¼ sec. 26, T.20 N., R.2 E., Pierce County, on left bank 0.3 mile upstream from mouth and 4.1 miles northeast of Steilacoom.

DRAINAGE AREA.--6.56 sq mi (includes 0.68 sq mi storm drainage from Flett Creek basin). Area used prior to July 1967, 5.88 sq mi.

PERIOD OF RECORD.--February 1957 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 140 ft (from topographic map). Supplementary water-stage recorder on right bank at site 200 ft downstream at different datum used Feb. 4, 1963, to Feb. 27, 1964.

AVERAGE DISCHARGE.--13 years, 9.55 cfs (6,920 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Jan. 5, 1966		76	3.52	Aug. 22, 1966		a4.6	-
1967	Jan. 19, 1967		85	3.97	Aug. 9, 1967		4.1	b1.37
1968	Feb. 18, 1968		76	3.52	July 30, 31, 1968		5.2	1.30
1969	Feb. 8, 1969		63	3.22	Aug. 24, 25, 30, Sept. 2, 1969		3.9	1.26
1970	Jan. 27, 1970		47	2.98	Sept. 12, 1970		4.1	c1.32

a Minimum daily.

b Occurred Oct. 5, 1966.

c Occurred Aug. 29, 30, 31, 1970.

Period of record: Maximum discharge, 94 cfs Nov. 21, 1959; maximum gage height, 3.97 ft Jan. 19, 1967; minimum discharge, 2.0 cfs July 3, 1961.

REMARKS.--Records good. Drainage into upper end of basin influenced by urbanizing of area. Some pumping for community use above gage. Flow can be regulated by manually operated gate in flood-control dam. Storage is not retained and observed annual runoff closely represents natural runoff of basin.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	6.4	8.0	8.7	8.3	8.9	7.7	6.5	5.9	6.1	5.3	5.1
2	6.5	7.0	8.0	24	8.0	8.2	7.4	6.1	7.7	8.2	5.2	5.0
3	6.5	12	12	11	8.3	9.8	7.4	6.3	6.7	13	5.1	5.6
4	7.5	15	32	15	8.7	8.2	7.2	6.3	6.5	7.6	5.1	5.2
5	15	9.2	11	35	8.7	8.7	6.8	6.0	6.3	6.5	5.1	5.2
6	9.9	7.4	11	28	8.3	10	7.0	15	6.0	6.5	5.3	5.1
7	6.8	7.2	11	15	8.0	8.7	7.2	8.9	6.0	6.3	5.4	5.2
8	6.5	7.4	8.0	16	8.3	27	7.2	6.7	6.0	6.3	5.1	5.2
9	6.4	7.7	7.6	10	8.2	24	7.2	6.4	6.0	6.1	5.0	4.9
10	6.3	8.5	9.8	9.6	7.8	11	7.6	6.1	7.2	6.0	5.0	5.9
11	6.3	9.2	7.6	10	10	9.1	18	6.3	6.1	5.6	5.1	13
12	6.4	7.6	7.4	14	8.5	9.6	13	6.4	6.1	5.6	5.0	6.8
13	6.3	7.4	6.0	26	8.0	13	7.8	6.4	5.9	5.7	5.3	6.0
14	9.4	8.2	7.4	15	7.8	11	9.8	6.7	5.7	5.7	5.4	6.0
15	8.2	7.1	7.0	10	7.7	12	7.6	8.7	5.9	5.7	4.9	5.9
16	6.0	6.8	7.0	8.5	8.2	10	7.0	8.0	5.7	7.1	4.9	5.9
17	6.1	6.8	6.8	8.0	8.2	8.3	7.0	6.7	5.7	6.1	4.9	8.0
18	6.9	8.2	7.2	7.7	7.8	12	7.0	6.5	5.9	5.9	4.9	13
19	10	16	7.2	7.4	8.0	12	7.0	6.4	5.9	5.7	4.8	6.1
20	7.7	10	7.1	7.4	9.1	18	8.6	6.3	5.6	5.7	5.2	6.3
21	6.7	8.0	8.5	7.2	7.8	18	7.1	6.4	5.9	5.6	5.2	6.1
22	6.4	13	7.7	7.1	7.8	9.4	7.0	6.4	5.7	5.6	4.6	6.5
23	6.3	7.6	8.3	8.6	7.7	8.7	6.8	6.0	6.0	5.9	4.8	8.9
24	6.3	7.7	16	8.2	7.6	8.0	6.5	5.9	7.6	5.9	4.8	6.0
25	6.4	11	9.6	8.2	10	7.8	6.4	6.1	6.0	5.7	5.1	5.9
26	6.4	11	9.2	8.0	8.5	7.7	6.8	6.1	6.0	5.7	5.2	6.5
27	7.0	8.7	49	9.2	12	7.6	6.4	6.3	5.7	5.6	6.8	5.9
28	7.4	7.7	53	8.3	10	7.4	6.5	6.3	11	5.6	6.0	5.9
29	6.5	7.0	19	8.9	-----	7.2	6.5	6.4	6.0	5.3	5.7	5.9
30	6.5	7.6	14	11	-----	10	6.8	6.1	5.9	5.6	5.3	6.0
31	6.5	-----	9.2	9.8	-----	8.0	-----	6.0	-----	5.9	5.3	-----
TOTAL	223.6	264.4	394.6	380.8	237.3	339.3	232.3	210.7	188.6	193.8	160.8	193.0
MEAN	7.21	8.81	12.7	12.3	8.48	10.9	7.74	6.80	6.29	6.25	5.19	6.43
MAX	15	16	53	35	12	27	18	15	11	13	6.8	13
MIN	6.0	6.4	6.8	7.1	7.6	7.2	6.4	5.9	5.6	5.3	4.6	4.9
AC-FT	444	524	783	755	471	673	461	418	374	384	319	383
CAL YR 1965	TOTAL	3,211.7	MEAN	8.80	MAX	53	MIN	5.0	AC-FT	6,370		
WTR YR 1966	TOTAL	3,019.2	MEAN	8.27	MAX	53	MIN	4.6	AC-FT	5,990		

12091300 LEACH CREEK NEAR STEILACOOM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	6.2	18	22	13	14	9.3	8.6	7.9	6.0	5.3	5.3
2	6.9	6.0	10	9.5	12	12	9.0	8.6	9.7	6.0	5.2	6.7
3	6.4	6.0	6.6	16	10	9.5	9.3	8.6	7.9	5.5	5.0	5.8
4	6.2	6.0	16	38	10	9.3	10	8.6	7.3	5.8	5.1	5.3
5	6.2	7.1	28	21	9.0	9.3	9.7	8.6	6.6	5.5	5.8	5.2
6	6.0	6.4	11	12	8.8	9.3	9.3	8.6	6.0	6.0	5.8	5.0
7	6.9	6.7	16	9.0	8.6	9.0	9.5	8.8	6.2	5.6	5.2	5.2
8	7.5	6.7	12	8.4	8.6	13	9.3	8.8	6.6	5.4	5.0	5.0
9	6.6	6.7	9.5	7.7	10	11	10	9.0	6.6	6.6	5.1	5.8
10	6.6	6.7	11	11	9.0	11	9.3	9.3	7.1	5.6	5.0	9.4
11	6.6	7.5	14	15	9.7	9.5	8.8	9.5	6.9	5.6	5.3	8.2
12	9.8	14	33	11	16	9.5	10	10	6.4	5.6	5.6	6.4
13	8.4	25	48	10	30	10	14	8.4	6.4	5.3	5.5	6.2
14	6.7	41	17	7.9	10	11	9.5	8.4	6.6	5.5	4.7	6.0
15	6.6	17	24	14	11	14	9.0	7.9	6.6	5.8	4.8	5.8
16	6.6	15	18	8.2	7.9	14	9.5	8.2	6.4	5.8	4.8	5.8
17	6.4	7.9	13	8.2	11	14	9.0	7.9	6.7	5.5	5.0	5.8
18	6.4	6.9	12	9.3	8.4	12	13	7.5	6.7	5.6	5.1	5.3
19	11	7.9	18	50	7.3	10	9.7	7.3	6.2	6.2	5.6	5.0
20	20	7.3	16	54	7.1	13	9.3	7.3	7.5	6.2	5.3	5.6
21	9.7	7.1	10	30	7.1	12	11	7.5	15	6.0	5.0	5.6
22	23	6.2	8.6	16	7.3	18	13	7.1	23	6.2	5.0	5.2
23	11	6.2	9.5	15	7.5	15	15	7.1	7.7	5.8	4.7	5.8
24	7.3	6.0	10	13	7.7	14	9.7	7.1	7.3	5.2	4.4	5.8
25	6.9	6.7	14	14	7.7	12	13	7.1	6.7	5.1	4.7	5.5
26	8.2	5.3	9.5	20	7.9	12	11	6.6	6.7	5.2	5.5	5.8
27	7.1	15	9.0	36	8.2	10	13	7.5	6.4	5.3	5.3	5.6
28	6.4	8.6	9.5	35	16	10	9.7	7.9	6.0	5.2	4.8	5.0
29	8.3	11	9.3	24	-----	11	9.0	8.8	5.8	6.2	4.8	6.2
30	6.9	41	8.6	16	-----	9.5	8.8	9.0	5.8	5.8	5.2	7.5
31	6.2	-----	10	12	-----	9.3	-----	7.9	-----	5.3	5.0	-----
TOTAL	255.4	327.1	459.1	573.2	286.8	357.2	309.7	253.5	228.7	177.4	158.6	176.8
MEAN	8.24	10.9	14.8	18.5	10.2	11.5	10.3	8.18	7.62	5.72	5.12	5.89
MAX	23	41	48	54	30	18	15	10	23	6.6	5.9	9.4
MIN	6.0	5.3	6.6	7.7	7.1	9.0	8.8	6.6	5.8	5.1	4.4	5.0
AC-FT	507	649	911	1,140	569	709	614	503	454	352	315	351

CAL YR 1966 TOTAL 3,178.2 MEAN 8.71 MAX 48 MIN 4.6 AC-FT 6,300
 WTR YR 1967 TOTAL 3,563.5 MEAN 9.76 MAX 54 MIN 4.4 AC-FT 7,070

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	10	8.7	8.5	14	9.5	10	8.0	27	6.2	5.7	7.8
2	7.2	7.6	23	7.7	23	9.5	13	7.8	27	6.0	5.6	7.0
3	18	7.6	18	7.7	31	9.5	10	7.6	9.4	5.8	6.0	6.6
4	7.9	7.1	18	8.2	45	14	16	8.0	8.9	6.0	6.2	6.6
5	8.0	7.1	22	11	19	16	10	8.2	8.2	5.8	5.8	6.5
6	7.6	7.2	9.5	8.3	13	9.2	10	8.2	7.6	6.0	5.8	6.3
7	12	8.0	9.6	9.4	11	9.6	9.0	8.2	7.4	6.5	5.7	6.3
8	6.5	10	7.8	10	10	8.7	10	7.4	7.2	5.7	5.7	6.5
9	6.0	16	8.7	33	9.4	8.7	9.0	7.2	7.2	5.7	5.8	6.5
10	6.4	20	9.9	14	8.9	8.7	8.0	7.2	7.4	5.6	6.2	6.6
11	23	8.5	8.7	12	8.7	11	8.0	7.8	7.2	6.0	6.3	8.7
12	9.2	7.6	7.6	14	8.5	18	8.0	7.8	6.5	9.4	5.8	7.2
13	12	7.1	7.2	23	8.3	8.7	8.0	7.4	6.2	6.2	6.6	7.2
14	7.8	8.2	7.1	23	8.3	9.8	17	7.4	7.4	6.5	14	13
15	6.7	7.7	7.1	16	8.3	22	13	6.8	7.0	7.0	7.8	14
16	6.7	7.4	7.2	12	8.2	36	8.4	6.8	7.0	6.2	7.0	7.4
17	6.7	7.1	7.4	12	12	18	8.2	7.0	6.5	6.0	6.6	11
18	7.2	7.1	7.4	11	36	14	8.0	7.2	6.5	5.8	7.8	21
19	6.8	6.7	7.2	39	50	12	9.5	9.8	7.0	8.1	11	16
20	7.2	6.7	7.2	40	22	11	8.4	24	6.8	6.6	7.8	8.4
21	39	6.8	8.0	34	29	10	8.2	11	7.4	6.3	6.5	6.6
22	19	7.0	19	14	28	10	8.2	9.1	9.1	6.0	6.6	6.5
23	8.7	6.8	12	12	30	15	12	8.4	7.6	6.2	22	8.3
24	7.5	7.0	14	11	18	14	8.2	8.0	7.0	6.2	20	6.3
25	13	7.0	8.9	10	13	26	7.8	11	6.5	6.0	19	6.3
26	8.2	7.0	8.7	12	12	14	8.4	8.4	8.8	5.8	13	6.3
27	29	7.1	9.6	10	11	27	9.1	8.4	7.0	5.8	25	6.2
28	17	9.2	8.0	9.6	10	16	8.6	8.2	7.0	6.2	12	6.2
29	9.6	11	7.7	9.8	10	14	8.4	8.0	6.6	5.4	7.4	6.0
30	8.0	10	7.6	11	-----	11	8.2	8.0	6.5	5.6	7.0	6.0
31	9.9	-----	8.3	13	-----	10	-----	7.6	-----	5.4	6.8	-----
TOTAL	358.8	253.6	321.1	466.2	515.6	433.9	286.6	265.9	260.9	192.0	283.7	243.3
MEAN	11.6	8.45	10.4	15.0	17.8	14.0	9.55	8.58	8.70	6.19	9.15	8.11
MAX	39	20	23	40	50	36	17	24	27	9.4	25	21
MIN	6.0	6.7	7.1	7.7	8.2	8.7	7.8	6.8	6.5	5.4	5.6	6.0
AC-FT	712	503	637	925	1,020	861	568	527	518	381	563	483

CAL YR 1967 TOTAL 3,455.4 MEAN 9.47 MAX 54 MIN 4.4 AC-FT 6,850
 WTR YR 1968 TOTAL 3,881.6 MEAN 10.6 MAX 50 MIN 5.4 AC-FT 7,700

CHAMBERS CREEK BASIN

12091300 LEACH CREEK NEAR STEILACOOM, WASH. --CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	8.4	12	19	12	7.8	11	6.1	5.7	5.1	4.4	4.4
2	6.2	15	12	23	14	8.0	15	5.9	5.6	5.0	4.8	4.4
3	6.2	12	20	24	27	21	7.6	5.3	5.3	5.1	4.4	4.3
4	8.8	9.3	25	28	32	19	15	5.2	5.3	5.4	4.3	4.2
5	6.5	9.3	20	25	20	19	10	5.0	5.4	5.3	4.3	4.2
6	9.1	9.1	20	38	12	8.7	7.8	5.3	5.4	5.2	4.2	4.3
7	6.5	10	33	36	15	8.0	7.6	5.3	5.4	5.0	4.2	4.3
8	6.2	19	37	15	41	7.8	7.6	5.0	5.1	5.0	4.4	4.1
9	7.3	18	21	19	35	7.7	7.8	5.2	4.6	5.0	4.8	4.3
10	14	16	34	21	23	7.7	7.8	5.1	4.8	6.5	4.6	4.4
11	8.9	33	29	17	25	7.6	7.4	5.0	4.8	7.6	4.4	4.2
12	12	22	14	12	15	7.4	8.8	4.8	4.9	5.4	4.2	4.5
13	22	18	12	14	12	7.6	7.6	4.9	4.8	5.3	4.3	4.9
14	10	16	11	18	11	7.7	7.4	4.8	4.8	5.2	4.5	5.1
15	15	14	14	16	11	7.8	7.2	4.8	5.0	5.0	4.8	4.6
16	8.9	14	14	16	11	13	7.1	4.6	4.8	5.0	4.6	5.2
17	12	12	9.8	15	9.4	15	11	4.6	4.8	4.9	4.6	10
18	17	12	12	11	8.3	12	11	4.8	4.4	4.4	4.3	18
19	16	11	9.8	11	8.3	9.4	9.4	4.8	4.4	4.9	4.4	18
20	15	10	8.6	10	8.2	9.1	7.8	4.8	4.6	5.0	4.3	12
21	9.3	12	8.9	9.3	8.0	8.9	6.8	4.4	4.8	5.2	4.3	6.7
22	12	17	12	8.6	8.0	10	6.7	4.5	5.4	4.9	4.3	19
23	8.6	14	24	8.4	8.0	8.7	14	4.4	7.1	4.5	4.4	31
24	8.2	13	26	8.2	8.0	8.5	6.5	5.1	5.9	4.5	4.4	28
25	9.0	12	12	8.2	7.8	8.5	6.0	5.0	5.4	4.6	4.2	15
26	8.6	13	11	8.2	7.8	8.5	6.0	6.4	5.7	5.0	4.3	7.7
27	8.6	14	10	8.2	7.8	8.3	5.7	6.4	5.7	4.9	4.5	7.6
28	8.9	12	9.5	8.2	8.2	8.2	6.1	5.4	6.0	4.8	4.6	8.0
29	12	14	9.0	8.2	-----	8.2	5.6	17	5.7	4.4	4.1	9.4
30	12	12	8.8	8.2	-----	8.2	5.4	19	5.3	4.4	4.2	10
31	8.9	-----	8.8	12	-----	9.1	-----	6.1	-----	4.2	4.3	-----
TOTAL	319.7	421.1	508.2	483.7	413.8	306.4	250.7	185.0	156.9	156.7	136.4	271.6
MEAN	10.3	14.0	16.4	15.6	14.8	9.88	8.36	5.97	5.23	5.05	4.40	9.05
MAX	22	33	37	38	41	21	15	19	7.1	7.6	4.8	31
MIN	6.0	8.4	8.6	8.2	7.8	7.4	5.4	4.4	4.4	4.2	4.1	4.1
AC-FT	634	835	1,010	959	821	608	497	367	311	311	271	539
CLAL YR 1968	TOTAL	4,197.1	MEAN	11.5	MAX	50	MIN	5.4	AC-FT	8,320		
WTR YR 1969	TOTAL	3,610.2	MEAN	9.89	MAX	41	MIN	4.1	AC-FT	7,160		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	7.0	5.6	5.9	7.7	6.5	6.4	10	6.0	6.1	6.7	4.8
2	7.0	7.0	4.9	5.9	7.2	6.8	6.5	11	5.9	5.7	8.4	4.9
3	6.7	7.1	6.7	7.1	7.7	6.8	6.5	11	5.9	5.6	6.0	9.5
4	6.4	22	6.5	6.5	7.0	6.5	6.7	10	5.7	5.7	6.1	5.7
5	6.3	20	5.0	5.9	8.5	6.5	8.5	9.8	5.7	5.9	6.0	5.7
6	6.3	11	5.2	5.9	7.8	20	13	9.6	5.7	5.0	6.1	6.0
7	7.8	6.3	5.0	5.7	8.2	17	8.2	9.6	5.7	5.0	6.3	13
8	18	6.7	9.2	7.3	6.7	7.8	8.3	13	5.9	5.1	6.3	6.0
9	22	6.5	6.5	7.4	6.5	7.1	22	12	7.6	5.3	6.1	5.4
10	8.3	6.4	5.9	6.3	6.5	6.8	18	13	6.1	9.3	6.1	9.3
11	7.0	6.1	12	6.5	6.5	7.4	8.7	9.6	6.0	5.9	6.3	5.3
12	6.5	6.1	20	6.7	6.7	11	8.2	11	5.6	5.7	6.5	5.0
13	6.4	5.7	20	20	7.4	8.3	8.0	9.2	5.7	5.0	6.8	4.9
14	6.4	5.6	20	35	6.5	19	8.7	8.9	6.0	5.0	6.8	5.1
15	6.4	5.9	14	20	20	8.3	7.7	8.3	6.5	5.0	6.8	5.1
16	6.4	5.6	12	20	28	8.3	7.8	8.0	6.0	5.0	6.5	5.0
17	6.4	5.3	8.9	20	28	7.4	7.6	7.6	5.4	5.1	6.4	6.8
18	6.5	5.1	13	22	19	6.8	10	6.4	5.2	5.7	6.3	14
19	6.8	5.2	11	27	8.5	6.8	16	6.7	5.1	6.1	6.1	14
20	7.0	8.6	10	20	8.0	6.8	12	6.5	5.7	6.4	5.9	7.6
21	6.5	7.8	14	22	7.6	6.8	12	6.5	5.4	6.7	5.1	5.2
22	6.7	5.2	13	24	7.4	6.7	12	7.1	5.3	6.7	5.1	5.1
23	6.8	9.6	20	25	7.1	6.7	12	6.8	5.3	6.8	4.8	5.1
24	6.8	6.5	16	36	7.0	6.5	16	6.4	5.3	6.7	4.8	5.0
25	6.8	5.2	11	29	6.8	6.7	14	6.1	5.3	8.2	4.9	5.0
26	6.8	5.1	7.1	29	6.7	6.7	12	6.3	5.4	7.8	4.6	4.9
27	8.7	5.0	6.3	40	7.2	6.8	10	6.1	6.0	7.1	4.6	4.8
28	7.4	5.1	5.9	17	7.0	6.8	10	5.9	6.3	6.8	4.9	4.9
29	7.2	5.1	6.1	10	-----	6.5	11	8.7	6.0	6.5	4.8	5.0
30	7.0	5.2	6.1	8.9	-----	6.3	10	9.4	6.4	6.7	4.5	4.9
31	7.0	-----	6.3	12	-----	6.3	-----	6.5	-----	6.7	4.6	-----
TOTAL	241.0	219.0	313.2	514.0	269.2	254.7	317.8	267.0	173.9	186.3	181.2	189.0
MEAN	7.77	7.30	10.1	16.6	9.61	8.22	10.6	8.61	5.80	6.01	5.85	6.30
MAX	22	22	20	40	28	20	22	13	7.6	8.2	8.4	14
MIN	6.3	5.0	4.9	5.7	6.5	6.3	6.4	5.9	5.1	5.0	4.5	4.8
AC-FT	478	434	621	1,020	534	505	630	930	345	370	359	375
CAL YR 1969	TOTAL 3,134.4			MEAN 8.59	MAX 41	MIN 4.1	AC-FT 6,220					
WTR YR 1970	TOTAL 3,126.3			MEAN 8.57	MAX 40	MIN 4.5	AC-FT 6,200					

12092000 PUYALLUP RIVER NEAR ELECTRON, WASH.

LOCATION.--Lat 46°54'14" N, long 122°02'02" W, in SE¼NW¼ sec.3, T.16 N., R.6 E., Pierce County, on left bank 1,000 ft upstream from Puget Sound Power & Light Co.'s flume headworks, 0.3 mile downstream from Mowich River, 9.8 miles southeast of Electron, and at mile 42.0.

DRAINAGE AREA.--92.8 sq mi.

PERIOD OF RECORD.--October 1908 to September 1926, October 1926 to September 1933 (monthly discharge only published in WSP 1932), October 1944 to September 1949, October 1957 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,640 ft (from river-profile map). See WSP 1932 for history of changes prior to Nov. 23, 1959.

AVERAGE DISCHARGE.--43 years, (1908-33, 1944-49, 1957-70), 531 cfs (77.70 inches per year, 384,700 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,300 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1230	*1,780	3.44	Jan. 21, 1968	0030	2,780	4.49	May 30, 1969	0300	3,040	4.72
Dec. 13, 1966	1200	*3,060	4.32	Feb. 19, 1968	0600	4,050	5.16	June 23, 1969	2200	2,300	4.35
				June 2, 1968	0400	4,780	5.45				
Oct. 27, 1967	2100	3,410	4.70	Nov. 11, 1968	1530	3,140	4.77	Jan. 19, 1970	2230	2,660	4.53
Dec. 25, 1967	1300	*6,900	6.3	Jan. 5, 1969	0400	*4,020	5.15	Jan. 22, 1970	2200	*2,680	4.54

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Feb. 15, 1966	157	1.19	1969	Feb. 6, 1969	167	1.94
1967	Apr. 20, 22, 23, 1967	182	1.35	1970	(b)	181	c2.05
1968	Dec. 21, 1967	168	a1.70				

a Occurred Oct. 6, 7, 1967.

b Oct. 26, 1969, Jan. 5, Sept. 15, 16, 17, 1970.

c Occurred Jan. 5, 1970.

Period of record: Maximum discharge, 10,800 cfs Nov. 22, 1959 (gage height, 11.9 ft, from floodmarks, site and datum then in use), result of slope-area measurement; minimum not determined, probably occurred during period of ice effect in December 1914 or December 1922.

REMARKS.--Records excellent. No gage-height record Dec. 25, 1967. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1092: 1946(M). WSP 1346: 1913, 1916-17(M), 1918-23, drainage area. WSP 1566: 1945(M), 1947(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	276	246	289	204	227	204	840	335	420	582	600	344
2	320	272	355	208	208	186	840	430	425	621	600	455
3	312	463	398	204	197	183	645	617	395	945	621	540
4	330	617	792	204	211	173	571	880	395	828	656	588
5	340	578	527	421	223	180	578	1,170	380	764	570	588
6	568	458	497	720	211	197	666	1,610	455	684	528	516
7	533	408	631	624	208	190	744	1,180	570	635	946	455
8	430	370	564	760	197	304	760	990	588	677	570	440
9	380	325	463	521	200	728	792	1,040	621	748	642	455
10	325	302	408	446	186	491	808	909	828	788	712	425
11	316	298	355	419	204	370	894	677	927	748	558	385
12	325	272	320	449	197	375	760	588	828	712	480	290
13	392	316	289	728	180	578	590	534	691	642	677	250
14	430	380	267	728	183	610	558	470	719	788	677	380
15	485	402	242	527	169	945	552	425	820	719	656	395
16	350	408	230	446	166	452	545	420	1,010	677	621	353
17	545	335	227	392	163	375	503	376	972	649	546	344
18	441	340	223	345	163	370	452	366	868	635	546	540
19	509	365	219	307	169	350	408	400	836	582	522	380
20	463	350	219	289	204	325	402	470	677	516	528	395
21	452	458	234	272	200	302	375	558	628	546	498	558
22	397	480	204	259	215	267	370	486	540	576	522	756
23	375	392	204	242	234	267	355	425	528	576	621	820
24	350	345	215	223	219	276	370	445	552	576	740	558
25	355	320	193	219	215	298	392	614	475	480	691	475
26	345	312	186	215	204	350	375	796	475	455	570	480
27	320	325	294	219	223	436	345	733	628	492	670	425
28	316	284	340	219	230	468	335	600	1,330	576	475	564
29	289	272	276	246	-----	527	325	570	945	635	371	698
30	302	255	234	272	-----	792	325	546	691	614	294	607
31	255	-----	211	255	-----	849	-----	465	-----	600	290	-----
TOTAL	11,826	10,948	10,106	11,603	5,606	12,018	16,475	20,125	20,217	20,066	17,598	14,459
MEAN	381	365	326	374	200	388	549	649	674	647	568	482
MAX	568	617	792	760	234	849	894	1,610	1,330	945	740	820
MIN	255	246	186	204	163	173	325	335	380	455	290	250
CFSM	4.11	3.93	3.51	4.03	2.16	4.18	5.92	6.99	7.26	6.97	6.12	5.19
IN.	4.74	4.39	4.05	4.65	2.25	4.92	6.40	8.07	8.10	8.04	7.05	5.80
AC-FT	23,460	21,720	20,050	23,010	11,120	23,840	32,680	39,920	40,100	39,800	34,910	28,680
CAL YR 1965	TOTAL 191,229	MEAN 524	MAX 5,340	MIN 186	CFSM 5.65	IN 76.66	AC-FT 379,300					
WTR YR 1966	TOTAL 171,047	MEAN 469	MAX 1,610	MIN 163	CFSM 5.05	IN 68.57	AC-FT 339,300					

PUYALLUP RIVER BASIN

12092000 PUYALLUP RIVER NEAR ELECTRON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967														
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP			
1	569	385	1,000	486	594	362	254	206	642	899	548			
2	732	344	740	425	528	322	250	214	884	1,020	702			
3	435	322	614	594	646	284	246	226	1,042	1,040	564			
4	435	294	588	607	1,208	278	254	254	864	998	560			
5	440	322	522	510	963	270	246	262	954	890	536			
6	371	299	495	435	733	258	234	344	1,050	746	512			
7	362	258	405	376	600	254	238	420	918	709	470			
8	450	238	356	405	522	270	242	518	820	653	512			
9	322	308	348	420	475	274	234	598	712	564	476			
10	312	335	522	492	450	254	226	455	691	584	688			
11	299	336	610	612	435	234	214	415	691	716	709			
12	262	643	978	635	420	218	218	410	677	899	347			
13	238	756	2,360	1,110	470	214	222	400	740	850	302			
14	214	1,010	1,390	1,180	405	206	210	405	892	716	632			
15	203	868	909	1,160	376	238	200	435	1,020	660	393			
16	200	684	860	909	376	335	196	649	1,220	674	660			
17	206	976	796	691	492	322	189	909	1,300	860	518			
18	186	582	733	588	522	299	206	909	1,280	572	730			
19	232	600	788	1,330	430	270	200	963	1,400	530	640			
20	522	534	852	1,060	390	274	189	1,270	1,490	512	597			
21	366	445	642	719	362	262	192	1,530	1,510	524	554			
22	1,120	385	546	582	344	579	189	1,380	1,570	530	512			
23	1,290	358	465	498	326	719	189	1,110	1,190	646	437			
24	868	322	430	440	312	510	196	836	1,060	730	470			
25	705	975	395	405	312	415	203	691	1,140	611	476			
26	788	719	348	420	299	366	203	649	1,190	578	512			
27	621	719	312	899	290	326	214	683	1,090	572	548			
28	486	621	317	1,640	358	312	206	788	1,010	572	590			
29	537	952	410	1,220	-----	299	206	900	1,010	594	474			
30	498	1,110	348	936	-----	278	203	719	899	560	746			
31	415	-----	358	698	-----	274	-----	607	-----	572	776			
TOTAL	14,684	15,902	28,419	22,682	13,630	9,786	6,469	20,107	30,706	21,343	18,618			
MEAN	474	530	859	732	487	316	216	649	1,024	688	601			
MAX	1,290	1,110	2,380	1,640	1,200	719	254	1,530	1,570	1,040	778			
MIN	186	238	312	376	290	206	189	206	642	512	302			
CFSM	5.11	5.71	7.10	7.89	5.25	3.41	2.33	6.99	11.0	7.41	6.48			
IN.	5.89	6.37	8.19	9.09	5.46	3.92	2.59	8.06	12.31	8.56	7.46			
AC-FT	29,130	31,940	40,500	44,900	27,040	19,410	12,850	39,880	60,910	42,330	36,930			
CAL YR 1966	TOTAL 189,172		MEAN 518		MAX 2,380		MIN 163		CFSM 5.58		IN 75.83		AC-FT 375,200	
MYR YR 1967	TOTAL 210,257		MEAN 576		MAX 2,380		MIN 186		CFSM 6.21		IN 84.28		AC-FT 417,000	

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP	
1	395	1,120	235	442	324	482	400	536	1,840	375	543	
2	298	770	360	385	548	454	375	459	3,650	442	530	
3	494	625	347	356	820	437	342	442	1,870	376	500	
4	512	625	329	329	512	324	324	442	1,120	500	488	
5	275	442	302	316	865	582	352	464	865	748	426	
6	247	390	232	284	651	470	342	459	756	788	390	
7	405	454	214	284	550	415	338	432	658	688	370	
8	385	462	193	275	500	375	324	437	595	672	370	
9	334	625	417	441	464	342	334	494	556	644	426	
10	356	1,830	620	352	442	320	365	982	562	576	530	
11	625	882	730	293	420	311	395	623	644	637	500	
12	464	730	512	366	405	302	356	636	536	702	426	
13	512	625	380	1,100	380	284	324	536	470	518	365	
14	584	730	329	1,400	356	284	324	494	426	470	602	
15	415	625	298	1,490	334	360	324	464	405	420	609	
16	352	516	263	998	316	410	306	442	442	375	418	
17	320	454	232	770	347	352	293	524	488	342	415	
18	338	415	210	667	1,410	316	284	658	543	365	415	
19	324	360	204	770	3,360	298	275	847	609	454	390	
20	280	324	182	1,530	1,960	284	284	1,350	562	454	352	
21	530	286	179	1,780	1,330	280	280	901	518	405	320	
22	639	284	316	1,000	1,080	275	275	740	756	385	298	
23	738	284	500	772	1,410	275	293	702	691	385	628	
24	536	538	952	820	1,210	280	286	651	582	437	874	
25	702	360	3,960	680	847	306	334	658	609	494	1,190	
26	900	329	2,160	562	672	298	356	623	665	518	1,000	
27	1,960	302	1,280	470	582	440	334	376	602	569	883	
28	1,720	275	690	437	530	665	375	602	488	630	1,460	
29	998	298	674	410	494	588	512	595	410	602	920	
30	1,270	255	548	370	-----	482	609	518	360	536	748	
31	1,230	-----	488	352	-----	420	-----	506	-----	536	630	
TOTAL	18,555	19,338	18,531	20,501	24,147	11,899	10,327	16,433	23,238	16,466	18,020	
MEAN	599	511	598	661	833	384	344	595	775	531	581	
MAX	1,960	1,120	3,960	1,780	3,360	665	609	1,350	3,650	788	1,460	
MIN	247	259	179	275	316	275	275	432	360	342	298	
CFSM	6.45	5.51	6.44	7.12	6.98	4.14	3.71	6.41	8.35	5.72	6.15	
IN.	7.44	6.15	7.43	8.22	9.68	4.77	4.14	7.39	9.32	6.60	7.22	
AC-FT	36,800	30,420	36,760	40,660	47,900	23,600	20,480	36,560	46,090	32,660	35,740	
CAL YR 1967	TOTAL 211,676		MEAN 580		MAX 3,960		CFSM 6.25		IN 84.85		AC-FT 419,900	
MYR YR 1968	TOTAL 212,581		MEAN 581		MAX 3,960		CFSM 6.26		IN 85.22		AC-FT 421,700	

PUYALLUP RIVER BASIN

12093500 PUYALLUP RIVER NEAR ORTING, WASH.

LOCATION.--Lat 47°02'22", long 122°12'24", in SW¼ sec.17, T.18 N., R.5 E., Pierce County, on right bank 600 ft downstream from highway bridge, 4.0 miles south of Orting, 8.5 miles (revised) upstream from Carbon River, and at mile 26.4.

DRAINAGE AREA.--172 sq mi.

PERIOD OF RECORD.--September 1931 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 352.5 ft above mean sea level, unadjusted. See WSP 1932 for history of changes prior to Mar. 13, 1965.

AVERAGE DISCHARGE.--39 years, 709 cfs (55.98 inches per year, 513,700 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (4,500 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1300	*1,900	6.60	Dec. 25, 1967	1500	*8,300	10.35	Jan. 5, 1969	1930	*5,430	9.09
Jan. 19, 1967	1830	*3,730	7.83	Feb. 19, 1968	0830	5,330	9.04	Jan. 20, 1970	0100	*3,780	8.22
				June 2, 1968	0800	5,350	9.05				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Dec. 20, 1965	95	3.79	1969	Sept. 16, 1969	150	c4.34
1967	Nov. 9, 1966	162	a4.17	1970	Sept. 15, 16, 1970	68	3.79
1968	July 22, 1968	210	b4.52				

a Occurred Oct. 18, Nov. 9, 1966.

b Occurred Oct. 7, 1967.

c Occurred Mar. 3, 1969.

Period of record: Maximum discharge, 15,300 cfs Nov. 20, 1962 (gage height, 11.82 ft, present datum), from rating curve extended above 8,600 cfs on basis of slope-area measurement at gage height 12.25 ft, present datum; maximum gage height, 11.87 ft Dec. 10, 1933 (site and datum then in use); minimum discharge, 25 cfs Nov. 28, 1952; minimum daily, 59 cfs Nov. 29, 1952.

REMARKS.--Records excellent. Water diverted for Electron powerplant of Puget Sound Power & Light Co., returned to river above gage. Flow regulated by Electron powerplant. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 932: 1937-39. WSP 962: 1934. WSP 1246: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	268	268	357	341	400	401	1,010	368	485	670	616	357
2	316	290	438	450	360	354	1,020	425	520	730	670	445
3	318	406	408	398	330	326	816	598	485	1,250	682	544
4	331	759	955	394	340	292	712	851	480	1,080	736	658
5	358	660	688	619	360	308	694	1,180	445	980	652	670
6	538	552	608	1,400	350	330	742	1,690	510	858	616	658
7	573	477	746	1,160	340	348	823	1,300	658	754	628	610
8	478	424	710	1,340	320	390	823	1,060	658	754	652	562
9	435	372	586	1,020	333	1,040	872	1,090	706	809	682	520
10	351	340	516	842	316	908	900	1,010	878	858	706	500
11	333	346	438	804	360	670	1,050	774	1,020	795	628	485
12	320	310	392	785	386	610	1,040	682	972	767	520	440
13	447	357	355	1,350	344	851	872	622	788	700	689	380
14	431	426	334	1,320	343	956	816	544	788	781	706	398
15	644	425	306	1,000	314	879	781	490	893	767	724	475
16	434	479	291	830	298	767	724	515	1,050	688	688	460
17	557	381	274	720	285	652	644	490	1,020	682	592	420
18	501	376	262	640	283	610	598	450	932	670	586	604
19	604	423	254	560	275	646	538	470	900	640	580	574
20	528	390	241	520	318	616	520	580	736	550	574	490
21	528	557	298	500	325	592	510	640	676	568	568	532
22	454	665	260	480	332	532	485	598	616	610	550	718
23	420	550	240	450	359	526	435	480	562	616	682	900
24	376	466	312	410	332	556	445	510	640	598	788	682
25	379	422	273	390	318	556	460	602	515	544	754	592
26	360	393	255	380	305	616	455	858	510	495	670	526
27	337	444	374	380	356	664	420	788	663	515	742	510
28	357	386	632	380	460	700	401	670	1,420	616	610	495
29	305	360	544	400	-----	730	378	622	1,070	670	500	652
30	334	336	444	440	-----	968	376	646	795	688	416	700
31	280	-----	379	460	-----	1,090	-----	915	-----	634	370	-----
TOTAL	12,895	13,040	13,170	21,163	9,442	19,482	20,380	22,198	22,391	22,337	19,577	16,557
MEAN	416	435	425	683	337	628	679	716	746	721	632	552
MAX	644	759	955	1,400	460	1,090	1,050	1,690	1,420	1,250	788	900
MIN	268	268	240	341	275	292	376	368	445	495	370	357
CFSM	2.42	2.53	2.47	3.97	1.96	3.65	3.95	4.16	4.34	4.19	3.67	3.21
IN.	2.79	2.82	2.85	4.58	2.04	4.21	4.41	4.80	4.84	4.83	4.23	3.58
AC-FT	25,580	25,860	26,120	41,980	18,730	38,640	40,420	44,030	44,410	44,310	38,830	32,840
CAL YR 1965	TOTAL	242,455	MEAN	664	MAX	9,070	MIN	240	CFSM	3.86	IN	52.44
WTR YR 1966	TOTAL	212,632	MEAN	593	MAX	1,690	MIN	240	CFSM	3.39	IN	45.99
									AC-FT	480,900		
										421,800		

12093500 PUYALLUP RIVER NEAR ORTING, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	634	368	1,240	1,050	994	628	405	368	635	954	570	818
2	858	340	954	890	890	552	380	360	914	1,050	552	803
3	669	308	803	1,100	906	492	372	364	930	1,120	582	663
4	562	296	761	1,150	1,330	445	372	376	874	1,080	588	726
5	515	320	733	1,040	1,340	420	372	385	946	978	564	834
6	485	328	635	866	1,040	410	340	445	1,050	818	552	635
7	450	279	600	768	786	385	340	534	962	747	522	540
8	440	265	510	826	796	410	344	656	874	733	522	635
9	435	276	455	834	719	516	340	712	761	601	628	522
10	402	368	649	866	663	450	332	594	726	607	733	629
11	384	324	740	1,530	663	420	312	540	747	747	761	656
12	352	661	1,060	1,170	656	380	320	600	761	962	733	455
13	326	712	2,950	1,940	826	376	356	546	768	938	684	386
14	298	1,130	2,020	2,110	733	360	348	540	922	719	670	340
15	274	1,030	1,340	1,900	677	405	328	560	1,080	663	677	380
16	254	922	1,220	1,640	663	534	300	740	1,270	663	698	455
17	242	761	1,120	1,320	914	540	300	980	1,410	677	726	534
18	232	726	1,050	1,080	1,090	528	332	960	1,400	594	834	504
19	246	684	1,130	2,320	850	475	348	1,000	1,530	552	747	649
20	698	621	1,380	2,420	733	465	320	1,300	1,660	534	656	705
21	526	516	1,050	1,620	663	450	332	1,650	1,670	564	614	670
22	1,120	435	890	1,180	600	690	332	1,400	1,850	540	588	552
23	1,200	395	740	962	540	1,050	316	1,200	1,300	666	430	522
24	796	368	670	903	510	803	312	940	1,160	775	498	470
25	635	1,040	670	698	510	670	328	760	1,200	670	498	480
26	719	906	582	663	480	600	320	700	1,240	614	552	425
27	628	890	510	1,210	455	540	348	720	1,170	614	588	534
28	480	782	516	2,490	519	510	364	1,080	621	588	614	522
29	455	663	670	1,920	492	380	960	1,080	607	726	480	480
30	498	1,330	600	1,550	-----	470	376	803	978	588	810	380
31	410	-----	588	1,180	-----	430	-----	670	-----	628	866	-----
TOTAL	16,224	18,044	28,816	41,096	21,842	15,896	10,269	23,203	32,948	22,634	19,977	16,812
MEAN	523	573	915	1,226	700	508	342	718	1,008	694	540	520
MAX	1,600	1,330	2,930	2,400	1,530	1,896	405	1,650	1,950	1,120	866	834
MIN	232	265	455	663	455	360	300	360	635	534	498	340
CFSM	3.04	3.49	5.41	7.71	4.53	2.98	1.99	4.35	6.38	4.24	3.74	3.26
IN.	3.51	3.90	6.23	8.89	4.72	3.44	2.22	5.02	7.13	4.90	4.32	3.64
AC-FT	32,186	35,790	57,160	81,510	43,320	31,530	20,372	46,020	65,350	44,890	39,620	33,550
CAL YR 1966	TOTAL 236,611	MEAN 648	NAX 2,930	MIN 232	CFSM 3.77	IN 51.17	AC-FT 469,300					
WTR YR 1967	TOTAL 267,761	MEAN 734	NAX 2,930	MIN 232	CFSM 4.27	IN 57.91	AC-FT 531,100					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	380	1,350	344	710	554	761	662	692	2,010	455	614	880
2	360	922	455	644	892	716	662	596	4,700	522	584	775
3	719	492	566	1,470	566	578	578	566	2,410	606	566	626
4	430	588	486	522	2,530	638	538	596	1,500	824	566	620
5	320	504	492	505	1,550	866	590	596	1,190	866	475	644
6	296	455	430	445	1,130	754	614	596	1,030	901	430	662
7	386	465	405	440	974	644	590	566	887	824	410	584
8	430	580	430	430	632	632	578	495	810	392	560	560
9	352	740	498	722	782	578	532	590	740	768	455	560
10	348	1,180	705	740	728	527	532	650	698	674	560	554
11	645	1,090	962	572	692	516	584	710	810	740	584	554
12	570	874	670	544	886	495	532	716	740	831	485	900
13	510	726	540	1,420	638	465	480	638	614	600	445	430
14	691	796	455	1,770	602	468	480	590	538	538	613	560
15	504	698	425	1,770	572	516	532	532	505	455	768	894
16	405	600	385	1,280	532	692	495	505	538	430	475	852
17	368	516	376	1,030	532	614	465	544	584	382	470	1,170
18	364	474	352	873	1,540	572	465	674	632	378	475	2,180
19	410	425	340	913	4,320	516	455	859	740	495	460	1,350
20	332	395	320	1,640	2,930	516	480	1,600	716	505	425	1,030
21	595	376	320	2,620	2,100	470	490	1,200	668	455	374	852
22	375	442	1,540	1,810	465	940	470	950	880	423	338	747
23	922	364	568	1,240	1,860	455	485	852	810	405	633	838
24	614	572	933	1,240	1,670	460	465	817	728	465	1,050	734
25	866	480	4,460	1,090	1,300	520	495	782	740	560	1,280	662
26	628	405	2,570	929	1,050	500	554	754	803	590	1,210	596
27	1,830	380	1,610	786	900	690	690	692	747	686	1,160	588
28	2,330	368	1,270	698	852	1,430	505	722	990	747	1,800	500
29	1,310	385	990	674	782	1,120	632	716	532	692	1,350	490
30	1,380	360	824	626	-----	880	740	650	450	614	1,080	475
31	1,380	-----	740	584	-----	728	-----	602	-----	602	887	-----
TOTAL	21,213	18,083	24,238	29,575	36,859	20,100	16,130	22,408	29,340	18,874	21,408	22,439
MEAN	684	603	782	954	1,271	643	538	711	978	609	691	748
MAX	2,330	1,350	4,460	2,620	4,320	1,430	740	1,600	4,700	901	1,800	2,180
MIN	296	360	320	430	532	455	455	495	450	378	338	430
CFSM	3.98	3.51	4.55	5.55	7.39	3.77	3.13	4.13	5.69	3.54	4.02	4.35
IN.	4.59	3.91	5.24	6.40	7.97	4.35	3.49	4.77	6.35	4.08	4.63	4.85
AC-FT	42,080	35,870	46,080	58,660	73,110	39,870	31,990	43,730	58,200	37,440	42,460	44,510
CAL YR 1967	TOTAL 268,211	MEAN 735	NAX 4,460	MIN 296	CFSM 4.27	IN 58.01	AC-FT 532,000					
WTR YR 1968	TOTAL 280,307	MEAN 766	NAX 4,700	MIN 296	CFSM 4.45	IN 60.62	AC-FT 556,000					

12093500 PUYALLUP RIVER NEAR ORTING, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	475	505	838	1,080	287	275	692	578	1,260	704	500	360		
2	415	566	740	1,030	267	263	698	578	1,240	775	450	430		
3	382	668	1,590	922	267	279	614	544	1,240	761	460	311		
4	480	566	1,690	1,320	299	287	549	495	1,370	734	425	267		
5	382	495	1,240	3,520	311	515	538	495	1,320	692	410	235		
6	480	445	1,010	3,790	299	485	554	527	1,140	626	338	255		
7	445	415	929	3,420	267	405	500	637	1,060	614	346	311		
8	382	852	1,190	2,440	457	360	465	922	1,060	638	328	415		
9	333	1,480	1,230	1,740	608	342	455	1,280	1,130	698	382	485		
10	632	1,090	1,570	1,410	549	315	490	1,340	1,180	734	387	470		
11	614	2,710	1,470	1,220	1,010	295	450	1,240	1,170	680	396	538		
12	692	2,100	1,240	1,010	866	275	500	1,150	1,060	584	382	465		
13	782	1,420	1,080	901	668	275	602	1,140	982	522	445	420		
14	680	1,050	929	803	590	275	516	1,040	943	490	538	267		
15	708	880	887	704	549	287	455	950	768	465	538	204		
16	775	740	908	620	549	356	430	838	803	465	500	204		
17	692	656	782	560	500	644	495	747	873	455	405	440		
18	740	1,050	789	532	470	698	722	950	894	490	450	824		
19	686	950	668	505	430	608	698	1,600	838	572	430	560		
20	922	922	608	450	405	522	644	1,360	775	620	460	538		
21	873	880	538	440	396	490	614	1,170	698	578	549	342		
22	838	1,490	544	400	360	490	710	1,180	686	626	538	464		
23	747	1,320	775	356	360	485	1,000	1,250	1,130	716	554	734		
24	740	1,030	1,120	340	320	420	796	1,490	1,620	716	578	560		
25	716	915	852	330	315	400	768	1,180	1,240	632	425	510		
26	662	817	722	320	311	445	656	1,020	1,160	544	400	410		
27	572	852	662	310	275	510	596	880	990	572	324	360		
28	644	824	549	300	275	527	596	996	950	549	291	415		
29	662	1,020	500	290	-----	544	632	1,510	824	510	247	538		
30	686	966	470	290	-----	614	590	2,650	754	505	259	850		
31	566	-----	660	290	-----	782	-----	1,560	-----	510	324	-----		
TOTAL	19,403	29,674	28,780	31,643	12,260	13,468	18,025	33,297	31,158	18,777	13,059	13,182		
MEAN	626	989	928	1,021	438	434	601	1,074	1,039	606	421	439		
MAX	922	2,710	1,690	3,790	1,010	782	1,000	2,650	1,620	775	578	850		
MIN	333	415	470	290	267	263	430	495	686	455	247	204		
CFSM	3.44	5.75	5.40	5.94	2.55	2.52	3.49	6.24	6.04	3.52	2.45	2.55		
IN	4.20	6.42	6.22	6.84	2.65	2.91	3.90	7.20	6.74	4.06	2.82	2.85		
AC-FT	38,490	58,860	57,090	62,760	24,320	26,710	35,750	66,400	61,800	37,240	25,900	26,150		
CAL YR 1968	TOTAL	294,630	MEAN	805	MAX	4,700	MIN	333	CFSM	4.68	IN	63.72	AC-FT	584,400
MTR YR 1969	TOTAL	262,726	MEAN	720	MAX	3,790	MIN	204	CFSM	4.19	IN	56.82	AC-FT	521,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	833	254	247	400	966	436	349	544	847	404	436	510		
2	672	234	240	375	819	424	395	550	1,220	436	400	400		
3	526	227	244	356	798	416	356	622	1,500	684	522	748		
4	426	1,070	299	342	686	392	368	770	1,370	1,010	629	570		
5	360	1,230	287	283	622	376	476	847	1,020	953	595	353		
6	333	777	258	268	616	436	563	718	1,150	732	590	604		
7	342	622	264	254	660	982	565	556	1,080	732	485	1,090		
8	761	514	301	291	738	672	484	565	833	732	432	565		
9	918	443	307	421	750	545	808	791	791	824	359	480		
10	653	395	272	380	764	476	1,490	634	686	726	442	346		
11	514	375	471	360	764	448	1,050	562	580	648	555	347		
12	465	365	805	338	770	448	798	526	492	605	560	301		
13	391	320	812	653	791	485	653	470	454	550	545	218		
14	315	315	1,400	2,780	698	555	544	395	592	545	452	204		
15	275	303	990	1,870	840	708	454	416	580	642	490	204		
16	258	311	812	1,250	1,690	824	380	698	526	780	545	197		
17	237	279	738	1,450	1,480	750	351	910	538	714	468	269		
18	240	268	770	2,850	1,300	630	333	731	705	636	436	570		
19	234	258	840	3,380	1,090	545	426	640	854	720	480	550		
20	227	272	791	3,060	936	485	400	520	910	696	505	380		
21	261	520	1,140	2,420	859	456	342	465	1,130	610	520	288		
22	275	400	1,130	2,230	768	424	342	574	1,160	464	615	828		
23	291	450	1,230	2,610	690	420	320	744	929	436	708	927		
24	240	526	990	2,100	610	424	428	660	873	468	520	520		
25	244	410	819	1,980	560	392	443	861	859	600	580	376		
26	205	342	738	1,760	510	384	503	990	1,020	738	497	372		
27	240	315	672	2,270	505	364	454	724	1,030	756	480	360		
28	268	283	1,620	460	412	421	421	568	768	545	468	353		
29	254	283	520	1,280	-----	408	454	580	580	392	448	339		
30	264	274	492	1,040	-----	372	568	998	480	356	408	353		
31	261	-----	454	966	-----	356	-----	744	-----	339	540	-----		
TOTAL	11,795	12,635	19,901	41,727	22,740	15,445	15,628	20,373	25,557	19,473	15,840	13,622		
MEAN	379	421	642	1,346	812	498	521	657	852	622	511	454		
MAX	910	1,230	1,400	3,380	1,690	982	1,490	998	1,500	1,010	708	1,090		
MIN	205	227	240	254	460	356	320	395	454	339	359	197		
CFSM	2.20	2.45	3.73	7.83	4.72	2.90	3.03	3.82	4.95	3.65	2.97	2.64		
IN	2.54	2.73	4.30	9.02	4.92	3.34	3.38	4.41	5.53	4.21	3.43	2.95		
AC-FT	23,280	25,060	39,470	82,770	45,100	30,640	31,000	40,410	50,690	38,620	31,420	27,020		
CAL YR 1969	TOTAL	229,140	MEAN	628	MAX	3,790	MIN	204	CFSM	3.65	IN	49.56	AC-FT	454,500
MTR YR 1970	TOTAL	234,676	MEAN	643	MAX	3,380	MIN	197	CFSM	3.75	IN	50.76	AC-FT	465,500

12093900 CARBON RIVER AT FAIRFAX, WASH.

LOCATION.--Lat 47°00'47", long 122°00'42", in SW¼SW¼ sec.26, T.18 N., R.6 E., Pierce County, on left bank at Fairfax, 0.7 mile downstream from Evans Creek and at mile 17.7.

DRAINAGE AREA.--76.2 sq mi.

PERIOD OF RECORD.--November 1910 to July 1912, October 1965 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,330 ft (from topographic map). Nov. 23, 1910, to July 12, 1912, nonrecording gage at approximately same site at different datum.

AVERAGE DISCHARGE.--5 years, 415 cfs (73.96 inches per year, 300,700 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,800 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1045	*1,580	4.34	Oct. 27, 1967	2245	4,920	5.52	Nov. 11, 1968	1715	1,840	4.16
				Dec. 25, 1967	1300	*7,480	6.25	Jan. 5, 1969	0600	*5,390	5.63
Oct. 23, 1966	0900	*1,950	4.52	Jan. 21, 1968	0130	3,400	4.90	May 30, 1969	0430	5,350	4.88
Dec. 13, 1966	1915	1,950	4.52	Feb. 19, 1968	0815	3,720	5.03	June 24, 1969	0015	2,190	4.32
Jan. 13, 1967	2300	1,820	4.46	June 2, 1968	1100	3,920	5.11				
Jan. 28, 1967	0515	1,920	4.51	Sept. 18, 1968	0800	2,460	4.48	Jan. 18, 1970	1400	*2,490	4.47
								Jan. 23, 1970	0015	1,970	4.21

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Mar. 4, 1966	92	2.29	1969	Feb. 27 to Mar. 4, 1969	124	1.78
1967	Oct. 18, 19, 1966	124	2.43	1970	Sept. 15, 1970	122	bl.90
1968	Oct. 2, 1967	147	a2.00				

a Occurred Feb. 16, 17, 1968.

b Occurred Nov. 2, 1969.

Period of record: Maximum discharge, 7,480 cfs Dec. 25, 1967 (gage height, 6.25 ft); minimum observed, 74 cfs Nov. 1, 1911 (gage height, 4.8 ft, datum then in use).

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	177	212	146	160	121	713	235	373	543	425	191
2	200	189	283	164	149	116	722	291	395	556	430	216
3	205	235	297	152	146	105	502	442	362	884	420	246
4	210	369	638	149	149	101	429	704	349	800	405	264
5	230	407	452	199	149	107	427	1,080	331	750	367	287
6	350	347	400	404	146	114	495	1,440	425	668	344	283
7	380	288	448	433	146	107	586	917	562	602	358	242
8	335	256	410	519	141	160	570	760	531	602	385	230
9	325	235	344	413	134	291	634	862	519	659	381	246
10	250	218	307	360	121	300	659	713	780	677	390	219
11	208	206	266	361	146	230	618	495	1,010	634	385	223
12	199	188	241	380	128	240	496	435	906	578	319	182
13	264	191	220	622	121	370	407	400	704	549	410	160
14	338	208	201	568	118	390	417	353	731	659	451	182
15	435	252	181	446	107	350	453	336	820	594	400	216
16	317	277	172	367	109	280	434	336	939	531	372	213
17	470	231	163	323	103	230	403	298	851	513	327	200
18	400	228	159	287	101	220	358	291	800	519	310	298
19	460	222	153	250	107	210	319	315	840	490	294	260
20	415	212	157	226	128	200	317	385	659	440	283	226
21	367	309	171	210	124	180	301	490	563	435	275	250
22	319	335	148	200	128	175	282	415	495	440	272	315
23	291	273	142	188	134	180	269	353	478	446	298	405
24	261	248	152	174	131	182	267	353	525	435	344	291
25	237	228	137	174	128	208	283	473	451	395	349	254
26	220	221	132	157	126	265	274	614	473	362	302	264
27	209	221	170	160	149	346	254	566	594	376	376	250
28	208	199	198	165	138	390	244	452	1,200	400	319	232
29	190	188	177	174	-----	450	235	426	851	415	250	287
30	199	184	161	188	-----	750	230	425	626	430	197	336
31	190	-----	150	174	-----	851	-----	381	-----	435	185	-----
TOTAL	8,862	7,342	7,442	8,733	3,667	8,219	12,598	16,036	19,143	16,817	10,623	7,468
MEAN	286	245	240	282	131	265	420	517	638	542	343	249
MAX	470	407	638	622	160	851	722	1,440	1,200	884	451	405
MIN	180	177	132	146	101	101	230	235	331	362	185	160
CFSM	3.75	3.22	3.15	3.70	1.72	3.48	5.51	6.78	8.37	7.11	4.50	3.27
IN-	4.33	3.58	3.63	4.26	1.79	4.01	6.15	7.83	9.35	8.21	5.19	3.65
AC-FT	17,580	14,560	14,760	17,320	7,270	16,300	24,990	31,810	37,970	33,360	21,070	14,810
WTR YR 1966	TOTAL	126,950	MEAN	348	MAX	1,440	MIN	101	CFSM	4.57	IN	61.98
									AC-FT	251,800		

PUYALLUP RIVER BASIN

12093900 CARBON RIVER AT FAIRFAX, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	268	398	656	528	493	268	178	188	603	586	332	365
2	462	360	509	460	433	248	178	190	938	656	310	385
3	298	322	420	679	553	230	186	192	867	702	319	301
4	236	292	380	605	1,280	218	205	209	795	694	337	310
5	226	317	344	494	946	210	198	243	884	649	323	337
6	211	305	318	413	645	207	187	300	950	551	301	297
7	220	269	295	365	510	203	195	405	851	494	301	253
8	331	247	267	406	436	225	202	539	743	464	293	257
9	252	317	262	428	399	232	195	620	661	405	328	253
10	201	415	368	501	365	206	184	464	622	385	355	264
11	188	364	419	944	352	191	178	395	652	428	365	355
12	179	614	515	676	351	182	180	372	641	500	365	242
13	168	606	1,340	1,160	404	176	194	355	692	506	351	189
14	149	813	1,060	1,270	340	170	177	348	799	482	346	173
15	138	690	749	1,310	317	186	166	377	887	428	332	189
16	131	604	944	921	307	228	161	617	992	410	342	216
17	138	513	912	651	431	233	194	890	1,070	416	346	245
18	129	553	800	545	514	219	169	851	1,080	395	380	238
19	165	521	790	962	405	203	165	850	1,220	355	346	257
20	484	492	938	893	350	201	160	1,090	1,260	365	328	272
21	347	423	657	625	316	200	173	1,290	1,160	390	337	289
22	1,240	370	523	484	290	250	169	1,160	1,120	351	306	272
23	1,500	343	439	402	272	372	172	928	810	365	310	213
24	933	314	397	348	258	307	176	700	780	400	268	220
25	693	965	367	311	252	268	186	582	830	380	249	230
26	757	706	320	324	236	250	184	565	830	370	261	196
27	665	735	291	712	226	229	202	572	820	355	289	209
28	519	661	292	1,580	264	219	190	665	726	351	297	237
29	522	519	377	1,010	-----	209	187	832	702	365	323	220
30	530	773	327	746	-----	196	194	652	621	370	351	210
31	441	-----	340	576	-----	185	-----	530	-----	360	365	-----
TOTAL	12,721	14,821	16,616	21,329	11,945	6,921	5,445	17,971	25,606	13,928	10,056	7,694
MEAN	410	494	536	688	427	223	182	580	854	449	324	256
MAX	1,500	965	1,340	1,580	1,280	372	205	1,290	1,260	702	380	385
MIN	129	247	262	311	226	170	154	188	603	351	249	173
CFSM	5.38	6.48	7.03	9.03	5.83	2.93	2.39	7.61	11.2	5.89	4.25	3.36
IN	6.21	7.24	8.11	10.41	5.83	3.38	2.11	8.77	12.59	6.80	4.91	3.76
AC-FT	25,230	29,400	32,960	42,310	23,690	13,730	10,800	35,650	50,790	27,630	19,950	15,260
CAL YR 1966	TOTAL 147,462	MEAN 404	MAX 1,500	MIN 101	CFSM 5.30	IN 71.99	AC-FT 292,500					
WTR YR 1967	TOTAL 165,053	MEAN 452	MAX 1,580	MIN 129	CFSM 5.93	IN 80.58	AC-FT 327,400					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	1,000	210	398	264	354	352	534	1,250	325	360	418
2	163	598	233	356	352	332	340	423	3,200	360	355	406
3	272	472	232	319	512	317	298	394	1,420	406	340	310
4	216	398	225	286	345	295	343	854	502	350	296	296
5	172	337	220	282	592	418	308	419	657	550	315	296
6	161	294	206	258	462	350	305	377	562	587	269	305
7	243	313	199	246	399	305	293	348	490	622	260	287
8	223	316	190	240	364	277	279	339	514	418	264	247
9	185	383	315	272	340	250	287	404	388	526	273	251
10	189	615	582	298	319	235	329	516	395	484	325	247
11	443	600	810	255	301	222	380	578	484	454	340	242
12	457	478	485	237	284	213	335	579	412	514	300	221
13	414	414	370	543	265	203	291	459	365	424	255	190
14	496	414	817	615	244	195	283	491	340	370	375	282
15	340	399	284	745	226	215	285	363	330	345	484	769
16	264	370	263	563	212	254	251	361	355	300	305	727
17	231	324	240	447	216	228	230	456	380	278	264	870
18	243	297	223	389	648	209	224	582	430	269	296	1,840
19	263	269	208	693	3,050	195	221	795	490	315	300	974
20	224	249	197	1,480	1,670	193	230	994	418	335	287	699
21	421	231	201	2,100	996	189	224	777	370	300	234	526
22	940	225	377	901	912	185	220	647	594	273	209	448
23	762	223	573	615	937	105	248	625	608	264	350	524
24	494	380	1,200	692	822	179	247	599	580	282	257	484
25	612	326	4,360	569	643	188	276	595	526	310	790	442
26	441	274	2,040	469	530	184	296	571	550	340	755	390
27	2,150	257	1,010	395	462	419	280	521	556	406	692	355
28	2,180	249	717	353	469	653	317	564	436	448	1,150	294
29	930	242	553	330	375	585	503	575	395	430	741	273
30	1,100	223	482	365	-----	474	645	489	330	355	532	260
31	1,170	-----	434	280	-----	388	-----	458	-----	350	430	-----
TOTAL	16,146	11,167	17,956	16,141	17,686	8,935	9,070	16,151	18,580	12,238	12,857	13,877
MEAN	521	372	579	521	610	288	302	521	419	395	415	463
MAX	2,180	1,060	4,360	2,100	3,050	653	645	994	3,200	622	1,150	1,840
MIN	161	223	190	237	212	179	220	339	330	264	209	190
CFSM	6.84	4.88	7.60	6.84	8.01	3.78	3.96	6.84	8.12	5.18	5.45	6.08
IN	7.88	5.45	8.77	7.88	8.63	4.36	4.43	7.88	9.07	5.97	6.28	6.77
AC-FT	32,030	22,150	35,620	32,020	35,080	17,720	17,990	32,040	36,850	24,270	25,500	27,530
CAL YR 1967	TOTAL 166,164	MEAN 455	MAX 4,360	MIN 154	CFSM 5.97	IN 81.12	AC-FT 329,600					
WTR YR 1968	TOTAL 170,804	MEAN 467	MAX 4,360	MIN 161	CFSM 6.13	IN 83.38	AC-FT 338,800					

12094400 SOUTH PRAIRIE CREEK NEAR ENUMCLAW, WASH.

LOCATION.--Lat 47°05'28", long 121°57'02", in SE¼ sec.31, T.19 N., R.7 E., Pierce County, on left bank 400 ft upstream from diversion dam, 1.2 miles downstream from East Fork, 8.1 miles south of Enumclaw, and at mile 157.

DRAINAGE AREA.--22.4 sq mi.

PERIOD OF RECORD.--September 1963 to September 1968 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 1,420 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 108 cfs (78,190 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (°) and peak discharges above base (600 cfs), water years 1966-68

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Mar. 30, 1966	1930	*425	3.67	Oct. 27, 1967	2030	976	4.42	Feb. 19, 1968	0830	904	4.33
Jan. 13, 1967	2230	606	3.96	Dec. 25, 1967	1200	*1,800	5.22	June 2, 1968	1030	838	4.24
Jan. 28, 1967	0530	*630	4.00	Jan. 21, 1968	0100	638	3.93	Sept. 18, 1968	0530	614	3.89

Annual minimum discharge, water years 1966-68

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 4, 1965	19	2.02	1968	Oct. 2, 1967	19	bl.96
1967	Sept. 22, 27-29, 1967	17	1.92				

a Occurred Oct. 1, 1965, Sept. 8-10, 1966.

b Occurred Oct. 2, 1967, Aug. 12, 13, 1968.

Period of record: Maximum discharge, 3,290 cfs Jan. 29, 1965 (gage height, 6.13 ft), from rating curve extended above 220 cfs on basis of slope-area measurement of peak flow; minimum, 17 cfs Sept. 22, 27-29, 1967 (gage height, 1.92 ft).

REMARKS.--Records excellent. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	34	67	46	66	53	238	69	81	117	36	24
2	20	37	91	46	60	48	220	90	93	129	34	23
3	20	50	96	42	58	45	158	147	91	284	33	23
4	21	103	214	40	58	42	139	220	95	208	33	22
5	31	129	135	69	58	43	141	270	91	168	32	21
6	100	95	125	160	55	45	158	305	125	147	31	21
7	77	75	131	172	54	42	170	188	141	129	30	21
8	47	63	113	211	51	58	160	185	123	119	30	20
9	69	55	93	162	50	123	198	190	115	113	31	20
10	51	57	82	139	47	131	202	145	195	105	31	22
11	62	57	69	135	54	109	182	113	198	99	30	35
12	40	51	61	149	50	105	145	107	172	86	29	31
13	67	50	55	246	46	147	127	97	143	79	33	25
14	95	54	50	235	46	165	135	86	145	97	33	25
15	143	53	45	185	42	143	155	90	151	84	30	24
16	99	54	42	145	41	119	151	91	153	79	29	23
17	115	47	41	119	41	99	137	81	131	71	28	25
18	95	53	39	99	40	91	121	79	115	67	27	47
19	123	50	37	86	40	86	105	91	117	64	26	39
20	105	46	41	74	47	74	103	111	97	58	26	30
21	82	79	45	67	48	67	101	139	97	55	25	27
22	66	95	35	63	50	61	95	113	91	53	24	30
23	55	74	35	58	57	61	90	97	90	50	24	35
24	48	69	37	55	54	61	88	97	113	50	24	35
25	43	64	33	54	55	71	88	135	93	48	24	31
26	40	67	32	51	54	107	82	155	99	46	24	39
27	40	67	54	51	57	141	75	133	113	43	31	40
28	42	60	64	51	57	147	72	99	242	42	27	33
29	37	58	67	63	-----	165	71	93	151	41	25	30
30	43	57	51	72	-----	278	67	90	127	40	26	28
31	39	-----	47	69	-----	263	-----	75	-----	39	24	-----
TOTAL	1,915	1,903	2,117	3,214	1,436	3,190	3,974	3,961	3,788	2,810	890	889
MEAN	61.8	63.4	68.3	104	51.3	103	132	128	126	90.6	28.7	29.4
MAX	143	129	214	246	66	278	238	305	242	284	36	67
MIN	20	34	32	40	40	42	67	69	81	39	24	20
CFSM	2.76	2.83	3.05	4.64	2.29	4.60	5.89	5.71	5.63	4.04	1.28	1.32
IN.	3.18	3.16	3.52	5.34	2.38	5.30	6.60	6.58	6.29	4.67	1.48	1.48
AC-FT	3,800	3,770	4,200	6,370	2,850	6,330	7,880	7,860	7,510	5,570	1,770	1,760
CAL YR 1965	TOTAL 34,307				MAX 2,170	MIN 19	CFSM 4.20	IN 56.97	AC-FT 68,050			
WTR YR 1966	TOTAL 30,087		MEAN 82.4	MAX 305	MIN 20	CFSM 3.68	IN 49.97	AC-FT 59,680				

12094400 SOUTH PRAIRIE CREEK NEAR ENUMCLAW, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	72	210	178	160	90	58	79	160	72	25	19
2	75	64	165	172	140	82	56	79	210	79	24	22
3	45	58	134	262	162	17	56	77	172	72	24	20
4	36	53	116	225	344	72	59	77	160	67	24	19
5	32	60	99	182	244	68	58	82	180	59	24	18
6	34	60	88	152	178	67	56	105	178	52	24	20
7	38	53	79	129	150	64	56	138	145	49	24	18
8	40	48	70	152	129	68	56	160	124	46	23	18
9	45	73	68	160	118	70	58	201	112	44	22	19
10	36	90	143	185	107	64	54	138	109	41	22	22
11	34	68	195	338	103	60	53	122	114	48	22	40
12	34	134	182	237	103	58	53	129	109	41	22	28
13	36	124	420	415	120	56	56	124	127	39	21	22
14	32	195	338	445	101	53	53	120	145	36	21	20
15	32	182	234	445	95	56	50	134	150	34	21	20
16	30	158	262	314	93	65	49	207	160	34	21	18
17	30	136	225	219	148	64	48	243	165	32	21	18
18	28	162	192	182	188	65	52	213	158	32	21	15
19	50	134	198	382	152	62	53	219	170	32	20	18
20	188	116	258	350	129	65	56	283	158	36	20	18
21	112	95	188	234	112	65	65	306	170	49	20	18
22	357	80	152	68	99	68	68	237	120	48	20	18
23	350	74	129	145	90	112	68	180	124	32	20	18
24	185	67	112	122	82	95	68	138	120	30	20	18
25	131	262	101	107	80	86	72	114	128	28	19	18
26	140	175	86	114	75	79	68	114	116	28	19	18
27	134	159	79	259	72	70	68	129	109	28	19	18
28	101	170	82	934	90	70	67	160	90	28	18	17
29	101	145	114	350	-----	65	65	192	88	27	18	18
30	103	269	99	243	-----	62	79	138	74	26	18	19
31	82	-----	107	182	-----	59	-----	114	-----	26	18	-----
TOTAL	2,700	3,572	4,085	7,587	3,668	2,177	1,780	4,760	4,175	1,273	655	595
MEAN	87.1	119	158	245	131	70.2	59.3	154	139	47.1	21.1	19.1
MAX	358	269	420	534	346	112	79	306	210	79	25	40
MIN	28	48	68	107	72	53	48	77	74	26	18	17
CFSM	3.89	5.31	7.05	10.9	5.85	3.13	2.65	6.88	6.21	1.83	.94	.88
IN.	4.45	5.93	8.11	12.60	6.09	3.62	2.96	7.91	6.93	2.11	1.09	.99
AC-FT	3,468	7,090	9,690	15,050	7,280	4,320	3,530	9,440	8,280	2,530	1,300	1,180
CAL YR 1966	TOTAL	35,309	MEAN	96.7	MAX	420	MIN	20	CFSM	4.32	IN	58.64
UTB YR 1967	TOTAL	37,827	MEAN	104	MAX	536	MIN	17	CFSM	4.64	IN	62.82

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	202	64	95	65	93	128	140	440	62	28	111
2	20	130	69	79	103	86	124	111	686	58	28	115
3	78	113	67	70	168	83	111	101	392	53	28	88
4	50	93	65	65	325	95	109	115	241	48	28	76
5	30	83	65	62	205	105	113	101	180	46	28	67
6	30	74	58	54	150	84	111	92	152	43	27	59
7	40	74	56	54	124	74	109	86	128	42	27	53
8	34	74	53	52	107	70	107	90	113	48	26	50
9	26	115	115	90	95	64	111	119	99	39	26	46
10	24	244	235	76	86	60	124	160	97	37	26	43
11	140	190	256	65	79	58	135	158	113	39	25	43
12	86	140	147	75	76	56	113	133	99	64	25	43
13	103	115	109	175	69	54	95	103	113	47	26	43
14	129	115	92	250	62	53	93	88	117	47	80	85
15	70	113	81	211	58	58	92	83	97	58	186	133
16	49	103	76	152	53	76	83	84	92	48	52	187
17	40	85	69	122	59	65	76	113	80	42	45	213
18	48	81	62	107	244	59	74	138	84	43	53	475
19	59	74	58	224	754	56	70	162	88	41	52	254
20	45	67	53	400	500	58	70	211	77	42	53	185
21	122	62	56	395	365	58	65	138	72	39	47	162
22	150	62	118	208	430	65	65	158	115	38	42	116
23	152	65	182	165	361	58	72	160	105	36	110	135
24	101	131	368	185	268	56	76	150	83	34	282	109
25	134	88	907	140	202	58	84	152	77	33	226	90
26	93	74	481	113	165	58	90	162	72	33	235	81
27	387	70	268	95	138	83	83	138	68	31	237	76
28	392	72	185	84	117	268	107	162	70	31	304	65
29	190	79	145	79	103	274	168	165	74	30	241	60
30	172	69	122	74	-----	199	180	133	67	29	165	54
31	200	-----	183	70	-----	155	-----	126	-----	29	122	-----
TOTAL	3,218	3,068	4,765	4,086	5,551	2,806	3,038	4,816	4,298	1,298	2,822	3,216
MEAN	104	102	154	132	178	90.4	101	130	143	41.9	90.0	107
MAX	392	244	907	400	754	274	180	211	686	64	304	475
MIN	20	62	53	52	53	53	65	83	67	29	25	43
CF5N	4.64	4.55	6.88	5.89	8.53	4.04	4.51	5.88	6.30	1.87	4.06	4.78
IN.	5.34	5.10	7.91	6.79	9.22	4.66	5.05	6.67	7.14	2.16	4.69	5.34
AC-FT	6,380	6,698	9,450	8,100	11,010	5,570	6,030	7,978	8,530	2,570	5,600	6,380
CAL YR 1967	TOTAL 37,721	MEAN 103	MAX 907	MIN 17	CF5N 4.60	IN 62.66	AC-FT 74,820					

12095000 SOUTH PRAIRIE CREEK AT SOUTH PRAIRIE, WASH.

LOCATION.--Lat 47°08'23", long 122°05'28", in NE¼NW¼ sec.18, T.19 N., R.6 E., Pierce County, on left bank 30 ft downstream from railroad bridge, 200 ft upstream from bridge on State Highway 162, 0.3 mile east of South Prairie, and at mile 5.9.

DRAINAGE AREA.--79.5 sq mi.

PERIOD OF RECORD.--June 1949 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 430 ft (from topographic map). Prior to July 1, 1969, at site 350 ft downstream at datum 1.21 ft lower.

AVERAGE DISCHARGE.--21 years, 242 cfs (41.34 inches per year, 175,300 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,400 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	0030	*985	4.09	June 2, 1968	1330	2,400	5.52	May 30, 1969	0530	2,040	5.69
				Sept. 18, 1968	0730	1,470	4.28	June 24, 1969	0100	1,470	4.69
Jan. 28, 1967	0700	*1,390	4.77								
				Nov. 11, 1968	1830	1,710	4.67	Jan. 14, 1970	1800	1,610	5.45
Dec. 25, 1967	1430	*2,840	6.14	Dec. 3, 1968	2200	1,690	4.67	Jan. 20, 1970	0200	*1,890	5.74
Feb. 19, 1968	1100	2,030	5.06	Jan. 7, 1969	0030	*3,060	6.58				

a Occurred Jan. 19, 1967.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1, 2, 1965	26	.89	1969	Sept. 10, 11, 12, 1969	33	2.56
1967	Sept. 23, 1967	20	a.80	1970	Aug. 23, 24, 30, 31, 1970	34	2.47
1968	Oct. 10, 1967	37	b.77				

a Occurred Sept. 28, 1967.

b Occurred July 8, 9, 1968.

Period of record: Maximum discharge, 6,850 cfs Dec. 11, 1955 (gage height, 9.78 ft, site and datum then in use), from rating curve extended above 3,000 cfs; minimum, 20 cfs Sept. 23, 1967.

REMARKS.--Records good. Small amount of diversion for domestic use. Rainier State School at Buckley and city of Sumner divert about 1 cfs above station. No regulation.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	60	110	135	164	188	419	127	114	198	64	42
2	30	64	190	220	152	159	422	142	150	228	61	42
3	30	79	137	173	144	144	310	202	146	647	59	43
4	33	208	384	165	144	131	258	278	154	500	58	41
5	58	213	260	284	142	131	248	356	142	374	58	40
6	146	171	213	814	139	139	268	464	157	302	56	42
7	133	129	228	671	135	146	285	318	190	245	53	42
8	78	106	206	739	129	166	270	270	164	210	53	40
9	115	96	165	954	129	362	327	282	150	188	55	39
10	88	95	154	440	122	386	372	225	271	170	55	42
11	71	110	133	422	139	290	395	175	312	173	54	86
12	67	94	116	428	150	258	431	159	290	151	50	78
13	115	89	106	610	133	350	345	148	222	139	54	50
14	166	96	96	663	137	416	362	135	210	166	60	50
15	265	94	88	524	125	350	371	148	208	157	55	50
16	160	92	83	395	122	292	332	175	212	144	53	43
17	167	85	78	320	120	240	285	150	182	131	50	41
18	135	94	76	272	118	222	242	135	159	121	49	159
19	196	94	75	228	114	252	210	133	164	122	48	101
20	162	86	75	195	129	240	218	148	142	107	46	67
21	129	111	116	182	131	232	212	190	135	99	45	54
22	108	201	100	172	125	208	188	173	133	96	45	48
23	94	165	90	163	131	202	173	146	123	90	42	101
24	82	135	122	155	131	210	166	135	198	89	43	71
25	76	139	101	152	129	236	164	168	146	85	45	60
26	71	137	92	146	129	292	157	210	139	82	48	72
27	67	150	152	150	163	320	146	198	148	77	62	82
28	72	126	378	154	238	310	137	146	517	74	64	66
29	66	113	297	161	-----	318	139	129	320	72	50	56
30	68	104	209	178	-----	451	151	127	228	70	50	52
31	67	-----	156	185	-----	494	-----	116	-----	67	45	-----
TOTAL	3,143	3,536	4,740	10,050	3,864	8,137	7,983	5,908	5,826	5,374	1,630	1,800
MEAN	101	118	153	324	138	262	266	191	194	173	52.6	60.0
MAX	265	213	384	814	238	494	431	464	517	647	64	159
MIN	28	60	75	135	114	131	131	116	114	67	42	39
CFSM	1.27	1.48	1.92	4.08	1.74	3.30	3.35	2.40	2.44	2.18	.66	.75
IN.	1.47	1.65	2.22	4.70	1.81	3.81	3.74	2.76	2.73	2.51	.76	.84
AC-FT	6,230	7,010	9,400	19,930	7,660	16,140	15,830	11,720	11,560	10,660	3,230	3,570
CAL YR 1965	TOTAL 74,075	MEAN 203	MAX 4,440	MIN 24	CFSM 2.55	IN 34.66	AC-FT 146,900					
WTR YR 1966	TOTAL 61,991	MEAN 170	MAX 814	MIN 28	CFSM 2.14	IN 29.01	AC-FT 123,000					

PUYALLUP RIVER BASIN

12095000 SOUTH PRAIRIE CREEK AT SOUTH PRAIRIE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	103	143	311	662	137	126	354	288	457	274	58	37			
2	95	167	287	578	133	126	343	293	388	236	56	37			
3	88	223	772	650	142	139	307	274	354	224	56	37			
4	111	175	1,100	1,180	158	146	299	251	343	260	54	37			
5	103	159	738	2,360	140	314	343	243	307	220	62	37			
6	159	148	558	2,140	139	315	365	258	261	192	58	37			
7	148	145	474	2,180	128	269	371	310	235	171	56	35			
8	124	236	658	1,040	198	230	326	421	227	144	54	34			
9	108	541	686	736	274	196	302	463	235	144	52	34			
10	159	376	885	576	238	177	299	451	214	135	51	33			
11	192	1,190	860	481	391	162	269	388	196	138	51	33			
12	237	1,090	670	412	397	151	280	349	184	132	51	33			
13	284	644	527	368	315	144	293	340	170	120	52	37			
14	234	464	467	329	269	137	251	312	172	115	49	37			
15	348	362	456	299	243	148	222	261	193	108	49	35			
16	287	302	478	277	240	189	204	227	142	98	52	34			
17	244	260	394	256	230	340	251	217	137	91	49	46			
18	366	341	390	238	217	406	436	274	137	86	46	91			
19	345	296	344	225	204	377	421	415	130	84	46	110			
20	590	269	296	214	192	310	394	335	124	82	46	115			
21	460	272	263	199	182	272	351	288	113	82	46	71			
22	449	257	258	172	266	307	307	142	80	147	46	80			
23	352	602	330	162	165	272	541	323	434	75	44	199			
24	296	470	460	162	155	235	475	343	816	69	43	132			
25	272	390	414	158	148	225	388	258	642	69	43	126			
26	237	348	392	158	142	238	326	225	628	65	41	108			
27	370	311	153	135	296	285	217	505	62	43	82	82			
28	161	348	268	146	130	186	186	498	60	40	46	269			
29	172	369	240	142	-----	280	310	458	420	60	41	117			
30	183	352	293	142	-----	312	266	1,360	337	60	40	269			
31	164	-----	470	146	-----	421	-----	642	-----	58	38	-----			
TOTAL	7,269	11,708	15,801	16,955	5,634	7,512	9,931	10,977	9,093	3,814	1,515	2,260			
MEAN	234	390	508	547	201	242	321	354	303	123	48.9	75.3			
MAX	590	1,190	1,100	2,360	397	421	541	1,360	816	274	62	269			
MIN	88	143	240	142	128	124	204	186	113	58	38	35			
CF5M	2.94	4.91	6.09	6.88	2.53	3.04	4.16	4.45	3.81	1.55	.62	.93			
IN.	3.40	5.48	7.82	7.93	2.44	3.52	4.65	5.14	4.25	1.78	.71	1.06			
AC-FT	14,420	23,220	29,750	35,630	11,180	14,900	19,700	21,770	18,040	7,570	3,610	4,480			
CAL YR	TOTAL	106,149	MEAN	290	MAX	1,930	MIN	46	CF5M	3.65	IN	49.67	AC-FT	210,590	
WTR YR	1969	TOTAL	101,649	MEAN	279	MAX	2,360	MIN	33	CF5M	3.51	IN	47.37	AC-FT	201,780

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228	67	192	172	390	147	125	335	240	96	49	36
2	174	65	96	162	330	130	132	330	267	05	62	36
3	144	67	94	162	330	132	119	350	272	05	57	55
4	115	361	119	150	280	125	117	415	204	81	51	65
5	95	564	112	132	262	119	135	380	168	78	44	52
6	84	276	102	127	258	147	186	200	179	74	45	57
7	82	196	180	125	262	316	186	216	159	66	45	108
8	170	159	127	132	280	204	168	212	130	65	49	105
9	350	141	138	204	276	172	519	308	156	63	44	83
10	248	127	125	208	262	159	750	249	179	68	46	64
11	100	117	119	172	236	150	455	224	168	57	41	57
12	147	109	228	168	224	147	326	216	138	55	39	51
13	120	102	276	340	220	153	258	216	130	54	39	46
14	100	98	750	1,418	190	159	212	193	132	54	39	45
15	91	96	480	998	366	186	186	193	135	52	38	44
16	84	90	365	672	684	244	162	272	127	51	38	42
17	00	91	321	870	606	204	147	267	112	51	39	45
18	77	85	405	1,618	516	186	144	193	122	49	41	112
19	71	85	410	1,670	390	168	224	168	122	49	37	240
20	71	109	365	1,530	335	156	186	156	114	48	37	144
21	71	224	660	1,100	294	147	162	141	125	48	37	109
22	71	150	660	962	158	135	159	153	112	46	36	136
23	88	220	564	1,000	232	130	153	106	90	45	36	165
24	73	244	445	914	288	132	224	165	89	45	36	107
25	71	182	350	963	193	119	254	182	87	49	36	87
26	65	162	335	921	176	122	267	200	87	62	37	78
27	77	130	1,160	1,168	168	122	267	144	95	63	36	60
28	84	127	254	810	159	114	258	122	78	60	37	62
29	75	117	224	606	-----	147	285	233	87	57	37	58
30	75	109	204	470	-----	135	370	510	132	52	36	55
31	71	-----	190	440	-----	125	-----	254	-----	51	34	-----
TOTAL	3,524	4,686	9,010	20,340	8,382	4,862	7,154	7,463	4,234	1,879	1,280	2,494
MEAN	114	156	291	656	269	157	238	261	141	60.6	41.3	83.1
MAX	350	564	750	1,670	684	316	750	510	272	96	62	240
MIN	65	65	94	125	159	114	117	122	78	45	34	36
CF5N	1.43	1.96	3.66	8.25	3.76	1.97	2.99	3.03	1.77	.76	.52	1.05
IN.	1.65	2.19	4.22	9.52	3.92	2.28	3.35	3.49	1.98	.88	.60	1.17
AC-FT	6,990	9,290	17,870	48,340	16,630	9,640	14,190	14,800	8,400	3,730	2,540	4,950
CAL YR 1969	TOTAL 75,911		MEAN 233	MAX 2,368	MIN 33	CF5N 2.93	IN 39.73	AC-FT 168,400				
WTR YR 1970	TOTAL 75,300		MEAN 206	MAX 1,670	MIN 33	CF5N 2.59	IN 35.24	AC-FT 149,400				

12096600 WHITE RIVER NEAR GREENWATER, WASH.

LOCATION.--Lat 46°53'47", long 121°36'50" (revised), Pierce County, Mount Rainier National Park, on left bank 100 ft downstream from bridge on Yakima Park road, 1.0 mile upstream from Fryingpan Creek, 18 miles south of Greenwater, and at mile 71.5.

DRAINAGE AREA.--16.2 sq mi.

PERIOD OF RECORD.--August 1964 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 3,880 ft (from topographic map). Prior to July 11, 1968, at present site at datum 3.0 ft lower.

AVERAGE DISCHARGE.--6 years, 121 cfs (101.43 inches per year, 87,660 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (370 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
June 28, 1966	0630	379	2.80	Dec. 25, 1967	1400	371	2.80	July 12, 1969	0830	425	3.60
July 9, 1966	2000	*401	2.86	Jan. 14, 1968	0730	496	3.34	July 20, 1969	0900	425	3.60
				June 2, 1968a	-	*b650	-	Aug. 14, 1969	2330	405	3.52
June 19, 1967	2230	*542	3.55	June 22, 1968a	-	b490	-	Aug. 23, 1969	1930	388	3.45
July 3, 1967	1900	480	3.30	June 27, 1968a	-	b520	-				
July 12, 1967	1800	373	2.86	July 6, 1968a	-	b500	-	June 6, 1970	2000	490	3.90
Aug. 17, 1967	1800	387	3.02	Aug. 25, 1968	1130	582	4.35	June 21, 1970	1200	*652	4.10
Aug. 31, 1967	1500	382	3.05					July 8, 1970	1530	610	3.75
Oct. 27, 1967	1600	522	3.45	June 4, 1969	1900	499	3.93	July 20, 1970	0130	541	3.69
				June 18, 1969	1700	*606	4.13	July 26, 1970	2000	544	3.78

a About.

b Maximum daily.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Feb. 2-20, Mar. 2-7, 1966	a24	-	1969	-	-	-
1967	Apr. 17, 19-21, 30, 1967	a27	-	1970	Feb. 26, 27, 28, Mar. 1,	28	bl.70
1968	Apr. 22, 1968	24	3.62		Apr. 27, 28, 1970		

a Minimum daily.

b Occurred Oct. 26-28, 31, 1969.

Period of record: Maximum daily discharge, 650 cfs June 2, 1968; minimum daily, 24 cfs Feb. 2-20, Mar. 2-7, 1966.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. No regulation or diversion above station. Water-quality records for the water years 1966-68 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	52	43	32	25	25	90	81	136	232	264	133
2	69	51	42	32	24	24	85	104	112	186	264	154
3	72	140	48	32	24	24	75	128	93	172	287	169
4	77	115	52	33	24	24	66	160	89	193	243	189
5	65	89	48	35	24	24	65	216	109	234	218	201
6	96	73	50	45	24	24	68	287	133	260	220	196
7	97	81	77	49	24	24	69	216	172	272	249	172
8	92	74	58	51	24	25	73	199	191	269	262	174
9	80	62	47	49	24	30	72	213	189	337	247	170
10	67	57	46	46	24	36	68	208	184	323	264	160
11	66	51	43	47	24	39	62	170	169	295	241	138
12	65	48	41	50	24	36	56	157	156	291	222	104
13	63	52	38	61	24	38	51	144	165	308	273	100
14	60	66	38	63	24	42	51	121	194	342	218	146
15	56	69	37	59	24	45	51	104	236	304	228	124
16	51	60	35	56	24	40	56	89	270	278	247	115
17	49	59	34	52	24	37	57	83	279	272	230	127
18	47	66	34	47	24	35	54	82	278	264	230	177
19	46	67	34	43	24	33	50	110	264	230	216	136
20	49	59	34	39	24	31	50	127	223	213	206	143
21	50	54	34	37	25	30	50	136	198	218	199	179
22	50	50	32	35	26	30	53	112	179	238	196	233
23	53	45	32	33	27	29	58	116	177	232	198	241
24	57	44	32	31	26	29	67	144	170	203	210	160
25	62	43	32	30	27	29	74	181	160	191	216	146
26	62	42	32	29	26	30	73	198	170	203	194	151
27	65	41	34	28	26	33	71	184	201	218	189	135
28	63	42	35	27	25	40	68	181	337	228	169	169
29	60	41	34	26	-----	50	69	184	287	241	141	167
30	57	41	33	27	-----	70	71	174	258	257	121	132
31	52	-----	32	26	-----	80	-----	151	-----	264	118	-----
TOTAL	1,961	1,834	1,241	1,250	689	1,082	1,923	4,760	5,779	7,760	6,730	4,741
MEAN	63.3	61.1	40.0	40.3	26.6	34.9	64.1	154	193	251	217	158
MAX	97	140	77	63	27	80	90	287	337	342	287	241
MIN	46	41	32	26	24	24	50	81	89	172	118	100
CFSM	3.91	3.77	2.47	2.49	1.52	2.15	3.96	9.51	11.9	15.5	13.4	9.75
IN	4.50	4.21	2.85	2.87	1.98	2.48	4.42	10.93	13.27	17.47	15.45	10.89
AC-FT	3,890	3,640	2,460	2,480	1,370	2,150	3,810	9,440	11,460	15,430	13,350	9,400
CAL YR 1965	TOTAL 39,449		MEAN 108	MAX 365	MTN 30	CFSM 6.67	IN 90.59	AC-FT 78,250				
WTR YR 1966	TOTAL 39,770		MEAN 109	MAX 342	MTN 24	CFSM 6.73	IN 91.32	AC-FT 78,880				

NOTE.--NO GAGE-HEIGHT RECORD DEC. 14 TO APR. 7.

12096600 WHITE RIVER NEAR GREENWATER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	133	45	162	37	37	30	31	30	133	282	194	280	
2	114	41	112	35	35	28	31	32	172	325	193	253	
3	97	39	88	36	39	28	33	34	183	362	208	248	
4	97	37	76	36	45	29	33	41	186	371	200	265	
5	94	36	65	30	42	30	31	44	198	325	198	272	
6	94	35	59	33	40	30	31	62	215	282	178	212	
7	89	33	55	31	39	31	32	88	213	270	173	181	
8	82	30	51	31	38	31	31	99	200	248	186	212	
9	65	32	48	31	38	31	29	110	200	222	203	170	
10	63	31	48	31	36	30	29	97	191	240	224	189	
11	57	29	53	30	35	30	29	88	191	272	229	148	
12	46	34	75	30	34	31	28	80	186	311	272	112	
13	39	42	152	32	34	28	28	72	194	332	268	105	
14	37	90	104	32	34	28	28	76	220	266	244	113	
15	35	66	96	34	34	29	28	86	248	236	238	137	
16	33	58	90	30	33	30	28	130	300	246	251	173	
17	32	51	81	33	33	31	27	160	342	242	272	180	
18	30	50	75	33	32	29	28	170	323	224	284	175	
19	33	78	72	35	33	28	27	175	396	215	266	190	
20	36	77	62	33	32	30	27	190	403	205	257	190	
21	32	61	58	33	31	28	27	230	398	215	246	200	
22	44	53	54	31	30	57	28	230	358	215	227	170	
23	61	50	54	31	30	57	28	200	328	251	227	135	
24	54	47	48	31	30	42	28	170	315	270	189	145	
25	54	61	44	31	29	40	28	150	315	248	180	135	
26	69	52	41	31	28	37	28	140	298	231	194	110	
27	56	49	39	41	28	37	28	135	282	217	234	140	
28	44	47	40	44	29	35	28	140	294	231	234	135	
29	49	54	42	48	-----	34	28	150	309	248	261	130	
30	57	126	40	42	-----	33	27	136	302	249	272	125	
31	49	-----	37	40	-----	32	-----	129	-----	218	284	-----	
TOTAL	1,677	1,554	2,121	1,056	958	1,024	867	3,678	7,893	8,069	7,086	5,230	
MEAN	60.5	51.8	68.4	34.1	34.2	33.0	28.9	119	263	260	229	174	
MAX	133	126	162	48	45	57	33	230	403	371	284	280	
MIN	30	29	37	30	28	28	27	30	133	205	173	105	
CFSM	3.73	3.20	4.22	2.10	2.11	2.04	1.78	7.35	16.2	16.0	14.1	10.7	
IN.	4.31	3.57	4.87	2.42	2.20	2.35	1.99	8.45	18.12	18.53	16.27	12.01	
AC-FT	3,720	3,080	4,210	2,090	1,900	2,030	1,720	7,300	15,660	16,000	14,060	10,370	
CAL YR 1966	TOTAL	40,286	MEAN	110	MAX	342	MIN	24	CFSM	6.79	IN	92.51	
WTR YR 1967	TOTAL	41,413	MEAN	113	MAX	403	MIN	27	CFSM	6.98	IN	95.10	
									AC-FT	79,910		AC-FT	82,140

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	100	128	36	53	65	71	38	67	300	250	302	240	
2	80	96	36	49	72	71	36	67	650	320	302	220	
3	90	76	35	45	71	69	36	73	500	390	295	190	
4	78	66	38	43	86	90	35	76	400	450	276	190	
5	68	60	37	38	71	104	35	68	330	480	258	190	
6	68	57	35	35	65	89	33	62	310	500	244	200	
7	68	57	35	32	63	82	31	65	300	490	240	190	
8	67	72	35	29	60	74	33	71	260	450	246	180	
9	67	72	40	28	58	68	36	77	230	410	260	190	
10	82	81	41	27	57	63	42	86	260	380	290	180	
11	146	68	39	26	54	59	44	104	270	350	276	180	
12	109	63	36	54	53	59	39	99	250	338	248	170	
13	97	63	36	225	52	56	36	87	210	290	214	160	
14	78	110	36	354	48	52	36	85	190	280	207	170	
15	71	99	36	238	47	51	35	87	190	256	178	210	
16	65	78	35	146	46	51	33	99	220	240	170	210	
17	62	71	35	108	46	48	32	116	280	236	162	240	
18	67	66	34	99	66	47	31	151	350	256	170	200	
19	59	60	33	156	110	46	29	184	390	260	160	180	
20	56	56	33	206	93	45	28	223	350	250	144	150	
21	94	52	34	208	97	45	28	170	330	244	138	120	
22	87	52	49	143	86	44	28	143	490	230	134	100	
23	76	49	44	120	100	43	29	136	450	230	168	114	
24	71	48	71	133	89	43	27	135	450	250	224	111	
25	74	43	266	110	78	42	29	128	450	270	380	111	
26	62	39	243	97	73	41	31	115	500	280	360	109	
27	248	41	182	86	71	40	37	116	520	300	310	104	
28	191	42	115	82	69	40	53	122	380	340	302	99	
29	128	40	83	77	69	38	73	136	270	350	284	100	
30	128	38	69	72	-----	38	76	124	230	310	250	103	
31	151	-----	61	67	-----	37	-----	136	-----	295	260	-----	
TOTAL	2,888	1,943	1,938	3,186	2,015	1,746	1,109	3,408	10,310	9,975	7,452	4,911	
MEAN	93.2	64.8	62.5	103	69.5	56.3	37.0	110	344	322	240	164	
MAX	248	128	266	354	110	104	76	223	650	500	380	240	
MIN	56	38	33	26	46	37	27	62	190	230	134	99	
CFSM	5.75	4.00	3.86	6.36	4.29	3.48	2.28	6.79	21.2	19.9	14.8	10.1	
IN.	6.63	4.46	4.45	7.32	4.63	4.01	2.55	7.83	23.67	22.91	17.11	11.28	
AC-FT	5,730	3,850	3,840	6,320	4,000	3,460	2,200	6,760	20,450	19,790	14,780	9,740	
CAL YR 1967	TOTAL	42,630	MEAN	117	MAX	403	MIN	27	CFSM	7.22	IN	97.89	
WTR YR 1968	TOTAL	50,881	MEAN	139	MAX	650	MIN	26	CFSM	8.58	IN	116.84	
									AC-FT	84,560		AC-FT	100,900

NOTE.--NO GAGE-HEIGHT RECORD JUNE 1 TO JULY 11.

12096600 WHITE RIVER NEAR GREENWATER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
1	101	70	66	40	30	27	47	46	251	223	299
2	95	70	85	39	30	27	45	46	263	245	279
3	70	70	39	30	27	42	45	341	214	221	127
4	68	68	89	43	30	27	42	45	398	221	255
5	68	68	85	80	29	27	42	52	380	227	218
6	84	68	82	61	29	27	42	65	348	237	197
7	79	68	85	53	29	27	42	86	350	275	198
8	90	90	89	53	29	27	42	112	340	321	207
9	72	130	85	49	28	27	43	142	340	305	255
10	71	120	89	46	28	27	43	159	350	281	271
11	73	220	86	44	28	27	45	159	360	283	275
12	72	220	81	42	28	27	50	152	375	335	255
13	175	74	42	28	28	28	47	150	388	265	269
14	69	150	75	40	28	28	45	147	412	229	297
15	69	130	70	40	28	28	45	136	415	233	295
16	67	116	68	39	27	29	46	126	400	241	225
17	68	108	62	39	27	30	50	127	405	253	221
18	108	108	39	39	27	31	140	140	246	241	225
19	69	103	56	38	27	30	47	141	375	297	211
20	70	104	55	37	27	30	45	146	368	380	211
21	69	112	51	37	27	31	50	164	305	350	235
22	67	110	51	36	27	32	55	184	291	320	249
23	102	102	57	35	27	31	77	202	293	328	281
24	71	99	72	35	27	32	66	266	267	340	237
25	72	96	56	33	27	32	60	239	237	309	176
26	71	93	51	31	27	35	56	211	223	309	152
27	71	90	49	31	27	40	56	188	200	319	140
28	87	87	44	30	27	44	156	160	167	313	134
29	87	102	40	30	-----	48	53	205	186	317	126
30	80	91	40	30	-----	52	50	297	197	305	127
31	75	-----	40	30	-----	50	-----	251	-----	305	138
TOTAL	2,361	3,238	2,109	1,265	783	986	1,480	4,589	9,697	8,845	6,927
MEAN	76.2	108	68.0	40.8	28.0	31.8	49.3	148	323	285	223
MAX	101	220	93	80	30	52	77	297	462	380	299
MIN	67	68	40	30	27	27	42	45	166	218	126
CFSM	4.70	6.67	4.20	2.52	1.73	1.96	3.04	9.14	19.9	17.6	13.8
IN-	5.42	7.44	4.84	2.90	1.80	2.26	3.40	10.54	22.27	20.31	15.91
AC-FT	4,680	6,420	4,180	2,510	1,550	1,960	2,940	9,100	19,230	17,940	13,740
CAL YR 1968	TOTAL 51,820	MEAN 142	MAX 650	MIN 26	CFSM 8.77	IN 118.99	AC-FT 102,800				
WTR YR 1969	TOTAL 46,592	MEAN 128	MAX 462	MIN 27	CFSM 7.90	IN 106.99	AC-FT 92,420				

NOTE.--NO GAGE-HEIGHT RECORD JAN. 20 TO APR. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
1	114	39	39	34	34	28	32	33	206	190	290
2	91	40	38	33	34	30	32	38	300	222	290
3	79	40	38	31	34	29	32	45	370	350	290
4	74	110	38	30	33	30	32	55	340	382	310
5	69	87	38	30	33	31	32	66	352	418	310
6	69	74	40	35	32	36	32	60	415	457	300
7	89	69	39	36	32	39	31	55	412	493	280
8	98	86	39	36	32	35	32	165	523	523	270
9	79	64	40	36	32	34	40	55	358	484	250
10	66	62	40	36	32	32	38	50	305	448	250
11	60	66	43	34	33	32	36	45	266	375	260
12	64	70	42	34	36	32	34	42	264	328	280
13	60	66	55	39	38	32	33	40	234	305	270
14	56	64	65	46	36	32	33	38	250	310	260
15	53	57	53	41	36	35	34	45	264	390	250
16	52	55	50	39	41	34	32	80	272	412	240
17	50	55	48	39	36	33	32	110	312	405	230
18	52	49	42	39	36	32	32	109	422	427	220
19	46	50	50	46	34	32	32	105	457	456	242
20	45	49	49	43	33	32	31	100	493	460	212
21	46	48	49	58	32	32	31	110	559	370	208
22	47	46	47	64	31	32	31	120	415	355	220
23	46	46	43	83	30	33	31	159	368	338	248
24	48	43	43	61	30	34	30	170	368	370	276
25	45	41	41	52	30	34	30	200	380	402	210
26	39	41	38	49	28	33	30	225	388	454	218
27	39	41	36	46	28	33	29	198	348	490	204
28	40	40	36	40	28	33	29	168	284	430	204
29	42	40	36	38	-----	33	30	165	238	350	190
30	40	39	36	37	-----	32	32	164	200	270	207
31	39	-----	36	36	-----	32	-----	182	-----	280	238
TOTAL	1,835	1,658	1,334	1,303	923	1,011	964	3,074	10,175	11,884	7,741
MEAN	59.2	55.3	42.0	42.0	33.0	32.4	32.1	99.2	339	383	250
MAX	114	110	65	83	41	39	40	225	559	523	310
MIN	39	39	36	30	28	28	29	33	200	190	190
CFSM	3.65	3.41	2.65	2.59	2.04	2.01	1.98	6.12	20.9	23.6	15.4
IN-	4.21	3.81	3.06	2.99	2.12	2.32	2.21	7.06	23.36	27.29	17.78
AC-FT	3,640	3,290	2,650	2,580	1,830	2,010	1,910	6,100	20,180	23,570	15,350
CAL YR 1969	TOTAL 43,711	MEAN 120	MAX 462	MIN 28	CFSM 7.41	IN 100.37	AC-FT 86,700				
WTR YR 1970	TOTAL 45,869	MEAN 126	MAX 559	MIN 28	CFSM 7.78	IN 105.33	AC-FT 90,980				

PUYALLUP RIVER BASIN

12097000 WHITE RIVER AT GREENWATER, WASH.

LOCATION.--Lat 47°08'48", long 121°38'44", in NW¼SE¼ sec.10, T.19 N., R.9 E., Pierce County, on right bank
0.7 mile southeast of Greenwater, 1.0 mile upstream from Greenwater River, and at mile 46.8.

DRAINAGE AREA.--216 sq mi.

PERIOD OF RECORD.--December 1911 to May 1912 (fragmentary, published as "near Enumclaw"), March 1929 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,725 ft (from river-profile map). Prior to May 6, 1912, non-recording gage at site 2 miles upstream at different datum.

AVERAGE DISCHARGE.--41 years (1929-70), 856 cfs (53.82 inches per year, 620,200 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,400 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1230	*2,740	4.52	Jan. 15, 1968	1030	2,420	4.25	May 24, 1969	0830	2,750	4.63
May 22, 1967	0100	2,760	4.46	Jan. 21, 1968	0200	4,420	5.31	May 30, 1969	0700	3,050	4.82
June 21, 1967	2330	*5,270	4.82	June 2, 1968	1230	5,220	5.69	June 5, 1969	0430	3,210	4.90
Oct. 27, 1967	1930	3,640	4.92	Nov. 11, 1968	2000	3,370	4.98	Jan. 20, 1970	0430	2,490	4.43
Dec. 25, 1967	1700	*6,780	6.31	Jan. 5, 1969	1230	*4,090	5.37	Jan. 23, 1970	0130	*3,430	5.01
				May 11, 1969	0230	2,580	4.53	June 4, 1970	0100	3,040	4.78

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Feb. 15, 1966	256	a1.80	1969	Mar. 11, 1969	323	2.02
1967	Oct. 19, 1966	264	1.76	1970	Jan. 5, 1970	302	1.98
1968	Oct. 20, 21, 1967	322	1.98				

a Occurred Dec. 23, 1965.

Period of record: Maximum discharge, 18,100 cfs Dec. 21, 1933 (gage height, 9.38 ft) from rating curve extended above 4,800 cfs on basis of slope-area measurement at gage height 8.96 ft; minimum, 120 cfs Nov. 2, 1935 (gage height, 1.69 ft).

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1286: 1932-33(M), 1934, 1943(M). WSP 1636: 1930(M). WSP 1716: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	372	344	370	286	309	337	1,350	692	1,080	1,240	886	453
2	384	354	355	289	302	320	1,360	790	990	1,150	894	486
3	393	441	390	289	298	309	1,170	1,120	926	1,120	894	302
4	404	636	480	286	295	298	1,070	1,440	894	1,110	886	542
5	408	490	420	302	302	298	1,080	1,910	878	1,210	783	584
6	485	436	500	432	298	295	1,170	2,570	942	1,260	769	590
7	480	416	630	432	292	292	1,350	2,310	1,140	1,250	769	530
8	450	400	560	470	289	320	1,410	2,070	1,330	1,280	806	524
9	428	390	500	436	292	450	1,380	2,100	1,370	1,360	776	530
10	396	376	430	412	277	440	1,350	2,030	1,480	1,400	806	514
11	382	368	400	404	295	412	1,270	1,670	1,500	1,350	734	497
12	382	354	375	424	292	424	1,140	1,470	1,350	1,300	664	431
13	400	354	360	606	286	552	966	1,360	1,280	1,270	727	395
14	408	400	345	640	292	702	926	1,180	1,360	1,490	706	514
15	445	416	325	582	277	709	942	1,080	1,530	1,410	713	464
16	390	420	312	525	283	618	950	998	1,830	1,290	706	442
17	396	396	302	480	280	546	942	918	1,850	1,210	671	431
18	386	408	309	450	277	525	902	910	1,680	1,160	664	584
19	404	432	302	404	274	505	830	918	1,610	1,080	638	486
20	393	416	306	386	280	475	776	1,010	1,460	942	620	464
21	393	440	302	379	289	445	727	1,160	1,320	942	602	514
22	379	450	289	362	323	416	699	1,080	1,190	950	620	578
23	379	412	280	358	348	416	692	990	1,160	950	620	692
24	376	400	292	344	348	420	727	1,010	1,160	934	626	566
25	379	393	286	330	348	440	783	1,200	1,040	886	650	502
26	379	382	283	370	340	546	741	1,540	1,050	854	602	497
27	372	376	309	316	344	738	699	1,600	1,130	862	614	475
28	382	365	326	309	344	858	685	1,440	1,700	870	566	492
29	362	360	309	312	-----	1,050	671	1,360	1,540	886	497	572
30	362	395	298	326	-----	1,340	671	1,310	1,320	918	458	519
31	351	-----	292	323	-----	1,410	-----	1,190	-----	902	436	-----
TOTAL	12,302	12,160	11,237	12,222	8,474	16,906	29,429	42,426	39,090	34,836	21,406	15,370
MEAN	397	406	362	394	303	545	981	1,369	1,303	1,124	690	512
MAX	485	636	638	648	348	1,410	1,410	2,570	1,850	1,490	894	692
MIN	351	344	280	286	274	292	671	692	870	854	436	395
CFSM	1.84	1.88	1.68	1.82	1.40	2.52	4.54	6.34	6.03	5.20	3.19	2.37
IN.	2.12	2.10	1.94	2.10	1.46	2.91	5.07	7.31	6.73	6.00	3.69	2.65
AC-FT	24,400	24,160	22,290	24,240	16,810	33,530	58,370	84,150	77,540	69,100	42,450	30,490
CAL YR 1965	TOTAL	302,018	MEAN	827	MAX	8,360	MIN	280	CFSM	3.83	IN	52.01
WTR YR 1966	TOTAL	295,875	MEAN	701	MAX	2,570	MIN	274	CFSM	3.25	IN	44.07
									AC-FT	599,100		
									AC-FT	507,500		

12097000 WHITE RIVER AT GREENWATER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	486	436	1,660	783	958	530	464	448	1,400	1,940	886	806
2	572	415	1,380	685	894	514	453	444	1,690	1,990	870	762
3	436	400	1,120	878	918	486	458	497	1,800	2,110	870	692
4	426	385	1,030	854	1,360	464	502	454	1,820	2,090	878	713
5	420	395	926	755	1,300	453	492	590	1,890	1,990	854	748
6	405	385	806	657	1,090	448	470	720	2,040	1,780	846	671
7	395	370	727	584	962	442	460	942	1,940	1,780	790	602
8	410	364	644	578	910	444	502	1,160	1,930	1,530	783	614
9	355	365	602	578	846	470	492	1,230	1,800	1,400	846	578
10	340	375	602	609	783	448	475	1,090	1,890	1,360	878	614
11	340	395	657	926	748	431	470	942	1,690	1,440	894	632
12	325	442	919	814	735	410	475	854	1,680	1,550	902	519
13	308	470	2,020	1,190	405	475	799	1,710	1,520	854	468	
14	300	713	1,920	1,360	748	400	448	830	1,890	1,400	862	448
15	292	720	1,510	1,600	706	410	436	926	2,090	1,280	870	492
16	284	644	1,460	1,330	850	549	431	1,300	2,310	1,250	862	548
17	280	584	1,450	1,020	685	584	420	1,720	2,540	1,230	878	566
18	272	554	1,388	854	762	548	448	1,860	2,480	1,160	950	578
19	276	578	1,330	1,180	678	508	436	1,900	2,890	1,090	854	608
20	458	644	1,410	1,690	632	502	453	2,120	3,120	1,020	814	614
21	380	626	1,190	1,390	608	492	464	2,530	2,960	1,010	776	632
22	685	560	1,020	806	578	620	464	2,740	2,720	1,020	720	572
23	822	519	910	699	554	918	470	2,390	2,340	1,070	727	486
24	685	486	862	638	542	783	475	1,990	2,270	1,150	657	562
25	566	783	783	590	524	685	497	1,680	2,300	1,090	626	486
26	584	783	899	584	514	626	486	1,540	2,350	1,020	832	444
27	548	814	632	788	497	584	508	1,510	2,340	998	878	514
28	492	870	614	1,460	519	560	480	1,540	2,320	974	899	562
29	470	798	664	1,440	-----	530	444	1,680	2,250	974	740	497
30	508	1,260	608	1,310	-----	502	448	1,540	2,120	966	798	470
31	453	-----	602	1,090	-----	480	-----	1,390	-----	926	822	-----
TOTAL	13,573	17,094	32,137	29,720	21,563	16,246	14,036	41,285	66,540	42,098	25,124	17,354
MEAN	438	570	1,037	954	685	524	453	1,332	2,131	1,357	810	578
MAX	822	1,260	2,020	1,690	1,360	918	508	2,570	3,120	2,118	950	806
MIN	272	345	402	578	497	400	420	448	1,400	926	626	448
CFSM	2.03	2.64	4.80	4.44	3.56	2.43	2.17	6.17	9.96	6.28	3.75	2.68
IN.	2.34	2.94	5.53	5.12	3.71	2.80	2.42	7.11	11.12	7.24	4.33	2.99
AC-FT	26,920	33,910	63,740	58,950	42,770	32,220	27,840	81,890	126,000	83,420	49,830	34,420
CAL YR 1966	TOTAL 282,960	MEAN 775	MAX 2,570	MIN 272	CFSM 3.59	IN 48.73	AC-FT 561,300					
WTR YR 1967	TOTAL 334,730	MEAN 917	MAX 3,120	MIN 272	CFSM 4.25	IN 57.65	AC-FT 663,900					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	454	1,440	436	1,060	868	1,060	687	820	2,060	964	799	743
2	420	1,200	484	924	964	1,040	680	757	4,700	1,090	792	694
3	496	1,030	490	860	1,100	1,010	638	750	3,500	1,220	792	592
4	410	900	484	780	1,550	1,100	624	806	2,350	1,310	764	586
5	385	830	484	720	1,240	1,280	624	792	1,890	1,380	780	592
6	370	760	460	680	1,060	1,170	624	743	1,790	1,390	631	604
7	375	700	425	640	956	1,060	598	694	1,680	1,340	645	580
8	380	670	442	620	908	988	574	680	1,550	1,240	624	550
9	355	720	556	590	884	900	574	722	1,430	1,200	645	562
10	350	996	820	570	852	850	604	813	1,430	1,100	715	556
11	617	932	1,150	550	806	810	673	900	1,460	1,070	715	550
12	490	828	860	562	771	780	624	1,000	1,360	1,100	666	508
13	520	760	715	1,240	722	740	586	908	1,220	924	610	484
14	538	900	659	1,980	687	715	580	852	1,140	868	680	538
15	430	813	645	2,290	645	729	574	813	1,110	820	586	680
16	380	710	610	1,720	617	785	544	820	1,160	764	532	624
17	355	640	586	1,360	610	701	508	916	1,240	743	582	889
18	365	580	562	1,180	1,080	638	502	1,120	1,340	750	508	1,500
19	360	530	532	1,700	2,800	592	508	1,420	1,440	785	520	1,200
20	330	500	502	2,750	2,420	574	502	1,890	1,310	758	478	1,000
21	469	480	502	3,640	2,120	562	502	1,680	1,270	722	442	820
22	586	460	843	2,400	1,990	550	496	1,440	1,620	701	425	722
23	722	486	1,080	1,890	2,080	544	514	1,320	1,500	694	490	743
24	556	562	1,710	1,828	1,930	538	508	1,230	1,460	729	729	700
25	701	502	4,640	1,628	1,620	562	508	1,220	1,450	771	1,030	673
26	574	460	4,080	1,410	1,400	544	514	1,160	1,540	799	1,060	645
27	1,850	454	2,840	1,190	1,270	694	502	1,130	1,540	836	892	604
28	2,380	454	2,080	1,060	1,180	900	538	1,160	1,240	900	964	568
29	1,450	466	1,600	1,010	1,090	860	722	1,220	1,040	900	799	556
30	1,540	442	1,330	972	-----	799	688	1,150	948	820	722	544
31	1,510	-----	1,170	900	-----	729	-----	1,100	-----	785	701	-----
TOTAL	20,718	21,185	33,777	40,688	36,180	24,804	17,580	32,034	48,768	29,465	21,164	20,615
MEAN	668	706	1,090	1,300	1,248	800	583	1,033	1,626	950	683	687
MAX	2,380	1,440	4,640	3,640	2,800	1,280	860	1,890	4,700	1,390	1,060	1,500
MIN	330	462	425	550	610	538	496	880	768	694	425	404
CFSM	3.89	3.27	5.05	6.08	5.78	3.70	2.70	4.78	7.33	6.40	3.16	3.10
IN.	3.57	3.65	5.82	7.01	6.23	4.27	3.81	5.52	8.40	5.07	3.65	3.55
AC-FT	41,090	42,020	67,808	80,700	71,760	49,200	34,710	63,540	96,730	58,440	41,900	40,090
CAL YR 1967	TOTAL 347,606	MEAN 952	MAX 4,600	MIN 330	CFSM 4.41	IN 59.87	AC-FT 689,500					
WTR YR 1968	TOTAL 346,900	MEAN 948	MAX 4,700	MIN 330	CFSM 4.39	IN 59.74	AC-FT 680,100					

PUYALLUP RIVER BASIN

12097000 WHITE RIVER AT GREENWATER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	535	746	738	400	334	1,030	786	2,140	980	730	505
2	445	552	730	1,910	354	334	899	1,030	2,210	1,160	702	520
3	445	546	1,140	600	379	334	778	681	2,380	1,020	674	470
4	480	505	1,360	924	376	337	730	642	2,650	962	654	440
5	436	480	1,080	3,400	368	368	723	688	2,960	962	594	424
6	490	470	899	2,420	354	358	730	778	2,610	935	564	428
7	445	455	874	1,910	354	351	709	1,030	2,640	953	570	455
8	408	688	874	1,420	372	344	688	1,500	2,440	971	558	505
9	400	1,280	850	1,180	372	340	702	2,010	2,520	1,010	600	552
10	436	1,070	1,040	1,020	362	340	738	2,390	2,560	1,070	606	588
11	436	2,310	1,110	890	450	334	738	2,380	2,750	1,020	618	618
12	470	926	794	340	354	350	899	2,210	2,580	935	588	564
13	475	1,650	834	754	408	337	971	2,210	2,270	834	618	530
14	455	1,290	770	723	390	340	642	2,170	2,100	778	667	445
15	540	1,100	754	681	379	354	762	2,010	2,000	738	702	416
16	520	944	730	636	368	390	738	1,800	1,880	746	612	412
17	490	688	606	365	345	495	778	1,920	1,940	746	582	534
18	515	874	667	576	365	546	874	1,820	1,920	762	606	810
19	520	850	624	552	365	515	890	1,980	1,920	818	576	648
20	695	858	570	525	358	500	802	1,950	1,760	890	558	520
21	695	874	558	495	358	520	794	2,000	1,590	826	600	424
22	688	1,270	546	480	354	576	971	2,160	1,470	818	606	460
23	642	1,170	564	440	354	576	1,460	2,370	1,470	874	630	552
24	636	1,030	716	424	348	546	1,370	2,670	1,480	908	667	470
25	636	908	681	400	344	546	1,120	2,440	1,270	874	582	445
26	606	850	624	390	340	636	980	2,130	1,140	786	546	393
27	570	842	580	337	340	842	870	1,060	1,070	794	510	379
28	562	786	535	370	337	890	944	1,610	971	786	485	416
29	618	826	495	360	-----	866	917	1,860	935	746	455	460
30	648	778	490	360	-----	1,010	834	2,860	917	738	450	546
31	588	-----	570	370	-----	1,120	-----	2,320	-----	730	465	-----
TOTAL	16,530	29,013	23,577	25,442	10,396	15,719	26,269	55,748	58,513	27,170	18,375	14,929
MEAN	533	967	741	821	371	507	876	1,798	1,950	876	593	498
MAX	695	2,380	1,360	3,400	450	1,120	1,460	2,860	2,960	1,160	730	810
MIN	400	455	490	360	337	334	688	642	917	730	450	379
CFSM	2.47	4.48	3.52	3.80	1.72	2.35	4.06	8.32	9.03	4.06	2.75	2.31
IN.	2.85	5.00	4.06	4.38	1.79	2.71	4.52	9.60	10.08	4.68	3.16	2.57
AC-FT	32,790	57,550	46,760	50,460	20,620	31,180	52,100	110,600	116,100	53,890	36,450	29,610
CAL YR 1968	TOTAL 340,340		MEAN 930	MAX 4,700	MIN 400	CFSM 4.08	IN 58.61	AC-FT 675,100				
WTR YR 1969	TOTAL 321,681		MEAN 881	MAX 3,400	MIN 334	CFSM 4.08	IN 55.40	AC-FT 638,100				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	351	340	396	786	515	440	515	1,520	1,030	667	540
2	546	351	334	386	709	490	436	588	2,030	1,070	667	515
3	470	354	334	386	688	475	420	702	2,560	1,330	681	642
4	416	646	348	358	630	450	424	882	2,670	1,600	738	546
5	386	818	334	330	600	436	450	1,090	2,300	1,610	734	470
6	372	640	326	340	570	497	495	1,010	2,350	1,430	702	588
7	382	520	320	351	564	826	480	908	2,380	1,340	674	762
8	520	465	323	354	618	660	460	890	2,040	1,380	606	564
9	485	450	320	354	667	600	763	908	1,870	1,340	576	465
10	465	428	312	337	723	558	1,100	834	1,850	1,230	600	440
11	436	428	372	334	762	540	866	746	1,400	1,150	636	432
12	416	450	436	326	818	530	730	709	1,260	1,090	654	396
13	400	432	495	351	899	525	654	654	1,250	1,010	642	372
14	393	424	426	702	334	612	600	624	1,260	989	588	372
15	368	424	702	624	935	648	576	681	1,350	1,010	600	396
16	370	408	582	535	1,360	702	535	1,020	1,350	1,120	618	400
17	370	386	520	505	1,260	660	510	1,480	1,420	1,080	582	424
18	368	372	552	1,230	1,030	606	500	1,420	1,640	1,030	558	515
19	368	368	576	2,060	570	570	570	1,350	1,830	1,070	582	470
20	365	386	588	2,180	802	552	490	1,260	1,910	1,040	582	408
21	368	432	695	2,000	738	530	470	1,240	2,100	917	576	372
22	368	396	688	2,100	695	510	455	1,380	2,150	818	630	516
23	372	428	709	2,880	648	500	455	1,450	1,980	786	688	582
24	372	436	606	2,060	618	505	485	1,910	1,880	778	716	490
25	362	404	552	1,640	588	480	480	1,710	1,850	826	660	416
26	354	386	530	1,340	558	475	455	2,050	1,880	908	594	393
27	368	372	490	1,380	552	465	445	1,810	1,810	935	594	396
28	365	362	460	1,100	530	475	436	1,500	1,520	818	588	393
29	354	454	445	926	-----	470	465	1,390	1,690	709	540	393
30	354	351	424	810	-----	455	505	1,360	1,150	642	540	379
31	351	-----	412	810	-----	440	-----	1,300	-----	642	612	-----
TOTAL	12,478	13,022	14,951	29,485	21,064	16,757	16,100	34,941	53,650	32,698	19,445	14,047
MEAN	403	434	482	951	752	541	537	1,127	1,788	1,055	627	468
MAX	600	818	826	2,880	1,360	826	1,100	2,050	2,670	1,610	754	762
MIN	351	351	312	326	530	436	420	515	1,150	642	540	372
CFSM	1.87	2.01	2.23	4.40	3.48	2.50	2.49	5.22	8.28	4.88	2.90	2.17
IN.	2.15	2.24	2.57	5.08	3.63	2.89	2.77	6.02	9.24	5.63	3.35	2.42
AC-FT	24,750	25,830	29,660	58,480	41,780	33,240	31,930	69,310	106,400	64,860	38,570	27,860
CAL YR 1969	TOTAL 293,012		MEAN 803	MAX 3,400	MIN 312	CFSM 3.72	IN 50.46	AC-FT 581,200				
WTR YR 1970	TOTAL 278,638		MEAN 763	MAX 2,880	MIN 312	CFSM 3.53	IN 47.99	AC-FT 552,700				

12097500 GREENWATER RIVER AT GREENWATER, WASH.

LOCATION.--Lat 47°09'13", long 121°38'04", in NW¼NW¼ sec.11, T.19 N., R.9 E., Pierce County, on left bank 0.9 mile east of Greenwater and 1.2 miles upstream from mouth.

DRAINAGE AREA.--73.5 sq mi.

PERIOD OF RECORD.--September 1911 to August 1912 (fragmentary, published as "near Enumclaw"), May 1929 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,725 ft (from topographic map). Prior to Aug. 10, 1912, non-recording gages at approximately present site at different datums. May 1, 1929, to Aug. 14, 1934, water-stage recorder at site 900 ft upstream at different datum.

AVERAGE DISCHARGE.--41 years, 208 cfs (38.43 inches per year, 150,700 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum Discharge	G.H.	Date	Minimum Discharge	G.H.
1966	May 6, 1966	820	3.73	Sept. 30, 1966	39	1.12
1967	May 22, 1967	876	a 3.81	Oct. 18, 19, 1966	33	1.04
1968	Dec. 23, 1967	1,820	5.07	Oct. 9, 10, 1967	37	1.09
1969	Jan. 5, 1969	1,380	4.55	Sept. 16, 1969	41	bl.17
1970	Jan. 23, 1970	780	3.64	(c)	41	d1.16

a Occurred May 21, 1967.

b Occurred Sept. 15, 16, 1969.

c Oct. 17-20, 22-27, 31, Nov. 1-4, 1969, Sept. 14-18, 21, 22, 29, 30, 1970.

d Occurred Oct. 26, 27, Nov. 1-4, 1969.

Period of record: Maximum discharge, 5,360 cfs Nov. 22, 1959 (gage height, 7.67 ft), from rating curve extended above 1,200 cfs on basis of slope-area measurement of peak flow; minimum, 23 cfs Oct. 7, 1934.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1716: 1947(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	48	54	76	50	101	100	506	232	295	190	78	49		
2	47	59	102	51	94	92	533	276	283	205	77	48		
3	46	64	96	54	90	86	450	388	271	265	75	48		
4	46	90	181	51	87	80	392	533	265	262	73	47		
5	49	90	160	50	86	74	385	670	253	240	72	46		
6	61	81	140	66	84	72	426	793	256	235	71	46		
7	59	73	142	82	83	70	497	746	271	220	69	46		
8	51	72	139	105	80	85	524	670	283	208	68	45		
9	51	76	129	100	83	110	538	675	286	194	68	44		
10	49	72	119	92	77	150	574	650	307	186	67	44		
11	47	72	108	105	82	130	528	576	317	178	66	45		
12	48	69	100	140	82	135	470	518	310	170	64	44		
13	60	64	91	205	74	160	403	463	292	164	68	43		
14	57	64	84	240	77	185	378	412	286	166	65	46		
15	71	74	77	220	69	200	371	376	286	156	63	46		
16	71	82	75	200	68	175	374	356	301	148	60	44		
17	86	74	72	170	68	155	371	324	307	138	59	44		
18	80	75	69	155	68	140	340	301	292	133	58	46		
19	99	80	67	130	69	125	308	295	289	126	57	45		
20	89	76	68	120	77	115	293	301	277	119	56	43		
21	78	84	72	115	90	105	267	328	262	112	55	42		
22	71	96	66	105	130	100	259	317	245	108	54	42		
23	67	87	62	105	144	96	245	301	235	105	54	43		
24	63	83	62	96	130	105	245	298	265	103	53	41		
25	60	83	61	87	124	125	259	317	230	100	53	41		
26	58	82	60	84	120	185	259	362	212	95	53	43		
27	57	81	59	84	115	273	245	376	208	88	56	42		
28	58	76	58	84	110	334	237	359	225	87	55	41		
29	56	73	56	91	-----	403	232	342	205	84	53	41		
30	59	72	54	106	-----	488	230	328	194	82	52	40		
31	57	-----	52	107	-----	528	-----	307	-----	80	51	-----		
TOTAL	1,899	2,278	2,757	3,450	2,562	5,181	11,139	13,190	8,008	4,747	1,923	1,325		
MEAN	61.3	75.9	88.9	111	91.5	167	371	425	267	153	62.0	44.2		
MAX	99	96	181	240	144	528	574	793	317	265	78	49		
MIN	46	54	52	50	68	70	230	232	194	80	51	40		
1	83	1.03	1.21	1.51	1.24	2.27	5.05	5.78	3.63	2.08	.84	.60		
2	96	1.15	1.40	1.75	1.30	2.62	5.64	6.68	4.05	2.40	.97	.67		
T	3,770	4,520	5,470	6,840	5,080	10,280	22,090	26,160	15,880	9,420	3,810	2,630		
1965	TOTAL	83,509	MEAN	229	MAX	3,650	MIN	46	CFSM	3.12	IN	42.27	AC-FT	165,600
1966	TOTAL	58,459	MEAN	160	MAX	793	MIN	40	CFSM	2.18	IN	29.59	AC-FT	116,000

PUYALLUP RIVER BASIN

12097500 GREENWATER RIVER AT GREENWATER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	65	297	310	400	167	127	127	460	305	90	48
2	53	62	271	280	360	180	124	128	503	288	87	50
3	45	59	258	350	380	171	124	137	530	274	92	46
4	41	56	223	340	540	163	135	149	951	259	80	47
5	40	58	204	310	520	157	135	154	569	245	79	46
6	39	58	188	280	470	152	130	188	600	231	79	46
7	50	54	176	240	410	147	133	228	600	218	77	44
8	43	52	162	230	370	149	140	296	564	205	75	43
9	38	54	158	230	350	152	140	345	534	196	73	43
10	36	61	146	250	320	144	136	324	491	185	72	44
11	35	56	162	380	310	135	132	285	468	176	69	67
12	36	73	200	350	310	130	132	268	455	170	68	97
13	38	74	300	500	360	125	136	258	456	162	67	60
14	36	121	455	580	310	122	129	263	479	155	64	50
15	35	134	362	680	290	125	124	279	512	149	63	47
16	34	138	336	568	278	145	120	401	549	144	62	43
17	35	129	351	450	280	147	117	565	585	139	60	42
18	34	117	351	350	310	152	125	604	609	136	59	42
19	35	108	363	400	280	144	129	616	619	130	58	42
20	75	106	432	640	250	141	133	718	626	129	58	41
21	61	104	387	580	234	137	141	845	618	129	56	39
22	68	96	354	350	218	143	140	853	596	121	56	38
23	182	92	296	280	203	178	138	706	528	117	55	37
24	142	88	270	250	196	183	137	676	476	113	54	36
25	110	217	240	240	192	174	141	581	439	109	52	36
26	108	250	220	230	185	167	138	515	412	106	51	36
27	99	231	200	280	178	158	143	489	393	103	50	35
28	87	184	180	180	182	151	138	369	369	108	51	35
29	80	239	280	560	-----	148	134	524	350	97	50	36
30	76	284	190	520	-----	140	129	520	328	94	48	37
31	69	-----	210	450	-----	133	-----	479	-----	92	48	-----
TOTAL	1,990	3,490	8,174	12,050	8,678	4,487	3,980	13,080	15,278	5,875	1,996	1,355
MEAN	64.2	116	264	389	310	151	133	422	509	164	64.4	45.2
MAX	162	284	455	680	540	187	143	853	626	305	90	97
MIN	34	52	146	230	178	122	117	127	328	92	48	35
CFSM	.87	1.58	3.59	5.29	4.22	2.05	1.81	5.74	6.93	2.23	.88	.62
IN.	1.01	1.77	4.14	6.10	4.39	2.37	2.01	6.62	7.73	2.57	1.01	.69
AC-FT	3,950	6,920	16,210	23,980	17,210	9,300	7,890	25,940	30,380	10,070	3,960	2,690
CAL YR 1966	TOTAL 65,179	MEAN 179	MAX 793	MIN 34	CFSM 2.44	IN 32.99	AC-FT 129,300					
WTR YR 1967	TOTAL 79,833	MEAN 219	MAX 853	MIN 34	CFSM 2.98	IN 40.41	AC-FT 158,300					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	203	86	369	254	314	194	262	297	144	62	84
2	40	172	86	319	252	300	193	239	387	138	61	81
3	59	148	87	263	272	289	186	225	432	133	60	74
4	55	129	87	258	319	289	182	229	413	127	59	71
5	45	114	87	241	384	301	182	228	391	124	58	67
6	43	106	82	219	278	289	187	218	384	119	58	65
7	43	100	79	210	258	272	196	210	363	114	57	63
8	40	96	77	198	243	255	190	207	345	111	56	62
9	38	103	119	195	231	240	193	210	317	108	54	60
10	38	144	233	184	218	228	208	221	295	105	53	59
11	60	158	380	172	207	218	229	237	289	103	52	58
12	50	140	253	160	198	209	217	252	280	108	51	57
13	58	129	198	189	190	199	197	244	259	99	50	56
14	79	124	172	236	182	191	187	232	245	98	70	62
15	59	120	158	292	173	187	181	221	233	96	75	79
16	49	119	140	287	166	189	172	216	218	94	62	73
17	45	111	135	254	163	178	160	219	213	90	59	189
18	45	108	126	238	231	160	155	236	203	87	56	380
19	45	102	117	290	647	160	153	270	280	87	58	288
20	62	98	109	483	681	154	149	361	196	85	58	222
21	53	95	186	783	618	150	145	382	190	82	54	188
22	80	92	133	629	661	146	142	367	203	79	52	171
23	126	91	172	522	607	143	146	358	190	77	56	192
24	82	112	359	562	557	141	144	364	180	75	73	182
25	96	105	1,250	529	489	145	149	338	174	73	85	165
26	64	98	1,300	466	430	143	159	327	164	71	100	111
27	184	93	896	404	386	175	155	311	160	70	88	59
28	298	92	699	362	353	260	169	307	160	68	125	25
29	184	95	565	326	350	250	229	301	164	66	110	120
30	243	89	473	301	-----	-----	296	296	154	65	95	114
31	228	-----	410	276	-----	207	-----	281	-----	63	86	-----
TOTAL	2,607	3,486	9,184	10,227	9,898	6,623	5,419	8,349	7,699	2,959	2,093	3,701
MEAN	84.1	116	296	330	361	214	181	269	257	95.3	67.5	123
MAX	298	203	1,380	783	681	218	270	382	432	164	125	380
MIN	38	92	177	168	163	141	142	207	154	63	50	56
CFSM	1.14	1.58	4.03	4.49	4.64	2.91	2.46	3.66	3.50	1.30	.92	1.67
IN.	1.32	1.76	4.45	5.18	5.01	3.35	2.74	4.23	3.90	1.50	1.06	1.87
AC-FT	5,170	6,910	18,220	20,290	19,630	13,140	10,790	16,560	15,270	5,870	4,150	7,340
CAL YR 1967	TOTAL 81,456	MEAN 223	MAX 1,300	MIN 35	CFSM 3.07	IN 41.23	AC-FT 161,600					
WTR YR 1968	TOTAL 72,245	MEAN 197	MAX 1,300	MIN 38	CFSM 2.68	IN 36.56	AC-FT 143,300					

12097500 GREENWATER RIVER AT GREENWATER, WASH. - CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	137	244	197	118	95	349	288	610	184	80	50
2	102	134	230	186	114	94	302	269	590	190	79	49
3	98	135	309	159	111	95	262	255	590	176	78	49
4	100	127	482	215	109	110	235	245	609	176	78	49
5	95	121	397	904	106	125	228	247	625	170	83	49
6	112	117	327	954	103	123	240	281	592	164	77	47
7	109	114	284	711	101	112	236	371	545	160	75	46
8	102	159	274	500	103	104	222	545	506	154	74	46
9	98	279	268	401	103	98	225	746	485	148	72	45
10	116	278	286	346	101	94	247	926	484	144	69	44
11	116	349	302	307	140	91	252	920	440	144	68	44
12	121	444	277	273	132	88	296	872	415	138	67	43
13	129	372	249	248	120	89	360	872	394	133	66	43
14	126	342	231	229	110	89	310	854	373	127	65	43
15	158	305	218	214	101	93	270	800	342	124	64	43
16	157	273	210	201	101	104	252	735	310	119	64	41
17	149	249	192	193	101	130	258	680	292	116	62	44
18	155	246	187	184	104	164	291	691	274	112	60	58
19	151	236	176	178	105	165	304	729	259	109	60	53
20	206	229	166	172	103	160	290	746	245	106	60	54
21	227	228	160	164	102	162	288	740	233	102	59	51
22	223	324	154	159	101	165	340	788	228	100	57	56
23	206	345	151	152	98	170	493	836	235	98	57	62
24	194	316	155	148	98	183	500	872	259	96	55	54
25	189	283	158	142	98	181	427	824	230	93	54	50
26	180	260	150	138	97	202	370	735	223	91	54	46
27	168	275	149	131	97	284	324	650	213	89	53	44
28	160	287	138	128	96	292	325	567	205	88	53	45
29	153	279	134	126	-----	291	325	572	198	86	52	44
30	156	264	141	122	-----	335	305	735	188	83	52	56
31	146	-----	172	120	-----	375	-----	670	-----	82	51	-----
TOTAL	4,510	7,507	6,971	8,302	2,973	4,863	9,126	20,061	11,172	3,902	1,998	1,448
MEAN	145	250	225	268	106	157	304	647	372	126	64.5	48.3
MAX	227	444	482	954	140	375	500	926	625	198	83	62
MIN	95	114	134	120	96	88	222	245	188	82	51	41
CFSM	1.97	3.40	3.05	3.65	1.44	2.14	4.14	8.80	5.06	1.71	0.86	0.66
IN-	2.28	3.40	3.35	4.20	1.50	2.46	4.62	10.15	5.65	1.97	1.01	.73
AC-FT	8,950	14,890	13,830	16,470	5,900	9,650	18,100	39,790	22,160	7,740	3,960	2,870
CAL YR 1968	TOTAL	75,956	MEAN 208	MAX 783	MIN 50	CFSM 2.83	IN 38.44	AC-FT 150,700				
WTR YR 1969	TOTAL	82,833	MEAN 227	MAX 954	MIN 41	CFSM 3.09	IN 41.92	AC-FT 164,380				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	42	55	75	227	158	140	236	464	200	64	42
2	86	41	54	71	212	150	140	257	547	185	80	42
3	69	41	54	71	206	144	132	304	590	176	78	49
4	58	63	71	66	188	136	130	368	690	168	64	46
5	52	100	70	63	178	136	136	408	660	158	61	44
6	49	71	62	62	165	136	153	368	650	148	60	49
7	48	63	59	62	168	195	150	329	630	142	59	46
8	59	62	57	60	175	160	144	304	570	176	59	56
9	65	58	55	60	215	163	206	294	512	128	57	52
10	60	56	54	58	230	155	311	278	440	122	55	48
11	55	56	55	56	245	148	287	260	412	116	55	46
12	55	55	68	56	251	144	254	251	368	110	54	44
13	50	55	78	61	260	140	230	236	343	106	53	43
14	50	55	136	150	245	142	209	218	329	103	52	42
15	45	55	132	173	294	158	193	227	322	98	51	41
16	43	57	112	138	448	170	178	325	318	95	50	41
17	42	56	100	122	424	170	168	452	308	92	49	41
18	41	55	95	336	350	160	160	448	311	88	49	44
19	42	55	92	588	297	153	168	420	322	85	49	46
20	42	61	95	655	275	148	155	396	322	82	48	43
21	42	80	112	570	251	144	146	384	332	80	48	42
22	42	73	126	579	230	138	140	396	332	78	46	66
23	42	77	134	745	212	136	140	428	318	76	46	66
24	41	79	120	601	198	134	148	452	301	75	45	53
25	42	72	107	496	188	128	150	504	284	76	45	48
26	41	68	104	428	178	130	144	592	272	76	45	46
27	41	65	408	175	124	136	138	561	254	75	44	44
28	44	62	85	332	165	142	132	496	236	71	44	43
29	43	60	82	278	-----	150	142	672	233	69	43	42
30	43	58	79	242	-----	144	230	460	224	67	43	41
31	42	-----	77	230	-----	140	-----	436	-----	65	42	-----
TOTAL	1,521	1,848	2,674	7,892	6,668	4,591	5,158	11,552	11,974	3,345	1,628	1,415
MEAN	49.1	61.4	86.3	255	218	148	172	373	399	108	52.5	47.2
MAX	69	100	136	745	448	195	311	592	690	200	80	68
MIN	41	41	54	56	165	124	130	218	224	65	42	41
CFSM	.67	.84	1.17	3.47	3.24	2.01	2.34	5.07	5.43	1.47	.71	.64
IN-	.77	.94	1.35	3.99	3.37	2.32	2.61	5.85	6.06	1.69	.82	.72
AC-FT	3,020	3,670	5,300	15,650	13,230	9,110	10,230	22,910	23,750	6,630	3,230	2,810
CAL YR 1969	TOTAL	69,888	MEAN 191	MAX 954	MIN 41	CFSM 2.60	IN 35.37	AC-FT 136,600				
WTR YR 1970	TOTAL	60,266	MEAN 165	MAX 745	MIN 41	CFSM 2.46	IN 30.50	AC-FT 119,500				

PUYALLUP RIVER BASIN

12098000 MUD MOUNTAIN LAKE NEAR BUCKLEY, WASH.
(Formerly published as Mud Mountain Reservoir near Buckley)

LOCATION.--Lat 47°08'27", long 121°55'48", in NE¼ sec.17, T.19 N., R.7 E., Pierce County, on left bank of reservoir just upstream from Mud Mountain Dam on White River, 5 miles southeast of Buckley, 5.6 miles downstream from Clearwater River, and at mile 29.7.

DRAINAGE AREA.--400 sq mi.

PERIOD OF RECORD.--October 1943 to September 1970. Monthend contents only October 1943 to September 1944, published in WSP 1316. Formerly published as Mud Mountain Reservoir near Buckley.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Maximums and minimums (contents in acre-feet, elevation in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum Contents	Elevation	Date	Minimum Contents	Elevation
1966	Apr. 12, 1966	18,030	1,072.0	Sept.20-22, 26-30, 1966	35	906.0
1967	Jan. 6, 1967	24,940	1,090.6	(a)	35	906.0
1968	Jan. 13, 1968	24,820	1,090.3	Sept.13, 1968	218	932.0
1969	May 25, 1969	27,210	1,095.9	Sept. 14-8, 14-17, 1969	20	b901.9
1970	Jan. 7, 1970	8,900	1,036.0	Aug. 10-12, 14, 15, 17, 1970	27	c904.0

a Oct. 1, 3-19, 21, Nov. 8, 9, 1966.

b Occurred Sept. 15, 1969.

c Occurred Aug. 10-12, 14, 17, 1970.

Period of record: Maximum contents observed since dam was completed, 44,130 acre-ft Jan. 31, 1965 (elevation, 1,130.0 ft); no pool at times in some years.

REMARKS.--Lake, for flood control, is formed by an earthfill dam. Embankment completed and storage began on small scale in 1942. Capacity, 106,000 acre-ft between elevations 895 (invert of outlet tunnel) and 1,215 ft (spillway crest). Storage is not retained but is dissipated as soon after a flood as is possible, without creating damaging flows downstream, in order to have the maximum capacity available for any following flood which might develop. Figures given herein represent total contents.

COOPERATION.--Records of lake elevations and capacity table furnished by Corps of Engineers, based on area maps in 1939.

Capacity table, water years 1966-70 (elevation, in feet, and contents, in acre-feet)

900	14	930	191	985	2,510
905	31	935	266	1,000	3,830
910	52	940	366	1,020	6,260
915	77	945	491	1,040	9,680
920	107	955	817	1,070	17,380
925	141	970	1,520	1,100	29,050

CONTENTS, IN ACRE-FEET, AT 1200 HOURS, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	323	266	72	107	107	107	5,500	7,650	323	329	311	158
2	284	158	72	107	107	107	8,080	7,050	323	348	311	89
3	284	1,260	72	107	107	107	9,950	6,360	323	366	311	137
4	284	158	107	107	107	107	10,340	7,320	323	371	311	120
5	817	158	107	107	107	107	10,640	8,640	323	375	311	120
6	1,310	158	107	134	107	107	10,730	10,200	313	373	311	120
7	2,490	158	107	134	107	107	11,620	11,170	313	340	311	191
8	1,880	158	107	134	107	107	12,940	9,780	351	338	311	817
9	1,830	158	107	134	107	107	14,340	8,240	353	336	307	77
10	1,830	158	107	107	107	107	16,140	8,770	378	334	307	77
11	1,830	158	107	107	107	107	17,320	8,170	368	331	307	77
12	1,850	158	107	107	107	107	18,030	6,260	364	284	307	52
13	1,940	158	107	413	107	107	17,900	4,060	362	313	307	43
14	1,940	158	107	691	107	107	17,740	3,320	371	340	307	43
15	921	158	107	218	107	107	17,740	2,680	418	327	307	43
16	438	158	107	134	107	107	17,870	2,140	950	327	307	43
17	413	158	107	107	107	107	18,000	266	941	327	307	43
18	413	107	107	107	107	107	17,870	266	945	323	307	47
19	413	52	107	107	107	107	17,350	340	441	323	307	43
20	413	52	107	107	107	107	17,190	334	394	315	307	35
21	413	62	107	107	107	107	16,850	319	344	311	307	35
22	323	72	107	107	107	107	15,540	327	329	311	307	35
23	1,520	72	107	107	107	107	14,260	323	323	313	307	43
24	2,010	72	107	107	107	107	12,920	323	334	315	307	43
25	366	72	107	107	107	107	11,920	327	329	313	307	39
26	266	72	107	107	107	107	11,170	519	325	315	307	35
27	266	72	107	107	107	107	10,380	829	369	317	307	35
28	266	72	107	107	107	107	9,560	708	872	315	307	35
29	266	72	107	107	107	107	8,810	648	971	313	307	35
30	1,020	72	107	107	107	1,050	8,130	597	342	313	307	35
31	266	-----	107	107	107	3,460	-----	342	-----	311	307	-----
MAX	2,490	1,260	107	691	107	3,460	18,030	11,170	971	375	311	817
MIN	266	52	72	107	107	107	5,500	266	313	284	307	35
(+)	935.0	914.0	920.0	920.0	920.0	1,005.0	1,030.3	938.4	938.6	937.4	931.9	906.0
(-)	-137	-194	+35	0	0	+4,240	+3,520	-7,540	+5	-25	-94	-182

CAL YR 1965 MAX 44,130 MIN 52 + -2,240
WTR YR 1966 MAX 18,030 MIN 35 + -368

+ ELEVATION, IN FEET, AT 2400 HOURS, ON LAST DAY OF MONTH.
+ CHANGE IN CONTENTS, IN ACRE-FEET.

12098000 MUD MOUNTAIN LAKE NEAR BUCKLEY, WASH.--CONTINUED

CONTENTS, IN ACRE-FeET, AT 1200 HOURS, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	37	1,870	211	516	220	152	156	23,800	1,530	204	1,940
2	43	37	1,570	196	226	218	153	155	24,000	1,270	204	218
3	35	37	539	726	222	215	153	155	24,410	1,210	204	1,820
4	35	36	254	787	1,440	214	153	157	24,690	1,230	168	1,880
5	35	36	135	644	1,850	211	154	158	24,780	1,470	158	1,940
6	35	36	123	266	1,520	210	154	158	24,940	1,040	154	1,930
7	35	36	120	220	1,77	166	155	159	24,570	923	149	1,980
8	35	35	117	218	896	153	154	165	23,880	270	149	1,930
9	35	35	114	238	221	154	154	491	22,610	221	149	1,920
10	35	37	115	221	221	154	154	366	20,880	218	149	1,900
11	35	36	116	1,670	221	154	154	244	19,250	221	145	1,930
12	35	38	126	1,610	220	153	154	199	19,110	215	143	1,920
13	35	38	1,730	1,900	1,020	153	155	548	18,030	323	143	1,930
14	35	43	3,080	2,200	448	152	155	220	15,400	3,150	141	1,930
15	35	45	1,770	2,310	226	152	154	210	13,800	1,140	83	1,940
16	35	46	1,600	2,130	222	154	154	198	12,570	218	77	1,940
17	35	46	1,680	1,820	222	160	156	2,094	12,570	641	72	1,970
18	35	46	1,620	4,020	505	154	156	4,970	12,700	2,010	62	1,960
19	35	45	1,360	3,990	228	153	155	8,600	10,200	2,000	67	1,960
20	40	46	1,850	3,020	1,070	151	155	10,200	11,510	2,010	72	1,970
21	35	46	1,610	1,140	226	204	154	13,460	20,590	2,040	77	1,970
22	40	43	817	691	222	151	155	17,710	21,250	641	77	1,980
23	44	42	211	179	220	829	154	21,180	18,230	366	80	1,980
24	60	40	195	177	218	160	154	23,840	13,860	249	83	1,970
25	39	116	194	177	220	158	155	24,370	8,170	218	82	1,970
26	38	674	192	176	220	157	155	24,160	6,700	218	311	1,970
27	39	191	191	179	218	155	157	23,090	9,970	215	1,680	1,960
28	39	438	189	2,070	215	154	156	23,560	2,670	207	1,690	1,960
29	38	62	194	1,910	-----	151	157	24,120	1,810	207	1,940	1,940
30	39	844	192	1,810	-----	151	157	24,120	1,810	205	1,940	1,910
31	38	-----	194	1,460	-----	151	-----	24,000	-----	204	1,950	-----
MAX	64	844	3,080	4,020	1,850	829	157	24,370	24,940	3,150	1,950	1,980
MIN	35	35	114	176	215	151	152	155	1,810	204	62	218
(+)	906.7	965.5	930.8	957.6	931.9	926.2	926.8	1,088.0	972.5	931.0	977.0	976.2
(*)	+3	+1,240	-1,080	+720	-704	-66	+5	+23,720	-22,210	-1,470	+1,740	-50

CAL YR 1966 MAX 18,030 MIN 35 * +94
WTR YR 1967 MAX 24,940 MIN 35 * +1,860

† ELEVATION, IN FEET, AT 2400 HOURS, ON LAST DAY OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-FeET.

CONTENTS, IN ACRE-FeET, AT 1200 HOURS, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,880	2,440	2,100	2,590	2,500	694	587	554	7,130	779	241	325
2	1,890	2,250	2,100	2,570	2,520	661	587	548	16,570	548	288	325
3	1,900	2,170	2,100	2,470	2,680	661	563	542	17,640	548	286	317
4	1,940	2,160	2,100	2,470	2,930	664	560	603	17,840	548	284	344
5	1,900	2,160	2,100	2,450	2,510	708	566	609	20,300	548	284	313
6	1,900	2,150	2,100	2,390	464	691	548	612	21,920	548	277	311
7	1,890	2,030	2,100	2,360	464	674	606	505	23,760	554	273	319
8	1,900	2,020	2,100	2,360	469	661	600	502	23,800	578	266	319
9	1,890	2,030	2,100	2,720	569	648	597	491	23,400	584	268	327
10	1,890	2,210	2,530	4,760	534	631	594	497	22,690	566	266	315
11	2,100	2,230	2,870	5,620	519	622	578	508	23,080	554	266	226
12	2,110	2,290	2,620	6,470	1,280	615	584	505	24,410	560	264	222
13	2,110	2,220	2,450	5,370	491	612	587	502	24,820	575	264	218
14	2,140	2,180	2,350	5,940	528	606	594	519	24,780	603	275	221
15	2,010	2,260	2,320	5,890	519	603	587	525	23,400	594	279	230
16	2,000	2,220	2,320	2,830	522	619	581	519	21,700	554	249	249
17	1,980	2,140	2,290	3,360	519	619	513	522	20,410	548	254	256
18	1,960	2,140	2,220	2,730	525	635	511	536	19,250	531	261	2,110
19	1,960	2,130	2,170	2,870	3,080	597	508	560	18,600	525	266	1,500
20	1,960	2,120	2,080	3,150	2,670	590	488	992	17,770	519	263	486
21	2,040	2,110	2,060	3,880	2,380	590	488	1,090	16,750	516	271	454
22	2,230	2,100	2,220	3,370	2,590	587	483	1,490	15,900	513	259	371
23	2,350	2,100	2,720	3,130	2,360	584	486	1,880	16,020	508	221	323
24	2,140	2,120	3,140	4,350	2,440	584	486	2,270	15,690	505	259	319
25	2,160	2,140	4,740	3,190	1,840	587	488	2,400	14,180	513	401	389
26	2,130	2,110	10,500	2,890	1,520	590	489	2,380	12,940	502	389	421
27	2,190	2,100	4,580	2,720	880	600	525	2,350	11,970	502	364	413
28	3,190	2,100	4,690	2,570	654	1,200	525	5,420	10,770	508	336	389
29	2,510	2,100	3,000	2,570	661	2,030	534	6,280	4,240	513	334	355
30	3,460	2,100	2,910	2,560	-----	1,350	551	6,580	654	464	331	348
31	2,900	-----	2,860	2,510	-----	691	-----	6,960	-----	233	327	-----
MAX	3,460	2,440	10,500	6,470	3,080	2,030	606	6,960	24,820	779	401	2,110
MIN	1,880	2,020	2,060	2,360	464	584	483	491	654	233	221	218
(+)	987.0	979.4	987.8	984.9	951.1	950.0	947.2	1,025.3	952.3	933.3	938.1	936.7
(*)	+780	-570	+630	-230	-1,820	-36	-87	+6,500	-6,330	-480	+87	+13

CAL YR 1967 MAX 24,940 MIN 62 * +2,530
WTR YR 1968 MAX 24,820 MIN 218 * -1,552

† ELEVATION, IN FEET, AT 2400 HOURS, ON LAST DAY OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-FeET.

PUYALLUP RIVER BASIN

12098000 MUD MOUNTAIN LAKE NEAR BUCKLEY, WASH.--CONTINUED

CONTENTS, IN ACRE-FEET, AT 1200 HOURS, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	327	204	353	204	1,020	154	2,700	175	17,130	403	107	20
2	323	199	357	204	1,160	154	2,960	172	11,620	406	104	22
3	327	204	411	204	674	141	864	170	7,160	408	101	22
4	264	190	1,770	403	389	137	204	164	5,830	408	95	20
5	327	191	1,330	5,100	364	134	168	164	8,100	403	1,210	20
6	353	191	413	3,750	303	134	178	168	8,298	389	62	20
7	249	168	360	3,378	303	134	169	106	7,950	380	52	20
8	241	158	408	3,978	303	134	168	937	5,940	378	52	20
9	233	400	375	1,520	323	134	144	2,080	5,030	355	52	21
10	204	288	423	684	303	127	170	2,480	4,420	371	57	21
11	273	722	569	534	344	127	168	2,630	3,730	362	58	21
12	275	3,030	394	519	334	125	170	3,320	2,720	215	31	21
13	280	2,780	309	1,210	344	126	179	8,280	1,700	210	218	21
14	277	979	364	434	249	124	175	12,380	1,540	284	31	20
15	280	364	357	520	240	127	168	15,450	1,290	287	31	20
16	288	362	357	511	275	130	166	17,540	856	205	31	20
17	284	348	323	508	279	144	168	18,900	772	204	31	20
18	280	371	323	502	141	163	175	20,340	747	149	364	137
19	282	381	319	502	141	158	172	22,690	743	143	31	77
20	327	357	313	502	130	154	170	25,360	528	144	29	69
21	344	353	313	494	250	323	168	27,160	438	146	31	67
22	351	345	309	497	1,410	1,610	168	23,920	418	147	28	67
23	344	313	311	494	1,710	2,090	164	25,320	451	153	27	72
24	344	316	319	497	1,850	1,790	1,000	26,300	1,240	127	31	74
25	264	375	303	825	1,830	2,220	1,150	27,210	448	128	32	67
26	263	355	303	872	1,020	2,330	644	26,770	436	127	29	62
27	261	380	301	896	1,650	2,500	403	25,320	408	126	29	52
28	264	364	299	809	158	3,080	273	25,230	417	122	29	65
29	254	362	293	743	2,540	2,004	204	25,110	403	141	31	54
30	233	364	284	794	2,480	179	24,980	401	127	127	27	62
31	211	-----	204	876	-----	2,080	-----	22,000	-----	802	26	-----
MAX	353	3,030	1,770	5,180	1,850	3,080	2,060	27,210	17,130	802	1,210	107
MIN	211	158	284	204	138	126	164	401	126	126	26	20
(†)	931.3	939.7	936.0	958.2	925.6	988.0	928.6	1,076.5	941.6	936.6	902.6	913.6
(#)	-130	+151	-75	+661	-789	+2,590	-2,570	+19,380	-19,160	-108	-272	+47

CAL YR 1968 MAX 24,820 MIN 158 # -2,450
WTR YR 1969 MAX 27,210 MIN 20 # -268

† ELEVATION, IN FEET, AT 2400 HOURS, ON LAST DAY OF MONTH.
CHANGE IN CONTENTS, IN ACRE-FEET.

CONTENTS, IN ACRE-FEET, AT 1200 HOURS, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	1,320	62	65	701	75	35	75	394	77	32	50
2	76	2,420	61	64	134	74	36	64	1,420	78	33	48
3	70	3,430	62	64	80	74	35	87	3,430	56	32	70
4	67	1,600	62	62	79	62	35	138	6,460	186	33	60
5	67	52	62	61	79	43	36	211	7,820	266	33	49
6	64	548	62	60	78	35	37	149	8,060	76	33	70
7	62	154	62	60	77	113	37	87	0,900	72	32	273
8	72	130	62	61	80	74	36	85	0,490	64	31	92
9	39	107	62	62	81	45	40	84	6,940	64	29	58
10	40	89	60	62	83	1,230	1,250	77	5,640	62	27	54
11	41	89	59	61	84	3,790	433	62	5,190	61	27	42
12	39	89	63	60	84	2,710	51	60	5,480	62	27	46
13	38	86	65	70	85	264	62	58	3,260	59	29	49
14	38	83	70	4,410	83	147	52	58	384	817	27	48
15	37	81	73	3,730	84	63	43	58	140	168	27	44
16	37	81	70	418	1,220	64	41	64	143	95	28	43
17	37	81	68	138	1,880	47	38	660	124	97	27	43
18	37	81	72	1,290	945	45	36	872	317	107	48	65
19	37	80	74	2,700	82	45	41	1,250	732	60	48	72
20	37	80	77	2,830	B1	46	39	307	904	95	48	58
21	37	83	77	2,490	80	45	37	158	1,270	43	48	50
22	37	81	79	2,230	79	45	36	243	2,040	41	54	52
23	37	84	81	3,000	79	31	35	428	1,990	39	65	139
24	37	82	88	2,420	78	33	36	560	1,370	39	76	66
25	37	81	76	2,100	77	33	37	825	844	39	65	56
26	35	80	75	2,910	76	33	37	1,820	641	43	60	54
27	35	79	75	4,800	76	33	36	2,520	688	31	51	55
28	36	78	74	5,320	76	45	35	1,710	179	33	51	68
29	35	67	67	3,650	-----	43	37	389	82	31	49	54
30	35	62	66	1,640	-----	39	83	1,030	79	31	55	52
31	35	-----	66	872	-----	36	-----	353	-----	32	62	-----
MAX	77	3,430	81	5,320	1,880	3,790	1,250	2,520	8,900	817	76	273
MIN	35	52	59	60	76	31	35	58	79	31	27	42
(†)	936.1	912.0	912.6	954.1	914.6	906.1	915.3	940.3	915.2	905.2	910.9	910.0
(#)	+216	-224	+3	+718	-708	-40	+44	+294	-295	-46	+24	-4

CAL YR 1969 MAX 27,210 MIN 20 # -219
WTR YR 1970 MAX 8,900 MIN 27 # -18

† ELEVATION, IN FEET, AT 2400 HOURS, ON LAST DAY OF MONTH.
CHANGE IN CONTENTS, IN ACRE-FEET.

12098500 WHITE RIVER NEAR BUCKLEY, WASH.

LOCATION (REVISED).--Lat 47°09'05", long 121°56'55", in SHOWN sec. 8, T. 19 N., R. 7 E., King County, on right bank 0.4 mile upstream from Red Creek, 1.7 miles downstream from Mud Mountain Dam, 3.8 miles east of Buckley, 7.4 miles downstream from Clearwater River, and at mile 27.9.

DRAINAGE AREA.--401 sq mi.

PERIOD OF RECORD.--October 1928 to November 1933, October 1938 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Corps of Engineers bench mark). Oct. 26 to Dec. 9, 1928, nonrecording gage and Dec. 9, 1928, to Nov. 30, 1933, water-stage recorder, at site 3 miles upstream at different datum. Nov. 26, 1938, to Feb. 14, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--37 years, 1,439 cfs (48.73 inches per year, 1,043,000 acre-ft per year), adjusted for storage since December 1943.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, elevation in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum		Date	Minimum		Minimum daily	
		Disch.	Elev.		Disch.	Elev.	Date	Disch.
1966	May 7, 1966	4,080	803.91	July 11, 1966	158	798.86	Oct. 23, 1965	464
1967	Dec. 14, 1966	5,600	804.85	Feb. 17, 1967	71	798.26	Oct. 26, 1967	354
1968	Dec. 26, 1967	9,620	806.49	July 1, 1968	56	798.00	Oct. 10, 1967	448
1969	Jan. 5, 1969	10,500	806.81	Aug. 13, 1969	39	798.14	Sept. 16, 1969	449
1970	Jan. 20, 1970	7,530	807.18	June 12, 1970	39	798.18	Nov. 2, 1969	81

a Occurred Aug. 26, 1967.

b Occurred Dec. 25, 1967.

c Occurred Mar. 10, 1970.

Period of record: Maximum discharge, 17,000 cfs Feb. 26, 1932 (gage height, 17.5 ft, site and datum then in use), from rating curve extended above 3,500 cfs; probably no flow for part of each day Oct. 1, 2, 7, 8, Nov. 14, Dec. 1, 5, 15, 1958, Jan. 3, Mar. 24, June 8, Aug. 19, 1959; minimum daily, 59 cfs June 25, 1957, Mar. 26, 1958.

Flood in December 1933 reached a stage of 23.4 ft, from floodmarks, at former site (discharge, 28,000 cfs, from rating curve extended above 3,500 cfs).

REMARKS.--Records good. No diversion from basin above station. Flow regulated since 1942 by Mud Mountain Lake (see station 12098000) for flood control. Storage is not retained, and observed annual runoff closely represents natural runoff of basin.

COOPERATION.--Water-stage recorder inspected by employees of Corps of Engineers.

REVISIONS.--WSP 1246: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	481	593	576	523	746	714	2,020	1,300	1,530	1,650	1,070	567
2	683	895	772	532	693	642	2,000	1,640	1,480	1,580	1,050	630
3	683	895	730	562	637	611	1,960	1,700	1,410	1,950	1,060	825
4	542	1,100	1,480	523	642	566	1,930	1,960	1,340	1,960	1,070	775
5	480	979	1,230	631	636	566	1,880	2,860	1,270	1,900	962	750
6	532	858	1,060	1,490	626	571	1,900	3,660	1,380	1,900	935	750
7	557	751	1,090	1,480	621	571	1,920	4,070	1,590	1,780	935	475
8	626	683	1,020	1,620	596	616	1,960	3,950	1,800	1,750	852	890
9	642	647	946	1,380	601	1,100	1,990	3,390	1,840	1,800	935	715
10	591	611	880	1,180	571	1,230	2,020	3,140	2,070	1,830	982	695
11	528	616	796	1,200	611	1,060	2,070	3,070	2,230	1,740	930	670
12	599	561	1,250	1,250	631	1,810	2,080	2,970	2,140	1,660	825	572
13	601	537	667	1,950	576	1,300	1,960	2,960	1,900	1,680	874	512
14	611	596	616	2,120	601	1,560	1,788	2,840	1,930	1,820	854	612
15	1,140	626	552	1,800	537	1,520	1,720	1,900	2,040	1,760	854	598
16	777	662	552	1,400	542	1,310	1,720	2,210	2,310	1,600	858	554
17	777	616	513	1,200	557	1,130	1,720	1,810	2,310	1,520	825	547
18	677	948	523	1,090	532	1,040	1,720	1,810	2,310	1,440	810	735
19	804	1,160	504	962	528	1,030	1,560	1,400	2,220	1,400	829	634
20	751	979	509	880	591	957	1,460	1,520	1,990	1,230	795	567
21	730	896	566	837	642	902	1,690	1,760	1,790	1,200	758	608
22	669	853	590	788	767	821	1,810	1,690	1,620	1,200	778	680
23	664	703	566	756	875	815	1,790	1,590	1,940	1,190	705	966
24	1,080	724	518	709	815	848	1,750	1,520	1,620	1,160	770	795
25	571	714	481	688	783	966	1,670	1,700	1,460	1,100	605	634
26	537	693	468	657	746	1,190	1,600	2,100	1,440	1,050	770	645
27	703	523	523	662	804	1,560	1,540	2,230	1,510	1,860	790	612
28	918	631	703	667	815	1,740	1,408	2,020	2,210	1,090	795	603
29	743	596	657	714	-----	2,010	1,610	1,870	2,300	1,070	837	695
30	646	566	596	794	-----	2,190	1,340	1,800	1,790	1,108	596	644
31	684	-----	547	821	-----	2,160	-----	1,650	-----	1,090	582	-----
TOTAL	20,000	22,432	21,031	31,046	18,322	34,284	53,470	68,220	54,560	46,120	28,327	19,783
MEAN	671	748	704	1,027	654	1,106	1,782	2,281	1,819	1,468	951	629
MAX	1,140	1,160	1,480	2,120	875	2,190	2,080	4,070	2,440	1,950	1,070	836
MIN	464	537	468	523	528	566	1,940	1,300	1,270	1,050	542	475
AC-FT	41,260	44,490	43,300	63,170	36,340	68,010	106,108	135,300	108,200	91,460	52,340	30,240
(+)	-137	-194	+35	0	0	+4,240	+3,520	-7,540	+5	-25	-74	-182
MEAN±	669	744	705	1,027	654	1,175	1,842	2,078	1,819	1,487	850	656
CFS±	1.67	1.86	1.76	2.56	1.83	2.93	4.59	5.18	4.54	3.71	2.12	1.64
1966	1.92	2.07	2.03	2.95	1.70	3.38	5.12	5.08	5.06	4.28	2.44	1.83
AC-FT±	41,120	44,3000	43,340	63,170	36,340	72,250	109,600	127,800	108,200	91,460	52,250	39,060

OBSERVED

CAL YR 1965	TOTAL 525,933	MEAN 1,441	MAX 10,800	MIN 464	AC-FT 1,043,000
WTR YR 1966	TOTAL 418,057	MEAN 1,145	MAX 4,070	MIN 464	AC-FT 829,200

ADJUSTED ±

CAL YR 1965	MEAN 1,438	CFS± 3.59	IN 48.68	AC-FT 1,041,000
WTR YR 1966	MEAN 1,145	CFS± 2.86	IN 38.75	AC-FT 828,800

† CHANGE IN CONTENTS, IN ACRE-FeET, IN MUD MOUNTAIN LAKE, FURNISHED BY CORPS OF ENGINEERS.

± ADJUSTED FOR CHANGE IN CONTENTS IN MUD MOUNTAIN LAKE.

PUYALLUP RIVER BASIN

12098500 WHITE RIVER NEAR BUCKLEY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	590	715	2,750	2,060	2,180	1,150	842	847	2,040	2,570	1,020	1,410
2	790	662	2,450	1,790	1,780	1,090	825	852	2,190	2,510	984	472
3	590	621	2,090	2,240	1,740	996	825	913	2,590	2,580	979	684
4	540	585	1,650	2,330	2,740	946	891	990	2,570	2,610	990	795
5	536	621	1,456	2,040	3,130	913	891	1,020	2,710	2,370	962	852
6	512	608	1,280	1,660	2,520	880	852	1,230	3,040	2,490	962	780
7	508	558	1,200	1,490	2,220	858	858	1,550	3,180	1,890	913	679
8	567	528	1,080	1,590	1,740	891	891	1,820	3,180	1,780	913	684
9	496	576	990	1,730	1,580	962	891	2,330	3,180	1,600	935	666
10	460	715	1,070	1,710	1,560	880	869	2,070	3,130	1,570	984	657
11	460	621	1,160	2,610	1,490	830	830	1,680	2,980	1,650	984	825
12	448	891	1,500	2,520	1,480	780	842	1,580	2,180	1,780	996	755
13	440	880	3,050	3,210	1,530	765	902	1,420	3,310	966	957	585
14	406	1,350	4,120	4,160	1,660	735	847	1,490	3,490	2,030	946	540
15	392	1,560	2,950	4,450	1,420	775	805	1,570	3,430	2,040	935	544
16	385	1,580	2,700	3,760	1,340	930	780	1,820	3,380	1,510	930	612
17	378	1,500	2,760	2,320	1,540	1,020	755	2,290	3,360	1,000	935	648
18	368	1,470	2,670	1,950	2,110	979	836	2,000	4,340	1,340	990	634
19	422	1,400	2,560	3,340	1,690	924	869	2,010	4,710	1,340	946	670
20	1,060	1,440	3,000	4,080	1,440	902	874	2,610	1,580	1,280	913	705
21	775	1,350	2,640	2,650	1,340	902	935	2,680	1,980	1,590	886	715
22	1,600	1,190	2,330	2,320	1,240	990	913	2,820	3,970	1,360	842	690
23	2,100	1,120	1,770	1,720	1,160	1,410	913	2,200	5,280	1,160	847	558
24	1,390	1,030	1,580	1,480	1,100	1,340	913	2,230	5,040	1,500	790	558
25	1,000	1,870	1,490	1,340	1,080	1,220	946	2,520	4,740	1,350	740	554
26	996	2,010	1,360	1,290	1,040	1,150	935	2,470	2,820	1,240	354	524
27	1,020	1,810	1,260	1,630	984	1,070	984	2,340	3,670	1,200	627	549
28	935	2,100	1,260	3,070	1,100	1,030	940	2,120	3,490	1,160	780	585
29	880	1,670	1,470	3,180	-----	1,000	896	2,180	3,070	1,150	836	567
30	924	2,150	1,410	2,850	-----	940	869	2,490	2,730	1,140	891	562
31	790	-----	1,510	2,470	-----	886	-----	2,210	-----	1,090	935	-----
TOTAL	22,758	35,181	60,560	75,040	45,954	30,144	26,219	58,362	97,380	50,846	27,680	20,070
MEAN	734	1,173	1,954	2,421	1,641	972	874	1,882	3,246	1,640	893	669
MAX	2,100	2,150	4,120	4,450	3,130	1,410	984	2,820	5,280	2,610	1,020	1,410
MIN	368	528	990	1,290	984	735	755	847	1,580	966	354	472
AC-FT	45,140	69,780	120,100	148,800	91,150	59,790	52,010	115,700	193,200	100,900	54,900	39,810
(+)	+3	+1,240	-1,080	+720	-704	-66	+5	+23,720	-22,210	-1,470	+1,740	-50
MEAN*	734	1,194	1,935	2,431	1,629	971	874	2,267	2,874	1,617	921	668
CFSM*	1.83	2.98	4.83	6.06	4.06	2.42	2.18	5.65	7.17	4.03	2.30	1.67
IN*	2.11	3.32	5.56	6.99	4.23	2.79	2.43	6.52	8.00	4.65	2.65	1.86
AC-FT*	45,140	71,020	119,000	149,500	90,450	59,720	52,000	139,400	171,000	99,430	56,640	39,760

OBSERVED

CAL YR 1966 TOTAL 471,493 MEAN 1,292 MAX 4,120 MIN 368 AC-FT 935,200
WTR YR 1967 TOTAL 550,184 MEAN 1,507 MAX 5,280 MIN 354 AC-FT 1,091,000

ADJUSTED *

CAL YR 1966 MEAN 1,292 CFSM 3.22 IN 43.73 AC-FT 935,300
WTR YR 1967 MEAN 1,510 CFSM 3.77 IN 51.11 AC-FT 1,093,000

* CHANGE IN CONTENTS, IN ACRE-FEET, IN MUD MOUNTAIN LAKE, FURNISHED BY CORPS OF ENGINEERS.

* ADJUSTED FOR CHANGE IN CONTENTS IN MUD MOUNTAIN LAKE.

12098500 WHITE RIVER NEAR BUCKLEY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	524	2,350	720	1,980	1,450	1,780	1,470	1,620	1,940	1,310	906	930
2	512	1,720	740	1,710	1,530	1,710	1,430	1,430	3,720	1,400	900	910
3	636	1,370	745	1,510	2,010	1,640	1,290	1,340	5,730	1,530	906	880
4	634	1,170	740	1,390	3,030	1,690	1,260	1,400	3,080	1,660	918	858
5	504	1,010	745	1,330	2,820	1,930	1,310	1,390	2,130	1,710	858	840
6	444	918	700	1,180	2,500	1,790	1,320	1,310	2,140	1,690	790	840
7	444	874	675	1,150	1,780	1,640	1,390	1,230	2,000	1,660	740	820
8	488	852	662	1,120	1,640	1,520	1,290	1,210	2,420	1,520	740	800
9	460	1,000	792	681	1,530	1,390	1,250	1,230	2,420	1,470	740	780
10	448	1,450	1,540	614	1,430	1,290	1,290	1,380	2,160	1,350	795	760
11	896	1,750	2,790	652	1,340	1,230	1,420	1,480	1,620	1,300	840	730
12	815	1,400	1,770	1,060	1,080	1,200	1,320	1,610	1,450	1,420	790	710
13	745	1,200	1,270	2,140	1,340	1,140	1,200	1,500	1,720	1,180	765	690
14	990	1,210	1,060	2,900	1,110	1,080	1,150	1,370	2,100	1,120	900	800
15	760	1,280	974	4,120	1,040	1,080	1,160	1,280	2,350	1,070	852	1,090
16	630	1,150	913	3,360	1,010	1,220	1,070	1,260	2,240	996	715	1,080
17	558	1,010	847	2,230	1,020	1,120	996	1,350	2,260	942	650	1,600
18	549	974	790	1,970	1,660	1,020	966	1,570	2,240	942	670	3,490
19	621	886	740	2,680	5,490	960	960	1,920	2,220	966	680	2,920
20	540	842	690	4,170	5,380	936	960	2,560	2,210	948	645	2,000
21	722	790	675	6,710	4,270	900	960	2,380	2,210	900	592	1,530
22	1,060	775	960	4,580	4,510	882	942	2,100	2,180	870	568	1,320
23	1,560	770	1,660	3,420	4,180	876	990	2,010	2,060	846	675	1,430
24	1,070	946	2,920	2,880	3,860	876	1,000	1,830	2,350	864	1,140	1,320
25	1,170	891	7,210	3,400	3,170	900	1,040	1,910	2,590	906	1,540	1,200
26	1,010	805	8,970	2,620	2,650	906	1,130	1,860	2,450	942	1,760	1,090
27	2,160	765	6,650	2,210	2,500	1,230	1,070	1,270	2,320	966	1,560	1,010
28	4,530	750	3,970	1,920	2,020	2,300	1,090	1,000	2,950	1,040	2,080	918
29	2,530	775	3,250	1,800	1,890	2,220	1,450	1,680	3,360	1,060	1,660	864
30	2,110	750	2,620	1,700	-----	2,240	1,690	1,700	1,990	1,010	1,320	815
31	2,710	-----	2,140	1,560	-----	1,660	-----	1,790	-----	948	950	-----
TOTAL	32,870	32,433	60,928	70,747	69,240	42,356	35,864	48,970	72,610	36,536	29,645	35,025
MEAN	1,060	1,081	1,965	2,282	2,388	1,366	1,195	1,580	2,420	1,179	956	1,168
MAX	4,530	2,350	8,970	6,710	5,490	2,300	1,690	2,560	5,730	1,710	2,080	3,490
MIN	448	750	662	614	1,010	876	942	1,000	1,450	846	568	690
AC-FT	65,200	64,330	120,900	140,300	137,300	84,010	71,140	97,130	144,000	72,470	58,800	69,470
(+)	+780	-570	+630	-230	-1,820	-36	-87	+6,500	-6,330	-480	+87	+13
MEAN*	1,073	1,072	1,974	2,279	2,356	1,366	1,194	1,685	2,314	1,171	958	1,168
CFSM*	2.68	2.67	4.92	5.68	5.88	3.41	2.98	4.20	5.77	2.92	2.39	2.91
IN*	3.09	2.98	5.68	6.55	6.34	3.93	3.32	4.84	6.44	3.37	2.75	3.25
AC-FT*	65,980	63,760	121,400	140,100	135,500	83,970	71,050	103,600	137,700	71,990	58,890	69,480

OBSERVED

CAL YR 1967 TOTAL 557,916 MEAN 1,529 MAX 8,970 MIN 354 AC-FT 1,107,000
WTR YR 1968 TOTAL 567,224 MEAN 1,550 MAX 8,970 MIN 448 AC-FT 1,125,000

ADJUSTED *

CAL YR 1967 MEAN 1,533 CFSM 3.82 IN 51.90 AC-FT 1,110,000
WTR YR 1968 MEAN 1,547 CFSM 3.86 IN 52.51 AC-FT 1,123,000

+ CHANGE IN CONTENTS, IN ACRE-FeET, IN MUD MOUNTAIN LAKE, FURNISHED BY CORPS OF ENGINEERS.

* ADJUSTED FOR CHANGE IN CONTENTS IN MUD MOUNTAIN LAKE.

PUYALLUP RIVER BASIN

12098500 WHITE RIVER NEAR BUCKLEY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	805	930	1,590	1,640	700	660	2,570	1,740	6,210	1,950	948	650
2	755	1,010	1,510	1,430	690	650	2,210	1,640	5,920	1,810	918	680
3	715	984	2,090	1,370	820	675	2,220	1,550	5,490	1,650	888	630
4	705	888	3,470	2,260	680	655	1,620	1,460	3,780	1,610	793	565
5	715	846	2,890	2,660	665	930	1,560	1,450	4,050	1,560	842	532
6	870	805	2,180	7,610	615	990	1,610	1,670	4,290	1,490	722	537
7	820	770	1,860	6,180	610	870	1,590	2,100	4,248	1,490	710	575
8	760	1,170	1,990	3,920	670	804	1,490	2,790	4,110	1,440	695	630
9	725	2,330	1,950	3,290	776	749	1,500	3,820	4,050	1,468	738	670
10	840	2,060	2,250	2,570	749	695	1,620	4,660	4,020	1,490	749	655
11	900	3,180	2,500	2,000	966	660	1,610	4,330	4,000	1,470	754	727
12	990	3,970	2,130	1,720	1,040	655	1,790	3,400	3,820	1,350	727	665
13	1,048	4,190	1,860	1,460	705	635	2,120	2,540	3,380	1,240	660	650
14	996	2,880	1,700	1,540	815	645	1,890	2,350	3,040	1,140	965	510
15	1,260	2,130	1,600	1,330	760	685	1,660	2,540	2,910	1,060	942	457
16	1,220	1,840	1,550	1,260	760	832	1,570	2,450	2,670	1,050	842	449
17	1,090	1,660	1,390	1,180	744	1,180	1,660	2,420	2,600	1,050	820	555
18	1,160	1,760	1,360	1,110	754	1,430	2,060	2,360	2,570	1,050	744	1,060
19	1,150	1,690	1,240	1,060	732	1,380	2,100	2,320	2,660	1,070	714	796
20	1,710	1,660	1,140	1,010	727	1,280	1,950	2,300	2,350	1,180	630	682
21	1,650	1,660	1,090	954	546	1,020	1,860	3,910	2,080	1,110	695	530
22	1,550	2,550	1,050	900	457	1,100	2,160	4,500	1,980	1,070	700	670
23	1,390	2,670	1,060	815	694	1,420	2,780	3,220	2,200	1,120	738	857
24	1,300	2,210	1,430	738	655	1,280	3,190	3,940	2,770	1,140	832	712
25	1,280	1,930	1,410	700	655	1,250	2,820	4,020	2,260	1,140	732	670
26	1,180	1,760	1,280	700	655	1,360	2,220	3,820	2,060	1,030	727	550
27	1,050	1,850	1,220	700	1,120	1,890	1,980	3,660	1,840	1,040	665	496
28	1,030	1,790	1,090	740	665	2,030	3,290	1,720	1,030	1,030	645	504
29	1,030	1,810	996	700	-----	2,000	2,010	3,690	1,620	990	580	620
30	1,090	1,740	852	700	-----	2,220	1,820	5,380	1,560	948	585	854
31	1,000	-----	976	760	-----	2,670	-----	6,450	-----	925	590	-----
TOTAL	32,856	56,723	50,704	61,007	20,536	35,220	59,270	96,290	96,250	38,753	23,290	19,133
MEAN	1,060	1,891	1,636	1,968	733	1,136	1,976	3,106	3,208	1,250	751	638
MAX	1,710	4,190	3,470	8,660	1,120	2,670	3,190	6,450	6,210	1,810	965	1,060
MIN	715	770	852	700	457	635	1,490	1,450	1,560	925	580	449
AC-FT	69,170	112,500	100,600	121,000	40,730	69,860	117,600	191,000	190,900	76,870	46,200	37,950
(1)	-130	+151	-75	+661	-789	+2,590	-2,570	+19,380	-19,160	-108	-272	+47
MEAN#	1,058	1,894	1,634	1,979	719	1,178	1,933	3,421	2,886	1,248	747	639
CFSM#	2.64	4.72	4.07	6.94	1.79	2.94	4.82	8.53	7.20	3.11	1.86	1.59
IN#	3.04	5.27	4.70	5.69	1.87	3.39	5.38	9.84	8.03	3.59	2.15	1.78
AC-FT#	65,040	112,700	100,500	121,700	39,940	72,450	115,000	210,400	171,700	76,760	45,930	38,000

OBSERVED

CAL YR 1968 TOTAL 581,276 MEAN 1,588 MAX 6,710 MIN 568 AC-FT 1,153,000
WTR YR 1969 TOTAL 590,032 MEAN 1,617 MAX 8,660 MIN 449 AC-FT 1,170,000

ADJUSTED *

CAL YR 1968 MEAN 1,585 CFSM 3.95 IN 53.82 AC-FT 1,151,000
WTR YR 1969 MEAN 1,616 CFSM 4.03 IN 54.71 AC-FT 1,170,000

* CHANGE IN CONTENTS, IN ACRE-FEET, IN MUD MOUNTAIN LAKE, FURNISHED BY CORPS OF ENGINEERS.

* ADJUSTED FOR CHANGE IN CONTENTS IN MUD MOUNTAIN LAKE.

12098500 WHITE RIVER NEAR BUCKLEY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,070	85	505	778	1,720	1,000	924	1,510	1,990	1,350	871	650
2	1,020	81	538	712	1,660	954	942	1,540	2,450	1,330	913	826
3	920	81	538	730	1,500	924	859	1,680	2,850	1,600	885	748
4	760	2,070	599	495	1,350	864	848	1,900	3,260	1,940	941	708
5	670	2,790	573	530	1,280	810	924	2,160	3,700	1,990	962	578
6	620	1,370	549	520	1,220	926	1,100	2,020	3,900	1,750	878	670
7	590	1,090	538	530	1,200	1,610	1,070	1,730	4,000	1,640	864	1,050
8	885	754	538	550	1,330	1,320	1,010	1,670	3,540	1,690	767	808
9	913	690	538	415	1,440	1,180	1,450	1,730	3,340	1,670	689	650
10	920	612	527	570	1,530	401	2,530	1,610	2,740	1,530	722	590
11	976	586	560	516	1,570	792	2,230	1,450	2,080	1,440	780	566
12	913	599	834	520	1,620	1,630	1,680	1,380	1,840	1,330	787	524
13	778	586	865	242	1,710	1,230	1,450	1,320	3,020	1,120	760	458
14	670	560	1,120	1,100	1,600	1,050	1,320	1,220	2,220	1,240	702	426
15	610	549	1,210	3,060	1,810	1,180	1,220	1,250	1,840	1,280	708	415
16	570	538	1,070	2,240	2,620	1,380	1,120	1,660	1,870	1,370	734	410
17	530	516	1,000	1,690	2,830	1,310	1,050	2,220	1,880	1,310	696	442
18	516	505	1,090	3,400	2,590	1,190	1,030	2,200	2,090	1,210	689	656
19	504	505	1,230	5,730	1,890	1,100	1,150	2,130	2,330	1,250	722	682
20	512	560	1,270	6,130	1,680	1,050	1,050	2,060	2,440	1,250	715	602
21	512	850	1,600	5,290	1,550	1,010	984	1,860	2,560	1,090	708	524
22	516	677	1,850	4,640	1,440	954	936	1,960	2,698	969	734	660
23	525	850	2,070	5,250	1,360	930	930	2,080	2,720	927	774	934
24	516	1,110	1,810	4,100	1,270	948	1,060	2,130	2,570	927	822	670
25	488	786	1,600	3,510	1,200	876	1,080	2,230	2,400	998	801	560
26	464	690	1,560	2,380	1,140	912	1,030	2,590	2,320	1,140	696	530
27	492	599	1,300	2,670	1,100	859	984	2,650	2,320	1,220	702	524
28	520	560	1,120	2,830	1,050	1,110	936	2,450	1,970	1,030	696	519
29	484	538	990	2,770	-----	1,070	1,060	2,110	1,610	878	650	497
30	468	505	892	2,330	-----	1,010	1,600	2,250	1,550	829	638	475
31	291	-----	838	1,840	-----	930	-----	1,990	-----	829	702	-----
TOTAL	20,223	22,292	31,322	68,428	44,260	32,510	35,557	58,740	76,120	40,127	23,728	18,152
MEAN	656	743	1,010	2,207	1,581	1,049	1,185	1,895	2,537	1,294	765	605
MAX	1,070	2,790	2,070	6,130	2,830	1,630	2,530	2,650	4,000	1,990	962	1,050
MIN	291	81	505	242	1,050	401	848	1,220	1,550	829	638	410
AC-PT	40,110	44,220	62,130	135,700	87,790	64,488	70,530	116,500	151,000	79,590	47,060	36,000
(+)	+216	-224	+3	+718	-708	-40	+44	+294	-295	-46	+24	-4
MEAN*	656	740	1,010	2,218	1,568	1,048	1,186	1,899	2,533	1,293	766	605
CFSM*	1.64	1.85	2.52	5.53	3.91	2.61	2.96	4.74	6.32	3.22	1.91	1.51
IN*	1.89	2.06	2.91	6.38	4.07	3.01	3.30	5.46	7.05	3.72	2.20	1.68
AC-FT*	40,330	44,000	62,130	136,400	87,080	64,440	70,570	116,800	150,700	79,540	47,080	36,000

OBSERVED

CAL YR 1969 TOTAL 523,586 MEAN 1,434 MAX 8,660 MIN 81 AC-FT 1,039,000
WTR YR 1970 TOTAL 471,459 MEAN 1,292 MAX 6,130 MIN 81 AC-FT 935,100

ADJUSTED *

CAL YR 1969 MEAN 1,434 CFSM 3.58 IN 48.58 AC-FT 1,039,000
WTR YR 1970 MEAN 1,292 CFSM 3.22 IN 43.73 AC-FT 935,100

+ CHANGE IN CONTENTS, IN ACRE-FEET, IN MUD MOUNTAIN LAKE, FURNISHED BY CORPS OF ENGINEERS.
* ADJUSTED FOR CHANGE IN CONTENTS IN MUD MOUNTAIN LAKE.

PUYALLUP RIVER BASIN

12099300 BOISE CREEK ABOVE RESERVOIR, NEAR ENUMCLAW, WASH.

LOCATION (REVISED).--Lat 47°11'35", long 121°53'45", in SW¼NE¼ sec.27, T.20 N., R.7 E., King County, on right bank 1.1 miles upstream from reservoir, 1.3 miles east of Meyerhaeuser Co. mill, 4.7 miles east of Enumclaw, and 7.7 miles upstream from mouth.

DRAINAGE AREA.--4.60 sq mi.

PERIOD OF RECORD.--January 1963 to July 1966 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 1,435 ft (from topographic map).

EXTREMES.--Maximum discharge during period, 162 cfs July 3 (gage height, 3.08); minimum, 1.3 cfs Oct. 3, 4. Period of record: Maximum discharge, 641 cfs Jan. 29, 1965 (gage height, 5.88 ft); minimum, 1.0 cfs Sept. 4-13, 1965.

REMARKS.--Records good. No regulation or diversion above station. Interbasin diversion from Scatter Creek enters Boise Creek 100 ft below station during period of low flow.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1965 TO JULY 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	3.2	8.9	8.9	17	14	43	12	8.5	16		
2	1.4	8.9	8.9	8.9	15	12	39	12	9.1	22		
3	1.3	19	19	7.7	14	11	30	14	10	111		
4	1.6	36	49	7.7	13	11	27	16	16	63		
5	3.9	55	32	31	12	11	25	19	11	40		
6	18	32	25	50	11	12	24	32	10	31		
7	4.7	21	37	50	11	12	24	25	9.4	23		
8	3.2	14	29	59	10	17	24	19	8.8	20		
9	10	11	23	36	10	31	39	17	8.5	16		
10	3.5	12	20	31	9.8	31	40	14	16	15		
11	2.4	13	15	34	11	24	45	14	16	16		
12	3.2	9.6	12	44	10	23	42	15	16	13		
13	21	7.7	10	65	9.4	33	36	13	15	12		
14	21	6.4	8.9	61	9.8	38	35	12	13	12		
15	22	5.7	7.7	46	8.8	34	33	16	12	11		
16	21	4.7	7.0	35	8.8	28	29	20	10	10		
17	21	4.3	5.7	29	10	22	25	17	11	9.4		
18	18	5.7	5.1	24	10	19	22	15	9.4	8.8		
19	47	4.3	4.7	20	10	19	19	14	9.8	9.1		
20	28	4.7	5.7	18	16	16	23	13	8.8	8.2		
21	18	8.3	9.6	16	16	15	20	15	11	8.2		
22	12	17	5.7	15	19	14	18	13	11	7.6		
23	8.9	9.6	5.1	14	20	14	18	11	9.4	7.2		
24	6.4	8.3	5.7	12	18	16	16	11	10	7.0		
25	4.7	10	4.7	13	17	20	16	10	9.4	6.7		
26	4.3	22	3.9	12	16	28	16	13	8.5	6.5		
27	4.3	21	8.3	13	17	32	15	13	10	6.4		
28	5.1	14	28	15	16	32	14	10	37	6.0		
29	3.9	11	19	16	-----	33	13	9.4	22	5.8		
30	7.7	8.9	13	20	-----	52	12	9.1	17	5.6		
31	3.9	-----	9.6	20	-----	48	-----	8.5	-----	5.5		-----
TOTAL	333.0	403.3	446.2	332.2	365.6	722	782	454.0	373.6	539.0		
MEAN	10.7	13.4	14.4	26.8	13.1	23.3	26.1	14.6	12.5	17.4		
MAX	47	55	49	65	20	52	45	32	37	111		
MIN	1.3	3.2	3.9	7.7	8.8	11	12	8.5	8.5	5.5		
CFSM	2.33	2.91	3.13	5.83	2.85	5.07	5.67	3.17	2.72	3.78		
IN.	2.89	3.26	3.61	6.73	2.96	5.04	6.32	3.67	3.02	4.36		
AC-FT	661	800	885	1,650	725	1,430	1,550	901	741	1,070		
CAL YR 1965	TOTAL	6,666.5	MEAN	18.3	MAX	484	MIN	1.0	CFSM	3.98	IN	53.91
									AC-FT	13,220		

12099400 BOISE CREEK BELOW MILLPOND, NEAR ENUMCLAW, WASH.

LOCATION.--Lat 47°11'23" (revised), long 121°55'47", in NW¼SW¼ sec.28, T.20 N., R.7 E., King County, on right bank just upstream from U.S. Highway 410, 700 ft downstream from millpond, 3.2 miles southwest of Enumclaw, and at mile 5.6.

DRAINAGE AREA.--8.27 sq mi.

PERIOD OF RECORD.--January 1963 to July 1966 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 1,000 ft (from topographic map).

EXTREMES.--Maximum discharge during period, 142 cfs July 3 (gage height, 3.67 ft); minimum, 0.60 cfs Oct. 10; minimum gage height, 1.91 ft Nov. 12.
Period of record: Maximum discharge, 923 cfs Jan. 29, 1965 (gage height, 11.01 ft), from rating curve extended above 230 cfs on basis of peak flow through culvert; minimum, 0.60 cfs Oct. 10, 1965; minimum gage height, 1.46 ft Oct. 7, 23, 1963.

REMARKS.--Records good. Diversions above station for domestic and industrial use. Interbasin diversion of about 2 cfs from Scatter Creek during low flow enters Boise Creek 2 miles above station. Flow partly regulated by White River Lumber Co. millpond 700 ft above station.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1965 TO JULY 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	9.9	17	11	29	18	44	19	14	24		
2	5.4	16	15	29	17	17	46	20	19	29		
3	5.0	15	25	18	21	15	30	20	18	90		
4	6.0	34	52	19	18	17	29	21	22	60		
5	7.8	34	35	40	18	22	30	23	21	40		
6	15	28	24	67	22	12	34	43	18	41		
7	6.0	22	38	64	14	16	35	37	18	24		
8	7.2	8.6	25	76	19	24	35	20	14	22		
9	15	12	28	51	17	43	51	23	15	20		
10	6.0	18	22	49	10	38	50	23	12	23		
11	6.5	20	14	52	24	31	61	22	12	26		
12	7.5	6.8	18	58	15	30	48	21	12	20		
13	17	14	12	72	15	45	46	20	16	18		
14	20	9.4	13	75	12	44	38	19	26	28		
15	13	10	13	69	17	39	38	26	21	14		
16	18	9.1	12	54	14	35	37	34	18	20		
17	13	11	12	36	15	26	37	29	19	13		
18	15	12	9.8	36	16	29	36	21	18	10		
19	28	29	9.8	30	19	26	33	21	18	14		
20	16	6.8	13	28	19	32	31	20	17	13		
21	14	6.6	16	26	18	19	22	18	12	12		
22	11	18	9.2	26	24	22	27	18	12	11		
23	12	18	20	20	24	21	26	18	12	11		
24	11	21	14	19	22	18	24	18	16	11		
25	11	19	12	20	21	26	25	17	17	11		
26	7.9	29	12	20	22	26	23	18	17	10		
27	8.5	32	31	24	30	41	22	19	17	10		
28	14	17	34	24	24	33	21	15	51	10		
29	4.8	14	33	22	-----	38	22	14	27	9.5		
30	9.8	18	26	27	-----	55	18	12	29	9.0		
31	9.9	-----	12	24	-----	50	-----	8.8	-----	9.0	-----	
TOTAL	346.7	518.2	626.8	1,186	536	908	1,019	657.8	558	662.5		
MEAN	11.2	17.3	20.2	38.3	19.1	29.3	34.0	21.2	18.6	21.4		
MAX	28	34	52	76	30	55	61	43	51	90		
MIN	4.8	6.6	9.2	11	10	12	18	8.8	12	9.0		
AC-FT	688	1,030	1,240	2,350	1,060	1,800	2,020	1,300	1,110	1,310		

CAL YR 1965 TOTAL 8,865.1 MEAN 24.3 MAX 688 MIN 4.3 AC-FT 17,580

PUYALLUP RIVER BASIN

12099500 BOISE CREEK NEAR ENUMCLAW, WASH.

LOCATION.--Lat 47°11'19", long 121°58'22", on west line of SW 1/4 sec.30, T.20 N., R.7 E., King County, 1.6 miles southeast of Enumclaw and 2.7 miles upstream from mouth.

DRAINAGE AREA.--12.3 sq mi.

PERIOD OF RECORD.--July 1945 to September 1946, December 1962 to September 1966 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 740 ft (from topographic map).

EXTREMES.--Maximum discharge during water year 1966, 178 cfs July 3 (gage height, 2.95 ft); minimum, 2.6 cfs Oct. 10, 11 (gage height, 0.85 ft).
Period of record: Maximum discharge, 1,700 cfs Jan. 29, 1965 (gage height, 7.64 ft, from high watermark in well), from rating curve extended above 300 cfs on basis of slope-area measurement of peak flow; minimum, 1.6 cfs July 29, Aug. 30, 1945 (gage height, 0.59 ft).

REMARKS.--Records excellent. Diversions above station for domestic and industrial use. Interbasin diversion of about 2.0 cfs from Scatter Creek during low flow enters Boise Creek 5.0 miles above station. Flow partly regulated by a millpond 2.9 miles upstream.

REVISIONS.--WSP 1736: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	11	14	17	32	26	50	23	17	28	11	7.0
2	6.6	19	14	43	22	24	51	23	20	32	11	7.6
3	6.4	18	20	25	25	23	39	23	20	119	11	6.4
4	7.6	34	47	27	23	23	36	25	24	82	11	6.7
5	9.7	34	32	59	23	24	34	27	21	53	11	6.7
6	18	28	22	100	24	18	37	48	18	50	9.1	7.6
7	7.0	21	38	84	18	22	38	41	18	35	10	6.7
8	6.1	12	28	95	22	27	38	24	17	32	10	6.3
9	16	16	28	66	21	48	57	27	16	25	11	6.1
10	8.8	17	23	58	15	45	55	27	26	30	10	6.1
11	6.8	19	17	60	27	37	68	25	28	29	10	11
12	8.8	9.8	20	64	21	36	54	25	29	25	9.1	9.1
13	10	14	14	79	18	52	52	24	22	20	10	7.3
14	22	11	16	77	18	55	44	22	25	29	10	7.3
15	16	11	14	61	21	47	43	28	21	18	9.6	7.7
16	21	11	13	49	18	42	42	39	20	22	9.1	8.0
17	16	13	14	41	18	33	41	31	20	18	8.7	7.7
18	16	14	12	41	20	34	40	24	18	18	9.1	25
19	34	27	12	35	21	37	37	24	18	18	8.4	7.5
20	21	10	14	33	22	40	36	23	17	17	8.0	8.1
21	18	7.8	23	30	23	31	30	25	17	16	8.0	7.2
22	12	17	14	30	26	32	34	23	21	14	8.0	7.7
23	23	17	21	26	26	30	32	21	18	14	7.6	12
24	32	19	22	25	25	28	30	20	20	14	7.3	8.4
25	12	20	16	27	25	34	32	18	20	13	7.6	8.8
26	10	25	14	25	25	36	30	20	18	13	8.4	12
27	11	26	44	29	37	43	27	25	19	13	13	11
28	16	16	59	29	37	39	26	18	56	13	10	8.7
29	8.1	14	43	26	-----	41	28	16	30	11	9.1	8.1
30	9.7	16	32	32	-----	59	21	14	28	11	8.4	7.9
31	21	18	29	-----	-----	56	-----	11	-----	11	8.2	-----
TOTAL	107.1	587.4	718	1,422	653	1,123	1,182	764	662	843	292.7	258.5
MEAN	3.5	17.6	23.2	45.9	23.3	36.2	39.4	24.6	22.1	27.2	9.44	8.62
MAX	34	35	59	100	37	59	68	48	56	119	13	25
MIN	6.4	7.8	12	17	15	18	21	11	16	11	7.3	6.1
AC-FT	806	1,050	1,020	2,020	1,300	2,230	2,340	1,520	1,310	1,670	581	513

CAL YR 1945 TOTAL 11,041.4 MEAN 30.3 MAX 700 MIN 3.6 AC-FT 21,900
HYR YR 1966 TOTAL 8,850.7 MEAN 24.2 MAX 119 MIN 6.1 AC-FT 17,560

12100500 WHITE RIVER NEAR SUMNER, WASH.

LOCATION.--Lat 47°14'58", long 122°14'36", in NE¼ sec.1, T.20 N., R.4 E., Pierce County, on right bank 300 ft downstream from county road bridge, 3.3 miles north of Sumner, and at mile 4.9.

DRAINAGE AREA.--470 sq mi.

PERIOD OF RECORD.--January 1945 to September 1970. Prior to October 1959, published as Stuck River near Sumner.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Intercounty River Improvement Commission bench mark).

AVERAGE DISCHARGE.--25 years, 615 cfs (445,600 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, elevation in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum		Date	Minimum	Discharge	Elevation
		Discharge	Elevation				
1966	May 8, 1966	2,910	56.26	Sept. 30, 1966	50		52.80
1967	June 22, 1967	5,630	57.84	Oct. 9, 1966	50		52.69
1968	Dec. 26, 1967	8,240	58.97	Oct. 1, 1967	b77		c52.59
1969	Jan. 6, 1969	13,800	60.95	Aug. 22, 1969	57		d52.75
1970	Jan. 23, 1970	5,290	57.57	Aug. 11, 13, 1970	64		52.99

a Occurred Aug. 26, 27, 1967.

b May have been less during period Aug. 13-20, 1968.

c Occurred Aug. 11, 12, 1968, but may have been less during period Aug. 13-20, 1968.

d Occurred Nov. 7, 1968.

Period of record: Maximum discharge, 15,100 cfs Dec. 12, 1955 (elevation, 61.40 ft); minimum, 28 cfs Nov. 1, 1958; minimum elevation, 48.48 ft Feb. 1, 1945 (channel affected by dredging).

REMARKS.--Records good except those for periods of no gage-height record Jan. 28 to Mar. 6, Apr. 15 to May 23, 1967, which are fair. An average of 1,000 to 1,200 cfs is diverted above station into Lake Tapps for Dieringer powerplant of Puget Sound Power & Light Co. High flow influenced by regulation in Mud Mountain Lake (see station 12098000). Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1216: Drainage area. WSP 1716: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	543	383	124	215	201	206	259	171	954	505	112	75
2	543	310	145	300	108	184	244	175	1,950	402	110	67
3	551	517	137	303	164	175	249	179	231	1,020	100	67
4	583	1,300	224	298	184	164	244	209	616	1,030	180	79
5	490	1,158	215	390	179	160	204	1,050	162	848	105	85
6	490	1,050	171	687	175	156	229	2,040	1,320	615	100	110
7	512	910	195	439	179	167	229	2,020	1,730	220	94	110
8	229	808	197	432	175	201	215	2,030	1,960	360	96	590
9	137	588	171	358	175	275	239	2,420	2,030	848	92	122
10	121	164	164	292	167	299	299	1,940	1,840	936	96	96
11	105	152	152	286	175	206	352	1,800	1,320	822	94	110
12	110	131	141	309	197	201	505	1,550	2,340	852	87	103
13	131	118	134	475	171	254	358	1,260	1,860	630	87	90
14	134	118	127	615	171	303	219	515	1,060	828	94	90
15	851	111	124	475	164	286	218	414	909	909	87	94
16	888	118	121	275	164	264	239	558	1,120	676	89	92
17	862	230	118	264	164	239	219	326	1,340	522	94	96
18	871	610	118	254	160	229	197	240	1,360	414	89	130
19	980	167	115	249	167	239	197	220	1,280	379	87	180
20	920	160	118	229	167	269	193	179	999	204	83	87
21	790	168	167	215	167	286	167	179	501	144	81	87
22	399	175	156	210	167	299	179	184	165	141	81	96
23	152	171	152	210	167	229	184	162	315	138	83	141
24	992	149	215	218	167	219	184	162	335	138	85	83
25	583	167	197	206	171	210	175	200	305	138	85	65
26	583	161	171	197	164	206	184	305	330	112	87	65
27	460	171	309	210	281	206	179	522	357	90	89	64
28	326	152	599	201	264	193	179	470	1,000	88	89	57
29	210	141	411	197	-----	234	179	200	1,290	83	79	53
30	127	121	286	197	-----	364	171	179	836	115	77	53
31	724	-----	239	206	-----	446	-----	156	-----	115	75	-----
TOTAL	15,005	10,562	5,911	9,414	4,975	7,289	6,863	23,609	30,855	14,506	2,823	3,229
MEAN	484	352	191	304	178	235	229	762	1,029	460	91.1	108
MAX	980	1,300	599	615	264	446	505	2,030	2,340	1,838	112	598
MIN	105	111	115	197	160	156	167	156	162	83	75	53
AC-FT	29,760	20,950	11,720	18,670	9,870	14,460	13,618	46,830	61,200	28,778	5,600	6,480
CAL YR 1965	TOTAL 267,161	MEAN 787	MAX 13,588	MIN 92	AC-FT 549,400							
WTR YR 1966	TOTAL 135,041	MEAN 378	MAX 2,830	MIN 53	AC-FT 267,900							

PUYALLUP RIVER BASIN

12100500 WHITE RIVER NEAR SUMNER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	115	1,430	690	550	200	176	170	645	972	102	132
2	73	112	1,350	408	300	190	165	170	638	836	98	133
3	69	110	716	576	300	170	159	170	1,100	892	87	82
4	60	110	310	1,160	1,300	160	162	170	1,070	918	85	78
5	55	120	254	1,040	2,100	190	162	240	1,200	1,210	96	69
6	60	110	224	456	1,200	180	150	180	1,480	892	98	78
7	58	110	244	432	600	168	150	280	1,760	460	102	77
8	65	112	216	384	250	182	147	700	1,780	257	98	78
9	58	108	300	338	550	262	153	1,008	1,770	191	89	80
10	52	112	204	325	350	212	153	500	1,850	159	87	85
11	53	105	216	985	250	190	144	230	2,040	131	87	89
12	62	122	330	1,230	270	176	144	290	1,578	703	85	85
13	67	125	1,120	1,440	500	172	186	400	1,810	1,220	84	78
14	62	179	2,660	2,970	350	165	193	240	2,150	1,490	84	78
15	55	200	1,900	3,090	230	179	160	250	2,100	2,280	85	78
16	57	182	1,220	2,910	250	186	170	600	2,050	1,590	85	80
17	55	196	1,570	1,490	450	204	160	830	2,080	1,160	85	80
18	55	172	1,180	470	740	240	160	570	2,680	1,300	80	82
19	60	172	1,080	1,790	620	262	160	1,000	4,700	1,060	80	80
20	184	130	1,520	3,360	840	212	160	1,200	2,380	194	80	94
21	118	144	1,190	1,740	400	224	180	1,300	1,450	162	78	98
22	168	132	820	1,040	230	216	160	1,500	4,180	148	77	96
23	384	125	384	336	300	362	160	1,180	5,060	143	70	91
24	120	120	262	295	250	262	170	1,180	3,740	143	72	85
25	138	159	280	290	220	258	165	1,080	3,560	124	67	84
26	138	668	240	280	200	232	160	1,010	2,090	121	69	70
27	135	315	220	508	170	232	170	918	2,090	115	88	72
28	122	470	1,220	1,650	180	208	170	800	2,030	108	67	72
29	125	302	258	2,208	212	212	170	543	1,440	126	69	72
30	135	820	285	1,500	-----	212	170	1,010	1,160	119	69	80
31	122	-----	280	1,000	-----	193	-----	740	-----	115	69	-----
TOTAL	3,110	5,955	22,563	36,583	13,950	6,493	4,909	20,251	63,833	19,539	2,572	2,549
MEAN	100	199	728	1,180	498	209	164	653	2,128	630	83.0	85.0
MAX	384	820	2,660	3,360	2,100	362	193	1,500	5,060	2,280	102	133
MIN	52	105	200	280	170	165	144	170	638	108	67	69
AC-FT	6,170	11,810	44,750	72,560	27,670	12,880	9,740	40,170	126,600	38,760	5,100	5,060
CAL YR 1966	TOTAL 135,191		MEAN 370		MAX 2,830		MIN 52		AC-FT 268,200			
WTR YR 1967	TOTAL 202,307		MEAN 554		MAX 5,060		MIN 52		AC-FT 401,300			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	632	100	1,190	255	288	259	163	311	1,120	113	100
2	85	301	111	941	284	229	248	155	1,780	240	118	100
3	93	239	111	485	245	247	247	6,400	1,69	118	508	100
4	98	111	111	384	1,520	219	215	144	3,630	157	116	927
5	100	115	108	336	1,360	284	226	152	2,320	155	116	955
6	98	115	98	222	1,870	300	225	152	2,250	147	109	700
7	96	113	108	192	1,910	212	212	160	1,670	147	109	200
8	116	119	102	192	1,690	196	206	152	744	150	105	280
9	321	131	108	230	1,560	183	192	147	720	139	100	200
10	102	154	117	280	1,440	177	183	150	973	137	97	100
11	121	203	744	350	1,300	177	186	157	1,770	137	97	100
12	104	141	301	550	550	177	172	155	1,440	142	95	100
13	96	115	186	650	210	174	169	155	1,710	134	95	100
14	98	104	89	1,500	202	172	183	150	1,510	129	95	100
15	102	113	85	2,600	186	183	215	142	666	125	95	200
16	481	108	100	2,300	183	280	109	144	556	122	95	100
17	584	102	89	1,150	186	240	172	147	1,890	120	100	300
18	538	100	89	669	344	196	169	152	2,250	308	100	1,310
19	611	98	85	869	3,290	180	169	172	2,200	160	100	1,350
20	495	96	85	2,430	4,450	172	174	633	2,240	137	100	800
21	163	94	89	5,550	3,180	160	166	715	1,700	122	109	450
22	104	100	100	3,550	3,580	155	160	584	518	120	111	400
23	118	108	115	2,110	3,180	160	160	356	360	118	108	308
24	119	104	624	1,760	2,820	160	160	209	1,850	113	189	271
25	519	96	4,020	1,980	2,150	186	160	246	2,520	116	157	248
26	117	100	7,940	1,140	1,630	180	163	1,100	2,430	118	345	229
27	187	100	6,980	714	1,130	174	160	1,020	1,840	120	288	229
28	2,820	104	3,720	386	534	1,220	150	653	985	122	574	222
29	1,300	104	2,860	280	350	598	166	206	1,690	113	300	212
30	843	102	2,040	219	-----	871	166	169	1,180	113	100	219
31	804	-----	1,320	215	-----	934	-----	166	-----	113	100	-----
TOTAL	11,532	4,251	32,655	36,235	41,779	9,175	5,610	8,663	52,133	5,361	4,544	11,222
MEAN	372	142	1,053	1,169	1,441	296	187	279	1,738	173	147	374
MAX	2,820	632	7,940	5,550	4,450	1,220	259	1,100	6,400	1,120	574	1,350
MIN	80	94	85	192	183	155	150	142	311	113	95	100
AC-FT	22,870	8,430	64,770	71,870	82,870	18,200	11,130	17,180	103,400	10,630	9,010	22,260
CAL YR 1967	TOTAL 219,117		MEAN 600		MAX 7,940		MIN 67		AC-FT 434,600			
WTR YR 1968	TOTAL 223,160		MEAN 610		MAX 7,940		MIN 80		AC-FT 442,600			

12100500 WHITE RIVER NEAR SUMNER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	134	215	1,600	233	192	885	358	4,020	184	92	75
2	155	132	199	1,770	192	183	672	354	3,680	190	89	75
3	142	132	1,590	1,730	229	236	768	327	3,340	204	87	73
4	125	127	3,430	2,590	271	163	345	288	2,540	172	424	71
5	127	118	3,220	9,130	288	196	263	271	2,420	159	324	71
6	134	116	2,220	11,100	229	202	233	252	2,690	147	112	71
7	129	116	425	9,360	202	184	215	280	2,560	141	98	69
8	125	129	460	5,110	229	180	192	710	2,380	125	94	67
9	132	335	445	4,520	322	163	189	1,520	2,300	115	89	67
10	142	357	696	3,440	288	157	206	2,380	2,240	115	85	67
11	190	1,730	990	2,510	300	150	196	2,500	2,220	115	87	67
12	163	3,190	660	2,020	288	144	192	1,890	2,110	112	83	67
13	199	2,510	384	1,530	271	139	348	690	1,740	108	81	71
14	180	1,480	318	1,100	263	139	244	660	1,340	108	81	67
15	233	794	318	672	252	137	174	708	1,200	101	81	64
16	199	395	372	512	229	139	166	666	972	94	81	67
17	180	252	573	405	222	163	180	654	836	94	79	77
18	196	219	425	318	509	199	358	618	764	92	77	105
19	192	199	627	296	751	209	415	1,870	812	89	79	103
20	206	183	430	275	280	189	370	2,240	668	89	69	105
21	569	192	420	275	233	169	237	3,090	450	89	62	87
22	1,100	639	420	271	233	172	267	4,460	300	89	58	98
23	314	976	450	280	270	189	2,100	2,880	340	85	65	135
24	229	612	501	395	345	166	2,570	2,110	804	85	77	115
25	196	314	415	606	219	163	1,160	2,190	1,540	87	75	103
26	177	237	395	654	202	157	788	2,090	2,090	77	77	101
27	163	229	384	600	196	163	455	1,910	1,380	79	77	94
28	163	212	332	518	196	263	363	1,720	330	71	77	94
29	163	240	292	465	-----	914	390	2,040	249	73	75	103
30	157	248	280	445	-----	435	354	3,280	200	73	73	144
31	137	-----	654	425	-----	714	-----	4,320	-----	106	75	-----
TOTAL	6,666	16,547	22,564	64,922	7,742	6,971	15,295	49,326	48,515	3,470	3,083	2,573
MEAN	215	552	728	2,094	277	225	510	1,591	1,617	112	99.5	85.8
MAX	1,100	3,190	3,450	11,100	751	914	2,570	4,460	4,020	204	424	144
MIN	125	116	199	271	192	137	166	252	200	71	58	64
AC-FT	13,220	32,802	44,760	128,800	15,360	13,830	30,340	97,840	96,230	6,880	6,120	5,100
CAL YR 1968	TOTAL	220,499	MEAN	602	MAX	6,400	MIN	58	AC-FT	437,400		
WTR YR 1969	TOTAL	247,674	MEAN	679	MAX	11,100	MIN	58	AC-FT	491,300		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	83	103	162	812	141	138	208	463	200	103	87
2	120	79	103	162	764	141	130	186	708	150	110	89
3	110	81	108	168	660	138	112	168	1,040	130	108	96
4	105	356	1708	645	135	195	115	250	445	87	92	92
5	103	849	112	153	622	135	115	402	1,400	936	85	81
6	94	153	105	156	638	150	130	403	1,450	764	83	85
7	101	128	103	162	615	182	141	194	1,600	557	85	101
8	120	118	110	179	585	135	120	176	3,320	159	195	96
9	135	115	112	240	557	120	184	172	3,340	147	112	83
10	130	112	115	262	536	177	830	168	2,870	135	98	85
11	125	110	128	240	515	193	737	162	3,640	125	92	81
12	115	108	216	240	515	219	286	172	1,510	125	98	79
13	188	105	196	368	515	162	250	196	1,290	122	89	79
14	103	105	362	740	796	182	168	172	772	120	87	77
15	101	105	240	1,420	557	193	168	156	357	132	92	77
16	94	105	526	1,040	1,220	186	150	179	362	120	92	75
17	94	103	196	496	1,570	153	147	400	357	120	94	81
18	96	101	204	1,100	1,260	141	144	622	368	112	87	112
19	94	101	204	3,840	456	132	204	350	522	112	92	105
20	92	110	196	4,940	614	135	190	510	660	110	87	94
21	94	122	254	3,850	212	138	172	267	732	105	87	87
22	92	115	236	3,400	196	135	176	276	1,710	101	87	81
23	92	128	262	4,530	168	138	176	414	2,380	94	101	83
24	94	132	240	4,000	165	125	218	496	1,710	101	94	77
25	92	120	193	3,390	159	125	290	589	796	108	87	73
26	87	112	182	2,580	156	125	262	836	724	115	87	79
27	87	110	196	2,160	153	125	228	954	716	122	87	77
28	108	168	165	1,870	141	138	182	676	645	110	87	75
29	94	108	162	1,870	-----	153	172	660	450	103	87	75
30	92	105	156	1,490	-----	150	236	764	350	101	85	73
31	89	-----	150	1,040	-----	144	-----	585	-----	103	85	-----
TOTAL	3,203	4,284	5,743	46,520	15,802	4,638	6,571	11,904	37,532	5,992	2,943	2,535
MEAN	103	143	185	1,501	564	130	219	384	1,251	193	94.9	84.5
MAX	141	849	526	4,940	1,570	219	830	954	3,640	936	195	112
MIN	87	79	103	153	141	120	112	156	350	101	83	73
AC-FT	6,350	8,500	11,390	92,270	31,340	9,200	13,030	23,610	74,440	11,890	5,840	5,030
CAL YR 1969	TOTAL	215,127	MEAN	589	MAX	11,100	MIN	58	AC-FT	426,700		
WTR YR 1970	TOTAL	147,667	MEAN	405	MAX	4,940	MIN	73	AC-FT	292,900		

PUYALLUP RIVER BASIN

12101000 LAKE TAPPS NEAR SUMNER, WASH.

LOCATION (REVISED).--Lat 47°14'28", long 122°11'26", in NE&NEK sec.8, T.20 N., R.5 E., Pierce County, 1.7 miles east of Dieringer and 3.5 miles northeast of Sumner.

PERIOD OF RECORD.--November 1911 to September 1970. October 1934 to October 1950, change in contents published with records for Puyallup River at Puyallup. Monthend contents only November 1911 to September 1950, published in WSP 1316.

GAGE.--Nonrecording gage. Datum of gage is 0.7 ft above mean sea level (levels by Puget Sound Power & Light Co.).

EXTREMES.--Maximums and minimums (contents in acre-feet, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum observed		Date	Date	Minimum observed	
		Contents	G.H.			Contents	G.H.
1966	Sept. 6, 1966	46,660	543.00	Mar. 7, 1966		11,070	525.10
1967	June 19, 1967	46,760	543.04	Apr. 14, 1967		4,740	519.80
1968	Aug. 17, 1968	46,660	543.00	May 7, 1966		21,120	531.45
1969	Oct. 28, 1968	46,230	542.83	Feb. 27, 1969		14,180	527.24
1970	Aug. 31, 1970	46,710	543.02	Mar. 27, 1970		4,330	519.41

Period of record: Maximum contents observed, 51,710 acre-ft June 30, 1958 (gage height, 541.57 ft, capacity table dated Jan. 19, 1920); maximum gage height observed, 543.04 ft June 19, 1967; minimum contents observed, 458 acre-ft June 24, 1912 (gage height, 505.70 ft).

REMARKS.--Reservoir is formed by a diked natural lake into which a great part of the low-water flow of White River is diverted. Construction of dike began June 1910; storage began in 1911. Usable capacity, 46,660 acre-ft between elevations 515 (normal minimum pool) and 543 ft (normal maximum pool), from capacity table dated July 28, 1959. Dead storage unknown. Figures given herein represent usable contents. Reservoir is used for power development at the Dieringer White River powerplant.

COOPERATION.--Gage-height record and contents curve furnished by Puget Sound Power & Light Co.

MONTHEND GAGE HEIGHT AND CONTENTS, WATER YEARS OCTOBER 1965 TO SEPTEMBER 1970

DATE	GAGE HEIGHT (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)	DATE	GAGE HEIGHT (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
OCT. 31, 1965.....	540.66	40,880	-1,500	OCT. 31, 1968.....	542.34	44,990	-760
NOV. 30.....	541.86	43,790	+2,910	NOV. 30.....	542.47	45,320	+330
DEC. 31.....	539.88	39,030	-4,760	DEC. 31.....	537.81	34,240	-11,080
CAL YR 1965.....	-	-	-4,060	CAL YR 1968.....	-	-	-9,550
JAN. 31, 1966.....	529.54	17,820	-21,210	JAN. 31, 1969.....	527.37	14,380	-19,860
FEB. 28.....	531.33	20,900	+3,080	FEB. 28.....	527.49	14,560	+180
MAR. 31.....	539.71	38,630	+17,730	MAR. 31.....	536.84	32,060	+17,500
APR. 30.....	540.01	39,330	+700	APR. 30.....	541.10	41,940	+9,880
MAY 31.....	541.44	42,770	+3,440	MAY 31.....	542.58	45,600	+3,660
JUNE 30.....	541.99	44,110	+1,340	JUNE 30.....	542.45	45,270	-330
JULY 31.....	542.70	45,900	+1,790	JULY 31.....	542.23	44,720	-550
AUG. 31.....	542.65	45,770	-130	AUG. 31.....	542.27	44,820	+108
SEPT. 30.....	542.70	45,900	+130	SEPT. 30.....	542.03	44,210	-610
WTR YR 1966.....	-	-	+3,520	WTR YR 1969.....	-	-	-1,540
OCT. 31.....	542.59	45,620	-280	OCT. 31.....	540.37	40,190	-4,020
NOV. 30.....	542.70	45,900	+280	NOV. 30.....	542.04	44,240	+4,050
DEC. 31.....	540.95	41,570	-4,330	DEC. 31.....	542.18	44,590	+390
CAL YR 1966.....	-	-	+2,540	CAL YR 1969.....	-	-	+10,350
JAN. 31, 1967.....	539.56	38,280	-3,290	JAN. 31, 1970.....	546.70	40,980	-3,610
FEB. 28.....	535.95	30,110	-8,170	FEB. 28.....	531.08	20,450	-20,590
MAR. 31.....	522.26	7,420	-22,690	MAR. 31.....	529.20	9,840	-10,610
APR. 30.....	525.50	11,750	+4,330	APR. 30.....	541.11	6,140	-3,700
MAY 31.....	540.88	41,410	+29,660	MAY 31.....	541.22	42,230	+36,090
JUNE 30.....	542.15	44,510	+3,100	JUNE 30.....	542.34	44,990	+2,760
JULY 31.....	542.53	45,470	+960	JULY 31.....	543.00	46,660	+1,670
AUG. 31.....	542.50	45,400	-70	AUG. 31.....	543.82	46,710	+50
SEPT. 30.....	541.64	43,260	-2,140	SEPT. 30.....	541.48	42,870	-3,840
WTR YR 1967.....	-	-	-2,640	WTR YR 1970.....	-	-	-1,340
OCT. 31.....	542.58	45,600	+2,340	† GAGE HEIGHT AT 2400 HOURS.			
NOV. 30.....	540.50	48,500	-5,100				
DEC. 31.....	541.86	49,790	+3,290				
CAL YR 1967.....	-	-	+2,220				
JAN. 31, 1968.....	542.26	44,790	+1,000				
FEB. 29.....	540.57	40,670	-4,120				
MAR. 31.....	542.38	44,960	+4,270				
APR. 30.....	532.52	23,110	-21,850				
MAY 31.....	542.44	45,240	+22,130				
JUNE 30.....	542.12	44,440	-800				
JULY 31.....	542.03	44,210	-230				
AUG. 31.....	542.42	45,190	+980				
SEPT. 30.....	542.64	45,790	+590				
WTR YR 1968.....	-	-	+2,490				

12101100 LAKE TAPPS DIVERSION AT DIERINGER, WASH.

LOCATION (REVISED).--Lat 47°14'18", long 122°13'37", in SW¼NW¼ sec. 7, T.20 N., R.5 E., Pierce County, on right bank 850 ft downstream from White River powerplant at Dieringer and 1,400 ft upstream from mouth.

PERIOD OF RECORD.--April 1958 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 60 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 1,039 cfs (752,800 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Maximum			Minimum		
Wtr yr	Date	Discharge	G.H.	Date	Discharge
1966	Nov. 26, 1965	2,190	5.73	June 1, 1966	11
1967	(a)	2,210	5.69	Sept. 29, 1967	7.2
1968	July 4, 1968	2,220	5.70	June 14, 15, 1968	27
1969	Nov. 11, 1968	2,210	5.69	July 14-18, 1969	28
1970	Dec. 21, 22, 23, 27, 1969	2,200	5.66	May 18-21, 1970	26

a Many days October to December 1966, January, July to September 1967.

b Occurred Oct. 21, 23, 1966, Aug. 18, Sept. 7, 1967.

Period of record: Maximum discharge, 2,530 cfs Jan. 29, 1965 (gage height, 6.23 ft); minimum, 7.2 cfs Sept. 29, 1967 (gage height, 0.20 ft); minimum daily, 20 cfs Aug. 22, 23, 1959.

REMARKS.--Records excellent. Flow regulated by White River powerplant.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	35	660	86	910	1,160	2,150	1,170	444	1,190	1,070	937
2	36	36	360	353	571	1,200	2,140	1,340	311	1,400	728	297
3	39	36	1,036	1,500	482	1,450	1,600	1,610	644	897	1,230	307
4	230	37	1,420	1,100	1,150	1,310	787	1,600	995	1,230	798	577
5	198	37	1,360	1,220	1,030	1,020	1,260	1,600	576	1,670	1,160	518
6	198	37	1,070	1,460	969	1,020	2,100	1,560	316	1,410	910	507
7	185	37	965	1,620	706	1,640	2,150	1,570	240	1,630	448	574
8	195	37	1,000	1,810	002	536	2,140	1,610	22	1,600	1,000	476
9	38	37	1,098	1,680	770	853	1,868	1,570	22	1,520	820	388
10	39	150	1,000	1,600	625	1,270	1,000	1,570	368	1,190	016	481
11	290	126	802	1,150	890	871	2,100	1,500	338	1,160	866	656
12	190	281	608	1,010	950	706	2,140	1,670	21	596	816	527
13	192	37	1,380	1,230	815	239	2,140	1,660	699	1,100	588	510
14	1,440	485	941	1,090	779	549	2,140	1,678	1,070	1,090	648	341
15	1,150	474	766	2,140	289	563	2,140	1,660	1,100	1,340	720	304
16	35	960	636	2,050	406	595	1,550	1,670	1,050	1,220	704	700
17	35	350	720	1,800	373	547	1,250	1,680	1,550	830	744	297
18	200	172	761	1,020	253	012	1,170	1,670	1,250	1,070	768	423
19	185	362	480	1,600	150	898	1,720	1,120	1,540	951	568	024
20	198	368	1,370	2,140	32	970	1,560	1,058	1,540	1,160	960	315
21	198	656	1,300	1,590	209	847	1,818	1,490	1,240	1,360	1,050	329
22	190	1,248	676	1,560	32	1,050	1,640	1,670	1,500	1,000	1,010	607
23	36	815	792	1,570	226	605	1,010	1,490	1,160	097	602	576
24	36	660	299	1,630	559	252	1,750	1,400	1,200	990	640	735
25	50	249	170	1,140	323	278	2,050	1,360	1,420	924	472	499
26	33	568	359	1,540	279	33	1,300	1,600	960	995	764	664
27	35	660	371	1,550	524	34	1,410	2,150	1,400	732	271	440
28	35	394	628	1,240	622	199	1,410	1,730	1,400	1,040	142	300
29	33	368	242	845	-----	298	1,410	1,800	1,970	1,240	640	738
30	33	584	390	1,150	-----	227	1,620	1,730	1,400	640	660	861
31	35	-----	460	1,400	-----	1,140	-----	1,670	-----	990	576	-----
TOTAL	6,001	10,284	24,154	43,954	15,706	23,252	51,467	49,000	27,506	35,062	23,329	15,304
MEAN	194	343	779	1,418	561	750	1,716	1,581	917	1,131	753	510
MAX	1,440	1,240	1,420	2,140	1,150	1,640	2,150	2,150	1,570	1,670	1,238	861
MIN	33	39	170	86	32	33	787	1,050	21	596	142	297
AC-FT	11,900	20,400	47,910	87,180	31,150	46,120	102,100	97,190	54,560	69,550	46,270	30,360
CAL YR 1965	TOTAL	310,279	MEAN	850	MAX	2,190	MIN	32	AC-FT	615,400		
WTR YR 1966	TOTAL	325,039	MEAN	891	MAX	2,150	MIN	21	AC-FT	644,700		

PUYALLUP RIVER BASIN

12101100 LAKE TAPPS DIVERSION AT DIERINGER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	520	910	2,110	1,070	2,120	1,340	1,070	881	2,100	1,400	1,170	800
2	544	878	1,870	1,120	2,190	1,500	503	864	1,660	1,390	775	884
3	1,100	960	2,090	1,340	2,010	1,560	644	873	1,790	1,600	808	641
4	714	945	1,850	1,450	2,180	1,520	869	887	1,580	1,710	932	339
5	478	1,120	1,900	2,200	2,180	1,660	851	797	1,880	1,680	780	881
6	612	1,010	1,580	2,200	2,180	1,980	792	770	1,860	1,430	732	612
7	576	1,320	1,510	2,190	2,180	2,090	915	1,190	1,740	1,610	1,250	1,090
8	36	712	1,470	2,200	2,180	2,030	1,020	1,140	1,730	1,570	903	952
9	203	747	1,690	2,190	2,110	1,590	990	1,090	1,670	1,470	668	1,150
10	556	652	1,630	1,440	1,620	1,930	1,130	1,340	1,840	1,590	887	844
11	454	513	1,810	1,360	1,510	1,900	1,200	1,570	1,510	1,600	1,060	800
12	935	422	1,660	1,560	1,420	1,830	1,170	1,340	1,780	1,260	472	789
13	580	624	1,300	1,990	1,620	1,570	935	1,340	1,520	328	287	909
14	955	995	1,390	2,150	1,900	891	1,050	1,580	624	274	1,070	1,820
15	285	1,160	1,520	2,150	2,030	869	572	419	401	221	895	619
16	333	975	2,020	2,190	1,990	915	548	560	1,010	35	869	200
17	608	1,170	2,190	2,200	1,670	950	592	214	532	213	857	87
18	377	970	2,190	2,200	2,190	556	596	412	1,290	214	1,010	512
19	244	844	2,190	2,200	754	548	448	374	688	227	851	474
20	676	1,360	2,190	2,200	1,260	1,010	648	264	568	282	625	675
21	1,010	1,640	1,580	2,190	985	1,090	564	264	940	339	878	600
22	440	1,200	1,570	2,190	1,490	738	261	457	359	1,470	791	415
23	1,330	1,240	1,460	2,190	1,230	842	29	422	237	883	487	530
24	1,620	708	1,580	2,190	1,190	1,320	824	345	584	870	468	330
25	1,150	833	1,680	2,190	708	1,120	1,050	450	930	1,140	680	618
26	1,050	995	1,910	1,520	783	1,220	935	461	1,650	1,090	175	729
27	1,140	1,440	1,650	1,600	1,380	1,390	930	712	1,270	1,140	395	506
28	1,030	1,690	1,700	1,950	1,410	1,630	900	688	1,690	1,120	767	386
29	532	2,100	1,190	1,930	-----	1,270	704	1,460	905	905	808	380
30	887	2,020	1,370	2,080	-----	1,310	692	2,190	1,780	809	934	509
31	1,010	-----	1,250	2,090	-----	1,660	-----	2,190	-----	1,110	1,080	-----
TOTAL	21,987	32,135	53,300	60,110	46,442	41,829	23,652	27,746	38,493	31,230	24,654	19,091
MEAN	709	1,071	1,719	1,939	1,489	1,349	768	895	1,263	1,007	795	616
MAX	1,620	2,100	2,190	2,200	2,190	2,090	1,200	2,190	2,100	1,710	1,250	1,150
MIN	36	422	1,190	1,070	708	548	29	214	237	35	175	87
AC-FT	43,610	63,740	105,700	119,200	92,120	82,970	46,910	55,030	76,350	61,940	48,900	37,870
CAL YR 1966	TOTAL 392,022		MEAN 1,074		MAX 2,190		MIN 21		AC-FT 777,600			
WTR YR 1967	TOTAL 420,669		MEAN 1,153		MAX 2,200		MIN 29		AC-FT 834,400			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	536	1,970	1,040	692	1,650	2,180	1,670	1,170	1,620	808	1,190	565
2	648	1,980	725	936	1,830	1,400	1,320	1,610	1,520	742	942	1,140
3	597	1,370	587	781	1,690	1,410	1,370	1,600	853	914	286	735
4	596	823	1,130	772	1,610	1,340	895	1,600	725	1,450	358	188
5	899	610	1,000	1,250	1,830	1,290	1,370	1,200	338	1,560	1,270	241
6	605	867	1,020	1,670	1,900	1,550	1,190	1,630	424	1,560	1,040	286
7	387	1,100	1,010	1,180	1,300	1,500	1,240	1,180	862	1,530	590	444
8	34	979	959	1,270	920	1,430	1,370	1,580	507	1,610	368	179
9	462	1,130	533	1,370	723	1,440	1,930	545	558	1,770	875	389
10	459	1,360	402	1,210	537	1,460	1,940	634	1,370	1,380	37	1,450
11	467	1,650	1,160	1,510	645	1,480	1,910	37	790	1,820	389	1,100
12	442	1,440	1,130	1,270	836	1,100	1,980	491	814	1,560	687	845
13	526	1,600	1,190	995	542	865	1,900	422	730	1,170	602	850
14	34	927	1,210	1,010	1,080	803	639	356	681	668	886	801
15	179	1,020	1,080	1,360	1,360	819	1,090	854	307	1,030	890	684
16	319	1,490	890	1,370	1,090	580	1,470	793	386	877	493	1,280
17	505	977	1,070	1,280	1,150	485	950	476	468	689	705	1,270
18	551	733	1,340	1,360	909	1,430	1,310	37	434	1,000	690	1,630
19	471	919	1,800	1,620	1,150	1,320	1,460	37	594	844	698	1,480
20	567	1,160	2,200	1,850	944	900	1,470	687	795	232	554	1,090
21	259	1,290	2,200	1,570	1,190	896	1,920	1,220	1,020	360	838	1,550
22	337	1,180	1,730	1,580	791	720	1,410	1,080	277	1,050	505	1,120
23	601	639	581	1,390	1,750	552	2,180	1,170	699	1,050	403	1,450
24	770	587	328	1,710	1,440	528	2,180	1,680	753	980	1,390	1,280
25	876	776	45	1,970	1,520	731	1,720	1,140	728	512	1,390	1,520
26	875	738	652	1,630	1,870	834	1,530	901	318	887	1,560	1,170
27	1,410	1,040	353	1,620	1,750	1,310	2,170	1,280	1,050	954	1,650	714
28	1,810	1,040	321	1,310	1,080	1,170	2,130	671	1,320	791	1,900	1,020
29	1,080	1,030	240	1,760	2,190	1,780	1,710	1,220	1,430	1,200	1,590	773
30	1,360	1,040	184	1,440	-----	2,190	941	1,250	645	1,020	1,560	908
31	1,330	-----	203	1,600	-----	1,630	-----	1,160	-----	1,220	961	-----
TOTAL	19,992	33,465	28,313	42,336	38,077	37,143	46,365	29,711	23,016	33,238	27,297	27,952
MEAN	645	1,116	913	1,366	1,313	1,198	1,546	958	767	1,072	881	932
MAX	1,810	1,980	2,200	2,190	2,190	2,180	2,180	1,680	1,620	1,820	1,900	1,630
MIN	34	587	45	692	537	485	639	37	277	232	37	179
AC-FT	39,650	66,380	56,100	83,970	75,530	73,670	91,960	58,390	45,650	65,930	54,140	55,440
CAL YR 1967	TOTAL 395,017		MEAN 1,082		MAX 2,200		MIN 29		AC-FT 783,500			
WTR YR 1968	TOTAL 386,905		MEAN 1,057		MAX 2,200		MIN 34		AC-FT 767,400			

PUYALLUP RIVER BASIN

12101500 PUYALLUP RIVER AT PUYALLUP, WASH.

LOCATION.--Lat 47°12'31", long 122°19'33", in SE¼NW¼ sec.20, T.20 N., R.4 E., Pierce County, on left bank 0.8 mile upstream from bridge at Clark Creek, 2.0 miles (revised) northwest of Puyallup City Hall, and at mile 6.6.

DRAINAGE AREA.--948 sq mi.

PERIOD OF RECORD.--May 1914 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Dec. 3, 1919, at sites 1.2 miles upstream and 900 ft upstream at different datums. Dec. 3, 1919, to Nov. 9, 1935, at site 500 ft upstream at datum 9.61 ft higher than present datum.

AVERAGE DISCHARGE.--56 years, 3,356 cfs (2,431,000 acre-ft per year), adjusted for storage in Lake Tapps since October 1934 and Mud Mountain Lake October 1964 to September 1967.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, elevation in feet) for the water years 1966-70 are contained in the following table:

Maximum				Minimum				Minimum daily			
Wtr yr	Date	Disch.	Elev.	Date	Disch.	Elev.		Date	Disch.		
1966	May 6, 1966	8,710	14.42	Feb. 19, 1966	796	a8.83		Feb. 20, 1966	949		
1967	Jan. 19, 1967	14,700	17.23	(b)	628	c8.65		Oct. 19, 1966	813		
1968	Dec. 25, 1967	24,400	21.08	Oct. 7, 1967	740	8.86		Oct. 8, 1967	1,010		
1969	Jan. 5, 1969	25,600	21.50	Sept. 6, 1969	513	d8.54		Sept. 7, 1969	695		
1970	Jan. 20, 1970	17,700	18.48	Sept. 16, 1970	331	8.23		Sept. 13, 1970	541		

a Occurred Dec. 19, 1965.

b Oct. 19, 1966, Sept. 14, 1967.

c Occurred Oct. 19, 1966.

d Occurred Sept. 16, 1969.

Period of record: Maximum discharge, 57,000 cfs Dec. 10, 1933 (elevation, 31.0 ft, present datum); minimum, 306 cfs Sept. 25, 1955 (elevation, 8.23 ft); minimum daily, 400 cfs Nov. 30, 1952.

REMARKS.--Records good. All diverted water returned to river above gage. Large part of flow of White River (a tributary) diverted through Lake Tapps (see station 12101000). Flood flow regulated since 1942 by Mud Mountain Lake on White River (see station 12098000). Some pondage on tributaries and upper Puyallup River.

Diurnal fluctuations caused by powerplants and a local melt above station. Since 1912 the city of Tacoma pipeline diversion from Green River has spilled as much as 123 cfs daily, and since 1957 an average of about 29 cfs per month into Puyallup River at south line of sec.7, T.19 N., R.5 E., 0.5 mile east of McMillin.

Water-quality records for the water years 1966-68 are published in reports of the Geological Survey.

REVISIONS.--WSP 832: Drainage area.

Monthly mean diversion, in cubic feet per second, from Green River, water years 1966-70

October 1965.....	9.78	January 1967.....	53.8	April 1968.....	7.95	July 1969.....	3.23
November.....	25.4	February.....	22.9	May.....	15.4	August.....	2.78
December.....	26.5	March.....	6.85	June.....	2.58	September.....	5.54
January 1966.....	24.8	April.....	3.51	July.....	1.23	October.....	4.08
February.....	22.0	May.....	34.8	August.....	2.46	November.....	7.75
March.....	14.9	June.....	3.81	September.....	26.1	December.....	7.47
April.....	45.0	July.....	6.00	October.....	5.46	January 1970.....	3.46
May.....	27.4	August.....	.62	November.....	53.5	February.....	10.5
June.....	1.64	September.....	1.48	December.....	20.5	March.....	3.98
July.....	5.42	October.....	2.2	January 1969.....	16.0	April.....	10.3
August.....	.57	November.....	26.0	February.....	6.68	May.....	29.1
September.....	10.3	December.....	46.9	March.....	31.0	June.....	9.82
October.....	5.60	January 1968.....	55.3	April.....	34.3	July.....	3.16
November.....	24.6	February.....	52.6	May.....	62.0	August.....	.03
December.....	44.2	March.....	20.5	June.....	25.8	September.....	1.92

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,460	1,070	1,730	1,310	2,180	2,510	3,000	2,420	2,550	3,500	2,570	1,350
2	1,340	1,140	1,700	2,070	1,780	2,500	3,250	2,580	2,760	3,650	2,240	1,220
3	1,390	1,210	2,070	1,960	1,840	2,610	4,380	3,220	2,090	4,570	2,820	1,340
4	1,500	3,010	3,720	2,570	2,100	2,360	2,970	3,630	2,850	5,130	2,430	1,680
5	1,440	2,710	3,330	2,090	2,160	2,140	3,130	5,160	2,040	5,120	2,630	1,770
6	1,620	2,830	2,990	3,490	2,170	2,010	4,260	7,460	2,660	4,270	2,250	1,820
7	2,040	2,190	3,080	3,220	1,810	2,820	4,560	7,910	3,500	3,830	1,890	1,570
8	1,950	1,940	3,10	3,490	1,850	2,810	4,570	7,160	3,540	3,900	2,370	2,000
9	1,220	1,620	2,800	4,820	1,800	3,040	4,380	6,790	3,640	4,280	2,300	1,370
10	1,070	1,190	2,510	4,270	1,660	3,750	4,810	6,020	4,220	4,010	2,340	1,490
11	1,190	1,190	2,120	3,430	1,920	2,890	3,220	5,280	4,120	3,850	2,410	1,700
12	1,080	1,660	2,890	3,990	2,980	2,310	5,550	4,820	4,890	3,290	2,060	1,450
13	1,280	1,050	2,290	4,330	1,890	2,430	4,950	4,390	4,350	3,350	1,890	1,310
14	3,300	1,500	2,000	5,660	1,930	3,200	4,620	3,360	4,020	3,520	2,260	1,170
15	2,700	1,340	1,840	5,370	1,280	2,980	4,630	3,360	3,930	4,020	2,200	1,240
16	2,060	1,980	1,370	4,560	1,320	2,730	3,910	3,540	4,310	3,670	2,130	1,640
17	2,060	1,660	2,890	3,990	2,980	2,310	5,550	4,820	4,890	3,290	2,060	1,450
18	2,280	1,700	1,730	2,970	1,170	2,480	2,990	3,150	4,350	3,160	2,020	1,760
19	2,310	1,460	1,250	3,210	1,020	2,670	3,430	2,660	4,660	2,630	1,770	1,990
20	2,440	1,430	2,270	3,620	949	2,780	3,310	2,660	4,200	2,860	2,120	1,340
21	2,280	1,770	2,280	3,080	1,200	2,750	3,450	3,260	3,260	2,940	2,230	1,410
22	1,660	1,660	2,890	3,990	2,980	2,310	5,550	4,820	4,890	3,290	2,060	1,450
23	1,190	2,230	1,760	2,910	1,250	2,160	2,530	3,240	2,780	2,400	2,110	2,440
24	1,310	1,080	1,990	2,910	1,590	1,790	3,090	2,920	3,090	2,570	2,080	1,930
25	1,440	1,570	1,300	2,370	1,340	1,040	3,520	3,130	3,010	2,380	1,930	1,560
26	1,480	1,710	1,360	2,700	1,270	1,710	2,880	3,900	2,590	2,350	2,030	1,680
27	1,290	1,680	2,800	3,800	1,480	1,850	2,770	4,650	3,080	1,990	1,740	1,510
28	1,160	1,570	3,090	2,660	2,200	2,090	2,710	3,880	5,390	2,480	1,420	1,320
29	1,080	1,430	2,400	2,010	-----	2,350	2,680	3,540	5,590	2,780	1,660	2,010
30	1,030	1,400	2,010	2,340	-----	2,960	2,820	3,498	4,470	2,190	1,430	2,130
31	1,410	-----	1,810	2,910	-----	4,530	-----	3,150	-----	2,610	1,370	-----
TOTAL	51,020	51,630	66,760	107,310	45,429	79,040	715,230	127,960	110,580	103,250	64,940	49,480
MEAN	1,644	1,721	2,154	3,462	1,622	2,556	3,841	4,128	3,686	3,331	2,095	1,616
MAX	3,700	3,010	3,720	5,660	2,200	4,530	5,750	7,910	5,390	5,130	2,820	2,440
MIN	1,030	1,050	1,250	1,310	949	1,710	2,530	2,420	2,840	1,990	1,370	1,170
AC-FT	101,200	102,400	132,400	212,800	90,110	156,880	228,080	253,860	219,300	204,800	128,080	96,160
AC-FT*	-1,500	+2,910	-4,760	-21,210	+3,080	-17,730	+700	+3,440	+1,340	+1,790	-130	+130
MEAN*	1,623	1,770	2,078	3,136	1,678	2,838	3,854	4,183	3,707	3,360	2,093	1,638
AC-FT*	99,700	105,300	127,600	191,600	93,190	174,500	229,300	257,200	220,600	206,600	128,700	96,290

CLR YR 1965 TOTAL 1,189,070 MEAN 3,258 MAX 35,000 MIN 812 AC-FT 1,259,000 MEAN 3,252 AC-FT* 2,354,000

WTR YR 1966 TOTAL 971,629 MEAN 2,662 MAX 7,910 MIN 949 AC-FT 1,927,000 MEAN 2,667 AC-FT* 1,931,000

* CHANGE IN CONTENTS, IN ACRE-FEET, IN LAKE TAPPS, FROM INFORMATION BY PUGET SOUND POWER & LIGHT CO.

† ADJUSTED FOR CHANGE IN CONTENTS IN LAKE TAPPS.

PUYALLUP RIVER BASIN

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12101500 PUYALLUP RIVER AT PUYALLUP, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,590	2,880	6,660	4,910	5,670	3,540	2,530	2,230	4,460	4,620	2,490	2,270
2	2,070	1,960	5,860	4,290	5,130	3,320	1,840	2,160	4,640	4,510	1,960	2,350
3	2,320	1,920	4,890	5,370	4,660	3,300	1,820	2,120	5,300	4,680	2,120	1,930
4	1,480	1,820	4,110	6,260	4,660	3,080	2,110	2,120	4,860	4,970	2,160	1,520
5	1,380	2,010	4,090	6,520	8,080	3,130	2,060	2,130	5,400	5,160	2,010	2,220
6	1,440	2,030	3,510	5,370	6,420	3,500	2,080	2,210	5,980	4,300	1,910	1,810
7	1,450	2,360	3,500	5,030	5,520	3,550	2,100	2,780	5,890	3,900	2,380	2,020
8	1,100	1,600	3,210	5,010	4,780	3,520	2,130	3,220	5,820	3,540	2,090	1,950
9	1,090	1,580	3,290	5,030	4,570	3,470	2,110	4,250	5,300	4,970	1,890	2,310
10	1,340	1,860	3,520	4,190	3,860	3,620	2,330	4,260	5,400	3,140	2,210	1,930
11	1,210	1,400	4,060	6,510	3,580	3,440	2,230	3,470	5,340	3,270	2,480	2,280
12	1,610	2,070	4,590	6,120	3,480	3,280	2,290	3,400	5,160	3,640	1,890	1,750
13	1,310	2,340	7,610	7,970	4,860	3,050	2,260	3,460	4,820	3,770	1,970	1,630
14	1,590	3,650	9,670	11,300	4,640	2,140	2,390	3,400	4,820	3,450	2,300	1,730
15	898	3,860	7,270	10,900	4,440	2,100	1,730	2,130	4,810	4,260	2,210	1,360
16	946	3,420	6,660	10,200	4,360	2,420	1,620	2,870	5,690	3,120	2,190	1,100
17	1,160	3,200	7,140	7,710	4,210	2,680	1,650	3,790	5,420	3,010	2,220	1,030
18	965	2,880	6,500	5,900	6,240	2,210	1,680	3,660	6,890	2,838	2,310	1,390
19	813	2,560	6,140	9,270	3,700	2,060	1,890	3,850	8,170	2,770	2,900	1,560
20	2,510	3,090	7,460	12,700	4,200	2,490	1,910	4,350	7,090	1,650	1,910	1,050
21	2,480	3,180	5,780	6,730	3,320	2,660	1,830	5,140	5,490	1,740	2,000	1,840
22	2,930	2,580	4,780	6,730	3,400	2,510	1,470	5,400	8,990	2,790	1,960	1,550
23	2,590	2,420	3,980	5,540	3,080	3,400	1,170	4,650	8,730	2,350	1,880	1,350
24	4,520	1,950	3,350	4,740	2,890	3,550	1,890	3,920	7,160	2,540	1,470	1,240
25	3,280	3,110	4,070	4,470	2,430	3,240	2,140	3,460	7,380	2,660	1,590	1,530
26	2,980	4,200	3,998	3,880	2,220	3,010	2,130	3,190	6,690	2,560	1,130	1,550
27	3,130	4,020	3,430	4,840	2,880	3,150	2,260	3,320	6,050	2,600	1,420	1,390
28	2,630	4,450	3,460	9,790	3,040	3,380	2,290	3,098	6,150	2,490	1,890	1,360
29	1,920	4,450	3,460	9,260	2,950	2,200	2,200	4,720	5,340	2,680	2,040	1,280
30	2,560	4,000	3,590	8,800	2,890	2,820	2,420	5,270	5,240	2,150	2,290	1,298
31	2,310	-----	3,430	6,510	-----	3,230	-----	4,730	-----	2,510	2,600	-----
TOTAL	62,466	84,180	153,370	213,180	122,740	93,890	60,310	108,570	179,210	100,450	63,170	50,478
MEAN	2,015	2,803	4,947	6,877	4,304	3,029	2,010	3,502	5,974	3,240	2,038	1,682
MIN	813	1,548	3,210	5,000	3,080	2,200	1,770	2,120	4,860	2,540	1,930	1,030
AC-FT	123,900	166,800	304,200	422,880	243,500	186,200	119,600	215,300	355,300	199,200	125,300	100,100
(+)	-280	+280	-4,330	-3,290	-8,170	-22,690	+4,330	+29,640	+3,100	+960	-70	-2,140
MEAN+	2,010	2,808	4,877	6,823	4,237	2,659	2,082	3,985	6,026	3,256	2,036	1,646
AC-FT+	123,600	167,100	299,900	419,500	235,300	163,500	123,900	245,000	358,600	200,200	125,200	97,960

CAL YR 1966 TOTAL 1,102,155 MEAN 3,020 MAX 9,670 MIN 813 AC-FT 2,186,000 MEAN + 3,024 AC-FT + 2,189,000
MTR YR 1967 TOTAL 1,291,926 MEAN 3,540 MAX 12,700 MIN 813 AC-FT 2,563,000 MEAN + 3,535 AC-FT + 2,559,000

† CHANGE IN CONTENTS, IN ACRE-FEET, IN LAKE TAPPS, FROM INFORMATION BY PUGET SOUND POWER & LIGHT CO.
* ADJUSTED FOR CHANGE IN CONTENTS IN LAKE TAPPS.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,138	6,190	2,030	3,410	3,310	4,150	3,750	3,040	5,230	3,110	2,570	2,390
2	1,440	4,640	1,640	3,350	3,930	3,360	3,330	3,960	14,200	2,220	2,340	2,950
3	1,690	3,580	1,830	2,670	5,030	3,300	3,090	3,140	15,400	2,410	1,480	2,650
4	1,730	2,440	2,360	2,320	7,700	3,360	2,590	3,210	9,050	3,100	1,990	2,420
5	1,710	2,840	2,380	2,620	6,780	3,710	3,040	2,840	5,940	3,420	2,290	2,460
6	1,340	2,110	2,190	2,860	6,400	3,710	2,940	3,238	5,340	3,490	2,100	2,380
7	1,800	1,250	2,110	2,680	5,370	3,470	3,060	2,650	4,770	3,600	1,950	1,870
8	1,010	2,180	2,000	2,610	4,390	3,340	2,940	3,020	3,270	3,440	1,260	1,460
9	1,910	2,700	1,610	3,210	3,890	3,210	3,570	2,180	3,090	3,720	1,000	1,570
10	1,220	3,710	2,340	3,510	3,540	3,090	3,650	2,360	3,980	3,070	1,130	2,490
11	1,840	4,450	4,500	3,350	3,410	3,040	3,710	1,890	4,450	3,530	1,400	2,270
12	1,980	3,530	3,300	3,180	3,190	2,730	3,620	2,470	4,090	3,600	1,700	2,170
13	1,730	3,580	2,630	4,500	2,090	2,340	3,420	2,090	4,210	2,840	1,610	1,820
14	1,710	2,600	2,500	5,640	2,390	2,270	2,140	1,770	3,990	2,030	1,950	2,030
15	1,440	2,880	2,240	7,440	2,630	2,240	2,680	2,170	2,570	2,380	3,060	2,940
16	1,680	2,970	1,910	6,670	2,320	2,640	2,910	2,130	2,510	2,880	1,690	3,550
17	1,880	2,320	2,060	4,660	2,450	2,250	2,340	1,840	3,690	1,800	1,710	3,660
18	1,850	1,920	2,220	3,830	3,500	2,960	2,500	1,690	4,370	2,190	1,790	9,090
19	2,020	2,030	2,660	4,440	14,200	2,780	2,620	2,120	4,580	2,060	1,820	6,968
20	1,870	2,180	3,130	7,740	14,500	2,280	2,680	4,280	4,760	1,450	1,660	4,340
21	1,600	2,220	3,100	14,700	10,000	2,180	3,350	4,620	4,380	1,288	1,830	3,520
22	2,170	2,130	2,890	9,830	9,870	2,020	2,490	3,520	2,010	2,100	1,370	2,620
23	2,920	1,730	2,490	6,760	9,780	1,680	3,470	3,300	3,180	2,110	1,680	2,890
24	2,390	1,900	3,400	6,060	8,850	1,690	3,460	3,750	4,248	2,878	4,850	2,590
25	3,140	2,090	13,880	6,350	7,050	2,020	3,010	3,250	1,690	1,650	4,220	2,630
26	2,430	1,890	18,000	4,730	6,200	2,100	2,970	4,100	4,560	2,030	5,240	2,420
27	4,380	2,020	12,600	3,960	5,190	2,910	3,940	4,288	4,770	2,320	4,610	1,910
28	12,700	2,130	7,750	3,060	4,350	6,790	3,500	3,270	3,570	2,300	6,540	2,198
29	6,150	2,110	5,900	3,490	4,280	5,800	3,590	3,280	4,500	2,690	5,510	1,820
30	5,370	2,050	4,630	3,010	-----	5,840	3,010	3,140	2,230	2,440	4,080	2,000
31	5,060	-----	3,350	3,820	-----	4,200	-----	2,798	-----	2,400	3,070	-----
TOTAL	88,450	80,450	126,200	145,820	166,530	97,460	92,910	90,740	149,780	79,030	78,700	86,060
MEAN	2,895	2,681	4,071	4,704	5,742	3,144	3,097	2,927	4,993	2,549	2,539	2,869
MAX	12,700	6,190	18,000	14,700	14,500	6,790	3,750	4,620	15,400	3,720	6,540	9,090
MIN	1,010	1,730	1,610	2,320	2,090	1,600	2,140	1,690	2,510	1,288	1,130	1,460
AC-FT	159,680	159,500	250,380	289,280	330,300	193,380	184,300	180,000	297,180	156,000	156,100	170,700
(+)	-2,340	-5,100	+3,290	+1,000	-4,120	+4,270	-21,830	-22,130	-800	-230	+980	+560
MEAN+	2,633	2,595	4,124	5,684	5,622	3,221	2,873	3,207	4,879	2,547	2,558	2,878
AC-FT+	161,900	154,400	253,600	290,200	326,200	197,600	162,500	202,100	296,300	156,000	157,100	171,300

CAL YR 1967 TOTAL 1,279,070 MEAN 3,504 MAX 18,000 MIN 1,010 AC-FT 2,537,000 MEAN + 3,507 AC-FT + 2,539,000
MTR YR 1968 TOTAL 1,274,110 MEAN 3,481 MAX 18,000 MIN 1,010 AC-FT 2,527,000 MEAN + 3,484 AC-FT + 2,529,000

† CHANGE IN CONTENTS, IN ACRE-FEET, IN LAKE TAPPS, FROM INFORMATION BY PUGET SOUND POWER & LIGHT CO.
* ADJUSTED FOR CHANGE IN CONTENTS IN LAKE TAPPS.

PUYALLUP RIVER BASIN

12101500 PUYALLUP RIVER AT PUYALLUP, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,870	2,380	3,800	5,050	1,430	1,540	4,170	3,510	10,100	3,170	1,660	764
2	1,710	2,070	3,880	5,120	1,250	1,260	3,550	3,550	9,730	3,430	1,710	1,580
3	1,890	2,430	6,030	4,860	1,740	1,590	3,340	2,840	9,090	3,800	1,780	1,450
4	1,850	2,410	11,400	7,510	2,260	1,580	2,990	2,620	8,030	3,640	2,280	1,510
5	1,850	2,320	8,940	20,400	2,500	2,090	2,440	3,300	7,420	3,520	2,100	1,380
6	2,050	2,100	6,890	22,200	2,370	2,620	2,450	3,350	7,390	3,270	1,690	756
7	2,310	1,700	4,090	20,200	2,240	2,440	2,990	3,690	6,800	3,380	1,530	695
8	2,150	2,440	4,480	11,300	1,800	1,640	3,000	4,820	6,800	3,060	1,610	1,100
9	2,290	4,700	4,640	9,070	2,490	1,450	2,920	6,350	6,930	2,750	1,430	1,410
10	2,620	5,000	5,800	7,120	2,530	2,230	3,260	7,830	7,250	2,480	1,460	1,340
11	2,390	9,170	6,260	5,510	3,220	1,960	3,130	7,830	6,930	3,130	1,970	1,970
12	2,430	12,000	5,540	4,670	3,450	1,880	2,730	7,210	6,780	3,520	1,790	1,640
13	2,370	8,560	4,470	4,380	3,050	1,690	3,540	5,740	6,050	2,280	1,590	1,710
14	2,560	5,620	4,170	3,820	3,000	1,710	3,350	5,140	5,350	2,090	1,620	1,200
15	2,910	4,070	3,940	3,400	2,120	1,620	3,360	4,920	5,030	1,860	1,910	1,580
16	3,220	3,830	4,420	3,250	1,720	1,490	3,340	4,630	4,940	2,160	1,910	965
17	2,910	3,750	4,130	3,140	2,000	2,640	3,180	4,290	4,700	2,170	1,650	1,590
18	3,230	3,940	3,740	2,890	2,380	2,960	4,170	4,590	4,680	1,710	1,490	2,780
19	3,120	4,230	3,990	2,480	2,870	2,710	4,110	6,580	4,810	2,000	1,590	2,570
20	4,570	4,070	3,320	2,790	2,460	2,540	4,080	6,670	4,500	2,040	1,500	2,010
21	4,660	3,830	3,010	2,890	2,230	2,480	3,750	6,980	3,900	2,380	1,670	1,840
22	4,480	5,570	2,950	3,190	2,180	2,420	3,920	8,750	3,300	2,660	2,040	2,040
23	2,930	5,920	3,230	2,930	2,050	2,610	6,570	7,030	4,380	2,570	2,060	2,800
24	3,210	5,120	3,720	2,710	2,230	2,620	7,250	6,600	7,030	2,450	1,790	2,510
25	2,960	4,900	3,440	3,000	1,990	2,650	5,290	5,910	6,280	2,350	1,530	2,270
26	2,820	4,030	3,510	2,840	2,260	2,070	4,330	5,720	6,000	2,000	1,430	1,940
27	2,420	4,220	3,340	2,870	2,490	2,320	3,410	5,590	4,950	2,430	1,430	1,570
28	2,710	4,220	3,300	2,420	1,670	2,650	3,480	5,540	4,380	2,690	1,340	1,560
29	2,820	3,850	3,810	2,390	-----	2,780	3,710	6,710	3,750	2,320	1,410	2,150
30	2,770	4,110	3,700	2,220	-----	2,110	3,480	13,800	3,520	1,870	973	2,830
31	2,570	-----	3,400	2,100	-----	3,930	-----	11,800	-----	2,070	1,040	-----
TOTAL	84,650	132,560	141,340	178,720	63,980	68,320	111,290	183,890	180,800	81,250	50,983	51,510
MEAN	2,731	4,419	4,559	5,765	2,285	2,204	3,710	5,932	6,027	2,621	1,645	1,717
MAX	4,660	12,000	11,400	22,200	3,450	3,930	7,250	13,800	10,100	3,000	2,280	2,830
MIN	1,710	1,700	2,950	1,250	1,260	2,440	2,620	3,300	3,300	1,710	973	695
AC-FT	167,900	262,900	280,300	354,500	126,800	135,900	228,700	364,700	358,600	161,100	101,100	102,500
(+)	-760	+330	-11,080	-19,860	+180	+17,500	+9,880	+3,660	-630	-550	+100	-610
MEAN*	2,717	4,424	4,377	5,441	2,289	2,488	3,876	5,990	6,022	2,611	1,646	1,708
AC-FT*	167,100	263,200	269,200	334,600	127,100	153,000	230,600	368,400	358,300	160,600	101,200	101,600

CAL YR 1968 TOTAL 1,345,580 MEAN 3,676 MAX 15,400 MIN 1,130 AC-FT 2,669,000 MEAN * 3,661 AC-FT * 2,659,000
WTR YR 1969 TOTAL 1,329,293 MEAN 3,642 MAX 22,200 MIN 695 AC-FT 2,637,000 MEAN * 3,639 AC-FT * 2,635,000

* CHANGE IN CONTENTS, IN ACRE-FEET, IN LAKE TAPPS, FROM INFORMATION BY PUGET SOUND POWER & LIGHT CO.

* ADJUSTED FOR CHANGE IN CONTENTS IN LAKE TAPPS.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,490	1,040	1,880	1,710	5,080	2,880	1,970	3,020	4,890	2,620	1,880	2,080
2	3,140	772	1,640	1,850	4,710	2,710	2,090	3,000	5,188	2,200	1,860	1,570
3	2,780	1,150	1,870	1,980	4,570	3,020	2,360	2,490	6,260	2,350	2,200	1,980
4	2,090	2,520	1,970	1,650	4,000	2,790	2,350	3,540	6,488	3,210	2,050	2,050
5	1,210	5,670	1,910	2,220	4,230	2,650	2,270	4,440	6,010	4,630	2,170	1,660
6	1,950	3,470	1,450	1,820	3,550	2,820	2,530	4,210	5,670	3,990	2,040	1,940
7	1,800	2,980	1,330	1,780	3,920	2,890	2,890	3,400	4,480	3,450	2,010	3,020
8	2,280	2,230	1,700	1,860	3,550	2,680	2,530	3,210	5,830	2,730	1,820	2,350
9	3,280	1,690	1,930	2,000	4,170	2,500	3,140	3,800	5,940	2,820	1,550	2,000
10	2,970	1,920	2,040	2,050	4,290	2,930	6,390	3,510	5,600	3,050	1,570	1,670
11	2,250	1,540	2,010	1,620	3,800	2,300	5,160	3,100	4,980	2,800	1,950	1,540
12	2,100	1,770	2,870	1,870	3,340	2,380	3,610	3,130	4,270	2,490	2,000	999
13	2,210	1,740	2,410	2,490	3,830	2,170	3,620	3,130	4,500	2,890	2,080	541
14	2,100	1,680	4,530	7,660	3,680	2,160	2,770	2,890	4,230	2,510	2,000	999
15	1,630	1,070	4,080	7,950	3,260	2,500	2,910	2,500	3,400	2,260	1,660	1,110
16	1,610	888	3,830	5,740	6,550	2,960	2,718	1,940	2,990	2,418	1,680	588
17	1,610	1,560	3,310	5,490	7,360	3,500	2,590	2,840	3,050	2,960	1,620	1,320
18	1,190	1,450	2,980	1,970	6,490	3,230	2,170	2,610	3,640	2,870	1,530	1,820
19	885	1,530	3,280	15,300	5,430	2,990	2,430	2,158	4,240	3,020	1,590	2,180
20	1,390	1,610	3,300	16,100	4,900	2,840	2,570	2,200	4,360	3,450	1,630	1,630
21	1,060	2,310	4,560	11,900	4,170	2,210	2,470	1,838	4,840	1,940	1,620	1,570
22	1,340	4,970	10,300	2,690	2,270	2,440	1,840	6,050	1,340	1,510	2,160	1,620
23	1,400	1,260	5,300	12,700	2,650	2,290	2,410	2,200	6,620	1,820	1,720	3,570
24	1,840	2,380	4,900	10,800	2,970	2,630	2,560	2,230	5,550	2,060	2,020	2,190
25	1,310	2,180	4,240	10,100	3,310	2,180	2,780	2,750	2,650	2,170	2,190	1,710
26	886	1,980	3,540	9,170	3,190	2,430	2,740	4,200	3,440	2,270	1,650	1,460
27	1,100	1,740	3,250	9,910	3,340	2,040	2,410	4,300	4,150	2,690	1,830	1,120
28	1,320	1,620	2,100	8,100	3,260	1,720	2,320	4,260	4,240	1,950	1,870	1,270
29	1,350	1,570	2,530	7,070	-----	1,390	2,350	4,700	3,250	1,630	1,540	1,780
30	1,350	1,540	2,290	6,010	-----	1,730	3,020	6,130	2,770	1,300	999	1,850
31	1,170	-----	1,950	5,340	-----	1,610	-----	5,130	-----	1,620	1,240	-----
TOTAL	56,191	56,460	89,950	194,510	116,290	78,130	84,500	100,646	139,560	79,500	55,079	51,767
MEAN	1,813	1,882	2,902	6,275	4,153	2,520	2,817	3,246	4,652	2,565	1,777	1,726
MAX	3,490	5,670	5,300	16,100	7,360	3,620	6,390	6,130	6,620	4,630	2,200	3,570
MIN	885	772	1,330	1,620	2,650	1,390	1,970	1,838	2,650	1,500	999	541
AC-FT	111,900	112,000	178,400	385,800	230,700	155,000	167,600	199,600	276,800	157,700	109,200	102,700
(+)	-4,020	+4,050	+350	-3,610	-20,530	-10,610	-3,700	-36,090	+2,760	+1,670	+650	-3,840
MEAN*	1,748	1,950	2,907	6,215	3,786	2,348	2,755	3,832	4,700	2,592	1,776	1,662
AC-FT*	107,500	116,000	178,800	382,200	210,200	144,400	163,900	235,700	279,600	159,400	109,200	98,860

CAL YR 1969 TOTAL 1,173,344 MEAN 3,215 MAX 22,200 MIN 695 AC-FT 2,327,000 MEAN * 3,227 AC-FT * 2,337,000
WTR YR 1970 TOTAL 1,102,577 MEAN 3,021 MAX 16,100 MIN 541 AC-FT 2,187,000 MEAN * 3,119 AC-FT * 2,186,000

* CHANGE IN CONTENTS, IN ACRE-FEET, IN LAKE TAPPS, FROM INFORMATION BY PUGET SOUND POWER & LIGHT CO.

* ADJUSTED FOR CHANGE IN CONTENTS IN LAKE TAPPS.

12103400 GREEN RIVER BELOW INTAKE CREEK, NEAR LESTER, WASH.

LOCATION.--Lat 47°12'44", long 121°25'13", in NW¼ sec.21, T.20 N., R.11 E., King County, Snoqualmie National Forest, on left bank 0.8 mile downstream from Intake Creek and 3.3 miles east of Lester.

DRAINAGE AREA.--34.8 sq mi.

PERIOD OF RECORD.--October 1966 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,800 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (700 cfs), water years 1967-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 15, 1967	1400	747	5.50	Dec. 25, 1967	1300	*2,430	5.92	Jan. 5, 1969	-	-	-
Jan. 4, 1967	1700	709	5.45	Jan. 21, 1968	0100	922	4.17	May 9, 1969	2300	802	4.67
May 21, 1967	0330	*769	5.57	Feb. 19, 1968	1030	928	4.18	June 3, 1970	2000	*449	4.02

Annual minimum discharge, water years 1967-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1967	Sept. 24-30, 1967	11	a2.66	1969	Aug. 23, 24, 1969	12	2.12
1968	Oct. 1, 2, 6-10, 1967	12	b1.33	1970	Sept. 2, 1970	13	1.82

a Occurred Sept. 26-29, 1967.
b Occurred Aug. 2-6, 1968.

Period of record: Maximum discharge, 2,430 cfs Dec. 25, 1967 (gage height, 5.92 ft); maximum gage height, 6.05 ft Dec. 25, 1967; minimum discharge, 11 cfs Sept. 24-30, 1967; minimum gage height, 1.33 ft Aug. 2-6, 1968.

REMARKS.--Records good. No gage-height record Dec. 31, 1968, to Feb. 4, 1969. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	45	246	200	239	102	77	85	260	93	27	14
2	25	42	217	166	201	98	77	92	338	88	27	14
3	17	40	182	237	250	92	84	109	353	85	26	14
4	15	37	162	214	592	86	98	132	329	78	24	14
5	14	38	142	168	521	82	96	154	341	75	22	14
6	15	36	122	140	370	82	95	221	370	71	21	14
7	16	32	108	118	290	81	99	287	350	67	20	13
8	15	31	98	142	236	85	107	350	293	64	21	12
9	14	32	86	170	201	88	104	362	245	60	22	12
10	14	33	81	177	192	82	96	308	224	57	20	13
11	14	32	83	273	176	77	93	242	215	53	19	18
12	15	37	111	252	168	71	99	201	215	51	19	21
13	15	41	322	372	196	68	98	184	224	48	19	14
14	15	68	386	477	168	66	91	189	263	47	18	13
15	15	75	264	637	149	66	85	239	299	45	18	13
16	15	84	258	514	138	82	82	324	317	43	18	13
17	16	84	330	362	173	92	78	567	323	42	16	12
18	16	74	350	281	224	91	81	549	317	40	16	12
19	17	70	372	287	174	88	81	541	305	39	16	12
20	38	68	483	296	147	85	82	644	299	40	16	12
21	29	67	368	236	130	84	82	749	278	42	16	12
22	69	64	279	189	119	100	82	684	254	37	16	12
23	112	63	222	158	110	152	84	567	206	35	15	12
24	91	60	184	141	107	152	88	418	168	34	15	11
25	77	216	198	124	104	130	93	329	196	33	14	11
26	78	237	138	115	99	113	92	281	149	32	14	11
27	70	182	122	144	96	105	92	266	136	31	14	11
28	60	156	112	341	98	99	86	281	123	30	14	11
29	57	156	136	384	-----	92	86	323	110	30	14	11
30	52	220	126	370	-----	86	84	305	102	29	14	12
31	47	-----	142	296	-----	81	-----	260	-----	28	14	-----
TOTAL	1,078	2,420	6,390	7,981	5,668	2,858	2,672	10,243	7,562	1,547	565	388
MEAN	34.8	80.7	206	257	202	92.2	89.1	330	252	49.9	18.2	12.9
MAX	112	237	483	637	592	152	107	749	370	93	27	21
MIN	14	31	81	115	96	66	77	85	102	28	14	11
CFSM	1.00	2.32	5.92	7.39	5.80	2.65	2.56	9.48	7.24	1.43	.52	.37
IN.	1.15	2.59	6.83	8.53	6.06	3.06	2.86	10.95	8.08	1.65	.60	.41
AC-FT	2,140	4,800	12,670	15,830	11,240	5,670	5,300	20,320	15,000	3,070	1,120	770
WTR YR 1967	TOTAL 49,372	MEAN 135	MAX 749	MIN 11	CFSM 3.88	IN 52.78	AC-FT 97,930					

DUWAMISH RIVER BASIN

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12103400 GREEN RIVER BELOW INTAKE CREEK, NEAR LESTER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	181	51	218	119	220	119	244	139	46	17	34
2	12	145	50	178	131	212	117	202	113	44	17	33
3	26	119	49	150	137	208	109	182	247	43	16	30
4	16	95	47	135	175	208	107	185	218	39	16	28
5	14	80	46	121	168	220	109	175	188	38	16	28
6	12	68	43	107	148	212	113	160	162	36	16	26
7	13	61	42	99	131	190	117	145	113	44	16	26
8	12	59	41	89	119	162	121	137	131	34	16	25
9	12	72	76	85	111	141	129	141	121	31	16	24
10	12	136	229	78	103	125	150	158	111	31	16	24
11	25	156	314	69	97	113	185	182	103	30	16	24
12	132	132	189	66	89	105	165	198	97	34	16	24
13	30	115	158	62	87	95	139	180	87	30	16	24
14	42	107	134	63	85	85	125	152	82	29	22	27
15	24	102	117	79	78	82	115	135	74	29	21	38
16	19	102	105	78	73	82	103	125	72	27	20	41
17	16	96	96	72	69	73	91	129	69	23	18	123
18	16	88	89	66	215	70	85	148	66	25	18	244
19	19	81	82	168	850	68	84	185	66	26	18	220
20	14	75	75	509	766	66	80	253	62	26	18	165
21	22	71	70	820	650	63	80	244	60	24	17	131
22	57	67	110	565	730	61	82	210	66	22	17	115
23	126	64	166	420	610	61	89	192	58	22	19	125
24	80	72	566	540	520	62	89	178	55	22	25	119
25	93	66	1,630	500	416	63	99	170	53	20	27	109
26	84	59	1,260	352	328	63	115	160	51	19	31	97
27	239	54	824	259	111	111	152	151	51	19	28	87
28	383	54	605	208	250	160	129	148	53	18	46	79
29	195	59	440	180	232	170	210	148	52	18	43	72
30	227	54	317	155	-----	155	268	141	48	18	39	67
31	218	-----	256	135	-----	133	-----	131	-----	17	35	-----
TOTAL	2,091	2,689	8,279	6,623	7,759	3,859	3,635	5,290	2,995	878	672	2,209
MEAN	67.5	89.6	267	214	268	124	121	171	99.8	28.3	21.7	73.6
MAX	383	181	1,630	820	850	220	268	253	247	46	46	244
MIN	12	54	41	62	72	61	80	125	48	17	16	24
CFSM	1.94	2.57	7.67	6.15	7.70	3.56	3.48	4.91	2.87	.81	.62	2.11
IN.	2.24	2.87	8.85	7.08	8.29	4.13	3.89	5.65	3.20	.94	.72	2.36
AC-FT	4,150	5,330	16,420	13,140	15,390	7,650	7,210	10,490	5,940	1,740	1,330	4,380
CAL YR 1967	TOTAL	52,543	MEAN 144	MAX 1,630	MIN 12	CFSM 4.14	IN 56.17	AC-FT 104,200				
WTR YR 1968	TOTAL	46,979	MEAN 128	MAX 1,630	MIN 12	CFSM 3.68	IN 50.22	AC-FT 93,180				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	74	102	150	50	25	328	205	363	78	22	15
2	56	71	99	100	47	25	286	186	363	76	21	15
3	52	68	352	70	45	25	237	173	371	73	21	15
4	52	62	472	130	43	25	208	163	383	73	20	16
5	47	58	274	1,100	41	34	208	178	371	68	20	16
6	58	56	179	680	40	36	211	237	325	66	18	15
7	59	55	135	400	38	34	205	351	286	63	17	14
8	53	91	112	250	38	32	197	500	256	60	17	14
9	51	358	99	200	37	29	211	676	246	56	18	14
10	69	382	102	165	37	29	243	736	231	56	18	14
11	74	430	102	145	39	30	252	646	211	54	18	14
12	79	511	87	130	38	31	321	575	191	52	18	13
13	87	370	74	115	35	34	367	585	175	48	16	14
14	87	268	66	105	32	38	289	545	160	47	16	16
15	135	196	62	95	31	42	243	449	146	43	16	14
16	138	148	57	90	30	60	234	387	132	40	16	14
17	117	120	54	85	29	94	243	371	121	36	14	15
18	107	109	50	80	29	143	279	391	111	35	14	25
19	99	104	45	75	30	130	286	426	101	31	14	22
20	151	120	42	73	31	130	169	431	89	32	14	22
21	183	158	40	70	32	143	166	436	80	30	14	18
22	183	430	39	68	32	160	336	500	80	29	13	24
23	171	376	38	66	30	173	530	545	89	28	13	27
24	156	280	37	63	29	153	426	545	132	27	13	22
25	145	192	36	61	28	143	336	462	113	26	14	21
26	135	155	34	59	27	170	275	383	107	25	14	19
27	122	151	34	58	25	262	249	325	101	24	16	17
28	107	145	32	56	25	286	249	289	94	23	16	17
29	95	135	31	53	-----	282	249	303	89	23	16	16
30	95	117	24	54	-----	325	228	510	82	24	16	34
31	83	-----	62	53	-----	367	-----	426	-----	23	15	-----
TOTAL	3,107	5,790	2,988	4,902	968	3,490	8,261	12,935	5,599	1,369	508	532
MEAN	100	193	96.4	158	34.6	113	275	417	187	44.2	16.4	17.7
MAX	183	511	472	1,100	50	367	530	736	500	78	22	34
MIN	47	55	31	53	25	197	166	80	23	13	13	13
CFSM	2.87	5.55	2.77	4.54	.99	3.25	7.90	12.0	5.37	1.27	.47	.51
IN.	3.32	6.19	3.19	5.24	1.03	3.73	8.83	13.83	5.99	1.46	.54	.57
AC-FT	6,160	11,480	5,930	9,720	1,920	6,920	16,390	25,660	11,110	2,720	1,010	1,060
CAL YR 1968	TOTAL	45,805	MEAN 125	MAX 850	MIN 16	CFSM 3.59	IN 48.96	AC-FT 90,653				
WTR YR 1969	TOTAL	50,449	MEAN 138	MAX 1,100	MIN 13	CFSM 3.97	IN 53.93	AC-FT 100,100				

12104000 FRIDAY CREEK NEAR LESTER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	12	74	66	34	20	13	14	55	12	3.8	2.3
2	11	12	56	45	30	17	14	16	62	11	3.6	2.6
3	4.2	11	42	70	46	15	17	19	60	11	3.6	2.4
4	3.5	9.8	34	54	104	14	18	25	56	10	3.3	2.4
5	3.2	12	28	41	78	14	17	27	59	9.5	3.5	2.4
6	3.3	11	24	32	54	14	16	38	60	9.0	3.5	2.4
7	3.5	9.8	21	25	41	13	18	59	55	8.5	3.3	2.4
8	4.8	9.3	18	46	33	15	18	64	45	8.5	3.3	2.4
9	3.6	12	17	49	31	15	16	63	39	7.7	3.3	2.4
10	3.5	13	17	48	37	14	15	49	35	7.2	3.2	2.6
11	3.3	12	18	80	32	12	15	40	34	7.0	3.2	5.8
12	3.9	13	43	62	32	12	16	35	32	6.8	3.2	4.0
13	3.5	13	104	32	43	11	15	34	35	6.5	3.0	2.5
14	3.3	23	111	127	32	11	13	35	37	6.1	3.0	2.4
15	3.2	24	67	153	26	11	12	47	40	5.9	3.0	2.3
16	3.2	26	71	96	24	14	11	74	40	5.7	3.0	2.1
17	3.2	25	83	63	42	17	11	92	40	5.4	2.9	2.0
18	3.2	23	88	48	48	15	11	88	37	5.2	2.8	1.9
19	5.2	20	98	53	35	14	11	87	36	5.0	2.8	1.9
20	12	20	123	55	27	14	11	107	34	5.2	2.6	1.7
21	9.9	20	79	39	24	15	11	115	30	5.4	2.5	1.6
22	35	18	56	30	22	28	12	107	27	4.7	2.5	1.7
23	66	17	42	25	20	36	13	90	23	4.7	2.5	1.7
24	41	17	34	22	20	28	15	72	21	4.5	2.5	1.7
25	27	85	29	20	19	23	16	60	20	4.2	2.4	1.9
26	28	70	24	18	18	20	15	55	19	4.2	2.4	2.0
27	26	48	22	38	17	18	15	56	18	4.2	2.3	2.0
28	21	40	21	82	18	17	14	60	15	4.2	2.3	1.9
29	19	39	36	69	-----	15	14	68	14	4.0	2.3	2.0
30	16	75	32	55	-----	15	13	59	13	3.8	2.3	2.1
31	14	-----	43	41	-----	13	-----	52	-----	3.8	2.4	-----
TOTAL	391.0	739.9	1,583	1,756	987	510	426	1,807	1,091	200.9	90.3	69.5
MEAN	12.6	24.7	51.1	56.6	35.3	16.5	14.2	58.3	36.4	6.48	2.91	2.32
MAX	66	85	132	153	104	36	18	115	62	12	3.8	5.8
MIN	3.2	9.3	17	18	17	11	11	14	13	3.8	2.3	1.6
CFSM	2.70	5.29	10.9	12.1	7.56	3.53	3.04	12.5	7.79	1.39	.62	.50
IN.	3.11	5.89	12.61	13.99	7.86	4.06	3.39	14.39	8.69	1.60	.72	.55
AC-FT	776	1,470	3,140	3,480	1,960	1,010	845	3,580	2,160	398	179	138

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	2.2	52	11	31	19	43	27	43	27	9.2	4.0	7.5		
2	2.0	39	11	25	21	41	26	35	41	8.8	4.0	6.8		
3	9.4	30	11	23	33	38	23	34	39	8.5	4.0	6.3		
4	3.2	24	11	20	49	38	23	35	33	8.2	4.0	5.9		
5	2.6	20	10	18	37	39	22	32	26	7.7	4.0	5.4		
6	2.5	18	9.3	16	29	34	25	28	23	7.5	3.8	5.2		
7	2.7	17	9.0	15	25	29	29	29	20	7.2	3.6	5.0		
8	2.5	15	8.7	15	22	25	28	31	19	7.0	3.6	5.0		
9	2.1	23	33	14	20	22	27	33	16	6.8	3.5	4.8		
10	2.2	64	77	13	19	20	30	35	15	6.8	3.5	4.7		
11	6.2	54	81	12	18	18	37	38	15	6.8	3.5	4.7		
12	6.4	39	45	11	17	17	29	37	14	8.0	3.5	4.5		
13	12	30	31	12	16	15	25	30	14	6.5	3.3	4.5		
14	23	26	25	13	15	15	22	27	13	6.3	6.5	8.2		
15	11	23	22	19	14	14	20	24	12	6.3	5.7	24		
16	8.0	23	19	17	13	15	18	23	11	5.9	4.5	29		
17	6.2	21	18	15	12	15	17	24	11	5.7	4.3	79		
18	7.0	19	15	14	59	14	14	23	10	5.4	4.3	102		
19	9.0	17	14	89	173	14	16	29	10	5.7	4.3	72		
20	6.7	15	14	164	142	14	15	38	9.6	6.3	4.2	48		
21	14	14	14	181	116	13	16	32	9.6	5.4	3.8	34		
22	35	14	53	96	125	13	16	27	11	5.2	4.0	32		
23	65	14	56	65	103	14	18	25	10	4.8	4.7	41		
24	39	19	193	96	90	14	19	23	9.6	4.7	6.5	34		
25	41	17	263	73	65	14	27	23	9.2	4.7	7.2	27		
26	28	15	186	51	52	14	32	24	8.8	4.7	7.5	23		
27	86	14	113	39	48	46	28	22	9.4	4.5	8.2	20		
28	110	14	82	39	45	56	32	21	10	4.3	13	17		
29	60	13	58	29	44	49	48	21	9.8	4.3	10	15		
30	65	12	45	23	-----	40	52	20	9.4	4.2	9.0	13		
31	62	-----	36	-----	-----	32	-----	18	-----	4.2	7.7	-----		
TOTAL	727.9	715	1,574.0	1,268	1,441	785	763	884	475.4	191.6	163.7	688.5		
MEAN	23.5	23.8	50.8	40.9	49.7	25.3	25.4	28.5	15.8	6.18	5.28	23.0		
MAX	110	64	263	181	173	56	52	43	41	9.2	13	102		
MIN	2.0	12	8.7	11	12	13	15	18	8.8	4.2	3.3	4.5		
CFSM	5.03	5.10	10.9	8.76	10.6	5.42	5.44	6.10	3.38	1.32	1.13	4.93		
IN.	5.80	5.70	12.94	10.10	11.48	6.25	6.08	7.04	3.79	1.53	1.30	5.48		
AC-FT	1,440	1,420	3,120	2,520	2,860	1,560	1,510	1,750	943	380	325	1,370		
CAL YR 1967	TOTAL	9,954.6	MEAN	27.3	MAX	263	MIN	1.6	CFSM	5.85	IN	79.30	AC-FT	19,740
WTR YR 1968	TOTAL	9,677.1	MEAN	26.4	MAX	263	MIN	2.0	CFSM	5.65	IN	77.09	AC-FT	19,190

12104500 GREEN RIVER NEAR LESTER, WASH.

LOCATION.--Lat 47°12'28", long 121°33'07" (revised), in NE¼Sec. 20, T.20 N., R.10 E., King County, on left bank 0.4 mile upstream from Champion Creek, 1.2 miles downstream from McCain Creek, 2.9 miles west of Lester, and at mile 80.1.

DRAINAGE AREA.--96.2 sq mi.

PERIOD OF RECORD.--October 1945 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,480 ft (from river-profile map). Prior to Nov. 22, 1959, water-stage recorder at site 300 ft upstream at different datum (gage destroyed by flood of Nov. 22, 1959). Dec. 28, 1959, to Sept. 21, 1960, nonrecording gage at mile 400 ft downstream at different datum.

AVERAGE DISCHARGE.--25 years, 405 cfs (57.17 inches per year, 293,400 acre-ft per year).

EXTREMES.--Maximums and minimums in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1545	*2,070	4.66	Dec. 11, 1967	0130	2,200	4.80	Dec. 4, 1968	-	2,220	4.78
				Dec. 7, 1967	1800	*7,160	67.58	Jan. 5, 1969	1300	*3,550	5.70
Jan. 15, 1967	1445	*2,610	5.11	Jan. 21, 1968	0115	3,980	5.97	May 10, 1969	0030	2,360	4.90
Feb. 4, 1967	1730	2,090	4.71	Feb. 19, 1968	-	-	-				
				Feb. 22, 1968	0145	2,400	4.91	Jan. 23, 1970	0330	*2,030	4.66

a About.

b From high watermark in well.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 30, 1966	31	1.31	1969	Sept. 11, 12, 13, 1969	31	1.28
1967	Sept. 27, 1967	22	1.15	1970	Aug. 30, 31, 1970	30	1.26
1968	Oct. 1, 2, 1967	30	1.23				

Period of record: Maximum discharge, 22,000 cfs Nov. 22, 1959 (gage height, 12.41 ft, from floodmarks, present site and datum), on basis of slope-area measurement of peak flow; minimum, 22 cfs Nov. 20, 1952, Sept. 27, 1967.

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1286: 1947(M). WSP 1316: 1948(M). WSP 1932: 1960, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	70	130	107	184	218	1,280	500	317	177	83	46
2	44	75	197	109	174	200	1,340	664	298	191	81	46
3	43	78	182	114	167	182	1,010	990	284	277	79	44
4	43	122	435	107	160	170	889	1,270	284	291	77	43
5	49	142	405	107	156	160	983	1,610	270	274	75	42
6	81	145	337	145	153	158	1,010	1,958	291	260	73	42
7	83	128	337	184	153	153	1,180	1,480	333	238	72	42
8	67	120	341	227	151	165	1,198	1,200	353	223	70	40
9	64	124	309	213	160	244	1,218	1,200	341	208	72	40
10	60	120	277	197	153	325	1,240	1,058	377	194	70	38
11	54	118	251	230	174	291	1,080	798	458	185	72	42
12	56	111	230	294	194	280	910	682	490	177	66	40
13	64	107	216	495	174	350	721	616	435	169	72	40
14	66	187	200	549	167	425	634	530	385	172	73	42
15	80	109	187	456	156	430	664	470	361	164	66	43
16	78	113	179	347	151	381	735	450	353	155	62	40
17	84	111	167	317	151	325	728	408	337	148	60	38
18	98	113	160	277	151	294	634	390	305	140	58	43
19	149	114	158	244	153	277	550	416	280	132	57	42
20	138	114	156	224	174	254	515	480	256	125	55	38
21	122	149	156	213	213	235	495	570	298	120	53	36
22	111	172	147	197	267	216	485	545	223	116	52	34
23	102	162	142	192	298	210	495	475	211	111	52	37
24	95	153	140	177	280	218	545	455	226	109	58	37
25	98	149	132	167	270	274	616	510	199	107	52	36
26	85	145	128	158	257	410	592	610	191	102	52	38
27	88	142	128	158	254	600	520	580	191	98	57	38
28	80	134	126	158	241	732	485	485	214	94	55	34
29	77	126	120	170	-----	894	475	426	191	92	52	34
30	77	118	114	187	-----	1,210	498	385	183	89	50	32
31	72	-----	111	194	-----	1,310	-----	349	-----	85	48	-----
TOTAL	2,434	3,691	6,298	6,931	5,336	11,591	23,621	22,344	8,867	5,023	1,966	1,189
MEAN	78.5	123	203	224	191	374	787	727	296	162	63.4	36.6
MAX	149	172	435	549	298	1,310	1,340	1,950	490	291	83	46
MIN	49	70	111	107	151	153	475	349	183	85	48	32
CFSM	82	1.28	2.11	2.33	1.99	3.88	8.18	7.54	3.00	1.68	0.64	0.41
IN.	.94	1.43	2.44	2.68	2.86	4.48	9.13	8.72	3.43	1.94	.76	.46
AC-FT	4,830	7,320	12,490	13,750	10,500	22,990	46,850	44,720	17,590	9,960	3,900	2,360
CAL YR 1965	TOTAL	134,957	MEAN	370	MAX	7,070	MIN	41	CFSM	3.85	IN	52.19
WTR YR 1966	TOTAL	99,491	MEAN	273	MAX	1,950	MIN	32	CFSM	2.84	IN	38.47
									AC-FT	267,700		
									AC-FT	197,360		

DUMAMISH RIVER BASIN

12104500 GREEN RIVER NEAR LESTER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	162	878	737	637	322	220	245	636	193	61	31
2	89	152	732	598	555	298	220	266	782	181	59	35
3	58	141	586	870	643	267	238	308	789	171	58	34
4	46	131	500	772	1,640	248	286	393	712	161	56	32
5	42	136	430	609	1,500	234	275	429	739	152	56	32
6	40	130	373	490	998	230	267	579	797	142	56	31
7	41	120	335	410	737	223	291	755	750	133	56	31
8	49	113	298	480	609	241	321	906	629	127	54	30
9	48	120	266	593	535	263	302	918	546	120	52	30
10	43	138	254	593	571	238	273	745	501	113	50	31
11	41	130	266	958	540	216	257	596	480	107	46	43
12	42	153	396	856	530	200	278	512	470	103	45	58
13	43	165	1,440	1,460	682	190	273	484	490	100	44	43
14	40	256	1,490	1,780	576	177	250	508	543	96	42	37
15	38	313	918	2,210	490	180	229	594	585	92	40	34
16	37	327	842	1,680	442	223	217	975	604	88	40	32
17	37	321	1,070	1,070	571	275	205	1,350	608	86	39	31
18	36	282	1,120	779	730	271	213	1,270	593	84	38	30
19	39	254	1,120	926	576	252	214	1,220	568	82	37	30
20	126	240	1,550	1,060	480	245	215	1,450	560	83	37	30
21	112	237	1,100	758	419	245	223	1,690	517	87	37	29
22	256	221	786	598	374	330	221	1,560	471	79	37	28
23	507	212	615	490	342	510	230	1,300	402	75	36	28
24	408	202	510	419	326	480	253	965	356	73	36	26
25	295	732	438	366	314	410	276	756	330	71	35	26
26	278	875	374	334	298	362	266	669	314	70	34	25
27	273	622	330	460	279	326	275	650	289	68	33	24
28	229	521	306	1,170	294	302	258	682	258	67	32	24
29	206	491	415	1,170	-----	279	254	780	236	65	31	25
30	190	793	401	1,040	-----	256	243	717	214	63	31	28
31	172	-----	438	793	-----	234	-----	626	-----	63	31	-----
TOTAL	3,895	8,690	20,577	26,529	16,688	8,527	7,543	24,898	15,769	3,195	1,339	948
MEAN	126	290	664	856	596	275	251	803	526	103	43.2	31.6
MAX	507	875	1,550	2,210	1,640	510	321	1,690	797	193	61	58
HIN	34	113	254	334	279	177	205	245	214	63	31	24
CFSM	1.31	3.01	6.90	8.90	6.20	2.86	2.61	8.35	5.47	1.07	4.45	3.33
IN.	1.51	3.36	7.96	10.26	6.45	3.30	2.92	9.63	6.10	1.24	5.52	3.37
AC-FT	7,730	17,240	40,810	52,620	33,100	16,910	14,960	49,390	31,280	6,340	2,660	1,880

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	600	142	573	342	565	398	592	346	113	39	118
2	32	500	140	492	349	540	386	490	535	108	39	110
3	53	400	140	424	461	510	358	440	598	103	39	98
4	54	330	137	385	694	505	342	445	510	98	39	91
5	44	280	137	347	612	530	354	422	426	100	39	85
6	40	240	131	333	507	500	370	394	378	93	39	79
7	40	210	126	286	443	445	414	366	334	87	37	75
8	39	200	122	268	380	394	402	358	307	83	37	71
9	36	250	238	273	350	390	406	370	279	79	37	67
10	36	450	894	244	320	314	440	398	261	77	36	65
11	65	700	1,550	226	300	289	520	440	247	75	36	63
12	74	550	807	214	290	268	460	460	230	87	36	63
13	94	420	566	212	280	247	394	406	216	77	36	59
14	196	350	442	222	269	230	358	358	202	73	75	75
15	117	310	370	304	225	226	342	322	187	73	75	163
16	89	300	326	308	206	230	310	303	178	69	59	230
17	76	280	286	275	203	219	282	307	169	65	57	500
18	70	260	252	258	700	205	272	342	160	61	52	974
19	83	220	223	861	2,700	193	268	394	157	63	54	805
20	70	200	200	2,250	2,400	184	258	515	148	67	55	560
21	96	180	186	3,230	2,000	178	258	480	143	59	51	422
22	245	174	447	1,740	2,150	172	258	422	160	55	48	354
23	648	165	744	1,150	1,700	172	279	394	145	54	55	398
24	388	216	2,590	1,390	1,470	175	282	366	135	51	85	366
25	388	209	5,150	1,240	1,120	184	318	358	128	49	93	326
26	350	183	3,910	895	868	187	386	350	123	48	115	289
27	700	171	2,310	678	735	426	362	330	123	46	113	254
28	1,300	168	1,560	542	658	742	390	326	133	45	175	226
29	700	162	1,100	473	604	622	560	318	135	42	166	205
30	800	150	814	422	-----	550	664	310	123	42	145	187
31	700	-----	644	380	-----	460	-----	289	-----	39	128	-----
TOTAL	7,655	8,828	26,684	20,895	23,336	10,812	11,091	12,065	7,216	2,181	2,070	7,378
MEAN	247	294	861	674	805	349	370	389	241	70.4	66.8	246
MAX	1,300	700	5,150	3,230	2,700	742	664	592	598	113	175	974
MIN	32	150	122	212	203	172	258	289	123	39	36	59
CFSM	2.57	3.06	8.95	7.01	8.37	3.63	3.85	4.04	2.51	7.3	6.9	2.56
IN.	2.96	3.41	10.32	8.08	9.02	4.18	4.29	4.67	2.79	8.4	8.0	2.85
AC-FT	15,180	17,510	52,930	41,450	46,290	21,450	22,000	23,930	14,310	4,330	4,110	14,630

12104500 GREEN RIVER NEAR LESTER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1960 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	216	370	406	141	94	846	529	825	198	73	37
2	163	205	340	310	137	94	694	470	811	204	72	37
3	151	209	700	216	132	95	568	422	811	201	70	40
4	151	196	1,200	326	120	100	491	413	818	198	70	40
5	140	187	900	2,760	123	120	491	460	783	193	79	41
6	187	178	700	1,700	119	125	535	649	668	184	72	39
7	240	169	550	1,050	115	120	518	970	562	176	68	36
8	209	258	440	727	115	115	496	1,480	502	170	66	35
9	193	798	370	568	115	110	557	1,980	470	165	63	33
10	244	854	380	460	113	110	668	2,140	440	155	59	33
11	265	958	390	390	119	115	681	1,830	399	150	59	32
12	272	1,120	370	338	121	125	895	1,630	362	142	59	32
13	289	847	340	303	117	132	1,060	1,580	334	135	58	35
14	282	646	310	272	113	139	804	1,440	303	130	56	40
15	398	535	290	249	111	146	649	1,190	279	125	55	36
16	414	445	270	234	109	184	613	1,020	253	123	55	33
17	364	386	250	220	109	265	944	944	234	119	53	39
18	338	374	265	206	111	386	797	1,000	223	115	50	56
19	314	366	240	198	113	374	832	1,050	209	111	50	53
20	402	418	223	188	115	358	755	1,010	196	106	50	55
21	440	545	212	181	117	386	701	1,040	183	104	49	47
22	465	1,200	202	174	119	422	874	1,170	186	100	47	65
23	430	1,150	196	169	117	485	1,430	1,270	201	96	46	84
24	402	868	190	165	113	426	1,230	1,280	300	94	44	77
25	374	676	184	163	108	395	909	1,050	256	90	43	72
26	338	560	175	160	100	455	734	853	253	86	43	65
27	303	480	175	158	95	660	655	714	237	82	43	58
28	279	440	166	155	94	734	688	607	229	80	44	56
29	258	420	151	155	-----	727	694	701	223	79	41	55
30	254	390	193	153	-----	839	601	1,200	209	77	40	113
31	237	-----	254	149	-----	962	-----	1,000	-----	75	39	-----
TOTAL	8,993	16,094	11,016	12,903	3,239	9,808	22,115	33,174	11,759	4,067	1,716	1,474
MEAN	290	536	355	416	116	316	737	1,070	392	131	55.4	49.1
MAX	465	1,200	1,200	2,760	141	962	1,430	2,140	825	206	79	113
MIN	140	169	151	149	94	94	491	413	183	75	39	32
CFSM	3.01	5.57	3.69	4.32	1.21	3.28	7.66	11.1	4.07	1.36	.58	.51
IN.	3.48	6.22	4.26	4.99	1.25	3.79	8.55	12.83	4.55	1.57	.66	.57
AC-FT	17,840	31,920	21,850	25,590	6,420	19,450	43,870	65,800	23,320	8,070	3,400	2,920
CAL YR 1960	TOTAL 133,147											
WTR YR 1969	TOTAL 136,358											
	MEAN 364											
	MAX 3,230											
	MIN 36											
	CFSM 3.78											
	IN 51.49											
	AC-FT 264,100											
	WTR YR 1969											
	TOTAL 136,358											
	MEAN 374											
	MAX 2,760											
	MIN 32											
	CFSM 3.89											
	IN 52.73											
	AC-FT 270,500											

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	56	120	143	399	272	334	445	734	153	61	33
2	191	55	112	136	382	246	378	557	923	143	69	33
3	191	55	106	134	358	229	354	707	1,060	137	62	46
4	155	106	113	124	322	211	346	938	962	132	58	47
5	134	183	107	116	286	198	426	1,110	769	126	56	42
6	115	146	101	112	256	217	557	888	727	119	54	59
7	106	130	97	109	249	440	535	714	675	115	53	95
8	117	119	94	105	322	404	460	643	529	111	54	91
9	137	113	91	103	390	354	741	637	445	107	51	81
10	141	106	88	99	404	314	1,210	562	404	103	50	68
11	132	102	86	96	426	289	853	480	358	99	48	60
12	121	98	100	94	435	269	643	431	318	95	45	54
13	111	94	120	98	460	253	529	390	300	92	45	51
14	102	90	183	239	431	269	445	378	296	88	45	48
15	96	92	209	325	607	366	399	470	300	85	44	46
16	90	94	182	253	1,160	460	358	853	293	83	43	45
17	84	94	163	221	881	450	334	1,230	272	81	42	45
18	80	90	158	320	643	382	322	938	269	79	42	51
19	77	92	157	418	507	342	326	797	279	76	40	40
20	75	105	175	888	431	326	307	720	272	74	39	52
21	73	188	228	927	382	318	286	637	272	74	39	48
22	70	189	279	1,100	354	296	269	675	259	73	38	62
23	68	196	273	1,730	334	296	262	701	234	71	38	82
24	66	214	240	1,120	322	334	282	769	214	69	38	69
25	63	195	211	888	318	314	282	888	196	74	37	62
26	61	175	197	675	310	307	272	1,050	186	79	36	57
27	60	160	175	551	314	300	259	790	178	76	35	53
28	63	150	162	431	293	404	249	613	169	71	35	51
29	59	139	156	358	-----	417	259	573	169	67	34	49
30	59	128	151	310	-----	370	395	637	169	66	32	48
31	58	-----	148	314	-----	334	-----	625	-----	62	32	-----
TOTAL	3,115	3,754	4,782	12,737	11,976	9,981	12,672	21,846	12,231	2,880	1,395	1,688
MEAN	100	125	154	411	322	322	422	705	408	92.9	45.0	56.3
MAX	191	214	279	1,730	1,160	460	1,210	1,230	1,060	153	69	95
MIN	58	55	86	94	249	198	249	378	169	62	32	33
CFSM	1.04	1.30	1.60	4.27	4.45	3.35	4.39	7.33	4.24	.97	.47	.59
IN.	1.20	1.45	1.85	4.93	4.63	3.86	4.90	8.45	4.73	1.11	.54	.65
AC-FT	6,180	7,450	9,490	25,260	23,750	19,800	25,130	43,330	24,260	5,710	2,770	3,350
CAL YR 1969	TOTAL 111,906											
WTR YR 1970	TOTAL 99,057											
	MEAN 271											
	MAX 2,760											
	MIN 32											
	CFSM 3.19											
	IN 43.27											
	AC-FT 222,000											
	WTR YR 1970											
	TOTAL 99,057											
	MEAN 271											
	MAX 2,760											
	MIN 32											
	CFSM 2.82											
	IN 38.30											
	AC-FT 196,300											

12104700 GREEN CANYON CREEK NEAR LESTER, WASH.

LOCATION.--Lat 47°13'08", long 121°34'28", in NE¼SE¼ sec.18, T.20 N., R.10 E., King County, on left bank 0.2 mile upstream from mouth and 4.0 miles west of Lester.

DRAINAGE AREA.--3.23 sq mi.

PERIOD OF RECORD.--April 1960 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Concrete control since Sept. 11, 1964. Altitude of gage is 1,480 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 12.5 cfs (\$2.55 inches per year, 9,060 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (a) and peak discharges above base (80 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Mar. 30, 1966	2300	*42	2.17	Dec. 25, 1967	1000	268	3.07	Jan. 20, 1970	0400	121	2.58
				Jan. 20, 1968	1730	*272	3.08	Jan. 21, 1970	1800	98	2.47
Dec. 13, 1966	1230	*128	2.65	Feb. 19, 1968	0100	125	2.64	Feb. 23, 1970	0100	*158	2.73
Jan. 19, 1967	2130	95	2.50					Feb. 16, 1970	0530	112	2.54
				Dec. 3, 1968	2100	140	2.70				
Oct. 27, 1967	2000	135	2.68	Jan. 5, 1969	0930	*205	2.90				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1, 2, 3, 4, Nov. 16-20, 1965	1.8	1.35	1969	Mar. 1, 1969	1.7	1.47
1967	Sept. 27, 28, 1967	1.9	1.37	1970	Sept. 25, 26-30, 1970	1.7	1.47
1968	Oct. 2, 9, 10, 1967	1.5	1.58				

a Occurred Nov. 17-20, 1965.

Period of record: Maximum discharge, 284 cfs Jan. 28, 1965 (gage height, 3.11 ft); minimum, 1.4 cfs

Flood of Nov. 22, 1959, reached a stage of 3.36 ft, from floodmarks (discharge, 359 cfs, result of culvert measurement of peak flow).

REMARKS.--Records excellent except those for period of no gage height record Jan. 30 to Mar. 11, 1969, which are fair. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.0	4.7	2.8	11	11	39	12	7.6	6.0	3.8	2.6
2	2.0	2.1	8.6	2.7	9.2	9.6	33	14	7.6	7.0	3.6	2.6
3	1.8	2.2	7.8	2.7	8.6	8.9	28	17	8.0	12	3.6	2.6
4	2.0	2.5	13	2.7	8.0	8.2	26	20	8.0	14	3.4	2.4
5	2.2	4.0	9.2	6.0	7.4	8.0	28	21	7.4	12	3.4	2.4
6	3.4	3.9	6.8	12	7.4	8.0	29	23	7.4	11	3.4	2.4
7	2.4	3.0	6.2	14	7.4	8.0	28	20	7.0	9.2	3.4	2.4
8	2.1	2.8	6.4	16	7.4	11	26	16	7.4	8.6	3.2	2.6
9	2.2	2.7	6.6	11	8.2	20	26	16	7.4	8.0	3.4	2.4
10	2.1	2.6	6.0	11	7.6	22	28	14	8.2	7.4	3.2	2.4
11	2.0	2.6	5.2	18	10	17	23	12	11	7.0	3.2	2.4
12	2.2	2.4	4.4	26	11	16	21	11	17	6.8	3.2	2.4
13	2.4	2.2	4.0	35	9.2	24	18	11	16	6.2	3.4	2.2
14	2.6	2.1	3.6	30	2.8	22	12	12	12	5.2	3.2	2.2
15	2.6	2.0	3.2	22	8.2	24	18	11	10	5.7	3.0	2.6
16	2.4	1.8	3.2	16	7.6	18	19	12	9.2	5.7	3.0	2.4
17	2.6	1.8	3.0	13	7.6	14	18	11	8.6	5.4	2.8	2.4
18	2.7	1.6	1.2	5.6	7.6	12	16	11	5.4	5.4	2.8	2.4
19	2.2	1.8	2.6	10	8.0	12	14	11	7.6	9.2	2.7	2.6
20	3.0	1.8	3.2	8.9	12	10	14	11	7.4	5.0	2.7	2.2
21	2.6	2.6	3.4	8.2	15	9.6	12	12	7.0	5.0	2.7	2.1
22	2.4	4.2	3.0	7.4	22	8.9	12	11	6.8	4.7	2.7	2.2
23	3.2	3.2	3.0	6.8	21	8.9	11	11	6.8	4.7	2.7	2.2
24	2.2	2.7	3.0	6.2	16	10	12	10	7.0	4.4	2.7	2.2
25	2.1	2.7	2.7	5.7	15	18	12	10	6.2	4.4	2.7	2.2
26	2.1	3.0	2.6	5.4	13	28	13	10	6.0	4.4	2.7	2.4
27	2.1	3.0	2.7	5.7	14	32	10	12	6.2	4.2	2.7	2.2
28	2.1	2.7	7.0	12	12	33	12	9.2	7.4	4.2	2.7	2.2
29	2.0	2.4	2.7	10	-----	34	12	8.9	6.2	4.0	2.7	2.2
30	2.1	2.2	2.6	13	-----	38	12	8.2	6.0	3.8	2.7	2.1
31	2.0	-----	2.6	14	-----	36	-----	8.8	-----	3.8	2.6	-----
TOTAL	72.8	76.4	148.1	359.2	300.6	546.1	585	392.3	248.6	201.4	94.1	70.7
MEAN	2.35	2.35	4.59	11.6	10.7	17.4	19.5	12.7	8.29	6.50	3.04	2.36
MAX	4.2	4.2	13	35	22	38	35	23	17	14	3.8	2.6
MIN	1.8	1.8	2.6	2.7	7.4	8.0	11	8.0	6.0	3.8	2.6	2.1
CFSM	.73	.79	1.41	3.59	3.31	5.45	6.04	3.73	2.57	2.09	.94	.73
1IN.	.84	.88	1.63	4.46	3.46	6.29	6.74	4.82	3.22	2.32	1.08	.88
PERCENT			712	585	1,000	1,000	779	493	359	251	187	181

CAL YR 1965	TOTAL 3,779.8	MEAN 10.4	MAX 2D5	MIN 1.8	CFSM 3.22	IN 43.53	AC-FT 7,500
WTR YR 1966	TOTAL 3,088.3	MEAN 8.46	MAX 38	MIN 1.8	CFSM 2.62	IN 39.97	AC-FT 6,130

12104700 GREEN CANYON CREEK NEAR LESTER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	3.8	26	32	26	18	13	11	11	6.5	3.4	2.0
2	3.6	3.8	18	26	24	17	13	11	11	6.2	3.4	2.2
3	2.4	3.4	12	37	25	15	15	11	12	6.2	3.1	2.0
4	2.2	3.4	10	29	40	14	18	12	11	6.2	3.1	1.8
5	2.2	3.8	9.2	23	40	14	16	13	11	5.9	3.1	1.8
6	2.4	3.4	8.2	19	30	14	14	17	11	5.9	3.4	1.8
7	2.2	3.4	7.6	16	25	14	15	17	10	5.6	3.4	1.8
8	2.4	3.2	7.0	24	22	14	17	21	10	5.6	3.1	1.8
9	2.2	3.4	6.4	25	21	14	14	21	9.6	5.3	3.1	1.8
10	2.1	3.4	6.4	27	22	14	13	18	9.3	5.0	3.1	2.2
11	2.1	3.4	9.2	42	23	13	12	15	9.3	5.0	3.1	2.4
12	2.2	6.0	24	34	24	12	12	14	9.3	4.7	2.8	2.4
13	2.2	6.0	108	62	33	12	13	14	8.9	4.7	2.8	1.8
14	2.1	9.2	67	57	28	11	12	15	8.9	4.4	2.8	1.8
15	2.1	12	29	59	24	11	11	17	8.9	4.1	2.8	1.8
16	2.1	12	26	49	22	14	10	24	8.9	4.1	2.6	1.8
17	2.1	10	30	34	29	16	10	26	8.9	4.1	2.4	1.6
18	2.1	8.6	31	28	35	14	10	24	8.5	4.1	2.4	1.6
19	2.2	7.6	34	58	25	14	10	22	8.5	4.1	2.4	1.8
20	4.4	6.4	56	58	22	14	10	24	8.5	4.4	2.4	1.8
21	3.4	5.7	30	36	20	14	11	24	8.9	4.4	2.2	1.6
22	12	5.2	22	29	18	22	11	22	8.5	4.1	2.2	1.6
23	11	5.2	17	25	17	27	11	19	7.8	3.8	2.2	1.6
24	8.2	5.0	15	22	18	23	11	15	7.5	3.8	2.2	1.6
25	5.7	12	13	20	18	19	12	13	7.1	3.8	2.0	1.5
26	6.0	18	12	18	17	18	11	13	7.1	3.8	2.0	1.5
27	6.2	15	11	28	15	17	12	12	6.8	3.8	1.8	1.5
28	5.2	14	11	62	16	16	12	12	6.8	3.8	1.8	1.5
29	5.2	13	17	49	-----	15	12	12	6.8	3.6	1.8	1.6
30	4.7	17	14	38	-----	14	11	12	6.5	3.6	1.8	1.6
31	4.2	-----	19	30	-----	14	-----	11	-----	3.6	1.8	-----
TOTAL	119.5	236.3	709.0	1,096	679	478	372	512	268.3	144.2	80.5	53.8
MEAN	3.85	7.88	22.9	35.4	24.3	15.4	12.4	16.5	8.94	4.65	2.60	1.79
MAX	12	27	108	62	40	27	18	26	12	6.5	3.4	2.4
MIN	2.1	3.2	6.4	16	15	11	10	11	6.5	3.6	1.8	1.5
CFSM	1.19	2.44	7.09	11.0	7.52	4.77	3.84	5.11	2.77	1.44	.81	.55
IN.	1.38	2.72	8.17	12.62	7.82	5.51	4.28	5.90	3.09	1.66	.93	.62
AC-FT	237	469	1,410	2,170	1,350	948	738	1,020	532	286	160	107

CAL YR 1966 TOTAL 3,862.8 MEAN 10.6 MAX 108 MIN 2.1 CFSM 3.28 IN 44.49 AC-FT 7,660
 WTR YR 1967 TOTAL 4,748.6 MEAN 13.0 MAX 108 MIN 1.5 CFSM 4.02 IN 54.69 AC-FT 9,420

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	16	4.4	19	15	19	18	14	17	6.2	3.1	4.4
2	1.8	12	5.0	17	16	18	18	13	29	5.9	3.1	4.1
3	3.4	10	5.9	15	25	17	17	11	25	5.6	3.1	3.8
4	2.2	8.2	6.2	14	45	17	15	11	18	5.6	2.8	3.6
5	2.2	6.8	6.2	13	31	16	14	10	14	5.6	2.8	3.4
6	2.0	6.2	5.6	12	24	15	15	11	12	5.6	3.1	3.4
7	2.2	5.9	5.3	11	22	14	18	11	11	5.3	3.2	3.4
8	1.8	5.3	5.0	11	21	14	17	11	10	5.0	3.1	3.6
9	1.6	8.2	9.3	11	20	13	17	13	9.3	4.7	3.1	3.4
10	1.8	23	27	10	19	12	17	13	8.9	4.7	3.1	3.4
11	3.8	23	39	9.6	18	12	17	11	8.5	4.7	2.8	3.4
12	2.6	15	20	9.6	18	11	15	10	8.5	5.6	2.8	3.4
13	4.7	10	14	10	17	11	13	9.3	8.5	4.1	2.8	3.4
14	3.6	9.6	11	14	15	10	12	8.5	8.5	4.1	5.6	5.0
15	2.2	9.3	9.6	21	14	10	12	8.2	7.8	4.1	4.1	5.6
16	1.8	8.2	9.3	19	13	11	11	7.8	7.8	3.8	3.8	6.2
17	1.8	7.5	8.5	15	14	11	11	7.5	7.8	3.8	3.8	20
18	1.8	7.1	7.8	14	37	10	11	7.1	7.8	3.8	3.8	31
19	2.6	6.8	7.1	115	101	10	12	7.1	7.5	3.8	3.8	24
20	2.0	6.5	6.8	152	71	10	12	7.8	7.5	3.8	3.4	16
21	6.8	5.9	6.8	111	94	10	12	7.8	7.1	3.6	3.1	12
22	8.2	5.6	14	93	62	9.6	14	7.8	7.8	3.6	3.1	9.6
23	14	5.3	23	38	52	9.6	14	7.8	7.1	3.4	3.8	9.3
24	8.9	5.3	71	62	40	9.6	14	7.5	7.1	3.4	4.4	9.3
25	10	5.0	170	34	32	9.6	14	8.2	6.5	3.4	5.3	8.5
26	8.2	4.4	115	28	27	9.6	14	8.9	6.5	3.4	5.3	7.5
27	46	4.4	52	19	23	30	13	9.3	6.5	3.4	5.6	6.5
28	48	4.7	35	20	22	48	14	9.6	7.1	3.4	7.5	6.2
29	17	5.0	27	19	20	32	18	9.3	6.8	3.4	6.2	5.6
30	15	4.7	22	18	-----	26	17	9.3	6.5	3.4	5.3	5.3
31	15	-----	18	17	-----	21	-----	8.9	-----	3.4	4.4	-----
TOTAL	245.0	254.9	766.8	911.2	888	476.0	436	296.7	303.4	133.6	120.8	234.3
MEAN	7.90	8.50	24.7	29.4	30.6	15.4	14.5	9.57	10.1	4.31	3.90	7.81
MAX	48	23	170	152	101	48	18	14	29	6.2	7.5	31
MIN	1.6	4.4	4.4	9.6	13	9.6	11	7.1	6.5	3.4	2.8	3.4
CFSM	2.45	2.63	7.65	9.10	9.47	4.77	4.49	2.96	3.13	1.33	1.21	2.42
IN.	2.82	2.94	8.83	10.49	10.23	5.48	5.02	3.42	3.49	1.56	1.38	2.70
AC-FT	486	506	1,520	1,810	1,760	944	865	589	402	265	240	465

CAL YR 1967 TOTAL 4,950.5 MEAN 13.6 MAX 170 MIN 1.5 CFSM 4.21 IN 57.02 AC-FT 9,820
 WTR YR 1968 TOTAL 5,066.7 MEAN 13.8 MAX 170 MIN 1.6 CFSM 4.27 IN 58.35 AC-FT 10,050

DUWAMISH RIVER BASIN

12104700 GREEN CANYON CREEK NEAR LESTER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.3	14	20	6.2	2.5	40	18	16	11	4.3	2.4
2	4.7	5.9	15	18	5.8	2.5	32	18	15	11	4.3	2.4
3	4.4	6.2	66	16	5.6	2.5	25	17	14	10	4.0	2.4
4	4.4	5.9	62	29	5.3	2.7	22	16	14	9.6	4.0	2.4
5	4.1	5.9	31	163	5.0	5.0	24	17	13	9.2	4.0	2.4
6	5.3	5.6	22	78	4.8	10	26	21	12	9.2	3.8	2.4
7	5.3	5.3	19	52	4.5	9.0	24	28	12	8.8	3.8	2.2
8	5.0	8.5	19	30	4.5	8.5	21	36	12	8.4	3.8	2.2
9	5.3	24	21	23	4.5	8.0	25	38	11	8.0	3.6	2.2
10	7.8	23	24	20	4.5	8.0	29	36	11	8.0	3.6	2.2
11	6.2	33	23	18	5.0	8.0	26	34	10	7.6	3.6	2.2
12	8.2	34	20	16	5.5	8.4	38	30	10	7.2	3.6	2.2
13	8.5	22	18	15	5.0	8.8	38	28	9.6	6.8	3.6	2.4
14	8.9	17	16	14	4.5	9.6	25	25	9.6	6.5	3.6	2.4
15	11	14	15	13	4.0	11	21	22	8.8	6.2	3.6	2.2
16	12	12	14	12	3.8	14	21	19	8.4	5.8	3.6	2.2
17	10	11	14	11	3.7	22	21	18	8.0	5.5	3.8	2.8
18	8.5	12	15	11	3.6	29	28	19	8.0	4.9	3.8	2.8
19	9.3	12	15	10	3.5	24	33	19	8.0	4.9	3.8	3.0
20	12	14	14	9.7	3.5	22	30	18	8.0	4.6	3.6	2.6
21	13	18	13	9.2	3.4	24	26	18	8.0	4.6	3.6	2.2
22	13	45	12	8.8	3.4	29	32	18	8.0	4.6	3.3	4.0
23	11	32	12	8.8	3.3	34	39	19	11	4.3	3.3	3.8
24	10	22	13	8.8	3.2	25	34	18	14	4.3	3.0	3.0
25	8.9	17	12	8.8	3.0	24	28	16	12	4.3	3.0	3.3
26	7.8	15	12	8.4	2.9	35	23	15	12	4.6	3.0	2.8
27	7.1	15	12	8.0	2.7	48	22	14	12	4.6	3.3	2.4
28	6.8	16	11	8.0	2.5	45	25	13	12	4.6	3.0	2.6
29	6.5	16	10	7.6	-----	41	22	16	12	4.3	2.8	2.8
30	6.2	15	9.8	7.2	-----	45	19	22	12	4.3	2.4	8.0
31	5.9	-----	13	6.6	-----	49	-----	18	-----	4.3	2.4	-----
TOTAL	244.5	487.6	586.8	688.9	117.2	614.5	819	664	331.4	202.0	108.9	82.9
MEAN	7.89	16.3	18.9	21.6	4.19	19.8	27.3	21.4	11.0	6.52	3.51	2.76
MAX	13	45	66	163	6.2	49	40	38	16	11	4.3	8.0
MIN	4.1	5.3	9.8	4.6	2.5	2.5	19	13	8.0	4.3	2.4	2.2
CFSM	2.44	5.05	5.85	6.69	1.30	6.13	8.45	6.63	3.41	2.02	1.09	.85
IN	2.82	5.62	6.76	7.70	1.35	7.08	9.43	7.65	3.82	2.33	1.25	.95
AC-FT	485	967	1,160	1,330	232	1,220	1,620	1,320	657	401	216	164

CAL YR 1968 TOTAL 5,118.9 MEAN 14.0 MAX 152 MIN 2.8 CFSM 4.33 IN 58.95 AC-FT 10,150
 MTR YR 1969 TOTAL 4,927.7 MEAN 13.5 MAX 163 MIN 2.2 CFSM 4.18 IN 56.75 AC-FT 9,770

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	2.6	4.0	6.8	29	14	14	27	10	5.2	3.3	2.1
2	7.6	2.6	4.0	6.5	25	13	14	26	11	4.9	3.6	2.0
3	7.2	2.6	4.0	6.5	22	12	14	26	11	4.6	3.3	3.5
4	5.2	8.0	4.9	5.8	20	12	14	27	11	4.6	3.0	2.2
5	4.6	8.4	5.2	5.2	17	11	14	24	9.2	4.6	3.0	2.1
6	4.0	5.8	4.9	4.9	16	13	16	20	8.8	4.6	3.0	2.6
7	4.0	4.9	4.6	4.9	16	25	17	17	8.8	4.3	3.0	3.0
8	4.9	4.3	4.3	4.9	25	21	17	15	8.4	4.0	2.8	4.0
9	5.2	4.0	4.3	4.9	30	18	40	14	8.4	4.0	2.8	2.4
10	6.2	4.0	4.0	4.6	33	16	52	13	8.0	4.0	2.8	2.1
11	6.2	3.8	4.3	4.6	32	14	30	12	7.6	4.0	2.6	2.1
12	5.2	3.6	5.8	4.3	26	13	23	12	7.2	3.8	2.6	1.9
13	4.6	3.6	8.0	5.2	24	12	20	12	6.8	3.8	2.6	2.1
14	4.0	3.6	12	22	20	12	18	11	6.8	3.8	2.6	2.1
15	3.8	3.6	13	23	43	12	16	11	6.8	3.8	2.5	2.1
16	3.6	3.6	10	14	94	15	14	12	6.8	3.8	2.6	2.1
17	3.4	3.6	8.8	11	45	16	14	16	6.5	3.6	2.6	2.1
18	3.0	3.6	9.2	28	33	15	13	14	6.2	3.6	2.5	2.8
19	3.0	3.8	9.6	83	26	14	14	12	6.2	3.6	2.4	2.6
20	3.0	4.7	10	93	22	14	13	11	6.2	3.6	2.4	2.2
21	3.0	8.8	12	82	21	13	12	11	5.8	3.6	2.3	2.1
22	3.0	8.8	16	89	20	13	12	10	5.8	3.6	2.2	2.2
23	3.0	9.2	17	104	18	12	12	10	5.5	3.3	2.1	2.1
24	3.0	9.6	14	58	18	12	14	10	5.5	3.3	2.1	1.9
25	2.8	8.8	11	48	17	12	16	11	5.5	3.8	2.2	1.9
26	2.8	6.8	9.6	35	17	11	16	12	5.2	3.8	2.1	1.7
27	2.8	6.2	8.4	30	16	11	14	11	5.2	3.6	2.0	1.7
28	2.8	5.2	7.2	22	15	15	14	9.6	5.2	3.3	2.0	1.7
29	2.8	4.9	6.8	19	-----	16	15	11	5.8	3.3	2.0	1.7
30	2.6	4.3	6.8	16	-----	15	25	10	5.5	3.3	2.0	1.7
31	2.6	-----	6.8	19	-----	13	-----	10	-----	3.3	1.9	-----
TOTAL	126.3	157.3	250.5	865.1	740	435	537	447.6	216.7	120.4	78.9	66.8
MEAN	4.07	5.24	8.08	27.9	26.4	14.0	17.9	14.4	7.22	3.88	2.55	2.23
MAX	7.6	9.6	17	104	94	25	52	27	11	5.2	3.6	4.0
MIN	2.6	2.6	4.0	4.3	15	11	12	9.6	5.2	3.3	1.9	1.7
CFSM	1.26	1.62	2.50	8.64	8.17	4.33	5.54	4.46	2.24	1.20	.79	.69
IN	1.45	1.81	2.89	9.96	8.52	5.01	6.18	5.16	2.50	1.39	.91	.77
AC-FT	251	312	497	1,720	1,470	863	1,070	888	430	239	157	133

CAL YR 1969 TOTAL 4,142.9 MEAN 11.4 MAX 163 MIN 2.2 CFSM 3.53 IN 47.71 AC-FT 8,220
 MTR YR 1970 TOTAL 4,041.6 MEAN 11.1 MAX 104 MIN 1.7 CFSM 3.44 IN 46.55 AC-FT 8,020

12105000 SMAY CREEK NEAR LESTER, WASH.

LOCATION.--Lat 47°15'43", long 121°33'52", in NE¼SW¼ sec.32, T.21 N., R.10 E., King County, Snoqualmie National Forest, on right bank 5.0 miles (revised) northwest of Lester and at mile 3.8.

DRAINAGE AREA.--8.56 sq mi.

PERIOD OF RECORD.--September 1946 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Concrete control since Sept. 21, 1948. Altitude of gage is 1,900 ft (from topographic map). Prior to Dec. 11, 1946, water-stage recorder at site 200 ft upstream at datum 4.28 ft higher (destroyed by high water of Dec. 11, 1946).

AVERAGE DISCHARGE.--24 years, 51.0 cfs (80.91 inches per year, 36,950 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (200 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1966	1500	*243	6.15	Dec. 25, 1967	1930	*896	7.56	Jan. 5, 1969	1430	*665	7.15
				Jan. 21, 1968	0600	560	6.94	May 10, 1969	0500	236	6.13
Dec. 13, 1966	2300	*330	6.40	Feb. 20, 1968	0300	382	6.53				
Dec. 20, 1966	1100	200	6.02	Sept. 18, 1968	0500	204	6.08	Jan. 20, 1970	0630	323	6.38
Jan. 15, 1967	1500	316	6.36					Jan. 23, 1970	0200	*330	6.40
				Dec. 4, 1968	0030	236	6.13	Feb. 16, 1970	0830	223	6.09
Oct. 28, 1967	0500	223	6.09								

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 30, 1966	6.8	4.77	1969	Sept. 8, 9-12, 13, 15, 1969	8.2	4.85
1967	Sept. 26-29, 1967	5.4	4.72	1970	Aug. 29-31, Sept. 2, 3, 1970	7.4	4.81
1968	Oct. 1, 1967	5.9	4.74				

a Occurred also Sept. 16, 1969.

Period of record: Maximum discharge, 2,380 cfs Nov. 23, 1959 (gage height, 8.14 ft), from rating curve extended above 310 cfs on basis of slope-area measurement of peak flow; maximum gage height, 11.59 ft Jan. 29, 1965 (from floodmark, backwater from logjam); minimum discharge, 4.2 cfs Nov. 21 to Dec. 1, 1952.

REMARKS.--Records excellent. No gage-height record Apr. 12 to May 16, 1967. No regulation or diversion above station.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	12	28	16	28	25	121	62	51	32	18	9.4
2	7.8	13	41	17	27	24	130	69	50	36	17	9.4
3	7.8	15	43	16	26	22	110	96	48	44	17	9.4
4	8.2	21	66	16	26	20	96	137	48	45	17	9.0
5	8.5	26	65	19	25	20	96	180	48	45	16	8.5
6	13	25	58	29	24	20	108	226	55	44	16	8.5
7	11	22	55	32	19	123	177	116	94	89	33	8.2
8	9.9	21	52	34	23	27	130	147	58	39	16	8.5
9	9.9	20	50	33	22	43	139	149	56	37	16	8.2
10	9.0	20	45	32	21	43	152	125	65	36	16	8.2
11	8.5	20	41	36	24	39	132	102	82	34	14	8.2
12	9.4	18	39	44	23	38	116	94	89	33	13	8.2
13	10	18	36	63	21	40	98	89	80	32	14	7.8
14	12	18	34	71	21	44	89	80	71	32	14	7.8
15	13	18	33	63	20	45	87	74	65	30	13	7.8
16	13	17	31	56	19	43	89	72	63	29	13	7.8
17	15	16	28	51	19	39	84	68	60	27	12	8.2
18	18	16	27	45	18	38	77	65	55	26	12	8.2
19	27	16	26	40	18	37	69	65	50	26	12	7.8
20	26	16	26	38	21	34	69	69	47	25	12	7.8
21	24	21	26	36	25	32	74	82	45	25	11	7.5
22	21	27	23	34	27	30	71	86	44	24	11	7.5
23	19	26	22	33	29	29	71	74	40	23	11	7.5
24	18	25	22	31	29	28	71	71	41	23	11	7.2
25	16	25	21	30	28	30	72	75	37	22	11	7.2
26	15	25	20	28	28	35	72	87	36	21	11	7.8
27	14	26	20	28	28	45	69	82	36	20	11	7.8
28	14	24	20	28	26	54	65	71	38	20	11	7.2
29	13	22	19	29	-----	69	63	65	34	20	10	7.2
30	13	21	18	30	-----	100	62	59	33	19	10	7.2
31	12	-----	17	29	-----	118	-----	56	-----	18	9.9	-----
TOTAL	423.8	610	1,052	1,087	669	1,230	2,805	2,954	1,583	928	411.9	241.3
MEAN	13.7	20.3	33.9	35.1	23.9	39.7	93.5	95.3	52.8	29.9	13.3	8.04
MAX	27	27	66	71	29	118	152	226	89	45	18	9.4
MIN	7.8	12	17	16	18	19	62	56	33	18	9.9	7.2
CFSM	1.60	2.37	3.96	4.10	2.79	4.64	10.9	11.1	6.17	3.49	1.55	.96
IN-	1.84	2.65	4.57	4.72	2.91	5.35	12.19	12.86	8.88	4.03	1.79	1.05
AC-FT	841	1,210	2,090	2,160	1,330	2,440	5,560	5,860	3,140	1,840	817	479
CAL YR 1965	TOTAL 16,625.4		MEAN 45.5	MAX 850	MIN 7.5	CFSM 5.32	IN 72.25	AC-FT 32,980				
WTR YR 1966	TOTAL 13,995.0		MEAN 38.3	MAX 226	MIN 7.2	CFSM 4.47	IN 60.82	AC-FT 27,760				

DUWAMISH RIVER BASIN

12105000 SMAY CREEK NEAR LESTER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	25	123	86	86	41	30	27	68	32	11	6.9
2	14	23	100	78	73	40	30	26	78	30	11	6.9
3	9.3	22	78	106	74	37	30	28	69	30	11	6.9
4	0.2	20	66	102	132	36	30	31	78	28	11	6.9
5	7.2	21	58	83	157	33	30	34	81	26	11	6.7
6	7.2	19	50	69	121	32	30	41	86	25	11	6.7
7	7.4	18	45	96	91	31	30	54	83	15	11	6.7
8	9.0	16	42	74	81	32	30	70	73	22	10	6.7
9	7.8	19	38	98	73	32	30	82	64	21	10	6.7
10	7.4	20	37	96	76	31	30	70	61	20	9.7	6.7
11	7.2	19	41	130	71	30	30	60	60	19	9.7	9.0
12	7.4	28	68	121	69	29	30	52	55	19	9.3	9.3
13	7.4	29	258	200	81	28	31	48	56	18	9.7	7.2
14	6.9	36	250	278	73	27	29	46	60	17	9.3	6.7
15	6.9	44	144	288	66	27	27	52	66	16	9.0	6.7
16	6.9	32	125	223	63	30	25	72	68	16	8.6	6.1
17	6.9	38	158	167	58	31	25	100	69	15	8.6	6.1
18	6.7	48	155	114	92	30	24	110	68	15	8.6	6.1
19	6.9	44	149	142	79	30	24	110	66	15	8.2	6.1
20	15	40	191	168	69	30	25	125	63	14	8.2	5.9
21	12	37	149	125	63	30	25	149	60	14	8.2	5.9
22	33	35	110	102	56	60	25	137	56	14	8.2	5.9
23	64	33	88	85	54	74	25	116	50	13	8.2	5.9
24	64	31	74	71	50	64	26	98	48	13	7.8	5.6
25	49	78	64	63	48	55	28	83	45	13	7.8	5.6
26	44	104	56	58	45	50	27	74	44	13	7.4	5.6
27	40	86	50	76	41	45	30	73	41	13	7.4	5.4
28	35	78	48	144	42	41	29	76	37	12	7.2	5.4
29	31	71	58	152	-----	37	28	88	36	12	7.2	5.6
30	30	110	55	121	-----	33	27	83	35	11	6.9	5.6
31	27	-----	61	100	-----	31	-----	73	-----	11	6.9	-----
TOTAL	595.5	1,256	2,983	3,763	2,107	1,157	840	2,296	1,840	560	279.1	193.5
MEAN	19.1	41.9	96.2	121	75.3	37.3	28.0	74.1	61.3	18.1	9.00	6.45
MAX	64	110	258	288	157	74	31	149	86	32	11	9.3
MIN	0.7	16	37	58	41	27	24	26	35	11	6.9	5.4
CFSH	2.23	4.89	11.2	14.1	8.80	4.36	3.27	8.66	7.16	2.11	1.05	.75
IN	2.58	5.46	12.96	16.35	9.16	5.03	3.85	9.98	8.00	2.43	1.21	.84
AC-FT	1,180	2,498	5,920	7,460	4,180	2,290	1,670	4,590	3,650	1,110	554	384

CAL YR 1966 TOTAL 16,741.7 MEAN 45.9 MAX 258 MIN 6.7 CFSH 5.36 IN 72.76 AC-FT 33,210
WTR YR 1967 TOTAL 17,866.1 MEAN 49.0 MAX 288 MIN 5.4 CFSH 5.72 IN 77.65 AC-FT 35,440

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	106	29	83	50	78	58	66	61	24	12	25
2	6.1	83	27	71	50	74	52	58	92	23	12	22
3	10	66	26	64	60	71	48	54	102	22	12	21
4	8.6	55	26	58	88	68	46	54	86	22	11	19
5	7.2	48	24	54	92	60	46	54	71	22	11	18
6	6.7	42	22	49	76	64	48	54	61	21	11	17
7	7.2	38	22	45	66	61	50	50	56	21	11	16
8	6.9	33	21	42	58	54	50	50	52	19	11	16
9	6.4	40	32	40	52	49	49	54	48	19	10	15
10	6.1	69	86	38	50	45	50	56	44	19	10	15
11	10	90	165	35	46	40	55	61	42	19	9.7	15
12	9.7	74	118	32	44	40	55	63	40	21	9.7	15
13	13	61	85	33	42	37	50	56	38	19	9.7	14
14	22	54	66	36	38	35	50	54	37	19	13	18
15	14	46	56	41	36	35	46	50	35	19	15	32
16	11	45	50	40	35	36	44	48	32	17	12	38
17	10	41	45	37	33	35	38	49	31	17	12	114
18	9.7	38	41	35	54	33	37	50	30	16	12	191
19	10	36	36	90	265	32	35	56	30	16	12	137
20	9.3	33	32	260	350	31	33	73	29	17	11	98
21	13	31	30	482	257	30	31	64	28	16	11	73
22	23	31	41	246	253	30	31	56	30	15	11	61
23	38	30	56	152	223	30	32	54	28	15	13	68
24	56	35	211	157	182	30	32	50	26	15	15	64
25	54	33	650	160	144	30	38	50	25	14	17	60
26	46	31	555	121	114	30	45	50	25	14	18	54
27	81	31	288	96	100	42	45	49	25	14	21	48
28	204	31	185	78	88	73	46	49	26	14	30	44
29	123	30	142	68	75	58	48	48	25	13	31	40
30	108	30	112	60	-----	76	49	46	25	12	30	37
31	112	-----	96	55	-----	68	-----	42	-----	12	27	-----
TOTAL	1,068.0	1,411	3,373	2,858	3,029	1,501	1,367	1,668	1,280	546	451.1	1,405
MEAN	34.5	47.0	109	92.2	106	48.4	45.6	53.8	42.7	17.6	14.6	46.8
MAX	204	106	650	482	350	78	69	73	102	26	31	191
MIN	6.1	30	21	32	33	30	31	42	25	12	9.7	14
CFSH	4.03	5.49	12.7	10.8	12.1	5.65	5.33	6.29	4.99	2.06	1.71	5.47
IN	6.64	6.13	14.66	12.42	13.16	6.52	5.94	7.25	5.56	2.37	1.96	6.11
AC-FT	2,120	2,800	6,690	5,670	6,010	2,980	2,710	3,310	2,540	1,080	895	2,790

CAL YR 1967 TOTAL 18,887.6 MEAN 51.7 MAX 650 MIN 5.4 CFSH 6.04 IN 82.08 AC-FT 37,460
WTR YR 1968 TOTAL 19,957.1 MEAN 54.5 MAX 650 MIN 6.1 CFSH 6.37 IN 86.73 AC-FT 39,580

12105000 SMAY CREEK NEAR LESTER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEP

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	33	35	66	55	22	12	88	68	116	49	16	9.3		
2	32	36	66	43	21	12	76	64	116	48	15	9.3		
3	30	35	131	40	20	12	66	60	121	45	15	9.3		
4	30	33	204	52	19	13	60	56	121	42	15	9.3		
5	28	32	134	437	18	14	61	56	118	40	15	9.3		
6	36	31	102	262	17	15	60	63	104	38	14	9.0		
7	40	30	83	147	17	14	56	86	90	36	14	8.6		
8	37	42	74	102	17	14	56	134	79	35	13	8.6		
9	37	92	68	81	16	13	60	197	78	33	13	8.2		
10	45	110	68	66	17	13	64	226	76	32	12	8.2		
11	46	134	66	56	17	13	68	204	69	31	12	8.2		
12	49	147	60	50	18	13	86	185	63	30	12	8.2		
13	50	112	55	45	17	13	98	180	60	29	12	8.6		
14	50	92	50	41	16	14	86	165	56	28	12	9.0		
15	66	76	48	37	16	14	76	142	52	27	11	8.6		
16	68	66	45	35	15	16	69	125	49	26	11	8.6		
17	63	60	42	33	15	22	71	116	46	25	11	9.3		
18	60	58	42	31	15	30	90	125	45	24	10	10		
19	56	56	38	30	16	30	100	134	41	21	10	10		
20	60	63	36	29	16	30	92	128	38	22	10	10		
21	60	74	35	28	16	31	88	125	37	22	10	9.7		
22	61	137	35	28	15	35	96	144	37	21	10	13		
23	58	137	35	27	14	38	125	165	41	20	9.7	15		
24	55	106	38	27	14	36	123	168	56	20	9.7	15		
25	52	88	33	26	13	36	102	144	58	19	9.7	14		
26	48	74	32	25	13	40	86	118	64	18	9.7	13		
27	44	86	30	24	13	50	79	108	61	17	9.7	12		
28	41	85	29	24	12	56	79	94	60	16	9.7	12		
29	38	83	28	23	12	60	78	114	56	16	9.7	12		
30	40	73	27	23	12	69	73	177	54	16	9.3	22		
31	37	-----	30	22	-----	88	-----	139	-----	16	9.3	-----		
TOTAL	1,450	2,283	1,830	1,949	455	866	2,414	4,010	2,062	1,564	359.5	317.3		
MEAN	46.8	76.1	59.0	62.9	16.3	27.9	80.5	129	68.7	27.4	11.6	10.6		
MAX	68	147	204	437	22	88	125	226	121	49	16	22		
MIN	28	30	27	22	12	12	56	56	37	16	9.3	8.2		
CFSM	5.47	8.89	6.89	7.35	1.90	3.26	9.40	15.1	8.03	3.73	1.36	1.24		
IN.	6.30	9.92	7.95	8.47	1.98	3.76	10.49	17.43	8.94	3.73	1.56	1.38		
AC-FT	2,880	4,530	3,630	3,870	902	1,720	4,790	7,950	4,090	1,710	713	629		
CAL YR 1968	TOTAL	19,668.1	MEAN	53.7	MAX	437	MIN	9.7	CFSM	6.27	IN	85.47	AC-FT	29,010
WTR YR 1969	TOTAL	18,859.8	MEAN	51.7	MAX	437	MIN	8.2	CFSM	6.04	IN	81.96	AC-FT	37,410

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	27	14	23	26	66	41	42	58	78	25	12	7.8		
2	31	14	22	23	58	38	45	61	100	23	12	7.4		
3	33	14	22	23	56	37	44	68	114	22	12	9.7		
4	31	26	23	22	50	35	45	86	102	22	11	9.3		
5	28	31	22	21	46	33	48	98	86	21	11	9.3		
6	25	27	21	19	44	38	56	85	85	20	11	11		
7	23	25	19	19	46	56	58	74	79	19	11	16		
8	27	22	19	19	55	54	58	64	68	19	10	13		
9	29	22	19	19	61	49	109	63	63	18	10	11		
10	30	21	18	18	64	45	171	56	60	18	10	10		
11	29	20	17	17	64	44	121	52	56	17	10	10		
12	27	19	21	16	66	44	92	49	52	17	10	9.7		
13	25	19	25	20	66	38	74	46	49	16	10	9.3		
14	23	18	32	46	61	42	66	44	48	15	10	9.3		
15	23	19	33	50	81	44	58	45	48	16	9.7	9.0		
16	22	18	31	46	200	52	52	58	45	13	9.7	9.0		
17	21	17	30	42	144	54	49	83	44	15	9.7	9.0		
18	19	17	35	100	49	46	46	76	42	15	9.3	10		
19	18	17	35	233	81	46	44	66	42	15	9.0	11		
20	19	20	46	278	69	44	42	61	42	15	9.0	10		
21	18	29	49	246	61	42	41	58	41	14	8.6	9.3		
22	16	29	56	263	55	40	38	40	58	14	8.2	12		
23	16	33	56	284	50	40	38	61	37	14	8.2	12		
24	16	36	49	177	48	40	41	64	35	13	8.2	11		
25	15	36	44	132	45	38	40	74	33	15	8.2	11		
26	15	33	38	104	44	38	37	92	30	13	8.2	10		
27	15	31	35	83	44	37	79	29	28	14	7.8	10		
28	15	30	31	71	42	44	37	68	28	13	7.8	10		
29	15	28	28	60	-----	45	40	68	28	13	7.8	10		
30	15	26	28	54	-----	42	35	73	27	12	7.4	10		
31	14	-----	27	55	-----	61	-----	71	-----	12	7.4	-----		
TOTAL	680	711	954	2,566	1,869	1,330	1,724	2,059	1,631	513	294.2	304.1		
MEAN	21.9	23.7	30.8	82.8	66.8	42.9	57.3	66.4	54.4	16.3	9.49	10.1		
MAX	33	36	56	284	200	56	171	98	114	25	12	14		
MIN	14	14	17	16	42	33	37	44	27	12	7.4	7.4		
CFSM	2.56	2.77	3.60	9.67	7.80	5.01	6.72	7.76	6.36	1.73	1.11	1.18		
IN.	2.96	3.09	4.15	11.15	8.12	5.78	7.49	8.95	7.09	2.23	1.28	1.32		
AC-FT	1,350	1,410	1,690	5,090	3,710	2,640	3,420	4,080	3,240	1,020	584	603		
CAL YR 1969	TOTAL	15,641.8	MEAN	42.9	MAX	437	MIN	8.2	CFSM	5.01	IN	67.98	AC-FT	31,070
WTR YR 1970	TOTAL	14,635.3	MEAN	40.1	MAX	284	MIN	7.4	CFSM	4.68	IN	63.60	AC-FT	29,030

DUNAMISH RIVER BASIN

12105710 NORTH FORK GREEN RIVER NEAR LEMOLO, WASH.

LOCATION.--Lat 47°18'21", long 121°46'20", near line between SW₄ and SE₄ sec.15, T.21 N., R.8 E., King County, on left bank 1.8 miles northeast of Lemolo siding, S.S miles east of Palmer, and at mile 2.3.

DRAINAGE AREA.--16.7 sq mi.

PERIOD OF RECORD.--June 1965 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,250 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 80.9 cfs (65.79 inches per year, 58,610 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (500 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Apr. 1, 1966	-	*434	6.41	Oct. 27, 1967	2200	519	6.34	Dec. 3, 1968	1730	750	6.60
Dec. 13, 1966	1315	*704	6.81	Dec. 10, 1967	2100	748	6.58	Jan. 5, 1969	0430	*1,080	7.11
Dec. 13, 1966	-	-	6.85	Dec. 25, 1967	1330	*1,110	7.16	Jan. 19, 1970	1400	572	6.25
Jan. 15, 1967	1000	588	6.52	Jan. 20, 1968	2100	970	6.95	Jan. 21, 1970	0800	536	6.17
				Feb. 19, 1968	0800	754	6.59	Jan. 22, 1970	2330	*582	6.27

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 4, 1965	2.4	63.72	1969	Sept. 11, 12, 1969	4.0	3.65
1967	Oct. 1, 1966	3.5	63.38	1970	Aug. 30, 31, 1970	4.5	3.73
1968	Aug. 12, 13, 1968	6.2	63.57				

a Occurred Sept. 22, 1966.

b Occurred Sept. 27, 28, 1967.

c Occurred Oct. 2, 3, 1967.

Period of record: Maximum discharge, 1,110 cfs Dec. 25, 1967 (gage height, 7.16 ft); no flow Aug. 8, 9, 18, Sept. 5-13, 1965.

Flood of Jan. 28, 1965, reached a stage of 9.50 ft, from floodmarks (discharge, 2,370 cfs, by slope-area measurement).

REMARKS.--Records good. No regulation or diversion above station. Considerable water goes underground a short distance above gage and, at times during dry summers, streambed at the gage may become completely dry.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	14	50	28	58	52	312	114	56	51	15	6.2
2	2.8	17	90	29	54	46	310	140	53	65	14	5.9
3	2.6	57	88	27	49	43	226	172	55	172	13	5.4
4	2.8	117	205	26	48	38	215	206	78	143	13	5.0
5	5.7	150	138	48	46	37	222	253	65	115	12	5.0
6	46	104	112	172	46	37	224	325	68	98	11	4.8
7	21	80	148	184	46	34	226	250	71	82	11	4.6
8	13	63	133	172	44	54	210	222	65	70	11	4.3
9	14	53	108	133	45	127	275	190	58	61	12	4.0
10	11	50	90	111	41	116	280	156	106	56	12	4.2
11	8.9	57	75	131	48	90	301	127	122	52	12	5.5
12	8.7	45	69	168	47	88	233	122	112	46	10	5.2
13	15	40	62	275	43	146	172	114	90	42	16	4.4
14	21	37	54	248	41	168	164	99	80	42	14	4.4
15	29	34	48	184	36	150	162	102	76	38	11	4.3
16	26	31	45	140	34	119	162	110	80	36	10	4.0
17	37	29	40	114	34	98	151	96	70	32	9.3	4.0
18	37	28	38	94	33	85	133	91	58	30	8.8	7.8
19	92	27	36	82	33	79	119	96	55	30	8.0	6.1
20	59	28	38	73	56	70	127	104	48	27	7.6	4.8
21	46	56	41	68	66	63	147	131	51	26	6.9	4.0
22	37	76	34	59	76	57	131	106	49	24	6.9	3.8
23	32	57	32	57	76	56	127	91	50	23	6.7	6.7
24	28	49	33	50	72	56	127	96	61	22	6.2	4.8
25	24	47	29	48	69	70	140	109	49	22	6.5	4.2
26	21	50	29	45	63	91	131	110	43	20	6.9	6.2
27	21	52	29	46	66	117	119	98	49	19	10	7.4
28	21	45	36	49	61	135	114	82	91	18	8.8	5.4
29	17	41	33	62	-----	164	112	76	64	17	7.4	4.3
30	20	37	29	68	-----	271	110	68	56	16	7.2	3.9
31	16	-----	28	66	-----	290	-----	58	-----	15	6.5	-----
TOTAL	738.5	1,571	2,020	3,057	1,431	3,047	5,482	4,114	2,029	1,510	310.7	150.6
MEAN	23.8	52.4	65.2	98.6	51.1	98.3	183	133	67.6	48.7	10.0	5.02
MAX	92	150	205	275	76	290	312	325	122	172	16	7.8
MIN	2.6	14	28	26	33	34	110	58	43	15	6.2	3.8
CFSH	1.43	3.14	3.90	5.90	3.06	5.89	11.0	7.96	4.05	2.92	.60	.30
IN.	1.65	3.50	4.50	6.81	3.19	6.79	12.21	9.16	4.52	3.36	.69	.34
AC-FT	1,460	3,120	4,010	6,060	2,840	6,040	10,870	8,160	4,020	3,000	616	299

WTR YR 1966 TOTAL: 25,460.8 MEAN 69.8 MAX 325 MIN 2.6 CFSH 4.18 IN 56.72 AC-FT 50,500

12105710 NORTH FORK GREEN RIVER NEAR LEMOLO, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	4.7	46	243	212	142	75	58	53	81	14	9.6	6.1		
2	64	41	180	182	125	66	61	57	108	13	9.3	8.6		
3	15	37	142	261	138	52	64	58	90	12	9.1	7.1		
4	11	32	120	230	292	16	69	64	82	12	8.8	6.4		
5	9.6	38	102	180	228	42	66	76	86	11	8.8	6.1		
6	8.5	34	90	142	169	58	62	95	81	13	8.8	6.0		
7	10	30	82	127	138	51	68	117	69	14	9.3	6.0		
8	22	25	72	171	119	64	69	142	59	14	9.1	5.7		
9	13	46	82	175	114	65	66	171	53	13	8.6	5.6		
10	11	55	82	170	138	54	61	129	51	13	8.3	7.4		
11	9.8	44	112	272	125	42	58	114	47	13	8.0	17		
12	12	82	221	246	129	34	42	101	44	13	7.8	14		
13	14	85	557	452	158	32	64	101	43	13	7.7	9.8		
14	12	134	390	536	132	30	56	98	45	11	7.6	8.4		
15	10	156	248	519	112	35	45	116	45	12	7.4	7.4		
16	9.8	153	272	349	105	75	43	154	44	12	7.1	6.8		
17	9.8	134	283	240	210	74	36	175	42	12	7.1	6.4		
18	8.5	115	272	184	240	69	47	164	36	12	7.0	6.1		
19	14	91	261	335	169	64	46	162	32	12	6.9	5.9		
20	74	78	278	318	136	76	45	184	30	12	6.8	5.7		
21	46	68	208	222	114	82	51	191	38	12	7.6	5.5		
22	232	57	160	169	95	171	50	171	47	11	7.3	6.1		
23	307	56	132	140	86	194	54	142	27	11	7.0	5.7		
24	162	52	117	117	78	150	59	114	24	11	6.9	5.7		
25	107	254	100	98	72	127	64	97	20	10	6.9	5.5		
26	99	201	82	90	66	108	58	92	19	10	6.5	5.3		
27	93	178	74	188	56	95	61	89	19	10	6.1	5.0		
28	68	156	72	302	69	86	58	90	17	10	6.1	4.9		
29	74	142	125	253	-----	80	56	100	15	9.8	5.7	5.4		
30	66	286	110	203	-----	69	53	84	14	9.8	5.6	7.0		
31	55	-----	145	162	-----	62	-----	76	-----	9.8	5.6	-----		
TOTAL	1,651.7	2,906	5,394	7,245	3,755	2,298	1,710	3,577	1,408	365.4	234.4	208.6		
MEAN	53.3	96.9	174	234	134	74.1	57.0	115	46.9	11.8	7.56	6.95		
MAX	307	286	557	536	292	194	69	191	108	14	9.6	17		
MIN	4.7	25	62	90	56	16	36	53	14	9.8	5.6	4.9		
CFSM	3.19	5.80	10.4	14.0	8.02	4.44	3.41	6.89	2.81	.71	.45	.42		
IN.	3.68	6.47	12.02	16.14	8.36	5.12	3.81	7.97	3.14	.81	.52	.46		
AC-FT	3,280	5,760	10,700	14,370	7,450	4,560	3,390	7,090	2,790	725	465	414		
CAL YR 1966	TOTAL	31,083.0	MEAN	85.2	MAX	557	MIN	3.8	CFSM	5.10	IN	69.24	AC-FT	61,650
WTR YR 1967	TOTAL	30,753.1	MEAN	84.3	MAX	557	MIN	4.7	CFSM	5.05	IN	68.50	AC-FT	61,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	8.2	169	46	140	59	95	115	104	188	26	9.7	57		
2	7.6	123	58	112	73	90	112	87	319	24	9.3	47		
3	19	92	58	96	117	80	94	87	240	23	9.3	41		
4	16	71	54	87	213	95	90	87	162	23	9.0	37		
5	12	57	51	80	144	90	92	80	121	22	9.3	32		
6	11	44	45	69	114	80	96	82	101	22	9.0	30		
7	12	42	43	66	94	75	104	84	87	21	8.1	28		
8	11	38	39	59	84	70	101	90	81	21	8.1	26		
9	9.4	80	92	62	75	65	104	101	68	20	7.6	25		
10	9.1	175	280	58	69	60	110	104	59	20	7.3	23		
11	24	132	340	54	62	55	119	101	62	20	6.7	22		
12	28	98	184	50	60	50	101	92	54	26	6.4	24		
13	40	80	134	174	56	48	87	76	57	22	6.4	22		
14	48	75	101	251	52	45	92	72	53	22	29	44		
15	24	74	84	312	48	52	94	66	45	23	43	82		
16	19	76	78	223	45	62	81	62	42	20	25	64		
17	16	66	71	167	45	52	72	62	39	18	22	211		
18	16	59	64	140	249	50	68	66	35	18	31	287		
19	18	56	58	365	670	45	67	67	35	18	32	221		
20	15	50	47	661	500	45	62	108	33	20	29	158		
21	34	47	46	637	443	44	60	76	29	18	25	121		
22	67	45	109	333	415	41	62	71	35	17	24	106		
23	110	44	146	242	383	42	69	75	31	16	35	144		
24	74	85	484	245	302	44	67	69	27	15	68	110		
25	80	61	838	184	218	47	87	76	24	14	69	92		
26	51	53	570	144	172	47	92	80	22	14	97	78		
27	204	48	379	110	138	158	86	66	31	13	112	69		
28	253	50	284	90	115	218	97	68	35	13	151	58		
29	144	61	210	84	99	221	119	62	35	12	114	47		
30	152	52	160	75	-----	172	123	64	30	12	86	43		
31	167	-----	136	68	-----	136	-----	57	-----	11	66	-----		
TOTAL	1,699.3	2,203	5,289	5,438	5,114	2,474	2,723	2,442	2,180	584	1,164.2	2,349		
MEAN	54.8	73.4	171	175	176	79.8	90.8	78.8	72.7	18.8	37.6	78.3		
MAX	253	175	838	661	670	221	123	108	319	26	151	287		
MIN	7.6	38	39	50	45	41	60	57	22	11	6.4	22		
CFSM	3.28	4.40	10.2	10.5	10.5	4.78	5.44	4.72	4.35	1.13	2.25	4.69		
IN.	3.79	4.91	11.78	12.11	11.39	5.51	6.07	5.44	4.86	1.30	2.59	5.23		
AC-FT	3,370	4,370	10,490	10,790	10,140	4,910	5,400	4,840	4,320	1,160	2,310	4,660		
CAL YR 1967	TOTAL	29,992.7	MEAN	82.2	MAX	838	MIN	4.9	CFSM	4.92	IN	66.81	AC-FT	59,490
WTR YR 1968	TOTAL	33,659.5	MEAN	92.0	MAX	838	MIN	6.4	CFSM	5.51	IN	74.98	AC-FT	66,760

DUNAWISH RIVER BASIN

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12105710 NORTH FORK GREEN RIVER NEAR LEMOLO, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	44	95	90	21	13	221	108	140	84	12	5.1
2	39	54	120	108	22	13	178	103	130	76	12	4.8
3	35	54	114	180	22	14	162	95	119	70	11	6.3
4	30	46	389	304	20	14	126	92	114	81	12	6.6
5	33	42	238	894	19	29	134	100	101	69	17	7.3
6	36	40	171	568	10	26	132	119	87	60	13	5.9
7	34	34	140	307	17	22	123	168	76	54	12	5.1
8	47	68	146	260	17	19	115	143	68	47	11	4.5
9	44	114	130	192	18	17	129	269	65	43	10	4.5
10	76	100	138	153	19	17	144	260	58	41	9.3	4.3
11	73	308	136	126	30	17	146	238	51	44	9.3	4.3
12	70	287	117	106	28	17	213	224	45	42	9.7	4.0
13	92	192	103	92	24	19	213	210	42	38	9.7	5.3
14	84	144	93	81	22	27	162	192	42	34	8.4	6.9
15	115	119	85	72	19	30	138	171	37	30	8.4	5.3
16	96	100	79	66	19	38	130	153	32	31	8.8	5.1
17	87	84	70	60	18	51	141	164	30	29	7.6	10
18	87	92	76	54	18	117	224	155	27	26	7.3	26
19	85	93	65	52	18	112	208	146	25	24	7.6	27
20	125	100	60	58	17	100	175	138	24	24	7.6	22
21	114	101	55	46	17	98	171	142	24	22	6.9	17
22	110	102	55	42	17	108	185	162	31	20	6.4	59
23	92	157	65	40	16	117	238	175	76	19	5.9	81
24	81	150	126	38	15	103	205	173	208	17	5.6	69
25	76	110	100	36	14	100	162	136	182	17	5.9	60
26	68	101	88	34	14	110	134	119	173	16	5.9	43
27	117	117	79	32	14	138	123	103	138	14	6.3	32
28	51	104	70	30	13	144	146	95	125	14	6.3	31
29	46	115	60	27	-----	149	136	188	117	14	6.6	32
30	58	105	55	24	-----	175	117	268	98	13	5.9	154
31	51	-----	60	22	-----	235	-----	164	-----	12	5.3	-----
TOTAL	2,196	3,347	3,678	4,272	526	2,226	4,829	5,073	2,483	1,133	270.9	750.3
MEAN	70.8	112	119	138	18.8	71.8	161	164	82.8	36.5	8.74	25.0
MAX	125	308	414	894	30	235	238	269	208	84	17	156
MIN	33	34	55	22	13	13	115	92	24	12	5.3	4.0
CFSM	4.24	6.71	7.13	8.26	1.13	4.30	9.64	9.82	4.96	2.19	.52	1.50
IN	4.89	7.46	8.19	9.52	1.17	4.96	10.76	11.30	5.53	2.52	.80	1.67
AC-FT	4,360	6,640	7,300	8,470	1,040	4,420	9,580	10,060	4,930	2,250	537	1,490

CAL YR 1968 TOTAL 33,689.2 MEAN 92.0 MAX 670 MIN 6.4 CFSM 5.51 IN 75.04 AC-FT 66,820
WTR YR 1969 TOTAL 30,784.2 MEAN 84.3 MAX 894 MIN 4.0 CFSM 5.05 IN 68.57 AC-FT 61,060

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	18	35	54	121	62	96	140	103	24	9.7	4.8
2	119	16	34	51	108	58	117	149	100	22	13	5.1
3	109	15	32	48	106	55	108	153	100	19	11	16
4	79	135	47	43	95	48	106	164	85	18	9.3	12
5	65	132	41	39	88	45	117	155	75	18	8.4	9.7
6	52	88	34	38	88	66	132	128	70	17	8.4	31
7	45	72	33	37	95	115	119	108	60	17	7.6	75
8	68	58	33	34	114	85	115	105	50	16	7.6	62
9	88	51	33	36	121	76	270	117	54	14	7.3	42
10	84	43	32	33	125	69	302	96	53	14	6.6	32
11	73	42	67	33	121	65	210	87	48	14	6.3	26
12	64	48	108	32	117	66	166	85	42	14	5.9	23
13	54	37	130	49	115	65	144	87	39	14	6.6	21
14	46	34	200	175	96	96	123	82	37	13	6.6	17
15	41	36	159	151	164	130	108	87	39	12	6.6	16
16	38	36	128	110	348	151	96	117	39	12	6.6	16
17	34	35	108	96	246	126	88	130	34	12	6.6	16
18	32	34	132	363	188	108	87	105	32	12	6.6	34
19	38	33	136	518	157	96	95	30	30	11	6.3	37
20	31	42	138	477	140	92	79	88	28	10	5.9	31
21	28	59	175	473	123	92	75	85	26	11	5.6	26
22	26	50	192	411	110	81	72	88	24	11	5.3	36
23	28	66	200	429	100	79	78	92	23	11	5.3	38
24	64	64	159	311	92	87	95	90	22	10	5.1	30
25	24	58	128	252	84	76	90	96	21	13	5.3	28
26	21	51	112	218	78	75	85	96	19	18	5.3	24
27	22	46	95	200	72	69	78	75	19	19	5.1	22
28	23	42	82	159	65	106	75	75	21	14	5.1	20
29	21	78	132	132	-----	98	87	107	26	11	6.3	17
30	20	37	68	112	-----	90	146	112	30	11	4.8	17
31	19	-----	63	114	-----	82	-----	95	-----	10	4.8	-----
TOTAL	1,542	1,510	3,009	5,224	3,477	2,609	3,552	3,289	1,349	444	209.7	780.6
MEAN	49.7	50.3	97.1	169	124	84.2	112	106	45.0	14.3	6.76	28.0
MAX	142	198	200	518	349	151	302	164	103	24	13	15
MIN	19	15	32	32	65	45	72	75	19	10	4.8	4.8
CFSM	2.90	3.01	5.81	10.1	7.43	5.04	7.07	6.35	2.69	.86	4.0	1.56
IN	3.43	3.36	6.70	11.64	7.75	5.81	7.91	7.33	3.00	.99	4.7	1.74
AC-FT	3,060	3,000	5,970	10,360	6,900	5,170	7,050	6,520	2,680	881	416	1,550

CAL YR 1969 TOTAL 27,624.2 MEAN 75.7 MAX 894 MIN 4.0 CFSM 4.53 IN 61.53 AC-FT 54,790
WTR YR 1970 TOTAL 26,995.3 MEAN 74.0 MAX 518 MIN 4.8 CFSM 4.43 IN 60.13 AC-FT 53,550

12105800 HOWARD A. HANSON RESERVOIR NEAR PALMER, WASH.

LOCATION.--Lat 47°16'38", long 121°47'03", in NE¼SE¼ sec.28, T.21 N., R.8 E., King County, near left bank on outlet gate structure just upstream from Howard A. Hanson Dam on Green River, 1.4 miles upstream from Bear Creek, 5.1 miles southeast of Palmer, and at mile 64.5.

DRAINAGE AREA.--220 sq mi, approximately.

PERIOD OF RECORD.--December 1961 to September 1970.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level. Supplementary long-distance water-stage recorder on right bank at same datum.

EXTREMES.--Maximums and minimums (contents in acre-feet, elevation in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum observed		Elevation	Date	Minimum observed		Elevation
		Contents				Contents		
1966	July 5, 1966	26,040		1,141.5	Nov. 2, 3, 1965	36		1,037.7
1967	July 21-26, 1967	23,940		1,138.7	Nov. 8, 1966	74		1,040.3
1968	Dec. 26, 1967	13,300		1,119.8	Dec. 7, 8, 1967	95		1,041.6
1969	Jan. 6, 1969	5,730		1,085.8	Dec. 30, 1968	100		1,042.2
1970	June 16, 17, 1970	25,340		1,140.6	Mar. 11, 1970	214		1,047.6

Period of record: Maximum contents observed, 44,910 acre-ft Jan. 31, 1965 (elevation, 1,161.7 ft); minimum observed, 34 acre-ft Nov. 2, 1962 (elevation, 1,037.6 ft).

REMARKS.--Reservoir is formed by an earthfill dam completed Mar. 31, 1962; storage began Dec. 5, 1961. Capacity, 105,600 acre-ft between elevations 1,035 (invert of outlet tunnel) and 1,206 ft (top of spillway gates). Storage is not retained but is dissipated as soon after a flood as is possible without creating damaging flows downstream in order to have the maximum capacity available for any following flood which might develop.

COOPERATION.--Record of reservoir elevations and capacity table furnished by Corps of Engineers.

Capacity table, water years 1966-70 (elevation, in feet, and contents, in acre-feet)

1,037	26	1,055	493	1,080	2,800	1,130	18,360
1,040	70	1,060	770	1,090	4,550	1,145	28,900
1,045	153	1,065	1,130	1,100	6,890		
1,050	289	1,070	1,590	1,120	13,390		

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14,090	74	84		124	131	228	1,450	18,940	23,720	18,590	18,880
2	13,910	36	128		115	121	275	3,130	19,240	23,720	18,840	18,378
3	13,730	36	119	72	111	112	203	4,920	19,420	24,010	18,480	18,420
4	13,560	117	122	67	106	106	174	7,330	19,910	25,190	18,420	18,318
5	13,340		254	67	103	103	174	8,810	20,400	26,040	18,420	18,110
6	13,220		104	148	103	99	181	7,840	20,910	25,080	18,420	18,318
7	13,220		107	181	106	99	206	6,300	21,160	24,440	18,420	15,860
8	12,560	62	109	198	103	106	212	3,840	23,500	23,090	18,420	15,710
9	12,040		101	174	107	170	204	939	21,000	22,418	18,420	15,560
10	11,150	84	93	148	106	231	243	179	22,210	21,758	18,420	15,410
11	10,430			172	104	188	220	146	22,950	21,100	18,420	15,260
12	9,720	82		212	124	164	191	130	24,010	21,030	18,400	15,128
13	9,070		74	430	114	198	155	122	25,040	20,970	18,480	15,020
14	8,370		68	209	115	250	140	111	24,090	20,840	18,400	14,038
15	7,920	74	64	160	106	235	140	104	24,370	20,910	18,400	14,698
16	7,460		62	139	103	222	144	109	24,590	20,910	18,360	14,550
17	7,050		60	117	101	184	144	563	24,740	20,910	18,258	14,418
18	6,740		85	106	99	164	133	1,600	24,740	20,918	18,140	14,320
19	6,690		84	96	114	157	121	2,660	24,670	20,840	18,020	14,108
20	6,220		82	88	128	146	115	3,900	24,440	20,720	17,970	14,050
21	5,420		91	130	131	137	119	5,390	24,190	20,590	17,860	13,070
22	4,530	122	84	121	149	124	115	7,310	23,860	20,400	17,750	13,730
23	3,590		73	117	144	121	112	8,750	23,440	20,159	17,640	13,620
24	2,670			111	155	121	115	10,030	23,090	19,970	17,530	13,478
25	1,700			106	148	131	124	11,260	23,160	19,840	17,370	13,340
26	1,020	96		101	142	170	124	12,720	23,160	19,600	17,260	13,220
27	522	103	74	101	142	240	114	14,410	23,160	19,360	17,200	13,138
28	198	93	76	103	144	300	111	15,740	23,300	19,060	17,150	13,010
29		88	74	114	-----	344	106	16,780	23,580	18,770	17,640	12,848
30		84	73	121	-----	400	186	17,640	23,720	18,710	18,940	12,680
31		-----		131	-----	269	-----	10,310	-----	18,650	18,038	-----
MAX					164	488	275	10,310	25,040	26,040	18,590	18,880
MIN					99	99	106	104	10,940	18,650	18,038	12,680
(+)	1,040.5	1,040.9	1,040.1	1,043.6	1,044.1	1,048.6	1,061.2	1,130.6	1,138.4	1,130.4	1,127.0	1,118.1
(*)	78	84	72	128	137	243	849	18,710	23,720	18,590	16,730	12,600
(++)	-14,060	+6	-12	+56	+9	+106	+606	+17,860	+5,010	-5,130	-1,860	-4,130

CAL YR 1965 ++ -13
WTR YR 1966 ++ -1,540

+ MONTHEND ELEVATION, IN FEET, ESTIMATED.

* MONTHEND CONTENTS, IN ACRE-FEET, ESTIMATED.

++ CHANGE IN CONTENTS, IN ACRE-FEET.

DUNAMISH RIVER BASIN

12105800 HOWARD A. HANSON RESERVOIR NEAR PALMER, WASH.--CONTINUED

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12,560	101	222	547	355	170	133	126	1,910	22,680	23,510	15,760
2	12,400	93	172	404	293	157	131	128	1,849	22,480	23,460	15,410
3	12,640	87	209	654	258	153	133	131	262	22,483	23,370	15,460
4	12,520	84	231	240	573	146	144	146	234	22,280	23,230	15,260
5	12,360	82	206	430	1,820	139	144	153	231	22,140	23,160	15,070
6	12,200	80	179	311	770	135	137	188	246	22,340	23,020	14,930
7	11,850	78	164	243	396	131	139	234	1,010	22,480	22,950	14,680
8	11,550	74	149	249	293	240	146	384	1,080	22,820	22,800	14,500
9	11,010	76	137	371	249	417	144	513	2,690	23,020	22,750	14,270
10	10,560	104	135	329	269	375	137	434	3,300	23,230	22,680	14,090
11	11,330		142	802	262	131	130	289	3,860	23,370	21,940	14,000
12	10,060	121	191	275	246	126	131	228	4,410	23,510	21,160	14,398
13	9,840	121	1,050	408	404	121	130	201	5,370	23,580	20,400	14,000
14	9,620	153	616	816	329	117	130	198	6,100	23,650	19,640	13,870
15	9,340		258	739	269	121	124	201	7,380	23,650	18,960	13,698
16	9,100	117	193	641	231	126	119	363	8,840	23,720	18,710	13,528
17	8,660	196	262	286	293	151	118	116	10,260	23,720	18,590	13,340
18	8,570	176	279	196	638	144	119	3,540	11,930	23,860	18,420	13,188
19	8,400	148	231	225	404	139	124	6,270	13,340	23,860	18,250	13,010
20	8,660	137	443	388	293	140	122	9,410	14,780	23,860	18,020	12,880
21	8,060	133	275	212	246	146	130	13,300	16,110	23,940	17,860	12,640
22	6,520	124	181	166	217	131	124	16,990	17,640	23,940	17,750	12,440
23	7,150	119	318	148	193	293	124	20,650	18,880	23,940	17,530	12,280
24	7,900	111	258	252	179	282	124	23,160	19,720	23,940	17,370	12,080
25	6,420	172	222	217	170	212	124	20,280	20,530	23,940	17,150	11,990
26	4,050	214	191	198	161	191	133	16,780	21,360	23,940	16,940	11,630
27	1,670	151	172	249	153	179	135	14,000	21,940	23,940	16,780	11,480
28	133	137	610	925	149	166	133	11,300	22,480	23,790	16,570	11,260
29		243	225	1,200	-----	159	131	9,250	22,610	23,720	16,370	11,040
30		452	228	903	-----	149	126	6,420	22,660	23,650	16,140	10,878
31	109	-----	234	518	-----	142	-----	4,010	-----	23,580	16,010	-----
MAX			1,050	1,200	1,820	417	146	23,160	22,660	23,940	23,510	15,760
MIN			135	148	149	117	115	126	231	22,140	16,010	10,870
(+)	1,042.2	1,050.2	1,053.2	1,053.2	1,045.4	1,044.1	1,043.5	1,077.8	1,136.9	1,138.1	1,125.3	1,113.2
(+)	104	296	413	413	161	137	126	2,500	22,680	23,510	15,860	10,770
(++)	-12,500	+192	+117	0	-252	-24	-11	+2,370	+20,180	+830	-7,650	-5,090

CAL YR 1966 ++ +341

WTR YR 1967 ++ -1,830

+ MONTHEND ELEVATION, IN FEET, ESTIMATED.

* MONTHEND CONTENTS, IN ACRE-FEET, ESTIMATED.

++ CHANGE IN CONTENTS, IN ACRE-FEET.

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,730	488	99	348	198	258	255	849	1,730	1,298	2,080	1,310
2	10,660	265	99	269	146	237	240	654	3,700	1,330	2,040	998
3	10,660	201	103	275	258	220	260	426	2,040	1,430	2,050	673
4	10,660	164	103	198	584	217	348	355	379	1,580	2,010	661
5	10,630	140	103	193	465	222	367	363	758	1,680	1,980	647
6	10,600	126	96	170	344	212	348	348	1,430	1,840	1,960	644
7	10,490	667	95	159	286	191	547	293	1,320	1,910	1,920	627
8	10,430	939	95	255	174	552	269	1,500	1,940	1,940	1,880	594
9	10,360	265	103	578	225	654	493	272	1,770	1,930	1,830	547
10	10,260	214	282	1,090	214	770	470	303	1,390	1,990	1,790	498
11	10,200	363	1,860	932	201	751	568	348	1,320	2,040	1,740	488
12	10,390	252	231	128	186	1,190	568	475	1,180	2,130	1,680	465
13	10,660	193	140	133	184	170	430	340	1,040	1,610	1,610	430
14	10,900	166	206	209	174	131	340	258	1,070	2,110	1,550	589
15	11,370	153	174	245	144	314	400	209	953	2,080	1,800	770
16	11,510	153	159	149	155	470	314	176	932	2,180	1,930	1,290
17	11,150	140	144	212	153	542	246	465	869	2,240	1,880	1,250
18	10,700	133	133	181	231	522	214	610	783	2,380	1,840	450
19	10,430	124	122	359	3,270	456	222	790	2,430	2,430	1,850	3,680
20	10,060	101	114	465	3,750	404	209	1,120	796	2,480	1,860	479
21	9,500	111	237	3,040	939	352	203	1,560	751		1,830	231
22	9,320	104	296	678	644	311	201	1,700	828	2,590	1,770	174
23	10,060	103	243	367	589	388	201	1,670	932	2,540	1,710	203
24	10,870	126	733	359	498	447	212	1,540	939	2,460	1,830	181
25	9,940	121	4,920	355	379	456	228	1,530	889	2,390	2,300	159
26	8,840	111	13,300	269	303	522	352	1,630	925	2,300	2,030	371
27	7,540	106	10,000	311	375	708	340	1,650	961	2,230	2,720	321
28	6,480	103	7,900	296	318	770	307	1,590	1,040	2,170	2,760	234
29	3,320	114	2,500	258	284	258	438	1,560	1,200	2,140	2,500	179
30	456	104	206	237	-----	568	733	1,490	1,280	2,120	1,880	149
31	447	-----	170	212	-----	318	-----	1,390	-----	2,110	1,440	-----
MAX	11,510	939	13,300	3,040	3,750	733	733	3,700			2,830	4,550
MIN	447	101	95	128	146	131	201	379			1,350	149
(+)	1,054.6	1,042.0	1,049.4	1,047.2	1,049.4	1,049.7	1,060.5	1,070.3	1,066.8	1,074.6	1,068.2	1,047.8
(+)	475	201	269	203	269	279	802	1,620	1,290	2,100	1,410	220
(++)	-10,300	-374	+168	-66	+66	+10	+523	+818	-330	+810	-690	-1,190

CAL YR 1967 MAX 23,940 MIN 95 ++ -144

WTR YR 1968 MAX MIN ++ -10,550

+ MONTHEND ELEVATION, IN FEET, ESTIMATED.

* MONTHEND CONTENTS, IN ACRE-FEET, ESTIMATED.

++ CHANGE IN CONTENTS, IN ACRE-FEET.

12105800 HOWARD A. HANSON RESERVOIR NEAR PALMER, WASH.--CONTINUED

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	265	179	198	314	311	282	388	303	584	1,160	855	822
2	255	159	184	552	296	296	329	262	421	1,078	862	822
3	217	184	616	484	307	325	340	340	584	961	869	828
4	201	174	764	733	275	311	275	307	594	1,100	862	849
5	237	157	286	1,990	252	375	589	303	925	1,188	894	869
6	188	220	203	3,730	255	367	568	408	961	1,190	925	833
7	384	203	321	1,600	282	255	616	708	622	1,150	917	839
8	443	231	318	249	284	333	352	794	990	1,050	894	883
9	388	783	246	193	303	318	352	578	622	925	903	876
10	470	661	272	303	296	275	461	325	447	783	903	862
11	447	649	293	644	367	286	503	282	421	678	910	862
12	137	739	946	527	300	275	578	300	522	794	903	862
13	220	375	776	375	307	269	1,170	289	479	835	884	867
14	201	237	1,051	282	265	275	1,050	269	649	828	883	883
15	269	314	279	225	269	286	384	228	794	889	862	894
16	465	493	262	258	275	384	359	198	751	910	883	903
17	363	367	212	269	272	702	348	648	903	883	917	883
18	303	333	304	282	279	652	644	421	690	876	883	1,070
19	325	222	198	249	296	311	470	456	702	946	883	1,230
20	375	321	212	220	311	272	413	408	862	975	883	1,250
21	456	325	329	311	314	363	329	188	998	998	869	1,120
22	484	610	325	303	484	359	426	1,120	998	903	883	917
23	421	702	300	243	307	822	1,080	493	1,330	983	835	1,250
24	325	417	164	333	275	889	508	932	2,760	953	809	1,290
25	255	293	255	344	246	379	300	842	1,190	910	783	1,210
26	217	275	203	388	272	400	388	503	201	932	882	1,100
27	172	275	262	417	265	638	318	126	946	822	1,140	883
28	149	272	249	296	249	598	309	493	779	946	835	1,170
29	133	272	188	282	-----	522	443	605	1,070	939	849	1,180
30	203	255	104	286	-----	627	379	1,170	1,200	925	849	1,380
31	222	-----	225	300	-----	644	-----	1,160	-----	889	842	-----
MAX	484	783	946	3,730	367	889	1,170	1,170	2,760	1,180	925	1,380
MIN	133	157	104	193	246	255	275	188	126	678	783	822
(+)	1,046.8	1,047.8	1,049.4	1,050.5	1,049.4	1,054.5	1,051.2	1,060.0	1,065.5	1,061.5	1,060.9	1,069.2
(*)	193	220	269	307	269	470	333	770	1,170	869	828	1,510
(++)	-27	+27	+49	+38	-38	+201	-137	+437	+400	-301	-41	+682

CAL YR 1968 MAX MIN ++ 0
WTR YR 1969 MAX 3,730 MIN 104 ++ +1,290

+ MONTHEND ELEVATION, IN FEET, ESTIMATED.

* MONTHEND CONTENTS, IN ACRE-FEET, ESTIMATED.

++ CHANGE IN CONTENTS, IN ACRE-FEET.

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,600	404	461	527	573	413	344	822	13,780	23,160	20,030	15,660
2	733	461	404	465	745	348	547	600	15,210	22,880	19,970	15,460
3	790	503	375	547	392	293	371	690	16,940	22,540	19,400	15,360
4	917	532	404	578	493	243	493	961	19,180	22,280	19,720	15,310
5	894	594	470	527	396	262	600	708	20,780	22,010	19,660	15,210
6	727	243	371	430	314	237	889	438	21,550	21,810	19,540	15,170
7	375	388	348	363	348	400	889	311	22,140	21,880	19,420	15,460
8	348	616	289	311	417	493	367	249	22,410	21,940	19,300	15,810
9	508	758	296	279	600	355	367	649	23,580	22,010	19,180	15,960
10	568	770	307	375	400	265	1,250	678	25,040	22,010	19,000	15,560
11	522	542	303	434	400	214	1,230	513	25,270	21,940	18,880	15,070
12	404	371	300	461	404	234	796	367	25,190	21,940	18,710	15,020
13	262	359	400	484	430	282	542	333	25,190	21,880	18,500	14,930
14	470	430	862	910	518	493	1,980	269	21,880	21,880	18,420	14,780
15	452	456	1,490	809	522	961	2,990	371	25,270	21,810	18,250	14,640
16	392	484	939	430	2,460	1,590	3,290	889	25,340	21,880	18,080	14,460
17	321	522	379	461	2,440	1,190	2,500	2,260	25,340	21,550	17,910	14,320
18	375	443	359	809	684	371	1,850	3,500	25,270	21,360	17,600	14,270
19	413	379	289	1,780	344	282	1,540	1,100	25,270	21,160	17,400	14,090
20	421	340	303	1,970	275	286	1,300	318	25,040	20,970	17,330	13,820
21	426	558	340	1,030	456	537	849	470	24,740	20,840	17,370	13,470
22	404	739	783	394	371	573	537	1,150	24,370	20,780	17,200	13,090
23	392	783	470	751	303	518	396	2,140	23,440	20,720	17,100	12,840
24	371	1,200	325	400	255	558	452	3,080	23,160	20,590	16,890	12,560
25	413	1,000	470	329	252	359	622	4,010	22,950	20,530	16,780	12,280
26	434	417	371	240	228	375	638	6,170	22,750	20,530	16,570	12,160
27	443	465	286	303	252	336	573	8,260	22,680	20,450	16,470	12,080
28	384	396	375	265	430	610	475	9,530	22,950	20,530	16,310	12,000
29	325	479	340	272	-----	1,030	426	10,290	23,090	20,340	16,160	11,930
30	282	498	513	417	-----	1,210	802	11,630	23,230	20,280	16,010	11,810
31	321	-----	547	503	-----	869	-----	12,840	-----	20,150	15,810	-----
MAX	1,600	1,200	1,490	1,970	2,460	1,590	3,290	12,840	23,160	20,030	15,960	-----
MIN	262	243	286	240	228	214	344	249	20,150	15,810	11,810	-----
(+)	1,052.3	1,054.6	1,055.8	1,056.2	1,053.3	1,054.8	1,060.7	1,120.2	1,137.6	1,132.9	1,125.0	1,115.9
(*)	375	475	532	552	417	484	816	13,470	23,160	20,090	15,710	11,740
(++)	-1,135	+100	+57	+20	-135	+67	+332	+7,650	+9,690	-3,070	-4,380	-3,970

CAL YR 1969 MAX 822 MIN 126 ++ +268
WTR YR 1970 MAX MIN ++ +10,230

+ MONTHEND ELEVATION, IN FEET, ESTIMATED.

* MONTHEND CONTENTS, IN ACRE-FEET, ESTIMATED.

++ CHANGE IN CONTENTS, IN ACRE-FEET.

12105900 GREEN RIVER BELOW HOWARD A. HANSON DAM, WASH.

LOCATION.--Lat 47°17'02", long 121°47'48", in NE¼ sec. 28, T.21 N., R.8 E., King County, on right bank 0.7 mile upstream from Bear Creek, 0.7 mile downstream from Howard A. Hanson Dam, 5.0 miles southeast of Palmer, and at mile 63.8.

DRAINAGE AREA.--221 sq mi.

PERIOD OF RECORD.--October 1960 (monthly discharge only), November 1960 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 990 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 1,016 cfs (62.43 inches per year, 736,100 acre-ft per year), adjusted for storage in Howard A. Hanson Reservoir since December 1961.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	May 5, 1966		4,820	10.55	Nov. 3, 1965		184	4.00
1967	Jan. 15, 1967		6,470	all.65	Sept. 29, 30, 1967		208	b4.10
1968	Dec. 26, 1967		9,150	13.14	Oct. 9, 10, 11, 1967		204	c4.04
1969	Jan. 6, 1969		7,510	12.23	Sept. 10, 11, 12, 13, 1969		139	3.78
1970	Jan. 2, 1970		6,390	11.63	Aug. 5, 6, 29, 30, 31, Sept. 1		188	d4.09

a Occurred Dec. 13, 1966.

b Occurred July 5, Sept. 29, 30, 1967.

c Occurred Aug. 11, 12, 1968.

d Occurred Oct. 31, 1969.

Period of record: Maximum discharge, 12,200 cfs Feb. 21, 1961 (gage height, 14.40 ft); minimum, 87 cfs Dec. 29, 1961 (gage height, 3.49 ft).

REMARKS.--Records excellent. Flow regulated since Dec. 5, 1961, by Howard A. Hanson Reservoir (see station 12105800) for flood control and, during summer months, to augment the natural river flow. Minor diversions on upstream tributaries for domestic use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	241	236	447	323	678	718	2,960	251	538	527	286	229
2	239	243	690	348	830	654	3,240	474	572	527	286	229
3	239	320	486	334	599	602	2,510	790	482	530	270	229
4	253	442	1,590	323	566	558	2,180	1,450	424	530	232	229
5	258	785	1,350	382	544	538	2,160	2,950	428	780	218	229
6	312	694	1,070	920	538	530	2,270	4,600	527	1,270	215	229
7	405	562	1,120	1,070	558	520	2,570	4,280	610	1,420	213	227
8	576	474	1,070	1,178	541	618	2,610	4,100	610	1,080	213	227
9	569	450	945	1,040	590	1,110	2,750	3,120	614	905	213	227
10	562	431	840	880	562	1,340	3,000	2,170	618	900	213	227
11	555	444	730	1,050	630	1,100	2,730	1,690	622	662	213	227
12	552	397	662	1,360	702	990	2,350	1,470	626	516	213	224
13	544	374	602	2,440	626	1,250	1,800	1,350	940	516	213	224
14	538	359	555	2,380	626	1,530	1,660	1,190	1,120	454	213	224
15	534	351	510	1,900	562	1,480	1,660	1,110	865	415	241	224
16	527	348	482	1,450	534	1,290	1,720	940	734	415	260	222
17	520	334	1,190	1,404	527	1,086	1,700	598	738	415	260	222
18	516	334	431	1,020	520	955	1,510	418	738	415	241	222
19	498	331	415	880	516	915	1,330	403	734	415	227	222
20	910	331	421	760	642	835	1,290	371	734	415	227	222
21	895	464	464	722	746	760	1,310	374	734	415	227	220
22	895	442	406	666	885	690	1,250	394	730	412	229	220
23	810	580	391	642	965	670	1,220	409	730	412	229	220
24	790	524	388	590	910	674	1,270	418	594	412	229	218
25	670	502	365	558	850	750	1,380	431	524	412	229	218
26	606	516	351	530	805	1,020	1,370	440	524	412	229	218
27	499	527	362	534	845	1,420	1,230	450	524	409	229	218
28	362	482	374	548	815	1,710	1,140	457	527	409	229	215
29	260	440	362	618	-----	1,980	1,060	464	527	336	229	215
30	260	412	342	686	-----	2,880	718	468	527	286	229	215
31	243	-----	328	734	-----	3,180	-----	471	-----	286	229	-----
TOTAL	15,858	13,529	19,193	28,048	18,503	34,347	56,028	38,461	19,215	17,308	7,184	6,692
MEAN	512	431	619	905	661	1,108	1,868	1,241	641	558	232	223
MAX	910	785	1,590	2,440	965	3,180	3,240	4,600	1,120	1,420	286	229
MIN	239	236	328	323	516	520	718	251	424	286	213	215
AC-FT	31,450	26,830	38,070	55,630	36,700	68,130	111,100	76,290	38,110	34,330	14,290	13,270
(+)	-14,060	+6	-12	+56	+9	+106	+606	+17,860	+5,010	-5,130	-1,860	-4,130
MEAN*	283	451	619	906	661	1,110	1,877	1,321	725	475	202	154
CFSM*	1.28	2.04	2.80	4.10	2.99	5.02	8.49	6.93	3.28	2.15	.914	.697
IN*	1.48	2.28	3.23	4.72	3.11	5.79	9.48	7.99	3.66	2.48	1.05	.78
AC-FT*	17,390	26,040	38,060	55,690	36,710	68,240	111,700	94,150	43,120	29,200	12,390	9,140

OBSERVED

CAL YR 1965	TOTAL 348,447	MEAN 955	MAX 10,400	MIN 215	AC-FT 691,100
WTR YR 1966	TOTAL 274,366	MEAN 752	MAX 4,600	MIN 213	AC-FT 544,200

ADJUSTED *

CAL YR 1965	MEAN 955	CFSM 4.32	IN 58.63	AC-FT 691,100
WTR YR 1966	MEAN 750	CFSM 3.39	IN 46.04	AC-FT 542,700

† CHANGE IN CONTENTS, IN ACRE-FEET, IN HOWARD A. HANSON RESERVOIR.

* ADJUSTED FOR CHANGE IN CONTENTS IN HOWARD A. HANSON RESERVOIR.

12105900 GREEN RIVER BELOW HOWARD A. HANSON DAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	527	2,700	2,360	1,950	1,030	767	699	2,028	479	227	234
2	215	474	2,810	2,120	1,710	970	756	715	1,950	479	227	231
3	239	440	1,680	2,910	1,660	900	767	750	1,960	479	227	230
4	254	409	1,390	2,920	2,940	845	835	851	1,400	479	227	230
5	255	424	1,210	2,210	3,720	803	830	914	1,400	321	227	230
6	307	409	1,050	1,770	2,840	771	788	1,140	1,160	227	227	229
7	308	379	959	1,900	2,040	704	804	1,300	935	227	227	228
8	416	362	859	1,680	1,690	740	849	1,720	759	228	227	227
9	413	428	765	2,040	1,510	870	833	1,960	658	228	227	227
10	349	538	789	1,950	1,600	950	779	1,760	654	228	417	227
11	308	492	886	3,330	1,960	763	741	1,440	676	228	940	229
12	307	654	1,320	2,930	1,980	713	758	1,300	946	229	937	229
13	304	682	4,370	4,930	2,050	679	792	1,190	488	229	934	225
14	301	972	4,740	5,820	1,840	651	741	1,180	405	229	932	225
15	302	1,210	2,940	5,950	1,980	667	694	1,240	340	227	993	224
16	300	1,160	2,660	5,060	1,430	749	669	1,690	294	227	242	223
17	299	1,160	3,140	3,230	1,920	845	645	1,360	279	228	242	223
18	266	1,010	3,170	2,450	2,650	840	675	895	287	228	242	222
19	250	879	3,040	3,250	2,110	798	699	802	272	228	242	222
20	601	795	4,040	3,830	1,690	812	695	766	239	228	242	221
21	1,210	740	3,060	2,740	1,450	850	724	819	243	229	242	220
22	1,360	873	2,160	2,130	1,280	1,080	713	806	246	229	241	218
23	1,380	642	1,830	1,690	1,150	1,490	713	794	249	229	237	217
24	1,800	607	1,950	1,500	1,070	1,430	729	2,320	251	229	237	216
25	2,070	1,860	1,350	1,310	1,020	1,280	768	3,290	253	229	237	215
26	2,140	2,440	1,170	1,190	965	1,160	754	2,940	294	229	237	214
27	1,970	1,850	763	1,640	910	1,070	788	2,710	319	229	236	213
28	795	1,520	1,280	3,180	960	995	762	2,600	395	228	235	211
29	690	1,450	1,390	3,470	-----	950	742	2,810	451	228	235	209
30	665	2,590	1,390	3,070	-----	885	710	2,780	473	228	234	209
31	579	-----	1,470	2,400	-----	821	-----	2,470	-----	227	234	-----
TOTAL	20,990	27,756	61,151	85,760	48,895	28,111	22,522	48,101	19,528	8,170	8,771	6,674
MEAN	676	925	1,973	2,766	1,766	907	751	1,552	651	264	283	222
MAX	2,140	2,590	4,740	5,950	3,720	1,490	849	3,290	2,020	479	940	234
MIN	215	362	763	1,190	910	651	645	699	239	227	227	209
AC-FT	41,550	55,050	121,300	170,100	96,980	55,760	44,670	95,410	38,730	16,210	17,480	13,240
(+)	-12,500	+192	+127	0	-252	-24	-11	+2,370	+20,180	+830	-7,650	-5,090
MEAN*	472	928	1,974	2,766	1,742	907	751	1,590	990	277	159	137
CFSM*	2.14	4.20	8.93	12.5	7.88	4.10	3.40	7.19	4.48	1.25	.719	.620
IN*	2.46	4.69	10.30	14.43	8.21	4.73	3.79	8.30	5.00	1.44	.83	.69
AC-FT*	29,050	55,240	121,400	170,100	96,730	55,740	44,660	97,780	58,910	17,030	9,750	8,150

OBSERVED

CAL YR 1966 TOTAL 335,643 MEAN 920 MAX 4,740 MIN 213 AC-FT 665,700
WTR YR 1967 TOTAL 386,389 MEAN 1,059 MAX 5,950 MIN 209 AC-FT 766,400

ADJUSTED *

CAL YR 1966 MEAN 920 CFSM 4.18 IN 56.50 AC-FT 666,000
WTR YR 1967 MEAN 1,056 CFSM 4.78 IN 64.87 AC-FT 764,600

* CHANGE IN CONTENTS, IN ACRE-FEET, IN HOWARD A. HANSON RESERVOIR.
* ADJUSTED FOR CHANGE IN CONTENTS IN HOWARD A. HANSON RESERVOIR.

12105900 GREEN RIVER BELOW HOWARD A. HANSON DAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	2,080	512	1,740	989	1,470	1,380	1,530	714	406	219	651
2	206	1,510	537	1,440	972	1,360	1,200	1,390	2,240	358	218	609
3	209	1,170	544	1,240	1,400	1,280	1,140	1,210	3,080	319	218	470
4	207	935	540	1,110	2,410	1,260	1,090	1,130	2,110	308	218	372
5	206	785	533	1,040	2,110	1,270	1,110	1,120	849	304	218	357
6	206	512	495	920	1,660	1,200	1,120	1,090	1,140	301	215	340
7	206	412	475	870	1,400	1,080	1,310	1,020	984	304	215	329
8	206	754	453	675	1,230	842	1,310	989	668	321	211	325
9	205	955	667	551	1,110	744	1,260	1,000	993	294	211	319
10	204	1,560	1,820	667	1,020	806	1,250	1,050	862	287	208	311
11	207	1,880	4,250	1,160	953	637	1,340	1,110	790	288	208	303
12	206	1,430	2,310	683	904	1,040	1,330	1,160	770	311	211	298
13	260	1,120	1,480	915	857	879	1,190	1,090	746	347	220	292
14	315	980	1,200	1,140	807	612	1,090	966	670	346	225	301
15	317	890	1,010	1,510	758	624	1,140	875	605	308	230	343
16	413	870	905	1,310	718	703	1,030	712	599	266	262	520
17	471	781	803	1,130	707	730	937	704	588	247	282	685
18	470	731	731	990	1,430	717	883	759	537	249	279	2,230
19	466	675	667	2,570	5,820	688	891	808	508	251	279	4,000
20	530	623	558	5,410	7,950	662	866	899	507	253	279	2,390
21	570	579	558	8,210	5,540	637	849	966	473	254	279	1,370
22	568	554	950	5,540	5,510	577	848	982	462	275	277	1,110
23	770	537	1,530	3,190	4,600	570	874	977	472	295	274	1,250
24	1,200	663	3,320	3,290	3,950	592	889	890	471	293	282	1,130
25	1,510	651	5,970	3,080	3,060	599	951	841	434	291	292	900
26	1,470	595	7,960	2,260	2,360	621	1,110	850	401	287	503	875
27	2,480	558	6,770	1,840	2,030	1,520	1,090	847	405	274	736	830
28	4,960	554	5,540	1,480	1,780	3,070	1,060	840	413	255	936	745
29	3,850	607	5,280	1,290	1,600	2,310	1,250	835	425	241	1,090	667
30	2,240	551	2,080	1,170	-----	2,080	1,470	827	430	230	829	558
31	2,090	-----	1,650	1,060	-----	1,660	-----	731	-----	223	683	-----
TOTAL	27,426	26,502	62,098	59,481	65,635	32,840	33,258	30,198	24,348	8,986	10,807	24,880
MEAN	885	883	2,003	1,919	2,263	1,059	1,109	974	812	290	349	829
MAX	4,960	2,080	7,960	8,210	7,950	3,070	1,470	1,530	3,080	406	1,090	4,000
MIN	204	412	453	551	707	570	848	704	401	223	208	292
AC-FT	54,400	52,570	123,200	118,000	130,200	65,140	65,970	59,900	48,290	17,820	21,440	49,350
(+)	-10,300	-374	+168	-66	+66	+10	+523	+818	-330	+810	-690	-1,190
MEAN*	717	877	2,007	1,917	2,265	1,060	1,117	988	806	303	337	809
CFSM*	3.24	3.97	9.08	8.67	10.2	4.80	5.05	4.47	3.65	1.37	1.52	3.66
IN*	3.74	4.43	10.47	10.00	11.05	5.53	5.64	5.15	4.07	1.58	1.76	4.09
TOTAL*	44,100	52,200	123,400	117,900	130,300	65,150	66,490	60,720	47,960	18,630	20,750	48,160

OBSERVED

CAL YR 1967	TOTAL 392,558	MEAN 1,076	MAX 7,960	MIN 204	AC-FT 778,600
WTR YR 1968	TOTAL 406,459	MEAN 1,111	MAX 8,210	MIN 204	AC-FT 806,200

ADJUSTED *

CAL YR 1967	MEAN 1,075	CFSM 4.86	IN 66.05	AC-FT 778,500
WTR YR 1968	MEAN 1,096	CFSM 4.96	IN 67.50	AC-FT 795,600

† CHANGE IN CONTENTS, IN ACRE-FEET, IN HOWARD A. HANSON RESERVOIR.

* ADJUSTED FOR CHANGE IN CONTENTS IN HOWARD A. HANSON RESERVOIR.

12105900 GREEN RIVER BELOW HOWARD A. HANSON DAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	547	671	1,280	516	468	365	2,550	1,450	2,010	726	256	163
2	540	671	1,240	683	461	368	2,090	1,260	1,690	714	243	157
3	512	713	3,350	740	461	391	1,770	1,190	1,670	698	243	151
4	505	667	4,920	1,500	447	409	1,420	1,130	1,680	602	243	153
5	492	603	2,900	6,790	424	576	1,400	1,140	1,160	606	246	153
6	540	595	2,030	6,930	397	714	1,490	1,340	2,050	606	248	153
7	619	579	1,720	5,130	391	587	1,620	2,010	1,750	606	246	153
8	635	2,580	1,630	2,640	394	534	1,450	2,940	1,320	590	241	153
9	615	1,650	1,490	1,950	400	527	1,460	3,780	1,150	573	220	153
10	763	2,220	1,580	1,470	415	485	1,670	3,890	1,000	552	220	145
11	1,010	2,850	1,350	1,330	506	468	1,730	3,530	860	468	220	139
12	865	3,500	1,290	1,230	499	464	1,930	3,180	805	431	220	141
13	965	2,580	1,690	1,070	475	461	2,400	3,080	718	434	218	141
14	925	1,850	1,100	960	444	464	2,410	2,880	638	400	218	141
15	1,130	1,490	1,040	850	418	475	1,750	2,520	666	385	204	141
16	1,310	1,340	1,010	805	421	520	1,570	2,080	650	385	195	141
17	1,180	1,190	920	742	418	980	1,600	2,010	583	385	195	145
18	1,090	1,220	955	714	421	1,440	2,390	2,070	503	345	195	149
19	985	1,110	865	686	431	1,360	2,540	2,220	464	323	195	220
20	1,220	1,220	758	610	437	1,220	2,310	2,230	437	326	195	304
21	1,320	1,400	740	598	437	1,190	2,010	1,990	400	326	195	296
22	1,540	2,550	736	594	437	1,240	1,910	2,270	415	326	193	312
23	1,260	2,870	821	513	434	1,500	3,180	2,350	431	326	193	409
24	1,140	2,230	895	489	421	1,660	3,050	2,470	1,420	323	191	450
25	1,030	1,740	875	496	394	1,360	2,290	2,320	2,030	299	174	444
26	945	1,510	776	510	388	1,300	1,940	1,800	1,100	276	163	374
27	845	1,590	763	538	385	1,800	1,720	1,520	730	276	163	288
28	781	1,450	713	510	365	2,010	1,710	1,310	666	276	165	291
29	704	1,950	627	468	-----	1,930	1,800	1,600	718	276	165	291
30	731	1,440	469	457	-----	2,170	1,630	2,690	726	276	165	545
31	731	-----	472	464	-----	2,820	-----	2,580	-----	273	165	-----
TOTAL	27,275	45,892	41,005	42,983	11,989	31,788	58,790	68,890	29,440	13,348	6,383	6,896
MEAN	880	1,530	1,323	1,387	428	1,025	1,960	2,220	981	431	206	230
MAX	1,340	3,500	4,920	6,930	506	2,820	3,180	3,890	2,050	726	256	545
MIN	492	579	469	457	365	365	1,400	1,130	400	273	163	139
AC-FT	54,100	91,030	81,330	85,260	23,780	63,050	116,600	136,500	58,390	26,480	12,660	13,680
(1)	-27	+27	+49	+38	-38	+201	-137	+437	+400	-301	-41	+682
MEAN*	879	1,531	1,323	1,387	428	1,028	1,958	2,226	988	426	205	241
CFSM*	3.98	6.93	5.99	6.28	1.94	4.65	8.86	10.1	4.67	1.93	.93	1.09
IN*	4.59	7.73	6.90	7.24	2.01	5.37	9.88	11.61	4.99	2.22	1.07	1.22
AC-FT*	54,070	91,060	81,380	85,300	23,740	63,250	116,500	136,900	58,790	26,180	12,620	14,360

OBSERVED

CAL YR 1968	TOTAL 404,605	MEAN 1,105	MAX 8,210	MIN 208	AC-FT 802,500
WTR YR 1969	TOTAL 384,619	MEAN 1,094	MAX 8,930	MIN 139	AC-FT 762,900

ADJUSTED *

CAL YR 1968	MEAN 1,105	CFSM 5.00	IN 68.09	AC-FT 802,500
WTR YR 1969	MEAN 1,095	CFSM 4.77	IN 64.84	AC-FT 764,200

† CHANGE IN CONTENTS, IN ACRE-FEET, IN HOWARD A. HANSON RESERVOIR.

* ADJUSTED FOR CHANGE IN CONTENTS IN HOWARD A. HANSON RESERVOIR.

12105900 GREEN RIVER BELOW HOWARD A. HANSON DAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,090	217	433	598	1,340	825	1,000	1,570	795	465	223	192
2	960	225	405	510	1,580	775	1,170	1,940	810	481	223	195
3	634	252	377	503	1,290	734	1,050	1,630	775	479	223	196
4	580	616	409	506	1,230	666	980	2,180	755	471	204	195
5	569	1,110	447	503	1,150	638	1,050	2,410	855	368	190	195
6	598	722	433	478	975	710	1,360	2,040	990	298	202	196
7	493	486	409	450	950	1,180	1,680	1,440	995	217	213	196
8	457	405	377	433	1,020	1,210	1,400	1,380	650	217	212	204
9	562	423	355	384	1,290	1,070	1,970	1,370	230	232	212	420
10	654	493	358	343	1,300	950	3,060	1,370	465	243	212	487
11	655	500	440	358	1,300	890	2,660	1,240	795	243	211	336
12	605	423	526	361	1,300	790	2,310	1,110	722	242	211	233
13	436	320	582	412	1,270	718	1,190	1,090	626	227	211	232
14	414	319	718	1,190	1,240	786	702	940	626	215	210	232
15	432	325	1,040	1,760	1,390	840	510	920	630	253	210	231
16	415	331	1,240	1,190	2,030	1,400	1,320	1,070	626	202	210	230
17	360	361	895	955	3,580	1,830	1,360	1,360	626	281	200	230
18	310	364	875	1,960	2,670	1,350	1,140	2,430	590	280	193	289
19	317	349	895	4,220	1,820	1,040	1,090	2,440	618	280	193	397
20	310	343	910	5,130	1,390	925	1,100	1,420	706	258	192	395
21	310	498	1,020	4,000	1,330	910	1,040	1,060	702	227	191	393
22	314	550	1,520	4,220	1,220	920	915	855	855	217	191	391
23	311	574	1,540	5,310	1,110	895	830	865	760	217	190	389
24	288	742	1,130	3,810	1,008	995	800	940	590	208	191	308
25	263	980	1,020	3,130	995	920	955	775	542	197	191	326
26	264	674	960	2,580	861	885	955	678	423	198	190	225
27	302	506	770	2,340	855	805	925	714	334	240	190	224
28	310	493	722	1,880	035	055	875	734	334	274	190	224
29	304	440	618	1,378	-----	075	865	750	334	245	190	223
30	267	444	602	1,270	-----	1,100	1,250	770	399	224	189	223
31	229	-----	606	1,190	-----	1,230	-----	785	-----	223	189	-----
TOTAL	14,039	14,495	22,624	54,212	39,101	29,725	37,892	39,934	19,166	8,522	6,247	8,349
MEAN	453	463	730	1,749	1,396	959	1,263	1,288	639	275	202	278
MAX	1,090	1,110	1,540	5,310	3,580	1,030	3,060	2,440	995	481	223	487
MIN	229	217	355	543	835	638	702	678	230	197	189	192
AC-FT	27,858	20,750	44,878	107,500	77,560	50,960	75,160	79,210	38,020	16,900	12,390	16,560
(+)	-1,135	+100	+57	+20	-135	+67	+332	+12,650	+9,690	-3,070	-4,380	-3,970
MEAN*	434	485	731	1,748	1,394	960	1,269	1,494	602	225	130	212
CFSM*	1.96	2.19	3.31	7.91	6.31	4.34	5.74	6.76	3.63	1.02	.59	.96
IN*	2.27	2.45	3.81	9.12	6.57	5.01	6.40	7.79	4.05	1.17	.68	1.07
AC-FT*	26,720	28,850	44,930	107,500	77,420	59,030	75,490	91,860	47,710	13,830	8,010	12,590

OBSERVED

CAL YR 1969	TOTAL 321,605	MEAN 881	MAX 6,930	MIN 139	AC-FT 637,900
WTR YR 1970	TOTAL 294,308	MEAN 806	MAX 5,310	MIN 189	AC-FT 583,800

ADJUSTED *

CAL YR 1969	MEAN 881	CFSM 3.99	IN 54.14	AC-FT 638,200
WTR YR 1970	MEAN 820	CFSM 3.71	IN 50.39	AC-FT 594,000

† CHANGE IN CONTENTS, IN ACRE-FEET, IN HOWARD A. HANSON RESERVOIR.

* ADJUSTED FOR CHANGE IN CONTENTS IN HOWARD A. HANSON RESERVOIR.

12106700 GREEN RIVER AT PURIFICATION PLANT, NEAR PALMER, WASH.

LOCATION.--Lat 47°18'19", long 121°50'58", in NE¼SE¼ sec.13, T.21 N., R.7 E., King County, on left bank at city of Tacoma purification plant, 0.6 mile downstream from diversion dam, 2 miles southeast of Palmer, and at mile 60.4.

DRAINAGE AREA.--231 sq mi.

PERIOD OF RECORD.--July 1963 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 859.53 ft above mean sea level.

AVERAGE DISCHARGE.--7 years, 979 cfs (709,300 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum		G.H.	Date	Minimum		G.H.
		Discharge				Discharge		
1966	May 5, 1966	4,760		8.93	Aug. 4, 15, 1966	96		4.53
1967	Jan. 15, 1967	6,170		9.58	Aug. 25, 1967	99		4.36
1968	Dec. 26, 1967	8,820		10.6	Aug. 10-12, 1968	97		4.37
1969	Jan. 5, 1969	7,940		10.28	Sept. 11, 1969	26		4.01
1970	Jan. 21, 1970	6,900		9.88	Aug. 4, 5, 6, 1970	100		4.40

a Occurred Aug. 15, 1966.

Period of record: Maximum discharge, 9,430 cfs Feb. 1, 1965 (gage height, 10.81 ft); minimum, 26 cfs Sept. 11, 1969 (gage height, 4.01 ft).

Flood of Nov. 23, 1959, had a discharge of 27,800 cfs, by slope-area measurement at site 0.6 mile downstream from gage.

REMARKS.--Records excellent. Flow regulated since Dec. 5, 1961, by Howard A. Hanson Reservoir (see station 12105800), 4.1 miles upstream, for flood control and during summer months to augment the natural river flow. City of Tacoma diverted an average daily discharge of about 110 cfs above station for municipal supply. Minor diversions on upstream tributaries for domestic use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	166	377	239	651	729	3,100	213	444	442	192	124
2	145	166	633	277	604	700	3,500	397	491	467	192	124
3	145	252	651	256	560	687	2,600	693	408	371	166	124
4	158	645	1,640	256	525	645	2,250	1,300	342	555	133	124
5	166	742	1,420	333	518	598	2,178	2,830	342	756	120	124
6	243	911	1,080	919	491	598	2,300	4,600	435	1,180	120	124
7	379	540	1,150	1,190	538	598	2,600	4,350	530	1,390	120	120
8	486	435	1,080	1,280	525	687	2,630	4,200	530	1,090	120	120
9	496	399	940	1,080	560	1,200	2,820	3,000	535	856	128	120
10	481	382	828	890	555	1,560	3,150	2,200	566	649	128	124
11	472	395	717	1,108	615	1,320	2,950	1,700	571	621	116	124
12	462	342	627	1,380	729	1,150	2,450	1,500	576	448	116	124
13	467	312	566	2,560	639	1,430	1,900	1,350	916	444	116	124
14	481	295	505	2,540	621	1,750	1,700	1,200	1,870	382	112	124
15	481	286	458	1,910	555	1,670	1,680	1,100	831	329	120	129
16	462	282	417	1,440	585	1,490	1,730	1,080	681	329	141	124
17	462	260	377	1,180	491	1,200	1,700	800	681	329	145	129
18	462	260	369	988	481	1,100	1,500	428	681	329	133	137
19	695	260	351	830	476	1,000	1,350	351	675	329	129	129
20	884	256	369	760	621	940	1,260	316	649	329	129	129
21	856	413	404	665	761	870	1,290	299	649	329	129	124
22	800	639	342	615	891	800	1,210	320	669	325	129	129
23	748	555	325	560	1,850	735	1,180	325	669	320	133	124
24	695	481	316	510	961	675	1,220	342	535	325	133	124
25	633	453	290	460	891	735	1,340	342	453	325	129	124
26	550	458	273	435	821	1,030	1,360	395	453	320	129	124
27	440	486	282	444	863	1,440	1,240	369	462	320	129	124
28	295	435	303	453	863	1,750	1,150	373	510	320	129	124
29	192	391	299	528	-----	2,020	1,030	377	500	243	124	124
30	187	364	273	604	-----	3,140	733	377	472	192	129	120
31	171	-----	243	649	-----	3,500	-----	382	-----	192	124	-----
TOTAL	13,735	12,161	17,905	27,335	18,345	37,787	57,113	37,469	17,366	15,256	4,077	3,742
MEAN	443	405	578	882	655	1,219	1,904	1,209	579	492	132	125
MAX	884	842	1,640	2,560	1,050	3,500	3,500	4,600	1,070	1,390	192	137
MIN	145	166	243	239	476	598	733	213	342	192	112	120
CFSM	1.92	1.75	2.50	3.82	2.84	5.28	8.24	5.23	2.51	2.13	.57	.54
IN.-FT	2.21	1.96	2.88	4.40	2.95	6.09	9.20	6.83	2.00	2.46	.66	.60
AC-FT	27,240	24,120	35,510	54,220	36,390	74,950	113,300	74,328	34,450	30,260	8,090	7,420
CAL YR 1965	TOTAL	316,506	MEAN	847	MAX	9,310	MIN	112	CFSM	3-75	IN	50.97
WTR YR 1966	TOTAL	262,291	MEAN	719	MAX	4,600	MIN	112	CFSM	3-11	IN	42.24
									AC-FT	527,800		628,300

12106700 GREEN RIVER AT PURIFICATION PLANT, NEAR PALMER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	508	2,800	2,480	2,000	1,020	740	650	1,950	405	116	121
2	124	450	2,040	2,200	1,740	968	720	655	1,840	405	114	125
3	133	414	1,670	2,840	1,670	785	720	690	1,450	405	114	125
4	154	374	1,400	2,580	3,000	816	760	786	1,300	405	114	125
5	154	382	1,210	2,270	3,740	792	800	840	1,300	240	114	125
6	204	378	1,040	1,780	2,850	750	750	1,060	1,060	121	114	123
7	295	328	940	1,510	2,090	680	750	1,300	822	123	114	121
8	381	311	840	1,720	1,680	750	792	1,440	685	123	114	121
9	347	387	750	1,640	1,480	860	780	1,910	670	123	114	121
10	277	531	768	2,000	1,550	940	732	1,700	590	121	315	123
11	222	468	877	3,550	1,550	760	696	1,380	615	121	464	125
12	222	440	1,340	3,220	1,550	700	690	1,210	518	121	464	125
13	222	465	4,240	4,600	2,050	708	708	1,410	428	121	464	123
14	213	996	4,540	5,670	1,850	640	690	1,110	333	121	464	121
15	213	1,330	3,020	5,720	1,570	660	645	1,150	243	118	276	121
16	213	1,230	2,740	5,070	1,430	740	625	1,620	195	118	130	116
17	213	1,150	3,240	5,310	2,060	840	610	1,320	118	128	116	116
18	187	1,050	3,240	2,430	2,810	820	635	846	178	116	125	116
19	192	900	3,070	3,380	2,170	790	665	762	174	116	125	118
20	616	800	3,940	3,990	1,730	820	660	714	133	118	121	118
21	1,170	726	3,070	2,950	1,450	840	690	768	142	118	123	116
22	1,410	670	2,140	2,250	1,270	1,000	670	750	148	118	123	116
23	1,450	640	1,770	1,730	1,140	1,500	665	732	145	118	123	116
24	1,770	610	1,500	1,540	1,050	1,400	690	2,180	145	116	123	116
25	2,040	1,860	1,300	1,340	1,000	1,250	702	3,210	145	116	121	116
26	2,090	2,500	1,110	1,200	940	1,100	702	2,870	178	118	118	116
27	1,940	1,890	1,200	1,700	877	1,000	720	2,640	219	118	118	112
28	761	1,590	1,200	1,900	960	930	708	2,520	311	118	118	109
29	670	1,450	1,420	3,580	-----	880	690	2,710	378	116	121	109
30	660	2,690	1,400	3,170	-----	840	665	2,680	400	116	121	109
31	575	-----	1,440	2,480	-----	800	-----	2,380	-----	116	121	-----
TOTAL	19,204	27,858	60,825	87,790	49,247	27,401	21,070	46,193	16,865	4,947	5,434	3,967
MEAN	619	929	1,962	2,832	1,759	884	702	1,490	562	160	175	119
MAX	2,090	2,690	4,540	5,720	3,740	1,500	800	3,210	1,950	405	464	128
MIN	116	311	730	1,200	877	640	610	650	133	116	114	109
CFSM	2.68	4.02	8.49	12.3	7.61	3.83	3.04	6.45	2.43	.69	.76	.52
IN.	3.09	4.49	9.80	14.14	7.93	4.41	3.39	7.44	2.72	.80	.88	.57
AC-FT	38,090	55,260	120,600	174,100	97,680	54,350	41,790	91,620	33,450	9,810	10,780	7,080

CAL YR 1966 TOTAL 326,377 MEAN 894 MAX 4,600 MIN 112 CFSM 3.87 IN 52.56 AC-FT 647,400
WTR YR 1967 TOTAL 370,401 MEAN 1,015 MAX 5,720 MIN 109 CFSM 4.39 IN 59.65 AC-FT 734,700

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	2,170	490	1,820	940	1,480	1,410	1,490	761	328	107	615
2	112	1,550	513	1,470	920	1,360	1,210	1,380	2,730	276	107	360
3	128	1,170	513	1,240	1,100	1,280	1,130	1,200	3,310	234	107	617
4	121	933	513	1,100	2,300	1,240	1,090	954	2,050	207	107	289
5	118	780	508	1,050	2,100	1,260	1,110	1,080	768	210	107	273
6	118	495	464	919	1,700	1,190	1,120	1,070	1,120	204	107	250
7	118	378	441	870	1,430	1,060	1,350	1,000	968	204	104	235
8	118	464	614	550	1,280	810	1,340	980	590	104	104	228
9	116	954	614	550	1,120	675	1,270	982	968	198	99	217
10	118	1,490	1,810	685	1,020	774	1,250	1,040	814	190	99	210
11	151	1,910	4,100	1,130	940	982	1,330	1,090	748	190	97	199
12	136	1,420	2,320	675	891	1,010	1,300	1,130	723	215	102	196
13	184	1,100	1,470	82	842	835	1,170	1,070	699	235	109	185
14	255	947	1,190	1,200	780	960	1,090	940	610	225	138	200
15	247	858	982	1,640	729	571	1,160	842	550	190	144	230
16	342	840	884	1,590	693	675	1,040	651	545	150	164	500
17	428	756	786	1,180	663	705	933	657	525	144	188	680
18	436	702	708	1,020	1,460	699	870	711	472	144	204	2,200
19	432	650	640	2,750	5,940	663	863	768	435	144	204	4,200
20	486	600	522	5,540	7,560	633	856	863	435	144	204	2,380
21	550	550	522	7,990	5,630	598	828	926	391	147	198	1,320
22	555	524	864	5,540	5,650	530	828	947	391	127	191	1,020
23	726	513	1,490	3,510	4,920	856	947	395	395	188	207	1,150
24	1,110	635	3,380	3,560	4,270	540	884	863	395	188	237	1,030
25	1,460	615	5,700	3,360	3,310	555	954	800	343	185	254	807
26	1,420	555	7,700	2,430	2,460	982	1,110	814	322	182	494	768
27	2,360	555	6,900	1,210	2,110	1,620	1,004	821	322	784	720	800
28	4,860	518	5,670	1,500	1,840	3,510	1,050	800	339	150	996	633
29	3,900	585	5,130	1,300	1,640	2,580	1,210	794	347	136	1,120	550
30	2,430	518	2,170	1,150	-----	2,280	1,440	787	356	122	821	435
31	2,140	-----	1,680	1,050	-----	1,760	-----	693	-----	112	663	-----
TOTAL	25,787	25,928	60,688	61,096	66,158	33,141	33,132	29,078	23,382	5,796	8,537	22,700
MEAN	832	864	1,958	1,971	2,281	1,069	1,064	938	779	187	275	757
MAX	4,860	2,170	7,700	7,990	7,560	3,510	1,440	1,490	3,310	328	1,120	4,200
MIN	112	378	414	550	663	520	828	651	322	112	97	185
CFSM	3.60	3.74	8.48	8.53	9.87	4.63	4.78	4.06	3.37	.81	1.19	3.28
IN.	4.15	4.18	9.77	9.84	10.65	5.34	5.34	4.68	3.77	.93	1.37	3.66
AC-FT	51,150	51,430	120,400	121,200	131,200	65,740	65,720	57,680	46,380	11,500	16,930	45,030

CAL YR 1967 TOTAL 374,917 MEAN 1,027 MAX 7,700 MIN 109 CFSM 4.45 IN 60.38 AC-FT 743,600
WTR YR 1968 TOTAL 395,423 MEAN 1,080 MAX 7,990 MIN 97 CFSM 4.68 IN 63.68 AC-FT 784,300

NOTE.--NO GAGE HEIGHT RECORD DEC. 25-27.

12107300 ICY CREEK NEAR BLACK DIAMOND, WASH.

LOCATION.--Lat 47°16'40", long 121°58'25", in NESEK sec. 25, T. 21 N., R. 6 E., King County, near left bank 80 ft downstream from dam, 0.3 mile upstream from mouth, and 2.5 miles southeast of Black Diamond.

PERIOD OF RECORD.--August 1963 to July 1968 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 540 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for October 1965 to July 1968 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Apr. 16-21, 1966		33	.66	Oct. 1-4, 7-14, 18, 1965		2.9	-.36
1967	Jan. 23, 1967		72	1.19	Sept. 29, 30, 1967		1.4	-.15
1968	Feb. 26, 27, 1968		39	b.79	Oct. 27, 28-31, 1967		.54	-.20

a Occurred Oct. 17-19, 1966.

b Occurred Feb. 26, 1968, backwater from debris.

Period of record: Maximum discharge, 200 cfs Jan. 30, 1965 (gage height, 2.74 ft), result of dam washout; minimum, 1.4 cfs Oct. 27, 28-31, 1968; minimum gage height, -0.36 ft Sept. 26 to Oct. 4, Oct. 7-14, 18, 1965.

REMARKS.--Records good. The creek is a natural spring-fed stream No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	4.6	7.0	11	25	22	28	26	18	14	15	7.8
2	2.9	4.8	7.8	11	25	22	30	26	18	14	14	7.8
3	2.9	5.3	7.2	11	25	22	30	25	18	15	14	7.8
4	3.0	5.5	7.3	12	25	22	30	25	17	15	14	7.6
5	3.0	5.5	7.4	12	25	22	31	25	17	16	13	7.6
6	3.1	5.5	7.4	12	25	22	31	25	17	10	13	7.6
7	3.0	5.3	7.6	12	24	22	31	25	17	21	13	7.4
8	2.9	5.5	7.8	14	24	21	30	24	16	23	12	7.1
9	2.9	5.5	8.1	16	24	21	30	24	16	24	12	7.1
10	2.9	5.7	8.6	19	24	21	30	24	15	24	12	6.8
11	2.9	6.0	6.9	24	23	21	30	24	15	25	12	6.8
12	2.9	6.2	9.5	20	23	22	30	23	15	24	12	6.6
13	2.9	6.4	9.0	29	23	24	30	23	14	24	11	6.6
14	3.1	6.6	18	28	22	26	32	23	14	23	11	6.4
15	3.1	6.8	10	28	21	26	32	22	15	23	11	6.2
16	3.1	7.0	10	30	21	28	32	22	15	22	11	6.0
17	3.0	7.2	10	31	21	28	33	22	15	22	11	5.6
18	3.2	7.4	10	32	21	29	33	21	15	21	11	5.6
19	3.9	7.4	10	32	20	29	33	21	15	20	10	5.4
20	3.1	7.4	10	32	20	29	33	20	15	20	10	5.2
21	3.0	7.4	10	32	20	29	32	20	15	19	10	5.2
22	3.0	7.4	10	31	20	28	32	20	15	19	10	5.2
23	3.0	7.4	10	31	20	28	31	20	15	10	10	5.2
24	3.0	7.2	10	30	20	28	30	19	15	17	9.4	5.0
25	3.0	7.2	10	29	21	28	30	19	15	17	9.1	4.0
26	3.0	7.0	10	28	21	20	29	19	14	16	0.8	4.0
27	3.1	7.0	10	27	22	28	20	19	14	16	8.6	4.8
28	3.5	7.0	10	27	22	20	28	19	14	16	8.4	4.0
29	3.8	7.0	10	26	-----	20	28	10	14	15	0.1	5.0
30	4.2	7.0	10	25	-----	20	26	18	14	15	8.1	4.6
31	4.4	-----	11	25	-----	28	-----	18	-----	15	8.1	-----
TOTAL	97.7	193.2	284.6	735	627	780	913	679	462	591	340.6	184.4
MEAN	3.15	6.44	9.18	23.7	22.4	25.4	30.4	21.9	15.4	19.1	11.0	6.15
MAX	4.4	7.4	11	32	25	29	33	26	18	25	15	7.8
MIN	2.9	4.6	7.0	11	20	21	26	10	14	14	8.1	4.6
AC-PT	194	383	565	1,460	1,240	1,560	1,810	1,350	916	1,170	676	366

CAL YR 1965 TOTAL 7,967.1 MEAN 21.0 MAX 170 MIN 2.9 AC-PT 15,800

WTR YR 1966 TOTAL 5,895.5 MEAN 18.2 MAX 33 MIN 2.9 AC-PT 11,690

12107300 ICY CREEK NEAR BLACK DIAMOND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	10	18	35	58	44	34	27	20	13	7.9	4.4
2	4.4	11	20	38	58	44	34	27	20	12	7.3	4.4
3	4.4	11	22	40	55	39	33	27	20	12	7.6	4.4
4	4.2	10	23	41	55	42	32	26	20	12	7.4	4.2
5	4.2	11	25	43	53	42	32	26	19	12	7.6	3.9
6	4.2	11	26	45	53	42	32	25	18	12	7.3	3.9
7	4.2	11	26	45	53	41	32	25	18	12	7.3	3.6
8	4.2	11	26	47	53	40	31	25	18	11	7.3	3.6
9	4.0	11	25	47	52	39	31	25	17	11	7.0	3.4
10	4.0	11	25	47	49	38	30	25	17	11	7.0	3.4
11	3.9	11	24	49	48	38	30	25	17	11	6.7	3.4
12	4.0	11	24	49	47	38	30	25	17	10	6.7	3.4
13	3.9	11	24	49	46	38	29	25	16	10	6.7	3.2
14	3.9	11	25	51	47	37	29	25	16	10	6.4	3.2
15	3.9	11	27	53	47	36	28	25	16	10	6.4	2.9
16	3.8	11	30	60	47	35	28	25	16	10	6.1	2.9
17	3.6	11	33	67	47	35	28	25	15	9.9	6.1	2.7
18	3.6	12	34	63	46	35	28	24	15	9.9	5.8	2.7
19	3.8	13	36	61	50	34	26	24	14	9.5	5.8	2.4
20	3.9	14	36	60	54	34	27	24	14	9.5	5.6	2.4
21	3.9	16	38	60	54	33	28	24	14	9.2	5.6	2.2
22	4.0	16	39	62	53	33	28	23	14	9.2	5.3	2.2
23	4.0	16	40	70	53	33	28	23	14	9.2	5.3	2.2
24	4.0	16	40	64	52	34	28	23	13	8.9	5.0	2.2
25	4.4	16	40	63	48	34	28	22	13	8.9	5.0	2.0
26	5.4	16	39	63	48	34	28	22	13	8.6	4.7	1.8
27	6.4	16	38	60	47	34	28	22	13	8.6	4.7	1.6
28	7.4	16	37	58	45	34	28	22	13	8.6	4.7	1.6
29	8.4	16	36	58	-----	34	28	22	13	8.6	4.7	1.4
30	9.1	17	34	58	-----	34	27	21	13	8.6	4.7	1.4
31	9.7	-----	36	58	-----	34	-----	20	-----	8.3	4.7	-----
TOTAL	147.4	384	948	1,654	1,618	1,147	885	748	676	314.5	190.6	87.0
MEAN	4.75	12.8	30.6	53.7	50.6	37.0	29.5	24.1	15.9	18.1	6.15	2.90
MAX	9.7	17	40	70	58	44	34	27	20	13	7.9	4.4
MIN	3.6	10	18	35	45	33	27	20	13	8.3	4.7	1.4
AC-FT	292	762	1,880	3,300	2,810	2,280	1,760	1,480	944	624	378	173

CAL YR 1966 TOTAL 6,799.4 MEAN 18.6 MAX 40 MIN 3.6 AC-FT 13,490
WTR YR 1967 TOTAL 6,409.5 MEAN 23.0 MAX 70 MIN 1.4 AC-FT 16,680

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1967 TO JULY 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.60	4.7	15	34	38	35	27	18	10		
2	1.4	.60	4.7	16	34	38	35	27	18	10		
3	1.4	.68	4.7	17	34	38	34	27	18	10		
4	1.4	.90	5.0	21	33	38	34	27	21	18		
5	1.4	1.0	5.0	23	34	38	34	26	25	17		
6	1.0	1.4	5.0	24	35	38	34	25	28	17		
7	1.6	2.0	5.0	24	35	38	33	25	29	17		
8	1.6	2.4	5.0	24	36	38	33	24	28	16		
9	1.0	2.9	5.0	24	36	38	32	24	28			
10	1.0	3.2	5.0	24	35	37	32	24	28			
11	1.0	3.4	5.0	23	35	37	31	23	27			
12	.90	3.6	4.7	23	35	35	31	24	26			
13	.90	3.9	4.7	22	35	34	30	23	26			
14	.78	4.2	4.7	22	34	33	30	23	25			
15	.68	4.2	4.7	22	33	33	30	22	25			
16	.60	4.7	4.7	23	32	32	29	22	24			
17	.60	5.0	4.7	24	31	32	29	22	24			
18	.60	5.0	4.7	25	30	32	29	22	23			
19	.60	5.3	4.7	26	30	32	29	21	23			
20	.60	5.6	4.7	26	31	32	28	20	22			
21	.68	5.8	4.7	27	34	31	28	20	22			
22	.60	5.8	4.7	30	38	31	28	20	22			
23	.60	5.3	4.7	34	38	30	27	20	22			
24	.60	5.3	4.7	37	38	30	27	19	21			
25	.60	5.3	5.6	38	38	29	27	19	20			
26	.60	5.3	7.0	37	38	29	27	19	20			
27	.60	5.3	9.0	36	38	29	27	18	20			
28	.54	5.3	11	37	38	28	27	18	20			
29	.54	5.0	13	37	38	28	27	18	19			
30	.54	5.0	15	36	-----	30	27	18	18			
31	.60	-----	15	35	-----	32	-----	18	-----			
TOTAL	26.96	113.98	190.8	832	1,010	1,038	904	685	690			
MEAN	.87	3.60	6.15	26.8	34.8	33.5	30.1	22.1	23.8			
MAX	1.6	5.8	15	38	38	38	35	27	29			
MIN	.54	.60	4.7	15	30	28	27	18	18			
AC-FT	33	226	378	1,650	2,000	2,060	1,790	1,340	1,370			

CAL YR 1967 TOTAL 7,261.84 MEAN 19.9 MAX 70 MIN .54 AC-FT 14,400

12108500 NEMAUKUM CREEK NEAR BLACK DIAMOND, WASH.

LOCATION.--Lat 47°16'33", long 122°03'30", in NW¼SW¼ (revised) sec.28, T.21 N., R.6 E., King County, on right bank 0.1 mile downstream from West Whitney Hill bridge, 3.5 miles southwest of Black Diamond, and at mile 0.8.

DRAINAGE AREA.--27.4 sq mi.

PERIOD OF RECORD.--July 1944 to November 1950. Annual maximums, water years 1951-52. September 1952 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 310 ft (from topographic map). November 1950 to September 1952 stilling well with nonrecording gage only.

AVERAGE DISCHARGE.--24 years (1944-50, 1952-70), 63.2 cfs (31.32 inches per year, 45,790 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (450 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 5, 1966	2200	*538	2.65	Mar. 28, 1968	0415	493	2.48	Jan. 20, 1970	-	-	2.68
Jan. 19, 1967	1745	*628	2.78	Jan. 6, 1969	2030	*634	2.88				
Feb. 19, 1968	0845	*538	2.63	Jan. 20, 1970	0500	*484	2.66				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 21, 22, Sept. 6, 1966	15	.76	1969	Sept. 7-12, 14-16, 1969	18	b.95
1967	Sept. 1, 1967	9.2	.66	1970	Sept. 28, 30, 1970	12	1.17
1968	Oct. 1-5, 8-10, 15-18, 1967	14	a.76				

a Occurred Oct. 9, 10, 16-18, 1967.

b Occurred Oct. 3, 4, 8, 9, 1968.

Period of record: Maximum discharge, 1,820 cfs probably Feb. 17, 1949 (gage height, 3.54 ft), from rating curve extended above 600 cfs; minimum, 8.0 cfs Oct. 13, 14, 1952; minimum gage height, 0.62 ft Aug. 26, 1958.

REMARKS.--Records good. Many small diversions above station for irrigation and domestic use. No regulation.

REVISIONS (WATER YEARS).--WSP 1396: 1946(M), 1949(P). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	18	26	70	53	80	53	36	27	26	19	16
2	16	18	26	144	48	64	53	36	28	30	19	16
3	16	23	30	92	45	56	47	36	29	93	19	16
4	16	41	84	98	44	53	44	35	32	74	19	16
5	21	42	50	229	43	53	41	34	30	52	19	16
6	21	34	43	310	42	54	40	49	29	44	19	16
7	18	29	62	166	44	53	38	44	28	38	19	16
8	17	25	60	172	44	60	37	38	26	34	19	16
9	18	24	45	119	43	104	32	36	26	31	19	16
10	16	24	45	102	42	90	44	35	32	30	20	16
11	16	36	40	94	49	70	90	35	35	30	19	19
12	16	28	36	92	54	67	150	35	33	28	17	19
13	20	26	34	100	46	100	87	34	29	27	18	17
14	23	24	32	92	53	102	73	33	29	29	18	17
15	23	22	29	79	47	84	64	37	27	27	17	17
16	22	22	29	70	44	80	58	43	26	27	17	16
17	21	21	27	66	44	68	53	38	26	25	17	17
18	21	23	27	63	43	66	48	34	25	26	16	28
19	35	24	28	56	42	80	46	32	24	24	16	19
20	26	23	29	54	47	87	52	31	24	23	16	18
21	22	24	54	54	44	96	48	32	25	22	16	17
22	21	37	43	52	40	79	46	31	26	22	16	17
23	19	31	43	54	39	67	44	30	25	22	16	21
24	18	28	87	56	38	61	43	30	25	22	16	18
25	18	35	67	59	40	58	42	28	24	22	16	17
26	18	33	50	54	42	55	41	30	23	22	17	18
27	18	38	180	59	66	53	39	35	25	21	19	19
28	18	32	336	58	115	49	39	30	52	21	18	18
29	18	29	144	55	-----	47	39	28	33	20	17	16
30	18	26	94	58	-----	56	37	28	28	19	17	16
31	18	-----	77	61	-----	56	-----	27	-----	19	17	-----
TOTAL	604	840	1,957	2,808	1,341	2,150	1,568	1,060	851	950	547	524
MEAN	19.5	28.0	63.1	93.2	47.9	69.4	52.3	34.2	28.4	30.6	17.6	17.5
MAX	35	42	336	310	115	104	150	49	52	93	20	28
MIN	16	18	26	52	38	47	32	27	23	19	16	16
CFSM	-71	1.02	2.30	3.40	1.75	2.53	1.91	1.25	1.04	1.12	.64	.64
IN-	.82	1.14	2.66	3.92	1.82	2.92	2.13	1.44	1.16	1.25	.74	.71
AC-FT	1.200	1.670	3.880	5.730	2.660	4.260	3.110	2.100	1.690	1.880	1.080	1.040
CAL YR 1965	TOTAL 20,756	MEAN 56.9	MAX 834	MIN 16	CFSM 2.08	IN 28.18	AC-FT 41,170					
WTR YR 1966	TOTAL 15,280	MEAN 41.9	MAX 336	MIN 16	CFSM 1.53	IN 20.75	AC-FT 30,310					

12108500 NEWAUKUM CREEK NEAR BLACK DIAMOND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	23	197	206	106	102	70	67	32	23	16	12
2	18	22	88	102	106	102	66	63	39	22	16	14
3	16	21	71	124	104	81	63	59	36	22	16	13
4	16	20	67	240	124	73	63	54	33	21	16	12
5	16	23	67	189	109	70	64	51	31	24	16	12
6	16	22	63	142	100	67	59	48	29	21	16	12
7	16	21	71	150	92	64	56	46	29	21	16	13
8	18	20	64	129	89	78	53	47	29	21	16	12
9	16	21	54	106	98	100	54	51	29	21	16	13
10	16	21	60	111	98	80	54	47	29	20	15	15
11	16	21	60	198	98	70	51	48	29	20	15	18
12	18	30	102	124	104	67	51	59	29	19	14	18
13	18	32	239	156	284	63	85	51	28	19	14	15
14	16	82	138	201	159	61	78	48	28	19	14	14
15	16	85	102	273	117	67	64	46	27	18	14	14
16	16	77	124	177	104	70	61	43	26	19	14	14
17	16	60	126	129	156	78	61	41	25	18	14	13
18	16	54	112	127	137	83	86	40	25	18	14	13
19	18	45	128	415	106	77	127	39	25	19	14	13
20	48	39	140	335	96	77	83	38	25	19	14	13
21	33	35	92	168	87	85	85	37	36	19	14	13
22	48	32	79	124	81	85	73	38	51	18	13	12
23	39	30	71	113	78	81	66	37	34	18	13	12
24	31	29	70	104	75	81	61	35	29	18	13	12
25	26	57	79	98	73	109	61	34	28	17	12	12
26	28	73	70	102	70	96	60	33	27	18	13	12
27	28	93	63	229	67	98	80	33	28	18	12	12
28	23	73	70	262	93	87	87	34	26	17	12	12
29	25	70	82	142	-----	106	89	35	25	17	12	13
30	30	243	77	122	-----	91	75	36	24	16	13	14
31	26	-----	80	109	-----	78	-----	34	-----	18	13	-----
TOTAL	699	1,474	2,866	5,207	3,011	2,527	2,086	1,372	891	598	440	397
MEAN	22.5	49.1	90.5	168	108	81.5	69.5	43.5	29.7	19.3	14.2	13.2
MAX	48	243	239	415	284	109	127	67	51	24	16	18
MIN	16	20	54	98	67	61	51	33	24	16	12	12
CFSM	.82	1.79	3.38	6.13	3.94	2.97	2.54	1.62	1.08	.70	.52	.48
IN	25	2.00	3.89	7.07	4.09	3.43	2.83	1.84	1.21	.81	.60	.54
AC-FT	1,390	2,920	5,680	10,330	5,970	5,010	4,140	2,720	1,770	1,190	873	787
CAL YR 1966	TOTAL 16,918	MEAN 46.4	MAX 310	MIN 16	CFSM 1.69	IN 22.97	AC-FT 33,560					
WTR YR 1967	TOTAL 21,568	MEAN 59.1	MAX 415	MIN 12	CFSM 2.16	IN 29.28	AC-FT 42,780					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	31	21	91	100	68	85	38	116	31	17	38
2	14	23	23	72	115	64	90	37	295	27	17	38
3	18	20	25	56	137	61	79	36	152	25	18	33
4	18	19	25	56	222	68	79	36	90	25	18	28
5	14	18	31	70	113	76	82	37	70	26	18	26
6	15	18	29	54	94	68	74	36	60	25	18	25
7	14	18	29	52	85	64	73	34	54	24	17	25
8	14	19	26	49	78	64	68	33	53	24	17	24
9	14	27	29	84	75	58	64	32	49	24	17	23
10	14	47	33	110	70	56	61	32	45	25	17	22
11	21	38	47	90	67	55	60	32	44	24	16	22
12	18	29	37	82	64	55	58	32	42	25	16	22
13	16	24	30	140	59	55	54	32	46	24	16	21
14	16	25	27	170	56	54	60	31	53	25	27	25
15	14	27	26	170	53	59	70	29	42	25	28	26
16	14	29	25	95	52	94	60	29	39	24	21	23
17	14	25	24	81	54	74	55	28	37	22	21	35
18	14	23	23	73	203	63	52	28	36	22	24	106
19	16	22	22	92	439	59	53	29	35	23	27	67
20	15	21	21	184	216	56	52	42	34	22	22	55
21	28	21	21	284	208	53	47	36	33	21	22	44
22	23	21	34	132	211	90	45	34	37	23	23	40
23	19	22	40	100	206	54	45	34	35	21	35	37
24	16	22	60	89	133	56	44	31	32	20	47	35
25	18	20	137	83	98	61	45	37	31	20	50	32
26	16	19	140	77	88	64	42	34	30	20	53	30
27	26	19	109	66	80	158	41	31	32	19	64	29
28	36	21	98	59	73	334	39	34	32	18	80	27
29	22	23	75	56	70	160	38	39	31	18	59	26
30	21	22	63	54	-----	115	38	34	29	18	46	25
31	22	-----	60	60	-----	98	-----	32	-----	18	38	-----
TOTAL	557	713	1,392	2,993	3,521	2,476	1,753	1,039	1,714	708	909	1,011
MEAN	18.0	23.8	44.9	94.6	121	79.9	58.4	33.5	57.2	22.8	29.3	33.7
MAX	36	47	140	286	439	334	90	42	295	31	80	106
MIN	14	18	21	49	52	50	38	28	29	18	16	21
CFSM	.66	.87	1.64	3.45	4.42	2.92	2.13	1.22	2.09	.83	1.07	1.23
IN	76	97	1.89	3.98	4.78	3.34	2.38	1.41	2.33	.96	1.23	1.37
AC-FT	1,100	1,410	2,760	5,820	6,980	4,910	3,480	2,060	3,400	1,400	1,800	2,010
CAL YR 1967	TOTAL 19,191	MEAN 52.6	MAX 415	MIN 12	CFSM 1.92	IN 26.05	AC-FT 38,070					
WTR YR 1968	TOTAL 18,728	MEAN 51.2	MAX 439	MIN 14	CFSM 1.87	IN 25.43	AC-FT 37,150					

12108500 NEWAUKUM CREEK NEAR BLACK DIAMOND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	36	79	100	67	52	52	82	57	41	23	19
2	24	42	74	131	66	50	78	78	46	44	23	19
3	24	42	162	158	105	56	76	67	41	38	24	20
4	27	38	244	304	132	55	76	61	36	40	25	20
5	25	36	193	390	118	83	87	56	35	37	27	20
6	26	35	131	476	83	82	89	52	33	36	24	19
7	25	34	110	452	71	74	80	50	33	34	24	19
8	24	48	133	326	128	66	67	48	32	33	23	20
9	25	88	133	240	197	58	59	46	30	32	23	19
10	32	67	187	209	142	53	63	45	30	33	22	18
11	34	313	187	170	155	52	55	44	30	33	23	18
12	49	276	133	138	138	50	52	41	30	31	23	18
13	70	136	106	121	125	49	50	39	28	29	23	19
14	55	92	98	112	103	49	48	39	29	28	22	19
15	74	80	100	105	89	48	48	38	28	27	22	18
16	58	71	119	101	91	50	46	38	27	26	22	19
17	49	66	92	93	83	73	58	37	26	26	22	22
18	61	79	90	87	78	85	140	37	26	29	22	24
19	60	68	84	85	74	80	99	39	26	25	22	29
20	71	66	76	80	69	64	95	39	27	25	21	27
21	59	67	73	76	66	56	74	37	27	26	21	23
22	55	138	73	71	64	58	66	35	29	25	20	33
23	48	110	94	67	63	61	112	34	48	24	20	39
24	44	84	133	64	59	53	85	35	55	24	21	27
25	45	77	98	61	58	50	80	35	59	24	21	27
26	42	74	85	61	56	49	67	35	70	24	20	24
27	39	82	85	61	55	48	59	36	55	24	21	23
28	37	71	76	58	53	48	66	35	87	24	21	24
29	31	65	65	46	46	46	56	36	59	24	21	34
30	39	90	60	55	55	45	59	200	49	23	20	67
31	39	-----	60	66	-----	52	-----	83	-----	23	20	-----
TOTAL	1,322	2,597	3,433	4,574	2,588	1,795	2,155	1,616	1,207	909	685	730
MEAN	42.6	86.6	111	148	92.4	57.9	71.8	52.1	40.2	29.3	22.1	24.3
MAX	74	313	244	476	187	85	140	200	87	55	27	67
MIN	24	34	60	55	53	45	44	34	26	23	20	18
CFSM	1.55	3.16	4.05	5.40	3.37	2.11	2.62	1.90	1.47	1.07	.81	.89
IN.	1.79	3.53	4.66	6.21	3.51	2.44	2.93	2.19	1.64	1.23	.93	.99
AC-FT	2,620	5,150	6,810	9,070	5,130	3,560	4,270	3,210	2,390	1,800	1,360	1,450

CAL YR 1969 TOTAL 23,418 MEAN 64.0 MAX 439 MIN 16 CFSM 2.34 IN 31.79 AC-FT 46,450
WTR YR 1969 TOTAL 23,611 MEAN 64.7 MAX 476 MIN 18 CFSM 2.36 IN 32.06 AC-FT 46,830

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	30	27	51	84	60	46	72	37	24	16	15
2	39	28	26	48	76	58	47	60	33	24	21	15
3	33	30	26	51	74	57	44	55	32	22	18	19
4	31	39	30	48	67	55	44	50	32	20	16	16
5	29	106	30	44	65	53	44	46	31	20	16	15
6	28	52	28	41	65	69	61	44	31	22	16	16
7	29	41	27	41	60	100	69	42	30	20	16	20
8	40	36	35	46	55	67	60	43	31	20	16	18
9	35	33	40	49	49	60	143	49	32	20	16	16
10	59	32	39	69	49	57	136	53	33	19	17	16
11	42	30	57	59	46	55	78	58	32	19	16	15
12	36	29	143	59	44	55	71	55	31	19	15	15
13	32	28	117	147	47	58	60	69	30	19	15	15
14	51	28	249	304	42	82	55	53	30	18	16	14
15	30	27	100	138	127	84	50	47	31	16	15	14
16	29	26	81	81	218	84	47	44	30	16	16	14
17	28	25	76	104	160	76	44	42	29	16	21	16
18	28	25	91	315	145	65	46	40	28	16	16	28
19	27	24	135	133	100	60	143	49	39	16	16	22
20	26	29	78	397	86	58	69	38	26	16	16	20
21	26	40	146	271	78	65	58	38	25	16	16	16
22	25	32	102	211	71	57	57	38	25	16	16	16
23	25	42	123	207	69	52	52	37	24	15	16	14
24	24	46	91	273	63	52	100	37	24	16	15	14
25	24	36	65	330	67	50	117	35	25	17	15	14
26	25	33	93	281	65	47	91	34	24	22	15	14
27	32	31	85	332	63	44	78	33	25	31	15	14
28	34	30	67	174	61	60	65	33	26	20	15	13
29	29	29	62	-----	-----	58	67	28	18	18	14	13
30	31	28	57	104	-----	53	93	55	28	17	15	13
31	31	-----	52	97	-----	47	-----	40	-----	17	15	-----
TOTAL	1,014	1,095	2,328	4,968	2,196	1,898	2,096	1,434	869	587	497	480
MEAN	32.7	36.5	75.1	160	78.4	61.2	69.9	46.3	29.0	18.9	16.0	16.0
MAX	59	106	433	433	218	100	143	72	37	31	21	28
MIN	24	24	26	41	42	44	44	33	24	15	14	13
CFSM	1.19	1.33	2.74	5.84	2.86	2.23	2.55	1.69	1.06	.69	.58	.58
IN.	1.38	1.49	3.16	6.74	2.98	2.58	2.85	1.95	1.18	.80	.67	.65
AC-FT	2,010	2,170	4,620	9,850	4,360	3,760	4,160	2,840	1,720	1,160	986	952

CAL YR 1970 TOTAL 20,696 MEAN 56.7 MAX 476 MIN 18 CFSM 2.07 IN 28.10 AC-FT 41,050
WTR YR 1970 TOTAL 19,462 MEAN 53.3 MAX 433 MIN 18 CFSM 1.95 IN 26.42 AC-FT 38,600

12111000 LAKE SAWYER NEAR BLACK DIAMOND, WASH.

LOCATION.--Lat 47°19'53", long 122°02'23", in SE¼SE¼ sec.4, T.21 N., R.6 E., King County, on west shore 0.2 mile south of lake outlet and 2 miles northwest of Black Diamond.

DRAINAGE AREA.--13.0 sq mi.

PERIOD OF RECORD.--April 1952 to September 1970.

GAGE.--Nonrecording gage. Datum of gage is 512.34 ft above mean sea level.

EXTREMES.--Maximum and minimum gage heights, in feet, for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum observed		Date	Minimum observed	
		Gage height			Gage height	
1966	Jan. 8, 9, 1966	6.76		Oct. 31, Nov. 1, 2, 1965	4.08	
1967	Jan. 20, 21, 1967	6.96		Oct. 19, 1966	3.67	
1968	Feb. 22, 1968	6.90		Oct. 9, 1967	3.74	
1969	Jan. 8, 1969	7.22		Sept. 17, 1969	5.16	
1970	Jan. 27, 1970	6.96		Sept. 30, 1970	4.70	

Period of record: Maximum gage height observed, 7.52 ft Jan. 30, 1965; minimum observed, 3.04 ft Dec. 1, 2, 1952.

REMARKS.--Lake level controlled by concrete dam at outlet constructed during July and August 1952. Probably small diversions for domestic use.

REVISIONS.--WSP 1952: Drainage area.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.26	4.08	4.64	6.50	6.48	6.50	6.54	6.42	6.32	6.30	6.00	5.16
2	4.22	4.08	4.66	6.56	6.48	6.50	6.54	6.42	6.34	6.34	5.98	5.12
3	4.20	4.10	4.66	6.56	6.46	6.50	6.52	6.40	6.34	6.40	5.94	5.88
4	4.18	4.18	4.78	6.56	6.46	6.50	6.50	6.40	6.34	6.40	5.90	5.04
5	4.24	4.26	4.84	6.58	6.46	6.52	6.48	6.40	6.34	6.38	5.88	5.30
6	4.28	4.28	4.92	6.64	6.46	6.52	6.48	6.42	6.34	6.36	5.86	4.94
7	4.26	4.32	4.98	6.74	6.46	6.52	6.48	6.42	6.34	6.34	5.84	4.88
8	4.24	4.32	5.06	6.76	6.46	6.52	6.48	6.42	6.32	6.34	5.80	4.84
9	4.24	4.34	5.10	6.76	6.44	6.54	6.48	6.42	6.30	6.32	5.78	4.80
10	4.22	4.34	5.16	6.74	6.44	6.54	6.50	6.42	6.34	5.32	5.76	4.76
11	4.20	4.36	5.20	6.70	6.44	6.54	6.54	6.42	6.34	6.30	5.74	4.74
12	4.18	4.34	5.22	6.69	6.44	6.56	6.58	6.42	6.34	5.30	5.70	4.70
13	4.18	4.34	5.24	6.68	6.46	6.58	6.56	6.40	6.32	6.30	5.66	4.66
14	4.18	4.36	5.26	6.68	6.44	6.62	6.54	6.48	6.32	6.30	5.64	4.62
15	4.18	4.36	5.26	6.66	6.44	6.62	6.52	6.42	6.30	6.30	5.62	4.58
16	4.18	4.34	5.26	6.64	6.44	6.64	6.52	6.42	6.28	5.28	5.62	4.54
17	4.16	4.34	5.28	6.62	6.44	6.64	6.52	6.40	6.28	6.26	5.60	4.50
18	4.14	4.34	5.28	6.60	6.44	6.64	6.52	6.38	6.26	6.26	5.58	4.50
19	4.20	4.36	5.28	6.58	6.44	6.62	6.50	6.38	6.26	6.24	5.54	4.48
20	4.22	4.38	5.28	6.56	6.46	6.62	6.50	6.36	6.26	6.22	5.50	4.44
21	4.22	4.40	5.32	6.56	6.46	6.62	6.48	6.36	6.24	6.20	5.46	4.40
22	4.20	4.42	5.40	6.54	6.46	6.60	6.48	6.36	6.24	6.20	5.42	4.36
23	4.20	4.42	5.44	6.54	6.46	6.60	6.48	6.36	6.24	6.18	5.40	4.34
24	4.18	4.44	5.50	6.52	6.46	6.58	6.48	6.36	6.24	6.18	5.38	4.30
25	4.16	4.48	5.58	6.52	6.46	6.58	6.46	6.36	6.24	6.16	5.36	4.28
26	4.14	4.50	5.66	6.50	6.46	6.58	6.46	6.34	6.26	6.14	5.34	4.26
27	4.12	4.56	5.84	6.50	6.46	6.56	6.46	6.34	6.28	6.12	5.32	4.22
28	4.12	4.58	6.06	6.50	6.48	6.56	6.44	6.34	6.32	6.10	5.30	4.18
29	4.10	4.60	6.26	6.50	-----	6.56	6.44	6.34	6.30	6.08	5.26	4.14
30	4.10	4.62	6.44	6.48	-----	6.56	6.44	6.34	-----	6.06	5.24	4.10
31	4.08	-----	6.50	6.48	-----	6.56	-----	6.32	-----	6.02	5.20	-----
MEAN	4.19	4.36	5.33	6.68	6.46	6.57	6.50	6.39	-----	6.25	5.60	4.60
MAX	4.28	4.62	6.50	6.76	6.48	6.64	6.58	6.42	-----	6.40	6.00	5.16
MIN	4.08	4.08	4.64	6.48	6.44	6.50	6.44	6.32	-----	6.02	5.20	4.10

12111000 LAKE SAWYER NEAR BLACK DIAMOND, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.20	6.44	6.38	6.64	6.68	6.58	6.48	6.56	6.50	6.38	6.14	5.52
2	6.38	6.44	6.58	6.64	6.60	6.56	6.52	6.56	6.48	6.38	6.12	5.50
3	6.30	6.44	6.62	6.70	6.60	6.56	6.52	6.56	6.44	6.36	6.12	5.48
4	6.30	6.46	6.68	6.74	6.62	6.58	6.54	6.54	6.44	6.36	6.10	5.44
5	6.30	6.46	6.74	6.78	6.62	6.58	6.52	6.54	6.42	6.38	6.08	5.42
6	6.30	6.58	6.76	6.92	6.60	6.54	6.52	6.52	6.40	6.38	6.08	5.48
7	6.20	6.54	6.78	7.20	6.68	6.54	6.52	6.52	6.40	6.38	6.06	5.38
8	6.32	6.58	6.80	7.22	6.64	6.54	6.52	6.50	6.38	6.36	6.04	5.36
9	6.32	6.62	6.82	7.14	6.70	6.54	6.50	6.58	6.30	6.36	6.02	5.34
10	6.54	6.64	6.82	6.78	6.72	6.54	6.50	6.48	6.38	6.34	6.00	5.32
11	6.38	6.60	6.82	6.66	6.70	6.52	6.38	6.48	6.34	6.34	5.98	5.38
12	6.40	6.70	6.84	6.66	6.76	6.52	6.32	6.46	6.34	6.34	5.96	5.26
13	6.44	6.74	6.82	6.66	6.76	6.52	6.32	6.48	6.36	6.34	5.94	5.24
14	6.44	6.70	6.80	6.68	6.74	6.50	6.30	6.44	6.36	6.34	5.92	5.22
15	6.46	6.66	6.80	6.60	6.74	6.50	6.48	6.44	6.34	6.32	5.90	5.20
16	6.46	6.62	6.78	6.78	6.76	6.50	6.48	6.44	6.34	6.32	5.88	5.18
17	6.46	6.60	6.76	6.76	6.74	6.52	6.48	6.44	6.34	6.30	5.88	5.16
18	6.48	6.58	6.74	6.74	6.78	6.54	6.52	6.42	6.32	6.30	5.86	5.24
19	6.48	6.58	6.72	6.72	6.68	6.54	6.56	6.42	6.32	6.38	5.84	5.28
20	6.58	6.50	6.70	6.78	6.68	6.52	6.54	6.42	6.32	6.30	5.88	5.30
21	6.58	6.58	6.68	6.68	6.66	6.52	6.56	6.48	6.32	6.28	5.78	5.48
22	6.58	6.58	6.66	6.66	6.64	6.52	6.54	6.40	6.38	6.28	5.76	5.42
23	6.48	6.58	6.66	6.64	6.64	6.52	6.50	6.40	6.42	6.28	5.74	5.40
24	6.48	6.54	6.68	6.64	6.62	6.52	6.38	6.48	6.44	6.26	5.72	5.54
25	6.46	6.58	6.60	6.64	6.62	6.58	6.58	6.48	6.44	6.24	5.70	5.50
26	6.46	6.58	6.66	6.62	6.60	6.58	6.54	6.39	6.44	6.24	5.68	5.60
27	6.44	6.58	6.66	6.62	6.60	6.50	6.54	6.38	6.44	6.22	5.64	5.64
28	6.44	6.60	6.66	6.60	6.58	6.48	6.54	6.38	6.42	6.20	5.62	5.66
29	6.44	6.60	6.64	6.60	-----	6.48	6.56	6.48	6.42	6.20	5.60	5.70
30	6.44	6.58	6.64	6.68	-----	6.48	6.54	6.52	6.40	6.18	5.58	5.74
31	6.44	-----	6.64	6.68	-----	6.48	-----	6.52	-----	6.16	5.56	-----
MEAN	6.41	6.58	6.72	6.73	6.66	6.52	6.53	6.46	6.39	6.30	5.87	5.42
MAX	6.58	6.74	6.82	7.22	6.78	6.58	6.58	6.56	6.50	6.38	6.14	5.74
MIN	6.30	6.44	6.58	6.60	6.58	6.48	6.48	6.38	6.32	6.16	5.56	5.16
CAL YR 1968	MEAN 6.47		MAX 6.90		MIN 5.88							
WTR YR 1969	MEAN 6.38		MAX 7.22		MIN 5.16							

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.78	5.80	6.36	6.62	6.76	6.56	6.50	6.56	6.42	6.30	5.90	5.14
2	5.78	5.82	6.36	6.60	6.74	6.56	6.50	6.56	6.40	6.30	5.98	5.12
3	5.78	5.82	6.36	6.58	6.72	6.56	6.50	6.56	6.40	6.28	5.96	5.10
4	5.78	5.88	6.36	6.50	6.70	6.56	6.50	6.56	6.40	6.28	5.94	5.08
5	5.78	5.98	6.36	6.50	6.70	6.56	6.50	6.56	6.38	6.28	5.92	5.06
6	5.76	6.12	6.36	6.50	6.68	6.56	6.50	6.56	6.38	6.28	5.90	5.04
7	5.74	6.22	6.36	6.56	6.66	6.56	6.52	6.54	6.36	6.26	5.88	5.08
8	5.80	6.26	6.36	6.56	6.64	6.56	6.54	6.54	6.36	6.24	5.86	5.08
9	5.84	6.26	6.36	6.56	6.62	6.56	6.56	6.54	6.36	6.22	5.82	5.06
10	5.88	6.28	6.48	6.54	6.60	6.56	6.50	6.54	6.38	6.20	5.80	5.02
11	5.88	6.28	6.42	6.54	6.60	6.56	6.60	6.54	6.38	6.18	5.76	4.98
12	5.88	6.30	6.50	6.54	6.60	6.56	6.60	6.54	6.38	6.16	5.74	4.94
13	5.86	6.38	6.56	6.58	6.58	6.56	6.62	6.54	6.38	6.14	5.70	4.92
14	5.86	6.30	6.60	6.62	6.58	6.58	6.60	6.52	6.36	6.12	5.68	4.88
15	5.84	6.30	6.66	6.66	6.60	6.58	6.58	6.52	6.34	6.10	5.66	4.84
16	5.84	6.30	6.66	6.68	6.66	6.58	6.56	6.50	6.36	6.08	5.62	4.82
17	5.82	6.32	6.68	6.70	6.66	6.58	6.54	6.50	6.36	6.06	5.60	4.80
18	5.80	6.34	6.60	6.76	6.66	6.56	6.54	6.48	6.36	6.04	5.54	4.84
19	5.80	6.36	6.66	6.82	6.64	6.56	6.58	6.48	6.36	6.02	5.50	4.88
20	5.80	6.38	6.66	6.84	6.64	6.56	6.56	6.48	6.34	6.00	5.46	4.90
21	5.80	6.40	6.64	6.86	6.64	6.56	6.54	6.46	6.34	5.98	5.42	4.90
22	5.70	6.38	6.64	6.86	6.64	6.56	6.56	6.46	6.32	5.94	5.40	4.88
23	5.80	6.30	6.66	6.88	6.62	6.56	6.56	6.46	6.32	5.92	5.38	4.86
24	5.80	6.38	6.60	6.90	6.62	6.56	6.56	6.46	6.32	5.90	5.36	4.84
25	5.80	6.38	6.70	6.92	6.60	6.54	6.58	6.44	6.30	5.94	5.32	4.80
26	5.70	6.38	6.72	6.94	6.60	6.54	6.58	6.44	6.30	5.98	5.28	4.78
27	5.70	6.36	6.74	6.96	6.58	6.54	6.58	6.42	6.28	6.02	5.24	4.76
28	5.78	6.36	6.70	6.94	6.58	6.52	6.56	6.42	6.28	6.02	5.22	4.74
29	5.78	6.36	6.60	6.92	-----	6.52	6.54	6.42	6.28	6.02	5.20	4.72
30	5.80	6.36	6.66	6.86	-----	6.50	6.56	6.40	6.28	6.08	5.18	4.70
31	5.80	-----	6.64	6.88	-----	6.50	-----	6.42	-----	5.98	5.16	-----
MEAN	5.81	6.24	6.55	6.72	6.64	6.55	6.55	6.50	6.35	6.10	5.60	4.92
MAX	5.88	6.40	6.74	6.96	6.76	6.58	6.62	6.56	6.42	6.30	5.98	5.16
MIN	5.74	5.80	6.36	6.54	6.58	6.50	6.50	6.40	6.28	5.98	5.16	4.70
CAL YR 1969	MEAN 6.29		MAX 7.22		MIN 5.16							
WTR YR 1970	MEAN 6.21		MAX 6.96		MIN 4.70							

12112600 BIG SOOS CREEK ABOVE HATCHERY, NEAR AUBURN, WASH.

LOCATION.--Lat 47°18'45", long 122°09'51", on west line of NW¼ sec.15, T.21 N., R.5 E., King County, on left bank 0.2 mile upstream from fish hatchery, 2.7 miles east of Auburn, and at mile 0.9.

DRAINAGE AREA.--66.7 sq mi, excludes 3.67 sq mi in vicinity of Youngs Lake, flow from which has been diverted to Cedar River since about 1935.

PERIOD OF RECORD.--August 1960 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 70 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 119 cfs (86,220 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (440 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 7, 1966	0530	*445	4.16	Jan. 21, 1968	0500	*482	4.29	Jan. 7, 1969	0730	*912	5.72
				Feb. 13, 1968		482	4.29	Jan. 9, 1969	1000	465	4.40
Dec. 13, 1966	1700	499	4.36	Feb. 23, 1968	1400	468	4.23				
Jan. 5, 1967	0500	493	4.33					Jan. 19, 1970	1300	501	4.38
Jan. 20, 1967	-	*724	5.18	Dec. 4, 1968	1030	548	4.57	Jan. 27, 1970	0900	*625	4.76
Jan. 28, 1967	1000	555	4.60	Dec. 11, 1968	1400	532	4.51				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 2, 1965	15	al.48	1969	Sept. 7, 1969	31	dl.93
1967	Sept. 3, 1967	18	1.43	1970	Aug. 22-24, 26, 27, 29-31, Sept. 1, 1970	28	1.62
1968	(b)	30	cl.60				

a Occurred Aug. 11, 1966.

b Oct. 1, 9, 10, 20, 1967, Aug. 11, 1968.

c Occurred Oct. 1, 9, 10, 20, 1967.

d Occurred Oct. 2, 3, 4, 9, 1968.

Period of record: Maximum discharge, 1,010 cfs Nov. 25, 1960 (gage height, 5.26 ft), from rating curve extended above 450 cfs; maximum gage height, 5.73 ft Jan. 30, 1965; minimum discharge, 11 cfs Sept. 5, 1963 (gage height, 1.07 ft).

REMARKS.--Records excellent. City of Seattle diverts probably less than 2 cfs from Youngs Lake into Little Soos Creek, a tributary, during low flows. Prior to October 1966 fish hatchery diverted up to 19 cfs 0.5 mile above station, which was returned below station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	20	36	186	130	150	124	73	40	43	33	30
2	16	21	37	276	119	140	124	70	42	52	33	31
3	16	29	44	269	114	135	114	68	43	81	32	31
4	19	58	89	254	112	130	107	65	43	60	32	31
5	33	57	75	285	118	135	101	62	42	65	32	30
6	33	42	74	428	116	140	97	85	39	58	32	30
7	26	35	83	430	116	145	94	104	37	54	32	30
8	22	29	80	410	112	155	92	81	46	51	32	29
9	19	26	62	364	108	198	93	72	51	48	32	29
10	18	28	66	318	103	196	94	66	53	47	29	30
11	18	36	62	297	107	174	158	62	52	47	27	34
12	18	32	56	302	120	163	225	61	51	45	32	33
13	19	29	51	312	114	184	183	60	49	45	32	32
14	22	28	49	320	112	231	159	58	49	46	32	32
15	25	27	44	280	107	231	147	64	47	45	31	32
16	22	26	42	251	103	231	132	76	45	48	31	32
17	19	24	42	229	101	205	122	66	44	44	29	33
18	21	27	41	212	100	191	113	59	43	42	29	41
19	31	36	42	200	100	201	106	55	42	42	29	36
20	26	42	43	186	110	210	118	53	42	40	29	34
21	24	40	68	176	100	222	114	52	42	39	28	32
22	22	46	66	166	95	203	103	51	42	38	28	32
23	21	40	61	159	93	184	96	48	42	38	29	36
24	20	37	72	153	92	171	92	46	44	38	29	34
25	19	41	69	148	97	158	89	44	42	38	29	33
26	19	41	66	140	100	150	88	44	42	38	30	33
27	19	47	141	148	130	140	84	49	42	37	32	32
28	22	41	322	143	165	134	81	44	58	37	31	32
29	20	36	335	139	-----	126	80	42	49	35	31	32
30	19	35	291	140	-----	130	76	42	45	34	31	32
31	19	-----	206	140	-----	134	-----	41	-----	34	31	-----
TOTAL	664	1,056	2,815	7,457	3,094	1,297	3,398	1,863	1,348	1,429	949	968
MEAN	21.4	35.2	90.8	241	111	171	113	60.1	44.9	46.1	30.6	32.3
MAX	33	58	335	430	165	231	225	104	58	81	33	41
MIN	16	20	36	139	92	126	76	41	37	34	27	29
AC-FT	1,320	2,090	5,580	14,790	6,140	10,510	6,740	3,700	2,470	2,835	1,880	1,920

CAL YR 1965 TOTAL 37,243 MEAN 102 MAX 880 MIN 16 AC-FT 73,870
WTR YR 1966 TOTAL 30,338 MEAN 83.1 MAX 430 MIN 16 AC-FT 60,180

12112600 BIG SOOS CREEK ABOVE HATCHERY, NEAR AUBURN, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	79	205	242	181	153	116	148	110	68	41	36
2	41	87	189	255	179	150	135	150	95	64	41	36
3	40	93	273	273	218	150	129	142	88	63	40	35
4	46	87	524	384	268	146	137	134	81	64	39	36
5	45	80	479	542	301	177	161	124	76	63	40	36
6	45	77	397	703	246	181	158	118	74	60	41	35
7	44	76	370	891	220	167	154	110	74	59	41	35
8	42	90	441	730	277	154	138	106	72	58	41	34
9	42	137	437	625	438	146	130	103	70	56	41	34
10	53	126	486	555	388	140	135	101	69	56	40	34
11	59	289	521	513	432	135	127	98	70	59	40	34
12	70	324	459	441	410	130	121	95	68	57	41	34
13	98	253	408	392	362	127	118	91	66	55	42	35
14	95	209	382	365	326	124	114	87	65	52	40	35
15	103	181	374	341	294	122	109	86	62	50	39	35
16	92	163	389	331	294	127	106	82	60	48	39	36
17	82	154	355	314	275	162	124	81	57	48	38	38
18	96	145	342	286	250	164	162	78	55	48	38	42
19	96	135	332	270	236	150	158	80	54	48	38	46
20	108	132	305	252	220	140	161	80	54	48	38	44
21	98	140	285	240	206	134	145	76	52	47	39	41
22	98	192	277	226	199	130	132	74	58	46	38	48
23	93	189	307	210	192	129	169	70	76	44	37	54
24	87	172	406	197	185	121	169	70	102	42	37	47
25	85	165	378	190	177	118	150	70	85	42	37	43
26	85	156	336	185	172	114	138	71	76	42	38	40
27	80	156	307	179	167	109	132	76	74	42	39	38
28	79	144	285	172	159	106	138	80	92	42	40	40
29	79	172	255	170	145	118	149	80	42	39	47	43
30	87	222	240	166	105	137	203	72	42	37	63	38
31	87	-----	234	174	-----	110	-----	151	-----	40	37	-----
TOTAL	2,297	4,625	10,978	10,814	7,272	4,226	4,148	3,155	2,187	1,595	1,216	1,191
MEAN	74.1	154	354	349	260	136	138	102	72.9	51.5	39.2	39.7
MAX	108	324	524	891	438	181	169	203	110	68	42	63
MIN	40	76	189	166	159	105	106	70	52	40	37	34
AC-FT	4,560	9,170	21,770	21,450	14,420	8,380	8,230	6,260	4,340	3,160	2,410	2,360

CAL YR 1968 TOTAL 53,621 MEAN 147 MAX 524 MIN 31 AC-FT 106,400
WTR YR 1969 TOTAL 53,704 MEAN 147 MAX 891 MIN 34 AC-FT 106,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	44	51	185	348	158	130	158	72	44	35	29
2	64	43	50	176	314	155	146	141	65	41	39	29
3	60	45	52	170	296	152	133	133	64	40	38	33
4	56	97	59	161	276	148	127	129	60	39	36	32
5	53	124	57	151	262	141	125	122	59	38	34	32
6	50	85	55	145	252	170	148	117	58	38	34	33
7	60	69	54	140	237	231	155	113	55	37	34	38
8	70	63	59	140	220	193	138	113	58	35	35	36
9	68	60	66	156	206	167	206	127	58	34	34	33
10	65	57	66	159	199	153	242	129	59	34	33	32
11	61	55	94	146	190	148	197	127	58	34	32	31
12	59	52	190	142	182	153	184	121	56	34	31	30
13	56	51	212	195	186	163	172	122	55	34	31	30
14	53	50	294	390	179	203	162	113	55	33	31	30
15	50	50	260	355	229	214	150	106	56	32	31	29
16	49	49	226	283	325	199	141	102	55	32	30	29
17	48	48	214	272	322	188	133	98	53	32	31	33
18	47	47	214	343	331	170	135	93	52	31	30	45
19	46	47	212	471	284	160	184	90	48	31	30	47
20	45	51	204	462	258	157	162	90	46	31	30	40
21	44	59	234	415	239	186	141	89	44	31	30	35
22	43	56	250	413	222	167	138	86	42	32	29	34
23	43	64	334	435	212	157	137	85	42	31	28	32
24	42	70	322	447	199	152	150	81	41	32	28	31
25	42	60	279	525	188	145	152	78	41	37	29	31
26	42	57	272	522	177	140	148	74	40	43	29	30
27	44	54	268	602	170	137	141	72	41	44	29	30
28	44	52	244	507	165	141	133	71	43	40	30	30
29	45	52	228	433	-----	140	137	78	44	37	29	30
30	45	52	208	386	-----	137	179	95	46	37	29	30
31	44	-----	195	369	-----	129	-----	82	-----	35	28	-----
TOTAL	1,606	1,763	5,523	9,696	6,668	5,054	4,626	3,235	1,566	1,103	977	984
MEAN	51.8	58.8	178	313	238	163	154	104	52.2	35.6	31.5	32.8
MAX	70	124	354	602	348	231	242	158	72	44	39	47
MIN	42	43	50	140	165	128	125	71	40	31	28	29
AC-FT	3,190	3,500	10,950	19,230	13,230	10,020	9,180	6,420	3,110	2,190	1,940	1,950

CAL YR 1969 TOTAL 44,696 MEAN 122 MAX 891 MIN 34 AC-FT 88,650
WTR YR 1970 TOTAL 42,801 MEAN 117 MAX 602 MIN 28 AC-FT 84,900

12113000 GREEN RIVER NEAR AUBURN, WASH.

LOCATION (REVISED).--Lat 47°18'45", long 122°12'10", in NW¼NW¼, sec. 17, T.21 N., R.5 E., King County, on left bank 1.2 miles east of Auburn, 1.8 miles downstream from Big Soos Creek, and at mile 32.0.

DRAINAGE AREA.--399 sq mi (excludes 3.67 sq mi in the vicinity of Youngs Lake, flow from which has been diverted to Cedar River basin since about 1935).

PERIOD OF RECORD.--August 1936 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Oct. 19, 1936, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--34 years, 1,338 cfs (969,400 acre-ft per year), unadjusted.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, elevation in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	Elev.	Date	Minimum	Discharge	Elev.
1966	May 6, 1966		4,900	58.86	Oct. 1, 1965		212	53.68
1967	Jan. 15, 1967		7,580	60.77	Sept. 28, 29, 1967		212	53.60
1968	Feb. 20, 1968		8,870	61.44	Aug. 11, 12, 1968		217	53.53
1969	Jan. 6, 1969		9,210	61.65	Sept. 12, 13, 15, 16, 17, 1969		158	53.35
1970	Jan. 21, 1970		7,080	60.25	Aug. 18 to Sept. 3, Sept. 5, 6, 1970		a230	53.50

a All or part of each day.

Period of record: Maximum discharge, 28,100 cfs Nov. 23, 1959 (elevation, 69.75 ft); minimum, 81 cfs Sept. 23, 1952; minimum elevation, 53.35 ft Sept. 12, 13, 15, 16, 17, 1969.

REMARKS.--Records excellent. Since Dec. 5, 1961, flow regulated by Howard A. Hanson Reservoir (see station 12105800) 32.5 miles above station, for flood control, and during summer months to augment the natural river flow. City of Tacoma diverted an average daily discharge of about 110 cfs from river at headworks near Palmer, 29 miles above station, for municipal use. Minor diversions on upstream tributaries for domestic use. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	229	270	514	702	1,100	1,230	3,330	612	638	682	365	265
2	242	265	713	951	1,020	1,160	3,800	578	729	706	365	265
3	242	310	810	875	963	1,120	3,080	881	718	901	360	260
4	252	720	1,590	851	925	1,060	2,580	1,310	597	926	335	260
5	320	972	1,720	955	901	1,020	2,510	2,340	583	895	300	260
6	335	979	1,400	1,720	877	1,010	2,550	4,780	586	1,330	285	256
7	415	778	1,380	2,050	904	1,020	2,820	4,570	750	1,590	280	256
8	610	640	1,470	2,080	888	1,060	2,960	4,320	757	1,450	275	256
9	628	564	1,270	1,960	908	1,630	2,950	3,700	756	1,110	275	254
10	616	536	1,150	1,630	920	2,040	3,490	2,500	789	1,090	275	259
11	610	580	1,020	1,650	910	1,770	3,400	2,020	807	1,020	275	288
12	604	530	905	1,940	1,120	1,600	3,240	1,740	815	706	270	276
13	622	476	824	2,940	1,010	1,800	2,530	1,620	907	686	265	262
14	634	454	759	3,190	1,000	2,240	2,190	1,470	1,250	675	270	261
15	658	432	697	2,750	934	2,220	2,090	1,390	1,150	577	265	259
16	628	420	650	2,190	871	2,050	2,110	1,350	891	575	305	255
17	610	405	606	1,850	854	1,800	2,100	1,070	885	558	315	264
18	616	405	568	1,640	844	1,640	1,930	685	877	551	315	322
19	739	415	552	1,460	830	1,560	1,730	636	873	546	280	279
20	1,030	415	542	1,320	916	1,470	1,660	595	869	539	270	262
21	993	470	680	1,210	1,100	1,430	1,700	563	874	534	265	254
22	951	746	615	1,140	1,180	1,290	1,620	580	875	529	265	255
23	902	772	576	1,090	1,220	1,200	1,570	585	870	525	265	278
24	856	676	655	1,040	1,340	1,170	1,580	588	838	523	265	257
25	791	664	604	991	1,210	1,190	1,650	593	667	521	265	254
26	713	646	554	931	1,170	1,380	1,700	611	651	513	265	263
27	622	706	754	935	1,230	1,720	1,580	641	661	508	290	259
28	508	652	1,180	943	1,400	2,030	1,480	625	791	509	285	252
29	370	586	1,080	975	-----	2,250	1,390	621	735	498	270	246
30	305	542	879	1,070	-----	3,020	1,340	620	696	380	265	243
31	295	-----	766	1,180	-----	3,760	-----	621	-----	365	265	-----
TOTAL	17,946	17,026	27,483	46,209	28,545	50,940	68,660	44,815	23,885	22,518	8,910	7,880
MEAN	579	568	887	1,491	1,019	1,643	2,289	1,444	796	726	287	263
MAX	1,030	979	1,720	3,190	1,400	3,760	3,800	4,780	1,250	1,590	365	322
MIN	229	265	514	702	830	1,010	1,340	563	583	365	265	243
AC-FT	35,600	33,770	54,510	91,660	56,620	101,000	136,200	88,890	47,380	44,660	17,670	15,630
CAL YR 1965	TOTAL	458,759	MEAN	1,257	MAX	10,900	MIN	226	AC-FT	909,900		
YR 1966	TOTAL	364,817	MEAN	999	MAX	4,780	MIN	229	AC-FT	723,600		

12113000 GREEN RIVER NEAR AUBURN, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	701	4,050	2,600	2,930	1,740	1,260	1,090	2,360	577	250	235
2	270	631	2,620	2,900	2,610	1,670	1,210	1,070	2,180	577	245	255
3	254	574	2,150	2,800	2,390	1,510	1,190	1,090	1,850	576	245	245
4	284	532	1,810	3,800	3,320	1,400	1,230	1,150	1,660	574	240	235
5	289	523	1,640	3,600	4,900	1,320	1,280	1,220	1,570	560	240	235
6	291	538	1,480	2,900	3,780	1,260	1,210	1,360	1,480	330	245	230
7	388	492	1,410	2,600	2,870	1,210	1,180	1,620	1,200	305	245	230
8	507	465	1,280	2,400	2,390	1,180	1,210	1,900	993	300	245	226
9	501	446	1,160	2,700	2,170	1,420	1,240	2,190	902	300	240	230
10	490	653	1,160	2,600	2,190	1,410	1,180	2,140	818	295	240	260
11	377	623	1,250	3,500	2,190	1,320	1,120	1,810	831	290	542	295
12	392	734	1,720	4,010	2,190	1,180	1,090	1,700	815	285	562	285
13	388	860	4,570	4,890	3,040	1,120	1,240	1,540	639	280	564	255
14	371	1,180	6,140	6,910	2,800	1,070	1,220	1,490	619	280	562	245
15	363	1,570	4,110	7,020	2,420	1,090	1,110	1,490	492	275	544	240
16	360	1,510	3,400	6,750	2,150	1,150	1,060	1,780	455	270	300	235
17	355	1,510	3,970	4,670	2,560	1,320	1,040	1,960	397	270	265	235
18	350	1,350	4,090	3,600	3,580	1,360	1,060	1,210	390	270	255	235
19	320	1,180	3,790	4,380	3,080	1,310	1,240	1,140	386	275	250	230
20	584	1,060	4,900	5,950	2,530	1,290	1,140	1,010	358	280	250	230
21	1,180	983	4,090	4,420	2,210	1,380	1,180	1,050	395	275	250	230
22	1,590	900	2,970	3,480	1,980	1,450	1,140	1,070	466	270	245	226
23	1,640	842	2,440	2,850	1,820	1,970	1,110	1,020	391	265	245	226
24	1,760	808	2,110	2,510	1,700	2,020	1,100	1,760	365	260	245	221
25	2,100	1,290	1,950	2,230	1,630	1,940	1,130	3,510	353	260	240	221
26	2,230	2,920	1,720	2,060	1,540	1,760	1,140	3,290	346	260	240	221
27	2,180	2,210	1,530	2,550	1,460	1,690	1,210	2,950	412	265	240	221
28	1,330	1,890	1,350	4,240	1,510	1,570	1,270	2,860	418	260	240	216
29	866	1,740	1,700	4,750	-----	1,560	1,210	2,940	529	255	235	221
30	927	2,820	1,850	4,280	-----	1,460	1,140	3,080	565	250	240	230
31	794	-----	1,800	3,210	-----	1,340	-----	2,770	-----	250	240	-----
TOTAL	23,974	33,535	79,610	117,460	69,540	44,470	35,140	56,260	24,635	10,039	9,189	7,099
MEAN	773	1,118	2,568	3,789	2,484	1,435	1,171	1,815	821	324	296	237
MAX	2,230	2,920	6,140	7,020	4,500	2,020	1,280	3,510	2,360	577	564	295
MIN	243	446	1,160	2,060	1,460	1,070	1,040	1,010	346	250	235	216
AC-FT	47,550	66,520	157,900	235,000	137,900	88,210	69,700	111,600	48,860	19,910	18,230	14,080
CAL YR 1966	TOTAL 439,481											
WTR YR 1967	TOTAL 510,951											
			MEAN 1,204	MAX 6,140		MIN 243	AC-FT 871,700					
			MEAN 1,400	MAX 7,020		MIN 216	AC-FT 1,013,000					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	2,470	652	2,200	1,550	2,050	2,000	1,800	1,190	578	250	844
2	237	1,900	664	1,930	1,510	1,900	1,830	1,730	2,470	518	245	788
3	269	1,490	721	1,650	1,930	1,790	1,650	1,560	4,200	467	245	704
4	278	1,220	721	1,480	3,120	1,760	1,620	1,440	2,980	423	245	500
5	246	1,010	721	1,460	2,970	1,800	1,640	1,440	1,560	418	241	445
6	242	854	682	1,320	2,400	1,750	1,610	1,420	1,540	401	241	429
7	246	508	658	1,230	2,030	1,610	1,790	1,360	1,450	396	237	401
8	237	556	622	1,160	1,800	1,510	1,800	1,290	1,110	390	233	390
9	228	1,240	640	1,020	1,620	1,120	1,730	1,270	1,290	401	229	380
10	224	1,530	1,560	1,040	1,490	1,220	1,680	1,300	1,270	365	225	370
11	296	2,240	4,080	1,480	1,390	1,160	1,720	1,350	1,120	365	221	365
12	296	1,800	3,120	1,220	1,310	1,080	1,740	1,400	1,100	385	221	360
13	273	1,440	1,920	1,340	1,240	1,570	1,640	1,370	1,080	418	225	350
14	372	1,240	1,510	1,690	1,170	1,090	1,560	1,250	1,060	434	305	365
15	383	1,150	1,310	2,160	1,090	1,040	1,660	1,140	900	434	350	429
16	383	1,100	1,170	2,090	1,040	1,320	1,550	1,030	872	355	281	467
17	544	996	1,050	1,800	1,000	1,310	1,400	879	851	335	310	802
18	556	924	952	1,570	1,600	1,210	1,300	942	809	320	330	1,740
19	580	861	868	2,340	5,470	1,150	1,330	998	739	325	345	3,950
20	574	791	770	5,220	8,700	1,090	1,310	1,140	725	325	340	3,210
21	777	735	688	6,670	7,000	1,040	1,260	1,200	704	320	320	1,700
22	777	694	889	6,380	6,520	984	1,240	1,220	669	315	315	1,360
23	819	676	1,610	4,220	5,900	949	1,250	1,210	669	345	360	1,360
24	1,140	707	2,880	3,720	5,180	970	1,280	1,170	662	350	440	1,330
25	1,640	805	5,930	3,810	4,130	1,020	1,310	1,080	641	340	451	1,150
26	1,610	735	7,780	2,980	3,330	1,050	1,450	1,080	566	330	530	1,010
27	1,910	688	7,630	2,420	2,770	1,560	1,480	1,070	566	320	977	991
28	4,970	664	5,570	2,020	2,470	4,260	1,420	1,060	578	300	1,200	914
29	4,450	735	6,380	1,780	2,220	3,220	1,500	1,050	596	281	1,380	8
30	2,800	700	2,670	1,640	-----	2,900	1,710	1,030	590	268	1,200	350
31	2,340	-----	2,100	1,510	-----	2,370	-----	998	-----	259	900	---
TOTAL	29,939	32,459	68,518	72,550	83,950	48,853	46,460	38,277	34,557	11,481	13,392	28,638
MEAN	966	1,082	2,210	2,340	2,895	1,576	1,549	1,235	1,152	370	432	955
MAX	4,970	2,470	7,780	6,670	8,700	4,260	2,000	1,800	4,200	578	1,380	3,950
MIN	224	508	622	1,020	1,000	949	1,240	879	566	259	721	350
AC-FT	59,380	64,380	135,900	143,900	166,500	96,900	92,150	75,920	68,540	22,770	26,560	56,800
CAL YR 1967	TOTAL 504,748											
WTR YR 1968	TOTAL 509,074											
			MEAN 1,383	MAX 7,780		MIN 216	AC-FT 1,001,000					
			MEAN 1,391	MAX 8,700		MIN 221	AC-FT 1,010,000					

12113000 GREEN RIVER NEAR AUBURN, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	608	865	1,820	1,090	955	722	3,140	2,000	2,570	1,040	365	203
2	614	844	1,670	1,250	941	722	2,700	1,850	2,140	1,020	335	195
3	584	914	2,950	1,390	1,030	735	2,360	1,670	1,970	977	325	191
4	578	865	6,940	1,990	1,130	767	2,070	1,600	1,990	897	316	183
5	566	802	4,840	6,960	1,190	906	1,920	1,550	1,440	897	327	183
6	566	739	3,160	9,100	1,000	1,250	2,010	1,640	2,370	886	314	183
7	725	725	2,520	8,500	920	1,140	2,130	2,060	1,290	870	310	179
8	704	774	2,520	5,170	1,050	962	2,020	2,960	1,460	848	304	175
9	697	1,390	2,360	3,830	1,380	934	1,920	3,940	1,470	818	283	175
10	788	2,480	2,570	3,180	1,260	892	2,090	4,290	1,320	791	274	172
11	1,090	3,360	2,640	2,730	1,400	829	2,170	3,980	1,180	768	273	165
12	1,110	4,670	2,090	2,520	1,430	808	2,280	3,570	1,060	646	270	158
13	1,250	3,490	2,510	2,270	1,310	787	2,720	3,440	1,040	637	260	158
14	1,210	2,520	1,990	2,050	1,220	780	2,850	3,240	865	622	255	161
15	1,340	1,920	1,770	1,910	1,100	787	2,340	2,890	882	593	250	161
16	1,550	1,770	1,810	1,800	1,100	829	1,990	2,450	868	545	250	161
17	1,470	1,650	1,690	1,690	1,120	808	2,280	2,390	835	547	249	159
18	1,400	1,590	1,620	1,580	1,020	2,000	2,820	2,270	716	526	245	251
19	1,270	1,570	1,570	1,510	990	1,930	3,140	2,440	639	456	240	266
20	1,460	1,520	1,410	1,410	969	1,780	3,000	2,520	637	453	233	371
21	1,570	1,660	1,290	1,310	968	1,680	2,590	2,290	567	456	233	362
22	1,590	2,680	1,290	1,270	927	1,650	2,260	2,390	583	447	229	429
23	1,530	3,600	1,370	1,190	906	1,920	3,400	2,600	696	439	229	595
24	1,400	2,840	1,670	1,050	878	2,050	3,840	2,610	1,300	429	224	676
25	1,290	2,290	1,590	1,040	836	1,930	3,010	2,640	2,580	421	224	629
26	1,200	1,950	1,450	1,040	794	1,690	2,460	2,220	1,740	383	220	582
27	1,080	1,930	1,040	1,040	780	2,020	2,840	1,840	1,310	370	220	422
28	998	2,040	1,280	1,030	754	2,420	2,150	1,700	1,050	367	220	387
29	914	2,000	1,150	962	-----	2,290	2,240	1,760	1,070	364	220	411
30	900	2,020	984	920	-----	2,440	2,130	3,400	1,070	357	215	554
31	935	-----	971	948	-----	3,140	-----	3,230	-----	358	207	-----
TOTAL	32,917	57,468	64,805	73,730	29,268	43,910	73,920	79,340	38,708	19,177	6,115	8,921
MEAN	1,062	1,916	2,090	2,378	1,045	1,414	2,464	2,559	1,290	619	262	297
MAX	1,590	4,670	6,940	9,100	1,430	3,140	3,840	4,290	2,580	1,040	365	676
MIN	566	725	971	920	754	722	1,920	1,550	567	357	207	158
AC-FT	65,290	114,000	128,500	146,200	58,050	87,100	146,600	157,400	76,780	38,040	16,100	17,690
CAL YR 1968	TOTAL 533,348	MEAN 1,457	MAX 8,700	MIN 221	AC-FT 1,058,000							
WTR YR 1969	TOTAL 530,279	MEAN 1,453	MAX 9,100	MIN 158	AC-FT 1,052,000							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,210	268	554	1,050	2,140	1,270	1,460	2,040	1,060	502	280	230
2	1,400	259	536	991	2,260	1,210	1,530	1,970	1,050	582	300	230
3	865	272	500	921	2,160	1,160	1,550	1,970	1,050	582	290	244
4	732	478	518	900	1,960	1,090	1,330	2,250	990	576	280	243
5	704	1,650	572	858	1,860	1,010	1,390	2,700	997	929	253	231
6	683	1,250	560	823	1,740	1,060	1,640	2,500	1,190	485	244	237
7	697	802	536	774	1,580	1,600	2,050	2,060	1,200	345	257	291
8	590	602	536	753	1,590	1,690	1,920	1,770	1,160	310	266	293
9	690	578	518	809	1,730	1,560	2,050	1,690	564	300	262	390
10	851	584	518	732	1,850	1,400	3,980	1,780	447	315	253	535
11	865	662	602	683	1,800	1,280	3,250	1,700	927	320	253	515
12	802	602	1,050	683	1,790	1,190	2,970	1,560	983	315	268	294
13	697	495	1,120	893	1,800	1,190	2,220	1,520	829	315	248	270
14	473	429	1,620	1,470	1,720	1,160	1,170	1,380	808	290	248	265
15	524	429	1,620	1,930	1,900	1,340	1,130	1,300	808	280	244	261
16	500	429	1,880	1,910	2,360	1,600	1,560	1,320	808	335	244	257
17	478	434	1,630	1,730	4,450	2,240	1,790	1,590	801	345	248	267
18	390	467	1,440	2,530	4,030	1,990	1,570	2,160	787	345	238	341
19	370	451	1,520	5,430	2,720	1,560	1,650	3,020	738	345	233	457
20	370	456	1,480	6,630	2,230	1,440	1,560	1,900	836	340	232	487
21	370	530	1,670	6,380	1,980	1,320	1,520	1,520	864	305	233	470
22	365	676	2,060	5,570	1,860	1,340	1,380	1,220	885	275	231	463
23	370	767	2,500	6,620	1,720	1,290	1,260	1,140	1,070	271	230	453
24	360	872	2,150	5,470	1,600	1,330	1,350	1,210	762	266	230	446
25	325	1,090	1,760	4,950	1,510	1,360	1,500	1,190	708	275	231	441
26	305	1,050	1,730	4,080	1,350	1,260	1,480	934	654	300	231	327
27	320	760	1,590	3,990	1,440	1,220	1,430	969	491	325	230	268
28	375	725	1,340	3,200	1,280	1,200	1,330	990	480	350	230	261
29	370	572	1,240	2,590	-----	1,360	1,300	1,040	480	345	230	257
30	390	572	1,100	2,260	-----	1,410	1,610	1,140	480	300	230	256
31	300	-----	1,080	2,090	-----	1,600	-----	1,070	-----	285	230	-----
TOTAL	17,701	19,211	37,530	79,700	57,410	42,730	51,930	50,603	24,907	11,053	7,657	9,980
MEAN	571	640	1,211	2,571	2,050	1,378	1,731	1,632	830	357	247	333
MAX	1,400	1,650	2,500	6,630	4,450	2,240	3,980	3,020	1,200	582	300	535
MIN	300	259	500	683	1,280	1,010	1,130	934	447	266	230	230
AC-FT	39,110	38,110	74,440	158,100	113,900	84,750	103,000	100,400	49,400	21,920	15,190	19,800
CAL YR 1969	TOTAL 449,531	MEAN 1,232	MAX 9,100	MIN 158	AC-FT 891,600							
WTR YR 1970	TOTAL 410,412	MEAN 1,124	MAX 6,630	MIN 230	AC-FT 814,100							

DUMAMISH RIVER BASIN

12113350 GREEN RIVER AT TUKWILA, WASH.

LOCATION (REVISED).--Lat 47°27'55", long 122°14'48", in NW1/4 sec. 24, T. 23 N., R. 4 E., King County, on right bank on highway bridge, 0.6 mile southeast of Tukwila, 1.4 miles upstream from Black River, and at mile 12.4.

DRAINAGE AREA.--440 sq mi.

PERIOD OF RECORD.--October 1960 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--10 years, 1,465 cfs (1,061,000 acre-ft per year), unadjusted.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, elevation in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum			Date	Minimum		
		Discharge	Elevation			Discharge	Elevation	
1966	May 6, 1966	4,910	alt.40		Oct. 1, 1965	258	b2.90	
1967	Jan. 16, 1967	7,510	alt.24		Sept. 28, 29, 1967	257	2.86	
1968	Jan. 21, 1968	9,710	18.97		Oct. 1, 10, 1967	271	c2.88	
1969	Jan. 6, 1969	9,750	19.35		Sept. 15, 16, 1969	231	2.63	
1970	Jan. 23, 1970	7,350	16.62		Aug. 30, 31, Sept. 1, 1970	261	2.78	

a Backwater from tide.

b Occurred Sept. 30, 1966.

c Occurred Aug. 12, 13, 1968.

Period of record: Maximum discharge, 12,100 cfs Jan. 31, 1965 (elevation, 21.70 ft); minimum recorded, 195 cfs Sept. 14, 15, 1961; minimum elevation, 2.63 ft Sept. 15, 16, 1969.

Flood of Nov. 24, 1959, reached a stage of 22.63 ft, present datum, from gage-height record of stages above 14.2 ft (discharge, 13,200 cfs).

REMARKS.--Records good. Flow regulated since Dec. 5, 1961, by Howard A. Hanson Reservoir (see station 12105800) for flood control and during summer periods to augment the natural river flow. City of Tacoma diverted an average daily discharge of about 110 cfs from river at headworks near Palmer, 49 miles above station, for municipal use. Minor diversions and regulation on upstream tributaries. Water-quality records for the water years 1966 and 1968-70 are published in reports of the Geological Survey.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	264	338	542	860	1,170	1,310	3,490	1,010	695	710	405	289
2	274	373	620	1,060	1,090	1,200	3,790	767	773	725	392	287
3	276	342	797	1,070	1,030	1,160	3,400	920	797	836	388	287
4	283	540	1,200	1,020	998	1,090	2,820	1,170	716	962	369	285
5	335	872	1,880	1,000	980	1,050	2,600	2,100	677	869	352	281
6	360	917	1,510	1,790	962	1,040	2,640	4,320	668	1,150	335	277
7	395	815	1,390	2,330	962	1,060	2,840	4,800	758	1,570	325	275
8	508	686	1,550	2,340	965	1,100	3,050	4,530	794	1,580	321	269
9	582	590	1,340	2,340	956	1,500	3,020	4,270	794	1,150	319	267
10	580	562	1,210	1,880	971	2,100	3,520	3,050	818	1,070	317	269
11	572	565	1,060	1,760	953	1,940	3,600	2,420	833	1,060	315	285
12	572	565	953	2,100	1,110	1,690	3,670	2,000	836	815	309	289
13	578	515	872	2,770	1,070	1,760	2,960	1,820	827	710	305	281
14	599	488	809	3,520	1,030	2,340	2,520	1,670	1,190	707	309	279
15	620	465	752	3,100	1,000	2,440	2,330	1,560	1,220	641	307	281
16	605	448	701	2,500	944	2,280	2,290	1,570	953	599	315	279
17	575	440	662	2,090	905	1,960	2,280	1,310	896	585	333	281
18	570	440	620	1,800	896	1,750	2,160	947	890	570	329	317
19	632	488	599	1,630	881	1,650	1,940	827	881	562	315	303
20	869	485	599	1,470	896	1,590	1,800	776	878	560	301	281
21	935	475	695	1,350	1,050	1,540	1,820	731	875	550	295	269
22	905	662	713	1,260	1,110	1,420	1,750	719	878	540	293	269
23	869	800	647	1,190	1,260	1,270	1,690	716	869	538	293	283
24	830	698	740	1,150	1,280	1,210	1,670	713	875	535	291	275
25	782	668	728	1,070	1,230	1,200	1,730	710	737	525	291	271
26	716	653	641	1,030	1,180	1,310	1,800	713	689	520	299	275
27	650	695	800	1,020	1,200	1,600	1,710	734	684	512	305	275
28	565	677	1,350	1,030	1,460	1,940	1,590	716	782	510	307	271
29	458	608	1,480	1,030	-----	2,200	1,520	704	785	502	301	267
30	375	565	1,150	1,010	-----	2,680	1,470	701	728	450	295	265
31	352	-----	965	1,210	-----	3,790	-----	701	-----	408	291	-----

TOTAL	17,486	17,385	29,575	50,880	29,539	52,170	73,470	49,695	24,798	23,021	9,922	8,382
MEAN	564	580	954	1,641	1,055	1,683	2,449	1,603	827	743	320	279
MAX	935	917	1,880	3,520	1,460	3,790	3,790	4,800	1,220	1,580	405	317
MIN	264	323	542	860	881	1,040	1,470	701	668	408	291	265
AC-FT	34,680	34,480	58,660	100,900	58,590	103,500	145,700	98,570	49,190	45,660	19,680	16,630

CAL YR 1965 TOTAL 498,444 MEAN 1,366 MAX 12,000 MIN 260 AC-FT 988,700
 WTR YR 1966 TOTAL 386,323 MEAN 1,058 MAX 4,800 MIN 264 AC-FT 766,300

12114000 SOUTH FORK CEDAR RIVER NEAR LESTER, WASH.

LOCATION.--Lat 47°18'30", long 121°31'00", in NE¼SE¼ sec.15, T.21 N., R.10 E., King County, Snoqualmie National Forest, on left bank on logging road bridge, 0.6 mile upstream from confluence with North Fork and 6.7 miles (revised) north of Lester.

DRAINAGE AREA.--6.00 sq mi.

PERIOD OF RECORD.--October 1944 to September 1970.

GAGE.--Water-stage recorder. Concrete control Aug. 31, 1951, to Dec. 9, 1956, and Oct. 8, 1957, to September 1970. Altitude of gage is 2,300 ft (from topographic map).

AVERAGE DISCHARGE.--26 years, 38.5 cfs (87.14 inches per year, 27,890 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (200 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1200	*275	6.02	Oct. 27, 1967	2030	254	5.96	Dec. 3, 1968	1545	276	6.03
				Dec. 25, 1967	1130	*520	6.60	Jan. 5, 1969	0715	*337	6.13
Dec. 13, 1966	2000	212	5.83	Jan. 20, 1968	2030	488	6.53	May 10, 1969a	-	-	-
Jan. 15, 1967	0930	*275	6.02	Feb. 19, 1968	0800	376	6.28				
				Feb. 21, 1968	2215	230	5.90	Jan. 22, 1970	2300	*195	5.75

a About.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 30, 1966	a3.2	-	1969	Feb. 27 to Mar. 3, 1969	b2.7	4.22
1967	Sept. 28, 29, 1967	2.8	4.25	1970	Aug. 30 to Sept. 3, 1970	b3.0	4.23
1968	Oct. 2, 3, 1967	3.0	4.27				

a Minimum daily.

b Part or all of each day.

Period of record: Maximum discharge, 2,340 cfs Dec. 9, 1956 (gage height, 10.41 ft. from floodmarks), from rating curve extended above 300 cfs on basis of slope-area measurement of peak flow; minimum, 1.9 cfs Nov. 27, 28, 1952 (gage height, 2.80 ft).

REMARKS.--Records excellent except those for period of no gage-height record Mar. 3 to May 23, 1969, which are fair. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1446: 1953-54. WSP 1736: 1950(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	7.6	30	8.0	13	10	95	59	41	21	7.2	3.8
2	4.5	8.3	28	8.5	13	9.6	95	77	38	23	7.0	3.6
3	4.4	10	29	8.5	12	9.3	77	114	36	39	6.8	3.7
4	4.4	21	66	8.0	12	9.0	72	147	35	39	6.6	3.7
5	4.9	34	58	9.0	11	9.0	74	203	36	37	6.5	3.7
6	12	30	50	17	11	9.0	80	241	45	34	6.3	3.7
7	7.6	24	55	19	11	8.6	93	169	54	31	6.2	3.4
8	6.4	22	53	19	11	12	95	150	54	28	6.0	3.5
9	6.2	20	45	17	10	23	105	152	49	26	6.0	3.5
10	5.7	18	39	17	9.6	20	110	123	60	24	6.0	3.5
11	5.4	18	33	17	11	17	103	95	80	22	5.9	3.7
12	5.4	14	29	23	11	17	82	86	79	20	5.5	3.5
13	5.9	16	26	46	9.6	23	66	79	65	19	7.0	3.5
14	6.4	15	24	48	9.3	26	58	66	58	18	5.9	3.5
15	10	16	21	39	8.6	26	60	58	57	16	5.4	3.5
16	9.6	16	20	32	8.6	24	66	55	59	15	5.3	3.6
17	11	15	18	30	8.6	21	66	49	53	14	5.1	3.6
18	14	15	17	26	8.3	20	60	49	44	13	5.0	4.1
19	30	16	16	24	8.3	18	52	56	41	12	5.0	3.6
20	25	16	16	21	10	18	49	70	36	12	4.8	3.5
21	20	26	15	19	11	17	50	88	32	11	4.7	3.4
22	17	30	14	18	13	16	48	75	29	11	4.6	3.5
23	15	26	13	17	13	16	50	66	27	10	4.3	3.5
24	14	24	13	16	12	16	58	67	29	9.8	4.3	3.4
25	12	22	12	15	12	17	66	84	26	9.4	4.2	3.4
26	11	21	11	14	11	20	60	97	26	8.9	4.3	3.8
27	11	19	10	14	11	25	52	82	26	8.5	5.2	3.7
28	10	17	11	14	11	32	49	65	31	8.2	4.5	3.4
29	9.3	16	9.5	14	-----	48	48	57	27	7.8	4.4	3.4
30	9.0	15	9.0	14	-----	79	48	52	23	7.6	4.2	3.2
31	8.3	-----	8.5	14	-----	93	-----	46	-----	7.4	3.9	-----
TOTAL	320.3	569.9	799.0	606.0	300.9	708.5	2,087	2,871	1,296	562.6	168.1	107.1
MEAN	10.3	19.0	25.8	19.5	10.7	22.9	69.6	92.6	43.2	18.1	5.42	3.57
MAX	30	34	66	48	13	93	110	241	80	39	7.2	4.1
MIN	4.4	7.6	8.5	8.0	8.3	8.6	48	46	23	7.4	3.9	3.2
CFSM	1.72	3.17	4.30	3.25	1.78	3.82	11.6	15.4	7.20	3.02	.90	.60
IN	1.99	3.53	4.95	3.76	1.87	4.39	12.94	17.80	8.06	3.49	1.04	.66
AC-FT	635	1,130	1,580	1,200	597	1,410	4,140	5,690	2,570	1,120	333	212

CAL YR 1965 TOTAL 11,890.6 MEAN 32.6 MAX 385 MIN 3.5 CFSM 5.43 IN 73.70 AC-FT 23,580
WTR YR 1966 TOTAL 10,396.4 MEAN 28.5 MAX 241 MIN 3.2 CFSM 4.78 IN 64.45 AC-FT 20,620

12114000 SOUTH FORK CEDAR RIVER NEAR LESTER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	19	112	49	53	19	17	17	84	26	5.6	3.3
2	6.0	17	82	45	47	10	17	20	108	26	5.3	3.9
3	4.1	16	61	70	56	17	18	25	99	25	5.3	3.6
4	3.7	14	51	50	119	16	19	30	92	23	5.1	3.3
5	3.6	15	42	46	105	16	18	36	99	20	5.1	3.3
6	3.6	13	36	39	77	15	18	47	103	18	5.1	3.3
7	3.9	11	32	34	62	15	20	68	92	16	5.1	3.3
8	4.3	12	27	42	51	16	20	82	74	15	4.9	3.2
9	4.3	14	24	46	46	14	19	88	65	14	4.8	3.2
10	4.1	14	22	51	49	14	18	70	61	13	4.8	3.6
11	4.1	14	25	84	42	12	18	56	59	12	4.6	5.4
12	4.3	17	49	77	41	12	18	50	58	12	4.6	4.4
13	4.3	17	169	128	46	11	18	48	64	11	4.6	3.7
14	3.7	25	162	163	139	11	16	49	72	11	4.3	3.3
15	3.7	32	92	203	36	11	15	62	77	10	4.3	3.2
16	3.7	35	97	130	33	15	15	99	80	9.6	4.1	3.2
17	3.7	34	125	86	40	15	14	130	80	9.3	4.1	3.2
18	3.6	33	128	65	43	15	15	125	77	8.7	4.1	3.2
19	5.1	32	135	108	39	14	15	125	79	8.7	3.9	3.2
20	13	31	152	99	34	14	14	155	75	8.4	3.9	3.2
21	8.4	29	101	68	32	14	14	174	64	8.0	4.1	3.0
22	38	26	70	53	29	37	15	160	56	7.4	3.9	3.2
23	99	25	55	45	26	46	17	130	48	7.2	3.7	3.0
24	67	22	47	39	24	40	19	99	44	6.9	3.7	2.9
25	46	75	40	34	22	35	20	82	46	6.7	3.6	2.9
26	42	68	34	30	20	31	19	77	44	6.5	3.6	2.9
27	39	55	30	51	18	27	19	79	38	6.5	3.5	2.9
28	33	49	27	103	20	25	17	90	34	6.3	3.4	2.9
29	30	53	37	101	22	22	17	105	32	6.0	3.3	3.0
30	25	112	30	82	20	17	17	90	30	5.8	3.3	3.2
31	22	36	65	18	18	79	79	5.8	3.3	5.8	3.3	---
TOTAL	540.6	929	2,110	2,294	1,250	605	516	2,547	2,036	369.8	132.8	99.9
MEAN	17.4	31.2	68.1	74.0	44.6	19.5	17.2	82.2	67.9	11.9	4.28	3.33
MAX	99	112	169	203	119	46	20	175	108	26	6.6	5.4
MIN	3.6	11	22	30	18	11	14	17	30	5.8	3.3	2.9
CFSM	2.90	5.17	11.4	12.3	7.43	3.25	2.87	13.7	11.3	1.98	.71	.96
IN.	3.35	5.76	13.08	14.22	7.75	3.75	3.20	15.79	12.62	2.29	.82	.62
AC-FT	1,070	1,840	4,190	4,950	2,480	1,200	1,020	5,050	4,040	734	263	198

CAL YR 1966 TOTAL 12,286.8 MEAN 33.6 MAX 241 MIN 3.2 CFSM 5.78 IN 78.51 AC-FT 25,120
WTR YR 1967 TOTAL 13,430.1 MEAN 36.8 MAX 203 MIN 2.9 CFSM 6.13 IN 83.27 AC-FT 26,440

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	88	17	43	26	56	37	67	59	16	7.0	18
2	3.0	65	16	36	30	53	36	55	98	15	6.8	16
3	7.4	51	15	31	37	50	33	53	87	14	6.8	14
4	4.8	41	14	30	65	51	32	54	64	13	6.8	13
5	3.9	34	13	29	54	53	32	50	93	12	6.6	12
6	3.7	28	12	22	45	46	31	44	46	11	6.6	12
7	4.1	25	11	21	39	40	30	42	41	11	6.6	11
8	3.7	22	11	19	35	35	29	42	37	10	6.4	10
9	3.4	34	20	19	31	31	50	50	33	10	6.4	9.8
10	3.7	84	74	18	28	28	35	61	31	10	6.1	9.5
11	8.7	60	105	16	26	26	41	69	30	10	6.1	9.2
12	14	61	65	14	24	24	40	64	27	12	5.9	9.2
13	25	48	48	16	22	22	36	51	26	10	5.9	8.8
14	43	41	40	16	20	21	34	44	24	10	8.5	13
15	22	37	35	21	19	22	31	41	23	10	8.2	36
16	16	34	31	18	17	22	28	39	22	9.5	7.3	45
17	13	50	26	17	17	21	26	42	22	9.2	7.0	105
18	13	28	23	17	65	20	24	49	21	9.2	7.3	135
19	12	25	20	81	312	19	22	56	20	9.2	7.3	95
20	11	22	18	19	210	19	21	69	19	9.5	7.3	65
21	19	20	17	304	185	18	20	54	18	8.8	7.0	50
22	64	19	56	140	188	18	20	46	19	8.8	7.0	44
23	114	18	101	93	165	19	21	43	17	8.5	8.2	45
24	6.8	30	313	129	145	19	21	41	16	8.5	10	41
25	67	25	399	100	100	19	27	42	16	8.2	13	37
26	55	23	251	69	75	19	30	43	15	7.8	15	32
27	119	22	150	51	65	38	31	40	16	7.5	19	29
28	63	21	100	42	61	40	38	39	16	7.5	27	25
29	99	79	38	58	58	46	38	16	7.3	26	22	22
30	110	18	61	33	44	79	37	16	7.0	23	21	21
31	188	50	30	40	40	40	34	7.0	19	7.0	19	---
TOTAL	1,204.8	1,094	2,219	1,790	2,172	979	977	1,499	948	307.5	311.1	992.5
MEAN	38.9	36.5	71.6	57.7	74.9	31.6	32.6	48.4	31.6	9.92	10.0	33.1
MAX	163	88	399	304	312	58	79	69	98	16	27	135
MIN	3.0	18	11	14	17	18	20	34	15	7.0	5.9	8.8
CFSM	6.48	6.08	11.9	9.62	12.5	5.27	5.43	8.07	5.27	1.65	1.67	5.52
IN.	7.47	6.78	13.76	11.10	13.47	6.07	6.06	9.29	5.88	1.91	1.93	6.15
AC-FT	2,390	2,170	4,400	3,550	4,310	1,940	1,940	2,970	1,880	610	617	1,970

CAL YR 1967 TOTAL 14,368.3 MEAN 39.4 MAX 399 MIN 2.9 CFSM 6.57 IN 89.06 AC-FT 25,500
WTR YR 1968 TOTAL 14,493.9 MEAN 39.6 MAX 399 MIN 3.0 CFSM 6.60 IN 89.86 AC-FT 26,750

12114000 SOUTH FORK CEDAR RIVER NEAR LESTER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	20	37	11	6.8	2.8	46	29	91	29	6.0	3.6
2	17	21	40	11	6.4	2.8	48	27	95	27	6.0	3.6
3	15	21	156	19	6.0	2.9	34	26	97	25	5.9	3.7
4	16	20	143	44	5.6	3.7	31	25	101	24	6.1	4.0
5	14	19	83	234	5.2	6.6	30	31	93	22	7.0	4.2
6	22	19	57	99	4.7	7.2	31	40	78	21	6.5	3.8
7	24	18	46	63	4.3	5.6	29	56	63	20	6.1	3.5
8	21	27	40	48	4.0	5.1	28	90	60	18	5.8	3.2
9	21	55	35	40	3.8	4.7	30	150	60	17	5.6	3.1
10	27	60	33	35	4.8	4.4	33	200	56	16	5.4	3.0
11	29	88	30	30	5.7	4.3	34	170	50	16	5.2	3.0
12	31	96	26	26	6.0	4.3	41	155	46	15	5.0	2.9
13	33	69	24	23	5.7	4.3	51	150	42	14	4.9	3.3
14	33	53	22	21	5.5	4.6	41	140	38	13	4.8	3.3
15	43	44	21	19	4.5	5.3	35	125	35	12	4.7	2.9
16	41	37	19	18	3.8	7.1	34	115	33	10	4.6	2.9
17	38	32	18	17	3.6	15	35	105	30	10	4.5	3.4
18	35	31	17	16	3.6	19	42	110	29	9.7	4.3	3.9
19	35	30	16	15	3.6	18	46	120	26	9.4	4.2	3.8
20	41	38	15	14	3.4	17	40	110	23	9.0	4.2	3.8
21	44	54	14	13	3.4	18	38	110	21	8.7	4.1	3.3
22	44	106	13	12	3.4	19	43	125	21	8.3	4.1	6.5
23	40	90	12	11	3.3	20	60	165	25	8.0	4.0	8.7
24	37	66	13	10	3.3	19	55	153	38	7.7	3.9	8.7
25	35	51	12	10	3.1	17	45	110	38	7.4	3.9	8.3
26	32	44	12	9.7	3.1	18	37	91	38	7.1	3.8	7.4
27	28	50	11	9.4	2.8	25	35	76	35	7.0	3.8	6.8
28	26	44	11	9.1	2.7	30	38	63	33	6.8	3.8	6.8
29	24	45	10	8.5	-----	33	38	97	31	6.6	3.8	6.8
30	24	40	10	7.9	-----	39	32	150	30	6.4	3.8	28
31	23	-----	9.8	7.3	-----	49	-----	101	-----	6.2	3.7	-----
TOTAL	911	1,388	1,005.8	910.9	122.1	431.7	1,152	3,215	1,456	417.3	149.5	160.2
MEAN	29.4	46.3	32.4	29.4	4.36	13.9	38.4	104	48.5	13.5	4.82	5.34
MAX	44	106	156	234	6.8	49	60	200	101	29	7.0	28
MIN	14	18	9.8	7.3	2.7	2.8	28	25	21	6.2	3.7	2.9
CFSM	4.90	7.72	5.40	4.90	7.3	2.32	6.40	17.3	8.08	2.25	.80	.89
IN-	5.65	8.41	6.24	5.65	7.6	2.44	7.14	19.93	9.03	2.59	.99	.99
AC-FT	1,810	2,750	2,000	1,810	242	856	2,280	6,380	2,890	828	297	318
CAL YR 1968	TOTAL	13,280.9	MEAN	36.3	MAX	312	MIN	5.9	CFSM	6.05	IN	82.34
WTR YR 1969	TOTAL	11,319.5	MEAN	31.0	MAX	234	MIN	2.7	CFSM	5.17	IN	70.18
									AC-FT	26,340	AC-FT	22,450

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	6.8	15	22	29	22	34	32	99	15	4.9	3.8
2	37	6.5	14	21	25	21	36	41	119	14	5.1	3.0
3	35	6.8	13	20	24	20	33	56	126	14	4.8	4.9
4	29	17	13	18	21	18	34	89	102	14	4.6	3.8
5	23	22	12	17	20	17	47	95	86	13	4.5	3.7
6	20	19	11	17	19	21	57	63	89	12	4.4	6.2
7	18	11	11	17	19	39	43	47	79	12	4.3	13
8	20	16	10	17	24	34	47	42	57	11	4.3	9.6
9	28	15	9.7	17	26	32	104	43	51	9.9	4.2	7.8
10	27	14	9.0	16	31	30	148	35	47	9.9	4.1	6.7
11	25	13	10	16	35	28	95	30	42	9.5	4.0	6.0
12	22	13	13	15	39	27	68	27	38	8.7	3.9	5.5
13	20	12	18	17	43	25	52	25	37	8.4	4.0	5.1
14	18	12	25	58	40	32	43	25	39	8.0	3.9	4.9
15	17	12	25	50	53	43	37	33	38	7.3	3.7	4.7
16	15	12	24	42	108	60	33	74	35	7.1	3.7	4.5
17	14	11	23	38	81	52	31	115	32	6.9	3.7	4.6
18	13	10	25	74	56	43	30	104	36	6.6	3.6	6.5
19	12	10	28	127	44	39	29	91	37	6.3	3.6	6.4
20	12	13	35	145	39	36	27	80	37	6.1	3.5	5.5
21	10	19	49	127	33	33	25	74	39	6.0	3.4	5.2
22	9.7	18	32	134	31	31	23	36	34	5.8	3.4	8.2
23	9.7	25	48	161	28	32	23	86	30	5.6	3.4	8.6
24	9.0	28	40	112	27	36	24	89	27	5.4	3.4	7.8
25	8.7	27	37	79	26	33	22	108	23	6.8	3.4	7.5
26	8.0	24	34	60	25	33	20	119	22	7.1	3.2	7.0
27	8.0	22	30	48	25	32	19	84	21	6.2	3.2	6.7
28	7.7	20	28	40	23	38	18	68	19	5.6	3.2	6.3
29	7.4	18	27	34	-----	36	20	71	19	5.3	3.2	6.0
30	7.4	17	25	30	-----	33	28	75	17	5.1	3.1	5.6
31	7.1	-----	23	30	-----	31	-----	75	-----	4.9	3.0	-----
TOTAL	530.7	477.1	736.7	1,619	994	1,007	1,260	2,077	1,473	263.5	118.7	184.3
MEAN	17.1	15.9	23.4	52.2	35.5	32.5	42.0	67.0	49.1	8.50	3.83	6.14
MAX	37	28	52	161	108	60	148	119	126	15	5.1	13
MIN	7.1	6.5	9.0	15	19	17	18	25	17	4.9	3.0	3.0
CFSM	2.85	2.65	3.97	8.70	5.92	5.42	7.00	11.2	8.18	1.42	.64	1.02
IN-	3.29	2.96	4.57	10.04	6.16	6.24	7.81	12.86	9.13	1.63	.74	1.14
AC-FT	1,050	946	1,460	3,210	1,970	2,000	2,500	4,120	2,920	523	235	366
CAL YR 1969	TOTAL	9,759.2	MEAN	26.7	MAX	234	MIN	2.7	CFSM	4.45	IN	60.51
WTR YR 1970	TOTAL	10,741.0	MEAN	29.4	MAX	161	MIN	3.0	CFSM	4.90	IN	66.59
									AC-FT	19,360	AC-FT	21,300

12115000 CEDAR RIVER NEAR CEDAR FALLS, WASH.

LOCATION (REVISED).--Lat 47°22'13", long 121°37'26", in SE¼SW¼ sec.23, T.22 N., R.9 E., King County, Snoqualmie National Forest, on left bank 1.4 miles upstream from Chester Morse Lake, 8.3 miles southeast of Cedar Falls, and at mile 43.5.

DRAINAGE AREA.--40.7 sq mi.

PERIOD OF RECORD.--October 1945 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (from topographic map). Prior to Oct. 26, 1957, at site 80 ft downstream at present datum.

AVERAGE DISCHARGE.--25 years, 273 cfs (91.09 inches per year, 197,800 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,200 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1430	*1,320	5.90	Oct. 27, 1967	2130	1,770	6.54	Jan. 5, 1969	1030	1,880	6.68
Dec. 13, 1966	1800	*1,450	6.09	Dec. 25, 1967	1330	5,260	8.25	May 30, 1969	0400	1,200	5.70
Dec. 20, 1966	0030	1,210	5.72	Jan. 20, 1968	2100	*3,280	8.27				
Jan. 15, 1967	1130	1,450	6.08	Feb. 19, 1968	1145	2,110	6.96	Jan. 22, 1970	2400	*1,270	5.84
Jan. 19, 1967	1830	1,230	5.75	Dec. 3, 1968	1830	*2,090	6.94				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 30, 1966	29	2.42	1969	Sept. 10, 11, 12, 13, 16, 1969	43	2.41
1967	Sept. 27, 28, 1967	25	2.32	1970	Aug. 30, 31, Sept. 1, 2, 3	30	3.41
1968	Oct. 1, 1967	31	2.41				

Period of record: Maximum discharge, 9,490 cfs Nov. 22, 1959 (gage height, 11.34 ft, from high watermark in well), from rating curve extended above 4,300 cfs on basis of slope-area measurements at gage heights 10.16 and 11.34 ft; maximum gage height, 11.4 ft Feb. 11, 1951 (backwater from Chester Morse Lake); minimum discharge, 20 cfs Nov. 30 to Dec. 1, 1952.

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1286: 1946-48, 1950(P), 1951. WSP 1516: 1946(M), 1947-48(P), 1950-51(M), 1953-54(P), 1955(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	66	190	71	130	124	700	317	259	189	68	36
2	34	76	216	73	120	113	715	412	248	197	66	36
3	34	92	216	73	113	105	565	610	237	337	64	35
4	34	212	471	68	111	98	524	790	240	341	63	34
5	38	338	397	74	109	92	524	1,010	240	317	62	33
6	96	292	337	186	105	92	547	1,220	305	292	59	33
7	74	221	386	254	111	89	610	950	383	257	58	33
8	58	187	386	265	103	112	615	845	397	234	57	32
9	59	165	324	214	105	273	655	835	368	219	57	32
10	54	152	274	187	98	271	735	705	455	204	58	32
11	49	157	229	229	114	209	750	542	542	194	58	33
12	49	138	199	318	118	197	625	493	480	176	55	33
13	57	128	178	570	105	265	480	463	401	165	62	32
14	64	124	159	538	105	311	420	408	383	165	58	32
15	96	122	144	405	94	295	412	379	401	150	54	33
16	91	128	134	311	89	254	431	379	439	142	51	32
17	103	118	124	257	87	214	427	334	393	132	50	32
18	114	113	116	221	87	192	390	321	334	122	49	38
19	237	120	111	192	87	183	354	334	314	120	46	34
20	224	114	111	174	113	169	347	393	271	111	43	32
21	165	178	114	159	134	154	365	516	245	103	41	31
22	140	254	100	148	172	138	341	459	221	100	41	30
23	122	216	92	140	176	132	341	386	211	96	41	31
24	107	192	92	130	163	132	368	375	240	94	40	31
25	96	176	87	122	154	148	408	467	209	92	40	30
26	89	167	82	114	146	180	401	592	201	85	42	32
27	85	172	81	114	150	234	351	511	209	82	49	32
28	84	152	91	116	138	289	330	401	295	77	44	30
29	77	138	81	128	-----	379	321	358	234	76	40	30
30	77	130	76	136	-----	592	317	337	199	73	40	30
31	70	-----	71	140	-----	715	-----	295	-----	70	38	-----
TOTAL	2,712	4,838	5,629	6,127	3,337	6,751	14,369	16,437	9,354	5,012	1,594	974
MEAN	87.5	161	182	198	119	218	479	530	312	162	51.4	32.5
MAX	237	338	471	570	176	715	750	1,220	542	341	68	38
MIN	34	66	71	68	87	89	317	295	199	70	38	30
CFSM	2.15	3.96	4.47	4.86	2.92	5.36	11.8	13.0	7.87	3.98	1.24	.80
IN.	2.48	4.42	5.14	5.60	3.05	6.17	13.13	15.02	6.55	4.58	1.46	.89
AC-FT	5,380	9,600	11,170	12,150	6,620	13,390	28,500	32,600	18,550	9,940	3,160	1,930
CAL YR 1965	TOTAL 83,787	MEAN 230	MAX 2,570	MIN 33	CFSM 5.65	IN 76.58	AC-FT 166,200					
WTR YR 1966	TOTAL 77,134	MEAN 211	MAX 1,220	MIN 30	CFSM 5.18	IN 70.50	AC-FT 153,000					

12115000 CEDAR RIVER NEAR CEDAR FALLS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	152	735	447	408	221	161	154	424	204	51	30
2	47	138	942	386	372	206	161	159	592	206	50	35
3	36	126	416	596	393	189	163	172	552	201	49	32
4	32	114	337	516	758	178	169	192	498	185	46	30
5	30	120	283	397	720	167	169	216	547	169	46	30
6	30	109	234	321	534	163	165	274	583	157	46	30
7	33	100	209	280	424	154	169	368	524	144	46	30
8	51	92	185	354	358	167	176	447	439	136	44	29
9	42	103	163	390	324	178	174	511	386	124	42	29
10	36	114	161	408	358	163	165	424	375	118	42	34
11	34	105	192	606	327	148	161	361	365	111	41	51
12	37	136	346	556	324	140	167	317	358	111	40	44
13	40	146	1,240	835	416	134	174	295	397	105	38	35
14	35	211	1,020	1,020	341	128	161	289	455	100	38	31
15	33	286	650	1,220	301	132	150	334	488	92	38	29
16	32	295	685	665	277	163	146	520	511	85	36	29
17	32	274	850	606	358	176	138	705	534	82	35	28
18	32	243	865	471	420	172	146	695	524	81	35	28
19	37	211	850	840	341	163	146	685	547	77	34	28
20	109	199	990	850	295	174	146	805	534	76	34	28
21	82	189	670	588	268	183	148	900	451	74	35	28
22	261	174	488	455	243	337	146	850	405	68	34	29
23	695	167	390	372	224	443	148	720	344	67	34	28
24	488	157	337	317	214	365	157	556	334	63	34	28
25	321	427	286	274	206	301	167	451	330	62	32	27
26	292	439	245	254	192	271	161	420	324	62	32	26
27	292	390	219	387	185	240	172	424	298	59	31	26
28	229	368	209	735	211	216	169	455	259	57	30	26
29	214	361	292	715	-----	201	161	538	248	55	30	27
30	199	725	268	606	-----	185	157	467	221	55	30	30
31	172	-----	283	475	-----	169	-----	397	-----	54	30	-----
TOTAL	4,033	6,671	14,640	17,142	9,792	6,227	4,793	14,101	12,847	3,242	1,183	915
MEAN	130	222	472	553	350	201	160	455	428	105	38.2	30.5
MAX	695	725	1,240	1,220	758	443	176	900	592	206	51	51
MIN	30	92	161	254	185	128	138	154	221	54	30	26
CFSM	3.19	5.45	11.6	13.1	8.60	4.94	3.93	11.2	10.5	2.58	0.94	.75
IN.	3.49	6.10	13.38	15.67	8.95	5.69	4.38	12.89	11.74	2.96	1.08	.84
AC-FT	8,000	13,230	29,040	34,000	19,420	12,350	9,510	27,070	25,480	6,430	2,350	1,610

CAL YR 1966 TOTAL 89,299 MEAN 245 MAX 1,240 MIN 30 CFSM 6.02 IN 81.62 AC-FT 177,100
WTR YR 1967 TOTAL 95,586 MEAN 262 MAX 1,240 MIN 26 CFSM 6.44 IN 87.37 AC-FT 189,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	583	138	375	201	400	300	428	565	133	53	151
2	34	427	152	305	229	379	283	359	935	127	51	137
3	60	334	152	268	335	359	250	336	755	122	51	122
4	61	262	144	245	660	382	244	349	538	118	50	110
5	43	214	138	224	471	400	258	333	435	110	50	101
6	40	185	122	201	379	352	269	318	382	107	48	94
7	43	169	113	192	324	306	283	291	333	99	45	88
8	41	157	107	180	283	269	266	286	312	96	43	81
9	37	214	163	176	252	237	260	315	274	91	41	78
10	36	593	477	159	224	218	266	362	258	89	40	75
11	82	524	790	146	206	206	315	421	244	89	39	72
12	116	383	471	144	196	194	297	414	231	108	39	72
13	165	301	344	172	184	184	269	339	229	94	38	70
14	317	271	277	209	175	173	277	303	224	96	60	103
15	178	257	234	286	169	196	280	271	206	96	78	216
16	134	245	211	251	164	218	250	266	201	88	62	237
17	109	224	187	206	166	204	226	291	194	83	60	597
18	101	209	169	194	533	191	216	352	189	78	71	835
19	109	189	152	800	1,790	180	211	428	184	78	67	628
20	91	174	140	1,950	1,310	171	201	547	169	84	62	470
21	148	161	132	1,980	1,180	164	194	421	160	75	58	371
22	339	150	424	984	1,210	158	189	349	178	72	57	327
23	596	146	735	710	1,090	162	194	327	160	70	67	364
24	397	219	1,860	825	960	169	198	303	149	68	99	306
25	408	192	2,700	710	720	173	247	324	141	64	112	266
26	324	172	1,720	538	556	182	271	336	137	63	169	237
27	795	163	1,110	414	484	351	258	312	147	60	196	208
28	1,010	161	850	359	443	463	274	309	158	59	286	185
29	570	163	640	310	418	475	393	312	151	58	247	168
30	610	148	488	221	-----	414	471	315	139	57	201	156
31	635	-----	405	239	-----	363	-----	286	-----	56	171	-----
TOTAL	7,663	7,590	15,745	14,019	15,312	8,273	7,910	10,603	8,378	2,688	2,711	6,925
MEAN	247	253	508	452	528	267	264	342	279	86.7	87.5	231
MAX	1,010	593	2,700	1,980	1,790	475	471	547	935	133	286	835
MIN	34	146	107	144	184	158	189	266	137	58	38	70
CFSM	6.07	6.22	12.5	11.1	13.0	6.56	6.49	8.40	6.86	2.13	2.15	5.68
IN.	7.00	6.94	14.39	12.81	14.00	7.56	7.23	9.69	7.66	2.46	2.48	6.33
AC-FT	15,200	15,050	31,230	27,810	30,370	16,410	15,690	21,030	16,620	5,330	5,380	13,740

CAL YR 1967 TOTAL 101,240 MEAN 277 MAX 2,700 MIN 26 CFSM 6.81 IN 92.53 AC-FT 200,800
WTR YR 1968 TOTAL 107,617 MEAN 295 MAX 2,700 MIN 34 CFSM 7.25 IN 98.55 AC-FT 213,900

12115000 CEDAR RIVER NEAR CEDAR FALLS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	148	292	115	95	67	510	333	624	248	77	47
2	134	150	300	125	95	69	427	309	660	258	76	47
3	127	156	1,060	129	95	72	351	280	695	237	74	52
4	133	166	1,060	312	88	70	312	266	730	248	72	52
5	120	140	633	1,520	84	103	318	280	710	220	94	56
6	160	133	458	960	82	103	321	342	606	208	77	50
7	179	127	371	678	78	94	306	486	506	196	73	47
8	156	177	351	466	80	88	298	775	482	185	72	45
9	148	351	330	367	80	83	312	904	490	174	68	44
10	196	371	336	312	83	78	351	1,040	482	168	67	44
11	215	618	327	266	103	76	358	935	431	168	65	43
12	237	710	286	225	98	76	486	875	394	168	65	44
13	286	518	250	201	89	76	562	870	364	154	63	47
14	269	388	225	163	83	76	450	820	330	144	57	52
15	321	327	213	168	82	82	374	710	306	138	56	46
16	306	275	203	160	80	100	351	628	295	131	54	44
17	275	235	185	152	80	120	367	592	286	123	49	49
18	258	190	144	115	82	261	526	638	272	120	47	49
19	242	240	148	144	82	245	542	670	242	115	46	65
20	324	289	158	136	78	230	458	633	213	111	46	64
21	345	379	150	125	78	218	420	670	192	108	47	58
22	336	695	144	120	77	230	458	800	201	103	48	99
23	312	615	144	115	74	253	885	885	236	100	49	108
24	292	482	184	110	72	218	604	890	412	97	50	156
25	272	384	154	110	72	208	486	715	367	95	52	136
26	225	336	144	108	69	225	412	602	351	90	52	123
27	196	361	140	104	68	286	374	526	327	88	53	110
28	179	324	129	104	67	308	458	309	266	83	50	108
29	168	351	120	102	-----	327	405	626	303	83	51	115
30	179	324	115	99	-----	384	361	1,040	275	82	49	347
31	164	-----	105	96	-----	514	-----	715	-----	78	48	-----
TOTAL	6,898	9,990	8,905	7,956	2,294	5,431	12,538	20,393	12,091	4,508	1,855	2,405
MEAN	223	323	287	257	81.9	175	418	658	423	145	59.8	80.2
MAX	345	710	1,060	1,520	243	514	638	1,048	730	250	94	347
MIN	120	127	105	96	67	67	298	266	192	78	46	43
CFSM	5.48	8.18	7.05	6.31	2.01	4.30	10.3	16.2	9.90	3.56	1.47	1.97
IN.	6.30	9.13	8.14	7.27	2.10	4.96	11.46	18.84	11.05	4.12	1.70	2.20
AC-FT	13,680	19,820	17,660	15,780	4,550	10,770	24,870	40,450	23,980	8,940	3,680	4,770

CAL YR 1968 TOTAL 102,612 MEAN 260 MAX 1,980 MIN 38 CFSM 6.88 IN 93.79 AC-FT 203,500
WTR YR 1969 TOTAL 95,244 MEAN 261 MAX 1,520 MIN 43 CFSM 6.41 IN 87.07 AC-FT 189,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	397	74	108	130	266	172	242	305	568	139	50	30
2	344	73	104	163	202	175	320	280	535	56	50	30
3	299	73	106	117	230	199	263	380	400	139	50	46
4	245	158	115	111	208	149	258	493	690	139	47	42
5	202	242	104	99	190	141	320	576	568	128	45	37
6	172	185	101	98	174	161	397	485	563	117	44	59
7	157	98	98	88	172	308	486	38	528	108	43	108
8	170	143	94	99	208	258	368	383	408	104	44	88
9	230	135	96	98	230	228	732	404	376	99	42	73
10	235	126	101	91	245	210	922	355	362	94	40	63
11	215	119	110	88	255	190	617	314	320	91	39	58
12	190	113	145	88	263	192	465	281	284	86	38	52
13	170	110	165	104	278	195	386	263	290	83	39	46
14	157	103	225	311	263	218	327	245	305	78	38	44
15	141	104	220	302	356	334	293	290	311	76	37	43
16	128	103	195	238	710	418	266	493	299	71	37	42
17	117	98	174	212	554	380	240	685	243	70	37	43
18	108	92	190	396	418	317	230	529	302	66	36	67
19	101	91	205	671	355	278	242	461	320	64	35	82
20	103	96	225	790	305	248	230	422	320	63	34	70
21	103	135	287	830	278	238	218	390	344	61	34	61
22	98	130	320	855	245	212	418	305	460	54	34	76
23	96	159	358	1,060	230	208	205	441	263	59	33	88
24	92	183	290	750	215	242	252	465	238	58	33	78
25	88	170	235	594	205	220	240	563	215	67	33	73
26	83	159	220	477	195	218	220	653	208	77	33	67
27	03	145	178	400	190	208	202	477	195	71	32	63
28	83	134	165	317	181	284	192	404	172	61	32	60
29	80	122	153	266	-----	269	200	408	163	59	32	58
30	78	115	145	228	-----	242	293	469	153	56	31	55
31	77	-----	137	230	-----	220	-----	445	-----	53	30	-----
TOTAL	4,842	3,851	5,379	10,276	7,661	7,278	9,681	13,235	10,857	2,632	1,188	1,802
MEAN	156	128	174	331	274	235	323	427	362	84.9	38.3	60.1
MAX	397	242	358	1,060	710	418	922	685	800	139	56	108
MIN	77	73	94	88	172	141	192	245	153	53	30	30
CFSM	3.83	3.15	4.28	8.13	6.73	5.77	7.94	10.5	8.89	2.09	.94	1.48
IN.	4.43	3.52	4.92	9.39	7.00	6.65	8.85	12.10	9.92	2.41	1.09	1.65
AC-FT	9,680	7,640	10,670	20,380	15,200	14,440	19,200	26,250	21,530	5,220	2,360	3,570

CAL YR 1969 TOTAL 83,543 MEAN 229 MAX 1,520 MIN 43 CFSM 5.63 IN 76.36 AC-FT 165,700
WTR YR 1970 TOTAL 70,682 MEAN 216 MAX 1,060 MIN 30 CFSM 5.31 IN 71.92 AC-FT 156,100

12115500 REX RIVER NEAR CEDAR FALLS, WASH.

LOCATION (REVISED).--Lat 47°21'03", long 121°39'43", in NE¼NW¼ sec.33, T.22 N., R.9 E., King County, Snoqualmie National Forest, on right bank 3.0 miles upstream from mouth and Chester Morse Lake and 7.5 miles southeast of Cedar Falls.

DRAINAGE AREA.--13.4 sq mi.

PERIOD OF RECORD.--October 1945 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,600 ft (from topographic map).

AVERAGE DISCHARGE.--25 years, 104 cfs (105.40 inches per year, 75,350 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (700 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1315	*632	5.27	Oct. 27, 1967	1945	1,060	5.90	Dec. 3, 1968	1800	1,400	6.30
				Dec. 25, 1967	1145	1,550	6.47	Jan. 5, 1969	-	*3,110	a7.81
Oct. 22, 1966	1615	833	5.59	Jan. 20, 1968	2000	*1,770	6.69	May 29, 1969	2400	805	5.55
Dec. 13, 1966	1330	*903	5.69	Feb. 19, 1968	0615	1,470	6.38	June 24, 1969	0100	791	5.53
Jan. 13, 1967	2200	749	5.47	Feb. 21, 1968	1930	805	5.55				
Jan. 15, 1967	0915	875	5.65	Sept. 17, 1968	1200	742	5.46	June 18, 1970	1500	*938	5.74
								Apr. 9, 1970	1700	840	5.60

a From high watermark.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 9, 10, 16, 17, 1966	9.4	3.13	1969	Sept. 10, 11, 12, 1969	6.7	3.18
1967	Sept. 26-29, 1967	4.8	3.05	1970	Aug. 30, 31, Sept. 2, 1970	6.7	3.11
1968	Oct. 2, 1967	7.4	3.13				

Period of record: Maximum discharge, 4,200 cfs Nov. 22, 1959 (gage height, 8.20 ft), from rating curve extended above 1,600 cfs on basis of slope-area measurement of peak flow; maximum gage height, 9.31 ft Nov. 19, 1962 (backwater from debris); minimum discharge, 4.3 cfs Nov. 29, 1952 (gage height, 2.43 ft).

REMARKS.--Records good. No gage-height record Dec. 20, 1968, to Jan. 17, 1969. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1286: 1946, 1948(P), 1949(M), 1950(P), 1952(M). WSP 1446: 1946(M), 1951, 1953-55(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	33	90	27	57	45	290	133	96	90	19	11
2	15	45	118	28	53	40	274	179	92	100	18	11
3	14	87	141	26	49	37	202	247	90	237	17	11
4	15	198	335	26	48	34	192	317	112	185	17	11
5	22	267	198	43	48	33	190	420	115	192	17	10
6	92	173	164	170	44	31	215	535	152	125	16	10
7	40	120	229	195	43	30	233	385	182	105	16	10
8	32	92	192	176	41	53	219	340	167	92	15	9.7
9	37	76	144	128	40	141	290	317	158	81	16	9.7
10	29	76	112	102	37	125	326	240	259	73	17	10
11	27	81	92	125	53	90	371	195	270	70	17	12
12	29	67	76	185	50	81	251	192	212	61	15	11
13	41	61	67	299	38	147	185	179	176	56	34	10
14	62	59	59	240	37	167	170	147	170	58	20	10
15	86	57	56	170	33	141	176	149	179	50	16	10
16	64	53	52	125	32	108	179	161	189	48	15	9.7
17	84	48	46	98	31	87	164	136	158	43	14	10
18	98	47	45	81	30	75	144	133	133	40	13	20
19	212	49	43	70	30	67	125	152	125	40	13	12
20	130	53	46	64	52	61	133	173	102	35	12	11
21	94	125	44	58	54	54	161	233	105	32	12	10
22	73	147	38	53	64	50	147	189	96	30	12	10
23	62	105	35	50	67	47	141	164	94	28	11	13
24	54	85	36	46	61	47	144	164	130	28	11	10
25	49	75	33	45	57	52	164	208	102	28	11	10
26	44	72	31	42	54	72	144	226	96	25	12	14
27	43	72	33	44	53	102	125	192	100	24	24	13
28	43	64	34	49	49	128	118	152	179	22	14	11
29	37	58	30	58	-----	167	120	158	115	21	12	10
30	48	54	29	61	-----	312	118	125	90	23	12	10
31	36	-----	27	61	-----	304	-----	105	-----	20	12	-----
TOTAL	1,727	2,599	2,675	2,945	1,303	2,928	5,719	6,626	4,252	2,019	480	330.1
MEAN	55.7	86.6	86.3	95.0	46.5	94.5	191	214	142	65.1	15.5	11.0
MAX	212	267	335	299	67	312	371	555	270	237	34	20
MIN	14	33	27	26	30	30	118	105	90	20	11	9.7
CFSM	4.16	6.46	6.44	7.09	3.47	7.05	14.3	16.0	10.6	4.66	1.16	6.62
IN.	4.79	7.22	7.43	8.18	3.62	8.13	15.88	18.39	11.80	5.60	1.33	9.92
AC-FT	3,430	5,160	5,310	5,840	2,580	5,810	11,340	13,140	8,430	4,000	952	655
CAL YR 1965	TOTAL	32,610.0	MEAN	89.3	MAX	1,380	MIN	11	CFSM	6.66	IN	90.53
WTR YR 1966	TOTAL	33,603.1	MEAN	92.1	MAX	535	MIN	9.7	CFSM	6.87	IN	93.29
										AC-FT	64,680	
											AC-FT	64,650

LAKE WASHINGTON BASIN

12115500 REX RIVER NEAR CEDAR FALLS, WASH.---CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	74	308	150	138	80	49	51	164	46	9.5	5.4
2	53	65	226	135	125	72	59	56	240	44	9.2	7.0
3	51	58	176	167	167	66	51	61	203	40	8.8	6.0
4	17	53	147	190	380	59	55	69	187	36	8.5	5.2
5	16	64	125	140	252	55	52	88	207	33	8.5	5.2
6	16	54	108	120	187	52	52	113	207	30	8.5	5.2
7	25	49	96	100	144	49	56	147	173	27	8.8	5.2
8	59	45	83	120	118	55	58	180	144	26	8.5	5.0
9	31	92	76	130	110	55	56	222	125	24	7.7	5.0
10	26	81	98	170	144	51	52	156	123	22	7.4	6.2
11	25	69	136	260	123	46	52	131	115	21	7.4	15
12	30	123	271	230	128	43	55	123	118	20	7.0	12
13	31	125	743	586	164	41	54	120	133	19	7.0	9.2
14	27	215	430	640	125	38	50	118	153	18	6.7	7.7
15	25	212	236	634	104	41	46	153	161	17	6.7	6.7
16	24	195	357	339	92	70	45	229	170	16	6.3	6.3
17	24	158	425	222	183	69	43	272	173	15	6.3	6.0
18	136	361	200	164	200	66	44	252	161	15	6.3	6.0
19	51	110	440	352	144	59	43	264	167	16	6.0	6.0
20	160	98	540	298	115	72	44	334	144	16	6.0	5.7
21	90	85	340	203	99	78	46	357	133	16	7.7	5.7
22	440	74	210	150	84	170	48	312	125	14	6.7	7.7
23	513	74	170	120	74	196	52	240	101	13	6.3	6.0
24	251	69	140	99	69	138	54	187	92	12	6.0	5.4
25	164	358	120	84	67	106	56	161	88	12	6.0	5.4
26	164	240	100	82	62	90	54	158	80	11	5.7	5.1
27	145	226	92	236	59	76	55	167	72	11	5.4	4.9
28	210	219	88	430	78	87	52	183	62	11	5.4	4.9
29	120	222	110	307	-----	61	49	193	56	10	5.4	6.0
30	103	410	92	233	-----	55	48	164	50	9.9	5.4	9.2
31	83	-----	110	170	-----	51	-----	144	-----	9.5	5.4	-----
TOTAL	2,890	4,053	6,954	7,314	3,735	2,227	1,520	5,405	4,127	630.4	216.7	196.3
MEAN	93.2	135	223	236	133	71.8	50.7	174	138	20.3	6.99	6.54
MAX	513	410	743	640	380	196	58	357	240	46	9.5	15
MIN	16	45	76	82	59	38	43	51	50	9.5	5.4	4.9
CFSM	6.96	10.1	16.7	17.6	9.93	5.36	3.78	13.0	10.3	1.51	.52	.49
IN-	8.02	11.25	19.31	20.30	10.37	6.18	4.22	15.00	11.46	1.75	.60	.54
AC-FT	5.730	8.040	13.790	14.510	7.410	4.420	3.010	10.720	8.190	1.250	.430	.389
CAL YR 1966	TOTAL 40,499.1			MEAN 111	MAX 743	MIN 9.7	CFSM 8.28	IN 112.43	AC-FT 80,330			
WTR YR 1967	TOTAL 39,268.4			MEAN 108	MAX 743	MIN 4.9	CFSM 8.06	IN 109.01	AC-FT 77,890			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	230	50	106	52	115	108	158	280	44	14	66
2	9.2	159	58	84	66	106	104	128	485	42	13	56
3	69	114	64	72	123	97	88	120	298	39	14	49
4	33	87	60	65	252	118	94	131	196	36	13	42
5	20	69	56	56	161	115	97	120	147	34	14	39
6	19	58	50	50	113	92	92	110	113	31	13	35
7	28	55	44	46	90	80	92	108	92	29	12	32
8	20	51	41	44	80	69	86	115	82	27	11	30
9	16	119	130	44	70	61	90	138	72	25	11	27
10	18	310	350	40	66	56	101	158	66	25	11	25
11	87	217	410	36	61	52	115	167	66	25	10	25
12	88	145	230	38	58	51	92	153	61	37	9.9	25
13	138	105	150	117	54	46	82	118	67	26	9.9	24
14	160	94	100	173	49	43	84	106	66	31	43	70
15	89	94	76	228	45	58	82	97	58	33	42	173
16	63	101	66	162	41	78	72	97	54	26	25	118
17	50	79	57	114	44	69	64	113	50	24	23	408
18	59	72	51	95	405	62	59	136	46	23	45	420
19	54	66	45	416	1,110	58	58	158	44	25	39	295
20	42	60	41	1,020	586	58	54	225	42	26	39	202
21	92	56	41	812	562	56	51	156	40	23	32	146
22	173	50	132	316	495	56	54	131	52	21	31	136
23	211	54	237	222	430	64	62	123	43	21	56	181
24	145	90	712	260	361	67	64	106	39	20	84	127
25	146	74	1,090	203	236	67	108	118	37	19	90	102
26	101	62	622	141	177	46	108	115	36	18	128	85
27	430	54	352	104	153	248	97	97	46	18	161	74
28	361	60	252	99	133	236	125	104	56	17	210	63
29	196	68	187	99	123	268	170	97	54	16	141	55
30	233	60	141	72	-----	180	193	97	48	15	99	50
31	268	-----	115	58	-----	131	-----	84	-----	14	78	-----
TOTAL	3,433.2	2,913	6,010	5,392	6,196	2,923	2,746	3,884	2,836	810	1,521.8	3,180
MEAN	111	97.1	194	174	214	94.3	91.5	125	94.5	26.1	49.1	106
MAX	430	310	1,090	1,020	1,110	268	193	225	485	44	210	420
MIN	9.2	50	41	36	41	43	51	84	36	14	9.9	24
CFSM	8.28	7.25	14.5	13.0	16.0	7.04	6.83	9.33	7.05	1.99	3.66	7.91
IN-	9.53	8.09	14.68	14.97	17.20	8.11	7.42	10.8	7.87	2.25	4.22	8.83
AC-FT	6.810	5.780	11.920	10.700	12.290	5.800	5.450	7.700	5.630	1.610	3.020	6.310
CAL YR 1967	TOTAL 37,727.6			MEAN 103	MAX 1,090	MIN 4.9	CFSM 7.69	IN 104.74	AC-FT 74,838			
WTR YR 1968	TOTAL 41,845.0			MEAN 114	MAX 1,110	MIN 9.2	CFSM 8.51	IN 116.17	AC-FT 83,000			

12115500 REX RIVER NEAR CEDAR FALLS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	45	54	106	56	24	16	208	96	226	98	16	7.8		
2	40	67	133	70	23	16	154	85	230	87	16	7.8		
3	36	67	628	100	20	16	111	77	230	93	15	11		
4	41	59	450	350	20	16	91	77	250	96	18	11		
5	34	55	233	1,000	20	32	96	87	223	80	33	11		
6	90	51	156	500	20	29	102	119	183	73	18	8.3		
7	85	48	123	250	19	27	93	190	148	65	16	7.8		
8	64	84	133	170	19	25	87	304	146	62	15	7.4		
9	64	208	123	130	18	24	100	395	191	58	14	7.1		
10	138	192	138	110	20	22	124	380	140	54	13	7.1		
11	132	427	131	92	32	21	126	332	121	59	13	7.1		
12	130	339	106	80	28	21	204	318	102	59	15	6.7		
13	155	218	86	70	25	20	212	300	93	52	13	11		
14	128	158	74	62	24	20	148	279	89	48	12	14		
15	179	125	67	58	22	26	116	234	80	44	12	8.7		
16	137	99	62	54	21	34	106	204	75	41	12	7.8		
17	117	84	55	50	21	91	151	204	71	38	11	18		
18	110	113	58	46	21	106	223	230	65	36	10	42		
19	116	108	52	44	20	91	193	246	59	34	11	48		
20	190	141	48	42	20	75	151	212	53	32	10	37		
21	175	177	45	40	19	68	143	230	47	30	10	28		
22	160	307	41	38	19	71	167	287	59	28	9.6	102		
23	123	248	48	36	18	77	238	332	143	26	9.1	151		
24	101	183	113	35	18	68	193	322	346	24	8.7	126		
25	89	141	82	34	17	63	143	234	262	24	9.6	106		
26	75	120	70	32	17	70	116	197	242	23	9.1	78		
27	65	161	62	30	16	98	116	173	183	21	10	67		
28	57	133	59	29	16	104	137	151	163	21	9.1	63		
29	52	144	96	28	-----	111	129	365	146	20	8.7	71		
30	72	123	54	28	-----	146	106	478	119	18	8.3	318		
31	62	-----	52	26	-----	223	-----	258	-----	17	7.8	-----		
TOTAL	3,062	4,434	3,644	3,690	577	1,827	4,284	7,396	4,445	1,461	393.0	1,396.6		
MEAN	98.8	148	118	119	20.6	58.9	143	239	148	47.1	12.7	46.6		
MAX	190	427	628	1,000	32	223	238	478	346	98	33	318		
MIN	34	48	41	26	16	16	87	77	47	17	7.8	6.7		
CFSM	7.37	11.0	8.81	8.88	1.54	4.40	10.7	17.8	11.0	3.51	.95	3.48		
IN.	8.50	12.31	10.12	10.24	1.60	5.07	11.89	20.53	12.34	4.06	1.09	3.88		
AC-FT	6,070	8,790	7,230	7,320	1,140	3,620	8,500	14,670	8,820	2,900	780	2,770		
CAL YR 1968	TOTAL	40,628.8	MEAN	111	MAX	1,110	MIN	9.9	CFSM	8.28	IN	112.79	AC-FT	80,590
WTR YR 1969	TOTAL	36,609.6	MEAN	100	MAX	1,000	MIN	6.7	CFSM	7.46	IN	101.63	AC-FT	72,620

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	242	25	43	41	93	47	89	147	222	31	13	7.0		
2	197	24	40	38	80	44	93	161	244	29	17	6.9		
3	143	28	35	36	78	43	83	183	244	27	13	27		
4	104	163	46	31	67	40	87	225	190	25	12	14		
5	82	163	39	28	60	38	148	210	161	23	11	16		
6	67	104	35	28	60	63	170	164	161	22	11	72		
7	63	78	33	28	67	143	131	131	125	21	11	118		
8	80	65	31	26	82	91	124	136	99	20	11	85		
9	170	59	30	26	89	75	484	161	108	19	9.9	54		
10	140	54	28	24	104	65	440	125	99	18	9.9	41		
11	106	50	42	24	114	60	233	104	84	17	9.5	34		
12	85	48	78	22	121	64	161	97	74	17	9.2	29		
13	71	44	121	43	129	64	125	90	72	16	11	26		
14	63	41	177	266	102	121	104	88	70	15	9.5	24		
15	56	45	129	170	193	177	90	123	74	15	8.8	21		
16	50	42	89	104	484	226	80	200	67	15	8.8	20		
17	40	39	77	93	250	148	74	222	61	14	8.8	22		
18	42	38	119	616	163	109	74	170	66	14	8.5	64		
19	39	39	126	646	121	87	76	147	62	13	8.1	58		
20	43	56	140	544	98	78	70	131	62	13	8.1	48		
21	37	75	208	520	82	75	66	125	59	13	7.7	40		
22	34	62	193	478	71	65	64	133	52	12	7.7	71		
23	37	106	186	478	67	70	70	141	48	12	7.4	56		
24	33	93	121	283	62	82	84	150	43	12	7.4	48		
25	31	77	87	208	59	68	76	196	39	21	7.4	42		
26	28	67	71	154	55	67	69	190	37	28	7.4	38		
27	32	60	60	134	53	64	62	138	35	23	7.3	35		
28	31	54	54	98	49	100	58	133	34	16	7.4	31		
29	30	50	50	78	-----	83	82	203	44	15	7.2	29		
30	29	47	47	77	-----	73	167	203	36	14	6.9	26		
31	27	-----	45	78	-----	65	-----	177	-----	13	6.9	-----		
TOTAL	2,232	1,896	2,580	5,410	3,053	2,595	3,734	4,804	2,772	563	289.8	1,202.9		
MEAN	72.0	63.2	83.2	175	109	83.7	124	155	92.4	18.2	9.35	40.1		
MAX	242	163	208	646	484	226	484	225	244	31	17	118		
MIN	27	24	28	22	49	38	58	88	34	12	6.9	6.9		
CFSM	5.37	4.72	6.21	13.1	8.13	6.25	9.25	11.6	6.90	1.36	.70	2.99		
IN.	6.20	5.26	7.16	15.02	8.48	7.20	10.37	13.34	7.70	1.56	.80	3.34		
AC-FT	4,430	3,760	5,120	10,730	6,060	5,150	7,410	9,530	5,500	1,120	575	2,390		
CAL YR 1969	TOTAL	32,177.6	MEAN	88.2	MAX	1,000	MIN	6.7	CFSM	6.58	IN	89.33	AC-FT	63,820
WTR YR 1970	TOTAL	31,131.7	MEAN	85.3	MAX	846	MIN	6.9	CFSM	6.37	IN	86.43	AC-FT	61,750

LAKE WASHINGTON BASIN

12116100 CANYON CREEK NEAR CEDAR FALLS, WASH.

LOCATION.--Lat 47°25'11", long 121°45'55", in NW¼SE¼ sec.3, T.22 N., R.8 E., King County, Snoqualmie National Forest, on right bank 400 ft upstream from mouth and 0.8 mile east of Cedar Falls.

DRAINAGE AREA.--0.19 sq mi.

PERIOD OF RECORD.--May 1945 to September 1970.

GAGE.--Water-stage recorder and wooden control. Altitude of gage is 1,040 ft (from topographic map).

AVERAGE DISCHARGE.--25 years, 16.1 cfs (11,660 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	May 13-16, 1966a		32	1.58	Oct. 23 to Nov. 3, 7-12, 1965		.42	.57
1967	Jan. 24, 25, 27, 28, 1967		46	bl.52	Oct. 28, 29, 1966		.30	.55
1968	Jan. 3-5, 1968		39	-	Oct. 17-20, 1967		c.42	-
1969	June 13, 1969		41	1.46	Mar. 14, 15, 16, 21, 22, 1969		1.9	.73
1970	June 17, 1970		23	1.22	Dec. 18-21, 1970		.72	.61

a About.

b Occurred Jan. 27, 1967.

c Minimum daily.

Period of record: Maximum discharge, 102 cfs Dec. 19, 1946 (gage height, 2.01 ft); minimum, 0.3 cfs for many days in 1953-55, 1958, 1961, Oct. 28, 29, 1966.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. No regulation or diversion above station. Flow is mostly seepage from Chester Morse Lake.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.66	.42	.66	1.9	4.2	2.7	2.3	22	26	16	9.9	3.0
2	.66	.42	.66	1.9	3.9	2.5	2.5	23	26	16	9.9	2.9
3	.66	.42	.73	1.9	3.9	2.5	2.3	24	25	16	9.4	2.8
4	.66	.55	1.1	1.9	3.9	2.5	2.5	24	25	16	9.4	2.7
5	.60	.60	.81	2.0	3.9	2.5	2.5	28	24	15	9.0	2.6
6	.66	.46	.81	2.0	3.9	2.7	2.9	29	23	15	8.6	2.5
7	.60	.42	.90	2.1	3.9	2.7	3.4	30	23	14	8.2	2.4
8	.60	.42	1.1	2.2	3.9	2.9	3.7	30	22	14	8.2	2.4
9	.55	.42	1.1	2.2	3.9	3.7	4.5	30	21	14	7.8	2.3
10	.55	.42	1.3	2.3	3.7	3.2	4.8	31	21	14	7.4	2.2
11	.55	.42	1.3	2.5	3.7	2.7	5.7	31	21	14	7.4	2.0
12	.30	.42	1.4	2.4	3.4	2.5	7.1	31	20	14	7.1	1.9
13	.30	.46	1.7	2.8	3.4	2.5	7.8	32	20	14	6.7	1.8
14	.30	.46	1.9	2.9	3.2	2.3	9.4	32	20	14	6.4	1.7
15	.30	.46	2.1	3.0	3.2	2.3	10	32	19	14	6.2	1.7
16	.30	.46	2.5	3.1	2.9	2.3	12	32	19	13	6.0	1.6
17	.30	.50	2.5	3.2	2.9	2.3	13	31	19	13	5.8	1.5
18	.50	.46	2.4	3.3	2.7	2.3	15	30	19	12	5.6	1.4
19	.55	.50	2.3	3.4	2.7	2.3	15	30	19	12	5.4	1.3
20	.30	.50	2.3	3.5	3.2	2.3	15	29	19	12	5.0	1.3
21	.46	.50	2.2	3.5	2.9	2.3	16	29	19	12	4.8	1.2
22	.46	.55	2.2	3.5	2.9	2.3	16	29	19	12	4.5	1.1
23	.42	.55	2.2	3.5	2.7	2.3	17	29	19	12	4.3	1.1
24	.42	.55	2.2	3.6	2.7	2.3	17	29	19	12	4.1	1.0
25	.42	.55	2.2	3.9	2.5	2.3	18	28	18	11	4.0	1.0
26	.42	.60	2.2	4.2	2.5	2.3	18	28	18	11	3.8	.95
27	.42	.60	2.1	4.2	2.7	2.3	19	28	18	11	3.7	.90
28	.42	.60	2.0	4.3	2.7	2.3	20	27	18	11	3.6	.90
29	.42	.60	2.0	4.5	-----	2.3	21	27	17	11	3.4	.85
30	.42	.60	1.9	4.5	-----	2.3	21	26	17	10	3.3	.80
31	.42	-----	1.9	4.5	-----	2.3	-----	26	-----	10	3.1	-----
TOTAL	16.00	14.89	52.87	95.1	92.0	77.0	324.4	889	613	405	192.0	51.80
MEAN	.52	.50	1.71	3.07	3.29	2.48	10.8	28.7	20.4	13.1	6.19	1.73
MAX	.66	.60	2.5	4.5	4.2	3.7	21	32	26	16	9.9	3.0
MIN	.42	.42	.66	1.9	2.5	2.3	2.3	22	17	10	3.1	.80
AC-FT	32	30	105	189	182	153	643	1,760	1,220	803	381	103

CAL YR 1965 TOTAL 3,271.76 MEAN 6.96 MAX 32 MIN .42 AC-FT 6,490
 WTR YR 1966 TOTAL 2,823.04 MEAN 7.73 MAX 32 MIN .42 AC-FT 5,600

NOTE.--NO GAGE-HEIGHT RECORD DEC. 18 TO JAN. 24, APR. 15 TO MAY 22, AUG. 13 TO SEPT. 30.

12116100 CANYON CREEK NEAR CEDAR FALLS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	.34	3.4	37	39	19	8.6	5.4	16	31	20	6.4
2	.77	.34	3.7	36	39	19	8.6	5.4	17	31	19	6.0
3	.73	.34	3.9	35	38	18	8.6	5.4	18	31	19	5.7
4	.73	.34	4.5	35	37	18	8.6	5.4	18	31	19	5.4
5	.66	.38	5.4	33	35	18	8.4	5.4	19	31	18	5.4
6	.66	.42	6.0	32	35	17	8.4	5.4	19	31	18	4.8
7	.66	.42	6.4	31	34	16	8.4	5.4	20	31	18	4.5
8	.60	.46	7.4	31	33	16	8.2	5.4	21	31	17	4.5
9	.60	.50	7.8	31	33	14	8.0	5.4	22	31	17	4.2
10	.55	.55	8.6	30	32	14	7.8	5.6	22	31	17	4.2
11	.55	.60	9.9	30	32	14	7.8	5.6	23	31	16	3.9
12	.55	.66	11	30	31	12	7.8	5.6	24	31	16	3.7
13	.55	.73	12	31	30	12	7.6	5.8	24	31	15	3.4
14	.50	1.0	11	32	28	11	7.4	5.8	25	31	14	3.2
15	.50	1.1	11	33	28	11	7.4	6.0	25	30	14	2.8
16	.50	1.1	11	33	27	11	7.2	6.0	26	30	14	2.5
17	.46	1.1	12	33	27	11	7.0	6.4	26	30	13	2.3
18	.46	1.1	14	36	26	10	7.0	6.7	26	29	12	2.1
19	.50	1.1	16	41	25	9.9	7.0	6.7	26	28	12	2.1
20	.60	1.3	18	41	24	9.4	6.6	7.1	27	28	11	1.9
21	.50	1.3	20	42	23	9.4	6.4	7.4	28	27	11	1.7
22	.55	1.4	23	44	23	9.4	6.0	7.8	28	26	10	1.6
23	.50	1.6	26	44	22	9.0	6.0	8.2	29	26	9.9	1.4
24	.38	1.7	31	46	22	9.0	5.8	9.0	29	25	9.0	1.4
25	.34	2.3	35	46	21	9.0	5.8	9.9	30	25	9.0	1.3
26	.34	2.5	36	45	21	8.6	5.6	11	30	25	8.6	1.3
27	.34	2.5	37	46	20	8.6	5.6	12	30	23	8.2	1.1
28	.34	2.5	38	46	20	8.6	5.6	12	30	23	7.4	1.0
29	.34	2.7	37	44	-----	8.6	5.6	14	31	22	7.1	1.0
30	.34	3.4	37	42	-----	8.6	5.6	14	31	22	6.7	.90
31	.34	-----	36	41	-----	8.6	-----	15	-----	21	6.4	-----
TOTAL	16.24	35.78	539.0	1,157	805	377.7	214.4	236.2	740	874	412.3	91.80
MEAN	.52	1.19	17.4	37.3	26.8	12.2	7.15	7.62	24.7	28.2	13.3	3.06
MAX	.80	3.4	38	46	39	19	8.6	15	31	31	20	6.4
MIN	.34	.34	3.4	30	20	8.6	5.6	5.4	16	21	6.4	1.0
AC-FT	32	71	1,070	2,290	1,600	749	425	469	1,470	1,750	818	182

CAL YR 1966 TOTAL 3,330.32 MEAN 9.12 MAX 46 MIN .34 AC-FT 6,610
 WTR YR 1967 TOTAL 5,499.42 MEAN 15.1 MAX 46 MIN .34 AC-FT 18,910

NOTE.--NO GAGE-HEIGHT RECORD APR. 4 TO MAY 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	1.9	31	35	32	31	19	16	16	28	13	4.8
2	.81	2.5	31	37	32	31	19	16	17	27	12	4.8
3	.81	3.2	31	39	31	31	18	16	16	27	12	4.8
4	.73	4.2	30	39	31	32	19	16	15	26	12	5.1
5	.73	4.8	29	39	29	33	19	16	16	26	11	5.1
6	.66	5.4	28	38	28	32	19	15	16	26	10	5.4
7	.66	6.4	28	37	26	32	19	15	17	26	9.9	5.4
8	.60	7.8	26	36	26	31	19	15	17	26	9.4	5.4
9	.60	9.4	26	35	25	31	19	15	17	25	9.0	5.7
10	.55	12	25	33	25	31	19	15	18	25	8.6	5.7
11	.55	14	25	32	24	30	19	15	19	24	8.2	5.7
12	.55	16	23	30	23	29	19	14	19	24	7.8	5.7
13	.50	17	22	29	23	28	19	14	20	23	7.8	5.7
14	.50	19	22	28	22	27	20	14	22	23	7.4	5.7
15	.46	21	22	26	21	27	20	14	23	23	7.4	5.4
16	.46	22	22	25	20	26	20	14	23	23	7.1	5.4
17	.42	23	22	23	20	25	19	14	24	22	7.1	5.4
18	.42	25	22	23	20	24	19	14	25	22	6.7	5.4
19	.42	25	22	23	21	23	19	14	25	21	6.7	5.1
20	.42	26	22	23	19	22	19	14	26	21	6.4	4.8
21	.46	28	21	23	19	22	19	14	26	20	6.4	4.8
22	.46	28	21	22	19	21	19	15	26	20	6.0	5.1
23	.46	29	20	22	19	20	18	15	26	19	6.0	5.4
24	.46	30	20	24	20	20	18	15	26	19	6.0	5.4
25	.46	30	21	26	22	19	18	16	27	18	5.7	5.7
26	.46	31	20	29	23	19	18	16	27	17	5.4	6.4
27	.66	31	20	31	26	20	18	16	28	16	5.4	7.1
28	.81	31	22	32	28	20	17	15	28	16	5.4	7.8
29	.73	31	25	33	30	19	17	15	28	14	5.1	8.6
30	.90	31	28	33	-----	19	17	14	28	14	4.8	9.0
31	1.3	-----	32	33	-----	19	-----	14	-----	14	4.8	-----
TOTAL	18.91	565.6	759	938	704	794	561	440	661	675	240.5	171.8
MEAN	.61	18.9	24.5	30.3	24.3	25.6	18.7	14.8	22.0	21.8	7.76	5.73
MAX	1.3	31	32	39	32	33	20	16	28	28	13	9.0
MIN	.42	1.9	20	22	19	19	17	14	15	14	4.8	4.8
AC-FT	38	1,120	1,510	1,860	1,400	1,570	1,110	912	1,310	1,340	477	341

CAL YR 1967 TOTAL 6,251.91 MEAN 17.1 MAX 46 MIN .42 AC-FT 12,400
 WTR YR 1968 TOTAL 6,548.81 MEAN 17.9 MAX 39 MIN .42 AC-FT 12,990

12116100 CANYON CREEK NEAR CEDAR FALLS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	12	11	8.6	8.6	2.5	2.3	9.9	34	37	20	5.3
2	11	11	11	8.2	8.2	2.5	2.5	9.9	36	37	20	5.3
3	12	11	12	7.8	7.8	2.5	2.7	10	36	36	19	5.0
4	12	11	11	8.6	7.1	2.5	2.9	10	37	36	19	5.0
5	13	11	11	10	6.4	2.7	3.2	11	38	36	18	4.6
6	13	10	11	9.4	6.0	2.7	3.7	11	38	35	18	4.6
7	14	9.9	11	9.0	5.7	2.5	4.2	11	39	35	16	4.6
8	14	9.4	12	7.4	5.4	2.3	4.5	10	39	34	15	4.6
9	14	9.4	12	7.8	5.4	2.3	4.8	10	39	34	15	4.3
10	14	9.0	12	8.6	5.4	2.3	5.1	10	40	34	14	4.3
11	14	9.9	12	9.9	5.1	2.1	5.4	10	40	34	13	4.0
12	14	9.0	12	11	4.8	2.1	5.7	10	40	33	12	4.0
13	14	8.2	12	12	4.2	2.1	6.4	11	40	32	12	4.0
14	14	8.2	13	13	4.2	2.1	6.4	11	40	31	11	4.0
15	14	8.2	14	14	3.9	1.9	6.4	12	38	31	10	4.0
16	14	8.2	13	14	3.9	2.1	6.7	12	38	30	9.7	3.7
17	14	8.2	13	14	3.9	2.3	7.1	14	38	30	9.2	3.7
18	14	8.6	13	14	3.7	2.3	7.4	14	38	29	8.8	3.4
19	14	9.0	13	15	3.7	2.3	7.8	16	37	29	8.4	3.2
20	14	9.0	13	15	3.4	2.3	7.4	17	37	29	8.0	3.2
21	14	9.4	12	14	3.2	2.1	7.4	18	37	28	7.6	3.2
22	14	10	12	14	3.2	2.1	7.4	19	37	27	7.6	3.4
23	14	10	12	14	2.9	2.3	7.4	20	37	27	7.2	3.4
24	14	10	12	14	2.7	2.3	7.8	22	37	27	6.8	3.2
25	14	10	11	14	2.7	2.3	7.8	24	37	26	6.4	3.0
26	14	10	11	13	2.7	2.1	8.2	25	37	25	6.0	3.0
27	14	10	10	12	2.7	2.1	8.6	27	37	25	6.0	2.7
28	13	9.1	9.9	12	2.1	2.1	8.6	29	37	24	5.6	2.7
29	12	11	9.4	11	-----	2.1	9.0	31	37	23	5.6	2.7
30	12	11	9.0	9.9	-----	2.3	9.4	32	37	22	5.6	3.0
31	12	-----	8.6	9.4	-----	2.3	-----	34	-----	22	5.6	-----
TOTAL	414	292.6	358.9	354.6	129.7	70.5	184.2	510.8	1,132	998	346.1	115.1
MEAN	13.4	9.75	11.6	11.4	4.63	2.27	6.14	16.5	37.7	30.3	11.2	3.84
MAX	14	12	14	15	8.6	2.7	9.4	34	40	37	20	5.3
MIN	10	8.2	8.6	7.4	2.5	1.9	2.3	9.9	34	22	5.6	2.7
AC-FT	821	580	712	703	257	140	365	1,010	2,250	1,860	686	228
CAL YR 1968	TOTAL 6,270.8			MEAN 17.1	MAX 39	MIN 4.8	AC-FT 12,440					
WTR YR 1969	TOTAL 4,846.5			MEAN 13.3	MAX 40	MIN 1.9	AC-FT 9,610					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	3.0	1.1	.98	14	12	5.4	12	12	18	3.7	1.4
2	2.7	3.0	1.1	.98	16	11	5.7	12	13	17	3.7	1.4
3	2.5	3.0	.98	.98	18	11	6.0	11	13	16	3.4	1.3
4	2.5	3.2	.98	.98	19	10	6.4	10	14	15	3.4	1.3
5	2.5	3.2	.89	.98	19	9.9	6.7	9.9	14	14	3.4	1.3
6	2.3	2.5	.89	1.1	19	9.4	7.4	9.4	15	13	3.4	1.1
7	2.3	2.3	.80	1.1	19	9.0	7.8	9.0	16	12	3.4	1.1
8	2.3	2.3	.80	1.1	19	8.6	8.2	9.0	17	11	3.4	1.1
9	2.5	2.1	.80	1.1	19	8.2	8.6	9.0	18	10	3.2	1.1
10	2.5	2.1	.80	1.1	18	7.8	9.4	9.0	19	9.4	3.2	1.0
11	2.5	1.9	.89	1.1	18	7.4	9.9	9.0	20	8.6	2.9	1.0
12	2.5	1.9	1.4	1.2	17	6.7	10	9.0	22	8.6	2.9	1.0
13	2.5	1.8	.98	1.3	17	6.4	11	9.0	22	8.2	2.9	1.0
14	2.7	1.6	1.1	2.1	16	6.0	11	9.0	22	7.4	2.7	1.0
15	2.7	1.6	.89	1.6	16	6.0	12	9.0	22	7.1	2.7	1.0
16	3.0	1.4	.80	1.3	16	5.7	14	8.6	22	6.7	2.7	1.0
17	3.0	1.4	.80	1.3	15	5.4	14	8.6	23	6.4	2.5	1.0
18	3.2	1.4	.80	2.1	14	5.4	14	8.6	22	6.0	2.5	1.0
19	3.2	1.4	.72	2.3	14	5.4	15	8.6	22	5.4	2.3	1.0
20	3.4	1.4	.72	2.1	14	5.1	16	8.6	22	5.1	2.3	1.0
21	3.4	1.4	.80	1.9	14	5.1	15	9.0	22	5.1	2.3	1.0
22	3.4	1.4	1.1	2.1	13	4.8	15	9.0	21	4.8	2.1	1.0
23	3.4	1.4	1.2	2.7	13	4.8	15	9.4	21	4.8	2.1	1.0
24	3.4	1.4	.89	3.2	13	4.8	15	9.4	20	4.5	1.9	1.0
25	3.4	1.3	.80	4.6	13	4.8	14	9.4	20	4.5	1.9	.90
26	3.2	1.3	.80	5.3	13	4.8	14	9.9	19	4.5	1.7	.90
27	3.2	1.2	.80	6.8	12	4.8	14	10	19	4.2	1.7	.90
28	3.2	1.2	.89	8.4	12	5.1	14	11	19	4.2	1.7	.81
29	3.2	1.2	.89	9.2	-----	5.1	14	11	18	4.2	1.6	.73
30	3.0	1.1	.89	11	-----	5.1	13	12	18	4.2	1.6	.73
31	3.0	-----	.98	13	-----	5.1	-----	12	-----	3.9	1.4	-----
TOTAL	89.3	55.4	28.28	95.00	440	210.7	341.5	300.4	567	253.8	80.6	31.07
MEAN	2.88	1.85	.91	3.06	15.7	6.80	11.4	9.89	18.9	8.19	2.60	1.04
MAX	3.4	3.2	1.4	13	19	12	16	12	23	18	3.7	1.4
MIN	2.3	1.1	.72	.98	12	4.8	5.4	8.6	12	3.9	1.4	.73
AC-FT	177	110	56	188	873	418	677	596	1,120	503	160	62
CAL YR 1969	TOTAL 3,953.98			MEAN 10.8	MAX 40	MIN .72	AC-FT 7,840					
WTR YR 1970	TOTAL 2,493.05			MEAN 6.83	MAX 23	MIN .72	AC-FT 4,940					

12116500 CEDAR RIVER AT CEDAR FALLS, WASH.

LOCATION (REVISED)--Lat 47°25'02", long 121°47'27", in SNA-S&S sec. 4, T.22 N., R.8 E., King County, Snoqualmie National Forest, on right bank 0.5 mile downstream from Seattle municipal powerplant at Cedar Falls, 4.0 mile downstream from Chester Morse Lake, and at mile 33.2.

DRAINAGE AREA--84.2 sq mi.

PERIOD OF RECORD--April 1914 to September 1970.

GAGE--Water-stage recorder. Altitude of gage is 910 ft (from river-profile map).

AVERAGE DISCHARGE--56 years, 315 cfs (228,200 acre-ft per year).

EXTREMES--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	May 10, 1966		881	7.23	Nov. 9, 1965		14	4.48
1967	Jan. 20, 1967		1,280	7.78	Oct. 19, 21, 1966		12	4.44
1968	Dec. 27, 28, 1967		1,600	8.15	Aug. 14, 1968		9.2	4.38
1969	June 2, 1969		bl,250		Sept. 28, 1969		15	4.55
1970	Jan. 19, 1970		746	7.06	Sept. 4, 5, 6, 1970		21	4.65

a Occurred Oct. 19, 1966.

b Maximum daily.

Period of record: Maximum discharge, 6,440 cfs Dec. 22, 1933 (gage height, 11.5 ft); no flow for part of Nov. 25, 1917, Aug. 18, 1923; minimum daily, 0.5 cfs Oct. 6, 1958.

REMARKS--Records excellent. No gage-height record May 22 to July 10, 1969. All artificially diverted water returned to river above station. Some regulation by Chester Morse Lake for power.

REVISIONS (WATER YEARS)---MSP 722: 1930. MSP 1286: 1934(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	169	432	69	398	277	539	88	570	300	47	41
2	35	139	231	69	372	228	521	517	632	120	30	43
3	31	192	268	104	239	222	483	562	660	150	48	43
4	58	237	95	283	215	298	39	605	608	100	52	42
5	33	290	94	329	97	88	261	600	256	480	49	41
6	45	82	510	180	90	89	540	639	582	520	45	43
7	42	77	674	426	185	343	580	600	535	550	45	42
8	110	476	510	374	154	246	581	143	514	450	151	42
9	22	354	524	461	195	300	553	696	531	220	48	37
10	39	444	483	526	261	423	524	804	560	320	49	37
11	39	396	470	358	251	447	642	750	477	420	45	39
12	40	322	239	548	99	240	706	691	120	200	44	158
13	36	73	476	542	101	332	685	687	553	85	44	233
14	41	74	508	543	418	473	603	684	571	75	43	229
15	137	396	352	353	274	497	669	601	560	80	43	267
16	179	300	311	299	140	502	631	713	555	76	43	124
17	190	246	289	620	184	569	564	643	548	75	42	102
18	150	225	239	551	149	506	646	668	472	74	42	103
19	97	234	65	445	90	329	676	615	164	75	41	101
20	53	74	325	700	93	315	670	651	525	61	40	99
21	51	76	293	450	153	396	711	657	542	51	40	98
22	190	412	198	680	160	336	627	601	542	52	41	98
23	110	388	273	350	173	333	584	694	544	57	119	97
24	43	300	198	520	283	241	542	692	541	58	43	96
25	211	77	85	300	316	320	614	661	458	83	44	95
26	152	440	85	284	250	196	641	471	246	55	45	95
27	152	88	216	85	325	180	630	662	540	190	84	94
28	139	82	184	79	326	433	602	546	536	57	217	93
29	106	480	185	82	-----	438	506	201	547	48	62	92
30	36	428	181	87	-----	480	90	447	550	46	37	90
31	35	-----	161	297	-----	498	-----	595	-----	88	104	-----
TOTAL	2,659	7,573	9,154	10,994	5,991	10,575	16,682	18,204	15,041	5,216	1,847	2,814
MEAN	85.8	252	295	355	214	341	556	587	501	168	59.6	93.8
MAX	211	480	674	700	418	569	711	804	660	550	217	267
MIN	22	73	65	69	90	88	39	88	120	46	37	37
AC-FT	5,270	15,020	18,160	21,810	11,080	20,980	33,090	36,110	29,830	10,350	3,660	5,580
CAL YR 1965	TOTAL 105,306	MEAN 289	MAX 637	MIN 17	AC-FT 208,900							
WTR YR 1966	TOTAL 106,750	MEAN 292	MAX 804	MIN 22	AC-FT 211,700							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	190	379	986	735	472	520	490	124	122	63	120
2	23	213	525	874	740	456	510	480	187	456	64	86
3	30	162	764	800	691	436	464	515	140	148	206	68
4	29	760	900	790	951	746	480	357	104	106	71	72
5	30	107	760	669	605	881	396	424	94	95	54	65
6	25	76	754	746	707	812	353	510	90	94	44	86
7	14	155	754	746	740	595	104	150	87	94	36	116
8	14	251	471	740	735	740	297	505	84	79	35	113
9	66	390	109	746	729	277	50	505	82	35	106	35
10	33	263	123	740	729	84	255	420	82	56	38	117
11	44	95	614	729	729	520	456	464	88	103	37	183
12	42	100	558	729	729	595	460	428	85	339	37	231
13	30	195	524	740	724	535	448	505	88	416	37	229
14	18	119	564	647	718	540	436	515	88	169	18	231
15	14	177	553	758	718	570	718	530	85	187	15	233
16	13	83	189	550	590	630	560	357	87	90	13	193
17	12	83	252	505	555	106	530	485	87	82	11	180
18	14	106	569	560	545	515	530	208	88	510	12	201
19	20	110	592	620	806	724	550	80	294	729	12	204
20	64	306	652	550	788	540	550	480	79	525	12	201
21	89	129	738	842	788	297	452	225	60	368	11	197
22	89	299	272	1,170	800	82	530	472	61	476	10	195
23	156	96	364	1,290	1,240	94	530	468	60	287	13	170
24	216	153	715	1,240	1,270	95	540	515	60	150	17	112
25	152	144	712	1,100	1,180	540	545	590	60	119	20	112
26	162	146	1,210	1,060	1,130	525	510	160	60	75	25	130
27	289	215	1,410	1,010	699	560	530	490	64	80	39	169
28	237	249	1,390	895	585	560	691	360	274	78	133	169
29	106	361	1,260	752	550	545	490	456	280	74	208	166
30	110	412	1,110	758	-----	271	515	120	311	69	246	166
31	150	-----	1,050	746	-----	155	-----	364	-----	64	159	-----
TOTAL	2,317	5,472	20,697	24,878	22,319	14,703	14,030	12,418	3,445	6,295	1,593	4,769
MEAN	74.7	182	668	803	770	474	468	407	115	203	51.4	159
MAX	288	412	1,410	1,290	1,270	951	718	580	311	729	246	233
MIN	12	76	109	500	545	82	80	80	60	56	10	65
AC-FT	4,600	10,850	41,050	49,350	44,270	29,160	27,830	25,030	6,830	12,490	3,160	9,460
WTR YR 1967	TOTAL	121,745	MEAN	334	MAX	1,410	MIN	12	AC-FT	241,500		
WTR YR 1968	TOTAL	133,136	MEAN	364	MAX	1,410	MIN	10	AC-FT	264,100		

12116500 CEDAR RIVER AT CEDAR FALLS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	346	605	680	220	157	315	740	980	370	440	63
2	152	122	696	680	230	112	311	740	1,250	300	116	69
3	130	88	735	674	370	130	580	740	1,100	260	120	66
4	225	255	605	476	310	106	707	735	1,100	260	420	63
5	277	325	674	464	290	112	713	718	920	260	402	67
6	277	343	600	540	255	162	605	950	1,000	900	303	72
7	271	318	555	580	192	110	718	555	540	200	228	69
8	284	325	702	746	157	108	707	930	980	180	261	66
9	284	67	702	729	162	182	707	565	650	180	88	63
10	287	62	707	718	162	94	718	301	940	198	88	63
11	287	95	707	713	167	108	713	246	450	96	267	63
12	294	360	707	713	162	116	724	565	690	100	183	66
13	304	353	702	713	164	114	729	647	710	98	206	69
14	301	284	702	718	240	112	729	565	310	98	206	72
15	343	680	696	718	143	110	729	540	700	240	124	54
16	392	585	696	718	150	110	724	735	380	402	74	53
17	392	580	585	713	152	118	729	746	190	90	80	56
18	392	680	615	707	160	118	746	696	190	93	86	60
19	392	685	585	707	157	116	752	729	190	93	88	65
20	396	685	620	707	155	114	585	735	180	93	66	66
21	392	685	152	707	160	112	329	735	180	158	79	65
22	392	641	203	510	157	116	746	735	160	303	85	60
23	388	691	357	500	155	122	746	770	570	555	74	91
24	396	685	80	650	225	104	752	420	330	362	76	91
25	404	685	261	595	122	146	746	510	460	310	70	83
26	404	685	376	400	108	228	615	1,000	950	132	69	80
27	400	590	476	450	104	208	525	1,100	340	128	72	76
28	400	595	400	300	139	255	740	1,050	490	425	69	97
29	400	595	135	350	-----	106	746	940	340	505	69	74
30	392	590	255	225	-----	110	746	1,100	650	490	67	85
31	392	-----	322	250	-----	261	-----	1,100	-----	246	66	-----
TOTAL	10,217	13,680	16,303	18,331	5,168	4,177	19,932	21,838	17,940	7,725	4,642	2,063
MEAN	330	456	526	591	185	135	664	704	590	249	150	68.8
MAX	404	691	735	746	370	261	752	1,100	1,250	595	440	91
MIN	150	62	80	225	104	94	311	246	160	93	66	53
AC-FT	20,270	27,130	32,340	36,360	10,250	6,290	39,540	43,320	35,980	15,320	9,210	4,090

CAL YR 1968 TOTAL 144,850 MEAN 396 MAX 1,290 MIN 10 AC-FT 287,300
 WTR YR 1969 TOTAL 142,016 MEAN 389 MAX 1,250 MIN 53 AC-FT 281,700

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	243	228	264	680	237	43	575	492	474	66	81
2	79	255	226	264	680	455	50	446	377	375	69	80
3	74	249	193	264	686	450	217	475	463	466	79	84
4	72	292	226	264	680	350	500	460	377	470	90	51
5	67	255	228	185	686	209	370	555	69	489	88	23
6	65	196	226	107	680	274	510	615	212	376	98	23
7	65	143	226	107	680	252	462	565	306	235	111	34
8	130	141	226	105	680	143	662	545	384	161	113	39
9	168	141	226	90	686	299	686	620	309	154	110	35
10	170	138	226	101	680	350	698	594	405	132	104	30
11	168	180	231	93	680	240	686	650	422	120	110	28
12	168	228	246	136	674	422	674	605	421	120	109	26
13	168	228	249	163	680	173	674	635	539	116	113	26
14	220	231	264	354	680	255	668	256	501	108	112	25
15	190	228	255	161	686	156	668	290	681	62	109	26
16	252	228	246	175	704	480	662	243	691	39	112	23
17	255	228	240	118	704	656	662	255	631	33	110	24
18	252	228	240	152	692	656	640	470	550	34	109	219
19	252	228	299	530	686	650	680	495	507	37	108	315
20	255	228	320	565	680	402	625	446	287	39	110	92
21	258	228	318	710	680	154	327	430	135	36	108	27
22	243	228	334	710	580	141	223	446	404	35	111	27
23	231	231	535	710	455	450	418	173	304	36	113	40
24	234	231	686	704	580	500	610	77	565	38	112	64
25	240	231	668	704	565	209	570	237	316	46	110	99
26	237	228	645	698	327	36	510	132	343	51	110	86
27	240	228	656	698	362	36	610	467	204	53	106	83
28	240	228	550	686	426	44	645	479	236	51	82	77
29	237	228	354	686	-----	42	620	236	532	63	73	78
30	237	228	264	680	-----	41	610	221	358	68	79	89
31	237	-----	267	686	-----	39	-----	208	-----	66	80	-----
TOTAL	5,790	6,537	10,090	11,878	17,659	8,601	16,180	12,641	12,269	4,583	3,114	1,956
MEAN	187	218	325	383	631	284	539	408	409	148	100	65.2
MAX	258	255	686	710	704	656	698	635	691	409	113	315
MIN	65	138	193	93	327	36	43	77	89	33	66	23
AC-FT	11,480	12,970	20,010	23,560	39,030	17,460	32,090	25,070	24,340	9,090	6,180	3,880

CAL YR 1969 TOTAL 124,233 MEAN 340 MAX 1,250 MIN 53 AC-FT 246,400
 WTR YR 1970 TOTAL 111,490 MEAN 305 MAX 1,210 MIN 23 AC-FT 221,200

LAKE WASHINGTON BASIN

12117000 TAYLOR CREEK NEAR SELLECK, WASH.

LOCATION.--Lat 47°23'12", long 121°50'42", in NW1/4 sec.19, T.22 N., R.8 E., King County, Snoqualmie National Forest, on left bank 0.6 mile upstream from mouth and 1.3 miles northeast of Selleck.

DRAINAGE AREA.--17.2 sq mi.

PERIOD OF RECORD.--June to October 1945, August 1956 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 940 ft (from topographic map). June to October 1945 on right bank at site 350 ft downstream at different datum.

AVERAGE DISCHARGE.--14 years, 102 cfs (80.53 inches per year, 73,900 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum Discharge	G.H.	Date	Minimum Discharge	G.H.
1966	Jan. 13, 1966	360	3.41	Oct. 3, 4, 1965	17	2.00
1967	Dec. 13, 1966	530	3.75	Sept. 21-29, 1967	18	a2.02
1968	Jan. 20, 1968	856	4.19	Oct. 2, 9, 10, 1967	20	2.05
1969	Dec. 3, 1968	676	3.98	Sept. 10, 11, 12, 16, 1969	23	2.06
1970	Jan. 18, 1970	500	3.70	Sept. 16, 1970	21	b2.07

a Occurred Sept. 27-29, 1967.

b Occurred on all or part of each day Aug. 29 to Sept. 2, 1970.

Period of record: Maximum discharge, 2,730 cfs Jan. 29, 1965 (gage height, 5.78 ft), from rating curve extended above 1,100 cfs on basis of slope-area measurement of peak flow; minimum, 16 cfs Oct. 2-7, 1958.

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	25	68	58	100	95	220	110	67	67	41	27
2	18	29	76	64	93	91	223	116	66	85	41	27
3	18	58	90	56	89	85	181	129	69	187	40	26
4	19	116	187	55	87	80	175	143	85	160	38	26
5	25	150	125	110	87	78	172	158	71	123	38	26
6	48	95	102	249	91	83	168	218	66	106	37	26
7	26	69	149	260	95	80	165	181	64	91	37	25
8	23	56	136	249	89	118	160	165	61	83	37	25
9	27	50	110	184	93	220	193	152	59	76	41	25
10	22	53	98	155	85	172	205	138	76	76	38	26
11	20	61	83	178	104	136	249	123	71	76	38	28
12	21	50	76	238	100	132	202	121	69	69	36	26
13	30	46	69	328	95	181	170	112	64	67	38	25
14	45	46	66	294	96	193	165	108	61	67	36	25
15	41	41	61	220	87	178	155	123	58	66	34	25
16	34	40	58	170	83	155	150	125	56	63	33	24
17	38	37	56	145	83	134	141	108	58	59	32	26
18	37	37	56	132	83	129	129	102	53	58	32	36
19	73	40	55	116	83	129	121	100	58	58	30	26
20	47	40	61	106	121	119	129	98	53	56	30	25
21	38	53	69	100	121	108	136	116	55	53	29	24
22	33	85	58	95	138	102	127	102	55	52	29	24
23	29	59	55	93	129	100	123	95	55	50	29	26
24	28	53	55	87	116	102	119	91	71	50	29	24
25	26	55	52	87	110	110	136	89	61	50	29	24
26	25	63	52	83	106	123	129	91	56	48	29	26
27	26	67	56	91	114	132	119	87	59	46	36	25
28	27	58	82	93	106	136	114	80	126	44	30	24
29	26	52	71	106	-----	143	112	74	87	44	29	23
30	30	48	63	116	-----	202	108	73	74	42	28	22
31	26	-----	59	116	-----	205	-----	71	-----	62	28	-----
TOTAL	944	1,732	2,454	4,434	2,784	4,051	4,696	3,599	1,984	2,214	1,052	767
MEAN	30.5	57.7	79.2	143	99.4	131	157	116	66.1	71.4	33.9	25.6
MAX	73	150	187	328	138	220	249	218	126	187	41	36
MIN	18	25	52	55	83	78	108	71	53	42	28	22
CFSM	1.77	3.35	4.60	8.31	5.78	7.62	9.13	6.74	3.84	4.15	1.97	1.49
IN	2.04	3.75	5.31	9.59	6.02	8.76	10.16	7.78	4.29	4.79	2.28	1.66
AC-FT	1,870	3,440	4,870	8,790	5,520	8,040	9,310	7,140	3,940	4,390	2,090	1,520
CAL YR 1965	TOTAL 32,648	MEAN 89.4	MAX 1,370	MIN 18	CFSM 5.20	IN 70.61	AC-FT 64,760					
WTR YR 1966	TOTAL 30,711	MEAN 84.1	MAX 328	MIN 18	CFSM 4.89	IN 66.42	AC-FT 60,920					

12117000 TAYLOR CREEK NEAR SELLECK, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	58	220	260	246	159	109	88	80	41	28	21
2	45	53	170	232	232	148	109	88	96	40	28	24
3	27	50	152	290	226	136	111	88	84	39	28	21
4	24	47	143	270	266	129	113	88	77	38	26	20
5	23	52	132	232	252	122	109	92	72	38	26	20
6	24	48	121	202	232	117	104	98	70	36	26	19
7	26	46	110	193	214	113	102	106	68	36	26	20
8	44	37	100	214	131	102	102	109	62	38	26	20
9	27	52	95	190	199	126	106	143	62	36	25	20
10	25	53	138	214	208	115	98	120	62	35	25	26
11	24	52	178	282	199	109	96	117	60	34	24	36
12	27	87	288	256	205	104	96	120	59	34	25	30
13	28	85	445	319	256	100	106	113	58	34	25	23
14	25	148	314	382	217	98	98	109	54	34	24	21
15	23	160	242	391	193	109	94	111	53	33	23	21
16	23	152	263	337	178	143	92	129	52	33	23	20
17	23	121	266	286	266	134	90	138	50	33	22	20
18	22	110	252	260	274	126	98	136	49	33	22	19
19	56	95	260	391	226	115	102	131	48	33	21	19
20	112	83	256	360	196	134	98	138	48	33	21	19
21	67	76	217	314	184	138	104	141	59	31	22	19
22	166	71	187	274	170	178	98	131	65	31	21	19
23	158	73	167	252	159	187	94	120	52	30	22	18
24	98	67	144	232	153	170	92	109	49	30	22	18
25	73	158	148	214	148	156	94	100	46	29	21	18
26	74	138	134	208	141	146	90	96	45	29	21	18
27	74	150	122	290	136	136	100	92	49	30	20	18
28	59	138	131	332	162	131	98	96	44	30	20	18
29	76	134	175	310	-----	126	94	98	42	29	20	19
30	73	252	159	282	-----	117	90	92	41	29	20	21
31	64	-----	193	256	-----	113	-----	84	-----	29	20	-----
TOTAL	1,628	2,853	5,942	8,525	5,737	4,066	2,987	3,436	1,759	1,038	723	625
MEAN	52.5	95.1	192	275	205	131	99.6	111	58.6	33.5	23.3	20.8
MAX	166	252	445	391	274	187	113	143	96	41	28	36
MIN	22	44	95	190	136	98	90	84	41	29	20	18
CFSM	3.05	5.53	11.2	16.0	11.9	7.62	5.79	6.45	3.41	1.95	1.35	1.21
IN.	3.52	6.17	12.85	18.44	12.41	8.79	6.46	7.43	3.80	2.24	1.56	1.35
AC-FT	3,230	5,660	11,790	16,910	11,380	8,060	5,920	6,820	3,490	2,060	1,430	1,240

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	24	100	54	167	120	126	146	115	229	60	34	67		
2	22	74	82	136	151	119	146	108	385	57	33	61		
3	40	60	79	117	208	115	130	102	261	55	34	55		
4	29	93	72	113	332	115	130	106	180	53	34	52		
5	26	48	65	106	220	117	138	106	143	52	34	49		
6	26	44	59	94	178	110	143	110	123	52	33	46		
7	26	44	56	96	159	102	157	106	112	49	32	46		
8	23	42	53	88	143	97	146	100	104	48	32	44		
9	21	68	88	111	134	93	138	104	97	47	31	43		
10	22	159	158	98	124	89	138	104	93	46	31	42		
11	54	113	184	88	117	88	148	98	93	46	30	41		
12	36	82	117	90	111	88	133	95	88	54	30	43		
13	48	67	94	178	104	84	126	89	93	48	30	41		
14	47	70	80	242	100	82	148	89	91	57	73	58		
15	34	70	72	260	96	100	154	84	82	55	76	62		
16	29	72	68	205	92	123	136	79	79	49	47	49		
17	26	62	64	167	98	104	123	78	76	47	41	96		
18	32	59	59	153	252	97	121	74	73	44	48	133		
19	33	56	56	373	458	91	123	78	73	46	49	112		
20	28	53	53	536	330	88	121	100	70	44	44	97		
21	52	50	53	512	308	84	117	86	67	42	40	84		
22	68	52	144	324	290	82	112	86	74	41	41	78		
23	62	50	178	246	303	88	119	88	70	41	62	84		
24	49	59	306	217	265	86	117	86	65	39	79	76		
25	49	52	542	184	214	95	117	95	62	39	93	70		
26	40	49	435	164	187	93	115	89	61	38	104	64		
27	152	48	306	148	165	226	112	84	65	37	126	61		
28	138	50	263	136	148	277	115	82	70	37	148	58		
29	79	75	199	129	138	261	121	81	71	36	108	54		
30	77	59	162	122	-----	203	126	82	65	36	86	52		
31	104	-----	151	120	-----	165	-----	78	-----	35	71	-----		
TOTAL	1,496	1,940	4,352	5,718	5,545	3,888	3,916	2,862	3,215	1,430	1,746	1,920		
MEAN	48.3	64.7	140	184	191	119	131	92.3	107	48.1	56.3	64.0		
MAX	152	159	542	536	458	277	157	115	385	60	140	133		
MIN	21	42	53	88	92	82	112	74	61	35	30	41		
CFSM	2.81	3.76	8.14	10.7	11.1	6.92	7.62	5.37	6.22	2.68	3.27	3.72		
IN.	3.24	4.20	9.41	12.37	11.99	7.98	8.47	6.19	6.95	3.09	3.78	4.15		
AC-FT	2,970	3,850	8,630	11,340	11,000	7,320	7,770	5,680	6,380	2,840	3,460	3,810		
CAL YR 1967	TOTAL	36,884	MEAN	101	MAX	542	MIN	18	CFSM	5.87	IN	79.34	AC-FT	72,760
WTR YR 1968	TOTAL	37,828	MEAN	103	MAX	542	MIN	21	CFSM	5.99	IN	81.81	AC-FT	75,030

12117500 CEDAR RIVER NEAR LANDSBURG, WASH.

LOCATION (REVISED).--Lat 47°23'38", long 121°57'12", on west line of NW¼SW¼ sec.17, T.22 N., R.7 E., King County, on left bank 1.8 miles upstream from intake of Seattle water-supply system near Landsburg, 4.0 miles east of Maple Valley, 5.9 miles downstream from Taylor Creek, and at mile 23.4.

DRAINAGE AREA.--122 sq mi, includes Rock Creek drainage above Walsh Lake diversion.

PERIOD OF RECORD.--July 1895 to September 1970 (prior to October 1948, flow of Rock Creek included). Monthly discharge only for some periods, published in WSP 1316. Published as "near Seattlet" 1895-98, "near Maple Valley" 1902, and as "near Ravensdale" 1898-1901, 1903-12.

GAGE.--Water-stage recorder. Altitude of gage is 600 ft (from river-profile map). See WSP 1932 for history of changes prior to Oct. 23, 1928.

AVERAGE DISCHARGE.--75 years, 695 cfs (503,500 acre-ft per year), unadjusted.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	June 29, 1966		1,580	2.87	Oct. 1-16, 21-25, 1965		193	.80
1967	Jan. 19, 1967		2,170	3.74	Sept. 27-30, 1967		238	.90
1968	Jan. 21, 1968		2,240	3.81	Oct. 8, 9, 17, 18, 20, 1967		215	.83
1969	Dec. 3, 1968		2,440	4.01	Sept. 15, 16, 17, 1969		288	1.13
1970	Jan. 20, 1970		1,620	3.15	Sept. 16, 17, 1970		206	.87

Period of record: Maximum discharge, 14,200 cfs Nov. 19, 1911 (gage height, 10.0 ft, from graph based on gage readings, site and datum then in use), by computation of peak flow over dam caused by failure of flashboards at Chester Morse Lake; minimum observed, 83 cfs Sept. 19, 1898.

REMARKS.--Records excellent. All diversions except Rock Creek returned to river above station. Rock Creek (a tributary which entered naturally just above station prior to 1932) is diverted during summer periods to enter river at a point about 2.1 miles (revised) downstream from Seattle municipal water-supply intake and 3.9 miles below station. Some regulation by Chester Morse Lake and Masonry Dam, 12.2 miles upstream. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 313: 1895-98, 1902-9. WSP 1286: 1912. WSP 1316: 1896-98(M), 1902-11(M). WSP 1736: 1960. WSP 1932: 1947, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	247	319	622	292	714	620	1,000	439	899	744	356	283
2	218	307	465	291	635	548	1,020	799	973	490	323	282
3	218	302	460	300	563	541	920	954	1,010	647	322	281
4	234	530	510	380	506	605	339	993	997	678	322	277
5	221	599	394	500	403	404	579	1,010	636	875	320	274
6	250	362	676	699	386	403	935	1,130	915	926	314	273
7	237	315	989	965	474	638	979	1,080	883	973	310	271
8	254	508	807	867	466	611	976	593	826	854	400	270
9	208	550	800	889	497	751	978	1,020	865	661	320	265
10	215	594	772	896	513	863	958	1,210	929	669	320	261
11	221	652	700	782	618	855	1,170	1,150	869	797	300	266
12	212	510	475	1,060	456	644	1,200	1,070	511	605	300	358
13	221	202	634	1,170	410	840	1,130	1,080	820	417	300	407
14	231	274	694	1,160	725	946	1,040	1,070	909	409	290	441
15	296	500	610	926	606	951	1,090	1,000	906	406	290	448
16	354	490	490	653	445	934	1,040	1,150	893	403	295	388
17	350	432	490	952	479	981	958	1,020	891	396	295	320
18	326	398	419	912	479	927	1,050	1,050	827	389	290	331
19	315	406	288	796	408	742	1,050	989	535	388	291	318
20	257	271	450	1,010	466	731	1,060	1,030	787	377	289	313
21	250	278	551	778	522	768	1,140	1,050	870	358	287	309
22	288	566	364	968	555	674	1,020	980	871	349	286	307
23	264	601	434	701	552	684	973	1,060	879	351	341	306
24	202	504	481	774	637	597	916	1,040	905	349	309	302
25	322	322	295	615	630	690	1,020	1,030	834	372	289	300
26	315	572	279	604	505	561	1,040	832	610	344	289	300
27	315	370	391	426	716	545	1,020	1,030	803	439	324	298
28	311	303	454	382	692	814	979	912	901	369	408	293
29	295	582	423	396	-----	834	962	607	980	332	354	289
30	227	634	413	406	-----	923	451	714	893	325	286	286
31	218	-----	380	606	-----	977	-----	945	-----	328	338	-----
TOTAL	8,082	13,493	16,210	22,156	15,118	22,602	29,193	30,057	25,517	16,020	9,758	9,309
MEAN	261	430	523	715	540	729	973	970	851	517	315	310
MAX	354	652	989	1,170	725	981	1,200	1,210	1,010	973	408	448
MIN	202	271	279	291	386	403	451	439	511	325	286	261
AC-FT	16,030	26,760	32,150	43,590	29,990	44,830	57,900	59,620	50,610	31,780	19,350	18,460
CAL YR 1965	TOTAL	242,555	MEAN	665	MAX	4,060	MIN	202	AC-FT	481,100		
WTR YR 1966	TOTAL	217,515	MEAN	596	MAX	1,210	MIN	202	AC-FT	431,400		

LAKE WASHINGTON BASIN

12117500 CEDAR RIVER NEAR LANDSBURG, WASH. --CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1964 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	286	437	1,020	1,310	1,420	1,200	613	580	834	406	334	306
2	316	427	944	1,270	1,380	1,110	510	601	862	367	334	314
3	293	376	893	1,350	1,330	1,120	827	613	530	363	334	310
4	286	360	837	1,390	1,410	1,200	695	602	447	363	334	306
5	279	364	927	1,290	1,430	1,110	565	467	820	363	330	303
6	278	260	913	1,240	1,400	1,160	585	462	848	363	330	406
7	278	389	935	1,240	1,340	1,060	743	437	876	359	330	555
8	300	381	922	1,280	1,300	788	673	828	768	359	330	495
9	285	320	879	1,270	1,280	788	645	852	807	359	326	471
10	278	398	917	1,290	1,290	678	662	815	471	359	326	376
11	274	360	910	1,390	1,280	550	550	831	389	354	326	376
12	278	372	1,170	1,340	1,290	535	623	794	731	471	359	303
13	282	296	1,540	1,440	1,380	800	662	872	749	406	322	284
14	274	660	1,260	1,620	1,320	707	721	474	768	389	318	277
15	271	676	1,200	1,800	1,300	755	505	784	794	354	334	273
16	268	727	1,150	1,840	1,290	743	466	865	701	354	457	269
17	268	789	1,070	1,750	1,470	737	662	911	384	701	322	269
18	268	810	1,000	1,620	1,430	570	673	884	372	411	314	269
19	268	717	1,160	1,930	1,270	550	689	862	618	354	314	266
20	334	457	1,280	2,120	1,330	713	505	761	510	350	310	259
21	260	673	1,250	1,990	1,300	575	500	590	645	350	420	256
22	355	638	1,220	1,800	1,230	713	480	775	476	346	495	252
23	402	515	1,160	1,640	1,200	1,010	471	838	402	346	433	252
24	338	430	1,120	1,510	1,200	1,040	737	857	402	342	314	248
25	376	640	1,110	1,390	1,100	695	618	848	402	342	471	245
26	448	519	1,080	1,340	1,070	707	466	876	673	342	314	245
27	497	544	1,070	1,470	1,110	953	673	634	550	342	306	241
28	599	799	1,090	1,610	1,140	981	719	420	550	342	314	238
29	485	955	1,160	1,570	-----	960	471	749	618	338	322	238
30	385	1,110	1,140	1,520	-----	918	452	689	443	338	314	241
31	578	-----	1,180	1,460	-----	904	-----	862	-----	338	310	-----
TOTAL	10,387	16,399	33,507	47,080	36,290	26,330	18,161	22,403	18,440	11,571	10,697	9,143
MEAN	335	547	1,081	1,519	1,296	849	605	723	615	373	345	305
MAX	599	1,110	1,540	2,120	1,470	1,200	827	911	876	701	495	555
MIN	260	260	837	1,240	1,070	535	452	420	372	338	306	238
AC-FT	20,600	32,530	66,460	93,380	71,980	52,230	36,020	44,440	36,580	22,950	21,220	18,140
CAL YR 1966	TOTAL 240,023		MEAN 658		MAX 1,540		MIN 260		AC-FT 476,100			
WTR YR 1967	TOTAL 260,408		MEAN 713		MAX 2,120		MIN 238		AC-FT 516,500			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	245	410	521	1,520	1,180	948	972	948	723	481	322	428
2	238	424	735	1,360	1,200	914	1,030	889	1,110	638	322	366
3	259	398	988	1,250	1,220	884	928	876	835	514	326	446
4	252	296	961	957	1,500	1,300	952	769	640	390	326	374
5	238	296	968	1,100	1,200	1,340	882	819	566	382	319	326
6	242	271	961	1,160	1,220	1,260	787	954	525	374	303	330
7	225	298	961	1,150	1,220	1,040	687	615	505	370	296	358
8	222	410	776	1,140	1,210	1,160	771	851	495	362	289	354
9	255	555	398	1,180	1,180	806	546	919	475	338	289	346
10	238	584	446	1,140	1,180	505	701	798	475	334	289	342
11	284	374	908	1,110	1,160	814	864	858	465	370	289	394
12	262	338	947	1,120	1,140	995	939	823	460	583	285	446
13	262	397	788	1,210	1,140	934	881	886	465	605	285	442
14	262	338	796	1,190	1,130	927	905	880	465	465	334	465
15	231	383	844	1,340	1,120	994	1,220	898	442	510	350	480
16	225	322	520	1,090	998	1,090	1,050	797	437	370	289	437
17	218	288	494	1,070	968	662	992	796	432	358	278	470
18	222	311	803	1,020	1,110	859	989	618	428	670	282	550
19	228	311	855	1,310	1,790	1,130	1,010	446	605	947	285	530
20	228	434	912	1,480	1,630	961	1,020	818	428	772	282	505
21	306	319	1,000	1,920	1,530	741	894	650	394	640	271	480
22	314	422	710	1,900	1,490	524	972	810	402	712	268	465
23	353	313	713	1,930	1,930	510	974	837	398	599	292	474
24	427	323	1,290	1,820	1,910	504	977	847	390	424	346	398
25	356	334	1,690	1,650	1,780	880	986	1,030	382	386	350	386
26	368	326	2,040	1,560	1,720	959	948	477	378	342	382	382
27	557	344	2,070	1,500	1,300	1,100	957	844	390	346	406	415
28	534	420	2,010	1,380	1,090	1,270	1,130	716	528	342	406	410
29	358	552	1,800	1,220	1,040	1,180	903	856	626	338	515	406
30	338	594	1,610	1,220	-----	907	947	469	581	330	535	402
31	388	-----	1,520	1,190	-----	682	-----	736	-----	326	437	-----
TOTAL	9,135	11,385	32,015	41,187	38,286	28,780	27,814	24,530	15,445	14,618	10,322	12,603
MEAN	295	380	1,033	1,329	1,320	928	927	791	515	472	333	420
MAX	557	594	2,070	1,930	1,930	1,340	1,220	1,030	1,110	947	535	550
MIN	218	271	398	957	968	504	546	446	378	326	268	326
AC-FT	18,120	22,580	63,500	81,690	75,940	57,090	55,170	48,660	30,640	28,990	20,470	25,000
CAL YR 1967	TOTAL 252,650		MEAN 692		MAX 2,120		NIN 218		AC-FT 501,100			
WTR YR 1968	TOTAL 266,120		MEAN 727		MAX 2,070		NIN 217		AC-FT 527,600			

12118500 ROCK CREEK NEAR MAPLE VALLEY, WASH.

LOCATION.--Lat 47°22'48", long 122°00'58", in SE&NW& sec.22, T.22 N., R.6 E., King County, on left bank 50 ft upstream from culvert crossing, 650 ft upstream from mouth, and 2.2 miles southeast of Maple Valley.

DRAINAGE AREA.--12.6 sq mi.

PERIOD OF RECORD.--June 1945 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 425 ft (from topographic map). Prior to Mar. 16, 1953, at site 50 ft downstream at datum 0.82 ft lower.

AVERAGE DISCHARGE.--25 years, 20.1 cfs (14,560 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum			Date	Minimum		
		Discharge	G.H.			Discharge	G.H.	
1966	Jan. 6, 1966	30	a1.97		Sept. 6, 1966	2.3	1.43	
1967	Jan. 21, 1967	79	2.25		Aug. 18, 19, 29, 1967	.86	1.29	
1968	Feb. 24, 25, 1968	47	1.98		Oct. 20, 1967	.74	b1.34	
1969	Jan. 8, 1969	104	c2.49		Sept. 14, 1969	.68	1.37	
1970	Jan. 27, 1970	54	2.13		(d)	1.0	1.38	

a Occurred Apr. 4, 1966, backwater from unknown source.

b Occurred Oct. 9, 19, 20, 1967.

c From high watermark in well.

d Part or all of each day Aug. 12-15, 19-23, 27, 28, Sept. 13, 15, 17, 1970.

Period of record: Maximum discharge, 187 cfs Jan. 30, 1965 (gage height, 3.57 ft); maximum gage height, 4.26 ft Feb. 11, 1951, site and datum then in use; minimum discharge, 0.68 cfs Sept. 14, 1969.

REMARKS.--Records good. No gage-height record Jan. 8, 9, 1969. No regulation. Small diversions above station for domestic use. The city of Kent diverted an average daily discharge of about 3.5 cfs for municipal use.

REVISIONS (WATER YEARS).--WSP 1932: 1956, 1960, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	3.9	5.7	13	18	14	21	16	11	6.4	5.7	3.4
2	3.6	4.2	6.0	15	16	14	20	16	11	8.0	5.1	3.1
3	3.6	5.7	6.5	14	16	14	19	16	10	8.8	5.1	3.1
4	4.2	6.4	10	14	16	14	18	15	11	8.0	5.7	3.4
5	4.6	6.4	9.0	18	16	15	18	15	10	8.0	4.6	3.4
6	4.6	6.4	8.0	25	16	16	18	17	10	8.0	5.7	2.7
7	4.2	6.4	7.0	28	16	16	18	15	10	7.2	4.2	3.4
8	3.6	6.4	5.7	29	15	17	17	15	9.6	6.4	5.1	3.4
9	3.9	6.4	5.4	29	14	17	16	15	9.6	6.4	5.7	3.4
10	3.9	8.0	5.4	28	14	17	16	15	10	6.4	5.7	3.4
11	3.9	8.8	5.4	28	14	18	17	14	9.6	6.4	5.7	3.9
12	3.9	8.0	5.4	28	14	18	18	14	9.6	6.4	5.1	3.9
13	3.9	6.4	5.2	29	14	18	18	14	9.6	6.4	5.1	3.3
14	4.6	6.4	5.2	28	13	19	18	14	9.6	6.4	5.1	3.3
15	4.2	6.4	5.2	28	13	21	18	14	9.6	6.4	5.1	3.3
16	4.2	6.4	5.2	28	13	22	18	14	8.8	6.4	5.1	3.1
17	4.2	7.2	5.2	28	13	22	18	13	8.8	5.7	4.6	3.3
18	4.6	8.0	5.2	28	13	23	18	13	8.0	5.7	4.2	7.2
19	5.7	8.8	5.1	27	13	24	18	13	8.0	5.7	4.2	3.9
20	4.6	8.0	5.1	26	14	24	19	13	7.2	6.4	3.6	3.5
21	4.2	8.8	6.0	25	14	24	19	13	7.2	6.4	3.6	3.3
22	3.9	8.8	6.0	24	14	24	18	12	8.0	4.6	3.9	3.3
23	3.9	8.0	6.0	23	14	24	18	11	8.0	4.6	3.6	4.6
24	3.9	7.5	8.0	22	14	24	18	11	7.2	6.4	4.6	3.5
25	3.6	7.5	10	21	13	24	18	11	7.2	5.7	5.1	3.3
26	3.6	7.5	9.0	20	12	24	18	12	7.2	5.7	5.1	3.7
27	3.9	7.5	9.0	20	14	22	18	12	7.2	5.1	6.4	3.9
28	3.9	7.0	13	19	14	22	17	12	8.0	4.6	5.7	3.5
29	3.9	6.5	15	18	-----	22	17	11	6.4	5.1	5.7	3.1
30	4.2	6.0	14	18	-----	22	16	11	6.4	5.7	3.9	3.1
31	3.9	-----	13	18	-----	21	-----	11	-----	5.7	3.6	-----
TOTAL	127.3	209.7	229.9	719	400	616	538	418	263.8	195.1	151.6	106.7
MEAN	4.11	6.99	7.42	23.2	14.3	19.9	17.9	13.5	8.79	6.29	4.89	3.56
MAX	5.7	8.8	13	29	18	24	21	17	11	8.8	6.4	7.2
MIN	3.6	3.9	5.1	13	12	14	16	11	6.4	4.6	3.6	2.7
AC-FT	253	416	456	1,430	793	1,220	1,070	829	523	387	301	212

CAL YR 1965 TOTAL 7,816.5 MEAN 21.4 MAX 177 MIN 2.7 AC-FT 15,500

WTR YR 1966 TOTAL 3,975.1 MEAN 10.9 MAX 29 MIN 2.7 AC-FT 7,880

12118500 ROCK CREEK NEAR MAPLE VALLEY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	7.7	16	29	30	29	16	15	9.3	7.4	3.6	1.5
2	4.4	7.7	23	31	29	28	17	15	8.6	8.0	3.3	1.5
3	4.4	7.1	25	32	29	28	16	15	6.8	8.0	4.4	1.5
4	4.9	6.5	31	34	29	27	16	15	5.8	8.6	4.4	1.5
5	3.6	6.5	38	39	29	28	15	14	6.2	9.3	4.0	1.3
6	4.4	5.9	40	54	29	27	16	17	6.2	9.3	4.4	1.1
7	4.0	5.9	42	86	28	26	15	17	6.8	7.4	3.3	.95
8	4.4	7.1	42	102	29	26	15	14	6.8	6.8	3.6	.95
9	3.6	6.5	44	98	31	26	16	14	7.4	6.8	4.0	.95
10	4.4	6.5	44	90	33	24	14	14	5.8	7.4	4.4	.95
11	4.4	11	44	84	38	24	14	14	5.8	7.4	4.8	.95
12	4.9	16	45	78	40	24	14	12	5.8	7.4	3.6	.95
13	5.4	15	46	72	42	23	14	11	5.3	7.4	3.0	1.1
14	6.5	15	46	66	44	22	14	11	6.2	6.2	2.6	.81
15	6.5	15	46	62	42	21	13	12	5.8	6.8	2.6	1.5
16	5.9	14	44	58	42	21	13	11	6.2	6.2	2.6	2.1
17	5.4	13	42	54	41	21	14	11	6.2	5.8	2.4	2.6
18	6.5	13	41	51	40	20	14	11	5.3	5.3	3.0	2.6
19	7.1	13	40	49	40	20	14	11	5.3	5.3	4.0	3.6
20	7.1	13	38	48	39	20	14	10	4.4	6.2	3.0	3.0
21	7.1	13	38	46	39	20	14	8.6	4.4	5.3	2.4	3.0
22	6.5	14	37	44	36	18	14	8.0	5.8	4.8	2.1	3.3
23	7.7	14	37	42	34	18	17	7.4	9.3	4.8	1.9	3.0
24	7.7	14	38	41	33	22	16	8.0	7.4	4.4	1.7	3.6
25	7.7	14	37	40	33	20	17	7.4	7.4	4.0	1.7	2.6
26	7.1	15	37	39	32	18	16	8.0	6.8	4.4	1.7	2.8
27	7.7	14	37	38	30	19	16	9.3	7.4	4.8	1.7	2.6
28	8.4	14	36	36	29	18	16	7.4	10	4.4	1.7	3.0
29	8.4	15	35	34	-----	18	15	11	10	4.0	1.9	3.0
30	7.1	16	33	32	-----	18	15	10	7.4	3.6	2.6	3.6
31	7.1	-----	32	31	-----	17	-----	8.6	-----	3.6	1.7	-----
TOTAL	184.7	348.4	1,174	1,640	970	691	450	357.7	201.9	191.1	92.1	61.91
MEAN	5.96	11.6	37.9	52.9	34.6	22.3	15.0	11.5	6.73	6.16	2.97	2.06
MAX	8.4	16	46	102	44	29	17	17	10	9.3	4.8	3.6
MIN	3.6	5.9	16	29	28	17	13	7.4	4.4	3.6	1.7	.81
AC-FT	366	691	2,330	3,250	1,920	1,370	893	710	400	379	183	123

CAL YR 1968 TOTAL 5,896.30 MEAN 16.1 MAX 46 MIN 2.4
 WTR YR 1969 TOTAL 6,362.81 MEAN 17.4 MAX 102 MIN .81

AC-FT 11,700
 AC-FT 12,620

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	4.8	4.8	28	42	27	20	23	13	6.5	2.6	1.6
2	3.0	4.8	4.8	27	41	27	19	24	11	5.5	3.1	1.6
3	3.3	4.8	4.4	26	40	27	18	24	11	5.0	3.1	1.6
4	3.3	8.0	4.8	24	39	26	18	23	11	4.3	3.1	1.6
5	3.0	8.0	4.8	23	38	26	19	23	10	4.3	2.6	1.7
6	3.3	7.4	3.6	22	36	26	19	23	10	3.6	2.3	1.9
7	3.6	7.4	4.4	21	34	26	18	23	10	3.3	1.7	1.9
8	4.0	6.2	4.4	21	34	25	18	22	10	3.3	2.1	1.7
9	3.6	6.8	4.8	20	33	24	20	21	10	3.1	1.7	1.7
10	4.0	6.8	4.4	20	32	24	20	21	10	3.1	2.6	1.6
11	4.0	6.2	5.8	20	30	23	21	21	10	3.1	1.3	1.7
12	3.6	6.2	7.4	20	28	23	24	21	10	2.8	1.0	1.4
13	4.0	6.8	9.3	20	28	23	24	20	10	2.8	1.0	1.6
14	4.4	5.8	12	21	27	24	24	20	8.9	2.6	1.0	1.6
15	4.4	6.2	14	24	27	23	25	20	8.9	2.6	1.1	1.3
16	3.6	6.2	14	24	28	23	24	19	8.9	2.3	1.1	1.4
17	4.4	5.8	14	26	28	23	24	18	7.6	2.1	1.6	1.6
18	4.8	5.3	14	28	29	23	24	18	7.0	2.1	1.4	2.3
19	4.0	5.3	15	31	34	23	24	18	6.5	1.9	1.1	1.9
20	4.8	4.0	17	35	35	24	23	17	7.0	2.1	1.0	1.9
21	4.8	4.0	18	39	35	24	23	16	6.0	2.1	1.0	1.7
22	4.8	4.4	19	41	34	24	23	16	6.0	2.6	1.0	1.9
23	4.0	6.2	21	41	33	23	23	16	5.5	1.9	1.1	1.9
24	4.8	6.2	24	40	32	22	23	15	5.0	1.7	1.3	2.1
25	4.8	5.8	26	46	32	21	23	15	5.0	3.3	1.6	1.9
26	4.8	5.8	26	49	30	21	22	14	5.0	4.0	1.4	1.9
27	4.8	5.8	28	52	29	21	23	14	5.0	4.3	1.0	1.7
28	4.8	5.3	29	51	28	21	22	13	5.0	3.1	1.1	1.7
29	5.3	4.4	27	49	-----	20	23	13	6.5	3.3	1.6	1.6
30	5.3	5.3	27	47	-----	20	23	14	7.0	3.1	1.6	1.7
31	4.4	-----	28	44	-----	20	-----	13	-----	3.1	1.4	-----
TOTAL	128.9	176.0	440.7	980	916	727	654	578	246.8	98.9	50.6	51.7
MEAN	4.16	5.67	14.2	31.6	32.7	23.5	21.8	18.6	8.23	3.19	1.43	1.72
MAX	5.3	8.0	29	52	42	27	25	24	13	6.5	3.1	2.3
MIN	3.0	4.0	3.6	20	27	20	18	13	5.0	1.7	1.0	1.3
AC-FT	256	349	874	1,940	1,820	1,440	1,300	1,150	490	196	100	103

CAL YR 1969 TOTAL 5,401.31 MEAN 14.8 MAX 102 MIN .81
 WTR YR 1970 TOTAL 5,048.60 MEAN 13.8 MAX 52 MIN 1.0

AC-FT 10,710
 AC-FT 10,010

12119000 CEDAR RIVER AT RENTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	406	1,110	1,460	1,490	1,240	737	520	705	185	90	67
2	222	314	999	1,450	1,420	1,140	490	632	729	122	84	70
3	208	280	925	1,550	1,340	1,100	634	562	527	111	85	73
4	197	227	858	1,770	1,400	1,190	667	588	369	106	83	67
5	194	302	935	1,620	1,430	1,090	607	535	507	104	82	64
6	190	183	895	1,350	1,420	1,110	517	441	663	104	84	72
7	197	214	928	1,310	1,370	1,090	607	436	670	104	85	296
8	211	304	908	1,310	1,340	772	658	624	584	157	82	236
9	208	228	950	1,300	1,290	814	627	843	601	163	80	308
10	197	234	869	1,280	1,200	753	572	802	471	160	78	176
11	200	234	902	1,440	1,360	951	620	818	221	197	75	192
12	262	280	1,290	1,378	1,370	521	517	813	342	198	73	164
13	235	229	2,100	1,450	1,600	631	501	816	528	212	104	128
14	208	409	1,710	1,640	1,490	744	499	595	553	173	74	114
15	200	616	1,540	2,100	1,440	730	490	576	574	145	82	106
16	197	615	1,446	2,140	1,400	723	317	816	505	120	128	98
17	194	722	1,370	1,960	1,400	803	387	849	235	122	94	164
18	190	727	1,330	1,670	1,600	608	511	791	179	358	71	89
19	204	647	1,410	2,240	1,500	550	632	752	233	125	64	88
20	293	474	1,470	2,840	1,430	687	526	714	263	109	61	86
21	232	518	1,330	2,600	1,380	589	450	485	338	101	89	84
22	262	578	1,250	2,310	1,300	632	429	536	464	139	202	83
23	372	454	1,140	1,960	1,250	995	416	640	317	142	179	81
24	297	349	1,090	1,630	1,240	1,040	533	623	304	136	139	79
25	289	466	1,090	1,470	1,130	822	716	645	267	101	92	76
26	351	493	1,040	1,390	1,090	711	451	671	339	98	176	76
27	396	493	1,010	1,430	1,100	873	591	598	480	98	74	74
28	411	654	1,000	1,940	1,150	974	763	294	294	97	63	70
29	406	853	1,040	1,820	-----	905	601	398	326	94	68	71
30	369	1,070	1,030	1,730	-----	929	470	606	254	92	68	76
31	292	-----	1,060	1,590	-----	898	-----	697	-----	90	66	-----
TOTAL	7,898	13,573	35,939	53,340	38,350	26,295	16,548	19,692	12,952	4,317	2,903	3,360
MEAN	255	452	1,159	1,721	1,370	848	552	635	432	139	93.6	112
MAX	411	1,070	2,100	2,840	1,800	1,240	763	845	729	358	202	308
MIN	190	183	850	1,280	1,090	521	317	294	179	90	61	64
AC-FT	15,670	26,920	71,290	105,800	76,870	52,160	32,820	39,060	25,690	8,560	5,760	6,660
CAL YR 1966	TOTAL	213,903	MEAN	586	MAX	2,100	MIN	65	AC-FT	424,300		
WTR YR 1967	TOTAL	235,167	MEAN	644	MAX	2,840	MIN	61	AC-FT	466,500		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	369	388	1,750	1,080	807	638	880	831	382	54	538
2	86	612	1,490	1,110	831	1,810	831	1,430	327	51	589	
3	143	341	879	1,118	1,290	739	915	796	1,230	518	56	438
4	152	230	877	876	1,940	1,180	915	747	817	256	64	323
5	119	206	882	939	1,480	1,420	936	674	542	235	66	190
6	91	203	854	1,020	1,210	1,320	761	894	455	160	58	172
7	91	183	857	1,020	1,160	1,060	761	768	415	169	53	190
8	93	234	730	988	1,170	1,140	740	680	391	160	50	197
9	88	442	437	1,040	1,130	915	782	817	365	136	47	191
10	128	585	360	1,070	1,090	475	831	698	343	111	45	175
11	150	368	780	1,010	1,060	632	845	747	339	104	45	208
12	162	290	978	1,010	1,040	966	887	716	327	255	47	272
13	152	295	698	1,170	1,010	908	831	775	322	358	48	287
14	166	383	705	1,200	990	894	852	748	335	427	134	353
15	130	277	695	1,388	974	1,010	1,220	728	310	327	310	374
16	120	290	509	1,120	859	1,200	1,030	734	298	284	219	354
17	114	205	343	1,060	831	899	922	572	290	239	150	359
18	113	208	529	990	1,050	728	873	626	278	348	152	658
19	122	208	661	1,360	2,370	1,148	908	348	365	758	172	675
20	128	247	718	1,830	2,280	974	915	524	339	624	189	646
21	287	319	791	2,510	2,050	831	789	650	247	532	178	613
22	296	719	2,390	1,860	1,640	607	510	244	522	178	593	
23	304	296	446	2,378	2,370	485	845	606	244	514	221	580
24	389	192	1,050	1,980	2,410	485	845	710	225	318	296	348
25	366	244	1,720	1,670	2,210	722	866	929	211	207	293	333
26	316	223	2,230	1,560	2,060	966	887	900	174	141	337	319
27	411	230	2,260	1,450	1,480	1,120	901	584	167	106	354	345
28	647	303	2,220	1,280	1,000	1,710	1,078	716	255	93	384	352
29	448	393	2,020	1,090	1,010	1,470	845	704	400	84	454	349
30	279	480	1,820	1,070	-----	1,150	873	506	495	78	452	342
31	291	-----	1,720	1,030	-----	768	-----	495	-----	62	483	-----
TOTAL	6,474	8,793	30,481	41,833	41,624	29,637	26,531	21,253	12,684	8,856	5,642	11,267
MEAN	209	293	983	1,349	1,435	954	884	686	423	286	182	376
MAX	647	585	2,260	2,918	2,410	1,718	1,220	929	1,430	758	483	675
MIN	84	183	343	876	831	475	748	348	167	62	45	172
AC-FT	12,840	17,440	60,480	82,980	82,560	58,780	52,620	42,160	25,160	17,570	11,190	22,380
CAL YR 1967	TOTAL	223,505	MEAN	612	MAX	2,840	MIN	61	AC-FT	443,300		
WTR YR 1968	TOTAL	245,075	MEAN	670	MAX	2,510	MIN	48	AC-FT	486,100		

12119000 CEDAR RIVER AT RENTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	334	557	1,100	544	405	404	820	1,100	1,470	574	383	112
2	320	503	1,190	404	405	430	799	1,110	1,530	440	365	109
3	316	361	1,910	673	562	430	924	1,100	1,390	420	192	111
4	333	365	2,340	972	631	385	1,190	1,060	1,170	410	304	112
5	414	521	1,840	2,330	598	404	1,210	1,040	1,000	390	471	111
6	445	541	1,400	2,920	490	624	1,140	844	834	410	519	139
7	440	525	1,140	3,180	442	631	1,130	844	790	526	365	137
8	433	589	1,380	2,710	687	538	1,170	868	520	340	337	134
9	407	747	1,370	2,410	764	514	1,180	916	631	320	387	129
10	456	648	1,400	2,040	708	590	1,140	868	736	304	194	124
11	486	1,070	1,590	1,820	840	442	988	380	652	333	229	122
12	500	1,420	1,410	1,670	852	345	988	631	562	302	321	127
13	609	1,180	1,310	1,620	792	390	1,620	932	673	287	304	129
14	571	1,020	1,310	1,620	729	340	972	932	538	276	321	132
15	606	1,220	1,290	1,550	778	335	956	631	400	362	278	125
16	661	1,190	1,290	1,490	701	390	948	932	472	404	174	115
17	619	1,020	1,130	1,330	659	338	1,000	980	335	440	154	142
18	619	1,090	1,200	1,290	652	667	1,180	932	172	253	154	255
19	608	1,040	1,130	1,260	638	638	1,280	964	169	227	186	324
20	685	1,040	1,120	1,220	610	592	1,340	964	182	228	186	327
21	656	1,060	813	1,200	598	538	836	940	175	283	163	272
22	646	1,380	902	1,010	580	472	1,290	900	169	255	179	395
23	614	1,410	828	892	568	544	1,330	892	390	536	170	529
24	592	1,430	820	924	580	502	1,200	580	1,520	506	166	512
25	598	1,300	785	785	538	478	1,110	526	1,030	519	166	357
26	596	1,040	736	708	466	496	948	836	1,630	249	146	310
27	581	941	934	694	436	580	828	1,240	1,170	213	132	269
28	572	905	940	631	630	556	1,040	1,300	884	265	131	251
29	575	1,030	666	415	-----	526	1,100	1,490	701	521	126	259
30	601	1,110	538	478	-----	448	1,070	1,930	916	550	119	388
31	596	-----	538	415	-----	568	-----	1,700	-----	491	115	-----
TOTAL	16,489	28,253	35,972	41,285	17,159	15,415	32,147	30,522	22,733	11,683	7,357	6,549
MEAN	532	942	1,162	1,332	613	497	1,072	985	758	377	237	218
MAX	685	1,430	2,340	3,180	860	687	1,340	1,930	1,630	574	519	529
MIN	316	361	802	415	405	338	799	526	169	213	115	109
AC-FT	32,710	56,400	71,350	81,890	34,030	30,580	63,760	60,560	45,090	23,170	14,590	12,990
CAL YR 1968	TOTAL	280,041	MEAN	765	MAX	2,510	MIN	45	AC-FT	555,500		
WTR YR 1969	TOTAL	265,564	MEAN	728	MAX	3,180	MIN	109	AC-FT	526,700		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	531	343	299	508	1,220	746	423	1,130	690	378	88	102
2	350	357	294	496	1,170	766	545	899	733	491	97	103
3	299	373	294	484	1,160	850	485	878	480	502	99	161
4	268	561	303	472	1,110	720	850	864	595	498	102	208
5	246	955	335	466	1,100	606	785	871	364	520	91	163
6	231	701	312	335	1,090	584	892	892	297	495	85	156
7	223	448	308	308	1,040	913	1,120	844	385	350	89	210
8	252	400	317	299	1,050	678	1,100	837	418	244	110	204
9	345	380	326	312	1,040	666	1,340	1,090	455	210	91	163
10	357	360	330	317	1,040	714	1,670	941	618	194	91	159
11	339	345	405	317	1,030	672	1,460	927	578	168	84	193
12	319	415	743	340	1,010	690	1,360	990	678	160	87	195
13	303	415	701	454	1,030	720	1,280	1,100	678	156	96	152
14	302	415	1,200	1,290	1,010	660	1,280	864	720	145	92	148
15	371	415	972	1,130	1,120	793	1,330	578	885	126	88	151
16	462	415	673	860	1,460	798	1,310	490	899	79	86	174
17	333	415	596	580	1,450	1,150	1,240	573	824	58	90	167
18	325	441	592	1,070	1,320	1,130	1,070	630	696	50	99	267
19	319	482	604	1,930	1,240	1,100	1,140	714	678	53	108	487
20	322	330	680	2,090	1,180	1,040	1,130	708	573	53	115	413
21	375	345	764	2,130	1,150	612	857	708	247	52	109	237
22	374	321	916	2,118	1,110	562	746	630	346	48	113	195
23	354	355	1,210	2,130	885	642	660	504	500	44	117	180
24	353	375	1,400	2,120	892	920	1,020	369	409	48	120	188
25	359	340	1,290	2,130	1,040	818	906	328	490	94	141	186
26	352	326	1,220	2,040	850	490	864	455	427	93	144	253
27	365	317	1,080	2,040	733	414	878	495	324	133	145	234
28	361	312	988	1,520	824	475	927	678	333	93	129	226
29	363	312	764	1,350	-----	465	941	636	490	70	110	216
30	357	303	554	1,270	-----	462	1,500	475	584	96	102	215
31	354	-----	526	1,270	-----	418	-----	510	-----	95	100	-----
TOTAL	10,464	12,272	21,000	34,168	30,374	22,174	30,909	22,488	16,324	5,758	3,218	5,988
MEAN	338	409	677	1,102	1,085	715	1,030	732	344	186	104	200
MAX	531	955	1,400	2,130	1,460	1,150	1,670	1,130	899	520	145	487
MIN	223	305	294	299	733	414	423	328	247	44	86	102
AC-FT	20,760	24,340	41,650	67,770	60,250	43,900	61,518	45,000	32,300	11,420	6,380	11,800
CAL YR 1969	TOTAL	228,586	MEAN	626	MAX	3,180	MIN	109	AC-FT	453,400		
WTR YR 1970	TOTAL	215,337	MEAN	590	MAX	2,130	MIN	44	AC-FT	427,100		

12119600 MAY CREEK AT MOUTH, NEAR RENTON, WASH.

LOCATION.--Lat 47°31'48", long 122°12'00", in NE1/4 sec.32, T.24 N., R.5 E., King County, on left bank at highway crossing, 0.2 mile upstream from mouth and 2 miles north of Renton.

DRAINAGE AREA.--12.7 sq mi.

PERIOD OF RECORD.--August 1964 to September 1970.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 25 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 21.0 cfs (22.46 inches per year, 15,210 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (150 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	2130	*208	3.30	Jan. 20, 1967	1015	*283	3.58	Dec. 4, 1968	0745	236	3.37
Dec. 13, 1966	2215	220	3.35	Jan. 28, 1967	1300	158	3.07	Jan. 7, 1969	0100	*286	3.49
				Jan. 21, 1968	0645	*156	3.06	Jan. 27, 1970a	-	-	-

a About.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 20, 21, 1966	3.0	1.23	1969	Sept. 1, 9, 10, 11, 1969	3.5	1.27
1967	Aug. 18, 1967	2.2	1.18	1970	July 15, 18, 19, 1970	3.0	1.25
1968	Aug. 3, 1968	2.9	1.22				

a Occurred also Aug. 18, 19, 21, 22, 23, 26, 29, 30, Sept. 13, 1970.

Period of record: Maximum discharge, 295 cfs Nov. 30, 1964 (gage height, 3.62 ft); minimum recorded, 2.2 cfs Aug. 18, 1967 (gage height, 1.18 ft).

REMARKS.--Records excellent except those for periods of no gage-height record, which are fair. Some minor diversions for irrigation above station. No regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	4.8	12	49	18	31	20	10	4.9	4.6	3.6	3.5
2	4.1	5.7	12	68	17	28	22	9.8	5.3	5.8	3.6	3.5
3	4.0	9.5	13	62	16	28	18	9.2	5.3	9.8	3.6	3.5
4	4.7	19	28	57	17	27	17	9.0	5.6	6.4	3.7	3.4
5	6.0	19	24	63	18	27	16	6.4	5.4	7.1	3.6	3.3
6	5.9	12	25	161	23	27	14	16	5.1	5.6	3.6	3.5
7	5.2	9.2	30	181	23	28	13	16	4.9	5.3	3.5	3.5
8	4.8	7.6	27	137	23	39	12	12	4.8	4.9	3.5	3.4
9	4.6	6.9	22	95	23	50	12	10	4.9	4.6	3.6	3.4
10	4.5	7.8	24	69	23	43	14	6.7	5.1	4.8	3.7	3.5
11	4.4	9.2	20	57	32	37	34	7.8	4.9	4.8	3.6	4.7
12	4.6	7.6	17	80	51	35	53	7.8	4.8	5.1	3.5	4.4
13	4.7	6.9	15	79	42	44	40	7.6	4.9	4.9	3.7	3.9
14	5.5	6.9	14	77	39	54	36	7.4	5.1	4.5	3.6	3.8
15	5.5	6.5	12	60	34	54	32	6.1	4.9	4.5	3.5	3.7
16	5.2	6.0	11	50	30	54	27	8.1	4.8	8.3	3.4	3.7
17	5.0	5.8	10	42	28	44	24	7.4	4.6	5.0	3.4	5.6
18	5.8	6.9	9.8	37	26	42	22	7.1	4.4	4.4	3.4	6.0
19	7.7	17	9.2	34	24	41	19	6.7	4.4	4.1	3.4	4.5
20	6.3	19	9.8	29	23	38	20	6.5	4.2	3.9	3.3	3.8
21	5.6	14	13	27	22	40	21	7.1	4.2	3.9	3.3	3.6
22	5.2	16	11	25	20	34	18	6.7	4.2	4.1	3.3	4.0
23	5.0	13	11	29	20	31	16	6.3	4.6	3.9	3.3	4.1
24	4.9	12	14	22	18	28	18	5.8	4.6	4.1	3.4	3.8
25	4.8	14	13	20	20	27	16	5.6	4.4	3.9	3.5	3.7
26	4.7	15	13	18	20	24	18	5.8	4.4	3.9	3.7	3.9
27	5.0	16	38	22	28	23	15	6.0	4.9	3.9	4.0	3.7
28	5.0	13	79	19	35	20	13	5.6	6.3	3.9	3.4	3.6
29	4.8	11	88	22	-----	19	14	5.3	4.9	3.7	3.4	3.5
30	4.8	10	82	21	-----	20	11	5.1	4.6	3.7	3.6	3.5
31	4.8	-----	62	19	-----	20	-----	5.1	-----	3.7	3.4	-----
TOTAL	157.1	327.3	768.8	1,725	713	1,057	622	248.0	145.4	152.9	109.1	116.0
MEAN	5.07	10.9	24.8	55.6	23.5	34.1	20.7	8.00	4.85	4.93	3.52	3.87
MAX	7.7	19	88	181	51	54	53	16	6.3	9.8	4.0	6.0
MIN	4.0	4.8	9.2	18	16	19	11	5.1	4.2	3.7	3.3	3.3
CFSM	.40	.86	1.95	4.38	2.01	2.69	1.63	.63	.38	.39	.28	.30
IN.	.46	.96	2.25	5.05	2.09	3.10	1.82	.73	.43	.45	.32	.34
AC-FT	312	649	1,520	3,420	1,410	2,100	1,230	492	288	303	216	230
CAL YR 1965	TOTAL 6,751.6	MEAN 18.5	MAX 208	MIN 3.9	CFSM 1.46	IN 19.78	AC-FT 13,390					
WTR YR 1966	TOTAL 6,141.6	MEAN 16.8	MAX 181	MIN 3.3	CFSM 1.32	IN 17.99	AC-FT 12,180					

12119600 MAY CREEK AT MOUTH, NEAR RENTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	9.8	47	34	19	19	18	20	15	10	4.4	3.8
2	4.8	12	43	34	21	19	23	18	12	11	4.4	3.8
3	4.8	12	92	37	32	19	24	19	10	8.4	4.3	4.0
4	9.4	11	20E	48	32	18	24	15	9.5	9.0	4.2	4.1
5	9.1	9.9	142	126	53	20	28	14	9.0	8.8	4.6	4.0
6	9.4	9.2	99	228	43	27	25	13	8.6	7.2	4.4	3.9
7	9.1	9.1	82	241	39	24	22	12	8.2	6.7	4.2	3.8
8	4.9	13	108	164	79	21	20	12	7.8	6.3	4.2	3.8
9	5.3	19	98	131	138	19	20	11	7.6	6.0	4.2	3.7
10	4.5	14	111	106	118	18	21	11	7.4	6.0	4.2	3.7
11	8.1	48	133	95	135	17	19	10	7.4	6.3	4.2	3.7
12	11	49	111	75	131	15	17	9.8	7.4	6.0	4.4	3.8
13	19	55	84	64	101	14	16	9.4	7.8	5.8	4.2	4.0
14	16	41	72	96	76	14	15	9.1	7.8	5.4	4.2	3.8
15	18	32	43	50	61	14	14	8.8	7.0	5.3	4.2	3.8
16	15	27	65	47	60	16	13	8.8	6.4	5.3	4.1	4.0
17	15	22	59	43	54	31	20	8.8	6.4	5.1	4.1	7.7
18	17	20	38	46	37	38	38	8.8	6.4	5.1	4.1	23
19	17	18	42	33	43	24	30	9.4	6.4	4.9	4.1	12
20	19	19	52	30	40	22	24	9.4	6.4	5.1	4.2	9.0
21	17	23	45	28	35	19	20	9.0	6.8	4.9	4.1	6.8
22	17	31	48	25	32	18	17	8.6	8.0	4.6	4.1	17
23	15	33	25	23	30	17	25	8.2	12	4.5	4.1	23
24	14	30	79	21	27	16	22	8.2	19	4.5	3.9	15
25	12	28	82	20	25	15	19	8.2	15	4.4	3.9	10
26	11	26	69	19	23	15	14	8.6	18	4.4	3.9	9.1
27	11	25	50	19	22	14	16	9.0	15	4.4	4.1	7.7
28	10	23	44	18	20	14	15	18	22	4.4	4.1	7.3
29	11	39	38	18	-----	13	17	25	15	4.3	4.0	9.8
30	13	49	35	17	-----	13	14	20	12	4.2	3.9	12
31	11	-----	33	18	-----	13	-----	30	-----	4.3	3.8	-----
TOTAL	349.3	779.0	2,380	1,925	1,546	575	606	409.1	306.1	181.8	128.8	219.1
MEAN	11.3	26.0	76.8	62.2	55.2	18.5	20.2	13.2	10.2	6.15	4.15	7.30
MAX	19	49	208	241	138	31	38	30	22	11	4.6	23
MIN	4.8	9.1	33	17	19	13	13	8.2	6.4	4.2	3.8	3.7
CFSM	.89	2.05	6.05	4.89	4.35	1.46	1.59	1.04	.80	.46	.33	.57
IN.	1.02	2.28	6.97	5.64	4.53	1.68	1.78	1.20	.90	.53	.38	.64
AC-FT	693	1,550	4,720	3,820	3,070	1,140	1,208	811	607	361	255	435

CAL YR 1968 TOTAL 9,154.9 MEAN 25.0 MAX 208 MIN 3.4 CFSM 1.97 IN 26.82 AC-FT 18,160
 WTR YR 1969 TOTAL 9,405.2 MEAN 25.0 MAX 241 MIN 3.7 CFSM 2.03 IN 27.55 AC-FT 18,660

NOTE.--NO GAGE-HEIGHT RECORD APR. 10 TO JULY 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	6.0	7.0	22	40	19	18	21	7.2	4.8	4.0	3.4
2	8.2	5.7	7.8	29	50	19	21	19	6.5	4.2	5.1	3.4
3	7.5	6.0	7.5	19	40	19	21	18	6.2	4.0	5.1	4.4
4	7.2	27	8.2	18	17	19	16	19	6.0	3.7	4.0	3.8
5	7.0	27	7.7	15	35	16	20	15	5.5	3.7	4.6	4.0
6	6.7	18	7.5	15	34	26	30	14	5.7	3.7	4.2	4.6
7	8.2	14	7.2	15	31	39	25	13	5.3	3.5	4.0	5.3
8	10	12	8.8	15	29	28	23	14	5.3	3.7	4.0	4.6
9	9.7	11	9.1	19	24	37	17	14	6.7	3.5	3.8	4.0
10	9.1	9.7	9.1	19	25	21	37	17	5.7	3.4	3.7	3.8
11	8.2	8.6	18	17	24	21	45	15	5.7	3.4	3.5	3.7
12	7.5	8.2	44	16	23	24	40	13	5.5	3.4	3.5	3.8
13	7.5	8.0	50	30	20	26	36	12	5.3	3.4	3.8	3.5
14	7.2	7.7	62	91	24	38	33	12	5.3	3.4	3.5	3.4
15	6.5	7.5	52	98	35	38	20	11	5.5	3.3	3.5	3.5
16	6.5	7.2	42	73	62	36	24	9.7	5.5	3.3	3.5	3.5
17	6.2	6.7	35	65	59	33	22	9.4	5.3	3.4	3.5	6.5
18	6.2	6.7	36	55	55	29	23	4.9	5.3	3.4	3.4	6.5
19	6.8	6.5	35	90	67	26	31	8.0	4.8	3.3	3.4	5.5
20	6.0	6.0	36	89	42	24	33	7.7	4.4	3.4	3.4	6.2
21	6.0	6.0	47	84	37	23	27	7.7	4.4	3.4	3.4	5.1
22	5.7	7.5	58	80	33	21	25	8.0	4.2	3.4	3.4	4.8
23	5.7	11	75	100	30	19	24	7.7	4.2	3.4	3.4	4.4
24	5.7	12	66	98	26	20	29	7.2	4.0	3.4	3.4	4.2
25	5.7	9.4	64	110	25	18	25	7.8	4.0	4.2	3.4	4.0
26	5.5	8.5	40	96	23	17	24	7.0	4.0	5.5	3.4	3.8
27	6.5	8.0	40	140	22	16	24	6.7	4.6	4.0	3.4	3.8
28	6.0	8.0	32	110	20	21	21	6.7	4.6	4.8	3.5	3.8
29	6.5	7.7	28	80	-----	20	22	12	4.9	4.2	3.4	3.8
30	6.2	7.5	26	60	-----	19	24	11	4.6	4.2	3.3	3.8
31	6.0	-----	24	80	-----	15	-----	8.5	-----	4.0	3.4	-----
TOTAL	216.9	380.3	987.1	1,954	982	730	815	357.1	155.8	111.2	115.7	128.9
MEAN	7.00	10.0	31.8	59.9	35.1	23.5	27.2	11.5	5.19	4.01	3.73	4.30
MAX	10	29	75	140	62	38	45	21	7.2	6.0	5.1	6.5
MIN	5.5	5.7	7.0	14	20	15	18	6.7	4.0	3.3	3.3	3.4
CFSM	.55	.79	2.50	4.71	2.76	1.85	2.14	.91	.41	.30	.29	.34
IN.	.64	.88	2.89	5.43	2.88	2.14	2.39	1.05	.46	.35	.34	.38
AC-FT	430	596	1,960	3,600	1,950	1,450	1,620	788	309	234	229	254

CAL YR 1969 TOTAL 7,401.2 MEAN 20.3 MAX 241 MIN 3.7 CFSM 1.60 IN 21.68 AC-FT 14,680
 WTR YR 1970 TOTAL 6,761.0 MEAN 19.5 MAX 140 MIN 3.3 CFSM 1.46 IN 19.80 AC-FT 13,418

NOTE.--NO GAGE-HEIGHT RECORD JAN. 18 TO FEB. 16.

12119700 COAL CREEK NEAR BELLEVUE, WASH.

LOCATION.--Lat 47°34'02", long 122°10'46", in NW¼SW¼ sec.16, T.24 N., R.5 E., King County, on left bank 3.3 miles southeast of Bellevue and at mile 0.72.

DRAINAGE AREA.--6.80 sq mi.

PERIOD OF RECORD.--December 1963 to September 1968. Annual maximums, water years 1969-70.

GAGE.--Crest-stage gage. Altitude of gage is 50 ft (from topographic map). Aug. 7, 1964, to Sept. 30, 1968, water-stage recorder at present site and datum. Prior to Aug. 7, 1964, water-stage recorder at site 700 ft downstream at different datum.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (100 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	0400	*130	2.55	Jan. 20, 1968	1545	101	2.30	Jan. 6, 1969	-	*362	5.83
				Feb. 5, 1968	2345	*109	2.37				
Dec. 13, 1966	0530	160	2.78	Aug. 23, 1968	1845	106	2.35	Jan. 27, 1970	-	*103	2.32
Jan. 19, 1967	1700	*163	2.80								

Annual minimum discharge, water years 1966-68

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 26, 29, 1966	1.3	.38	1968	Oct. 2, 1967	1.3	.38
1967	Sept. 26, 1967	1.0	.35				

Period of record: Maximum discharge, 362 cfs Jan. 6, 1969 (gage height, 5.83 ft), from rating curve extended above 100 cfs; minimum, 1.0 cfs Sept. 26, 1967 (gage height, 0.35 ft).

REMARKS.--Records excellent. Some minor diversions and possible regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	3.1	7.2	23	10	17	11	13	5.0	3.4	2.7	2.5
2	2.9	4.2	9.5	30	9.9	15	12	12	5.5	3.4	2.7	2.6
3	2.9	9.4	7.2	26	9.9	17	11	10	5.3	3.1	2.7	2.6
4	4.2	10	11	22	9.6	14	10	9.4	5.1	4.3	2.7	2.5
5	4.9	7.4	9.5	44	9.9	15	9.8	8.8	4.9	4.0	2.7	2.5
6	4.6	5.0	9.8	108	11	15	9.6	17	4.7	3.7	2.7	2.5
7	3.1	4.5	13	85	12	15	9.6	17	4.6	3.6	2.7	2.4
8	3.0	4.3	9.5	56	13	33	9.4	11	4.5	3.4	2.7	2.4
9	2.9	5.0	7.3	37	13	36	9.4	7.6	4.5	3.3	2.7	2.4
10	2.7	6.0	8.2	30	13	29	11	7.4	4.3	3.7	2.7	2.9
11	2.7	6.5	6.7	28	20	25	28	7.2	4.0	3.4	2.6	3.8
12	3.2	5.0	6.1	45	23	23	28	7.2	3.9	3.2	2.6	3.6
13	3.2	4.5	5.9	42	21	28	24	7.2	4.0	3.3	3.0	3.6
14	4.6	5.0	5.5	38	19	35	24	8.6	3.9	3.4	2.6	3.6
15	3.9	4.6	5.2	30	17	36	21	9.1	3.9	3.2	2.6	3.6
16	3.1	4.5	5.0	25	15	33	18	8.3	3.7	6.1	2.6	3.6
17	3.0	4.4	4.7	22	14	28	16	7.5	3.7	5.0	2.6	3.5
18	5.6	6.0	4.5	23	13	29	15	7.0	3.6	2.9	2.5	4.7
19	4.2	9.8	4.4	19	12	26	14	6.3	3.6	2.7	2.5	2.9
20	3.6	10	4.9	16	11	25	14	4.8	3.6	2.7	2.5	2.6
21	3.2	7.0	5.2	14	10	24	13	7.0	3.6	2.7	2.5	2.5
22	3.1	8.9	4.7	13	11	23	12	6.5	3.6	2.7	2.5	3.7
23	3.1	7.0	5.5	12	10	21	11	6.0	4.3	2.7	2.6	3.2
24	3.0	6.4	9.2	11	9.9	19	11	5.5	4.0	2.7	2.6	2.3
25	3.0	8.0	7.3	11	12	18	11	5.2	4.5	2.7	2.6	2.4
26	3.1	9.0	6.9	10	10	17	12	6.0	4.3	2.7	2.6	2.6
27	4.0	8.3	35	11	18	15	12	5.6	5.8	2.7	3.6	2.4
28	3.2	5.5	64	18	17	14	14	5.2	5.4	2.9	2.6	2.3
29	3.1	5.2	52	11	-----	12	21	4.9	3.7	2.7	2.4	2.5
30	3.4	4.9	32	11	-----	12	16	4.8	3.6	2.7	2.6	2.5
31	3.1	-----	22	10	-----	12	-----	4.7	-----	2.7	2.5	-----
TOTAL	106.5	185.9	384.9	873	374.2	481	437.8	249.2	129.1	106.7	82.2	93.4
MEAN	3.44	6.02	12.4	28.2	13.4	22.0	14.6	8.04	4.30	3.44	2.65	3.11
MAX	5.6	10	64	108	23	36	20	17	5.8	8.1	3.4	4.5
MIN	2.7	3.1	4.4	18	9.6	12	9.4	4.7	3.6	2.7	2.4	2.3
AC-FT	211	369	763	1,730	742	1,350	868	494	256	212	163	189

CAL YR 1965 TOTAL 3,694.0 MEAN 10.1 MAX 97 MIN 2.7 AC-FT 7,330

WTR YR 1966 TOTAL 3,703.9 MEAN 10.1 MAX 108 MIN 2.3 AC-FT 7,350

12119700 COAL CREEK NEAR BELLEVUE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	2.4	31	25	30	14	14	16	5.0	3.4	2.9	3.1
2	4.9	2.4	23	25	24	14	13	14	5.2	3.6	2.9	3.2
3	2.7	2.2	17	26	21	12	12	13	5.4	3.6	2.9	2.8
4	2.5	2.3	17	52	21	12	11	12	5.0	3.6	2.9	2.7
5	2.5	4.4	23	48	18	12	11	11	4.8	3.6	2.9	2.7
6	2.6	3.7	19	40	16	11	9.9	10	4.7	3.6	2.9	2.7
7	3.3	2.4	18	38	15	10	9.4	9.6	4.7	3.7	3.0	2.7
8	3.5	2.5	16	40	14	10	9.1	9.1	4.7	3.7	2.9	2.8
9	2.6	4.0	14	37	16	10	9.6	8.8	4.7	3.6	2.9	3.0
10	2.6	3.6	17	35	15	9.6	8.8	8.8	4.5	3.4	3.0	4.0
11	3.2	4.4	26	32	15	9.4	8.6	9.9	4.5	3.4	2.9	5.5
12	4.1	4.7	63	28	18	9.1	8.6	8.8	4.3	3.6	2.9	4.0
13	2.9	19	126	28	28	8.8	11	8.1	4.3	3.4	2.7	3.0
14	2.6	28	65	28	24	8.3	9.1	7.8	4.3	3.3	2.7	2.3
15	2.5	20	52	33	23	12	8.6	7.5	4.2	3.4	2.6	1.8
16	2.9	15	48	28	19	11	12	7.4	4.0	3.3	2.6	1.7
17	2.7	9.1	44	24	24	16	11	6.8	4.0	3.2	2.6	1.7
18	2.7	7.2	41	22	21	17	13	6.5	3.9	3.0	2.6	1.6
19	7.0	7.4	45	99	19	15	15	6.1	3.9	3.2	2.6	1.5
20	5.7	6.5	42	97	18	16	14	6.1	4.7	3.3	2.6	1.6
21	3.6	6.3	32	62	16	15	14	5.9	11	3.2	2.6	4.5
22	4.2	5.5	26	44	15	27	13	5.7	7.2	3.0	2.6	2.3
23	3.0	5.0	24	38	14	25	11	5.7	4.5	3.0	2.6	2.3
24	2.5	4.5	23	30	12	22	10	5.5	4.0	3.0	2.5	2.3
25	2.5	11	26	26	12	19	10	5.4	3.9	2.9	2.5	1.7
26	2.7	7.8	22	26	11	17	9.9	5.4	3.7	2.9	2.5	1.1
27	2.3	9.4	20	48	10	15	24	5.4	3.6	2.9	2.5	3.5
28	2.2	9.7	18	72	15	17	25	5.9	3.4	2.9	2.5	2.3
29	3.9	13	21	55	-----	19	21	5.4	3.4	2.9	2.5	2.6
30	2.7	30	20	41	-----	16	18	5.2	3.4	2.9	2.7	2.4
31	2.4	-----	20	33	-----	15	-----	5.2	-----	2.9	3.0	-----
TOTAL	99.7	253.4	999	1,260	504	444.2	374.6	248.0	138.9	101.4	84.5	79.4
MEAN	3.22	8.45	32.2	40.6	18.0	14.3	12.5	8.00	4.63	3.27	2.73	2.65
MAX	7.0	30	126	99	30	27	25	16	11	3.7	3.0	5.5
MIN	2.2	2.2	14	22	10	8.3	8.6	5.2	3.4	2.9	2.5	1.1
AC-FT	198	503	1,980	2,500	1,000	881	743	492	276	201	168	197

CAL YR 1966 TOTAL 4,378.7 MEAN 12.0 MAX 126 MIN 2.2 AC-FT 8,490
WTR YR 1967 TOTAL 4,587.1 MEAN 12.6 MAX 126 MIN 1.1 AC-FT 9,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.2	5.9	14	17	14	18	9.4	24	4.2	2.9	3.9
2	2.0	3.5	16	11	26	13	16	9.1	35	4.0	2.9	5.3
3	3.5	3.2	10	9.6	45	12	14	8.8	21	3.7	3.0	3.1
4	5.1	2.9	11	12	72	15	14	8.6	15	3.7	2.9	2.9
5	3.3	2.7	9.1	11	45	16	14	8.8	12	3.7	2.9	2.9
6	2.9	2.6	7.2	9.6	31	13	12	8.6	8.8	3.4	2.9	3.1
7	3.2	3.2	10	24	12	12	12	8.3	7.6	3.4	2.9	3.0
8	2.6	4.8	7.1	9.6	20	12	11	7.8	7.8	3.6	2.9	3.0
9	2.5	4.4	6.5	27	17	11	10	7.8	7.6	3.6	2.9	3.0
10	3.6	6.3	7.5	22	15	11	12	7.6	7.2	3.4	2.7	3.0
11	3.3	4.2	7.8	17	14	14	14	7.4	6.8	3.4	2.6	3.6
12	2.4	3.9	7.2	19	12	18	12	7.0	6.3	4.5	2.7	3.2
13	4.1	3.6	4.1	34	11	14	11	6.5	6.1	3.7	2.6	3.2
14	2.6	4.5	5.5	50	10	15	13	6.3	5.2	4.0	1.2	5.0
15	2.5	4.7	5.4	43	9.6	28	14	5.7	5.0	3.6	3.4	3.4
16	2.4	3.9	6.3	32	9.1	48	18	5.4	4.8	3.4	3.2	3.2
17	2.4	3.6	5.7	26	12	39	16	5.2	4.7	3.4	3.2	8.1
18	1.9	3.3	5.2	25	29	32	18	5.2	4.7	3.4	3.3	9.8
19	2.6	3.2	4.7	49	48	26	19	7.2	5.4	4.4	3.5	9.6
20	3.7	3.0	4.3	70	40	21	19	10	4.7	3.4	3.0	18
21	11	2.7	5.8	65	39	18	17	5.5	4.8	3.3	2.7	11
22	6.9	2.9	16	42	36	16	15	5.2	4.8	3.2	3.4	7.8
23	5.0	2.7	12	30	46	18	17	5.2	4.5	3.2	15	6.3
24	5.9	4.0	13	26	36	16	14	5.0	4.2	3.0	5.2	5.2
25	3.7	2.9	34	20	28	24	13	6.3	4.0	3.0	9.8	4.5
26	3.3	2.9	37	18	24	19	12	5.2	4.5	3.0	7.5	4.0
27	10	2.9	26	16	20	28	11	5.2	5.4	3.0	8.2	3.6
28	4.3	4.4	19	14	18	26	11	4.7	5.2	2.9	5.4	3.4
29	3.3	4.5	15	13	16	26	10	4.7	4.7	2.9	4.3	3.3
30	3.2	5.5	12	13	-----	22	9.9	4.7	4.3	2.9	3.7	3.3
31	7.2	-----	12	15	-----	20	-----	5.3	-----	2.9	3.6	-----
TOTAL	125.9	110.9	390.3	774.8	769.7	617	416.9	207.7	246.1	109.2	137.2	150.7
MEAN	4.06	3.70	11.3	25.0	26.5	19.9	13.6	6.70	8.20	3.52	4.43	5.02
MAX	11	6.3	37	70	72	48	19	10	35	6.5	15	18
MIN	2.0	2.6	4.3	9.6	9.1	11	9.9	4.7	4.0	2.9	2.6	2.9
AC-FT	250	220	695	1,540	1,530	1,220	827	412	488	217	272	299

CAL YR 1967 TOTAL 3,822.1 MEAN 10.5 MAX 99 MIN 1.1 AC-FT 7,580
WTR YR 1968 TOTAL 4,016.4 MEAN 11.0 MAX 72 MIN 2.0 AC-FT 7,970

12120000 MERCER CREEK NEAR BELLEVUE, WASH.

LOCATION (REVISED).--Lat 47°36'11", long 122°10'47", in NW¼NW¼ sec.4, T.24 N., R.5 E., King County, on left bank 40 ft upstream from Northern Pacific Railway trestle, 1.2 miles southeast of Bellevue, and 2.0 miles upstream from mouth.

DRAINAGE AREA.--12.0 sq mi.

PERIOD OF RECORD.--June to October 1945, June 1955 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 17.11 ft above mean sea level (levels by Municipality of Metropolitan Seattle engineers). Prior to June 5, 1959, at site 600 ft downstream at different datums.

AVERAGE DISCHARGE.--15 years, 20.9 cfs (23.65 inches per year, 15,140 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (150 cfs, revised) water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	1100	*187	6.84	Nov. 11, 1968	2100	156	5.60	Feb. 11, 1969a	-	204	a6.30
Dec. 13, 1966	1400	210	7.06	Nov. 29, 1968	2200	150	5.43	Nov. 4, 1969	1730	180	5.68
Jan. 19, 1967	a2000	*254	b8.15	Dec. 4, 1968	a0050	*248	7.88	Jan. 14, 1970	1530	*189	5.89
Feb. 4, 1968	0500	*175	6.17	Jan. 6, 1969	0300	181	5.71	Jan. 27, 1970	0500	169	5.41

a About.

b From high watermark in well.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 6, 1966	3.7	1.15	1969	July 27, 1969	5.1	1.03
1967	Aug. 13, 1967	3.8	.97	1970	July 23, 1970	6.0	-
1968	Aug. 7, 11, 1968	4.7	1.02				

Period of record: Maximum discharge, 254 cfs Jan. 19, 1967 (gage height, 8.15 ft, from high watermark in well), from rating curve extended above 130 cfs on basis of peak flow through culvert; minimum, 1.9 cfs Aug. 6, 1958.

REMARKS.--Records good except those for period of no gage-height record Jan. 16 to Feb. 19, 1969, which are fair. Some small diversions for irrigation and domestic use. No regulation.

REVISIONS.--WSP 1446: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	7.4	22	30	18	31	19	13	7.4	7.4	4.9	4.8
2	5.3	12	26	70	17	23	22	12	9.8	13	4.8	4.9
3	5.2	24	17	42	16	23	16	11	9.4	30	4.8	4.9
4	7.5	53	36	41	19	22	15	10	8.9	17	4.9	4.9
5	17	34	24	60	22	22	14	9.5	8.2	11	4.9	4.8
6	17	17	32	156	36	22	13	28	7.4	10	4.3	4.8
7	10	13	34	95	37	23	13	31	7.2	9.0	4.3	4.6
8	7.8	11	24	68	33	57	13	14	7.3	8.1	4.3	4.4
9	7.3	11	17	44	27	68	13	12	7.3	7.7	4.6	4.4
10	6.5	16	23	36	22	35	14	11	7.7	8.3	4.9	4.8
11	6.4	15	17	34	32	26	47	18	7.2	9.5	4.9	17
12	7.6	11	14	76	39	24	50	10	6.9	8.8	4.4	8.4
13	8.4	11	13	51	24	41	22	10	7.2	8.1	5.2	6.5
14	19	14	12	58	25	48	20	18	7.3	9.0	5.2	6.5
15	19	11	12	34	21	48	18	14	6.8	9.0	5.1	6.4
16	9.2	10	11	28	20	39	15	14	6.4	35	5.1	6.0
17	7.4	9.7	11	25	19	26	14	11	6.3	14	5.1	9.8
18	9.0	16	11	27	18	33	13	9.8	6.2	9.9	5.1	33
19	15	45	10	24	17	33	12	8.9	6.0	8.8	4.9	10
20	9.5	49	11	21	18	33	15	8.8	6.0	8.3	4.6	8.3
21	8.4	22	18	20	16	29	22	12	6.2	7.9	4.4	7.4
22	7.8	18	15	19	16	22	14	10	6.0	7.6	4.3	7.8
23	7.6	14	14	19	20	20	13	8.8	7.3	7.2	4.8	12
24	7.3	16	38	18	16	19	12	8.2	8.4	7.7	4.6	8.3
25	7.3	29	30	18	23	18	16	7.7	7.0	7.4	4.9	7.4
26	7.3	23	21	17	22	16	26	8.6	6.7	6.7	5.6	8.4
27	8.8	32	102	22	36	16	15	10	7.3	5.9	7.4	7.4
28	10	17	120	19	38	15	14	8.4	14	5.7	6.0	6.9
29	7.4	14	88	30	-----	15	26	7.8	8.3	5.6	5.2	6.7
30	9.7	12	54	26	-----	19	15	7.7	7.3	5.4	5.2	6.5
31	7.8	-----	34	22	-----	18	-----	7.6	-----	5.2	5.1	-----
TOTAL	288.7	587.1	911	1,250	667	884	551	362.8	225.4	314.2	153.8	238.0
MEAN	9.31	19.6	29.4	40.3	23.8	28.5	18.4	11.7	7.51	10.1	4.96	7.93
MAX	19	53	120	156	39	68	50	31	14	35	7.4	33
MIN	5.0	7.4	10	17	16	15	12	7.6	6.0	5.2	4.3	4.4
CFSM	-70	1.63	2.45	3.36	1.98	2.38	1.53	.98	.63	.84	.41	.66
IN.	.89	1.82	2.82	3.88	2.07	2.74	1.71	1.12	.70	.97	.48	.74
AC-FT	573	1,160	1,810	2,480	1,320	1,750	1,090	720	447	623	305	472
CAL YR 1965	TOTAL	6,651.3	MEAN	18.2	MAX	125	MIN	4.3	CFSM	1.52	IN	20.62
WTR YR 1966	TOTAL	6,433.0	MEAN	17.6	MAX	156	MIN	4.3	CFSM	1.47	IN	19.94
									AC-FT	13,190		
										12,760		

12120000 MERCER CREEK NEAR BELLEVUE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	6.6	8.4	77	47	36	29	20	23	8.0	6.5	5.2	6.4	
2	7.7	8.0	64	28	30	32	18	21	8.2	6.1	4.8	6.7	
3	6.6	7.8	40	39	27	21	17	20	9.1	6.1	5.2	5.8	
4	6.4	7.8	50	81	27	19	17	19	8.9	6.1	5.2	5.4	
5	6.0	10	63	81	22	17	17	18	7.7	5.9	5.3	5.3	
6	6.2	18	44	56	20	16	16	17	7.5	5.9	5.3	5.6	
7	9.2	11	40	56	20	16	15	16	7.2	6.1	5.0	5.3	
8	12	9.0	41	54	19	17	14	15	7.7	6.7	5.2	5.4	
9	7.3	10	28	36	26	16	16	15	7.5	6.5	5.0	6.1	
10	6.8	22	41	39	25	16	15	15	7.2	6.1	4.8	9.3	
11	7.9	14	46	52	22	16	14	19	7.2	5.9	4.7	16	
12	19	25	101	32	27	15	14	17	7.2	5.9	4.7	14	
13	12	41	189	64	71	14	20	15	7.0	5.8	4.4	9.3	
14	8.2	126	96	52	44	16	16	14	6.9	5.8	4.4	8.4	
15	7.5	85	72	57	35	30	15	13	6.5	5.8	4.7	8.0	
16	7.3	52	74	35	26	32	23	12	6.2	5.8	4.7	6.7	
17	7.8	31	53	28	38	38	22	11	6.2	5.4	4.8	6.2	
18	7.1	25	57	26	34	33	33	9.9	6.2	5.4	4.8	6.2	
19	21	24	65	138	25	21	46	9.3	6.1	5.8	4.7	6.2	
20	47	22	97	146	22	26	25	9.3	7.5	6.5	4.7	6.2	
21	18	20	96	73	20	20	25	8.9	22	6.5	4.8	6.4	
22	20	19	36	52	19	54	20	9.1	33	5.6	4.8	6.4	
23	15	16	29	53	18	53	18	9.1	13	5.4	5.0	6.4	
24	11	15	31	47	17	30	16	9.5	9.9	5.2	4.8	6.4	
25	9.4	33	47	37	17	26	16	9.1	8.4	5.2	5.2	7.3	
26	9.8	30	29	43	16	21	17	8.6	7.5	9.6	5.0	6.4	
27	9.2	23	23	74	15	21	42	8.4	7.3	5.3	5.2	6.4	
28	8.4	24	24	181	36	24	60	8.8	7.2	5.3	4.8	6.2	
29	11	31	25	67	-----	36	35	8.6	6.9	5.2	5.0	7.2	
30	10	85	22	48	-----	30	28	8.9	6.5	5.3	5.6	7.5	
31	9.0	-----	21	36	-----	22	-----	8.6	-----	5.3	5.8	-----	
TOTAL	330.4	853.0	1,681	1,778	754	777	670	406.1	267.7	180.0	153.6	215.1	
MEAN	11.3	28.4	54.2	57.4	26.9	25.1	22.3	13.1	8.92	5.81	4.99	7.16	
MAX	47	126	189	146	71	54	60	23	33	6.7	5.8	16	
MIN	6.0	7.8	21	26	15	14	14	8.4	6.1	5.2	4.4	5.3	
CFSM	.94	2.37	4.52	4.78	2.24	2.89	1.86	1.09	.74	.48	.41	.60	
IN.	1.89	2.64	5.21	5.51	2.34	2.41	2.08	1.26	.83	.56	.48	.67	
AC-FT	695	1,690	3,330	3,530	1,500	1,540	1,330	.806	531	357	305	427	
CAL YR 1966	TOTAL 7,530.6		MEAN 20.6		MAX 189		MIN 4.3		CFSM 1.72		IN 23.34		AC-FT 14,940
WTR YR 1967	TOTAL 8,089.9		MEAN 22.2		MAX 189		MIN 4.4		CFSM 1.85		IN 25.07		AC-FT 16,040

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	13	24	21	32	34	18	20	16	82	8.2	6.3	13	
2	12	12	77	19	47	17	18	14	103	7.7	6.5	12	
3	20	9.7	62	16	60	16	18	12	34	7.5	6.1	11	
4	17	9.3	46	19	124	35	17	12	20	7.3	6.1	10	
5	10	8.3	47	25	50	44	36	12	16	7.2	6.2	9.9	
6	9.1	8.5	23	17	32	27	23	13	14	6.9	5.8	8.9	
7	12	9.7	34	17	26	22	20	12	14	6.7	5.3	8.8	
8	9.3	12	21	16	22	20	17	11	12	6.5	5.8	8.6	
9	8.2	19	20	69	19	17	16	10	11	6.5	5.8	9.1	
10	8.8	25	18	55	18	17	15	10	9.9	6.7	5.8	8.2	
11	16	17	23	33	16	20	37	10	9.7	7.0	5.4	10	
12	10	15	21	29	15	58	48	10	9.5	19	5.4	12	
13	14	11	15	92	14	50	25	10	11	8.5	5.6	9.5	
14	13	15	13	98	14	27	24	10	11	7.9	5.6	17	
15	9.7	17	12	78	13	60	31	9.3	8.9	6.7	21	16	
16	8.9	18	16	52	12	98	76	8.9	8.8	6.5	10	14	
17	8.2	13	18	37	18	56	34	8.6	8.2	6.4	8.8	28	
18	9.3	17	14	34	63	37	33	8.2	7.7	6.2	9.3	56	
19	9.7	13	13	86	89	28	45	9.2	10	9.4	9.7	24	
20	8.9	11	13	93	56	24	47	37	9.1	7.7	9.3	19	
21	51	10	14	87	63	22	27	16	8.2	6.4	7.7	14	
22	29	10	56	44	59	19	22	11	9.7	6.4	7.7	12	
23	16	9.9	42	31	70	22	29	18	8.9	6.2	32	13	
24	12	26	36	37	50	26	22	11	8.2	6.2	55	12	
25	17	15	100	30	34	48	20	17	7.5	6.4	39	11	
26	10	12	82	26	28	28	18	18	11	6.2	37	10	
27	29	11	50	22	24	47	18	14	16	6.2	58	9.9	
28	27	14	34	19	21	36	15	12	17	5.9	22	9.1	
29	11	26	24	18	19	31	14	11	11	5.8	16	8.9	
30	10	21	20	19	-----	26	16	9.5	8.8	5.6	13	9.1	
31	19	-----	19	33	-----	22	-----	9.1	-----	5.6	12	-----	
TOTAL	458.1	439.4	1,004	1,283	1,109	998	799	389.8	516.1	223.4	479.6	414.2	
MEAN	14.8	14.6	32.4	41.4	36.2	32.2	26.6	12.6	17.2	7.21	15.5	13.6	
MAX	51	26	100	98	124	98	76	37	103	19	58	56	
MIN	6.2	6.3	12	16	12	16	14	8.2	7.5	5.6	5.3	8.2	
CFSM	1.23	1.22	2.70	3.45	3.18	2.60	2.22	1.09	1.43	.60	1.29	1.15	
IN.	1.42	1.36	3.11	3.98	3.44	3.09	2.48	1.21	1.60	.69	1.49	1.28	
AC-FT	909	872	1,998	2,540	2,200	1,980	1,580	773	1,020	443	951	822	
CAL YR 1967	TOTAL 7,103.0		MEAN 19.5		MAX 146		MIN 4.4		CFSM 1.63		IN 22.02		AC-FT 14,090
WTR YR 1968	TOTAL 8,113.6		MEAN 22.2		MAX 124		MIN 5.3		CFSM 1.85		IN 25.15		AC-FT 16,090

12120000 NERCER CREEK NEAR BELLEVUE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	8.9	18	49	30	28	17	24	38	15	9.6	5.9	9.3		
2	8.9	29	38	87	34	17	34	24	12	21	6.1	8.4		
3	8.9	28	92	47	54	21	20	18	11	11	6.4	9.8		
4	26	20	153	114	70	20	37	16	10	14	6.6	9.8		
5	13	17	75	140	64	47	38	14	9.8	11	7.7	9.6		
6	14	15	50	163	38	28	24	13	9.8	9.8	7.0	8.8		
7	20	15	47	130	50	22	20	12	9.8	9.4	6.8	8.6		
8	12	31	105	89	140	21	18	18	10	9.2	7.0	8.1		
9	12	53	68	99	150	18	18	10	9.4	8.3	6.8	8.1		
10	17	27	93	86	130	18	21	9.8	9.4	7.9	6.8	7.7		
11	17	111	99	85	170	17	17	9.8	9.4	9.0	7.7	7.9		
12	26	96	59	60	140	16	17	9.4	9.2	7.5	7.5	8.1		
13	50	49	43	60	90	16	17	9.8	9.2	7.3	7.5	19		
14	26	35	51	70	70	16	14	8.6	9.2	6.8	6.6	15		
15	37	34	45	64	60	16	13	8.8	8.4	6.2	7.1	10		
16	19	26	92	54	56	22	13	8.8	7.5	6.4	7.7	10		
17	24	22	44	48	41	67	41	8.4	7.7	6.4	7.3	25		
18	46	23	90	40	33	51	36	8.3	7.7	6.1	7.3	64		
19	32	22	64	35	27	28	34	8.4	8.1	6.2	7.0	48		
20	38	32	38	31	24	24	23	8.8	8.3	6.1	7.1	34		
21	22	34	33	28	22	22	18	8.3	7.9	6.1	7.5	18		
22	29	40	55	26	22	21	16	8.1	9.8	5.7	7.3	52		
23	21	40	79	23	21	28	54	7.5	14	5.7	7.1	66		
24	18	29	113	22	20	18	25	11	23	5.7	7.5	25		
25	18	26	67	21	21	17	19	8.4	34	5.9	7.5	18		
26	17	25	45	20	19	17	17	9.4	19	5.7	7.9	14		
27	15	26	38	28	18	17	15	14	15	5.5	6.8	13		
28	14	20	27	19	18	16	17	11	24	5.7	9.4	14		
29	22	69	23	19	-----	16	27	44	13	5.9	8.3	22		
30	42	84	21	19	-----	16	18	85	10	6.1	7.9	21		
31	24	-----	20	21	-----	19	-----	22	-----	5.9	8.1	-----		
TOTAL	497.7	1,111	1,901	1,792	1,652	701	707	475.0	360.8	243.1	227.2	591.2		
MEAN	22.5	37.0	61.3	57.8	59.0	22.6	23.6	15.3	12.8	7.84	7.33	19.7		
MAX	50	111	153	163	170	67	54	85	34	21	9.4	66		
MIN	8.9	15	20	19	18	16	13	7.5	7.5	5.5	5.9	7.7		
CFSH	1.88	3.08	5.11	4.82	4.92	1.88	1.97	1.28	1.08	.65	.61	1.64		
IN-	2.16	3.44	5.89	9.54	5.12	2.17	2.19	1.47	1.12	.75	.70	1.87		
AC-FT	1,380	2,200	3,770	3,550	3,280	1,390	1,400	942	716	482	451	1,170		
CAL YR 1968	TOTAL	9,921.8	MEAN	27.1	MAX	153	MIN	5.3	CFSH	2.26	IN	30.76	AC-FT	19,680
WTR YR 1969	TOTAL	10,459.0	MEAN	28.7	MAX	170	MIN	5.3	CFSH	2.39	IN	32.42	AC-FT	20,750

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	18	12	12	20	36	15	20	16	9.8	8.7	8.0	8.0		
2	14	12	12	19	28	14	44	15	9.0	8.1	19	8.1		
3	12	16	14	19	27	19	20	14	8.9	7.8	11	13		
4	11	92	18	18	24	16	17	13	8.3	7.4	8.9	29		
5	13	66	15	16	24	14	20	12	8.0	7.3	8.1	14		
6	10	27	13	15	24	46	37	12	8.1	7.1	7.6	16		
7	12	20	12	13	22	74	21	12	8.0	7.1	8.8	22		
8	32	18	23	16	20	29	18	13	7.6	7.0	21	19		
9	20	16	20	30	20	20	52	13	11	7.0	9.6	12		
10	20	15	19	22	19	18	31	14	9.2	6.9	8.0	11		
11	14	14	51	17	18	17	36	12	9.2	6.8	8.5	10		
12	12	13	97	15	18	20	23	12	8.7	6.8	8.3	9.2		
13	11	12	71	38	31	25	19	11	8.3	6.6	7.4	8.7		
14	10	12	91	163	20	60	17	10	8.5	6.6	7.3	8.7		
15	10	17	45	70	50	50	15	10	8.7	6.6	7.3	8.5		
16	10	16	36	44	86	55	14	18	8.5	6.4	7.6	8.5		
17	11	14	35	59	48	40	13	9.6	8.1	6.4	7.3	31		
18	10	13	48	74	33	35	16	9.0	8.0	6.4	7.1	29		
19	10	13	38	96	26	30	42	8.9	7.5	6.2	7.0	18		
20	11	18	36	61	23	25	66	9.0	7.5	6.2	7.0	29		
21	10	18	71	65	21	22	27	9.0	7.0	6.2	7.4	16		
22	10	15	69	63	19	20	21	9.0	7.0	6.0	7.8	13		
23	10	33	86	83	18	21	19	9.0	7.8	6.0	8.0	11		
24	9.4	31	55	80	17	22	34	9.0	7.0	6.0	8.0	10		
25	9.6	18	37	100	16	18	20	9.0	7.0	9.5	7.8	9.8		
26	10	16	37	79	16	17	18	8.9	7.3	15	7.6	9.4		
27	19	14	33	123	16	16	21	8.9	7.8	37	7.6	9.4		
28	17	13	26	61	15	18	17	8.9	8.1	12	8.1	9.4		
29	19	12	23	44	-----	17	21	18	14	9.0	8.5	9.2		
30	13	12	22	36	-----	16	24	18	14	8.9	8.1	8.9		
31	12	-----	21	49	-----	15	-----	11	-----	8.1	7.8	-----		
TOTAL	410.0	618	1,186	1,608	735	826	763	354.2	257.1	263.1	271.5	418.8		
MEAN	13.2	20.6	38.3	51.9	26.3	26.6	25.4	11.4	8.57	8.49	8.76	14.0		
MAX	32	92	97	163	86	76	66	18	14	37	21	31		
MIN	9.4	12	12	13	15	14	13	8.9	7.8	6.0	7.0	6.8		
CFSH	1.10	1.72	3.19	4.33	2.19	2.22	2.12	.95	.71	.71	.73	1.17		
IN-	1.27	1.92	3.68	4.98	2.28	2.56	2.37	1.10	.98	.82	.84	1.30		
AC-FT	813	1,230	2,390	3,190	1,460	1,640	1,510	703	510	522	539	831		
CAL YR 1969	TOTAL	8,963.3	MEAN	24.6	MAX	170	MIN	5.5	CFSH	2.05	IN	27.79	AC-FT	17,780
WTR YR 1970	TOTAL	7,710.7	MEAN	21.1	MAX	163	MIN	6.0	CFSH	1.76	IN	23.90	AC-FT	15,290

12120500 JUANITA CREEK NEAR KIRKLAND, WASH.

LOCATION.--Lat 47°42'27", long 122°12'51", in SW-SEK sec.30, T.26 N., R.5 E., King County, on right bank 0.3 mile upstream from mouth and Lake Washington and 1.7 miles (revised) north of Kirkland.

DRAINAGE AREA.--6.43 sq mi.

PERIOD OF RECORD.--June to October 1945, September 1963 to September 1970.

GAGE.--Water-stage recorder and concrete control since September 1963. A. titude of gage is 20 ft (from topographic map). Prior to Oct. 2, 1945, at site 500 ft upstream at different datum.

AVERAGE DISCHARGE.--7 years (1963-70), 10.1 cfs (21.33 inches per year, 7,320 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum Discharge	Minimum Discharge	G.H.
1966	Jan. 5, 1966	82	2.20	1.8
1967	Jan. 19, 1967	107	3.06	1.58
1968	Dec. 25, 1967	100	2.72	2.8
1969	Dec. 3, 1968	114	3.54	2.6
1970	Jan. 27, 1970	92	2.43	2.5

Period of record: Maximum discharge, 114 cfs Dec. 3, 1968 (gage height, 3.54 ft); minimum, 0.58 cfs Sept. 13, 1967 (gage height, 0.39 ft).

REMARKS.--Records excellent. Probably several small diversions above station for domestic use. No regulation.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	3.0	12	24	11	20	11	8.2	4.8	3.5	2.6	2.0
2	2.4	3.3	12	37	11	16	10	7.6	5.2	5.5	2.6	2.1
3	2.4	6.6	9.9	26	9.6	14	9.0	7.2	4.8	7.6	2.6	2.1
4	2.9	8.2	11	23	11	12	8.2	6.9	5.0	5.2	2.7	2.1
5	3.7	7.0	11	41	12	12	7.4	6.4	4.5	4.3	2.6	2.1
6	4.1	4.9	14	74	17	12	7.4	11	4.1	4.3	2.5	2.1
7	3.3	4.3	13	51	25	12	7.4	9.3	4.1	4.0	2.5	2.2
8	3.0	4.0	11	40	22	12	7.4	7.6	4.0	3.5	2.6	2.1
9	2.8	4.0	8.8	32	19	37	8.6	6.9	4.0	3.5	2.6	2.1
10	2.7	5.1	11	26	16	24	8.6	6.4	4.0	3.7	2.7	2.2
11	2.7	4.8	9.2	22	18	18	18	6.2	4.0	3.5	2.5	4.3
12	3.1	4.2	8.0	28	19	16	28	6.2	5.5	3.4	2.5	2.8
13	3.1	4.1	8.0	25	16	23	14	6.2	4.5	3.4	2.7	2.6
14	3.8	4.5	7.7	22	16	24	13	7.6	4.0	3.5	2.6	2.6
15	5.7	4.1	6.9	19	14	24	11	6.9	3.8	3.5	2.5	2.6
16	3.6	3.9	6.5	17	14	20	9.6	6.4	3.8	5.9	2.5	2.6
17	3.6	3.7	6.0	15	13	16	9.0	5.9	3.7	4.0	2.5	4.8
18	3.5	4.8	5.9	17	12	19	8.4	5.5	3.5	3.8	2.5	6.2
19	4.2	8.3	5.7	16	11	19	7.6	5.4	3.5	3.5	2.4	3.0
20	3.9	11	5.9	14	11	19	7.9	5.5	3.5	3.3	2.1	2.7
21	3.4	14	7.4	13	9.6	16	7.9	6.6	3.5	3.1	2.1	2.6
22	3.2	13	7.1	13	9.6	14	7.9	6.6	3.3	3.0	2.4	2.8
23	3.1	8.5	7.3	12	11	12	7.4	5.5	3.7	3.0	2.4	3.5
24	3.0	8.0	11	12	9.3	12	7.2	5.4	3.7	3.4	2.4	3.0
25	3.0	9.5	10	11	11	11	17	6.4	3.5	3.3	2.5	2.8
26	2.9	10	8.9	11	12	10	11	5.5	3.5	3.0	2.6	3.0
27	3.1	16	29	12	17	10	8.4	5.4	3.8	2.8	2.8	2.8
28	3.2	9.5	57	12	20	9.6	9.3	5.0	4.8	2.5	2.4	2.7
29	3.0	7.4	46	14	-----	9.0	16	4.6	3.8	2.5	2.2	2.7
30	3.3	6.6	32	14	-----	11	10	4.6	3.5	2.5	2.1	2.6
31	3.0	-----	23	13	-----	9.6	-----	4.6	-----	2.6	2.4	-----
TOTAL	101.1	206.3	422.2	706	397.1	503.2	299.6	197.9	121.5	114.6	77.1	83.8
MEAN	3.26	6.88	13.6	22.8	14.2	16.2	9.99	6.38	4.05	3.70	2.49	2.79
MAX	5.7	16	57	74	25	37	20	11	5.5	7.6	2.8	6.2
MIN	2.4	3.0	5.7	11	9.3	9.0	7.2	4.6	3.4	2.5	2.1	2.0
CFSM	51	1.07	2.12	3.55	2.21	2.52	1.55	.99	.63	.58	.39	.43
IN.	.58	1.19	2.44	4.08	2.30	2.91	1.73	1.14	.70	.66	.45	.48
AC-FT	201	409	837	1,400	788	998	594	393	241	227	153	164

CAL YR 1965 TOTAL 3,282.8 MEAN 8.99 MAX 64 MIN 2.2 CFSM 1.40 IN 18.99 AC-FT 6,510

WTR YR 1966 TOTAL 3,230.4 MEAN 8.85 MAX 74 MIN 2.0 CFSM 1.38 IN 18.69 AC-FT 6,410

12120500 JUANITA CREEK NEAR KIRKLAND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	3.5	21	17	23	16	11	12	5.3	3.5	2.9	7.6
2	2.7	3.4	23	16	20	14	9.9	11	5.9	3.2	3.1	3.1
3	2.5	3.4	17	16	18	13	9.6	10	5.7	3.2	3.1	2.8
4	2.5	3.4	27	17	17	12	9.8	9.5	5.3	3.1	2.9	2.7
5	2.4	4.8	25	32	16	12	9.6	6.9	5.1	3.2	2.9	2.7
6	2.5	6.0	20	26	15	11	9.0	6.6	4.7	3.2	3.1	3.0
7	3.7	4.3	16	29	14	11	8.7	8.2	4.7	3.2	2.9	3.1
8	3.3	4.0	13	32	16	11	8.5	8.2	4.7	3.7	2.7	3.1
9	2.8	3.9	12	26	10	10	9.1	6.1	4.7	3.4	3.0	3.0
10	2.8	4.0	13	22	15	11	8.6	8.0	4.5	3.4	2.8	4.7
11	2.8	4.0	15	25	14	9.9	8.1	9.9	4.2	3.1	2.8	5.0
12	2.8	7.0	40	21	15	9.5	7.9	9.2	4.2	3.1	3.2	4.0
13	3.8	3.8	31	48	9.4	8.6	8.3	6.3	3.1	2.8	3.1	2.8
14	3.2	24	43	26	32	9.8	8.1	7.8	4.2	2.9	3.2	3.3
15	3.0	17	33	26	25	14	7.8	7.4	4.0	2.9	3.1	3.1
16	3.1	17	29	21	20	15	10	7.0	3.9	2.9	2.9	3.0
17	3.1	16	13	16	15	10	6.6	3.7	2.9	3.2	2.9	3.0
18	3.0	15	24	17	14	14	12	6.1	3.7	2.9	2.7	3.2
19	7.8	16	28	67	16	12	13	5.9	3.5	2.9	2.5	3.0
20	8.6	15	32	71	15	14	11	5.7	3.9	3.1	2.5	2.9
21	5.6	9.0	24	42	14	12	11	5.7	8.5	3.1	2.5	2.9
22	8.8	7.0	19	32	14	24	9.7	5.7	7.4	2.9	2.5	2.8
23	5.4	6.5	17	34	13	28	6.9	5.7	5.1	2.8	2.7	2.6
24	4.3	6.0	18	29	13	19	8.5	5.5	4.5	2.9	3.0	2.7
25	4.0	9.0	18	25	13	16	8.5	5.5	4.0	2.9	2.9	2.8
26	3.9	8.0	16	26	12	14	8.2	5.1	4.0	2.9	2.9	2.9
27	3.7	7.0	14	34	12	13	17	5.3	3.9	3.1	2.9	3.0
28	3.5	9.0	14	49	19	14	31	5.3	3.7	3.1	2.9	2.8
29	3.9	12	14	43	-----	14	19	5.3	3.7	2.9	3.0	3.4
30	3.7	22	13	32	-----	12	14	6.7	3.5	2.9	3.0	3.7
31	3.6	-----	13	25	-----	12	-----	5.9	-----	2.9	3.5	-----
TOTAL	119.3	281.2	722	941	494	421.8	326.1	228.1	138.4	95.4	90.2	98.3
MEAN	3.85	9.37	23.3	30.4	17.6	13.6	10.9	7.36	4.61	3.08	2.91	3.28
MAX	8.6	24	88	71	41	28	31	12	8.5	3.5	2.5	7.6
MIN	2.4	3	12	15	12	9.5	7.8	5.1	3.3	2.8	2.5	2.1
CFM	-4.60	-1.46	3.82	4.73	2.74	2.22	1.70	1.46	-0.72	-0.68	-0.68	-0.68
IN.	-.69	1.63	4.18	5.44	2.86	2.44	1.89	1.32	-.80	-.55	-.52	-.57
AC-FT	237	598	1,430	1,870	980	837	647	452	275	189	179	195

CAL YR 1966	TOTAL 3,623.3	MEAN 9.93	MAX 88	MIN 2.0	CFSM 1.54	IN 20.96	AC-FT 7,190
WTR YR 1967	TOTAL 3,955.8	MEAN 10.8	MAX 88	MIN 2.1	CFSM 1.68	IN 22.89	AC-FT 7,850

CAL YR 1988	TOTAL 3,823.3	MEAN 9.93	MAX 88	MIN 2.0	CFSM 1.34	IN 20.98	AC-FT 7,190
WTR YR 1967	TOTAL 3,955.8	MEAN 10.8	MAX 88	MIN 2.1	CFSM 1.68	IN 22.09	AC-FT 7,850

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	5.6	8.1	12	14	11	12	9.1	15	5.0	3.6	4.8
2	4.4	5.1	23	11	21	10	10	8.1	25	4.6	3.7	4.5
3	8.3	4.4	18	9.8	32	10	9.5	7.4	15	4.1	3.5	4.5
4	6.2	4.1	15	10	44	20	9.2	7.7	10	3.8	3.4	4.3
5	4.4	4.0	14	10	24	24	15	6.7	7.0	3.8	3.7	4.3
6	4.1	4.0	9.8	9.2	20	17	11	7.6	6.4	3.8	3.6	4.2
7	4.9	4.1	13	9.4	17	15	10	7.4	6.4	3.6	3.5	4.0
8	4.2	4.5	9.2	9.2	16	14	9.4	6.9	6.4	3.8	3.3	4.1
9	4.9	4.7	8.8	25	12	12	6.9	6.9	6.0	3.6	3.3	4.2
10	4.2	5.3	9.5	19	13	11	9.4	6.4	6.0	4.8	3.3	4.1
11	5.4	4.6	10	14	12	13	14	6.4	5.7	6.2	3.2	6.7
12	4.4	4.3	11	15	11	22	13	6.6	5.5	6.9	3.4	5.0
13	5.0	4.2	8.3	10	15	11	17	5.4	5.8	7.8	5.5	4.6
14	4.0	5.2	7.1	61	9.3	16	6.0	6.9	5.2	5.6	11.4	5.6
15	3.8	5.4	6.7	49	9.0	24	11	6.2	5.0	4.5	5.8	7.6
16	3.3	5.0	7.0	30	8.8	45	17	6.0	4.9	5.1	5.1	6.5
17	3.6	4.5	7.3	22	11	32	13	5.8	4.9	4.6	4.7	12.7
18	4.5	4.9	21	22	17	22	15	5.6	4.7	4.0	4.4	14.7
19	4.4	4.5	6.3	34	18	17	16	5.6	5.3	5.7	4.3	8.0
20	4.0	4.5	6.1	44	15	15	18	9.0	4.8	4.5	4.2	6.6
21	9.9	4.5	5.8	33	19	13	14	7.0	4.9	5.2	4.1	5.6
22	9.0	17.5	12	12	12	12	6.0	4.9	5.2	4.1	4.4	5.6
23	6.0	4.5	17	18	31	13	13	5.6	4.9	4.1	16	5.4
24	5.8	5.0	23	16	25	12	11	5.4	4.7	4.3	9.4	5.4
25	6.2	4.5	68	15	20	18	10	5.4	4.6	3.8	14	5.2
26	5.3	4.5	45	14	16	14	9.4	5.4	5.4	3.9	12	5.0
27	7.8	4.5	32	12	14	15	9.1	5.2	10	4.2	13	4.8
28	6.4	5.0	23	11	12	14	8.6	5.2	16	3.8	8.0	4.6
29	5.5	9.0	17	11	12	15	8.0	5.2	6.4	3.6	6.6	4.5
30	5.2	8.2	14	11	14	14	10	5.0	5.2	4.0	5.6	4.5
31	6.0	-----	12	14	-----	12	-----	5.0	-----	3.7	4.3	-----
TOTAL	186.2	146.9	478.9	636.4	508.1	519	349.5	201.1	221.9	138.3	181.9	170.4
MEAN	5.36	4.90	15.4	20.5	17.5	16.7	11.7	6.49	7.40	4.46	5.87	5.68
MAX	9.9	9.0	68	61	44	45	18	9.1	25	6.9	16	14
MIN	3.6	4.0	5.8	9.2	8.8	10	8.0	5.0	4.6	3.6	3.2	4.0
CHN	3.78	2.40	3.9	2.72	2.60	1.82	1.01	1.15	1.15	0.91	0.8	0.8
IN.-	2.94	.85	2.77	3.68	2.94	3.00	2.02	1.16	1.28	.80	1.05	.99
AC-FT	330	291	950	1,260	1,010	1,030	693	399	440	274	361	338

CAL YR 1967	TOTAL 3,625.3	MEAN 9.93	MAX 71	MIN 2.1	CFSM 1.54	IN 20.97	AC-FT 7,190
WTR YR 1968	TOTAL 3,716.8	MEAN 10.2	MAX 68	MIN 3.2	CFSM 1.59	IN 21.51	AC-FT 7,380

CAL YR 1967	TOTAL 3,625.3	MEAN 9.93	MAX 71	MIN 2.1	CFSM 1.54	IN 20.47	AC-FT 7,190
WTR YR 1968	TOTAL 3,718.8	MEAN 10.2	MAX 68	MIN 3.2	CFSM 1.59	IN 21.51	AC-FT 7,380

12120500 JUANITA CREEK NEAR KIRKLAND, WASH.---CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	4.5	11	21	13	13	10	9.4	13	6.8	5.8	3.7	2.9		
2	4.3	13	17	23	18	10	12	11	5.8	8.0	3.8	3.0		
3	4.3	11	59	37	34	11	8.8	9.8	5.6	5.6	3.5	4.7		
4	11	8.9	54	63	42	11	15	8.8	5.4	5.6	3.7	4.3		
5	6.0	7.9	33	78	29	16	15	8.0	5.2	5.2	3.8	3.7		
6	5.8	7.2	21	72	20	12	11	7.4	5.0	5.0	3.2	3.3		
7	5.0	6.9	32	56	22	10	9.8	7.1	4.7	5.0	3.3	3.0		
8	4.6	12	54	37	70	18	9.1	6.5	4.5	5.4	3.7	3.2		
9	5.8	14	41	35	61	9.8	9.1	6.5	4.3	5.0	3.5	3.0		
10	5.4	13	56	34	44	9.4	8.8	6.3	4.3	5.2	3.5	3.0		
11	5.6	39	43	33	50	9.1	8.2	6.3	4.3	5.0	3.7	2.9		
12	7.7	23	26	26	32	8.8	8.8	6.1	4.1	4.5	3.7	3.3		
13	8.5	16	20	29	24	8.8	8.2	5.8	4.1	4.0	3.5	5.6		
14	11	12	23	34	20	8.8	7.7	5.6	4.1	4.1	3.3	3.7		
15	9.9	12	38	30	18	8.8	7.4	5.6	4.1	4.5	3.8	3.7		
16	6.7	10	49	29	20	12	7.7	5.6	4.0	4.5	3.3	4.1		
17	15	9.3	25	26	16	20	15	5.4	3.8	4.3	3.2	22		
18	12	9.0	49	28	15	15	11	5.4	3.8	4.1	3.3	19		
19	13	6.9	29	19	14	12	12	5.4	3.8	3.8	3.3	19		
20	10	12	20	17	13	10	9.1	5.2	4.8	3.8	3.3	8.5		
21	9.3	15	17	16	13	9.8	8.5	5.2	4.1	3.8	3.2	5.6		
22	9.6	14	19	14	12	10	8.5	5.0	4.3	3.8	3.2	22		
23	7.9	12	52	12	12	9.6	19	4.7	11	3.8	3.0	17		
24	6.7	11	64	11	12	9.1	12	5.8	18	3.8	2.9	8.0		
25	6.3	9.5	38	12	12	8.8	11	5.2	32	3.7	2.9	6.5		
26	6.0	9.1	27	12	11	8.5	8.8	5.4	9.1	3.7	3.2	5.8		
27	5.7	8.6	22	12	11	8.5	8.2	6.1	25	3.7	3.2	5.8		
28	5.5	8.3	16	11	11	8.2	16	5.4	11	3.7	3.3	6.3		
29	10	52	13	10	-----	8.8	16	20	7.1	3.5	3.0	8.8		
30	27	34	11	10	-----	9.1	12	14	6.1	3.5	2.9	14		
31	18	-----	11	12	-----	8.8	-----	6.2	-----	3.5	2.9	-----		
TOTAL	267.3	429.6	1,000	895	669	321.1	323.1	225.8	211.4	138.9	103.8	224.7		
MEAN	8.62	14.3	32.3	26.9	21.9	10.4	10.8	7.28	7.05	4.68	3.35	7.49		
MAX	27	52	64	72	78	20	19	28	32	38	38	22		
MIN	4.3	6.9	11	18	11	8.0	7.4	4.7	3.8	3.5	2.9	2.9		
CFSM	1.34	2.22	5.82	4.18	3.72	1.62	1.68	1.13	1.10	.78	.52	1.16		
IN.	1.55	2.49	5.79	4.83	3.87	1.86	1.87	1.31	1.22	.88	.60	1.30		
AC-FT	530	852	1,980	1,660	1,350	637	641	448	419	276	206	446		
CAL YR 1968	TOTAL	4,623.7	MEAN	12.6	MAX	64	MIN	3.2	CFSM	1.96	IN	26.75	AC-FT	9,178
WTR YR 1969	TOTAL	4,749.7	MEAN	13.0	MAX	72	MIN	2.9	CFSM	2.82	IN	27.48	AC-FT	9,420

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	8.8	4.3	5.4	9.4	19	8.5	17	7.7	4.5	3.2	3.0	2.9		
2	9.1	4.3	5.4	9.1	16	8.5	16	7.4	4.3	3.4	3.0	6.8		
3	6.1	5.6	5.8	9.1	26	8.2	10	7.1	4.8	8.4	3.8	5.2		
4	5.2	44	7.4	8.5	17	8.0	9.1	6.5	3.8	4.2	3.5	5.2		
5	4.7	17	6.1	8.0	16	8.0	10	6.3	3.8	4.1	3.3	3.3		
6	5.0	9.8	5.6	7.7	15	29	15	6.1	3.7	5.0	3.2	7.1		
7	7.4	8.0	5.4	7.7	14	28	9.4	5.8	3.7	3.4	3.2	6.3		
8	19	7.1	8.0	8.8	12	14	8.5	8.2	3.8	3.3	4.1	5.0		
9	10	6.5	6.8	15	11	11	32	6.8	4.3	3.1	3.2	3.7		
10	7.7	6.1	6.5	9.8	11	9.8	19	8.8	4.1	3.1	3.0	3.5		
11	6.3	5.6	27	8.8	10	9.4	19	7.4	4.1	3.0	3.0	3.2		
12	5.6	5.6	40	10.2	13	13	13	6.1	4.0	3.0	2.9	3.0		
13	5.0	5.4	44	27	15	15	10	5.8	3.7	3.1	2.9	3.0		
14	5.2	5.4	38	57	11	30	9.1	5.8	3.7	2.9	3.0	3.0		
15	4.5	9.8	19	25	34	16	8.2	5.6	3.8	2.9	2.9	3.1		
16	4.7	6.8	17	18	45	18	8.0	5.4	3.8	2.9	2.9	4.0		
17	4.3	5.8	14	24	23	13	7.7	5.2	3.8	2.8	2.9	9.0		
18	4.3	5.6	24	31	16	11	11	5.2	3.5	2.8	2.7	7.0		
19	4.3	5.4	20	44	14	10	24	5.0	3.3	2.8	2.7	5.3		
20	4.1	8.5	15	33	13	9.4	16	5.0	3.3	2.9	2.7	16		
21	4.3	6.5	48	37	12	9.4	11	5.0	3.3	2.9	2.7	9.0		
22	4.3	5.8	32	18	8.8	11	12	5.0	3.2	2.8	2.7	7.0		
23	4.1	19	46	37	10	11	9.4	4.7	3.2	2.8	2.7	7.5		
24	4.1	9.8	28	43	10	10	11	4.5	3.2	2.9	2.7	6.0		
25	4.0	8.0	19	43	9.4	8.5	10	4.3	2.9	7.1	2.9	5.0		
26	4.8	7.1	22	52	9.4	8.2	11	4.3	3.8	5.9	2.9	4.5		
27	6.5	6.3	17	67	9.1	8.5	16	4.3	3.3	7.3	2.7	4.0		
28	4.5	6.1	13	37	8.8	9.8	10	4.7	4.3	3.9	3.0	3.8		
29	5.4	5.8	12	25	-----	8.8	12	11	4.5	3.6	2.9	3.7		
30	4.5	5.4	11	20	-----	8.8	10	5.8	3.3	3.5	2.7	3.6		
31	4.5	-----	10	30	-----	7.4	-----	5.0	-----	3.2	2.7	-----		
TOTAL	181.5	256.4	608.4	880.1	427.7	376.2	382.4	185.8	111.2	118.2	96.3	156.1		
MEAN	5.85	8.35	19.6	25.8	15.3	12.1	12.7	5.99	3.71	3.81	3.11	5.20		
MAX	19	44	52	67	45	30	32	11	4.5	8.4	6.8	16		
MIN	4.0	4.3	5.4	7.7	8.8	7.4	7.7	4.3	2.9	2.8	2.7	2.9		
CFSM	.91	1.33	3.05	4.01	2.38	1.88	1.98	.93	.58	.59	.48	.81		
IN.	1.05	1.48	3.52	4.63	2.47	2.18	2.21	1.07	.64	.68	.56	.90		
AC-FT	360	509	1,210	1,598	848	746	758	369	221	234	191	310		
CAL YR 1969	TOTAL	4,099.1	MEAN	11.2	MAX	72	MIN	2.9	CFSM	1.74	IN	23.71	AC-FT	8,130
WTR YR 1970	TOTAL	3,700.3	MEAN	10.1	MAX	67	MIN	2.7	CFSM	1.57	IN	21.41	AC-FT	7,340

12121600 ISSAQUAH CREEK NEAR MOUTH, NEAR ISSAQUAH, WASH.

LOCATION.--Lat 47°33'09", long 122°02'48", in SE¼NW¼ sec.21, T.24 N., R.6 E., King County, on right bank 30 ft downstream from SE 56th Street bridge, 0.7 mile (revised) downstream from North Fork, 1.2 miles upstream from mouth, and 1.6 miles northwest of Issaquah.

DRAINAGE AREA.--54.7 sq mi.

PERIOD OF RECORD.--September 1965 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 142 cfs (35.25 inches per year, 102,900 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (800 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 7, 1966	0430	*876	6.52	Dec. 25, 1967	2100	*1,090	6.86	Jan. 5, 1969	2300	*1,960	9.07
				Jan. 21, 1968	0200	990	6.60				
Dec. 13, 1966	1600	*1,480	8.14					Jan. 14, 1970	1800	*824	6.28
Jan. 19, 1967	2045	1,360	7.76	Dec. 3, 1968	2300	1,800	8.74				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 8-10, 1966	21	2.94	1969	Sept. 10, 11, 12, 1969	28	2.74
1967	Aug. 29, Sept. 7, 8, 9, 1967	21	2.80	1970	Aug. 18, 26, 27, 31, 1970	24	2.54
1968	Oct. 9, 1967	24	2.84				

Period of record: Maximum discharge, 1,960 cfs Jan. 5, 1969 (gage height, 9.07 ft); minimum, 21 cfs Sept. 8, 9, 10, 1966, Aug. 29, Sept. 7, 8, 9, 1967; minimum gage height, 2.34 ft Sept. 21, 22, 29, 30, Oct. 12, 13, 16, 1963.

REMARKS.--Records good. Many minor diversions for irrigation and domestic use above station. Upstream withdrawal of water for gravel-washing operations caused as much as 4 to 5 cfs variation in the normal flow during working hours on weekdays. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	47	87	177	132	191	141	108	56	46	31	29
2	31	58	85	240	121	167	152	103	50	07	31	25
3	31	79	87	214	115	157	132	96	59	154	31	24
4	35	196	204	200	114	146	119	91	72	143	31	24
5	58	163	144	312	121	142	112	87	62	100	31	24
6	71	107	137	738	150	156	105	146	56	04	30	25
7	58	83	179	799	183	165	102	132	93	73	28	29
8	49	72	163	656	167	210	96	107	93	64	31	24
9	44	65	132	457	173	316	98	98	52	57	33	24
10	41	66	123	352	137	290	90	95	56	55	33	24
11	41	70	103	322	223	236	223	90	54	59	31	40
12	42	61	93	470	295	212	255	88	54	53	36	54
13	48	57	88	472	238	262	202	87	54	90	30	30
14	56	57	83	462	238	313	196	85	53	53	30	28
15	68	56	77	343	204	294	181	98	52	52	30	20
16	57	53	72	276	187	279	157	115	49	61	20	28
17	53	52	71	235	191	237	162	95	48	48	28	28
18	57	57	66	216	193	233	132	83	47	48	28	50
19	85	83	65	191	179	242	119	77	45	46	27	36
20	66	82	68	167	229	233	137	74	45	45	25	31
21	56	76	85	154	227	223	196	79	47	40	25	30
22	52	114	76	141	210	200	152	76	45	40	27	30
23	47	93	72	132	193	191	135	70	47	38	27	36
24	47	85	82	126	169	181	126	65	49	38	26	30
25	47	98	76	126	163	171	141	64	47	40	27	28
26	44	100	71	119	156	161	161	64	45	36	28	31
27	45	119	137	132	202	152	141	66	48	36	34	31
28	49	96	325	126	216	142	132	59	77	34	30	30
29	47	87	336	141	-----	132	133	97	54	33	28	28
30	50	82	242	141	-----	142	117	57	49	31	28	27
31	48	-----	191	150	-----	139	-----	57	-----	31	27	-----
TOTAL	1,555	2,514	3,820	8,815	5,144	6,317	4,333	2,671	1,588	1,747	902	878
MEAN	50.2	83.8	123	284	184	204	144	86.2	52.9	56.4	29.1	29.3
MAX	85	196	336	799	295	316	255	148	77	156	34	50
MIN	31	47	68	119	114	132	96	57	48	31	24	24
CFSM	.92	1.93	2.25	5.19	3.36	3.73	2.63	1.58	.97	1.03	.53	.54
IN.	1.06	1.71	2.60	5.99	3.50	4.30	2.95	1.82	1.08	1.19	.61	.60
AC-FT	3,080	4,990	7,580	17,480	10,210	12,530	8,590	5,300	3,158	3,470	1,790	1,740

CAL YR 1965 TOTAL 45,338 MEAN 119 MAX 1,398 MIN 24 CFSM 2.18 IN 29.47 AC-FT 89,960
WTR YR 1966 TOTAL 40,286 MEAN 110 MAX 799 MIN 24 CFSM 2.01 IN 27.48 AC-FT 79,910

12121600 ISSAQUAH CREEK NEAR MOUTH, NEAR ISSAQUAH, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	55	355	390	271	201	165	167	57	34	28	24
2	34	52	271	304	247	203	158	156	61	35	27	25
3	33	50	223	346	221	179	149	145	61	34	27	24
4	30	48	214	341	241	165	145	134	55	33	26	23
5	30	48	259	516	220	154	144	124	50	34	27	23
6	28	55	233	388	199	145	131	118	48	33	27	23
7	34	53	223	353	185	138	124	111	45	34	27	23
8	43	50	196	380	170	134	118	109	45	34	27	23
9	33	50	170	363	188	167	129	107	45	34	26	23
10	31	53	210	331	205	149	124	106	45	33	26	30
11	31	52	259	380	201	140	115	109	48	32	26	39
12	40	71	450	311	233	134	111	116	45	32	26	34
13	38	88	1,130	320	413	127	154	104	43	31	25	27
14	31	229	756	395	327	149	97	41	31	25	26	24
15	28	229	498	546	291	154	136	91	40	31	25	24
16	30	199	440	425	253	170	145	88	38	30	25	24
17	34	163	443	327	395	196	145	84	34	30	24	24
18	36	129	430	271	430	199	179	81	34	30	24	24
19	55	107	413	729	318	176	243	79	31	24	23	24
20	131	97	433	988	263	188	208	73	34	31	24	23
21	82	88	334	633	231	188	221	68	73	31	24	24
22	102	79	269	448	208	231	196	68	102	30	24	24
23	100	73	225	360	192	241	176	66	61	29	24	24
24	82	70	214	298	235	179	158	58	59	29	24	23
25	71	145	243	255	165	225	149	66	43	29	23	23
26	68	160	203	245	152	210	142	61	41	29	23	23
27	66	149	181	403	143	192	192	59	41	29	23	23
28	61	147	181	600	194	192	225	66	38	29	23	23
29	61	151	205	478	214	201	214	70	34	28	23	23
30	62	365	194	365	-----	194	179	66	34	28	23	26
31	59	-----	197	288	-----	179	-----	61	-----	28	24	-----
TOTAL	1,594	3,305	10,052	13,007	6,735	5,562	4,811	2,918	1,424	966	774	746
MEAN	51.4	110	324	420	241	179	160	94.1	47.5	31.2	25.0	24.9
MAX	131	365	988	420	430	243	243	102	102	31	24	24
MIN	28	48	170	245	143	122	111	59	34	28	23	23
CFSM	.94	2.01	5.92	7.68	4.41	3.27	2.93	1.72	.87	.57	.46	.46
IN.	1.08	2.25	6.84	8.85	4.58	3.78	3.27	1.98	.97	.66	.53	.51
AC-FT	3,160	6,560	19,940	25,800	13,360	11,030	9,540	5,790	2,820	1,920	1,540	1,480
CAL YR 1966	TOTAL 47,348	MEAN 130	MAX 1,130	MIN 24	CFSM 2.38	IN 32.20	AC-FT 93,910					
WTR YR 1967	TOTAL 51,894	MEAN 142	MAX 1,130	MIN 23	CFSM 2.60	IN 35.29	AC-FT 102,900					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	91	79	273	175	157	212	100	305	58	31	55
2	31	63	208	214	227	145	204	94	656	47	32	57
3	44	50	221	177	353	134	178	89	404	44	32	47
4	44	44	163	147	563	195	171	85	249	45	32	46
5	30	40	148	179	393	174	187	86	181	43	32	43
6	29	36	117	147	301	158	178	107	139	41	33	41
7	31	39	113	138	245	142	197	94	120	40	32	40
8	29	44	97	127	209	134	171	86	109	39	31	40
9	27	45	99	258	184	124	156	82	99	37	31	40
10	29	142	113	278	164	118	147	78	90	39	31	39
11	67	108	204	214	150	118	189	74	84	39	30	41
12	41	75	179	201	137	147	184	74	77	49	30	44
13	41	60	154	352	127	128	169	74	77	44	31	41
14	43	63	135	426	118	127	227	72	84	43	31	41
15	33	63	124	425	111	210	302	70	69	44	31	42
16	30	62	122	369	106	326	280	68	63	43	46	50
17	29	55	115	309	110	280	245	61	62	40	40	86
18	29	52	108	268	263	256	229	58	58	40	41	141
19	49	40	100	390	212	234	222	59	40	41	46	148
20	30	47	95	578	560	187	222	103	57	41	46	127
21	90	44	93	822	459	166	193	81	54	40	40	97
22	62	44	197	510	397	151	175	70	58	39	37	82
23	47	44	223	371	429	168	183	67	55	39	63	82
24	40	47	262	300	364	175	159	65	52	37	100	77
25	44	47	705	250	301	207	149	69	49	36	99	69
26	39	43	765	215	256	200	140	68	50	36	99	65
27	84	43	486	183	219	292	130	62	62	36	124	58
28	47	384	162	162	162	353	181	59	63	33	104	55
29	58	79	285	147	172	330	112	56	58	33	84	54
30	49	79	221	142	-----	283	107	56	54	33	67	54
31	75	-----	193	147	-----	243	-----	55	-----	32	58	-----
TOTAL	1,385	1,765	6,508	8,737	7,982	6,004	5,551	2,322	3,598	1,241	1,658	1,938
MEAN	44.7	56.3	210	282	275	194	185	74.9	120	40.0	53.5	64.6
MAX	104	142	765	822	695	395	302	107	656	50	124	148
MIN	27	36	79	127	106	118	107	55	49	32	30	39
CFSM	.82	1.08	3.84	5.16	5.03	3.55	3.38	1.37	2.19	.73	.98	1.18
IN.	.94	1.20	4.43	5.94	5.43	4.08	3.78	1.58	2.45	.84	1.13	1.32
AC-FT	2,750	3,500	12,910	17,330	15,830	11,910	11,010	4,610	7,140	2,460	3,290	3,840
CAL YR 1967	TOTAL 46,601	MEAN 128	MAX 988	MIN 23	CFSM 2.34	IN 31.69	AC-FT 92,430					
WTR YR 1968	TOTAL 48,689	MEAN 133	MAX 822	MIN 27	CFSM 2.43	IN 33.11	AC-FT 96,570					

12121600 ISSAQUAH CREEK NEAR MOUTH, NEAR ISSAQUAH, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	71	230	201	133	144	174	171	133	93	35	30
2	49	80	222	214	144	142	176	214	115	84	35	30
3	47	84	752	229	196	158	156	194	105	80	35	33
4	51	75	1,090	246	142	158	172	172	99	84	34	33
5	51	70	611	1,240	233	300	172	153	91	80	38	33
6	59	66	407	1,600	192	250	165	138	86	73	35	31
7	57	64	395	1,470	178	216	151	127	86	69	34	30
8	50	81	447	816	328	194	140	117	82	65	34	30
9	51	139	413	665	442	172	131	107	78	59	34	29
10	84	123	471	570	389	160	140	101	73	59	34	29
11	89	469	543	490	588	149	126	99	73	67	34	29
12	105	520	436	402	528	140	131	91	71	61	33	29
13	148	513	344	348	402	135	136	86	71	57	34	31
14	125	315	318	330	131	118	80	67	55	33	31	
15	147	187	293	290	288	127	111	75	63	49	33	29
16	118	162	349	280	318	140	107	75	61	48	34	30
17	106	141	287	254	298	278	144	71	57	45	31	43
18	125	138	303	232	286	272	190	69	55	43	31	109
19	127	261	264	264	228	207	207	69	59	41	31	97
20	148	128	225	198	245	201	207	69	59	41	31	82
21	125	138	205	187	222	185	178	65	59	43	31	51
22	126	193	200	171	207	180	156	61	65	40	31	145
23	111	194	258	158	194	199	207	57	133	38	30	211
24	98	173	448	147	178	172	147	63	249	37	30	149
25	93	159	391	144	167	162	153	61	181	37	30	111
26	87	147	308	140	162	156	138	59	156	37	30	89
27	79	140	261	135	153	156	127	73	135	35	33	71
28	74	126	221	129	147	151	140	78	149	35	35	67
29	67	189	204	124	144	176	156	124	134	35	35	103
30	88	235	166	120	-----	140	156	332	109	34	31	133
31	78	-----	171	138	-----	163	-----	172	-----	34	30	-----
TOTAL	2,818	4,966	11,132	12,170	7,434	5,512	4,641	3,475	2,938	1,663	1,017	1,948
MEAN	90.9	166	359	393	266	178	155	112	97.9	53.6	32.8	64.9
MAX	148	520	1,090	1,400	588	300	207	332	245	93	38	211
MIN	47	64	166	120	133	127	107	57	55	34	30	29
CFSM	1.66	3.03	6.56	7.18	4.86	3.25	2.83	2.05	1.79	.98	.60	1.19
IN.	1.92	3.38	7.57	8.28	5.06	3.75	3.16	2.36	2.00	1.13	.69	1.32
AC-FT	5,590	9,850	22,080	24,140	14,750	10,930	9,210	6,890	5,830	3,300	2,020	3,860
CAL YR 1968	TOTAL	57,947	MEAN	158	MAX	1,090	MIN	30	CFSM	2.89	IN	39.41
WTR YR 1969	TOTAL	59,714	MEAN	164	MAX	1,600	MIN	29	CFSM	3.00	IN	40.61
									AC-FT	114,900		
									AC-FT	118,400		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	41	59	134	269	120	143	216	73	42	34	27
2	95	40	57	126	238	116	229	190	66	40	41	27
3	78	45	50	122	217	120	184	170	62	38	38	31
4	67	221	79	115	199	146	156	156	59	35	35	33
5	61	265	72	107	188	109	157	141	57	35	34	30
6	55	159	64	100	179	145	217	130	54	35	32	33
7	55	130	61	96	165	231	201	121	52	34	32	67
8	82	113	97	97	156	165	177	129	52	35	32	66
9	89	102	77	117	147	145	145	134	57	32	31	47
10	89	94	83	114	141	134	274	134	59	32	30	37
11	75	88	140	107	134	132	311	134	59	31	29	32
12	67	83	329	101	129	141	265	125	55	30	28	30
13	59	79	327	157	143	143	231	121	52	31	31	29
14	55	80	490	629	129	199	204	111	50	31	30	27
15	49	83	346	560	192	202	181	103	52	30	28	26
16	46	80	264	372	326	217	165	98	52	30	28	26
17	45	75	217	341	330	204	180	93	50	31	29	35
18	45	73	213	491	311	183	156	87	47	30	28	66
19	45	70	187	640	255	166	252	85	44	29	28	67
20	43	79	191	570	221	156	274	82	44	29	28	64
21	41	84	265	498	199	154	229	80	41	30	28	57
22	41	73	304	482	179	139	202	80	41	30	27	46
23	104	104	410	518	126	146	195	80	40	30	26	41
24	44	119	357	520	154	147	235	73	38	30	27	37
25	46	97	280	603	143	130	212	71	38	39	27	34
26	43	89	261	550	138	125	197	67	37	57	27	31
27	48	84	228	643	130	120	183	66	40	81	26	29
28	73	195	475	125	125	166	166	65	44	47	27	65
29	46	64	175	381	-----	147	188	105	47	39	27	26
30	44	63	158	316	-----	134	265	114	47	37	26	23
31	42	-----	146	314	-----	125	-----	85	-----	35	26	-----
TOTAL	1,805	2,852	6,174	10,396	5,303	4,663	6,272	3,446	1,509	1,114	920	1,160
MEAN	58.2	95.1	199	335	169	155	209	111	50.3	35.9	29.7	38.7
MAX	120	265	490	645	330	231	311	216	73	81	41	69
MIN	41	40	57	96	125	189	143	66	37	29	26	25
CFSM	1.06	1.74	3.64	6.12	3.46	2.74	3.82	2.03	.92	.66	.54	.71
IN.	1.23	1.94	4.20	7.07	3.61	3.17	4.27	2.34	1.03	.76	.63	.79
AC-FT	3,580	5,660	12,250	20,620	10,520	9,250	12,440	6,840	2,990	2,210	1,820	2,300
CAL YR 1969	TOTAL	51,629	MEAN	141	MAX	1,600	MIN	25	CFSM	2.58	IN	35.11
WTR YR 1970	TOTAL	45,614	MEAN	125	MAX	643	MIN	25	CFSM	2.29	IN	31.02
									AC-FT	102,400		
									AC-FT	90,480		

LAKE WASHINGTON BASIN

12121700 TIBBETTS CREEK NEAR ISSAQUAH, WASH.

LOCATION.--Lat 47°32'30", long 122°03'47", in SW 1/4 sec.29, T.24 N., R.6 E., King County, on right bank just upstream from old highway bridge, 1.3 miles upstream from mouth and 1.5 miles northwest of Issaquah.

DRAINAGE AREA.--3.90 sq mi.

PERIOD OF RECORD.--August 1963 to September 1968 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 75 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 6.94 cfs (24.17 inches per year, 5,020 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (100 cfs), water years 1966-68

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Feb. 11, 1966	1330	*136	5.42	Jan. 4, 1967	1000	110	5.38	Jan. 20, 1968	2200	*53	4.60
				Jan. 19, 1967	1330	*174	5.63				
Dec. 13, 1966	1200	138	5.51	Jan. 28, 1967	0300	108	5.37				

Annual minimum discharge, water years 1966-68

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 15, 1966	.02	3.63	1968	Oct. 2, 5-10, 1967, Aug. 11, 1968	b.25	c3.27
1967	Aug. 25, 1967	.01	a3.73				

a Occurred Oct. 11, 12, 19, 1967.

b May have been less during period of no gage-height record Oct. 1-4, 1967.

c Occurred Aug. 11, 1968.

Period of record: Maximum discharge, 174 cfs Jan. 19, 1967, from rating curve extended above 80 cfs; maximum gage height, 5.64 ft Jan. 1, 1964; minimum discharge, 0.01 cfs Aug. 25, 1967.

REMARKS.--Records good. Several small diversions for domestic use. No regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	1.2	4.5	16	6.2	11	6.7	4.9	.90	.30	.30	.10
2	.20	3.4	4.5	24	6.0	9.7	8.8	4.5	.90	.30	.30	.10
3	.20	4.9	5.7	15	5.8	8.8	6.7	3.9	1.8	2.6	.30	.10
4	.30	18	12	14	5.8	7.9	5.8	3.4	1.2	1.7	.30	.10
5	.70	7.0	11	26	6.7	7.9	5.5	3.1	1.0	1.1	.30	.10
6	1.0	4.7	10	71	9.4	8.8	5.3	6.2	.90	.90	.30	.10
7	.70	3.4	12	64	13	9.7	5.3	6.5	.70	.70	.30	.10
8	.20	2.9	11	44	9.7	14	4.9	6.7	.60	.60	.20	.10
9	.70	2.4	9.4	30	10	18	4.9	4.1	.60	.50	.20	.10
10	.50	2.7	9.1	23	9.4	16	4.5	3.0	.70	.50	.20	.10
11	.50	3.2	7.9	19	32	14	16	3.4	.60	.50	.20	.30
12	.50	2.7	6.7	43	20	12	23	3.2	.60	.50	.10	.50
13	.60	2.6	6.0	27	16	14	17	2.9	.60	.40	.20	.20
14	1.1	2.4	5.5	27	14	18	14	2.9	.60	.50	.28	.20
15	1.4	2.2	4.9	20	12	18	12	3.4	.50	.50	.20	.20
16	1.2	2.1	4.5	16	10	18	10	3.1	.50	1.4	.20	.20
17	1.0	2.1	4.1	13	9.4	16	8.5	2.7	.40	.80	.20	.30
18	1.5	2.7	4.1	12	8.2	19	7.6	2.4	.40	.70	.20	.60
19	2.0	5.5	3.9	11	7.3	14	6.5	2.1	.40	.60	.20	.30
20	1.1	6.2	3.9	9.4	7.3	14	7.0	2.0	.40	.50	.10	.30
21	.80	5.3	4.7	8.5	6.7	14	8.5	2.1	.40	.50	.10	.20
22	.70	6.5	4.5	7.6	6.2	14	7.0	2.0	.30	.40	.10	.30
23	.70	5.3	4.5	7.0	6.0	13	6.2	1.7	.40	.40	.10	.50
24	.60	5.1	5.5	6.5	5.5	12	5.8	1.6	.40	.40	.10	.40
25	.60	5.8	5.3	6.2	5.8	10	6.5	1.4	.40	.40	.20	.30
26	.70	6.5	4.9	6.0	5.8	9.4	8.2	1.4	.30	.40	.20	.40
27	1.2	7.0	19	6.0	11	7.9	6.7	1.7	.40	.40	.20	.40
28	1.8	5.8	41	5.5	12	7.0	1.7	1.2	.70	.40	.20	.40
29	1.6	4.9	36	6.2	-----	6.5	7.0	1.1	.40	.50	.20	.40
30	1.0	4.3	22	6.5	-----	6.2	5.8	1.0	.30	.30	.20	.30
31	1.4	-----	16	6.7	-----	6.7	-----	.90	-----	.30	-----	-----
TOTAL	27.90	190.8	304.1	597.1	277.2	371.5	248.4	89.30	17.50	28.80	6.30	7.70
MEAN	2.90	6.36	9.01	19.3	9.90	12.0	8.28	2.80	.58	.65	.20	.26
MAX	.40	10	41	71	32	10	23	6.5	1.2	2.6	.30	.60
MIN	.20	1.2	3.9	5.5	5.5	6.2	4.5	.90	.30	.30	.10	.10
CFSM	.23	1.12	2.52	4.95	2.94	3.08	2.12	.74	.15	.17	.05	.07
IN.	.27	1.25	2.90	5.70	2.64	3.94	2.37	.89	.17	.19	.06	.07
AC-FT	55	259	603	1,108	558	737	493	177	35	40	13	15
CAL YR 1965	TOTAL	1,963.60	MEAN	5.30	NAX	64	MIN	.10	CFSM	1.30	IN	18.73
WTR YR 1966	TOTAL	2,097.80	MEAN	5.75	NAX	71	MIN	.10	CFSM	1.47	IN	20.01
									AC-FT	3,090		4,168

12121700 TIBBETTS CREEK NEAR ISSAQUAH, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.70	41	28	14	8.3	9.4	9.0	1.4	.51	.14	.11
2	.42	.61	29	19	12	9.4	8.3	7.9	1.4	.43	.14	.14
3	.30	.58	20	20	11	8.3	7.6	7.8	1.9	.43	.11	.11
4	.26	.58	18	57	11	7.6	7.0	6.1	1.2	.43	.08	.08
5	.26	.70	32	45	9.8	6.7	6.7	5.3	.98	.43	.11	.08
6	.26	1.1	24	26	9.0	6.4	5.9	4.6	.90	.43	.11	.11
7	.32	.83	22	24	8.3	6.1	5.6	4.1	.90	.36	.11	.10
8	.47	.76	18	27	7.3	6.7	5.1	3.9	.90	.36	.14	.08
9	.38	.76	14	25	9.0	6.4	5.1	3.5	.83	.36	.14	.08
10	.34	1.4	17	23	9.8	5.9	4.8	3.4	.83	.36	.11	.20
11	.30	1.2	24	23	10	5.3	4.6	3.5	.76	.30	.11	.30
12	.47	2.4	60	20	12	5.1	4.6	3.7	.70	.30	.11	.20
13	.42	3.4	115	18	23	4.8	4.4	3.4	.76	.30	.11	.15
14	.38	13	54	20	18	4.6	5.9	3.0	.72	.25	.08	.15
15	.34	12	36	29	15	6.4	5.3	2.8	.64	.25	.08	.14
16	.34	9.0	34	22	13	7.3	6.4	2.7	.58	.21	.08	.13
17	.34	7.3	32	20	17	10	6.7	2.4	.58	.21	.08	.12
18	.34	5.1	29	17	16	13	9.8	2.2	.52	.21	.08	.11
19	.92	3.9	29	83	14	11	15	2.2	.52	.25	.08	.11
20	1.8	3.2	28	65	12	11	12	2.0	.58	.25	.08	.11
21	1.1	2.5	21	38	10	10	11	2.0	1.4	.25	.08	.12
22	1.2	2.1	18	25	9.0	15	9.8	2.0	1.5	.21	.08	.12
23	.98	1.8	15	20	8.3	15	8.7	1.8	.98	.21	.11	.12
24	.76	1.7	14	17	7.3	14	7.6	2.0	.83	.14	.11	.12
25	.64	6.6	17	14	6.7	13	7.6	1.8	.70	.14	.06	.12
26	.76	7.0	15	14	6.1	12	7.3	1.7	.70	.17	.11	.13
27	.76	7.0	13	35	5.6	10	12	1.6	.64	.17	.08	.13
28	.70	7.6	13	50	7.6	10	16	2.4	.58	.14	.06	.13
29	.98	9.8	13	30	-----	12	13	2.1	.58	.14	.08	.14
30	.90	37	12	21	-----	11	11	2.0	.58	.14	.11	.15
31	.83	-----	17	16	-----	10	-----	1.7	-----	.14	.11	-----
TOTAL	18.65	151.62	844	891	311.8	282.3	246.4	103.8	25.89	8.44	3.07	3.89
MEAN	.60	5.05	27.2	28.7	11.1	9.11	8.21	3.35	.86	.27	.099	.13
MAX	1.8	37	115	83	23	15	16	9.0	1.6	.51	.14	.30
MIN	.26	.58	12	14	5.4	4.6	4.6	1.6	.52	.14	.06	.08
CFSM	.15	1.29	6.97	7.36	2.85	2.34	2.11	.86	.22	.07	.03	.03
IN-	.18	1.45	8.05	8.50	2.97	2.69	2.35	.99	.25	.08	.03	.04
AC-FT	37	301	1,670	1,770	618	560	488	206	51	17	6.1	7.7

CAL YR 1966 TOTAL 2,649.27 MEAN 7.26 MAX 115 MIN .10 CFSM 1.86 IN 25.27 AC-FT 5,250
WTR YR 1967 TOTAL 2,890.66 MEAN 7.92 MAX 115 MIN .06 CFSM 2.03 IN 27.37 AC-FT 5,730

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	1.9	2.1	11	8.6	7.8	11	3.8	13	.86	.41	.47
2	.25	1.5	9.7	10	13	6.9	9.7	3.7	25	.65	.38	.47
3	.40	1.2	8.5	9.4	20	5.9	8.3	3.4	16	.60	.44	.44
4	.30	1.1	7.0	9.4	33	6.8	7.8	3.1	10	.55	.44	.41
5	.25	.98	7.0	9.7	23	8.1	8.1	3.1	7.3	.55	.41	.41
6	.25	.77	5.8	8.6	17	7.5	7.5	3.3	5.5	.55	.38	.41
7	.30	.77	6.2	8.1	14	6.8	6.8	2.9	4.7	.51	.38	.38
8	.30	.85	5.5	7.5	11	6.1	6.1	2.6	4.2	.51	.38	.38
9	.25	1.5	5.1	13	9.4	5.7	5.7	2.4	3.7	.51	.38	.38
10	.46	2.8	5.5	13	8.1	5.3	5.7	2.2	3.3	.51	.35	.38
11	1.2	2.2	7.9	11	7.0	5.5	7.5	2.1	3.0	.51	.35	.44
12	.43	1.6	7.3	11	6.3	7.8	8.3	2.1	2.6	.80	.35	.44
13	.51	1.3	6.2	18	5.7	6.5	7.8	2.1	2.6	.80	.38	.41
14	.43	1.5	5.3	22	5.1	6.5	8.8	2.0	2.4	.60	.60	.60
15	.36	1.6	4.9	20	4.7	11	10	1.8	2.1	.55	.65	.51
16	.36	1.6	4.7	17	4.3	21	12	1.7	2.0	.55	.51	.47
17	.30	1.5	4.5	15	4.5	19	12	1.6	1.9	.51	.47	1.2
18	.36	1.3	4.1	14	8.8	17	12	1.5	1.7	.47	.51	2.9
19	.36	1.2	3.8	24	24	14	13	1.6	1.9	.51	.51	2.8
20	.43	1.1	3.6	37	23	12	12	2.8	1.6	.51	.55	4.1
21	2.2	1.1	3.6	38	22	10	11	2.0	1.5	.47	.47	2.5
22	1.2	.98	8.1	26	21	8.8	10	1.8	1.6	.44	.51	2.0
23	.77	.98	8.5	19	24	9.1	9.4	1.6	1.4	.44	1.3	1.8
24	.77	1.1	9.1	15	22	9.1	8.3	1.5	1.2	.44	.90	1.7
25	.68	.98	20	13	17	12	7.5	1.7	1.1	.44	1.1	1.6
26	.59	.98	22	11	14	11	6.8	1.7	1.3	.44	.92	1.4
27	2.2	.98	17	9.4	12	14	5.9	1.6	1.6	.44	.98	1.3
28	1.8	1.1	14	8.1	10	16	5.5	1.4	1.5	.41	.86	1.2
29	.98	1.5	12	7.3	8.8	16	4.9	1.3	1.2	.41	.70	1.2
30	.87	1.8	9.7	6.5	-----	14	4.5	1.2	1.0	.41	.55	1.1
31	1.9	-----	9.1	6.8	-----	12	-----	1.2	-----	.41	.47	-----
TOTAL	21.76	39.77	247.8	448.8	401.3	319.2	259.9	66.8	127.9	16.16	17.79	33.80
MEAN	.70	1.33	7.99	14.5	13.8	10.3	8.46	2.15	4.26	.52	.57	1.13
MAX	2.2	2.8	22	38	33	21	13	3.8	25	.86	1.3	4.1
MIN	.25	.77	2.1	6.5	4.3	5.3	4.5	1.2	1.0	.41	.35	.38
CFSM	.18	.34	2.05	3.72	3.54	2.64	2.17	.95	1.09	.13	.15	.29
IN-	.21	.38	2.36	4.28	3.83	3.04	2.42	.64	1.22	.15	.17	.32
AC-FT	43	79	492	890	796	633	504	133	254	32	35	67

CAL YR 1967 TOTAL 2,185.72 MEAN 5.99 MAX 83 MIN .06 CFSM 1.54 IN 28.05 AC-FT 4,340
WTR YR 1968 TOTAL 1,994.98 MEAN 5.45 MAX 38 MIN .25 CFSM 1.40 IN 19.03 AC-FT 3,960

LAKE WASHINGTON BASIN

12121800 PINE LAKE NEAR ISSAQUAH, WASH.

LOCATION.--Lat 47°35'26", long 122°02'15", in SE¼SE¼ sec.4, T.24 N., R.6 E., King County, on northeast shore 4.0 miles north of Issaquah.

DRAINAGE AREA.--1.06 sq mi.

PERIOD OF RECORD.--May 1956 to September 1970.

GAGE.--Nonrecording gage. Altitude of gage is 390 ft (from topographic map). Prior to Sept. 11, 1966, at site on north shore 0.6 mile across lake at present datum.

EXTREMES.--Maximum and minimum gage heights, in feet, for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum observed		Date	Minimum observed	
		Gage height			Gage height	
1966	Jan. 7, 1966	4.48		Oct. 3, 1965	1.78	
1967	Jan. 21, 1967	4.80		Sept. 29, 1967	1.56	
1968	Jan. 22, 1968	4.16		Oct. 2, 1967	1.60	
1969	Jan. 8, 1969	4.71		Sept. 15, 1969	2.18	
1970	Jan. 29, 1970	4.23		Sept. 16, 1970	1.95	

Period of record: Maximum gage height observed, 4.80 ft Jan. 21, 1967 (water over gage; observer estimated gage height); minimum observed, 1.14 ft Oct. 7, 1958.

REMARKS.--No regulation or diversion above station.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			2.38	3.78								
2				3.78			3.68					
3	1.78											
4												
5				3.97	3.75		3.60	3.52		3.05	2.67	
6												
7	1.86	2.06	3.56	4.48		3.64					2.66	
8			3.68		3.85		3.56				2.59	2.14
9		2.07				3.82						2.12
10											2.58	2.10
11	1.86	2.08		4.30								2.16
12			3.78						3.24	3.04		2.16
13	1.86	2.08										2.14
14	1.90				3.76							
15				4.26	3.95		3.68	3.48	3.22	3.00		2.11
16	1.90	2.10		4.26								
17						3.94			3.17		2.48	2.11
18	1.94										2.46	2.16
19							3.60			2.96		2.17
20	1.94											2.14
21												
22												
23			3.89	3.90	3.84	3.96	3.66			2.92	2.40	2.13
24												2.12
25	1.90											2.16
26												2.13
27				3.87	3.71		3.66			2.84		2.15
28		2.32				3.78			3.04			2.14
29										2.82		2.12
30	1.88	2.33				3.70	3.60				2.16	2.11
31		-----		3.78	-----		-----		-----	2.76	2.25	-----

12121800 PINE LAKE NEAR ISSAQUAH, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.10	2.13	2.78	3.92			3.69	3.78			2.38	1.79
2	2.10	2.13	2.84		4.12		3.67	3.77	3.36			1.78
3	2.08	2.12	2.87		4.06	3.63	3.62	3.74	3.35	2.92	2.35	1.79
4	2.07	2.10	2.94	4.12	4.02	3.61			3.32		2.32	1.77
5	2.08	2.10	3.06	4.14	3.96	3.59	3.60	3.66	3.30		2.29	
6	2.06	2.10	3.14	4.14		3.57	3.60	3.62	3.28		2.27	1.74
7	2.06	2.10	3.20	4.13	3.87	3.56	3.60	3.61	3.26		2.26	1.72
8	2.08		3.24	4.14	3.82		3.60	3.58			2.24	1.70
9	2.06	2.10	3.27	4.12		3.55	3.60	3.56	3.23			1.69
10	2.05	2.11	3.35	4.11	3.78	3.54		3.54	3.22	2.79		1.77
11			3.38	4.12	3.76	3.53	3.59			2.78		
12	2.05	2.12	3.54		3.52	3.52	3.61	3.56	3.19	2.76	2.18	1.76
13	2.04	2.22	4.06	4.12	3.67	3.52	3.64		3.18	2.74	2.16	1.75
14	2.04	2.34	4.22	4.13	3.87	3.54		3.51	3.16	2.70	2.15	1.74
15	2.03	2.36		4.14	3.88	3.58	3.62		3.14	2.69		1.72
16	2.02	2.40	4.31	4.10		3.63	3.64	3.48	3.14	2.67	2.10	1.70
17	2.02	2.42	4.32			3.63	3.64	3.46	3.12	2.65	2.09	
18	2.02	2.42	4.32	4.04	3.88	3.66	3.74	3.44	3.10		2.06	
19		2.43	4.32		3.86	3.66	3.76	3.42	3.09		2.04	
20	2.13	2.44	4.30	4.70	3.83			3.39	3.09		2.02	1.66
21	2.12	2.44		4.80	3.79	3.66	3.81	3.38	3.14		2.00	
22	2.14	2.45	4.18	4.60	3.74	3.76	3.80		3.14		1.98	1.65
23	2.16	2.45	4.12	4.50			3.79	3.36				
24	2.15	2.44	4.10	4.44	3.69	3.80	3.78	3.35	3.10	2.82	1.93	1.61
25	2.14		4.09	4.31	3.67	3.79	3.80	3.36		2.50	1.91	1.60
26	2.15	2.51	4.05	4.25	3.64	3.77	3.80	3.34	3.08	2.49	1.90	1.59
27	2.14	2.53	3.98	4.25		3.74		3.30	3.06	2.48	1.88	1.57
28	2.14	2.57		4.36		3.76	3.84	3.38	3.03	2.46	1.86	
29	2.15	2.60	3.94	4.38	-----	3.76	3.82	3.35	3.00	2.44		
30	2.14	2.70	3.90	4.32	-----	3.74	3.80	3.35		2.42	1.83	
31	2.14	-----	3.94	4.24	-----	3.70	-----	3.35	-----	2.40	-----	-----

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		1.90	2.06	3.54		3.82	3.80	3.64	3.73	3.62		
2	1.60			3.58	3.86				3.82	3.60		
3		1.89		3.59			3.76	3.61		3.60	3.07	
4	1.65				4.08	3.78				3.58		3.02
5	1.66	1.86			4.08	3.80	3.76	3.60	3.87			
6	1.65			3.62		3.79	3.74				3.00	
7	1.67				4.01							2.98
8		1.88	2.30		3.76	3.70	3.58	3.81	3.48			
9				3.76	3.90	3.72	3.58		3.46			
10	1.68		2.38	3.78		3.71	3.72		3.78			2.92
11	1.69				3.82		3.78	3.56				
12	1.68	1.95	2.41			3.78				3.46	2.88	
13		1.93				3.76		3.53				2.94
14	1.69			4.08	3.70		3.76		3.76	3.45	2.94	2.96
15	1.68	1.98	2.40					3.51		2.95		
16				4.13	3.66		3.94		3.74			2.94
17	1.67	1.98	2.44			4.00	3.98			3.37		2.98
18			2.43	4.09	3.76			3.49		3.36	2.90	
19		1.96				3.96	3.97		3.70			
20	1.66					3.91				3.34	2.90	3.06
21		1.95			3.96		3.91	3.52	3.68			
22	1.78			4.16	3.99				3.67	3.30	2.89	
23						3.83	3.86	3.56	3.76	3.30		
24	1.80	2.00	2.60	4.08				3.52		3.28		3.04
25	1.80		2.88		4.00						3.04	
26		2.00		3.96	3.98		3.75	3.53	3.65	3.24		3.02
27				3.91	3.91	3.87			3.67		3.08	
28	1.84		3.26		3.89					3.20		2.99
29	1.84	2.03		3.81	-----		3.68	3.50	3.66		3.09	2.98
30			3.40	3.80	-----	3.86				3.17		
31		-----			-----		-----		-----		-----	-----

LAKE WASHINGTON BASIN

12121800 PINE LAKE NEAR ISSAQUAH, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.96						3.92			3.21		2.27
2		3.31					3.92		3.54			
3			4.35							3.20		
4	2.96											
5		3.30		4.31	3.91	3.75	3.07					2.24
6			4.49					3.79			2.64	
7	2.98				3.93	3.74			3.42	3.16		
8	2.96	3.33	4.44	4.71							2.61	
9					4.22		3.70	3.68	3.40	3.14		2.19
10		3.37	4.48			3.72						
11							3.68	3.60	3.37		2.59	
12	3.00	3.66		4.48		3.71						
13	3.03			4.38					3.35	3.00	2.54	
14		3.77	4.31		4.20		3.67					
15	3.14		4.26	4.24		3.70		3.52				2.10
16		3.12			4.10		3.66			3.04		
17		3.78						3.48			2.46	
18				4.11		3.86			3.26			
19		3.76		4.06	3.94		3.77	3.44			2.44	2.40
20	3.22		4.16		3.90				3.22			
21		3.75			3.86	3.88				2.96		
22	3.26			4.00			3.78	3.40				
23		3.82								2.90	2.38	2.52
24	3.20					3.89	3.82		3.24			
25	3.20				3.76			3.36			2.35	
26		3.88				3.88	3.80		3.24			
27												
28					3.70							2.52
29	3.27				-----	3.88	3.78					
30		3.98			-----		3.79				2.29	
31	3.30	-----			-----		-----	3.54	-----	2.75		-----

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.58				4.02			3.65	2.91			
2		2.42	2.65						3.30			
3							3.69				2.43	
4	2.54			3.60	3.94				3.27			2.02
5							3.69	3.56				
6		2.60										
7						3.83			3.20			
8	2.56				3.88					2.80	2.39	2.05
9		2.61	2.68									
10				3.48		3.77		3.52				
11	2.55	2.68		3.48			3.85		3.15			2.80
12												
13								3.48				
14					3.84	3.76	3.79					
15		2.62										
16	2.49		3.40				3.73		3.08			1.95
17												
18	2.47			4.04						2.55		
19		2.60	3.54						3.04	2.54	2.20	2.02
20						3.72		3.39				
21					3.96							
22					3.90	3.69	3.73	3.38			2.18	
23	2.46		3.68									
24				4.16		3.68						
25	2.44	2.68		4.22				3.35	2.92	2.44		2.00
26												
27		2.68	3.80				3.71		2.90		2.10	
28		2.67			3.75							1.97
29	2.44			4.23	-----	3.64			2.88		2.06	
30		2.46			-----		-----	3.34	2.93		2.04	-----
31		-----			-----			3.32	-----			

12122000 SAMMAMISH LAKE NEAR REDMOND, WASH.

LOCATION.--Lat 47°34'47", long 122°06'38", in NE¼SW¼ sec.12, T.24 N., R.5 E., King County, on west shore 5.6 miles (revised) uplake from outlet and 6.5 miles south of Redmond.

DRAINAGE AREA.--97.7 sq mi.

PERIOD OF RECORD.--January 1939 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 24.04 ft above mean sea level. Prior to June 22, 1942, nonrecording gage 4.6 miles downlake at datum 1.00 ft higher. June 22, 1942, to Aug. 22, 1951, nonrecording gage 4.5 miles downlake at datum 1.00 ft higher and Aug. 23, 1951, to Apr. 29, 1965, at present datum.

EXTREMES.--Maximum and minimum gage heights, in feet, for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum		Date	Minimum	
		Gage height			Gage height	
1966	Jan. 8, 1966	3.50		Sept. 10, 1966	1.63	
1967	Jan. 21, 1967	3.87		Sept. 8, 9, 1967	1.52	
1968	Jan. 22, 1968	3.59		Aug. 13, 1968	1.64	
1969	Jan. 7, 1969a	4.55		Aug. 27, 31 to Sept. 2, Sept. 4	1.72	
1970	Jan. 27, 1970	4.02		July 22-24, 1970	1.68	

a About.

Period of record: Maximum gage height observed, 9.40 ft Feb. 12, 1951 (present datum); minimum observed, 1.09 ft Aug. 25-27, 1951.

A stage of 10.83 ft (present datum) was observed Dec. 22, 1933, from information by Corps of Engineers.

REMARKS.--No gage-height record Dec. 28, 1968, to Jan. 8, 1969. Many small diversions from tributaries for irrigation and domestic use. Slight regulation on tributaries.

REVISIONS.--WSP 1446: Drainage area.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.79	1.95	2.28	2.70	2.42	2.56	2.44	2.39	2.02	1.86	1.78	1.70
2	1.79	1.96	2.28	2.77	2.40	2.54	2.45	2.37	2.02	1.88	1.79	1.69
3	1.78	2.01	2.28	2.77	2.37	2.53	2.43	2.36	2.01	1.94	1.77	1.69
4	1.80	2.12	2.34	2.76	2.36	2.49	2.41	2.33	2.01	1.99	1.77	1.68
5	1.83	2.21	2.38	2.78	2.37	2.47	2.38	2.31	2.01	2.01	1.70	1.68
6	1.87	2.23	2.41	3.09	2.41	2.47	2.36	2.33	2.00	2.01	1.78	1.68
7	1.90	2.22	2.46	3.38	2.44	2.47	2.34	2.36	1.99	2.01	1.78	1.66
8	1.91	2.19	2.48	3.49	2.45	2.52	2.32	2.37	1.98	2.01	1.78	1.65
9	1.91	2.18	2.47	3.45	2.47	2.62	2.30	2.35	1.97	1.99	1.78	1.64
10	1.90	2.18	2.47	3.37	2.47	2.67	2.30	2.32	1.95	1.98	1.78	1.64
11	1.90	2.18	2.45	3.29	2.50	2.68	2.37	2.30	1.95	1.98	1.78	1.68
12	1.90	2.15	2.41	3.30	2.59	2.67	2.51	2.28	1.94	1.96	1.78	1.70
13	1.90	2.14	2.39	3.32	2.62	2.69	2.53	2.25	1.93	1.94	1.79	1.69
14	1.91	2.14	2.35	3.33	2.63	2.75	2.55	2.26	1.93	1.95	1.80	1.69
15	1.95	2.12	2.32	3.27	2.63	2.80	2.55	2.26	1.94	1.94	1.88	1.68
16	1.95	2.11	2.29	3.17	2.61	2.82	2.53	2.25	1.92	1.97	1.80	1.68
17	1.95	2.09	2.25	3.07	2.58	2.80	2.51	2.24	1.90	1.97	1.81	1.71
18	1.95	2.09	2.23	2.99	2.57	2.78	2.47	2.22	1.89	1.95	1.80	1.78
19	1.99	2.14	2.20	2.91	2.55	2.78	2.44	2.20	1.80	1.94	1.79	1.78
20	2.00	2.21	2.18	2.83	2.54	2.77	2.42	2.18	1.87	1.92	1.78	1.77
21	2.00	2.21	2.20	2.75	2.54	2.75	2.46	2.17	1.85	1.91	1.76	1.76
22	1.99	2.22	2.20	2.68	2.53	2.71	2.45	2.17	1.85	1.89	1.75	1.77
23	1.98	2.22	2.22	2.63	2.53	2.67	2.44	2.16	1.85	1.88	1.75	1.79
24	1.97	2.23	2.25	2.58	2.51	2.63	2.42	2.14	1.85	1.86	1.73	1.78
25	1.97	2.26	2.25	2.54	2.50	2.60	2.42	2.12	1.85	1.85	1.73	1.70
26	1.96	2.27	2.23	2.49	2.49	2.57	2.45	2.11	1.84	1.83	1.72	1.79
27	1.95	2.30	2.35	2.48	2.52	2.53	2.44	2.11	1.84	1.82	1.72	1.79
28	1.95	2.29	2.52	2.45	2.56	2.50	2.43	2.10	1.87	1.82	1.72	1.78
29	1.95	2.27	2.71	2.45	-----	2.47	2.44	2.08	1.87	1.81	1.71	1.78
30	1.95	2.27	2.75	2.45	-----	2.46	2.41	2.06	1.86	1.80	1.71	1.78
31	1.95	-----	2.75	2.44	-----	2.45	-----	2.04	-----	1.78	1.70	-----
MEAN	1.92	2.17	2.37	2.90	2.51	2.62	2.43	2.23	1.92	1.92	1.78	1.72
MAX	2.00	2.30	2.75	3.49	2.63	2.82	2.55	2.39	2.02	2.01	1.81	1.79
MIN	1.78	1.95	2.18	2.44	2.36	2.45	2.30	2.04	1.84	1.78	1.78	1.64

WTR YR 1966 MEAN 2.21 MAX 3.49 MIN 1.64

12122000 SAMMAMISH LAKE NEAR REDMOND, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.79	1.97	2.67		2.77	2.61		2.61	2.08	1.87	1.68	1.55
2	1.80	1.96	2.74		2.17	2.61	2.55	2.59	2.07	1.86		1.55
3	1.79	1.95	2.77		3.09	2.59	2.54	2.56	2.06	1.84		1.55
4	1.79	1.94	2.77		3.02	2.57	2.51	2.53	2.06	1.83		1.55
5	1.78	1.94	2.80		2.95	2.53	2.50	2.50	2.05	1.82		1.54
6	1.77	1.95	2.82		2.88	2.50	2.48	2.47	2.02	1.81		1.54
7	1.77	1.95	2.82		2.82	2.48	2.46	2.44	2.00	1.80		1.53
8	1.80	1.94	2.81		2.76	2.47	2.43	2.42	1.99	1.79		1.53
9	1.79	1.93	2.76	3.17	2.72	2.46	2.42	2.40	1.98	1.78		1.53
10	1.79	1.95	2.72	3.15	2.71	2.44	2.41	2.37	1.97	1.77		1.53
11	1.79	1.94	2.74	3.16	2.68	2.43	2.39	2.38	1.96	1.76		1.61
12	1.81	1.97	2.91	3.14	2.70	2.41	2.38	2.38	1.95	1.76		1.64
13	1.82	2.02	3.32	3.14	2.80	2.39	2.39	2.36	1.94	1.75		1.64
14	1.81	2.22	3.59	3.15	2.89	2.38	2.40	2.33	1.93	1.74		1.64
15	1.80	2.35	3.63	3.19	2.90	2.40	2.39	2.32	1.92	1.73		1.64
16	1.79	2.41	3.62	3.23	2.87	2.43	2.40	2.30	1.91	1.72		1.64
17	1.79	2.44	3.57	3.19	2.88	2.48	2.41	2.27	1.90	1.71		1.64
18	1.79	2.43	3.55	3.14	2.94	2.53	2.43	2.25	1.90	1.71	1.60	1.65
19	1.82	2.42	3.52	3.31	2.94	2.53	2.51	2.23	1.89	1.71	1.59	1.66
20	1.92	2.39	3.52	3.74	2.92	2.53	2.54	2.21	1.87	1.71	1.58	1.66
21	1.92	2.38	3.46	3.85	2.87	2.53	2.57	2.10	1.91	1.72	1.57	1.66
22	1.97	2.35	3.33	3.79	2.82	2.58	2.58	2.17	1.97	1.72	1.57	1.67
23	1.97	2.32	3.23	3.69	2.76	2.65	2.57	2.15	1.98	1.71	1.57	1.66
24	1.99	2.28	3.14	3.57	2.70		2.55	2.14	1.97	1.71	1.56	1.66
25	1.99	2.30	3.09	3.42	2.66		2.53	2.13	1.96	1.71	1.54	1.66
26	1.99	2.35	3.02	3.31	2.61		2.52	2.10	1.93	1.70	1.53	1.66
27	1.99	2.37	2.94	3.29	2.57		2.56	2.09	1.92	1.70	1.53	1.66
28	1.97	2.37	2.87	3.42	2.58		2.62	2.09	1.91	1.69	1.54	1.66
29	1.98	2.41	2.82	3.47	-----		2.63	2.09	1.90	1.69	1.54	1.67
30	1.99	2.52	2.77	3.44	-----		2.63	2.09	1.90	1.69	1.54	1.67
31	1.98	-----	2.73	3.35	-----		-----	2.09	-----	1.68	1.54	-----
MEAN	1.86	2.19	3.07		2.84			2.30	1.96	1.75		1.62
MAX	1.99	2.52	3.63		3.27			2.61	2.00	1.87		1.67
MIN	1.77	1.93	2.67		2.57			2.09	1.87	1.68		1.53

CAL YR 1966 MEAN 2.26 MAX 3.63 MIN 1.64

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.70	2.18	2.17	3.00	2.78	2.83	2.79	2.45	2.27	2.05	1.76	2.26
2	1.73	2.16	2.26	2.96	2.77	2.76	2.76	2.42	2.56	2.03	1.75	2.04
3	1.76	2.15	2.38	2.90	2.86	2.70	2.72	2.39	2.71	2.02	1.73	2.02
4	1.79	2.13	2.43	2.86	3.06	2.68	2.69	2.36	2.72	2.00	1.72	2.01
5	1.80	2.10	2.45	2.83	3.15	2.69	2.69	2.34	2.69	1.99	1.71	1.98
6	1.80	2.09	2.45	2.78	3.14	2.67	2.67	2.32	2.63	1.97	1.70	1.97
7	1.83	2.09	2.46	2.74	3.09	2.63	2.63	2.31	2.56	1.95	1.69	1.96
8	1.84	2.09	2.45	2.69	3.02	2.59	2.62	2.30	2.52	1.94	1.68	1.94
9	1.85	2.11	2.45	2.74	2.96	2.55	2.59	2.28	2.47	1.91	1.67	1.93
10	1.87	2.15	2.43	2.83	2.88	2.52	2.56	2.26	2.43	1.90	1.67	1.91
11	1.91	2.19	2.46	2.83	2.82	2.49	2.60	2.24	2.38	1.89	1.66	1.90
12	1.91	2.19	2.49	2.82	2.76	2.53	2.64	2.22	2.34	1.92	1.66	1.90
13	1.93	2.18	2.48	2.91	2.70	2.52	2.61	2.22	2.30	1.91	1.65	1.89
14	1.94	2.19	2.45	3.05	2.64	2.51	2.61	2.20	2.28	1.90	1.71	1.91
15	1.94	2.20	2.42	3.15	2.59	2.55	2.67	2.19	2.25	1.88	1.76	1.91
16	1.93	2.20	2.42	3.22	2.54	2.70	2.76	2.18	2.23	1.87	1.77	1.91
17	1.93	2.19	2.41	3.20	2.51	2.76	2.78	2.16	2.20	1.86	1.76	1.94
18	1.94	2.18	2.39	3.19	2.57	2.80	2.78	2.14	2.18	1.85	1.76	2.03
19	1.94	2.17	2.35	3.24	2.79	2.79	2.80	2.14	2.17	1.85	1.77	2.08
20	1.94	2.15	2.33	3.34	2.97	2.76	2.81	2.20	2.15	1.85	1.78	2.11
21	2.03	2.13	2.31	3.53	3.08	2.73	2.78	2.20	2.12	1.84	1.78	2.11
22	2.08	2.12	2.35	3.58	3.13	2.69	2.74	2.20	2.11	1.83	1.78	2.10
23	2.08	2.11	2.41	3.53	3.19	2.67	2.73	2.20	2.10	1.82	1.83	2.09
24	2.08	2.13	2.48	3.44	3.22	2.66	2.68	2.19	2.08	1.81	1.94	2.09
25	2.08	2.13	2.68	3.34	3.18	2.68	2.64	2.19	2.07	1.80	1.99	2.08
26	2.07	2.10	3.00	3.29	3.12	2.67	2.61	2.18	2.06	1.80	2.04	2.07
27	2.10	2.08	3.13	3.13	3.05	2.71	2.58	2.17	2.07	1.79	2.09	2.05
28	2.14	2.09	3.16	3.01	2.97	2.79	2.54	2.16	2.10	1.79	2.10	2.03
29	2.14	2.12	3.13	2.93	2.90	2.82	2.50	2.14	2.07	1.78	2.10	2.01
30	2.15	2.14	3.08	2.87	-----	2.84	2.47	2.13	2.06	1.77	2.09	2.00
31	2.16	-----	3.01	2.79	-----	2.83	-----	2.11	-----	1.77	2.07	-----
MEAN	1.95	2.14	2.54	3.05	2.91	2.68	2.67	2.23	2.30	1.88	1.81	2.00
MAX	2.16	2.20	3.16	3.58	3.22	2.84	2.81	2.45	2.72	2.05	2.10	2.11
MIN	1.70	2.08	2.17	2.69	2.51	2.49	2.47	2.11	2.06	1.77	1.65	1.89

WTR YR 1968 MEAN 2.35 MAX 3.58 MIN 1.65

12122000 SAMMAMISH LAKE NEAR REDMOND, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.99	2.20	2.72		2.49	2.57	2.49	2.53	2.34	2.14	1.80	1.72
2	1.97	2.20	2.74		2.49	2.53	2.50	2.54	2.32	2.12	1.80	1.72
3	1.96	2.20	2.89		2.52	2.52	2.50	2.55	2.29	2.10	1.79	1.73
4	1.98	2.18			2.56	2.51	2.51	2.55	2.27	2.10	1.76	1.73
5	1.98	2.16			2.61	2.55	2.53	2.53	2.24	2.10	1.76	1.73
6	1.98	2.15			2.62	2.60	2.53	2.51	2.20	2.08	1.76	1.73
7	1.99	2.12			2.60	2.60	2.52	2.50	2.17	2.07	1.76	1.73
8	1.98	2.15			2.73	2.59	2.51	2.48	2.15	2.06	1.76	1.74
9	1.97	2.21		4.50	2.90	2.57	2.49	2.45	2.13	2.05	1.76	1.74
10	1.98	2.23	3.63	4.42	3.02	2.53	2.49	2.41	2.10	2.03	1.75	1.73
11	2.01	2.40	3.72	4.34	3.17	2.52	2.47	2.39	2.07	2.02	1.75	1.73
12	2.04	2.69	3.73	4.19	3.18	2.49	2.46	2.37	2.05	2.01	1.74	1.73
13	2.08	2.77	3.65	4.02	3.33	2.47	2.45	2.35	2.04	2.00	1.73	1.76
14	2.16	2.77	3.51	3.88	3.29	2.43	2.44	2.31	2.03	1.99	1.74	1.77
15	2.20	2.76	3.50	3.73	3.26	2.42	2.42	2.29	2.01	1.98	1.74	1.76
16	2.22	2.73	3.51	3.62	3.21	2.43	2.40	2.27	2.00	1.97	1.74	1.77
17	2.23	2.70	3.45	3.50	3.19	2.50	2.42	2.25	1.99	1.96	1.74	1.82
18	2.27	2.66	3.43	3.38	3.13	2.58	2.48	2.21	1.98	1.94	1.74	1.94
19	2.29	2.61	3.42	3.35	3.08	2.59	2.51	2.18	1.95	1.92	1.74	2.30
20	2.31	2.59	3.33	3.15	3.02	2.59	2.53	2.16	1.92	1.91	1.75	2.05
21	2.32	2.58	3.24	3.07	2.97	2.57	2.54	2.15	1.90	1.90	1.75	2.03
22	2.32	2.56	3.17	2.97	2.91	2.57	2.53	2.13	1.89	1.89	1.75	2.11
23	2.32	2.62	3.15	2.89	2.85	2.57	2.57	2.12	1.92	1.92	1.88	1.75
24	2.31	2.61	3.25	2.80	2.80	2.56	2.57	2.12	2.01	1.89	1.75	2.25
25	2.30	2.58	3.32	2.72	2.74	2.53	2.56	2.11	2.09	1.86	1.74	2.24
26	2.27	2.57	3.32	2.68	2.69	2.52	2.54	2.09	2.12	1.85	1.74	2.22
27	2.25	2.57	3.26	2.63	2.66	2.50	2.51	2.08	2.14	1.85	1.73	2.21
28	2.21	2.53		2.61	2.61	2.48	2.51	2.08	2.15	1.84	1.74	2.18
29	2.21	2.62		2.57	-----	2.48	2.52	2.12	2.15	1.83	1.73	2.19
30	2.23	2.71		2.54	-----	2.46	2.52	2.34	2.15	1.82	1.73	2.21
31	2.22	-----		2.52	-----	2.47	-----	2.35	-----	1.81	1.72	-----
MEAN	2.15	2.48			2.88	2.53	2.50	2.31	2.09	1.97	1.75	1.92
MAX	2.32	2.77			3.33	2.60	2.57	2.55	2.34	2.14	1.80	2.25
MIN	1.96	2.12			2.49	2.42	2.40	2.08	1.89	1.81	1.72	1.72

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.21	1.96	2.08	2.84	3.58	2.48	2.39	2.68	2.17	1.90	1.83	1.73
2	2.20	1.95	2.08	2.78	3.46	2.46	2.47	2.67	2.15	1.91	1.85	1.72
3	2.18	1.96	2.08	2.72	3.34	2.42	2.48	2.64	2.13	1.91	1.85	1.73
4	2.15	2.10	2.08	2.66	3.24	2.40	2.47	2.60	2.12	1.89	1.85	1.74
5	2.13	2.27	2.08	2.60	3.14	2.37	2.49	2.57	2.10	1.88	1.84	1.76
6	2.12	2.29	2.08	2.54	3.04	2.40	2.54	2.54	2.08	1.88	1.84	1.77
7	2.11	2.29	2.07	2.49	2.97	2.53	2.54	2.49	2.06	1.87	1.83	1.81
8	2.12	2.27	2.08	2.45	2.89	2.53	2.54	2.47	2.04	1.85	1.85	1.85
9	2.12	2.26	2.09	2.43	2.81	2.51	2.59	2.45	2.04	1.83	1.84	1.85
10	2.13	2.24	2.10	2.43	2.76	2.49	2.66	2.44	2.03	1.82	1.83	1.85
11	2.12	2.22	2.17	2.40	2.67	2.48	2.74	2.43	2.03	1.80	1.83	1.85
12	2.11	2.20	2.33	2.37	2.64	2.48	2.77	2.40	2.02	1.79	1.82	1.84
13	2.09	2.18	2.53	2.41	2.62	2.49	2.77	2.38	2.01	1.78	1.82	1.83
14	2.07	2.18	2.74	2.71	2.59	2.53	2.75	2.32	2.00	1.76	1.80	1.83
15	2.07	2.17	2.85	2.98	2.60	2.55	2.73	2.33	1.99	1.75	1.79	1.83
16	2.03	2.16	2.90	3.05	2.73	2.58	2.68	2.32	1.98	1.74	1.79	1.84
17	2.02	2.13	2.88	3.10	2.79	2.60	2.64	2.30	1.98	1.72	1.78	1.89
18	2.01	2.11	2.88	3.19	2.84	2.59	2.61	2.28	1.97	1.73	1.77	1.94
19	2.00	2.10	2.88	3.36	2.86	2.57	2.67	2.25	1.96	1.73	1.77	1.96
20	1.99	2.10	2.88	3.49	2.83	2.55	2.74	2.23	1.98	1.71	1.76	2.00
21	1.99	2.10	2.93	3.53	2.81	2.53	2.75	2.22	1.95	1.69	1.76	2.01
22	1.98	2.09	2.98	3.58	2.78	2.51	2.73	2.20	1.93	1.68	1.75	2.01
23	1.97	2.12	3.13	3.65	2.73	2.48	2.72	2.20	1.93	1.68	1.75	2.00
24	1.97	2.15	3.21	3.68	2.69	2.48	2.73	2.18	1.92	1.68	1.74	1.99
25	1.96	2.15	3.21	3.79	2.64	2.44	2.73	2.18	1.91	1.71	1.74	1.99
26	1.96	2.15	3.19	3.86	2.60	2.42	2.72	2.16	1.90	1.74	1.74	1.98
27	1.95	2.13	3.16	3.99	2.56	2.40	2.70	2.14	1.90	1.82	1.74	1.98
28	1.96	2.13	3.10	3.99	2.52	2.42	2.67	2.13	1.90	1.83	1.74	1.97
29	1.97	2.13	3.04	3.90	-----	2.42	2.65	2.15	1.91	1.82	1.74	1.96
30	1.97	2.10	2.98	3.77	-----	2.40	2.68	2.18	1.92	1.83	1.74	1.96
31	1.96	-----	2.91	3.68	-----	2.38	-----	2.18	-----	1.83	1.73	-----
MEAN	2.05	2.15	2.64	3.11	2.85	2.48	2.65	2.35	2.00	1.79	1.79	1.88
MAX	2.21	2.29	3.21	3.99	3.58	2.60	2.77	2.68	2.17	1.91	1.85	2.01
MIN	1.95	1.95	2.07	2.37	2.52	2.37	2.39	2.13	1.90	1.68	1.73	1.72

WTR YR 1970 MEAN 2.31 MAX 3.99 MIN 1.68

12124000 EVANS CREEK ABOVE MOUTH, NEAR REDMOND, WASH.

LOCATION.--Lat 47°40'31", long 122°04'48", on north line of NE¼NE¼ sec.7, T.25 N., R.6 E., King County, on right bank 25 ft upstream from county bridge, 2.0 miles east of Redmond, and at mile 0.8.

DRAINAGE AREA.--13.0 sq mi.

PERIOD OF RECORD.--June 1955 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 50 ft (from topographic map).

AVERAGE DISCHARGE.--15 years, 22.3 cfs (23.29 inches per year, 16,160 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Jan. 8, 1966		135	3.22	July 29, 30, Aug. 1, 2, 12, 13, 18		5.8	1.53
1967	Jan. 20, 1967		120	3.05	Aug. 29, 1967		4.9	al.59
1968	Dec. 26, 1967		108	2.93	Aug. 8, 9, 10, 11, 12, 13, 1968		5.7	1.66
1969	Jan. 7, 1969		176	3.50	Aug. 25, 26, Sept. 2, 1969		5.4	bl.73
1970	Jan. 27, 1970		125	3.10	Aug. 23, 24, 1970		3.9	cl.82

a Occurred Oct. 4, 1966.

b Occurred May 23, 1969.

c Occurred July 16, 1970.

Period of record: Maximum discharge, 176 cfs Jan. 7, 1969 (gage height, 3.50 ft); minimum, 3.9 cfs Aug. 23, 24, 1970.

REMARKS.--Records good. No gage-height record May 11 to June 13, 1966. Several small diversions above station for irrigation and domestic use. No regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	9.4	17	48	24	29	22	19	10	8.2	6.1	6.7
2	7.8	12	20	56	23	26	24	19	10	10	5.8	6.4
3	8.3	16	18	57	23	25	21	18	11	18	6.1	6.7
4	9.4	26	26	52	29	24	19	16	11	16	6.1	6.7
5	12	24	22	53	28	23	19	16	10	11	6.4	6.7
6	15	17	24	101	33	25	18	23	9.5	10	6.4	6.4
7	12	14	25	128	37	23	17	27	9.4	9.8	6.4	6.4
8	11	12	24	128	37	31	16	21	9.4	9.0	6.4	6.7
9	11	11	20	110	37	38	16	18	9.4	8.6	6.1	7.0
10	10	12	20	88	36	32	18	17	9.4	8.6	6.4	7.4
11	8.8	15	18	73	37	29	31	15	11	9.0	6.4	8.6
12	9.4	12	16	78	41	28	45	14	14	8.2	6.1	9.0
13	9.4	12	18	76	36	34	37	14	11	8.2	6.7	7.8
14	12	13	17	70	37	41	31	16	8.6	8.6	7.0	7.4
15	16	12	15	60	34	41	28	17	8.6	9.0	6.7	7.4
16	12	11	14	51	32	41	25	16	8.2	13	6.4	7.4
17	10	10	13	45	38	37	23	14	7.8	11	6.1	8.2
18	10	12	13	42	29	36	21	13	8.6	9.0	6.1	16
19	14	24	13	41	28	39	19	13	8.6	8.0	6.4	10
20	11	28	13	36	27	37	19	12	8.6	7.4	6.7	8.6
21	9.4	20	17	33	25	33	25	13	8.2	7.0	6.7	7.8
22	9.4	17	17	30	23	30	21	17	8.6	7.0	6.1	7.8
23	8.6	16	16	30	23	28	20	14	8.6	7.0	6.1	9.4
24	8.6	16	21	29	22	28	19	13	9.4	8.8	6.4	9.0
25	8.6	25	21	27	23	27	21	12	8.2	8.8	6.7	8.6
26	8.6	22	19	25	23	25	28	13	7.8	7.8	7.0	8.6
27	18	24	36	26	28	23	23	13	8.2	6.4	7.8	9.0
28	11	18	60	25	30	21	22	11	12	6.4	7.8	8.6
29	10	16	70	28	-----	21	26	11	8.2	6.1	7.4	8.2
30	11	14	42	28	-----	22	22	18	8.2	6.1	7.8	7.8
31	10	-----	57	26	-----	22	-----	18	-----	6.4	6.7	-----
TOTAL	324.9	490.4	762	1,700	835	919	696	475	281.5	276.2	202.5	240.3
MEAN	10.5	16.3	24.6	54.8	29.8	29.6	23.2	15.3	9.30	8.91	6.53	8.01
MAX	18	28	70	128	41	41	45	27	14	18	7.8	14
MIN	7.0	9.4	13	25	22	21	16	10	7.8	6.1	5.8	6.4
CFSM	.81	1.29	1.09	4.22	2.29	2.28	1.78	1.18	.72	.69	.50	.62
IN.	.93	1.40	2.18	4.86	2.39	2.63	1.99	1.36	.81	.79	.58	.69
AC-FT	644	973	1,510	3,378	1,660	1,828	1,380	942	558	548	402	477

CAL YR 1965 TOTAL 7,687.8 MEAN 21.1 MAX 138 MIN 5.8 CFSM 1.62 IN 22.08 AC-FT 15,258
 WTR YR 1966 TOTAL 7,202.8 MEAN 19.7 MAX 128 MIN 5.8 CFSM 1.52 IN 20.61 AC-FT 14,290

12124000 EVANS CREEK ABOVE MOUTH, NEAR REDMOND, WASH.---CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	10	39	41	54	31	24	25	12	7.8	6.1	5.5
2	6.2	10	39	38	50	29	22	23	12	7.4	5.8	5.8
3	6.6	9.8	37	39	45	26	21	23	12	7.4	5.8	5.8
4	7.0	10	38	51	41	25	21	21	12	7.4	6.1	5.8
5	6.6	12	42	77	40	25	20	19	11	7.4	6.1	5.8
6	7.0	16	41	69	36	25	19	18	10	7.4	6.1	5.2
7	7.6	13	38	64	33	23	18	17	10	7.4	5.8	5.5
8	9.0	11	37	66	32	23	17	17	10	7.8	5.8	5.8
9	8.2	12	32	65	33	23	18	16	9.8	7.8	5.8	5.8
10	7.6	12	30	61	33	22	17	16	9.8	7.4	5.8	7.0
11	7.6	12	31	63	31	21	16	20	9.8	7.4	5.8	7.4
12	9.4	14	48	58	33	21	16	20	9.8	7.4	5.8	6.7
13	11	18	93	68	52	20	21	19	9.4	7.4	5.8	6.1
14	9.0	45	102	82	69	20	20	16	9.4	7.4	5.8	6.1
15	8.2	43	92	84	59	23	19	16	9.0	7.4	5.8	5.8
16	6.2	31	87	77	55	25	21	15	9.0	7.4	5.5	5.8
17	8.2	27	78	65	53	26	20	14	8.6	7.4	5.5	5.8
18	8.2	22	75	57	53	31	22	14	8.6	7.0	5.8	5.8
19	12	19	77	76	48	28	27	14	8.6	7.4	5.8	5.8
20	18	18	92	118	42	27	23	13	8.2	7.8	5.8	5.8
21	14	16	94	111	38	26	25	12	11	7.4	5.8	6.1
22	14	16	77	97	35	33	23	13	14	7.4	6.1	6.1
23	14	14	62	82	32	36	21	12	10	7.0	6.1	6.1
24	12	14	54	72	30	33	20	12	9.4	6.7	6.1	6.1
25	11	18	51	62	29	31	19	12	9.0	6.7	6.1	5.8
26	12	23	47	57	26	29	20	12	8.6	7.8	6.4	6.1
27	14	19	41	58	26	27	24	12	8.2	7.0	6.4	6.1
28	12	20	37	76	30	25	41	12	8.2	6.7	5.8	5.8
29	12	23	41	76	-----	28	33	14	8.2	6.7	5.2	6.4
30	12	34	37	69	-----	30	29	14	7.4	6.4	5.2	6.7
31	11	-----	33	61	-----	27	-----	13	-----	6.4	5.5	-----
TOTAL	316.2	561.8	1,722	2,140	1,140	825	657	493	293.0	224.6	181.3	180.4
MEAN	10.2	18.7	55.5	69.0	40.7	26.6	21.9	15.9	9.77	7.25	5.85	6.01
MAX	18	45	102	118	69	36	41	25	14	7.8	6.4	7.4
MIN	6.8	9.8	30	38	26	20	16	12	7.4	6.4	5.2	5.2
CFSM	7.78	1.44	4.27	5.31	3.13	2.05	1.68	1.22	.75	.56	.45	.46
IN.	.90	1.61	4.93	6.12	3.26	2.36	1.88	1.41	.84	.64	.52	.52
AC-FT	627	1,110	3,420	4,240	2,260	1,640	1,300	978	581	448	340	358
CAL YR 1966	TOTAL	6,225.5	MEAN 22.5	MAX 128	MIN 5.8	CFSM 1.73	IN 23.54	AC-FT 16,328				
WTR YR 1967	TOTAL	6,734.3	MEAN 23.9	MAX 118	MIN 5.2	CFSM 1.84	IN 24.99	AC-FT 17,320				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	14	16	43	33	30	29	23	31	12	6.6	8.6
2	8.6	11	24	39	35	28	28	20	61	11	6.3	8.8
3	9.0	9.4	28	34	39	26	26	18	58	12	6.3	8.8
4	8.2	9.0	23	30	67	29	25	18	41	11	6.3	8.8
5	-----	9.0	23	30	64	36	31	18	31	9.2	6.3	7.2
6	7.4	8.6	18	27	55	36	30	18	25	8.0	6.3	6.9
7	8.6	8.6	18	26	47	31	27	17	22	7.2	6.0	6.6
8	7.8	9.8	16	26	42	29	26	15	20	7.2	6.0	6.9
9	7.0	11	16	32	38	26	24	14	18	7.2	6.0	6.9
10	7.4	12	16	39	36	25	24	14	17	7.2	6.0	6.3
11	9.0	12	19	36	33	24	32	13	16	7.2	6.0	6.9
12	7.8	10	17	33	30	34	36	13	14	9.6	5.7	8.0
13	9.0	9.8	15	45	27	31	34	13	15	8.8	5.7	7.6
14	9.0	11	14	58	26	28	32	13	16	8.4	9.2	9.2
15	8.2	12	14	61	25	33	34	13	13	7.6	9.2	11
16	7.4	12	14	59	24	50	43	12	13	7.6	8.0	12
17	7.0	11	14	53	24	54	41	11	12	7.8	7.2	10
18	8.2	12	14	48	34	47	37	11	11	7.2	7.6	23
19	9.4	12	14	55	47	41	40	11	12	8.0	7.2	19
20	8.6	11	13	66	49	36	40	19	11	8.0	7.2	14
21	16	10	12	79	50	32	40	16	11	7.6	6.9	12
22	13	10	19	72	53	29	33	13	11	7.6	6.9	11
23	11	10	25	60	58	29	31	14	11	7.2	12	11
24	9.4	14	28	53	58	30	28	12	9.6	7.2	18	9.6
25	12	13	61	49	52	33	26	12	9.2	6.9	16	9.6
26	11	11	102	44	45	32	24	12	10	6.9	18	9.6
27	12	11	101	39	39	34	23	11	15	6.6	21	9.2
28	14	12	85	36	36	36	22	11	26	6.9	16	9.2
29	12	16	71	33	32	35	21	18	18	6.6	12	9.2
30	10	16	56	31	-----	34	22	10	16	6.6	10	9.2
31	12	-----	44	32	-----	31	-----	10	-----	6.6	8.8	-----
TOTAL	296.0	338.2	950	1,368	1,198	1,029	909	436	591.8	248.7	280.7	300.7
MEAN	9.55	11.3	30.6	44.1	41.3	33.2	30.3	14.1	19.7	8.02	9.95	10.9
MAX	16	16	102	79	67	54	43	23	61	12	21	23
MIN	7.0	8.6	12	26	24	24	21	10	9.2	6.6	5.7	6.9
CFSM	.73	.87	2.35	3.39	3.18	2.55	2.33	1.08	1.52	.62	.70	.77
IN.	.85	.97	2.72	3.91	3.43	2.94	2.60	1.25	1.69	.71	.80	.86
AC-FT	587	671	1,880	2,710	2,380	2,040	1,800	865	1,170	493	557	596
CAL YR 1967	TOTAL	7,718.5	MEAN 21.1	MAX 118	MIN 5.2	CFSM 1.62	IN 22.09	AC-FT 15,310				
WTR YR 1968	TOTAL	7,946.1	MEAN 21.7	MAX 118	MIN 5.7	CFSM 1.67	IN 22.74	AC-FT 15,780				

12124000 EVANS CREEK ABOVE MOUTH, NEAR REDMOND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	30	54	33	30	25	22	24	21	31	6.6	5.8
2	8.8	27	48	36	31	24	25	28	17	11	6.9	5.8
3	8.8	26	58	40	37	24	24	24	14	11	6.2	7.3
4	15	24	107	62	42	24	23	24	12	12	6.1	7.8
5	14	21	116	98	48	30	23	20	11	11	6.2	7.8
6	12	20	94	151	42	30	26	18	10	11	6.6	7.3
7	18	18	75	172	39	26	24	17	9.4	9.9	6.2	6.9
8	14	20	84	150	53	25	22	17	9.4	9.4	6.9	6.9
9	12	29	85	122	84	24	21	16	7.8	8.8	6.6	6.6
10	13	27	86	109	85	23	21	15	7.8	8.8	6.6	6.9
11	14	48	95	102	83	22	20	15	7.8	9.4	6.2	7.3
12	15	79	94	92	82	22	20	14	7.8	8.2	6.2	7.3
13	22	74	80	80	72	21	20	13	7.8	7.8	6.2	11
14	20	61	70	75	61	21	18	13	7.8	8.2	6.0	11
15	21	50	63	68	53	21	17	13	7.3	8.2	6.6	9.4
16	18	44	71	62	49	22	17	12	6.9	7.8	6.6	9.4
17	17	37	68	58	46	30	22	11	6.6	6.9	6.6	14
18	22	67	64	45	42	34	30	11	7.3	6.2	6.6	23
19	22	30	72	48	39	28	27	11	7.8	6.2	6.0	23
20	24	29	63	44	35	26	26	11	7.8	6.2	6.2	20
21	23	30	54	40	33	24	24	11	7.8	6.2	6.2	16
22	23	35	49	38	31	24	22	11	9.4	6.0	6.0	24
23	21	31	34	34	30	24	22	9.4	7.3	6.0	6.0	21
24	20	40	32	30	22	25	22	11	20	6.0	5.8	21
25	18	28	64	30	29	22	22	11	21	6.0	5.6	17
26	18	27	62	30	27	21	20	11	20	6.2	5.7	16
27	16	26	57	30	26	20	20	11	18	6.6	6.0	14
28	15	25	50	28	19	21	21	13	17	6.2	6.2	16
29	15	38	40	26	19	26	22	15	7.3	5.8	18	20
30	25	58	34	26	18	26	44	13	6.9	5.8	20	20
31	34	32	28	19	19	28	28	6.6	5.8	5.8	5.8	5.8
TOTAL	547.4	1,059	2,105	1,996	1,287	734	684	513.4	348.5	249.0	193.0	396.5
MEAN	17.7	35.3	67.9	64.4	44.0	23.7	22.8	16.4	17.6	8.0	6.2	13.2
MAX	34	79	116	172	86	34	30	44	21	12	6.9	30
MIN	8.8	18	32	26	26	18	17	9.4	6.6	6.0	5.6	5.8
CFSM	1.36	2.72	5.22	4.95	3.54	1.82	1.75	1.28	.89	.62	.48	1.02
IN.	1.57	3.03	6.02	5.71	3.68	2.10	1.96	1.47	1.00	.71	.55	1.13
AC-FT	1,090	2,100	4,180	3,960	2,550	1,460	1,360	1,020	691	494	383	786

CAL YR 1968 TOTAL 10,073.3 MEAN 27.5 MAX 116 MIN 5.7 CFSM 2.12 IN 28.83 AC-FT 19,980
WTR YR 1969 TOTAL 10,112.8 MEAN 27.7 MAX 172 MIN 5.6 CFSM 2.13 IN 28.94 AC-FT 20,060

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	13	12	25	62	20	29	26	14	6.8	9.3	7.1
2	14	12	12	24	52	19	42	24	11	7.6	13	7.6
3	14	13	12	24	48	22	35	23	9.6	7.1	11	9.3
4	14	33	13	21	42	20	29	22	9.6	6.2	9.6	11
5	13	46	13	20	39	19	29	20	9.3	7.1	8.6	10
6	13	30	13	19	37	27	33	19	8.3	6.8	7.9	12
7	13	22	11	18	33	53	32	18	8.3	6.2	7.6	14
8	18	20	13	18	31	42	28	18	8.3	6.8	7.6	13
9	16	18	15	21	30	34	35	20	9.6	6.5	6.5	11
10	15	15	15	22	29	30	37	20	10	6.2	6.2	10
11	13	15	21	20	27	29	36	21	10	6.0	5.4	9.6
12	13	13	37	18	25	29	33	20	10	6.2	5.4	9.3
13	12	13	40	24	27	30	29	19	10	6.2	5.7	10
14	11	13	50	65	27	34	26	17	9.6	6.0	5.2	10
15	11	15	50	80	33	37	25	16	10	6.2	5.2	10
16	10	18	40	67	51	38	24	15	10	6.0	5.4	9.6
17	8.8	14	38	62	50	38	23	15	9.6	6.0	5.2	13
18	10	13	37	65	43	33	23	14	8.3	6.0	5.2	15
19	11	13	34	73	39	30	31	13	7.1	6.2	4.7	14
20	10	14	34	76	33	28	36	13	6.8	6.5	5.2	15
21	8.8	15	44	71	31	27	31	13	6.2	6.8	4.9	14
22	9.4	13	53	68	29	24	29	13	6.0	6.2	4.9	13
23	9.1	20	65	77	27	23	28	15	5.6	6.5	4.7	13
24	8.2	23	64	80	24	25	30	13	5.2	6.5	4.5	12
25	8.2	18	58	97	23	22	28	11	4.9	7.9	5.7	11
26	8.8	17	45	98	22	21	26	11	4.9	11	6.0	11
27	12	14	43	121	21	20	26	10	5.2	16	6.0	11
28	12	13	39	118	20	24	25	12	6.0	11	7.1	11
29	13	13	34	97	28	26	28	16	6.5	10	7.1	10
30	13	13	31	78	26	28	24	6.5	9.3	7.1	9.6	9.6
31	12	29	68	24	24	18	18	9.0	9.0	7.1	7.1	7.1
TOTAL	374.3	522	1,019	1,735	955	876	892	531	246.4	228.8	205.0	336.1
MEAN	12.1	17.4	32.9	56.0	34.1	28.3	29.7	17.1	8.21	7.38	6.61	11.2
MAX	18	46	65	121	62	53	42	26	14	16	13	15
MIN	8.2	12	11	18	20	19	23	10	4.9	6.0	4.5	7.1
CFSM	.93	1.34	2.53	4.31	2.62	2.18	2.28	1.32	.63	.57	.51	.86
IN.	1.07	1.49	2.92	4.96	2.73	2.51	2.55	1.52	.71	.65	.59	.96
AC-FT	742	1,040	2,020	3,440	1,890	1,740	1,770	1,050	489	454	407	667

CAL YR 1969 TOTAL 8,316.7 MEAN 22.8 MAX 172 MIN 5.6 CFSM 1.75 IN 23.80 AC-FT 16,500
WTR YR 1970 TOTAL 7,920.6 MEAN 21.7 MAX 121 MIN 4.5 CFSM 1.67 IN 22.67 AC-FT 15,710

12125200 SAMMAMISH RIVER NEAR WOODINVILLE, WASH.

LOCATION.--Lat 47°42'15", long 122°08'29", in SW¼SW¼ sec. 26, T.26 N., R.5 E., King County, on right bank 3.6 miles southeast of Woodinville, 3.9 miles upstream from Bear Creek, and at mile 10.8.

DRAINAGE AREA.--157 sq mi.

PERIOD OF RECORD.--January 1965 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Corps of Engineers bench mark). Prior to July 7, 1970, auxiliary water-stage recorder 2 miles downstream from base gage at present datum.

AVERAGE DISCHARGE.--5 years, 317 cfs (27.42 inches per year, 229,700 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, elevation in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum		Date	Minimum	
		Discharge	Elevation		Discharge	Elevation
1966	Jan. 7, 1966	1,410	22.43	Aug. 17, 1966	40	a15.38
1967	Jan. 20, 1967	1,480	22.80	Aug. 21, Sept. 9, 1967	b40	-
1968	Dec. 26, 1967	1,080	20.93	Aug. 13, 1968	b60	-
1969	Jan. 7, 1969	1,760	23.90	Sept. 2, 1969	b54	c15.14
1970	Jan. 27, 1970	1,490	22.84	July 24, 1970	b49	d15.52

a Occurred Oct. 1-3, 1965.

b Minimum daily.

c Occurred Aug. 20, 1969.

d Occurred July 25, 1970.

Period of record: Maximum discharge, 1,900 cfs Jan. 30, 1965; maximum elevation, 23.90 ft Jan. 7, 1969; minimum daily discharge, 40 cfs Aug. 21, Sept. 9, 1967.

REMARKS.--Records good. Some minor regulation and many small diversions for irrigation and domestic use on tributaries above station. Water-quality records for the water years 1966-67 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	114	247	554	361	467	337	296	132	117	70	60
2	65	121	271	708	342	431	352	278	133	127	67	59
3	66	142	252	648	325	406	324	264	133	146	63	59
4	68	211	302	620	324	398	303	253	131	144	57	62
5	83	225	307	648	335	372	287	246	132	136	51	63
6	95	222	334	1,170	400	364	272	292	128	138	49	63
7	101	210	354	1,390	482	365	262	329	124	136	51	62
8	96	200	354	1,360	508	437	254	294	122	136	45	62
9	92	195	332	1,230	495	610	251	271	120	134	46	61
10	92	195	332	1,060	473	586	254	260	125	131	46	61
11	91	203	314	960	478	541	340	248	117	132	47	71
12	92	190	299	995	541	515	474	240	120	133	44	77
13	97	186	283	978	521	561	432	231	111	126	43	72
14	100	185	270	952	526	642	417	246	113	121	46	71
15	120	180	248	882	503	684	396	241	112	120	48	71
16	114	173	234	805	484	691	375	246	111	138	45	71
17	111	166	225	730	468	631	357	225	110	127	47	74
18	110	172	217	698	443	627	337	211	112	124	49	106
19	126	220	210	657	421	649	315	204	112	121	53	91
20	128	264	199	606	412	629	310	200	107	117	54	82
21	124	276	213	556	408	589	337	204	106	110	57	78
22	120	270	215	513	403	540	329	213	107	106	56	77
23	117	253	214	477	386	501	314	193	104	100	59	86
24	113	236	247	448	371	469	301	181	113	97	58	84
25	111	272	247	420	371	441	313	174	113	96	61	82
26	111	266	231	393	370	412	356	174	112	89	61	85
27	114	294	354	389	405	386	330	172	112	88	68	86
28	120	266	604	374	469	364	313	162	133	85	66	84
29	114	248	712	394	-----	343	349	152	122	79	64	83
30	117	235	679	395	-----	343	320	142	117	76	63	80
31	117	-----	609	380	-----	342	-----	136	-----	72	60	-----
TOTAL	3,190	6,390	9,909	22,392	12,025	15,338	9,913	6,978	3,546	3,602	1,694	2,223
MEAN	103	213	320	722	429	495	330	225	118	116	54.6	74.1
MAX	128	294	712	1,390	541	691	474	329	133	146	70	106
MIN	65	114	199	374	324	342	251	136	106	72	43	59
CFSM	-66	1.36	2.04	4.40	2.73	3.15	2.10	1.43	-75	-74	-35	-47
IN.	-76	1.51	2.35	5.31	2.85	3.63	2.35	1.65	-.84	-.85	-.40	-.53
AC-FT	6,330	12,670	19,650	44,410	23,850	30,420	19,660	13,840	7,030	7,140	3,360	4,410

WTR YR 1966 TOTAL 97,200 MEAN 266 MAX 1,390 MIN 43 CFSM 1.69 IN 23.03 AC-FT 192,800

12125200 SAMMAMISH RIVER NEAR WOODINVILLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	114	573	602	879	474	416	432	162	106	57	42
2	82	110	653	606	817	453	382	419	160	188	57	44
3	80	107	628	644	754	428	365	390	158	95	57	43
4	78	104	633	766	705	405	348	369	157	94	54	42
5	74	107	681	912	668	386	339	348	152	89	52	44
6	72	132	661	884	616	368	324	333	146	88	49	43
7	124	121	675	878	577	353	309	319	140	85	48	41
8	83	111	611	903	540	346	298	307	138	88	48	41
9	78	110	562	890	526	343	298	300	136	88	46	40
10	77	116	551	816	538	332	288	286	133	77	44	45
11	72	112	562	871	504	321	278	298	128	76	47	58
12	85	128	745	827	504	307	270	296	122	74	41	54
13	94	156	1,220	909	703	295	291	278	119	72	61	52
14	85	168	1,300	917	786	290	293	268	118	70	65	51
15	78	401	1,190	948	744	315	290	253	114	69	44	51
16	75	374	1,140	911	694	354	303	241	111	67	46	51
17	75	360	1,070	854	690	371	309	211	118	65	45	51
18	74	329	1,040	805	712	407	319	222	106	64	43	51
19	90	312	1,040	1,070	690	384	379	215	100	63	44	51
20	152	301	1,140	1,470	654	388	375	210	98	64	42	51
21	134	283	1,040	1,400	614	386	388	199	118	64	40	52
22	139	266	935	1,270	578	454	388	187	168	63	42	54
23	144	253	832	1,170	542	553	369	180	152	62	47	52
24	133	238	780	1,080	586	521	356	174	143	60	48	52
25	126	265	755	970	473	503	350	172	134	60	46	52
26	124	294	700	912	443	482	367	166	130	61	46	52
27	125	285	644	923	411	455	378	168	126	60	44	52
28	118	293	609	1,090	447	445	349	162	118	59	42	52
29	119	322	598	1,100	-----	467	501	168	111	58	42	52
30	122	478	571	1,030	-----	468	463	166	106	56	42	54
31	118	-----	543	936	-----	442	-----	164	-----	56	42	-----
TOTAL	3,063	6,944	24,642	29,322	17,303	12,496	10,565	7,911	3,912	2,237	1,431	1,470
MEAN	98.8	231	795	946	618	403	352	255	130	72.2	46.2	49.0
MAX	152	470	1,300	1,470	879	553	549	432	166	106	57	58
MIN	72	104	543	602	411	290	270	162	98	56	40	40
CFSN	.63	1.47	5.86	6.03	3.94	2.57	2.24	1.62	.83	.46	.29	.31
IN.	.73	1.65	5.84	6.95	4.10	2.96	2.50	1.87	.93	.53	.34	.35
AC-FT	6,080	13,770	48,880	58,160	34,320	24,790	20,960	15,690	7,760	4,440	2,840	2,920

CAL YR 1966 TOTAL 112,360 MEAN 308 MAX 1,390 MIN 43 CFSN 1.96 IN 26.62 AC-FT 222,900
WTR YR 1967 TOTAL 121,296 MEAN 332 MAX 1,470 MIN 40 CFSN 2.11 IN 28.74 AC-FT 240,602

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	185	191	630	909	516	531	343	301	156	78	166
2	63	172	271	591	533	480	508	309	566	148	77	161
3	69	161	343	591	595	448	480	286	554	143	76	155
4	73	151	329	525	808	471	655	274	498	140	73	148
5	67	146	338	510	776	525	490	271	448	134	71	143
6	67	139	306	473	724	505	473	259	408	130	70	138
7	73	138	298	449	679	465	450	248	372	126	68	133
8	77	142	283	426	631	436	424	236	343	117	66	128
9	74	156	286	524	587	402	400	228	319	114	65	127
10	73	172	277	584	546	375	381	220	299	110	65	124
11	84	177	299	546	506	362	438	211	262	107	63	122
12	87	173	298	523	468	443	464	206	262	127	61	128
13	91	168	282	697	433	428	454	198	248	122	60	125
14	98	173	265	882	401	402	438	198	241	117	82	130
15	88	181	252	942	369	469	468	190	228	108	89	138
16	87	186	248	910	346	674	576	181	214	101	83	143
17	85	177	247	832	335	705	568	176	203	97	82	155
18	88	176	238	770	418	668	556	174	194	94	82	211
19	97	173	225	848	574	610	588	172	186	97	82	207
20	91	162	217	937	647	566	568	220	180	100	83	202
21	138	154	211	1,030	703	524	540	214	168	99	82	193
22	152	149	266	982	727	487	504	203	166	96	84	185
23	146	145	339	914	813	469	488	206	163	95	108	181
24	133	160	379	851	820	474	468	200	158	96	163	176
25	145	158	796	796	759	497	440	199	152	95	168	169
26	137	148	1,040	734	705	496	414	206	146	94	194	163
27	145	143	1,010	673	650	507	385	199	163	91	229	157
28	172	139	900	616	599	553	361	194	240	87	206	151
29	171	167	796	560	558	576	343	189	198	83	188	146
30	164	176	712	532	-----	586	341	188	171	82	177	142
31	164	-----	649	516	-----	557	-----	178	-----	79	168	-----
TOTAL	3,257	4,847	12,601	21,354	17,219	15,678	13,986	6,776	8,071	3,385	3,243	4,647
MEAN	105	162	406	689	594	506	466	219	269	109	105	155
MAX	172	186	1,060	1,030	820	705	580	343	240	156	229	211
MIN	61	138	181	426	335	362	341	172	146	79	60	122
CFSN	.67	1.03	2.59	4.39	3.78	3.22	2.97	1.39	1.71	.69	.77	.99
IN.	.77	1.15	2.99	5.06	4.08	3.71	3.31	1.61	1.91	.80	.77	1.10
AC-FT	6,460	9,610	24,990	42,360	34,150	31,100	27,740	13,440	16,010	6,710	6,430	9,220

CAL YR 1967 TOTAL 107,352 MEAN 294 MAX 1,470 MIN 40 CFSN 1.87 IN 25.44 AC-FT 212,900
WTR YR 1968 TOTAL 115,064 MEAN 314 MAX 1,060 MIN 60 CFSN 2.00 IN 27.26 AC-FT 228,200

12125200 SAMMAMISH RIVER NEAR WOODINVILLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	353	590	644	394	383	294	332	252	164	77	61
2	133	327	450	560	387	364	317	346	235	162	72	34
3	130	321	700	694	474	357	305	341	220	156	75	57
4	155	291	1,130	914	344	351	313	327	208	152	74	59
5	155	265	1,120	1,200	584	390	339	314	199	149	74	60
6	152	244	1,040	1,560	534	402	329	303	190	146	73	61
7	156	228	975	1,740	564	393	314	290	180	127	69	64
8	149	237	1,150	1,660	728	382	306	270	169	138	72	61
9	142	312	1,130	1,580	1,020	367	302	267	167	136	71	64
10	152	304	1,200	1,500	939	353	306	252	161	136	70	65
11	160	482	1,250	1,470	1,060	337	288	248	155	134	69	65
12	176	722	1,190	1,340	1,050	323	282	230	149	127	69	64
13	224	684	1,100	1,230	972	310	290	224	143	121	69	77
14	231	622	1,040	1,170	905	299	274	220	142	118	71	80
15	265	576	995	1,090	836	290	262	210	136	114	68	77
16	256	538	1,090	1,020	798	287	246	200	120	112	67	78
17	253	963	923	921	754	372	270	197	124	97	63	96
18	304	658	1,020	821	716	416	319	189	118	107	63	167
19	294	430	993	804	680	397	323	186	112	102	63	181
20	327	416	901	743	644	381	320	170	105	100	63	188
21	312	408	828	692	608	366	311	169	100	100	63	171
22	324	444	790	639	576	368	303	162	98	97	63	207
23	309	444	858	584	549	365	349	156	108	95	60	280
24	293	424	1,050	541	514	347	344	167	168	94	63	268
25	279	404	1,050	503	487	333	328	158	214	92	63	241
26	267	387	976	484	460	321	310	155	207	89	63	224
27	255	374	903	493	436	310	293	155	207	85	64	208
28	240	353	817	436	406	301	295	154	200	80	63	206
29	237	468	733	410	-----	290	347	186	186	78	63	213
30	307	632	662	400	-----	280	328	324	174	79	62	234
31	410	-----	646	396	-----	279	-----	280	-----	79	62	-----
TOTAL	7,185	12,644	29,470	28,365	18,565	10,710	9,208	7,187	4,947	3,999	2,088	3,922
MEAN	232	422	951	915	603	345	307	232	165	114	67.4	131
MAX	410	722	1,250	1,740	1,060	418	349	346	252	166	77	280
MIN	130	228	550	396	387	279	246	154	98	78	60	54
CFSM	1.48	2.69	6.06	5.83	4.22	2.20	1.96	1.48	1.05	.74	.63	.03
IN.	1.70	3.00	6.98	6.72	4.40	2.54	2.18	1.70	1.17	.85	.49	.93
AC-FT	14,250	25,080	58,450	56,260	36,820	21,240	18,260	14,260	9,810	7,130	4,140	7,780
CAL YR 1968	TOTAL 143,660	MEAN 393	MAX 1,258	MIN 60	LFSM 2.50	IN 36.04	AC-FT 284,900					
WTR YR 1969	TOTAL 137,888	MEAN 378	MAX 1,740	MIN 54	CFSM 2.41	IN 32.67	AC-FT 273,500					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	247	108	149	554	932	325	317	426	181	94	79	63
2	227	107	149	522	858	314	410	410	173	92	85	59
3	188	109	157	496	806	311	379	395	166	95	84	63
4	174	211	158	466	745	297	363	380	154	92	85	71
5	166	348	149	435	695	281	361	367	154	08	85	68
6	162	294	143	406	656	316	409	348	154	84	83	71
7	158	265	136	381	613	308	408	332	145	80	82	85
8	162	244	144	364	569	436	390	322	137	78	84	91
9	162	227	152	372	529	393	479	319	137	74	82	90
10	164	211	156	375	496	364	512	309	134	73	82	86
11	162	200	208	355	464	349	532	298	130	70	82	86
12	158	191	354	336	433	349	519	285	130	67	77	83
13	152	182	454	359	443	366	503	276	130	64	76	82
14	146	174	598	678	418	412	480	262	131	61	72	83
15	146	181	572	744	460	435	457	254	138	61	73	83
16	134	190	528	720	653	446	432	248	120	62	73	84
17	132	173	556	738	634	452	408	234	127	61	73	100
18	128	162	566	810	607	431	396	220	125	68	76	116
19	125	155	582	944	578	410	460	211	121	63	70	110
20	122	156	594	997	551	389	535	202	120	55	68	122
21	122	163	696	1,020	524	375	504	195	120	55	68	130
22	120	154	838	1,010	496	399	486	190	112	52	64	133
23	120	177	967	1,110	469	345	471	188	101	52	66	131
24	118	163	921	1,110	437	353	491	185	94	49	62	124
25	114	176	864	1,250	414	335	476	181	89	59	62	117
26	112	172	802	1,220	389	323	455	174	89	61	58	111
27	114	166	762	1,460	369	308	452	166	86	95	62	111
28	116	163	711	1,360	366	323	435	166	87	82	64	112
29	116	163	666	1,200	-----	324	426	166	82	78	59	111
30	114	156	625	1,070	-----	316	438	206	98	84	64	189
31	111	-----	588	1,010	-----	302	-----	190	-----	82	64	-----
TOTAL	4,492	5,589	14,925	23,872	15,576	11,247	13,392	8,127	3,777	2,217	2,264	2,099
MEAN	145	186	481	770	556	363	446	262	126	71.5	73.0	66.4
MAX	247	347	947	1,460	932	508	535	426	181	95	85	158
MIN	111	107	136	336	366	281	317	166	86	49	58	59
CFSM	.92	1.18	3.06	4.90	3.54	2.31	2.84	1.67	.80	.66	.67	.61
IN.	1.06	1.32	3.54	5.66	3.69	2.66	3.17	1.93	.89	.83	.54	.69
AC-FT	8,910	11,090	29,600	47,350	30,900	22,310	26,568	16,120	7,490	4,480	4,490	5,740
CAL YR 1969	TOTAL 113,593	MEAN 311	MAX 1,740	MIN 54	CFSM 1.98	IN 26.92	AC-FT 225,308					
WTR YR 1970	TOTAL 108,371	MEAN 297	MAX 1,460	MIN 49	CFSM 1.89	IN 25.68	AC-FT 215,800					

12125500 BEAR CREEK AT WOODINVILLE, WASH.

LOCATION.--Lat 47°45'25", long 122°09'48", in SE&NE&K sec.9, T.26 N., R.5 E., King County, on left bank 25 ft downstream from 130th Avenue NE.culvert at Woodinville and at mile 0.3.

DRAINAGE AREA.--15.3 sq mi.

PERIOD OF RECORD.--July to October 1945, January 1965 to July 1969 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 30 ft (from topographic map). June 28 to Oct. 1, 1945, at site 0.2 mile upstream at different datum.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (120 cfs), October 1965 to July 1969

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	2400	*193	2.81	Dec. 25, 1967	1500	*248	4.68	Dec. 8, 1968	0700	163	2.48
Feb. 7, 1966	1030	128	2.32	Jan. 14, 1968	1000	202	2.97	Dec. 10, 1968	1600	152	2.41
				Feb. 3, 1968	2315	122	2.22	Dec. 15, 1968	2250	160	2.46
Nov. 13, 1966	2300	132	2.29	Oct. 30, 1968	1300	187	2.72	Dec. 24, 1968	1100	179	2.61
Dec. 15, 1966	1030	242	4.22	Nov. 29, 1968	1600	188	2.73	Feb. 8, 1969	2030	224	3.48
Jan. 19, 1967	1730	*249	4.80	Dec. 3, 1968	1730	*230	3.67	Feb. 11, 1969	0930	214	3.19
Jan. 28, 1967	0500	134	2.30								

Annual minimum discharge, October 1965 to July 1969

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 11, 1966	2.4	.66	1968	Aug. 10, 11, 1968	5.0	.84
1967	Aug. 27, 1967	3.7	.75	1969	July 23, 27, 28, 30, 1969	6.2	.89

Period of record: Maximum discharge, 249 cfs Jan. 19, 1967 (gage height, 4.80 ft); minimum, 2.4 cfs Aug. 11, 1966 (gage height, 0.66 ft).

REMARKS.--Records good except those for period of no gage-height record Oct. 1 to Dec. 1, 1965, which are fair. Several small diversions for domestic use. No regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	8.0	25	36	21	34	23	16	11	8.2	6.3	6.8
2	6.3	10	19	64	20	26	21	15	13	14	6.0	7.1
3	6.3	17	15	33	19	24	19	14	13	24	6.0	7.1
4	7.1	18	18	26	22	22	18	13	13	17	6.3	6.6
5	9.2	13	17	69	26	27	17	12	11	13	6.8	6.3
6	13	11	26	173	40	26	16	26	10	13	6.6	6.8
7	11	9.0	23	151	87	25	16	21	9.9	10	6.6	6.8
8	9.0	8.3	17	86	64	48	16	16	9.9	8.9	6.6	6.8
9	7.0	9.5	14	50	54	78	21	14	9.6	8.9	7.1	6.6
10	6.5	13	19	39	43	51	23	14	9.6	9.3	7.1	6.8
11	6.5	11	14	33	42	39	44	13	10	10	2.4	13
12	7.0	10	13	46	36	35	41	13	19	8.9	6.3	9.6
13	10	9.0	13	43	30	44	29	14	13	8.6	7.4	8.2
14	12	11	12	39	31	45	27	18	12	11	7.4	8.2
15	13	9.5	11	32	26	45	23	18	10	10	7.1	8.2
16	10	8.5	10	29	29	36	21	17	9.6	23	7.1	7.9
17	8.0	10	9.7	27	27	31	19	15	9.3	12	6.8	13
18	10	13	9.7	35	24	41	18	13	9.3	9.3	6.8	21
19	14	21	10	29	23	41	17	12	8.9	8.6	6.8	9.9
20	11	24	10	25	22	38	17	13	8.2	7.9	6.3	8.6
21	9.0	25	13	23	21	32	18	21	8.2	7.6	6.0	7.9
22	8.0	29	12	22	20	28	18	23	8.6	7.4	6.3	7.9
23	7.0	22	12	24	21	26	17	16	8.9	7.1	7.1	10
24	7.0	16	17	23	19	23	16	13	9.6	8.6	7.1	8.9
25	7.0	20	15	21	21	21	28	12	8.6	8.9	7.6	8.6
26	7.0	21	13	20	21	20	27	13	8.2	7.6	8.2	9.3
27	8.0	23	45	24	38	19	28	13	8.6	7.1	9.3	8.6
28	9.0	15	77	21	33	18	18	11	12	6.8	8.2	8.2
29	8.0	13	54	30	-----	17	21	11	8.6	6.6	7.6	8.2
30	11	12	39	29	-----	22	17	11	7.9	6.3	7.6	8.2
31	9.0	-----	23	24	-----	21	-----	11	-----	6.3	7.4	-----
TOTAL	272.8	440.0	625.4	1,326	880	1,005	646	462	308.5	315.9	212.2	261.1
MEAN	8.80	14.7	20.2	42.8	31.4	32.4	21.5	14.9	10.3	10.2	6.85	8.70
MAX	14	29	77	173	87	78	44	26	19	24	9.3	21
MIN	5.9	8.0	9.7	20	19	17	16	11	7.9	6.3	2.4	6.3
CFSM	.58	.96	1.32	2.80	2.05	2.12	1.41	.97	.67	.67	.45	.57
IN.	.66	1.07	1.52	3.22	2.16	2.66	1.57	1.12	.75	.77	.52	.63
AC-FT	541	873	1,240	2,630	1,750	1,990	1,280	916	612	627	421	518
CAL YR 1965	TOTAL	7,744.0	MEAN	21.2	MAX	182	MIN	5.9	CFSM	1.39	IN	18.83
WTR YR 1966	TOTAL	6,754.9	MEAN	18.5	MAX	173	MIN	2.4	CFSM	1.21	IN	16.44
									AC-FT	15,360		
									AC-FT	13,398		

12125500 BEAR CREEK AT WOODINVILLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	15	48	27	48	32	20	24	11	7.8	6.5	6.2
2	8.8	15	60	26	39	25	19	22	12	7.8	6.2	6.5
3	8.5	15	42	34	34	22	18	21	14	7.5	5.8	5.8
4	8.1	15	59	61	32	21	19	20	7.2	7.5	5.5	5.5
5	8.1	23	57	60	28	20	19	19	10	7.8	6.5	5.5
6	8.1	28	46	57	25	20	17	18	10	8.1	7.2	5.8
7	12	18	42	57	24	20	17	18	10	8.1	7.2	5.8
8	12	16	39	63	24	20	17	20	10	9.2	6.8	5.8
9	9.6	16	33	54	28	26	18	20	10	9.2	6.2	7.2
10	9.2	15	41	50	28	23	17	19	10	8.1	6.2	14
11	9.2	15	45	68	25	21	16	25	10	7.5	5.8	18
12	18	20	106	56	27	21	16	24	9.6	7.5	5.8	11
13	14	46	231	70	67	21	16	20	9.2	7.8	9.5	8.5
14	11	76	119	60	54	20	17	17	9.2	7.5	9.2	7.5
15	9.6	38	70	60	45	35	16	16	8.8	7.2	5.2	7.2
16	9.2	35	59	53	37	39	21	15	8.5	6.8	5.2	7.0
17	9.2	24	42	48	42	34	20	14	8.5	7.2	5.2	6.5
18	8.8	20	42	42	39	33	22	13	8.1	6.8	5.2	6.5
19	27	21	164	48	32	25	12	12	8.1	7.5	6.5	6.5
20	29	20	64	213	30	30	21	12	6.5	8.5	5.2	6.5
21	18	18	41	101	27	25	21	12	17	8.5	5.2	7.0
22	26	16	34	66	25	52	18	12	20	7.5	5.2	7.0
23	23	16	29	69	24	57	17	12	12	6.8	5.5	7.0
24	18	15	32	62	22	38	16	12	11.1	6.5	7.5	7.0
25	16	23	32	54	22	30	17	12	9.6	6.8	5.2	8.0
26	14	20	24	56	21	28	16	11	9.2	7.2	5.2	7.0
27	14	18	21	65	20	24	32	11	9.2	7.5	3.7	7.0
28	13	21	21	101	43	25	65	12	8.8	7.2	5.0	8.5
29	16	27	89	23	-----	38	25	14	8.8	8.5	7.5	7.5
30	17	55	17	63	-----	22	28	14	8.1	6.5	5.5	8.0
31	16	-----	18	51	-----	21	-----	12	-----	6.8	5.8	-----
TOTAL	428.9	720	1,585	2,095	912	859	640	503	311.2	233.5	174.9	225.3
MEAN	13.8	24.0	51.1	67.6	32.6	27.7	21.3	16.2	10.4	7.53	5.64	7.51
MAX	29	76	231	213	67	57	65	25	20	9.2	7.2	18
MIN	8.1	15	17	26	20	20	16	11	8.1	6.5	3.7	5.5
CFSM	.90	1.57	3.34	4.42	2.13	1.81	1.39	1.06	.68	.49	.37	.49
IN.	1.04	1.75	3.85	5.09	2.22	2.09	1.56	1.22	.76	.57	.43	.55
AC-FT	851	1,430	3,140	4,160	1,810	1,700	1,270	998	617	463	347	447

CAL YR 1966 TOTAL 8,150.6 MEAN 22.3 MAX 231 MIN 2.4 CFSM 1.46 IN 19.83 AC-FT 16,165
 MTR YR 1967 TOTAL 6,687.8 MEAN 23.8 MAX 231 MIN 3.7 CFSM 1.56 IN 21.13 AC-FT 17,228

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	16	23	29	28	21	22	20	46	9.6	6.2	12
2	13	13	76	24	44	20	20	17	71	8.8	6.2	12
3	19	11	56	21	53	19	15	15	28	8.5	6.5	10
4	18	10	35	24	74	37	19	17	19	8.1	6.8	8.8
5	11	10	31	25	48	46	25	25	15	8.1	6.8	8.8
6	11	9.6	21	21	34	33	20	18	13	7.8	6.8	8.5
7	23	10	25	22	32	30	19	16	13	7.5	6.5	8.5
8	13	12	19	22	32	27	18	15	7.2	7.2	5.8	8.5
9	9.6	13	21	59	25	23	17	13	12	7.2	5.8	8.5
10	10	14	19	41	22	21	17	13	12	7.5	5.8	8.5
11	15	12	18	28	21	25	32	13	12	7.8	5.5	12
12	11	11	16	32	20	46	25	12	11	11	5.8	13
13	15	10	14	102	19	32	23	12	11	9.2	6.5	11
14	14	13	13	169	18	32	21	13	10	8.8	23	12
15	12	14	12	153	17	52	35	12	9.6	8.1	14	16
16	10	12	13	91	17	90	51	11	9.6	7.8	11	20
17	11	11	14	54	22	68	34	11	9.6	7.5	9.6	23
18	17	12	13	45	41	51	36	11	9.2	7.2	9.6	35
19	19	11	12	70	37	38	35	11	10	10	9.2	19
20	13	11	11	79	30	32	31	21	9.6	10	9.2	14
21	28	11	11	62	38	27	25	14	9.2	8.8	8.8	12
22	19	11	43	43	37	24	22	11	9.2	8.5	9.2	18
23	15	11	33	36	61	25	25	12	10	8.1	30	12
24	15	13	55	32	51	25	22	11	8.8	7.8	25	12
25	18	11	216	28	37	37	21	11	8.5	7.5	31	10
26	14	11	187	26	33	28	21	11	10	7.2	22	10
27	21	11	290	22	30	28	17	11	17	28	6.8	10
28	27	13	71	19	25	28	17	11	30	6.8	16	10
29	19	25	49	19	23	32	16	11	16	6.5	12	9.6
30	15	23	34	20	-----	28	21	10	11	6.5	10	9.6
31	18	-----	28	25	-----	24	-----	10	-----	6.2	9.6	-----
TOTAL	495.6	375.6	1,275	1,443	963	1,054	728	420	475.1	248.4	368.2	376.3
MEAN	15.0	12.9	41.1	46.5	33.2	34.0	24.3	13.5	15.8	8.01	11.9	12.5
MAX	28	25	216	169	74	90	51	25	71	11	31	35
MIN	9.6	9.6	11	19	17	20	16	10	8.5	6.2	5.5	8.5
CFSM	1.05	.82	2.69	3.04	2.17	2.22	1.59	.88	1.03	.52	.78	.82
IN.	1.20	.91	3.10	3.51	2.34	2.56	1.77	1.02	1.16	.60	.90	.91
AC-FT	983	745	2,530	2,860	1,910	2,090	1,440	833	942	493	730	746

CAL YR 1967 TOTAL 8,100.1 MEAN 22.2 MAX 216 MIN 5.0 CFSM 1.45 IN 19.70 AC-FT 16,068
 MTR YR 1968 TOTAL 6,222.2 MEAN 22.5 MAX 216 MIN 5.5 CFSM 1.47 IN 19.99 AC-FT 16,310

LAKE WASHINGTON BASIN

12125500 BEAR CREEK AT WOODINVILLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1968 TO JULY 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	35	53	28	18	23	22	30	13	11		
2	9.2	40	42	25	22	22	28	25	12	13		
3	9.2	37	122	51	43	24	21	23	11	12		
4	20	28	121	105	60	23	28	20	10	11		
5	14	24	73	163	47	36	32	18	10	10		
6	16	22	50	177	36	27	28	17	10	10		
7	13	21	55	131	42	23	22	16	10	9.6		
8	11	34	125	82	161	21	20	15	9.6	9.2		
9	12	39	86	77	155	21	20	14	9.2	8.5		
10	14	31	111	74	130	20	20	13	9.2	9.2		
11	13	78	97	71	198	19	18	13	9.6	9.6		
12	20	62	76	56	119	18	20	12	9.6	9.2		
13	21	42	57	54	80	18	21	12	9.6	8.8		
14	20	34	57	60	61	18	17	12	9.2	8.5		
15	22	32	63	54	52	18	16	12	8.5	8.5		
16	16	28	99	50	52	24	16	11	8.1	8.1		
17	24	25	60	46	44	47	30	11	8.5	7.8		
18	26	24	83	38	37	36	27	11	8.5	7.5		
19	26	22	63	36	34	26	30	11	8.5	7.5		
20	25	26	46	33	30	23	21	11	9.2	7.8		
21	22	30	40	31	27	21	18	10	10	7.8		
22	24	37	40	28	26	24	17	10	11	7.5		
23	19	30	84	24	26	28	32	10	16	7.2		
24	17	27	154	21	27	22	22	12	23	7.2		
25	16	25	119	20	27	20	27	11	50	7.5		
26	15	24	76	19	25	19	20	11	18	7.5		
27	14	23	60	19	24	19	17	13	19	7.2		
28	14	21	42	18	23	18	32	13	16	7.2		
29	18	93	30	17	-----	17	45	32	13	7.5		
30	98	73	22	17	-----	17	28	36	12	7.2		
31	66	-----	19	17	-----	18	-----	17	-----	7.2		
TOTAL	666.0	1,867	2,229	1,634	1,626	718	715	482	381.3	267.8		
MEAN	21.5	35.6	71.9	52.7	58.1	22.9	23.8	15.5	12.7	8.44		
MAX	98	93	154	177	198	47	45	36	50	13		
MIN	9.2	21	19	17	18	17	16	10	8.1	7.2		
CFSM	1.40	2.33	4.79	3.44	3.80	1.50	1.56	1.81	.83	.56		
IN	1.62	2.59	5.42	3.97	3.95	1.73	1.74	1.17	.95	.65		
AC-FT	1,320	2,120	4,420	3,240	3,230	1,410	1,420	956	756	531		

CAL YR 1968 TOTAL 10,038.0 NEAN 27.4 MAX 169 MIN 5.5 CFSM 1.79 IN 24.40 AC-FT 19,910

12126000 NORTH CREEK NEAR BOTHELL, WASH.

LOCATION.--Lat 47°47'30", long 122°11'47", near SE corner of SW¹/₄ sec.29 (revised), T.27 N., R.5 E., Snohomish County, on left bank 2.0 miles north of Bothell and at mile 2.7.

DRAINAGE AREA.--24.6 sq mi.

PERIOD OF RECORD.--June 1945 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 70 ft (from topographic map). Apr. 5, 1950, to Sept. 30, 1951, at present site at datum 0.59 ft higher.

AVERAGE DISCHARGE.--25 years, 36.0 cfs (19.87 inches per year, 26,080 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (190 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 28, 1965	1430	224	3.56	Jan. 29, 1967	1530	235	3.31	Dec. 10, 1968	1530	234	3.74
Jan. 1, 1966	2330	253	3.87	Dec. 25, 1967	1500	*362	5.02	Dec. 15, 1968	2200	220	3.60
Jan. 6, 1966	2030	*291	4.29	Jan. 14, 1968	0930	301	4.41	Dec. 24, 1968	0900	260	4.00
Feb. 7, 1966	1030	236	3.69	Oct. 30, 1968	1200	206	3.48	Jan. 6, 1969	0500	237	3.72
Mar. 9, 1966	0530	218	3.50	Nov. 29, 1968	1500	228	3.68	Feb. 11, 1969	2100	289	4.29
Nov. 13, 1966	2200	223	3.63	Dec. 3, 1968	1900	*310	4.50	Feb. 11, 1969	1100	268	4.08
Dec. 13, 1966	1000	369	5.09	Dec. 8, 1968	0430	255	3.95	Dec. 22, 1969	2130	220	3.60
Jan. 19, 1967	1630	*386	4.66					Jan. 27, 1970	0100	*258	3.93

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 7, 12, 1966	5.8	.96	1969	July 29, 30, 31, 1969	5.6	bl.17
1967	July 4, 1967	1.6	.97	1970	Aug. 11, 12, 13, 14, 1970	6.3	-
1968	July 29, Aug. 1, 1968	6.0	al.20				

a Occurred sometime May 10-15, 1968.

b Occurred July 19, 23, 24, 26, 27, 29, 30, Aug. 14, 1969.

Period of record: Maximum discharge, 680 cfs Mar. 5 or 6, 1950 (gage height, 7.0 ft, present datum, from high watermark, from information by local resident); minimum, 1.0 cfs Aug. 10, 1946 (gage height, 0.45 ft, present datum); minimum daily, 4.5 cfs Aug. 23, 1945.

REMARKS.--Records good. Many small diversions for irrigation and domestic use.

REVISIONS (WATER YEARS)---WSP 1286: 1960(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	12	48	110	43	64	34	19	11	7.0	6.2	6.6
2	8.5	16	38	204	38	54	32	17	12	14	6.0	7.0
3	8.5	38	30	143	36	45	27	15	13	29	6.0	7.0
4	9.7	38	36	111	41	40	25	14	12	20	6.2	6.6
5	15	29	31	158	50	51	23	14	12	14	6.6	6.4
6	17	16	54	282	84	49	22	35	11	14	6.4	6.4
7	12	13	47	260	178	50	21	31	11	11	6.4	6.6
8	10	12	34	217	144	121	21	11	10	10	6.6	6.6
9	9.7	14	26	152	116	180	26	18	10	9.4	6.6	6.8
10	9.4	19	38	111	89	117	31	17	9.4	9.7	4.8	7.0
11	9.4	19	27	89	83	74	58	15	12	10	7.0	13
12	12	14	21	93	74	66	65	16	20	9.4	6.4	9.4
13	12	14	23	86	61	104	44	16	14	8.5	6.8	6.5
14	17	16	21	81	64	105	39	23	12	8.0	6.8	6.5
15	14	14	17	66	52	108	35	20	9.7	8.0	6.8	6.5
16	11	12	16	56	53	78	29	19	8.5	19	6.6	8.5
17	14	12	15	51	50	60	26	16	8.2	11	6.6	13
18	14	22	16	71	44	89	22	14	7.9	9.4	6.6	21
19	18	46	16	57	42	100	21	13	7.9	9.7	4.4	10
20	14	61	14	48	40	87	19	13	7.6	8.6	6.4	6.8
21	12	62	21	44	36	65	21	28	7.6	8.0	6.4	8.2
22	10	69	19	43	36	54	24	32	7.9	7.5	6.4	8.2
23	10	35	19	44	38	48	21	20	8.5	7.2	6.4	11
24	13	29	28	44	34	43	21	16	6.6	8.4	6.4	9.1
25	10	34	26	40	37	40	42	14	7.9	9.0	7.0	8.8
26	9.7	35	21	37	36	36	37	14	8.2	8.0	7.9	9.1
27	10	45	83	43	63	34	27	14	8.8	7.4	8.5	8.8
28	12	27	191	40	59	31	24	12	12	6.8	7.3	8.2
29	11	21	153	57	-----	29	28	12	6.8	6.6	7.0	6.2
30	14	18	138	60	-----	36	21	11	6.5	6.6	7.0	7.9
31	13	-----	88	50	-----	34	-----	11	-----	6.5	6.8	-----
TOTAL	366.4	812	1,357	2,948	1,721	2,094	886	550	307.2	322.1	207.3	263.9
MEAN	11.8	27.1	43.8	95.1	61.5	67.5	29.5	17.7	10.2	10.4	6.69	8.00
MAX	18	49	191	282	178	180	65	35	20	29	6.5	21
MIN	8.5	12	15	37	34	29	19	11	7.6	6.5	6.0	6.4
CFSM	.48	1.10	1.78	3.87	2.50	2.74	1.20	.72	.41	.42	.27	.36
IN.	.55	1.23	2.05	4.46	2.60	3.17	1.34	.83	.46	.49	.31	.40
AC-FT	727	1,610	2,690	5,850	3,410	4,150	1,760	1,090	609	639	411	523
CAL YR 1965	TOTAL 12,345.1	MEAN 33.8	MAX 265	NIN 5.4	CFSM 1.37	IN 18.67	AC-FT 24,490					
WTR YR 1966	TOTAL 11,834.9	MEAN 32.4	MAX 282	NIN 6.0	CFSM 1.32	IN 17.90	AC-FT 23,470					

LAKE WASHINGTON BASIN

12126000 NORTH CREEK NEAR BOTHELL, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	12	100	64	114	60	35	42	11	7.0	6.4	6.2
2	8.4	11	110	58	94	49	31	37	11	7.0	6.2	6.4
3	8.1	11	78	78	80	42	30	34	12	6.9	6.2	6.2
4	7.8	11	133	113	74	37	31	30	11	6.4	6.2	6.2
5	8.1	22	126	115	64	34	30	28	9.5	6.4	7.2	6.0
6	8.1	29	96	97	57	31	27	26	9.1	6.4	7.5	6.2
7	11	18	80	106	53	30	25	25	9.1	6.2	7.5	6.2
8	11	15	64	125	48	32	25	25	9.8	7.2	7.5	6.2
9	9.1	15	52	100	54	35	25	26	9.8	6.9	6.8	6.9
10	9.1	14	60	88	52	46	24	24	9.5	6.2	6.4	14
11	9.5	14	69	132	45	39	23	34	9.5	5.8	6.4	12
12	20	21	159	114	44	35	23	36	9.5	5.8	6.2	8.4
13	14	84	329	125	133	33	24	28	9.5	5.8	6.4	7.5
14	11	118	215	109	105	34	25	25	9.5	5.8	6.2	7.2
15	10	71	169	113	88	62	22	22	8.7	5.8	6.2	6.9
16	9.8	59	146	108	73	73	33	21	8.4	5.6	6.4	6.7
17	9.8	40	115	102	77	66	32	19	8.1	5.4	6.4	6.7
18	9.5	31	109	88	74	61	32	18	8.1	5.8	6.0	6.9
19	35	33	112	278	61	50	40	16	7.8	6.0	6.2	6.9
20	35	32	128	325	52	56	33	15	8.7	7.2	5.8	7.2
21	20	27	100	229	47	45	34	14	14	6.9	6.8	7.5
22	33	24	80	163	42	90	29	14	16	6.7	6.4	7.5
23	22	23	74	159	39	118	27	13	10	6.7	6.2	7.2
24	15	21	82	143	37	78	25	13	8.4	6.4	6.2	7.5
25	13	34	80	120	38	62	24	13	7.8	6.7	6.2	7.2
26	14	32	64	131	36	54	23	12	7.6	7.2	6.2	7.5
27	13	28	53	152	33	53	49	12	7.4	6.9	6.0	7.8
28	12	38	53	210	64	52	132	12	7.2	6.9	5.8	7.5
29	14	81	42	205	-----	72	52	12	7.2	6.7	6.0	8.7
30	14	107	54	185	-----	43	52	12	7.0	6.4	6.2	9.8
31	12	-----	52	124	-----	38	-----	11	-----	6.4	6.2	-----
TOTAL	434.1	1,046	3,204	4,259	1,778	1,610	1,036	669	282.1	199.5	198.1	225.1
MEAN	14.0	34.9	103	137	63.5	51.9	34.5	21.6	9.40	6.44	6.39	7.50
MAX	35	118	329	325	133	118	132	42	16	7.2	7.5	14
MIN	7.8	11	52	58	33	30	22	11	7.0	5.4	5.8	6.0
CFSM	.57	1.42	4.19	5.57	2.58	2.11	1.40	.88	.38	.26	.26	.30
IN.	.66	1.58	4.85	6.44	2.69	2.43	1.57	1.01	.43	.30	.30	.34
AC-FT	861	2,070	6,360	8,450	3,530	3,190	2,050	1,330	560	396	393	446

CAL YR 1966 TOTAL 13,983.6 MEAN 38.3 MAX 329 MIN 6.0 CFSM 1.56 IN 21.15 AC-FT 27,740
WTR YR 1967 TOTAL 14,940.9 MEAN 40.9 MAX 329 MIN 5.4 CFSM 1.66 IN 22.59 AC-FT 29,640

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	20	39	75	52	33	33	28	55	9.1	7.2	14
2	12	16	142	60	78	30	31	22	102	8.7	7.5	13
3	18	15	143	52	98	28	28	19	44	8.7	7.8	12
4	13	14	105	52	124	50	27	22	27	8.7	8.1	10
5	11	13	90	52	81	74	48	33	21	8.4	8.4	9.5
6	12	13	58	42	63	50	38	24	18	8.1	8.1	9.1
7	22	14	72	42	52	44	34	21	17	7.8	7.5	9.1
8	12	17	50	42	45	39	30	18	17	7.5	7.2	9.1
9	9.8	20	49	113	42	34	27	15	16	7.8	7.2	9.1
10	10	20	42	93	38	30	27	15	14	8.1	6.9	9.1
11	14	18	41	66	35	35	45	15	13	8.4	6.9	11
12	11	16	34	72	33	86	40	14	12	10	7.2	12
13	14	14	28	201	30	62	38	14	12	9.5	8.1	11
14	12	20	25	270	27	62	33	15	11	9.5	21	13
15	11	19	24	246	25	85	52	14	10	8.7	14	15
16	9.8	18	25	193	24	151	69	13	10	8.1	11	16
17	9.5	15	27	138	31	115	51	12	10	7.8	9.8	21
18	16	15	24	122	54	87	52	12	9.5	7.5	9.8	37
19	17	14	21	149	51	86	52	13	11	11	9.5	24
20	12	13	19	151	42	55	48	28	11	11	9.5	17
21	27	13	19	128	55	47	38	20	9.8	8.4	9.1	14
22	36	14	66	98	55	42	33	15	12	8.1	9.8	13
23	21	14	83	81	98	44	38	16	11	8.1	30	15
24	17	16	98	70	98	44	32	15	9.5	8.1	23	13
25	21	15	308	62	67	58	32	15	8.7	7.8	25	12
26	16	14	269	57	53	47	31	14	12	7.5	24	12
27	24	14	190	50	45	44	25	14	16	7.2	40	11
28	30	19	149	43	39	42	24	14	26	7.2	19	11
29	22	40	112	40	35	46	21	15	16	6.9	14	11
30	20	41	90	40	-----	43	26	14	11	6.9	12	11
31	20	-----	76	51	-----	37	-----	13	-----	6.9	11	-----
TOTAL	516.1	524	2,518	2,951	1,570	1,710	1,105	532	572.5	257.5	399.6	404.0
MEAN	16.6	17.5	81.2	95.2	54.1	55.2	36.8	17.2	19.1	8.31	12.9	13.5
MAX	36	41	308	270	124	151	69	33	102	11	40	37
MIN	9.5	13	59	40	24	28	21	12	8.7	6.9	6.9	9.1
CFSM	.67	.71	3.30	3.87	2.10	2.24	1.50	.70	.34	.24	.52	.65
IN.	.78	.79	3.81	4.46	2.37	2.59	1.67	.80	.87	.39	.60	.61
AC-FT	1,020	1,040	4,990	5,850	3,110	3,390	2,190	1,060	1,140	511	793	801

CAL YR 1967 TOTAL 13,814.9 MEAN 37.8 MAX 328 MIN 5.4 CFSM 1.54 IN 20.89 AC-FT 27,400
WTR YR 1968 TOTAL 13,059.7 MEAN 35.7 MAX 305 MIN 6.9 CFSM 1.45 IN 19.75 AC-FT 25,900

12126000 NORTH CREEK NEAR BOTHELL, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	57	86	50	38	34	34	49	17	13	6.8	8.8
2	11	58	68	67	60	33	46	41	15	18	6.8	10
3	10	57	165	150	80	35	38	38	13	16	6.4	16
4	30	40	189	200	122	33	48	33	13	14	6.4	13
5	20	33	135	215	118	48	52	30	12	13	6.8	12
6	25	30	101	226	93	38	42	26	12	12	7.3	9.8
7	17	27	108	203	90	34	36	25	12	12	7.8	8.8
8	14	52	216	164	226	31	33	22	12	11	7.8	7.8
9	14	68	174	149	235	30	31	22	11	9.8	7.8	7.8
10	16	52	201	148	190	28	32	22	11	10	8.3	7.3
11	17	130	185	147	250	28	28	21	11	12	8.3	7.3
12	30	106	154	125	189	28	28	21	11	12	8.3	7.8
13	27	75	118	123	140	28	30	20	11	9.8	8.8	19
14	22	58	119	128	110	27	26	18	10	9.3	7.8	14
15	27	52	130	122	95	26	26	16	9.8	8.8	8.3	11
16	20	44	166	117	94	33	25	15	8.8	8.3	8.3	11
17	36	39	119	108	79	81	38	14	8.8	8.3	7.8	45
18	48	36	146	93	68	64	37	13	8.3	7.8	8.3	50
19	40	33	117	87	59	45	47	13	8.8	7.8	8.3	38
20	39	39	94	79	52	39	34	13	9.3	7.8	8.8	26
21	33	44	82	73	47	35	31	13	9.8	7.8	9.3	20
22	42	56	79	60	45	37	28	12	11	7.8	8.3	44
23	33	44	149	55	46	43	52	11	16	7.8	8.3	56
24	40	27	240	50	44	35	35	13	25	7.3	8.3	28
25	23	38	190	40	42	32	51	12	35	7.8	8.8	22
26	22	34	140	40	39	31	38	12	27	7.3	9.3	19
27	21	32	113	38	36	30	33	16	21	6.4	10	19
28	20	30	85	36	35	29	58	16	19	7.3	11	21
29	129	60	35	35	-----	28	68	35	16	6.8	10	31
30	137	120	45	35	-----	27	46	40	14	6.4	9.8	33
31	114	-----	40	35	-----	28	-----	22	-----	6.0	8.8	-----
TOTAL	974	1,653	4,014	3,198	2,722	1,098	1,153	674	418.6	299.4	257.1	623.4
MEAN	31.4	55.1	129	103	97.2	35.4	38.4	21.7	14.0	9.66	8.29	20.8
MAX	137	130	240	226	250	81	68	49	35	18	11	56
MIN	10	27	40	35	35	25	25	11	8.3	6.0	6.4	7.3
CFSM	1.28	2.24	5.24	4.19	3.95	1.44	1.56	.88	.57	.39	.34	.85
IN.	1.47	2.50	6.07	4.84	4.12	1.66	1.74	1.02	.63	.45	.39	.94
AC-FT	1,930	3,280	7,960	6,340	5,400	2,180	2,290	1,340	830	594	510	1,240

CAL YR 1968 TOTAL 16,142.6 MEAN 44.1 MAX 270 MIN 6.0 CFSM 1.79 IN 24.41 AC-FT 32,020
WTR YR 1969 TOTAL 17,084.5 MEAN 46.8 MAX 250 MIN 6.0 CFSM 1.90 IN 25.84 AC-FT 33,890

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	16	21	48	66	26	27	29	14	9.8	7.9	8.2
2	48	16	21	46	54	27	27	26	11	9.5	8.8	8.2
3	28	19	22	46	50	30	24	24	9.8	9.2	8.5	9.2
4	22	98	28	42	45	27	24	22	9.8	8.5	8.2	8.5
5	20	68	25	38	45	26	25	20	9.8	8.2	7.9	8.5
6	18	39	24	36	45	60	42	19	9.5	8.2	7.2	10
7	19	33	22	34	41	66	33	19	9.8	8.2	7.2	13
8	36	29	28	37	38	42	29	20	9.8	8.2	10	11
9	25	27	39	56	37	36	74	21	10	7.9	7.5	9.5
10	23	25	35	47	36	32	49	25	11	7.9	7.0	9.2
11	20	24	94	41	35	30	42	34	11	7.9	6.8	8.5
12	18	23	109	38	34	34	38	26	10	7.5	6.8	8.5
13	16	22	109	70	42	44	33	24	9.8	7.5	6.8	8.8
14	16	22	118	124	37	74	30	20	10	7.5	6.8	9.2
15	15	31	78	90	70	53	27	19	10	7.2	7.0	9.8
16	15	49	65	74	119	77	24	17	11	7.2	7.2	9.8
17	15	34	60	74	80	68	23	17	10	7.2	7.2	18
18	15	28	64	85	63	57	27	15	9.8	7.2	7.5	13
19	15	26	64	121	52	47	48	14	9.5	7.5	7.5	11
20	15	30	65	104	46	42	38	14	9.5	7.9	7.9	22
21	15	28	126	117	42	39	30	15	9.5	8.2	7.9	15
22	14	25	151	133	39	35	33	15	9.5	8.5	7.2	15
23	14	47	172	138	38	37	30	14	9.5	8.2	7.2	15
24	14	38	118	138	34	38	43	13	9.5	8.5	7.5	13
25	14	30	94	149	32	32	36	14	9.2	12	7.9	12
26	14	27	97	158	30	30	32	13	9.2	13	7.9	11
27	22	25	85	210	30	29	39	12	9.8	14	7.9	11
28	18	24	73	135	27	34	34	14	10	8.8	8.5	11
29	18	22	66	84	-----	31	34	25	10	8.5	7.9	11
30	18	22	59	68	-----	27	34	21	10	8.8	7.5	11
31	17	-----	53	86	-----	26	-----	18	-----	8.2	7.5	-----
TOTAL	611	947	2,185	2,667	1,307	1,256	1,029	599	301.3	266.9	236.6	338.9
MEAN	19.7	31.6	70.5	86.0	46.7	40.5	34.3	19.3	10.0	8.61	7.63	11.3
MAX	48	98	172	210	119	77	74	34	14	14	10	22
MIN	14	16	21	34	27	26	23	12	9.2	7.2	6.8	8.2
CFSM	.80	1.28	2.87	3.50	1.90	1.65	1.39	.78	.41	.35	.31	.46
IN.	.92	1.43	3.30	4.03	1.98	1.90	1.56	.91	.46	.40	.36	.51
AC-FT	1,210	1,880	4,330	5,290	2,590	2,490	2,040	1,190	598	529	469	672

CAL YR 1969 TOTAL 14,186.5 MEAN 38.9 MAX 270 MIN 6.0 CFSM 1.58 IN 21.45 AC-FT 28,140
WTR YR 1970 TOTAL 11,744.7 MEAN 32.2 MAX 210 MIN 6.8 CFSM 1.31 IN 17.76 AC-FT 23,300

LAKE WASHINGTON BASIN

12127100 SWAMP CREEK AT KENMORE, WASH.

LOCATION.--Lat 47°45'22", long 122°13'57", in NE¼ sec.12, T.26 N., R.4 E., King County, on right bank on upstream side of Bothell Way bridge (State Highway 522) at Kenmore, at mile 0.5.

DRAINAGE AREA.--25.1 sq mi.

PERIOD OF RECORD.--October 1963 to September 1970.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 14.46 ft above mean sea level (Washington State Highway Department), revised. Apr. 24, to Sept. 7, 1967, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--7 years, 34.3 cfs (20.16 inches per year, 24,850 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (200 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 28, 1965	1545	214	3.92	Feb. 4, 1968b		262	4.13	Jan. 6, 1969	0445	252	4.09
Jan. 2, 1966	0200	270	4.16	Mar. 16, 1968	1245	228	3.99	Feb. 8, 1969	2345	*424	5.32
Jan. 6, 1966	1145	*376	4.88					Feb. 11, 1969	1200	349	4.66
				Nov. 29, 1968	1815	276	4.19				
Dec. 13, 1966	-	428	a5.36	Dec. 3, 1968	2015	380	4.92	Dec. 22, 1969	2400	309	4.37
Jan. 20, 1967	-	*447	a5.55	Dec. 8, 1968	0615	311	4.38	Jan. 23, 1970	0145	226	3.98
				Dec. 10, 1968	1700	286	4.24	Jan. 25, 1970	0615	226	3.98
Dec. 25, 1967	1930	*437	5.45	Dec. 15, 1968	2400	252	4.09	Jan. 27, 1970	0500	*355	4.71
Jan. 14, 1968b	-	271	4.17	Dec. 24, 1968	1215	327	4.49				

a From high watermark in well.

b About.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 3, 1966	2.8	1.72	1969	Sept. 10, 11, 1969	3.1	1.77
1967	Aug. 15, 1967	a3.2	1.73	1970	July 19, 20, 1970	2.7	1.75
1968	July 30, 31, Aug. 2, 10, 11, 1968	3.6	1.78				

a Minimum observed.

Period of record: Maximum discharge, 447 cfs Jan. 20, 1967 (gage height, 5.55 ft, from high watermark in well); minimum, 2.7 cfs July 31, Aug. 1, 2, 1965, July 19, 20, 1970; minimum gage height, 1.71 ft July 31, Aug. 1, 2, 1965.

REMARKS.--Records excellent except those for periods of no gage-height record, which are fair. Some minor diversion for irrigation above station. No regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	6.7	41	108	36	54	32	19	9.2	6.1	3.7	3.9
2	4.6	7.4	41	222	35	45	28	17	11	12	3.5	4.0
3	4.7	17	27	152	32	40	24	15	11	19	3.4	4.1
4	5.2	23	32	126	35	35	22	14	10	15	4.2	3.7
5	6.2	21	28	163	40	42	21	12	9.3	11	4.4	3.6
6	10	13	57	350	60	41	20	26	8.1	11	4.3	3.7
7	7.2	10	49	281	140	40	19	26	7.8	9.0	4.1	3.6
8	6.0	9.2	35	219	129	70	17	19	7.5	7.6	4.3	3.7
9	5.6	11	27	154	90	160	22	17	7.2	6.4	4.0	3.7
10	5.3	12	36	118	70	100	25	15	6.8	6.4	4.4	3.8
11	5.3	13	28	91	68	78	48	13	7.8	7.0	4.2	8.6
12	6.1	11	23	99	80	60	62	14	16	6.0	3.8	6.8
13	6.5	9.8	24	87	52	80	39	13	11	5.5	4.2	5.9
14	9.0	11	23	86	54	78	35	19	9.0	6.0	4.3	5.5
15	9.7	10	19	63	45	80	29	17	7.4	6.1	4.0	5.4
16	7.1	9.2	18	50	49	70	26	15	6.5	11	4.0	5.1
17	7.3	8.7	16	43	44	54	23	13	6.0	7.9	3.8	6.1
18	7.6	13	16	57	40	74	20	11	6.1	6.3	3.7	12
19	9.4	29	15	50	36	80	20	11	6.5	6.1	3.5	6.8
20	8.0	42	15	42	33	70	18	11	6.6	5.9	3.4	5.6
21	7.3	50	19	38	32	56	18	19	5.3	5.0	8.3	5.7
22	6.6	53	17	37	32	44	17	26	5.5	4.8	9.6	6.2
23	6.4	29	18	39	34	40	17	17	7.2	4.8	4.1	8.2
24	6.4	22	28	37	31	37	16	14	10	5.7	5.5	6.9
25	6.2	27	27	35	34	35	34	12	7.2	6.1	6.2	6.7
26	6.5	27	26	34	33	33	40	12	6.0	5.1	6.7	6.8
27	6.8	38	70	58	56	31	25	14	6.3	4.7	8.1	6.2
28	7.5	23	105	35	52	30	24	11	8.6	4.3	6.4	6.4
29	6.7	18	161	48	-----	29	38	10	6.3	4.1	4.8	5.7
30	7.7	16	146	47	-----	34	23	9.6	5.7	4.0	4.4	5.2
31	7.0	-----	106	40	-----	31	-----	9.6	-----	3.9	4.1	-----
TOTAL	212.4	590.0	1,371	2,989	1,443	1,743	802	471.2	238.9	223.8	136.4	169.6
MEAN	6.85	19.7	44.2	96.4	51.5	56.2	26.7	15.2	7.96	7.22	4.40	5.65
MAX	10	53	185	350	140	160	62	26	16	19	8.1	12
MIN	4.5	6.7	15	34	31	29	16	9.6	5.3	3.9	3.3	3.6
CFSM	.30	.85	1.91	4.17	2.23	2.43	1.16	.66	.34	.31	.19	.24
IN.	.34	.95	2.21	4.81	2.32	2.81	1.29	.76	.38	.36	.22	.27
AC-FT	421	1,170	2,720	5,930	2,860	3,460	1,590	935	474	444	271	336

CAL YR 1965 TOTAL 10,912.4 MEAN 29.9 MAX 303 MIN 3.1 CFSM 1.24 IN 17.57 AC-FT 21,640
WTR YR 1966 TOTAL 10,390.3 MEAN 28.5 MAX 350 MIN 3.3 CFSM 1.23 IN 16.73 AC-FT 20,610

NOTE.--NO GAGE-HEIGHT RECORD MAR. 7 TO APR. 7.

12127100 SWAMP CREEK AT KENMORE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	7.7	100	68	112	58	33	48	8.2	5.4	3.7	4.6
2	5.5	7.5	110	62	90	47	29	38	8.4	5.2	3.6	5.2
3	4.8	7.4	80	80	71	41	27	39	9.5	5.0	3.5	4.5
4	4.8	7.4	120	128	60	35	27	29	8.6	4.8	3.5	4.3
5	4.6	11	110	130	52	32	25	26	8.0	4.8	4.8	4.5
6	4.8	23	80	110	46	30	23	23	7.3	4.8	4.2	4.8
7	6.5	14	70	114	42	28	22	21	7.3	5.0	4.5	5.0
8	6.6	11	60	139	38	28	19	20	7.5	6.0	4.5	5.2
9	5.4	9.9	45	114	41	40	19	22	7.3	6.0	4.5	5.7
10	5.5	9.4	50	97	39	39	18	20	8.0	5.3	4.0	10
11	5.8	8.9	60	143	35	35	18	27	8.5	5.0	3.6	16
12	14	15	170	126	35	31	18	29	8.0	5.0	3.3	9.7
13	13	45	400	138	111	30	18	25	7.3	5.0	3.3	7.5
14	8.1	131	200	114	106	32	18	22	6.6	4.8	3.3	7.1
15	7.5	91	150	120	90	59	17	20	6.4	4.5	3.3	7.2
16	6.5	64	130	110	71	79	27	17	5.9	4.3	3.3	6.4
17	6.5	44	120	104	68	74	27	16	5.6	4.3	3.3	6.2
18	6.2	32	110	90	64	71	28	14	5.5	4.3	3.3	6.3
19	18	30	110	300	52	54	35	14	5.3	4.3	3.3	6.6
20	25	30	130	351	44	56	28	13	5.8	4.8	3.3	6.7
21	17	26	100	218	40	46	28	12	9.0	5.5	3.4	6.3
22	24	22	80	157	37	97	25	11	14	5.2	3.3	6.5
23	18	20	70	143	34	160	22	11	13	5.0	3.3	6.1
24	12	19	80	130	32	108	20	11	7.0	4.5	3.3	6.2
25	10	29	75	106	31	77	19	10	6.6	4.3	3.4	6.3
26	9.5	28	60	120	31	58	18	9.9	6.2	4.0	3.3	7.2
27	9.1	24	50	144	29	51	35	9.6	6.0	4.3	3.3	9.7
28	8.3	32	50	196	59	51	150	9.6	5.8	4.0	3.3	7.3
29	8.7	45	60	198	-----	55	84	8.8	5.6	4.0	3.3	6.7
30	8.5	110	52	180	-----	44	57	8.8	5.6	4.0	3.3	6.8
31	8.0	-----	54	126	-----	38	-----	8.8	-----	3.7	4.0	-----
TOTAL	297.0	954.2	3,136	4,354	1,560	1,684	994	587.5	223.8	147.3	110.7	202.6
MEAN	9.58	31.8	101	140	55.7	54.3	31.1	19.0	7.46	4.75	3.37	6.75
MAX	25	131	400	351	112	160	150	48	14	6.0	4.5	16
MIN	4.6	7.4	45	62	29	28	17	8.8	5.3	3.7	3.3	4.3
CFSM	4.1	1.38	4.37	6.06	2.41	2.35	1.35	.82	.32	.21	.15	.29
IN.	.48	1.54	5.05	7.01	2.51	2.71	1.50	.95	.36	.24	.18	.33
AC-FT	589	1,890	6,220	8,640	3,090	3,340	1,850	1,170	444	292	220	402

CAL YR 1966 TOTAL 12,604.1 MEAN 34.5 MAX 400 MIN 3.3 CFSM 1.49 IN 20.30 AC-FT 25,000
 WTR YR 1967 TOTAL 14,191.1 MEAN 38.9 MAX 400 MIN 3.3 CFSM 1.68 IN 22.85 AC-FT 26,150

NOTE.--NO GAGE-HEIGHT RECORD DEC. 1 TO JAN. 3, JAN. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	18	31	59	50	34	32	26	43	8.5	4.3	12
2	12	15	113	48	60	32	29	22	111	7.0	4.3	11
3	14	11	131	41	100	30	26	20	45	6.6	5.0	9.3
4	12	11	102	40	180	70	25	20	28	6.2	7.0	8.2
5	9.1	10	92	42	120	90	43	33	21	5.9	6.9	8.2
6	10	9.9	57	40	62	56	38	24	17	5.6	6.0	7.0
7	15	11	74	40	60	46	36	20	16	5.4	5.6	7.4
8	11	13	49	40	50	41	31	18	15	5.2	5.1	7.8
9	8.2	16	45	130	45	36	27	16	14	5.2	5.2	6.8
10	7.7	16	42	100	40	33	25	14	12	5.4	4.8	6.3
11	12	15	44	70	35	36	30	13	12	5.6	4.1	8.3
12	8.4	13	40	80	33	110	44	13	12	8.0	4.2	10
13	13	12	30	150	30	83	38	13	10	7.0	4.7	8.3
14	11	16	25	300	26	74	33	13	12	6.6	16	10
15	9.0	16	22	250	27	102	46	12	12	6.2	13	12
16	8.7	16	23	200	27	196	83	11	8.7	5.8	9.0	12
17	8.0	14	26	157	40	159	54	10	8.7	5.4	7.3	16
18	12	13	22	124	70	111	54	9.6	8.1	5.2	7.0	37
19	15	12	19	177	54	82	65	10	8.8	7.5	6.6	24
20	11	11	18	173	45	62	54	25	8.3	6.8	6.6	16
21	22	11	17	139	62	50	41	19	8.1	6.0	6.1	12
22	28	11	66	97	64	42	35	14	8.9	5.8	6.3	11
23	18	11	81	76	135	43	39	14	8.5	5.6	20	12
24	16	12	79	64	110	47	33	12	7.7	5.4	27	11
25	19	10	332	58	80	67	30	12	7.5	5.4	26	9.7
26	14	9.8	335	52	60	52	29	11	9.3	5.7	23	9.5
27	19	9.6	210	45	45	46	25	12	15	5.4	48	8.8
28	19	12	143	40	40	41	23	11	26	5.0	21	8.5
29	15	28	103	35	37	45	21	13	14	4.7	14	8.6
30	14	31	76	35	-----	40	26	13	10	4.3	11	7.8
31	15	-----	61	40	-----	35	-----	11	-----	4.3	9.0	-----
TOTAL	421.1	412.3	2,508	2,942	1,789	1,985	1,135	484.6	537.6	182.7	344.1	336.5
MEAN	13.6	13.7	80.9	94.9	61.7	64.0	37.8	15.6	17.9	5.89	11.1	11.2
MAX	28	31	335	300	180	196	83	33	111	8.5	48	37
MIN	7.7	9.6	17	35	27	30	21	9.6	7.5	4.3	4.1	6.3
CFSM	.59	.59	3.50	4.11	2.67	2.77	1.64	.68	.77	.26	.48	.48
IN.	.68	.66	4.84	4.74	2.88	3.20	1.83	.78	.87	.29	.55	.54
AC-FT	835	818	4,970	5,840	3,550	3,940	2,250	941	1,070	362	683	667

CAL YR 1967 TOTAL 13,145.3 MEAN 36.0 MAX 351 MIN 3.3 CFSM 1.56 IN 21.17 AC-FT 26,070
 WTR YR 1968 TOTAL 13,077.9 MEAN 35.7 MAX 335 MIN 4.1 CFSM 1.55 IN 21.06 AC-FT 25,940

NOTE.--NO GAGE-HEIGHT RECORD JAN. 25 TO MAR. 6.

12127100 SWAMP CREEK AT KENMORE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	47	110	50	32	27	28	52	15	11	4.3	3.6
2	7.4	79	89	87	36	26	44	42	12	11	4.7	3.8
3	7.2	48	179	139	90	29	35	38	11	11	4.5	10
4	24	34	219	220	127	28	53	33	9.4	10	4.3	8.2
5	17	28	138	225	121	42	59	28	8.8	9.1	4.3	7.7
6	18	26	93	238	88	33	43	24	9.6	8.5	4.1	5.7
7	14	22	89	202	76	28	34	21	9.1	8.0	4.3	4.8
8	11	36	257	146	27	26	30	18	7.9	11	4.1	4.3
9	11	56	192	133	344	24	27	16	7.4	6.6	4.0	4.1
10	12	40	229	127	239	23	27	16	7.2	6.6	4.1	3.7
11	12	120	201	135	324	22	24	15	7.2	8.0	4.3	3.3
12	20	114	147	107	233	21	24	14	6.9	8.8	4.3	3.8
13	20	69	108	106	156	20	25	13	7.2	7.3	4.5	11
14	17	53	107	112	113	20	21	12	7.0	6.2	4.1	8.8
15	22	45	112	104	89	20	20	11	6.1	5.7	4.7	6.4
16	15	38	185	96	88	27	19	11	6.0	5.2	5.0	5.9
17	28	32	113	90	68	86	32	10	6.1	5.0	4.0	31
18	43	131	131	68	57	69	33	11	5.9	4.8	4.1	59
19	31	27	107	60	50	45	47	12	6.0	4.7	4.1	42
20	31	31	78	51	44	36	34	12	6.3	4.7	4.3	26
21	25	36	64	45	39	31	28	11	6.8	4.8	4.5	17
22	31	47	60	37	37	32	24	14	7.8	4.7	4.1	35
23	25	41	142	28	39	41	56	9.6	11	4.5	3.8	64
24	21	37	296	26	38	31	37	10	18	4.3	3.7	26
25	18	34	209	24	35	28	54	9.4	40	4.3	3.6	17
26	17	31	138	24	32	26	42	8.9	31	4.5	3.7	13
27	15	29	107	23	29	24	33	11	31	4.1	4.1	12
28	14	26	71	28	22	22	43	11	43	4.3	3.8	64
29	20	132	40	22	-----	41	68	27	21	4.7	4.3	28
30	85	157	27	22	-----	21	44	52	15	4.3	4.0	35
31	93	-----	30	27	-----	21	-----	22	-----	4.1	3.8	-----
TOTAL	732.2	1,515	4,058	2,796	2,924	950	1,088	594.9	386.7	198.5	130.0	515.1
MEAN	23.6	50.5	131	90.2	104	30.4	36.3	19.2	12.9	6.0	4.19	17.2
MAX	93	157	296	238	344	86	68	52	43	11	5.0	64
MIN	7.2	22	27	22	28	20	19	8.9	5.9	4.1	3.6	3.3
CFSM	1.02	2.19	5.67	3.90	4.50	1.32	1.57	.83	.56	.28	.18	.74
IN.	1.18	2.44	6.53	4.50	4.71	1.53	1.75	.96	.62	.32	.21	.83
AC-FT	1,450	3,010	8,050	5,550	5,800	1,880	2,160	1,180	767	394	258	1,020

CAL YR 1968 TOTAL 16,041.7 MEAN 43.8 MAX 300 MIN 4.1 CFSM 1.90 IN 25.83 AC-FT 31,820
 WTR YR 1969 TOTAL 15,888.4 MEAN 43.5 MAX 344 MIN 3.3 CFSM 1.88 IN 25.59 AC-FT 31,510

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	9.8	14	34	56	21	22	24	9.6	4.8	4.3	4.0
2	39	9.4	14	31	48	21	24	22	8.0	4.7	5.9	4.1
3	23	11	15	31	70	23	21	20	7.3	4.1	5.3	5.9
4	17	89	22	28	50	21	19	18	7.0	3.8	4.8	5.2
5	15	70	20	25	45	20	20	17	6.4	3.7	4.5	4.7
6	13	31	18	24	40	52	34	16	6.2	3.7	4.0	5.5
7	13	30	14	22	35	79	25	15	6.2	3.8	3.8	10
8	33	23	21	24	32	41	22	16	6.2	3.7	4.8	8.8
9	22	23	30	41	29	33	84	17	6.8	4.0	4.5	6.4
10	17	19	28	33	28	29	96	21	7.3	3.7	3.8	5.2
11	14	17	101	30	27	27	46	23	6.6	3.6	3.6	4.7
12	13	16	151	28	27	28	38	17	6.2	3.6	3.4	4.1
13	12	15	133	64	38	39	32	16	5.7	3.6	3.7	4.1
14	11	15	159	152	31	77	27	15	5.9	3.6	3.7	4.1
15	10	21	96	99	85	55	24	14	5.9	3.3	3.6	4.1
16	9.8	39	76	74	140	82	21	12	6.2	3.3	3.7	4.3
17	9.5	26	69	72	75	63	20	12	5.7	3.4	3.8	13
18	9.3	22	74	90	50	49	24	11	5.2	3.3	3.6	11
19	9.2	20	73	131	40	42	42	10	4.7	3.3	3.8	7.5
20	9.2	23	81	123	36	36	34	10	4.3	3.2	3.7	20
21	9.1	22	153	139	33	32	26	10	4.1	3.6	4.0	13
22	9.1	18	197	145	31	29	35	10	4.0	3.6	3.4	9.9
23	9.0	38	238	183	29	29	26	9.9	4.1	3.4	3.2	11
24	8.8	32	146	157	28	34	36	8.9	4.1	3.4	3.6	7.7
25	8.5	24	99	199	26	27	30	8.4	4.1	7.0	4.0	6.8
26	8.4	21	96	179	24	25	27	8.1	3.8	7.3	3.8	6.4
27	14	19	79	280	23	23	35	8.4	4.7	12	3.8	5.5
28	12	17	61	150	22	30	29	9.6	5.3	7.0	4.7	5.3
29	11	16	51	40	-----	26	29	21	5.5	5.5	4.1	5.2
30	11	15	44	60	-----	23	28	17	5.1	5.2	3.8	5.2
31	10	-----	39	85	-----	21	-----	12	-----	4.7	3.7	-----
TOTAL	439.9	750.2	2,414	2,823	1,198	1,137	936	449.3	172.2	136.9	124.4	212.7
MEAN	14.2	25.0	77.9	91.1	42.8	36.7	31.2	14.5	5.74	4.42	4.01	7.09
MAX	39	89	238	280	140	82	84	24	9.6	12	5.9	20
MIN	8.4	9.4	14	22	19	20	19	8.1	3.8	3.2	3.2	4.0
CFSM	.61	1.08	3.37	3.94	1.85	1.59	1.35	.63	.25	.19	.17	.31
IN.	.71	1.21	3.89	4.55	1.93	1.83	1.51	.72	.28	.22	.20	.34
AC-FT	873	1,490	4,790	5,600	2,380	2,260	1,860	891	342	272	247	422

CAL YR 1969 TOTAL 13,187.3 MEAN 36.1 MAX 344 MIN 3.3 CFSM 1.56 IN 21.24 AC-FT 26,160
 WTR YR 1970 TOTAL 10,793.6 MEAN 29.6 MAX 280 MIN 3.2 CFSM 1.28 IN 17.38 AC-FT 21,410

12127300 LYON CREEK AT LAKE FOREST PARK, WASH.

LOCATION.--Lat 47°45'11", long 122°16'35", in NW¼ sec.10, T.26 N., R.4 E., King County, on right bank in town of Lake Forest Park, 700 ft upstream from mouth.

DRAINAGE AREA.--3.67 sq. mi.

PERIOD OF RECORD.--August 1963 to September 1968. Annual maximums, water years 1969-70.

GAGE.--Crest-stage gage. Altitude of gage is 20 ft (from topographic map). Prior to Oct. 1, 1968, water-stage recorder at present site and datum.

AVERAGE DISCHARGE.--5 years, 6.44 cfs (4,660 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum			Date	Minimum		
		Discharge	G.H.			Discharge	G.H.	
1966	Jan. 1, 5, 1966	94	3.42		July 27, 1966	97	al. 71	
1967	Jan. 19, 1967	147	3.86		Aug. 17, 1967	.85	1.75	
1968	Dec. 25, 1967	114	3.60		Sept. 6, 1968	.66	1.57	
1969	Dec. 3, 1968	126	3.70		-	-	-	
1970	Nov. 4, 1969	78	3.26		-	-	-	

■ Occurred July 27, 28, 1966.

Period of record: Maximum discharge, 147 cfs Jan. 19, 1967 (gage height, 3.86 ft); minimum, 0.66 cfs Sept. 6, 1968; minimum gage height, 1.28 ft Sept. 30, 1963, result of construction work upstream.

REVISIONS.--Figures of maximum discharge for the water years 1964-65 have been revised to 72 cfs Jan. 1, 1964 (gage height, 3.20 ft), and 91 cfs Feb. 5, 1965 (gage height, 3.39 ft), superseding those published in WSP 1932.

REMARKS.--Records good. Several small diversions for domestic use. No regulation.

REVISIONS (WATER YEARS).--Revised figures of discharge, in cubic feet per second, for high-water periods in the water years 1964-65, superseding those published in WSP 1932, are given herewith:

Jan. 1, 1964..... 46 Feb. 5, 1965..... 59

Month	Cfs-days	Maximum	Minimum	Mean	Per square mile	Runoff Inches	Runoff Acre-feet
January 1964.....	410.0	46	4.9	13.2	3.60	4.15	813
NTR YR 1964.....	2,118.9	46	1.4	5.79	1.58	21.47	4,204
CAL YR 1964.....	2,117.9	46	1.4	5.79	1.58	21.46	4,203
February 1965.....	378.6	59	5.8	13.5	3.68	3.84	751
NTR YR 1965.....	2,236.9	59	1.3	6.13	1.67	22.67	4,438
CAL YR 1965.....	2,186.2	59	1.3	5.99	1.63	22.15	4,336

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.1	18	27	5.8	9.6	7.1	6.0	3.6	4.0	1.6	1.4
2	1.6	2.4	7.4	36	5.4	6.9	5.6	5.0	4.9	5.0	1.6	1.6
3	1.6	11	6.7	19	5.4	6.3	5.1	4.5	4.0	8.0	1.4	1.4
4	2.4	7.7	6.9	16	7.7	1.8	4.7	4.0	4.0	6.0	1.6	1.3
5	3.1	6.5	8.2	35	10	9.1	4.6	4.0	3.7	4.0	1.6	1.4
6	4.9	3.4	16	40	17	6.9	4.6	9.0	3.6	3.6	1.4	1.6
7	2.4	2.9	11	25	27	8.0	7.1	4.0	6.9	2.4	1.5	2.4
8	2.1	3.0	6.1	26	14	31	4.2	5.5	3.2	3.0	1.6	1.4
9	1.9	3.8	5.0	14	11	27	7.5	5.0	3.1	3.0	1.7	1.4
10	1.9	5.0	9.0	12	8.0	11	6.9	4.5	3.4	3.1	1.8	1.6
11	1.9	3.7	5.1	11	12	8.5	17	3.8	4.9	3.0	1.8	8.5
12	2.4	3.0	4.5	18	10	9.1	11	4.0	6.9	2.4	1.5	2.4
13	2.4	3.2	6.8	17	7.7	20	6.6	3.7	3.8	2.3	1.8	2.0
14	4.2	3.9	5.0	12	9.1	15	6.0	5.2	3.4	2.5	1.6	2.0
15	3.7	3.0	4.3	8.5	6.9	16	5.0	4.1	3.0	2.4	1.6	1.9
16	2.4	2.8	4.1	7.7	7.1	9.5	4.5	3.6	3.0	5.0	1.6	1.8
17	2.7	2.7	3.8	7.1	6.9	7.7	4.0	3.4	2.8	2.1	1.6	3.7
18	2.8	4.7	3.8	9.8	6.1	16	4.0	3.1	3.0	2.0	1.4	4.8
19	3.2	14	3.7	7.1	5.6	12	4.0	3.2	3.0	2.0	1.3	2.1
20	3.2	16	4.1	6.9	5.6	10	4.0	3.6	3.0	1.8	1.3	2.0
21	2.7	21	4.9	6.6	5.2	7.7	4.0	7.6	2.5	1.9	1.3	1.9
22	2.5	19	4.1	6.1	6.1	6.9	4.0	5.6	2.5	2.0	1.5	2.5
23	2.5	6.2	4.7	6.9	7.4	6.3	4.0	4.0	3.0	2.0	1.4	3.6
24	2.2	6.9	7.6	6.1	5.4	6.1	5.0	3.7	4.0	2.9	1.5	2.1
25	2.1	6.6	6.4	5.6	6.1	5.4	10	3.6	3.5	2.2	1.8	2.0
26	2.1	13	6.1	5.4	5.6	5.4	10	4.6	3.0	2.0	1.9	2.2
27	2.4	16	30	7.1	13	9.2	8.0	4.7	3.0	1.8	2.2	1.9
28	2.4	7.1	42	6.3	9.4	5.1	8.0	3.7	4.0	1.7	1.7	1.8
29	2.1	4.2	29	10	-----	4.9	12	3.6	3.5	1.7	1.6	2.0
30	2.6	3.9	28	9.5	-----	6.9	8.0	3.6	3.0	1.7	1.5	1.9
31	2.2	-----	15	6.9	-----	5.4	-----	4.0	-----	1.6	1.5	-----
TOTAL	78.2	208.7	317.3	431.6	246.5	310.9	194.0	140.9	105.5	89.8	49.1	67.8
MEAN	2.52	6.76	10.2	13.9	8.00	10.0	6.47	4.55	3.52	2.90	1.58	2.26
MAX	4.9	21	42	40	27	31	17	9.0	6.9	8.0	2.2	8.5
MIN	1.6	2.1	3.7	5.4	5.2	4.9	4.0	3.1	2.5	1.6	1.3	1.3
CFSM	.69	1.90	2.78	3.79	2.40	2.72	1.76	1.24	.96	.79	.43	.62
IN.	.79	2.12	3.22	4.37	2.50	3.15	1.97	1.43	1.07	.91	.50	.69
AC-FT	155	414	629	856	489	617	385	279	209	178	97	134
CAL YR 1965	TOTAL	2,204.2	MEAN	6.04	MAX	77	MIN	1.3	CFSM	1.65	IN	22.34
NTR YR 1966	TOTAL	2,240.3	MEAN	6.14	MAX	42	MIN	1.3	CFSM	1.67	IN	22.71
									AC-FT	4,370	AC-FT	4,440

12127300 LYON CREEK AT LAKE FOREST PARK, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.5	19	9.9	14	6.6	5.6	5.4	3.6	1.9	1.4	1.7
2	1.9	2.4	22	9.3	9.3	6.0	5.2	5.2	3.3	1.7	1.3	1.5
3	1.8	2.4	11	9.3	8.5	5.4	5.6	4.8	2.9	1.6	1.3	1.5
4	1.8	2.4	27	24	8.2	5.2	5.3	4.4	2.7	1.8	1.3	1.3
5	1.8	6.0	18	19	7.1	5.0	4.8	4.2	2.8	1.8	1.4	1.3
6	1.8	6.0	13	15	6.8	5.0	4.6	4.2	2.9	1.8	1.8	1.6
7	3.2	3.3	11	19	6.4	4.8	4.4	4.0	2.8	1.8	1.8	1.5
8	2.7	2.9	9.0	15	6.4	5.2	4.6	4.4	2.8	2.0	1.6	1.8
9	2.2	2.9	7.6	10	7.1	5.2	5.0	4.6	2.7	1.4	2.0	2.0
10	2.3	2.8	11	13	6.4	5.6	4.4	4.0	2.6	2.0	1.3	6.6
11	2.5	3.3	14	19	6.2	4.8	4.2	6.2	2.6	1.9	1.3	4.4
12	7.6	6.3	48	12	7.4	4.6	4.2	5.2	2.6	1.7	1.3	2.5
13	3.1	34	86	16	22	5.2	4.6	4.2	2.5	1.5	1.2	1.8
14	2.6	42	20	12	6.0	6.0	4.6	3.9	2.5	1.7	1.4	1.8
15	2.4	16	19	10	11	12	3.9	3.7	2.5	1.8	1.3	1.7
16	2.4	14	16	9.0	7.9	12	8.3	3.6	2.3	1.7	1.3	1.6
17	2.4	6.8	11	8.2	9.3	11	5.6	3.5	2.3	1.7	1.1	1.6
18	2.4	5.6	12	8.2	7.4	12	8.2	3.4	2.3	1.7	1.2	1.6
19	10	7.4	14	92	6.4	6.8	6.8	3.4	2.3	1.5	1.3	1.7
20	8.7	6.6	16	42	6.2	8.5	5.6	3.3	2.7	1.8	1.3	1.6
21	4.8	5.0	9.6	20	5.8	6.2	5.6	3.2	11	2.1	1.5	1.7
22	8.9	4.4	7.9	14	5.8	23	4.8	3.2	5.4	1.8	1.3	1.7
23	4.7	9.3	23	13	5.6	17	4.2	3.2	3.1	2.1	1.3	1.6
24	3.3	6.0	11	13	5.6	9.3	4.0	3.3	2.9	1.6	1.3	1.7
25	3.0	12	9.9	12	5.4	8.2	4.2	3.0	2.4	1.6	1.3	1.6
26	3.2	5.8	7.4	17	5.0	7.4	3.9	3.0	2.3	1.5	1.3	1.8
27	3.1	5.2	6.6	29	5.0	7.1	24	3.1	2.3	1.6	1.2	1.8
28	2.7	9.6	7.1	32	13	8.2	32	3.1	2.0	1.5	1.3	1.9
29	3.2	14	7.4	34	7.1	7.1	8.2	3.1	2.0	1.6	1.3	2.0
30	2.8	31	6.4	14	-----	6.4	6.2	2.9	2.0	1.4	1.4	1.9
31	2.6	-----	7.6	12	-----	6.0	-----	3.0	-----	1.5	1.7	-----
TOTAL	107.8	271.0	494.8	593.9	226.2	243.2	202.0	119.3	89.4	54.8	42.4	56.7
MEAN	3.48	9.03	16.0	19.2	8.08	7.85	6.73	3.85	2.98	1.77	1.37	1.96
MAX	10	42	86	92	22	23	32	6.2	11	3.0	1.8	6.6
MIN	1.8	2.4	6.4	8.2	5.0	4.6	3.9	2.9	2.0	1.4	1.1	1.3
CFSM	.95	2.46	4.36	5.23	2.20	2.14	1.83	1.05	.81	.48	.37	.53
IN.	1.09	2.75	5.02	6.02	2.29	2.47	2.05	1.21	.91	.56	.43	.59
AC-FT	214	938	981	1,180	449	482	401	237	177	109	84	116
CAL YR 1966	TOTAL 2,509.7	MEAN 6.88	MAX 86	MIN 1.3	CFSM 1.87	IN 25.44	AC-FT 4,980					
WTR YR 1967	TOTAL 2,503.5	MEAN 6.86	MAX 92	MIN 1.1	CFSM 1.87	IN 25.38	AC-FT 4,970					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	4.2	10	8.0	8.6	5.8	4.2	4.8	23	2.4	1.6	3.5
2	4.2	3.3	30	6.4	21	5.5	5.4	4.0	21	2.1	1.7	3.0
3	6.0	3.0	30	5.9	48	5.3	5.0	3.9	6.0	2.0	1.7	2.4
4	3.0	2.8	20	7.1	30	13	5.2	6.2	4.4	2.0	1.6	2.0
5	3.3	2.6	15	6.6	12	15	9.2	7.4	3.6	2.0	1.8	2.0
6	3.0	2.6	8.6	5.4	9.4	7.7	5.4	4.8	3.1	2.0	1.8	2.0
7	4.8	3.6	17	6.9	8.2	7.2	5.0	4.0	3.1	1.9	1.6	2.0
8	2.6	5.0	7.4	6.0	7.4	6.3	5.0	3.9	3.3	1.9	1.6	2.0
9	2.2	5.0	7.1	40	6.8	5.8	4.8	3.6	3.0	1.9	1.7	2.0
10	2.9	5.0	8.5	11	6.5	5.6	5.6	3.6	2.9	1.9	1.6	2.0
11	3.9	3.7	7.4	7.7	6.3	10	9.6	3.6	2.9	2.1	1.6	4.0
12	2.5	3.4	9.0	15	6.0	22	7.9	3.6	2.8	2.8	1.6	2.5
13	5.2	3.0	5.6	66	5.7	9.4	5.6	3.4	2.9	2.1	1.9	2.4
14	2.9	4.8	4.6	78	5.3	11	5.4	3.6	2.6	2.4	9.3	3.4
15	2.3	4.6	4.4	53	5.3	19	11	3.3	2.5	2.2	2.6	3.3
16	2.3	3.9	5.2	19	5.3	42	20	3.1	2.5	2.0	2.0	2.9
17	2.2	3.3	5.2	12	9.4	14	8.3	3.1	2.5	1.9	2.0	7.4
18	4.4	3.3	4.4	19	16	9.7	13	3.0	2.4	2.1	1.9	10
19	3.6	2.9	3.9	29	10	8.1	9.5	3.9	2.6	4.2	1.8	4.0
20	2.8	2.8	3.9	29	7.5	7.3	10	10	2.4	2.5	1.8	2.9
21	11	2.8	4.0	16	12	6.7	6.8	4.0	2.4	2.0	1.8	2.5
22	13	2.8	27	11	12	6.4	6.1	3.3	2.8	2.0	2.1	2.4
23	4.0	2.8	12	9.1	28	9.8	8.1	4.6	2.4	2.0	13	2.8
24	5.2	3.4	29	9.1	14	7.7	5.4	3.3	2.2	1.7	5.4	2.4
25	5.0	2.8	82	8.1	8.7	14	5.4	3.3	2.2	1.8	6.8	2.2
26	3.6	2.6	29	7.8	7.4	7.5	5.2	3.0	3.9	1.8	6.0	2.3
27	7.9	2.6	18	6.7	6.7	8.1	4.8	3.6	7.8	1.7	14	2.1
28	4.6	4.4	13	6.2	6.3	7.6	4.6	3.0	8.8	1.6	6.0	2.1
29	4.6	7.9	9.3	6.3	6.0	9.1	4.4	3.9	3.1	1.6	4.0	2.2
30	3.9	9.3	8.0	7.0	-----	7.1	6.6	3.1	2.6	1.6	3.3	2.1
31	5.8	-----	7.8	10	-----	6.5	-----	3.3	-----	1.6	3.0	-----
TOTAL	139.3	114.2	462.5	528.5	336.0	320.2	214.7	125.2	137.7	63.8	110.4	88.8
MEAN	4.49	3.81	14.9	17.0	11.6	10.3	7.16	4.04	4.59	2.06	3.57	2.96
MAX	13	9.3	82	78	48	42	20	10	23	4.6	14	10
MIN	2.2	2.6	3.9	5.4	5.3	5.3	4.4	3.0	2.2	1.6	1.4	2.0
CFSM	1.27	1.04	4.06	4.93	3.1	2.81	1.95	1.18	1.25	.56	.97	.81
IN.	1.41	1.16	4.69	5.36	3.41	3.25	2.18	1.27	1.40	.65	1.12	.90
AC-FT	276	227	917	1,050	646	635	426	248	273	127	219	176
CAL YR 1967	TOTAL 2,345.9	MEAN 6.43	MAX 92	MIN 1.1	CFSM 1.97	IN 23.78	AC-FT 4,650					
WTR 1968	TOTAL 2,641.5	MEAN 7.22	MAX 82	MIN 1.6	CFSM 1.97	IN 26.77	AC-FT 5,240					

LAKE WASHINGTON BASIN

12127400 LAKE BALLINGER NEAR EDMONDS, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		2.06	2.02	1.44	2.06	1.42	1.46	1.67	1.26	1.87	1.94	1.74
2		2.04	2.09	1.45	1.91	1.40	1.41	1.57	1.28	1.87	1.93	1.74
3	2.00	2.03	2.04	1.47	1.77	1.37	1.35	1.49	1.32	1.88	1.93	1.74
4		2.02	2.10	1.61	1.67	1.34	1.31	1.42	1.34	1.88	1.92	1.73
5		2.05	2.15	1.61	1.57	1.30	1.29	1.36	1.35	1.87	1.91	1.73
6		2.12	2.07	1.84	1.50	1.27	1.26	1.30	1.36	1.87	1.90	1.74
7		2.12	1.99	1.86	1.43	1.25	1.23	1.27	1.37	1.87	1.90	1.73
8		2.11	1.86	1.92	1.39	1.25	1.21	1.23	1.38	1.90	1.89	1.73
9		2.09	1.72	1.85	1.36	1.25	1.20	1.22	1.39	1.93	1.88	1.74
10		2.08	1.70	1.77	1.36	1.26	1.19	1.20	1.40	1.93	1.88	1.80
11		2.08	1.68	1.90	1.33	1.25	1.17	1.24	1.41	1.94	1.88	1.89
12		2.13	2.03	1.89	1.31	1.24	1.16	1.29	1.42	1.95	1.87	1.93
13		2.30	2.99	1.91	1.57	1.24	1.15	1.30	1.44	1.95	1.86	1.95
14	2.12	2.84	2.87	1.88	1.70	1.26	1.15	1.30	1.45	1.94	1.85	1.95
15	2.09	2.78	2.54	1.80	1.69	1.39	1.15	1.30	1.45	1.94	1.85	1.96
16	2.07	2.36	2.30	1.72	1.62	1.52	1.22	1.29	1.47	1.94	1.84	1.96
17	2.06	2.04	2.07	1.64	1.58	1.60	1.26	1.28	1.47	1.94	1.83	1.97
18	2.04	1.81	1.91	1.57	1.55	1.62	1.28	1.27	1.48	1.93	1.82	1.97
19	2.10	1.67	1.82	2.04	1.49	1.58	1.35	1.26	1.48	1.93	1.81	1.97
20	2.24	1.59	1.84	2.72	1.42	1.58	1.34	1.24	1.49	1.93	1.81	1.98
21	2.23	1.51	1.77	2.55	1.37	1.56	1.32	1.21	1.57	1.95	1.80	1.98
22	2.28	1.43	1.65	2.30	1.34	1.73	1.30	1.19	1.77	1.95	1.80	1.99
23	2.25	1.39	1.59	2.15	1.31	2.11	1.27	1.18	1.81	1.95	1.79	1.99
24	2.20	1.52	1.60	2.14	1.27	2.07	1.24	1.17	1.82	1.95	1.78	2.00
25	2.16	1.40	1.59	1.98	1.26	1.95	1.22	1.17	1.84	1.95	1.77	2.01
26	2.13	1.44	1.54	1.96	1.24	1.82	1.20	1.17	1.85	1.95	1.77	2.01
27	2.12	1.41	1.48	2.03	1.22	1.72	1.33	1.18	1.86	1.95	1.76	2.01
28	2.10	1.44	1.44	2.21	1.34	1.67	1.85	1.20	1.87	1.95	1.76	2.02
29	2.09	1.52	1.42	2.32	-----	1.68	1.88	1.20	1.87	1.95	1.75	2.04
30	2.09	1.81	1.40	2.42	-----	1.60	1.78	1.22	1.87	1.95	1.75	2.05
31	2.07	-----	1.38	2.22	-----	1.54	-----	1.24	-----	1.95	1.75	-----
MEAN		1.90	1.89	1.95	1.49	1.51	1.32	1.28	1.54	1.93	1.84	1.90
MAX		2.84	2.99	2.72	2.06	2.11	1.88	1.67	1.87	1.95	1.94	2.05
MIN		1.35	1.38	1.44	1.22	1.24	1.15	1.17	1.26	1.87	1.75	1.73

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.14	1.72	1.63	2.12	1.85	1.81	1.72	1.54	2.25		1.92	
2	2.20	1.66	2.15	2.00	2.04	1.75	1.68	1.59	2.61		1.91	
3	2.26	1.60	2.60	1.90	2.27	1.69	1.63	1.46	2.48	2.07	1.90	
4	2.25	1.55	2.68	1.84	2.73	1.72	1.60	1.44	2.32		1.88	
5	2.22	1.50	2.67	1.82	2.65	1.87	1.63	1.53	2.17		1.87	
6	2.24	1.45	2.50	1.77	2.48	1.91	1.61	1.52	2.03		1.87	1.92
7	2.25	1.43	2.48	1.72	2.32	1.87	1.58	1.50	1.92		1.86	1.89
8	2.23	1.44	2.36	1.71	2.17	1.84	1.55	1.46	1.89	1.97	1.85	1.96
9	2.20	1.46	2.25	2.04	2.06	1.78	1.51	1.43	1.88	1.98	1.85	1.93
10	2.18	1.47	2.13	2.27	1.95	1.72	1.49	1.41	1.87	2.00	1.84	1.80
11	2.20	1.46	2.07	2.20	1.80	1.70	1.60	1.41	1.87	2.00	1.83	1.81
12	2.17	1.44	2.04	2.14	1.67	2.05	1.65	1.42	1.87	1.99	1.83	1.83
13	2.19	1.42	1.96	2.75	1.73	2.15	1.64	1.43	1.86	1.98	1.82	1.83
14	2.20	1.42	1.87	3.48	1.67	2.12	1.60	1.45	1.86	1.96	1.96	1.84
15	2.18	1.44	1.79	3.73	1.62	2.22	1.65	1.47	1.87	1.96	2.07	1.86
16	2.16	1.45	1.75	3.65	1.58	2.62	1.91	1.49	1.87	1.97	2.07	1.87
17	2.15	1.42	1.72	3.31	1.58	2.73	1.97	1.50	1.87	1.97	2.07	1.91
18	2.17	1.40	1.67	2.99	1.73	2.58	1.95	1.52	1.87	1.98	2.06	2.14
19	2.22	1.38	1.62	3.07	1.85	2.40	2.03	1.54	1.87	1.97	2.05	2.22
20	2.20	1.36	1.58	3.10	1.83	2.24	1.98	1.70	1.88	1.95	2.05	2.19
21	2.27	1.34	1.56	3.04	1.90	2.10	1.92	1.79	1.89	1.96	2.05	2.15
22	2.34	1.33	1.77	2.80	1.95	1.98	1.84	1.82	1.91	1.98	2.06	2.12
23	2.31	1.32	1.95	2.56	2.17	1.92	1.82	1.87	1.93	1.99	2.15	2.09
24	2.13	1.31	2.00	2.38	2.37	1.91	1.79	1.90	1.93	2.01	2.30	2.08
25	2.01	1.30	2.62	2.24	2.32	1.97	1.74	1.92	-----	2.01	2.31	2.06
26	1.88	1.29	3.10	2.12	2.20	1.53	1.69	1.95	-----	1.99	2.35	2.03
27	1.83	1.28	3.07	2.01	2.08	1.90	1.65	1.98	-----	1.98	2.47	2.01
28	1.82	1.29	2.85	1.91	1.97	1.85	1.60	2.00	-----	1.97	2.37	1.99
29	1.77	1.41	2.62	1.83	1.88	1.84	1.56	2.04	-----	1.96	2.27	1.97
30	1.70	1.54	2.42	1.79	-----	1.83	1.54	2.07	-----	1.94	2.17	1.94
31	1.69	-----	2.25	1.81	-----	1.78	-----	2.08	-----	1.93	-----	-----
MEAN	2.12	1.43	2.18	2.39	2.02	1.99	1.70	1.65				
MAX	2.34	1.72	3.10	3.73	2.73	2.73	2.03	2.08				
MIN	1.69	1.28	1.56	1.71	1.58	1.69	1.49	1.41				

CAL YR 1967 MEAN 1.71 MAX 3.10 MIN 1.15

12127400 LAKE BALLINGER NEAR EDMONDS, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.92	1.96	2.54			1.33	2.17		2.15	1.77	1.71	1.84
2	1.89	1.95	2.41			1.30	2.26		2.12	1.77	1.71	1.84
3	1.86	1.95	2.53			1.32	2.08		2.09	1.77	1.71	1.91
4	1.97	1.88	2.94	2.61		1.35	2.02		2.08	1.78	1.71	1.94
5	2.05	1.81	2.82	2.74		1.45	1.98		2.06	1.78	1.71	1.96
6	2.10	1.75	2.62	2.39		1.53	1.85		2.04	1.78	1.71	1.97
7	2.09	1.69	2.49	2.95		1.57	1.73		2.01	1.78	1.71	1.95
8	2.09	1.69	3.04	2.81		1.62	1.63		2.00	1.78	1.72	1.93
9	2.08	1.80	3.14	2.66		1.65	1.56		1.98	1.78	1.72	1.91
10	2.09	1.80	3.28	2.59		1.68	1.51		1.96	1.78	1.73	1.90
11	2.10	2.08	3.34	2.62		1.72	1.45		1.95	1.79	1.73	1.88
12	2.17	2.26	3.12	2.52		1.75	1.41		1.95	1.80	1.73	1.87
13	2.19	2.19	2.84	2.47		1.79	1.38		1.95	1.81	1.74	1.93
14	2.17	2.09	2.71	2.52		1.82	1.38		1.97	1.79	1.75	1.95
15	2.10	2.00	2.65	2.52		1.87			1.97	1.76	1.75	1.95
16	1.98	1.92	2.99	2.48		1.93			1.97	1.74	1.75	1.96
17	1.93	1.84	2.84	2.46		2.25			1.97	1.72	1.76	2.15
18	2.08	1.77	2.80	2.36		2.38			1.97	1.72	1.76	2.47
19	2.01	1.71	2.75	2.25		2.33		1.60	1.96	1.72	1.76	2.38
20	1.98	1.69	2.57	2.14		2.27		1.61	1.95	1.74	1.77	2.20
21	1.89	1.70	2.40	2.00		2.23		1.62	1.95	1.75	1.78	2.02
22	1.87	1.77	2.30	1.87		2.22		1.63	1.97	1.76	1.79	1.96
23	1.82	1.78	2.50	1.83		2.24		1.64	2.03	1.76	1.79	2.13
24	1.77	1.75	3.18	1.83	1.45	2.21		1.69	2.19	1.76	1.80	2.01
25	1.70	1.74	3.23		1.43	2.18		1.72	2.40	1.75	1.80	1.86
26	1.65	1.70	2.99		1.40	2.17		1.70	2.41	1.75	1.80	1.74
27	1.60	1.66	2.77		1.37	2.16		1.70	2.24	1.73	1.81	1.65
28	1.55	1.62	2.55		1.35	2.15		1.71	2.07	1.72	1.82	1.61
29	1.57	1.93			-----	2.14		1.81	1.93	1.71	1.82	1.64
30	1.80	2.49			-----	2.14		2.16	1.80	1.71	1.83	1.71
31	2.01	-----			-----	2.14		2.17	-----	1.71	1.83	-----
MEAN	1.94	1.87				1.90			2.04	1.76	1.76	1.94
MAX	2.19	2.49				2.38			2.41	1.81	1.83	2.47
MIN	1.55	1.62				1.30			1.80	1.71	1.71	1.61

NOTE.--NO GAGE-HEIGHT RECORD JAN. 25 TO FEB. 23, APR. 15 TO MAY 18.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.71	1.34	1.46	1.78	2.21	1.48	1.53	1.63			2.20	2.18
2	1.72	1.33	1.45	1.72	2.08	1.46	1.57	1.59			2.22	2.18
3	1.66	1.33	1.45	1.68	1.98	1.46	1.54	1.56			2.22	2.21
4	1.59	1.60	1.50	1.65	1.98	1.47	1.51	1.52			2.22	2.22
5	1.53	1.87	1.52	1.61	1.84	1.45	1.50	1.48			2.21	2.22
6	1.48	1.85	1.51	1.58	1.79	1.55	1.55	1.46		2.16	2.21	2.23
7	1.45	1.81	1.49	1.55	1.75	1.83	1.54	1.44		2.16	2.19	2.29
8	1.58	1.76	1.51	1.54	1.70	1.80	1.52	1.43		2.16	2.19	2.30
9	1.59	1.72	1.54	1.58	1.66	1.74	1.75			2.15	2.19	2.28
10	1.57	1.67	1.56	1.61	1.63	1.68	1.87			2.15	2.18	2.26
11	1.53	1.64	1.91	1.60	1.59	1.64	1.87			2.15	2.18	2.24
12	1.48	1.60	2.31	1.60	1.57	1.62	1.80			2.14	2.17	2.22
13	1.45	1.57	2.40	1.70	1.62	1.66	1.75			2.14	2.17	2.21
14	1.41	1.55	2.55	2.10	1.61	1.83	1.69			2.13	2.16	2.21
15	1.38	1.57	2.40	2.13		1.87	1.63			2.13	2.16	2.21
16	1.37	1.62	2.26	2.05		1.94	1.59			2.12	2.16	2.21
17	1.35	1.61	2.20	2.02		1.93	1.56			2.12	2.16	2.31
18	1.34	1.58	2.18	2.05		1.86	1.53	1.45		2.12	2.15	2.36
19	1.33	1.56	2.18	2.18		1.78	1.61	1.47		2.12	2.15	2.37
20	1.32	1.56	2.21	2.26		1.73	1.68	1.49		2.12	2.16	2.50
21	1.32	1.56	2.39	2.35		1.67	1.65	1.52		2.12	2.16	2.50
22	1.30	1.55	2.60	2.40		1.63	1.64	1.54		2.11	2.16	2.38
23	1.30	1.60	2.90	2.56		1.60	1.64	1.57		2.11	2.16	2.23
24	1.30	1.64	2.73	2.50		1.64	1.67	1.60		2.12	2.16	2.09
25	1.29	1.62	2.47	2.65	1.60	1.62	1.65	1.61		2.16	2.16	1.97
26	1.28	1.60	2.35	2.63	1.57	1.58	1.64	1.62		2.21	2.16	1.88
27	1.32	1.56	2.25	3.20	1.54	1.55	1.70			2.28	2.17	1.81
28	1.33	1.54	2.11	3.00	1.52	1.58	1.71			2.26	2.18	1.75
29	1.35	1.51	2.00	2.67	-----	1.58	1.69			2.24	2.18	1.69
30	1.35	1.48	1.91	2.39	-----	1.56	1.67		2.20	2.23	2.18	1.65
31	1.34	-----	1.84	2.30	-----	1.53	-----		-----	2.21	2.18	-----
MEAN	1.43	1.59	2.04	2.09		1.66	1.64				2.18	2.17
MAX	1.72	1.87	2.90	3.20		1.94	1.87				2.22	2.50
MIN	1.28	1.33	1.45	1.54		1.45	1.50				2.15	1.65

NOTE.--NO GAGE-HEIGHT RECORD MAY 27 TO JULY 5.

LAKE WASHINGTON BASIN

12127600 MCALEER CREEK AT LAKE FOREST PARK, WASH.

LOCATION.--Lat 47°45'07", long 122°16'48", in SE¼SW¼ sec.10, T.26 N., R.4 E., King County, on right bank 40 ft upstream from culvert on NE. Bothell Way in town of Lake Forest and 0.2 mile upstream from mouth.

DRAINAGE AREA.--7.80 sq mi.

PERIOD OF RECORD.--August 1963 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 22.50 ft above mean sea level (levels by municipality of Metropolitan Seattle).

AVERAGE DISCHARGE.--7 years, 14.7 cfs (25.59 inches per year, 10,650 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Jan. 5, 1966		129	3.56	July 26, 1966			
1967	Jan. 19, 1967		208	b3.83	Sept. 18, 1967		3.8	2.17
1968	Jan. 14, 1968		161	3.62	(c)		6.8	d2.30
1969	Dec. 3, 1968		178	3.71	July 22, 23, 26, 1969		5.1	e2.30
1970	Jan. 26, 1970		93	3.30	June 2, 19, 20, 21, 23, 24, 25, 1970		5.1	2.29

a Part of day.

b From high watermark in well.

c Oct. 1, 1967, July 30, Aug. 1, 2, 8, 9, 10, 11, 1968.

d Occurred July 30, 1968.

e Occurred June 16, Aug. 14, 29, 30, Sept. 1, 6, 1969.

Period of record: Maximum discharge, 208 cfs probably Jan. 19, 1967 (gage height, 3.83 ft, from high watermark in well), from rating curve extended above 70 cfs; no flow for part of July 26, 1966, result of unknown causes upstream.

REMARKS.--Records good. Many small diversions for domestic use. Minor regulation by Lake Ballinger.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	6.6	7.1	24	50	14	17	14	11	8.1	7.0	5.3	5.3		
2	6.8	7.4	20	54	13	15	13	9.8	9.0	9.8	5.3	5.5		
3	6.6	15	18	48	13	14	12	9.2	8.4	12	5.3	5.5		
4	7.8	15	18	43	14	13	12	9.0	8.1	9.8	5.5	5.5		
5	9.8	15	20	59	17	16	11	8.7	7.8	9.2	5.5	5.5		
6	11	12	22	73	23	14	11	13	7.6	8.4	5.5	5.7		
7	7.8	10	25	60	31	15	10	11	7.6	7.8	5.5	5.5		
8	7.8	9.7	20	59	29	34	9.4	10	7.6	7.3	5.7	5.5		
9	7.3	10	16	45	27	42	11	9.5	7.6	7.8	5.7	5.5		
10	7.0	11	19	38	23	32	9.9	9.0	7.6	7.0	5.7	5.7		
11	7.3	10	15	33	24	26	17	8.4	9.0	6.8	6.0	12		
12	7.6	9.3	13	34	23	23	11	8.7	9.5	6.4	5.7	7.3		
13	7.3	9.2	17	32	20	30	9.0	8.1	8.4	6.2	6.0	7.0		
14	9.8	9.7	14	28	19	29	9.2	9.5	7.8	6.2	5.7	6.8		
15	9.9	8.8	13	25	17	31	8.4	8.7	7.6	6.2	5.7	6.6		
16	8.3	8.6	12	22	17	26	8.1	8.4	7.3	8.7	6.0	6.6		
17	8.3	8.2	12	20	15	21	8.4	8.1	7.3	6.8	6.0	8.4		
18	8.5	10	11	19	14	27	8.7	8.1	7.3	6.6	5.7	9.0		
19	9.0	18	11	17	13	26	8.7	7.8	7.0	6.4	5.7	7.3		
20	8.5	23	12	16	13	25	8.7	7.8	7.0	6.0	5.5	7.0		
21	8.0	37	13	15	12	21	9.0	11	6.8	5.7	5.5	6.8		
22	7.7	42	12	14	13	18	9.0	11	6.8	5.7	5.7	7.6		
23	7.6	28	13	14	13	17	9.0	9.5	7.0	6.2	5.7	7.6		
24	7.3	25	21	13	12	15	9.0	9.0	7.0	7.3	5.7	7.3		
25	7.3	21	20	13	13	14	14	8.7	6.8	7.0	6.0	7.0		
26	7.2	22	18	12	12	13	14	9.2	6.6	5.4	6.0	7.3		
27	7.4	22	30	14	18	13	12	9.2	7.0	5.7	6.4	7.0		
28	7.4	17	70	13	17	12	13	8.4	7.6	5.7	5.7	7.0		
29	7.2	15	54	17	-----	12	15	8.1	6.8	5.5	5.7	7.3		
30	7.6	13	50	17	-----	13	12	8.1	6.8	5.5	5.7	7.0		
31	7.2	-----	42	15	-----	12	-----	8.7	-----	5.5	5.3	-----		
TOTAL	244.1	469.0	675	932	489	636	326.5	284.7	226.8	216.8	176.4	205.3		
MEAN	7.87	15.6	21.8	30.1	17.5	20.5	10.9	9.18	7.56	6.99	5.69	6.84		
MAX	11	42	70	73	31	42	17	13	9.5	12	6.4	12		
MIN	6.6	7.1	11	12	12	12	8.1	7.8	6.6	5.4	5.3	5.3		
CFSM	1.01	2.00	2.79	3.86	2.24	2.63	1.40	1.18	.97	.90	.73	.88		
IN.	1.16	2.24	3.22	4.44	2.33	3.03	1.56	1.36	1.08	1.03	.84	.98		
AC-FT	484	930	1,340	1,890	970	1,260	648	565	450	430	350	407		
CAL YR 1965	TOTAL 4,966.8		MEAN 13.6		MAX 71		MIN 6.0		CFSM 1.74		IN 23.69		AC-FT 9,850	
WTR YR 1966	TOTAL 4,881.6		MEAN 13.4		MAX 73		MIN 5.3		CFSM 1.72		IN 23.28		AC-FT 9,680	

12127600 MCALEER CREEK AT LAKE FOREST PARK, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	7.8	36	15	29	15	14	18	6.6	6.0	5.7	6.0
2	7.0	7.6	40	16	27	14	13	17	7.0	6.0	5.7	6.0
3	6.8	7.3	31	15	23	13	13	15	7.0	6.0	5.7	6.0
4	6.8	7.3	43	27	20	13	12	14	6.6	6.0	5.7	6.0
5	6.6	11	40	28	18	12	12	13	6.2	6.2	6.0	5.7
6	6.6	9.8	35	28	16	11	11	12	6.2	6.4	6.0	6.0
7	7.6	9.0	31	30	15	11	11	12	6.4	6.4	6.0	5.7
8	7.3	8.7	25	28	14	11	10	11	6.4	7.3	5.7	6.0
9	6.8	8.1	23	25	14	11	10	11	6.4	6.4	5.7	6.4
10	6.8	7.8	23	26	14	12	9.9	11	6.4	6.0	5.7	10
11	7.3	8.7	25	30	13	11	9.7	12	6.4	6.0	5.5	7.8
12	11	11	69	27	14	11	9.4	9.9	6.4	6.0	5.5	6.0
13	9.0	39	108	31	30	11	9.5	9.5	6.4	6.2	5.5	6.0
14	8.4	70	69	26	23	12	9.2	9.6	6.5	6.0	5.5	6.0
15	7.8	63	92	22	23	18	9.1	9.4	6.4	6.0	5.7	6.0
16	7.8	50	44	20	20	18	13	9.3	6.4	6.0	5.5	5.7
17	7.6	32	33	18	20	19	12	9.0	6.3	5.7	5.5	6.0
18	7.3	25	29	17	17	17	14	9.0	6.3	6.0	5.5	6.0
19	13	23	28	125	16	16	14	8.9	6.2	6.0	5.5	6.0
20	15	19	30	80	15	17	13	8.7	6.9	6.4	5.5	6.2
21	13	16	23	60	14	15	13	8.6	13	6.0	5.7	6.2
22	16	14	20	40	13	31	12	8.7	0.2	6.0	5.7	6.2
23	12	13	19	45	13	30	11	8.6	6.8	5.7	5.7	6.0
24	11	12	20	35	12	25	11	0.3	6.5	6.0	5.5	6.0
25	9.5	19	18	30	12	23	10	7.6	6.3	6.0	5.5	6.0
26	9.2	15	16	34	11	20	9.0	7.3	6.4	6.0	5.7	6.2
27	9.0	14	15	40	11	10	24	6.8	6.2	6.0	5.5	6.2
28	8.4	18	14	44	17	19	29	6.8	6.2	6.0	5.7	6.2
29	8.4	23	14	45	-----	18	22	6.6	6.1	5.7	6.0	6.8
30	8.1	36	13	68	-----	16	18	6.8	6.2	6.0	5.7	6.4
31	7.8	-----	14	27	-----	15	-----	6.6	-----	6.0	6.0	-----
TOTAL	276.2	605.1	1,000	1,062	484	503	389.6	312.0	201.3	188.1	175.8	107.1
MEAN	8.91	20.2	32.3	34.3	17.3	16.2	13.0	10.1	6.71	6.07	5.67	6.24
MAX	16	70	108	125	30	31	29	18	13	7.3	6.0	10
MIN	6.6	7.3	13	15	11	9.1	6.1	6.1	5.7	5.5	5.7	5.7
CFSM	1.14	2.59	4.14	4.40	2.22	2.08	1.67	1.29	0.84	0.78	0.73	0.80
IN.	1.32	2.89	4.77	5.06	2.31	2.40	1.84	1.49	0.96	0.90	0.84	0.89
AC-FT	948	1,200	1,980	2,110	960	998	773	619	399	373	349	371
CAL YR 1966	TOTAL 5,374.8	MEAN 14.7	MAX 108	MIN 5.3	CFSM 1.88	IN 25.63	AC-FT 10,440					
WTR YR 1967	TOTAL 5,384.2	MEAN 14.6	MAX 125	MIN 5.3	CFSM 1.90	IN 25.68	AC-FT 10,680					

NOTE.--NO GAGE-HEIGHT RECORD JAN. 15 TO FEB. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	20	22	18	17	16	13	27	9.8	7.3	12
2	12	14	45	18	27	16	15	13	38	9.4	7.3	11
3	15	13	40	18	42	15	14	12	26	9.1	7.6	11
4	12	12	35	17	40	20	14	14	22	9.0	7.6	10
5	13	11	33	17	33	23	16	14	20	8.7	7.6	9.8
6	12	11	29	16	29	19	14	13	17	8.4	7.6	9.5
7	13	12	32	16	26	18	14	13	15	8.4	7.6	9.5
8	11	13	26	15	23	17	13	12	13	8.2	7.6	9.5
9	11	15	24	34	21	16	13	11	11	8.2	7.3	9.2
10	11	15	23	25	19	16	14	9.9	10	8.8	7.3	9.0
11	11	14	21	23	17	19	16	9.6	9.5	8.1	7.3	11
12	9.8	13	21	27	16	29	16	9.5	9.1	8.8	7.6	9.2
13	13	12	18	38	16	24	15	8.5	8.8	8.1	7.0	9.2
14	10	13	17	79	15	25	15	8.4	8.7	8.6	14	9.5
15	9.7	14	16	80	15	30	18	8.1	8.6	8.0	8.4	9.5
16	9.3	14	16	63	15	46	24	8.1	8.6	7.0	7.8	9.0
17	9.1	13	15	50	16	37	20	0.0	8.5	7.8	7.8	13
18	11	12	14	47	25	32	22	7.9	8.4	7.8	7.8	15
19	11	12	13	52	19	28	21	8.8	8.5	10	7.6	13
20	11	11	13	93	10	24	20	13	8.2	9.2	7.6	12
21	19	11	13	44	19	22	18	8.6	0.1	9.2	7.6	11
22	24	11	24	36	22	19	17	8.2	0.4	9.0	8.1	10
23	21	11	21	31	33	21	18	8.8	8.1	6.7	20	10
24	23	12	26	28	30	19	16	8.2	7.0	8.4	16	9.5
25	20	11	58	24	27	24	16	8.4	8.1	8.4	20	9.5
26	17	11	91	22	24	19	15	8.3	9.2	8.1	25	9.5
27	19	11	44	19	22	19	14	8.8	13	0.1	25	9.0
28	16	14	37	18	19	18	13	0.4	17	8.1	19	9.0
29	15	18	31	17	18	19	13	9.6	12	7.8	16	9.0
30	16	19	26	16	-----	17	14	9.4	11	7.6	13	9.2
31	16	-----	23	19	-----	17	-----	10	-----	7.6	11	-----
TOTAL	431.9	388	825	1,004	664	685	484	311.5	388.6	262.4	339.2	306.6
MEAN	13.9	12.9	26.6	32.4	22.9	22.1	16.1	10.0	13.0	8.46	10.9	10.2
MAX	24	19	58	80	42	46	24	14	38	10	25	15
MIN	9.1	11	13	15	15	15	13	7.9	7.8	7.6	7.3	9.0
CFSM	1.78	1.65	3.41	4.15	2.94	2.83	2.06	1.28	1.67	1.08	1.40	1.31
IN.	2.06	1.85	3.93	4.79	3.17	3.27	2.31	1.49	1.85	1.25	1.62	1.46
AC-FT	897	770	1,640	1,990	1,320	1,360	960	618	771	520	673	680
CAL YR 1967	TOTAL 9,147.8	MEAN 14.1	MAX 125	MIN 5.3	CFSM 1.81	IN 24.55	AC-FT 10,210					
WTR YR 1968	TOTAL 6,090.2	MEAN 16.6	MAX 80	MIN 7.3	CFSM 2.13	IN 29.05	AC-FT 12,080					

NOTE.--NO GAGE-HEIGHT RECORD NOV. 4 TO DEC. 4.

12127600 MCALEER CREEK AT LAKE FOREST PARK, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	17	30	21	16	13	14	19	12	9.0	6.2	5.9
2	9.0	21	27	25	15	12	21	21	11	9.8	6.2	6.4
3	8.7	19	50	32	22	12	26	26	10	9.4	5.9	8.4
4	14	17	41	41	29	11	30	21	9.8	9.0	6.2	6.5
5	10	15	36	47	27	13	25	18	9.4	8.6	6.2	6.3
6	11	13	29	50	25	9.8	21	16	9.4	8.2	6.2	6.3
7	9.5	12	39	49	28	9.0	18	15	9.0	8.2	6.2	7.9
8	9.2	16	52	40	70	9.0	17	13	8.6	7.6	6.1	7.4
9	9.2	20	52	37	70	8.6	16	9.4	8.2	7.6	6.2	6.9
10	9.0	17	62	37	69	8.6	15	9.4	8.2	7.6	6.3	6.8
11	9.5	40	53	36	71	8.2	14	9.0	8.2	7.6	6.4	6.9
12	12	34	44	32	59	8.2	13	8.6	7.6	7.6	6.5	7.1
13	11	29	37	35	48	8.2	12	8.2	7.3	7.6	6.4	8.6
14	15	25	36	35	37	8.2	9.4	8.2	7.3	8.6	6.3	6.9
15	18	21	48	34	30	8.2	9.4	7.9	7.0	8.6	6.4	6.9
16	16	20	43	33	30	13	9.8	7.9	6.8	7.9	6.2	7.3
17	23	18	37	30	25	22	14	7.6	7.0	7.3	6.2	28
18	19	16	43	26	22	20	11	7.6	6.8	6.5	6.5	34
19	19	15	34	24	21	18	13	7.6	7.0	6.5	6.4	35
20	17	16	29	23	18	16	9.4	7.6	7.0	6.5	6.5	29
21	16	18	24	22	17	14	9.0	7.3	7.3	6.2	6.4	23
22	17	17	25	20	16	14	9.0	7.0	7.9	5.9	6.3	33
23	16	16	47	17	16	14	16	7.0	16	5.6	6.4	30
24	15	16	61	16	15	13	13	9.4	17	5.9	6.2	23
25	14	16	50	15	15	12	17	8.2	26	6.2	6.0	19
26	13	15	43	15	14	12	15	9.4	33	5.9	6.3	17
27	13	14	36	15	13	11	13	11	31	7.0	6.3	16
28	12	13	29	14	13	11	18	9.4	23	7.0	6.2	15
29	14	44	24	14	-----	11	18	22	20	6.2	5.9	20
30	26	33	20	13	-----	11	16	14	14	6.2	5.9	22
31	20	-----	20	14	-----	11	-----	13	-----	6.2	5.9	-----
TOTAL	434.1	603	1,203	862	851	370.0	462.0	365.7	362.8	228.0	193.3	456.5
MEAN	14.0	20.1	38.8	27.8	30.4	11.9	15.4	11.8	12.1	7.35	6.24	15.2
MAX	26	44	62	50	71	22	30	26	33	9.8	6.5	35
MIN	8.7	12	20	13	13	8.2	9.0	7.0	6.8	5.6	5.9	5.9
CFSM	1.79	2.58	4.97	3.56	3.90	1.53	1.97	1.51	1.35	.94	.80	1.95
IN.	2.07	2.88	5.74	4.11	4.06	1.76	2.20	1.74	1.73	1.09	.92	2.18
AC-FT	861	1,200	2,390	1,710	1,690	734	916	725	720	452	383	905
CAL YR 1968	TOTAL 6,685.4		MEAN 18.3		MAX 80	MIN 7.3	CFSM 2.35	IN 31.88	AC-FT 13,260			
WTR YR 1969	TOTAL 6,391.4		MEAN 17.5		MAX 71	MIN 5.6	CFSM 2.24	IN 30.48	AC-FT 12,680			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	10	12	18	21	12	16	13	5.9	7.3	7.0	6.8
2	19	10	11	17	19	12	14	13	5.6	7.0	8.2	7.0
3	16	11	12	16	23	12	12	12	5.6	7.0	7.0	8.2
4	15	13	13	15	20	11	12	12	6.2	6.8	6.8	7.6
5	14	19	12	14	18	11	12	11	6.2	6.5	6.5	7.3
6	13	19	12	14	18	24	14	11	5.9	6.5	6.8	8.6
7	14	17	12	14	17	18	12	10	6.2	6.5	6.8	9.4
8	18	17	14	14	15	16	12	11	6.2	6.8	6.8	9.4
9	14	16	13	16	14	15	26	10	6.5	6.5	6.8	8.2
10	13	15	13	14	14	14	19	11	6.2	6.2	6.8	7.6
11	12	14	36	14	14	13	18	10	6.2	6.2	6.5	7.3
12	11	13	35	13	13	14	16	10	6.2	6.2	6.5	6.8
13	11	13	40	26	15	17	15	10	6.2	6.2	7.3	6.2
14	10	12	38	30	14	24	14	9.4	6.2	6.2	7.0	6.2
15	10	15	31	25	20	18	13	9.0	6.5	6.2	7.0	6.8
16	9.8	13	30	23	37	22	12	7.0	6.2	6.2	7.0	6.8
17	9.8	13	26	24	28	19	12	6.8	5.9	6.2	6.8	13
18	10	12	28	25	23	17	13	6.9	5.9	6.2	6.8	9.8
19	10	12	28	35	20	16	16	7.0	6.2	6.2	6.5	7.3
20	9.8	14	28	31	18	15	15	7.0	5.9	6.5	6.5	20
21	9.8	12	41	37	17	14	13	7.0	5.9	6.8	6.5	16
22	9.8	12	51	39	16	13	15	7.0	5.9	6.5	6.8	16
23	9.8	17	37	15	14	13	14	6.8	5.9	6.5	6.2	17
24	9.8	14	41	40	14	13	15	6.8	5.9	6.5	6.5	15
25	9.8	13	35	42	13	13	13	6.5	5.9	8.6	6.5	13
26	9.8	13	33	53	13	12	13	6.5	6.2	8.6	6.2	12
27	12	12	29	58	12	12	17	6.8	6.8	11	6.5	11
28	15	12	25	44	12	13	14	6.5	8.6	6.8	6.2	17
29	11	12	22	34	-----	12	15	11	8.2	7.9	7.0	10
30	11	12	20	21	-----	12	14	6.5	7.3	7.3	6.8	9.5
31	11	-----	19	25	-----	11	-----	6.2	-----	7.0	6.8	-----
TOTAL	373.2	425	810	828	493	459	435	274.7	187.2	214.7	210.0	300.8
MEAN	12.0	14.2	26.1	26.7	17.6	14.8	14.5	8.86	6.24	6.93	6.77	10.0
MAX	19	31	51	58	37	24	26	13	8.2	11	8.2	20
MIN	9.8	10	11	13	12	11	12	6.2	5.6	6.2	6.2	6.2
CFSM	1.54	1.82	3.35	3.42	2.26	1.90	1.86	1.14	.80	.89	.87	1.28
IN.	1.78	2.03	3.86	3.95	2.35	2.19	2.07	1.31	.89	1.02	1.00	1.43
AC-FT	740	863	1,610	1,640	978	910	863	545	371	426	417	597
CAL YR 1969	TOTAL 5,759.5		MEAN 15.8		MAX 71	MIN 5.6	CFSM 2.03	IN 27.47	AC-FT 11,420			
WTR YR 1970	TOTAL 5,010.6		MEAN 13.7		MAX 58	MIN 5.6	CFSM 1.76	IN 23.90	AC-FT 9,940			

12128000 THORNTON CREEK NEAR SEATTLE, WASH.

LOCATION.--Lat 47°41'45", long 122°16'30", in NW¼SE¼ sec.34, T.26 N., R.4 E., King County, on left bank at highway crossing, 0.2 mile upstream from mouth and 1.5 miles north of Seattle city limits.

DRAINAGE AREA.--12.1 sq mi.

PERIOD OF RECORD.--June 1945 to September 1946, May 1961 to September 1968 (discontinued).

GAGE.--Water-stage recorder. Concrete control since June 25, 1962. Altitude of gage is 40 ft (from topographic map). June 1945 to September 1946 at present site at datum 0.09 ft higher.

AVERAGE DISCHARGE.--7 years, 11.8 cfs (8,540 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-68 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Jan. 5, 1966		239	4.08	Oct. 25, 1965		.98	1.05
1967	Jan. 19, 1967		261	4.28	Aug. 14, 16, 1967		2.2	al.22
1968	Aug. 23, 1968		113	2.83	Nov. 27, 1967		.78	1.05

a Occurred Aug. 16, 1967.

Period of record: Maximum discharge, 261 cfs Jan. 19, 1967 (gage height, 4.28 ft), from rating curve extended above 56 cfs on basis of computation of flow through culvert at gage height 4.08 ft; minimum, 0.78 cfs Nov. 27, 1967.

REMARKS.--Records good. Flow partly regulated by supplemental inflow from city of Seattle water supply. Many small diversions for irrigation.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	6.7	29	34	12	16	15	9.9	8.5	7.7	6.7	4.4
2	6.5	7.5	14	28	11	13	11	9.6	10	17	6.7	5.3
3	6.3	26	16	28	11	11	10	9.3	9.9	18	6.5	6.3
4	10	20	16	21	14	10	9.6	9.3	10	11	6.5	6.3
5	10	16	21	63	20	17	9.3	9.0	9.3	11	6.5	6.1
6	11	9.0	25	47	30	13	9.3	20	8.0	10	6.9	5.3
7	6.9	7.7	19	29	40	14	10	10	8.0	9.6	7.1	5.3
8	6.5	8.8	12	31	30	43	10	9.9	8.0	9.6	6.5	5.3
9	6.1	9.0	10	20	20	34	15	9.6	8.0	9.9	6.3	5.2
10	6.1	13	21	20	15	19	13	9.3	8.0	10	6.3	6.7
11	6.1	9.3	11	20	20	15	29	8.8	8.0	10	6.1	19
12	8.2	7.7	9.9	30	19	16	18	9.3	8.1	9.0	6.1	8.2
13	6.7	8.8	13	28	15	28	13	9.0	7.0	8.5	7.1	7.3
14	14	11	10	20	17	26	15	11	6.9	9.0	6.9	7.1
15	9.6	7.3	9.3	15	13	26	12	9.9	6.5	8.5	6.1	6.9
16	7.3	7.3	8.8	13	12	16	11	9.6	6.3	16	5.6	6.9
17	7.5	7.1	8.8	13	12	14	11	9.0	6.3	9.9	5.5	13
18	10	12	8.8	13	10	27	10	8.7	7.1	8.2	5.5	10
19	9.7	26	8.2	12	10	22	9.6	8.2	6.9	8.2	5.2	6.9
20	9.1	27	10	12	11	18	11	8.8	5.9	7.7	6.1	6.7
21	7.3	22	9.9	11	9.6	13	10	11	6.1	8.2	6.1	6.5
22	6.7	16	8.8	11	11	13	10	10	6.3	7.7	5.5	8.9
23	6.7	10	11	12	14	12	9.9	9.0	7.7	8.2	5.3	8.8
24	6.9	13	24	11	10	11	9.9	8.2	7.1	10	5.3	6.9
25	6.4	11	16	10	13	11	20	8.2	7.7	8.2	5.5	6.5
26	7.1	20	15	10	12	10	14	10	7.7	7.5	5.9	6.7
27	10	21	52	13	25	10	11	9.9	7.7	7.5	8.5	5.5
28	9.0	12	50	12	20	10	12	9.6	9.0	7.3	6.5	5.9
29	8.8	9.9	42	18	-----	9.9	13	9.9	6.9	6.9	5.5	5.5
30	9.9	9.6	30	16	-----	14	10	9.6	6.5	7.7	5.5	5.3
31	6.9	-----	19	13	-----	10	-----	9.0	-----	7.7	4.7	-----
TOTAL	249.6	391.7	558.5	634	456.6	521.9	371.6	302.6	229.4	295.7	190.5	214.7
MEAN	8.05	13.1	18.0	20.5	16.3	16.8	12.4	9.76	7.65	9.54	6.15	7.16
MAX	14	27	52	63	40	43	29	20	10	18	8.5	19
MIN	6.1	6.7	8.2	10	9.6	9.9	9.3	8.2	5.9	6.9	4.7	4.4
AC-FT	495	777	1,110	1,260	906	1,040	737	600	455	587	378	426

CAL YR 1965 TOTAL 4,206.8 MEAN 11.5 MAX 65 MIN 4.5 AC-FT 8,340

WTR YR 1966 TOTAL 4,416.8 MEAN 12.1 MAX 63 MIN 4.4 AC-FT 8,760

12128000 THORNTON CREEK NEAR SEATTLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	6.7	28	17	25	13	9.0	10	6.3	5.9	4.4	4.8
2	5.6	6.9	28	19	18	12	9.3	9.6	8.0	5.8	4.5	5.2
3	5.6	6.7	18	16	16	10	8.8	9.0	7.7	5.0	4.2	4.8
4	5.5	8.5	29	32	10.5	10	9.6	8.6	6.9	5.3	4.4	4.8
5	5.5	15	27	29	14	9.9	9.6	8.5	5.2	5.2	5.2	4.2
6	5.5	12	22	28	13	9.9	8.8	8.2	5.2	5.2	5.3	4.4
7	11	9.6	23	26	13	10	9.0	8.0	5.3	5.2	4.5	4.2
8	8.5	8.8	19	22	13	9.9	8.8	8.5	5.2	7.1	4.2	4.2
9	6.1	11	18	17	14	9.9	9.6	8.2	5.3	6.1	4.4	6.1
10	6.1	11	18	23	22	13	12	9.0	8.5	5.9	5.2	13
11	6.2	12	24	21	12	10	8.8	13	5.6	4.8	4.5	10
12	16	16	59	18	16	9.6	8.8	9.3	5.0	4.8	5.3	6.3
13	7.7	41	62	27	3.8	12	9.9	8.5	5.0	5.2	5.0	5.7
14	6.7	42	32	18	20	12	8.2	8.0	5.0	5.2	4.2	5.2
15	6.1	24	30	18	21	24	8.8	8.0	4.8	5.6	4.0	5.0
16	6.3	24	26	14	14	20	20	7.7	4.8	5.6	4.0	5.0
17	6.7	15	20	14	17	21	11	7.3	5.6	5.0	4.0	5.0
18	13.3	23	15	13	14	20	6.9	5.6	5.0	3.9	4.8	5.0
19	19	16	26	83	12	12	15	7.1	4.7	5.0	4.8	4.8
20	17	14	28	42	11	18	11	6.9	7.2	5.5	5.0	5.0
21	11	11	19	31	11	12	12	6.7	19	5.0	4.0	5.0
22	14	10	16	24	10	37	9.6	6.9	12	5.2	3.9	5.0
23	8.8	11	20	32	10	26	9.0	6.9	7.5	5.0	3.9	5.0
24	7.7	9.3	23	24	10	17	9.3	7.5	7.1	4.4	4.2	5.0
25	7.1	19	18	25	10	15	9.6	7.3	6.7	4.4	4.0	5.0
26	7.7	12	15	30	10	12	9.0	6.9	5.6	4.5	4.8	5.0
27	6.7	13	14	38	9.6	11	36	6.9	5.5	4.5	4.8	5.0
28	6.7	18	15	42	22	16	34	6.9	5.5	4.4	4.2	5.0
29	8.4	23	14	37	-----	12	15	6.7	5.5	5.2	4.0	6.8
30	6.7	38	13	26	-----	10	12	7.3	5.3	5.2	4.5	5.5
31	6.5	-----	16	21	-----	9.6	-----	6.7	-----	4.4	4.2	-----
TOTAL	253.5	477.5	748	828	421.6	436.8	362.5	246.7	194.0	159.9	136.7	164.8
MEAN	8.18	15.9	24.1	26.7	15.1	14.1	12.1	7.96	6.47	5.16	4.41	5.49
MAX	19	42	32	83	38	37	34	13	19	7.1	5.3	13
MIN	5.5	6.7	13	14	9.6	9.6	8.2	6.7	4.7	4.4	3.9	4.2
AC-FT	503	947	1,480	1,640	836	866	719	489	385	317	271	327
CAL YR 1966	TOTAL	4,469.0	MEAN	12.9	MAX	63	MIN	4.4	AC-FT	9,310		
WTR YR 1967	TOTAL	4,430.0	MEAN	12.1	MAX	83	MIN	3.9	AC-FT	8,790		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	8.0	18	11	15	10	9.6	7.5	40	5.6	3.6	10
2	11	6.3	47	9.6	31	9.9	8.7	7.3	33	4.7	3.6	7.1
3	20	5.6	35	8.8	41	9.6	8.2	6.9	13	4.7	4.5	6.5
4	9.9	6.3	28	12	30	21	8.2	7.6	9.9	3.9	4.7	7.1
5	9.3	5.1	23	10	17	28	17	8.6	8.5	3.6	3.6	6.3
6	7.5	3.8	14	8.8	16	14	10	6.9	6.7	4.4	3.5	6.1
7	8.8	5.2	24	11	13	14	8.8	6.3	6.1	4.4	3.8	5.9
8	6.5	11	15	9.3	12	12	8.2	6.3	6.5	3.5	3.5	5.9
9	6.3	10	13	33	11	10	8.0	5.9	6.5	3.0	3.6	5.6
10	9.6	12	15	17	11	9.9	11	5.6	5.2	3.6	4.4	5.6
11	9.3	7.3	17	12	10	20	15	5.9	5.2	5.5	4.4	16
12	6.3	7.3	17	40	10	33	12	5.6	4.7	5.9	3.3	7.7
13	13	6.9	11	44	10	17	8.5	5.5	4.8	4.8	4.5	7.5
14	6.5	11	9.3	43	9.9	24	11	7.9	5.3	7.5	28	11
15	5.0	11	8.8	39	9.6	31	14	5.6	5.3	3.9	7.7	7.5
16	5.9	8.2	16	26	9.3	40	23	5.6	5.3	3.8	6.5	7.1
17	4.2	7.3	12	20	17	24	11	5.5	4.7	3.8	6.5	22
18	7.7	9.6	24	29	17	17	17	5.2	4.5	3.8	6.1	21
19	6.1	6.9	8.5	35	23	14	14	9.0	6.4	9.8	6.3	9.3
20	7.5	6.5	8.0	37	16	12	11	18	5.0	6.5	5.9	7.5
21	21	6.9	16	25	22	11	9.6	7.1	4.8	5.3	5.0	7.1
22	21	6.9	34	20	24	11	8.5	5.2	6.3	4.8	6.8	6.5
23	9.9	6.5	19	18	35	16	13	6.3	5.3	4.0	29	7.5
24	13	8.0	25	18	21	13	9.0	4.8	4.4	4.0	12	6.9
25	9.3	6.3	45	14	16	25	8.2	6.3	4.2	3.6	24	6.3
26	7.5	4.8	29	12	14	13	7.5	7.3	8.5	3.8	22	6.3
27	1	3.6	20	10	17	18	7.3	7.1	20	4.4	22	5.9
28	8.8	11	17	9.9	11	14	7.1	4.7	21	4.5	11	5.9
29	7.5	14	13	9.9	11	14	6.9	7.7	8.0	3.3	8.2	5.6
30	7.7	17	11	13	-----	11	11	8.1	7.1	3.3	7.3	5.6
31	12	-----	11	16	-----	10	-----	6.9	-----	3.3	6.9	-----
TOTAL	314.1	238.9	589.2	596.3	506.8	526.4	322.3	214.2	140.7	272.2	246.3	
MEAN	10.1	7.96	19.0	19.2	16.8	17.0	10.7	6.91	9.21	4.94	8.78	8.21
MAX	21	17	47	44	41	40	23	18	40	9.8	29	22
MIN	4.2	3.6	8.0	8.8	9.3	9.6	6.9	4.7	4.2	3.0	3.3	5.6
AC-FT	623	474	1,170	1,180	1,010	1,040	639	425	548	279	540	489
CAL YR 1967	TOTAL	4,093.2	MEAN	11.2	MAX	83	MIN	3.6	AC-FT	8,120		
WTR YR 1968	TOTAL	4,243.6	MEAN	11.6	MAX	47	MIN	3.0	AC-FT	8,420		

12133000 SOUTH FORK SKYKOMISH RIVER NEAR INDEX, WASH.

LOCATION.--Lat 47°48'20", long 121°32'44", in NE¼ sec.29, T.27 N., R.10 E., Snohomish County, on right bank 600 ft upstream from Sunset Falls, 1.1 miles southeast of Index, 2.0 miles upstream from confluence with North Fork, and at mile 51.6.

DRAINAGE AREA.--355 sq mi.

PERIOD OF RECORD.--October 1902 to September 1905, April 1911 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 574.80 ft above mean sea level. See WSP 1932 for history of changes prior to Mar. 15, 1934.

AVERAGE DISCHARGE.--62 years, 2,416 cfs (92.42 inches per year, 1,750,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (12,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1800	*12,200	11.83	Dec. 24, 1967	1045	22,100	15.58	Dec. 3, 1968	1830	17,500	14.01
Dec. 13, 1966	1200	*16,800	13.70	Jan. 20, 1968	2030	*50,100	17.76	Jan. 5, 1969	0600	424,000	16.10
Oct. 27, 1967	2115	27,400	17.07	Feb. 19, 1968	1200	14,200	12.68	May 30, 1969	0500	13,000	12.22
Oct. 30, 1967	1500	13,200	12.30	Feb. 24, 1968	0015	12,000	11.74	June 3, 1970	2300	*10,800	11.14
				June 2, 1968	0700	20,000	14.88				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 17, 1966	342	al.50	1969	Sept. 12, 1969	439	1.43
1967	Sept. 28, 1967	299	1.33	1970	Sept. 3, 1970	373	1.31
1968	Aug. 14, 1968	532	1.72				

a Occurred Sept. 30, 1966.

Period of record: Maximum discharge, 55,000 cfs Dec. 12, 1921 (gage height, 22.8 ft, from high watermarks, site then in use), from rating curve extended above 22,500 cfs on basis of slope-area measurement at gage height 22.12 ft; minimum, 165 cfs Nov. 29, 1952; minimum gage height, 1.27 ft Oct. 12, 13, 1963.

Flood in 1897 reached a stage of about 5 ft higher than that of Dec. 12, 1921 (discharge, about 70,000 cfs).

REMARKS.--Records excellent. Small diversions for domestic use. No regulation.

REVISIONS (WATER YEARS).--WSP 512: 1903-5, 1911-14. WSP 572: Drainage area. WSP 792: 1934. WSP 1286: 1903-5(M), 1912(M), 1914-29(M), 1931-34(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	430	785	1,610	800	1,280	1,100	4,910	2,070	2,750	2,780	1,200	470
2	418	1,120	3,580	800	1,160	956	4,730	2,480	2,820	2,940	1,150	455
3	414	1,510	2,770	812	1,090	938	4,560	4,110	2,790	3,300	1,120	446
4	414	4,710	5,300	780	1,030	812	3,220	5,680	2,600	3,500	1,120	434
5	796	4,870	3,620	806	1,040	785	3,250	7,440	2,550	3,380	1,050	430
6	3,610	3,170	3,260	1,770	1,060	775	3,570	10,600	3,690	3,150	974	434
7	2,120	2,290	3,970	3,040	1,120	770	4,220	8,520	5,310	2,960	932	418
8	1,390	1,960	3,600	3,060	938	750	4,150	7,150	3,008	3,008	926	402
9	1,410	1,890	2,710	2,400	1,140	2,600	4,600	7,330	5,020	3,030	878	394
10	1,150	1,650	2,250	1,900	1,080	2,500	4,790	5,980	5,260	2,900	848	386
11	956	1,740	1,900	2,080	1,180	1,880	6,170	4,500	5,420	2,820	806	386
12	860	1,560	1,680	2,870	1,220	1,600	4,910	4,160	5,170	2,510	750	382
13	602	1,400	1,510	6,370	1,070	2,000	3,590	3,820	4,430	2,570	790	366
14	1,000	1,430	1,370	6,030	1,030	2,670	3,080	3,210	4,780	2,700	986	366
15	1,900	2,440	1,240	3,840	920	2,810	3,070	2,840	5,220	2,620	812	366
16	1,490	3,070	1,170	2,680	860	2,410	3,240	3,000	5,950	2,350	755	358
17	1,460	2,190	1,100	2,130	824	1,930	3,080	2,630	5,680	2,160	710	346
18	1,950	1,830	1,060	1,820	806	1,690	2,710	2,440	4,500	1,990	665	406
19	2,120	2,290	1,080	1,570	800	1,580	2,430	2,690	4,530	1,930	635	426
20	1,770	2,280	1,120	1,420	980	1,460	2,260	3,390	3,880	1,750	610	376
21	1,650	3,510	1,260	1,300	1,120	1,320	2,130	4,570	3,270	1,620	590	374
22	1,440	4,070	1,100	1,210	1,170	1,180	2,030	4,430	3,040	1,590	570	382
23	1,270	2,830	1,020	1,170	1,230	1,140	1,990	3,560	2,940	1,560	560	430
24	1,130	2,210	980	1,090	1,190	1,140	2,080	3,340	3,050	1,530	555	410
25	1,020	1,970	914	1,050	1,140	1,210	2,430	4,380	2,610	1,630	555	378
26	920	1,790	866	980	1,120	1,520	2,410	6,060	2,750	1,440	555	366
27	854	1,770	878	980	1,240	2,010	2,100	5,480	3,040	1,360	620	366
28	1,620	1,620	920	988	1,180	2,470	1,980	4,150	4,920	1,350	735	360
29	812	1,480	908	1,150	-----	3,420	1,970	3,950	3,760	1,320	590	362
30	992	1,360	836	1,290	-----	5,150	2,060	3,940	2,910	1,290	545	354
31	872	-----	800	1,410	-----	5,940	-----	3,200	-----	1,250	510	-----
TOTAL	37,974	66,795	56,382	59,606	30,190	58,638	97,250	141,100	120,030	70,340	24,102	11,831
MEAN	1,225	2,227	1,819	1,923	1,078	1,892	3,242	4,552	4,001	2,269	777	394
MAX	3,610	4,870	5,300	6,370	1,280	5,940	6,170	10,600	5,950	3,500	1,200	470
MIN	414	785	800	780	800	770	1,970	2,070	2,550	1,250	510	346
CFSM	3.45	6.27	5.12	5.42	3.04	5.33	9.13	12.8	11.3	6.39	2.19	1.11
IN.	3.98	7.00	5.91	6.25	3.16	6.14	10.19	14.79	12.58	7.37	2.53	1.24
AC-FT	75,320	132,500	111,800	118,200	59,880	116,300	192,900	279,900	238,100	139,500	47,810	23,470
CAL YR 1965	TOTAL 841,727	MEAN 2,306	MAX 13,200	MIN 406	CFSM 6.50	IN 88.20	AC-FT 1,670,000					
WTR YR 1966	TOTAL 774,238	MEAN 2,121	MAX 10,400	MIN 346	CFSM 5.97	IN 81.13	AC-FT 1,536,000					

SNOHOMISH RIVER BASIN

12133000 SOUTH FORK SKYKOMISH RIVER NEAR INDEX, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	347	1,300	6,050	3,670	2,780	1,920	1,170	1,200	4,490	4,180	1,090	455
2	486	1,200	4,250	2,910	2,600	1,640	1,160	1,270	6,930	4,480	1,030	650
3	434	1,050	3,230	5,210	3,170	1,490	1,210	1,430	6,720	4,920	970	526
4	378	990	2,790	3,920	6,520	1,320	1,350	1,760	5,860	4,560	935	466
5	368	1,020	2,420	2,910	5,180	1,230	1,340	1,970	6,400	3,960	905	455
6	350	1,150	2,160	2,290	3,680	1,200	1,280	2,490	7,120	3,490	875	430
7	402	1,020	1,980	1,990	2,930	1,140	1,320	3,450	6,620	3,080	855	416
8	875	920	1,750	2,440	2,440	1,360	1,410	4,050	5,330	2,940	812	413
9	650	1,100	1,950	2,910	2,220	1,730	1,420	4,930	4,610	2,580	780	396
10	494	1,450	1,610	2,750	2,410	1,440	1,340	3,640	4,390	2,390	790	486
11	448	1,200	2,540	5,040	2,290	1,260	1,270	3,030	4,290	2,560	776	870
12	441	1,400	4,760	3,910	2,320	1,170	1,350	2,620	4,390	2,960	762	695
13	452	1,450	13,700	4,920	4,030	1,080	1,380	2,350	5,090	2,890	731	530
14	420	2,400	8,300	2,830	2,830	1,030	1,280	2,340	6,210	2,620	654	455
15	392	2,650	5,330	8,280	2,290	1,090	1,200	2,750	7,090	2,340	677	420
16	374	2,300	7,640	5,820	2,070	1,350	1,140	4,330	7,630	2,230	659	420
17	506	2,000	8,610	3,910	2,400	1,700	1,140	5,780	8,340	2,150	622	406
18	484	1,730	8,520	3,000	2,990	1,450	1,140	5,640	8,260	1,980	606	396
19	801	1,650	8,250	6,220	2,260	1,900	1,170	5,900	8,500	1,790	582	388
20	3,150	1,740	8,560	6,260	1,920	1,460	1,170	6,880	9,110	1,700	562	396
21	1,620	1,750	5,400	4,060	1,730	1,550	1,230	8,440	8,000	1,720	570	392
22	2,170	1,540	4,000	2,980	1,570	2,310	1,200	8,060	6,590	1,630	570	382
23	7,630	1,370	3,160	2,390	1,460	4,290	1,200	6,890	5,760	1,600	534	317
24	5,440	1,270	2,770	2,030	1,410	3,250	1,230	5,240	5,860	1,620	506	320
25	3,100	4,600	2,370	1,790	1,410	2,490	1,300	4,260	6,120	1,550	486	320
26	2,640	3,710	2,080	1,640	1,380	2,080	1,300	4,030	6,180	1,490	455	317
27	2,920	2,790	1,850	2,800	1,310	1,790	1,320	4,100	5,900	1,410	455	320
28	2,010	2,970	1,730	6,240	1,560	1,600	1,330	4,540	5,000	1,320	448	317
29	2,100	3,160	2,560	5,310	-----	1,470	1,260	5,570	5,040	1,230	455	320
30	2,150	6,060	2,260	4,710	-----	1,350	1,220	4,800	4,570	1,160	455	416
31	1,950	-----	2,160	3,400	-----	1,240	-----	3,950	-----	1,120	455	-----
TOTAL	45,584	58,940	134,300	121,540	71,170	51,180	37,830	126,910	186,310	75,850	21,062	13,120
MEAN	1,470	1,965	4,332	3,921	2,342	1,651	1,261	4,094	6,210	2,447	679	437
MAX	7,630	6,060	13,700	8,280	6,520	4,290	4,420	8,440	9,110	4,920	1,090	870
MIN	347	920	1,950	1,640	1,310	1,030	1,140	1,200	4,290	1,120	448	317
CFSM	4.14	5.54	12.2	11.0	7.16	4.65	3.55	11.5	17.5	6.89	1.91	1.23
IN-	4.78	6.18	14.07	12.74	7.46	5.36	3.96	13.30	19.52	7.95	2.21	1.37
AC-FT	90,420	116,900	266,400	241,100	141,200	101,500	75,040	251,700	369,500	150,400	41,780	26,020

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	826	6,550	1,340	2,770	1,850	3,160	2,110	4,070	7,320	2,360	832	910		
2	1,310	4,410	1,550	2,310	2,250	3,180	2,130	3,090	16,400	2,540	800	858		
3	1,580	3,370	1,650	2,010	4,320	3,110	1,980	2,890	8,310	2,720	787	782		
4	1,780	2,670	1,570	1,820	8,360	3,520	1,870	3,290	5,860	2,810	769	727		
5	1,090	2,210	1,430	1,680	4,680	4,390	1,960	3,100	5,200	2,730	747	691		
6	1,240	1,910	1,270	1,500	3,340	3,840	1,940	2,660	4,720	2,510	711	663		
7	2,360	1,790	1,170	1,420	2,770	3,100	1,860	2,330	3,980	2,330	663	655		
8	1,900	1,760	1,090	1,360	2,370	2,610	1,700	2,240	3,630	2,110	631	623		
9	1,190	2,470	1,680	1,380	2,170	2,270	1,630	2,490	3,470	2,030	607	611		
10	998	7,520	4,740	1,270	2,000	2,040	1,730	2,260	3,490	1,830	603	584		
11	3,330	4,910	6,600	1,170	1,880	1,880	2,160	4,070	3,460	1,700	592	578		
12	4,540	3,280	3,460	1,110	1,820	1,780	1,940	4,160	3,050	1,980	560	578		
13	4,380	2,780	2,480	1,390	1,720	1,710	1,710	3,290	2,990	1,730	548	553		
14	6,140	2,860	2,020	2,050	1,610	1,640	2,000	2,840	2,780	1,700	611	761		
15	3,300	3,290	1,790	2,980	1,480	1,870	2,390	2,660	2,660	1,800	868	3,920		
16	2,220	3,370	1,620	2,670	1,400	2,080	2,020	2,720	2,710	1,570	727	5,660		
17	1,740	2,600	1,430	2,040	1,390	1,980	1,790	3,290	2,900	1,370	655	7,620		
18	1,670	2,350	1,290	1,870	5,270	1,740	1,710	4,280	3,180	1,270	743	6,420		
19	1,990	2,110	1,180	10,300	13,600	1,580	1,670	5,340	3,340	1,250	735	3,930		
20	1,630	1,850	1,110	19,000	10,600	1,500	1,570	7,720	2,870	1,570	723	2,740		
21	2,550	1,690	1,090	17,500	8,120	1,430	1,450	5,570	2,650	1,370	651	2,160		
22	4,650	1,550	3,800	7,950	7,690	1,380	1,450	4,380	2,900	1,220	603	1,820		
23	6,520	1,450	8,170	5,640	9,510	1,440	1,600	4,340	2,990	1,140	663	2,070		
24	3,940	2,560	18,900	7,200	9,730	1,610	1,790	3,930	2,810	1,090	1,190	1,760		
25	3,850	2,200	18,500	5,910	6,270	1,530	2,110	3,920	3,100	1,060	1,270	1,500		
26	3,070	1,770	11,500	4,290	4,690	1,520	2,780	3,730	3,300	1,040	2,000	1,270		
27	13,700	1,550	8,180	3,280	3,920	2,860	2,360	3,420	3,570	1,000	1,840	1,170		
28	13,500	1,460	6,420	2,620	3,470	3,690	2,610	3,380	4,220	985	1,690	1,080		
29	7,160	1,500	4,740	2,330	3,190	4,030	4,020	3,380	3,260	960	1,350	1,010		
30	9,660	1,390	3,740	2,170	-----	3,230	4,740	2,950	2,560	930	1,120	955		
31	8,820	-----	3,070	1,980	-----	2,480	-----	2,810	-----	872	970	-----		
TOTAL	122,634	81,180	128,580	122,970	131,470	74,180	62,780	110,600	123,680	51,577	27,259	54,659		
MEAN	3,956	2,706	4,148	3,967	4,533	2,393	2,093	3,568	4,123	1,664	879	1,822		
MAX	13,700	7,520	18,900	19,000	13,600	4,390	4,740	7,720	16,400	2,810	2,000	7,620		
MIN	826	1,170	1,090	1,110	1,390	1,380	1,450	2,240	2,560	872	548	553		
CFSM	11.1	7.62	11.7	11.2	12.8	6.74	5.90	10.1	11.6	4.69	2.48	5.13		
IN-	12.85	8.51	13.47	12.89	13.78	7.77	6.58	11.59	12.96	5.40	2.86	5.73		
AC-FT	243,200	161,000	255,000	243,900	260,800	147,100	124,500	219,400	245,300	102,300	54,070	108,400		
CAL YR 1967	TOTAL	1,037,366	MEAN	2,842	MAX	18,900	MIN	317	CFSM	8.01	IN	108.70	AC-FT	2,058,000
WTR YR 1968	TOTAL	1,091,369	MEAN	2,982	MAX	19,000	MIN	548	CFSM	8.40	IN	114.38	AC-FT	2,165,000

12133000 SOUTH FORK SKYKOMISH RIVER NEAR INDEX, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	890	2,200	2,780	1,100	796	611	4,200	2,730	6,410	2,080	739	460
2	809	2,050	2,590	1,400	796	607	3,700	2,520	7,480	2,250	719	466
3	755	2,510	10,200	3,500	850	651	2,950	2,330	8,320	2,360	683	556
4	1,010	2,080	7,540	7,300	786	667	2,460	2,180	9,240	2,390	667	542
5	1,100	1,820	4,410	19,500	743	985	2,280	2,280	9,340	2,100	900	564
6	2,110	1,620	3,190	8,900	703	1,030	2,280	2,850	8,160	1,850	881	514
7	2,460	1,470	2,620	6,210	683	900	2,200	4,240	7,100	1,760	739	481
8	1,820	2,110	2,560	4,100	707	814	2,080	6,480	7,180	1,710	683	466
9	1,540	4,900	2,430	3,210	731	755	2,210	8,400	7,320	1,800	655	463
10	2,170	3,560	2,520	2,620	743	723	2,660	9,210	7,220	1,850	647	460
11	2,610	7,700	2,550	2,260	935	691	2,620	8,440	6,650	1,950	623	457
12	2,350	7,780	2,260	1,990	895	687	2,960	8,080	6,060	1,800	599	451
13	2,650	5,380	1,960	1,790	822	683	4,110	7,930	5,460	1,570	588	466
14	2,370	3,900	1,780	1,660	755	695	3,400	7,520	5,130	1,400	584	570
15	2,850	3,110	1,670	1,520	731	814	2,810	6,230	4,690	1,300	588	500
16	2,800	2,550	1,710	1,440	751	1,150	2,610	5,610	4,670	1,240	584	463
17	2,220	2,200	1,540	1,380	727	2,910	2,830	5,260	4,720	1,210	556	469
18	2,220	3,170	1,610	1,270	731	3,130	3,930	5,650	4,710	1,170	539	768
19	2,110	3,270	1,420	1,220	723	2,450	4,150	6,260	4,450	1,150	532	850
20	3,830	3,940	1,290	1,150	719	2,080	3,460	5,870	3,890	1,160	528	1,000
21	3,440	4,370	1,220	1,070	715	1,880	3,010	6,560	3,190	1,120	536	822
22	2,970	7,000	1,160	1,020	707	1,960	3,440	7,740	3,270	1,070	525	1,780
23	2,660	5,610	1,170	955	683	2,180	4,920	8,900	3,470	1,080	518	3,850
24	2,750	4,180	1,320	905	655	1,880	4,680	9,540	4,000	1,070	522	3,400
25	2,730	3,210	1,330	925	643	1,720	3,800	7,740	3,560	1,040	511	2,510
26	2,620	2,710	1,220	925	631	1,870	3,150	6,620	2,870	945	497	1,930
27	2,080	2,870	1,150	858	615	2,540	2,880	6,190	2,510	886	490	1,440
28	1,880	2,640	1,000	809	615	2,720	3,190	5,680	2,270	872	518	1,240
29	1,900	3,520	900	760	-----	2,650	3,390	6,970	2,160	832	514	1,500
30	2,730	3,520	800	720	-----	3,110	2,970	10,900	2,060	782	484	5,640
31	2,700	-----	950	730	-----	4,240	-----	6,860	-----	751	466	-----
TOTAL	69,134	106,950	70,850	83,197	20,591	49,783	95,330	193,770	157,560	44,548	18,615	35,078
MEAN	2,230	3,565	2,285	2,684	735	1,606	3,178	6,251	5,252	1,437	600	1,169
MAX	3,830	7,780	10,200	19,500	935	4,240	4,920	10,900	9,340	2,390	900	5,640
MIN	755	1,470	800	720	615	607	2,080	2,180	2,060	751	466	451
CFSM	6.28	10.0	6.44	7.56	2.07	4.52	8.95	17.6	14.8	4.05	1.69	3.29
IN.	7.24	11.21	7.42	8.72	2.16	5.22	9.99	20.30	16.31	4.67	1.95	3.48
AC-FT	137,100	212,100	140,500	165,000	40,840	98,740	189,100	384,300	312,500	88,360	36,920	69,580

CAL YR 1968 TOTAL 1,006,109 MEAN 2,749 MAX 19,000 MIN 548 CFSM 7.74 IN 105.43 AC-FT 1,996,000
WTR YR 1969 TOTAL 945,406 MEAN 2,590 MAX 19,500 MIN 451 CFSM 7.30 IN 99.07 AC-FT 1,875,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,660	720	1,120	990	2,530	1,320	1,350	1,440	5,200	1,820	684	397
2	6,890	684	1,050	925	2,240	1,230	1,570	1,690	7,390	1,840	732	394
3	4,500	710	1,000	895	2,100	1,200	1,430	1,180	9,390	2,370	712	473
4	3,120	2,370	1,110	815	1,910	1,110	1,440	3,050	8,530	2,800	676	590
5	2,440	3,130	1,030	756	1,680	1,050	3,290	3,180	6,910	2,570	652	492
6	2,090	2,090	955	740	1,530	1,200	4,710	3,330	7,570	2,150	612	950
7	1,880	1,830	905	712	1,460	3,450	3,500	2,760	7,270	1,950	590	1,960
8	2,460	1,530	709	708	1,600	2,520	2,600	2,600	9,390	2,370	712	473
9	2,980	1,390	865	708	1,730	2,010	5,840	3,270	4,850	1,930	565	1,020
10	2,860	1,260	840	676	1,880	1,770	6,860	2,690	4,680	1,710	540	756
11	2,260	1,180	970	684	2,020	1,610	4,260	2,270	3,700	1,570	530	632
12	1,920	1,270	1,880	668	2,150	1,520	3,170	2,080	3,090	1,420	520	558
13	1,680	1,200	2,120	760	2,480	1,580	2,580	1,920	3,440	1,300	516	502
14	1,490	1,120	2,730	4,050	2,330	1,850	2,210	1,780	3,860	1,230	498	467
15	1,310	1,230	2,480	3,190	2,490	2,890	1,960	2,080	4,040	1,200	484	451
16	1,180	1,350	1,940	2,020	4,590	3,360	1,810	4,180	3,790	1,250	481	430
17	1,080	1,300	1,660	1,650	4,180	2,860	1,710	5,860	3,270	1,220	467	502
18	990	1,220	1,660	3,230	3,280	2,330	1,660	4,420	4,170	1,110	448	2,270
19	925	1,240	1,720	4,430	2,570	2,010	1,720	4,070	4,870	1,060	436	2,390
20	930	1,330	2,610	4,870	2,180	1,850	1,630	3,890	4,730	1,020	430	1,590
21	995	2,110	2,680	5,110	1,950	1,750	1,520	3,440	5,590	950	427	1,140
22	920	1,890	2,880	6,240	1,800	1,620	1,450	4,170	5,260	865	427	1,500
23	2,930	2,260	3,250	7,960	1,700	1,560	1,470	4,260	4,560	795	427	2,250
24	850	2,520	2,540	5,110	1,640	1,870	1,870	4,560	4,000	752	430	1,520
25	800	1,950	1,970	4,280	1,570	1,680	1,800	6,030	3,590	770	430	1,160
26	748	1,660	1,710	3,390	1,520	1,570	1,650	6,840	3,660	1,210	415	960
27	748	1,450	1,500	2,970	1,500	1,480	1,510	4,840	3,660	1,320	406	835
28	756	1,310	1,320	2,430	1,420	1,530	1,380	3,780	2,910	1,030	740	800
29	728	1,240	1,210	2,060	-----	1,540	1,350	3,570	2,370	850	394	680
30	740	1,180	1,130	1,780	-----	1,430	1,360	3,790	2,040	795	391	616
31	744	-----	1,060	1,850	-----	1,350	-----	3,720	-----	724	388	-----
TOTAL	58,604	45,730	50,745	76,657	60,120	56,100	70,830	108,530	143,900	43,551	15,694	29,495
MEAN	1,890	1,526	1,658	2,473	2,157	1,810	2,261	3,501	4,797	1,405	506	983
MAX	6,890	3,130	3,250	7,960	4,590	3,450	6,860	6,840	9,390	2,800	732	2,390
MIN	728	684	840	668	1,420	1,050	1,350	1,440	2,040	724	388	394
CFSM	5.32	4.29	4.61	6.97	6.05	5.10	6.65	9.86	13.5	3.96	1.43	2.77
IN.	6.14	4.79	5.32	8.03	6.30	5.88	7.42	11.37	15.08	4.56	1.64	3.09
AC-FT	116,200	90,710	100,700	152,000	119,200	111,300	140,500	215,300	285,400	86,380	31,130	58,500

CAL YR 1969 TOTAL 853,571 MEAN 2,339 MAX 19,500 MIN 451 CFSM 6.59 IN 89.44 AC-FT 1,693,000
WTR YR 1970 TOTAL 759,976 MEAN 2,082 MAX 9,390 MIN 388 CFSM 5.86 IN 79.64 AC-FT 1,507,000

12134500 SKYKOMISH RIVER NEAR GOLD BAR, WASH.

LOCATION.--Lat 47°50'15", long 121°39'56", in S.W. 1/4 sec. 9, T. 27 N., R. 9 E., Snohomish County, on right bank 2.0 miles southeast of Gold Bar, 7.3 miles (revised) upstream from Wallace River, and at mile 43.0.

DRAINAGE AREA.--535 sq mi.

PERIOD OF RECORD.--September 1928 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 209.26 ft above mean sea level.

AVERAGE DISCHARGE.--42 years, 3,918 cfs (99.45 inches per year, 2,839,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (19,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1830	*19,100	11.07	Dec. 24, 1967	1000	36,900	14.54	Nov. 11, 1968	2000	19,300	11.13
				Jan. 20, 1968	2200	*49,200	16.46	Dec. 3, 1968	1800	29,000	13.14
Dec. 13, 1966	1200	*29,000	13.10	Feb. 19, 1968	0300	24,100	12.21	Jan. 5, 1969	0530	*41,900	15.36
				Feb. 24, 1968	0100	20,800	11.55	May 30, 1969	0500	21,100	11.56
Oct. 27, 1967	1900	41,700	15.31	June 2, 1968	1000	33,000	13.94				
				Sept. 17, 1968	1500	19,300	11.18	June 3, 1970	2400	*16,900	10.05

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 30, 1966	579	3.37	1969	Sept. 1, 2, 12, 1969	644	3.63
1967	Sept. 27, 28, 29, 1967	546	3.28	1970	Aug. 31, Sept. 2, 3, 1970	564	3.49
1968	Sept. 13, 1968	892	3.84				

Period of record: Maximum discharge, 88,700 cfs Dec. 21, 1933 (gage height, 21.3 ft), from rating curve extended above 32,000 cfs; minimum, 315 cfs Nov. 29, 1952; minimum gage height, 2.73 ft Dec. 1, 1936.

REMARKS.--Records excellent. No regulation. Some small diversions above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--MSP 1316: 1932-35(M), 1944(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	708	1,240	2,450	1,280	2,040	1,470	7,730	3,180	4,440	4,550	1,870	813	
2	694	1,770	5,220	1,280	1,830	1,480	7,460	4,110	4,550	4,700	1,790	787	
3	681	2,520	4,200	1,280	1,690	1,380	5,850	6,650	4,480	5,200	1,740	772	
4	682	7,980	8,980	1,220	1,620	1,280	5,150	8,890	4,180	5,600	1,740	754	
5	1,570	7,970	5,840	1,340	1,710	1,250	5,190	11,900	4,150	5,400	1,610	749	
6	6,800	5,030	5,280	3,060	1,740	1,240	5,650	16,800	5,960	5,100	1,510	750	
7	3,550	3,600	6,420	5,190	1,870	1,250	6,650	13,300	8,240	4,800	1,460	731	
8	2,230	3,070	5,730	5,140	1,850	1,520	7,210	11,300	8,500	4,950	1,430	705	
9	2,200	2,960	4,280	3,970	1,890	4,040	7,160	11,500	7,870	4,900	1,360	691	
10	1,760	2,570	3,510	3,090	1,710	3,840	7,560	9,280	8,310	4,750	1,300	680	
11	1,480	2,680	2,970	3,330	1,860	2,860	9,860	6,970	8,890	4,600	1,260	685	
12	1,330	2,390	2,590	4,470	1,920	2,450	7,760	6,560	8,530	4,250	1,180	679	
13	1,390	2,110	2,320	10,900	1,670	3,140	5,760	6,000	7,300	4,290	1,280	645	
14	1,530	2,170	2,090	10,200	1,610	4,290	4,950	5,110	7,820	4,540	1,480	638	
15	2,980	4,070	1,910	6,260	1,440	4,510	4,950	4,630	8,500	4,370	1,260	636	
16	2,310	5,170	1,780	4,320	1,380	3,830	5,230	4,850	9,690	3,970	1,180	622	
17	2,190	3,540	1,650	3,400	1,320	3,040	4,970	4,300	9,210	3,620	1,110	611	
18	2,380	2,910	1,600	2,880	1,300	2,640	4,440	4,040	7,240	3,340	1,060	709	
19	3,400	3,580	1,680	2,490	1,290	2,480	3,960	4,470	7,200	3,230	1,020	741	
20	2,820	3,820	1,750	2,210	1,500	2,230	3,670	5,530	6,170	2,900	991	661	
21	2,620	5,800	2,030	2,030	1,710	2,030	3,440	7,260	5,210	2,680	961	628	
22	2,240	6,670	1,740	1,870	1,790	1,830	3,250	6,880	4,920	2,610	930	636	
23	1,990	4,570	1,600	1,810	1,900	1,720	3,170	5,250	4,790	2,540	910	702	
24	1,750	3,530	1,540	1,660	1,840	1,680	3,320	5,230	4,960	2,500	905	684	
25	1,570	3,100	1,430	1,610	1,740	1,820	3,910	6,830	4,280	2,810	900	636	
26	1,440	2,800	1,360	1,530	1,720	2,250	3,970	5,590	4,480	2,330	905	627	
27	1,340	2,790	1,390	1,530	1,920	3,070	3,390	8,670	5,000	2,190	1,080	634	
28	1,340	2,550	1,490	1,550	1,820	3,800	3,200	6,580	7,800	2,170	1,200	610	
29	1,280	2,300	1,470	1,840	-----	5,150	3,180	6,260	6,200	2,120	1,100	603	
30	1,540	2,110	1,360	2,090	-----	8,230	3,340	6,290	4,700	2,060	930	592	
31	1,370	-----	1,280	2,270	-----	9,650	-----	5,130	-----	1,970	869	-----	
TOTAL	61,165	107,370	88,940	97,100	47,680	91,650	155,330	223,640	193,570	115,040	38,321	20,411	
MEAN	1,973	3,579	2,869	3,132	1,703	2,956	5,178	7,214	6,452	3,711	1,236	680	
MAX	6,800	7,980	8,980	10,900	2,040	9,650	9,860	16,800	9,690	5,600	1,870	813	
MIN	681	1,240	1,280	1,220	1,290	1,240	3,170	3,180	4,150	1,970	869	592	
CFSM	3.69	6.69	5.36	5.85	3.18	5.59	9.68	13.5	12.1	6.94	2.31	1.27	
IN.	4.25	7.47	6.18	6.75	3.32	6.37	10.80	15.55	13.46	8.00	2.66	1.42	
AC-FT	121,300	213,000	176,400	192,600	94,570	181,800	308,100	443,600	383,900	228,200	76,010	40,490	
CAL YR 1965	TOTAL	1,328,741	MEAN	3,640	MAX	20,500	MIN	681	CFSM	6.80	IN	92.39	
WTR YR 1966	TOTAL	1,240,217	MEAN	3,398	MAX	16,800	MIN	592	CFSM	6.35	IN	86.24	
											AC-FT	2,636,000	
												AC-FT	2,460,000

12134500 SKYKOMISH RIVER NEAR GOLD BAR, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	587	2,150	9,920	5,780	4,270	2,970	1,820	1,850	6,960	6,490	1,770	788
2	972	1,900	6,810	4,530	3,950	2,950	1,810	1,960	10,600	7,320	1,680	1,170
3	798	1,710	5,150	8,450	5,200	2,280	1,890	2,170	10,200	7,770	1,590	1,050
4	683	1,580	4,430	6,250	11,000	2,080	2,120	2,800	8,990	7,270	1,570	868
5	634	1,640	3,950	4,650	8,370	1,960	2,070	3,090	10,000	6,200	1,490	804
6	598	1,910	3,520	3,620	5,710	1,900	2,000	3,970	11,200	5,390	1,410	772
7	806	1,660	3,210	3,100	4,470	1,840	2,050	5,240	10,400	4,730	1,380	733
8	1,870	1,510	2,820	3,820	3,770	2,100	2,190	6,370	8,150	4,490	1,330	705
9	1,220	1,630	2,480	4,650	3,420	2,740	2,200	7,140	7,040	3,950	1,300	691
10	935	2,370	2,700	4,330	3,710	2,340	2,070	5,930	6,790	3,640	1,330	740
11	818	1,930	4,390	8,510	3,650	2,040	1,970	4,510	6,540	4,040	1,320	1,350
12	816	2,270	8,260	6,320	3,650	1,850	2,080	6,660	6,660	4,710	1,300	1,330
13	799	2,360	24,900	7,580	6,270	1,740	2,150	3,500	7,750	4,650	1,260	990
14	735	3,820	13,100	9,260	4,560	1,630	2,000	3,490	9,560	4,180	1,240	820
15	686	4,470	8,450	13,900	3,650	1,740	1,870	4,080	11,100	3,790	1,210	748
16	653	3,730	13,200	9,500	3,240	2,270	1,790	6,660	11,900	3,610	1,170	726
17	875	3,230	14,200	6,170	3,790	2,750	1,770	9,110	13,000	3,490	1,110	712
18	852	2,810	13,800	4,690	4,710	2,670	1,750	8,820	13,100	3,150	1,070	691
19	2,210	2,700	13,400	9,500	3,550	2,400	1,790	8,820	13,400	2,820	1,040	677
20	5,660	2,820	13,900	9,980	3,010	2,320	1,770	10,500	14,400	2,670	1,020	670
21	2,830	2,880	8,620	6,490	2,750	2,410	1,890	13,000	12,700	2,780	1,030	670
22	4,190	2,510	6,220	4,730	2,440	3,680	1,850	12,400	10,400	2,610	1,020	670
23	14,000	2,250	4,920	3,790	2,240	7,010	1,840	10,700	8,930	2,590	963	628
24	9,020	2,070	4,350	3,180	2,210	5,110	1,910	7,960	9,050	2,610	909	588
25	5,000	7,670	3,750	2,790	2,210	3,840	2,030	6,990	9,710	2,510	852	576
26	4,330	5,940	3,260	2,600	2,160	3,180	2,050	5,980	9,830	2,430	812	564
27	4,470	4,430	2,900	4,330	2,070	2,730	2,020	6,250	8,820	2,270	788	552
28	3,090	4,710	2,700	10,000	2,480	2,440	2,060	6,940	7,690	2,120	772	552
29	3,400	5,050	3,930	8,540	-----	2,250	1,950	8,700	7,720	1,940	780	552
30	3,400	10,100	3,950	7,500	-----	2,080	1,680	7,700	7,060	1,890	788	677
31	2,530	-----	3,320	5,310	-----	1,930	-----	5,980	-----	1,620	796	-----
TOTAL	79,267	95,810	220,310	193,850	112,510	80,830	58,640	195,260	289,650	119,940	36,100	23,064
MEAN	2,557	3,194	7,107	6,253	4,018	2,607	1,955	6,299	9,655	3,669	1,165	769
MAX	14,000	10,100	24,900	13,900	11,800	7,010	2,200	13,000	14,400	7,770	1,770	1,350
MIN	587	1,510	2,480	2,600	2,070	1,630	1,750	1,850	6,540	1,820	772	552
CFSM	4.78	5.97	13.3	11.7	7.51	4.87	3.65	11.6	18.0	7.21	2.18	1.44
IN.	5.51	6.66	15.32	13.48	7.82	5.62	4.08	13.58	20.14	8.34	2.51	1.60
AC-FT	157,200	190,000	437,000	384,500	223,200	160,300	116,300	387,300	574,500	237,900	71,600	45,750
CAL YR 1966	TOTAL 1,378,129	MEAN 3,776	MAX 24,900	MIN 587	CFSM 7.06	IN 95.83	AC-FT 2,734,000					
WTR YR 1967	TOTAL 1,505,231	MEAN 4,124	MAX 24,900	MIN 552	CFSM 7.71	IN 104.66	AC-FT 2,986,000					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,360	10,300	2,160	4,210	2,880	5,110	3,430	6,460	12,000	3,800	1,380	1,490
2	2,460	6,790	2,630	3,530	3,260	5,170	3,450	4,940	26,900	4,200	1,330	1,420
3	2,790	5,100	2,800	3,680	2,340	5,070	3,200	4,450	14,300	4,550	1,300	1,300
4	3,060	4,050	2,660	2,820	14,000	5,920	2,960	5,280	9,650	4,690	1,280	1,200
5	1,830	3,390	2,390	2,600	7,770	7,530	3,200	4,920	8,400	4,930	1,220	1,140
6	2,250	2,950	2,110	2,320	5,390	6,440	3,070	4,220	7,800	4,180	1,160	1,090
7	4,470	2,720	1,940	2,120	4,370	5,030	2,970	3,700	6,510	3,910	1,090	1,050
8	3,370	2,370	1,840	2,220	2,200	2,740	2,740	4,450	14,300	4,550	1,300	1,020
9	2,070	3,690	2,560	2,170	3,400	3,620	2,600	4,020	5,460	3,380	1,010	981
10	1,710	11,300	7,460	2,040	3,130	3,250	2,760	5,260	5,590	2,990	999	954
11	5,240	8,320	10,800	1,860	2,940	2,960	3,430	6,680	5,480	2,750	1,010	936
12	7,900	5,330	5,430	1,760	2,820	2,790	3,070	6,810	4,790	3,450	972	936
13	6,900	4,380	3,790	2,530	2,700	2,660	2,720	5,370	4,710	2,880	945	909
14	10,400	4,510	3,120	4,180	2,500	2,580	3,010	4,570	4,430	2,790	1,070	1,040
15	5,270	5,310	2,740	5,720	2,320	2,970	3,950	4,310	4,160	2,960	1,570	7,580
16	3,500	5,270	2,500	4,770	2,190	3,400	3,380	4,470	4,310	2,570	1,320	9,530
17	2,700	4,030	2,260	3,590	2,160	3,260	2,870	5,460	4,570	2,250	1,160	13,000
18	2,510	3,670	2,070	3,110	8,230	2,850	2,700	7,010	5,090	2,070	1,290	10,200
19	3,260	3,280	1,880	16,500	22,300	2,590	2,670	8,930	5,460	2,010	1,290	6,080
20	2,490	2,900	1,730	30,900	17,200	2,430	2,510	12,590	4,690	2,640	1,210	4,250
21	4,640	2,620	1,670	27,100	13,000	2,320	2,330	9,260	4,270	2,280	1,090	3,300
22	8,280	2,420	5,510	12,600	12,700	2,240	2,280	7,110	4,570	2,000	1,030	2,800
23	11,200	2,300	13,100	8,900	15,700	2,340	2,530	7,060	4,690	1,650	1,130	2,280
24	6,260	4,150	31,400	11,300	16,800	2,680	2,780	6,460	4,530	1,780	1,960	2,700
25	6,430	3,340	29,400	9,350	10,100	2,540	3,170	6,440	5,070	1,730	1,950	2,300
26	4,830	2,730	18,500	6,790	7,500	2,510	4,250	6,250	5,780	1,710	3,200	2,060
27	23,000	2,450	12,880	5,200	6,290	4,420	3,710	5,660	6,390	1,690	3,010	1,880
28	21,300	2,300	10,300	4,200	5,570	5,890	4,220	5,330	6,940	1,670	2,690	1,720
29	10,900	2,480	7,560	3,710	5,150	6,780	6,560	5,480	5,220	1,620	2,140	1,610
30	13,900	2,260	5,790	3,400	-----	5,430	7,750	4,770	4,010	1,590	1,790	1,510
31	13,500	-----	4,730	3,120	-----	4,140	-----	4,470	-----	1,460	1,580	-----
TOTAL	199,740	127,050	205,630	197,700	212,480	121,080	100,190	181,420	201,640	85,520	45,216	89,586
MEAN	6,443	4,135	6,633	6,377	7,327	3,906	3,340	5,852	6,721	2,759	1,459	2,986
MAX	23,000	11,300	31,400	30,900	22,300	7,530	7,750	12,500	26,900	4,690	3,200	13,000
MIN	1,360	2,260	1,670	1,760	2,160	2,240	2,280	3,570	4,010	1,460	945	909
CFSM	12.0	7.92	12.4	11.9	13.7	7.30	6.24	10.9	12.6	5.16	2.73	5.58
IN.	13.89	8.83	14.30	13.75	14.77	8.42	6.97	12.61	14.02	5.95	3.14	6.23
AC-FT	396,200	252,000	407,900	392,100	421,500	240,200	198,700	399,800	400,000	169,600	89,690	177,700
CAL YR 1967	TOTAL 1,642,264	MEAN 4,499	MAX 31,400	MIN 552	CFSM 8.41	IN 114.19	AC-FT 3,257,000					
WTR YR 1968	TOTAL 1,767,252	MEAN 4,829	MAX 31,400	MIN 909	CFSM 9.03	IN 122.88	AC-FT 3,505,000					

12134500 SKYKOMISH RIVER NEAR GOLD BAR, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,420	3,660	4,410	1,550	1,240	995	6,730	4,230	10,500	3,400	1,250	651
2	1,350	3,370	4,050	1,910	1,250	995	5,920	3,880	12,100	3,740	1,180	662
3	1,280	4,030	16,400	1,970	1,280	1,070	4,750	3,560	13,400	3,990	1,120	782
4	1,640	3,320	12,300	11,900	1,230	1,090	3,680	3,320	14,900	3,900	1,080	803
5	1,850	2,870	7,020	32,700	1,190	1,500	3,600	3,470	15,000	3,380	1,500	836
6	3,550	2,570	5,050	14,000	1,130	1,590	3,540	4,410	13,200	2,900	1,400	744
7	4,060	2,340	4,130	9,950	1,100	1,410	3,360	6,540	11,300	2,770	1,180	680
8	2,990	3,260	4,230	6,580	1,140	1,290	3,170	10,300	11,600	2,710	1,080	663
9	2,500	7,460	3,940	5,160	1,190	1,210	3,360	13,000	12,000	2,900	1,040	660
10	3,550	5,660	4,110	4,230	1,210	1,150	4,090	14,300	11,800	3,040	1,020	657
11	4,330	12,900	4,210	3,600	1,530	1,110	4,050	13,200	10,800	3,450	991	657
12	3,970	12,700	3,650	3,120	1,520	1,090	4,540	12,600	9,890	3,070	947	654
13	4,490	8,430	3,090	2,810	1,400	1,080	6,530	12,400	8,890	2,540	920	744
14	4,040	6,010	2,770	2,570	1,290	1,110	5,470	11,700	8,550	2,230	917	911
15	4,690	4,830	2,590	2,350	1,230	1,260	4,430	9,740	7,710	2,060	931	795
16	4,470	3,920	2,690	2,230	1,250	1,750	4,030	8,780	7,710	2,000	933	691
17	3,550	3,360	2,390	2,110	1,250	4,660	4,310	8,260	7,820	1,920	882	764
18	3,590	3,690	2,530	1,950	1,220	4,940	6,110	8,860	7,820	1,860	851	1,400
19	3,450	5,590	2,190	1,870	1,220	3,860	6,360	10,000	7,410	1,860	845	1,650
20	6,050	6,680	1,960	1,750	1,200	3,220	5,340	9,310	6,360	1,890	841	1,780
21	5,280	7,150	1,830	1,650	1,170	2,920	4,640	10,400	5,110	1,820	840	1,420
22	4,610	11,600	1,730	1,570	1,150	3,040	5,310	12,300	5,310	1,720	818	3,660
23	4,200	9,070	1,800	1,470	1,110	3,310	7,600	14,000	5,610	1,730	785	7,630
24	4,350	6,610	2,250	1,400	1,080	2,900	7,470	15,200	6,480	1,730	793	5,750
25	4,550	5,050	2,230	1,410	1,060	2,630	6,040	12,200	5,820	1,720	784	4,450
26	4,250	4,230	1,990	1,410	1,020	2,870	4,980	10,400	4,640	1,560	763	3,450
27	3,320	4,430	1,840	1,320	1,000	3,920	4,490	9,990	4,030	1,440	755	2,390
28	2,990	4,110	1,670	1,270	1,000	4,250	5,000	9,260	3,610	1,430	785	2,050
29	3,050	5,680	1,470	1,230	-----	4,150	5,310	11,200	3,430	1,360	756	2,710
30	4,770	5,610	1,330	1,180	-----	4,850	4,660	17,800	3,270	1,320	699	9,250
31	4,610	-----	1,350	1,140	-----	6,780	-----	11,100	-----	1,270	667	-----
TOTAL	112,800	170,210	113,200	129,360	33,640	78,000	149,070	305,710	256,100	72,710	29,353	59,944
MEAN	3,639	5,674	3,652	4,173	1,201	2,516	4,969	9,862	8,537	2,345	947	1,998
MAX	6,050	12,900	16,400	32,700	1,530	6,780	7,600	17,800	15,000	3,990	1,500	9,250
MIN	1,280	2,340	1,330	1,140	1,000	995	3,170	3,320	3,270	1,270	667	651
CFSM	10.80	16.60	10.83	7.80	2.24	4.70	9.29	18.4	16.4	4.38	1.77	3.73
IN.	7.84	11.84	7.87	8.99	2.34	5.42	10.37	21.26	17.81	5.06	2.04	4.17
AC-FT	223,700	337,600	224,500	256,600	66,720	154,700	295,700	606,400	508,000	144,200	58,220	118,900
CAL YR 1968 TOTAL 1,631,042 MEAN 4,456 MAX 30,900 MIN 909 CFSM 8.33 IN 113.41 AC-FT 3,235,000												
WTR YR 1969 TOTAL 1,510,097 MEAN 4,137 MAX 32,700 MIN 651 CFSM 7.73 IN 105.40 AC-FT 2,999,000												

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,000	1,240	1,750	1,540	4,090	1,970	1,990	2,100	8,130	2,790	1,210	596
2	11,600	1,150	1,650	1,440	3,580	1,840	2,290	2,510	11,800	2,950	1,310	588
3	7,410	1,220	1,590	1,380	3,410	1,770	2,070	3,350	14,800	3,060	1,250	716
4	5,070	4,580	1,750	1,270	2,940	1,630	2,110	4,870	13,500	4,580	1,180	959
5	3,920	5,720	1,640	1,180	2,550	1,550	5,360	6,280	11,000	4,210	1,140	812
6	3,330	3,680	1,520	1,150	2,310	1,760	7,770	5,230	12,000	3,510	1,080	1,710
7	2,930	3,200	1,430	1,110	2,220	5,320	5,690	4,290	11,100	3,150	1,030	3,630
8	3,990	2,620	1,390	1,110	2,400	3,870	4,370	4,010	8,480	3,240	1,020	2,130
9	5,250	2,350	1,400	1,120	2,680	3,050	9,510	5,080	7,710	3,140	968	1,660
10	4,920	2,100	1,360	1,070	2,960	2,640	10,700	4,170	7,280	2,790	923	1,260
11	3,760	1,940	1,670	1,070	3,220	2,380	6,590	3,470	5,680	2,530	905	1,060
12	3,100	2,040	3,260	1,050	3,450	2,270	4,850	3,120	4,890	2,270	896	932
13	2,630	1,920	3,710	1,210	4,210	2,370	3,930	2,820	5,660	2,090	887	852
14	2,250	1,760	4,960	6,610	3,890	2,920	3,350	2,600	6,310	1,970	869	796
15	2,010	1,940	4,320	5,240	4,020	4,560	2,980	3,040	6,590	1,930	636	740
16	1,830	2,190	3,300	3,230	7,340	5,410	2,730	6,500	5,860	2,020	820	676
17	1,690	2,100	2,800	2,570	6,650	4,500	2,550	9,250	5,310	1,960	804	923
18	1,560	1,960	2,840	5,170	5,220	3,610	2,490	6,860	7,070	1,800	772	4,330
19	1,460	1,950	2,940	7,080	4,060	3,090	2,600	6,310	7,600	1,730	716	4,330
20	1,450	2,100	4,370	7,830	3,400	2,800	2,460	5,960	7,670	1,670	708	2,890
21	1,540	3,370	4,540	8,030	3,000	2,590	2,250	5,360	9,070	1,550	692	2,010
22	1,440	3,070	4,900	9,650	2,750	2,390	2,140	6,420	8,290	1,410	692	3,400
23	1,670	3,750	5,470	12,600	2,560	2,280	2,160	6,410	7,170	1,300	692	4,720
24	1,380	4,160	4,210	8,100	2,440	2,860	2,770	6,950	6,280	1,240	700	2,760
25	1,310	3,130	3,230	6,710	2,350	2,520	2,660	9,280	5,730	1,310	708	2,040
26	1,210	2,620	2,760	5,360	2,260	2,330	2,390	10,700	5,870	2,360	668	1,670
27	1,220	2,300	2,360	4,790	2,230	2,200	2,190	7,460	5,700	2,470	636	1,450
28	1,210	2,080	2,080	3,900	2,110	2,260	2,020	5,840	4,490	1,780	620	1,300
29	1,170	1,960	1,900	3,190	-----	2,270	1,980	5,390	3,710	1,450	612	1,190
30	1,220	1,860	1,760	2,720	-----	2,130	1,970	5,820	3,150	1,460	588	1,090
31	1,280	-----	1,640	2,680	-----	2,010	-----	5,720	-----	1,300	580	-----
TOTAL	95,610	76,060	84,500	121,360	94,300	85,150	108,920	167,170	228,100	71,800	26,512	53,220
MEAN	3,084	2,535	2,726	3,915	3,368	2,747	3,631	5,393	7,603	2,316	855	1,774
MAX	11,600	5,720	5,470	12,600	7,340	5,410	10,700	10,700	14,800	4,580	1,310	4,720
MIN	1,170	1,150	1,360	1,050	2,110	1,550	1,970	2,100	3,150	1,240	588	588
CFSM	5.76	4.74	5.10	7.32	6.30	5.13	6.79	10.1	14.2	4.33	1.60	3.32
IN.	6.65	5.29	5.88	8.44	6.56	5.92	7.57	11.62	15.86	4.99	1.84	3.70
AC-FT	189,600	150,900	167,600	240,700	187,000	168,900	216,000	331,600	452,400	142,400	52,590	105,600
CAL YR 1969 TOTAL 1,370,057 MEAN 3,754 MAX 32,700 MIN 651 CFSM 7.02 IN 95.26 AC-FT 2,718,000												
WTR YR 1970 TOTAL 1,212,702 MEAN 3,322 MAX 14,800 MIN 580 CFSM 6.21 IN 84.32 AC-FT 2,405,000												

12135000 WALLACE RIVER AT GOLD BAR, WASH.

LOCATION.--Lat 47°51'50", long 121°41'47", in NW¼NE¼ sec.6, T.27 N., R.9 E., Snohomish County, on right bank 30 ft downstream from highway bridge, 0.5 mile north of Gold Bar, 1.3 miles upstream from Olney Creek, and at mile 5.8.

DRAINAGE AREA.--19.0 sq mi.

PERIOD OF RECORD.--October 1928 to September 1933, July 1946 to September 1970. Monthly discharge only for some periods, published in WSP 1316.

GAGE.--Water-stage recorder. Datum of gage is 174.08 ft above mean sea level (revised). December 1928 to Sept. 30, 1933, nonrecording gage at site 50 ft upstream at different datum. July 25, 1946, to Sept. 19, 1958, water-stage recorder on left bank at present site and datum.

AVERAGE DISCHARGE.--29 years, 161 cfs (115.07 inches per year, 116,600 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,420 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	0330	*1,240	6.22	Feb. 4, 1967	1030	2,110	7.22	Sept. 17, 1968	1100	*2,380	7.71
Nov. 25, 1966	0930	*2,620	7.70	Dec. 25, 1967	1130	2,040	7.44	Jan. 5, 1969	0400	*3,400	8.37
Dec. 13, 1966	1330	1,690	6.79	Jan. 20, 1968	1730	2,110	7.50	May 30, 1969	0030	1,490	6.78
Jan. 15, 1967	1030	1,590	6.68	Feb. 19, 1968	0100	2,300	7.65				
				June 2, 1968	0600	1,530	6.95	Sept. 22, 1970	1700	*2,330	7.68

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 17, 1966	17	2.60	1969	Sept. 1, 2, 11, 12, 1969	19	2.67
1967	Sept. 27-29, 1967	11	-	1970	Aug. 30, 31, 1970	15	2.58
1968	Aug. 13, 1968	17	2.44				

Period of record: Maximum discharge, 3,400 cfs Jan. 5, 1969 (gage height, 8.37 ft), from rating curve extended above 860 cfs on basis of slope-area measurement at gage height 8.27 ft; minimum, 5.8 cfs Aug. 25, 29, 30, 1961.

REMARKS.--Records good. Flow affected by some natural storage in Wallace Lake. No diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1316: 1930(M), 1932-33(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	42	143	62	92	86	336	139	106	124	43	26
2	21	83	200	67	81	79	278	202	126	157	41	24
3	19	125	188	61	75	72	215	296	129	299	40	23
4	19	333	405	56	74	66	206	336	131	282	38	23
5	132	341	221	67	102	62	221	420	142	203	36	22
6	236	134	245	367	94	62	242	571	215	197	33	21
7	77	102	338	350	96	58	253	420	215	177	32	21
8	62	90	209	299	88	81	251	364	188	163	31	19
9	84	94	149	200	94	262	294	330	171	149	30	19
10	52	86	129	171	88	182	340	233	238	139	30	19
11	42	126	110	171	86	139	414	185	345	154	29	21
12	39	98	96	238	83	129	254	191	342	126	27	21
13	76	74	86	831	72	250	191	177	312	117	71	19
14	96	94	75	457	74	287	191	136	269	129	48	18
15	205	265	67	257	66	254	215	154	257	113	35	18
16	92	206	61	188	61	194	206	171	251	113	31	18
17	92	120	56	157	60	154	182	141	209	98	29	18
18	177	102	56	134	62	144	157	136	163	90	27	49
19	239	154	98	115	62	136	141	171	174	86	26	32
20	134	199	97	102	104	120	134	197	131	74	25	23
21	104	322	102	92	113	108	131	236	113	68	23	21
22	83	283	70	83	120	96	136	188	124	67	23	19
23	70	168	62	79	122	92	139	149	113	62	23	21
24	60	136	60	72	113	88	141	163	186	62	22	21
25	52	124	54	72	104	102	165	236	126	135	21	19
26	47	115	51	68	104	141	160	269	124	74	22	22
27	43	131	55	67	113	136	188	200	136	64	47	27
28	45	113	81	74	98	215	134	144	292	60	44	22
29	41	102	83	110	-----	263	134	154	149	55	30	19
30	85	94	70	117	-----	508	141	154	113	51	31	18
31	50	-----	62	108	-----	422	-----	115	-----	47	30	-----
TOTAL	2,594	4,446	3,779	5,292	2,501	5,040	6,148	6,978	5,590	3,735	1,038	463
MEAN	83.7	148	122	171	89.3	163	205	225	186	120	33.5	22.1
MAX	239	341	405	831	122	508	414	571	345	299	71	49
MIN	19	42	51	56	60	58	131	115	106	47	21	18
CFSM	4.41	7.79	6.42	9.00	4.70	8.58	10.8	11.8	9.79	6.32	1.76	1.16
IN.	5.08	8.70	7.40	10.36	4.90	9.87	12.04	13.66	10.94	7.31	2.03	1.30
AC-FT	5,150	8,820	7,500	10,500	4,960	10,000	12,190	13,840	11,090	7,410	2,060	1,320
CAL YR 1965	TOTAL 52,701	MEAN 144	MAX 1,840	MIN 16	CFSM 7.58	IN 103.18	AC-FT 104,500					
WTR YR 1966	TOTAL 47,806	MEAN 131	MAX 831	MIN 18	CFSM 6.89	IN 93.60	AC-FT 94,820					

SNOHOMISH RIVER BASIN

12135000 WALLACE RIVER AT GOLD BAR, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	74	365	335	161	141	78	89	302	120	24	12
2	71	66	266	216	144	116	82	95	368	139	23	49
3	32	58	228	405	415	105	89	99	285	136	22	24
4	26	52	225	269	926	97	105	116	295	110	22	17
5	23	74	190	205	349	91	95	156	365	93	20	15
6	21	98	171	164	219	89	89	202	344	78	19	14
7	127	75	146	146	174	84	101	288	259	68	22	15
8	354	66	130	342	148	110	110	325	199	68	22	13
9	74	182	114	331	146	103	112	331	185	62	20	13
10	50	197	168	319	205	89	97	213	190	55	19	17
11	41	124	311	669	171	84	91	182	182	70	18	70
12	43	168	462	356	177	80	97	164	193	78	17	46
13	43	172	1,080	469	234	75	99	148	225	65	17	24
14	38	308	449	752	177	72	89	154	275	56	16	19
15	35	281	325	1,050	164	80	84	208	305	54	16	16
16	35	227	752	488	151	172	80	351	308	51	15	15
17	72	194	634	302	222	164	78	402	338	49	15	14
18	45	185	494	225	225	144	80	368	308	43	15	14
19	274	185	632	472	164	125	84	385	334	40	14	13
20	399	168	566	375	141	127	86	466	298	47	13	13
21	152	174	311	256	127	127	91	508	263	59	16	13
22	349	136	219	205	114	215	88	424	216	47	16	13
23	582	131	171	166	105	388	86	311	182	43	14	13
24	236	120	166	141	103	222	95	222	193	38	13	12
25	154	850	144	125	105	166	108	185	202	36	13	12
26	163	275	120	114	99	139	101	213	162	34	12	12
27	157	234	105	289	93	123	97	238	154	31	12	12
28	108	269	99	592	142	108	105	306	132	30	12	11
29	142	285	187	427	-----	99	95	385	139	28	12	12
30	117	500	134	305	-----	91	91	253	120	27	12	41
31	86	-----	188	202	-----	84	-----	208	-----	24	12	-----
TOTAL	4,069	5,928	9,552	10,712	5,601	3,910	2,783	7,995	7,341	1,877	513	584
MEAN	131	198	308	346	200	126	92.8	258	245	60.5	16.5	19.5
MAX	582	850	1,080	1,050	926	388	112	508	368	139	24	70
MIN	20	52	99	114	93	72	78	89	120	24	12	11
CFSM	6.89	10.4	16.2	18.2	10.5	6.63	4.88	13.6	12.9	3.18	.87	1.03
IN-	7.97	11.61	18.70	20.97	10.97	7.66	5.45	15.65	14.37	3.67	1.00	1.14
AC-FT	8,070	11,760	18,950	21,250	11,110	7,760	5,520	15,860	14,560	3,720	1,020	1,160

CAL YR 1966 TOTAL 56,534 MEAN 155 MAX 1,080 MIN 18 CFSM 8.16 IN 110.69 AC-FT 112,100
WTR YR 1967 TOTAL 60,865 MEAN 167 MAX 1,080 MIN 11 CFSM 8.79 IN 119.17 AC-FT 120,700

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	310	92	162	82	140	140	275	532	110	27	91
2	124	195	140	136	143	132	158	202	1,040	101	26	82
3	411	148	162	122	255	122	142	205	384	94	25	71
4	154	120	132	114	522	176	144	230	260	86	24	62
5	82	99	112	103	205	202	156	182	222	74	23	57
6	128	84	92	91	154	154	146	158	190	68	23	51
7	313	81	84	89	136	112	134	142	160	62	22	48
8	128	81	78	84	124	94	120	148	172	55	20	42
9	81	182	275	99	116	84	120	200	150	51	20	40
10	103	456	456	96	107	78	142	238	146	46	20	37
11	337	168	330	86	98	74	165	245	134	44	19	37
12	400	110	175	84	94	81	130	215	116	105	18	39
13	350	91	132	196	87	78	114	154	140	64	18	36
14	449	118	110	384	76	78	128	146	132	70	48	133
15	182	154	92	417	68	133	140	150	110	79	156	576
16	128	154	87	262	64	158	120	165	109	65	82	378
17	99	96	78	188	64	130	110	205	105	53	68	1,170
18	120	105	70	162	525	105	109	230	107	46	140	483
19	138	89	58	534	992	98	105	255	109	46	96	290
20	92	73	54	1,160	480	94	103	399	91	128	96	200
21	271	65	54	705	471	98	99	260	78	71	78	154
22	342	65	273	352	363	98	99	210	124	57	68	146
23	300	74	669	280	545	124	132	305	96	51	140	210
24	188	405	1,490	390	384	148	132	275	84	46	192	132
25	220	150	1,430	235	222	120	215	262	92	42	165	105
26	146	110	670	172	185	120	245	230	130	39	185	91
27	689	92	519	138	165	248	198	185	178	37	282	81
28	522	91	423	116	148	205	272	168	295	33	175	71
29	310	122	285	109	142	336	350	158	190	32	142	65
30	480	99	215	99	-----	190	390	140	128	30	114	58
31	408	-----	178	91	-----	152	-----	128	-----	28	96	-----
TOTAL	7,842	4,187	9,015	7,256	7,017	4,162	4,758	6,465	5,804	1,913	2,608	5,036
MEAN	253	140	291	234	242	134	159	209	193	61.7	84.1	168
MAX	689	456	1,490	1,160	992	336	390	399	1,040	128	282	1,170
MIN	81	65	54	84	64	74	99	128	78	28	18	36
CFSM	13.3	7.37	15.3	12.3	12.7	7.05	8.37	11.0	10.2	3.25	4.43	8.84
IN-	15.35	8.20	17.65	14.21	13.74	8.15	9.32	12.66	11.36	3.75	5.11	9.86
AC-FT	15,550	8,300	17,880	14,390	13,920	8,260	9,440	12,820	11,510	3,790	5,170	9,990

CAL YR 1967 TOTAL 62,360 MEAN 171 MAX 1,490 MIN 18 CFSM 9.00 IN 122.09 AC-FT 123,700
WTR YR 1968 TOTAL 66,063 MEAN 181 MAX 1,490 MIN 11 CFSM 9.53 IN 129.34 AC-FT 131,000

12135000 WALLACE RIVER AT GOLD BAR, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	192	160	100	44	46	288	158	291	142	26	19
2	49	200	182	132	46	45	238	190	309	198	26	19
3	95	605	222	168	48	51	172	318	315	210	25	37
4	78	160	340	1,890	45	48	145	132	339	200	25	48
5	79	134	230	2,390	44	68	158	140	294	140	68	48
6	233	116	180	731	41	65	152	190	232	116	51	31
7	159	101	158	453	41	58	132	297	182	104	38	26
8	103	212	270	291	51	55	126	425	200	95	33	24
9	84	300	228	232	61	51	140	467	222	88	31	21
10	228	188	255	195	60	50	175	422	200	86	29	20
11	195	616	235	170	100	49	150	372	168	180	27	20
12	185	408	192	142	104	49	218	363	148	118	26	19
13	248	262	162	128	83	49	264	336	130	88	26	37
14	170	200	150	116	74	50	190	300	134	77	25	46
15	295	168	144	108	71	58	145	228	120	71	25	31
16	178	142	152	100	70	74	132	222	124	65	28	26
17	144	128	132	93	68	285	202	220	120	68	25	37
18	178	148	142	66	67	188	285	261	112	57	23	148
19	212	318	120	80	65	138	208	241	100	51	25	172
20	301	305	107	76	64	122	158	228	85	51	27	160
21	188	229	98	71	62	118	155	270	80	48	26	106
22	188	415	91	68	61	124	200	342	170	45	25	580
23	160	250	101	64	58	122	330	366	246	42	22	651
24	152	178	238	61	55	104	243	348	273	40	21	288
25	171	148	180	57	53	102	182	235	339	40	20	291
26	142	134	148	55	51	130	152	232	222	39	20	182
27	107	195	130	54	49	178	148	252	243	34	20	136
28	148	116	110	51	44	168	202	212	33	32	116	31
29	99	271	95	48	-----	175	198	641	192	31	27	167
30	357	195	85	46	-----	218	162	757	168	28	23	434
31	275	-----	87	44	-----	366	-----	309	-----	27	20	-----
TOTAL	5,155	6,821	5,507	8,300	1,685	3,401	5,680	9,292	5,970	2,564	865	3,940
MEAN	166	227	178	268	60.2	110	189	309	189	82.7	27.9	131
MAX	357	616	405	2,390	104	366	330	757	339	210	68	651
MIN	45	101	85	44	41	45	126	132	80	27	20	19
CFSM	8.74	11.9	9.37	14.1	3.17	5.79	9.95	15.8	10.5	4.35	1.47	6.89
IN.	10.09	13.35	10.78	16.25	3.30	6.66	11.12	18.19	11.69	5.02	1.69	7.71
AC-FT	10,220	13,530	10,920	16,460	3,340	6,750	11,270	18,430	11,840	5,090	1,720	7,810
CAL YR 1968	TOTAL 62,502	MEAN 171	MAX 1,170	MIN 18	CFSM 9.00	IN 122.37	AC-FT 124,000					
WTR YR 1969	TOTAL 59,180	MEAN 162	MAX 2,390	MIN 19	CFSM 8.53	IN 115.87	AC-FT 117,400					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	443	76	96	78	208	80	88	110	258	48	54	16
2	600	62	87	72	168	75	110	140	289	53	57	16
3	336	90	83	68	162	70	94	185	304	67	52	42
4	220	448	110	62	135	64	137	255	218	67	44	32
5	170	542	90	55	120	61	563	242	192	54	41	39
6	134	190	76	54	130	87	427	175	222	46	36	469
7	114	160	68	52	140	305	240	132	175	42	34	439
8	199	122	67	50	185	130	192	158	122	44	38	170
9	294	110	78	54	220	100	525	215	168	41	35	106
10	195	94	73	54	238	87	325	142	200	36	31	82
11	132	85	112	49	228	83	212	120	118	33	29	66
12	110	87	265	48	230	90	170	112	94	31	27	55
13	90	78	324	61	403	112	142	110	116	29	25	49
14	80	70	400	653	232	205	124	98	122	27	25	45
15	72	85	268	262	252	235	114	151	175	27	24	40
16	67	100	195	180	409	310	102	275	152	27	23	37
17	61	114	170	162	275	182	98	245	124	26	22	92
18	57	98	215	653	220	142	100	178	152	24	21	304
19	51	96	212	424	175	124	122	168	140	24	20	324
20	70	128	280	415	160	118	114	135	140	23	20	150
21	80	238	250	376	142	114	104	128	152	21	20	102
22	61	158	272	358	135	104	104	160	116	20	19	623
23	67	344	260	451	124	109	112	155	102	20	18	343
24	62	225	195	286	116	128	132	168	90	19	18	185
25	62	165	162	255	110	114	106	252	80	51	18	132
26	51	138	145	208	102	106	98	222	82	311	18	104
27	64	122	124	200	98	100	88	138	75	238	17	85
28	72	114	110	180	88	118	83	124	62	102	16	75
29	72	122	100	150	-----	104	87	165	60	73	16	66
30	77	114	92	130	-----	94	100	192	53	85	16	58
31	97	-----	83	148	-----	87	-----	178	-----	66	15	-----
TOTAL	4,260	4,575	5,062	6,248	5,205	3,838	5,013	5,228	4,353	1,775	849	4,346
MEAN	137	153	163	202	166	124	167	169	145	57.3	27.4	145
MAX	600	542	400	653	409	310	563	275	304	311	57	623
MIN	61	62	67	48	88	61	83	98	53	10	15	16
CFSM	7.21	8.05	8.58	10.4	9.79	6.53	8.79	8.89	7.63	3.02	1.44	7.63
IN.	8.34	8.96	9.91	12.23	10.19	7.81	9.81	10.24	8.52	3.48	1.66	8.51
AC-FT	8,450	9,070	10,040	12,390	10,320	7,610	9,940	10,370	8,630	3,520	1,680	8,620
CAL YR 1969	TOTAL 55,594	MEAN 152	MAX 2,390	MIN 19	CFSM 8.00	IN 108.85	AC-FT 110,300					
WTR YR 1970	TOTAL 50,752	MEAN 139	MAX 653	MIN 15	CFSM 7.32	IN 99.37	AC-FT 100,700					

SNOHOMISH RIVER BASIN

12137300 SPADA LAKE NEAR STARTUP, WASH.

LOCATION.--Lat 47°58'28", long 121°41'10", in NW¼ sec.29, T.29 N., R.9 E., Snohomish County, Snoqualmie National Forest, on right bank at Culmback Dam on Sultan River, 1.7 miles downstream from South Fork, 7.8 miles north of Startup, and at mile 16.5.

DRAINAGE AREA.--68.3 sq mi.

PERIOD OF RECORD.--April 1965 to September 1970.

GAGE.--Water-stage recorder and nonrecording gage. Datum of gages is at mean sea level (levels by Snohomish County Public Utilities District No. 1).

EXTREMES.--Maximums and minimums (contents in acre-feet, elevation in feet) for the water years 1966-70 are contained in the following table:

Maximum			Minimum		
Wtr yr	Date	Contents	Elevation	Date	Contents
1966	Jan. 13, 1966	37,140	1,363.3	Sept. 30, 1966	8,540
1967	Dec. 13, 1966	38,580	1,365.1	Sept. 30, 1967	4,250
1968	June 2, 1968	38,580	1,365.1	Oct. 1, 1967	4,500
1969	Jan. 4, 1969	39,300	1,366.0	Mar. 16, 1969	14,420
1970	Apr. 9, 1970	37,200	1,363.38	Sept. 5, 1970	22,870

a Minimum observed.

Period of record: Maximum contents, 39,300 acre-ft Jan. 4, 1969 (elevation, 1,366.00 ft); minimum observed, 4,250 acre-ft Sept. 30, 1967 (elevation, 1,301.28 ft), since reservoir was first filled.

REMARKS.--No gage-height record Jan. 5 to Feb. 17, 1969. Reservoir is formed by an earthfill dam completed to elevation 1,408 ft (corrected) in 1965; storage began Apr. 5, 1965. Capacity, 34,500 acre-ft between elevations 1,250 and 1,360 ft (crest of spillway). No dead storage below 1,250 ft. Figures given herein represent total contents. Spada Lake is used to regulate the flow of Sultan River to supplement city of Everett water supply.

MONTHEND ELEVATION AND CONTENTS, WATER YEARS OCTOBER 1965 TO SEPTEMBER 1970

DATE	ELEVATION (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)	DATE	ELEVATION (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
OCT. 31, 1965.....	1,360.3	34,740	+13,720	OCT. 31, 1968.....	1,361.2	35,460	+560
NOV. 30.....	1,360.7	35,060	+320	NOV. 30.....	1,361.1	35,380	-80
DEC. 31.....	1,360.4	34,820	-240	DEC. 31.....	1,360.4	34,820	-560
CAL YR 1965.....	-	-	+34,820	CAL YR 1968.....	-	-	-480
JAN. 31, 1966.....	1,360.8	35,140	+320	JAN. 31, 1969.....	-	-	-
FEB. 28.....	-	435,000	-140	FEB. 28.....	1,338.4	19,640	-
MAR. 31.....	1,361.7	35,860	+860	MAR. 31.....	1,357.2	32,260	+12,620
APR. 30.....	1,360.8	35,140	-720	APR. 30.....	1,361.0	35,300	+5,040
MAY 31.....	1,358.4	33,220	-1,920	MAY 31.....	1,361.2	35,460	+160
JUNE 30.....	1,360.9	35,220	+2,000	JUNE 30.....	1,360.9	35,220	-240
JULY 31.....	1,360.5	34,900	-320	JULY 31.....	1,356.0	31,300	-3,920
AUG. 31.....	1,341.9	21,740	-13,160	AUG. 31.....	1,341.1	21,260	-10,040
SEPT. 30.....	1,315.1	8,540	-13,200	SEPT. 30.....	1,361.9	36,020	+14,760
WTR YR 1966.....	-	-	-12,480	WTR YR 1969.....	-	-	+1,120
OCT. 31.....	1,360.8	35,140	+26,600	OCT. 31.....	1,353.2	29,240	-6,780
NOV. 30.....	1,362.5	36,500	+1,360	NOV. 30.....	1,359.9	34,420	+5,180
DEC. 31.....	1,361.8	35,940	-560	DEC. 31.....	1,359.2	33,860	-560
CAL YR 1966.....	-	-	+1,120	CAL YR 1969.....	-	-	+1,120
JAN. 31, 1967.....	1,361.1	35,380	-560	JAN. 31, 1970.....	1,360.0	34,500	+640
FEB. 28.....	1,361.3	35,540	+160	FEB. 28.....	1,360.1	34,580	+80
MAR. 31.....	1,360.7	35,060	-480	MAR. 31.....	1,359.8	34,340	-240
APR. 30.....	1,360.6	34,980	-80	APR. 30.....	1,360.2	34,660	+320
MAY 31.....	1,360.8	35,140	+160	MAY 31.....	1,360.6	34,980	+320
JUNE 30.....	1,360.6	34,980	-160	JUNE 30.....	1,360.1	34,580	-400
JULY 31.....	1,321.1	10,940	-24,040	JULY 31.....	1,359.9	34,420	-160
AUG. 31.....	1,312.1	7,480	-3,460	AUG. 31.....	1,346.1	24,270	-10,150
SEPT. 30.....	1,302.3	4,500	-2,980	SEPT. 30.....	1,359.4	34,020	+9,750
WTR YR 1967.....	-	-	-4,040	WTR YR 1970.....	-	-	-2,000
OCT. 31.....	1,362.4	36,420	+31,920	† ELEVATION AT 2400 HOURS.			
NOV. 30.....	1,360.7	35,060	-1,360	A NO RECORD; CONTENTS ESTIMATED.			
DEC. 31.....	1,361.0	35,300	+240				
CAL YR 1967.....	-	-	-640				
JAN. 31, 1968.....	1,360.3	34,740	-560				
FEB. 29.....	1,360.9	35,220	+480				
MAR. 31.....	1,360.8	35,140	-80				
APR. 30.....	1,361.7	35,860	+720				
MAY 31.....	1,360.6	34,980	-880				
JUNE 30.....	1,360.7	35,060	+80				
JULY 31.....	1,357.7	32,660	-2,400				
AUG. 31.....	1,358.1	32,980	+320				
SEPT. 30.....	1,360.5	34,900	+1,920				
WTR YR 1968.....	-	-	+30,400				

12137500 SULTAN RIVER NEAR STARTUP, WASH.

LOCATION.--Lat 47°58'27", long 121°46'47", in SW¼NE¼ sec.28, T.29 N., R.8 E., Snohomish County, Snoqualmie National Forest, on left bank 1.9 miles upstream from intake of Everett water-supply system, 7.8 miles north of Startup, and at mile 11.3.

DRAINAGE AREA.--74.5 sq mi.

PERIOD OF RECORD.--May 1934 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (from topographic map). Prior to July 2, 1934, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--36 years, 797 cfs (145.28 inches per year, 577,400 acre-ft per year), adjusted for storage in Spada Lake since April 1965.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Jan. 13, 1966		4,550	9.60	June 5, 1966		18	2.65
1967	Dec. 13, 1966		9,800	12.00	June 12, 1967		14	2.58
1968	Jan. 20, 1968		14,600	13.40	June 12, 1968		25	2.80
1969	Jan. 4, 1969a		14,600	13.4	June 17, 1969		28	2.87
1970	Apr. 9, 1970		5,250	10.03	June 15, 1970		49	3.15

a About.

Period of record: Maximum discharge, 34,600 cfs Feb. 9, 1951 (gage height, 17.22 ft, from high watermark in well), from rating curve extended above 5,000 cfs on basis of slope-area measurement of peak flow; minimum, 3.9 cfs Aug. 10, 1965 (gage height, 2.02 ft).

REMARKS.--Records excellent except those for period of no gage-height record Dec. 30, 1968, to Feb. 7, 1969, which are fair. Flow regulated since Apr. 5, 1965, by Spada Lake 5.2 miles upstream (see station 12137300). No diversion above station.

REVISIONS (WATER YEARS).--WSP 1182: 1935, 1936(M), 1937-39, 1940(M), 1941, 1943(P), 1943-49. WSP 1216: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	238	242	573	268	534	365	1,680	550	978	645	293	377
2	238	508	1,130	286	410	300	1,580	715	418	770	313	377
3	236	657	1,020	246	359	268	1,130	1,180	20	1,080	322	377
4	246	2,380	3,300	227	345	252	990	1,540	20	1,250	331	374
5	266	2,440	1,680	264	486	240	1,030	1,940	334	984	353	374
6	302	1,180	1,390	1,250	514	248	1,120	2,650	755	870	393	371
7	274	750	1,770	2,060	534	264	1,250	2,210	1,000	750	414	368
8	278	570	1,370	1,980	458	383	1,340	1,730	960	765	414	365
9	278	510	882	1,150	430	1,500	1,320	1,740	906	760	414	362
10	274	462	690	870	342	1,160	1,700	1,250	1,010	740	410	359
11	270	600	546	942	386	740	2,390	930	1,550	735	407	362
12	276	506	458	1,280	392	610	1,650	850	1,830	615	401	356
13	300	395	392	4,100	310	1,130	1,050	790	1,390	585	407	350
14	293	418	340	3,000	300	1,460	972	690	1,440	635	401	348
15	305	880	310	1,490	262	1,380	990	725	1,290	620	401	345
16	290	1,260	281	936	252	1,070	1,010	1,010	1,350	590	401	325
17	295	775	262	705	262	740	930	865	1,220	546	401	298
18	538	554	276	595	300	630	800	715	948	486	401	310
19	1,190	740	368	486	288	620	685	740	912	474	401	276
20	845	1,160	446	414	497	494	625	882	800	426	398	272
21	688	2,120	546	374	542	398	600	1,060	645	392	395	270
22	518	2,140	404	332	600	359	600	1,160	635	383	389	268
23	398	1,100	338	332	595	330	566	1,010	620	377	389	268
24	350	730	310	295	510	325	566	830	775	383	389	266
25	288	590	288	298	438	365	685	865	715	502	383	260
26	256	546	268	293	474	510	770	1,190	640	422	386	266
27	240	740	272	310	526	760	655	1,160	680	362	407	262
28	240	530	353	338	430	960	585	900	1,390	350	392	258
29	248	434	350	530	-----	1,190	566	800	1,030	345	389	256
30	325	398	293	725	-----	2,260	585	978	700	332	386	254
31	283	-----	260	765	-----	2,390	-----	978	-----	310	383	-----
TOTAL	11,066	26,315	21,166	27,141	11,776	23,701	30,420	34,633	26,961	18,484	11,964	9,574
MEAN	357	877	683	876	421	765	1,014	1,117	899	596	386	319
MAX	1,190	2,440	3,300	4,100	600	2,390	2,650	1,830	1,250	1,250	414	377
MIN	236	242	260	227	252	240	566	550	20	310	293	254
AC-FT	21,950	52,200	41,980	53,830	23,360	47,010	60,340	68,690	53,480	36,660	23,730	18,990
(T)	+13,720	+320	-240	+220	-140	+860	-720	-1,920	+2,000	-320	-13,160	-13,200
MEAN*	580	883	679	881	418	779	1,002	1,086	932	591	172	97.3
IN*	7.79	11.9	9.11	11.8	5.61	10.5	13.4	14.6	12.5	7.93	2.31	1.31
CFSM*	8.98	13.22	10.51	13.63	5.84	12.05	15.01	16.80	13.96	9.15	2.66	1.46
AC-FT*	35,670	52,520	41,740	54,150	23,220	47,870	59,620	66,770	55,480	36,340	10,570	5,790

OBSERVED

CAL YR 1965 TOTAL 242,698.4 MEAN 665 MAX 6,460 MIN 4.0 AC-FT 481,400
MTR YR 1966 TOTAL 253,201.0 MEAN 694 MAX 4,100 MIN 20 AC-FT 502,200

ADJUSTED*

CAL YR 1965 MEAN 716 CFSM 9.57 IN 129.92 AC-FT 516,200
MTR YR 1966 MEAN 678 CFSM 9.07 IN 123.25 AC-FT 489,700

† CHANGE IN CONTENTS, IN ACRE-FEET, IN SPADA LAKE.

* ADJUSTED FOR CHANGE IN CONTENTS IN SPADA LAKE.

12137500 SULTAN RIVER NEAR STARTUP, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	494	2,310	1,940	858	960	332	440	1,150	720	225	213
2	268	410	1,470	1,290	775	630	335	440	1,550	828	225	215
3	256	350	1,160	2,490	1,920	488	364	440	1,450	942	225	211
4	254	318	1,070	1,590	3,710	408	454	536	1,340	858	225	211
5	252	400	978	1,000	2,160	370	472	720	1,520	700	225	211
6	250	498	835	680	1,240	355	424	972	1,860	580	225	211
7	295	410	700	565	882	335	432	1,280	1,740	508	227	211
8	295	353	554	1,080	705	677	484	1,540	1,450	848	225	209
9	272	562	458	1,410	760	794	554	1,590	1,520	912	225	211
10	268	775	685	1,360	930	488	492	1,190	781	912	225	287
11	268	526	1,620	3,250	924	379	444	1,010	630	906	225	266
12	272	735	2,630	1,990	930	335	488	870	654	960	225	236
13	272	817	6,070	2,080	1,710	310	560	750	770	1,120	225	229
14	270	1,510	3,370	2,810	1,040	291	484	715	805	1,260	225	225
15	268	1,470	1,980	5,360	740	349	404	864	1,270	1,240	223	223
16	272	1,090	7,030	2,680	645	802	376	1,420	1,370	1,230	223	221
17	274	845	3,700	1,420	795	1,040	379	2,050	1,480	1,220	223	219
18	485	685	3,040	1,000	1,040	864	370	2,070	1,640	1,200	221	217
19	488	675	3,200	2,290	695	615	376	1,780	1,670	1,180	221	217
20	442	695	3,580	2,460	548	548	379	1,910	1,730	1,160	219	217
21	374	720	1,770	1,520	484	615	436	2,240	1,520	1,140	219	217
22	418	640	1,110	948	436	1,040	412	2,140	1,300	1,120	219	217
23	398	575	800	685	385	2,280	400	1,790	1,020	1,100	219	215
24	562	546	816	560	379	1,420	440	1,140	1,010	783	217	215
25	906	2,380	715	476	436	882	516	655	1,120	615	217	225
26	876	1,630	554	452	432	710	512	888	1,230	575	215	255
27	876	1,130	464	1,110	385	595	492	1,050	1,060	472	215	253
28	630	1,400	440	3,350	809	496	528	1,190	834	394	213	250
29	847	1,610	1,030	2,430	-----	452	492	1,600	616	349	211	248
30	1,050	2,630	834	1,970	-----	394	456	1,330	780	253	211	261
31	660	-----	884	1,180	-----	352	-----	1,030	-----	225	211	-----
TOTAL	13,365	26,879	57,059	53,426	26,753	20,276	13,291	37,660	37,190	26,310	6,849	6,816
MEAN	431	896	1,866	1,723	955	634	443	1,215	1,240	849	221	227
MAX	1,050	2,630	8,070	5,360	3,710	2,280	560	2,240	1,860	1,260	227	267
MIN	250	318	440	452	379	291	332	440	630	225	211	209
AC-FT	26,510	53,310	114,800	106,000	53,060	40,220	26,360	74,700	73,770	52,190	13,580	13,520
(T)	+26,600	+1,360	-560	-560	+160	-480	-80	+160	-160	-24,040	-3,460	-2,980
MEAN*	864	919	1,857	1,734	958	646	442	1,217	1,237	458	165	177
CFSM*	11.6	12.3	26.9	23.0	12.9	8.67	5.93	16.3	16.6	6.15	2.21	2.38
IN#	13.37	13.76	28.74	26.53	13.39	10.00	6.61	18.84	18.53	7.08	2.55	2.65
AC-FT*	53,110	54,670	114,200	105,400	53,220	39,740	26,280	74,860	73,610	28,150	10,120	10,540

OBSERVED

CAL YR 1966 TOTAL 292,757 MEAN 802 MAX 8,070 MIN 20 AC-FT 580,700
WTR YR 1967 TOTAL 326,674 MEAN 895 MAX 8,070 MIN 209 AC-FT 648,000

ADJUSTED*

CAL YR 1966 MEAN 804 CFSM 10.8 IN 146.43 AC-FT 581,800
WTR YR 1967 MEAN 889 CFSM 11.9 IN 162.06 AC-FT 643,900

* CHANGE IN CONTENTS, IN ACRE-FEET, IN SPADA LAKE.

* ADJUSTED FOR CHANGE IN CONTENTS IN SPADA LAKE.

12137500 SULTAN RIVER NEAR STARTUP, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	284	1,420	436	715	325	660	705	1,670	2,650	590	305	325
2	282	640	670	556	534	720	690	1,110	7,450	575	305	320
3	332	373	826	420	1,790	630	635	924	2,700	575	305	315
4	316	273	700	382	4,520	733	635	1,040	1,450	552	305	315
5	315	209	524	382	1,740	1,220	605	966	565	506	306	313
6	325	180	424	328	954	1,060	840	822	990	585	308	310
7	444	170	352	313	680	710	710	680	790	575	310	310
8	355	170	340	320	552	536	560	630	745	448	308	310
9	338	700	878	355	488	444	500	740	675	412	308	310
10	352	2,300	2,400	370	440	382	548	996	660	404	308	306
11	448	1,600	3,060	315	394	352	690	1,180	645	328	305	310
12	412	1,200	1,260	284	370	343	585	1,130	575	182	305	310
13	492	750	760	1,150	349	338	488	864	635	322	303	308
14	1,650	840	570	2,970	320	355	759	705	650	367	315	396
15	1,330	920	472	2,680	291	631	975	665	552	406	343	1,200
16	397	876	412	1,660	268	996	635	710	540	382	313	2,450
17	273	650	361	1,090	270	816	488	864	540	328	315	4,350
18	310	556	320	810	2,340	605	444	996	565	315	322	2,480
19	492	504	291	5,260	7,060	464	468	1,280	635	343	318	1,360
20	298	420	266	8,260	4,060	400	424	1,970	544	364	315	864
21	1,050	364	250	5,830	2,740	373	376	1,490	468	355	313	610
22	1,980	352	600	2,280	2,740	367	367	1,050	585	310	310	548
23	1,760	404	3,500	1,440	3,480	436	504	1,090	590	269	343	775
24	805	1,010	7,000	1,770	3,750	660	595	1,100	504	298	349	585
25	948	695	5,690	1,420	1,810	595	672	1,050	548	310	364	440
26	789	484	3,100	948	1,170	610	1,060	1,130	732	308	367	364
27	3,130	382	2,300	675	900	1,860	858	966	1,170	308	404	325
28	2,940	376	2,030	520	750	1,760	954	785	1,340	305	349	289
29	1,200	575	1,330	440	680	2,640	1,560	760	1,060	305	338	259
30	1,330	484	918	397	-----	1,540	1,690	660	780	305	332	231
31	1,730	-----	735	364	-----	930	-----	580	-----	305	322	-----
TOTAL	27,109	20,077	42,707	45,084	45,785	24,148	21,620	30,603	32,263	11,961	10,015	21,598
MEAN	874	649	1,378	1,454	1,579	779	721	987	1,075	386	323	720
MAX	3,130	2,300	7,000	8,260	7,060	2,640	1,690	1,970	7,450	590	404	4,350
MIN	273	170	250	284	268	338	367	580	468	182	303	231
AC-FT	53,770	39,820	84,710	89,420	90,810	47,900	42,880	60,700	63,990	23,720	19,660	42,828
(T)	+31,920	-1,360	+240	-560	+680	-80	+720	-880	+80	-2,400	+320	+1,920
MEAN*	1,394	646	1,382	1,445	1,587	778	733	973	1,077	347	328	752
CFSM*	18.7	8.67	18.6	19.4	21.3	10.4	9.84	13.1	14.5	4.66	4.40	10.1
IN*	21.57	9.68	21.38	22.36	22.98	12.04	10.97	15.06	16.12	5.37	5.08	11.26
AC-FT*	65,690	38,460	84,950	88,660	91,290	47,820	43,600	59,820	64,070	21,320	20,180	44,740

OBSERVED

CAL YR 1967 TOTAL 318,464 MEAN 873 MAX 7,000 MIN 170 AC-FT 631,700
WTR YR 1968 TOTAL 332,962 MEAN 910 MAX 8,260 MIN 170 AC-FT 660,400

ADJUSTED*

CAL YR 1967 MEAN 872 CFSM 11.7 IN 158.83 AC-FT 631,100
WTR YR 1968 MEAN 952 CFSM 12.8 IN 173.86 AC-FT 690,800

† CHANGE IN CONTENTS, IN ACRE-FEET, IN SPADA LAKE.

* ADJUSTED FOR CHANGE IN CONTENTS IN SPADA LAKE.

SNOHOMISH RIVER BASIN

12137500 SULTAN RIVER NEAR STARTUP, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	217	888	840	650	250	420	504	760	1,350	540	338	315
2	199	770	870	1,100	270	428	795	715	1,440	680	338	315
3	184	1,030	4,670	1,200	310	408	854	650	1,520	840	335	313
4	264	765	2,800	8,000	340	394	730	570	1,710	894	332	315
5	358	565	1,360	9,000	310	484	785	570	1,720	700	338	313
6	1,150	472	882	2,500	270	428	760	725	1,430	548	332	313
7	1,330	394	700	1,500	360	400	680	1,110	1,110	480	330	313
8	822	715	1,250	1,300	394	388	615	1,840	1,040	440	330	313
9	1,140	1,560	1,160	1,100	400	385	690	2,320	1,220	440	328	313
10	930	1,210	1,310	900	400	379	858	2,290	1,360	472	328	313
11	1,160	3,110	1,330	800	496	379	790	1,880	1,220	710	328	310
12	1,050	3,070	876	700	452	376	972	1,850	1,330	665	328	310
13	1,310	1,640	620	620	440	373	1,700	1,740	1,270	500	328	320
14	1,090	1,070	552	560	456	373	1,160	1,590	1,420	408	328	313
15	1,320	770	536	500	452	379	828	1,200	1,280	370	330	310
16	1,040	605	595	460	464	428	700	1,050	556	338	330	310
17	710	428	468	430	460	560	894	1,030	282	322	328	328
18	770	848	520	400	460	480	1,940	1,100	326	310	328	355
19	810	1,720	408	380	452	500	1,370	1,260	382	379	328	379
20	1,650	1,550	382	350	452	448	996	1,110	385	436	325	358
21	1,220	1,450	335	330	448	432	822	1,190	388	416	325	343
22	1,110	2,690	305	310	440	476	984	1,480	484	412	322	536
23	930	1,770	382	290	436	464	1,450	1,760	820	388	320	556
24	834	1,120	1,390	290	428	432	1,380	1,860	1,170	352	318	597
25	894	795	1,250	290	428	428	1,010	1,380	1,090	332	318	560
26	924	645	800	290	428	440	780	1,170	840	335	318	996
27	590	822	590	280	424	448	695	1,280	645	335	318	846
28	484	846	464	270	420	436	876	1,300	615	338	325	770
29	508	1,250	394	260	-----	452	1,060	2,450	610	338	315	795
30	1,480	1,170	380	250	-----	488	834	3,880	590	338	315	1,420
31	1,460	-----	390	250	-----	520	-----	1,740	-----	338	315	-----
TOTAL	27,938	35,738	28,809	31,560	11,340	13,426	28,112	44,850	29,603	14,374	10,119	13,648
MEAN	901	1,191	929	1,018	405	433	937	1,447	987	464	326	455
MAX	1,650	3,110	4,670	8,000	496	560	1,700	3,880	1,720	894	338	1,420
MIN	184	394	305	250	250	373	504	570	282	310	315	310
AC-FT	55,420	70,890	57,140	62,600	22,490	26,630	55,760	88,960	58,720	28,510	20,070	27,070
(T)	+560	-80	-560			+12,620	+3,040	+160	-240	-3,920	-10,040	+14,760
MEAN#	910	1,190	920			638	988	1,449	983	400	163	703
CFSM#	12.2	16.0	12.3			8.56	13.3	19.4	13.2	5.37	2.19	9.44
IN*	14.09	17.82	14.24			9.88	14.80	22.43	14.72	6.19	2.52	10.53
AC-FT#	55,970	70,810	56,580			39,250	58,800	89,120	58,480	24,590	10,030	41,830

OBSERVED

CAL YR 1968 TOTAL 335,554 MEAN 917 MAX 8,260 MIN 182 AC-FT 665,600
WTR YR 1969 TOTAL 289,517 MEAN 793 MAX 8,000 MIN 184 AC-FT 574,300

ADJUSTED*

CAL YR 1968 MEAN 916 CFSM 12.3 IN 167.41 AC-FT 665,100
WTR YR 1969 MEAN 794 CFSM 10.7 IN 144.80 AC-FT 574,300

† CHANGE IN CONTENTS, IN ACRE-FEET, IN SPADA LAKE.

* ADJUSTED FOR CHANGE IN CONTENTS IN SPADA LAKE.

12137500 SULTAN RIVER NEAR STARTUP, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,190	367	376	376	1,090	320	376	436	942	280	308	277
2	3,280	364	376	373	948	303	385	500	1,360	250	318	277
3	1,740	376	379	370	864	298	379	700	1,750	260	305	293
4	1,110	520	408	367	640	293	408	996	1,640	290	301	277
5	816	761	394	367	488	293	1,740	1,220	1,600	300	301	291
6	795	1,120	388	364	496	352	2,680	906	1,600	310	298	436
7	760	1,040	388	361	528	1,620	1,570	660	1,590	300	298	420
8	765	725	394	338	770	1,020	1,020	645	1,570	290	298	322
9	816	590	440	328	1,000	665	2,910	1,000	1,560	300	298	303
10	1,360	484	412	320	1,100	508	2,770	810	974	277	296	298
11	942	416	436	318	1,100	432	1,420	630	610	325	296	296
12	695	397	492	318	1,070	400	960	524	548	394	293	293
13	595	382	1,110	346	1,720	492	720	488	460	394	293	291
14	544	376	2,170	1,430	1,330	745	575	436	376	394	293	291
15	524	385	1,450	1,740	1,260	1,210	508	440	235	346	293	289
16	400	394	918	900	2,260	1,640	448	864	277	332	291	291
17	349	394	740	660	1,890	1,150	404	1,260	259	343	291	320
18	370	397	858	2,310	1,400	780	397	900	257	332	291	338
19	370	400	966	2,460	972	625	508	755	255	332	289	352
20	391	424	1,190	2,470	740	524	520	660	255	330	289	320
21	379	775	1,250	2,040	635	476	448	560	257	330	289	291
22	376	864	1,390	2,040	560	424	424	645	436	330	286	1,130
23	373	1,160	1,550	3,060	508	440	468	660	620	330	284	1,880
24	373	1,280	1,050	1,800	472	740	750	705	580	330	284	918
25	370	760	710	1,400	436	570	710	978	516	349	282	575
26	370	556	595	1,070	397	492	552	1,140	516	464	282	436
27	370	460	476	1,010	358	440	484	790	500	358	280	355
28	370	404	404	770	338	448	436	595	416	296	280	310
29	370	385	385	590	-----	416	424	585	360	322	280	303
30	370	379	385	480	-----	382	432	690	310	349	280	313
31	370	-----	379	590	-----	367	-----	635	-----	315	277	-----
TOTAL	23,903	17,335	22,859	31,366	25,370	18,865	25,826	22,813	22,629	10,152	9,044	12,786
MEAN	771	578	737	1,012	906	609	861	736	754	327	292	426
MAX	3,280	1,280	2,170	3,060	2,260	1,640	2,910	1,260	1,750	464	318	1,880
MIN	349	364	376	318	338	293	376	436	235	250	277	277
AC-FT	47,410	34,380	45,340	62,210	50,320	37,420	51,230	45,250	44,880	20,140	17,940	25,360
(†)	-6,780	+5,180	-560	+640	+80	-240	+320	+320	-400	-160	-10,150	+9,750
MEAN‡	661	665	728	1,022	908	605	867	741	748	325	127	590
IN‡	10.23	9.96	11.27	15.82	12.69	9.36	12.98	11.47	11.20	5.03	1.96	8.84
CFSM‡	8.87	8.93	9.77	13.7	12.2	8.12	11.6	9.95	10.0	4.36	1.70	7.92
AC-FT‡	40,630	39,560	44,780	62,850	50,400	37,180	51,550	45,570	44,480	19,980	7,790	35,110

OBSERVED

CAL YR 1969	TOTAL 261,129	MEAN 715	MAX 8,000	MIN 250	AC-FT 517,900
WTR YR 1970	TOTAL 242,948	MEAN 666	MAX 3,280	MIN 235	AC-FT 481,900

ADJUSTED‡

CAL YR 1969	MEAN 717	CFSM 9.62	IN 130.63	AC-FT 519,000
WTR YR 1970	MEAN 663	CFSM 8.90	IN 120.79	AC-FT 479,900

† CHANGE IN CONTENTS, IN ACRE-FEET, IN SPADA LAKE.

‡ ADJUSTED FOR CHANGE IN CONTENTS IN SPADA LAKE.

SNOHOMISH RIVER BASIN

12141000 WOODS CREEK NEAR MONROE, WASH.

LOCATION (REVISED)---Lat 47°52'08", long 121°55'31", in NW¼SW¼ sec.33, T.28 N., R.7 E., Snohomish County, on right bank 0.4 mile downstream from West Fork, 2.4 miles northeast of Monroe, and at mile 3.1.

DRAINAGE AREA---56.4 sq mi.

PERIOD OF RECORD---July 1946 to September 1970.

GAGE---Water-stage recorder. Altitude of gage is 100 ft (from topographic map). Prior to June 6, 1957, at site 0.4 mile upstream at present datum.

AVERAGE DISCHARGE---24 years, 154 cfs (37.08 inches per year, 111,600 acre-ft per year).

EXTREMES---Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (700 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 7, 1966	0600	*625	3.07	Feb. 18, 1967	2030	702	3.30	Dec. 12, 1968	0200	878	3.58
Dec. 13, 1966	2230	912	3.63	Dec. 3, 1967	0430	834	3.49	Jan. 5, 1969	1530	*1,460	4.65
Dec. 20, 1966	2000	780	3.39	Dec. 25, 1967	2100	*2,060	6.08	Feb. 11, 1969	2100	914	3.64
Jan. 11, 1967	1630	780	3.39	Jan. 14, 1968	1630	840	3.50	Dec. 23, 1969	0600	716	3.31
Jan. 16, 1967	0200	*1,030	3.85					Jan. 27, 1970	2030	*782	3.42
Jan. 20, 1967	0700	988	3.77	Dec. 4, 1968	0430	1,110	3.99				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 8, 9, 1966	17	1.32	1969	Aug. 31, 1969	17	1.28
1967	Aug. 17 to Sept. 1, 1967	14	al.24	1970	July 24, Aug. 16, 19, 20, 22,	16	cl.25
1968	Oct. 1, 1967	19	b1.26		23, 27, 30, 31, 1970		

a Occurred Aug. 19, 29, 30, Sept. 1, 1967.

b Occurred Aug. 12, 1968.

c Occurred July 24, 1970.

Period of record: Maximum discharge, 2,260 cfs Jan. 29, 1965 (gage height, 6.73 ft); maximum gage height, 7.18 ft Feb. 26, 1950, site then in use; minimum discharge, 10 cfs Aug. 26, 1958 (gage height, 1.11 ft).

REMARKS---Records good. Several small diversions above station for farm use. No regulation.

REVISIONS (WATER YEARS)---WSP 1636: 1958. WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	27	110	270	158	226	127	76	48	32	27	21
2	22	37	105	454	136	198	124	72	54	52	26	21
3	22	50	100	374	127	172	110	68	57	92	26	20
4	24	90	140	270	124	149	100	64	52	140	26	20
5	27	86	130	278	143	149	90	59	50	105	25	19
6	36	64	140	555	194	152	83	90	48	97	25	19
7	32	50	170	605	377	149	79	113	42	90	24	20
8	28	48	150	575	454	204	74	86	40	79	24	19
9	27	48	140	500	495	418	83	74	38	72	23	19
10	26	48	150	418	490	423	102	68	37	64	23	23
11	26	50	130	414	428	333	168	66	49	70	23	24
12	26	48	115	378	400	284	292	63	86	63	23	24
13	27	43	97	508	320	302	218	61	72	57	23	23
14	32	44	88	508	324	333	186	64	70	68	23	22
15	37	46	81	405	270	382	158	64	59	74	20	23
16	36	48	74	320	242	382	136	72	52	76	20	22
17	33	46	70	264	222	354	124	83	48	66	20	25
18	36	54	68	226	194	346	113	66	44	57	20	30
19	64	72	68	202	166	436	100	61	40	52	20	27
20	52	102	64	172	155	400	95	55	37	48	19	24
21	43	130	81	152	149	333	95	70	36	44	19	24
22	37	186	79	136	127	284	97	34	34	42	20	22
23	34	176	72	143	119	238	95	90	32	39	20	25
24	39	133	72	130	110	210	88	74	36	39	20	24
25	32	158	72	121	105	176	90	66	34	48	21	24
26	28	149	68	113	113	155	116	61	32	42	21	26
27	28	200	90	110	198	136	108	57	31	37	25	26
28	28	170	296	106	234	130	95	54	46	34	24	26
29	28	140	472	130	-----	116	88	49	38	33	22	23
30	30	120	468	155	-----	130	79	46	33	30	22	22
31	28	-----	360	183	-----	143	-----	46	-----	29	21	-----
TOTAL	990	2,663	4,320	9,179	6,574	7,845	3,513	2,135	1,373	1,871	695	687
MEAN	31.9	85.8	139	296	235	253	117	68.9	45.8	60.4	22.4	22.9
MAX	64	200	472	605	495	436	292	113	86	140	27	30
MIN	22	27	64	108	105	116	74	46	31	29	19	19
CFSM	.57	1.57	2.46	5.25	4.17	4.49	2.07	1.22	.81	1.07	.40	.41
IN.	.65	1.76	2.85	6.05	4.34	5.17	2.32	1.41	.91	1.23	.46	.45
AC-FT	1,960	5,280	8,570	18,210	13,040	15,560	6,970	4,230	2,720	3,710	1,380	1,360

CAL YR 1965 TOTAL 51,746 MEAN 142 MAX 2,090 MIN 21 CFSM 2.52 IN 34.13 AC-FT 102,600

WTR YR 1966 TOTAL 41,645 MEAN 115 MAX 605 MIN 19 CFSM 2.04 IN 27.60 AC-FT 83,000

12141000 WOODS CREEK NEAR MONROE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	40	366	298	330	242	161	182	58	28	20	14
2	38	28	425	302	298	196	140	158	93	27	19	16
3	27	36	425	375	274	168	134	137	54	26	19	16
4	24	36	430	475	322	147	125	128	53	25	19	15
5	23	50	490	515	298	134	128	116	48	25	19	15
6	24	100	430	430	250	125	122	110	45	25	19	15
7	74	384	404	402	218	116	113	107	41	25	21	15
8	32	63	310	445	192	137	107	107	40	26	21	15
9	29	65	266	485	196	246	107	116	40	26	19	16
10	25	82	234	450	210	258	105	100	40	27	17	22
11	25	74	230	702	214	246	97	113	37	24	17	46
12	29	82	310	680	222	222	89	147	34	24	17	30
13	32	107	724	615	348	200	102	134	34	24	16	24
14	29	322	774	575	470	182	102	116	34	24	15	20
15	27	344	620	810	520	230	102	107	34	23	16	19
16	26	326	580	922	530	278	102	100	33	23	16	18
17	27	310	580	625	286	286	87	87	35	23	15	17
18	27	242	575	525	642	298	107	84	30	22	14	17
19	47	194	590	668	595	258	119	80	29	23	14	17
20	113	178	741	961	470	238	113	78	28	24	14	17
21	84	147	680	752	375	218	125	69	34	25	14	18
22	94	137	480	560	302	258	113	67	42	24	14	18
23	100	134	375	480	254	375	102	63	38	24	15	16
24	76	128	334	416	214	318	97	63	34	22	14	17
25	63	161	330	344	192	278	97	63	33	22	16	17
26	54	175	282	314	182	246	97	61	31	26	14	16
27	93	242	418	161	246	238	110	98	31	24	14	16
28	48	168	226	445	200	218	274	60	32	24	14	16
29	45	218	270	450	-----	218	266	67	50	21	14	16
30	56	302	270	485	-----	196	214	67	29	21	14	18
31	46	-----	266	430	-----	175	-----	60	-----	21	14	-----
TOTAL	1,363	4,491	13,239	16,271	9,008	6,945	3,780	3,003	1,134	748	504	552
MEAN	44.0	150	427	525	322	224	126	96.9	37.8	24.1	16.3	18.4
MAX	113	344	774	961	642	375	274	182	58	28	21	46
MIN	23	36	226	298	161	116	89	58	28	21	14	14
CFSM	.78	2.66	7.57	9.31	5.71	3.97	2.23	1.72	.67	.43	.29	.33
IN.	.90	2.96	8.73	10.73	5.94	4.58	2.49	1.98	.75	.49	.33	.36
AC-FY	2,700	8,910	26,260	32,270	17,870	13,780	7,500	5,960	2,250	1,480	1,000	1,090
CAL YR 1966	TDYAL	52,965	MEAN 145	MAX 774	MIN 14	CFSM 2.57	IN 34.93	AC-FY	105,100			
WTR YR 1967	TOTAL	61,038	MEAN 167	MAX 961	MIN 14	CFSM 2.96	IN 40.26	AC-FY	121,100			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	210	334	344	142	130	172	175	114	53	28	71
2	31	172	960	286	160	120	160	151	374	47	28	73
3	34	147	796	246	203	111	148	135	318	42	28	66
4	45	125	642	222	290	130	142	128	214	40	29	61
5	36	116	480	226	250	169	242	142	169	40	29	55
6	34	113	352	192	214	166	250	157	138	40	29	53
7	76	113	298	186	186	148	230	157	120	39	27	48
8	63	105	258	189	166	138	200	135	120	40	26	47
9	38	125	258	282	145	130	178	128	109	37	26	46
10	32	113	238	330	132	122	163	113	98	36	25	42
11	60	116	242	286	128	120	189	109	88	36	25	43
12	67	110	206	258	118	138	178	105	84	39	25	48
13	60	100	178	505	107	132	178	100	80	37	25	46
14	168	102	154	774	102	132	169	90	75	37	36	50
15	122	107	140	752	96	178	214	84	68	37	53	339
16	76	105	131	631	90	334	210	78	63	37	43	250
17	58	92	122	515	92	393	189	71	57	36	36	274
18	69	87	116	430	109	352	175	66	53	34	40	375
19	137	80	113	393	148	286	206	66	54	35	42	290
20	97	76	107	366	157	234	206	102	54	40	41	214
21	140	74	89	375	157	200	192	94	47	37	42	166
22	322	71	119	322	160	175	169	76	53	37	39	148
23	270	74	172	274	214	160	169	75	53	36	63	142
24	116	308	266	250	266	151	160	75	47	35	100	125
25	172	116	1,460	226	234	160	154	75	45	33	92	111
26	150	105	1,570	196	196	163	145	76	43	33	120	100
27	188	97	1,030	175	172	172	138	70	54	32	175	88
28	272	107	834	157	151	210	125	66	88	31	130	76
29	250	330	615	142	138	238	113	61	78	30	100	71
30	214	393	460	140	-----	218	138	60	63	30	84	66
31	203	-----	375	138	-----	196	-----	54	-----	30	73	-----
TOTAL	3,694	3,797	12,757	9,808	4,723	5,698	5,302	3,074	3,021	1,146	1,659	3,584
MEAN	119	127	412	316	163	184	177	99.2	101	37.0	53.5	119
MAX	322	393	774	961	290	393	250	175	374	53	175	375
MIN	24	71	89	138	90	111	113	54	43	30	25	42
CFSM	2.11	2.25	7.31	5.60	2.89	3.26	3.14	1.76	1.79	.66	.95	2.11
IN.	2.44	2.50	8.41	6.47	3.12	3.76	3.50	2.03	1.99	.76	1.09	2.36
AC-FY	7,330	7,530	25,300	19,450	9,370	11,300	10,520	6,100	5,990	2,270	3,290	7,110
CAL YR 1967	TOTAL	62,193	MEAN 170	MAX 1,570	MIN 14	CFSM 3.01	IN 41.02	AC-FY	123,400			
WTR YR 1968	TOTAL	58,263	MEAN 159	MAX 1,570	MIN 24	CFSM 2.82	IN 38.43	AC-FY	115,600			

SNOHOMISH RIVER BASIN

12141000 WOODS CREEK NEAR MONROE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	415	363	175	99	107	109	186	93	47	29	19
2	58	304	415	195	101	105	127	206	76	48	29	20
3	55	296	374	300	120	105	137	196	66	55	26	21
4	69	240	994	900	147	103	125	172	61	52	28	22
5	75	200	694	1,300	169	157	132	152	58	52	30	22
6	108	174	496	1,220	147	157	125	137	57	48	28	20
7	123	160	390	1,090	142	142	114	129	58	44	28	19
8	103	186	589	600	314	123	105	111	52	42	28	19
9	95	268	584	616	600	114	103	103	49	39	26	19
10	99	252	611	534	490	107	101	95	49	37	26	23
11	93	386	752	490	752	101	95	89	49	39	26	24
12	111	501	800	400	740	95	93	82	49	39	26	24
13	144	465	584	336	518	91	101	75	45	36	22	29
14	147	405	501	309	390	87	97	73	40	34	21	26
15	172	340	430	280	318	91	89	65	39	33	28	21
16	154	304	567	260	300	95	87	61	36	31	31	20
17	147	252	470	240	276	147	105	57	36	31	30	28
18	189	224	480	206	244	174	147	55	36	36	30	71
19	189	203	420	189	220	147	137	52	31	35	23	63
20	248	189	327	172	200	132	123	51	33	34	23	60
21	232	174	280	160	180	123	116	47	31	34	22	45
22	248	213	248	144	169	123	105	44	36	33	21	92
23	206	203	309	132	154	166	123	41	41	39	25	152
24	180	183	518	125	147	140	123	41	58	31	21	105
25	172	174	572	118	137	127	144	40	76	33	21	80
26	163	160	460	110	127	118	127	40	71	33	20	68
27	137	157	368	110	123	111	118	42	65	31	21	61
28	125	150	284	105	116	105	123	42	61	31	21	60
29	123	272	240	100	-----	99	180	78	55	30	20	71
30	394	386	200	95	-----	101	174	189	52	30	21	91
31	594	-----	170	101	-----	105	-----	118	-----	30	19	-----
TOTAL	5,016	7,836	14,690	11,312	7,440	3,698	3,585	2,863	1,556	1,161	770	1,395
MEAN	162	261	474	365	266	119	120	92.4	51.9	37.5	24.8	46.5
MAX	594	501	994	1,300	752	174	180	206	93	55	31	152
MIN	55	150	170	95	99	87	87	40	31	30	19	19
CFSM	2.87	4.63	8.40	6.47	4.72	2.11	2.13	1.44	.92	.66	.44	.82
IN.	3.31	5.17	9.49	7.46	4.91	2.44	2.36	1.89	1.03	.77	.51	.92
AC-FT	9,950	15,540	29,140	22,440	14,760	7,330	7,110	5,680	3,090	2,300	1,530	2,770

CAL YR 1968	TOTAL	65,557	MEAN	179	MAX	994	MIN	25	CFSM	3.17	IN	43.24	AC-FT	130,000
WTR YR 1969	TOTAL	61,322	MEAN	168	MAX	1,300	MIN	19	CFSM	2.98	IN	40.45	AC-FT	121,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	51	105	157	363	93	105	144	54	27	25	17
2	276	48	97	144	300	93	125	132	48	27	27	17
3	196	58	93	140	240	87	116	118	44	26	25	19
4	144	136	109	125	252	80	114	107	41	25	23	21
5	114	232	111	114	213	78	130	101	39	24	22	20
6	97	177	101	101	196	91	187	91	37	24	21	24
7	89	154	95	97	174	154	225	85	36	24	21	35
8	99	132	95	157	157	118	210	89	35	24	24	29
9	105	123	123	103	144	111	232	97	39	23	21	25
10	114	118	127	105	137	99	228	105	45	22	20	22
11	101	105	169	93	132	91	203	105	40	21	19	19
12	93	101	296	85	125	93	180	93	37	20	18	18
13	85	91	358	99	140	109	146	95	35	20	18	17
14	74	87	506	276	150	140	150	85	34	19	17	17
15	69	99	475	300	193	147	137	78	36	19	17	17
16	66	169	354	244	350	196	125	71	41	19	17	19
17	83	272	292	224	350	266	118	69	37	18	17	25
18	63	268	264	300	292	228	116	65	34	18	17	31
19	55	210	240	354	248	186	177	61	31	17	17	26
20	58	183	217	350	203	169	193	58	30	17	17	29
21	57	177	309	336	183	150	166	58	30	17	17	29
22	54	166	334	327	154	137	152	58	28	17	17	37
23	52	189	682	425	137	134	144	55	27	17	16	61
24	52	232	550	430	125	152	218	52	26	17	17	55
25	51	196	405	572	114	132	228	51	25	24	17	41
26	49	169	358	496	105	130	200	48	25	41	17	34
27	55	150	345	694	103	123	174	48	25	55	16	30
28	58	134	280	666	97	123	163	51	24	37	17	27
29	55	120	240	496	-----	120	157	65	28	29	17	25
30	55	114	200	376	-----	111	163	76	27	31	16	24
31	52	-----	172	354	-----	107	-----	61	-----	29	17	-----
TOTAL	2,708	4,461	8,302	8,678	5,437	4,046	4,998	2,472	1,040	748	587	810
MEAN	87.4	149	268	280	194	131	167	79.7	34.7	24.1	18.9	27.0
MAX	276	272	682	694	363	264	232	144	54	55	27	61
MIN	49	88	93	85	97	78	105	48	25	17	16	17
CFSM	1.55	2.64	4.75	6.96	3.44	2.32	2.96	1.41	.62	.43	.34	.48
IN.	1.79	2.94	5.48	5.72	3.59	2.67	3.30	1.63	.69	.49	.39	.53
AC-FT	5,370	8,850	16,470	17,210	10,780	8,030	9,910	4,900	2,080	1,480	1,160	1,610

CAL YR 1969	TOTAL	49,251	MEAN	135	MAX	1,300	MIN	19	CFSM	2.39	IN	32.48	AC-FT	97,690
WTR YR 1970	TOTAL	44,287	MEAN	121	MAX	694	MIN	16	CFSM	2.15	IN	29.21	AC-FT	87,840

12141300 MIDDLE FORK SNOQUALMIE RIVER NEAR TANNER, WASH.

LOCATION (REVISED).--Lat 47°29'10", long 121°38'48", in SW¼SE¼ sec.10, T.23 N., R.9 E., King County, on left bank 0.7 mile downstream from Granite Creek, 6.4 miles east of North Bend, and at mile 55.6.

DRAINAGE AREA.--154 sq. mi.

PERIOD OF RECORD.--February 1961 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 780 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 1,257 cfs (110.84 inches per year, 910,700 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (8,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1500	*6,860	7.82	Dec. 10, 1967	2300	8,580	8.54	Dec. 3, 1968	1700	12,800	10.05
Dec. 13, 1966	0830	*10,900	9.41	Dec. 25, 1967	1400	16,600	11.35	Jan. 5, 1969	0300	*21,200	12.66
Jan. 19, 1967	1745	8,190	8.38	Jan. 20, 1968	2115	*18,000	11.75	May 30, 1969	0200	8,240	8.40
				Feb. 19, 1968	0900	11,500	9.63				
				June 2, 1968	1045	11,300	9.54	Apr. 9, 1970	1700	*8,070	8.33
Oct. 27, 1967	2030	13,100	10.16	Sept. 15, 1968	2400	8,790	8.62				
Oct. 30, 1967	1400	8,790	8.62	Sept. 17, 1968	1300	12,100	9.83				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 17, 1966	a178	-	1969	Sept. 2, 1969	168	1.17
1967	Sept. 29, 1967	143	1.04	1970	Aug. 31, 1970	145	1.05
1968	Aug. 13, 14, 1968	233	1.45				

a Minimum daily.

Period of record: Maximum discharge, 22,800 cfs Nov. 19, 1962 (gage height, 13.14 ft); minimum, 140 cfs Aug. 28, 29, 30, 1961; minimum gage height, 1.04 ft Sept. 29, 1967.

Flood of Nov. 23, 1959, reached a stage of 18.7 ft, from floodmarks (discharge, 49,000 cfs, by slope-area measurement at site 6 miles downstream).

REMARKS.--Records excellent. No gage-height record June 20 to July 25, 1968. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	431	966	417	722	587	2,670	1,020	1,170	1,390	555	255
2	223	640	1,800	456	627	519	2,530	1,460	1,190	1,490	512	245
3	215	1,000	1,410	415	571	474	1,810	2,480	1,180	2,680	500	235
4	218	2,760	3,360	400	551	438	1,620	3,250	1,170	2,450	516	225
5	379	2,930	1,790	520	579	428	1,640	4,590	1,190	2,020	478	220
6	1,660	1,680	1,650	1,800	611	442	1,870	6,050	1,860	1,790	442	210
7	1,080	1,170	2,330	2,410	664	438	2,170	4,020	2,590	1,590	421	205
8	647	978	1,930	2,130	639	610	2,130	3,460	2,470	1,600	421	203
9	651	885	1,340	1,440	740	1,970	2,340	3,500	2,190	1,560	404	203
10	559	810	1,070	1,140	643	1,590	2,540	2,610	2,800	1,500	385	196
11	434	945	896	1,450	736	1,040	3,460	1,650	3,210	1,460	379	203
12	411	790	776	2,030	709	901	2,370	1,680	2,590	1,280	351	201
13	563	691	686	3,710	607	1,550	1,600	1,520	1,970	1,230	488	187
14	763	736	623	3,050	631	1,800	1,480	1,290	2,040	1,380	587	181
15	1,670	1,180	563	1,850	547	1,570	1,540	1,260	2,460	1,300	438	183
16	1,170	1,380	500	1,300	508	1,260	1,600	1,440	3,040	1,150	385	181
17	1,160	923	463	1,050	504	994	1,470	1,200	2,620	1,060	357	178
18	1,310	781	448	906	508	875	1,240	1,150	1,990	972	330	249
19	1,950	998	456	781	504	865	1,090	1,370	2,050	956	310	238
20	1,390	1,010	496	696	756	772	1,140	1,690	1,680	845	293	206
21	1,200	1,720	611	647	772	709	1,280	2,390	1,420	790	276	189
22	960	1,080	492	599	745	639	1,230	2,170	1,350	754	268	189
23	800	1,210	460	595	732	615	1,170	1,620	1,340	736	260	228
24	680	967	435	551	682	619	1,190	1,580	1,510	722	265	215
25	591	890	415	535	639	700	1,350	2,290	1,280	691	270	194
26	519	912	401	531	623	956	1,340	3,050	1,370	623	270	196
27	481	1,090	411	555	709	1,300	1,130	2,440	1,560	603	368	210
28	474	865	523	623	655	1,490	1,040	1,800	3,170	615	366	194
29	452	736	523	830	-----	1,960	1,020	1,760	1,960	607	293	185
30	575	664	456	918	-----	3,320	1,050	1,760	1,420	603	280	183
31	492	-----	421	885	-----	3,160	-----	1,380	-----	587	265	-----
TOTAL	23,907	33,652	28,701	35,220	17,914	34,591	50,110	68,930	57,840	37,034	11,733	6,187
MEAN	771	1,122	926	1,136	640	1,114	1,670	2,224	1,928	1,195	378	206
MAX	1,950	2,930	3,360	3,710	772	3,320	3,460	6,050	3,210	2,680	587	255
MIN	215	431	401	400	504	428	1,020	1,020	1,170	587	260	178
CFSM	5.01	7.29	6.01	7.38	4.16	7.25	10.8	14.4	12.5	7.76	2.45	1.34
IN.	5.77	6.13	6.93	8.51	4.33	8.36	12.10	16.65	13.97	8.95	2.83	1.49
AC-FT	47,420	66,750	56,930	69,860	35,530	68,610	99,390	136,700	114,700	73,460	23,270	12,270
CAL YR 1965	TOTAL 427,701	MEAN 1,172	MAX 11,100	MIN 198	CFSM 7.61	IN 103.31	AC-FT 848,300					
WTR YR 1966	TOTAL 405,819	MEAN 1,112	MAX 6,050	MIN 178	CFSM 7.22	IN 98.03	AC-FT 804,900					

SNOHOMISH RIVER BASIN

12141300 MIDDLE FORK SNOQUALMIE RIVER NEAR TANNER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	678	3,730	2,400	1,330	1,810	575	599	1,970	1,440	456	215
2	182	579	2,110	1,500	1,150	835	575	611	3,460	1,455	428	324
3	281	516	1,530	3,000	1,980	732	607	644	2,850	1,730	394	287
4	225	470	1,280	1,800	5,170	660	682	781	2,490	1,630	391	228
5	198	500	1,130	1,410	2,780	623	647	885	2,870	1,400	379	208
6	189	595	1,010	1,130	1,700	599	611	1,170	3,010	1,230	366	203
7	282	504	918	1,000	1,350	565	638	1,610	2,500	1,100	357	192
8	722	448	810	1,790	1,150	688	682	1,880	1,960	1,030	345	183
9	456	748	718	1,870	1,100	790	648	2,120	1,690	912	339	175
10	324	1,160	1,020	1,830	1,400	647	607	1,530	1,670	860	363	200
11	270	745	1,780	3,300	1,250	579	579	1,340	1,640	912	360	500
12	276	1,150	3,520	2,130	1,700	527	607	1,180	1,700	1,110	354	540
13	287	994	9,730	4,260	1,800	496	643	1,050	2,040	1,070	339	316
14	262	1,600	4,350	5,440	1,300	470	595	1,040	2,530	978	330	251
15	250	1,740	2,470	5,440	1,110	539	547	1,300	2,890	870	324	220
16	240	1,420	4,540	3,030	1,110	820	531	2,270	3,050	820	316	213
17	1,170	1,020	9,020	1,750	940	812	940	3,300	3,300	800	295	208
18	400	1,020	4,130	1,460	1,920	850	523	2,660	3,160	736	284	201
19	625	945	3,970	4,790	1,260	736	567	2,700	3,420	678	276	194
20	2,500	940	4,420	3,470	1,030	763	547	3,600	3,620	635	268	196
21	1,200	901	2,190	2,000	918	830	579	4,310	3,080	635	276	192
22	2,100	740	1,540	1,480	825	1,460	551	3,750	2,440	631	281	194
23	4,300	709	1,210	1,200	763	2,150	563	2,800	2,000	627	254	181
24	1,800	644	1,110	1,020	736	1,430	583	1,990	2,090	651	238	164
25	1,100	3,550	994	885	754	1,120	627	1,610	2,220	635	220	154
26	1,150	2,100	855	865	714	984	603	1,600	2,230	615	208	152
27	1,500	1,680	758	2,500	673	865	647	1,710	2,090	583	203	150
28	1,090	1,810	740	4,660	901	781	673	1,950	1,760	539	203	149
29	1,040	1,750	1,250	3,070	-----	722	643	2,680	1,770	485	208	150
30	1,110	4,380	1,100	2,330	-----	664	615	1,970	1,600	470	215	203
31	820	-----	1,200	1,600	-----	611	-----	1,600	-----	463	218	-----
TOTAL	26,062	36,206	71,133	74,560	39,124	25,684	18,024	57,920	73,020	27,925	9,488	6,743
MEAN	841	1,207	2,295	2,405	1,397	829	601	1,868	2,434	901	306	225
MAX	4,300	4,380	9,730	5,460	5,170	2,150	682	4,310	3,620	1,730	456	540
MIN	183	448	718	865	673	470	512	599	1,600	463	203	149
CFSH	5.48	7.84	14.9	15.6	9.07	5.38	3.90	12.1	15.8	5.85	1.99	1.46
IN-	6.30	8.75	17.18	18.01	9.45	6.20	4.35	13.99	17.64	6.75	2.29	1.63
AC-FT	91,690	71,810	141,100	147,900	77,600	50,940	35,750	114,900	144,800	59,390	18,820	13,370

CAL YR 1966 TOTAL 452,960 MEAN 1,241 MAX 9,730 MIN 178 CFSH 8.06 IN 109.42 AC-FT 898,400
WTR YR 1967 TOTAL 465,889 MEAN 1,276 MAX 9,730 MIN 149 CFSH 8.29 IN 112.54 AC-FT 924,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	382	2,790	700	1,230	754	1,260	1,020	1,830	5,160	1,050	366	607
2	658	1,600	870	1,000	930	1,260	1,070	1,370	9,100	1,050	354	563
3	1,070	1,600	901	855	1,970	1,210	912	1,340	4,210	1,050	351	496
4	981	923	810	800	4,850	1,480	890	1,560	2,440	1,030	351	445
5	591	768	727	768	2,700	1,850	1,040	1,420	2,050	1,000	327	404
6	709	673	627	668	1,500	1,430	1,040	1,320	1,890	940	310	385
7	1,220	647	587	643	1,200	1,110	1,030	1,140	1,550	880	284	366
8	956	647	567	615	1,000	923	885	1,140	1,520	770	270	348
9	619	1,280	1,090	644	920	800	865	1,330	1,380	760	257	324
10	504	4,990	3,170	650	860	736	983	1,660	1,390	670	254	310
11	2,310	2,410	4,250	600	810	673	1,280	2,060	1,390	630	262	301
12	1,990	1,460	1,770	560	800	651	1,040	1,960	1,240	720	254	301
13	2,430	1,220	1,200	1,050	730	631	875	1,410	1,260	740	238	284
14	3,430	1,270	967	2,700	680	615	1,030	1,260	1,320	640	327	437
15	1,480	1,510	835	3,050	620	830	1,220	1,190	1,150	900	651	3,000
16	983	1,560	763	1,900	580	1,050	972	1,230	1,170	800	481	4,620
17	763	1,150	682	1,350	560	918	840	1,570	1,190	640	398	6,810
18	737	1,000	623	1,100	2,240	786	815	2,060	1,280	600	523	4,550
19	984	900	559	6,850	10,400	704	800	2,870	1,370	570	535	2,370
20	732	750	516	11,300	6,520	678	745	6,310	1,150	780	485	1,610
21	1,420	673	500	9,490	3,580	651	700	2,450	1,050	660	404	1,190
22	2,720	623	2,790	3,680	3,710	639	704	1,820	1,150	600	360	1,110
23	3,010	639	4,920	2,670	4,960	722	813	1,880	1,350	540	446	1,520
24	1,520	2,720	13,600	3,660	4,170	835	896	1,680	1,150	520	989	1,130
25	1,510	1,380	13,800	2,490	2,340	795	1,330	1,750	1,200	480	1,030	885
26	1,130	956	7,160	1,660	1,770	795	1,530	1,790	1,200	474	1,560	754
27	5,920	815	4,500	1,240	1,500	1,760	1,210	1,540	1,300	466	1,400	664
28	5,270	758	3,230	1,000	1,330	2,010	1,490	1,480	1,700	452	1,600	595
29	2,590	875	2,060	906	1,260	2,310	2,280	1,500	1,500	448	1,110	543
30	5,520	763	1,510	835	-----	1,600	2,470	1,310	1,200	428	820	496
31	4,100	-----	1,250	781	-----	1,190	-----	1,190	-----	385	678	-----
TOTAL	58,239	38,890	77,534	66,565	65,244	32,902	32,777	52,120	56,010	21,593	17,675	37,218
MEAN	1,879	1,296	2,501	2,147	2,250	1,061	1,093	1,681	1,867	697	570	1,241
MAX	5,920	4,990	13,800	11,300	10,400	2,310	2,470	4,310	9,100	1,050	1,600	6,810
MIN	382	623	500	560	560	615	700	1,140	1,050	385	238	284
CFSH	12.2	8.42	16.2	13.9	14.6	6.89	7.10	10.9	12.1	4.53	3.70	8.06
IN-	14.07	9.39	18.73	16.08	15.76	7.95	7.92	12.59	13.53	5.22	4.27	8.99
AC-FT	115,500	77,140	153,800	132,000	129,400	65,260	65,010	103,400	111,100	42,830	35,060	73,620
CAL YR 1967 TOTAL 507,151 MEAN 1,389 MAX 13,800 MIN 149 CFSH 9.02 IN 122.51 AC-FT 1,006,000												
WTR YR 1968 TOTAL 556,767 MEAN 1,521 MAX 13,800 MIN 238 CFSH 9.88 IN 134.49 AC-FT 1,104,000												

12142000 NORTH FORK SNOQUALMIE RIVER NEAR SNOQUALMIE FALLS, WASH.

LOCATION (REVISED).--Lat 47°36'54", long 121°42'44", in NW¼NW¼ sec.31, T.25 N., R.9 E., King County, on left bank 0.6 mile upstream from Calligan Creek, 7.0 miles northeast of town of Snoqualmie Falls, and at mile 9.2.

DRAINAGE AREA.--64.0 sq mi.

PERIOD OF RECORD.--August 1929 to October 1949. Annual maximums, water years 1950-60. February 1961 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,130 ft (from topographic map). Prior to Oct. 19, 1949, water-stage recorder and October 1949 to February 1961 nonrecording gage, at site 1,500 ft downstream at different datum.

AVERAGE DISCHARGE.--29 years (1929-49, 1961-70), 495 cfs (105.03 inches per year, 358,600 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (4,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 4, 1965	0330	*2,660	6.69	Dec. 25, 1967	1415	6,720	9.51	Dec. 3, 1968	1830	6,200	9.22
				Jan. 20, 1968	1945	*7,900	10.15	Jan. 5, 1969	0100	*9,420	10.91
Dec. 13, 1966	1430	*4,630	8.25	Feb. 19, 1968	0115	4,870	8.42	Sept. 30, 1969	2030	4,810	8.38
				June 2, 1968	1000	5,380	8.74				
Oct. 27, 1967	2000	4,740	8.33	Sept. 17, 1968	1445	4,660	8.27	Apr. 9, 1970	1700	*3,870	7.70

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 17, 1966	63	2.03	1969	Sept. 12, 1969	66	2.05
1967	Sept. 29, 1967	45	1.84	1970	Sept. 2, 1970	49	1.93
1968	Aug. 13, 14, 1968	72	2.15				

Period of record: Maximum discharge, 15,800 cfs Feb. 26, 1932 (gage height, 17.5 ft, site and datum then in use), from rating curve extended above 2,200 cfs on basis of slope-area measurement at gage height 16.47 ft; minimum observed, 30 cfs Sept. 17-19, 1929.

REMARKS.--Records excellent except those for period of no gage-height record July 16 to Sept. 1, 1970, which are good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1346: 1930-31(M), 1932, 1935, 1936-37(M), 1938, 1939-42(M), 1944, 1945-46(P), 1947, 1948(P), 1949(M). WSP 1736: 1932-34(M), 1935, 1938(M), 1943-45(M), 1947(M), drainage area. WSP 1932: 1950-54(M), 1956-57(M), 1959-60(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	189	363	193	328	249	1,060	408	394	464	166	97
2	93	306	916	195	280	220	1,040	586	416	556	158	92
3	89	489	586	184	253	207	685	996	416	1,090	153	90
4	87	1,620	1,780	178	242	189	606	1,210	436	1,090	149	86
5	160	1,590	820	218	277	189	640	1,540	419	740	140	83
6	1,000	749	790	1,010	294	198	740	1,990	665	640	132	81
7	900	469	1,150	1,340	300	198	862	1,400	824	560	125	79
8	260	388	832	1,080	274	230	838	1,230	735	556	122	77
9	300	359	542	954	269	736	892	1,240	665	542	118	73
10	230	320	444	512	248	650	928	904	850	504	114	71
11	200	410	374	601	272	419	1,490	640	802	512	113	73
12	180	349	325	778	272	360	898	635	690	433	107	73
13	280	282	289	1,960	238	729	892	583	560	426	136	71
14	340	302	261	1,470	232	886	570	488	665	444	164	69
15	870	342	238	826	211	735	645	484	778	422	124	68
16	492	392	220	570	204	529	660	596	880	384	114	66
17	564	290	204	468	209	412	588	456	772	354	109	66
18	598	260	200	405	220	374	496	433	592	334	104	96
19	1,070	398	225	350	216	380	430	508	650	325	100	100
20	605	416	242	312	300	328	426	630	512	292	96	82
21	469	678	340	289	363	294	456	916	416	272	93	78
22	368	832	250	264	360	264	476	808	416	264	90	76
23	305	487	218	255	360	255	464	610	412	250	88	76
24	297	372	207	235	328	255	468	588	496	248	86	78
25	226	333	195	238	297	283	534	825	426	250	82	73
26	204	330	182	232	286	394	520	1,070	452	218	81	76
27	191	392	189	238	294	547	430	808	492	209	152	79
28	197	339	242	255	269	615	408	552	1,080	207	161	78
29	187	302	255	374	-----	796	408	574	630	198	116	72
30	276	279	220	430	-----	1,410	430	592	452	191	112	69
31	223	-----	200	408	-----	1,310	-----	444	-----	180	104	-----
TOTAL	10,918	14,264	13,299	16,824	7,696	14,639	19,980	24,744	17,975	13,155	3,709	2,348
MEAN	352	475	429	543	275	472	666	798	599	424	120	78.3
MAX	1,070	1,620	1,780	1,960	363	1,410	1,490	1,990	1,080	1,090	166	100
MIN	87	189	182	178	204	189	408	408	394	180	81	66
CFSM	5.50	7.42	6.70	8.48	4.30	7.38	10.4	12.5	9.36	6.63	1.68	1.22
IN.	6.35	8.29	7.73	9.78	4.47	8.51	11.61	14.38	10.45	7.65	2.16	1.36
AC-FT	21,660	28,290	26,380	33,370	15,270	29,040	39,630	49,080	35,630	26,090	7,360	4,660
CAL YR 1965	TOTAL 168,615	MEAN 462	MAX 4,620	MIN 74	CFSM 7.22	IN 98.01	AC-FT 334,400					
WTR YR 1966	TOTAL 159,551	MEAN 437	MAX 1,990	MIN 66	CFSM 6.83	IN 92.74	AC-FT 316,500					

12142000 NORTH FORK SNOQUALMIE RIVER NEAR SNOQUALMIE FALLS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	274	1,300	1,040	538	542	258	283	820	422	110	48
2	104	240	838	650	508	416	258	294	1,240	492	106	95
3	93	214	640	1,300	673	354	272	315	954	488	102	83
4	82	195	610	814	2,070	315	315	354	850	488	97	66
5	79	200	538	610	1,090	294	300	422	1,020	344	93	64
6	77	253	464	484	680	286	277	570	1,040	340	91	62
7	124	220	419	426	538	269	292	705	826	297	88	58
8	404	188	347	773	464	303	312	444	954	488	87	55
9	230	451	322	968	440	328	322	916	588	269	82	53
10	162	789	509	846	570	280	289	596	588	240	79	60
11	139	422	1,090	1,780	504	253	269	538	574	266	76	175
12	140	676	1,740	892	484	235	286	496	578	300	78	181
13	149	640	3,960	1,780	504	223	312	444	695	286	73	106
14	137	1,120	1,610	2,310	534	214	292	452	802	250	68	92
15	127	928	1,060	2,540	448	238	272	617	880	232	69	83
16	122	710	2,150	1,290	412	479	255	1,080	910	220	67	77
17	255	615	2,130	826	612	524	250	1,230	989	211	63	73
18	202	552	1,740	635	796	436	250	1,040	910	193	61	69
19	561	520	1,800	1,910	520	360	258	1,050	1,020	174	60	66
20	1,490	500	2,010	1,430	448	357	255	1,330	1,030	178	58	64
21	547	476	922	844	402	408	272	1,510	826	191	59	62
22	1,020	388	660	630	370	663	272	1,280	730	172	63	58
23	2,010	367	520	516	344	1,170	982	982	601	180	58	55
24	856	344	484	440	337	655	292	705	620	158	56	53
25	520	1,630	440	394	347	315	601	670	149	149	55	50
26	529	854	380	374	337	412	306	650	660	140	53	48
27	697	825	340	1,050	318	354	297	695	606	137	52	47
28	419	922	328	2,090	479	398	306	802	500	164	51	46
29	438	862	547	1,330	-----	309	297	1,090	508	122	50	46
30	456	1,770	497	1,050	-----	294	283	745	460	118	48	84
31	328	-----	524	660	-----	277	-----	596	-----	114	48	-----
TOTAL	12,567	18,155	30,974	32,682	16,013	12,052	8,521	23,166	23,135	7,574	2,201	2,179
MEAN	405	585	969	1,054	512	389	274	747	751	249	71.0	72.6
MAX	2,010	1,770	3,960	2,540	2,070	1,170	322	1,510	1,240	492	110	181
MIN	70	195	322	374	318	214	250	283	460	114	48	46
CFSM	6.33	9.45	15.6	16.5	8.94	6.08	4.44	11.7	12.0	3.81	1.11	1.13
IN.	7.30	10.55	18.00	19.00	9.31	7.01	4.95	13.47	13.45	4.40	1.28	1.27
AC-FT	24,930	36,010	61,440	64,820	31,760	23,910	16,900	45,950	45,890	15,020	4,370	4,320

CAL YR 1966 TOTAL 182,766 MEAN 501 MAX 3,960 MIN 46 CFSM 7.83 IN 106.23 AC-FT 362,500
WTR YR 1967 TOTAL 189,219 MEAN 518 MAX 3,960 MIN 46 CFSM 8.09 IN 109.98 AC-FT 375,300

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	263	982	270	505	273	444	432	892	1,990	382	108	253
2	364	580	372	402	339	440	487	605	3,920	363	103	235
3	701	432	402	346	967	410	402	615	1,540	349	100	207
4	520	352	359	320	2,220	519	399	722	934	323	97	184
5	276	299	308	305	822	640	469	605	778	293	95	172
6	339	262	262	268	541	496	416	541	688	262	93	160
7	845	257	237	254	432	365	410	474	550	244	89	151
8	481	268	223	244	392	314	368	496	570	219	85	142
9	268	498	488	270	359	276	359	615	505	204	82	135
10	212	1,950	1,400	268	326	252	420	778	500	191	79	128
11	1,490	865	1,710	235	305	237	575	874	505	181	77	127
12	829	492	630	226	290	247	424	772	424	260	75	127
13	930	399	420	656	270	247	349	532	464	240	74	120
14	1,640	399	346	1,440	244	242	396	532	482	250	105	207
15	600	478	305	1,450	226	358	448	510	406	342	273	1,220
16	382	693	282	820	212	518	372	514	406	262	165	1,730
17	293	399	254	536	212	420	323	640	402	210	138	2,460
18	286	349	235	440	1,750	336	323	796	424	187	204	1,560
19	497	314	212	2,940	4,110	290	311	910	440	171	199	814
20	323	268	197	4,430	2,380	273	287	1,430	362	260	219	565
21	678	240	189	3,300	1,820	265	270	886	333	223	185	436
22	854	228	1,480	1,300	1,590	265	276	694	449	189	173	367
23	903	226	2,240	916	1,970	308	336	898	448	171	226	512
24	478	1,200	4,800	1,360	1,540	372	399	738	372	158	565	398
25	595	565	5,540	866	874	333	555	744	396	149	471	315
26	440	378	2,610	585	666	326	802	732	406	141	862	277
27	2,610	314	1,750	444	550	861	575	610	528	134	725	248
28	1,670	290	1,350	368	474	910	784	532	904	129	610	223
29	904	352	880	336	440	1,120	1,170	556	600	122	460	204
30	1,650	299	625	314	-----	705	1,230	478	424	116	347	187
31	1,230	-----	514	293	-----	492	-----	440	-----	111	286	-----
TOTAL	23,551	14,628	30,890	26,437	26,594	13,281	14,367	21,141	21,150	6,838	7,370	13,864
MEAN	760	488	996	853	917	428	479	682	705	221	238	462
MAX	2,610	1,950	5,540	4,430	4,110	1,120	1,230	3,920	3,920	382	862	2,460
MIN	212	226	212	235	212	247	323	406	406	111	74	120
CFSM	11.9	7.63	15.4	13.3	14.3	6.49	7.48	10.7	11.0	3.45	3.72	7.22
IN.	13.69	8.50	17.95	15.37	15.46	7.72	8.35	12.29	12.29	3.97	4.28	8.06
AC-FT	46,710	29,010	61,270	52,440	52,750	26,340	28,500	41,930	41,950	13,560	14,620	27,500

CAL YR 1967 TOTAL 196,592 MEAN 539 MAX 5,540 MIN 46 CFSM 8.42 IN 114.27 AC-FT 389,900
WTR YR 1968 TOTAL 220,111 MEAN 601 MAX 5,540 MIN 74 CFSM 9.39 IN 127.94 AC-FT 436,600

SNOHOMISH RIVER BASIN

12142000 NORTH FORK SNOQUALMIE RIVER NEAR SNOQUALMIE FALLS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	448	512	440	156	155	934	504	975	440	107	71
2	144	464	495	460	160	155	820	472	1,090	426	103	69
3	156	615	3,190	551	170	164	570	433	1,230	440	100	81
4	236	426	1,620	4,500	162	164	464	405	1,260	570	97	91
5	258	350	838	6,150	153	274	500	440	1,210	444	134	118
6	534	306	588	2,050	144	277	500	601	975	363	132	95
7	601	274	508	1,390	139	230	433	940	760	334	109	86
8	394	512	808	866	164	207	398	1,420	820	306	103	81
9	312	1,270	710	670	184	191	433	1,570	904	300	99	77
10	658	660	790	542	176	180	538	1,510	900	289	95	73
11	772	2,210	750	460	384	174	492	1,290	850	354	92	70
12	670	1,580	560	398	412	170	625	1,260	700	325	91	67
13	808	898	464	360	286	168	784	1,210	600	274	92	88
14	601	640	426	331	250	170	542	1,090	588	242	88	116
15	868	520	408	309	228	193	436	820	547	220	87	95
16	949	433	426	292	230	269	422	778	547	204	92	87
17	610	391	367	272	223	1,050	646	760	556	191	87	107
18	635	757	377	258	216	853	1,070	916	520	182	83	304
19	587	1,020	328	245	211	592	850	954	500	178	82	379
20	1,390	928	292	230	204	480	620	820	430	170	81	444
21	982	856	292	216	198	436	560	988	400	160	81	357
22	730	1,378	258	204	193	448	745	1,210	480	155	79	1,240
23	630	975	325	185	184	512	1,150	1,310	856	151	76	1,630
24	610	640	814	170	172	405	831	1,370	1,200	146	72	1,110
25	596	500	620	175	168	377	578	1,000	1,100	139	71	935
26	520	440	448	176	162	456	476	850	745	132	70	615
27	384	370	168	156	154	476	588	832	606	135	72	416
28	360	520	318	162	155	588	640	802	542	122	81	337
29	374	844	269	156	-----	610	670	1,600	560	119	90	532
30	728	685	240	155	-----	832	556	2,200	484	113	78	2,250
31	640	-----	269	156	-----	1,210	-----	1,080	-----	110	73	-----
TOTAL	17,933	22,092	18,687	22,699	5,640	12,659	18,759	31,415	22,935	7,723	2,797	12,021
MEAN	578	736	593	732	201	408	625	1,013	765	249	90.2	401
MAX	1,390	2,210	3,160	6,150	4,120	1,210	1,150	2,200	1,260	570	134	2,250
MIN	156	274	240	155	139	155	398	405	400	110	70	67
CF5N	9.03	11.5	9.42	11.4	3.14	6.38	9.77	15.8	12.0	3.89	1.41	6.27
IN.	10.42	12.84	10.86	13.19	3.28	7.36	10.90	18.26	13.33	4.49	1.63	6.99
AC-FT	35,570	49,820	37,070	45,020	11,190	25,110	37,210	62,310	45,490	15,320	5,550	23,840
CAL YR 1968	TOTAL 209,756		MEAN 573		NAX 4,430		MIN 74		CF5N 8.95		IN 121.92	
WTR YR 1969	TOTAL 205,364		MEAN 535		NAX 4,150		MIN 67		CF5N 8.36		IN 113.55	
	AC-FT 416,000								AC-FT 387,500			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,700	191	216	225	578	235	329	340	745	209	140	50
2	1,400	170	200	209	484	220	460	420	1,000	228	150	49
3	954	209	189	200	484	216	354	547	1,120	288	160	138
4	630	1,160	245	183	404	205	354	750	880	306	130	156
5	480	1,040	225	168	351	196	988	750	710	262	120	127
6	402	578	195	166	379	247	1,140	534	838	225	110	61
7	350	476	178	164	436	1,080	670	408	690	200	105	1,370
8	690	367	175	156	578	508	578	444	484	200	130	650
9	890	318	205	180	665	365	2,180	760	556	191	120	408
10	635	286	185	174	700	306	1,480	476	578	172	110	276
11	444	277	440	168	675	276	745	379	412	158	100	216
12	378	289	978	166	690	279	547	334	390	144	95	180
13	312	253	993	200	868	351	448	312	396	132	92	160
14	274	225	1,220	2,100	606	556	390	288	456	127	90	138
15	245	250	750	975	695	808	348	386	516	122	85	127
16	220	292	512	524	1,470	318	808	504	116	82	116	116
17	204	255	446	330	904	630	297	824	404	113	80	138
18	189	240	630	2,300	678	468	294	556	538	110	76	1,050
19	176	245	700	1,900	538	196	344	520	524	105	74	1,070
20	191	285	1,000	1,580	472	358	334	456	529	100	72	606
21	200	590	950	1,500	428	334	300	390	610	95	68	424
22	182	380	950	1,500	390	306	291	512	520	90	66	544
23	193	550	954	1,840	354	288	309	592	440	85	64	556
24	182	630	596	1,000	327	404	424	578	390	80	62	376
25	178	416	464	850	306	321	354	790	362	95	61	285
26	162	337	393	650	285	297	300	808	379	250	60	240
27	188	289	700	270	273	270	307	368	500	58	207	80
28	198	261	306	534	255	303	258	432	303	350	56	183
29	189	248	279	444	-----	300	270	524	260	250	55	164
30	204	238	260	382	-----	270	315	755	250	200	54	150
31	211	-----	245	428	-----	252	-----	560	-----	150	53	-----
TOTAL	12,797	11,308	15,426	22,096	15,270	12,121	15,689	16,743	16,089	5,653	2,778	10,775
MEAN	413	376	526	745	545	436	536	582	536	182	86	337
MAX	1,700	1,160	1,220	2,300	1,470	1,080	2,180	824	1,120	500	160	1,370
MIN	162	170	175	156	255	196	258	288	250	80	53	49
CFPM	6.45	5.89	7.78	11.1	8.52	6.11	8.17	8.44	8.38	2.84	1.40	5.61
IN.	7.44	6.57	6.97	12.84	8.88	7.05	9.12	9.73	9.35	3.29	1.61	6.26
AC-FT	25,380	22,420	50,600	43,830	30,290	24,040	31,120	33,210	31,910	11,210	5,510	21,370
CAL YR 1969	TOTAL	176,176	MEAN	483	MAX	6,150	MIN	67	CFPM	7.55	IN	102-40
WTR YR 1970	TOTAL	156,742	MEAN	429	MAX	2,300	MIN	69	CFPM	6.70	IN	91-11

12142200 CALLIGAN CREEK NEAR SNOQUALMIE, WASH.

LOCATION.--Lat 47°36'05", long 121°41'20", in SWSN¼ sec. 32, T.25 N., R.9 E., King County, on left bank (corrected) 0.5 mile downstream from Calligan Lake outlet, 1.5 miles upstream from mouth, and 8.2 miles northeast of Snoqualmie.

DRAINAGE AREA.--7.31 sq mi.

PERIOD OF RECORD.--August 1964 to May 1970 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 2,210 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 47.8 cfs (88.80 inches per year, 34,630 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (200 cfs), October 1965 to May 1970

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1900	*203	2.40	Dec. 25, 1967	1300	*876	4.34	Dec. 3, 1968	2400	223	2.41
Dec. 15, 1966	2030	242	2.53	Jan. 21, 1968	0350	450	3.18	Jan. 5, 1969	1200	*720	3.95
Dec. 17, 1966	2300	225	2.46	Feb. 20, 1968	0100	344	2.84	May 30, 1969	0700	304	2.76
Jan. 15, 1967	1200	*340	2.92	June 2, 1968	1600	405	3.04	Jan. 19, 1970	2300	*181	2.26
				Sept. 17, 1968	2000	302	2.70				

Annual minimum discharge, October 1965 to May 1970

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 10-18, 24-30, 1966	0	-	1968	Oct. 1-3, 1967	0	-
1967	Oct. 1, 1966, Aug. 6 to Sept. 30, 1967	0	-	1969	Sept. 2, 1969	0	-
				1970	Jan. 12, 1970	7.5	.96

Period of record: Maximum discharge, 985 cfs Jan. 29, 1965 (gage height, 4.77 ft), from rating curve extended above 450 cfs; no flow for part or all of several days in most years.

REMARKS.--Records excellent except those for period of no gage-height record Jan. 14 to Feb. 21, 1969, which are fair. Flow affected by natural storage in Calligan Lake. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	20	23	12	26	10	122	39	48	51	6.1	3.2
2	3.8	20	32	13	23	16	131	45	44	50	5.4	2.8
3	3.0	22	38	12	21	15	109	67	45	92	4.7	2.3
4	2.8	55	90	12	20	14	90	98	45	122	4.1	1.0
5	3.8	88	100	12	20	13	81	129	45	106	3.5	1.3
6	13	80	80	23	20	13	81	179	53	88	3.0	.90
7	22	64	96	50	21	12	87	181	64	72	2.5	.60
8	22	50	96	68	21	13	90	154	67	62	2.3	.48
9	25	42	74	67	20	18	97	149	66	55	1.9	.18
10	23	37	62	59	19	26	188	122	88	49	1.8	0
11	20	36	50	55	18	26	136	98	84	50	1.4	0
12	18	33	41	58	18	26	129	82	78	46	1.3	0
13	22	29	36	75	16	32	103	73	69	42	1.9	0
14	25	26	29	91	17	50	82	64	68	39	4.4	0
15	50	26	25	80	15	59	75	59	70	36	4.4	0
16	58	25	20	67	14	56	73	61	74	34	3.8	0
17	60	22	18	55	13	47	60	56	73	30	3.5	0
18	67	20	17	46	13	42	60	50	67	27	3.0	0
19	100	21	16	39	12	39	51	51	66	26	2.8	.20
20	91	25	16	33	14	34	40	59	59	23	2.5	.20
21	72	32	18	28	16	30	49	72	50	21	2.1	.10
22	58	46	18	25	18	26	50	85	45	19	1.6	.10
23	45	45	16	23	20	22	50	75	42	17	.90	.10
24	37	40	15	21	20	19	50	70	44	16	.60	0
25	30	37	14	19	20	10	51	75	45	15	.40	0
26	25	36	13	18	20	19	52	94	43	13	.30	0
27	20	34	13	17	20	26	48	94	42	12	1.8	0
28	18	30	15	17	20	36	44	75	69	10	4.1	0
29	16	28	15	18	-----	49	41	68	72	9.0	4.1	0
30	23	23	14	23	-----	84	40	63	60	0.1	4.1	0
31	23	-----	13	27	-----	128	-----	56	-----	7.3	3.0	-----
TOTAL	1,008.8	1,092	1,139	1,163	515	1,026	2,296	2,645	1,781	1,247.4	88.10	14.10
MEAN	32.5	36.4	36.7	37.5	16.4	33.1	76.5	85.3	59.4	40.2	2.84	.47
MAX	108	88	100	91	26	128	136	181	84	122	6.1	3.2
MIN	2.8	20	13	12	12	12	40	39	42	7.3	.30	0
CFSM	4.45	4.98	5.02	5.13	2.52	4.53	10.5	11.7	8.13	5.58	.39	.06
IN.	5.13	5.56	5.80	5.92	2.62	5.22	11.68	13.46	9.06	6.35	.45	.07
AC-FT	2,000	2,170	2,260	2,310	1,020	2,040	4,550	5,250	3,530	2,470	175	28
CAL YR 1965	TOTAL 15,983.10	MEAN 49.8	MAX 784	MIN 0	CFSM 5.99	IN 81.34	AC-FT 31,700					
WTR YR 1966	TOTAL 14,015.40	MEAN 30.4	MAX 181	MIN 0	CFSM 5.25	IN 71.32	AC-FT 27,800					

12142200 CALLIGAN CREEK NEAR SNOQUALMIE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP	
1	0	29	117	66	78	36	21	19	87	33	1.4	
2	.03	24	103	68	68	36	19	19	107	31	1.0	
3	.07	21	89	87	64	33	17	19	112	30	.73	
4	.07	18	80	90	126	30	18	19	103	28	.32	
5	.03	17	69	82	148	26	18	21	107	24	.06	
6	.03	18	58	69	117	24	17	30	112	21	0	
7	.38	17	49	59	90	21	16	41	103	19	0	
8	8.8	16	44	59	72	22	17	55	87	17	0	
9	12	21	39	78	64	22	19	76	76	15	0	
10	11	53	35	82	68	21	19	75	72	14	0	
11	10	50	47	122	68	19	18	72	69	13	0	
12	10	54	81	114	62	17	17	66	65	12	0	
13	9.4	62	182	148	66	16	20	58	64	11	0	
14	9.2	90	192	268	64	15	20	53	70	10	0	
15	8.4	97	141	320	57	15	19	53	75	9.0	0	
16	7.9	89	170	220	49	22	19	76	78	8.2	0	
17	10	81	208	148	53	31	18	112	84	7.3	0	
18	10	74	200	110	72	34	16	120	84	6.8	0	
19	16	68	165	114	68	31	18	122	86	6.1	0	
20	82	65	170	131	58	31	16	139	86	5.7	0	
21	78	58	129	108	50	31	17	159	81	5.7	0	
22	84	49	102	89	43	35	16	157	80	5.2	0	
23	129	44	75	74	38	62	16	139	70	4.5	0	
24	115	40	62	59	33	64	16	112	64	4.2	0	
25	86	65	53	50	30	55	17	94	59	3.8	0	
26	69	81	43	43	29	46	18	81	55	3.4	0	
27	68	75	34	52	26	40	19	80	53	3.0	0	
28	57	78	33	103	30	34	21	86	46	2.9	0	
29	47	87	38	122	-----	30	21	107	42	2.5	0	
30	61	114	41	119	-----	27	20	105	38	2.0	0	
31	35	-----	45	97	-----	24	-----	89	-----	1.7	0	
TOTAL	1,014.51	1,655	2,896	3,351	1,791	950	543	2,454	2,315	360.0	3.51	0
MEAN	32.7	55.2	93.4	108	64.0	30.6	18.1	79.2	77.2	11.6	.11	0
MAX	129	114	208	320	148	64	21	159	112	33	1.4	0
MIN	0	16	33	43	26	15	16	19	38	1.7	0	0
CFSM	4.47	7.55	12.8	14.8	8.76	4.19	2.48	10.8	10.6	1.59	.02	0
IN.	5.16	8.42	14.74	17.05	9.11	4.83	2.76	12.49	11.78	1.83	.02	0
AC-FT	2,010	3,280	5,740	6,650	3,550	1,880	1,080	4,870	4,590	714	7.0	0

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968														
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	.03	119	34	67	32	47	55	122	96	36	5.4	33		
2	.03	92	35	52	30	43	51	98	320	31	5.0	27		
3	.61	70	34	42	39	40	47	84	260	27	4.5	23		
4	.32	53	32	36	78	40	43	81	155	24	4.0	20		
5	.26	41	30	34	79	44	46	76	112	21	3.6	17		
6	.20	33	26	29	66	43	44	68	88	18	3.3	15		
7	2.8	30	22	25	54	38	42	60	68	16	2.9	12		
8	7.5	21	24	24	34	34	37	55	63	14	2.5	10		
9	8.2	30	24	24	38	28	36	59	56	13	2.2	9.7		
10	7.9	62	47	24	35	24	36	68	50	11	1.9	8.6		
11	39	75	108	22	31	22	46	79	48	9.7	1.8	7.5		
12	61	59	92	21	29	21	48	84	42	12	1.2	7.5		
13	61	48	72	25	25	20	42	73	42	12	7.64	7.3		
14	103	40	55	54	23	20	41	68	44	13	1.4	7.5		
15	87	39	45	96	21	22	39	66	42	15	7.3	20		
16	64	46	39	98	19	29	38	61	38	16	10	105		
17	46	43	34	76	18	31	33	63	36	15	10	203		
18	39	39	29	61	35	29	29	70	34	13	12	243		
19	42	33	24	74	212	26	28	82	33	12	15	155		
20	38	29	21	198	302	24	25	122	30	13	15	107		
21	41	24	19	411	228	22	22	116	28	13	15	76		
22	46	22	25	230	215	22	21	94	29	12	15	58		
23	53	21	55	147	181	24	21	101	32	11	16	52		
24	48	119	305	145	159	28	24	100	30	10	28	48		
25	43	120	764	125	122	29	28	93	29	9.4	52	40		
26	39	89	510	93	91	29	38	100	27	8.6	49	35		
27	53	68	305	70	73	36	42	86	31	7.9	58	29		
28	90	52	210	55	60	59	51	72	39	7.3	61	25		
29	87	46	147	44	52	78	86	64	43	6.8	58	22		
30	94	60	103	39	-----	81	116	59	39	6.4	46	19		
31	102	-----	78	36	-----	67	-----	51	-----	5.9	58	-----		
TOTAL	1,303.85	1,610	3,345	2,477	2,391	1,100	1,255	2,675	1,984	440.0	525.66	1,442.1		
MEAN	42.1	53.7	108	79.9	82.4	35.5	41.8	79.8	66.1	14.2	17.0	48.1		
MAX	103	120	764	411	302	81	116	122	320	36	61	243		
MIN	.03	21	19	21	18	20	21	51	27	5.9	.64	7.3		
CFSM	5.76	7.35	14.8	10.9	11.3	4.86	5.72	10.9	9.04	1.94	2.33	6.58		
IN.	6.64	8.19	17.02	12.61	12.17	5.40	6.19	12.60	10.10	2.24	2.67	7.34		
AC-FT	2,590	3,190	6,630	4,910	4,740	2,180	2,490	4,910	3,940	873	1,040	2,860		
CAL YR 1967	TOTAL	18,026.36	MEAN	49.4	MAX	764	MIN	0	CFSM	6.76	IN	91.73	AC-FT	35,760
WTR YR 1968	TOTAL	20,348.59	MEAN	55.6	MAX	764	MIN	.03	CFSM	7.61	IN	103.55	AC-FT	40,360

12142200 CALLIGAN CREEK NEAR SNOQUALMIE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	49	60	25	9.2	4.4	105	61	139	63	1.8	.01
2	15	47	35	25	9.4	4.1	99	55	125	55	1.4	.01
3	13	50	128	27	9.7	4.1	85	49	120	46	1.1	.03
4	13	44	194	144	9.6	3.8	71	44	122	50	.76	.05
5	16	39	133	614	9.4	7.0	64	43	122	50	1.2	.12
6	17	35	96	392	9.2	8.4	61	49	108	44	1.8	.19
7	28	29	73	224	9.0	7.9	56	94	94	58	1.8	.15
8	29	32	70	143	9.4	7.4	49	108	82	34	1.4	.12
9	28	59	68	103	11	6.6	46	146	82	30	1.2	.09
10	35	66	70	81	12	6.2	49	164	79	28	1.1	.07
11	51	106	74	67	16	5.8	49	160	74	27	.76	.06
12	58	159	67	55	25	5.2	54	148	66	26	.64	.04
13	68	124	58	46	21	4.6	66	143	58	24	1.1	.36
14	67	91	48	42	17	4.4	64	132	55	22	.90	2.2
15	72	72	42	36	12	4.8	56	111	50	19	.90	2.7
16	94	58	40	32	13	5.8	50	99	46	17	1.1	2.7
17	81	48	36	25	11	16	54	91	44	15	.90	3.5
18	76	51	36	26	10	31	79	92	42	13	.64	10
19	66	72	33	23	9.6	37	85	99	38	12	.54	17
20	96	76	29	20	9.6	37	76	94	34	9.8	.44	27
21	110	72	26	18	8.8	35	68	94	30	8.4	.36	30
22	93	86	25	16	8.4	36	69	110	33	7.9	.24	54
23	74	88	25	15	7.0	37	90	122	64	7.0	.12	120
24	67	74	30	13	6.2	35	97	135	144	6.2	.06	127
25	60	63	36	12	5.8	32	84	122	174	5.5	.05	113
26	56	54	35	12	5.8	32	68	105	144	4.8	.02	102
27	44	51	34	111	5.2	60	61	100	113	4.1	.02	76
28	38	50	31	10	4.8	45	62	94	96	3.5	.04	61
29	36	55	27	9.5	-----	50	69	121	85	3.0	.05	56
30	47	67	24	9.3	-----	60	64	282	75	2.4	.03	84
31	55	-----	22	9.2	-----	91	-----	187	-----	2.2	.02	-----
TOTAL	1,622	1,967	1,725	2,289.0	294.1	704.7	2,050	3,428	2,540	677.8	22.49	889.40
MEAN	52.3	65.6	55.6	73.8	10.5	22.7	68.3	111	84.7	21.9	.73	29.6
MAX	110	159	194	614	25	91	105	282	174	63	1.8	127
MIN	13	29	22	9.2	4.8	3.8	46	43	30	2.2	.02	.01
CFSM	7.15	8.97	7.61	10.1	1.44	3.11	9.34	15.2	11.6	3.00	.10	4.05
IN.	8.25	10.01	8.78	11.65	1.50	3.59	10.43	17.44	12.93	3.45	.11	4.53
AC-FT	3,220	3,900	3,420	4,340	583	1,400	4,070	6,800	5,040	1,340	45	1,760

CAL YR 1968	TOTAL	19,403.74	MEAN	53.0	MAX	411	MIN	.64	CFSM	7.25	IN	98.74	AC-FT	38,490
WTR YR 1969	TOTAL	18,209.49	MEAN	49.9	MAX	614	MIN	.01	CFSM	6.83	IN	92.67	AC-FT	36,120

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1969 TO MAY 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	16	21	20	40	22	28	24				
2	132	14	19	18	37	20	37	28				
3	115	16	17	16	36	20	36	38				
4	90	37	18	16	33	18	36	53				
5	71	81	17	14	29	16	51	67				
6	57	71	15	12	28	16	75	64				
7	48	60	14	10	28	32	74	57				
8	52	49	13	8.0	35	36	65	52				
9	71	41	13	9.5	44	32	86	68				
10	74	35	13	9.5	57	29	122	63				
11	64	30	19	9.5	64	26	102	53				
12	54	28	37	8.0	67	24	78	47				
13	45	24	61	9.3	81	25	63	40				
14	37	22	102	67	78	31	52	35				
15	30	22	94	101	72	53	44	32				
16	26	24	75	78	97	71	37	50				
17	22	22	63	67	101	71	32	65				
18	19	21	60	125	84	59	30	62				
19	16	19	64	176	70	49	32	60				
20	16	20	78	166	59	42	32	50				
21	16	27	96	150	52	37	29	45				
22	16	28	107	158	46	32	27	45				
23	15	36	104	160	42	29	26	50				
24	14	52	83	129	38	35	28	55				
25	14	48	65	109	34	33	28	60				
26	13	41	53	86	31	32	26	70				
27	13	34	69	75	28	29	23	60				
28	14	29	37	64	25	31	22	55				
29	14	26	31	54	-----	31	21	60				
30	16	23	26	45	-----	29	22	85				
31	16	-----	23	41	-----	27	-----	75	-----			
TOTAL	1,348	996	1,487	2,010.8	1,436	1,037	1,362	1,668				
MEAN	43.5	33.2	48.0	64.9	51.3	33.5	45.4	53.8				
MAX	148	81	107	176	101	71	122	85				
MIN	13	14	13	8.0	25	16	21	24				
CFSM	5.95	4.54	6.57	8.88	7.02	4.58	6.21	7.36				
IN.	6.86	5.07	7.57	10.23	7.31	5.28	6.93	8.49				
AC-FT	2,670	1,980	2,950	3,990	2,850	2,060	2,700	3,310				

CAL YR 1969	TOTAL	16,726.49	MEAN	45.8	MAX	614	MIN	.01	CFSM	6.27	IN	85.12	AC-FT	33,180
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12142300 HANCOCK CREEK NEAR SNOQUALMIE, WASH.

LOCATION.--Lat 47°34'21", long 121°41'12", in SE¼SE¼ sec.8, T.24 N., R.9 E., King County, on left bank 300 ft downstream from Lake Hancock Outlet, 1.5 miles upstream from mouth, and 7.2 miles northeast of Snoqualmie.

DRAINAGE AREA.--7.67 sq mi.

PERIOD OF RECORD.--August 1964 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 2,165 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 51.3 cfs (90.83 inches per year, 37,170 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (200 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	2000	*277	2.88	Dec. 25, 1967	0800	*910	4.00	Nov. 11, 1968	2230	235	1.88
				Jan. 15, 1968	1500	213	1.69	Dec. 3, 1968	2230	238	1.89
Dec. 13, 1966	1600	*394	2.41	Jan. 21, 1968	0200	484	2.68	Jan. 5, 1969	1030	*646	3.22
Dec. 16, 1966	2330	213	1.73	Feb. 4, 1968	1230	205	1.66	Jan. 5, 1969	-	a.5.24	
Jan. 14, 1967	2300	300	2.07	Feb. 19, 1968	2130	391	2.36	May 30, 1969	0600	300	2.06
Jan. 19, 1967	2300	208	1.67	June 2, 1968	1330	466	2.66				
May 22, 1967	0100	201	1.64	Sept. 17, 1968	1645	388	2.44	Jan. 19, 1970	1900	*208	1.69

a Backwater from debris.

Annual minimum discharge, water years 1966-70

Ntr yr	Date	Disch.	G.H.	Ntr yr	Date	Disch.	G.H.
1966	Sept. 16, 17, 1966	3.8	.38	1969	Aug. 26, 27, 1969	3.4	.19
1967	Aug. 29 to Sept. 1, 1967	1.4	.11	1970	Aug. 30 to Sept. 3, 1970	2.5	.13
1968	Oct. 1, 1967	2.4	a.13				

a Occurred Aug. 13, 1968.

Period of record: Maximum discharge, 910 cfs Dec. 25, 1967 (gage height, 4.00 ft), from rating curve extended above 390 cfs; maximum gage height, 4.80 ft Jan. 29, 1965 (backwater from debris); minimum discharge, 1.4 cfs Aug. 29 to Sept. 1, 1967 (gage height, 0.11 ft).

REMARKS.--Records excellent. Flow affected by natural storage in Lake Hancock. No diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	8.7	26	26	17	34	23	131	46	53	58	11	6.6		
2	8.3	26	40	18	29	21	137	53	51	57	9.8	6.1		
3	7.4	38	34	17	25	19	101	82	51	111	8.7	5.7		
4	7.4	110	144	17	25	18	75	118	53	141	8.3	5.3		
5	12	141	114	18	25	16	68	167	34	113	7.4	4.8		
6	29	99	90	46	27	16	68	234	63	91	7.0	4.4		
7	43	69	114	93	28	18	82	230	75	72	6.6	4.4		
8	36	50	110	106	27	18	90	179	75	63	6.6	4.4		
9	35	41	77	85	26	50	101	166	72	56	6.1	4.0		
10	30	34	57	63	24	68	113	137	87	51	5.7	4.0		
11	25	38	44	56	24	54	134	99	90	53	5.7	4.4		
12	23	36	37	68	24	43	125	82	83	51	5.3	4.4		
13	27	31	32	93	21	56	98	79	71	44	7.4	4.4		
14	33	28	28	114	22	90	79	72	66	48	12	4.0		
15	91	28	25	90	21	88	74	66	68	38	12	4.0		
16	88	27	23	66	18	72	72	72	71	36	10	3.8		
17	80	23	21	58	18	54	69	68	71	33	9.8	3.8		
18	80	24	19	41	17	44	62	63	66	29	8.3	6.6		
19	126	26	19	36	17	40	54	66	63	27	7.8	8.3		
20	96	31	19	31	16	36	50	72	58	25	6.6	6.3		
21	71	39	21	27	22	33	51	90	50	22	6.1	7.8		
22	51	56	20	25	25	29	54	104	44	21	5.7	7.4		
23	39	50	19	24	26	26	57	83	41	20	5.3	7.0		
24	35	36	18	23	26	24	58	75	50	18	4.8	7.0		
25	30	36	17	22	25	23	60	87	53	18	4.4	6.6		
26	25	34	16	21	25	26	63	107	50	17	4.0	6.6		
27	23	35	16	21	25	36	58	106	48	16	6.1	7.0		
28	21	33	18	21	25	48	53	82	89	14	8.7	7.0		
29	20	29	19	21	-----	68	48	89	87	14	8.7	7.0		
30	26	26	18	36	-----	122	47	66	66	12	8.3	6.6		
31	28	-----	18	36	-----	159	-----	60	-----	12	7.4	-----		
TOTAL	1,258.8	1,306	1,301	1,392	669	1,436	2,332	3,080	1,919	1,373	231.6	171.7		
MEAN	40.6	43.5	42.8	44.9	23.9	46.3	77.7	99.4	64.0	44.3	7.47	5.72		
MAX	126	141	144	114	34	159	137	234	90	141	12	8.3		
MIN	7.4	26	16	17	17	16	47	46	41	12	4.0	3.8		
CFSM	5.29	5.67	5.48	5.85	3.12	6.04	10.1	13.0	8.34	5.78	.97	.75		
IN.	6.11	6.33	6.31	6.75	3.24	6.96	11.31	14.94	9.31	6.66	1.12	.83		
AC-FT	2,500	2,590	2,580	2,760	1,330	2,850	4,630	6,110	3,610	2,720	459	341		
CAL YR 1965	TOTAL	16,661.3	MEAN	45.6	MAX	454	MIN	2.0	CFSM	5.95	IN	80.81	AC-FT	33,050
WTR YR 1966	TOTAL	16,478.1	MEAN	45.1	MAX	234	MIN	3.8	CFSM	5.88	IN	79.88	AC-FT	32,670

12142300 HANCOCK CREEK NEAR SNOQUALMIE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	29	164	63	75	44	26	27	107	31	4.4	1.4
2	9.3	26	133	61	61	44	22	27	140	28	3.9	1.9
3	10	24	185	92	86	38	22	22	142	27	3.0	2.1
4	9.3	21	88	92	138	34	22	29	131	25	3.4	2.1
5	8.7	21	77	82	159	30	23	34	133	22	3.4	2.1
6	8.3	22	63	65	117	27	22	48	138	21	3.2	1.9
7	9.8	21	53	52	84	25	22	65	123	18	3.2	1.9
8	21	21	46	52	63	25	22	82	103	17	3.0	1.9
9	25	25	38	75	55	26	25	113	92	16	3.0	1.8
10	21	54	35	81	63	23	25	99	86	15	3.0	2.2
11	18	47	58	121	66	22	24	88	82	12	2.9	4.4
12	18	58	127	103	60	20	24	82	77	12	2.7	6.9
13	18	64	327	144	18	27	72	77	12	12	2.7	6.5
14	18	108	258	250	58	17	27	66	92	12	2.5	5.8
15	17	122	141	282	52	17	25	72	92	12	2.4	4.6
16	16	101	177	208	45	20	24	107	94	11	2.5	4.4
17	16	83	205	140	55	31	24	150	97	10	2.4	3.9
18	16	71	191	99	92	36	24	153	96	9.0	2.4	3.6
19	21	64	161	140	81	32	24	146	94	8.5	2.2	3.4
20	87	57	180	189	65	30	23	161	92	8.1	2.1	3.2
21	77	53	127	138	55	33	24	198	88	8.1	2.1	3.0
22	82	46	77	99	46	52	24	189	90	7.6	1.9	3.0
23	132	41	52	73	40	119	24	164	77	7.2	1.9	2.9
24	113	37	45	55	35	103	24	131	63	6.9	1.8	2.7
25	79	64	40	45	34	79	25	105	58	6.5	1.8	2.5
26	60	87	34	40	32	60	27	92	53	6.1	1.6	2.4
27	57	79	28	61	29	49	27	97	50	5.8	1.6	1.9
28	30	90	29	164	33	30	20	60	44	5.5	1.5	1.8
29	43	101	33	161	---	36	29	140	38	5.5	1.4	1.9
30	39	161	36	138	---	31	27	133	34	4.9	1.4	2.1
31	34	---	45	99	---	27	---	109	---	4.6	1.4	---
TOTAL	1,139.5	1,798	3,193	3,464	1,016	1,186	739	3,111	2,673	395.3	77.3	90.2
MEAN	36.8	59.9	103	112	84.9	38.3	24.6	102	89.1	12.6	2.49	3.01
MAX	132	161	327	282	159	119	30	198	142	31	4.4	6.9
MIN	6.1	21	28	40	29	17	22	27	34	4.6	1.4	1.4
CFSH	4.80	7.81	13.4	14.6	8.46	4.99	3.21	13.0	11.6	1.67	.32	.39
IN.	5.53	8.72	15.49	16.80	8.81	5.75	3.58	15.09	12.96	1.92	.37	.44
AC-FT	2,260	3,570	6,330	6,870	3,600	2,350	1,470	6,170	5,300	784	153	179

CAL YR 1966 TOTAL 18,734.8 MEAN 51.3 MAX 327 MIN 3.8 CFSH 6.69 IN 90.87 AC-FT 37,160
WTR YR 1967 TOTAL 19,682.3 MEAN 53.9 MAX 327 MIN 1.4 CFSH 7.03 IN 95.46 AC-FT 39,040

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	131	35	66	29	48	35	146	143	38	6.2	33
2	8.1	92	36	54	32	47	56	105	391	32	5.6	29
3	17	63	38	44	64	44	52	88	253	27	5.3	25
4	28	45	35	37	175	49	48	88	136	24	5.8	21
5	25	35	32	33	133	62	52	86	92	21	4.7	18
6	23	29	20	29	85	61	49	77	72	18	4.7	16
7	32	27	24	25	61	49	47	65	61	16	4.4	15
8	42	26	22	23	49	39	41	62	58	15	4.1	14
9	31	31	24	26	41	31	39	68	54	14	4.1	12
10	25	103	54	27	36	26	44	82	48	13	4.1	12
11	77	109	146	24	32	23	64	98	47	12	3.0	11
12	86	72	111	22	29	24	64	99	42	15	3.9	11
13	79	52	79	48	26	23	52	93	42	15	3.9	11
14	133	41	55	134	24	21	47	77	52	16	6.6	12
15	96	40	45	196	21	28	44	74	47	21	22	36
16	63	48	38	155	19	46	42	69	42	21	23	164
17	42	44	33	101	19	50	36	74	38	18	18	240
18	34	38	30	70	64	44	33	85	35	16	20	263
19	44	35	25	126	303	34	32	99	34	15	23	144
20	48	31	22	286	316	31	26	161	32	16	24	99
21	53	27	21	399	240	28	26	140	20	16	21	74
22	73	26	31	228	222	28	25	105	30	15	18	56
23	88	26	79	140	203	32	26	111	36	13	23	55
24	61	150	306	153	180	40	33	107	33	12	42	52
25	52	142	728	133	117	39	39	99	31	11	50	42
26	46	94	427	92	86	38	54	119	28	10	77	35
27	46	63	271	66	68	47	56	96	33	9.6	83	31
28	131	49	220	50	50	78	65	77	47	8.7	86	26
29	105	45	142	40	50	98	117	66	55	7.9	72	23
30	107	48	96	36	---	64	148	59	47	7.2	58	20
31	111	---	78	32	---	89	---	50	---	6.6	42	---
TOTAL	1,822.0	1,754	3,311	2,897	2,782	1,371	1,514	2,817	2,087	500.0	764.6	1,620
MEAN	58.8	58.5	107	93.5	95.9	44.2	50.5	90.9	69.6	16.1	24.7	54.0
MAX	133	150	728	399	316	98	148	161	391	38	86	263
MIN	3.9	26	21	22	21	28	25	30	34	4.6	3.2	1.1
CFSH	7.47	7.63	14.6	12.2	12.5	5.78	6.58	11.9	9.07	2.10	3.22	7.04
IN.	8.84	8.51	16.06	14.05	13.49	6.65	7.34	13.66	10.12	2.43	3.71	7.86
AC-FT	3,610	3,488	6,570	5,750	5,520	2,720	3,000	5,590	4,140	992	1,520	3,218

CAL YR 1967 TOTAL 20,438.8 MEAN 56.0 MAX 728 MIN 1.4 CFSH 7.38 IN 99.13 AC-FT 40,940
WTR YR 1968 TOTAL 23,239.6 MEAN 63.5 MAX 720 MIN 3.5 CFSH 8.28 IN 112.71 AC-FT 46,100

12142300 HANCOCK CREEK NEAR SNOQUALMIE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	48	70	34	12	8.7	110	62	123	57	5.3	3.7
2	17	48	61	39	12	8.7	102	56	113	49	5.3	3.7
3	14	61	136	40	14	8.7	85	50	110	42	5.0	5.3
4	18	52	184	163	13	9.1	66	44	115	48	6.9	9.1
5	27	42	115	532	12	12	62	43	113	49	6.9	9.1
6	34	36	80	288	12	16	60	52	100	43	7.8	9.1
7	56	30	65	183	11	16	54	75	82	38	7.3	7.8
8	54	33	75	119	13	15	48	127	72	32	6.6	6.9
9	44	80	75	84	16	13	45	171	72	28	5.9	6.3
10	52	80	80	65	16	12	51	185	72	25	5.3	5.6
11	75	142	83	52	32	11	53	166	68	26	5.0	5.3
12	75	193	70	43	39	10	57	152	61	27	5.0	4.7
13	88	129	39	37	32	10	74	148	53	26	5.0	7.8
14	82	88	54	31	26	9.5	68	137	49	23	5.0	12
15	86	68	47	28	20	10	58	115	45	21	5.0	11
16	99	54	46	27	22	12	50	100	41	18	5.3	10
17	85	46	36	26	16	42	56	93	38	16	5.3	10
18	82	50	39	23	15	69	93	96	35	14	4.7	30
19	72	36	36	21	14	65	95	106	31	12	4.7	43
20	111	78	32	19	14	52	80	100	28	11	4.7	54
21	121	75	28	17	13	44	66	100	26	10	4.7	52
22	96	103	26	16	11	42	69	119	28	10	4.3	69
23	78	99	31	15	11	44	98	133	66	9.1	4.0	143
24	65	75	80	15	10	39	108	141	157	8.7	3.7	139
25	58	61	90	14	10	34	88	125	178	7.8	3.7	110
26	52	52	72	14	10	35	69	106	135	7.3	3.4	95
27	39	49	61	14	10	48	60	96	108	6.9	3.4	69
28	34	50	50	13	9.1	56	66	91	91	6.6	4.3	54
29	31	46	43	12	-----	58	118	82	6.3	4.7	52	-----
30	47	85	35	12	-----	72	69	265	70	5.9	4.7	75
31	56	-----	30	12	-----	104	-----	171	-----	5.6	4.3	-----
TOTAL	1,866	2,148	1,969	2,008	445.1	985.7	2,136	3,543	2,362	689.2	155.0	1,110.2
MEAN	60.2	71.8	63.5	64.8	15.9	31.8	71.2	114	78.7	22.2	5.00	37.0
MAX	121	193	184	532	39	104	110	166	178	57	7.8	143
MIN	14	30	26	12	9.1	8.7	45	43	26	5.6	3.4	3.7
CFSH	7.85	9.34	8.28	8.45	2.07	4.15	9.28	14.9	10.3	2.89	.65	4.82
IN.	9.05	10.42	9.55	9.74	2.16	4.78	10.36	17.18	11.46	3.34	.75	5.38
AC-FT	3,700	4,260	3,910	3,980	883	1,960	4,240	7,030	4,690	1,370	307	2,200

CAL YR 1968 TOTAL 22,335.6 MEAN 61.0 MAX 399 MIN 3.5 CFSH 7.95 IN 108.33 AC-FT 44,300
WTR YR 1969 TOTAL 19,417.2 MEAN 53.2 MAX 532 MIN 3.4 CFSH 6.94 IN 94.17 AC-FT 38,510

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	16	20	25	46	25	38	35	86	23	13	2.5
2	108	15	18	23	42	23	52	41	94	20	13	2.5
3	101	16	16	20	40	23	50	53	101	18	14	4.9
4	80	56	18	19	38	21	47	74	98	17	14	9.5
5	62	122	17	16	34	19	58	89	83	16	12	10
6	50	91	14	14	31	21	84	82	80	14	10	18
7	38	71	14	13	30	55	84	70	74	13	9.1	59
8	50	55	13	12	34	60	72	60	62	11	9.1	76
9	72	43	12	13	47	51	119	77	58	10	9.1	71
10	78	36	12	14	58	43	165	72	59	9.5	8.2	52
11	68	30	17	13	65	37	115	59	53	8.7	7.3	39
12	56	27	44	12	70	34	88	51	46	7.3	6.5	30
13	46	25	42	15	86	39	70	44	41	6.5	6.5	24
14	37	22	112	106	84	51	56	40	39	5.8	6.2	20
15	26	24	100	126	80	83	48	40	40	5.5	5.8	16
16	20	27	74	91	136	98	41	62	46	5.2	5.2	14
17	18	26	60	71	124	91	37	83	43	4.9	4.9	14
18	16	24	64	120	100	74	34	76	42	4.4	4.4	32
19	14	22	74	188	80	62	35	70	41	3.9	4.2	71
20	14	22	101	175	64	51	36	60	40	3.9	3.9	78
21	14	28	115	164	58	44	34	53	40	3.6	3.7	70
22	13	30	124	165	52	39	31	55	38	3.2	3.5	60
23	12	37	120	180	46	35	30	64	34	3.2	3.5	59
24	12	56	93	134	40	42	34	66	30	3.2	3.3	51
25	12	50	70	112	36	41	32	76	27	4.4	3.1	41
26	10	41	54	89	34	40	30	84	24	12	3.1	31
27	11	32	48	84	31	38	28	76	23	24	2.9	24
28	14	28	41	76	27	40	26	66	22	26	2.9	22
29	15	25	36	64	-----	43	25	71	22	22	2.7	20
30	16	22	31	53	-----	41	29	105	23	18	2.7	17
31	16	-----	27	46	-----	37	-----	91	-----	15	2.5	-----
TOTAL	1,202	1,119	1,623	2,253	1,615	1,401	1,630	2,047	1,509	342.2	200.3	1,038.4
MEAN	38.8	37.3	52.4	72.7	57.7	45.2	54.3	66.0	50.3	11.0	6.46	34.6
MAX	108	122	124	188	136	98	165	105	101	26	14	78
MIN	10	15	12	12	27	19	25	35	22	3.2	2.5	2.9
CFSH	5.06	4.86	6.83	9.48	7.52	5.89	7.08	8.61	6.56	1.43	.88	4.51
IN.	5.83	5.43	7.87	10.93	7.83	6.79	7.91	9.93	7.32	1.66	.97	5.04
AC-FT	2,380	2,220	3,220	4,470	3,200	2,780	3,230	4,060	2,990	679	397	2,060

CAL YR 1969 TOTAL 17,378.2 MEAN 47.6 MAX 532 MIN 3.4 CFSH 6.21 IN 84.29 AC-FT 34,470
WTR YR 1970 TOTAL 15,979.9 MEAN 43.8 MAX 188 MIN 2.5 CFSH 5.71 IN 77.50 AC-FT 31,700

12143000 NORTH FORK SNOQUALMIE RIVER NEAR NORTH BEND, WASH.

LOCATION.--Lat 47°32'15", long 121°44'26", in SW¼NE¼ sec.26, T.24 N., R.8 E., King County, on right bank 3.4 miles northeast of North Bend and at mile 2.2.

DRAINAGE AREA.--95.7 sq mi.

PERIOD OF RECORD.--July 1907 to September 1926, February 1929 to September 1938, October 1960 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 470 ft (from river-profile map). Prior to Sept. 2, 1912, non-recording gage and Sept. 2, 1912, to Sept. 26, 1916, water-stage recorder, at site 1.8 miles downstream, at different datum. Sept. 27, 1916, to June 3, 1926, and Feb. 14, 1929, to Sept. 30, 1938, water-stage recorder at present site at different datum (records represent flow past measuring section 1.8 miles downstream).

AVERAGE DISCHARGE.--38 years, 699 cfs (99.19 inches per year, 506,400 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (4,300 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 4, 1965	0500	*3,050	6.13	Jan. 20, 1968	2245	10,520	9.58	Jan. 5, 1969	0500	*13,000	10.16
				Feb. 4, 1968	0645	4,320	6.31	Mar. 30, 1969	0300	5,140	7.17
Dec. 13, 1966	1600	*6,100	7.84	Feb. 19, 1968	0245	6,040	7.77	Sept. 30, 1969	2130	5,560	7.38
				June 2, 1968	1030	7,420	8.37				
Oct. 27, 1967	2115	5,660	7.58	Sept. 17, 1968	1530	5,860	7.68	Jan. 18, 1970	1230	4,440	6.80
Dec. 11, 1967	0015	4,690	7.05					Apr. 9, 1970	1830	*4,570	6.87
Dec. 25, 1967	1345	*10,600	9.59	Dec. 3, 1968	1930	7,950	8.58				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 17, 1966	94	2.19	1969	Sept. 12, 1969	79	2.16
1967	Sept. 28, 29, 1967	56	2.01	1970	Sept. 2, 1970	64	2.10
1968	Oct. 1, 1967	118	2.31				

a Occurred Aug. 12, 13, 1968.

Period of record: Maximum discharge, 15,800 cfs Nov. 23 or 24, 1909 (gage height, 15.5 ft, from graph based on gage readings, site and datum then in use), from rating curve extended above 2,300 cfs; minimum, 54 cfs Aug. 31, Sept. 1, 1930, Sept. 1, 1934.

REMARKS.--Records excellent. No gage-height record Sept. 1-30, 1970. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1346: 1909-12(M), 1914(M), 1916-17(M), 1918, 1920(M), 1922, 1923-24(M), 1925, 1926(M), 1932, 1933-34(M), 1935, 1938(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	261	460	283	461	339	1,500	602	565	614	220	131
2	127	355	1,040	290	410	312	1,510	799	590	711	210	126
3	123	548	751	273	370	294	1,060	1,270	583	1,440	201	122
4	120	1,820	2,200	266	350	273	918	1,560	614	1,430	193	119
5	199	1,840	1,210	341	400	273	939	1,950	583	1,060	186	117
6	1,130	986	1,090	1,180	420	276	1,030	2,630	848	911	176	114
7	618	660	1,480	1,610	430	280	1,180	1,990	1,060	771	169	112
8	362	534	1,180	1,370	400	340	1,180	1,730	984	744	163	109
9	432	484	820	946	380	907	1,240	1,700	904	704	156	106
10	324	427	659	737	360	834	1,300	1,290	1,070	666	152	102
11	261	529	553	806	390	583	1,960	960	1,070	685	150	109
12	238	463	482	969	390	509	1,330	918	904	583	142	107
13	332	380	427	2,250	350	902	953	855	785	560	161	102
14	384	389	390	1,840	340	1,180	876	744	897	580	215	101
15	1,060	427	347	1,100	310	1,040	925	718	1,000	560	167	99
16	725	484	327	806	305	792	939	883	1,110	520	156	96
17	735	375	308	659	305	620	855	692	1,010	470	150	98
18	761	336	297	577	310	559	737	646	792	490	144	133
19	1,420	463	315	509	310	559	640	724	841	430	138	138
20	839	518	327	456	400	487	633	876	711	390	133	117
21	660	751	451	422	500	441	692	1,180	577	360	129	112
22	529	986	347	385	500	394	704	1,120	553	340	126	109
23	427	660	308	377	500	377	698	861	948	330	124	110
24	353	501	297	351	460	368	692	827	646	320	120	110
25	312	463	280	347	430	394	778	1,070	583	320	119	109
26	278	453	263	339	410	509	764	1,770	583	290	117	110
27	258	529	280	343	420	718	659	1,390	640	280	168	112
28	258	463	347	359	380	820	620	613	1,300	270	206	112
29	245	413	363	501	-----	1,020	608	785	862	260	152	106
30	349	380	319	583	-----	1,720	626	806	633	250	148	102
31	308	-----	290	559	-----	1,860	-----	646	-----	240	138	-----
TOTAL	14,317	17,878	18,208	21,834	10,991	19,980	28,546	34,177	23,846	17,539	4,929	3,350
MEAN	462	596	587	704	353	645	952	1,102	795	566	159	112
MAX	1,420	1,840	2,200	2,250	500	1,860	1,960	2,630	1,300	1,440	220	138
MIN	120	261	263	266	305	273	608	602	548	240	117	96
CFSM	6.83	6.23	6.13	7.36	4.11	6.74	9.95	11.5	8.31	5.91	1.66	1.17
IN.	5.57	6.95	7.08	8.49	4.27	7.77	11.10	13.29	9.27	6.82	1.92	1.30
AC-FT	28,400	39,460	36,120	43,310	21,800	39,630	56,827	67,790	47,300	34,790	9,780	6,640
CAL YR 1965	TOTAL 231,330	MEAN 634	MAX 7,430	MIN 104	CFSM 6.62	IN 89.92	AC-FT 458,800					
WTR YR 1966	TOTAL 215,595	MEAN 591	MAX 2,630	MIN 96	CFSM 6.18	IN 83.80	AC-FT 427,600					

SNOHOMISH RIVER BASIN

12143000 NORTH FORK SNOQUALMIE RIVER NEAR NORTH BEND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	355	1,470	1,290	815	759	375	390	1,060	531	124	58
2	138	312	1,130	899	726	615	365	405	1,560	591	118	89
3	139	280	932	1,420	878	523	375	432	1,300	565	114	94
4	119	257	848	1,140	2,490	470	426	476	1,140	543	108	74
5	114	253	764	928	1,530	442	415	549	1,300	470	105	73
6	110	312	659	752	1,060	420	380	759	1,330	415	103	70
7	139	283	652	829	717	415	390	699	1,140	365	99	68
8	437	260	520	959	717	415	426	1,020	899	352	99	65
9	287	424	454	1,270	671	464	432	1,240	822	320	92	63
10	215	970	591	1,110	822	395	395	892	822	292	88	69
11	183	553	1,250	2,130	759	360	360	801	794	312	86	173
12	183	840	2,020	1,200	724	358	380	759	787	342	84	213
13	193	813	4,930	2,140	741	316	420	678	878	329	81	124
14	183	1,380	2,350	3,240	187	308	395	644	1,020	284	78	107
15	169	1,210	1,500	3,480	678	329	365	815	1,090	265	77	96
16	161	953	2,500	1,880	621	598	352	1,340	1,120	254	74	88
17	277	846	2,460	1,260	836	710	347	1,460	1,200	240	73	83
18	247	757	2,390	984	1,130	621	347	1,140	1,200	220	72	80
19	387	704	2,690	2,290	829	520	360	1,380	1,220	201	70	75
20	1,760	678	2,470	2,040	697	503	352	1,740	1,240	201	68	74
21	750	633	1,340	1,290	627	579	380	1,970	1,060	217	70	73
22	1,110	937	984	960	573	886	370	1,750	976	196	72	70
23	2,180	487	780	815	514	1,530	375	1,390	806	187	68	68
24	1,170	441	717	710	498	968	385	1,050	801	178	68	63
25	730	1,660	644	627	508	745	420	885	822	171	65	61
26	633	1,120	573	597	492	627	410	878	808	163	63	60
27	848	1,010	506	1,300	459	543	405	952	752	155	63	58
28	959	1,140	481	2,350	233	503	347	1,040	1,400	148	61	57
29	514	1,140	704	1,750	-----	470	420	1,410	639	141	60	57
30	577	2,070	690	1,400	-----	442	395	1,100	585	132	59	73
31	417	-----	717	964	-----	405	-----	871	-----	128	58	-----
TOTAL	15,024	22,720	40,486	44,243	22,934	17,196	11,454	31,625	29,762	8,928	2,521	2,480
MEAN	485	757	1,306	1,427	819	555	368	1,022	928	288	81.3	82.7
MAX	2,180	2,070	4,930	3,480	2,490	1,530	437	1,970	1,560	591	124	213
MIN	101	253	456	597	459	308	347	390	585	128	58	57
CFSM	5.87	7.91	13.6	14.9	8.56	5.80	4.05	10.7	10.4	3.01	8.5	8.6
IN.	5.84	8.83	15.74	17.20	8.91	6.68	4.53	12.29	11.57	3.47	9.8	9.6
AC-FT	29,800	45,070	80,300	87,760	45,490	34,110	23,120	62,730	59,030	17,710	5,000	4,920

CAL YR 1966 TOTAL 243,422 MEAN 667 MAX 4,930 MIN 96 CFSM 6.97 IN 94.62 AC-FT 482,800
WTR YR 1967 TOTAL 249,573 MEAN 684 MAX 4,930 MIN 57 CFSM 7.15 IN 97.01 AC-FT 495,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236	1,200	437	843	470	680	674	1,320	2,440	542	161	372
2	410	843	547	704	520	670	745	954	5,270	510	157	340
3	649	658	609	609	1,210	630	690	930	2,310	485	153	304
4	621	537	561	561	2,870	720	626	1,040	1,390	455	149	275
5	350	440	481	525	1,240	870	731	922	1,140	421	147	251
6	420	380	415	444	874	700	662	836	1,000	380	143	232
7	800	365	375	442	724	572	650	745	815	354	141	218
8	640	380	352	420	644	495	594	752	822	314	135	207
9	350	621	591	459	596	440	572	882	745	296	132	196
10	265	2,200	1,560	459	548	398	638	1,070	724	275	130	189
11	1,520	1,130	2,200	400	510	376	829	1,190	710	261	124	184
12	992	731	944	380	405	390	692	1,110	710	349	123	186
13	1,000	603	697	955	460	365	584	829	668	320	121	179
14	1,810	561	579	1,860	426	376	620	901	710	324	147	227
15	815	645	503	1,920	394	520	692	773	614	455	358	1,130
16	561	864	459	1,200	367	731	608	759	596	376	251	2,150
17	426	597	415	857	367	644	530	690	590	304	207	2,980
18	375	320	380	710	1,920	530	520	1,060	596	271	268	2,210
19	633	481	342	3,180	5,200	465	500	1,230	626	254	286	1,230
20	454	410	312	5,180	3,300	445	475	1,860	530	336	296	850
21	811	360	304	4,890	2,450	426	445	1,240	485	316	264	668
22	976	842	1,530	2,030	2,220	421	445	1,000	590	271	245	548
23	1,120	338	2,540	1,424	2,600	445	520	1,210	626	246	304	656
24	578	1,450	6,190	1,860	2,300	572	602	1,060	530	229	698	564
25	745	928	8,720	1,350	1,200	520	752	1,060	536	218	602	460
26	609	671	4,030	954	1,000	510	1,040	1,090	536	204	1,080	403
27	2,790	543	2,820	759	840	1,040	808	966	606	194	936	354
28	2,090	481	2,540	632	720	1,260	1,060	801	1,060	186	820	314
29	1,120	561	1,376	578	680	1,460	1,580	787	801	179	642	289
30	1,000	481	1,040	542	-----	1,060	1,690	710	620	175	505	264
31	1,430	-----	871	500	-----	787	-----	656	-----	168	416	-----
TOTAL	27,496	20,409	44,051	87,763	37,655	19,538	21,536	30,493	29,424	9,674	10,195	18,434
MEAN	887	658	1,421	1,188	1,188	630	718	984	981	312	329	614
MAX	2,790	2,200	8,728	5,280	5,400	1,460	1,690	1,860	5,270	542	1,080	2,980
MIN	236	338	304	380	367	376	445	656	485	168	121	179
CFSM	9.27	7.11	14.8	12.7	13.6	6.50	7.50	10.3	10.3	3.26	3.44	6.42
IN.	10.69	7.93	17.12	14.68	14.59	7.59	8.37	11.85	11.44	3.76	3.96	7.17
AC-FT	54,540	40,400	87,380	74,900	74,070	38,750	42,720	60,480	58,360	19,190	20,220	36,560
CAL YR 1967 TOTAL 263,299 MEAN 721 MAX 8,720 MIN 57 CFSM 7.53 IN 102.35 AC-FT 522,300 WTR YR 1968 TOTAL 306,368 MEAN 837 MAX 8,720 MIN 121 CFSM 8.75 IN 119.09 AC-FT 607,700												

SNOHOMISH RIVER BASIN

12143400 SOUTH FORK SNOQUALMIE RIVER ABOVE ALICE CREEK, NEAR GARCIA, WASH.

LOCATION.--Lat 47°24'55" long 121°35'10", in SW/4 sec. 6, T. 22 N., R. 10 E., King County, Snoqualmie National Forest, on left bank 0.4 mile upstream from Alice Creek, 1.5 miles (revised) southeast of Garcia, 11 miles southeast of North Bend, and at mile 17.3.

DRAINAGE AREA.--41.6 sq mi.

PERIOD OF RECORD.--October 1960 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 1,480 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--10 years, 295 cfs (96.30 inches per year, 213,700 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,500 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	-	-	a6.77	Dec. 10, 1967	2330	1,810	6.53	Dec. 3, 1968	1730	2,500	7.05
May 6, 1966	1400	*1,720	6.43	Dec. 25, 1967	1230	4,380	8.65	Jan. 5, 1969	0500	*3,040	7.54
				Jan. 20, 1968	1845	*4,400	8.66	May 30, 1969	0200	1,810	6.16
Dec. 13, 1966	1330	*1,960	6.68	Feb. 19, 1968	0730	2,810	7.34				
Dec. 19, 1966	2300	1,630	6.33	Feb. 21, 1968	2030	1,690	6.22	Jan. 22, 1970	2330	*1,440	5.75
				June 2, 1968	1030	1,700	6.23				
Oct. 27, 1967	1900	3,030	7.69	Sept. 17, 1968	1215	1,920	6.48				

a Backwater from logjam.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 30, 1966	33	5.05	1969	Sept. 12, 13, 16, 1969	31	2.93
1967	Sept. 26-29, 1967	29	a2.91	1970	Sept. 2, 1970	28	2.88
1968	Oct. 1, 1967	42	b3.08				

a Occurred Sept. 27, 28, 1967.

b Occurred Oct. 1, 1967, Aug. 13, 14, 1968.

Period of record: Maximum discharge, 7,090 cfs Nov. 19, 1962 (gage height, 11.96 ft); minimum, 28 cfs Sept. 2, 1970 (gage height, 2.88 ft).

Floods in November and December 1959 reached stages of 14.7 and 13.4 ft, respectively, from floodmarks (discharges not determined).

REMARKS.--Records excellent. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	85	184	90	140	136	774	339	331	284	83	44
2	42	114	261	91	130	124	748	490	335	294	78	44
3	42	187	248	95	122	114	593	742	314	538	77	43
4	42	432	476	90	120	107	554	935	314	495	74	41
5	64	484	358	90	118	103	560	1,230	343	389	72	41
6	250	334	318	269	118	103	604	1,500	505	355	69	41
7	168	249	416	480	124	102	693	1,050	621	327	68	40
8	118	212	376	472	120	136	693	965	598	312	67	38
9	113	195	297	376	124	309	729	950	538	294	65	38
10	95	182	255	288	114	291	820	748	669	277	64	38
11	82	218	228	390	134	228	900	571	693	261	64	40
12	79	188	202	553	136	208	663	544	549	236	60	40
13	105	165	180	740	120	288	500	510	454	224	82	37
14	122	168	163	700	118	351	445	416	490	248	80	37
15	228	230	154	532	109	344	469	403	576	216	67	38
16	178	230	150	424	102	291	516	398	633	194	60	36
17	175	180	140	344	102	238	490	339	532	180	57	37
18	188	163	134	270	102	208	416	331	440	167	54	46
19	334	215	128	218	102	200	372	394	435	163	53	42
20	255	205	136	188	128	185	372	500	359	147	51	38
21	215	324	144	170	146	163	394	651	316	134	49	35
22	172	358	124	157	172	148	367	522	309	126	49	34
23	154	270	114	148	175	142	359	421	301	122	48	36
24	136	230	113	136	163	142	389	445	343	118	48	35
25	118	210	107	130	154	161	430	657	301	109	48	34
26	107	202	102	124	152	220	403	780	312	102	49	36
27	100	218	102	126	163	303	347	621	339	99	63	37
28	102	190	107	132	152	372	331	485	549	95	57	35
29	95	168	102	138	-----	500	335	480	381	94	50	34
30	100	157	95	148	-----	775	339	464	305	90	48	34
31	91	-----	91	157	-----	858	-----	367	-----	86	45	-----
TOTAL	4,113	6,763	6,005	8,266	3,664	7,850	15,605	19,248	13,189	6,776	1,901	1,149
MEAN	133	225	194	267	131	253	520	621	440	219	61.3	38.3
MAX	334	484	476	740	175	858	900	1,500	693	538	83	46
MIN	42	85	91	90	102	102	331	301	301	86	45	34
CFSM	3.20	5.41	4.66	6.42	3.15	6.08	12.5	14.9	10.6	5.24	1.47	.92
IN	3.68	6.05	5.37	7.39	3.28	7.02	13.95	17.21	11.79	6.06	1.70	1.03
AC-FT	8,160	13,410	11,910	16,400	7,270	15,570	30,950	38,180	26,160	13,440	3,770	2,280
CAL YR 1965	TOTAL	97,016	MEAN	266	MAX	2,940	MIN	41	CFSM	6.39	IN	86.75
WTR YR 1966	TOTAL	94,529	MEAN	259	MAX	1,500	MIN	34	CFSM	6.23	IN	84.53
									AC-FT	192,400		
									AC-FT	187,500		

12143400 SOUTH FORK SNOQUALMIE RIVER ABOVE ALICE CREEK, NEAR GARCIA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	163	780	492	367	238	157	168	587	311	68	36
2	82	145	538	420	355	216	159	183	842	331	66	50
3	36	128	407	660	470	194	168	211	699	331	62	43
4	46	117	363	489	919	176	189	250	648	299	60	38
5	42	134	319	363	648	168	181	292	735	257	59	37
6	41	130	280	295	480	164	176	384	761	231	57	36
7	49	115	254	280	393	159	186	490	658	208	57	34
8	103	106	227	350	339	183	202	545	550	194	55	34
9	70	150	202	420	315	194	194	609	495	171	54	34
10	56	182	210	400	363	168	178	456	500	164	54	40
11	49	145	291	640	319	155	173	388	480	171	52	104
12	51	163	510	520	323	144	181	351	500	183	50	80
13	54	172	1,670	820	434	135	189	331	576	178	50	50
14	49	261	942	1,000	350	125	171	343	664	164	48	43
15	44	327	626	1,200	280	142	159	438	693	146	48	38
16	43	309	886	681	264	189	155	658	699	140	46	36
17	43	267	1,090	510	384	208	146	800	748	131	44	35
18	48	239	954	411	420	194	150	729	699	120	44	35
19	58	221	1,020	856	323	176	157	754	699	105	43	34
20	251	221	1,000	754	274	186	155	947	735	102	42	34
21	156	227	626	925	247	196	157	1,050	614	98	43	34
22	373	194	485	406	225	315	150	926	520	95	41	34
23	1,300	184	398	335	211	420	157	742	470	95	40	32
24	565	172	343	284	199	339	168	576	475	95	40	32
25	331	665	303	247	194	288	181	500	495	88	39	31
26	357	454	260	244	186	260	176	490	470	87	38	30
27	389	372	234	905	178	231	189	520	424	82	37	29
28	248	359	225	800	216	214	183	587	380	77	36	29
29	250	381	367	644	194	178	178	670	388	73	36	31
30	245	826	307	564	184	181	166	530	331	74	36	40
31	190	-----	331	420	-----	166	-----	470	-----	73	36	-----
TOTAL	5,676	7,529	16,448	16,492	9,676	6,318	5,131	16,369	17,590	4,874	1,481	1,193
MEAN	183	251	531	532	346	204	171	528	586	157	47.8	39.8
MAX	1,300	826	1,670	1,200	919	420	202	1,050	842	331	68	104
MIN	37	106	202	244	178	125	146	168	331	73	36	29
CFSM	4.40	6.03	12.8	12.8	8.32	4.90	4.11	12.7	14.1	3.77	1.15	.96
IN.-	5.08	6.73	14.71	14.75	8.65	5.65	4.59	14.64	15.73	4.36	1.32	1.07
AC-FT	11,260	14,930	32,620	32,710	9,9190	12,530	10,180	32,470	34,890	9,670	2,940	2,370

CAL YR 1966 TOTAL 107,301 MEAN 294 MAX 1,670 MIN 34 CFSM 7.07 IN 95.95 AC-FT 212,800
 MTR YR 1967 TOTAL 108,777 MEAN 298 MAX 1,670 MIN 29 CFSM 7.16 IN 97.27 AC-FT 215,800

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	570	152	405	220	415	281	450	1,110	172	57	132
2	87	388	173	328	254	425	285	360	1,430	169	56	100
3	236	307	181	297	402	425	254	370	798	166	56	108
4	192	254	176	251	774	534	244	430	576	156	55	97
5	112	219	164	230	492	588	265	365	510	151	54	88
6	120	194	146	201	370	435	265	314	445	136	52	83
7	173	181	137	184	310	336	265	277	385	125	50	80
8	137	173	129	181	273	277	237	281	360	114	49	76
9	93	305	219	178	248	244	237	350	332	108	48	72
10	62	1,060	728	164	230	220	265	462	314	98	47	68
11	326	609	926	153	214	208	336	606	293	97	46	67
12	359	402	456	143	204	195	273	540	281	134	45	66
13	467	335	323	169	186	186	230	370	285	108	44	64
14	537	355	267	224	175	178	237	323	297	112	71	113
15	281	398	231	310	164	201	254	314	269	134	110	380
16	194	388	216	273	153	240	224	341	265	118	78	420
17	155	288	194	230	156	214	201	456	262	102	67	1,010
18	146	260	176	214	886	192	192	606	258	93	92	808
19	183	222	159	1,090	2,340	175	192	684	251	90	92	558
20	146	199	146	2,640	1,430	169	178	960	217	104	86	390
21	298	178	140	2,180	1,360	164	172	606	204	90	71	297
22	594	171	487	1,040	1,270	159	172	474	240	83	66	258
23	357	166	1,070	762	1,390	172	186	462	220	80	85	385
24	375	369	2,730	1,050	1,160	198	195	425	204	77	189	277
25	367	274	3,230	750	744	195	262	462	201	76	198	230
26	270	216	1,810	540	594	195	273	445	195	72	281	198
27	1,320	191	1,260	400	522	411	248	405	204	70	277	175
28	996	181	971	332	468	468	310	410	230	67	341	159
29	515	178	708	293	430	534	540	410	217	64	237	143
30	815	164	540	265	-----	405	600	400	184	62	184	132
31	687	-----	435	244	-----	318	-----	350	-----	60	148	-----
TOTAL	10,679	9,195	18,880	15,723	17,419	9,076	7,873	13,708	11,037	3,288	3,332	7,034
MEAN	344	307	609	507	601	293	262	442	368	106	107	234
MAX	1,320	1,060	3,230	2,640	2,340	588	600	960	1,430	172	341	1,010
MIN	59	164	129	143	153	159	172	277	184	60	44	64
CFSM	8.27	7.38	14.8	12.2	14.4	7.04	6.30	10.6	8.85	2.55	2.57	5.43
IN.-	9.55	8.22	16.88	14.06	15.58	8.12	7.04	12.26	9.87	2.94	2.98	6.29
AC-FT	21,180	18,240	37,450	31,190	34,550	18,000	15,620	27,190	21,890	6,520	6,610	13,950

CAL YR 1967 TOTAL 117,878 MEAN 323 MAX 3,230 MIN 29 CFSM 7.76 IN 105.41 AC-FT 233,800
 MTR YR 1968 TOTAL 127,244 MEAN 348 MAX 3,230 MIN 44 CFSM 8.37 IN 113.79 AC-FT 252,400

SNOHOMISH RIVER BASIN

12143400 SOUTH FORK SNOQUALMIE RIVER ABOVE ALICE CREEK, NEAR GARCIA, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	178	265	66	89	63	528	326	759	252	63	35
2	116	186	293	70	87	64	130	302	885	246	60	35
3	110	201	1,330	100	91	66	134	270	928	224	58	43
4	129	175	887	656	85	67	298	256	1,000	242	60	43
5	122	159	546	2,200	80	111	298	278	936	218	80	50
6	222	148	395	1,030	75	113	302	375	780	191	70	42
7	258	138	323	696	74	100	282	584	640	182	67	38
8	198	240	305	435	74	91	278	920	647	176	57	36
9	169	318	293	342	74	84	294	1,180	668	170	56	34
10	277	336	314	290	78	80	350	1,220	654	165	54	34
11	314	849	305	249	102	78	342	1,060	558	162	53	33
12	297	774	258	221	94	78	462	1,020	504	165	51	31
13	340	498	224	200	84	80	558	1,000	456	146	50	34
14	297	375	204	182	78	82	415	952	415	133	49	42
15	390	314	192	167	75	93	350	780	405	124	48	34
16	318	269	195	162	75	117	342	710	385	117	46	31
17	245	277	151	314	75	117	405	654	370	108	45	38
18	265	277	178	143	75	126	619	745	355	104	44	78
19	289	310	156	134	75	274	584	766	318	102	44	77
20	522	435	141	126	75	246	445	724	270	98	43	93
21	420	570	136	115	74	238	400	885	232	94	42	69
22	385	1,030	109	105	72	260	462	1,040	264	40	46	160
23	355	642	129	100	69	294	489	1,140	554	89	39	322
24	350	462	134	97	67	235	626	1,120	546	85	38	330
25	344	365	127	106	67	218	450	829	445	80	39	232
26	273	323	122	108	66	238	375	724	330	74	39	179
27	224	390	118	98	63	310	350	640	298	70	39	156
28	190	328	108	88	63	330	428	577	290	70	39	159
29	189	346	90	89	-----	342	430	821	326	67	38	141
30	224	305	75	93	-----	415	365	1,300	278	64	37	566
31	208	-----	78	87	-----	570	-----	759	-----	63	35	-----
TOTAL	8,215	11,350	8,217	8,714	2,155	5,977	12,483	23,957	15,278	4,172	1,527	3,169
MEAN	265	378	262	281	70	196	402	773	509	135	49	106
MAX	522	1,010	1,330	2,200	102	570	689	1,300	1,000	252	89	566
MIN	110	138	70	66	63	63	278	256	232	63	35	31
CFPM	6.37	9.09	6.37	6.75	1.85	4.64	10.0	18.6	12.2	3.25	1.19	2.55
IN.	7.35	18.15	7.35	7.79	1.93	5.34	11.16	21.42	13.66	3.73	1.37	2.83
AC-FT	16,290	22,510	16,300	17,280	4,270	11,860	24,760	47,528	30,300	8,280	3,030	6,290
CAL YR 1968	TOTAL 116,272		MEAN 318	MAX 2,640	MIN 44	LSM 6.86	IN 103.97			AC-FT 230,600		
WTR YR 1969	TOTAL 105,214		MEAN 318	MAX 2,200	MIN 31	CFPM 6.92	IN 94.09	AC-FT 208,700				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	516	78	115	121	266	171	242	260	864	166	66	30
2	430	74	109	111	238	161	298	314	1,100	180	74	29
3	318	77	103	105	235	156	242	400	1,220	222	68	68
4	238	354	115	96	209	148	232	570	976	229	64	54
5	191	389	187	94	188	139	400	661	815	188	60	46
6	159	242	101	98	177	168	462	486	920	166	58	134
7	143	204	96	96	174	355	370	400	724	158	55	270
8	204	171	94	96	203	254	318	400	510	158	53	161
9	310	153	92	94	222	219	825	510	522	143	52	121
10	294	143	91	91	229	197	952	385	492	130	50	91
11	224	139	105	89	229	188	584	314	380	119	49	76
12	191	143	148	89	235	191	425	286	350	109	46	65
13	162	132	188	105	263	191	346	260	415	101	46	59
14	143	121	254	354	249	270	306	256	430	100	45	55
15	131	130	235	302	366	385	282	376	430	98	43	50
16	119	127	188	213	703	486	260	766	375	98	42	48
17	111	117	169	183	522	360	249	899	350	91	41	52
18	102	113	200	310	415	290	246	693	468	85	40	144
19	96	109	213	474	330	256	263	564	462	84	38	206
20	100	128	263	661	278	242	249	510	480	81	37	148
21	98	197	330	843	249	229	225	474	510	76	37	109
22	164	93	368	229	213	209	564	440	171	36	36	194
23	93	230	350	1,110	219	219	213	570	365	68	35	177
24	87	242	263	752	209	256	274	640	326	66	35	134
25	84	197	213	584	203	206	246	864	298	87	35	109
26	77	171	183	456	197	216	222	906	302	123	34	94
27	78	153	375	195	197	209	206	558	270	113	32	84
28	80	141	146	302	183	282	186	468	229	89	32	77
29	80	132	136	252	-----	246	197	517	203	77	31	73
30	87	123	130	225	-----	216	246	619	183	73	30	68
31	85	-----	125	238	-----	203	-----	584	-----	68	30	-----
TOTAL	5,124	4,896	5,367	9,887	7,417	7,324	9,775	16,014	15,409	3,617	1,394	3,026
MEAN	165	163	173	319	245	234	326	517	514	117	45.0	101
MAX	516	389	350	1,110	703	486	952	906	1,220	229	74	270
MIN	77	74	91	89	174	139	186	256	183	66	30	29
CF5N	3.97	3.92	4.16	7.67	6.37	5.67	7.84	12.4	12.4	2.81	1.08	2.43
IN.	4.58	4.30	4.80	8.84	6.63	6.55	8.74	14.32	13.78	7.23	1.25	2.71
AC-FT	10,160	9,710	10,650	19,610	14,710	14,530	19,390	31,760	30,560	7,170	2,770	6,000

LOCATION.--Lat 47°25'58", long 121°45'04", in NE¼ sec.35, T.23 N., R.8 E., King County, on left bank 1.7 miles northeast of Cedar Falls and 2.5 miles upstream from mouth.

PERIOD OF RECORD.--August 1945 to September 1970. Prior to October 1960, published in WSP 1932.

GAGE.--Water-stage recorder. Altitude of gage is 1,220 ft (from topographic map).

AVERAGE DISCHARGE.--25 years, 25.8 cfs (18,690 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Maximum				Minimum			
Wtr yr	Date	Discharge	G.H.	Date	Discharge	G.H.	
1966	May 24, 26, 1966	45	1.59	Nov. 15-17, 28-30, Dec. 9, 1965	0.19	-	
1967	Jan. 25, 26, 27, 1967	105	1.87	Several days	0	-	
1968	Jan. 8, 1968	108	1.88	Nov. 5-8, 1967	0	-	
1969	June 23, 1969	92	1.83	Apr. 7-11, 1969	1.8	.84	
1970	June 20, 1970	29	1.55	Jan. 10, 11, 12, 13, Sept. 30, 1970	.55	-	

a Minimum daily.

Period of record: Maximum discharge, 182 cfs Dec. 22, 23, 1946; maximum gage height, 2.18 ft May 26, 1949; no flow for all or part of each day Oct. 28 to Nov. 9, 1966, Nov. 5-8, 1967.

REMARKS.--Records good. No gage-height record July 8 to Aug. 15, 1966. No regulation or diversion above station. Flow is mostly seepage from Chester Morse Lake.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	.32	.23	.53	2.3	3.1	2.0	20	39	26	15	5.2
2	1.5	.38	.23	.64	2.5	2.9	2.0	21	39	26	15	4.9
3	1.5	.45	.27	.64	2.6	2.9	2.0	21	39	26	15	4.7
4	1.5	.64	.32	.64	2.8	2.0	2.0	22	37	15	14	4.5
5	1.4	.93	.27	.98	2.8	2.0	2.0	22	36	24	14	4.3
6	1.5	.30	.27	1.2	2.9	2.8	2.0	23	34	23	14	4.1
7	1.2	.32	.27	1.2	3.1	2.0	2.0	24	34	23	13	4.1
8	1.1	.32	.23	1.5	3.1	2.9	2.0	26	33	23	13	3.9
9	.90	.27	.19	1.4	3.1	2.9	2.0	26	34	22	12	3.7
10	.98	.32	.23	1.5	3.1	2.9	2.0	27	34	21	12	3.6
11	.86	.27	.23	1.6	3.6	2.8	2.2	28	33	20	11	3.6
12	.86	.23	1.8	2.8	3.6	2.8	2.2	29	33	20	11	3.6
13	.84	.23	.27	1.9	3.4	2.5	2.2	30	31	20	11	3.4
14	.98	.23	.27	2.0	3.6	2.6	2.3	31	31	28	10	3.1
15	.73	.19	.27	2.0	3.6	2.6	2.5	34	31	20	9.8	2.9
16	.73	.19	.27	2.0	3.6	2.5	2.8	36	30	19	9.3	2.9
17	.73	.19	.27	1.9	3.6	2.5	2.9	39	30	18	9.3	2.8
18	.73	.23	.27	1.9	3.6	2.5	3.2	42	30	18	9.0	2.8
19	.64	.27	.27	1.9	3.4	2.5	3.7	42	29	18	8.7	2.6
20	.53	.27	.27	1.9	3.4	2.5	4.3	42	29	18	8.4	2.5
21	.53	.27	.27	1.8	3.4	2.3	5.2	42	29	18	8.1	2.3
22	.53	.32	.27	1.8	3.4	2.3	6.2	42	29	17	7.8	2.2
23	.53	.23	.27	1.8	3.4	2.3	7.4	42	28	17	7.4	2.0
24	.53	.23	.27	1.8	3.2	2.2	9.0	45	28	17	7.4	1.9
25	.53	.27	.27	1.8	3.2	2.2	11	44	28	17	7.1	1.9
26	.45	.23	.27	1.8	3.2	2.2	13	44	27	17	6.8	1.8
27	.49	.23	.38	1.9	3.1	2.2	15	44	27	17	6.5	1.6
28	.53	.19	.45	1.9	3.1	2.0	17	42	27	17	6.2	1.5
29	.53	.19	.45	2.0	-----	2.8	19	41	26	16	5.8	1.5
30	.53	.19	.45	2.2	-----	2.0	20	19	26	16	5.6	1.6
31	.38	-----	.45	2.3	-----	2.0	-----	39	-----	16	5.4	-----
TOTAL	26.47	8.53	8.97	50.23	89.9	78.6	171.1	1,049	942	615	308.6	90.7
MEAN	.85	.28	.29	1.62	3.21	2.54	5.70	33.8	31.6	19.8	9.95	3.02
MAX	1.6	.64	.69	2.3	3.6	3.6	9.5	30	26	26	15	5.2
MIN	.38	.19	.19	.53	3.0	2.0	2.0	20	26	16	5.4	1.4
AC-FT	53	18	10	100	178	156	339	2,080	1,870	1,220	612	180

CAL YR 1965	TOTAL 9,367.67	MEAN 14.7	MAX 50	MIN .19	AC-FT 10,690
WTR YR 1966	TOTAL 3,439.10	MEAN 9.42	MAX 49	MIN .19	AC-FT 6,028

12143700 BOXLEY CREEK NEAR CEDAR FALLS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	0	.45	41	85	38	13	7.8	11	43	38	12
2	1.1	0	.45	44	82	37	12	7.8	12	43	38	12
3	.98	0	.53	44	82	35	12	7.4	13	43	37	11
4	.98	0	.64	45	80	34	12	7.1	14	44	37	11
5	1.1	0	.64	44	77	34	12	7.1	15	46	35	9.9
6	1.1	0	.64	42	77	33	12	6.8	16	46	34	9.5
7	.98	0	.64	42	74	32	12	6.8	17	46	33	8.8
8	.98	0	.53	41	74	32	12	6.8	18	46	33	8.4
9	.86	.06	.53	41	72	31	12	6.4	20	46	32	8.1
10	.86	.19	.73	41	70	29	12	6.4	22	46	32	8.1
11	.86	.19	.86	42	67	28	11	6.4	23	46	31	7.8
12	.86	.23	.98	42	64	27	11	6.1	24	46	31	7.4
13	.73	.23	1.6	44	64	27	11	6.1	25	46	29	7.1
14	.73	.27	1.8	45	62	26	11	6.1	25	46	28	6.4
15	.53	.23	2.3	47	55	25	11	6.1	26	46	27	6.1
16	.53	.27	2.8	45	53	23	11	6.1	27	46	26	5.8
17	.45	.19	3.4	47	53	23	11	6.1	27	44	26	5.5
18	.45	.19	3.7	49	53	22	10	6.1	28	44	25	5.5
19	.64	.19	4.3	54	48	20	10	6.1	29	44	24	5.2
20	.53	.19	5.2	61	48	19	9.9	6.1	32	44	23	5.2
21	.45	.19	6.0	67	48	18	9.9	6.4	33	43	22	4.9
22	.64	.19	7.4	77	46	18	9.5	6.4	34	43	20	4.6
23	.45	.16	9.0	82	44	17	9.5	6.8	35	41	19	4.3
24	.45	.16	12	92	44	16	9.1	6.8	37	41	18	4.3
25	.38	.38	15	95	43	16	8.8	7.1	37	41	17	4.0
26	.38	.23	20	102	41	15	8.8	7.4	38	41	16	3.7
27	.27	.27	24	102	41	15	8.8	7.8	39	41	15	3.5
28	.01	.23	27	98	39	14	8.4	8.1	39	39	15	3.0
29	.17	.32	30	98	-----	14	8.1	8.8	39	39	14	2.7
30	.02	.45	33	92	-----	13	7.8	9.5	41	39	14	2.5
31	0	-----	37	85	-----	13	-----	10	-----	39	13	-----
TOTAL	19.87	5.01	253.12	1,891	1,686	744	316.6	216.8	796	1,348	802	198.3
MEAN	.64	.17	8.17	61.0	60.2	24.0	10.6	6.99	26.5	43.5	25.9	6.61
MAX	1.4	.45	37	102	85	38	13	10	41	46	38	12
MIN	0	0	.45	41	39	13	7.8	6.1	11	39	13	2.5
AC-FT	39	9.9	502	3,750	3,340	1,480	628	430	1,580	2,670	1,590	393

CAL YR 1966 TOTAL 3,673.13 MEAN 10.1 MAX 45 MIN 0 AC-FT 7,290
WTR YR 1967 TOTAL 8,276.70 MEAN 22.7 MAX 102 MIN 0 AC-FT 16,420

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	.53	41	48	70	43	29	27	21	43	22	7.1
2	2.1	.42	43	57	72	44	29	26	22	43	21	6.8
3	1.9	.23	44	74	74	48	29	25	19	44	21	6.4
4	1.7	.15	44	80	72	52	29	25	18	43	21	6.4
5	1.5	0	46	85	67	53	28	25	18	41	19	6.1
6	1.4	0	48	98	62	55	28	25	18	39	18	5.8
7	1.4	0	48	102	57	60	28	24	18	39	18	5.8
8	1.2	0	46	102	55	62	28	24	19	39	18	5.8
9	1.2	.15	46	98	52	64	28	23	21	38	17	5.8
10	1.1	.23	44	95	50	64	28	23	22	37	17	5.8
11	1.2	.15	44	92	46	62	28	23	23	37	17	5.8
12	1.1	.15	43	82	44	57	28	23	23	37	16	5.8
13	1.2	.32	43	74	44	53	28	22	24	34	15	5.8
14	1.1	.42	41	70	43	52	29	22	26	33	15	5.8
15	1.1	.42	41	60	41	52	29	21	27	33	14	5.8
16	.92	.53	39	52	39	50	29	21	31	33	13	5.8
17	.92	1.7	39	46	38	46	29	20	33	33	12	5.8
18	1.1	3.7	39	43	37	44	29	20	34	33	12	5.8
19	.92	6.1	39	43	37	43	31	20	35	33	12	5.8
20	.78	8.1	38	41	35	39	31	20	37	33	11	5.8
21	.92	11	38	39	35	38	31	20	38	32	11	5.8
22	.92	14	38	38	34	35	31	19	39	31	10	5.8
23	.78	18	38	37	33	33	31	18	39	31	10	5.8
24	.78	22	38	35	33	32	29	18	41	31	9.9	5.8
25	.65	26	38	37	33	33	29	19	39	31	9.5	5.8
26	.53	32	37	39	34	32	29	19	41	31	9.1	5.8
27	.78	35	37	41	35	32	29	19	43	31	8.8	6.1
28	.65	37	37	48	35	31	28	19	43	29	8.4	6.1
29	.53	38	38	52	38	31	28	19	43	28	8.1	6.4
30	.53	38	39	60	-----	31	28	19	43	25	7.8	6.8
31	.53	-----	43	67	-----	29	-----	20	-----	24	7.4	-----
TOTAL	33.54	294.30	1,277	1,935	1,345	1,400	868	668	898	1,069	429.0	180.0
MEAN	1.08	9.81	41.2	62.4	46.4	45.2	28.9	21.5	29.9	34.5	13.8	6.00
MAX	2.1	38	48	102	74	64	31	27	43	44	22	7.1
MIN	.53	0	37	35	33	29	28	18	18	24	7.4	5.8
AC-FT	67	584	2,530	3,840	2,670	2,780	1,720	1,320	1,780	2,120	891	357

CAL YR 1967 TOTAL 9,603.54 MEAN 26.3 MAX 102 MIN 0 AC-FT 19,050
WTR YR 1968 TOTAL 10,396.84 MEAN 28.4 MAX 102 MIN 0 AC-FT 20,620

SNOHOMISH RIVER BASIN

12143800 RATTLESNAKE LAKE AT CEDAR FALLS, WASH.

LOCATION.--Lat 47°25'39", long 121°46'29", in SW¼SW¼ sec.34, T.23 N., R.8 E., King County, on southeast shore 0.6 mile northeast of Cedar Falls.

DRAINAGE AREA.--1.86 sq mi.

PERIOD OF RECORD.--November to December 1945 (fragmentary), January 1953 to September 1970. Extremes prior to October 1960 published in WSP 1932 and daily gage heights are available in the district office in Tacoma.

GAGE.--Nonrecording gage. Datum of gage is 7.25 ft above mean sea level (levels by city of Seattle).

EXTREMES.--Maximum and minimum gage heights, in feet, for the water years 1966-70 are contained in the following table:

Maximum observed			Minimum observed		
Wtr yr	Date	Gage height	Date	(a)	Gage height
1966	June 14, 1966	906.72			
1967	Feb. 19, 1967	910.88	Nov. 29, 1966		866.70
1968	Jan. 23, 1968	910.92	Nov. 18, 1967		873.62
1969	Jan. 9, 1969	909.78	Apr. 14, 1969		889.78
1970	May 9, 1970	904.50	Jan. 18, 1970		877.98

a Sometime during period Dec. 13, 1965, to Jan. 3, 1966, when water was below gage.

Period of record: Maximum gage height observed, 911.80 ft Nov. 25, 26, 1959; minimum observed, 852.80 ft Jan. 9, 1953, but may have been less during period Dec. 13, 1965, to Jan. 3, 1966, when water was below gage.

REMARKS.--No regulation or diversion.

COOPERATION.--Gage readings furnished by city of Seattle.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	890.60	876.86	867.28	880.34	889.02	889.62	895.14	905.54	906.48	903.14	897.30	
2	899.16	876.44	867.08	880.60	889.12	889.62	895.58	905.66	906.46	902.99	897.26	
3	889.76	876.06	866.80	880.82	889.20	889.72	896.02	905.85	906.58	902.83	896.78	
4		875.92	866.78	866.38	881.28	889.30	889.62	896.48	906.02	906.50	902.68	896.50
5		875.40	866.56	866.50	881.46	889.26	889.58	896.96	906.28	906.54	902.52	896.20
6	888.42	874.90	866.36	866.90	881.78	889.22	889.48	897.44	906.24	906.56	902.36	895.92
7	887.94	874.50	866.38	867.65	882.06	889.24	889.40	897.92	906.28	906.58	902.20	895.64
8	887.44	874.32	866.18	868.70	882.32	889.26	889.28	898.34	906.38	906.58	902.80	895.34
9	887.00	874.02	866.18	869.66	882.60	889.32	889.18	898.78	906.42	906.54	901.89	895.02
10	886.52	873.72	865.98	878.78	882.90	889.42	889.12	899.18	906.54	906.48	901.72	894.72
11	886.04	873.58	865.98	871.52	883.28	889.58	889.12	899.54	906.58	906.40	901.59	894.46
12	885.52	873.30	865.98	872.40	883.72	889.74	889.18	899.92	906.60	906.32	901.42	894.14
13	885.10	872.95		873.26	884.06	889.90	889.28	900.32	906.62	906.28	901.26	893.84
14	884.62	872.58		874.25	884.52	890.86	889.32	900.70	906.72	906.10	901.18	893.58
15	884.20	872.26		875.24	884.88	890.20	889.38	901.04	906.62	905.96	900.91	893.26
16	883.72	871.90		876.10	885.30	890.34	889.58	901.40	906.64	905.78	900.73	892.98
17	883.26	871.52		876.76	885.70	890.42	889.68	901.72	906.65	905.60	900.54	892.68
18	882.80	871.28		877.36	886.08	890.50	889.98	902.10	906.65	905.44	900.38	892.46
19	882.48	870.90		877.80	886.40	890.64	890.82	902.42	906.66	905.26	900.17	892.10
20	882.04	870.60		878.40	886.76	890.70	890.26	902.74	906.60	905.18	899.90	891.74
21	881.62	870.28		878.58	887.08	890.70	890.60	903.06	906.58	904.92	899.72	891.40
22	881.25	869.90		878.62	887.20	890.70	890.92	903.38	906.56	904.74	899.52	891.02
23	880.72	869.58		879.18	887.62	890.64	891.34	903.70	906.52	904.54	899.32	890.70
24	880.32	869.26		879.30	887.96	890.60	891.74	903.96	906.56	904.38	899.10	890.34
25	879.88	868.96		879.40	888.24	890.54	892.88	904.20	906.53	904.22	898.90	889.96
26	879.44	868.66		879.58	888.46	890.42	892.68	904.46	906.58	904.86	898.68	889.60
27	879.00	868.34		879.74	888.66	890.36	893.18	904.78	906.46	903.90	898.46	889.24
28	878.50	868.10		879.62	888.88	890.18	893.50	904.90	906.52	903.74	898.28	888.72
29	878.00	867.80		879.94	-----	890.06	894.18	905.10	906.50	903.60	898.05	888.44
30	877.78	867.58		880.04	-----	889.98	894.68	905.24	906.48	903.42	897.88	888.06
31	877.30	-----		880.22	-----	889.90	-----	905.40	-----	903.30	897.58	-----
MEAN		872.05			884.67	889.95	890.53	901.03	906.43	905.43	900.57	892.97
MAX		876.86			888.88	890.78	894.68	905.40	906.72	906.58	903.14	897.30
MIN		867.50			880.34	889.02	889.12	895.14	905.54	903.30	897.54	888.86

12143800 RATTLESNAKE LAKE AT CEDAR FALLS, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	887.68	874.98	866.72	891.18	910.70	910.28	907.32	901.62	897.50	902.22	904.44	902.58
2	887.35	874.68	866.72	892.30	910.68	910.20	907.10	901.46	897.55	902.36	904.44	902.64
3	886.95	874.29	866.80	893.58	910.62	910.12	906.88	901.29	897.60	902.58	904.40	902.24
4	886.50	873.86	866.80	894.78	910.60	910.12	906.62	901.18	897.61	902.68	904.38	902.84
5	886.10	873.52	867.00	895.12	910.60	910.04	906.54	900.95	897.66	902.74	904.38	901.82
6	885.68	873.02	867.18	897.40	910.60	909.96	906.18	900.75	897.70	902.82	904.38	901.62
7	885.29	872.60	867.48	898.28	910.58	909.94	905.94	900.52	897.84	902.96	904.34	901.40
8	884.90	872.16	867.80	899.20	910.56	909.90	905.69	900.36	897.89	903.08	904.32	901.24
9	884.46	871.74	868.10	900.14	910.52	909.84	905.50	900.20	898.15	903.18	904.30	901.04
10	884.02	871.29	868.50	900.98	910.51	909.74	905.27	900.02	898.34	903.38	904.28	900.82
11	883.60	870.88	868.80	901.84	910.50	909.66	905.86	899.90	898.48	903.39	904.24	900.72
12	883.16	870.46	869.40	902.58	910.40	909.58	904.82	899.75	898.68	903.48	904.22	900.46
13	882.76	870.10	870.22	903.48	910.40	909.58	904.66	899.64	898.80	903.55	904.18	900.18
14	882.28	869.74	871.48	904.20	910.40	909.28	904.46	899.46	899.00	903.67	904.12	899.88
15	881.82	869.40	872.86	905.22	910.62	909.18	904.26	899.38	899.20	903.75	904.08	899.64
16	881.36	869.07	874.12	906.30	910.60	909.10	904.06	899.16	899.25	903.82	904.84	899.32
17	880.92	868.80	875.23	907.12	910.68	908.95	903.90	899.90	899.65	903.88	904.00	899.92
18	880.48	868.49	876.38	907.74	910.78	908.90	903.66	899.82	899.86	904.04	904.16	899.60
19	880.02	868.20	877.32	908.38	910.88	908.76	903.58	899.78	900.06	904.12	904.08	899.24
20	879.76	868.00	878.70	909.07	910.78	908.64	903.40	899.62	900.22	904.19	903.00	897.62
21	879.32	867.84	879.88	909.65	910.78	908.54	903.28	899.44	900.40	904.25	903.76	897.46
22	878.96	867.62	888.20	910.08	910.88	908.40	903.08	899.29	900.68	904.31	903.70	897.88
23	878.62	867.45	881.38	910.29	910.58	908.44	902.90	899.12	900.86	904.34	903.62	896.66
24	878.02	867.25	883.12	910.30	910.50	908.28	902.70	899.80	901.04	904.36	903.56	896.22
25	877.80	867.02	884.14	910.40	910.42	908.22	902.54	899.92	901.18	904.38	903.40	895.80
26	877.40	867.18	885.04	910.42	910.30	908.10	902.40	899.85	901.32	904.42	903.48	895.84
27	876.90	867.00	885.90	910.53	910.24	908.00	902.24	899.75	901.52	904.41	903.28	894.86
28	876.00	866.80	886.86	910.65	910.16	907.88	902.15	899.68	901.70	904.42	903.16	894.40
29	876.22	866.70	887.84	910.71	-----	907.78	901.97	899.62	901.88	904.43	903.02	893.98
30	875.90	866.78	888.85	910.72	-----	907.68	901.88	899.56	902.05	904.44	902.88	893.52
31	875.48	-----	889.88	910.72	-----	907.48	-----	899.50	-----	904.46	902.77	-----
MEAN	881.47	869.90	875.51	904.33	910.58	909.05	904.33	899.27	899.46	903.67	903.90	890.88
MAX	887.68	874.98	889.88	910.72	910.88	910.20	907.32	901.62	902.05	904.46	904.44	902.58
MIN	875.48	866.70	866.72	891.18	910.16	907.48	901.80	897.50	897.50	902.22	902.77	893.50

MTR YR 1967 MEAN 896.62 MAX 910.88 MIN 866.70

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	893.04	878.32	883.20	907.62	910.20	910.02	909.82	908.44	905.10	905.20	905.28	900.02
2	892.58	878.02	884.40	907.90	910.16	909.94	909.80	908.32	905.36	905.22	905.18	899.88
3	892.12	877.60	885.60	908.16	910.18	909.82	909.70	908.26	905.78	905.32	905.04	899.78
4	891.62	877.32	886.82	908.40	910.30	909.72	909.60	908.14	906.12	905.38	904.93	899.58
5	891.12	876.78	888.10	908.62	910.38	909.78	909.56	908.04	906.30	905.42	904.80	899.32
6	890.64	876.48	889.30	908.82	910.40	909.80	909.46	908.02	906.34	905.45	904.67	899.18
7	890.12	876.14	890.48	909.00	910.40	909.78	909.38	907.94	906.30	905.46	904.54	899.10
8	889.58	875.70	891.54	909.18	910.40	909.78	909.30	907.80	906.22	905.48	904.38	898.50
9	889.05	875.38	892.54	909.46	910.40	909.74	909.18	907.68	906.12	905.48	904.20	898.20
10	888.46	875.12	893.40	909.68	910.40	909.70	909.08	907.62	906.00	905.48	904.06	898.00
11	888.02	874.80	894.34	910.10	910.30	909.65	909.14	907.50	905.88	905.48	903.88	897.65
12	887.50	874.50	895.20	910.18	910.28	909.60	909.02	907.38	905.74	905.50	903.70	897.50
13	886.96	874.22	895.92	910.25	910.24	909.60	908.92	907.26	905.60	905.53	903.50	897.25
14	886.58	874.02	896.85	910.20	910.20	909.56	908.88	907.16	905.56	905.58	903.36	897.05
15	886.08	873.80	897.60	910.28	910.18	909.56	908.86	907.02	905.44	905.62	903.30	896.90
16	885.55	873.72	898.41	910.30	910.10	909.62	908.96	906.90	905.33	905.66	903.17	896.75
17	885.02	873.68	899.22	910.30	909.95	909.62	909.00	906.78	905.22	905.64	902.90	896.62
18	884.47	873.62	899.38	910.30	909.90	909.58	909.08	906.64	905.12	905.62	902.71	896.68
19	883.96	873.70	899.90	910.35	910.06	909.58	909.06	906.48	905.88	905.64	902.49	896.55
20	883.44	873.85	900.28	910.42	910.30	909.56	909.04	906.40	905.04	905.72	902.28	896.55
21	882.88	874.12	900.66	910.70	910.50	909.52	909.00	906.26	905.00	905.80	902.04	896.30
22	882.38	874.66	901.14	910.90	910.52	909.48	908.94	906.10	905.00	905.82	901.80	896.18
23	881.90	875.38	901.54	910.92	910.60	909.40	909.92	906.00	904.98	905.84	901.58	896.10
24	881.60	876.20	901.92	910.80	910.56	909.30	909.84	905.87	904.96	905.84	901.42	896.02
25	880.98	877.10	902.60	910.72	910.52	909.26	909.80	905.76	904.96	905.82	901.21	896.84
26	880.52	877.98	903.70	910.62	910.44	909.20	908.76	905.67	904.95	905.78	901.04	895.92
27	880.10	878.95	904.78	910.48	910.32	909.16	908.68	905.52	904.95	905.71	900.84	895.82
28	879.80	879.90	905.64	910.36	910.26	909.44	908.62	905.42	905.04	905.64	900.70	895.70
29	879.38	881.02	906.30	910.34	910.16	909.68	908.58	905.30	905.10	905.58	900.52	895.58
30	879.02	882.10	906.80	910.30	-----	909.82	908.48	905.10	905.15	905.46	900.36	895.55
31	878.64	-----	907.18	910.20	-----	909.80	-----	905.08	-----	905.38	900.20	-----
MEAN	885.58	876.14	896.93	909.87	910.30	909.62	909.08	906.83	905.46	905.57	902.91	897.33
MAX	893.04	882.10	907.18	910.92	910.60	910.02	909.82	908.44	906.34	905.84	905.28	900.02
MIN	878.64	873.62	883.20	907.62	909.90	909.16	908.48	905.08	904.95	905.20	900.20	895.55

CAL YR 1967 MEAN 899.30 MAX 910.88 MIN 873.62

MTR YR 1968 MEAN 901.30 MAX 910.92 MIN 875.62

12143800 RATTLESNAKE LAKE AT CEDAR FALLS, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	895.40	901.78	905.74			902.30	892.28	892.98	899.86	906.76	906.32	901.92
2	895.35	901.84	905.82			902.00	892.04	893.26	900.08	906.78	906.30	901.64
3	895.40	902.04	906.04		906.12	901.95	891.80	893.54	900.44	906.80	906.26	901.38
4	895.32	902.10	906.62		906.08		891.56	893.85	900.78	906.84	906.22	901.10
5	895.30	902.18	907.02	906.96	906.05		891.38	894.14	901.10	906.84	906.20	900.82
6	895.25	902.24	907.14	907.50	904.02		891.22	894.42	901.38	906.82	906.20	900.56
7	895.35	902.34	907.20	908.50	905.90		891.15	894.68	901.68	906.80	906.16	900.28
8	895.45	902.46	907.24	908.80	905.72		890.90	894.92	901.94	906.78	906.10	900.02
9	895.64	902.60	907.22	909.78	905.64		890.74	895.16	902.18	906.76	906.02	899.70
10	895.80	902.65	907.20	908.58	905.52		890.60	895.38	902.42	906.76	905.96	899.40
11	896.04	902.85	907.24	908.36	905.54		890.48	895.58	902.68	906.76	905.86	899.10
12	896.20	903.18	907.20	908.02	905.52		890.40	895.76	902.92	906.76	905.78	898.78
13	896.35	903.54	907.20	907.70	905.52		890.26	895.90	903.12	906.64	905.70	898.50
14	896.65	903.86	907.20	907.50	905.52		889.78	896.08	903.34	906.60	905.58	898.20
15	897.00	904.10	907.20	907.28	905.46		890.12	896.26	903.52	906.56	905.48	897.90
16	897.35	904.28	907.16	907.12	905.18		890.10	896.42	903.70	906.54	905.36	897.58
17	897.70	904.40	907.10	906.95	905.02		890.14	896.54	903.86	906.54	905.20	897.28
18	898.10	904.48	907.06	906.85	904.80		890.26	896.72	904.00	906.50	905.06	897.38
19	898.35	904.60	907.02	906.76	904.60		890.40	896.90	904.12	906.48	904.90	896.80
20	898.65	904.70	906.96	906.70	904.42		890.54	897.04	904.24	906.44	904.70	896.54
21	899.15	904.76	906.92	906.64	904.20		890.72	897.20	904.32	906.42	904.50	896.26
22	899.35	904.92	906.88	906.60	903.98		890.88	897.36	904.42	906.40	904.30	896.05
23	899.60	905.04	906.82	906.55	903.80		891.12	897.50	904.58	906.38	904.10	895.88
24	899.98	905.12	906.88	906.50	903.80		891.32	897.68	904.88	906.40	903.88	895.70
25	900.28	905.24	906.80	906.48	903.50		891.54	897.80	905.16	906.40	903.64	895.52
26	900.55	905.34	906.76	906.47	903.20		891.74	897.98	905.46	906.40	903.42	895.28
27	900.76	905.40	906.76		902.90	893.46	891.94	898.12	905.84	906.38	903.20	895.36
28	901.02	905.46	906.76		902.60	893.20	892.15	898.34	906.18	906.38	902.98	894.80
29	901.20	905.52	906.72		-----	893.00	892.44	898.62	906.42	906.32	902.74	894.60
30	901.42	905.64	906.80		-----	892.70	892.70	899.10	906.58	906.34	902.44	894.42
31	901.60	-----	-----		-----	892.60	-----	899.42	-----	906.32	902.20	-----
MEAN	897.79	903.82					891.09	896.28	903.37	906.58	904.93	897.94
MAX	901.60	905.64					892.70	899.42	906.58	906.84	906.32	901.72
MIN	895.25	901.78					889.78	892.98	899.86	906.32	902.20	894.42

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	894.18	887.86	884.68	881.82	884.34	899.64	900.60	903.76	901.40	902.28	897.98	889.02
2	893.96	887.78	884.46	881.64	884.56	899.90	900.58	903.90	901.28	902.34	897.46	888.30
3	893.72	887.62	884.22	881.44	884.86	900.10	900.48	904.10	901.16	902.40	897.38	888.04
4	893.52	887.48	884.08	881.24	885.16	900.34	900.42	904.22	901.06	902.44	897.08	887.72
5	893.26	887.74	883.88	881.00	885.50	900.54	900.38	904.32	900.36	902.46	896.74	887.38
6	893.02	887.68	883.56	880.70	885.90	900.70	900.38	904.40	900.88	902.52	896.42	887.08
7	892.74	887.72	883.32	880.55	886.28	901.00	900.38	904.46	900.78	902.54	896.10	886.84
8	892.52	887.70	883.04	880.35	886.70	901.10	900.36	904.48	900.72	902.52	895.78	886.58
9	892.30	887.64	882.82	879.96	887.34	901.18	900.46	904.50	900.66	902.48	895.48	886.24
10	892.06	887.60	882.55	879.70	888.00	901.32	900.66	904.48	900.64	902.44	895.16	885.88
11	891.80	887.56	882.40	879.38	888.70	901.42	900.88	904.46	900.62	902.36	894.86	885.52
12	891.58	887.50	882.35	879.12	889.40	901.54	901.22	904.38	900.64	902.30	894.56	885.18
13	891.34	887.38	882.20	878.80	889.96	901.60	901.46	904.30	900.66	902.18	894.30	884.78
14	891.12	887.26	882.20	878.66	890.60	901.70	901.62	904.24	900.70	902.10	893.98	884.42
15	891.00	887.16	882.04	878.48	891.32	901.76	901.78	904.12	900.76	901.98	893.70	884.06
16	890.66	887.07	881.90	878.22	892.16	901.80	901.90	904.02	900.88	901.80	893.38	883.64
17	890.40	886.94	882.10	878.18	892.88	901.84	901.94	903.88	901.00	901.66	893.12	883.30
18	890.20	886.80	882.10	877.98	893.70	901.86	901.98	903.72	901.12	901.48	892.80	883.00
19	890.00	886.66	882.10	878.00	894.48	901.90	902.08	903.54	901.24	901.28	892.50	882.72
20	889.74	886.50	882.06	878.24	895.18	901.94	902.20	903.38	901.36	901.08	892.20	882.20
21	889.56	886.40	882.00	878.70	895.90	901.94	902.30	903.24	901.46	900.86	891.90	881.90
22	889.34	886.34	881.95	879.28	896.60	901.88	902.36	903.08	901.52	900.64	891.58	881.74
23	889.16	886.08	882.00	879.86	897.16	901.88	902.46	902.94	901.62	900.40	891.36	881.40
24	888.98	886.02	882.00	880.40	897.60	901.72	902.60	902.76	901.70	901.14	891.08	881.02
25	888.70	885.76	882.00	880.50	898.16	901.60	902.74	902.56	901.78	899.85	890.78	880.70
26	888.58	885.64	882.12	881.42	898.58	901.50	902.90	902.36	901.88	899.70	890.46	880.45
27	888.48	885.50	882.24	882.12	898.94	901.34	903.04	902.16	901.94	899.48	890.18	879.90
28	888.38	885.28	882.24	882.72	899.30	901.26	903.18	902.00	902.04	899.20	889.88	879.68
29	888.24	885.10	882.20	883.24	-----	901.08	903.30	901.84	902.12	898.90	889.60	879.20
30	888.08	884.95	882.10	883.64	-----	900.94	903.56	901.72	902.22	898.58	889.36	878.70
31	887.98	-----	881.98	884.08	-----	900.76	-----	901.58	-----	898.30	889.20	-----
MEAN	890.79	886.82	882.61	880.30	891.40	901.26	901.67	903.51	901.21	901.28	893.44	883.89
MAX	894.18	887.86	884.68	884.06	899.30	901.94	903.56	904.50	902.22	902.54	897.98	889.02
MIN	887.98	884.95	881.90	877.98	884.34	899.64	900.36	901.58	900.36	898.30	889.20	878.70

WTR YR 1970 MEAN 893.19 MAX 904.50 MIN 877.98

12144000 SOUTH FORK SNOQUALMIE RIVER AT NORTH BEND, WASH.

LOCATION (REVISED).--Lat 47°29'18", long 121°47'03", in SW¼Sec. 9, T.23 N., R.8 E., King County, on left bank 0.5 mile south of North Bend and 2.8 miles upstream from mouth.

DRAINAGE AREA.--81.7 sq mi.

PERIOD OF RECORD.--July 1907 to September 1926, February 1929 to September 1938, June 1945 to April 1950, October 1960 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 432.47 ft above mean sea level. See WSP 1932 for history of changes prior to Mar. 11, 1965.

AVERAGE DISCHARGE.--42 years (1907-26, 1929-38, 1945-49, 1960-70), 544 cfs (90.42 inches per year, 394,100 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,200 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1700	*2,260	6.26	Oct. 27, 1967	2230	3,640	7.39	Dec. 3, 1968	1900	4,780	8.25
				Dec. 11, 1967	0100	2,800	6.63	Jan. 5, 1969	1030	*5,560	8.77
Dec. 13, 1966	1630	*3,720	7.28	Dec. 25, 1967	1530	*6,270	9.38	May 30, 1969	0400	2,780	6.73
Dec. 20, 1966	0215	2,710	6.46	Jan. 20, 1968	2115	6,210	9.53				
Jan. 15, 1967	1315	2,670	6.43	Feb. 19, 1968	0945	4,390	8.02	Jan. 23, 1970	0130	*2,380	6.39
Jan. 19, 1967	1930	2,810	6.55	June 22, 1968	1230	2,880	6.70	Apr. 9, 1970	2130	2,370	6.38
Feb. 4, 1967	1500	2,230	6.09	Sept. 17, 1968	1515	2,470	6.33				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 4, 1965	67	3.37	1969	Sept. 12, 13, 16, 1969	83	3.33
1967	Sept. 29, 1967	79	3.33	1970	Sept. 2, 3, 1970	88	3.25
1968	Oct. 1, 1967	97	3.38				

a Occurred Aug. 12-14, 1967.

Period of record: Maximum discharge, 9,280 cfs Nov. 20, 1962 (gage height, 13.09 ft, present datum), from rating curve extended above 1,600 cfs on basis of slope-area measurement of peak flow; maximum gage height, 15.2 ft, from high watermark, present datum, Oct. 25, 1934; minimum discharge, 63 cfs Oct. 22, 1925. Flood of Nov. 22, 1959, reached a stage of 14.49 ft, present datum, from floodmarks (discharge, 13,000 cfs, slope-area measurement).

REMARKS.--Records excellent. City of North Bend diverts about 0.8 cfs daily from Clough Creek for municipal use. No regulation.

REVISIONS (WATER YEARS).--WSP 1316: 1918(M), 1919(M). WSP 1736: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	160	312	238	337	332	1,080	542	562	454	201	118
2	101	178	442	265	312	312	1,130	652	555	454	190	115
3	96	218	419	256	298	293	884	664	542	755	186	115
4	88	666	868	252	288	274	792	1,230	548	815	186	112
5	110	900	710	283	283	270	800	1,620	542	666	182	112
6	299	688	589	550	288	270	888	2,060	695	589	175	110
7	298	491	795	376	308	265	986	1,980	852	529	171	110
8	209	402	785	868	303	312	980	1,380	852	503	167	107
9	193	358	609	695	317	602	980	1,400	792	479	164	104
10	175	332	510	575	303	609	1,110	1,150	876	454	160	101
11	157	358	468	644	348	303	1,330	884	980	402	160	107
12	147	332	396	892	380	448	1,090	845	830	408	157	101
13	171	298	344	1,370	348	562	845	808	695	385	167	98
14	197	283	337	1,310	348	674	732	710	681	402	190	98
15	327	317	308	932	317	666	725	674	770	380	160	98
16	317	343	288	718	303	596	770	732	868	348	150	96
17	288	293	270	596	293	503	748	637	808	332	147	96
18	306	270	256	522	288	460	666	409	652	312	144	112
19	553	298	247	460	278	454	596	652	652	303	140	101
20	454	303	252	419	337	425	589	770	568	283	137	96
21	369	425	283	385	358	402	666	940	516	274	134	90
22	303	609	252	358	380	369	602	868	497	260	130	88
23	260	479	238	343	391	358	582	703	485	256	130	90
24	230	402	238	322	369	353	596	695	536	247	127	88
25	209	380	230	303	348	364	659	892	491	238	124	88
26	197	369	222	288	343	414	666	1,130	479	234	127	93
27	186	385	222	298	374	510	589	972	497	226	149	93
28	186	353	247	298	358	596	555	770	770	222	144	90
29	175	322	260	322	-----	732	555	725	609	213	130	88
30	178	283	247	343	-----	1,080	555	732	479	213	127	88
31	171	-----	238	358	-----	1,270	-----	623	-----	209	124	-----
TOTAL	7,056	11,495	11,842	16,339	9,198	15,278	23,666	28,949	19,679	11,885	4,778	3,003
MEAN	228	363	382	527	329	493	769	934	656	383	154	100
MAX	553	900	868	1,370	391	1,270	1,330	2,060	980	815	201	118
MIN	88	160	222	238	278	265	555	542	479	209	124	88
CFSM	2.79	4.69	4.68	6.45	4.03	6.03	9.66	11.4	8.03	4.69	1.88	1.22
IN.	3.21	5.23	5.39	7.44	4.19	6.96	10.78	13.18	8.96	5.41	2.18	1.37
AC-FT	14,000	22,800	23,490	32,410	18,240	30,300	46,940	57,420	39,030	23,570	9,480	5,960
CAL YR 1965	TOTAL 169,589	MEAN 465	MAX 5,300	MIN 88	CFSM 5.69	IN 77.22	AC-FT 336,400					
WTR YR 1966	TOTAL 163,168	MEAN 447	MAX 2,060	MIN 88	CFSM 5.47	IN 74.29	AC-FT 323,600					

12144000 SOUTH FORK SNOQUALMIE RIVER AT NORTH BEND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	278	1,430	912	840	572	372	330	792	460	186	103
2	132	235	965	792	816	530	360	336	1,170	481	182	115
3	112	237	752	1,270	848	488	366	360	1,010	488	179	112
4	99	219	656	1,070	1,700	453	390	397	856	453	172	103
5	93	224	600	856	1,310	432	378	432	1,000	411	168	100
6	90	232	537	728	965	418	360	544	1,060	378	168	100
7	96	211	495	664	824	404	366	672	938	354	165	100
8	160	198	439	800	744	396	390	760	792	342	165	97
9	145	219	397	864	712	474	390	872	712	315	158	94
10	121	314	432	840	752	425	366	696	712	300	154	109
11	109	260	608	1,310	712	390	348	608	688	300	151	162
12	112	309	965	1,050	720	366	360	565	696	315	151	165
13	115	325	3,120	1,420	896	348	390	776	305	148	124	97
14	109	468	2,080	2,020	784	336	360	530	904	295	140	106
15	102	656	1,180	2,330	728	366	336	593	929	280	140	103
16	99	586	1,450	1,530	672	432	325	920	947	272	137	100
17	99	530	1,920	1,070	880	474	315	1,200	983	268	130	100
18	99	453	1,400	896	1,020	460	325	1,090	929	256	127	100
19	121	404	1,650	1,820	808	425	342	1,070	965	248	124	97
20	308	384	2,000	1,760	704	446	330	1,370	992	244	121	97
21	299	384	1,150	1,160	640	467	336	1,620	840	236	121	94
22	574	336	872	929	553	660	320	1,420	744	228	121	97
23	1,550	314	736	814	558	816	320	1,150	648	228	116	94
24	937	294	664	744	530	696	330	880	656	224	115	91
25	551	971	608	680	516	600	348	752	672	216	115	88
26	495	832	544	656	488	558	336	728	664	216	112	85
27	600	696	502	1,040	467	509	366	752	600	212	109	82
28	404	664	496	1,760	523	460	325	816	572	204	106	82
29	372	664	688	1,410	-----	493	354	965	544	196	103	82
30	411	1,410	640	1,180	-----	425	336	792	495	193	103	94
31	320	-----	632	929	-----	390	-----	680	-----	190	103	-----
TOTAL	9,001	13,347	31,007	35,506	21,801	14,740	10,575	24,430	24,291	9,101	4,292	3,076
MEAN	290	432	998	1,145	718	475	353	788	810	295	138	103
MAX	1,550	1,410	3,120	2,330	1,700	816	390	1,620	1,170	481	186	165
MIN	87	198	397	656	467	336	315	330	495	190	103	82
CFSM	3.55	5.45	12.2	14.0	9.53	5.81	4.32	9.65	9.91	3.60	1.69	1.26
IN.	4.10	6.08	14.12	16.17	9.93	6.71	4.82	11.12	11.06	6.14	1.95	1.40
AC-FT	17,850	26,470	61,500	70,430	45,240	29,240	20,980	48,460	48,180	18,050	6,510	6,100

CAL YR 1967	TOTAL	186,130	MEAN	510	MAX	3,120	MIN	87	CFSM	6.24	IN	84.75	AC-FT	369,200
WTR YR 1967	TOTAL	201,167	MEAN	551	MAX	3,120	MIN	82	CFSM	6.74	IN	91.60	AC-FT	399,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	109	947	342	728	544	742	637	794	1,560	360	170	279		
2	137	648	425	608	593	742	624	651	2,410	355	167	257		
3	230	537	432	551	832	728	565	637	1,430	350	164	232		
4	272	460	418	523	1,540	802	547	714	970	334	164	216		
5	179	397	390	488	1,050	906	591	658	834	330	158	204		
6	182	354	348	439	784	770	591	610	756	321	154	194		
7	200	330	330	432	720	644	598	547	658	302	151	187		
8	208	325	315	411	648	578	547	541	624	283	151	180		
9	168	439	378	432	593	529	529	604	572	274	148	170		
10	151	1,560	944	397	551	487	565	714	559	261	145	167		
11	353	1,040	1,640	360	516	463	672	874	529	257	142	161		
12	460	644	760	360	495	445	604	842	511	297	139	164		
13	535	551	593	446	467	423	541	637	505	279	137	158		
14	787	530	516	608	432	423	591	572	529	274	164	194		
15	397	579	467	816	404	481	644	553	481	292	236	460		
16	285	600	446	704	378	559	578	565	469	279	194	586		
17	240	481	411	586	384	529	523	658	463	257	176	1,200		
18	220	432	384	530	1,220	481	511	802	457	240	187	1,150		
19	260	390	354	1,720	3,830	445	499	954	463	236	204	814		
20	220	354	330	3,910	2,530	428	475	1,270	418	248	198	611		
21	343	330	325	3,850	2,140	412	451	866	406	236	180	482		
22	648	320	937	1,910	2,120	396	445	700	440	228	167	405		
23	973	310	1,620	1,400	2,190	418	469	693	428	220	187	524		
24	516	525	3,640	1,660	1,960	451	475	644	390	216	326	434		
25	509	481	5,220	1,330	1,310	457	529	686	380	208	355	365		
26	390	397	3,220	1,010	1,000	451	584	686	375	201	523	320		
27	1,430	366	1,980	808	898	864	535	624	406	198	475	286		
28	1,890	360	1,530	688	834	1,100	598	604	445	194	584	268		
29	600	384	1,130	632	778	1,110	874	617	434	187	457	245		
30	1,110	354	872	593	-----	890	978	604	380	184	360	223		
31	1,050	-----	760	565	-----	728	-----	553	-----	176	306	-----		
TOTAL	15,252	15,445	31,457	29,495	31,741	18,882	17,370	21,474	19,282	8,077	7,269	11,136		
MEAN	492	515	1,015	951	1,095	609	579	693	643	261	234	371		
MAX	1,890	1,560	5,220	3,910	3,850	1,110	978	1,270	2,410	360	584	1,200		
MIN	109	310	315	360	378	396	445	541	375	176	137	158		
CFSM	6.02	6.30	12.4	11.6	13.4	7.45	7.09	8.48	7.87	3.19	2.86	4.54		
IN.	6.94	7.03	14.32	13.43	14.45	8.60	7.91	9.78	8.78	3.68	3.31	5.07		
AC-FT	30,250	30,640	62,390	58,500	62,960	37,450	34,450	42,590	38,250	16,020	14,420	22,090		
CAL YR 1967	TOTAL	209,966	MEAN	575	MAX	5,220	MIN	82	CFSM	7.04	IN	95.60	AC-FT	416,500
WTR YR 1968	TOTAL	226,880	MEAN	620	MAX	5,220	MIN	109	CFSM	7.59	IN	103.30	AC-FT	450,000

12144000 SOUTH FORK SNOQUALMIE RIVER AT NORTH BEND, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	350	524	290	286	219	950	618	1,070	530	108	99
2	180	375	544	301	219	814	978	518	1,190	512	184	99
3	186	400	2,340	355	310	228	674	534	1,260	473	184	105
4	211	350	1,900	970	294	228	590	512	1,350	512	106	106
5	211	305	1,090	4,490	286	320	584	524	1,290	476	215	112
6	319	284	814	2,290	272	330	584	618	1,100	448	203	105
7	205	709	1,680	263	301	560	863	918	1,428	512	182	99
8	325	355	709	1,100	277	277	542	1,350	902	416	174	92
9	291	400	688	902	286	263	554	1,640	934	410	167	89
10	416	566	737	765	305	259	625	1,700	934	409	163	89
11	590	1,250	730	688	380	254	604	1,500	835	410	163	86
12	510	1,290	832	611	350	245	723	1,430	778	410	163	86
13	611	821	566	566	320	245	878	1,420	716	390	163	86
14	542	644	524	530	294	245	723	1,320	640	370	159	85
15	611	560	500	500	264	254	625	1,120	646	355	155	86
16	560	500	506	476	288	286	604	998	618	345	148	83
17	470	446	458	458	277	584	648	604	534	354	140	102
18	470	488	494	428	277	681	990	1,070	584	320	136	163
19	458	540	440	405	272	584	974	1,090	554	315	136	178
20	765	632	410	395	268	536	807	1,030	500	310	133	190
21	695	765	390	380	263	512	718	1,160	446	301	126	159
22	611	1,480	375	360	254	584	772	1,370	452	296	122	311
23	544	1,010	375	335	250	625	1,120	1,510	572	282	122	404
24	580	758	464	315	241	530	982	1,520	926	277	119	653
25	500	625	458	325	232	488	779	1,190	849	283	119	494
26	490	566	416	330	228	494	674	1,010	702	254	116	405
27	400	604	312	215	632	680	980	818	618	241	116	311
28	375	554	350	301	219	646	709	870	611	232	119	286
29	350	597	315	291	-----	660	751	1,250	639	223	116	305
30	490	578	260	291	-----	744	674	2,070	578	215	108	618
31	400	-----	240	296	-----	966	-----	1,160	-----	107	105	-----
TOTAL	13,665	18,357	19,368	21,764	7,804	13,363	21,874	34,919	23,837	10,949	4,852	6,502
MEAN	441	612	625	702	279	431	729	1,126	735	353	190	217
MAX	765	1,480	2,340	4,490	380	966	1,120	2,070	1,350	530	215	618
MIN	186	272	240	290	219	219	542	512	446	207	105	83
CFSM	5.40	7.49	7.65	8.59	3.41	5.28	8.92	13.8	9.73	4.32	1.84	2.66
IN.	6.22	8.36	8.82	9.91	3.55	6.08	9.96	15.90	10.85	4.99	2.12	2.96
AC-FT	27,100	36,410	38,420	43,170	15,480	26,510	43,390	69,260	47,280	21,720	9,250	12,900

CAL YR 1968 TOTAL 216,116 MEAN 590 MAX 3,910 MIN 137 CFSM 7.22 IN 98.40 AC-FT 426,700
WTR YR 1969 TOTAL 197,056 MEAN 540 MAX 4,490 MIN 83 CFSM 6.61 IN 89.72 AC-FT 390,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	816	161	222	286	554	375	452	530	1,200	331	137	89
2	669	195	210	272	518	350	620	584	1,510	324	152	89
3	542	158	203	259	500	340	512	690	1,630	345	142	110
4	420	442	226	242	458	322	470	872	1,350	385	132	119
5	355	676	214	226	425	308	614	1,600	1,110	355	126	106
6	304	435	199	218	405	340	768	800	1,220	313	124	144
7	277	380	188	210	395	627	676	683	1,060	295	121	370
8	336	318	185	210	425	512	590	655	776	286	121	290
9	464	290	188	214	458	435	1,350	800	746	277	119	230
10	506	268	181	199	476	405	1,690	676	776	250	114	178
11	410	254	254	199	488	390	1,120	578	634	234	112	148
12	395	254	420	192	494	385	848	534	572	222	110	134
13	313	242	458	228	538	390	704	900	634	206	112	124
14	282	226	655	728	512	464	620	482	682	199	110	118
15	259	226	572	669	655	676	572	566	662	192	108	112
16	238	226	458	470	1,290	816	530	1,050	602	188	108	110
17	226	214	415	410	1,040	683	500	1,300	554	181	106	114
18	210	203	458	757	840	572	494	938	689	171	104	185
19	199	196	488	1,190	690	506	548	856	704	168	102	331
20	199	203	566	1,380	602	484	542	800	690	168	100	277
21	199	313	690	1,440	542	435	488	725	732	161	100	230
22	188	282	739	1,520	506	410	452	856	662	155	98	250
23	188	378	840	1,960	470	405	452	864	590	148	98	313
24	191	476	841	1,330	446	470	590	936	942	142	96	234
25	174	380	518	1,190	435	420	548	1,190	500	155	96	196
26	188	331	464	952	420	400	500	1,320	494	206	94	171
27	188	295	410	864	410	390	458	896	476	210	92	155
28	171	272	370	883	390	500	425	776	415	178	92	145
29	168	250	340	590	-----	464	430	784	385	161	92	134
30	171	234	318	524	-----	415	524	864	370	148	91	129
31	171	-----	304	536	-----	395	-----	904	-----	142	89	-----
TOTAL	9,327	8,738	12,394	20,144	15,380	14,864	19,087	25,129	22,927	6,918	3,398	5,353
MEAN	301	291	400	650	549	454	636	811	764	223	110	178
MAX	816	676	840	1,960	1,290	816	1,690	1,320	1,630	385	152	370
MIN	188	155	181	192	390	308	425	482	370	162	88	89
CFSM	3.68	3.58	4.90	7.96	6.72	5.58	7.78	9.93	9.35	2.73	1.35	2.18
IN.	4.25	3.98	5.64	9.17	7.00	6.40	8.49	11.44	10.44	3.15	1.55	2.44
AC-FT	18,500	17,330	24,580	39,960	30,510	27,900	37,840	49,840	45,480	13,720	6,740	10,620

CAL YR 1969 TOTAL 176,125 MEAN 483 MAX 4,490 MIN 83 CFSM 5.91 IN 80.19 AC-FT 349,300
WTR YR 1970 TOTAL 162,859 MEAN 446 MAX 1,960 MIN 89 CFSM 5.46 IN 74.15 AC-FT 323,500

12144500 SNOQUALMIE RIVER NEAR SNOQUALMIE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	387	1,400	7,290	4,650	3,300	2,630	1,470	1,480	3,700	2,460	800	331
2	600	1,240	4,800	3,370	3,120	2,210	1,440	1,440	5,930	2,660	735	536
3	582	1,100	3,630	6,070	3,400	1,890	1,540	1,550	5,410	2,810	732	583
4	454	996	3,090	4,810	8,680	1,790	1,640	1,740	4,590	2,680	711	476
5	423	1,050	2,810	3,820	6,370	1,650	1,610	1,890	5,040	2,460	698	455
6	397	1,180	2,510	2,970	4,200	1,540	1,500	2,400	5,470	2,040	682	444
7	478	1,100	2,400	2,620	3,300	1,570	1,510	3,070	4,860	1,890	663	441
8	1,280	991	2,040	3,400	2,800	1,590	1,560	3,700	3,840	1,740	649	420
9	1,000	1,080	1,840	4,530	2,610	1,950	1,640	4,420	3,360	1,590	635	414
10	711	2,700	2,070	3,760	3,120	1,680	1,570	3,340	3,240	1,450	641	455
11	563	1,720	3,900	7,030	2,890	1,420	1,380	2,840	3,160	1,510	642	844
12	602	2,340	6,150	4,710	2,830	1,420	1,500	2,660	3,120	1,770	636	999
13	622	2,230	17,600	7,570	4,080	1,340	1,580	2,390	3,670	1,770	619	654
14	564	3,610	10,500	10,200	3,220	1,200	1,490	2,280	4,360	1,700	604	561
15	534	3,960	5,950	11,300	2,790	1,350	1,420	2,550	4,860	1,450	594	510
16	502	3,130	8,050	7,250	2,600	1,840	1,280	4,360	5,040	1,370	580	480
17	709	2,840	9,600	4,800	3,450	2,370	1,380	5,790	5,330	1,290	562	464
18	658	2,410	8,880	3,780	4,660	2,050	1,310	5,310	5,330	1,250	545	464
19	889	2,210	7,470	8,200	3,300	1,890	1,410	5,090	5,350	1,150	526	401
20	4,240	2,180	9,580	8,700	2,720	1,840	1,370	6,270	5,890	1,100	518	438
21	2,260	2,090	5,430	5,350	2,450	2,090	1,440	7,650	5,020	1,100	531	422
22	3,720	1,830	3,960	4,020	2,260	2,950	1,390	6,950	4,380	1,080	539	414
23	9,440	1,590	3,090	3,240	1,940	5,040	1,380	5,650	3,550	1,050	506	418
24	5,450	1,530	2,760	2,770	2,000	3,570	1,440	4,180	3,570	1,070	489	393
25	3,070	5,530	2,580	2,480	1,910	2,790	1,480	3,400	3,780	1,040	477	398
26	2,510	4,650	2,240	2,310	1,880	2,460	1,490	3,240	3,860	1,010	451	373
27	3,190	3,510	1,990	4,440	1,780	2,240	1,530	3,480	3,640	957	450	387
28	2,210	3,930	1,910	9,150	2,030	2,000	1,610	3,810	3,010	942	445	353
29	1,870	3,810	2,790	6,650	-----	1,890	1,510	5,130	2,910	908	443	389
30	2,280	7,510	2,760	5,610	-----	1,750	1,480	4,150	2,810	747	485	415
31	1,820	-----	2,640	3,990	-----	1,610	-----	3,210	-----	845	534	-----
TOTAL	54,015	75,447	152,310	163,590	89,960	63,610	44,350	115,420	128,080	46,889	18,122	14,332
MEAN	1,742	2,515	4,913	5,276	3,203	2,052	1,478	3,723	4,269	1,513	585	478
MAX	9,440	7,510	17,600	11,300	8,680	5,040	1,640	7,650	5,930	2,810	800	999
MIN	387	991	1,840	2,310	1,780	1,200	1,280	1,440	2,810	747	443	331
AC-FT	107,100	149,600	302,100	324,400	177,900	126,200	87,970	228,900	254,000	93,000	35,940	28,430
CAL YR 1966	TOTAL	926,299	MEAN	2,538	MAX	17,600	MIN	253	AC-FT	1,837,000		
WTR YR 1967	TOTAL	965,815	MEAN	2,646	MAX	17,600	MIN	331	AC-FT	1,916,000		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	868	5,830	1,670	3,210	1,980	2,860	2,680	4,390	8,080	1,950	751	1,350
2	1,260	3,550	2,040	2,700	2,080	2,850	2,760	3,270	16,300	2,010	734	1,260
3	1,560	2,620	2,200	2,320	4,050	2,770	2,470	3,000	9,250	2,040	714	1,120
4	2,380	2,120	2,160	2,160	9,330	3,030	2,280	3,480	5,370	2,010	734	1,020
5	1,190	1,800	1,860	2,070	5,040	3,960	2,630	3,250	4,440	1,940	693	942
6	1,320	1,570	1,620	1,850	3,570	3,330	2,520	2,940	4,060	1,780	672	888
7	2,100	1,460	1,530	1,750	2,880	2,600	2,560	2,620	3,330	1,660	629	849
8	2,150	1,460	1,400	1,700	2,590	2,230	2,290	2,550	3,210	1,490	622	809
9	1,220	2,060	1,890	1,900	2,340	1,980	2,170	2,840	2,880	1,440	601	771
10	962	7,980	4,840	1,800	2,200	1,820	2,300	3,490	2,830	1,310	590	743
11	3,900	5,630	9,100	1,660	1,970	1,700	3,030	4,260	2,820	1,240	587	714
12	3,820	3,300	4,140	1,950	2,020	1,650	2,670	4,230	2,610	1,460	573	726
13	3,580	2,640	2,880	2,480	1,830	1,610	2,280	3,150	2,570	1,440	552	705
14	6,510	2,400	2,290	4,710	1,700	1,950	2,450	2,760	2,780	1,330	668	800
15	3,180	2,810	2,080	5,850	1,580	1,960	3,040	2,670	2,420	1,790	1,260	3,570
16	2,190	3,370	1,850	4,410	1,480	2,600	2,610	2,640	2,370	1,570	1,020	7,680
17	1,580	2,530	1,720	3,180	1,420	2,420	2,280	3,100	2,400	1,280	849	9,900
18	1,380	2,090	1,570	2,660	5,430	2,120	2,160	3,910	2,450	1,150	986	8,850
19	2,060	1,980	1,420	9,350	18,600	1,840	2,140	4,800	2,580	1,090	1,090	5,010
20	1,580	1,720	1,280	17,500	15,700	1,750	2,000	7,230	2,290	1,340	1,040	3,600
21	2,320	1,470	1,260	23,800	9,280	1,680	1,850	5,070	2,120	1,280	908	2,660
22	4,030	1,420	4,360	8,730	9,230	1,620	1,810	3,870	2,360	1,120	840	2,200
23	5,670	1,380	8,930	5,790	9,430	1,710	1,960	3,990	2,600	1,030	922	2,800
24	3,120	4,600	21,400	7,150	8,930	2,030	2,180	3,460	2,780	971	2,070	2,470
25	2,900	3,220	31,400	5,690	5,630	1,970	2,610	3,630	2,300	942	1,990	1,950
26	2,400	2,300	17,900	4,080	4,300	2,000	3,450	3,870	2,330	932	3,380	1,680
27	7,410	1,920	9,930	3,100	3,690	3,550	2,760	3,280	2,610	913	2,840	1,490
28	11,000	1,690	7,680	2,630	3,220	5,230	3,120	2,980	3,240	888	3,240	1,350
29	5,210	2,030	5,310	2,340	2,930	5,310	4,800	3,030	2,770	864	2,460	1,230
30	7,830	1,790	4,060	2,210	-----	4,260	5,270	2,770	2,190	849	1,880	1,130
31	6,990	-----	3,310	2,040	-----	3,190	-----	2,560	-----	784	1,540	-----
TOTAL	103,670	80,740	165,080	142,590	142,430	79,180	79,130	109,290	109,840	41,893	37,435	70,267
MEAN	3,344	2,601	5,325	4,600	4,911	2,554	2,638	3,525	3,661	1,351	1,208	2,342
MAX	11,000	7,980	31,400	23,800	18,600	5,310	5,270	7,230	16,300	2,040	3,380	9,900
MIN	868	1,380	1,260	1,950	1,420	1,550	1,810	2,550	2,120	784	552	705
AC-FT	205,600	160,100	327,400	282,800	282,500	157,100	157,000	216,800	217,900	83,090	74,250	139,400
CAL YR 1967	TOTAL	1,033,593	MEAN	2,832	MAX	31,400	MIN	331	AC-FT	2,050,000		
WTR YR 1968	TOTAL	1,161,945	MEAN	3,174	MAX	31,400	MIN	552	AC-FT	2,304,000		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,310	921	1,120	1,390	2,960	1,490	1,660	2,080	4,260	1,400	740	388
2	5,990	861	1,060	1,290	2,690	1,400	2,810	2,320	5,980	1,360	826	408
3	4,360	886	1,010	1,210	2,560	1,390	2,310	2,770	6,940	1,670	838	529
4	2,900	2,910	1,210	1,280	2,180	1,280	2,030	3,710	2,260	1,410	761	821
5	2,350	4,960	1,170	1,040	2,040	1,240	3,600	4,280	4,750	1,880	727	680
6	1,960	2,730	1,040	1,020	1,970	1,360	4,680	3,340	5,180	1,570	678	1,700
7	1,730	2,310	974	987	2,010	4,200	3,680	2,690	4,910	1,430	658	4,070
8	2,370	1,840	957	977	2,340	2,750	2,860	2,540	3,410	1,400	670	2,640
9	3,420	1,620	1,010	1,010	2,570	2,140	7,370	3,720	3,210	1,410	661	1,950
10	3,250	1,460	1,010	1,000	2,830	1,860	8,740	2,850	3,590	1,250	619	1,350
11	2,440	1,350	1,480	963	2,860	1,700	5,040	2,350	2,740	1,150	583	1,070
12	2,000	1,400	3,400	940	2,910	1,660	3,740	2,110	2,280	1,060	583	900
13	1,710	1,350	3,360	1,140	3,540	1,870	2,980	1,970	2,450	991	576	806
14	1,490	1,210	4,950	6,750	2,960	2,230	2,580	1,820	2,710	947	569	734
15	1,330	1,220	3,810	4,950	3,190	3,820	2,300	2,040	2,960	915	537	678
16	1,190	1,400	2,740	2,870	6,560	4,350	2,110	3,950	3,040	944	525	642
17	1,100	1,260	2,400	2,320	5,190	3,460	1,970	5,260	2,510	938	504	678
18	1,040	1,170	2,750	7,440	4,150	2,670	1,910	3,820	3,040	866	488	2,290
19	985	1,140	2,990	8,560	3,250	2,300	2,160	3,340	3,320	854	471	3,500
20	985	1,160	4,160	8,500	2,760	2,090	2,330	3,010	3,070	823	465	2,510
21	1,040	1,990	4,330	8,090	2,490	1,970	2,060	2,640	3,650	783	460	1,880
22	980	1,740	4,480	8,180	2,270	1,800	1,890	3,130	3,040	735	458	2,040
23	990	2,200	5,040	10,400	2,110	1,700	1,870	3,460	2,870	694	450	2,730
24	960	3,020	3,680	6,430	1,970	2,250	2,490	3,600	2,500	658	452	1,840
25	940	2,080	2,760	5,630	1,860	1,930	2,310	4,430	2,310	740	448	1,430
26	852	1,740	2,420	4,520	1,770	1,790	2,030	5,420	2,290	1,340	442	1,200
27	880	1,510	2,120	4,450	1,710	1,680	1,850	3,660	2,340	1,770	422	1,040
28	910	1,370	1,880	3,560	1,610	2,000	1,700	2,940	2,020	1,260	418	932
29	890	1,280	1,720	2,870	-----	1,930	1,740	2,970	1,770	967	410	875
30	931	1,210	1,600	2,470	-----	1,730	2,000	4,240	1,680	857	402	804
31	932	-----	1,490	2,470	-----	1,560	-----	3,400	-----	785	392	-----
TOTAL	59,995	51,298	74,121	114,957	77,410	65,630	86,620	99,860	101,280	35,477	17,233	43,134
MEAN	1,935	1,710	2,391	3,695	2,765	2,117	2,894	3,221	3,376	1,144	556	1,438
MAX	7,310	4,960	5,040	10,400	6,560	4,350	8,760	5,420	6,940	2,050	838	4,070
MIN	852	861	957	940	1,610	1,240	1,660	1,820	1,680	658	392	388
AC-FT	119,000	101,700	147,000	227,200	153,500	130,200	172,200	198,100	200,900	70,370	34,180	85,560
CAL YR 1969	TOTAL 826,153			MEAN 2,461		MAX 34,100		MIN 474		AC-FT 1,781,000		
WTR YR 1970	TOTAL 878,815			MEAN 2,265		MAX 10,400		MIN 398		AC-FT 1,640,000		

12144800 BEAVER CREEK NEAR SNOQUALMIE, WASH.

LOCATION.--Lat 47°37'56", long 121°44'56", in SW¼ sec.23, T.25 N., R.8 E., King County, on left bank 2.0 miles upstream from mouth and 8 miles northeast of Snoqualmie.

DRAINAGE AREA.--4.13 sq mi.

PERIOD OF RECORD.--August 1964 to September 1967 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 950 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-67 are contained in the following table:

Wtr yr	Date	Maximum Discharge	G.H.	Date	Minimum Discharge	G.H.
1966	Jan. 7, 1966	33	1.36			
1967	Jan. 20, 1967	56	1.65	Aug. 23, 25-28, 1967	4.4	0.53

a Oct. 4, 1965, Sept. 22, 23, 24, 1966.

b Occurred Oct. 4, 1965.

Period of record: Maximum discharge, 197 cfs Jan. 29, 1965 (gage height, 2.78 ft), from rating curve extended above 58 cfs; minimum, 4.4 cfs Aug. 23, 25-28, 1967 (gage height, 0.53 ft).

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	7.6	14	18	19	20	18	16	13	11	8.8	6.5
2	6.1	8.3	14	19	19	20	18	16	13	11	8.6	6.5
3	6.1	8.8	14	18	19	20	17	16	13	13	8.6	6.5
4	6.1	14	18	18	18	20	17	15	13	13	8.3	6.5
5	6.7	16	17	19	18	20	17	15	12	13	8.3	6.5
6	7.9	15	17	27	18	20	16	16	12	13	8.1	6.5
7	6.7	13	19	32	20	20	16	16	12	12	7.9	6.5
8	6.3	12	19	31	21	20	16	15	12	12	7.9	6.5
9	6.7	11	19	28	22	21	16	15	12	11	8.1	6.5
10	6.3	11	18	26	22	20	16	15	13	11	7.9	6.5
11	6.1	11	18	27	22	20	19	14	12	12	7.6	6.7
12	6.3	9.8	17	31	23	19	19	14	12	11	7.6	6.7
13	7.0	9.6	18	32	22	20	19	14	12	10	7.6	6.5
14	7.0	9.6	15	31	22	20	19	14	12	11	7.9	6.3
15	10	9.3	15	28	21	20	18	14	11	10	7.6	6.3
16	9.1	9.1	14	26	21	20	17	15	11	10	7.4	6.1
17	8.3	8.8	13	24	21	19	16	14	11	9.6	7.4	6.3
18	8.6	9.1	13	23	21	19	16	14	11	9.6	7.4	7.0
19	11	11	13	23	21	20	16	14	11	9.6	7.2	6.3
20	10	10	13	22	21	20	17	13	11	9.1	7.0	6.1
21	9.1	11	15	22	21	20	17	14	10	9.1	6.7	6.1
22	8.6	13	13	21	21	19	17	16	10	9.1	6.7	6.1
23	8.3	13	13	21	21	19	16	15	10	9.1	6.3	6.1
24	7.9	13	13	20	21	19	16	15	10	9.6	6.5	6.1
25	7.9	14	13	20	20	19	17	14	9.8	10	6.5	6.5
26	7.6	15	13	19	20	18	18	14	9.8	9.3	6.5	7.0
27	7.6	16	13	19	21	18	17	14	9.8	9.3	7.0	7.0
28	7.6	15	17	19	21	18	17	14	12	9.3	6.7	6.9
29	7.4	15	19	19	-----	18	17	13	10	9.3	7.0	6.5
30	8.6	14	19	20	-----	18	16	13	10	9.1	7.0	6.5
31	7.9	-----	18	20	-----	18	-----	13	-----	8.8	6.3	-----
TOTAL	236.9	353.0	482	723	577	602	511	450	340.4	323.9	230.6	194.1
MEAN	7.64	11.8	15.5	23.3	20.6	19.4	17.0	14.5	11.3	10.4	7.44	6.47
MAX	11	16	19	32	23	21	19	16	13	13	8.8	7.0
MIN	6.1	7.6	13	18	18	18	16	13	9.8	8.8	6.3	6.1
CFSM	1.85	2.86	3.75	5.64	4.99	4.70	4.12	3.51	2.74	2.52	1.80	1.57
IN.	2.13	3.18	4.34	6.51	5.20	5.42	4.60	4.05	3.07	2.92	2.08	1.57
AC-FT	470	700	956	1,430	1,140	1,190	1,010	893	675	642	457	385

CAL YR	1965	TOTAL	6,309.4	MEAN	17.3	MAX	164	MIN	6.1	CFSM	4.19	IN	56.79	AC-FT	12,510
WTR YR	1966	TOTAL	5,023.9	MEAN	13.8	MAX	32	MIN	6.1	CFSM	3.34	IN	45.25	AC-FT	9,960

SNOHOMISH RIVER BASIN

12144800 BEAVER CREEK NEAR SNOQUALMIE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	7.2	20	26	30	28	25	24	15	9.8	5.9	4.8
2	6.5	7.2	20	27	28	27	24	23	15	9.8	5.7	5.2
3	7.0	7.0	19	28	28	26	24	23	15	9.8	5.6	5.0
4	6.7	7.2	19	32	30	26	23	22	15	9.8	5.6	5.0
5	7.0	7.4	19	32	29	26	23	21	15	9.6	5.6	4.8
6	7.2	7.9	20	30	28	26	23	21	15	9.3	5.7	5.0
7	7.9	7.4	20	28	28	25	22	21	14	9.1	5.7	5.2
8	8.3	7.4	19	28	27	26	22	21	14	9.1	5.7	5.0
9	7.6	8.8	18	28	28	25	22	20	14	9.1	5.6	5.2
10	7.6	10	19	28	28	25	22	20	14	8.3	5.4	5.7
11	7.2	9.6	19	31	27	24	21	21	14	8.1	5.4	6.7
12	8.1	11	22	30	27	24	21	21	13	7.9	5.2	6.1
13	7.9	11	32	38	32	24	23	21	13	7.6	5.2	5.4
14	7.6	13	35	45	32	23	22	20	13	7.4	5.2	5.2
15	7.4	14	29	49	31	24	21	20	13	7.2	5.2	5.0
16	7.4	16	28	42	31	24	20	20	12	7.0	5.2	5.0
17	8.1	15	29	37	34	24	21	19	12	6.7	5.2	5.0
18	7.4	14	32	35	38	25	20	19	12	6.7	5.2	4.8
19	8.3	13	31	41	36	24	22	19	12	6.5	4.8	4.8
20	11	12	32	55	33	25	22	19	11	6.5	4.8	5.0
21	9.3	12	28	48	31	25	22	18	12	6.5	4.6	5.0
22	10	11	26	42	29	26	22	18	12	6.3	4.6	5.2
23	9.8	11	25	37	28	28	22	17	11	6.3	4.4	5.2
24	8.6	10	24	35	28	27	22	17	11	6.1	4.6	5.2
25	8.1	13	24	33	27	26	22	16	11	6.1	4.4	5.2
26	8.1	13	23	31	26	26	22	16	10	6.1	4.4	5.4
27	8.3	14	22	32	26	25	23	16	10	6.1	4.4	5.4
28	7.6	15	22	34	28	25	25	16	10	5.9	4.6	5.4
29	7.9	15	23	33	-----	26	26	16	10	5.9	4.6	5.4
30	7.9	19	23	32	-----	26	25	16	9.8	5.7	4.6	5.7
31	7.6	-----	24	30	-----	25	-----	16	-----	5.7	4.6	-----
TOTAL	245.7	339.1	746	1,077	828	786	674	597	377.8	232.0	157.7	157.0
MEAN	7.93	11.3	24.1	34.7	29.6	25.4	22.5	19.3	12.6	7.48	5.09	5.23
MAX	11	19	35	55	38	28	26	24	15	9.8	5.9	6.7
MIN	6.3	7.0	18	26	26	23	20	16	9.8	5.7	4.4	4.8
CFSM	1.92	2.74	5.84	8.40	7.17	6.15	5.45	4.67	3.05	1.81	1.23	1.27
IN.	2.21	3.05	6.72	9.70	7.46	7.08	6.07	5.38	3.40	2.09	1.42	1.41
AC-FT	487	673	1,480	2,140	1,640	1,560	1,340	1,180	749	460	313	311

CAL YR 1966	TOTAL	5,282.8	MEAN	14.5	MAX	35	MIN	6.1	CFSM	3.51	IN	47.58	AC-FT	10,480
WTR YR 1967	TOTAL	6,217.3	MEAN	17.0	MAX	55	MIN	4.4	CFSM	4.12	IN	56.00	AC-FT	12,330

12145500 RAGING RIVER NEAR FALL CITY, WASH.

LOCATION.--Lat 47°32'24", long 121°54'28", on west line of sec.27, T.24 N., R.7 E., King County, on right bank at highway bridge, 2.0 miles southwest of Fall City and 2.6 miles upstream from mouth.

DRAINAGE AREA.--30.6 sq mi.

PERIOD OF RECORD.--July 1945 to September 1950. Annual maximums, water years 1951, 1953-63. December 1963 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (from topographic map). Prior to Oct. 1, 1950, water-stage recorder; August 1951 and January 1953 to February 1963 nonrecording gage; both on left bank at present site and datum.

AVERAGE DISCHARGE.--11 years (1945-50, 1964-70), 145 cfs (64.35 inches per year, 105,100 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,300 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 7, 1966	0045	*1,110	3.91	Jan. 20, 1968	2330	*1,210	4.02	Jan. 6, 1969	2330	1,760	4.61
Dec. 13, 1966	1245	*1,600	4.45	Dec. 3, 1968	1730	1,740	4.59	Jan. 14, 1970	1615	*1,230	4.04
Jan. 19, 1967	1745	1,310	4.13	Jan. 5, 1969	1645	*1,980	4.83				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 22, 1966	10	a.75	1969	Sept. 12, 1969	12	.72
1967	Aug. 21, 1967	b4.4	-	1970	Aug. 22-24, 26, 27, 29-31, 1970	10	.70
1968	Aug. 11, 1968	9.2	.75				

a Occurred Oct. 3, 4, 1965.

b Minimum daily.

Period of record: Maximum discharge, 3,420 cfs Feb. 9, 1951 (gage height, 6.76 ft, from high watermark in well), from rating curve extended above 1,700 cfs on basis of contracted-opening measurement of peak flow; minimum daily, 4.4 cfs Aug. 21, 1967.

REMARKS.--Records excellent except those for periods of no gage-height record, which are good. Some small diversions for irrigation and domestic use above station. No regulation.

REVISIONS.--WSP 1316: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	38	107	141	165	154	197	104	44	42	19	16
2	13	52	114	212	134	133	209	96	45	53	19	16
3	13	120	126	156	115	119	165	89	52	211	18	15
4	14	340	395	148	110	104	144	84	71	184	17	15
5	37	346	249	329	119	106	135	80	55	119	17	15
6	109	196	217	823	168	135	119	138	46	94	16	13
7	56	130	297	819	235	142	110	127	42	77	16	13
8	34	99	254	638	198	240	106	106	39	63	16	13
9	33	83	188	408	220	445	117	96	38	55	17	13
10	27	80	157	323	188	377	122	89	56	50	18	13
11	23	89	129	381	281	263	331	80	51	54	19	19
12	22	73	110	657	301	225	313	75	48	45	17	17
13	38	64	98	612	225	375	241	71	44	42	20	14
14	54	60	87	602	228	390	219	79	42	48	20	13
15	106	55	79	373	185	331	187	124	38	43	18	14
16	75	51	72	269	156	284	158	179	34	42	18	13
17	62	47	67	210	167	225	137	126	33	37	17	14
18	64	48	64	179	103	227	119	103	32	34	17	27
19	163	64	67	148	158	259	103	89	33	33	16	17
20	93	70	72	127	312	223	146	80	30	31	16	13
21	67	84	107	114	276	194	315	94	28	29	15	12
22	52	235	82	102	259	169	146	86	28	27	15	11
23	43	153	76	98	212	158	165	73	28	25	15	16
24	38	121	76	90	169	150	140	66	34	26	15	13
25	34	135	68	100	152	148	154	60	32	25	16	12
26	31	161	64	92	150	150	182	59	28	24	17	15
27	31	205	94	118	192	148	156	63	28	23	27	18
28	35	150	142	124	180	142	137	55	108	21	23	14
29	31	118	273	179	-----	137	142	50	59	21	19	13
30	62	99	193	196	-----	186	119	47	45	19	18	12
31	44	-----	147	226	-----	180	-----	45	-----	18	17	-----
TOTAL	1,518	3,566	4,401	8,994	5,438	6,519	5,084	2,713	1,291	1,615	548	439
MEAN	49.0	119	142	290	194	210	169	87.5	43.0	52.1	17.7	14.6
MAX	163	346	395	823	312	445	331	179	108	211	27	27
MIN	13	38	64	90	110	104	103	45	28	18	15	11
CFSM	1.60	3.89	4.64	9.48	6.34	6.86	5.52	2.86	1.41	1.70	.58	.48
IN.	1.85	4.34	5.35	10.93	6.61	7.93	6.18	3.30	1.57	1.96	.67	.53
AC-FT	3,010	7,070	8,730	17,840	10,790	12,930	10,080	5,380	2,560	3,200	1,090	871
CAL YR 1965	TOTAL	40,340	MEAN	111	MAX	1,630	MIN	12	CFSM	3.63	IN	49.04
WTR YR 1966	TOTAL	42,126	MEAN	115	MAX	823	MIN	11	CFSM	3.76	IN	51.21
									AC-FT	80,010	AC-FT	83,560

12145500 RAGING RIVER NEAR FALL CITY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	58	400	512	230	221	135	124	38	18	8.5	9.8
2	24	53	298	360	230	188	124	113	41	18	8.4	17
3	17	49	258	495	194	161	114	103	41	17	8.3	14
4	14	47	261	638	316	137	116	93	37	16	7.8	11
5	12	50	298	415	281	122	114	85	34	16	8.2	10
6	12	60	260	295	227	109	100	81	32	16	8.3	9.7
7	14	53	227	293	186	100	91	78	31	16	8.2	9.8
8	44	50	103	387	159	150	86	76	30	17	8.1	9.7
9	28	56	154	363	184	184	112	79	30	17	7.7	9.7
10	28	74	269	346	232	141	101	72	30	16	7.4	21
11	18	68	373	457	224	122	88	88	28	15	7.3	35
12	22	130	637	346	269	109	87	114	27	14	6.9	28
13	26	139	1,260	497	536	98	145	93	26	14	6.4	18
14	21	344	671	699	357	90	143	82	24	13	6.0	15
15	18	343	425	779	302	137	133	76	24	13	5.6	13
16	17	295	449	462	266	176	126	72	22	12	5.4	11
17	18	227	489	320	602	218	122	70	22	12	5.1	11
18	16	174	440	254	536	227	145	67	20	11	4.7	11
19	47	130	432	747	345	186	194	62	20	12	4.6	11
20	189	116	458	848	262	202	169	60	20	13	4.5	10
21	108	100	306	504	213	227	189	57	33	13	4.4	11
22	218	87	231	349	178	288	157	56	61	12	9.2	13
23	214	82	181	269	154	295	135	53	36	11	7.7	11
24	137	78	186	218	137	281	118	55	28	10	7.0	11
25	96	261	202	181	132	269	109	50	25	9.2	8.0	10
26	87	249	144	186	116	250	103	45	23	10	6.7	10
27	81	229	140	470	103	218	135	43	24	10	6.0	9.6
28	68	210	156	688	199	196	179	43	22	9.6	6.0	9.0
29	75	205	254	456	-----	191	157	45	20	9.2	7.1	11
30	76	587	221	336	-----	174	137	44	19	9.0	9.1	16
31	65	-----	246	256	-----	150	-----	41	-----	8.8	9.5	-----
TOTAL	1,812	4,532	10,521	13,424	7,170	5,617	3,844	2,220	868	407.8	218.1	396.3
MEAN	58.5	151	339	433	236	181	129	71.6	28.9	13.2	7.04	13.2
MAX	218	507	1,260	868	602	295	194	124	61	18	9.5	25
MIN	12	47	140	181	103	90	86	41	19	8.5	4.4	9.0
CFSH	1.91	4.93	11.1	14.2	8.37	5.92	4.22	2.34	.94	.43	.23	.43
IN.	2.20	5.51	12.79	16.32	8.72	6.83	4.70	2.70	1.06	.50	.27	.48
AC-FT	3,590	8,990	20,870	26,630	14,220	11,140	7,660	4,400	1,720	809	433	786

CAL YR 1966	TOTAL 49,506.8	MEAN 134	MAX 1,260	MIN 11	CFSH 4.44	IN 60.18	AC-FT 98,200
WTR YR 1967	TOTAL 51,050.2	MEAN 140	MAX 1,260	MIN 4.4	CFSH 4.58	IN 62.06	AC-FT 101,300

NOTE.--NO GAGE-HEIGHT RECORD JULY 12 TO AUG. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	224	153	357	130	105	224	93	441	39	13	43
2	24	128	393	247	280	93	210	83	862	34	13	41
3	52	93	373	189	400	86	171	75	456	32	13	35
4	34	73	275	176	720	98	157	73	275	29	14	31
5	25	62	230	186	400	115	189	80	191	28	14	29
6	27	54	174	144	280	111	194	189	142	26	13	27
7	28	52	146	134	210	95	238	130	117	26	12	25
8	25	54	130	124	170	86	189	106	101	24	12	24
9	21	106	149	285	140	77	153	90	89	23	11	23
10	21	393	250	272	120	71	134	82	77	22	11	22
11	88	296	377	194	105	71	176	73	70	22	11	23
12	51	164	253	174	95	83	171	68	62	34	9.9	30
13	65	120	191	369	85	75	151	64	64	29	11	27
14	95	120	153	446	75	79	369	63	70	29	36	32
15	46	120	128	446	72	210	499	58	58	32	53	45
16	34	117	115	361	70	349	342	53	54	29	25	90
17	29	96	101	292	72	278	269	50	48	25	20	180
18	31	86	90	253	250	233	235	48	43	23	23	199
19	30	76	80	530	1,010	186	227	47	44	23	26	212
20	31	67	70	784	629	148	196	95	41	23	27	142
21	106	60	66	862	489	124	169	80	38	22	23	107
22	100	58	215	489	410	104	148	67	46	20	20	88
23	81	56	288	334	446	130	162	66	43	20	43	101
24	57	76	494	259	349	140	151	61	38	19	78	88
25	65	71	967	207	269	194	151	70	33	18	89	73
26	52	61	736	169	213	194	144	67	32	17	99	61
27	204	56	479	136	174	489	126	59	52	11	114	54
28	235	71	373	115	130	658	113	54	60	16	113	48
29	122	210	281	100	120	489	103	49	58	15	85	43
30	110	164	218	93	-----	369	100	55	46	14	61	40
31	179	-----	199	95	-----	281	-----	50	-----	14	48	-----
TOTAL	2,103	3,344	8,167	8,826	7,993	5,821	5,861	2,300	3,751	744	1,140.9	1,983
MEAN	67.8	111	263	285	276	188	195	74.2	125	24.0	36.8	66.1
MAX	235	393	967	862	1,010	658	499	189	862	39	114	212
MIN	11	52	66	93	70	71	100	47	32	14	9.9	22
CFSH	2.22	3.63	8.59	9.31	9.02	6.14	6.37	2.42	4.09	.78	1.20	2.16
IN.	2.56	4.07	9.93	10.73	9.72	7.08	7.13	2.80	4.56	.90	1.39	2.41
AC-FT	4,170	6,630	16,200	17,518	15,850	11,550	11,630	4,560	7,440	1,480	2,260	3,930

CAL YR 1967	TOTAL 47,799.2	MEAN 131	MAX 967	MIN 4.4	CFSH 4.28	IN 58.11	AC-FT 94,810
WTR YR 1968	TOTAL 52,033.9	MEAN 142	MAX 1,010	MIN 9.9	CFSH 4.64	IN 63.26	AC-FT 109,200

12145500 RAGING RIVER NEAR FALL CITY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	70	218	140	60	81	249	187	102	89	19	14
2	35	85	256	191	62	86	210	234	82	96	20	14
3	32	92	890	208	104	186	171	202	69	81	19	19
4	37	78	725	674	102	110	159	164	59	93	18	18
5	36	68	442	1,590	108	323	172	138	52	81	24	18
6	50	51	300	1,380	91	279	166	121	48	70	20	16
7	49	57	245	1,140	83	196	144	110	47	64	19	14
8	42	81	348	515	166	153	127	104	45	58	18	14
9	44	144	419	419	257	126	120	109	37	51	17	13
10	102	122	399	333	248	109	129	99	37	49	17	13
11	135	620	422	266	436	97	115	95	37	60	17	13
12	146	490	311	204	344	89	128	88	34	56	17	13
13	243	285	233	167	241	83	127	83	35	49	18	18
14	182	200	224	144	187	79	104	76	30	43	19	16
15	199	160	202	128	167	81	95	70	28	40	18	14
16	152	140	247	119	205	103	89	65	26	36	18	14
17	124	120	200	106	195	342	126	59	25	33	16	26
18	138	150	236	96	195	341	239	56	23	31	16	75
19	125	135	187	90	177	90	227	22	22	29	16	84
20	202	132	153	83	151	230	265	52	23	28	16	66
21	158	142	132	77	132	189	207	48	23	28	16	42
22	154	260	120	71	118	201	173	44	29	26	15	192
23	126	237	185	66	107	279	209	42	149	25	14	261
24	107	189	388	64	97	210	175	41	331	24	14	187
25	101	161	315	60	90	176	148	39	247	23	15	145
26	90	148	232	58	86	174	129	37	246	23	15	109
27	78	142	186	56	82	186	116	40	193	21	17	82
28	69	120	147	54	80	172	133	42	168	21	20	70
29	65	181	115	52	-----	164	164	136	22	17	121	121
30	96	216	115	50	-----	174	187	296	111	19	15	219
31	83	-----	110	48	-----	234	-----	143	-----	19	14	-----
TOTAL	3,252	5,056	8,612	8,649	4,371	5,470	4,873	3,094	2,494	1,386	534	1,897
MEAN	105	169	278	279	156	176	162	99.8	83.1	44.7	17.2	63.2
MAX	243	620	890	1,590	436	342	279	296	331	36	24	261
MIN	32	57	110	48	60	79	89	37	22	19	14	13
CFSH	3.43	5.52	9.09	9.12	5.10	5.75	5.29	3.26	2.72	1.46	.96	2.07
IN.	3.95	6.15	18.47	10.51	5.31	6.65	5.92	3.76	3.03	1.68	.65	2.31
AC-FT	6,450	10,030	17,080	17,160	8,670	10,850	9,670	6,140	4,950	2,750	1,060	3,760
CAL YR 1968	TOTAL 55,339.9			MEAN 151	MAX 1,010	MIN 9.9	CFSH 4.93	IN 67.28	AC-FT 109,600			
WTR YR 1969	TOTAL 49,688.0			MEAN 136	MAX 1,590	MIN 13	CFSH 4.44	IN 60.41	AC-FT 98,560			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	35	53	110	203	64	164	215	47	20	13	12
2	125	52	50	100	168	60	326	179	41	18	19	13
3	97	37	52	90	153	64	240	145	35	17	17	15
4	60	313	97	80	128	59	183	124	34	16	15	13
5	69	331	78	77	119	55	160	111	32	15	14	15
6	61	180	66	74	115	110	291	98	29	15	13	50
7	130	130	60	107	303	264	89	27	14	13	45	49
8	95	104	67	70	92	175	213	92	27	14	13	35
9	122	87	85	80	86	130	435	98	32	13	13	25
10	132	75	100	77	78	106	457	90	31	13	12	20
11	107	67	150	74	72	98	422	89	39	13	12	15
12	87	62	300	70	68	106	329	84	33	12	12	14
13	73	57	490	150	83	108	261	87	28	12	16	13
14	65	53	600	846	71	195	210	75	26	12	14	13
15	57	54	350	525	166	205	173	67	28	12	12	13
16	50	51	250	306	378	231	145	61	30	12	12	25
17	45	47	200	267	435	208	123	57	26	12	12	40
18	42	45	180	674	382	171	126	55	24	11	11	50
19	40	44	160	756	275	140	267	49	22	11	11	45
20	40	52	150	553	208	119	333	48	21	11	11	35
21	38	63	300	480	164	115	261	47	20	11	11	30
22	53	400	475	134	98	205	475	47	19	11	11	27
23	39	126	500	500	117	92	203	45	16	11	11	25
24	39	171	400	505	101	128	297	40	17	11	11	22
25	39	123	380	622	89	101	261	37	17	16	11	19
26	35	97	250	515	81	92	219	35	16	48	11	18
27	42	82	200	542	75	83	193	34	17	48	10	16
28	39	71	170	370	68	171	195	44	22	27	11	15
29	40	64	150	282	-----	130	193	83	27	20	11	14
30	39	59	130	218	-----	110	303	92	25	17	11	13
31	37	-----	120	234	-----	95	-----	60	-----	16	11	-----
TOTAL	2,052	2,765	6,418	9,816	4,210	3,922	7,411	2,469	810	521	387	708
MEAN	66.2	92.2	207	317	150	127	247	79.6	27.0	16.8	12.5	23.6
MAX	184	331	600	846	435	303	457	213	47	60	19	50
MIN	35	32	50	70	68	55	123	34	16	11	10	12
CFSH	2.16	3.01	6.76	10.4	4.90	4.15	0.07	2.60	.88	.95	.41	.77
IN.	2.49	3.36	7.80	11.93	5.12	4.77	9.01	3.00	.98	.63	.47	.86
AC-FT	4,070	5,480	12,730	19,470	8,350	7,780	14,700	4,900	1,610	1,030	768	1,400
CAL YR 1969	TOTAL 44,003			MEAN 121	MAX 1,590	MIN 10	CFSH 3.95	IN 53.49	AC-FT 87,280			
WTR YR 1970	TOTAL 41,489			MEAN 114	MAX 846	MIN 13	CFSH 3.73	IN 50.44	AC-FT 82,290			

NOTE.--NO GAGE-HEIGHT RECORD DEC. 9 TO JAN. 13, AUG. 31 TO SEPT. 30.

12146000 PATTERSON CREEK NEAR FALL CITY, WASH.

LOCATION.--Lat 47°34'52", long 121°56'23", in SW¼ sec.8, T.24 N., R.7 E., King County, on left bank 150 ft upstream from private road bridge, 2.6 miles northwest of Fall City, and at mile 1.9.

DRAINAGE AREA.--15.5 sq mi.

PERIOD OF RECORD.--February 1947 to October 1950, June 1955 to September 1970. Records for June to October 1945 at site 1.1 miles downstream not equivalent owing to intervening drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 70 ft (from topographic map). Prior to June 1955, at different datum.

AVERAGE DISCHARGE.--18 years, 32.1 cfs (28.12 inches per year, 23,260 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (130 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966	2400	*184	4.65	Feb. 4, 1968	0245	151	4.20	Jan. 6, 1969	2330	284	5.69
				June 2, 1968	0830	145	4.12	Jan. 8, 1969	2000	154	4.31
Dec. 13, 1966	1230	223	5.06	Nov. 11, 1968	1500	157	4.34	Dec. 14, 1969	0700	139	4.05
Jan. 19, 1967	1730	*328	6.13	Nov. 29, 1968	1800	173	4.52	Dec. 23, 1969	0130	135	4.00
Dec. 25, 1967	1200	*202	4.82	Dec. 3, 1968	1730	*285	5.70	Jan. 14, 1970	1530	*181	4.57
Jan. 20, 1968	2030	149	4.18	Dec. 11, 1968	0800	166	4.45	Jan. 19, 1970	1200	131	3.89
								Jan. 27, 1970	0300	178	4.54

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 20, 21, 1966	8.5	1.04	1969	Aug. 1, 1969	9.7	bl.22
1967	Sept. 10, 19-21, 1967	8.2	1.04	1970	July 15-25, 1970	8.7	1.08
1968	July 28, 1968	8.7	al.09				

a Occurred Oct. 1, 1967.

b Occurred July 23-28, Aug. 1, 1969.

Period of record: Maximum discharge, 480 cfs Feb. 17, 1949 (gage height, 4.81 ft, datum then in use), from rating curve extended above 130 cfs; maximum gage height, 6.46 ft Dec. 15, 1959; minimum discharge, 6.4 cfs July 22, 1956, July 26, 1958; minimum gage height, 1.04 ft Aug. 20, 21, 1966, Sept. 10, 19-21, 1967.

REMARKS.--Records good. Many small diversions for irrigation and domestic use. No regulation.

REVISIONS.--WSP 1446: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	20	72	28	32	27	22	13	12	9.7	8.9
2	11	14	20	86	26	29	28	21	13	13	9.7	8.9
3	11	19	26	73	25	28	24	20	14	18	9.7	8.9
4	12	37	48	62	26	26	23	19	14	14	9.7	8.9
5	13	28	36	83	32	26	22	18	13	13	9.7	8.9
6	16	17	37	169	45	27	21	29	13	14	9.5	8.9
7	14	14	47	173	53	28	20	25	13	12	9.3	8.9
8	13	13	40	152	53	42	20	13	12	12	9.3	8.9
9	12	13	33	106	54	54	20	19	13	12	9.3	8.9
10	12	13	32	82	48	44	20	19	13	11	9.3	8.9
11	12	14	27	70	64	38	52	17	13	11	9.3	10
12	12	13	25	90	68	34	65	17	12	11	9.2	9.9
13	13	12	23	88	53	42	50	17	12	11	9.7	9.3
14	14	12	64	56	55	42	21	13	12	12	9.3	9.5
15	20	12	21	64	44	59	36	20	12	12	9.2	9.5
16	14	12	20	93	39	59	31	20	12	12	9.2	9.5
17	13	12	19	46	38	46	28	17	12	11	9.2	10
18	12	13	19	44	34	48	26	16	12	11	9.2	13
19	16	29	19	39	30	51	24	16	12	10	8.9	11
20	14	25	19	34	30	47	28	15	12	10	8.9	10
21	13	19	23	32	27	44	35	16	12	10	8.7	10
22	13	24	22	30	25	38	28	17	12	10	8.7	11
23	12	19	21	30	25	34	26	16	12	10	8.9	12
24	12	19	26	30	24	30	24	15	12	10	8.9	11
25	12	31	25	28	24	28	32	14	12	10	8.9	11
26	12	26	22	26	24	26	44	16	12	10	9.2	11
27	12	29	42	29	33	25	30	16	12	10	9.3	11
28	13	92	21	36	24	26	14	14	9.7		9.2	11
29	12	18	102	31	-----	23	28	14	12	9.7	9.2	11
30	13	16	83	32	-----	25	24	13	12	9.7	9.0	11
31	13	-----	62	31	-----	24	-----	13	-----	9.7	9.0	-----
TOTAL	404	556	1,073	2,000	1,064	1,136	904	552	376	350.8	286.3	300.7
MEAN	13.0	18.5	34.6	64.5	36.0	36.6	30.1	17.8	12.5	11.3	9.24	10.0
MAX	20	37	102	173	68	59	65	29	14	18	9.7	13
MIN	11	12	19	26	24	23	20	13	12	9.7	8.7	8.9
CF5M	.84	1.19	2.23	4.16	2.45	2.36	1.94	1.15	.81	.73	.60	.65
IN.	.97	1.33	2.58	4.80	2.55	2.73	2.17	1.32	.90	.84	.69	.72
AC-FT	801	1,100	2,130	3,970	2,110	2,250	1,790	1,090	746	696	568	596

CAL YR 1965 TOTAL 10,525.0 MEAN 28.8 MAX 220 MIN 11 CF5M 1.86 IN 25.26 AC-FT 20,880

WTR YR 1966 TOTAL 9,002.8 MEAN 24.7 MAX 173 MIN 8.7 CF5M 1.59 IN 21.61 AC-FT 17,860

12146000 PATTERSON CREEK NEAR FALL CITY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	66	63	59	40	36	38	15	12	9.7	8.7
2	11	13	62	53	51	38	33	34	15	12	9.5	8.7
3	11	13	55	61	44	34	30	31	16	12	9.2	8.7
4	11	13	59	111	44	31	30	28	15	11	9.5	8.7
5	11	13	82	111	39	29	29	26	15	11	9.5	8.7
6	11	16	73	88	35	28	27	24	14	11	9.5	8.7
7	12	14	64	80	32	26	26	23	14	11	9.5	8.7
8	14	14	56	88	30	28	24	22	14	10	9.5	8.7
9	12	14	46	87	34	27	25	22	14	10	9.5	8.7
10	12	17	46	80	34	26	24	22	14	10	9.5	9.2
11	12	16	55	85	33	25	23	26	14	10	9.7	9.5
12	17	19	114	71	37	25	23	26	14	10	10	9.0
13	15	25	208	94	81	24	32	22	14	9.7	10	8.5
14	13	62	162	107	84	23	31	21	14	9.7	9.7	8.5
15	12	47	111	112	75	37	30	20	13	9.7	9.5	8.5
16	12	44	100	94	64	42	33	19	13	9.7	9.5	8.5
17	12	33	94	74	71	47	33	18	12	9.7	9.7	8.5
18	12	24	94	61	74	50	41	17	12	9.7	9.2	8.5
19	20	20	96	203	59	42	53	17	12	10	9.0	8.2
20	28	19	96	249	50	43	45	16	12	10	9.2	8.2
21	17	18	86	182	44	39	46	16	15	10	9.5	8.2
22	20	17	66	122	39	64	39	16	16	10	9.5	8.5
23	18	16	51	90	35	71	35	16	14	10	9.2	8.5
24	15	15	48	71	32	60	31	16	13	9.7	9.0	8.5
25	14	34	60	59	30	52	30	16	13	9.7	9.0	8.5
26	14	31	49	55	28	46	30	15	13	9.7	8.7	8.5
27	14	26	42	80	26	40	44	15	13	9.7	8.7	8.7
28	13	31	40	115	41	41	69	16	13	9.7	9.0	8.7
29	14	36	42	104	42	46	54	18	13	9.7	9.0	9.0
30	14	74	39	84	-----	45	45	16	13	9.7	9.0	9.2
31	13	-----	40	65	-----	40	-----	16	-----	9.7	9.0	-----
TOTAL	435	747	2,302	2,999	1,305	1,209	1,051	648	412	315.8	290.0	259.7
MEAN	14.0	24.9	74.3	96.7	46.6	39.0	35.0	20.9	13.7	10.2	9.35	8.66
MAX	28	74	208	249	84	71	69	38	16	12	10	9.5
MIN	11	13	39	53	26	23	15	12	9.7	8.7	8.2	8.2
CFSM	.90	1.61	4.79	6.24	3.01	2.52	2.25	1.35	.88	.66	.60	.56
IN.	1.04	1.79	5.72	7.20	3.13	2.90	2.52	1.56	.99	.76	.70	.62
AC-FT	863	1,480	4,570	5,950	2,590	2,400	2,080	1,290	817	626	575	515

CAL YR 1966 TOTAL 10,453.8 MEAN 28.6 MAX 208 MIN 8.7 CFSM 1.05 IN 25.09 AC-FT 20,740
WTR YR 1967 TOTAL 11,973.5 MEAN 32.8 MAX 249 MIN 8.2 CFSM 2.12 IN 28.74 AC-FT 23,750

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	20	25	52	40	30	38	25	74	15	9.3	12
2	10	15	67	42	55	27	36	23	129	14	9.1	12
3	12	13	59	64	60	32	32	21	89	13	9.5	11
4	12	12	42	35	126	32	30	21	59	13	9.6	11
5	11	12	36	34	91	41	41	21	37	12	9.6	10
6	11	11	28	31	66	38	38	22	27	12	9.6	10
7	12	12	26	31	52	33	36	21	23	12	9.1	10
8	12	14	22	41	43	31	32	20	21	11	8.9	10
9	11	18	24	73	38	28	30	19	20	11	8.9	10
10	11	24	24	70	34	27	29	18	18	12	8.9	9.8
11	13	19	34	53	31	27	46	18	18	12	8.9	10
12	12	16	27	47	29	34	63	18	17	14	8.9	11
13	12	14	22	70	27	30	58	18	17	14	8.9	11
14	12	15	20	100	26	30	67	18	17	13	12	12
15	11	16	19	105	24	52	70	17	16	12	12	12
16	11	17	19	92	24	84	89	17	15	12	11	15
17	11	14	19	72	26	80	78	16	15	11	10	22
18	11	16	18	63	48	67	68	16	14	11	11	27
19	12	17	17	95	79	51	63	17	15	11	11	27
20	12	15	16	116	74	42	54	26	15	11	11	24
21	25	14	15	126	74	36	45	21	14	11	10	16
22	18	14	35	95	68	32	38	18	15	11	10	15
23	15	14	39	69	77	38	38	20	15	11	15	14
24	14	27	59	62	70	40	34	18	14	10	18	13
25	15	19	165	55	57	47	31	18	13	10	22	13
26	13	16	195	46	47	43	29	19	15	10	20	12
27	19	14	157	39	40	53	27	18	17	10	21	12
28	19	16	107	34	36	59	24	17	23	9.6	17	11
29	14	23	74	32	32	56	23	16	20	9.6	14	11
30	14	25	56	31	-----	49	25	16	17	9.6	13	11
31	20	-----	47	35	-----	43	-----	17	-----	9.3	12	-----
TOTAL	415	494	1,514	1,872	1,492	1,306	1,312	590	819	357.1	368.0	412.8
MEAN	13.4	16.5	48.9	60.4	51.4	42.1	43.7	9.0	27.3	11.5	11.9	13.8
MAX	25	27	195	126	126	84	89	26	129	15	22	35
MIN	10	11	15	31	24	26	23	16	13	9.3	8.9	9.8
CFSM	.86	1.06	3.15	3.90	3.32	2.72	2.82	1.23	1.76	.74	.77	.89
IN.	1.00	1.19	3.64	4.49	3.58	3.13	3.15	1.42	1.97	.86	.88	.99
AC-FT	823	980	3,010	3,710	2,960	2,990	2,800	1,170	1,620	708	730	819

CAL YR 1967 TOTAL 10,914.5 MEAN 29.9 MAX 249 MIN 8.2 CFSM 1.93 IN 26.19 AC-FT 21,650
WTR YR 1968 TOTAL 10,953.9 MEAN 29.9 MAX 195 MIN 8.9 CFSM 1.93 IN 26.29 AC-FT 21,730

12146000 PATTERSON CREEK NEAR FALL CITY, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	31	92	27	24	26	30	37	18	13	10	10
2	12	29	68	30	27	25	30	38	16	13	10	10
3	12	27	146	40	38	26	27	34	16	13	10	11
4	17	24	227	106	48	25	28	31	14	14	10	11
5	16	21	202	227	53	36	33	28	13	13	10	12
6	16	20	131	275	43	33	32	26	13	13	10	11
7	26	19	92	257	39	29	29	24	13	13	10	11
8	16	14	113	194	91	27	27	22	13	12	10	12
9	16	42	116	198	144	26	26	21	13	12	9.9	12
10	19	37	129	143	130	25	27	21	12	12	9.9	12
11	21	117	150	127	145	24	28	20	12	12	10	12
12	26	123	127	96	129	24	26	19	12	12	9.9	12
13	36	106	93	76	88	23	26	18	12	11	9.9	14
14	30	72	74	68	74	23	24	18	12	11	9.9	14
15	32	56	64	62	61	23	23	17	12	11	10	12
16	26	45	80	56	59	26	23	17	11	11	10	12
17	26	36	65	53	52	44	30	17	11	11	10	17
18	33	32	74	45	46	38	16	11	11	9.9	9.9	34
19	33	28	79	40	42	33	36	17	11	10	9.9	28
20	37	27	58	36	38	30	33	14	11	11	9.9	22
21	33	30	47	33	35	28	30	16	11	10	10	17
22	33	41	41	29	33	28	28	16	12	10	9.9	31
23	29	66	66	26	32	29	35	15	10	10	9.9	47
24	26	30	114	24	30	26	32	16	18	10	9.9	28
25	22	33	107	24	30	25	28	15	17	10	10	19
26	22	29	80	24	29	24	25	15	17	10	10	16
27	20	27	62	23	27	24	24	16	15	10	11	14
28	19	24	46	22	28	26	18	16	10	10	11	14
29	20	91	34	22	---	22	34	33	14	10	11	21
30	28	111	27	21	---	22	34	57	14	10	11	22
31	30	---	24	24	---	26	---	25	---	10	10	---
TOTAL	744	1,384	2,824	2,390	1,623	845	872	699	404	349	312.9	518
MEAN	24.0	44.1	91.1	77.1	51.0	27.3	29.1	22.5	13.5	11.3	10.1	17.5
MAX	37	123	227	275	145	44	38	57	18	14	11	47
MIN	12	19	24	21	24	22	23	15	11	10	9.9	10
CFSM	1.55	2.97	5.88	4.97	3.74	1.76	1.88	1.45	.87	.73	.65	1.12
IN-	1.79	3.32	6.78	5.74	3.90	2.03	2.09	1.68	.97	.84	.75	1.24
AC-FT	1,480	2,750	5,600	4,740	3,220	1,680	1,730	1,390	801	692	621	1,030
CAL YR 1968	TOTAL 13,480.9	MEAN 36.8	MAX 227	MIN 8.9	CFSM 2.37	IN 32.35	AC-FT 26,740					
WTR YR 1969	TOTAL 12,964.9	MEAN 35.5	MAX 275	MIN 9.9	CFSM 2.29	IN 31.12	AC-FT 25,720					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	13	17	27	61	25	30	35	16	11	10	9.8
2	16	12	16	25	52	24	72	31	14	10	12	9.8
3	14	13	16	24	46	26	53	29	14	10	11	11
4	14	77	18	22	41	24	45	26	14	9.8	10	11
5	13	55	18	20	38	23	41	25	13	9.6	10	11
6	13	31	17	20	36	35	55	24	13	9.4	9.8	11
7	13	24	16	19	33	54	50	26	13	9.1	10	14
8	17	20	18	19	31	42	43	23	13	9.1	11	16
9	16	19	19	23	29	35	68	24	14	9.1	10	13
10	16	18	19	23	28	32	64	24	14	9.1	10	12
11	14	17	39	22	27	30	68	24	14	9.1	9.8	11
12	14	16	98	20	26	35	55	22	12	8.9	9.6	10
13	13	16	95	38	30	36	47	21	12	8.9	9.6	10
14	13	16	120	145	27	51	41	20	12	8.9	9.4	10
15	13	22	85	133	43	52	36	19	12	8.9	9.4	10
16	12	23	63	100	76	51	33	14	12	8.9	9.4	10
17	12	19	50	98	74	50	31	18	12	8.9	9.6	14
18	12	17	48	97	62	43	30	17	11	8.7	9.6	17
19	12	17	46	121	50	38	55	17	10	8.7	9.4	16
20	12	16	47	115	44	35	65	17	10	8.7	9.4	23
21	12	19	69	180	39	33	50	16	10	8.7	9.4	19
22	12	17	98	98	35	30	42	17	10	8.7	9.4	14
23	13	24	122	101	33	29	39	17	10	8.7	9.1	12
24	13	31	97	121	30	35	47	16	10	8.7	9.4	11
25	13	24	72	156	28	30	41	16	10	10	9.4	10
26	13	21	59	138	27	28	37	16	9.8	14	9.1	10
27	13	19	50	170	26	26	35	15	10	17	9.4	10
28	13	19	42	145	25	33	34	16	11	12	9.8	9.8
29	14	18	36	106	---	30	38	21	12	11	9.8	9.8
30	14	17	32	80	---	27	41	24	12	13	9.4	9.8
31	13	---	29	72	---	26	---	17	---	12	9.6	---
TOTAL	420	672	1,563	2,390	1,097	1,068	1,386	651	359.8	308.6	303.0	365.0
MEAN	13.5	22.4	50.4	77.1	39.2	34.5	44.2	21.0	12.0	9.95	9.77	12.2
MAX	18	77	122	170	76	54	72	35	16	17	12	23
MIN	12	12	14	25	23	23	15	9.8	8.7	9.1	9.1	9.8
CFSM	.87	1.45	3.25	4.97	2.53	2.23	2.98	1.35	.77	.66	.63	.79
IN-	1.01	1.61	3.75	5.74	2.63	2.56	3.33	1.56	.86	.74	.73	.88
AC-FT	833	1,330	3,100	4,740	2,180	2,120	2,750	1,290	714	612	601	724
CAL YR 1969	TOTAL 10,667.9	MEAN 29.2	MAX 175	MIN 8.9	CFSM 1.88	IN 25.60	AC-FT 21,160					
WTR YR 1970	TOTAL 10,593.4	MEAN 29.0	MAX 170	MIN 8.7	CFSM 1.87	IN 25.40	AC-FT 20,990					

12147000 GRIFFIN CREEK NEAR CARNATION, WASH.

LOCATION.--Lat 47°36'58", long 121°54'15", in SW¼SW¼ sec.27, T.25 N., R.7 E., King County, on left bank 0.2 mile upstream from bridge on State Highway 203, 2.3 miles (revised) south of Carnation, and at mile 0.9.

DRAINAGE AREA.--17.1 sq mi.

PERIOD OF RECORD.--June 1945 to September 1970 (discontinued). Prior to October 1951, published as "near Tolt."

GAGE.--Water-stage recorder. Altitude of gage is 120 ft (from topographic map). Prior to Sept. 21, 1951, at site 1,000 ft downstream at different datum.

AVERAGE DISCHARGE.--25 years, 41.1 cfs (32.64 inches per year, 29,780 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (220 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 6, 1966a		*401	4.54	Dec. 25, 1967	1930	*855	5.27	Jan. 5, 1969	2300	*600	4.45
				June 2, 1968	2015	270	3.64				
Dec. 13, 1966	2100	*385	4.50	Nov. 12, 1968	1330	223	3.20	(b)	-	*201	3.10
Jan. 15, 1967	0800	224	3.99	Dec. 4, 1968	0800	234	3.25				
Jan. 20, 1967	1200	300	4.25								

a About.

b Sometime during period Dec. 10, 1969, to Jan. 13, 1970.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 23, 1966	1.7	2.06	1969	Sept. 1, 11, 1969	2.0	1.27
1967	Aug. 22, 1967	.94	1.77	1970	July 18-24, 1970	a2.2	1.27
1968	Aug. 8, 1968	2.5	1.49				

a Part of each day.

Period of record: Maximum discharge, 1,000 cfs Jan. 29, 1965 (gage height, 5.70 ft), from rating curve extended above 95 cfs on basis of slope-area measurement of peak flow; minimum, 0.94 cfs Aug. 22, 1967; minimum gage height, 1.27 ft Sept. 1, 11, 1969, July 18-24, 1970.

REMARKS.--Records excellent. Some small diversions for irrigation and domestic use. No regulation.

REVISIONS (WATER YEARS).--MSP 1286: Drainage area. MSP 1736: 1959-60(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	6.7	39	45	37	35	27	28	11	6.0	6.2	2.2
2	3.2	8.2	38	70	35	34	30	26	12	8.1	5.7	2.2
3	3.2	11	37	55	34	32	26	24	13	16	5.1	2.1
4	3.7	34	55	90	35	30	26	21	12	18	4.5	2.1
5	5.3	50	68	120	40	30	24	19	12	15	4.3	2.4
6	7.4	43	68	250	50	30	21	26	10	14	4.0	2.2
7	5.3	34	76	300	60	34	20	31	8.8	13	3.6	2.1
8	4.7	27	90	270	60	42	19	26	8.1	11	3.6	2.4
9	5.0	23	78	206	62	60	19	22	7.8	9.6	3.6	2.4
10	4.4	20	65	151	56	64	18	22	9.2	8.8	3.6	2.2
11	4.2	19	53	133	74	60	34	22	8.5	11	3.6	3.1
12	4.4	17	45	188	80	54	57	20	7.8	8.8	3.1	2.9
13	5.3	16	38	173	62	58	59	18	7.4	7.8	3.8	2.4
14	6.0	15	32	151	66	66	54	21	7.1	9.6	4.0	2.7
15	13	14	27	115	52	69	48	21	6.8	9.6	3.1	2.7
16	8.9	13	24	91	47	68	41	21	6.0	9.6	2.9	2.7
17	7.8	12	22	72	45	62	40	20	5.7	7.8	2.9	3.0
18	8.5	13	20	62	40	60	32	18	5.4	6.5	2.9	6.0
19	15	19	21	52	35	62	29	16	5.1	6.8	2.7	3.6
20	12	25	24	44	35	57	30	14	4.8	5.4	2.4	3.1
21	10	26	35	39	33	53	40	15	4.5	5.1	2.4	2.4
22	10	36	30	35	32	31	38	22	4.0	4.5	2.2	2.4
23	9.3	43	25	33	31	46	34	22	4.3	4.3	2.4	3.6
24	8.2	44	26	31	31	41	32	20	5.1	12	2.4	3.4
25	7.0	65	23	29	30	37	34	18	4.5	26	2.7	3.1
26	6.7	63	20	27	29	33	44	16	4.0	15	2.9	3.4
27	6.7	65	30	28	30	30	41	16	4.8	12	3.4	3.1
28	7.0	60	80	27	35	27	38	14	10	9.9	3.1	2.9
29	6.7	51	90	32	-----	26	35	13	8.1	8.5	2.9	2.7
30	9.6	43	60	34	-----	26	32	12	6.5	7.8	2.7	2.7
31	7.8	-----	50	38	-----	26	-----	11	-----	6.5	2.4	-----
TOTAL	219.5	915.9	1,389	2,931	1,256	1,403	1,022	615	224.3	313.2	105.3	85.0
MEAN	7.08	30.5	44.8	94.5	44.9	45.3	34.1	19.8	7.48	10.1	3.40	2.83
MAX	15	65	90	300	80	69	59	31	13	26	6.2	6.0
MIN	3.2	6.7	20	27	29	26	18	11	4.0	4.3	2.2	2.1
CFSM	.48	1.78	2.62	5.53	2.63	2.65	1.99	1.16	.44	.59	.20	.17
IN.	.48	1.99	3.02	6.38	2.73	3.05	2.22	1.34	.49	.68	.23	.18
AC-FT	435	1,820	2,760	5,810	2,490	2,780	2,030	1,220	445	621	209	169
CAL YR 1965	TOTAL 12,656.5	MEAN 34.7	MAX 761	MIN 2.9	CFSM 2.03	IN 27.54	AC-FT 25,110					
WTR YR 1966	TOTAL 10,479.2	MEAN 28.7	MAX 300	MIN 2.1	CFSM 1.68	IN 22.80	AC-FT 20,790					

NOTE.--NO GAGE-HEIGHT RECORD DEC. 14 TO JAN. 8.

12147000 GRIFFIN CREEK NEAR CARNATION, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	9.9	141	66	72	46	44	48	11	3.3	2.0	1.4
2	3.1	8.8	135	75	62	46	40	42	11	3.3	2.0	1.4
3	3.1	8.5	124	89	55	42	36	38	11	3.1	2.0	1.4
4	2.7	8.1	119	136	53	39	34	35	10	2.9	1.8	1.3
5	2.4	8.5	139	175	51	36	33	32	9.4	3.1	2.0	1.3
6	2.4	11	143	128	45	35	30	29	8.7	3.0	2.1	1.2
7	3.1	10	130	103	42	33	28	26	7.6	3.1	2.1	1.3
8	4.3	9.9	104	101	39	25	26	23	7.3	3.1	2.1	1.3
9	3.6	12	86	109	39	31	26	23	7.0	3.5	2.0	1.4
10	3.1	20	83	107	41	31	25	21	7.0	3.1	2.0	3.1
11	3.4	20	86	111	42	28	22	26	7.0	2.9	2.0	5.3
12	4.8	24	135	96	45	27	21	29	6.7	2.7	1.8	4.1
13	4.5	28	300	130	39	25	26	27	7.0	2.7	1.7	2.9
14	3.8	57	306	191	98	24	28	25	6.5	2.5	1.6	2.5
15	3.6	80	194	217	104	31	26	23	5.6	2.4	1.6	2.4
16	3.4	89	155	170	104	35	26	22	5.1	2.4	1.6	2.2
17	3.8	86	147	119	114	38	26	20	4.8	2.4	1.4	2.2
18	3.8	70	148	89	161	42	28	17	4.3	2.4	1.4	2.1
19	6.3	56	157	171	143	42	35	16	4.3	2.5	1.3	2.2
20	9.9	45	149	288	111	43	39	16	4.3	2.7	1.3	2.2
21	10	37	126	200	86	43	44	15	7.0	2.7	1.2	2.0
22	16	32	94	159	70	53	42	15	8.0	2.5	1.3	2.2
23	18	28	37	104	60	71	38	13	5.4	2.2	1.3	2.2
24	14	25	59	82	52	74	35	13	5.3	2.1	1.3	2.1
25	13	32	58	68	46	66	33	13	4.8	2.1	1.3	1.8
26	12	41	48	63	40	58	31	12	4.3	2.4	1.3	2.0
27	13	44	41	71	36	52	37	11	4.3	2.4	1.3	2.1
28	11	48	119	49	40	49	11	3.9	3.9	2.2	1.3	2.0
29	11	53	42	124	-----	50	60	12	3.5	2.1	1.3	2.5
30	11	98	46	101	-----	49	56	12	3.5	2.1	1.3	2.9
31	11	-----	48	83	-----	47	-----	12	-----	2.1	1.4	-----
TOTAL	218.0	1,097.7	3,673	3,815	1,945	1,318	1,029	679	195.8	82.2	50.1	65.2
MEAN	7.3	34.8	118	123	69.5	42.5	34.3	21.9	6.3	2.5	1.62	2.17
MAX	18	98	306	288	161	74	60	48	11	3.5	2.1	5.3
MIN	2.4	8.1	39	63	36	24	21	11	3.5	2.1	1.2	1.2
CFSM	.41	2.14	6.90	7.19	4.06	2.49	2.01	1.28	.38	.16	.09	.13
IN.	.47	2.39	7.99	8.30	4.23	2.87	2.24	1.48	.43	.18	.11	.14
AC-FT	432	2,180	7,290	7,570	3,860	2,610	2,040	1,350	388	163	99	129
CAL YR 1966	TOTAL 12,943.5	MEAN 35.5	MAX 306	MIN 2.1	CFSM 2.08	IN 28.16	AC-FT 25,670					
WTR YR 1967	TOTAL 14,168.0	MEAN 38.8	MAX 306	MIN 1.2	CFSM 2.27	IN 30.82	AC-FT 28,100					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	30	46	84	43	42	63	41	58	17	3.0	9.0
2	4.5	26	78	69	49	38	68	36	208	14	3.0	9.0
3	7.0	23	124	61	62	34	63	33	218	12	3.2	7.5
4	4.8	20	102	55	99	36	60	31	136	11	3.2	6.3
5	3.9	17	84	50	96	38	68	31	90	9.5	3.5	6.0
6	3.7	15	67	45	80	36	74	34	66	7.5	3.5	5.6
7	5.3	15	57	42	68	35	80	32	52	7.0	3.2	5.6
8	4.5	15	49	39	59	32	73	30	45	6.6	3.0	5.2
9	3.7	18	49	54	53	30	66	27	38	6.0	3.2	5.2
10	3.7	21	47	66	46	29	60	24	33	5.6	3.2	4.6
11	6.7	20	60	63	41	28	68	20	28	5.6	3.0	4.6
12	5.3	19	59	62	36	29	74	19	24	9.0	3.0	6.3
13	5.3	18	53	85	32	27	70	18	23	10	3.2	5.6
14	5.6	18	47	100	29	28	81	17	22	8.0	6.3	6.3
15	3.5	20	42	110	25	38	99	16	18	7.5	6.6	8.5
16	4.1	22	39	108	23	64	117	14	17	6.4	5.2	1.9
17	3.9	21	37	90	24	75	111	13	15	5.8	4.9	3.3
18	4.8	22	33	75	36	73	106	13	13	5.2	4.9	6.3
19	6.5	23	30	88	70	63	101	12	13	5.6	5.2	6.3
20	5.6	22	26	122	124	56	91	26	13	6.0	4.9	5.8
21	14	21	25	194	131	48	77	24	12	5.6	4.6	4.4
22	11	20	31	156	113	43	67	19	12	5.6	4.9	3.6
23	9.4	20	39	115	113	43	62	24	13	6.3	9.5	31
24	8.7	37	81	96	102	43	56	24	12	5.2	13	26
25	9.8	39	547	84	85	46	48	27	10	4.2	13	22
26	9.4	38	522	72	72	48	46	26	10	3.8	14	19
27	18	35	315	62	62	53	42	22	14	3.8	19	16
28	22	35	235	53	54	74	38	21	28	3.8	17	15
29	20	44	168	48	47	87	34	17	23	3.5	14	13
30	21	44	120	45	-----	82	36	16	19	3.5	11	12
31	24	-----	90	43	-----	72	-----	16	-----	3.2	9.0	-----
TOTAL	264.2	738	3,302	2,436	1,874	1,470	2,099	723	1,283	213.8	208.2	565.3
MEAN	8.52	24.6	107	78.6	64.6	47.4	70.0	23.3	42.8	6.90	6.72	18.8
MAX	24	44	547	194	131	87	117	41	218	17	19	63
MIN	3.5	15	25	39	27	34	13	10	3.2	3.0	3.0	4.6
CFSM	.50	1.44	6.26	4.60	3.78	2.77	4.09	1.36	2.50	.40	.39	1.10
IN.	.57	1.61	7.18	5.30	4.08	3.20	4.57	1.57	2.79	.47	.45	1.23
AC-FT	524	1,460	6,550	4,830	3,720	2,920	4,160	1,430	2,540	424	413	1,120
CAL YR 1967	TOTAL 13,483.5	MEAN 36.9	MAX 547	MIN 1.2	CFSM 2.16	IN 29.33	AC-FT 26,740					
WTR YR 1968	TOTAL 15,176.5	MEAN 41.5	MAX 547	MIN 3.0	CFSM 2.43	IN 33.02	AC-FT 30,100					

12147000 GRIFFIN CREEK NEAR CARNATION, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	50	87	40	21	35	29	54	46	20	4.2	2.2
2	11	42	93	45	21	34	31	67	35	18	4.2	2.6
3	9.7	38	130	60	24	35	30	66	28	16	4.2	3.5
4	14	34	219	104	28	36	30	59	25	18	4.2	3.8
5	16	30	178	385	35	52	32	45	21	17	4.5	3.8
6	14	26	142	500	34	66	31	42	16	15	4.5	3.0
7	19	23	112	410	33	64	30	38	16	14	4.0	2.8
8	16	27	142	246	56	56	28	32	15	13	4.0	2.6
9	16	42	147	176	100	49	27	28	14	11	4.0	2.6
10	22	49	156	146	106	42	27	25	13	10	3.8	2.4
11	28	112	162	122	156	38	25	24	12	10	3.5	2.2
12	35	205	144	98	178	35	25	20	12	10	4.0	2.2
13	51	174	114	83	137	32	25	16	11.5	9.7	3.8	5.0
14	55	127	94	70	108	28	24	14	11	8.5	3.5	4.5
15	64	103	80	60	88	27	21	14	10	7.5	3.8	3.8
16	90	87	87	54	86	28	21	13	8.9	7.2	3.8	3.2
17	88	72	79	49	84	39	25	13	7.8	6.9	3.5	5.9
18	70	64	43	80	49	35	12	7.2	5.9	5.0	3.0	35
19	59	56	74	40	73	47	36	12	6.9	5.6	3.5	11
20	60	52	62	36	65	44	35	12	6.9	5.6	3.5	9.7
21	60	48	55	34	58	41	33	11	6.6	5.9	3.5	6.2
22	55	49	51	30	52	39	30	10	8.1	5.0	3.2	19
23	47	49	55	28	47	42	36	9.3	16	9.0	3.0	35
24	39	46	93	27	43	37	35	9.3	32	4.8	2.8	35
25	34	44	117	28	41	35	32	9.3	30	4.8	2.8	29
26	30	42	106	27	38	32	29	8.9	31	4.5	2.8	24
27	27	42	88	25	37	30	27	10	30	4.5	3.2	20
28	24	41	73	23	35	28	28	12	28	4.5	3.8	18
29	21	56	50	21	-----	26	41	24	27	4.2	3.2	24
30	28	84	40	20	-----	25	45	69	24	4.2	2.8	28
31	55	-----	35	20	-----	27	-----	62	-----	4.0	2.4	-----
TOTAL	1,168.7	1,914	3,150	3,052	1,864	1,198	903	840.8	555.4	280.3	111.5	326.0
MEAN	37.7	60.8	102	98.5	66.4	38.8	30.1	21	18.5	9.6	3.40	10.9
MAX	90	205	219	500	178	64	65	49	46	20	4.5	35
MIN	9.7	23	35	20	21	25	21	8.9	6.6	4.0	2.4	2.2
CFSM	2.20	3.73	5.96	5.76	3.89	2.26	1.76	1.58	1.08	.53	.21	.64
AC-FT	2.54	4.16	6.85	6.64	4.06	2.61	1.96	1.83	1.21	.61	.24	.71
AC-FT	2,320	3,800	6,250	6,050	3,700	2,380	1,790	1,670	1,100	556	221	647
CAL YR 1968	TOTAL 17,105.0											
WTR YR 1969	TOTAL 15,363.7											
	MEAN 46.7 MAX 219 MIN 3.0 CFSM 2.73 IN 37.21 AC-FT 33,930											
	MEAN 42.1 MAX 500 MIN 2.2 CFSM 2.46 IN 33.42 AC-FT 30,470											

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	11	22	34	77	24	30	39	11	5.3	3.5	3.2
2	44	11	21	31	64	22	62	36	9.3	4.8	5.9	3.0
3	54	12	20	30	56	22	59	33	8.5	4.2	5.0	4.5
4	46	34	21	28	51	21	53	31	7.8	4.0	4.2	4.0
5	38	93	20	26	47	19	48	28	7.5	3.8	3.8	3.8
6	31	52	18	24	44	23	59	26	6.9	3.5	3.5	4.5
7	27	45	17	23	40	30	62	25	6.6	3.5	3.5	6.6
8	28	39	19	23	36	28	58	25	6.2	3.5	4.5	6.6
9	28	34	21	27	34	27	66	25	7.5	3.2	3.8	4.8
10	27	30	20	28	32	25	69	25	7.8	3.0	3.2	3.8
11	25	27	45	26	29	24	69	25	7.5	3.0	3.0	3.5
12	23	25	110	24	28	25	59	23	7.2	3.0	3.0	3.2
13	21	23	110	30	32	27	50	22	6.2	3.2	3.0	3.2
14	19	21	125	86	30	37	44	20	6.6	3.0	2.8	3.2
15	18	27	105	128	38	45	39	18	7.2	3.0	2.8	3.2
16	16	30	80	109	67	48	35	17	7.5	2.8	2.8	3.2
17	15	29	62	98	86	50	32	16	6.6	2.6	2.8	4.8
18	14	28	54	112	83	48	32	15	5.9	2.6	2.6	7.2
19	14	27	52	142	72	44	51	14	5.3	2.4	2.6	7.2
20	13	28	56	146	61	41	70	13	5.0	2.4	2.6	9.3
21	12	29	72	122	52	36	64	12	4.8	2.4	2.8	6.9
22	12	27	97	108	45	33	55	12	4.5	2.4	2.6	5.3
23	12	32	130	112	41	31	50	12	4.5	2.4	2.4	4.8
24	12	39	110	120	37	34	56	11	4.2	2.4	2.6	4.2
25	12	38	92	176	33	30	52	12	4.0	4.5	2.8	4.0
26	12	35	78	160	30	29	48	10	4.0	8.9	2.6	3.8
27	13	32	63	180	28	28	44	9.7	4.5	9.7	2.6	3.8
28	13	29	52	182	26	30	41	9.7	5.3	5.9	2.8	3.8
29	13	27	46	142	-----	29	42	13	5.9	4.5	3.0	3.8
30	13	24	41	108	-----	28	42	16	5.9	4.2	2.8	3.8
31	12	-----	38	91	-----	26	-----	13	-----	3.8	3.2	-----
TOTAL	675	898	1,817	2,676	1,299	964	1,541	606.4	191.7	117.9	99.1	137.0
MEAN	21.8	29.9	58.6	86.3	46.4	31.1	51.4	19.6	6.39	3.80	3.20	4.57
MAX	54	53	130	182	86	50	70	39	11	9.7	5.9	9.3
MIN	12	11	17	25	26	19	30	9.7	4.0	2.4	2.4	3.0
CFSM	1.27	1.75	3.43	5.05	2.71	1.82	3.01	1.15	.37	.22	.19	.27
IN.	1.47	1.95	3.95	5.82	2.83	2.10	3.35	1.32	.42	.26	.22	.30
AC-FT	1,340	1,780	3,600	5,310	2,580	1,910	3,060	1,200	380	234	197	272
CAL YR 1969	TOTAL 12,521.0											
WTR YR 1970	TOTAL 11,022.1											
	MEAN 34.3 MAX 500 MIN 2.2 CFSM 2.01 IN 27.24 AC-FT 24,840											
	MEAN 30.2 MAX 182 MIN 2.4 CFSM 1.77 IN 23.98 AC-FT 21,860											

NOTE.--NO GAGE-HEIGHT RECORD DEC. 10 TO JAN. 13.

12147500 NORTH FORK TOLT RIVER NEAR CARNATION, WASH.

LOCATION (REVISED).--Lat 47°42'45", long 121°47'15", in SW 1/4 sec.28, T.26 N., R.8 E., King County, on right bank 2.9 miles upstream from confluence with South Fork, 7.4 miles northeast of Carnation, and at mile 11.7.

DRAINAGE AREA.--39.9 sq mi.

PERIOD OF RECORD.--October 1952 to December 1963, November 1967 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 600 ft above mean sea level (from river-profile map).

AVERAGE DISCHARGE.--13 years (1952-63, 1968-70), 373 cfs (129.22 inches per year, 270,200 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (3,000 cfs), November 1967 to September 1970

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 25, 1967a	-	*4,210	10.17	June 2, 1968	0930	3,090	9.14	Jan. 5, 1969a	-	*6,540	11.78
Jan. 20, 1968a	-	4,180	10.14	Dec. 3, 1968	1530	4,260	10.21	Oct. 1, 1969	2400	*2,870	8.92

a About.

Annual minimum discharge, November 1967 to September 1970

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1968	Aug. 9-13, 1968	a90	-	1970	Sept. 2, 3, 1970	52	3.40
1969	Sept.12, 1969	60	3.43				

a Minimum daily.

Period of record: Maximum discharge, 9,560 cfs Dec. 15, 1959 (gage height, 13.15 ft), from rating curve extended above 2,800 cfs; minimum, 38 cfs Sept. 13, 14, 1958, but may have been less sometime during period of no gage-height record in October 1952; minimum gage height, 3.40 ft Sept. 2, 3, 1970.

REMARKS.--Records excellent except those for periods of no gage-height record, which are fair. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1566: 1957. WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, NOVEMBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			248	500	310	340	362	530	1,090	240	120	159
2			329	450	450	320	383	425	1,900	230	115	144
3			362	380	650	309	341	425	664	220	105	129
4			324	350	1,250	371	478	461	461	221	120	129
5			284	350	800	407	419	431	404	206	95	131
6			248	320	600	356	377	422	353	190	110	105
7			235	300	500	300	365	422	323	173	100	102
8			221	290	450	275	335	446	326	164	95	99
9			422	330	400	242	326	492	309	157	90	97
10			920	300	370	255	353	520	295	146	90	96
11			780	280	340	250	386	492	289	146	90	100
12			380	260	320	245	330	458	264	295	90	100
13			330	600	300	240	370	365	281	214	90	94
14			300	1,300	280	240	450	392	275	211	120	198
15			270	900	270	350	550	395	259	238	220	936
16			250	560	260	467	470	389	238	211	150	656
17			230	419	250	386	450	428	235	186	120	1,210
18			220	383	550	309	420	461	238	170	130	528
19			210	1,500	1,500	284	400	488	235	150	150	350
20			200	3,500	1,100	275	380	730	208	350	170	300
21			190	2,200	800	273	370	492	203	250	150	238
22			450	1,500	600	270	350	407	259	200	140	256
23			1,000	750	850	329	380	479	229	170	261	350
24			2,000	600	700	377	440	416	206	160	386	251
25			3,500	650	500	318	500	410	206	150	323	214
26			2,000	550	460	300	600	371	230	150	398	188
27			1,300	460	400	770	500	335	400	145	473	178
28			1,200	400	380	652	550	323	700	140	332	164
29		330	900	370	360	840	650	309	400	135	254	155
30		273	700	340	-----	506	600	292	300	130	201	150
31		-----	550	320	-----	392	-----	273	-----	125	166	-----
TOTAL			20,755	21,612	15,950	11,268	12,966	13,297	11,780	5,673	5,434	7,799
MEAN			670	687	550	363	432	429	393	189	175	260
MAX			3,500	3,500	1,500	840	800	730	1,900	350	473	1,210
MIN			190	260	250	240	326	273	203	125	90	94
CFSM			17.1	17.8	14.0	9.26	11.0	10.9	10.0	4.82	4.46	6.63
IN.			19.70	20.51	15.14	10.69	12.30	12.62	11.18	5.57	5.16	7.40
AC-FT			41,170	42,670	31,640	22,350	25,720	26,370	23,370	11,650	10,780	15,470

NOTE.--NO GAGE-HEIGHT RECORD DEC. 10 TO JAN. 16, JAN. 19 TO MAR. 1.

12147500 NORTH FORK TOLT RIVER NEAR CARNATION, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
1	140	362	380	450	125	133	689	383	476	278	99
2	135	389	494	560	125	133	548	371	499	264	96
3	133	443	2,210	750	140	144	416	376	506	264	94
4	227	338	788	2,000	130	144	377	329	544	338	93
5	190	289	513	4,500	120	267	431	338	482	270	100
6	300	262	428	2,000	120	229	407	416	416	229	99
7	329	243	404	1,200	110	190	356	572	347	211	93
8	524	400	725	700	120	168	332	743	368	203	91
9	198	604	600	560	140	157	362	774	389	196	90
10	224	395	648	500	150	150	410	716	362	193	88
11	479	1,200	604	430	300	144	368	648	326	254	86
12	413	702	473	370	330	144	485	632	289	208	86
13	600	520	428	350	250	144	528	592	275	183	86
14	431	431	422	290	210	144	589	544	273	164	81
15	616	374	425	270	190	157	329	434	248	159	81
16	428	341	416	250	190	200	312	416	251	146	83
17	338	329	377	230	180	824	485	425	291	142	79
18	464	704	401	200	180	564	488	488	290	140	78
19	382	644	359	180	180	437	902	482	275	137	79
20	652	532	335	170	173	362	398	431	201	129	78
21	499	476	318	160	171	329	392	470	188	125	78
22	431	857	306	155	164	356	461	580	278	123	76
23	345	620	395	155	157	389	660	628	598	121	74
24	335	649	107	150	150	320	479	604	480	110	73
25	341	374	590	150	144	309	413	443	730	118	72
26	312	353	450	145	140	365	368	428	422	114	70
27	262	395	370	140	133	458	356	446	510	108	72
28	246	365	320	135	133	428	458	446	365	107	76
29	246	624	130	135	135	437	446	1,140	380	105	75
30	587	449	280	130	-----	552	389	1,160	318	102	69
31	524	-----	300	130	-----	779	-----	524	-----	99	67
TOTAL	11,252	14,364	15,746	17,525	4,655	9,557	13,230	16,977	11,436	5,366	2,562
MEAN	363	479	508	565	166	308	461	548	381	173	82.6
MAX	652	1,200	2,210	4,500	140	824	689	1,160	730	338	100
MIN	133	243	280	130	110	133	312	329	188	99	67
CFSM	9.26	12.2	13.0	14.4	4.23	7.86	11.3	14.0	9.72	4.41	2.11
IN-	10.68	13.63	14.94	16.63	4.42	9.07	12.56	16.11	10.85	5.09	2.43
AC-FT	22,320	28,490	31,230	34,760	9,230	18,960	26,240	33,670	22,680	10,640	5,080
CAL YR 1968	TOTAL 147,341	MEAN 403	MAX 3,500	MIN 90	CFSM 10.3	IN 139.82	AC-FT 292,300				
WTR YR 1969	TOTAL 130,389	MEAN 357	MAX 4,500	MIN 60	CFSM 9.11	IN 123.74	AC-FT 258,600				

NOTE.--NO GAGE-HEIGHT RECORD DEC. 25 TO FEB. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
1	910	162	175	215	559	246	246	278	347	110	103
2	1,260	145	160	205	448	235	272	311	399	113	110
3	615	192	160	195	448	232	243	382	402	126	103
4	416	837	232	185	378	216	281	467	317	124	96
5	335	579	196	180	344	209	794	486	275	110	88
6	296	396	167	175	385	344	780	299	266	103	84
7	266	332	156	167	459	695	452	252	224	96	82
8	434	257	171	164	527	360	402	324	199	96	87
9	543	224	222	199	527	290	1,230	420	246	94	82
10	459	204	196	184	527	257	675	287	254	88	76
11	320	189	304	167	499	238	427	249	201	84	75
12	263	192	687	158	495	252	350	232	173	82	73
13	229	180	686	263	722	290	311	224	180	79	70
14	209	170	785	1,520	471	452	284	211	192	76	69
15	199	190	487	575	623	571	260	281	263	75	67
16	182	200	357	347	906	722	246	427	260	74	65
17	171	190	320	354	663	434	229	382	196	73	64
18	160	182	416	1,680	547	347	260	287	211	70	62
19	156	199	424	1,010	459	308	290	275	199	70	60
20	178	235	583	862	424	287	280	243	196	69	58
21	175	360	615	776	388	269	275	224	206	67	58
22	158	266	623	749	360	254	300	257	184	65	58
23	164	481	623	875	341	257	323	260	167	63	56
24	140	396	438	643	320	341	396	260	158	62	56
25	160	266	354	619	302	263	302	338	154	110	56
26	143	226	320	527	287	246	266	317	180	563	55
27	171	206	280	587	275	232	249	219	145	559	55
28	173	196	250	448	260	243	232	204	133	214	55
29	169	192	240	392	-----	232	254	306	126	145	55
30	182	187	230	350	-----	219	287	350	120	126	54
31	184	-----	225	448	-----	204	-----	272	-----	112	54
TOTAL	9,440	8,031	11,082	15,219	12,944	9,745	11,196	9,244	6,543	3,898	2,186
MEAN	305	268	357	491	462	314	373	298	218	126	70.5
MAX	1,260	837	785	1,680	906	722	1,230	467	402	363	110
MIN	143	145	156	158	260	204	229	204	120	62	54
CFSM	7.78	6.84	9.11	12.5	11.8	8.01	9.52	7.60	5.56	3.21	1.80
IN-	8.48	7.62	10.52	14.44	12.0	9.25	10.42	8.77	6.21	3.70	2.07
AC-FT	18,720	15,930	21,980	30,190	25,670	19,330	22,210	18,340	12,980	7,730	4,340
CAL YR 1969	TOTAL 117,580	MEAN 322	MAX 4,900	MIN 60	CFSM 8.21	IN 111.58	AC-FT 233,200				
WTR YR 1970	TOTAL 106,385	MEAN 291	MAX 1,680	MIN 53	CFSM 7.42	IN 100.96	AC-FT 211,000				

12147600 SOUTH FORK TOLT RIVER NEAR INDEX, WASH.

LOCATION.--Lat 47°42'25", long 121°35'56", in NE1/4 sec. 25, T.26 N., R.9 E., King County, on left bank 0.6 mile upstream from Phelps Creek, 8.1 miles south of Index, and at mile 12.9.

DRAINAGE AREA.--5.34 sq mi.

PERIOD OF RECORD.--December 1959 to December 1963, November 1967 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,850 ft (from topographic map). Prior to Oct. 1, 1961, at present site at datum 0.85 ft higher.

AVERAGE DISCHARGE.--5 years (1960-63, 1968-70), 53.8 cfs (136.82 inches per year, 38,980 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (550 cfs), November 1967 to September 1970

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 25, 1967a	-	1,030	5.44	Sept. 14, 1968	1800	618	4.38	Sept. 30, 1969	1600	1,030	5.46
Jan. 20, 1968	1400	*1,180	5.77	Sept. 17, 1968	1100	604	4.34				
Feb. 4, 1968	0130	576	4.26					Nov. 4, 1969	1530	562	4.22
Feb. 18, 1968	2000	1,090	5.58	Dec. 3, 1968	1430	1,450	6.29	Jan. 14, 1970	1000	628	4.41
June 2, 1968	0600	854	5.01	Jan. 4, 1969	1700	*1,750	6.79	Jan. 18, 1970	0800	576	4.26
				May 29, 1969	2300	642	4.45	Apr. 9, 1970	1400	*758	4.77

a About.

b From high watermark in well.

Annual minimum discharge, November 1967 to September 1970

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1968	Aug. 13, 1968	5.2	.75	1970	Aug. 30 to Sept. 2, 1970	2.8	.33
1969	Sept. 12, 1969	a3.4	-				

a Minimum daily.

Period of record: Maximum discharge, 1,880 cfs Nov. 19, 1962; maximum gage height, 7.13 ft, present datum, Dec. 14, 1959; minimum daily discharge, 2.3 cfs Aug. 28-30, 1961.

REMARKS.--Records excellent. No gage-height record Nov. 25 to Dec. 26, 1967. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, NOVEMBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		114	23	39	16	39	34	120	363	42	8.9	21
2		54	31	30	57	39	37	80	553	38	8.4	20
3		37	32	26	179	38	32	70	132	36	8.2	16
4		29	35	25	250	54	34	76	74	33	8.0	14
5		24	30	23	63	68	39	66	63	28	7.7	12
6		21	23	21	39	47	35	62	55	26	7.5	12
7		23	20	20	32	34	32	56	46	23	7.1	11
8		25	17	19	28	28	29	58	56	20	6.6	10
9		98	70	20	26	24	31	66	46	19	6.2	9.4
10		328	200	18	24	21	43	84	45	17	6.2	8.9
11		95	95	16	22	20	52	90	50	16	5.8	8.7
12		46	55	16	22	20	36	70	42	39	5.6	9.2
13		34	30	44	20	20	28	60	59	24	5.4	8.7
14		44	24	96	17	21	44	62	49	32	17	42
15		64	22	109	14	37	37	60	41	37	44	337
16		77	20	59	14	49	26	60	40	27	21	195
17		42	18	38	31	36	23	74	41	21	16	308
18		40	16	35	539	26	24	90	43	18	28	136
19		32	15	369	612	22	22	110	43	19	25	63
20		27	14	697	220	23	21	140	34	46	23	40
21		22	13	269	240	24	22	84	30	30	20	30
22		22	120	92	160	24	25	68	51	24	18	26
23		25	260	46	267	35	44	96	44	20	43	40
24		177	470	141	178	40	40	76	36	18	66	32
25		54	850	68	78	33	78	78	39	16	64	24
26		32	200	41	56	31	96	67	48	14	90	20
27		26	158	30	47	138	63	54	90	13	82	18
28		24	119	22	42	76	101	50	187	12	51	15
29		32	67	20	40	166	137	50	86	11	36	13
30		24	46	18	-----	62	160	46	51	10	28	12
31		-----	40	17	-----	41	-----	41	-----	9.7	22	-----
TOTAL		1,692	3,133	2,504	3,333	1,336	1,425	2,264	2,537	738.7	785.6	1,511.9
MEAN		56.4	101	80.8	115	43.1	47.5	73.0	84.6	23.8	25.3	50.4
MAX		328	850	697	612	166	160	140	553	46	90	337
MIN		21	13	16	14	20	21	41	30	9.7	5.4	8.7
CFSM		10.6	18.9	15.1	21.5	8.07	8.90	13.7	15.8	4.46	4.74	9.44
IN.		11.79	21.83	17.44	23.22	9.31	9.93	15.77	17.67	5.15	5.47	10.33
AC-FT		3,360	6,210	4,970	6,610	2,650	2,830	4,490	5,030	1,470	1,560	3,000

12147600 SOUTH FORK TOLT RIVER NEAR INDEX, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	11	40	39	21	10	6.4	98	42	114	44	9.1	3.8		
2	10	45	80	30	12	6.9	71	37	135	42	8.5	3.6		
3	10	56	466	48	11	8.7	44	31	154	50	7.8	8.7		
4	29	38	124	820	9.6	8.3	40	31	175	85	7.4	12		
5	22	31	48	659	8.9	17	46	39	147	52	12	12		
6	83	26	34	137	8.5	13	44	63	114	38	10	8.3		
7	60	23	29	71	8.0	10	38	116	84	32	8.0	6.0		
8	35	74	50	43	7.8	8.9	36	195	99	28	7.1	5.1		
9	30	147	46	35	7.6	8.5	48	219	112	27	6.4	4.4		
10	104	66	52	28	9.3	8.5	56	199	99	28	6.2	4.0		
11	79	305	41	25	21	8.7	50	161	84	45	6.2	3.6		
12	61	128	29	22	16	9.6	83	156	70	31	6.2	3.4		
13	87	61	25	20	12	11	92	147	62	25	6.2	13		
14	54	43	23	19	9.8	12	52	127	62	22	5.8	12		
15	100	36	24	18	8.9	17	40	90	58	20	6.2	8.0		
16	63	30	22	17	8.9	30	39	84	58	19	8.3	6.0		
17	42	26	20	16	8.7	128	78	83	59	18	6.2	16		
18	46	77	24	16	8.5	70	117	106	56	18	5.5	35		
19	83	119	20	15	8.9	44	75	117	48	17	5.3	46		
20	165	128	18	14	8.9	33	49	96	39	16	5.1	42		
21	96	114	17	14	8.7	35	51	111	36	15	4.9	26		
22	78	176	16	13	8.7	37	70	160	79	14	4.6	298		
23	60	96	19	13	8.0	31	133	181	166	14	4.4	313		
24	52	54	54	13	7.4	28	79	175	169	14	4.3	118		
25	55	39	33	12	6.9	31	54	111	145	14	4.2	117		
26	44	35	23	12	6.7	48	45	106	77	13	4.1	57		
27	32	53	20	12	6.4	66	46	114	71	12	4.0	32		
28	29	41	17	11	6.4	56	63	114	56	11	7.8	27		
29	30	83	15	11	-----	65	63	318	60	10	7.1	58		
30	84	55	15	11	-----	89	48	338	50	9.6	4.9	407		
31	64	-----	16	10	-----	142	-----	114	-----	9.6	4.4	-----		
TOTAL	1,798	2,245	1,459	2,206	263.5	1,087.5	1,848	3,981	2,738	793.2	198.2	1,705.9		
MEAN	58.0	74.8	47.1	71.2	9.41	35.1	61.6	128	91.3	25.6	6.39	56.9		
MAX	165	305	466	820	21	142	133	338	175	85	12	407		
MIN	10	23	15	10	6.4	6.4	36	31	36	9.6	4.0	3.4		
CFSM	10.9	14.0	8.82	13.3	1.76	6.57	11.5	24.0	17.1	4.79	1.20	10.7		
IN-	12.53	15.64	10.16	15.37	1.84	7.58	12.87	27.73	19.07	5.53	1.38	11.88		
AC-FT	3,570	4,450	2,890	4,380	523	2,160	3,670	7,900	5,430	1,570	393	3,380		
CAL YR 1968	TOTAL	21,937.2	MEAN	59.9	MAX	697	MIN	5.4	CFSM	11.2	IN	152.82	AC-FT	43,510
WTR YR 1969	TOTAL	20,323.3	MEAN	55.7	MAX	820	MIN	3.4	CFSM	10.4	IN	141.58	AC-FT	40,310

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	181	20	17	16	53	21	33	38	100	21	13	2.8		
2	185	17	16	14	36	20	38	53	126	24	16	2.8		
3	84	23	16	14	42	18	30	70	140	32	14	31		
4	48	225	25	12	30	17	37	96	94	34	11	27		
5	35	104	19	11	26	16	183	91	81	28	10	20		
6	29	64	16	11	30	71	167	64	97	23	8.8	148		
7	27	46	15	10	54	132	70	47	74	21	8.2	234		
8	75	32	14	10	72	52	60	71	52	22	10	76		
9	100	27	16	11	73	36	404	104	67	20	8.6	45		
10	72	23	15	10	73	30	160	52	69	17	7.3	29		
11	42	22	26	9.6	68	27	68	37	50	15	6.7	22		
12	30	21	82	9.6	68	29	49	32	39	14	6.1	18		
13	24	20	81	32	98	34	40	30	47	12	6.3	15		
14	21	20	102	436	62	69	34	29	54	12	5.9	12		
15	18	22	54	91	94	98	30	53	75	11	5.3	11		
16	16	25	35	44	175	124	28	113	66	11	5.0	10		
17	15	21	31	55	84	60	27	110	54	11	4.8	57		
18	14	20	66	400	58	45	29	68	68	9.3	4.6	173		
19	14	23	64	280	43	38	33	60	63	8.8	4.3	116		
20	18	42	125	175	39	34	29	47	65	8.4	4.3	67		
21	18	67	90	165	35	33	26	44	73	7.7	4.1	43		
22	16	39	86	182	32	29	34	64	59	6.7	3.9	68		
23	19	122	70	193	30	35	38	75	50	5.9	3.8	70		
24	17	62	37	90	28	47	47	75	44	5.5	3.6	44		
25	16	35	27	68	27	34	30	109	40	15	3.6	31		
26	14	27	23	52	26	31	25	97	43	88	3.6	24		
27	17	22	20	46	26	29	24	56	38	86	3.3	20		
28	16	20	19	36	24	35	22	47	32	35	3.3	17		
29	17	20	18	30	-----	33	26	81	27	23	3.2	15		
30	20	19	16	27	-----	28	32	84	24	18	2.8	14		
31	23	-----	16	40	-----	25	-----	70	-----	15	2.8	-----		
TOTAL	1,241	1,250	1,257	2,580.2	1,506	1,330	1,853	2,067	1,911	660.3	198.2	1,462.6		
MEAN	40.0	41.7	40.5	83.2	53.8	42.9	61.8	66.7	63.7	21.3	6.39	48.8		
MAX	185	225	125	436	175	132	404	113	140	88	16	234		
MIN	14	17	14	9.6	24	16	22	29	24	5.5	2.8	2.8		
CFSM	7.49	7.81	7.58	15.6	10.1	8.03	11.6	12.5	11.9	3.99	1.20	9.14		
IN-	8.65	8.71	8.76	17.97	10.49	9.27	12.91	14.40	13.31	4.60	1.38	10.19		
AC-FT	2,460	2,480	2,490	5,120	2,990	2,640	3,680	4,100	3,790	1,310	393	2,900		
CAL YR 1969	TOTAL	18,569.3	MEAN	50.9	MAX	820	MIN	3.4	CFSM	9.53	IN	129.36	AC-FT	36,830
WTR YR 1970	TOTAL	17,316.3	MEAN	47.4	MAX	436	MIN	2.8	CFSM	8.88	IN	120.63	AC-FT	34,350

12148000 SOUTH FORK TOLT RIVER NEAR CARNATION, WASH.

LOCATION.--Lat 47°41'22", long 121°42'44", in SW¼SW¼ sec.31, T.26 N., R.9 E., King County, on left bank 0.1 mile upstream from private road bridge, 9.8 miles northeast of Carnation, and at mile 6.8.

DRAINAGE AREA.--19.7 sq mi.

PERIOD OF RECORD.--October 1952 to December 1963, June 1969 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,300 ft (from river-profile map).

AVERAGE DISCHARGE.--11 years (1952-63), 198 cfs (145,300 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for June 1969 to September 1970 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1969	July 31, Aug. 1, 1969		542	3.57	Aug. 26, 1969		38	1.77
1970	Apr. 13, 1970		743	3.89	Aug. 30 to Sept. 2, 1970		38	1.75

Period of record: Maximum discharge, 6,500 cfs Dec. 15, 1959 (gage height, 7.45 ft), from rating curve extended above 2,700 cfs; maximum gage height, 7.62 ft Nov. 20, 1958 (backwater from debris); minimum discharge, 8.4 cfs Sept. 12, 1963; minimum gage height, 0.81 ft Aug. 23-27, 1958.

REMARKS.--Records excellent. Since September 1963, flow regulated by South Fork Tolt River Reservoir (capacity, 57,830 ac-ft). During water year 1970, the Seattle Water Department diverted an average daily discharge of about 75 cfs above station for municipal use.

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1969

DAY	JUN	JUL	AUG	SEP	DAY	JUN	JUL	AUG	SEP	DAY	JUN	JUL	AUG	SEP
1	95	94	728	46	11	92	90	77	46	21	88	88	46	49
2	95	92	720	46	12	92	90	77	46	22	92	138	46	69
3	95	94	712	46	13	92	90	81	48	23	110	283	51	71
4	95	94	698	46	14	90	90	94	46	24	104	435	51	57
5	94	92	640	46	15	90	90	85	46	25	106	510	51	58
6	94	92	499	46	16	90	88	85	46	26	97	510	44	55
7	94	90	233	46	17	90	88	85	50	27	95	510	41	54
8	92	90	78	46	18	90	88	77	50	28	95	504	41	53
9	92	90	78	46	19	88	88	60	53	29	94	504	41	60
10	92	90	77	46	20	88	88	46	50	30	94	576	40	76
										31	-	728	40	-
TOTAL.....											2,815	6,594	5,722	1,541
MEAN.....											93.8	213	185	51.4
MAX.....											110	728	728	76
MIN.....											88	88	40	44
AC-FT.....											5,580	13,080	11,350	3,060

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	62	64	77	92	77	88	79	108	71	40	39
2	75	61	64	76	88	77	85	80	122	66	43	38
3	68	65	64	76	88	77	85	85	132	59	40	40
4	64	78	66	76	87	77	84	122	125	59	40	40
5	65	114	64	74	85	77	88	159	98	59	40	40
6	64	65	64	74	85	84	98	172	85	50	40	44
7	64	64	63	74	85	84	87	150	79	44	40	48
8	68	64	64	74	87	79	85	147	74	44	43	44
9	69	53	64	77	85	77	138	210	77	43	40	48
10	66	63	63	76	84	77	381	190	76	42	40	53
11	65	83	71	74	82	77	350	147	84	42	40	50
12	64	63	83	74	82	77	263	118	98	42	40	50
13	64	63	86	84	92	77	220	219	100	42	40	50
14	64	63	85	120	84	87	140	85	100	41	40	50
15	63	66	77	84	96	85	110	102	113	40	40	50
16	83	85	75	79	100	88	95	102	77	40	40	50
17	63	64	74	82	94	82	80	138	74	40	40	54
18	63	63	78	106	92	80	80	74	74	40	40	60
19	63	63	78	102	87	79	85	74	74	40	40	57
20	63	65	81	92	85	79	82	74	74	40	40	56
21	63	65	97	92	84	79	80	74	74	40	40	56
22	63	64	90	94	82	79	82	74	74	40	40	53
23	63	71	90	90	82	82	85	74	74	40	40	54
24	63	66	84	100	82	80	87	74	74	40	40	71
25	63	65	82	96	80	79	85	74	74	43	40	88
26	62	64	82	98	79	79	84	76	73	55	39	88
27	64	64	80	98	77	79	82	74	73	50	39	88
28	63	64	79	90	77	79	82	74	73	44	39	88
29	63	64	79	87	-----	79	84	80	73	42	39	88
30	63	64	79	85	-----	77	80	88	73	41	39	88
31	62	-----	77	94	-----	77	-----	98	-----	40	39	-----
TOTAL	2,006	1,988	2,347	2,673	2,403	2,466	3,550	3,385	2,379	1,419	1,240	1,723
MEAN	64.7	64.3	75.7	86.2	85.5	79.5	118	109	86.0	45.8	40.0	57.4
MAX	79	114	97	120	100	88	381	219	132	71	43	76
MIN	62	61	63	74	77	77	80	74	73	40	39	88
AC-FT	3,980	3,940	4,660	5,300	4,770	4,890	7,040	6,710	5,120	2,810	2,460	3,420

WTR YR 1970 TOTAL 27,779 MEAN 76.1 MAX 381 MIN 38 AC-FT 55,100

12148500 TOLT RIVER NEAR CARNATION, WASH.

LOCATION (REVISED).--Lat 47°41'45", long 121°49'22", in SE¼NE¼ sec.31, T.26 N., R.8 E., King County, on right bank 500 ft downstream from the forks, 0.4 mile upstream from Stosel Creek, 5.5 miles northeast of Carnation, and at mile 8.7.

DRAINAGE AREA.--81.4 sq mi.

PERIOD OF RECORD.--August 1928 to January 1932, September 1937 to September 1970. Prior to October 1951, published as "near Tolt."

GAGE.--Water-stage recorder. Datum of gage is 348 ft above mean sea level (river-profile survey). See WSP 1932 for history of changes prior to Oct. 7, 1937.

AVERAGE DISCHARGE.--36 years (1928-31, 1937-70), 606 cfs (439,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (3,400 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	0330	*2,200	7.65	Dec. 25, 1967	1400	*6,900	10.22	Jan. 5, 1969	0400	*10,300	11.34
				Jan. 20, 1968	1900	6,270	9.96				
Oct. 23, 1966				June 2, 1968	1000	4,730	9.19	Oct. 1, 1969	2400	*3,320	8.45
Dec. 13, 1966	1315	*a3,780	8.75								
Jan. 13, 1967				Dec. 3, 1968	1600	5,930	9.79				

a Maximum recorded, but may have been higher during period of no gage-height record.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 30, 1966	114	4.14	1969	Aug. 31, Sept. 1, 10, 11, 12, 1969	140	4.30
1967	Sept. 25-29, 1967	a100		1970	Aug. 30, 31, Sept. 1, 2, 1970	100	4.20
1968	Aug. 7, 8, 11, 12, 13, 1968	147	4.37				

a Minimum daily.

Period of record: Maximum discharge, 17,400 cfs Dec. 15, 1959 (gage height, 13.04 ft), from rating curve extended above 7,600 cfs on basis of slope-area measurement at gage height 12.92 ft; minimum, 53 cfs Sept. 22, 23, 1951 (gage height, 3.84 ft).

REMARKS.--Records excellent except those for periods of no gage-height record, which are fair. Some regulation by South Fork Tolt River Reservoir (capacity, 57,830 acre-ft). During water years 1966-70, city of Seattle Water Department diverted a daily average of about 50 cfs above station for municipal use. Water-quality records for the water year 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1286: 1929(M), 1930, 1938(M), 1939, 1943(M), 1945(M), 1951(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	348	682	445	571	362	802	489	341	392	249	233
2	283	494	864	458	527	337	742	597	362	508	246	230
3	280	628	748	432	503	327	556	778	370	1,050	241	230
4	280	1,280	1,600	416	494	311	532	838	377	1,080	222	222
5	355	1,240	844	508	561	311	561	948	362	766	196	218
6	885	694	820	1,550	561	327	613	1,220	454	654	194	212
7	480	561	1,090	1,680	592	320	665	927	508	551	189	225
8	384	499	857	1,300	576	412	628	838	517	485	191	222
9	450	480	688	899	576	899	649	802	517	458	189	220
10	377	476	618	808	542	688	712	634	649	462	187	225
11	337	546	556	871	618	512	1,160	527	597	512	212	244
12	337	485	517	1,190	602	480	778	508	1,130	428	189	244
13	412	450	494	1,850	556	814	628	450	724	400	233	244
14	450	462	462	1,440	542	857	694	412	706	458	260	238
15	772	512	445	955	489	748	760	476	634	428	198	230
16	499	556	420	784	428	587	694	556	628	420	187	233
17	499	454	412	694	392	489	634	437	592	400	174	235
18	644	454	404	639	373	476	571	408	517	362	176	289
19	969	556	437	587	366	480	537	454	532	370	172	254
20	582	634	454	556	537	428	556	489	467	348	178	238
21	485	1,050	517	522	532	400	571	628	416	324	161	235
22	441	1,220	437	503	512	373	623	623	366	314	161	233
23	412	760	420	494	499	358	592	512	314	308	176	222
24	388	639	408	467	454	358	556	489	331	327	172	196
25	373	602	392	480	424	373	608	597	298	424	200	194
26	366	618	384	485	416	441	613	644	292	334	222	187
27	358	754	408	499	428	532	566	522	320	302	298	148
28	377	654	571	527	388	561	532	412	742	295	263	124
29	366	597	561	644	-----	649	522	408	408	280	225	119
30	462	556	489	670	-----	1,060	499	412	366	263	225	116
31	384	-----	454	660	-----	906	-----	358	-----	263	222	-----
TOTAL	13,967	19,259	18,453	24,013	14,059	16,176	19,154	18,393	14,837	13,966	6,408	6,460
MEAN	451	642	595	775	502	522	638	593	495	451	207	213
MAX	969	1,280	1,600	1,850	618	1,060	1,160	1,220	1,130	1,080	298	289
MIN	280	348	384	416	366	311	499	358	292	263	161	116
CFSM	5.84	7.89	7.31	9.52	6.17	6.41	7.84	7.29	6.08	5.54	2.84	2.84
IN.	6.38	8.80	8.43	10.67	6.42	7.39	8.75	8.41	6.78	6.38	2.93	2.95
AC-FT	27,700	38,200	36,600	47,630	27,890	32,090	37,990	36,480	29,430	27,700	12,710	12,810
CAL YR 1965	TOTAL	204,161	MEAN	559	MAX	5,200	MIN	116	CFSM	6.87	IN	93.30
WTR YR 1966	TOTAL	185,145	MEAN	507	MAX	1,850	MIN	116	CFSM	6.23	IN	84.61
									AC-FT	405,000		
										367,200		

SNOHOMISH RIVER BASIN

12148500 TOLT RIVER NEAR CARNATION, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	430	1,600	1,400	821	822	390	366	626	293	159	135
2	174	360	1,200	1,000	765	669	387	366	814	305	164	174
3	142	320	950	1,700	941	605	390	366	752	296	162	153
4	128	280	880	1,350	2,180	561	418	383	686	279	161	130
5	119	310	800	1,430	1,430	536	387	438	740	262	168	113
6	117	380	720	880	988	520	359	488	734	236	194	125
7	238	330	650	780	797	480	373	565	644	217	164	135
8	522	300	600	1,000	685	517	383	632	530	222	140	131
9	225	350	550	1,200	698	517	402	716	497	226	142	131
10	172	760	903	1,100	859	458	766	488	530	190	135	135
11	155	520	1,150	2,100	764	428	355	511	497	197	133	194
12	191	720	1,700	1,500	779	408	366	520	462	203	131	160
13	189	640	3,090	1,900	1,270	396	406	466	484	197	130	140
14	180	1,300	1,540	2,400	965	388	362	454	525	188	130	125
15	170	1,050	1,130	3,400	842	441	348	520	535	197	128	120
16	168	900	1,800	2,200	747	628	345	740	525	194	126	120
17	242	800	1,910	1,500	1,030	628	338	821	545	194	125	118
18	193	700	1,910	1,100	1,250	592	352	722	511	182	123	116
19	215	650	2,040	2,100	947	517	359	710	545	188	123	113
20	1,350	700	2,220	2,400	793	546	345	842	525	205	121	110
21	700	600	1,420	1,500	699	592	387	898	484	190	123	110
22	1,100	540	1,030	1,150	629	934	359	814	520	174	123	107
23	2,800	500	839	910	576	1,100	348	746	426	170	119	104
24	1,900	466	813	796	589	710	352	626	406	168	135	101
25	900	1,700	770	694	616	571	366	550	402	164	128	100
26	620	1,200	665	656	580	515	348	525	383	178	123	100
27	860	1,000	590	1,340	556	470	359	560	380	168	119	100
28	560	1,050	562	2,390	816	446	406	656	317	157	116	100
29	600	1,100	1,160	1,660	-----	430	390	821	514	157	113	100
30	660	1,900	1,290	-----	422	-----	376	680	302	159	113	130
31	540	-----	850	965	-----	406	-----	550	-----	155	116	-----
TOTAL	16,246	21,850	36,992	45,361	24,612	17,253	11,122	18,540	15,641	6,311	4,187	3,730
MEAN	524	728	1,193	1,463	879	557	371	598	521	204	135	124
MAX	2,800	1,900	3,090	3,400	2,180	1,100	418	898	814	305	194	194
MIN	116	280	550	656	556	338	336	366	302	155	113	100
CFSM	6.44	8.94	14.7	18.0	10.8	6.84	4.56	7.35	6.40	2.51	1.66	1.52
IN.	7.42	9.99	16.91	20.73	11.25	7.88	5.08	8.47	7.15	2.88	1.91	1.70
AC-FT	32,220	43,340	73,370	89,970	48,820	34,220	22,060	36,770	31,020	12,520	8,300	7,400

CAL YR 1966 TOTAL 208,554 MEAN 571 MAX 3,090 MIN 116 CFSM 7.01 IN 95.31 AC-FT 413,700
 WTR YR 1967 TOTAL 221,845 MEAN 608 MAX 3,400 MIN 100 CFSM 7.47 IN 101.38 AC-FT 440,000

NOTE.--NO GAGE-HEIGHT RECORD OCT. 19 TO DEC. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	750	551	842	509	603	756	1,160	1,770	401	167	396
2	260	606	755	704	659	571	762	867	3,580	363	163	390
3	420	520	797	628	1,110	554	679	786	1,890	334	161	367
4	280	470	701	609	2,050	641	690	838	1,160	314	159	335
5	240	440	632	607	1,130	688	798	810	886	297	157	320
6	260	415	563	565	862	615	756	831	737	281	169	278
7	500	415	511	548	701	549	732	786	642	267	150	247
8	290	412	476	556	622	458	652	780	633	254	152	253
9	250	602	753	614	585	375	565	852	582	246	154	243
10	380	1,300	1,450	592	556	363	591	880	541	237	151	238
11	860	727	1,230	508	532	348	685	880	515	232	148	256
12	700	550	736	485	512	348	624	831	476	450	153	263
13	725	491	617	1,330	460	334	570	690	480	317	153	242
14	931	554	565	1,650	420	338	714	702	462	300	216	333
15	454	601	531	1,330	370	510	859	708	415	326	401	943
16	362	694	512	923	324	708	798	663	400	286	236	1,230
17	325	552	487	710	327	613	732	696	372	254	195	1,720
18	383	555	464	642	1,470	505	708	733	346	239	257	1,180
19	481	522	443	2,020	2,870	449	685	778	364	241	281	771
20	385	486	427	3,830	1,690	427	652	1,170	328	255	316	604
21	687	461	420	3,290	1,330	411	635	958	305	342	274	512
22	743	449	1,390	1,710	1,140	403	591	767	408	280	272	487
23	673	459	1,820	1,220	1,450	476	679	857	363	255	438	648
24	498	1,300	3,230	1,310	1,280	565	726	774	303	241	688	535
25	596	712	5,330	1,060	841	495	859	749	301	230	584	463
26	503	581	3,280	841	789	480	1,040	703	348	221	687	426
27	1,560	529	2,980	692	750	1,240	817	615	521	214	872	410
28	1,050	537	1,200	624	668	1,470	943	562	1,080	208	785	402
29	810	686	1,340	581	629	1,720	1,200	533	631	199	579	389
30	1,000	594	1,020	556	-----	1,220	1,360	505	460	182	461	356
31	860	-----	861	531	-----	922	-----	497	-----	172	405	-----
TOTAL	17,656	17,970	36,072	32,108	26,636	19,399	22,858	23,981	21,299	8,708	9,984	15,237
MEAN	570	599	1,164	1,036	918	626	762	774	710	281	322	508
MAX	1,560	1,300	5,330	3,830	2,870	1,720	1,360	1,170	3,580	525	872	1,720
MIN	190	412	420	485	324	334	565	497	301	172	148	238
CFSM	7.00	7.36	14.3	12.7	11.3	7.69	9.36	9.51	8.72	3.45	3.96	6.24
IN.	8.07	8.21	16.48	14.67	12.17	8.87	10.45	10.96	9.73	3.98	4.56	6.96
AC-FT	35,020	35,640	71,550	63,690	52,830	38,480	45,340	47,570	42,250	17,270	19,800	30,220

CAL YR 1967 TOTAL 218,455 MEAN 599 MAX 5,330 MIN 100 CFSM 7.36 IN 99.03 AC-FT 433,300
 WTR YR 1968 TOTAL 251,908 MEAN 688 MAX 5,330 MIN 148 CFSM 8.45 IN 115.12 AC-FT 499,700

12148500 TOLT RIVER NEAR CARNATION, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	346	650	708	667	290	360	1,020	692	716	493	680	142
2	316	670	842	694	290	360	880	704	728	488	674	147
3	358	730	3,540	922	310	380	750	656	722	530	668	166
4	357	600	2,280	6,070	300	450	700	615	740	587	656	176
5	341	540	1,340	7,110	280	600	760	604	686	525	626	176
6	417	490	983	3,260	280	540	660	662	626	458	545	159
7	487	640	847	2,390	280	490	600	821	576	430	345	151
8	367	650	1,380	1,500	290	460	530	1,010	560	410	226	147
9	340	950	1,190	1,160	310	430	582	1,050	571	369	224	144
10	736	700	1,270	920	340	410	644	996	525	376	219	142
11	747	1,900	1,220	760	540	390	587	905	497	475	219	140
12	665	1,600	980	630	570	380	716	870	470	438	224	140
13	926	1,300	840	570	600	370	788	814	446	394	229	174
14	706	900	750	530	460	370	615	740	466	359	214	168
15	996	740	710	490	390	390	545	604	426	338	214	153
16	805	630	700	450	380	510	525	576	406	324	217	147
17	637	600	640	370	380	1,400	728	571	402	317	210	171
18	639	1,100	714	400	380	1,000	996	650	380	293	217	398
19	650	1,050	616	380	370	800	800	686	355	270	203	430
20	1,120	939	542	360	400	700	650	587	334	276	178	387
21	1,080	891	484	350	380	640	620	626	345	284	168	268
22	1,020	1,430	472	340	370	670	698	740	479	282	159	1,170
23	920	1,160	589	330	360	740	947	770	849	380	161	1,560
24	720	880	1,190	330	350	610	776	764	1,020	493	159	764
25	660	726	1,010	320	350	620	686	598	1,080	555	159	674
26	630	663	772	310	350	680	609	576	728	560	151	484
27	520	685	730	310	370	587	740	598	870	555	176	369
28	470	619	543	310	350	750	710	692	698	545	168	327
29	470	852	468	300	-----	760	752	1,490	668	555	153	502
30	950	810	415	300	-----	910	692	1,640	576	565	144	1,310
31	850	-----	429	300	-----	1,200	-----	807	-----	686	142	-----
TOTAL	20,046	25,915	29,120	33,183	10,290	19,110	21,153	24,154	17,945	13,610	8,728	11,289
MEAN	647	864	939	1,070	368	616	705	779	598	439	282	376
MAX	1,120	1,900	3,540	7,110	600	1,400	1,020	1,640	1,080	686	680	1,560
MIN	258	460	415	300	280	360	525	571	334	270	142	140
CFSM	7.95	10.6	11.5	13.1	4.52	7.57	8.66	9.57	7.35	5.39	3.46	4.62
IN.	9.16	11.84	13.31	15.16	4.70	8.73	9.67	11.04	8.20	6.22	3.99	5.16
AC-FT	39,760	51,400	57,760	65,820	20,410	37,900	41,960	47,910	35,590	27,000	17,310	22,390
CAL YR 1968	TOTAL 255,291	MEAN 698	MAX 3,830	MIN 148	CFSM 8.57	IN 116.67	AC-FT 506,400					
MTR YR 1969	TOTAL 234,543	MEAN 643	MAX 7,110	MIN 140	CFSM 7.50	IN 107.19	AC-FT 465,200					

NOTE.--NO GAGE-HEIGHT RECORD OCT. 19 TO NOV. 19, JAN. 8 TO APR. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,160	273	310	370	806	376	404	463	503	216	178	102
2	1,840	290	360	685	364	449	548	559	203	210	105	105
3	873	305	290	340	685	364	408	565	579	207	164	164
4	625	1,040	370	330	595	343	420	691	479	207	153	147
5	517	848	330	310	550	336	967	663	412	195	146	137
6	454	560	300	309	580	467	1,030	550	427	180	140	600
7	416	280	282	641	689	491	718	420	363	145	126	164
8	595	404	305	289	707	517	600	472	377	161	138	836
9	685	364	360	329	702	432	1,620	702	389	157	138	257
10	610	336	340	312	680	396	1,200	555	387	151	132	211
11	467	315	500	289	652	380	880	476	344	147	128	180
12	404	318	1,040	280	647	392	718	420	363	145	126	164
13	360	299	1,100	392	925	432	620	494	357	147	126	156
14	336	286	1,200	2,080	647	595	526	380	365	143	123	150
15	315	329	800	899	818	729	472	485	457	135	121	144
16	299	339	600	620	1,240	925	428	620	402	134	119	140
17	286	315	560	647	906	625	400	620	314	140	117	208
18	277	309	690	2,290	770	526	408	624	328	130	115	843
19	267	322	680	1,560	663	481	490	408	314	127	114	620
20	289	360	900	1,260	620	449	485	380	307	126	112	444
21	289	499	980	1,110	570	432	458	357	317	141	112	325
22	270	410	1,000	1,080	530	412	490	412	292	132	103	503
23	277	700	950	1,210	503	408	521	432	271	121	108	605
24	273	560	770	925	472	526	610	404	258	121	108	440
25	273	450	640	960	449	424	508	485	253	170	108	372
26	255	400	560	836	428	404	458	472	248	650	107	336
27	283	360	500	932	420	438	432	396	242	635	102	308
28	292	350	460	770	396	400	412	368	252	280	105	289
29	280	340	430	680	-----	392	445	503	239	223	107	258
30	295	330	410	605	-----	368	476	530	228	192	102	235
31	292	-----	390	696	-----	346	-----	432	-----	173	102	-----
TOTAL	14,154	12,495	18,335	23,362	18,287	14,524	18,026	15,218	10,509	6,049	3,923	9,633
MEAN	457	417	591	754	653	469	601	491	353	195	127	321
MAX	1,840	1,060	1,200	2,290	1,240	925	1,620	702	579	650	210	843
MIN	255	255	280	280	396	336	400	357	228	121	102	102
CFSM	5.61	5.12	7.26	9.26	8.02	5.76	7.38	6.03	4.34	2.40	1.56	3.94
IN.	6.47	5.71	8.38	10.68	8.36	6.64	8.24	6.95	4.84	2.76	1.79	4.40
AC-FT	28,070	24,780	36,370	46,340	36,270	28,810	35,750	30,180	21,020	12,000	7,780	19,110
CAL YR 1969	TOTAL 204,446	MEAN 560	MAX 7,110	MIN 140	CFSM 6.88	IN 93.43	AC-FT 405,500					
MTR YR 1970	TOTAL 164,605	MEAN 451	MAX 2,290	MIN 102	CFSM 5.54	IN 75.22	AC-FT 326,500					

NOTE.--NO GAGE GAGE-HEIGHT RECORD NOV. 22 TO JAN. 5.

SNOHOMISH RIVER BASIN

12149000 SNOQUALMIE RIVER NEAR CARNATION, WASH.

LOCATION.--Lat 47°39'58", long 121°55'27", in NW¼ sec. 9, T.25 N., R.7 E., King County, on left bank 40 ft downstream from highway bridge, 1.3 miles (revised) northwest of Carnation, 1.9 miles downstream from Tolt River, and at mile 23.0.

DRAINAGE AREA.--603 sq mi.

PERIOD OF RECORD.--October 1928 to September 1970. Prior to October 1951, published as "near Tolt."

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, unadjusted. Prior to Dec. 20, 1933, nonrecording gage on old bridge at site 100 ft upstream and Dec. 20, 1933, to Sept. 30, 1939, water-stage recorder at present site, at datum 42.96 ft higher.

AVERAGE DISCHARGE.--42 years, 3,771 cfs (84.93 inches per year, 2,732,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, elevation in feet).

Annual maximum discharge (cfs) and peak discharges above base (16,000 cfs), water years 1966-70

Date	Time	Disch.	Elev.	Date	Time	Disch.	Elev.	Date	Time	Disch.	Elev.
May 7, 1966	0030	*12,400	49.91	Dec. 26, 1967	0030	*43,400	57.71	Dec. 4, 1968	0845	*20,900	53.60
				Jan. 21, 1968	1300	34,900	56.69	Jan. 5, 1969	1915	*50,600	58.50
				Feb. 20, 1968	0300	21,600	53.90				
Dec. 14, 1966	0315	*22,700	54.27	June 3, 1968	0100	21,000	53.64	Jan. 23, 1970	1015	*13,400	50.63
Jan. 15, 1967	2100	16,400	51.81								

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	Elev.	Wtr yr	Date	Disch.	Elev.
1966	Sept. 15, 1966			1969	Sept. 11, 1969		
1967	Sept. 28-30, 1967			1970	Aug. 27 to Sept. 3, 1970		
1968	Oct. 1, 1967						

a Minimum daily.

b Part of each day.

Period of record: Maximum discharge, 59,500 cfs Feb. 27, 1932 (elevation, 59.88 ft); maximum elevation observed, 59.93 ft Nov. 13, 1932; minimum discharge, 239 cfs Aug. 21, 1945, but may have been less sometime during period Sept. 13 or 14, 1949; minimum daily, 396 cfs Sept. 24, 1938.

REMARKS.--Records excellent. During water years 1966-70, city of Seattle Water Department diverted an average daily discharge of about 50 cfs above station for municipal use. Several small diversions for irrigation and domestic use above station. Low flow diverted for operation of powerplant at Snoqualmie Falls but returned to river above station. Some pondage at Snoqualmie Falls and some diurnal fluctuation caused by powerplant. Water-quality records for the water years 1968-69 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1316: 1932-33(M). WSP 1446: 1934(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	858	1,510	2,430	2,060	2,970	2,330	6,710	3,110	3,220	3,150	1,420	892
2	870	1,670	4,520	2,540	2,540	2,090	7,350	3,540	3,100	3,400	1,470	871
3	858	2,040	3,740	2,320	2,360	1,930	5,480	5,400	3,060	5,450	1,280	862
4	774	6,440	7,980	2,200	2,200	1,810	6,410	6,980	3,050	7,000	1,290	841
5	1,020	7,820	6,030	2,420	2,380	1,750	4,550	8,440	2,980	5,680	1,240	820
6	3,080	5,510	4,770	6,210	2,590	1,760	4,780	11,100	3,770	4,760	1,180	806
7	3,720	3,740	5,990	10,100	2,810	1,910	5,460	10,200	5,180	4,100	1,130	819
8	2,140	3,060	6,330	8,810	2,620	2,140	5,670	8,020	5,360	3,880	1,170	806
9	1,790	2,700	4,530	6,430	2,870	4,750	5,540	8,230	5,040	3,640	1,130	799
10	1,740	2,460	3,760	5,230	2,880	5,500	6,310	6,960	5,300	3,550	1,090	764
11	1,560	2,590	3,210	5,420	2,880	3,950	8,390	5,360	6,260	3,570	1,030	812
12	1,320	2,600	2,880	6,860	3,500	3,240	7,560	4,800	6,220	3,170	1,030	841
13	1,480	2,200	2,510	10,400	2,930	4,140	5,480	4,540	4,860	3,030	1,020	1,000
14	1,840	2,120	2,300	10,300	2,860	6,030	4,750	4,080	4,640	3,060	1,430	815
15	3,750	2,320	2,100	7,340	2,620	5,480	4,760	3,810	5,040	3,220	1,280	614
16	3,590	3,160	1,910	5,440	2,320	4,660	4,780	4,680	5,800	2,790	1,100	752
17	2,830	2,560	1,870	4,450	2,230	3,730	4,530	3,900	5,880	2,620	996	751
18	3,130	2,240	1,760	3,900	2,160	3,360	3,940	3,480	4,540	2,410	1,030	857
19	5,490	2,400	1,770	3,460	2,130	3,350	3,500	3,550	4,460	2,330	907	941
20	4,070	2,880	1,770	3,000	2,510	3,140	3,360	4,230	4,020	2,200	921	887
21	3,310	3,700	2,260	2,800	3,150	2,960	4,220	5,100	3,370	2,010	883	816
22	2,760	5,600	1,940	2,540	2,820	2,590	3,860	6,010	3,100	1,890	926	786
23	2,360	4,100	1,810	2,430	2,850	2,390	3,740	4,660	2,960	1,840	671	802
24	1,980	3,260	1,770	2,360	2,680	2,310	3,600	4,110	3,190	1,820	783	790
25	1,870	3,010	1,690	2,240	2,400	2,360	3,860	4,800	3,100	1,940	848	775
26	1,650	3,040	1,600	2,210	2,350	2,600	4,360	6,580	2,940	1,760	882	755
27	1,480	3,310	1,720	2,220	2,490	3,410	3,770	6,180	3,080	1,630	965	749
28	1,530	3,160	2,430	2,300	2,630	3,930	3,400	4,420	5,740	1,600	1,210	693
29	1,490	2,800	2,960	2,750	-----	4,620	3,340	4,190	5,000	1,600	1,030	660
30	1,600	2,430	2,490	3,190	-----	6,540	3,240	4,280	3,530	1,480	968	636
31	1,660	-----	2,240	3,430	-----	8,710	-----	3,700	-----	1,470	914	-----
TOTAL	67,600	96,430	95,070	137,760	73,930	109,470	144,900	168,640	127,790	92,050	33,224	24,006
MEAN	2,181	3,114	3,067	4,444	2,400	3,531	4,830	5,440	4,260	2,969	1,072	800
MAX	5,490	7,820	7,980	10,400	3,500	8,710	8,390	11,100	6,260	7,000	1,470	1,000
MIN	774	1,510	1,600	2,060	2,130	1,750	3,240	3,110	2,940	1,470	671	614
CFSM	3.62	5.33	5.09	7.37	4.38	5.86	8.01	9.02	7.06	4.92	1.78	1.33
IN.	4.17	5.95	5.87	8.50	4.56	6.75	8.94	10.40	7.88	5.68	2.05	1.48
AC-FT	134,100	191,300	188,600	273,200	146,600	217,100	287,400	334,500	253,500	182,600	65,900	47,620
CAL YR 1965	TOTAL	1,254,003	MEAN	3,436	MAX	35,500	MIN	642	CFSM	5.70	IN	77.36
WTR YR 1966	TOTAL	1,170,870	MEAN	3,208	MAX	11,100	MIN	614	CFSM	5.32	IN	72.23
									AC-FT	2,487,000		

12149000 SNOQUALMIE RIVER NEAR CARNATION, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	614	2,010	9,790	7,200	5,240	4,310	2,320	2,310	4,350	2,950	1,010	604
2	717	1,810	7,250	5,760	4,890	3,120	2,310	2,220	4,350	3,080	985	557
3	980	1,690	5,770	8,740	4,790	3,120	2,340	2,300	6,810	3,310	939	634
4	788	1,560	5,110	8,120	9,780	2,850	2,440	2,390	5,480	3,170	914	677
5	706	1,530	4,960	6,970	9,460	2,620	2,420	2,650	5,980	2,940	903	655
6	671	1,860	4,500	5,480	6,320	2,570	2,220	3,120	6,520	2,440	920	448
7	694	1,720	4,210	4,730	5,040	2,420	2,230	3,850	6,020	2,210	893	637
8	1,640	1,580	3,680	5,400	4,340	2,360	2,240	4,450	4,840	2,090	840	637
9	1,560	1,710	3,220	7,310	4,000	3,010	2,380	5,500	4,260	1,970	820	626
10	1,160	3,890	3,520	6,130	4,640	2,570	2,300	4,460	4,110	1,710	840	740
11	934	2,690	5,700	9,640	4,500	2,290	2,100	3,880	4,030	1,740	830	975
12	923	3,320	8,050	7,590	4,220	2,120	2,110	3,760	3,890	1,950	820	1,290
13	1,010	3,330	17,000	9,840	6,320	2,070	2,370	3,300	4,300	2,030	800	1,050
14	953	5,300	19,400	12,900	5,700	1,950	2,300	3,130	5,010	1,950	790	800
15	886	6,000	9,680	15,700	4,930	2,080	2,100	3,280	5,640	1,730	770	700
16	854	5,050	9,680	12,400	4,460	2,710	2,050	5,040	5,830	1,610	750	640
17	942	4,740	12,300	8,000	3,290	3,590	2,040	6,810	4,070	1,540	740	610
18	1,080	3,870	12,300	6,280	7,570	3,330	2,040	6,530	4,290	1,500	720	600
19	1,280	3,480	10,100	9,000	5,860	2,890	2,290	6,150	5,970	1,420	700	530
20	5,440	3,340	12,900	14,200	4,780	2,890	2,190	7,020	6,760	1,390	670	570
21	3,370	3,130	8,800	9,540	4,180	3,240	2,280	8,560	6,010	1,350	680	560
22	4,020	2,080	6,450	7,000	3,720	3,870	2,180	8,150	5,490	1,320	700	550
23	9,560	2,520	5,160	5,680	3,320	7,130	2,120	7,028	4,410	1,270	670	540
24	7,750	2,390	4,590	4,840	3,190	5,510	2,170	5,400	4,250	1,290	640	530
25	4,310	6,020	4,630	4,210	3,080	4,440	2,150	4,470	4,390	1,260	620	515
26	3,290	7,120	3,820	3,850	2,990	3,820	2,240	4,120	4,500	1,250	589	494
27	4,140	4,970	3,340	5,730	2,790	3,510	2,250	4,320	4,290	1,200	569	484
28	3,390	5,550	3,110	11,800	3,110	3,100	2,630	4,400	3,730	1,150	558	462
29	2,480	5,490	4,380	9,890	-----	3,020	2,540	6,130	3,550	1,140	545	452
30	3,000	8,810	4,740	8,400	-----	2,800	2,380	5,420	3,400	1,010	545	484
31	2,450	-----	4,390	6,310	-----	2,610	-----	4,290	-----	1,020	873	-----
TOTAL	71,432	109,340	222,330	248,840	138,710	98,490	67,750	144,830	152,910	56,010	23,443	19,251
MEAN	2,304	3,645	7,172	8,027	4,954	3,177	2,258	4,672	5,097	1,807	763	642
MAX	9,560	8,810	19,400	15,700	9,780	7,130	2,630	8,560	6,810	3,310	1,010	1,290
MIN	614	1,530	3,110	3,850	2,790	1,950	2,040	2,220	3,400	1,010	545	452
CFSM	3.82	6.04	11.9	13.3	8.22	5.27	3.74	7.75	8.45	3.00	1.27	1.06
IN.	4.41	6.75	13.72	15.35	8.56	6.08	4.18	8.93	9.43	3.46	1.46	1.18
AC-FT	141,700	216,900	441,000	493,600	275,100	195,400	134,400	287,300	303,300	111,100	46,900	38,180

CAL YR 1966	TOTAL	1,314,892	MEAN	3,602	MAX	19,400	MIN	614	CFSM	5.97	IN	81.12	AC-FT	2,608,000
WTR YR 1967	TOTAL	1,353,554	MEAN	3,708	MAX	19,400	MIN	452	CFSM	6.15	IN	85.50	AC-FT	2,685,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	774	7,510	2,520	5,220	3,300	4,100	4,170	6,440	7,790	2,480	896	1,780		
2	1,620	4,840	3,240	4,500	3,420	4,000	4,130	4,800	17,000	2,420	871	1,670		
3	1,550	3,620	3,960	3,850	5,840	3,850	3,730	4,230	16,900	2,420	857	1,510		
4	3,110	2,910	3,440	3,120	11,300	3,990	3,370	3,940	4,400	2,360	849	1,370		
5	1,600	2,460	3,100	3,350	8,040	5,180	3,920	4,540	6,390	2,270	827	1,270		
6	1,510	2,140	2,670	3,050	5,760	4,730	3,830	4,300	5,610	2,100	805	1,180		
7	2,170	1,970	2,430	2,840	4,680	3,780	3,940	3,890	4,700	1,950	758	1,100		
8	2,980	1,990	2,190	2,820	4,150	3,200	3,530	3,670	4,390	1,780	731	1,060		
9	1,630	2,540	2,540	3,120	3,660	2,740	3,170	3,940	4,060	1,700	710	1,010		
10	1,260	7,560	5,360	3,350	3,510	2,490	3,210	4,550	3,820	1,570	694	973		
11	3,690	7,490	10,500	2,910	3,210	2,320	4,150	5,350	3,700	1,500	685	952		
12	4,810	4,460	5,860	2,670	3,060	2,300	4,020	5,430	3,480	1,760	678	976		
13	3,830	3,510	4,140	4,100	2,880	2,200	3,480	4,340	3,260	1,870	655	930		
14	7,620	3,150	3,290	6,890	2,710	2,100	3,680	3,790	5,610	1,570	754	1,010		
15	4,290	3,580	2,860	8,060	2,490	2,690	5,040	3,690	3,140	2,010	1,460	3,140		
16	2,830	4,230	2,630	6,850	2,360	4,090	4,500	3,510	2,970	1,930	1,370	8,900		
17	2,020	3,400	2,390	5,180	2,270	4,020	3,980	3,910	2,950	1,580	1,050	9,000		
18	1,740	2,860	2,210	4,320	6,050	3,440	3,620	4,680	2,960	1,420	1,070	11,700		
19	2,840	2,720	2,010	8,770	16,600	2,940	3,600	5,730	3,080	1,350	1,360	6,900		
20	2,030	2,350	1,830	17,000	19,800	2,690	3,310	8,110	2,870	1,490	1,320	4,980		
21	2,620	2,110	1,770	28,800	12,500	2,528	3,050	6,870	2,560	1,688	1,190	3,760		
22	4,430	2,020	4,480	17,500	11,700	2,370	2,840	5,110	2,710	1,430	1,110	3,010		
23	6,870	1,940	10,000	8,990	11,000	2,460	2,960	5,840	3,180	1,310	1,220	3,540		
24	4,130	5,200	15,700	9,030	11,700	3,040	3,310	4,840	2,770	1,230	2,610	3,410		
25	3,690	4,560	34,400	8,330	8,090	2,950	3,550	4,560	2,670	1,180	2,560	2,650		
26	3,220	3,220	33,200	4,220	6,260	3,010	4,880	4,950	2,730	1,140	4,180	2,240		
27	5,660	2,660	18,300	4,980	5,400	4,560	4,100	4,290	3,100	1,120	3,960	1,980		
28	12,700	2,360	12,400	4,190	4,740	8,150	4,080	3,890	4,460	1,080	4,360	1,800		
29	6,880	3,010	8,500	3,730	4,300	7,440	4,070	3,850	3,890	1,050	3,460	1,660		
30	7,620	2,740	6,470	3,510	-----	6,830	4,910	3,580	2,960	1,010	2,840	1,520		
31	8,440	-----	5,360	3,370	-----	5,120	-----	3,300	-----	953	2,040	-----		
TOTAL	119,486	105,310	220,150	200,940	190,780	115,500	118,150	143,700	142,110	50,913	47,630	86,981		
MEAN	3,854	3,351	7,102	6,482	6,579	3,726	3,938	4,635	4,737	1,642	1,536	2,899		
MAX	12,700	7,690	34,400	28,800	19,800	8,150	6,910	8,110	17,000	2,480	4,360	11,700		
MIN	774	1,940	1,770	2,670	2,270	2,100	2,840	3,000	2,560	993	655	930		
CFSM	6.39	5.82	11.8	10.7	10.9	6.18	6.53	7.69	7.86	2.72	2.55	4.81		
IN.	7.37	6.50	13.58	12.40	11.77	7.13	7.29	8.87	8.77	3.14	2.94	5.37		
AC-FT	237,000	208,900	436,700	398,600	378,400	229,100	234,400	285,000	281,900	101,000	94,470	172,500		
CAL YR 1967	TOTAL	1,395,380	MEAN	3,823	MAX	34,400	MIN	452	CFSM	6.34	IN	86.08	AC-FT	2,768,000
WTR YR 1968	TOTAL	1,541,650	MEAN	4,212	MAX	34,400	MIN	455	CFSM	6.99	IN	95.11	AC-FT	3,058,000

12149000 SNOQUALMIE RIVER NEAR CARNATION, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,440	3,250	4,720	2,930	1,950	1,780	6,720	4,370	6,510	3,370	1,570	679
2	1,340	2,870	4,320	3,640	2,020	1,770	5,870	4,260	6,890	3,240	1,550	684
3	1,220	3,700	11,000	3,460	2,260	1,840	4,850	3,920	7,290	3,220	1,520	765
4	1,360	3,080	18,400	12,000	2,260	1,870	4,050	3,610	7,710	3,610	1,480	841
5	1,710	2,560	9,540	36,400	2,290	2,550	3,970	3,500	7,820	3,410	1,550	903
6	2,010	2,240	6,600	31,700	2,120	3,150	4,030	3,940	6,850	2,830	1,700	855
7	3,350	2,040	5,310	18,900	2,060	2,680	3,700	5,090	5,810	2,570	1,310	743
8	2,660	2,430	11,100	2,380	2,260	2,360	3,370	7,400	5,470	2,440	1,240	725
9	2,100	5,760	5,990	8,280	3,070	2,180	3,390	8,990	5,810	2,330	1,040	690
10	2,890	5,050	6,350	6,910	2,980	2,050	3,940	9,470	5,830	2,290	1,020	678
11	4,610	7,960	6,720	5,970	4,320	1,940	3,620	8,590	5,450	2,430	993	668
12	4,010	12,200	5,690	5,150	4,720	1,880	4,090	8,000	4,970	2,490	976	672
13	4,910	8,090	4,720	4,580	3,860	1,840	5,410	7,840	4,430	2,260	981	747
14	4,490	5,990	4,260	4,220	3,250	1,820	4,400	7,450	4,410	2,020	959	925
15	4,750	4,810	3,860	3,860	2,930	1,820	3,790	6,240	3,990	1,870	940	869
16	5,820	4,110	4,200	3,640	2,910	2,110	3,460	5,630	3,820	1,770	964	770
17	4,310	3,520	3,700	3,430	2,900	4,770	3,610	5,310	3,610	1,710	951	809
18	4,110	3,860	3,880	3,180	2,790	4,120	6,300	5,690	3,730	1,630	916	1,650
19	3,610	5,420	3,520	3,010	2,680	4,890	6,330	6,330	3,590	1,570	899	1,850
20	6,220	5,230	3,050	2,840	2,550	4,260	5,450	5,730	3,180	1,560	861	2,300
21	6,540	5,320	2,760	2,700	2,290	3,730	4,530	6,050	2,780	1,560	829	1,800
22	5,290	8,470	2,570	2,550	2,200	3,630	4,400	7,190	2,900	1,470	798	3,210
23	4,640	7,540	2,840	2,390	2,110	4,530	6,540	8,000	4,320	1,540	789	7,720
24	4,350	5,660	5,150	2,290	2,020	3,860	6,640	8,590	7,380	1,630	775	6,630
25	4,030	4,480	5,410	2,230	1,940	3,390	5,170	7,190	7,190	1,670	777	4,780
26	3,890	3,780	4,240	2,260	1,880	3,390	4,280	5,850	5,750	1,640	758	4,080
27	3,050	3,980	3,630	2,170	1,860	4,260	3,880	5,730	4,810	1,560	774	2,790
28	2,460	2,400	2,070	2,090	1,790	4,450	4,500	5,510	4,550	1,520	797	2,270
29	2,590	4,510	2,570	2,000	-----	4,300	5,110	6,510	4,280	1,530	800	2,500
30	3,490	5,860	1,990	1,900	-----	4,930	4,720	13,300	3,920	1,480	749	5,680
31	4,360	-----	1,900	1,900	-----	6,600	-----	8,460	-----	1,580	707	-----
TOTAL	112,010	147,970	158,290	199,480	72,380	100,750	141,030	203,740	155,130	65,800	31,653	60,303
MEAN	3,613	4,932	5,106	6,441	2,385	3,250	4,701	6,572	5,171	2,123	1,028	2,010
MAX	6,540	12,200	18,400	36,400	4,720	6,600	7,020	13,300	7,820	3,610	1,700	7,720
MIN	1,220	2,040	1,900	1,900	1,800	1,770	3,370	3,500	2,780	1,470	707	668
CF5H	5.99	8.18	8.47	10.7	4.29	5.39	7.80	10.9	8.58	3.52	1.70	3.33
IN-	6.91	9.13	9.77	12.32	4.47	6.22	8.70	12.57	9.57	4.06	1.97	3.72
AC-FT	222,200	293,500	314,000	396,100	143,600	199,800	279,700	404,100	307,700	130,500	63,180	119,600
CAL YR 1968	TOTAL 1,514,974			MEAN 4,139	MAX 28,800	MIN 655	CF5H 6.66	IN 93.46	AC-FT	3,005,000		
WTR YR 1969	TOTAL 1,448,936			MEAN 3,730	MAX 36,400	MIN 668	CF5H 6.58	IN 89.39	AC-FT	2,874,000		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,450	1,420	1,730	2,280	4,810	2,230	2,330	3,080	4,690	1,730	1,030	530
2	8,150	1,330	1,630	2,140	4,410	2,110	4,260	3,220	6,520	1,630	1,110	522
3	6,380	1,350	1,570	2,030	4,090	2,080	3,550	3,750	7,500	1,820	1,160	611
4	4,480	2,890	1,810	1,910	3,710	1,990	3,060	4,600	7,100	2,220	1,030	1,040
5	3,490	7,600	1,840	1,790	3,260	1,880	4,730	5,420	5,580	2,140	977	927
6	2,880	4,270	1,630	1,760	3,130	1,970	6,480	4,560	5,760	1,840	923	1,880
7	2,520	3,550	1,530	1,680	3,130	5,480	5,620	3,730	5,800	1,640	886	4,920
8	3,100	2,810	1,510	1,660	3,510	4,200	4,350	3,390	4,180	1,610	901	3,430
9	4,450	2,430	1,630	1,780	3,760	3,170	7,310	4,730	3,730	1,660	904	2,570
10	4,650	2,190	1,660	1,630	4,030	2,720	11,500	4,030	4,220	1,500	836	1,790
11	3,550	2,020	2,050	1,580	4,070	2,470	7,410	3,310	3,460	1,400	793	1,440
12	2,880	1,990	5,240	1,660	4,070	2,390	5,700	2,880	2,860	1,320	776	1,230
13	2,460	1,990	5,480	9,750	4,860	2,720	4,690	2,790	2,860	1,270	769	1,100
14	2,170	1,810	7,810	6,930	4,370	3,060	3,980	2,490	3,170	1,220	764	997
15	1,970	1,810	6,280	6,560	4,350	5,210	3,480	2,640	3,480	1,170	727	917
16	1,790	2,050	4,690	5,030	8,150	5,860	3,130	4,370	3,760	1,170	698	887
17	1,670	1,900	4,000	4,030	7,440	5,130	2,880	6,220	3,030	1,200	685	903
18	1,580	1,780	4,110	8,880	6,260	4,070	2,770	4,830	3,400	1,110	667	2,820
19	1,510	1,730	4,600	11,000	5,090	3,480	3,300	4,140	3,840	1,080	625	4,340
20	1,500	1,750	5,680	11,300	4,330	3,100	3,820	3,600	3,530	1,050	613	3,530
21	1,570	2,590	6,080	9,560	3,850	2,890	3,330	3,350	4,000	1,030	602	2,540
22	1,490	2,510	6,970	10,400	3,460	2,670	3,010	3,710	3,980	980	597	2,360
23	1,490	2,640	7,770	12,300	3,190	2,470	2,930	4,140	3,390	902	589	3,810
24	1,470	4,540	6,240	9,120	2,940	3,170	3,760	4,270	2,910	866	583	2,540
25	1,440	3,100	4,860	8,610	2,760	2,840	3,620	4,900	2,660	944	590	2,000
26	1,350	2,550	4,140	7,250	2,600	2,590	3,150	4,220	2,550	1,850	568	1,720
27	1,360	2,250	3,660	7,410	2,490	2,440	2,840	4,550	2,640	2,720	555	1,520
28	1,440	2,050	3,170	6,300	2,380	2,770	2,600	3,750	2,360	1,870	548	1,380
29	1,390	1,910	2,860	5,210	-----	2,770	2,620	3,510	2,120	1,390	539	1,270
30	1,430	1,820	2,640	4,410	-----	2,520	3,080	5,300	2,000	1,200	528	1,170
31	1,420	-----	2,440	4,160	-----	2,250	-----	4,240	-----	1,100	524	-----
TOTAL	86,460	74,630	117,310	170,110	114,500	94,700	125,290	126,020	117,080	44,652	23,097	56,494
MEAN	2,790	2,488	3,784	5,487	4,089	3,055	4,176	4,065	3,903	1,444	745	1,890
MAX	9,450	7,600	7,810	12,300	8,150	5,860	11,500	6,220	7,500	2,720	1,160	4,920
MIN	1,350	1,330	1,510	1,580	2,340	1,860	2,330	2,490	2,000	866	524	522
CF5H	6.63	6.13	6.28	9.10	6.78	5.07	6.93	6.74	6.47	2.39	1.24	3.13
IN-	5.34	4.60	7.24	10.49	7.06	5.84	7.73	7.77	7.22	2.75	1.42	3.50
AC-FT	171,500	148,000	232,700	337,400	227,100	187,800	248,500	250,000	232,200	88,570	45,810	112,500
CAL YR 1969	TOTAL 1,309,086			MEAN 3,587	MAX 36,400	MIN 668	CF5H 5.95	IN 80.76	AC-FT	2,597,000		
WTR YR 1970	TOTAL 1,150,563			MEAN 3,152	MAX 12,300	MIN 522	CF5H 5.23	IN 70.98	AC-FT	2,282,000		

12150800 SNOHOMISH RIVER NEAR MONROE, WASH.

LOCATION (REVISED).--Lat 47°49'52", long 122°02'50", in NE¼NW¼ sec.16, T.27 N., R.6 E., Snohomish County, on left bank 150 ft upstream from bridge on State Highway 202, 0.1 mile downstream from confluence of Snoqualmie and Skykomish Rivers, 3.6 miles southwest of Monroe, and 6 miles south of Snohomish.

DRAINAGE AREA.--1,537 sq mi.

PERIOD OF RECORD.--February 1963 to September 1970. Annual maximums (stage only), water years 1932, 1934, 1951, 1960, 1962-63, published in WSP 1932. Approximate annual maximum stages for water years 1921, 1949-50, 1952-59, 1961 are on file in Tacoma district office.

GAGE.--Water-stage recorder. Datum of gage is 13.25 ft above mean sea level. Prior to February 1963, crest-stage gage only at site about 800 ft downstream and Feb. 8, 1963, to May 27, 1964, water-stage recorder at site 100 ft upstream, both at present datum.

AVERAGE DISCHARGE.--7 years, 9,821 cfs (86.77 inches per year, 7,115,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (33,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 7, 1966	0230	*34,100	10.19	Dec. 26, 1967	0800	*73,100	17.68	Dec. 4, 1968	0200	50,000	13.59
				Jan. 21, 1968	0630	69,600	17.10	Jan. 5, 1969	1430	*72,100	17.52
Dec. 13, 1966	2100	*54,900	14.94	Feb. 4, 1968	1300	34,800	10.54	May 30, 1969	1100	39,100	11.39
Dec. 20, 1966	0630	40,300	11.63	Feb. 20, 1968	0300	46,700	13.04				
Jan. 15, 1967	2000	43,600	12.39	June 2, 1968	1930	56,800	15.07	Jan. 23, 1970	1000	*32,700	9.96
Jan. 20, 1967	0330	35,300	10.46	Sept. 17, 1968	2200	35,400	10.66				
Oct. 28, 1967	0600	55,400	14.69	Nov. 12, 1968	0230	37,100	10.95				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 30, 1966	1,550	-	1967	Sept. 2, 1969	1,650	1.10
1967	Sept. 29, 1967	1,140	.65	1970	Sept. 1, 1970	1,290	.86
1968	Oct. 1, 1967	1,300	.80				

a Minimum daily.

Period of record: Maximum discharge, 73,100 cfs Dec. 26, 1967 (gage height, 17.68 ft); maximum gage height, 35.8 ft Feb. 10, 1951, datum then in use; minimum discharge, 1,140 cfs Sept. 29, 1967 (gage height, 0.65 ft).

Flood in December 1921 reached a discharge of approximately 180,000 cfs; floods in November or December 1897 and November 1906 are believed to be higher.

REMARKS.--Records excellent except those for periods of no gage-height record, which are good. Some regulation by powerplant above station at Snoqualmie Falls (40 miles upstream) and by Spada Lake (30 miles upstream). Minor diversions for irrigation returned to river above gage. During water years 1966-70, the city of Seattle Water Department diverted an average daily discharge of about 50 cfs above station for municipal use and the city of Everett diverted an average daily discharge of about 150 cfs above station for municipal use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,050	3,420	6,010	5,040	6,790	5,740	18,200	7,410	9,200	8,620	3,730	2,200
2	2,050	3,680	11,700	6,040	5,900	5,140	18,500	8,090	8,620	9,170	3,710	2,150
3	2,000	4,850	10,600	5,640	5,360	4,710	14,500	12,500	8,190	11,700	3,490	2,100
4	2,000	16,200	20,800	5,260	5,070	4,440	12,200	17,400	7,700	16,000	3,420	2,050
5	2,750	20,600	17,400	5,120	5,360	4,200	11,800	21,600	7,540	13,700	3,380	2,050
6	8,520	15,000	13,500	12,500	5,850	4,140	12,300	29,700	9,690	12,100	3,200	2,000
7	9,320	9,830	15,800	22,000	6,880	4,320	14,000	30,000	14,100	10,600	3,150	2,000
8	5,380	7,630	16,500	20,700	7,350	4,600	15,200	23,400	15,400	10,400	3,150	1,950
9	4,760	6,940	15,900	17,000	7,220	11,100	15,000	23,300	14,800	10,000	3,050	1,900
10	4,340	6,240	9,860	12,700	7,160	13,700	16,900	20,100	14,500	9,550	2,950	1,900
11	3,750	6,280	8,290	12,100	6,610	10,200	21,800	15,300	17,600	9,550	2,850	1,950
12	3,420	6,320	7,190	14,500	7,730	8,110	20,800	13,300	18,800	8,590	2,750	1,950
13	3,380	5,510	6,320	27,700	6,640	9,240	15,400	12,500	15,200	8,190	2,900	2,100
14	3,820	5,120	5,610	27,900	6,260	14,000	12,800	11,000	15,200	8,290	3,450	1,900
15	6,580	6,620	5,140	19,800	5,740	14,000	12,300	9,830	15,400	8,860	3,100	1,700
16	7,280	10,800	4,730	14,200	5,190	12,400	12,400	11,000	17,400	7,860	2,800	1,800
17	5,610	8,080	4,440	11,000	4,970	9,830	11,900	10,200	17,800	7,250	2,650	1,750
18	6,010	6,580	4,200	9,300	4,880	8,510	10,600	8,890	14,300	6,580	2,600	2,000
19	10,600	7,060	4,340	8,020	4,730	8,490	9,340	8,890	13,200	6,290	2,400	2,050
20	9,140	9,170	4,410	6,910	4,950	7,820	8,590	10,700	12,100	5,850	2,400	1,950
21	7,580	12,900	5,380	6,320	6,440	6,970	8,960	13,200	10,000	5,360	2,350	1,850
22	6,260	17,600	5,070	5,740	6,210	6,200	8,660	15,600	9,000	5,090	2,350	1,800
23	5,410	13,400	4,530	5,480	6,350	5,610	8,450	12,700	8,720	4,900	2,100	1,900
24	4,660	9,720	4,370	5,260	6,010	5,360	8,190	10,900	9,000	4,780	2,150	1,850
25	4,230	8,590	4,160	4,920	5,560	5,360	8,830	12,200	8,890	5,510	2,200	1,800
26	3,770	7,860	3,930	4,880	5,410	6,010	10,000	17,500	8,160	4,950	2,300	1,750
27	3,460	8,520	4,090	4,710	5,900	7,600	9,030	17,700	8,490	4,460	2,600	1,750
28	3,200	8,160	3,440	4,920	6,320	9,380	8,060	13,600	14,000	4,300	3,000	1,650
29	3,400	7,050	7,100	5,670	-----	11,400	7,730	11,900	14,500	4,230	2,700	1,600
30	3,640	6,150	6,440	6,850	-----	16,600	7,760	12,100	10,000	4,070	2,450	1,550
31	3,910	-----	5,560	7,700	-----	23,100	-----	10,700	-----	3,930	2,300	-----
TOTAL	152,280	246,160	248,810	325,880	168,840	268,300	370,200	493,210	367,300	240,730	87,630	56,950
MEAN	4,912	8,872	8,026	10,510	6,030	8,655	12,340	14,620	12,240	7,765	2,827	1,888
MAX	10,600	20,600	20,800	27,900	7,730	23,100	21,800	30,000	18,800	16,000	3,730	2,200
MIN	2,000	3,420	3,930	4,710	4,730	4,140	7,730	7,410	7,540	3,930	2,100	1,550
CFSM	3.20	5.77	5.22	6.84	3.92	5.63	8.03	9.51	7.96	5.05	1.84	1.23
IN.	3.69	6.44	6.02	7.89	4.09	6.49	8.96	10.97	8.89	5.83	2.12	1.38
AC-FT	302,000	527,900	493,500	646,400	334,900	532,200	734,300	898,900	728,500	477,500	173,800	113,000
CAL YR 1965	TOTAL 3,240,940	MEAN 8,879	MAX 62,500	MIN 1,900	CFSM 5.78	IN 78.44	AC-FT 6,428,000					
WTR YR 1966	TOTAL 3,006,290	MEAN 8,236	MAX 30,000	MIN 1,950	CFSM 5.36	IN 72.76	AC-FT 5,963,000					

NOTE.--NO GAGE-HEIGHT RECORD AUG. 6 TO SEPT. 30.

12150800 SNOHOMISH RIVER NEAR MONROE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,700	5,280	26,100	17,200	13,500	10,400	5,560	5,560	13,000	10,900	3,000	1,650
2	2,200	4,650	20,200	14,500	12,000	8,720	5,340	5,510	18,700	11,600	2,900	1,600
3	2,250	4,200	15,900	22,000	12,800	7,570	5,310	5,610	20,200	12,500	2,700	1,850
4	1,950	3,830	13,900	21,000	25,300	6,570	5,670	6,150	17,400	12,200	2,400	1,700
5	1,800	3,760	13,300	17,500	25,300	6,040	5,770	7,000	18,200	10,800	2,600	1,500
6	1,700	4,840	11,700	13,600	17,200	5,800	5,480	8,420	20,700	9,440	2,600	1,500
7	2,300	4,360	10,600	11,000	13,400	5,560	5,310	10,600	19,800	8,180	2,500	1,450
8	3,700	4,010	9,200	13,000	11,300	5,540	5,540	13,600	16,300	7,860	2,500	1,400
9	3,850	3,940	7,940	15,500	10,100	7,960	5,770	15,500	14,300	7,440	2,400	1,400
10	2,700	7,380	8,000	14,500	11,000	6,940	5,690	13,100	13,100	6,730	2,300	1,600
11	2,300	6,320	12,800	25,000	11,300	6,100	5,260	10,900	12,000	6,760	2,300	2,250
12	2,300	6,580	19,900	19,000	11,000	5,560	5,140	10,200	12,300	7,670	2,200	3,100
13	2,400	7,320	48,300	23,000	16,800	5,240	5,670	8,960	13,300	6,190	2,200	2,460
14	2,250	12,200	42,200	28,500	16,000	4,810	5,560	8,390	15,700	7,630	2,150	1,910
15	2,100	15,300	28,900	38,900	13,200	5,040	5,140	8,690	18,500	7,220	2,100	1,680
16	2,000	12,700	32,400	33,700	11,800	6,580	4,940	13,100	20,100	6,790	2,000	1,520
17	2,400	11,700	34,800	29,300	12,200	9,000	4,910	18,600	21,100	6,580	1,950	1,440
18	2,500	9,500	35,300	17,000	17,500	9,230	4,840	18,200	22,500	6,210	1,900	1,430
19	5,000	3,320	23,000	23,000	11,000	7,100	5,110	19,200	21,700	5,740	1,900	1,400
20	12,900	7,990	37,400	33,000	11,600	7,030	5,080	20,200	24,000	5,510	1,850	1,340
21	8,350	7,830	26,900	25,200	10,000	7,570	5,340	25,000	22,500	5,540	1,800	1,340
22	7,990	7,220	19,500	18,600	8,890	9,060	5,310	25,000	19,400	5,360	1,800	1,330
23	22,400	6,410	15,000	14,700	7,960	18,900	5,080	22,000	16,000	5,100	1,750	1,300
24	21,400	6,910	13,000	12,100	7,380	15,600	5,060	17,000	15,200	5,010	1,700	1,270
25	12,800	13,900	12,000	10,300	7,220	12,000	5,280	13,200	16,000	4,700	1,650	1,200
26	9,520	19,000	10,300	9,130	6,940	9,900	5,510	12,200	16,400	4,530	1,600	1,190
27	10,400	12,600	8,860	11,700	6,440	8,660	5,340	12,500	15,600	4,290	1,550	1,190
28	8,000	11,400	7,900	27,200	6,790	7,400	6,410	13,500	19,700	4,150	1,550	1,180
29	8,580	14,400	10,700	25,000	6,190	6,190	6,190	13,200	14,900	3,700	1,400	1,150
30	8,290	21,400	11,800	22,800	6,610	5,900	16,100	12,300	3,400	1,400	1,400	1,210
31	6,350	-----	10,500	17,000	-----	6,100	-----	12,900	-----	3,200	1,500	-----

TOTAL	182,580	265,850	606,990	619,830	349,420	247,200	162,910	414,090	512,700	215,010	64,300	46,760
MEAN	5,880	8,662	19,560	19,990	12,440	7,974	5,430	13,360	17,090	6,730	2,074	1,560
MAX	22,400	21,400	48,300	38,900	25,300	18,900	6,490	25,000	24,000	12,500	3,000	3,100
MIN	1,700	3,760	7,940	9,130	6,440	4,910	4,840	5,510	12,000	3,200	1,400	1,150
CFSN	3.83	5.77	12.7	13.0	6.12	5.19	3.53	8.69	11.1	4.51	1.35	1.01
IN.	4.42	6.43	14.69	15.00	8.46	5.98	3.94	10.02	12.41	5.20	1.56	1.13
AC-FT	362,100	527,300	1,204M	1,229M	693,100	490,300	323,100	821,300	1,017M	426,500	127,500	92,750

CAL YR 1967 TOTAL 3,394,460 MEAN 9,300 MAX 48,300 MIN 1,550 CFSN 6.05 IN 82-16 AC-FT 6,733,000
WTR YR 1968 TOTAL 3,687,640 MEAN 10,100 MAX 48,300 MIN 1,150 CFSN 6.57 IN 89-25 AC-FT 7,314,000

M EXPRESSED IN THOUSANDS.

NOTE.--NO GAGE-HEIGHT RECORD JULY 29 TO SEPT. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,960	24,400	6,700	13,500	7,420	11,100	10,100	16,600	16,900	7,570	2,710	4,200
2	3,990	19,900	8,440	11,700	7,810	11,000	9,520	12,700	46,000	7,510	2,570	4,010
3	4,250	11,900	10,900	9,830	13,700	10,600	8,960	10,900	43,200	7,640	2,530	3,640
4	7,400	9,470	9,470	11,000	11,100	8,050	11,200	22,800	17,400	7,840	2,950	3,330
5	4,750	7,690	8,350	8,170	22,600	14,300	9,020	11,700	19,700	7,780	2,370	3,130
6	4,200	6,670	7,090	7,300	15,000	14,100	9,270	10,600	16,800	7,270	2,330	2,960
7	6,560	5,830	6,250	6,670	11,900	10,700	8,990	10,100	14,000	7,000	2,180	2,800
8	8,500	5,770	5,620	6,580	10,200	9,900	8,200	8,600	12,700	6,140	2,470	2,870
9	5,200	7,360	6,730	7,180	9,020	7,900	7,450	9,270	11,700	5,830	1,990	2,570
10	3,990	17,600	13,100	7,930	8,170	7,100	7,300	11,000	10,200	5,380	1,970	2,450
11	7,700	22,200	26,400	6,600	7,690	6,500	8,880	13,100	10,900	5,050	1,960	2,410
12	14,100	13,400	16,600	6,160	7,210	6,200	8,960	14,000	10,100	5,620	1,920	2,450
13	11,400	11,200	9,400	6,760	6,000	7,960	12,000	9,440	10,900	5,400	1,840	2,700
14	20,200	9,160	8,740	16,600	6,160	6,580	7,810	9,870	9,520	5,080	1,990	2,530
15	14,200	10,600	7,480	28,200	5,650	6,820	11,000	9,520	8,740	5,560	3,050	9,260
16	8,820	11,200	6,790	18,600	5,220	9,940	10,600	9,200	8,350	5,420	3,530	22,400
17	6,580	9,720	8,160	13,600	4,980	10,500	9,240	10,100	8,380	4,750	2,730	24,600
18	5,480	9,100	12,100	12,000	6,160	8,230	12,100	10,900	13,300	4,750	2,750	30,200
19	7,480	7,510	5,100	22,600	4,700	7,630	7,700	15,500	9,410	4,060	3,160	19,500
20	6,460	6,610	4,720	46,900	42,800	6,850	8,840	21,200	8,780	6,880	3,150	13,300
21	8,220	5,860	4,480	63,400	33,100	6,370	7,180	20,000	7,810	4,980	2,940	10,000
22	15,700	5,320	7,930	46,700	31,500	5,950	6,670	18,500	7,840	4,250	2,670	8,020
23	22,800	5,150	25,100	11,710	12,900	5,740	7,240	13,500	8,170	4,680	2,880	6,500
24	15,000	9,510	48,000	25,600	36,800	7,240	7,810	13,500	8,170	4,680	4,920	8,410
25	13,100	11,100	64,700	24,000	29,300	7,120	8,200	12,700	8,260	3,460	5,350	6,880
26	11,500	7,810	70,700	17,700	18,400	7,120	11,100	13,100	8,820	3,400	7,660	6,010
27	19,200	6,550	54,400	13,900	15,000	9,460	10,300	12,000	11,000	3,330	8,820	5,250
28	47,200	6,770	38,300	11,200	12,900	17,500	9,830	19,900	13,300	3,200	8,440	4,780
29	27,200	7,240	26,400	9,760	11,700	17,600	13,400	11,000	11,800	3,110	7,270	4,420
30	22,900	7,150	19,600	6,570	-----	16,800	16,500	9,940	8,880	2,980	5,620	4,110
31	27,400	-----	15,200	7,900	-----	12,500	-----	9,100	-----	2,860	4,680	-----

TOTAL	383,640	292,600	556,770	517,920	489,790	295,350	273,420	384,150	405,060	159,900	110,590	227,160
MEAN	12,380	9,430	17,950	16,710	15,770	9,520	8,570	12,360	13,000	5,150	3,567	7,572
MAX	47,200	24,400	70,700	63,400	42,800	17,600	16,580	21,200	46,000	7,930	8,820	30,200
MIN	1,960	5,150	4,480	6,160	4,980	5,680	6,670	8,850	7,810	2,860	1,840	2,370
CFSN	8.05	6.35	11.7	10.9	11.0	6.20	5.93	8.06	8.78	3.36	2.32	4.93
IN.	9.29	7.09	13.48	12.54	11.85	7.15	6.62	9.30	9.80	3.87	2.68	5.50
AC-FT	760,900	580,800	1,104M	1,027M	971,500	585,800	542,300	762,000	803,400	317,200	219,400	450,600

CAL YR 1967 TOTAL 3,865,430 MEAN 10,590 MAX 70,700 MIN 1,150 CFSN 6.89 IN 93-55 AC-FT 7,667,000
WTR YR 1968 TOTAL 4,096,750 MEAN 11,190 MAX 70,700 MIN 1,640 CFSN 7.28 IN 99-15 AC-FT 8,126,000

M EXPRESSED IN THOUSANDS.

12150800 SNOHOMISH RIVER NEAR MONROE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,820	11,400	12,900	6,200	3,850	3,500	15,300	10,700	20,100	8,180	3,060	1,680
2	3,600	9,280	11,400	8,000	3,850	3,480	13,900	10,400	20,900	8,240	3,020	1,670
3	3,300	10,800	25,200	7,850	4,180	3,580	12,200	9,670	22,600	8,480	2,920	1,880
4	4,350	9,360	41,100	26,900	4,350	3,480	9,880	8,780	24,200	8,900	2,860	2,000
5	4,700	7,940	26,600	66,100	4,480	4,550	9,250	8,480	25,400	8,570	3,080	2,110
6	6,410	6,950	18,700	64,700	4,150	6,200	9,250	9,390	23,200	7,220	3,700	2,060
7	10,200	6,230	14,200	49,800	3,950	5,360	8,630	12,200	19,600	6,500	3,040	1,870
8	8,120	8,920	25,400	31,600	4,880	4,750	7,970	18,300	16,500	6,110	2,620	1,840
9	6,500	14,800	15,200	22,200	6,890	4,350	7,850	23,900	19,700	6,170	2,450	1,910
10	7,400	14,900	15,400	17,700	6,500	4,080	9,000	26,600	19,600	6,200	2,370	1,860
11	11,400	20,700	16,700	14,600	10,200	3,850	9,320	25,200	18,600	6,800	2,320	1,840
12	10,400	39,700	15,100	12,300	10,200	3,680	9,530	23,500	17,000	7,040	2,250	1,840
13	11,800	29,900	12,200	10,500	8,240	3,550	13,400	22,900	15,200	6,020	2,250	1,840
14	11,800	17,200	10,900	9,360	6,930	3,500	12,600	21,900	15,000	5,210	2,210	2,140
15	11,700	13,500	9,840	8,360	6,080	3,550	10,000	18,800	13,700	4,700	2,160	2,140
16	13,200	11,500	10,800	7,760	5,780	4,250	8,750	16,500	12,500	4,420	2,190	1,870
17	10,600	9,600	9,670	7,370	5,720	9,320	8,900	19,300	12,400	4,200	2,140	1,860
18	9,920	9,460	9,180	6,710	5,450	13,200	15,600	12,600	12,000	4,000	2,060	3,180
19	9,220	13,900	9,180	6,230	5,210	11,000	14,900	17,900	11,800	3,900	2,020	4,180
20	13,900	14,400	7,790	5,810	4,950	9,500	13,500	16,900	10,600	4,020	1,970	5,060
21	15,200	15,000	7,070	5,480	4,720	8,300	11,000	17,600	8,940	3,950	1,950	4,220
22	13,000	22,600	6,500	5,000	4,500	7,910	11,400	20,500	8,640	3,720	1,910	5,680
23	11,700	21,600	6,770	4,750	4,300	8,970	14,600	23,700	10,300	3,680	1,840	17,500
24	10,900	16,300	11,400	4,420	4,190	8,360	17,000	26,000	15,400	3,700	1,930	15,400
25	10,500	12,700	13,100	4,300	3,980	7,340	13,900	23,000	16,000	3,720	1,810	11,400
26	10,900	10,500	10,400	4,320	3,850	7,160	11,400	18,600	13,500	3,620	1,850	10,100
27	8,660	10,400	8,780	4,150	3,750	8,660	9,980	17,900	11,400	3,320	1,860	7,610
28	7,310	11,000	7,660	4,000	3,600	9,760	10,400	17,000	10,300	3,260	1,920	5,900
29	7,070	11,700	6,300	3,900	-----	9,460	12,400	17,800	9,360	3,200	1,940	6,200
30	10,400	15,800	5,200	3,700	-----	10,300	11,700	36,000	8,970	3,080	1,840	10,500
31	15,400	-----	4,500	3,800	-----	13,700	-----	27,200	-----	3,100	1,760	-----
TOTAL	292,680	414,240	395,540	437,870	148,510	208,870	341,610	578,220	465,810	163,230	71,180	139,380
MEAN	9,441	12,730	12,430	13,780	4,786	6,728	10,971	18,330	14,725	5,038	2,284	4,466
MAX	25,600	33,700	41,100	66,100	10,200	13,700	17,000	36,000	25,400	8,900	3,700	17,500
MIN	3,300	6,230	4,500	3,700	3,600	3,480	7,850	8,840	8,840	3,080	1,760	1,670
CFSM	6.14	8.99	8.30	9.19	3.45	4.38	7.41	12.1	10.1	3.43	1.49	3.02
IN-	7.08	10.03	9.57	10.60	3.59	5.06	8.27	13.99	11.27	3.95	1.72	3.37
AC-FT	580,500	821,600	784,600	868,500	294,600	414,900	677,600	1,147M	923,900	323,800	141,200	276,900

CAL YR 1968 TOTAL 3,965,800 MEAN 10,840 MAX 63,400 MIN 1,840 CFSM 7.05 IN 95.98 AC-FT 7,866,000

WTR YR 1969 TOTAL 3,657,140 MEAN 10,020 MAX 66,100 MIN 1,670 CFSM 6.52 IN 86.51 AC-FT 7,254,000

M EXPRESSED IN THOUSANDS.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25,600	3,460	4,520	5,270	12,200	5,390	5,390	6,800	12,900	5,240	2,720	1,320
2	27,300	3,240	4,220	4,880	11,700	5,060	7,370	7,130	18,900	5,030	2,780	1,340
3	20,100	3,240	4,020	4,620	10,600	4,900	7,130	8,300	23,400	5,810	2,860	1,420
4	14,400	5,660	4,420	4,350	9,530	4,680	6,470	10,500	26,000	7,160	2,660	2,800
5	10,100	16,900	4,650	4,020	8,240	4,420	11,000	13,400	19,400	7,310	2,520	2,020
6	8,330	11,400	4,180	3,820	7,670	4,500	18,300	12,300	19,200	6,200	2,390	3,140
7	7,370	9,500	3,900	3,550	7,430	12,100	16,000	9,980	19,800	5,450	2,270	8,600
8	7,970	7,670	3,750	3,500	7,880	11,300	11,900	8,870	15,600	5,210	2,270	7,660
9	10,800	6,590	3,980	3,580	8,570	8,360	15,900	11,100	13,400	5,240	2,270	5,450
10	12,300	5,810	4,180	3,750	9,040	7,160	29,000	10,600	13,300	4,850	2,120	3,900
11	9,840	5,210	4,620	3,500	9,420	6,410	20,000	8,840	11,000	4,350	2,060	3,120
12	7,940	4,980	9,810	3,400	9,530	5,990	14,200	7,700	8,940	4,100	1,970	2,700
13	6,740	4,920	12,400	3,500	11,700	6,560	11,400	7,130	9,040	3,820	1,950	2,390
14	5,900	4,550	17,600	14,300	11,700	7,340	9,530	6,650	10,100	3,620	1,920	2,140
15	5,270	4,480	15,800	21,000	10,600	11,500	8,300	6,530	10,500	3,460	1,870	2,000
16	4,780	5,600	11,900	12,800	18,000	13,900	7,610	10,400	10,800	3,420	1,790	1,910
17	4,280	5,810	9,780	9,530	19,200	13,500	7,010	16,700	9,140	3,460	1,760	1,910
18	4,000	5,510	9,140	15,400	16,000	10,700	6,650	14,200	10,400	3,240	1,750	6,020
19	3,750	5,270	10,200	23,100	12,600	8,970	7,430	12,000	12,000	3,100	1,840	6,690
20	3,580	5,150	11,900	24,900	10,600	8,000	8,270	11,300	11,600	3,020	1,780	8,420
21	3,900	7,100	13,500	22,200	9,250	7,340	7,670	10,100	13,100	2,900	1,600	6,170
22	3,720	8,000	16,500	24,500	8,300	6,800	7,070	10,800	13,200	2,780	1,560	5,390
23	3,680	7,670	18,400	30,200	7,700	6,320	6,830	11,700	11,800	2,580	1,540	12,500
24	3,620	11,900	15,800	24,600	7,130	7,790	8,120	12,200	10,300	2,500	1,520	8,000
25	3,480	9,000	12,000	21,900	6,770	7,460	8,840	14,100	9,320	2,440	1,530	5,510
26	3,300	7,250	9,920	22,200	6,440	6,710	7,880	18,700	9,000	4,200	1,480	4,450
27	3,300	6,260	8,660	17,800	6,170	6,200	7,100	14,900	9,140	7,040	1,440	3,750
28	3,440	5,570	7,550	15,800	5,810	6,410	6,530	11,900	7,850	5,120	1,410	3,300
29	3,300	5,120	6,740	12,800	-----	6,590	6,230	10,200	6,770	3,600	1,400	3,040
30	3,580	6,820	6,710	10,500	-----	6,740	6,200	12,300	5,900	3,260	1,390	2,840
31	3,400	-----	5,660	9,640	-----	5,600	-----	11,500	-----	3,000	1,340	-----
TOTAL	239,170	197,640	275,870	384,910	279,780	234,160	301,870	338,230	379,890	132,530	59,720	130,990
MEAN	7,715	6,588	8,899	12,420	9,992	7,554	10,060	10,910	12,660	4,275	1,926	4,366
MAX	27,300	16,900	18,400	30,200	19,200	13,900	29,000	18,700	24,000	7,310	2,860	12,500
MIN	3,300	3,240	3,750	3,400	3,600	3,480	7,850	8,840	8,840	3,080	1,760	1,670
CFSM	5.02	4.29	5.79	8.08	6.50	4.91	6.55	7.10	8.24	2.78	1.25	2.84
IN-	5.79	4.78	6.68	9.32	6.77	5.67	7.31	8.19	9.19	3.21	1.45	3.17
AC-FT	474,400	392,000	547,200	763,500	554,900	464,500	598,800	670,900	753,500	262,900	118,500	259,800

CAL YR 1969 TOTAL 3,267,360 MEAN 8,952 MAX 66,100 MIN 1,670 CFSM 5.82 IN 79.08 AC-FT 6,481,000

WTR YR 1970 TOTAL 2,954,760 MEAN 8,095 MAX 30,200 MIN 1,320 CFSM 5.27 IN 71.51 AC-FT 5,861,000

SNOHOMISH RIVER BASIN

12153000 LITTLE PILCHUCK CREEK NEAR LAKE STEVENS, WASH.

LOCATION.--Lat 48°02'00", long 122°03'04", in NW 1/4 sec. 4, T.29 N., R.6 E., Snohomish County, on right bank 30 ft downstream from culvert on State Highway 92, 1.3 miles northeast of Lake Stevens, 2.0 miles upstream from Stevens Creek, and at mile 3.6.

DRAINAGE AREA.--17.0 sq mi.

PERIOD OF RECORD.--June 1946 to September 1951, September 1952 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Wooden control prior to Nov. 21, 1959. Altitude of gage is 200 ft (from topographic map).

AVERAGE DISCHARGE.--23 years (1946-51, 1952-70), 31.0 cfs (24.76 inches per year, 22,460 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (170 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 8, 1966	1830	*143	3.55	Dec. 3, 1967	2330	177	3.86	Jan. 7, 1969	0730	240	4.36
				Dec. 26, 1967	0100	*486	5.78	Feb. 11, 1969	2100	218	4.19
Dec. 15, 1966	1300	178	3.87	Jan. 14, 1968	1030	232	4.30				
Jan. 11, 1967	1100	198	4.13					Jan. 22, 1970	2330	170	3.65
Jan. 30, 1967	0700	170	3.84	Dec. 4, 1968	0030	256	4.47	Jan. 27, 1970	2200	*233	4.23
Feb. 18, 1967	1630	*211	4.14	Dec. 11, 1968	2330	*259	4.49				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 7, 1966	1.0	a.97	1969	July 30, 1969	.73	1.05
1967	Aug. 18, 19, 1967	.35	b1.02	1970	July 22, Aug. 7, 1970	.57	1.03
1968	Aug. 10, 11, 1968	.43	1.05				

a Occurred Aug. 25, Sept. 7, 1966.

b Occurred Aug. 27, 28, 29, 1967.

Period of record: Maximum discharge, 625 cfs Nov. 21, 1959 (gage height, 6.02 ft, from floodmarks), from rating curve extended above 180 cfs on basis of computation of peak flow through culvert; maximum gage height, 6.04 ft Jan. 29, 1965 (backwater from bridge 350 ft downstream); no flow for part of Aug. 31, 1959.

REMARKS.--Records good. Several small diversions above station for farm use. No regulation.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.3	9.7	58	27	53	25	11	8.1	5.8	4.7	1.4
2	1.5	3.5	9.4	100	25	48	23	11	9.7	13	4.7	1.4
3	1.4	4.2	8.8	79	22	41	22	10	10	23	4.7	1.5
4	1.4	4.9	13	62	22	35	20	9.7	10	28	4.3	1.5
5	2.4	5.9	13	58	25	34	19	8.9	9.4	22	3.8	1.3
6	2.9	4.5	16	93	31	32	18	18	8.6	23	3.8	1.2
7	2.2	4.3	17	93	60	31	16	24	7.8	23	3.8	1.2
8	2.0	3.6	15	116	69	39	15	19	7.4	19	3.7	1.2
9	1.9	3.5	12	111	79	53	15	14	6.9	15	3.5	1.2
10	1.9	3.6	14	84	74	59	16	14	6.7	11	3.1	1.4
11	1.9	3.3	13	71	68	53	25	13	8.6	13	3.2	1.8
12	2.2	3.5	11	71	66	45	41	12	24	11	3.1	1.8
13	2.9	3.5	9.9	88	56	55	33	12	20	9.4	2.8	1.8
14	3.6	4.0	9.4	82	65	62	30	13	20	14	3.1	1.9
15	2.9	4.1	8.3	64	53	67	28	12	20	17	3.4	2.1
16	2.2	4.9	7.7	50	50	97	25	14	14	22	2.6	2.1
17	2.1	4.9	7.5	41	47	100	19	17	11	20	2.9	2.5
18	2.3	5.2	7.5	41	40	100	18	16	9.4	15	2.5	3.7
19	3.5	5.9	8.0	38	34	116	17	14	7.8	14	2.8	2.0
20	4.7	9.9	8.3	32	33	91	16	12	7.4	12	2.1	1.9
21	4.3	10	9.7	29	29	72	16	16	6.9	9.7	1.8	2.0
22	3.0	14	9.7	27	27	57	16	23	7.4	8.1	1.4	1.9
23	2.3	11	9.7	28	25	47	17	21	6.5	7.4	1.4	2.1
24	2.3	9.7	9.9	29	23	40	16	16	6.3	6.7	1.4	1.8
25	2.2	14	10	26	22	34	15	14	5.6	7.8	1.2	1.8
26	2.2	13	9.7	24	26	30	17	13	5.4	7.8	1.6	2.0
27	2.2	21	19	23	42	27	15	12	5.2	6.7	2.0	2.4
28	2.4	15	70	22	47	25	14	11	7.4	6.3	1.9	2.0
29	2.2	12	92	24	-----	23	13	10	6.5	5.6	1.8	1.8
30	2.7	10	88	30	-----	27	12	9.4	5.6	5.6	1.6	1.8
31	2.4	-----	70	30	-----	29	-----	8.6	-----	5.2	1.7	-----
TOTAL	75.6	219.2	616.2	1,724	1,187	1,622	592	428.6	289.6	407.1	86.4	54.5
MEAN	2.44	7.31	19.9	55.6	42.4	52.3	19.7	13.8	9.65	13.1	2.79	1.82
MAX	4.7	21	92	116	79	116	41	24	24	28	4.7	3.7
MIN	1.4	2.3	7.5	22	22	23	12	8.6	5.2	5.2	1.2	1.2
CFSM	14	43	1.17	3.27	2.49	3.08	1.16	.81	.57	.77	.16	.11
IN-	17	48	1.35	3.77	2.60	3.55	1.30	.94	.63	.89	.19	.12
AC-FT	150	435	1,220	3,420	2,350	3,220	1,170	850	574	807	171	108
CAL YR 1965	TOTAL	8,764.2	MEAN	24.0	MAX	490	MIN	1.3	CFSM	1.41	IN	19.18
WTR YR 1966	TOTAL	7,302.2	MEAN	20.0	MAX	116	MIN	1.2	CFSM	1.18	IN	15.98
									AC-FT	17,380	AC-FT	14,480

12153000 LITTLE PILCHUCK CREEK NEAR LAKE STEVENS, WASH.-CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	2.1	6.2	86	78	82	74	30	36	7.2	1.5	1.4	.97		
2	4.4	5.7	103	72	65	76	27	30	7.0	1.4	1.1	1.1		
3	2.6	5.4	97	74	63	60	24	26	7.2	1.4	1.3	.97		
4	2.0	4.8	128	102	104	50	24	17	6.7	1.3	.72	.97		
5	1.7	8.2	147	128	102	41	24	18	6.2	1.4	.72	1.1		
6	1.5	13	107	101	79	36	23	21	5.7	1.5	.72	1.4		
7	2.0	10	84	98	63	32	22	18	5.2	1.2	.88	1.3		
8	2.3	9.7	65	132	53	39	19	21	4.8	1.3	.80	1.3		
9	2.0	10	54	159	51	76	18	25	4.2	1.4	.66	1.4		
10	2.0	12	48	126	49	68	17	20	2.6	1.3	.66	2.8		
11	2.8	11	47	187	45	58	16	27	3.5	1.4	.60	4.6		
12	2.1	12	63	166	43	51	16	36	4.2	1.3	.60	2.6		
13	1.8	21	106	134	78	43	14	32	4.2	1.3	.54	1.8		
14	2.1	65	182	116	97	39	14	26	3.3	1.7	.48	1.7		
15	2.0	59	164	144	119	48	17	23	3.3	1.2	.54	1.5		
16	1.8	56	150	140	124	52	16	20	3.3	1.1	.43	1.4		
17	2.1	50	121	128	136	48	18	17	3.1	1.2	.43	1.5		
18	2.1	39	114	96	190	45	18	15	2.8	1.2	.43	1.5		
19	8.2	34	123	122	174	40	20	14	2.3	1.2	.39	1.5		
20	14	31	147	148	114	38	18	12	2.3	1.5	.48	1.5		
21	10	26	125	108	80	34	19	12	3.9	1.5	.54	1.5		
22	14	23	88	80	63	41	17	9.9	5.7	1.1	.54	1.5		
23	12	22	69	73	52	68	16	9.9	4.4	1.1	.60	1.4		
24	9.7	20	62	72	44	57	14	10	3.7	1.1	.69	1.4		
25	7.7	26	65	61	42	54	14	9.9	3.1	1.1	.60	1.3		
26	7.4	33	54	56	39	51	14	8.5	2.8	1.2	.60	1.7		
27	7.2	28	46	58	34	50	18	8.0	2.5	1.2	.54	1.2		
28	6.7	38	47	72	47	45	58	8.0	2.5	.97	.60	1.4		
29	6.7	37	59	88	-----	45	55	8.3	2.3	.97	.60	1.5		
30	6.7	68	63	158	-----	39	46	8.0	1.8	1.1	.72	2.0		
31	6.4	-----	63	117	-----	34	-----	7.4	-----	1.1	.80	-----		
TOTAL	156.1	804.0	2,857	3,394	2,232	1,532	666	553.9	121.8	39.24	20.71	47.81		
MEAN	5.04	26.8	92.2	109	79.7	49.4	22.2	17.9	4.06	1.27	.67	1.59		
MAX	14	68	164	187	190	76	58	36	7.2	1.7	1.4	4.6		
MIN	1.5	4.8	46	34	32	14	7.4	1.8	.97	.39	.97	-----		
CFSM	.30	1.58	5.42	6.41	4.69	2.91	1.31	1.05	.24	.07	.04	.09		
IN.	.34	1.76	6.25	7.43	4.88	3.35	1.46	1.21	.27	.09	.05	.10		
AC-FT	310	1,590	5,670	6,730	4,430	3,040	1,320	1,100	242	78	41	95		
CAL YR 1966	TOTAL	10,208.30	MEAN	28.0	MAX	164	MIN	1.2	CFSM	1.65	IN	22.34	AC-FT	20,250
WTR YR 1967	TOTAL	12,424.36	MEAN	34.0	MAX	190	MIN	.39	CFSM	2.00	IN	27.19	AC-FT	24,640

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	16	47	75	28	20	34	60	12	4.0	.72	4.6
2	2.9	14	109	62	34	19	30	48	34	3.5	.97	4.6
3	3.4	12	161	52	44	18	28	36	26	2.8	.97	4.4
4	3.3	10	151	50	54	24	29	31	20	2.3	1.1	3.7
5	2.6	8.8	110	53	47	35	54	40	14	2.1	1.1	3.5
6	3.1	7.7	76	47	39	33	55	41	12	2.0	1.1	3.1
7	7.7	8.0	65	45	34	29	51	40	11	2.0	1.1	3.1
8	9.0	8.3	53	49	32	28	43	32	11	1.9	1.8	3.5
9	3.5	11	54	88	28	26	36	26	10	1.8	.88	3.7
10	3.5	13	53	91	26	24	32	22	9.4	1.8	.72	3.7
11	4.4	16	47	76	24	23	38	19	9.1	1.4	.66	3.7
12	4.2	14	39	69	22	33	41	17	8.8	2.0	.66	3.9
13	4.2	13	32	147	21	32	41	16	8.0	2.0	1.1	4.4
14	5.0	14	27	214	20	31	36	15	8.3	1.5	2.8	4.6
15	4.2	15	24	195	18	38	41	12	16	1.7	4.2	5.2
16	3.5	14	22	152	17	74	40	10	12	1.3	3.3	5.0
17	3.3	14	20	104	19	91	34	11	10	1.2	1.7	12
18	6.8	14	19	79	19	86	33	10	10	.97	2.9	17
19	7.7	16	17	68	24	66	40	9.9	9.5	2.0	2.6	13
20	6.0	13	16	59	24	51	47	16	10	3.3	2.3	10
21	10	12	15	53	24	42	43	14	8.0	2.5	1.8	8.3
22	12	12	20	45	26	35	30	12	7.0	2.0	2.0	8.3
23	15	13	21	39	36	32	35	11	8.0	1.8	5.6	8.8
24	12	26	54	38	36	30	36	9.9	6.5	1.8	7.7	7.4
25	18	26	331	34	36	33	34	9.7	5.0	1.5	7.2	6.7
26	15	22	419	31	28	32	32	9.7	5.0	1.3	9.7	6.0
27	16	20	278	28	26	35	28	9.4	5.0	1.3	13	5.2
28	20	22	215	26	24	52	27	9.7	5.0	1.1	8.5	4.6
29	16	54	149	24	22	53	23	9.1	5.0	.97	7.0	4.4
30	14	51	98	24	-----	47	31	8.0	5.0	1.1	5.4	4.2
31	15	-----	80	26	-----	40	-----	8.0	-----	.88	4.6	-----
TOTAL	254.4	509.8	2,822	2,143	832	1,212	1,108	622.4	320.6	57.62	105.18	180.6
MEAN	8.21	17.0	91.0	69.1	28.7	39.1	36.9	20.1	10.7	1.86	3.39	6.02
MAX	20	54	419	214	54	91	55	60	34	4.0	13	17
MIN	2.6	7.7	15	24	17	18	23	8.0	5.0	.88	.66	3.1
CFSM	1.48	1.00	5.35	4.06	1.69	2.30	2.17	1.18	.63	.11	.20	.35
IN.	.56	1.12	6.18	4.69	1.82	2.65	2.42	1.36	.70	.13	.23	.40
AC-FT	505	1,010	5,600	4,250	1,650	2,400	2,200	1,230	636	114	209	358

12153000 LITTLE PILCHUCK CREEK NEAR LAKE STEVENS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	50	121	29	23	17	16	41	10	5.9	1.7	1.2
2	3.5	42	146	38	25	16	28	48	8.2	6.4	1.7	1.1
3	3.5	54	175	52	32	15	32	46	7.1	9.0	1.6	1.3
4	5.7	47	228	166	56	15	30	36	6.6	13	1.6	1.6
5	6.0	38	182	222	65	22	34	30	5.9	11	2.7	1.4
6	26	32	135	205	53	22	32	24	5.7	8.4	3.4	1.3
7	24	28	104	227	44	19	27	18	5.3	7.1	1.6	1.2
8	16	45	176	172	127	17	24	15	5.0	6.4	2.2	1.2
9	13	78	186	132	196	15	22	13	3.2	5.7	1.3	.91
10	12	68	200	117	154	14	20	11	4.0	5.3	1.3	1.0
11	12	98	243	104	194	14	16	11	4.4	5.5	1.3	.91
12	16	124	219	85	189	13	15	9.7	4.4	5.7	1.1	.91
13	20	111	146	75	129	12	20	8.7	4.6	5.0	1.2	2.7
14	17	84	114	79	94	11	18	8.2	4.0	4.8	1.3	1.8
15	24	73	95	72	75	13	16	7.4	3.7	4.6	1.3	1.4
16	25	69	126	66	69	14	15	7.1	3.5	4.6	1.3	1.4
17	23	55	103	62	61	24	20	7.7	3.0	4.6	1.2	5.0
18	44	54	109	53	53	31	26	6.6	2.9	3.5	1.3	7.1
19	53	41	93	47	46	26	24	6.1	2.2	2.9	1.3	5.9
20	84	35	71	42	39	22	24	6.1	3.2	2.9	1.8	5.0
21	76	34	59	37	35	19	20	5.7	3.4	3.0	1.7	4.4
22	66	41	53	32	31	20	19	5.5	3.2	2.3	1.2	11
23	52	36	42	30	28	30	25	5.5	6.1	2.6	1.3	15
24	41	32	92	27	26	25	26	5.5	7.1	2.0	1.2	11
25	35	30	108	25	24	22	36	5.5	7.9	2.2	1.2	9.7
26	33	26	86	22	22	20	28	5.3	7.9	1.4	1.4	7.4
27	32	78	24	18	20	18	24	5.7	1.8	1.4	1.1	5.9
28	24	22	54	17	19	14	24	5.0	7.4	1.7	1.3	6.9
29	22	72	37	16	-----	16	35	8.2	6.4	1.0	1.3	12
30	53	115	28	17	-----	15	31	20	6.4	1.0	1.1	16
31	63	-----	24	20	-----	16	-----	16	-----	1.4	1.1	-----
TOTAL	928.4	1,660	3,665	2,308	1,929	569	734	446.1	161.1	142.7	46.7	143.63
MEAN	29.9	55.3	118	74.5	68.9	18.4	24.5	14.4	5.37	4.60	1.51	4.79
MAX	84	124	243	227	196	31	38	48	10	13	3.4	16
MIN	3.5	22	24	16	19	11	15	5.0	2.2	1.0	1.1	.91
CFSM	1.76	3.25	6.94	4.38	4.05	1.08	1.44	.85	.32	.27	.09	.28
IN.	2.03	3.63	8.02	5.05	4.22	1.25	1.61	.98	.35	.31	.10	.31
AC-FT	1,840	3,290	7,270	4,580	3,830	1,130	1,460	885	320	283	93	285

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	24	7.1	16	31	102	19	16	36	8.7	1.7	1.7	1.2		
2	30	7.1	15	28	88	18	24	30	8.2	1.8	1.8	1.2		
3	22	14	14	27	72	19	22	23	7.4	1.7	3.0	1.8		
4	16	42	20	24	57	18	20	24	6.4	1.7	1.8	1.9		
5	13	64	20	21	48	17	20	22	5.9	1.9	2.2	1.8		
6	11	41	18	20	45	21	33	19	5.5	2.2	1.4	2.7		
7	9.7	29	17	18	42	28	44	17	5.0	1.7	1.0	3.2		
8	11	24	19	18	37	23	35	18	5.0	1.2	1.1	2.2		
9	11	24	27	21	33	20	33	33	5.5	1.0	1.1	1.9		
10	10	10	26	20	30	19	45	43	6.4	1.0	1.3	1.7		
11	9.0	18	44	19	27	18	45	47	5.7	1.1	1.4	1.4		
12	8.7	17	59	18	24	18	38	38	5.5	1.2	1.3	1.7		
13	7.4	16	62	23	39	20	30	45	5.3	1.3	1.2	1.7		
14	7.4	15	113	50	42	23	26	38	5.0	1.2	1.2	1.4		
15	6.9	16	104	50	64	24	23	30	5.3	1.2	1.2	1.8		
16	6.6	26	78	43	120	32	21	25	5.5	1.2	1.2	.82		
17	6.6	46	64	42	111	41	20	22	5.5	1.4	1.7	2.0		
18	6.1	37	56	79	86	36	20	18	5.3	1.6	1.1	2.4		
19	6.4	30	52	98	65	30	36	14	4.8	2.5	1.2	5.2		
20	6.9	29	45	89	52	27	38	16	5.0	1.1	1.2	3.5		
21	6.6	28	84	81	44	26	32	14	3.2	1.2	1.3	3.0		
22	6.4	25	132	84	38	23	30	13	3.2	.82	1.4	3.0		
23	6.4	40	150	94	33	23	30	12	1.7	1.1	1.3	4.6		
24	6.4	48	124	90	29	25	38	11	1.1	1.1	1.3	3.7		
25	6.1	38	86	132	26	23	44	10	1.2	2.0	1.2	3.2		
26	5.9	30	96	108	24	22	43	9.7	1.7	2.6	1.2	2.7		
27	6.9	26	100	206	22	20	44	9.4	1.8	3.2	1.2	2.4		
28	7.4	22	72	211	20	24	41	9.7	2.2	2.3	1.2	2.2		
29	7.4	20	54	161	-----	22	37	11	2.6	2.0	1.3	2.2		
30	7.7	18	44	109	-----	19	45	11	1.9	2.7	1.3	2.0		
31	7.4	-----	37	91	-----	18	-----	9.4	-----	2.0	1.2	-----		
TOTAL	304.3	817.2	1,848	2,106	1,420	716	973	678.2	137.5	50.72	43.0	68.52		
MEAN	9.82	27.2	59.6	67.9	50.7	23.1	32.4	21.9	4.58	1.64	1.39	2.28		
MAX	30	64	150	211	120	41	45	47	8.7	3.2	3.0	4.6		
MIN	5.9	7.1	14	18	20	17	16	9.4	1.1	.82	1.0	.82		
CFSM	.58	1.60	3.51	3.99	2.98	1.36	1.91	1.29	.27	.10	.08	.13		
IN.	.67	1.79	4.04	4.61	3.11	1.57	2.13	1.48	.30	.11	.09	.15		
AC-FT	604	1,620	3,670	4,180	2,820	1,420	1,930	1,350	273	101	85	136		
CAL YR 1969	TOTAL	9,449.73	MEAN	25.9	MAX	227	MIN	.91	CFSM	1.52	IN	20.68	AC-FT	18,740
WTR YR 1970	TOTAL	9,162.44	MEAN	25.1	MAX	211	MIN	.82	CFSM	1.48	IN	20.05	AC-FT	18,170

12157000 QUILCEDA CREEK NEAR MARYSVILLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	7.4	62	60	57	83	25	28	10	8.5	4.1	3.6
2	7.4	7.0	69	56	47	65	22	24	10	8.1	3.8	3.8
3	5.6	7.0	63	58	58	51	21	21	10	6.6	3.8	3.8
4	5.4	6.6	98	68	93	41	22	19	10	4.7	3.8	3.6
5	5.4	12	95	80	74	34	23	18	9.7	5.0	3.8	3.6
6	5.4	16	75	64	57	30	21	16	9.3	5.0	4.1	4.7
7	5.6	11	64	62	48	27	19	16	8.9	5.8	4.4	3.8
8	5.6	9.5	50	84	42	36	18	18	8.9	6.2	4.4	3.8
9	5.6	11	43	96	42	56	18	22	8.9	5.8	3.8	4.1
10	5.6	11	42	82	40	52	18	18	8.9	5.0	3.6	12
11	5.6	11	42	110	37	43	17	25	8.5	5.0	3.4	15
12	6.3	14	58	93	36	39	18	33	7.7	4.7	3.4	7.3
13	6.3	20	79	78	33	19	29	33	7.7	4.7	3.4	6.2
14	6.0	56	101	76	71	30	18	22	7.7	4.7	3.2	5.4
15	5.6	47	99	89	73	46	16	20	7.3	4.7	3.4	5.0
16	5.6	42	91	91	75	49	18	18	7.0	4.7	3.4	4.7
17	5.6	34	71	83	92	44	19	15	7.0	4.7	3.6	4.7
18	5.4	25	68	71	119	42	18	12	7.0	4.7	3.4	4.7
19	5.4	23	78	100	94	36	19	14	7.0	5.0	3.2	5.0
20	16	22	90	98	68	33	18	13	6.2	5.4	3.2	5.0
21	13	19	76	72	55	28	18	12	8.9	6.2	3.6	5.0
22	15	17	60	58	45	31	17	12	10	5.0	3.6	4.7
23	12	18	52	61	38	66	11	8.1	5.0	3.4	4.7	5.0
24	9.5	18	47	59	34	81	15	12	7.3	5.0	3.4	4.7
25	8.6	23	50	50	32	55	14	11	7.3	5.0	3.2	4.7
26	7.8	22	45	50	28	47	14	11	7.7	5.0	3.2	4.7
27	8.2	20	39	56	26	46	18	10	8.1	5.0	3.4	4.7
28	7.4	22	40	69	42	42	64	10	7.0	5.0	3.4	4.4
29	7.4	30	48	84	-----	42	54	10	6.6	4.7	3.4	5.0
30	8.2	41	50	96	-----	34	38	10	7.7	4.4	3.6	5.4
31	7.4	-----	55	69	-----	29	-----	10	-----	4.1	3.6	-----
TOTAL	235.5	622.5	2,000	2,323	1,580	1,351	655	523	246.4	163.4	111.0	157.8
MEAN	7.60	20.8	64.5	74.9	50.4	43.6	21.8	16.9	8.21	5.27	3.58	5.26
MAX	16	56	101	110	119	83	64	33	10	8.5	4.4	15
MIN	5.4	6.6	39	50	26	27	14	10	6.2	4.1	3.2	3.6
CFSM	.49	1.35	4.19	4.86	3.66	2.83	1.42	1.10	.53	.34	.23	.34
IN.	.57	1.50	4.83	5.61	3.82	3.26	1.58	1.26	.60	.39	.27	.38
AC-FT	467	1,230	3,970	4,610	3,130	2,680	1,300	1,040	489	324	220	313

CAL YR 1966 TOTAL 8,622.0 MEAN 23.6 MAX 108 MIN 4.0 CFSM 1.53 IN 20.83 AC-FT 17,100
WTR YR 1967 TOTAL 9,968.6 MEAN 27.3 MAX 119 MIN 3.2 CFSM 1.77 IN 24.08 AC-FT 19,770

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	16	32	62	25	18	28	32	16	8.5	5.0	9.7
2	6.2	13	77	49	31	17	26	28	25	8.1	5.0	9.7
3	7.3	12	89	44	40	16	23	23	19	7.7	5.0	8.1
4	7.3	11	77	42	45	20	25	24	15	7.3	5.4	7.7
5	6.2	11	71	42	40	29	42	30	13	7.0	5.8	7.3
6	6.2	10	65	39	35	27	38	30	13	7.0	5.8	6.6
7	11	10	64	37	30	26	32	29	12	6.6	5.0	7.0
8	8.5	11	49	42	27	24	28	25	12	6.6	4.7	7.0
9	7.0	15	59	60	25	21	26	21	11	6.2	4.7	6.6
10	7.3	17	52	70	22	19	25	17	11	6.6	4.7	6.6
11	9.3	20	44	51	20	20	28	17	11	6.6	4.7	8.1
12	8.1	16	32	52	19	30	28	16	11	7.0	4.7	8.5
13	8.5	14	24	126	18	30	28	15	12	6.6	4.7	7.7
14	10	14	21	148	17	28	26	14	58	6.6	7.0	10
15	8.1	15	18	131	16	30	27	13	29	7.0	8.9	10
16	7.3	13	18	107	16	72	27	13	20	7.3	7.3	9.3
17	7.0	13	18	77	17	80	25	13	16	6.6	6.6	24
18	11	13	17	61	18	66	26	12	13	6.6	9.7	25
19	11	13	16	57	21	48	32	12	14	9.3	6.6	18
20	9.3	12	14	50	23	34	42	18	12	10	6.6	15
21	21	11	14	42	25	29	32	15	11	8.1	6.2	16
22	23	11	19	34	28	26	28	13	12	7.3	6.2	16
23	16	12	20	30	42	24	30	13	11	7.0	10	17
24	13	23	63	29	32	22	34	12	10	7.0	13	14
25	14	20	173	28	28	26	30	12	10	6.6	13	12
26	13	16	162	28	25	27	28	13	10	6.6	15	12
27	15	15	145	25	22	32	23	12	10	5.4	40	10
28	16	19	128	24	20	52	21	11	10	6.2	15	9.7
29	13	43	93	22	19	53	18	11	9.7	5.8	10	9.3
30	14	39	70	22	-----	40	27	11	9.3	5.8	8.9	8.9
31	15	-----	63	24	-----	30	-----	11	-----	5.4	8.5	-----
TOTAL	336.6	478	1,807	1,655	746	1,016	853	536	446.0	216.4	263.7	336.8
MEAN	10.9	15.9	58.3	53.4	25.7	32.8	28.4	17.3	14.9	6.98	8.51	11.2
MAX	23	43	173	148	45	80	42	32	58	10	40	25
MIN	6.2	10	14	22	16	16	18	11	9.3	5.4	4.7	6.6
CFSM	.71	1.03	3.79	3.47	1.67	2.13	1.84	1.12	.97	.48	.55	.73
IN.	.81	1.15	4.36	4.00	1.80	2.45	2.06	1.29	1.08	.52	.64	.81
AC-FT	668	948	3,580	3,280	1,480	2,020	1,690	1,060	685	429	523	668

CAL YR 1967 TOTAL 9,732.2 MEAN 26.7 MAX 173 MIN 3.2 CFSM 1.73 IN 25.51 AC-FT 19,300
WTR YR 1968 TOTAL 8,690.5 MEAN 23.7 MAX 173 MIN 4.7 CFSM 1.54 IN 20.99 AC-FT 17,240

SNOHOMISH RIVER BASIN

12157000 QUILCEDA CREEK NEAR MARYSVILLE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	45	99	18	15	18	13	43	9.7	7.3	3.8	3.4
2	8.1	42	121	24	17	17	20	47	7.7	12	4.4	3.8
3	8.1	48	111	41	60	17	22	40	6.6	10	3.8	4.4
4	13	44	121	114	83	17	21	32	5.4	9.0	5.0	5.4
5	11	38	112	120	74	25	23	26	5.0	8.5	13	5.4
6	21	33	81	117	49	22	21	22	4.7	7.8	7.7	4.7
7	16	30	61	123	38	20	17	19	4.7	7.4	7.7	5.0
8	11	52	128	100	103	18	16	17	4.1	7.0	7.3	5.4
9	9.7	66	126	109	130	17	15	14	3.8	6.2	7.0	6.2
10	10	52	134	92	107	16	14	14	3.8	6.6	7.3	5.4
11	10	73	136	79	126	16	13	13	3.8	7.4	7.3	5.4
12	15	84	116	64	114	16	15	12	3.8	7.8	7.0	6.6
13	18	67	88	61	87	14	19	12	3.8	7.0	7.0	9.7
14	18	51	69	59	71	14	17	11	3.6	6.6	6.2	7.7
15	22	53	63	54	60	14	14	10	3.2	6.4	6.2	7.3
16	19	51	97	49	54	15	13	9.7	3.2	6.2	5.4	8.5
17	22	42	68	45	46	18	18	9.3	3.2	6.1	5.0	21
18	42	40	69	38	40	19	19	9.3	2.9	6.0	5.4	22
19	50	34	52	34	36	17	28	9.3	2.9	5.8	4.7	13
20	69	30	40	29	32	16	28	8.9	3.2	5.4	3.8	10
21	61	29	32	26	28	15	25	8.5	3.6	5.4	3.6	8.1
22	57	30	32	22	28	16	22	8.5	4.1	5.0	3.2	29
23	49	30	50	20	27	19	33	8.5	7.3	4.7	3.8	31
24	42	28	91	18	25	17	30	9.7	7.3	4.4	3.2	23
25	38	24	82	17	24	16	32	9.3	8.5	4.4	3.2	12
26	35	22	57	15	22	15	26	8.9	9.3	4.1	3.8	8.1
27	32	22	44	14	20	14	22	9.3	8.5	3.6	4.1	10
28	29	21	28	13	18	13	24	9.3	7.7	3.8	4.1	14
29	28	67	19	11	-----	13	39	21	11	4.1	3.8	24
30	46	96	14	12	-----	13	43	32	8.9	3.8	3.6	24
31	51	-----	14	13	-----	13	-----	14	-----	3.6	3.2	-----
TOTAL	849.4	1,344	2,355	1,551	1,534	510	662	517.5	165.3	193.4	164.6	343.5
MEAN	28.0	44.8	76.0	50.0	54.8	16.5	22.1	16.7	5.51	6.24	5.31	11.5
MAX	69	96	136	123	130	25	43	47	11	12	13	31
MIN	8.1	21	14	11	15	13	13	8.9	2.9	3.6	3.2	3.4
CFSM	1.82	2.91	4.94	3.25	3.56	1.07	1.44	1.08	.36	.41	.34	.75
IN.	2.10	3.25	5.69	3.75	3.71	1.23	1.60	1.25	.40	.47	.40	.83
AC-FT	1,720	2,670	4,670	3,080	3,840	1,010	1,310	1,030	328	384	326	681

CAL YR 1968 TOTAL 10,637.3 MEAN 29.1 MAX 148 MIN 4.7 CFSM 1.89 IN 25.70 AC-FT 21,100
WTR VR 1969 TOTAL 10,209.7 MEAN 28.0 MAX 136 MIN 2.9 CFSM 1.82 IN 24.66 AC-FT 20,250

12157500 LAKE GOODWIN NEAR SILVANA, WASH.

LOCATION (REVISED).--Lat 48°08'08", long 122°18'01", in NW1/4 sec.33, T.31-N., R.4 E., Snohomish County, on west shore 0.1-mile north of channel connecting Lake Goodwin and Lake Shoecraft and 5.0 miles southwest of Silvana.

DRAINAGE AREA.--5.17 sq mi.

PERIOD OF RECORD.--April 1953 to September 1970.

GAGE.--Nonrecording gage. Altitude of gage is 321 ft (from topographic map). Prior to Oct. 1, 1954, at site 1.3 miles (revised) north at datum 3.00 ft higher. Oct. 1, 1954, to Feb. 14, 1955, at site 1.3 miles (revised) north at present datum.

EXTREMES.--Maximum and minimum gage heights, in feet, for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum observed Gage height	Date	Minimum observed Gage height
1966	Mar. 19, 20, 1966	6.46	Oct. 4, 5, 1965	4.88
1967	Jan. 20, 21, 1967	6.24	Sept. 9, 1967	4.82
1968	Jan. 15, 16, 1968	6.30	Oct. 1-5, 1967	4.86
1969	Feb. 13, 1969	6.52	Sept. 11, 12, 1969	5.14
1970	Jan. 28 to Feb. 1, 1970	6.28	Sept. 15, 16, 1970	4.86

Period of record: Maximum gage height observed, 6.76 ft Jan. 6, 7, 1956; minimum observed, 4.58 ft Sept. 14, 1958.

REMARKS.--Outflow from lake controlled by flashboards in a wooden flume at mouth of Lake Shoecraft. No diversion.

REVISIONS.--WSP 1932: Drainage area.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.90	4.90	5.10	5.56	5.94	6.12	6.16	5.98	5.90	5.80	5.78	5.42
2	4.90	4.92	5.10	5.60	5.94	6.12	6.14	5.98	5.90	5.86	5.76	5.42
3	4.90	4.92	5.10	5.64	5.94	6.12	6.12	5.98	5.92	5.90	5.74	5.40
4	4.88	4.94	5.12	5.66	5.96	6.12	6.10	5.98	5.94	5.92	5.72	5.40
5	4.88	4.94	5.12	5.68	5.96	6.12	6.10	5.96	5.94	5.92	5.72	5.40
6	4.92	4.96	5.14	5.70	5.96	6.12	6.08	6.08	5.92	5.94	5.70	5.38
7	4.94	4.96	5.16	5.72	6.04	6.12	6.08	6.08	5.92	5.94	5.68	5.38
8	4.94	4.96	5.18	5.78	6.06	6.18	6.08	6.06	5.90	5.94	5.68	5.36
9	4.92	4.96	5.20	5.78	6.06	6.18	6.08	6.06	5.90	5.92	5.68	5.36
10	4.92	4.98	5.20	5.80	6.04	6.24	6.06	6.04	5.90	5.92	5.66	5.34
11	4.92	4.98	5.20	5.80	6.08	6.24	6.06	6.02	5.92	5.90	5.64	5.34
12	4.90	4.98	5.20	5.82	6.06	6.24	6.12	6.02	5.92	5.88	5.64	5.34
13	4.92	4.98	5.20	5.82	6.06	6.28	6.10	6.00	5.94	5.88	5.62	5.34
14	4.92	5.00	5.18	5.86	6.06	6.30	6.12	6.00	5.96	5.94	5.60	5.32
15	4.92	5.00	5.18	5.86	6.06	6.30	6.12	6.00	5.96	5.94	5.60	5.32
16	4.92	5.00	5.18	5.86	6.06	6.38	6.10	6.02	5.94	5.94	5.58	5.32
17	4.90	5.00	5.18	5.86	6.08	6.38	6.08	6.02	5.94	5.92	5.56	5.30
18	4.90	5.01	5.18	5.90	6.08	6.44	6.06	6.00	5.92	5.92	5.54	5.36
19	4.92	5.02	5.18	5.90	6.08	6.46	6.04	5.98	5.92	5.90	5.52	5.36
20	4.92	5.02	5.18	5.90	6.08	6.46	6.04	5.98	5.90	5.88	5.52	5.36
21	4.92	5.02	5.18	5.90	6.08	6.44	6.04	6.00	5.90	5.86	5.50	5.34
22	4.92	5.04	5.18	5.90	6.06	6.44	6.04	6.00	5.88	5.84	5.50	5.34
23	4.92	5.04	5.20	5.90	6.06	6.44	6.04	6.00	5.88	5.82	5.48	5.34
24	4.92	5.04	5.24	5.92	6.06	6.42	6.02	5.98	5.86	5.84	5.46	5.34
25	4.92	5.06	5.24	5.92	6.06	6.42	6.04	5.98	5.86	5.84	5.44	5.34
26	4.90	5.06	5.26	5.92	6.06	6.40	6.04	5.96	5.84	5.84	5.44	5.34
27	4.90	5.08	5.34	5.92	6.08	6.34	6.02	5.96	5.84	5.82	5.46	5.34
28	4.90	5.08	5.46	5.92	6.10	6.24	6.02	5.94	5.82	5.82	5.46	5.32
29	4.90	5.08	5.46	5.92	-----	6.20	6.00	5.94	5.82	5.80	5.44	5.32
30	4.90	5.08	5.52	5.94	-----	6.18	6.00	5.92	5.80	5.78	5.44	5.32
31	4.90	-----	5.54	5.94	-----	6.16	-----	5.92	-----	5.76	5.42	-----
MEAN	4.91	5.00	5.22	5.83	6.04	6.28	6.07	5.97	5.90	5.88	5.58	5.35
MAX	4.94	5.08	5.54	5.94	6.10	6.46	6.16	6.08	5.96	5.94	5.78	5.42
MIN	4.88	4.90	5.10	5.56	5.94	6.12	6.00	5.98	5.80	5.78	5.42	5.30

CAL YR 1965 MEAN 5.50 MAX 6.58 MIN 4.88
WTR YR 1966 MEAN 5.67 MAX 6.46 MIN 4.88

TULALIP CREEK BASIN

12157500 LAKE GOODWIN NEAR SILVANIA, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.32	5.40	5.76	5.98	6.18	5.94	6.18	6.14	5.94	5.70	5.30	4.90
2	5.34	5.40	5.84	5.98	6.16	5.94	6.18	6.14	5.94	5.68	5.30	4.90
3	5.34	5.40	5.84	5.96	6.16	5.92	6.16	6.12	5.92	5.66	5.28	4.88
4	5.34	5.38	5.94	6.08	6.16	5.90	6.16	6.12	5.92	5.66	5.26	4.88
5	5.34	5.42	5.96	6.08	6.14	5.90	6.16	6.10	5.92	5.64	5.26	4.86
6	5.31	5.44	6.00	6.08	6.12	5.88	6.14	6.10	5.90	5.64	5.24	4.86
7	5.32	5.44	6.00	6.08	6.10	5.86	6.14	6.08	5.90	5.62	5.22	4.84
8	5.32	5.44	6.00	6.10	6.08	5.88	6.12	6.08	5.88	5.62	5.22	4.84
9	5.30	5.46	6.00	6.10	6.06	5.88	6.12	6.10	5.88	5.60	5.20	4.82
10	5.30	5.48	5.98	6.10	6.04	5.86	6.12	6.10	5.88	5.58	5.20	4.88
11	5.30	5.48	5.98	6.10	6.00	5.86	6.12	6.12	5.86	5.58	5.18	4.98
12	5.32	5.48	6.00	6.09	6.00	5.86	6.10	6.14	5.86	5.56	5.18	4.96
13	5.32	5.50	6.04	6.10	6.00	5.88	6.10	6.14	5.84	5.56	5.16	4.96
14	5.32	5.58	6.04	6.12	6.00	5.90	6.08	6.14	5.84	5.54	5.16	4.94
15	5.30	5.60	6.06	6.14	6.00	5.92	6.08	6.12	5.82	5.52	5.14	4.94
16	5.30	5.62	6.08	6.16	6.02	5.94	6.08	6.10	5.82	5.50	5.14	4.92
17	5.30	5.62	6.08	6.20	6.04	5.94	6.08	6.10	5.80	5.48	5.12	4.92
18	5.28	5.62	6.10	6.20	6.04	5.94	6.06	6.08	5.80	5.48	5.12	4.90
19	5.32	5.64	6.12	6.22	6.02	5.92	6.06	6.08	5.78	5.46	5.10	4.90
20	5.34	5.66	6.04	6.24	6.00	5.92	6.06	6.06	5.78	5.46	5.08	4.90
21	5.36	5.66	6.02	6.24	6.00	5.90	6.06	6.04	5.78	5.44	5.06	4.88
22	5.40	5.66	6.00	6.22	5.98	6.02	6.04	6.04	5.82	5.44	5.04	4.88
23	5.40	5.66	5.98	6.20	5.96	6.06	6.04	6.02	5.82	5.42	5.02	4.88
24	5.40	5.66	5.98	6.20	5.94	6.08	6.04	6.02	5.80	5.42	5.00	4.86
25	5.38	5.68	5.98	6.18	5.92	6.10	6.04	6.00	5.80	5.40	4.98	4.86
26	5.38	5.68	5.98	6.18	5.90	6.10	6.02	6.00	5.78	5.38	4.96	4.86
27	5.40	5.68	5.96	6.16	5.88	6.10	6.02	5.98	5.78	5.38	4.96	4.84
28	5.40	5.70	5.94	6.18	5.92	6.16	6.14	5.98	5.76	5.36	4.94	4.84
29	5.40	5.70	5.96	6.20	-----	6.18	6.14	5.96	5.74	5.36	4.94	4.84
30	5.40	5.72	5.96	6.20	-----	6.18	6.14	5.96	5.72	5.34	4.92	4.84
31	5.40	-----	5.98	6.18	-----	6.16	-----	5.94	-----	5.32	4.92	-----
MEAN	5.34	5.56	5.99	6.14	6.03	5.97	6.10	6.07	5.84	5.51	5.12	4.89
MAX	5.40	5.72	6.12	6.24	6.18	6.18	6.18	6.14	5.94	5.70	5.30	4.98
MIN	5.28	5.38	5.76	5.96	5.88	5.86	6.02	5.94	5.72	5.32	4.92	4.82
CAL YR 1966	MEAN 5.81		MAX 6.46		MIN 5.28							
WTR YR 1967	MEAN 5.71		MAX 6.24		MIN 4.82							

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.86	5.20	5.34	6.14	5.94	5.84	6.08	6.08	5.92	5.78	5.46	5.44
2	4.86	5.18	5.44	6.12	5.94	5.82	6.08	6.08	5.96	5.78	5.44	5.44
3	4.86	5.18	5.48	6.12	5.94	5.82	6.08	6.06	5.94	5.76	5.42	5.44
4	4.86	5.18	5.54	6.12	5.98	5.86	6.08	6.08	5.94	5.76	5.40	5.42
5	4.86	5.16	5.56	6.10	5.96	5.86	6.12	6.06	5.94	5.74	5.40	5.42
6	4.88	5.16	5.60	6.10	5.94	5.88	6.12	6.08	5.92	5.74	5.38	5.42
7	4.92	5.16	5.66	6.10	5.90	5.90	6.10	6.08	5.92	5.72	5.36	5.40
8	4.92	5.18	5.66	6.08	5.88	5.92	6.10	6.06	5.90	5.70	5.34	5.40
9	4.92	5.18	5.68	6.12	5.86	5.92	6.08	6.06	5.90	5.68	5.32	5.40
10	4.92	5.22	5.70	6.12	5.84	5.92	6.08	6.06	5.90	5.66	5.30	5.38
11	4.96	5.24	5.72	6.10	5.82	5.94	6.08	6.04	5.88	5.66	5.30	5.38
12	4.98	5.24	5.70	6.10	5.80	5.94	6.12	6.04	5.88	5.64	5.28	5.38
13	4.98	5.24	5.70	6.16	5.78	5.96	6.12	6.02	5.88	5.62	5.26	5.38
14	5.00	5.24	5.68	6.26	5.76	5.98	6.10	6.02	5.90	5.60	5.28	5.40
15	5.00	5.26	5.68	6.30	5.74	6.00	6.10	6.00	5.90	5.58	5.34	5.42
16	5.00	5.26	5.66	6.30	5.72	6.06	6.08	6.00	5.88	5.60	5.34	5.42
17	5.00	5.26	5.66	6.28	5.70	6.08	6.08	6.00	5.88	5.58	5.32	5.46
18	5.02	5.26	5.64	6.28	5.72	6.10	6.10	5.98	5.86	5.56	5.32	5.46
19	5.02	5.26	5.64	6.28	5.76	6.10	6.10	5.98	5.86	5.58	5.32	5.46
20	5.02	5.26	5.62	6.26	5.78	6.10	6.10	6.00	5.84	5.58	5.32	5.44
21	5.12	5.26	5.62	6.26	5.80	6.10	6.10	6.00	5.84	5.58	5.30	5.44
22	5.12	5.26	5.60	6.24	5.82	6.08	6.10	6.00	5.84	5.56	5.28	5.44
23	5.12	5.26	5.62	6.20	5.84	6.08	6.10	5.98	5.84	5.56	5.32	5.46
24	5.12	5.26	5.66	6.16	5.86	6.08	6.10	5.98	5.82	5.54	5.36	5.46
25	5.12	5.30		6.14	5.86	6.10	6.08	5.96	5.82	5.54	5.38	5.46
26	5.12	5.30	6.00	6.10	5.84	6.10	6.08	5.96	5.82	5.52	5.40	5.44
27	5.14	5.30	6.08	6.06	5.84	6.10	6.08	5.94	5.80	5.52	5.42	5.44
28	5.14	5.32	6.10	6.04	5.84	6.12	6.06	5.94	5.80	5.50	5.44	5.44
29	5.14	5.32	6.12	6.00	5.84	6.12	6.06	5.92	5.78	5.50	5.44	5.42
30	5.14	5.34	6.12	5.98	-----	6.10	6.08	5.92	5.78	5.48	5.42	5.42
31	5.18	-----	6.14	5.96	-----	6.10	-----	5.90	-----	5.46	5.42	-----
MEAN	5.01	5.24		6.15	5.84	6.00	6.09	6.01	5.87	5.62	5.36	5.43
MAX	5.18	5.34		6.30	5.98	6.12	6.12	6.08	5.96	5.78	5.46	5.46
MIN	4.86	5.16		5.96	5.70	5.82	6.06	5.90	5.78	5.46	5.26	5.38

12157500 LAKE GOODWIN NEAR SILVANIA, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.42	5.62	5.92	6.28	6.22	6.08	6.00	6.12	5.94	5.74	5.44	5.22
2	5.40	5.62	5.96	6.26	6.20	6.06	6.04	6.12	5.92	5.74	5.44	5.20
3	5.40	5.62	6.00	6.26	6.20	6.06	6.08	6.10	5.92	5.76	5.40	5.20
4	5.42	5.62	6.02	6.28	6.22	6.06	6.08	6.10	5.90	5.82	5.40	5.20
5	5.42	5.62	6.04	6.30	6.22	6.06	6.08	6.08	5.90	5.82	5.46	5.20
6	5.46	5.62	6.04	6.32	6.20	6.06	6.06	6.08	5.89	5.80	5.46	5.18
7	5.46	5.64	6.04	6.34	6.18	6.04	6.04	6.06	5.88	5.80	5.44	5.18
8	5.46	5.64	6.12	6.38	6.30	6.06	6.06	6.06	5.88	5.80	5.44	5.18
9	5.44	5.68	6.18	6.38	6.34	6.06	6.06	6.04	5.86	5.80	5.42	5.16
10	5.44	5.68	6.26	6.40	6.38	6.06	6.04	6.04	5.84	5.78	5.42	5.16
11	5.44	5.70	6.28	6.40	6.44	6.04	6.04	6.02	5.84	5.76	5.40	5.14
12	5.44	5.74	6.30	6.40	6.50	6.04	6.04	6.02	5.82	5.74	5.40	5.14
13	5.46	5.76	6.30	6.40	6.52	6.04	6.06	6.00	5.82	5.72	5.38	5.16
14	5.46	5.76	6.30	6.42	6.50	6.02	6.06	6.00	5.80	5.70	5.38	5.16
15	5.48	5.78	6.30	6.42	6.50	6.02	6.06	5.98	5.78	5.68	5.38	5.16
16	5.48	5.78	6.34	6.42	6.48	6.02	6.06	5.98	5.78	5.66	5.36	5.16
17	5.50	5.78	6.34	6.44	6.46	6.02	6.06	5.96	5.76	5.64	5.36	5.22
18	5.52	5.78	6.34	6.42	6.42	6.02	6.06	5.94	5.78	5.62	5.34	5.26
19	5.54	5.76	6.32	6.40	6.38	6.04	6.06	5.94	5.74	5.60	5.34	5.28
20	5.58	5.76	6.32	6.38	6.34	6.04	6.06	5.92	5.74	5.60	5.32	5.30
21	5.58	5.78	6.30	6.36	6.32	6.04	6.06	5.92	5.72	5.58	5.30	5.30
22	5.58	5.78	6.30	6.34	6.28	6.04	6.04	5.90	5.70	5.56	5.26	5.34
23	5.58	5.78	6.30	6.32	6.26	6.04	6.06	5.90	5.70	5.56	5.28	5.40
24	5.58	5.78	6.38	6.30	6.24	6.02	6.08	5.88	5.72	5.56	5.28	5.44
25	5.58	5.78	6.38	6.28	6.20	6.02	6.08	5.88	5.72	5.54	5.28	5.44
26	5.60	5.78	6.36	6.28	6.16	6.02	6.06	5.86	5.74	5.52	5.26	5.44
27	5.60	5.78	6.36	6.26	6.12	6.00	6.06	5.86	5.74	5.50	5.26	5.44
28	5.60	5.78	6.34	6.26	6.10	6.00	6.06	5.86	5.74	5.50	5.26	5.44
29	5.60	5.90	6.32	6.26	-----	6.00	6.10	5.86	5.74	5.48	5.26	5.48
30	5.62	5.90	6.30	6.24	-----	6.00	6.10	5.94	5.74	5.48	5.24	5.48
31	5.62	-----	6.28	6.22	-----	6.00	-----	5.94	-----	5.46	5.24	-----
MEAN	5.51	5.73	6.24	6.34	6.31	6.04	6.06	5.98	5.80	5.66	5.35	5.27
MAX	5.62	5.90	6.38	6.44	6.52	6.08	6.10	6.12	5.94	5.82	5.46	5.48
MIN	5.40	5.62	5.92	6.22	6.10	6.00	6.00	5.86	5.70	5.46	5.24	5.14
CAL YR 1968	MEAN 5.82		MAX 6.38		MIN 5.26							
WTR YR 1969	MEAN 5.85		MAX 6.52		MIN 5.14							

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.50	5.44	5.62	6.00	6.28	5.90	5.84	6.00	5.76	5.50	5.16	4.90
2	5.50	5.44	5.62	5.98	6.26	5.88	5.85	5.98	5.76	5.48	5.20	4.88
3	5.50	5.44	5.62	5.98	6.24	5.88	5.86	5.98	5.74	5.48	5.20	4.90
4	5.48	5.52	5.64	5.96	6.22	5.88	5.86	5.96	5.74	5.46	5.20	4.92
5	5.48	5.52	5.64	5.96	6.22	5.86	5.85	5.96	5.72	5.46	5.18	4.90
6	5.48	5.52	5.64	5.94	6.20	5.88	5.86	5.94	5.72	5.44	5.16	4.92
7	5.46	5.52	5.64	5.94	6.18	5.90	5.87	5.94	5.70	5.44	5.16	4.94
8	5.50	5.54	5.64	5.92	6.16	5.90	5.87	5.94	5.70	5.42	5.16	4.94
9	5.50	5.54	5.66	5.94	6.12	5.88	5.85	6.00	5.68	5.40	5.16	4.94
10	5.48	5.54	5.66	5.92	6.10	5.88	5.87	6.00	5.72	5.38	5.14	4.94
11	5.48	5.54	5.72	5.92	6.08	5.86	5.91	5.98	5.72	5.36	5.12	4.92
12	5.48	5.54	5.74	5.92	6.06	5.86	5.89	5.98	5.70	5.34	5.12	4.90
13	5.46	5.54	5.82	5.94	6.06	5.88	5.88	5.96	5.68	5.32	5.10	4.90
14	5.46	5.54	5.84	5.96	6.04	5.88	5.88	5.96	5.66	5.32	5.10	4.88
15	5.46	5.56	5.84	5.96	6.04	5.88	5.86	5.96	5.66	5.30	5.08	4.86
16	5.44	5.60	5.84	5.96	6.08	5.92	5.86	5.94	5.66	5.30	5.06	4.86
17	5.44	5.60	5.86	5.98	6.06	5.92	5.86	5.94	5.64	5.28	5.06	4.88
18	5.44	5.60	5.86	5.98	6.05	5.90	5.84	5.92	5.64	5.26	5.04	4.90
19	5.44	5.58	5.86	5.98	6.04	5.90	5.90	5.90	5.64	5.24	5.02	4.94
20	5.44	5.60	5.86	5.98	6.02	5.88	5.90	5.88	5.64	5.22	5.02	4.94
21	5.44	5.62	5.90	6.04	6.00	5.90	5.90	5.86	5.62	5.20	5.00	4.96
22	5.44	5.62	5.92	6.06	5.98	5.88	5.90	5.86	5.60	5.18	5.00	4.98
23	5.44	5.64	5.98	6.10	5.96	5.88	5.88	5.84	5.58	5.18	5.00	4.98
24	5.44	5.64	5.98	6.10	5.94	5.88	5.92	5.82	5.58	5.16	4.98	4.98
25	5.42	5.64	5.98	6.10	5.92	5.86	5.96	5.82	5.56	5.16	4.98	4.96
26	5.42	5.64	6.00	6.14	5.92	5.86	5.96	5.80	5.54	5.18	4.96	4.96
27	5.44	5.64	6.04	6.26	5.90	5.86	5.96	5.80	5.54	5.16	4.96	4.96
28	5.44	5.64	6.04	6.28	5.90	5.86	5.96	5.78	5.53	5.16	4.94	4.96
29	5.44	5.64	6.02	6.28	-----	5.86	5.98	5.82	5.50	5.16	4.94	4.94
30	5.44	5.62	6.02	6.28	-----	5.84	6.00	5.80	5.50	5.16	4.92	4.94
31	5.44	-----	6.00	6.28	-----	5.84	-----	5.78	-----	5.16	4.90	-----
MEAN	5.46	5.57	5.82	6.03	6.07	5.88	5.89	5.91	5.65	5.30	5.07	4.93
MAX	5.50	5.64	6.04	6.28	6.28	5.92	6.00	6.00	5.76	5.50	5.20	4.98
MIN	5.42	5.44	5.62	5.92	5.90	5.84	5.84	5.78	5.50	5.16	4.90	4.86
CAL YR 1969	MEAN 5.81		MAX 6.52		MIN 5.14							
WTR YR 1970	MEAN 5.63		MAX 6.28		MIN 4.86							

TULALIP CREEK BASIN

12158000 LAKE SHOECRAFT NEAR TULALIP, WASH.

LOCATION.--Lat 48°07'34", long 122°18'11", in NW¼SW¼ sec.33, T.31 N., R.4 E., Snohomish County, on southwest shore 0.1 mile east of outlet and 4.2 miles north of Tulalip.

DRAINAGE AREA.--6.02 sq mi.

PERIOD OF RECORD.--April 1953 to September 1970.

GAGE.--Nonrecording gage. Altitude of gage is 324 ft (from topographic map). Prior to Aug. 12, 1963, at site 300 ft downslope at present datum.

EXTREMES.--Maximum and minimum gage heights, in feet, for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum observed		Date	Minimum observed	
		Gage height			Gage height	
1966	Mar. 20, 21, 1966	2.27		Oct. 4, 1965	1.79	
1967	Apr. 5, 6, 1967	2.02		Sept. 9, 1967	1.68	
1968	Jan. 16, 17, 1968	2.10		Oct. 1, 2, 1967	1.75	
1969	Feb. 12, 1969	2.30		Sept. 11, 12, 1969	1.98	
1970	Jan. 28-30, 1970	2.08		Sept. 14-16, 1970	1.70	

Period of record: Maximum gage height observed, 2.48 ft Jan. 5, 1956; minimum observed, 0.45 ft Sept. 13-15, 1958.

REMARKS.--No gage-height record Jan. 19 to Feb. 2, 1969, to top of ice. Level of Lake Shoecraft is controlled by planks in wooden flume at outlet. No diversion.

REVISIONS.--WSP 1932: Drainage area.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	.88	1.10	1.40	1.80	1.97	2.00	1.84	1.76	1.66	1.64	1.28
2	.80	.89	1.10	1.48	1.80	1.97	2.00	1.84	1.76	1.67	1.62	1.28
3	.80	.89	1.10	1.50	1.80	1.97	1.99	1.84	1.78	1.74	1.60	1.27
4	.79	.90	1.15	1.52	1.80	1.96	1.97	1.83	1.78	1.77	1.59	1.27
5	.80	.92	1.15	1.52	1.82	1.96	1.96	1.82	1.77	1.77	1.58	1.26
6	.83	.93	1.18	1.56	1.84	1.96	1.95	1.81	1.77	1.80	1.56	1.25
7	.85	.94	1.18	1.58	1.87	1.96	1.94	1.93	1.76	1.80	1.56	1.24
8	.86	.94	1.20	1.62	1.89	1.98	1.92	1.92	1.76	1.79	1.54	1.22
9	.85	.94	1.20	1.64	1.89	2.04	1.92	1.89	1.75	1.78	1.52	1.20
10	.84	.94	1.22	1.64	1.90	2.08	1.92	1.89	1.74	1.77	1.50	1.20
11	.84	.96	1.22	1.66	1.88	2.08	1.92	1.87	1.78	1.77	1.50	1.20
12	.83	.96	1.22	1.67	1.88	2.09	1.96	1.86	1.82	1.76	1.48	1.20
13	.86	.96	1.22	1.68	1.90	2.10	1.96	1.86	1.82	1.76	1.47	1.19
14	.87	.97	1.22	1.71	1.90	2.14	1.96	1.86	1.81	1.77	1.46	1.18
15	.88	.98	1.22	1.72	1.92	2.14	1.96	1.84	1.80	1.77	1.45	1.18
16	.87	.98	1.22	1.72	1.92	2.20	1.94	1.87	1.80	1.78	1.44	1.17
17	.86	.98	1.22	1.72	1.92	2.18	1.94	1.88	1.79	1.78	1.42	1.16
18	.85	1.01	1.22	1.74	1.93	2.20	1.93	1.86	1.78	1.77	1.41	1.20
19	.87	1.04	1.22	1.75	1.93	2.24	1.90	1.85	1.76	1.76	1.40	1.20
20	.87	1.04	1.20	1.75	1.92	2.27	1.90	1.84	1.76	1.76	1.38	1.20
21	.87	1.04	1.22	1.75	1.92	2.27	1.90	1.84	1.75	1.73	1.37	1.20
22	.87	1.04	1.22	1.75	1.91	2.25	1.89	1.85	1.75	1.72	1.36	1.19
23	.86	1.04	1.20	1.75	1.91	2.25	1.89	1.85	1.74	1.70	1.35	1.20
24	.86	1.04	1.28	1.77	1.91	2.24	1.88	1.84	1.73	1.78	1.34	1.20
25	.86	1.06	1.28	1.77	1.90	2.16	1.88	1.83	1.72	1.70	1.32	1.20
26	.86	1.07	1.28	1.77	1.92	2.12	1.88	1.82	1.71	1.70	1.32	1.20
27	.86	1.09	1.32	1.77	1.92	2.08	1.88	1.82	1.69	1.69	1.32	1.19
28	.86	1.09	1.39	1.77	1.96	2.04	1.87	1.80	1.69	1.68	1.33	1.19
29	.86	1.10	1.42	1.78	-----	2.02	1.86	1.80	1.68	1.67	1.32	1.18
30	.87	1.10	1.42	1.80	-----	1.99	1.85	1.76	1.67	1.65	1.31	1.18
31	.87	-----	1.42	1.80	-----	1.97	-----	1.76	-----	1.64	1.30	-----
MEAN	.85	.99	1.23	1.68	1.89	2.09	1.84	1.76	1.74	1.64	1.44	1.21
MAX	.88	1.10	1.42	1.80	1.96	2.27	1.93	1.82	1.80	1.64	1.28	1.28
MIN	.79	.88	1.10	1.40	1.80	1.96	1.76	1.67	1.64	1.30	1.16	1.16

12158000 LAKE SHOECRAFT NEAR TULALIP, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.18	1.26	1.60	1.76	1.90	1.72	2.00	1.98	1.80	1.56	1.17	.76
2	1.18	1.26	1.68	1.76	1.88	1.74	2.00	1.98	1.78	1.56	1.16	.76
3	1.20	1.25	1.70	1.76	1.86	1.74	2.00	1.97	1.78	1.54	1.14	.75
4	1.19	1.25	1.80	1.80	1.88	1.72	2.00	1.96	1.77	1.52	1.12	.74
5	1.19	1.28	1.82	1.78	1.88	1.70	2.02	1.94	1.77	1.50	1.10	.72
6	1.18	1.30	1.82	1.88	1.86	1.68	2.02	1.94	1.76	1.48	1.10	.72
7	1.18	1.31	1.84	1.87	1.84	1.68	2.00	1.94	1.74	1.48	1.08	.70
8	1.18	1.30	1.86	1.87	1.80	1.68	1.98	1.92	1.74	1.47	1.08	.70
9	1.18	1.30	1.85	1.88	1.78	1.70	1.98	1.96	1.74	1.46	1.06	.68
10	1.18	1.32	1.84	1.88	1.76	1.70	1.96	1.94	1.72	1.44	1.06	.72
11	1.16	1.32	1.83	1.90	1.76	1.70	1.95	1.96	1.72	1.44	1.05	.86
12	1.15		1.85	1.88	1.72	1.69	1.94	1.98	1.70	1.42	1.04	.84
13	1.15		1.87	1.90	1.76	1.68	1.95	1.98	1.68	1.40	1.02	.84
14	1.16	1.41	1.88	1.90	1.77	1.67	1.92	1.98	1.68	1.38	1.00	.82
15	1.16	1.45	1.88	1.95	1.76	1.68	1.92	1.97	1.68	1.38	1.00	.82
16	1.16	1.47	1.87	1.96	1.76	1.74	1.92	1.96	1.68	1.36	.98	.80
17	1.15	1.47	1.86	1.98	1.75	1.72	1.92	1.96	1.66	1.34	.97	.80
18	1.14	1.47	1.84	1.97	1.78	1.72	1.91	1.94	1.66	1.32	.96	.79
19	1.14	1.48	1.84	1.96	1.78	1.74	1.92	1.93	1.64	1.30	.94	.78
20	1.19	1.49	1.84	2.00	1.76	1.73	1.90	1.92	1.63	1.30	.94	.78
21	1.20	1.50	1.84	2.00	1.74	1.72	1.90	1.90	1.62	1.30	.92	.78
22	1.25	1.50	1.82	2.00	1.71	1.72	1.90	1.90		1.28	.90	.78
23	1.26	1.51	1.80	1.98	1.69	1.76	1.90	1.88	1.66	1.28	.88	.76
24	1.26	1.51	1.80	1.98	1.67	1.84	1.88	1.86	1.66	1.26	.86	.76
25	1.26	1.52	1.78	1.97	1.66	1.90	1.88	1.86	1.66	1.25	.85	.75
26	1.25	1.54	1.78	1.98	1.64	1.88	1.86	1.86	1.64	1.24	.84	.74
27	1.26	1.54	1.76	1.90	1.61	1.95	1.86	1.84	1.64	1.22	.82	.74
28	1.26	1.54	1.76	1.92	1.61	1.97	1.98	1.82	1.62	1.20	.80	.74
29	1.24	1.54	1.76	1.91	-----	2.00	2.00	1.82	1.61	1.20	.80	.72
30	1.26	1.56	1.75	1.96	-----	2.00	2.00	1.80	1.60	1.20	.78	.72
31	1.26	-----	1.74	1.94	-----	2.01	-----	1.81	-----	1.18	.78	-----
MEAN	1.20		1.81	1.91	1.76	1.77	1.95	1.92		1.36	.97	.76
MAX	1.26		1.88	2.00	1.90	2.01	2.02	1.98		1.56	1.17	.86
MIN	1.14		1.60	1.76	1.61	1.67	1.86	1.80		1.18	.78	.68

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	1.14	1.33	1.90	1.72	1.68	1.94	1.94	1.77	1.64	1.30	1.28
2	.75	1.14	1.40	1.90	1.72	1.68	1.96	1.93	1.82	1.62	1.28	1.29
3	.76	1.14	1.46	1.90	1.72	1.68	1.94	1.92	1.82	1.62	1.28	1.29
4	.78	1.14	1.45	1.88	1.74	1.70	1.92	1.90	1.80	1.60	1.26	1.28
5	.78	1.14	1.44	1.90	1.72	1.74	1.97	1.92	1.79	1.60	1.24	1.28
6	.76	1.13	1.44	1.89	1.70	1.76	1.96	1.92	1.78	1.58	1.22	1.27
7	.84	1.12	1.46	1.87	1.66	1.76	1.96	1.94	1.77	1.56	1.20	1.26
8	.86	1.12	1.44	1.88	1.64	1.77	1.96	1.92	1.76	1.54	1.20	1.26
9	.86	1.16	1.40	1.92	1.62	1.77	1.95	1.92	1.76	1.54	1.18	1.26
10	.86	1.16	1.38	1.90	1.58	1.77	1.94	1.90	1.75	1.52	1.16	1.25
11	.90	1.20	1.45	1.90	1.56	1.76	1.92	1.88	1.74	1.50	1.14	1.24
12	.92	1.20	1.48	1.90	1.54	1.88	1.96	1.88	1.74	1.48	1.14	1.26
13	.92	1.20	1.48	1.94	1.52	1.82	1.96	1.88	1.72	1.48	1.12	1.26
14	.94	1.21	1.48	2.04	1.50	1.84	1.94	1.87	1.74	1.46	1.14	1.26
15	.92	1.21	1.48	2.08	1.54	1.86	1.93	1.86	1.74	1.44	1.16	1.28
16	.92	1.22	1.48	2.10	1.58	1.91	1.95	1.86	1.73	1.44	1.18	1.26
17	.92	1.22	1.48	2.10	1.58	1.92	1.94	1.84	1.72	1.44	1.18	1.29
18	.92	1.23	1.47	2.06	1.57	1.94	1.92	1.84	1.71	1.42	1.18	1.32
19	.98	1.23	1.46	2.04	1.60	1.96	1.94	1.82	1.70	1.48	1.17	1.32
20	.98	1.23	1.44	2.02	1.62	1.96	1.96	1.88	1.70	1.45	1.17	1.30
21	1.02	1.22	1.46	2.00	1.62	1.94	1.95	1.86	1.69	1.44	1.16	1.30
22	1.08	1.22	1.46	1.98	1.64	1.94	1.94	1.84	1.70	1.42	1.16	1.28
23	1.10	1.24	1.44		1.68	1.92	1.94	1.84	1.70	1.48	1.18	1.30
24	1.10	1.24	1.48	1.92	1.70	1.92	1.96	1.82	1.68	1.40	1.24	1.30
25	1.08	1.27	1.67	1.90	1.70	1.92	1.96	1.80	1.68	1.38	1.24	1.30
26	1.08	1.27	1.80	1.86	1.70	1.94	1.94	1.80	1.68	1.38	1.26	1.30
27	1.07	1.27	1.87	1.84	1.70	1.96	1.96	1.80	1.68	1.37	1.28	1.29
28	1.10	1.26	1.90	1.80	1.70	1.96	1.92	1.79	1.66	1.36	1.29	1.28
29	1.10	1.30	1.90	1.76	1.70	1.96	1.92	1.78	1.66	1.34	1.29	1.28
30	1.12	1.33	1.90	1.76	-----	1.98	1.90	1.76	1.64	1.32	1.28	1.28
31	1.13	-----	1.90	1.70	-----	1.96	-----	1.76	-----	1.30	1.27	-----
MEAN	.95	1.21	1.54		1.64	1.85	1.94	1.86	1.73	1.47		1.28
MAX	1.13	1.33	1.90		1.74	1.90	1.97	1.94	1.82	1.64		1.32
MIN	.75	1.12	1.33		1.50	1.68	1.90	1.76	1.64	1.30		1.24

TULALIP CREEK BASIN

12158000 LAKE SHOECRAFT NEAR TULALIP, WASH.--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.26	1.48	1.74	2.08	2.24	1.86	1.82	1.94	1.76	1.56	1.27	1.26
2	1.26	1.48	1.82	2.08	2.24	1.84	1.88	1.94	1.76	1.57	1.26	1.05
3	1.26	1.48	1.80	2.08	2.00	1.88		1.94	1.76	1.60	1.25	1.04
4	1.26	1.48	1.84	2.14	2.04	1.88	1.90	1.94	1.74	1.66	1.24	1.04
5	1.26	1.46	1.88	2.14	2.04	1.90	1.90	1.94	1.74	1.66	1.30	1.04
6	1.30	1.48	1.86	2.16	2.02	1.90	1.90	1.91		1.64	1.28	1.02
7	1.30	1.47	1.84	2.16	2.00	1.90	1.90	1.88		1.64	1.28	1.00
8	1.30	1.50	1.94	2.18	2.06	1.90	1.90	1.88	1.70	1.63	1.26	1.00
9	1.30	1.54	1.98	2.18	2.16	1.90	1.88	1.88	1.70	1.62	1.26	1.00
10	1.30	1.54	2.02	2.16	2.18	1.88	1.88	1.87	1.68	1.60	1.24	.99
11	1.30	1.57	2.10	2.22	2.24	1.88	1.88	1.86	1.68	1.66	1.24	.98
12	1.30	1.60	2.10	2.22	2.30	1.88	1.88	1.86	1.66	1.52	1.22	.98
13	1.32	1.62	2.10	2.20	2.27	1.86	1.88	1.84	1.66	1.49	1.22	1.02
14	1.30	1.62	2.10	2.20	2.25	1.86	1.90	1.82	1.64	1.45	1.21	1.00
15	1.34	1.61	2.10	2.22		1.84	1.90	1.82	1.64	1.42	1.20	1.00
16	1.34	1.64	2.16	2.24	2.24	1.84	1.88	1.80	1.62	1.45	1.18	.99
17	1.31	1.62	2.15	2.24	2.22	1.84	1.88	1.80	1.60		1.18	1.00
18	1.39	1.62	2.15	2.24	2.18	1.86	1.88	1.78	1.58	1.45	1.18	1.14
19	1.39	1.63	2.16	2.24	2.16	1.86	1.88	1.76	1.58	1.45	1.16	1.10
20	1.42	1.62	2.14	2.24	2.12	1.86	1.88	1.76	1.58	1.42	1.15	1.14
21	1.44	1.62	2.12	2.24	2.08	1.86	1.88	1.75	1.56	1.42	1.14	1.14
22	1.44	1.63	2.12	2.24	2.04	1.84	1.88	1.74	1.54	1.40	1.13	1.22
23	1.43	1.65	2.14	2.24	2.00	1.87	1.90	1.74	1.54	1.40	1.12	1.26
24	1.44	1.64	2.18	2.24	2.02	1.86	1.90	1.75	1.56		1.10	1.28
25	1.44	1.64	2.18	2.24	1.98	1.86	1.90	1.74	1.56	1.36	1.10	1.28
26	1.44	1.64	2.18	2.24	1.94	1.86	1.88	1.70	1.58	1.34	1.10	1.26
27	1.44	1.64	2.18	2.24	1.90	1.85	1.88	1.68	1.56	1.34	1.08	1.26
28	1.42	1.64	2.16	2.24	1.86	1.84	1.88	1.68	1.56	1.32	1.08	1.30
29	1.44	1.66	2.16	2.24	-----	1.84	1.90	1.68	1.57	1.30	1.08	1.32
30	1.48	1.74	2.16	2.24	-----	1.84	1.94	1.78	1.58	1.30	1.07	1.36
31	1.68	-----	2.16	2.24	-----	1.84	-----	1.78	-----	1.28	1.06	-----
MEAN	1.36	1.59	2.06	2.20		1.86		1.81			1.18	1.11
MAX	1.48	1.74	2.18	2.24		1.90		1.94			1.30	1.32
MIN	1.26	1.46	1.74	2.08		1.84		1.68			1.06	.98

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.30	1.28	1.46	1.82	2.04	1.72	1.66	1.80	1.62	1.32	1.00	.72
2	1.34	1.29	1.46	1.80	2.02	1.72	1.68	1.80	1.62	1.31	1.04	.72
3	1.34	1.30	1.45	1.80	2.00	1.72	1.68	1.80	1.58	1.30	1.02	.74
4	1.32	1.30	1.47	1.80	1.98	1.70	1.68	1.78	1.57	1.29	1.00	.74
5	1.32	1.40	1.48	1.78	1.96	1.70	1.66	1.78	1.57	1.28	1.00	.74
6	1.32	1.38	1.47	1.78	1.94	1.68	1.68	1.78	1.56	1.26	1.00	.74
7	1.33	1.38	1.47	1.76	1.92	1.70	1.70	1.76	1.54	1.25	.98	.76
8	1.33	1.40	1.48	1.76	1.90	1.70	1.70	1.76	1.52	1.24	.98	.77
9	1.33	1.41	1.49	1.74	1.88	1.71	1.68	1.81	1.52	1.22	.96	.77
10	1.32	1.41	1.50	1.74	1.85	1.70	1.72	1.81	1.54	1.22	.96	.76
11	1.32	1.40	1.54	1.74	1.82	1.68	1.74	1.80	1.54	1.20	.96	.76
12	1.32	1.42	1.58	1.74	1.80	1.69	1.72	1.79	1.52	1.18	.95	.74
13	1.31	1.42	1.60	1.72	1.81	1.70	1.70	1.79	1.50	1.16	.94	.72
14	1.30	1.42	1.66	1.77	1.80	1.70	1.70	1.78	1.48	1.14	.92	.70
15	1.30	1.44	1.68	1.79	1.80	1.70	1.70	1.77	1.50	1.14	.90	.70
16	1.28	1.46	1.68	1.78	1.82	1.72	1.68	1.76	1.50	1.10	.89	.70
17	1.28	1.49	1.68	1.79	1.80	1.74	1.68	1.75	1.50	1.10	.88	.71
18	1.27	1.49	1.67	1.79	1.80	1.73	1.66	1.74	1.49	1.08	.87	.74
19	1.26	1.48	1.68	1.80	1.78	1.72	1.70	1.72	1.48	1.06	.86	.78
20	1.28	1.46	1.68	1.82	1.76	1.70	1.74	1.70	1.48	1.06	.85	.80
21	1.28	1.46	1.71	1.84	1.75	1.72	1.74	1.70	1.46	1.04	.84	.80
22	1.28	1.46	1.72	1.86	1.72	1.70	1.72	1.68	1.45	1.02	.82	.80
23	1.28	1.46	1.78	1.88	1.70	1.69	1.70	1.68	1.45	1.00	.80	.84
24	1.28	1.48	1.80	1.90	1.74	1.69	1.73	1.66	1.41	1.00	.80	.84
25	1.28	1.48	1.80	1.92	1.76	1.70	1.78	1.66	1.38	.98	.79	.84
26	1.27	1.48	1.81	1.92	1.76	1.68	1.78	1.65	1.38	1.00	.78	.83
27	1.28	1.46	1.86	2.04	1.74	1.68	1.79	1.64	1.38	1.02	.77	.83
28	1.28	1.46	1.85	2.08	1.74	1.68	1.78	1.61	1.38	1.02	.76	.82
29	1.29	1.46	1.84	2.08	-----	1.68	1.78	1.64	1.36	1.00	.75	.82
30	1.28	1.46	1.84	2.08	-----	1.68	1.82	1.64	1.34	1.02	.74	.82
31	1.28	-----	1.82	2.06	-----	1.67	-----	1.62	-----	1.00	.74	-----
MEAN	1.30	1.42	1.65	1.84	1.84	1.70	1.72	1.73	1.49	1.13	.89	.77
MAX	1.34	1.49	1.86	2.08	2.04	1.74	1.82	1.81	1.62	1.32	1.04	.84
MIN	1.26	1.28	1.45	1.72	1.70	1.67	1.66	1.61	1.34	.98	.74	.70

WTR YR 1970 MEAN 1.45 MAX 2.08 MIN .70

12161000 SOUTH FORK STILLAGUAMISH RIVER NEAR GRANITE FALLS, WASH.

LOCATION.--Lat 48°06'13", long 121°56'37", in SWNW sec.8, T.30 N., R.7 E., Snohomish County, on right bank 0.3 mile upstream from county road bridge, 1.2 miles upstream from Canyon Creek, 1.6 miles northeast of Granite Falls, and at mile 34.9.

DRAINAGE AREA.--119 sq mi.

PERIOD OF RECORD.--December 1902 to July 1903 (gage heights only, published as "at Robe"), July 1928 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 310 ft (from river-profile map). Prior to Aug. 31, 1928, non-recording gage at site 8 miles upstream at different datum. Aug. 31 to Sept. 30, 1928, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--42 years, 1,066 cfs (121.65 inches per year, 772,300 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (8,700 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	0530	8,740	10.37	Dec. 10, 1967	2015	9,000	10.50	Dec. 3, 1968	1530	13,600	12.69
				Dec. 24, 1967	0545	12,400	12.21	Jan. 4, 1969	1730	*14,200	12.92
Oct. 20, 1966	0145	10,900	11.46	Jan. 20, 1968	1830	*16,800	13.99				
Dec. 13, 1966	1130	*12,800	12.40	Feb. 4, 1968a	-	-	-	Nov. 4, 1969	1715	*10,000	11.02
Dec. 16, 1966	1115	9,780	10.89	Feb. 19, 1968a	-	11,500	b11.75	Jan. 14, 1970	0515	9,020	10.51
Jan. 15, 1967	1045	10,700	11.34	Feb. 24, 1968	0145	9,220	10.61	Apr. 9, 1970	1530	8,760	10.38
				June 2, 1968	0715	13,800	12.78				
Oct. 27, 1967	1715	14,400	13.01	Sept. 17, 1968	1145	9,300	10.65				

a About.

b From high watermark.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 17, 1966	127	3.35	1969	Sept. 2, 12, 1969	138	3.39
1967	Sept. 29, 1967	107	3.26	1970	Aug. 31, Sept. 1, 2, 1970	115	-
1968	Aug. 13, 14, 1968	149	3.44				

Period of record: Maximum discharge, 32,400 cfs Feb. 26, 1932 (gage height, 19.7 ft), from rating curve extended above 21,000 cfs; minimum, 55 cfs Sept. 23, 24, 1938; minimum gage height, 2.99 ft Aug. 19-21, 1941.

REMARKS.--Records excellent. Some small diversion for domestic use above station. No regulation. Water-quality records for the water year 1966 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 902: 1939. WSP 1286: 1929-31(M), 1932, 1935, 1937(M), 1939(P), 1940-41(M), 1943(P), 1947(P). WSP 1736: 1932-35(M), 1944(M), 1946-48(M), 1951(M), 1957(M). WSP 1932: 1938(P), 1945(P), 1950(P), 1956(P), 1959(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	142	331	1,190	425	828	538	2,090	726	697	780	348	182
2	137	1,280	1,750	528	646	460	1,880	1,020	758	1,020	336	169
3	134	1,400	1,640	410	560	410	1,340	1,620	795	1,640	333	163
4	139	3,660	5,110	360	560	368	1,190	2,030	748	1,670	326	157
5	1,360	3,560	1,920	500	1,010	378	1,240	2,430	725	1,150	297	154
6	3,960	1,510	2,280	2,630	956	430	1,390	3,550	1,090	1,070	273	153
7	1,240	948	2,370	3,410	933	460	1,620	2,630	1,310	922	262	152
8	718	758	1,630	3,340	772	1,000	1,680	2,070	1,280	958	261	146
9	828	758	1,070	1,740	772	4,270	1,630	2,050	1,190	928	249	140
10	550	676	863	1,360	646	2,040	2,110	1,530	1,550	886	235	143
11	425	980	712	1,670	786	1,180	2,990	1,120	2,260	888	233	169
12	368	700	599	2,360	706	940	1,880	1,110	2,110	718	215	173
13	500	560	528	6,600	538	2,340	1,220	1,010	1,640	735	244	150
14	610	640	460	4,030	495	2,340	1,310	879	1,660	810	328	139
15	1,440	1,720	405	1,900	430	2,310	1,330	994	1,510	786	244	135
16	786	1,860	368	1,220	405	1,650	1,260	1,330	1,610	846	222	131
17	712	1,040	335	940	396	1,140	1,110	1,010	1,520	700	207	130
18	1,330	835	339	828	430	1,090	958	836	1,120	616	197	379
19	2,280	1,440	538	676	425	1,160	839	926	1,130	616	190	273
20	1,220	2,340	550	599	737	841	781	1,100	943	543	183	198
21	905	3,240	730	550	765	686	757	1,490	774	481	177	168
22	670	3,230	495	495	682	594	799	1,510	769	476	171	153
23	544	1,470	420	485	758	548	774	1,150	762	472	169	160
24	450	1,010	400	430	688	544	769	1,020	899	409	166	170
25	386	856	351	445	610	615	937	1,290	761	790	168	156
26	343	821	319	470	694	819	969	1,710	760	568	172	19:
27	312	1,250	445	516	765	1,100	803	1,450	848	468	567	218
28	425	870	980	604	622	1,290	746	1,000	2,120	451	449	178
29	355	712	772	1,140	1,170	1,680	731	955	1,190	432	267	157
30	588	658	544	1,170	-----	3,480	737	977	811	613	223	148
31	410	-----	440	1,220	-----	2,940	-----	812	-----	381	204	-----
TOTAL	24,267	41,113	30,553	43,051	18,615	39,641	37,870	43,335	35,340	23,713	7,916	5,139
MEAN	783	1,370	986	1,389	665	1,279	1,262	1,398	1,178	765	235	171
MAX	3,960	3,660	5,110	6,600	1,010	4,270	2,990	3,550	2,260	1,670	567	379
MIN	134	331	319	360	396	368	731	726	697	381	166	130
CFSM	6.58	11.5	8.29	11.7	5.59	10.7	10.6	11.7	9.90	6.43	2.14	1.44
IN.	7.59	12.85	9.35	13.46	5.82	12.39	11.84	13.55	11.05	7.41	2.47	1.61
AC-FT	48,130	81,550	60,600	85,390	36,920	78,630	75,120	85,950	70,100	47,030	15,700	10,190
CAL YR 1965	TOTAL 366,989	MEAN 1,005	MAX 8,320	MIN 134	CFSM 8.45	IN 114.72	AC-FT 727,900					
MTR YR 1966	TOTAL 350,553	MEAN 960	MAX 6,600	MIN 130	CFSM 8.07	IN 109.58	AC-FT 695,300					

12161000 SOUTH FORK STILLAGUAMISH RIVER NEAR GRANITE FALLS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	631	2,800	2,870	1,170	1,460	520	623	1,420	812	273	133
2	450	824	2,160	1,620	1,230	942	515	617	2,010	935	262	534
3	290	449	1,730	3,610	4,040	746	560	656	1,690	998	251	337
4	220	392	1,770	1,900	5,390	639	639	752	1,530	928	234	203
5	190	541	1,470	1,190	2,360	579	650	949	1,770	782	242	164
6	180	735	1,450	900	1,450	546	590	1,200	1,880	674	224	156
7	260	590	1,130	788	1,110	510	601	1,390	1,600	584	259	146
8	860	827	1,620	921	1,070	650	650	1,710	1,180	958	251	131
9	500	790	677	1,860	949	1,260	782	2,070	1,030	534	224	127
10	340	1,080	1,610	1,670	1,130	752	674	1,340	1,030	461	200	675
11	285	690	2,840	4,270	1,110	617	601	1,100	984	547	205	1,820
12	250	960	2,270	2,270	1,300	546	639	1,060	1,020	663	200	778
13	230	1,100	10,900	2,520	2,670	500	788	1,310	649	190	419	
14	215	2,100	4,200	3,070	1,260	460	639	914	1,490	572	190	292
15	199	2,000	3,000	6,430	1,030	595	579	1,020	1,650	521	185	231
16	188	1,500	7,160	2,670	935	1,100	535	1,530	1,690	509	180	197
17	308	1,180	4,950	1,600	1,300	1,360	568	2,060	1,840	505	175	179
18	282	920	3,440	1,190	1,650	1,270	560	1,820	1,820	461	170	167
19	4,140	1,980	4,600	4,270	1,030	679	530	1,950	1,880	404	165	157
20	5,360	950	4,240	3,410	830	800	530	2,300	1,910	441	155	149
21	1,740	1,000	1,910	1,880	770	921	656	2,370	1,700	556	165	143
22	3,070	880	1,270	1,230	698	2,330	612	2,330	1,450	442	180	150
23	5,170	790	977	1,901	634	4,030	562	1,860	1,110	413	161	141
24	2,280	740	1,220	818	612	1,940	568	1,330	1,110	416	150	129
25	1,220	3,200	1,080	722	686	1,260	650	1,040	1,260	400	138	121
26	1,110	2,200	788	752	668	1,030	656	1,070	1,270	381	129	115
27	1,090	1,530	668	2,870	601	921	617	1,230	1,100	347	125	111
28	1,749	617	1,910	1,430	1,430	734	734	940	940	307	123	109
29	1,460	2,200	1,760	3,500	-----	722	698	1,910	949	367	125	113
30	1,340	3,600	1,010	2,910	-----	634	650	1,430	886	295	129	317
31	811	-----	1,120	1,950	-----	568	-----	1,130	-----	280	131	-----
TOTAL	34,957	34,592	77,514	72,211	39,034	31,781	18,445	43,479	42,491	16,724	5,810	8,444
MEAN	1,128	1,128	2,450	2,329	1,254	1,034	594	1,403	1,376	535	187	281
MAX	5,360	3,600	10,900	6,430	5,390	4,030	782	2,570	2,010	998	273	1,820
MIN	150	392	617	722	681	460	515	617	886	280	123	109
CF5M	9.48	10.3	21.0	19.6	11.7	8.61	5.18	11.8	11.9	4.53	1.57	2.36
IN	10.93	11.44	24.23	22.57	12.20	9.93	5.77	13.59	12.28	5.23	1.82	2.64
AC-FT	69,340	72,580	153,700	143,200	77,420	63,040	36,630	86,240	84,280	33,170	11,520	16,750

CAL YR 1966 TOTAL 403,683 MEAN 1,106 MAX 10,900 NIN 130 CF5M 9.29 IN 126.19 AC-FT 800,700
 MTR YR 1967 TOTAL 427,502 MEAN 1,171 MAX 10,900 NIN 109 CF5M 9.84 IN 135.64 AC-FT 848,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,670	2,220	712	919	660	916	901	2,180	4,310	635	226	393
2	2,010	1,270	1,770	724	800	926	961	1,380	9,710	678	218	390
3	2,490	919	1,990	616	2,000	888	835	1,170	2,950	707	213	322
4	2,060	724	1,230	583	6,000	1,280	964	1,800	1,630	705	207	282
5	1,060	599	912	544	3,000	2,090	1,430	1,240	1,330	651	200	257
6	1,430	511	688	475	2,000	1,620	1,190	1,140	1,210	592	192	240
7	3,300	511	568	470	1,300	1,020	1,090	964	994	566	178	227
8	1,590	511	544	470	920	811	876	883	902	499	167	214
9	864	1,880	1,860	1,100	820	667	776	988	820	492	161	202
10	782	4,760	4,250	842	740	586	840	1,250	837	431	158	191
11	3,250	2,630	3,510	572	660	543	1,050	1,480	841	388	159	188
12	2,440	1,350	1,440	524	600	636	838	1,430	786	777	157	221
13	2,470	1,000	960	3,880	591	598	693	1,070	865	607	150	198
14	3,120	1,170	737	5,200	556	698	1,030	937	810	586	196	1,070
15	1,290	1,300	628	4,330	522	1,568	1,500	948	698	616	495	3,920
16	856	1,160	561	2,490	489	2,160	878	939	692	589	341	2,980
17	663	607	495	1,560	479	1,400	718	1,100	703	453	249	5,620
18	941	712	445	1,430	2,000	994	661	1,280	755	380	807	2,820
19	1,330	616	398	7,760	8,000	768	725	1,880	859	407	459	1,470
20	768	522	355	9,670	4,500	677	724	2,420	712	713	363	990
21	2,890	460	335	5,810	3,100	638	655	1,730	618	479	301	731
22	4,640	445	1,890	2,530	3,180	624	626	1,210	880	383	253	626
23	3,190	470	5,110	1,800	4,950	770	957	1,160	767	337	484	1,330
24	1,590	1,330	10,300	2,530	5,270	1,210	926	1,860	667	316	688	735
25	3,170	718	7,680	1,790	2,130	942	1,380	1,140	745	303	794	556
26	1,630	544	4,150	1,230	1,450	970	1,240	1,390	985	298	1,260	467
27	6,730	470	2,920	942	1,160	3,000	1,000	1,090	1,280	290	1,980	403
28	4,890	470	2,370	780	982	2,150	1,250	938	1,140	286	1,030	358
29	2,180	1,150	1,330	910	470	1,920	832	1,010	810	316	688	735
30	2,490	751	1,120	643	-----	1,810	2,430	808	706	257	510	321
31	2,970	-----	919	610	-----	1,150	-----	723	-----	238	413	-----
TOTAL	70,684	31,980	62,575	63,526	59,769	38,264	31,039	38,060	41,267	14,933	13,894	27,714
MEAN	2,280	1,066	2,019	2,049	2,061	1,234	1,035	1,228	1,376	482	448	824
MAX	6,730	4,760	10,300	9,760	8,000	4,140	2,430	2,420	9,710	777	1,980	5,620
MIN	463	445	335	470	479	543	626	723	618	238	150	188
CF5M	19.2	8.96	17.0	17.2	17.3	10.4	8.70	10.3	11.6	4.05	3.76	7.76
IN	22.18	10.00	19.56	19.86	18.68	11.96	9.70	11.90	12.90	4.67	4.36	8.66
AC-FT	140,200	63,430	124,100	126,000	118,600	75,900	61,570	75,490	81,850	29,620	27,560	54,970

CAL YR 1967 TOTAL 443,678 MEAN 1,216 MAX 10,300 NIN 109 CF5M 10.2 IN 138.70 AC-FT 880,000
 MTR YR 1968 TOTAL 493,705 MEAN 1,349 MAX 10,300 NIN 150 CF5M 11.3 IN 154.33 AC-FT 979,300

12161000 SOUTH FORK STILLAGUAMISH RIVER NEAR GRANITE FALLS, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	271	1,080	1,120	1,820	240	287	2,470	980	1,510	599	211	141
2	252	919	1,220	1,340	248	290	2,290	990	1,660	712	205	145
3	236	1,230	7,340	1,600	314	338	1,410	863	1,750	1,680	193	147
4	424	890	3,020	10,700	344	350	1,070	778	1,900	1,200	185	193
5	453	696	1,550	7,980	322	682	1,120	790	1,800	838	447	241
6	1,700	587	1,080	3,170	266	599	1,090	987	1,530	643	366	179
7	1,420	919	1,220	1,340	248	290	1,930	990	1,660	712	205	145
8	885	1,130	2,170	1,360	520	402	844	2,250	1,190	520	214	142
9	652	2,020	1,880	1,100	670	358	913	2,630	1,400	530	190	140
10	1,590	1,350	2,340	909	475	334	1,140	2,620	1,350	571	185	140
11	1,410	3,790	1,950	772	1,130	314	1,040	2,300	1,200	1,050	180	140
12	1,400	3,840	1,220	665	1,040	302	1,180	2,180	1,050	896	175	140
13	1,900	1,930	941	604	670	298	2,470	2,070	941	626	170	306
14	1,330	1,220	967	560	525	302	1,460	1,880	994	500	165	385
15	1,720	980	922	520	460	350	1,050	1,420	941	442	173	250
16	1,150	802	1,020	495	475	535	941	1,250	922	406	208	193
17	865	724	796	475	475	3,340	1,540	1,250	994	318	178	390
18	1,110	1,900	870	438	438	2,190	2,390	1,590	928	370	160	1,300
19	1,430	2,460	682	415	411	1,500	1,940	1,600	883	370	165	1,760
20	2,410	2,140	577	388	388	1,090	1,330	1,330	754	370	177	1,300
21	1,540	1,970	515	362	366	909	1,110	1,470	615	346	195	833
22	1,250	1,250	405	334	354	1,000	1,000	1,250	994	318	182	3,580
23	1,150	1,970	1,220	310	338	1,150	1,960	2,040	935	314	164	5,200
24	1,010	1,260	3,200	270	322	844	1,660	2,130	1,120	314	156	2,380
25	1,410	948	1,990	250	306	754	1,250	1,540	987	314	158	1,900
26	1,260	814	1,170	250	294	850	994	1,460	832	287	158	1,180
27	1,330	902	230	287	1,180	928	1,730	1,330	648	318	182	3,580
28	658	1,130	712	220	283	1,650	1,180	1,550	718	252	235	675
29	701	2,020	621	210	-----	1,130	1,340	3,810	742	241	207	1,090
30	2,480	1,490	550	200	-----	1,430	1,040	4,520	670	224	167	2,780
31	1,800	-----	621	220	-----	2,470	-----	1,830	-----	217	150	-----
TOTAL	36,969	46,370	44,573	39,987	12,215	27,198	41,397	54,918	32,871	16,346	6,127	28,216
MEAN	1,193	1,546	1,438	1,290	436	877	1,380	1,772	1,096	527	198	941
MAX	2,480	3,840	7,340	10,700	1,130	3,340	2,470	4,520	1,900	1,680	447	5,200
MIN	236	510	485	200	240	287	844	778	615	217	150	140
CF5M	10.0	13.0	12.1	10.8	3.66	7.37	11.6	14.9	9.21	4.43	1.66	7.91
IN.	11.56	14.50	13.93	12.50	3.62	8.50	12.94	17.17	10.28	5.11	1.92	8.82
AC-FT	73,330	91,970	88,410	79,310	24,230	53,950	82,110	108,900	65,200	32,420	12,150	55,970
CAL YR 1968	TOTAL 456,378	MEAN 1,247	MAX 9,710	MIN 150	CF5M 10.5	IN 142.67	AC-FT 905,200					
MTR YR 1969	TOTAL 387,187	MEAN 1,061	MAX 10,700	MIN 140	CF5M 8.92	IN 121.04	AC-FT 768,000					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,560	358	420	424	2,000	459	448	706	940	274	347	115
2	2,610	303	379	388	1,390	427	612	807	1,410	277	331	115
3	1,520	406	362	366	1,310	405	523	1,030	1,660	369	298	318
4	995	3,770	577	334	922	374	592	1,370	1,390	475	258	277
5	768	2,550	480	302	753	349	3,040	1,450	1,070	435	239	196
6	627	1,650	384	290	888	539	3,730	1,050	1,180	351	221	1,710
7	537	1,330	342	276	928	2,520	1,700	800	1,110	305	204	2,620
8	1,190	896	366	273	1,110	1,070	1,120	1,160	772	312	212	856
9	2,280	790	515	362	1,240	761	4,750	1,690	877	327	204	546
10	1,620	643	505	375	1,250	624	3,090	1,120	1,070	290	180	382
11	955	560	1,150	338	1,240	545	1,700	821	694	264	167	298
12	734	550	2,300	346	1,280	579	1,160	694	550	239	162	245
13	600	495	2,440	706	2,370	913	905	658	605	221	159	215
14	510	447	3,090	6,550	1,450	1,290	751	594	700	212	162	192
15	444	525	1,810	2,020	1,820	1,710	684	658	863	210	154	177
16	391	665	1,150	1,050	3,430	2,340	594	1,220	814	224	144	164
17	350	593	1,140	880	2,360	1,260	544	1,460	599	224	139	646
18	318	577	1,350	3,970	1,680	927	550	964	724	204	137	2,090
19	294	599	1,220	3,010	1,170	756	779	870	779	198	132	1,870
20	406	688	1,530	2,850	966	660	724	807	758	198	132	1,210
21	511	1,680	1,650	2,620	854	603	588	724	891	187	132	744
22	373	1,000	2,240	2,500	778	545	566	870	800	174	129	1,790
23	371	1,890	2,340	4,130	715	619	688	835	670	159	127	1,770
24	343	1,330	1,350	2,020	664	1,070	1,120	870	599	149	122	891
25	336	857	948	1,790	815	675	988	1,180	528	177	122	610
26	289	682	814	1,430	574	637	800	1,320	528	1,830	120	475
27	362	582	688	1,630	547	558	664	835	533	2,020	117	387
28	402	510	599	1,100	503	597	616	656	450	688	117	331
29	346	480	540	883	543	543	724	369	425	149	117	291
30	373	660	500	748	-----	492	688	779	315	919	117	261
31	388	-----	460	1,380	-----	447	-----	694	-----	490	115	-----
TOTAL	24,803	27,866	33,639	45,341	34,807	25,294	35,334	29,418	24,248	12,827	5,317	21,793
MEAN	800	929	1,085	1,463	1,243	816	1,178	949	808	414	172	726
MAX	3,560	3,770	3,090	6,550	3,430	2,520	4,750	1,690	1,660	2,020	367	2,620
MIN	289	303	342	273	503	349	448	594	315	149	115	115
CF5M	6.72	7.81	9.12	12.3	10.4	6.86	9.90	7.97	6.79	3.48	1.45	6.10
IN.	7.75	8.71	10.52	14.17	10.88	7.91	11.05	9.20	7.58	4.01	1.66	6.81
AC-FT	49,200	55,270	66,120	89,930	69,040	50,170	70,080	58,350	48,100	25,440	10,550	43,230
CAL YR 1969	TOTAL 345,583	MEAN 947	MAX 10,700	MIN 140	CF5M 7.96	IN 108.03	AC-FT 685,500					
MTR YR 1970	TOTAL 320,687	MEAN 879	MAX 6,550	MIN 115	CF5M 7.39	IN 100.25	AC-FT 636,100					

STILLAGUAMISH RIVER BASIN

12165000 SQUIRE CREEK NEAR DARRINGTON, WASH.

LOCATION.--Lat 48°16'13", long 121°40'10", in SW¼SE¼ sec.8, T.32 N., R.9 E., Snohomish County, on left bank 150 ft upstream from bridge on State Highway 530, 0.3 mile upstream from Ashton Creek, 3.4 miles northwest of Darrington, and at mile 1.0.

DRAINAGE AREA.--20.0 sq mi.

PERIOD OF RECORD.--June 1950 to September 1969 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 490 ft (from topographic map).

AVERAGE DISCHARGE.--19 years, 186 cfs (126.29 inches per year, 134,800 acre-ft per year).

EXTREMES.--Maximums and minimums (discharges in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,200 cfs), water years 1966-69

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1965	0600	*1,900	6.47	Dec. 16, 1966	0530	2,200	6.93	Jan. 20, 1968	1530	2,550	7.40
Dec. 13, 1966	0730	*2,910	7.91	Oct. 27, 1967	1630	*3,580	8.75	Jan. 4, 1969	1930	*2,150	5.83

Annual minimum discharge, water years 1966-69

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 4, 1965	12	2.02	1968	Aug. 13, 14, Sept. 13, 1968	38	2.35
1967	Oct. 1, 16, 1966	18	2.11	1969	Sept. 7, 8, 12, 1969	25	2.25

Period of record: Maximum discharge, 6,440 cfs Feb. 10, 1951 (gage height, 10.52 ft), from rating curve extended above 700 cfs; minimum, 7.3 cfs Oct. 20-24, 1952 (gage height, 0.57 ft).

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	53	245	48	108	81	274	106	120	160	83	32
2	13	240	244	53	92	70	243	150	137	195	79	29
3	12	394	427	46	83	64	198	231	137	200	79	28
4	30	518	632	43	87	59	182	273	120	200	72	26
5	452	515	276	50	135	59	188	349	152	190	67	26
6	720	225	460	237	126	64	202	464	231	175	64	24
7	168	158	360	354	116	65	222	350	246	204	64	24
8	118	141	240	425	106	99	225	318	240	213	60	22
9	110	137	178	234	98	439	212	322	215	207	56	22
10	79	110	148	175	88	240	261	246	298	185	54	24
11	65	120	122	215	98	165	318	192	288	162	51	28
12	60	96	106	274	92	141	240	198	249	195	47	24
13	59	88	92	875	81	286	188	175	228	175	74	22
14	108	165	79	502	74	294	200	143	246	172	54	22
15	160	301	70	285	67	294	200	146	282	168	48	22
16	90	200	62	205	62	240	188	175	309	162	46	20
17	88	137	57	165	60	180	162	146	270	139	43	20
18	133	122	57	141	59	170	146	128	228	143	41	58
19	188	274	75	122	57	175	132	146	252	132	40	30
20	194	332	74	106	68	148	124	178	188	108	38	24
21	124	364	74	96	81	126	118	215	162	112	36	24
22	94	369	62	86	83	110	112	182	168	118	35	22
23	77	220	56	81	88	102	108	148	155	108	34	24
24	67	165	54	72	84	98	110	143	162	108	36	22
25	59	139	48	67	79	106	126	216	150	112	34	22
26	54	122	46	64	83	132	122	264	162	92	32	24
27	54	132	53	72	92	158	108	212	222	102	114	24
28	67	116	77	77	86	178	102	165	444	102	66	20
29	54	102	60	126	-----	225	100	178	192	100	47	20
30	108	98	54	150	-----	465	100	175	150	96	41	20
31	59	-----	48	135	-----	350	-----	132	-----	88	36	-----
TOTAL	3,678	6,173	4,636	5,581	2,433	5,383	5,213	6,466	6,403	4,623	1,671	749
MEAN	119	204	150	180	86.9	174	174	209	213	149	53.9	25.0
MAX	720	518	632	875	135	465	318	464	444	213	114	58
MIN	12	53	46	43	57	59	100	106	120	88	32	20
CFSM	5.95	10.3	7.50	9.00	4.35	8.70	8.70	10.5	10.7	7.45	2.70	1.25
IN	6.84	11.48	8.62	10.38	4.53	10.01	9.70	12.03	11.91	8.60	3.11	1.39
AC-FT	7,300	12,240	9,200	11,070	4,830	10,680	10,340	12,830	12,700	9,170	3,310	1,490
CAL YR 1965	TOTAL	56,922	MEAN	156	MAX	1,160	MIN	12	CFSM	7.80	IN	105.87
WTR YR 1966	TOTAL	53,009	MEAN	145	MAX	875	MIN	12	CFSM	7.25	IN	98.60
									AC-FT	112,900		105,100

12165000 SQUIRE CREEK NEAR DARRINGTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	110	468	198	220	172	104	88	282	231	92	58
2	85	90	332	190	234	128	104	90	357	276	88	125
3	34	77	252	380	488	110	106	100	291	282	90	54
4	26	65	237	249	673	96	110	120	285	249	88	46
5	22	81	208	182	334	92	106	152	332	218	79	41
6	22	83	208	148	240	88	100	182	343	188	74	54
7	56	67	188	130	192	83	102	231	285	168	88	40
8	170	59	146	165	168	108	104	261	222	180	74	36
9	59	65	122	166	152	120	110	258	210	163	79	35
10	44	74	353	247	152	98	102	182	210	150	79	147
11	39	62	542	476	143	88	98	160	200	200	83	318
12	32	221	902	294	176	81	100	143	245	212	77	94
13	28	298	2,100	285	230	75	102	135	297	190	79	62
14	24	412	674	270	162	70	96	141	318	168	75	51
15	20	276	743	632	143	81	90	190	332	168	75	46
16	20	192	1,320	316	137	145	84	273	354	168	70	41
17	32	148	908	220	171	162	86	306	396	162	67	39
18	28	135	580	180	192	152	81	282	378	139	67	35
19	468	155	756	487	143	120	81	291	424	122	62	32
20	469	139	549	452	122	116	81	350	432	155	59	31
21	192	126	332	312	112	120	84	385	385	168	64	30
22	386	106	246	225	104	393	86	350	300	139	54	36
23	815	92	202	185	98	700	81	288	270	139	53	28
24	320	83	208	155	94	364	83	212	291	143	43	26
25	202	304	180	137	98	246	90	180	322	139	46	24
26	234	175	150	139	94	200	88	182	297	126	43	22
27	170	198	132	388	88	172	86	212	255	116	43	24
28	20	181	122	937	157	148	92	261	240	108	40	22
29	403	180	135	600	135	86	31	318	1249	104	43	28
30	126	688	135	452	-----	122	84	231	218	98	43	158
31	139	-----	140	273	-----	112	-----	192	-----	94	43	-----
TOTAL	5,111	5,205	13,617	9,473	5,317	4,899	2,807	6,746	9,020	5,143	2,065	1,783
MEAN	165	174	439	306	190	158	93.6	218	301	166	66.6	59.4
MAX	815	688	2,100	937	673	700	110	385	432	282	92	318
MIN	20	59	122	130	88	70	81	86	200	94	40	22
CFSM	8.25	8.70	22.00	15.3	9.50	7.90	4.68	10.9	15.1	8.30	3.33	2.97
IN.	9.51	9.68	25.33	17.62	9.89	9.11	5.22	12.55	16.78	9.57	3.84	3.32
AC-FT	10,140	10,320	27,010	18,790	10,550	9,720	5,570	13,380	17,890	10,200	4,100	3,540

CAL YR 1966 TOTAL 62,455 MEAN 171 MAX 2,100 MIN 20 CFSM 8.55 IN 116.17 AC-FT 123,900
WTR YR 1967 TOTAL 71,186 MEAN 195 MAX 2,100 MIN 20 CFSM 9.75 IN 132.41 AC-FT 141,200

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	496	309	102	155	120	182	148	218	740	168	65	75
2	500	218	208	139	364	188	141	168	1,280	188	62	67
3	444	175	261	126	651	178	126	158	408	200	60	57
4	328	148	185	118	776	342	130	180	285	198	57	54
5	243	126	150	110	300	329	139	160	267	183	54	51
6	423	114	122	100	218	243	135	141	246	178	50	48
7	500	130	108	98	188	185	135	130	220	160	46	46
8	237	152	94	90	165	155	122	124	195	160	44	43
9	152	302	196	127	152	137	118	139	192	146	43	41
10	277	790	709	116	143	124	124	190	200	126	43	40
11	462	402	436	98	135	118	139	212	200	122	41	40
12	309	252	225	102	128	120	118	200	180	193	40	46
13	553	220	165	709	120	116	108	155	175	120	39	38
14	425	323	141	850	112	120	135	143	162	180	56	389
15	205	270	122	628	104	172	158	146	162	141	65	568
16	150	210	112	357	100	208	130	158	168	132	46	521
17	116	158	102	258	106	162	116	190	180	106	46	597
18	168	148	90	276	748	135	110	222	205	94	126	296
19	203	122	83	1,410	813	120	110	249	218	132	65	191
20	132	110	75	1,480	449	114	102	340	172	150	72	142
21	755	96	74	671	460	108	96	222	155	102	56	115
22	724	90	260	374	368	106	96	190	191	88	50	108
23	466	83	695	306	717	118	120	188	166	86	86	125
24	260	116	1,060	396	617	132	114	188	190	86	92	90
25	503	98	824	270	318	122	118	188	225	84	141	79
26	231	83	524	212	246	120	116	180	364	83	175	75
27	1,630	74	392	180	210	279	118	162	237	83	300	69
28	787	74	310	155	190	218	150	158	217	81	114	63
29	406	116	234	143	180	455	212	162	155	75	94	57
30	460	98	198	137	228	128	128	141	170	77	53	57
31	535	-----	172	128	-----	172	-----	141	-----	68	70	-----
TOTAL	13,100	5,607	8,429	10,319	9,198	5,506	3,936	5,545	7,896	3,983	2,375	4,184
MEAN	423	187	272	333	317	178	131	179	263	128	76.6	139
MAX	1,630	790	1,060	1,480	813	455	252	340	1,280	200	300	597
MIN	116	74	74	90	100	106	96	126	141	68	39	38
CFSM	21.2	9.35	13.6	16.7	15.9	8.90	6.55	8.95	13.2	6.40	3.83	6.95
IN.	24.37	10.43	15.68	19.19	17.11	10.24	7.32	10.31	14.69	7.41	4.42	7.78
AC-FT	25,980	11,120	16,720	20,470	18,240	10,920	7,810	11,000	15,660	7,900	4,710	8,300

CAL YR 1967 TOTAL 74,389 MEAN 204 MAX 1,630 MIN 22 CFSM 10.2 IN 138.36 AC-FT 147,600
WTR YR 1968 TOTAL 80,078 MEAN 219 MAX 1,630 MIN 38 CFSM 11.0 IN 148.95 AC-FT 158,800

12165000 SQUIRE CREEK NEAR DARRINGTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	150	163	160	50	45	365	153	326	145	55	28
2	44	168	148	203	55	47	344	143	372	191	51	29
3	41	170	435	221	58	53	245	133	384	230	45	28
4	125	128	375	1,170	65	53	203	123	414	178	45	55
5	83	104	236	935	62	61	197	130	400	135	110	35
6		93	178	431	60	81	185	163	340	120	61	27
7	326	83	156	333	58	71	188	233	309	120	49	25
8	190	266	257	251	60	65	160	340	344	123	45	25
9	108	269	272	212	95	59	168	396	358	133	44	26
10	180	173	323	178	72	55	180	379	361	160	42	26
11	183	709	269	158	160	53	170	347	323	245	39	26
12	191	457	194	140	158	51	194	344	290	175	38	26
13	227	257	160	128	113	51	269	330	281	125	36	85
14	175	185	165	118	90	51	206	309	296	110	38	53
15	180	155	158	105	78	61	173	257	266	100	41	39
16	153	130	163	100	76	90	163	239	281	95	38	30
17	148	115	138	93	74	410	236	233	284	90	33	150
18	168	389	133	85	72	302	302	272	278	93	33	254
19	284	316	113	79	69	200	290	296	260	95	36	361
20	333	493	100	75	65	168	257	269	203	90	42	197
21	203	513	88	71	63	153	230	296	173	81	51	128
22	233	407	83	66	61	163	257	354	165	83	36	610
23	203	290	163	62	57	173	316	346	180	85	35	736
24	206	206	445	58	53	148	251	410	233	81	35	403
25	263	163	269	54	51	135	203	290	180	85	45	296
26	183	143	183	50	49	155	173	316	140	69	35	178
27	133	175	148	48	47	197	168	330	190	71	39	136
28	145	158	123	46	47	183	194	296	128	65	45	123
29	188	278	180	43	-----	180	191	632	125	61	35	221
30	330	206	90	40	-----	233	163	589	130	59	30	553
31	206	-----	110	45	-----	372	-----	316	-----	59	28	-----
TOTAL	5,586	7,353	6,340	5,758	2,038	4,139	6,621	9,304	7,956	3,552	1,337	4,911
MEAN	180	245	205	184	72.8	134	221	300	265	115	43.1	164
MAX	333	709	835	1,170	140	410	365	632	414	245	110	736
MIN	41	83	83	40	47	45	160	123	125	59	28	25
CFSM	9.00	12.3	10.3	9.30	3.64	6.70	11.1	15.0	13.3	5.75	2.16	8.20
IN.	10.39	13.68	11.79	10.71	3.79	7.70	12.32	17.31	14.80	6.61	2.49	9.13
AC-FT	11,080	14,580	12,500	11,420	4,040	8,210	13,130	18,450	15,780	7,050	2,650	9,740
CAL YR 1968	TOTAL 72,221		MEAN 197	MAX 1,480	MIN 38	CFSM 9.85	IN 134.33	AC-FT 143,300				
WTR YR 1969	TOTAL 64,895		MEAN 178	MAX 1,170	MIN 25	CFSM 8.90	IN 120.70	AC-FT 126,780				

STILLAGUAMISH RIVER BASIN

503

12167000 NORTH FORK STILLAGUAMISH RIVER NEAR ARLINGTON, WASH.

LOCATION (REVISED).--Lat 48°15'42", long 122°02'47", in SE¼NW¼ sec.16, T.32 N., R.6 E., Snohomish County, on right bank 5.7 miles northeast of Arlington, 7.8 miles downstream from Deer Creek, and at mile 6.5.

DRAINAGE AREA.--262 sq mi.

PERIOD OF RECORD.--July 1928 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 89.34 ft above mean sea level.

AVERAGE DISCHARGE.--42 years, 1,849 cfs (95.84 inches per year, 1,340,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (13,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 4, 1965a	-	14,300	b9.12	Oct. 21, 1967	1800	15,700	9.52	Dec. 3, 1968	1700	17,500	9.63
Jan. 13, 1966a	-	*15,000	b9.33	Oct. 27, 1967	2200	16,400	9.69	Jan. 4, 1969	2330	*26,300	11.74
				Dec. 10, 1967	2200	14,900	9.30	Sept. 23, 1969	0800	13,600	8.66
Oct. 23, 1966	-	14,500	b9.18	Dec. 24, 1967	0700	*20,500	10.37				
Dec. 13, 1966	1700	*22,200	11.12	Jan. 20, 1968	2000	19,200	10.05	Nov. 4, 1969	2000	16,200	9.31
Dec. 16, 1966	0900	20,300	10.67	Feb. 4, 1968	0400	16,200	9.30	Jan. 14, 1970	1200	13,500	8.63
Dec. 19, 1966	2245	14,200	9.09	Feb. 19, 1968	0500	16,600	9.41	Apr. 9, 1970	2000	*20,000	10.24
Jan. 15, 1967	1115	15,400	9.44	June 2, 1968	0900	17,900	9.73				
Feb. 4, 1967	1115	14,900	9.30	Sept. 17, 1968	1200	13,300	8.55				

a About.

b From high watermark in well.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 2, 3, 4, 1965	220	a2.23	1969	Sept. 10, 11, 12, 1969	200	2.31
1967	Aug. 27, 28, 29, Sept. 27, 28, 29	235	b2.20	1970	Aug. 30, 31, 1970	225	2.00
1968	Aug. 12, 13, 14, 1968	358	2.37				

a Occurred Oct. 2, 3, 4, 1965, Sept. 16, 17, 30, 1966.

b Occurred Sept. 27, 28, 29, 1967.

Period of record: Maximum discharge, 30,600 cfs Feb. 9, 1951; maximum gage height, 13.46 ft Feb. 10, 11, 1951; minimum discharge, 117 cfs Sept. 23, 1938; minimum gage height, 0.97 ft Sept. 10, 12, 1944.

REMARKS.--Records excellent. No regulation. Small diversion for domestic use. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1286: 1938-39. WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	640	2,200	1,100	1,840	1,270	3,300	1,300	950	1,130	560	328
2	225	1,740	3,100	1,300	1,510	1,130	3,110	1,800	1,050	1,400	540	306
3	220	1,580	3,000	830	1,330	1,030	2,420	2,800	1,100	1,850	540	301
4	235	3,910	7,200	750	1,270	947	2,190	3,300	1,050	2,140	526	290
5	1,180	5,850	3,200	1,000	1,630	956	2,310	4,000	1,000	1,570	305	284
6	4,270	2,710	3,800	4,400	1,840	1,010	2,520	5,200	1,150	1,520	477	284
7	1,630	1,770	3,900	5,800	1,830	1,100	2,750	4,000	1,750	1,330	457	279
8	965	1,410	2,700	5,600	1,650	1,500	2,890	3,500	1,700	1,290	497	274
9	1,040	1,320	2,100	2,900	1,630	6,270	2,620	3,200	1,580	1,220	438	268
10	760	1,150	1,700	2,300	1,400	3,610	3,340	2,500	1,990	1,200	424	268
11	632	1,280	1,400	3,000	1,590	2,410	3,310	1,900	2,700	1,200	424	323
12	582	1,080	1,200	4,000	1,580	2,010	2,930	1,800	2,190	1,000	393	340
13	784	938	1,100	9,000	1,330	3,490	2,190	1,608	1,780	1,050	484	296
14	1,420	1,200	930	5,800	1,240	3,850	2,570	1,500	1,800	1,150	540	274
15	2,640	3,070	820	4,100	1,110	3,670	2,670	1,600	1,700	1,100	431	268
16	1,190	2,790	760	2,800	1,090	3,150	2,430	2,000	1,700	1,200	399	262
17	912	1,760	670	2,200	1,080	2,390	2,050	1,600	1,650	980	375	262
18	1,220	1,510	680	1,900	1,110	2,150	1,778	1,400	1,480	850	363	561
19	2,360	1,860	1,100	1,650	1,890	2,310	1,580	1,608	1,480	856	351	450
20	1,580	3,660	1,200	1,460	1,580	1,890	1,480	1,800	1,310	792	340	340
21	1,270	5,090	1,500	1,340	1,710	1,600	1,440	2,300	1,140	715	328	296
22	956	5,100	1,300	1,240	1,470	1,420	1,460	2,400	1,230	700	323	279
23	792	2,900	1,100	1,240	1,500	1,330	1,430	1,800	1,110	670	323	290
24	700	1,800	820	1,130	1,410	1,280	1,380	1,780	1,110	685	323	284
25	625	1,500	730	1,080	1,320	1,350	1,500	2,000	1,020	1,050	323	274
26	575	1,500	660	1,080	1,460	1,630	1,700	2,500	1,030	800	328	323
27	533	2,200	920	1,180	1,570	2,050	1,500	2,100	1,090	660	589	363
28	800	1,600	1,800	1,270	1,360	2,310	1,300	1,608	2,640	650	662	296
29	625	1,300	1,600	2,240	-----	2,880	1,300	1,950	1,660	630	450	274
30	1,010	1,200	1,300	2,490	-----	5,740	1,300	1,500	1,220	620	393	257
31	715	-----	1,100	2,450	-----	5,290	-----	1,150	-----	600	363	-----
TOTAL	32,676	69,418	55,590	76,630	40,530	73,623	64,820	69,000	44,380	32,608	13,429	9,194
MEAN	1,054	2,181	1,793	2,534	1,448	2,381	2,161	2,226	1,479	1,052	433	306
MAX	4,270	5,850	7,200	9,000	1,840	6,270	3,380	5,200	2,700	2,140	662	561
MIN	220	640	660	750	1,080	947	1,300	1,158	950	600	323	257
CFSH	4.02	8.32	6.84	9.68	5.75	9.09	6.25	8.50	9.45	4.02	1.69	1.17
IN.	6.64	9.29	7.89	11.16	5.75	10.48	9.20	9.80	6.30	4.63	1.91	1.31
AC-FT	64,810	129,800	110,300	156,000	80,390	146,400	128,600	136,900	88,030	64,800	26,640	18,240
CAL YR 1965	TOTAL 631,696	MEAN 1,731	MAX 12,900	MIN 220	CFSH 6.61	IN 89.72	AC-FT 1,253,000					
WTR YR 1966	TOTAL 580,098	MEAN 1,589	MAX 9,000	MIN 220	CFSH 6.06	IN 82.37	AC-FT 1,191,000					

NOTE.--NO GAGE-HEIGHT RECORD NOV. 22 TO JAN. 19, APR. 26 TO JUNE 7.

12167000 NORTH FORK STILLAGUAMISH RIVER NEAR ARLINGTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	268	1,600	5,810	4,530	2,630	3,400	1,420	1,200	2,270	1,130	444	268
2	678	1,300	4,410	2,880	2,610	2,720	1,410	1,220	3,160	1,200	431	519
3	431	1,100	3,540	5,260	8,120	1,400	1,400	1,200	2,670	1,200	42	425
4	334	1,000	3,100	3,740	10,800	1,430	1,540	1,400	2,440	1,190	405	318
5	296	1,100	2,750	2,730	5,370	1,280	1,480	1,670	2,730	1,080	399	285
6	284	1,200	2,650	2,130	3,390	1,210	1,370	1,970	2,860	975	381	329
7	405	1,000	2,400	1,770	2,570	1,150	1,390	2,170	2,490	889	425	323
8	1,340	900	1,950	3,110	2,120	2,210	1,420	2,710	1,930	891	418	274
9	685	980	1,590	3,360	1,970	2,410	1,510	3,340	1,740	938	381	263
10	498	1,020	3,130	3,330	2,220	1,590	1,370	2,160	1,690	768	381	399
11	424	900	5,250	7,650	2,200	1,330	1,290	1,930	1,600	792	387	2,040
12	381	2,500	7,320	4,300	2,780	1,190	1,350	1,860	1,660	848	381	896
13	345	4,000	10,100	4,040	2,400	1,100	1,400	1,700	2,210	856	363	576
14	320	5,400	10,800	4,090	2,490	1,030	1,280	1,670	2,250	792	357	458
15	290	4,000	8,290	10,600	2,170	1,110	1,180	1,930	2,370	738	351	397
16	350	3,200	14,600	5,460	2,330	1,780	1,130	2,700	2,410	715	345	363
17	400	2,500	10,500	3,500	3,630	2,260	1,160	3,380	2,600	708	329	342
18	2,000	2,000	2,680	3,940	2,140	1,550	1,010	2,370	1,730	625	296	340
19	3,500	2,200	8,730	5,470	2,490	1,690	1,160	3,040	2,610	633	312	311
20	8,600	2,000	8,580	5,440	1,960	1,490	1,170	3,530	2,640	655	301	303
21	3,000	1,750	4,870	3,610	1,680	1,530	1,270	3,920	2,460	872	312	302
22	5,000	1,350	3,460	2,680	1,490	3,930	1,250	3,560	2,210	685	329	340
23	11,000	1,500	2,730	2,210	1,360	8,520	1,170	2,940	1,730	625	296	340
24	7,000	1,460	5,010	1,860	1,310	5,110	1,160	2,180	1,610	610	274	278
25	3,500	4,910	2,780	1,610	1,450	3,330	1,250	1,790	1,730	603	257	260
26	2,800	3,050	2,130	1,580	1,370	2,680	1,220	1,750	1,720	589	246	250
27	2,500	2,800	1,790	3,830	1,230	2,810	1,170	1,990	1,520	561	235	241
28	2,000	4,110	1,840	9,890	2,910	1,980	1,280	2,270	1,480	580	235	270
29	5,600	4,370	3,170	7,210	-----	1,920	1,260	3,000	1,280	519	241	253
30	4,500	5,640	2,310	6,350	-----	1,720	1,190	2,290	1,200	498	252	546
31	2,300	-----	2,740	3,510	-----	1,550	-----	1,810	-----	444	252	-----
TOTAL	69,469	71,340	162,610	130,710	82,900	68,270	36,870	71,480	63,710	24,192	10,450	12,431
MEAN	2,241	2,378	5,265	4,216	2,961	2,202	1,296	2,306	2,121	780	337	414
MAX	11,000	5,640	18,100	10,800	10,800	8,520	1,540	3,920	3,160	1,250	444	2,040
MIN	268	900	1,590	1,580	1,230	1,030	1,130	1,200	1,200	464	235	239
CFSM	8.55	9.08	20.0	16.1	11.3	8.40	4.95	8.80	8.11	2.98	1.29	1.58
IN.	9.86	10.13	23.09	18.56	11.77	9.69	5.52	10.15	9.05	3.43	1.48	1.77
AC-FT	137,800	141,500	322,500	259,300	164,400	135,400	77,100	141,900	126,400	47,980	20,730	24,660
CAL YR 1966	TOTAL 729,833	MEAN 2,000	MAX 18,100	MIN 257	CFSM 7.63	IN 103.63	AC-FT 1,448,000					
WTR YR 1967	TOTAL 806,432	MEAN 2,209	MAX 18,100	MIN 235	CFSM 8.43	IN 114.50	AC-FT 1,600,000					

NOTE.--NO GAGE-HEIGHT RECORD OCT. 14 TO NOV. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,040	4,310	1,590	2,250	1,260	2,280	2,010	2,810	4,850	976	481	685
2	3,940	2,810	2,750	1,870	2,710	2,220	1,930	1,960	12,600	967	466	709
3	2,880	2,180	2,710	1,630	7,580	2,060	1,700	1,740	5,340	967	466	822
4	3,370	2,780	1,540	2,170	10,200	2,670	1,070	2,010	3,400	970	474	554
5	1,630	1,520	2,180	1,460	4,240	4,230	2,420	2,060	2,480	926	441	535
6	1,860	1,340	1,770	1,290	2,840	3,290	2,100	1,950	2,180	865	428	500
7	5,070	1,280	1,630	1,230	2,240	2,330	2,400	1,740	1,870	830	408	480
8	2,680	1,200	1,470	1,190	1,930	1,870	2,030	1,560	1,640	777	392	461
9	1,480	2,960	3,640	1,680	1,770	1,580	1,720	1,640	1,490	766	382	442
10	1,430	5,280	7,770	1,730	1,660	1,410	1,700	1,900	1,440	716	374	429
11	5,710	3,850	7,140	1,320	1,570	1,310	2,060	2,140	1,380	685	372	429
12	3,820	2,390	3,300	1,190	1,490	1,530	1,690	2,070	1,320	824	367	480
13	3,440	1,900	2,280	5,450	1,440	1,530	1,450	1,630	1,250	770	360	435
14	4,910	1,190	10,200	1,310	1,310	1,600	1,780	1,440	1,440	738	402	1,160
15	2,210	2,050	1,520	9,380	1,190	2,410	2,590	1,440	1,210	1,440	500	3,540
16	1,540	2,060	1,380	5,670	1,070	4,090	1,940	1,410	1,130	1,070	467	3,050
17	1,230	1,620	1,240	3,560	1,030	3,040	1,650	1,820	1,110	792	424	7,900
18	1,410	1,160	1,130	3,220	5,010	2,210	1,590	1,600	1,120	681	910	3,620
19	1,240	1,130	1,010	12,400	1,100	1,800	1,100	2,190	1,200	690	622	2,170
20	1,410	1,230	929	13,000	7,120	1,630	1,640	3,320	1,130	1,210	600	1,560
21	7,630	1,110	872	10,700	5,620	1,520	1,450	2,330	999	855	563	1,240
22	8,100	1,030	1,720	5,790	5,190	1,470	1,370	1,770	1,170	722	494	1,150
23	6,390	1,020	5,660	4,230	6,210	1,660	1,860	1,690	1,070	685	685	2,020
24	3,270	2,220	16,500	4,670	8,480	2,110	1,870	1,570	979	618	474	1,260
25	4,530	1,590	16,600	3,730	4,380	2,730	2,150	1,510	1,020	594	1,060	1,020
26	2,770	1,220	10,200	2,720	3,170	1,640	2,020	1,590	1,440	578	1,940	900
27	7,260	1,060	7,770	2,100	2,680	4,180	1,630	1,400	1,870	562	2,780	819
28	8,720	1,050	6,200	1,770	2,390	3,950	1,820	1,310	1,420	554	1,510	759
29	4,830	2,160	4,070	1,580	2,260	6,940	2,590	1,310	1,380	538	1,040	712
30	5,350	1,730	3,010	1,440	-----	3,820	3,210	1,160	1,070	518	837	671
31	5,640	-----	2,460	1,360	-----	2,510	-----	1,090	-----	497	734	-----
TOTAL	116,790	58,980	126,301	120,550	109,440	76,620	57,850	55,160	61,828	24,353	21,427	40,328
MEAN	3,832	1,966	4,071	3,889	3,530	2,472	1,839	1,779	1,994	772	678	1,179
MAX	8,720	5,280	16,600	13,000	11,500	6,940	3,210	3,320	12,600	1,440	2,780	7,900
MIN	1,230	1,020	872	1,190	1,030	1,310	1,370	1,090	979	497	360	429
CFSM	14.4	7.50	15.5	14.8	14.4	9.44	7.36	6.79	7.87	3.00	2.64	5.13
IN.	16.87	8.37	17.93	17.12	15.57	10.88	8.21	7.83	8.78	3.46	3.04	5.73
AC-FT	235,600	117,000	250,500	239,100	217,500	152,000	114,700	109,400	122,600	48,300	42,500	79,990
CAL YR 1967	TOTAL 807,084	MEAN 2,211	MAX 16,600	MIN 231	CFSM 8.44	IN 114.59	AC-FT 1,601,000					
WTR YR 1968	TOTAL 871,827	MEAN 2,382	MAX 16,600	MIN 360	CFSM 9.09	IN 123.79	AC-FT 1,729,000					

12167000 NORTH FORK STILLAGUAMISH RIVER NEAR ARLINGTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	636	1,740	2,400	2,100	712	859	4,700	2,130	2,680	859	441	285
2	605	1,670	2,210	2,880	752	868	4,820	2,130	2,800	1,280	434	258
3	580	2,220	9,580	2,550	805	950	3,140	1,820	2,780	2,850	423	266
4	766	1,600	6,260	14,400	886	1,000	2,380	1,600	2,900	2,410	413	365
5	817	1,320	3,680	15,400	886	1,440	2,470	1,590	2,710	1,490	604	433
6	2,770	1,140	2,670	7,300	796	1,380	2,410	1,900	2,370	1,140	536	309
7	2,310	1,040	2,210	5,820	760	1,150	2,070	2,580	1,990	990	444	263
8	1,550	2,050	4,470	3,920	1,080	1,050	1,870	3,830	1,900	903	418	225
9	1,190	3,330	3,980	3,140	1,550	980	1,990	4,620	2,010	851	404	212
10	1,800	2,180	4,650	2,600	1,200	931	2,340	4,600	1,930	894	388	209
11	2,150	4,610	4,560	2,200	2,700	904	2,130	4,070	1,800	2,240	380	205
12	2,100	6,130	3,020	1,920	3,050	886	2,320	3,790	1,580	1,810	371	203
13	3,210	3,500	2,320	1,760	1,970	877	4,090	3,600	1,410	1,180	372	327
14	2,260	2,470	2,240	1,600	1,540	886	2,870	3,320	1,400	964	363	399
15	2,700	2,070	2,150	1,490	1,360	913	2,100	2,570	1,380	868	354	346
16	2,100	1,680	2,480	1,380	1,360	1,130	1,860	2,280	1,270	783	361	285
17	1,650	1,480	1,960	1,290	1,340	4,670	2,760	2,190	1,260	730	340	960
18	2,040	3,240	2,030	1,180	1,250	4,560	4,620	2,380	1,220	691	330	3,170
19	2,580	3,980	1,660	1,140	1,200	2,940	3,700	2,800	1,160	666	329	2,890
20	5,870	4,440	1,420	1,080	1,130	2,340	3,160	2,350	1,050	651	338	2,270
21	3,280	3,800	1,290	1,010	1,080	2,000	2,570	2,520	913	623	370	1,400
22	3,370	4,700	1,210	1,050	1,040	2,070	2,780	3,050	904	592	348	5,060
23	2,330	3,700	1,810	1,000	990	2,430	3,740	3,380	904	575	328	9,650
24	1,930	2,530	5,970	930	990	1,890	3,180	3,580	1,330	570	319	6,080
25	2,130	1,930	4,450	870	922	1,690	2,410	2,600	1,200	556	318	3,580
26	1,940	1,670	4,740	860	886	1,870	1,960	2,280	1,010	541	320	2,300
27	1,450	2,880	2,100	800	859	2,520	1,810	2,410	886	515	311	1,720
28	1,260	2,850	1,660	770	859	2,410	2,160	2,290	931	505	583	1,580
29	1,330	3,350	1,300	740	-----	2,290	2,600	6,050	1,110	494	392	2,080
30	3,900	3,030	1,100	700	-----	2,850	2,170	7,540	1,050	378	4,870	-----
31	2,540	-----	1,200	740	-----	4,420	-----	3,340	-----	454	303	-----
TOTAL	64,744	82,330	92,780	84,620	33,913	57,154	83,180	95,290	47,838	30,143	11,963	52,000
MEAN	2,089	2,744	2,993	2,730	1,211	1,844	2,773	3,074	1,595	972	386	1,733
MAX	5,870	6,130	9,580	15,400	3,050	4,670	4,820	7,640	2,900	2,850	604	9,650
MIN	580	1,040	1,100	700	712	859	1,810	1,590	886	454	303	203
CFSM	7.97	10.5	11.4	10.4	4.62	7.04	10.6	11.7	6.09	3.71	1.47	6.61
IN.	9.19	11.69	13.17	12.01	4.82	8.11	11.81	13.53	6.79	4.28	1.70	7.38
AC-FT	128,400	163,300	184,000	167,800	67,270	113,400	165,000	189,000	94,890	59,790	23,730	103,100

CAL YR 1968	TOTAL	807,610	MEAN	2,207	MAX	13,000	MIN	360	CFSM	8.42	IN	114.47	AC-FT	1,602,000
WTR YR 1969	TOTAL	735,935	MEAN	2,016	MAX	15,400	MIN	203	CFSM	6.59	IN	104.49	AC-FT	1,460,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,770	710	912	992	3,820	1,010	844	1,520	1,130	474	424	236
2	3,960	666	852	929	2,860	938	1,030	1,630	1,540	450	435	236
3	2,660	755	803	878	2,560	895	886	1,890	1,800	480	413	451
4	1,900	5,010	992	803	2,030	835	956	2,030	1,620	524	380	925
5	1,530	5,420	920	755	1,720	795	4,040	2,090	1,310	506	365	511
6	1,320	3,360	803	740	1,760	844	6,000	1,630	1,350	466	347	2,490
7	1,170	2,740	748	710	1,960	2,620	3,150	1,360	1,310	440	341	2,800
8	1,640	1,910	779	703	2,190	1,530	2,040	1,590	1,040	439	389	1,170
9	3,400	1,720	886	938	2,320	1,210	9,320	2,560	1,010	439	353	795
10	2,660	1,430	869	912	2,340	1,060	8,150	1,780	1,380	421	325	624
11	1,730	1,280	1,200	827	2,310	974	4,060	1,420	983	401	314	527
12	1,400	1,260	2,520	819	2,350	974	2,860	1,260	844	382	307	458
13	1,220	1,150	3,120	895	3,820	1,350	2,250	1,180	835	368	305	429
14	1,080	1,060	6,160	8,540	2,750	1,700	1,850	1,110	878	361	298	400
15	992	1,060	3,700	3,980	3,600	2,150	1,610	1,150	920	355	291	380
16	903	1,200	2,470	2,220	5,820	3,190	1,430	1,640	903	362	288	367
17	835	1,110	2,470	1,730	4,250	1,950	1,310	1,950	787	360	283	1,160
18	779	1,040	3,000	4,620	3,400	1,510	1,270	1,390	844	345	276	2,550
19	740	1,100	2,850	6,180	2,530	1,300	1,740	1,290	869	345	270	5,610
20	811	1,120	2,740	5,900	2,120	1,180	1,610	1,230	835	341	265	2,340
21	886	2,130	3,140	6,880	1,860	1,090	1,350	1,130	920	334	263	1,400
22	771	1,530	3,240	5,660	1,670	1,020	1,250	1,260	895	325	260	3,470
23	733	3,050	4,160	6,160	1,520	1,170	1,360	1,210	795	313	256	2,800
24	733	2,670	2,910	3,800	1,410	1,700	1,810	1,230	733	305	260	1,490
25	771	1,730	2,090	3,240	1,320	1,170	1,890	1,480	659	317	260	1,090
26	688	1,410	1,780	2,860	1,230	1,060	1,660	1,660	638	1,030	256	878
27	787	1,240	1,530	3,220	1,180	974	1,460	1,230	659	1,960	250	755
28	861	1,120	1,350	2,560	1,080	983	1,380	1,040	617	775	246	666
29	748	1,050	1,230	2,080	-----	929	1,430	1,000	565	529	246	604
30	748	983	1,140	1,760	-----	861	1,510	1,010	529	662	239	558
31	740	-----	1,060	2,530	-----	811	-----	956	-----	499	236	-----
TOTAL	43,966	52,034	62,424	84,821	67,780	39,783	71,506	44,606	29,218	15,308	9,441	38,166
MEAN	1,418	1,734	2,014	2,736	2,421	1,283	2,384	1,439	974	494	305	1,272
MAX	4,770	5,420	6,160	8,540	5,820	3,190	9,320	2,560	1,800	1,960	435	5,610
MIN	688	666	748	703	1,080	795	844	956	529	305	236	236
CFSM	5.41	6.62	7.69	10.4	9.24	4.90	9.10	5.49	3.72	1.89	1.16	4.86
IN.	6.24	7.39	8.18	12.04	9.62	5.69	10.15	6.33	4.15	2.17	1.34	5.42
AC-FT	87,210	103,200	123,800	168,200	134,400	78,910	141,800	88,480	57,950	30,360	18,730	75,700

CAL YR 1969	TOTAL	654,525	MEAN	1,793	MAX	15,400	MIN	203	CFSM	6.84	IN	92.93	AC-FT	1,298,000
WTR YR 1970	TOTAL	559,053	MEAN	1,932	MAX	9,320	MIN	236	CFSM	5.85	IN	79.38	AC-FT	1,109,000

STILLAGUAMISH RIVER BASIN

12168500 PILCHUCK CREEK NEAR BRYANT, WASH.

LOCATION.--Lat 48°15'58", long 122°09'46", in NE¼NE¼ sec. 14 T. 32 N., R. 5 E., Snohomish County, on right bank 500 ft upstream from bridge on State Highway 9, 1.8 mi' s north of Bryant, and at mile 6.4.

DRAINAGE AREA.--52.0 sq mi.

PERIOD OF RECORD.--March 1929 to September 1931, June 1950 to September 1951, September 1952 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 119.8 ft above mean sea level (stadia traverse). Prior to Oct. 1, 1931, nonrecording gage at site 100 ft downstream at different datum.

AVERAGE DISCHARGE.--21 years, 276 cfs (72.08 inches per year, 200,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (2,500 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	0315	*3,360	6.12	Oct. 11, 1967	0900	3,740	6.37	Dec. 3, 1968	1500	3,300	6.08
Mar. 9, 1966	0345	2,550	5.52	Dec. 25, 1967	1200	*4,670	6.96	Jan. 4, 1969	1700	*4,140	6.63
				Feb. 3, 1968	0300	2,550	5.52	Sept. 23, 1969	0700	3,190	6.00
Feb. 3, 1967	2100	*3,860	6.45	Sept. 17, 1968	1200	3,660	6.32	Apr. 9, 1970	2000	*2,590	5.47

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Aug. 23-26, 1966	4.3	1.48	1969	Aug. 25, 1969	5.9	1.54
1967	Aug. 17-21, 1967	2.7	1.41	1970	Aug. 30, 31, 1970	3.3	al.43
1968	Aug. 12-14, 1968	4.0	1.47				

a Occurred July 21, 22, 1970.

Period of record: Maximum discharge, 6,240 cfs Dec. 9, 1956 (gage height, 7.60 ft), from rating curve extended above 3,900 cfs; minimum observed, 0.5 cfs Aug. 29 to Sept. 1, 1931 (gage height, 0.90 ft, site and datum then in use).

REMARKS.--Records excellent. No regulation or diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--NSP 1316: 1930-31(M). NSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	7.4	115	800	192	350	246	358	118	70	39	12	12		
2	7.3	338	700	310	254	206	314	148	78	124	11	9.5		
3	7.6	254	600	230	206	181	258	167	88	440	9.5	8.5		
4	11	418	900	192	195	160	254	167	83	475	8.5	7.5		
5	171	546	400	198	318	167	262	181	74	212	8.0	7.1		
6	504	266	500	779	470	198	250	386	86	230	7.5	6.3		
7	178	178	478	948	516	238	246	334	81	160	7.1	5.9		
8	88	142	400	1,320	390	594	220	216	68	115	6.7	5.5		
9	118	136	310	570	378	1,620	202	188	62	86	6.3	5.2		
10	72	121	250	504	298	744	234	139	123	72	6.3	5.2		
11	56	127	210	612	386	406	242	109	198	70	7.5	8.0		
12	45	106	180	1,260	402	354	274	148	139	62	8.0	16		
13	198	90	150	2,160	294	856	242	160	112	53	19	12		
14	580	133	135	1,150	254	702	455	142	127	51	37	9.5		
15	737	492	120	600	220	654	410	206	93	51	16	8.0		
16	254	435	110	414	209	534	306	576	83	62	11	7.5		
17	164	230	100	338	238	430	230	298	68	62	8.5	7.5		
18	167	195	95	302	254	504	188	195	54	50	7.5	48		
19	318	209	180	262	258	612	160	164	54	45	6.7	39		
20	250	435	110	226	426	402	167	151	51	43	5.9	21		
21	198	688	154	202	414	318	198	254	45	37	5.2	14		
22	136	780	127	181	342	270	209	242	64	33	4.6	11		
23	106	378	109	192	338	238	188	164	53	29	4.6	11		
24	88	270	106	181	286	238	167	139	48	32	4.3	11		
25	76	246	98	167	254	290	174	151	43	71	4.3	10		
26	66	274	88	167	318	330	184	139	39	72	4.3	13		
27	60	628	121	202	366	330	178	115	36	45	6.6	37		
28	164	362	366	246	294	318	148	88	72	34	8.6	21		
29	115	240	310	564	-----	350	133	83	60	29	37	16		
30	206	270	274	470	-----	751	124	81	62	18	21	12		
31	124	-----	212	552	-----	492	-----	68	-----	14	15	-----		
TOTAL	5,272.3	9,082	8,625	15,691	8,928	13,733	6,975	5,717	2,294	2,916	462.3	405.2		
MEAN	170	303	278	506	319	443	233	184	76.5	94.1	14.9	13.5		
MAX	737	780	900	2,160	516	1,620	455	576	198	475	86	48		
MIN	7.3	90	88	167	195	160	124	68	36	14	4.3	5.2		
CFSM	3.27	5.83	5.35	9.73	6.13	8.52	4.48	3.54	1.47	1.81	.29	.26		
IN	3.77	6.50	6.17	11.23	6.39	9.82	4.99	4.09	1.66	2.09	.33	.29		
AC-FY	10,460	18,010	17,110	31,120	17,710	27,240	13,830	11,340	4,590	5,780	917	804		
CAL YR 1965	TOTAL	90,035.6	MEAN	247	MAX	3,040	MIN	3.3	CFSM	4.75	IN	64.41	AC-FY	178,600
WTR YR 1966	TOTAL	80,100.8	MEAN	219	MAX	2,160	MIN	4.3	CFSM	4.21	IN	57.30	AC-FY	158,900

12168500 PILCHUCK CREEK NEAR BRYANT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	147	744	1,200	331	844	259	203	119	16	3.9	3.1
2	170	125	735	693	345	522	269	181	142	15	3.6	3.8
3	54	108	604	1,330	2,070	384	279	171	104	13	3.4	5.7
4	34	95	890	849	1,960	308	314	190	99	11	3.3	6.1
5	22	272	718	582	794	263	289	217	107	9.9	3.1	4.7
6	17	275	619	424	476	240	243	207	103	8.9	3.1	4.2
7	30	178	535	380	373	213	251	225	82	8.2	3.5	3.8
8	157	138	393	844	311	523	236	270	58	8.2	5.2	3.6
9	70	378	313	889	296	648	271	365	59	8.4	5.4	3.8
10	42	431	408	758	325	394	219	205	55	8.4	4.5	6.3
11	32	242	979	1,250	314	319	208	309	52	7.5	3.8	142
12	28	502	1,180	794	819	276	231	353	51	6.7	3.4	47
13	24	424	1,490	762	1,250	244	358	280	105	6.2	3.2	21
14	20	921	1,030	791	550	219	296	231	77	5.8	3.1	13
15	17	616	921	1,570	452	288	240	245	70	5.4	3.0	9.4
16	16	408	1,260	847	521	526	227	271	69	5.0	2.9	7.4
17	23	333	1,000	605	1,130	485	254	263	73	4.7	2.8	6.1
18	250	386	320	473	1,030	387	258	220	65	4.6	5.2	6.2
19	297	214	1,010	1,030	969	364	228	207	63	4.4	2.7	4.4
20	1,050	204	803	962	407	324	217	228	59	5.9	2.7	4.4
21	944	251	527	555	333	310	216	209	61	30	2.8	4.2
22	803	281	392	383	284	825	208	173	107	15	2.9	4.6
23	1,250	386	320	473	1,030	387	258	220	65	4.6	5.2	6.2
24	908	321	611	307	233	937	175	104	47	7.2	3.3	4.4
25	309	1,070	632	259	328	591	180	93	42	6.0	3.2	4.2
26	273	502	383	296	296	475	145	107	36	5.4	3.1	3.8
27	276	452	299	889	236	407	152	120	30	5.2	3.1	3.7
28	220	616	267	1,350	836	355	213	119	25	5.1	3.1	3.5
29	226	497	924	927	354	233	154	221	44	4.8	3.1	4.8
30	252	627	475	794	-----	343	207	105	19	4.4	2.9	149
31	181	-----	781	428	-----	295	-----	86	-----	4.2	2.9	-----
TOTAL	6,971	11,264	21,991	23,558	17,026	14,207	7,054	6,246	2,058	261.4	103.0	492.6
MEAN	225	375	719	760	558	458	235	201	68.6	8.43	3.32	16.4
MAX	1,250	1,070	1,490	1,570	2,070	1,520	359	365	142	30	5.4	149
MIN	12	95	267	259	233	213	145	86	19	4.2	2.7	3.1
CFSM	4.33	7.21	13.6	14.6	11.7	8.81	4.52	3.87	1.32	.16	.06	.32
IN.	4.99	8.06	15.73	16.85	12.18	10.16	5.05	4.47	1.47	.19	.07	.35
AC-FT	13,830	22,340	43,620	46,730	33,770	28,180	13,990	12,390	4,080	518	204	977

CAL YR 1966 TOTAL 97,347.5 MEAN 267 MAX 2,160 MIN 4.3 CFSM 5.13 IN 69.64 AC-FT 193,100
WTR YR 1967 TOTAL 111,232.0 MEAN 309 MAX 2,070 MIN 2.7 CFSM 5.87 IN 79.57 AC-FT 220,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	497	535	474	354	137	165	260	247	226	61	10	55
2	449	326	1,200	300	617	155	235	182	827	50	7.4	88
3	203	243	1,180	244	1,660	142	203	161	327	41	6.1	64
4	262	194	698	226	1,210	155	238	187	199	35	5.9	51
5	141	161	563	230	488	279	440	295	147	31	5.9	43
6	163	138	429	199	341	297	408	449	119	28	6.1	37
7	967	129	394	181	275	247	441	396	100	25	6.1	33
8	293	129	355	175	236	202	483	281	95	22	5.6	43
9	135	586	1,140	356	212	167	352	224	92	19	5.2	41
10	111	530	1,460	376	194	145	305	196	80	18	4.8	42
11	1,400	340	903	255	175	134	373	171	72	17	4.5	42
12	664	225	461	208	198	286	306	152	68	19	4.3	61
13	554	174	340	488	145	280	253	128	65	22	4.0	53
14	703	183	274	1,200	125	298	418	113	113	19	4.9	206
15	285	248	228	880	108	523	666	111	84	108	9.3	464
16	196	290	200	575	96	817	403	100	66	125	9.6	333
17	151	197	175	435	90	504	332	97	59	58	8.3	1,500
18	175	250	153	460	294	368	286	94	51	40	49	468
19	316	225	132	979	988	300	299	95	49	39	34	255
20	194	168	116	970	612	258	325	301	47	159	30	167
21	1,030	139	107	664	567	217	301	197	41	84	26	151
22	949	130	323	397	533	188	279	133	59	55	17	163
23	624	140	705	333	637	190	480	150	60	43	106	422
24	343	715	2,760	342	517	251	412	120	47	35	208	232
25	506	403	3,280	274	339	236	443	103	40	29	152	162
26	306	254	1,510	226	264	246	356	95	64	24	266	131
27	510	193	1,300	184	228	766	280	81	122	21	345	108
28	717	191	1,060	161	199	822	264	72	78	19	192	94
29	375	872	604	146	180	754	253	65	119	16	112	83
30	833	588	419	133	-----	445	273	57	84	14	77	74
31	817	-----	350	130	-----	320	-----	53	-----	12	59	-----
TOTAL	14,869	8,896	23,293	12,085	11,625	10,157	10,567	5,106	3,600	1,288	1,781.0	5,686
MEAN	480	297	751	390	401	328	352	165	120	41.5	57.5	190
MAX	1,400	872	3,280	1,200	1,660	822	666	449	827	159	345	1,500
MIN	111	129	107	130	90	134	203	53	60	12	4.0	33
CFSM	9.23	5.71	14.6	7.50	7.71	6.31	6.17	3.17	2.31	.80	1.11	3.65
IN.	10.64	6.36	16.66	8.65	8.32	7.27	7.56	3.65	2.58	.92	1.27	4.07
AC-FT	29,490	17,650	46,200	23,970	23,060	20,150	20,960	10,130	7,140	2,550	3,530	11,280

CAL YR 1967 TOTAL 118,064.0 MEAN 323 MAX 3,280 MIN 2.7 CFSM 6.21 IN 84.46 AC-FT 234,200
WTR YR 1968 TOTAL 108,953.0 MEAN 298 MAX 3,280 MIN 4.0 CFSM 5.73 IN 77.94 AC-FT 216,100

STILLAGUAMISH RIVER BASIN

12168500 PILCHUCK CREEK NEAR BRYANT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	257	492	264	100	138	498	498	169	78	18	12
2	62	246	513	336	120	147	702	326	150	147	17	10
3	56	429	1,900	410	140	190	410	370	129	395	.5	12
4	84	281	969	2,950	180	207	342	302	120	487	13	35
5	92	208	558	1,690	200	520	425	288	103	228	32	59
6	261	170	412	946	160	425	390	275	88	150	37	31
7	287	148	351	884	150	275	298	384	74	114	20	19
8	210	275	1,080	581	564	221	280	202	70	93	15	15
9	139	497	917	509	760	193	293	280	67	76	12	12
10	152	322	1,030	465	435	176	365	247	59	70	11	10
11	204	497	918	395	995	165	298	210	52	375	9.5	9.0
12	271	552	554	325	773	159	321	193	46	271	9.0	8.5
13	488	377	402	280	460	159	706	179	43	159	14	32
14	275	298	399	251	347	159	476	162	40	120	13	54
15	331	270	397	225	280	179	302	123	37	98	10	72
16	251	245	500	207	320	243	259	120	32	80	9.5	38
17	205	212	362	193	320	644	407	114	28	70	10	293
18	318	413	391	172	263	623	618	129	24	61	8.5	671
19	477	400	321	159	239	531	520	138	21	55	7.5	509
20	812	420	257	147	214	410	405	100	19	48	7.1	504
21	502	345	217	135	197	356	347	105	19	45	7.1	293
22	717	349	202	120	183	424	334	126	24	41	7.5	925
23	382	313	265	110	165	564	465	132	67	38	6.7	1,520
24	277	236	996	100	153	370	347	141	153	34	6.3	531
25	246	189	802	100	144	324	267	93	85	31	7.1	395
26	241	167	443	100	135	370	232	78	78	29	11	284
27	194	489	336	95	129	420	224	90	80	26	11	228
28	168	414	250	90	129	375	251	108	78	24	78	247
29	174	560	220	90	-----	360	356	553	120	24	45	228
30	656	515	200	90	-----	450	405	635	138	21	24	403
31	403	-----	210	95	-----	587	-----	232	-----	20	16	-----
TOTAL	8,983	10,096	16,864	12,516	8,255	10,364	11,543	6,933	2,213	3,508	508.8	7,459.5
MEAN	290	337	544	404	295	334	385	224	73.8	113	16.4	249
MAX	812	560	1,900	2,950	995	644	706	635	169	487	78	1,520
MIN	56	148	200	90	100	138	224	78	19	20	6.3	8.5
CFSM	5.58	6.48	10.5	7.77	5.67	6.42	7.40	4.31	1.42	2.17	.32	4.79
IN.-	6.43	7.22	12.06	8.95	5.91	7.41	8.26	4.96	1.58	2.51	.36	5.34
AC-FT	17,820	20,030	33,450	24,830	16,370	20,560	22,900	13,750	4,390	6,960	1,010	14,800

CAL YR 1968 TOTAL 97,838.0 MEAN 267 MAX 1,900 MIN 4.0 CFSM 5.13 IN 69.99 AC-FT 194,100
WTR YR 1969 TOTAL 95,243.5 MEAN 272 MAX 2,950 MIN 6.3 CFSM 5.23 IN 71.00 AC-FT 196,800

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	555	111	80	144	788	98	98	293	38	9.0	21	4.6
2	435	93	76	129	526	88	200	255	37	8.5	61	4.9
3	275	126	76	117	450	83	153	235	32	7.5	59	56
4	214	708	138	105	343	76	126	218	28	6.7	35	416
5	176	741	135	93	280	70	352	179	22	6.3	26	214
6	153	515	105	85	307	80	816	132	21	5.5	19	875
7	132	380	88	78	375	232	471	108	18	5.2	16	565
8	221	251	103	74	343	138	302	190	16	4.9	28	209
9	311	247	162	93	284	103	1,120	370	18	4.9	21	137
10	228	193	190	114	251	85	1,080	255	88	4.6	15	99
11	172	169	343	114	221	76	520	204	48	4.3	12	76
12	144	172	493	141	200	80	356	165	38	4.3	10	61
13	120	153	471	207	559	126	280	150	29	4.3	9.0	50
14	105	135	916	1,200	476	190	225	138	25	4.3	8.5	43
15	93	129	623	482	647	380	190	123	34	4.3	7.1	38
16	83	150	390	275	844	445	162	123	83	4.0	6.3	35
17	74	162	352	214	659	235	141	117	59	4.0	5.2	129
18	67	150	361	605	683	165	138	90	40	4.0	4.9	211
19	61	147	293	872	509	132	405	80	31	3.7	4.6	851
20	117	141	251	695	395	111	509	72	24	3.7	4.6	356
21	200	179	509	767	316	100	334	65	20	3.5	4.3	225
22	120	144	564	677	259	90	271	70	18	3.5	4.3	721
23	100	284	774	548	221	105	365	65	16	3.7	3.7	430
24	117	302	542	370	193	214	504	57	14	3.7	3.7	225
25	135	204	361	410	165	132	515	57	12	4.6	3.7	162
26	103	159	298	352	147	111	425	54	9.0	69	3.7	129
27	132	135	263	609	132	95	343	45	6.5	172	3.5	105
28	159	114	225	570	114	120	293	40	6.5	80	3.5	88
29	129	103	200	465	-----	105	302	43	8.0	40	3.5	76
30	129	90	179	347	-----	90	338	48	9.0	63	3.5	67
31	123	-----	162	559	-----	78	-----	41	-----	35	4.3	-----
TOTAL	5,183	6,587	9,723	11,571	10,687	4,233	11,334	4,082	852.0	582.0	414.9	6,658.5
MEAN	167	220	314	373	382	137	378	132	28.4	18.8	13.4	222
MAX	555	741	916	1,200	844	445	1,120	370	88	172	61	875
MIN	61	90	76	74	114	70	98	40	8.0	3.5	3.5	4.6
CFSM	3.21	4.23	6.04	7.17	7.35	2.63	7.27	2.54	.55	.36	.26	4.27
IN.-	3.71	4.71	6.96	8.28	7.65	3.03	8.11	2.92	.61	.42	.30	4.76
AC-FT	10,280	13,070	19,290	22,950	21,200	8,400	22,480	8,100	1,690	1,150	823	13,210

CAL YR 1969 TOTAL 84,793.3 MEAN 232 MAX 2,950 MIN 6.3 CFSM 4.46 IN 60.66 AC-FT 168,200
WTR YR 1970 TOTAL 71,907.4 MEAN 197 MAX 1,200 MIN 3.5 CFSM 3.79 IN 51.44 AC-FT 142,600

12170600 SKAGIT RIVER AT INTERNATIONAL BOUNDARY, NEAR HOPE, BRITISH COLUMBIA

(International gaging station)

LOCATION.--Lat 49°00'01", long 121°04'15", on left bank at international boundary, approximately 31 miles south-east of Hope and at mile 127.0.

DRAINAGE AREA.--381 sq mi, of which 3 sq mi is in the United States.

PERIOD OF RECORD.--December 1953 to September 1970 (gage heights only).

GAUGE.--Water-stage recorder. Datum of gage is 1,583.44 ft above mean sea level, U.S. Coast & Geodetic Survey datum of 1929, supplementary adjustment of 1947; 1,582.53 ft above Geodetic Survey of Canada 1959 datum; 1,584.07 ft above city of Seattle 1936 datum; and 1,581.65 ft above city of Seattle Ross Dam datum (by water level transfer in 1955). Prior to Apr. 15, 1955, nonrecording gage at present site and datum. Apr. 15, 1955, to Dec. 6, 1960, water-stage recorder at site 300 ft upstream at present datum.

EXTREMES.--Maximum and minimum gage heights, in feet, for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum Gage height	Date	Minimum Gage height
1966	Aug. 10, 1966	18.67	Mar. 4, 1966	2.96
1967	Aug. 23, 1967	20.58	Dec. 10, 11, 1966	5.24
1968	Aug. 3, 1968	20.84	Apr. 27, 1968	2.70
1969	July 1, 1969	20.95	Feb. 6, 1969	b2.42
1970	Aug. 2, 1970	21.02	Feb. 10, 11, 1970	c2.50

a May have been higher during periods of no gage-height record July 17 to Aug. 22, Aug. 26 to Sept. 5, 1967.

b May have been lower during period of no gage-height record Dec. 18, 1968, to Feb. 5, 1969.

c Minimum recorded, but may have been lower during period of no gage-height record Dec. 11-31, 1969.

Period of record: Maximum gage height, 21.02 ft Aug. 2, 1970; minimum observed, 1.25 ft Mar. 5, 1955.

REMARKS.--No diversion above station. Stage subject to backwater from Ross Reservoir. Starting about July 1, 1967, the taintor gates at Ross Dam were extended to elevation 1,602.50 ft (city of Seattle Ross Dam datum).

COOPERATION.--This station is maintained by Canada under agreement with the United States.

GAUGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.28	12.84	6.76	3.45	3.18	3.04	5.31	4.20	5.50	8.82	18.45	18.48
2	16.99	12.69	6.43	3.45	3.17	3.03	5.15	4.34	5.43	9.28	18.43	18.37
3	16.92	12.67	6.02	3.43	3.16	3.02	5.03	4.83	5.34	10.07	18.43	18.27
4	16.76	12.80	6.35	3.34	3.15	2.98	4.93	5.35	5.24	10.98	18.45	18.27
5	16.53	13.02	6.60	3.30	3.15	3.01	5.03	5.83	5.15	11.84	18.45	18.44
6	16.64	13.13	6.63	3.25	3.15	3.01	5.21	6.52	5.36	12.43	18.45	18.46
7	16.79	13.18	6.64	3.35	3.15	3.01	5.43	6.79	5.72	13.01	18.50	18.33
8	16.69	13.11	6.55	3.42	3.15	3.01	5.66	6.62	5.98	13.76	18.53	18.24
9	16.78	12.94	6.35	3.43	3.15	3.11	5.81	6.71	6.13	14.58	18.54	18.13
10	17.04	12.67	6.06	3.38	3.13	3.14	5.76	6.72	6.10	15.60	18.52	18.04
11	17.10	12.33	5.76	3.35	3.14	3.13	5.64	6.36	6.00	16.48	18.45	18.13
12	16.80	11.94	5.52	3.35	3.12	3.13	5.43	6.13	5.71	17.05	18.45	18.11
13	16.49	11.67	5.11	3.35	3.10	3.15	5.15	5.97	5.50	17.73	18.47	18.12
14	16.23	11.57	4.56	3.45	3.10	3.31	5.00	5.71	5.36	18.25	18.47	18.02
15	15.91	11.48	4.25	3.46	3.07	3.42	4.91	5.51	5.48	18.39	18.47	17.83
16	15.74	11.25	4.00	3.44	3.05	3.45	4.91	5.34	5.75	18.29	18.48	17.63
17	15.64	10.96	3.87	3.40	3.05	3.45	4.86	5.14	6.06	18.23	18.45	17.53
18	15.38	10.66	3.85	3.38	3.05	3.43	4.77	4.99	5.94	18.35	18.41	17.54
19	15.02	10.42	3.86	3.35	3.05	3.43	4.68	5.00	5.74	18.34	18.37	17.51
20	14.80	10.28	3.99	3.31	3.04	3.41	4.57	5.12	5.53	18.36	18.35	17.34
21	14.62	10.26	3.94	3.41	3.02	3.36	4.48	5.24	5.32	18.33	18.43	17.23
22	14.48	10.02	3.84	3.40	3.02	3.33	4.41	5.34	5.14	18.28	18.48	17.13
23	14.37	9.64	3.75	3.30	3.02	3.30	4.35	5.15	5.02	18.36	18.36	17.00
24	14.30	9.19	3.72	3.22	3.05	3.29	4.37	5.03	4.97	18.35	18.34	16.99
25	14.14	8.86	3.65	3.24	3.04	3.31	4.42	5.13	4.97	18.36	18.35	16.99
26	13.81	8.69	3.55	3.25	3.04	3.42	4.41	5.71	5.15	18.37	18.38	16.92
27	13.48	8.41	3.45	3.23	3.05	3.63	4.33	6.13	5.55	18.35	18.52	16.70
28	13.13	8.23	3.35	3.22	3.04	3.78	4.28	5.95	6.48	18.44	18.48	16.55
29	12.75	7.74	3.43	3.21	-----	4.26	4.23	5.76	7.58	18.45	18.44	16.49
30	12.84	7.19	3.48	3.21	-----	4.98	4.23	5.74	8.32	18.40	18.45	16.38
31	12.94	-----	3.46	3.20	-----	5.46	-----	5.61	-----	18.43	18.47	-----
MEAN	15.43	10.99	4.80	3.34	3.09	3.41	4.89	5.61	5.72	16.19	18.45	17.64
MAX	17.28	13.18	6.76	3.46	3.18	5.46	5.81	6.79	8.32	18.45	18.54	18.48
MIN	12.75	7.19	3.35	3.20	3.02	2.98	4.23	4.20	4.97	8.82	18.34	16.38

WTR YR 1966 MEAN 9.17 MAX 18.54 MIN 2.98

12170600 SKAGIT RIVER AT INTERNATIONAL BOUNDARY, NEAR HOPE, BRITISH COLUMBIA--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98.80	95.70	86.12	87.25	86.21	85.94	86.00	86.21	88.54	100.83		
2	98.70	95.61	86.08	87.17	86.24	85.93	86.00	86.32	89.27	100.84		
3	99.69	95.99	86.08	87.06	86.31	85.91	86.01	86.58	89.79	100.86		
4	98.54	94.65	86.02	86.67	86.66	85.90	86.09	86.90	89.91	100.86		
5	98.34	94.27	86.01	86.47	86.70	85.89	86.09	87.04	89.74	100.85		
6	98.11	93.99	85.95	86.36	86.60	85.89		87.21	89.77	100.84		102.97
7	97.06	93.49	85.92	86.30	86.53	85.89		87.45	89.84	100.84		102.85
8	97.76	92.83	85.85	86.28	86.52	85.89		87.77	89.76	100.89		102.80
9	97.72	92.16	85.78	86.28	86.44	85.90		87.91	89.98	100.85		102.71
10	97.50	91.46	85.77	86.28	86.41	85.88		87.75	90.83	100.84		102.64
11	97.14	90.88	85.77	86.41	86.35	85.84		87.63	92.02	100.79		102.50
12	96.69	90.32	85.95	86.40	86.37	85.82		87.45	93.07	100.89		102.23
13	96.26	90.03	86.43	86.32	86.31	85.79	86.20	87.36	94.26	100.91		101.96
14	95.86	89.67	87.04	86.29	86.27	85.78	86.16	87.33	95.63	100.91		101.82
15	95.50	89.31	86.89	86.35	86.24	85.79	86.13	87.39	97.26	101.51		101.65
16	95.35	88.95	87.63	86.44	86.19	85.82	86.12	87.76	98.93	102.41		101.59
17	95.07	88.50	87.11	86.37	86.16	85.86	86.11	88.31	100.19			101.43
18	94.63	88.18	88.13		86.13	85.82	86.88	88.55	100.69			101.14
19	94.36	87.75	88.40		86.10	85.87	86.06	88.65	100.75			100.84
20	94.32	87.35	88.56		86.05	85.87	86.06	88.90	100.87			100.63
21	93.96	86.90	88.50		86.02	85.86	86.07	89.33	100.91			100.49
22	93.62	86.32	88.61		85.91	85.87	86.08	89.63	100.91			100.46
23	93.75	85.93	88.38		85.99	86.09	86.08	89.59	100.82		103.11	100.41
24	94.40	85.80	88.38		85.96	86.32	86.10	89.13	100.91		103.06	100.44
25	94.71	86.68	88.49		85.94	86.28	86.14	88.65	100.83		103.05	100.38
26	95.82	86.29	88.61		85.92	86.23	86.19	88.39	100.85			100.14
27	95.18	86.18	88.48		86.19	86.19	86.19	88.30	100.91			99.91
28	95.24	86.19	88.12		85.93	86.15	86.19	88.42	100.83			99.78
29	95.94	86.26	87.78		86.11	86.19	86.19	88.62	100.82			99.78
30	95.69	86.21	87.44		86.07	86.19	86.19	88.62	100.82			99.71
31	95.08	87.22			86.03			88.52				
MEAN	96.13	89.76	87.17		86.23	85.95		87.99	95.99			
MAX	98.80	95.78	88.61		86.78	86.32		89.63	100.91			
MIN	93.62	85.88	85.77		85.91	85.78		86.21	88.54			

CAL VR 1966 MEAN 29.50 MAX 98.88 MIN 4.98

NOTE.--TO OBTAIN ELEVATIONS ABOVE MEAN SEA LEVEL ADD THE APPROPRIATE STANDARD DATUM AND SUBTRACT 82.53 FT.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99.64	100.34	92.36	86.44	86.33	86.40	85.70	86.11	91.66	103.18	103.27	102.98
2	99.50	99.57	92.14	86.33	86.35	86.53	85.68	86.06	95.03	102.96	103.24	103.19
3	99.27	99.29	91.66	86.24	86.55	86.62	85.65	86.02	98.62	102.90	103.30	103.16
4	99.82	99.32	92.84	86.18	86.75	86.67	85.64	86.08	100.82	103.13	103.27	102.92
5	99.88	99.36	90.63	86.14	86.59	87.85	85.61	86.11	102.38	102.99	103.24	102.81
6	98.77	99.18	90.16	86.86	86.40	87.31	85.59	86.84	102.60	103.00	103.11	102.83
7	98.78	98.87	89.68	86.83	86.24	87.12	85.55	85.95	102.63	103.09	102.97	102.93
8	99.06	98.75	89.29	85.96	86.16	86.86	85.52	85.90	102.71	103.07	102.77	103.16
9	99.28	98.63	88.92	85.95	86.10	86.66	85.48	85.91	102.87	103.18	102.65	103.26
10	99.21	98.57	88.88	85.92	86.84	86.51	85.49	86.11	103.18	103.07	102.64	103.15
11	99.79	98.54	89.89	85.85	85.99	86.37	85.58	86.47	102.98	103.04	102.82	103.00
12	100.48	98.36	89.02	85.83	85.94	86.26	85.60	86.85	102.81	103.12	102.89	102.73
13	100.61	98.34	88.72	85.84	85.90	86.22	85.54	86.82	102.62	102.95	102.88	102.43
14	100.73	98.19	88.18	85.93	85.86	86.14	85.52	86.79	102.55	103.17	102.87	102.26
15	100.77	98.07	87.54	86.04	85.80	86.12	85.53	86.70	102.60	103.14	102.86	102.46
16	100.61	97.66	87.85	86.06	85.76	86.10	85.51	86.69	102.86	103.02	102.76	102.72
17	100.29	97.28	86.50	86.04	85.73	86.05	85.43	87.00	102.85	103.26	102.65	102.86
18	99.82	97.82	86.10	86.04	85.74	86.00	85.42	87.51	102.93	102.99	102.66	103.03
19	99.38	96.76	85.94	86.44	85.90	85.94	85.41	88.09	102.85	102.58	102.59	102.98
20	99.88	96.37	85.83	87.30	86.04	85.91	85.36	88.47	102.56	102.52	102.49	102.75
21	98.86	96.12	85.83	88.18	86.12	85.87	85.32	88.80	102.82	102.77	102.43	102.52
22	99.10	95.83	85.89	87.84	86.23	85.84	85.28	88.37	102.88	102.84	102.36	102.50
23	99.18	95.55	86.02	87.47	86.32	85.84	85.27	88.00	102.86	102.55	102.17	102.40
24	98.80	95.20	86.63	88.13	86.71	85.83	85.27	87.76	102.81	102.53	102.11	102.10
25	98.36	94.83	86.99	88.34	86.66	85.82	85.26	87.66	103.03	102.70	102.25	101.85
26	97.99	94.34	87.84	87.84	86.50	85.77	85.25	87.66	103.11	102.80	102.51	101.55
27	97.90	93.86	86.98	87.24	86.38	85.77	85.24	87.71	103.84	102.95	102.70	101.19
28	99.07	93.44	86.94	86.90	86.34	85.80	85.30	88.03	102.69	103.24	102.71	100.93
29	99.98	93.82	86.82	86.72	86.35	85.79	85.32	88.64	102.81	103.19	102.72	100.78
30	100.43	92.65	86.67	86.58	86.58	85.75	85.98	89.46	103.04	103.17	102.75	100.46
31	100.41	86.55	86.47	86.47	85.73	85.73	85.73	90.42	103.14	102.83		
MEAN	99.44	97.11	88.13	86.59	86.20	86.21	85.49	87.23	101.98	102.97	102.76	102.46
MAX	100.77	100.34	92.36	88.34	86.73	87.31	85.98	90.42	103.18	103.26	103.30	103.26
MIN	97.90	92.65	85.83	85.83	85.73	85.73	85.24	85.90	91.66	102.52	102.11	100.46

MTA VR 1968 MEAN 93.89 MAX 103.30 MIN 55.24

NOTE.--TO OBTAIN ELEVATIONS ABOVE MEAN SEA LEVEL ADD THE APPROPRIATE STANDARD DATUM AND SUBTRACT 82.53 FT.

12170600 SKAGIT RIVER AT INTERNATIONAL BOUNDARY, NEAR HOPE, BRITISH COLUMBIA--CONTINUED

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1960 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100.16	95.63	92.78			85.08	85.90	86.21	87.80	103.24	103.32	102.43
2	99.74	95.54	92.19			85.08	85.95	86.12	88.24	103.26	103.27	102.37
3	99.51	95.55	91.41			85.07	85.85	86.04	88.63	103.26	103.31	102.15
4	99.29	95.36	91.02			85.05	85.75	85.96	88.87	103.24	103.25	101.96
5	99.20	94.86	90.63			85.06	85.71	85.94	88.92	103.17	103.13	101.69
6	99.11	94.43	90.18		84.95	85.06	85.70	86.06	89.18	103.18	103.02	101.50
7	98.85	94.10	89.98		84.97	85.05	85.70	86.37	90.29	103.25	103.01	101.49
8	98.50	93.79	89.84		84.98	85.03	85.70	87.07	92.35	103.25	103.06	101.42
9	98.10	93.67	89.50		84.99	85.03	85.76	88.00	94.52	103.29	103.22	101.30
10	97.64	93.67	88.99		84.99	85.02	85.93	88.84	96.68	103.28	103.32	101.26
11	97.26	93.69	88.49		85.01	85.02	86.02	89.26	98.74	103.28	103.36	101.23
12	97.00	93.69	87.94		85.04	85.02	86.12	89.32	100.20	103.27	103.24	101.21
13	97.01	93.50	87.40		85.04	85.01	86.34	89.29	101.10	103.28	103.04	101.27
14	96.90	93.30	87.03		85.06	85.01	86.40	89.27	101.89	103.25	102.88	101.31
15	96.69	93.11	86.84		85.08	85.01	86.27	89.09	102.28	103.28	102.90	101.26
16	96.33	92.88	86.38		85.06	85.02	86.19	88.63	102.62	103.29	102.97	101.02
17	96.07	92.85	86.04		85.07	85.05	86.17	88.30	102.71	103.27	103.09	100.83
18	95.86	92.79			85.07	85.08	86.23	88.21	102.86	103.28	103.21	100.84
19	95.71	92.82			85.05	85.09	86.25	88.36	102.97	103.28	103.14	100.74
20	95.64	93.05			85.06	85.12	86.17	88.67	103.02	103.29	103.22	100.60
21	95.49	93.48			85.07	85.11	86.06	88.86	103.00	103.29	103.29	100.57
22	95.20	94.07			85.06	85.09	86.10	89.01	102.99	103.30	103.22	100.52
23	94.92	94.50			85.07	85.11	86.57	89.25	102.86	103.29	103.26	100.83
24	94.84	94.74			85.07	85.12	86.94	89.45	103.15	103.33	103.38	101.14
25	94.94	94.64			85.08	85.13	86.73	89.34	103.08	103.33	103.29	101.08
26	95.16	94.22			85.07	85.16	86.48	88.71	103.11	103.26	103.24	100.87
27	95.34	93.75			85.08	85.20	86.32	88.30	103.22	103.30	103.14	100.88
28	95.49	93.59			85.08	85.37	86.29	87.89	103.19	103.33	103.25	100.95
29	95.55	93.43			-----	85.51	86.36	87.77	103.21	103.30	102.51	101.10
30	95.62	93.09			-----	85.59	86.28	88.13	103.20	103.33	102.40	101.21
31	95.65	-----			-----	85.72	-----	87.89	-----	103.34	102.40	-----
MEAN	96.86	93.93				85.13	86.14	88.05	98.50	103.28	103.09	101.23
MAX	100.16	95.63				85.72	86.94	89.45	103.22	103.34	103.38	102.43
MIN	94.84	92.79				85.01	85.70	85.94	87.80	103.17	102.40	100.52

NOTE.--TO OBTAIN ELEVATIONS ABOVE MEAN SEA LEVEL ADD THE APPROPRIATE STANDARD DATUM AND SUBTRACT 82.53 FT.

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.95	13.56	4.47	2.90	2.54	2.73	2.62	2.64	4.77	18.25	20.89	15.58
2	19.02	13.40	4.22	2.90	2.54	2.70	2.61	2.71	5.80	18.54	20.90	15.43
3	19.04	13.17	4.02	2.88	2.53	2.67	2.60	2.84	6.60	19.80	20.89	15.30
4	19.11	12.87	3.67	2.85	2.53	2.65	2.60	3.17	6.87	19.70	20.88	15.10
5	19.19	12.93	3.17	2.82	2.53	2.64	2.62	3.62	6.44	20.37	20.88	14.96
6	19.23	12.64	3.02	2.80	2.52	2.64	2.74	3.81	6.13	20.55	20.90	14.97
7	19.18	12.24	2.95	2.78	2.51	2.74	2.80	3.76	6.14	20.56	20.85	14.97
8	19.06	12.06	2.84	2.77	2.51	2.75	2.78	3.74	5.77	20.58	20.72	14.85
9	19.03	12.11	2.78	2.77	2.51	2.72	2.87	3.72	5.30	20.53	20.60	14.58
10	18.87	11.96	2.76	2.77	2.50	2.71	3.23	3.66	4.91	20.63	20.54	14.31
11	18.76	11.73		2.76	2.50	2.69	3.20	3.54	4.50	20.60	20.30	14.24
12	18.80	11.43		2.75	2.52	2.68	3.15	3.43	4.23	20.62	20.21	
13	18.72	11.13		2.73	2.57	2.68	3.05	3.34	4.16	20.66	20.12	
14	18.39	10.78		2.72	2.66	2.69	2.98	3.27	4.25	20.43	19.98	
15	18.08	10.61		2.71	2.71	2.71	2.93	3.30	4.61	20.48	19.97	
16	17.73	10.52		2.68	2.78	2.73	2.89	3.88	4.66	20.70	20.09	
17	17.41	10.14		2.66	2.86	2.74	2.84	4.98	5.03	20.84	20.03	
18	17.15	9.66		2.65	2.87	2.73	2.83	4.86	6.10	20.85	19.87	
19	17.03	9.14		2.64	2.84	2.72	2.83	4.65	7.44	20.85	19.64	
20	16.90	8.74		2.66	2.82	2.71	2.83	4.67	8.92	20.77	19.35	
21	16.57	8.30		2.69	2.79	2.70	2.82	4.88	10.58	20.69	19.08	
22	16.19	7.82		2.74	2.78	2.69	2.81	5.11	12.06	20.66	18.96	
23	15.88	7.72		2.86	2.77	2.68	2.80	5.13	13.32	20.60	19.04	
24	15.58	7.48		2.92	2.77	2.68	2.80	5.22	14.32	20.44	18.89	
25	15.35	7.27		2.92	2.77	2.68	2.80	5.59	15.09	20.32	18.48	
26	15.27	6.57		2.91	2.76	2.67	2.76	6.07	15.90	20.32	18.04	
27	15.08	5.87		2.76	2.76	2.65	2.74	6.68	16.79	20.72	17.57	
28	14.76	5.44		2.56	2.75	2.65	2.71	5.07	17.47	20.81	17.00	
29	14.38	5.10		2.56	-----	2.65	2.69	4.69	17.87	20.81	16.59	
30	14.00	4.83		2.55	-----	2.64	2.66	4.43	18.02	20.83	16.34	
31	13.72	-----		2.54	-----	2.63	-----	4.36	-----	20.83	16.01	-----
MEAN	17.30	9.91		2.75	2.66	2.69	2.82	4.19	8.80	20.41	19.47	
MAX	19.23	13.56		2.92	2.87	2.75	3.23	6.07	18.02	20.85	20.90	
MIN	13.72	4.83		2.54	2.50	2.63	2.60	2.64	4.16	18.25	16.01	

SKAGIT RIVER BASIN

12172000 BIG BEAVER CREEK NEAR NEWHALEM, WASH.

LOCATION (REVISED).--Lat 48°46'33", long 121°04'01", in SE $\frac{1}{4}$ sec.14, T.38 N., R.13 E. (unsurveyed), Whatcom County, Ross Lake National Recreation Area, on left bank 3.0 miles north of Ross Dam on Skagit River, 10.5 miles northeast of Newhalem, and at mile 1.1.

DRAINAGE AREA.--63.2 sq mi.

PERIOD OF RECORD.--March 1940 to September 1948 (published as Beaver Creek near Newhalem, November 1962 to September 1969 (discontinued)).

GAGE.--Water-stage recorder. Altitude of gage is 1,600 ft (from river-profile map).

AVERAGE DISCHARGE.--14 years (1940-48, 1963-69), 414 cfs (88.96 inches per year, 299,900 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (1,550 cfs, revised), water years 1966-69

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1965	1030	1,750	4.63	Oct. 11, 1967	2400	1,590	4.40	June 27, 1968	0615	2,000	4.97
Oct. 30, 1965	0130	1,560	4.36	Oct. 28, 1967	0300	2,710	5.84				
June 28, 1966	1330	*2,090	5.09	Oct. 31, 1967	2000	2,280	5.33	May 10, 1969	0500	1,570	4.37
				Jan. 21, 1968	0500	2,020	5.00	May 25, 1969	0030	*1,770	4.66
Dec. 16, 1966	1230	2,080	5.07	Jan. 24, 1968	1315	1,750	4.63	May 29, 1969	1700	1,550	4.34
June 7, 1967	0300	1,560	4.36	May 20, 1968	1245	1,550	4.34	June 6, 1969	0300	1,710	4.57
June 21, 1967	2130	*2,130	5.14	June 2, 1968	1330	*3,720	7.22	Sept. 23, 1969	0900	1,760	4.64

Annual minimum discharge, water years 1966-69

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Jan. 6, 1966	75	.58	1968	Dec. 21, 1967	135	.96
1967	Oct. 18, 19, 1966, Mar. 15, 1967	106	.79	1969	Mar. 7-12, 1969	a64	.50

a Part or all of each day.

Period of record: Maximum discharge, 4,420 cfs Oct. 22, 1963 (gage height, 7.59 ft), from rating curve extended above 2,000 cfs; maximum gage height, 7.76 ft Dec. 2, 1941; minimum discharge, 64 cfs part or all of each day Mar. 7-12, 1969.

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 982: 1942. WSP 1316: 1941-42(M), 1946(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	445	242	119	118	86	603	331	635	648	600	256
2	124	791	397	105	114	84	575	391	627	644	587	273
3	129	691	436	108	111	82	512	599	583	761	635	276
4	147	1,310	885	97	110	81	460	820	543	756	658	297
5	249	915	591	109	113	82	490	1,000	583	825	603	312
6	1,200	640	666	108	111	81	535	1,380	855	748	547	315
7	452	498	648	142	110	79	591	1,280	1,060	800	563	284
8	421	459	547	182	106	84	680	1,190	1,140	885	583	276
9	632	459	456	200	105	110	725	1,310	1,150	915	535	284
10	342	361	391	178	100	122	716	1,230	1,180	920	498	284
11	276	340	342	164	100	128	743	930	1,050	835	462	310
12	244	304	304	162	95	156	653	900	815	820	400	337
13	231	281	273	244	92	153	535	820	725	1,090	501	331
14	271	278	246	326	91	192	487	680	702	1,000	498	348
15	354	375	226	264	88	226	466	579	865	1,030	470	345
16	268	348	209	244	86	220	476	531	1,120	1,040	445	297
17	235	302	194	218	85	198	445	462	1,300	875	391	276
18	220	273	184	194	84	186	410	434	1,130	780	378	406
19	224	346	184	178	84	176	376	454	1,100	805	357	307
20	246	417	186	164	82	166	357	539	925	707	337	273
21	345	431	178	155	82	153	340	689	707	627	334	289
22	334	410	166	144	83	142	331	666	627	653	337	351
23	328	354	160	138	84	137	331	555	627	684	348	456
24	297	312	156	128	84	133	351	519	679	671	391	342
25	273	286	146	124	84	137	363	720	579	623	434	310
26	291	266	138	119	86	151	360	623	619	600	400	284
27	268	246	137	118	89	184	342	1,160	730	580	442	268
28	366	231	126	114	86	224	331	895	1,760	610	424	271
29	294	218	124	119	84	328	328	805	1,150	630	331	294
30	922	207	122	122	-----	596	331	810	780	660	299	242
31	438	-----	121	121	-----	707	-----	743	-----	620	266	-----
TOTAL	10,862	12,816	9,181	4,908	2,663	5,586	14,265	24,047	26,246	23,842	14,054	9,194
MEAN	350	427	296	158	95.1	180	476	776	875	769	453	306
MAX	1,200	1,310	885	326	118	707	743	1,380	1,760	1,090	658	456
MIN	121	207	121	89	82	79	328	331	543	580	266	242
CFSM	5.54	6.76	4.68	2.50	1.50	2.85	7.53	12.3	13.8	12.2	7.17	4.84
IN.	6.39	7.94	5.40	2.89	1.57	3.29	8.40	14.15	15.45	14.03	6.27	5.41
AC-FT	21,540	25,420	18,210	9,740	5,280	11,080	28,290	47,700	52,060	47,290	27,880	16,240
CAL YR 1965	TOTAL 150,367	MEAN 412	MAX 1,310	MIN 82	CFSM 6.52	IN 88.51	AC-FT 298,300					
WTR YR 1966	TOTAL 157,664	MEAN 432	MAX 1,760	MIN 79	CFSM 6.84	IN 92.80	AC-FT 312,700					

12172000 BIG BEAVER CREEK NEAR NEWHALEM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	275	320	326	218	302	146	166	226	985	995	555	484
2	330	294	369	204	281	137	160	254	1,440	1,130	515	583
3	224	266	357	218	299	133	164	315	1,390	1,270	527	410
4	215	240	340	209	384	128	172	400	1,370	1,250	583	391
5	229	229	320	192	381	126	174	452	1,340	1,160	579	400
6	213	213	297	178	334	124	186	543	1,420	990	575	394
7	246	196	273	168	299	124	198	627	1,440	840	579	323
8	382	180	246	164	273	128	202	752	1,220	865	508	307
9	231	172	226	162	249	128	202	738	1,090	825	523	304
10	192	164	224	168	235	122	198	671	1,100	702	607	409
11	176	151	229	231	220	119	196	615	1,020	820	658	510
12	158	160	326	226	220	116	207	543	1,020	1,020	653	320
13	142	156	895	204	213	113	202	504	1,050	1,130	627	258
14	131	215	945	192	192	108	194	494	1,230	970	635	256
15	124	284	844	256	184	108	186	555	1,300	880	666	281
16	118	261	1,820	261	174	119	178	766	1,390	875	653	307
17	114	226	1,620	235	168	131	172	1,010	1,520	885	607	342
18	110	215	1,600	215	164	129	170	1,030	1,690	785	571	328
19	239	224	1,400	258	155	126	170	1,000	1,710	694	543	348
20	340	266	1,180	278	146	124	174	1,150	1,920	671	515	381
21	240	263	855	251	140	126	182	1,390	2,100	707	515	391
22	209	244	648	229	135	167	190	1,400	1,920	648	452	420
23	733	224	512	211	131	348	192	1,230	1,620	658	438	286
24	1,020	211	438	194	126	342	200	960	1,460	734	375	291
25	671	284	378	178	124	299	211	785	1,480	780	340	281
26	761	289	340	172	122	268	215	725	1,470	825	342	261
27	563	281	302	178	121	237	215	752	1,340	780	354	286
28	394	334	278	274	135	218	215	875	1,230	689	372	294
29	576	369	261	375	-----	202	215	1,010	1,170	627	417	284
30	536	345	237	417	-----	186	224	910	1,070	615	452	366
31	375	-----	226	342	-----	176	-----	790	-----	583	476	-----
TOTAL	10,267	7,276	18,312	7,058	5,907	5,058	5,730	23,472	41,505	26,403	16,212	10,496
MEAN	331	243	591	228	211	163	191	757	1,384	852	523	350
MAX	1,020	369	1,820	417	384	348	224	1,400	2,100	1,270	666	583
MIN	110	151	224	162	121	108	160	226	985	583	340	256
CFSM	5.24	3.84	9.35	3.61	3.34	2.58	3.02	12.0	21.9	13.5	8.28	5.94
IN-	6.04	4.28	10.78	4.15	3.48	2.98	3.27	13.82	24.63	15.34	9.54	6.42
AC-FT	20,360	14,430	36,320	14,000	11,720	10,030	11,370	46,560	82,330	52,370	32,160	20,820

CAL YR 1966 TOTAL 160,660 MEAN 440 MAX 1,820 MIN 79 CFSM 6.96 IN 94.57 AC-FT 318,700
 MTR YR 1967 TOTAL 177,696 MEAN 487 MAX 2,100 MIN 108 CFSM 7.71 IN 104.59 AC-FT 352,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	378	1,260	184	307	304	504	240	567	1,660	738	662	404
2	437	780	188	276	352	583	233	480	3,220	950	680	387
3	317	599	192	249	515	623	222	462	2,036	1,120	716	310
4	431	476	182	233	745	745	222	512	1,320	1,260	671	302
5	281	404	172	215	535	1,230	222	473	1,160	1,280	599	334
6	393	360	162	200	438	1,000	218	417	1,150	1,130	476	369
7	680	360	153	192	378	736	209	381	1,150	1,090	414	360
8	658	360	146	184	340	603	202	381	1,120	990	391	323
9	442	442	149	170	312	498	200	428	915	1,190	388	312
10	536	668	246	168	289	424	222	579	950	1,060	445	312
11	1,510	635	366	156	273	375	289	761	950	1,000	480	326
12	1,090	494	291	149	258	351	273	845	850	1,210	424	345
13	730	445	242	153	244	345	249	712	734	900	388	281
14	680	662	218	235	235	326	244	725	648	860	381	698
15	494	895	202	326	222	320	233	635	619	825	366	681
16	400	648	192	334	209	315	218	662	640	653	334	738
17	348	515	182	281	202	299	204	820	698	635	366	1,150
18	363	459	172	276	244	276	198	1,010	840	607	384	694
19	375	397	140	656	452	261	190	1,230	1,050	676	326	466
20	315	357	147	1,250	619	246	182	1,430	950	756	302	360
21	494	326	140	1,790	680	237	176	1,220	815	615	284	302
22	512	302	172	1,160	694	233	172	1,000	716	549	273	266
23	504	281	870	760	246	182	182	920	761	527	310	310
24	424	268	954	1,450	1,020	268	184	860	900	591	397	273
25	462	249	623	1,100	785	266	184	845	1,110	658	439	276
26	381	226	648	785	627	254	188	775	1,390	712	661	289
27	995	215	575	595	543	273	190	748	1,750	798	746	276
28	1,820	207	519	480	504	271	220	734	1,110	835	494	237
29	910	209	445	410	490	286	405	785	790	845	394	226
30	884	194	381	363	-----	276	627	725	648	734	366	224
31	1,880	-----	342	337	-----	256	-----	680	-----	648	378	-----
TOTAL	20,024	13,693	8,593	15,356	13,249	12,946	6,996	22,802	32,499	26,543	13,954	11,803
MEAN	646	436	277	495	437	418	233	736	1,083	856	450	393
MAX	1,880	1,260	648	1,790	1,020	1,230	627	1,430	3,220	1,280	765	1,150
MIN	281	194	140	149	202	233	172	381	619	527	273	224
CFSM	10.2	7.22	4.38	7.83	7.23	6.61	3.69	11.6	17.1	13.5	7.12	6.22
IN-	11.79	8.06	5.06	9.04	7.80	7.62	4.12	13.42	19.13	15.62	8.21	6.95
AC-FT	39,720	27,160	17,040	30,460	26,280	25,680	13,880	45,230	64,460	52,650	27,680	23,410

CAL YR 1967 TOTAL 184,151 MEAN 505 MAX 2,100 MIN 108 CFSM 7.99 IN 108.39 AC-FT 365,300
 MTR YR 1968 TOTAL 198,458 MEAN 542 MAX 3,220 MIN 140 CFSM 8.58 IN 116.81 AC-FT 393,600

12173500 RUBY CREEK BELOW PANTHER CREEK, NEAR NEWHALEM, WASH

LOCATION.--Lat 48°42'32", long 120°58'29", in NW¼ sec.10, T.37 N., R.14 E., Whatcom County, Ross Lake National Recreation Area, on right bank 200 ft downstream from Panther Creek, 12.5 miles northeast of Newhalem, and at mile 4.0.

DRAINAGE AREA.--206 sq mi.

PERIOD OF RECORD.--September 1948 to September 1956, October 1962 to September 1969 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 1,640 ft (by barometer).

AVERAGE DISCHARGE.--15 years (1948-56, 1962-69), 714 cfs (47.07 inches per year, 517,300 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (3,000 cfs), water years 1966-69

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	2000	*2,870	6.16	June 22, 1967	0530	*7,160	9.88	June 26, 1968	2300	3,410	6.75
May 21, 1967	2300	3,430	6.73	Oct. 31, 1967	1630	3,820	7.13	May 10, 1969	2330	3,230	6.61
(a)		3,850	-	May 20, 1968	1445	4,250	7.55	May 23, 1969	2230	*4,150	7.48
				June 2, 1968	1530	*5,800	8.88	June 4, 1969	2100	3,920	7.27

a June 6 or 7, 1967.

Annual minimum discharge, water years 1966-69

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Feb. 15, 1966	56	1.19	1968	Oct. 5, 1967	158	1.64
1967	Oct. 18, 1966	105	1.37	1969	Mar. 13, 1969	a84	1.32

a May have been less during period of no gage-height record Dec. 29, 1968, to Jan. 3, 1969.

Period of record: Maximum discharge, 8,640 cfs Nov. 27, 1949 (gage height, 10.95 ft), from rating curve extended above 5,600 cfs; minimum, 46 cfs Feb. 10, 1949, Nov. 28, 1952; minimum gage height, 0.70 ft Feb. 10, 1949.

REMARKS.--Records excellent except those for winter periods, which are good. No gage-height record Dec. 29, 1968, to Jan. 3, 1969, June 24 to Aug. 17, 1969. No regulation or diversion above station.

REVISIONS.--NSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	195	165	105	100	88	680	456	1,420	980	540	200
2	135	230	180	100	94	80	615	600	1,340	1,030	527	202
3	140	228	212	100	98	82	554	944	1,240	1,180	536	202
4	140	345	342	95	98	84	550	1,330	1,140	1,150	532	205
5	155	307	250	90	98	82	610	1,790	1,190	1,230	484	215
6	442	268	250	105	98	80	715	2,650	1,550	1,160	448	218
7	280	245	259	120	96	78	830	2,470	1,980	1,170	452	205
8	235	248	238	130	96	82	980	2,540	2,220	1,230	452	200
9	225	245	222	125	92	110	1,050	2,560	2,320	1,240	424	198
10	202	232	210	125	88	102	968	2,340	2,060	1,200	440	195
11	188	220	195	122	92	96	875	1,860	1,760	1,090	366	240
12	162	208	185	125	88	98	760	1,650	1,460	1,060	328	289
13	185	198	158	162	88	125	655	1,460	1,340	1,300	362	310
14	182	205	140	175	88	155	625	1,260	1,370	1,160	356	271
15	188	230	142	155	78	162	625	1,130	1,670	1,400	345	248
16	170	230	145	142	88	152	635	1,020	2,160	1,270	331	230
17	165	215	150	132	84	138	605	896	2,260	1,050	307	218
18	162	208	160	128	82	132	568	870	1,900	944	295	232
19	160	220	160	122	82	125	522	938	1,740	885	286	212
20	170	225	158	112	84	118	496	1,120	1,570	780	271	198
21	190	232	150	118	84	112	472	1,290	1,300	715	262	200
22	162	228	135	110	88	105	452	1,160	1,170	715	256	222
23	180	198	128	110	94	105	448	1,020	1,120	715	256	256
24	172	198	130	94	96	110	464	1,030	1,090	700	274	225
25	168	188	120	110	96	138	488	1,410	974	630	295	208
26	170	180	120	102	96	185	468	2,210	998	568	289	192
27	165	175	115	100	94	242	440	2,240	1,090	558	277	182
28	165	168	110	100	90	320	428	1,850	1,560	590	259	185
29	180	162	110	100	-----	514	432	1,760	1,370	605	240	195
30	250	160	105	100	-----	780	444	1,760	1,100	605	230	178
31	208	-----	105	102	-----	805	-----	1,600	-----	576	210	-----
TOTAL	5,868	6,591	5,249	3,616	2,550	5,585	18,454	47,214	45,462	29,486	10,930	6,531
MEAN	189	220	169	117	91.1	180	613	1,523	1,515	951	353	218
MAX	442	345	342	175	100	805	1,050	2,650	2,320	1,400	540	310
MIN	132	160	105	90	78	78	428	456	974	558	210	178
CFSM	.92	1.07	.82	.57	.44	.87	2.99	7.39	7.35	4.62	1.71	1.06
IN.	1.06	1.19	.95	.65	.46	1.01	3.33	8.53	8.21	5.32	1.97	1.18
AC-FT	11,640	13,070	10,410	7,170	5,060	11,080	36,600	93,650	90,170	58,490	21,680	12,950
CAL YR 1965	TOTAL 231,668	MEAN 635	MAX 3,230	MIN 105	CFSM 3.08	IN 41.84	AC-FT 459,500					
WTR YR 1966	TOTAL 187,536	MEAN 514	MAX 2,650	MIN 78	CFSM 2.50	IN 33.87	AC-FT 372,000					

12173500 RUBY CREEK BELOW PANTHER CREEK, NEAR NEWHALEM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	450	304	314	271	175	165	245	2,160	2,430	560	360
2	212	400	310	295	259	170	172	289	2,960	2,560	540	420
3	170	362	295	298	274	165	198	404	3,050	2,760	576	350
4	162	331	283	289	342	160	218	532	3,150	2,600	655	300
5	158	320	268	271	328	165	212	595	3,100	2,330	640	292
6	150	295	256	259	298	165	220	745	3,500	2,040	630	280
7	168	277	242	248	277	165	240	914	3,500	1,760	640	240
8	190	250	225	248	262	170	245	1,140	2,950	1,720	540	238
9	160	253	212	242	253	165	238	1,090	2,730	1,580	572	242
10	148	238	218	248	245	160	230	1,010	2,730	1,440	590	261
11	145	220	220	277	238	152	232	896	2,550	1,210	595	366
12	138	232	242	265	238	152	245	805	2,490	1,800	581	240
13	128	228	494	250	230	142	238	775	2,640	1,860	568	200
14	120	240	522	250	220	190	228	800	3,000	1,650	545	190
15	115	248	500	289	212	148	220	944	3,500	1,450	554	200
16	112	232	1,270	277	205	155	215	1,320	3,850	1,430	545	210
17	110	220	1,170	256	202	160	212	1,630	4,300	1,380	500	220
18	108	215	1,170	245	198	155	212	1,730	4,650	1,270	468	210
19	247	225	1,140	250	188	152	212	1,860	4,750	1,140	440	225
20	253	235	1,020	245	180	152	220	2,220	4,990	1,030	408	238
21	200	238	820	250	180	152	225	2,890	5,880	1,020	408	245
22	180	228	705	230	172	172	222	3,100	6,000	968	373	230
23	700	218	595	220	170	242	222	2,730	4,420	974	359	198
24	900	212	532	212	168	228	232	2,190	3,820	1,000	328	190
25	600	295	480	205	168	212	242	1,830	3,840	1,050	298	188
26	750	274	436	205	165	200	240	1,740	3,650	1,100	283	175
27	540	259	396	212	162	190	238	1,760	3,390	1,000	295	185
28	450	274	376	277	175	182	240	1,960	3,050	850	310	190
29	660	283	362	304	-----	178	240	2,140	2,890	730	330	185
30	580	289	338	317	-----	170	240	1,998	2,640	650	340	240
31	500	-----	324	277	-----	168	-----	1,820	-----	610	350	-----
TOTAL	9,237	8,041	15,725	8,025	6,280	5,272	6,713	44,094	106,130	45,392	14,821	7,330
MEAN	298	268	507	259	224	170	224	1,422	3,538	1,464	478	244
MAX	900	450	1,270	317	342	242	245	3,100	6,000	2,760	655	420
MIN	108	212	212	205	162	142	165	2,160	610	283	175	175
CFSM	1.45	1.30	2.46	1.26	1.09	.83	1.09	6.90	17.2	7.11	2.32	1.18
IN.	1.67	1.45	2.84	1.45	1.13	.95	1.21	7.96	19.17	8.20	2.68	1.32
AC-FT	18,320	15,950	31,190	15,920	12,460	10,460	13,320	87,460	210,500	90,040	29,400	14,540
CAL YR 1966	TOTAL 202,831		MEAN 556	MAX 2,650	MIN 78	CFSM 2.70		IN 36.63	AC-FT 402,300			
WTR YR 1967	TOTAL 277,040		MEAN 759	MAX 6,000	MIN 108	CFSM 3.68		IN 50.63	AC-FT 549,500			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	2,270	292	400	545	700	320	735	2,740	1,610	735	310
2	188	1,380	298	342	550	765	320	660	5,100	2,060	725	307
3	185	1,060	283	338	576	785	307	685	3,820	2,460	740	277
4	178	850	280	334	710	865	304	785	2,860	2,650	705	256
5	160	725	277	307	586	1,200	301	760	2,750	2,650	645	265
6	165	650	259	289	527	1,150	292	695	2,780	2,440	558	280
7	248	615	248	280	492	992	289	645	2,680	2,280	492	280
8	304	600	240	274	468	860	280	650	2,440	2,230	452	256
9	238	600	250	268	448	770	289	730	2,440	2,220	436	245
10	248	700	380	256	428	700	317	962	2,480	1,910	452	240
11	625	645	404	245	412	650	356	1,320	2,320	1,740	476	240
12	504	572	328	238	396	605	334	1,530	2,110	1,700	444	240
13	400	563	280	240	384	563	317	1,400	1,900	1,460	362	222
14	396	635	283	253	370	522	320	1,380	1,720	1,300	359	259
15	320	680	271	271	352	500	307	1,260	1,670	1,190	366	328
16	280	640	265	259	342	476	295	1,330	1,740	1,060	331	352
17	253	586	250	245	338	452	289	1,730	1,980	1,170	328	553
18	250	554	230	259	380	424	286	2,370	2,350	1,110	320	444
19	262	504	220	576	563	400	280	2,880	2,710	1,090	298	334
20	240	480	210	990	635	384	271	3,920	2,440	1,080	280	286
21	429	456	210	1,530	650	376	268	3,170	2,140	980	271	253
22	444	440	270	1,180	640	370	268	2,540	1,950	908	253	238
23	416	408	298	1,000	680	373	277	2,230	2,000	875	262	248
24	366	376	595	1,710	795	373	271	2,080	2,400	885	328	232
25	324	376	790	1,510	715	362	268	2,030	2,800	870	352	222
26	289	345	850	1,120	645	348	268	1,960	3,130	914	480	220
27	801	356	755	885	610	362	274	1,870	2,880	980	468	215
28	1,340	328	655	780	610	348	324	1,830	2,140	986	373	200
29	820	317	550	720	635	356	536	1,860	1,720	938	324	192
30	1,000	304	480	660	-----	334	800	1,740	1,480	850	307	188
31	2,990	-----	440	595	-----	328	-----	1,620	-----	765	301	-----
TOTAL	14,843	19,015	11,441	18,354	15,482	17,693	9,628	49,357	73,710	45,361	13,223	8,182
MEAN	479	634	369	592	534	571	321	1,592	2,457	1,463	427	273
MAX	2,990	2,270	850	1,710	795	1,200	800	3,920	5,100	2,650	740	553
MIN	160	304	210	238	338	328	268	645	1,480	765	253	188
CFSM	2.33	3.08	1.79	2.87	2.59	2.77	1.56	7.73	11.9	7.10	2.07	1.33
IN.	2.68	3.43	2.07	3.11	2.80	3.20	1.74	8.91	13.31	8.19	2.39	1.48
AC-FT	29,440	37,720	22,690	36,410	30,710	35,090	19,100	97,900	146,200	89,970	26,230	16,230
CAL YR 1967	TOTAL 289,356		MEAN 793	MAX 6,000	MIN 142	CFSM 3.85		IN 52.25	AC-FT 573,900			
WTR YR 1968	TOTAL 256,289		MEAN 810	MAX 5,100	MIN 160	CFSM 3.93		IN 53.50	AC-FT 587,700			

12173500 RUBY CREEK BELOW PANTHER CREEK, NEAR NEWHALEM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	180	256	259	105	125	110	476	695	2,280	660	400	165		
2	172	244	250	110	130	110	432	640	2,850	1,060	360	182		
3	165	235	346	135	140	112	390	605	3,240	1,140	340	182		
4	168	218	337	281	152	112	358	595	3,510	900	320	170		
5	180	210	298	572	148	114	346	635	3,590	800	290	158		
6	228	200	268	476	140	112	349	810	3,370	730	260	146		
7	200	195	256	383	135	110	343	1,140	3,190	760	258	146		
8	188	205	247	337	133	110	352	1,790	3,120	820	262	154		
9	180	225	235	310	132	108	411	2,520	3,000	900	277	182		
10	180	208	232	289	132	106	476	2,980	2,880	1,050	277	202		
11	172	241	225	271	136	106	504	3,000	2,720	1,160	262	220		
12	172	271	212	256	136	110	590	2,940	2,650	1,000	238	218		
13	175	235	202	244	132	114	710	2,920	2,700	700	235	205		
14	168	220	202	235	128	116	625	2,850	2,550	600	265	175		
15	172	208	200	228	126	126	568	2,650	2,050	500	280	152		
16	162	192	192	210	124	132	560	2,380	1,970	470	253	140		
17	162	192	178	205	124	175	572	2,130	2,000	490	228	146		
18	170	222	185	200	122	185	605	2,190	1,990	510	225	205		
19	172	292	170	190	120	168	580	2,570	1,900	540	220	195		
20	185	372	140	180	120	162	532	2,910	1,670	580	218	188		
21	175	450	130	170	118	168	520	3,050	1,430	530	232	170		
22	175	520	130	160	120	180	615	3,240	1,200	510	222	263		
23	175	428	155	150	118	172	1,110	3,650	1,120	580	225	442		
24	218	372	175	140	116	168	1,130	3,940	1,150	620	244	362		
25	271	334	165	140	114	178	922	3,260	1,000	550	232	316		
26	283	313	156	130	114	215	805	2,760	880	420	212	256		
27	256	301	140	130	112	301	765	2,470	780	450	200	222		
28	268	280	110	130	110	340	795	2,080	700	470	188	218		
29	301	298	100	120	-----	355	800	2,200	600	410	170	546		
30	319	274	100	120	-----	418	745	2,460	600	370	160	580		
31	283	-----	100	120	-----	512	-----	2,180	-----	380	160	-----		
TOTAL	6,295	8,211	6,095	6,727	3,557	5,505	17,986	70,240	62,690	20,660	7,713	6,906		
MEAN	203	274	197	217	127	178	600	2,266	2,090	666	249	230		
MAX	319	520	346	572	152	512	1,130	3,940	3,590	1,160	400	580		
MIN	162	192	100	105	110	106	343	595	600	370	160	140		
CFSM	.99	1.33	.96	1.05	.62	.86	2.91	11.0	10.1	3.23	1.21	1.12		
IN.	1.14	1.48	1.10	1.21	.64	.99	3.25	12.68	11.32	3.73	1.39	1.25		
AC-FT	12,490	16,290	12,090	13,340	7,060	10,920	35,680	139,300	124,300	40,980	15,300	13,700		
CAL YR 1968	TOTAL	271,591	MEAN	742	MAX	5,100	MIN	100	CFSM	3.60	IN	49.04	AC-FT	538,700
WTR YR 1969	TOTAL	222,585	MEAN	610	MAX	3,940	MIN	100	CFSM	2.96	IN	40.19	AC-FT	441,500

12175000 ROSS RESERVOIR NEAR NEWHALEM, WASH.

(International gaging station)

LOCATION.--Lat 48°43'58", long 121°04'02" (revised), in SE¼ sec.35, T.38 N., R.13 E., Whatcom County, Ross Lake National Recreation Area, at Ross Dam on Skagit River, 1.0 mile downstream from Ruby Creek, 9.1 miles north-east of Newhalem, and at mile 105.2.

DRAINAGE AREA.--999 sq mi, of which 400 sq mi is in Canada.

PERIOD OF RECORD.--March 1940 to September 1970 (prior to October 1946, monthend elevations and contents only). Prior to October 1945, published as Ruby Reservoir near Newhalem.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (city of Seattle Ross Dam datum); 1.79 ft above mean sea level, U.S. Coast and Geodetic Survey datum; and 0.88 ft above mean sea level, Geodetic Survey of Canada 1959 datum (by water level transfer of elevation from the international boundary). See MSP 1932 for history of changes prior to Apr. 30, 1948.

EXTREMES.--Maximums and minimums (contents in acre-feet, elevation in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Contents	Elevation	Date	Minimum	Contents	Elevation
1966	Aug. 1, 1966		1,405,500	1,600.02	Mar. 29, 1966		493,900	1,497.31
1967	Aug. 28, 1967		1,435,000	1,602.52	May 3, 1967		719,800	1,530.22
1968	July 17, 1968		1,435,100	1,602.53	May 1, 2, 1968		990,200	1,561.01
1969	July 25, 1969		1,435,400	1,602.55	Apr. 10, 1969		465,500	1,492.11
1970	Aug. 2, 1970		1,435,500	1,602.56	Apr. 8, 1970		519,600	1,501.76

Period of record: Maximum contents, 1,435,500 acre-ft Aug. 2, 1970 (elevation, 1,602.56 ft); minimum observed since dam was completed in 1949, 51,760 acre-ft Apr. 5, 1952 (elevation, 1,348.50 ft).

REMARKS.--Reservoir is formed by a concrete arch dam completed to elevation 1,615 ft in 1949; storage began Mar. 11, 1940. Starting about July 1, 1957, taintor gates were extended to elevation 1,602.50 ft. Usable storage, 1,052,300 acre-ft between elevations 1,475 (lower limit of operation) and 1,602.5 ft (top of taintor gates). Dead storage below elevation 1,250 ft, 1,175 acre-ft. Water used for power and to supplement low flow of Skagit River through city of Seattle's Diablo and Gorge powerplants. Figures given herein represent total contents.

COOPERATION.--Capacity table furnished by city of Seattle. This station is maintained by the United States under agreement with Canada.

REVISIONS.--MSP 1932: Drainage area.

Capacity table, water years 1966-70 (elevation, in feet, and contents, in acre-feet)

1,492	465,000	1,525	679,000	1,575	1,130,200
1,500	509,200	1,550	888,300	1,603	1,440,700

ELEVATION, IN FEET, AT 2400. WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,598.56	1,594.17	1,588.15	1,572.63	1,546.71	1,521.02	1,499.48	1,510.71	1,555.37	1,590.37	1,599.82	1,599.90
2	1,598.42	1,594.15	1,587.72	1,571.86	1,545.63	1,519.96	1,500.34	1,510.88	1,556.15	1,591.06	1,599.86	1,599.76
3	1,598.39	1,594.12	1,587.58	1,570.63	1,544.49	1,518.70	1,501.41	1,511.68	1,556.88	1,592.00	1,599.87	1,599.66
4	1,598.10	1,594.40	1,587.95	1,569.51	1,543.67	1,517.42	1,501.64	1,512.61	1,565.17	1,596.52	1,599.88	1,599.80
5	1,597.91	1,594.59	1,588.14	1,568.54	1,542.74	1,516.80	1,502.05	1,514.83	1,558.84	1,593.54	1,599.87	1,599.95
6	1,598.33	1,594.65	1,588.12	1,567.76	1,542.16	1,516.07	1,502.64	1,517.59	1,559.98	1,594.16	1,599.87	1,599.83
7	1,598.25	1,594.73	1,588.87	1,567.20	1,540.99	1,514.32	1,503.32	1,520.70	1,561.55	1,594.80	1,599.99	1,599.73
8	1,598.13	1,594.52	1,587.90	1,566.69	1,540.00	1,513.18	1,504.32	1,523.77	1,563.30	1,595.58	1,599.98	1,599.66
9	1,598.65	1,590.36	1,587.67	1,565.92	1,539.47	1,512.42	1,501.84	1,512.61	1,565.17	1,596.52	1,599.97	1,599.50
10	1,598.70	1,594.02	1,587.34	1,565.22	1,537.98	1,511.24	1,507.48	1,529.29	1,566.93	1,597.55	1,599.90	1,599.58
11	1,598.48	1,593.67	1,587.04	1,564.18	1,536.74	1,510.22	1,507.77	1,531.19	1,568.68	1,598.23	1,599.85	1,599.65
12	1,598.13	1,593.26	1,586.81	1,563.29	1,536.15	1,509.64	1,508.25	1,532.68	1,570.12	1,598.78	1,599.89	1,599.66
13	1,597.87	1,593.08	1,586.09	1,562.82	1,535.40	1,509.41	1,508.66	1,533.80	1,571.09	1,599.50	1,599.90	1,599.64
14	1,597.57	1,591.11	1,585.37	1,562.35	1,534.21	1,508.47	1,508.76	1,535.18	1,572.08	1,599.73	1,599.95	1,599.49
15	1,597.29	1,592.90	1,584.58	1,562.13	1,533.16	1,507.49	1,508.69	1,536.58	1,573.38	1,599.86	1,599.91	1,599.27
16	1,597.09	1,592.68	1,583.76	1,561.84	1,531.99	1,506.40	1,509.32	1,537.14	1,575.08	1,599.73	1,599.88	1,599.12
17	1,597.07	1,592.38	1,582.88	1,560.79	1,530.84	1,505.57	1,510.10	1,537.82	1,576.98	1,599.73	1,599.84	1,599.07
18	1,596.68	1,592.03	1,582.34	1,560.05	1,530.06	1,504.55	1,510.15	1,538.24	1,578.74	1,599.79	1,599.85	1,599.16
19	1,596.39	1,591.79	1,581.95	1,559.02	1,529.48	1,503.70	1,510.15	1,538.76	1,580.37	1,599.84	1,599.79	1,598.95
20	1,596.18	1,591.75	1,581.19	1,558.00	1,529.17	1,503.28	1,510.01	1,539.26	1,581.49	1,599.85	1,599.81	1,598.88
21	1,596.07	1,591.68	1,580.31	1,557.02	1,528.30	1,502.10	1,509.99	1,540.34	1,582.46	1,599.76	1,599.93	1,598.74
22	1,595.93	1,591.32	1,579.43	1,556.22	1,527.70	1,501.13	1,509.79	1,541.65	1,583.26	1,599.80	1,599.85	1,598.58
23	1,595.83	1,590.96	1,578.64	1,555.62	1,526.84	1,500.16	1,510.00	1,542.24	1,583.84	1,599.83	1,599.77	1,598.53
24	1,595.81	1,590.49	1,578.33	1,554.14	1,526.00	1,499.29	1,510.50	1,543.04	1,584.52	1,599.80	1,599.80	1,598.59
25	1,595.50	1,590.36	1,577.95	1,553.15	1,525.10	1,498.38	1,510.30	1,544.13	1,585.28	1,599.87	1,599.78	1,598.58
26	1,595.16	1,590.00	1,577.54	1,552.16	1,524.27	1,498.04	1,510.24	1,545.70	1,586.18	1,599.83	1,599.93	1,598.34
27	1,594.74	1,589.77	1,576.81	1,551.04	1,523.10	1,498.00	1,510.16	1,547.74	1,586.84	1,599.79	1,599.98	1,598.16
28	1,594.37	1,589.58	1,575.88	1,550.26	1,522.10	1,497.42	1,510.06	1,547.68	1,588.30	1,599.85	1,599.85	1,598.12
29	1,594.22	1,588.95	1,574.96	1,549.52	1,521.00	1,497.36	1,509.89	1,551.47	1,589.35	1,599.83	1,599.90	1,598.03
30	1,594.38	1,588.47	1,573.67	1,548.99	1,520.00	1,498.00	1,510.07	1,553.18	1,590.08	1,599.81	1,599.90	1,597.88
31	1,594.44	-----	1,573.12	1,547.73	-----	1,498.96	-----	1,554.35	-----	1,600.01	1,599.97	-----
MEAN	1,596.85	1,592.33	1,582.82	1,569.54	1,534.08	1,507.04	1,507.38	1,533.98	1,573.66	1,597.80	1,599.88	1,599.13
MAX	1,598.70	1,594.73	1,588.15	1,572.63	1,546.71	1,521.02	1,510.50	1,554.35	1,590.08	1,600.01	1,599.99	1,599.95
MIN	1,594.22	1,588.47	1,573.12	1,547.73	1,522.10	1,497.36	1,498.48	1,510.71	1,555.37	1,590.37	1,599.77	1,597.88
(+)	1,341	1,275	1,110.5	867.9	656.9	503.5	571.8	928.2	1,292.8	1,405.3	1,405.3	1,381
(+)	-51,500	-66,000	-164,500	-242,600	-211,000	-153,400	+68,300	+356,400	+364,600	+112,500	0	-24,300
CAL YR 1965 MEAN	-	-	-	-	-	-	-	-	-	-	-	-
WTR YR 1966 MEAN	1,565.69	-	-	-	-	-	-	-	-	-	-	-
MAX	1,600.01	-	-	-	-	-	-	-	-	-	-	-
MIN	1,497.34	-	-	-	-	-	-	-	-	-	-	-

† TOTAL CONTENTS, IN THOUSANDS OF ACRE-Feet, AT END OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-Feet.

12175000 ROSS RESERVOIR NEAR NEMIALEM, WASH.--CONTINUED

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,597.80	1,594.63	1,582.51	1,586.06	1,574.82	1,563.65	1,547.11	1,531.31	1,569.65	1,600.08	1,602.49	1,602.22
2	1,597.82	1,594.30	1,582.32	1,586.00	1,574.52	1,563.05	1,547.15	1,530.68	1,572.00	1,599.98	1,602.44	1,602.36
3	1,597.66	1,593.97	1,582.27	1,585.57	1,574.29	1,562.47	1,546.54	1,530.24	1,575.05	1,599.97	1,602.43	1,602.28
4	1,597.47	1,593.43	1,582.25	1,584.86	1,574.59	1,562.30	1,546.40	1,530.32	1,578.15	1,599.96	1,602.41	1,602.28
5	1,597.26	1,593.16	1,581.82	1,584.21	1,574.86	1,562.10	1,545.60	1,530.61	1,580.60	1,599.95	1,602.51	1,602.11
6	1,597.01	1,592.90	1,581.49	1,583.70	1,574.50	1,561.40	1,545.09	1,531.14	1,583.10	1,599.98	1,602.48	1,602.03
7	1,596.81	1,592.23	1,580.89	1,583.47	1,574.16	1,560.60	1,544.71	1,532.47	1,585.44	1,599.95	1,602.47	1,601.97
8	1,596.80	1,591.53	1,580.25	1,585.30	1,573.71	1,559.84	1,544.50	1,533.33	1,587.22	1,599.99	1,602.39	1,601.84
9	1,596.76	1,591.43	1,579.72	1,582.76	1,573.30	1,559.20	1,544.40	1,536.02	1,588.15	1,599.97	1,602.41	1,601.77
10	1,596.39	1,590.14	1,579.55	1,582.24	1,572.90	1,558.65	1,543.92	1,534.65	1,598.21	1,600.06	1,602.38	1,601.65
11	1,595.97	1,589.45	1,579.25	1,581.80	1,572.40	1,558.16	1,543.44	1,535.15	1,591.53	1,599.84	1,602.41	1,601.47
12	1,595.52	1,589.12	1,578.88	1,581.37	1,572.03	1,557.49	1,542.77	1,535.36	1,592.74	1,600.03	1,602.40	1,601.23
13	1,595.12	1,588.89	1,579.30	1,581.03	1,571.10	1,556.45	1,541.94	1,535.90	1,593.99	1,599.99	1,602.44	1,600.97
14	1,594.72	1,588.46	1,578.60	1,580.89	1,570.16	1,560.41	1,545.15	1,536.70	1,595.94	1,600.20	1,602.38	1,600.93
15	1,594.41	1,588.16	1,580.02	1,581.08	1,569.64	1,556.77	1,540.66	1,537.37	1,597.29	1,601.01	1,602.40	1,600.75
16	1,594.26	1,587.62	1,581.64	1,580.66	1,569.14	1,556.28	1,540.33	1,538.50	1,598.75	1,601.93	1,602.28	1,600.63
17	1,593.87	1,587.30	1,583.20	1,580.13	1,568.73	1,553.58	1,539.50	1,540.22	1,599.73	1,602.41	1,602.33	1,600.43
18	1,593.45	1,586.91	1,584.73	1,579.49	1,568.51	1,553.22	1,538.52	1,542.15	1,599.89	1,602.46	1,602.31	1,600.02
19	1,593.42	1,586.56	1,582.77	1,579.16	1,568.41	1,553.32	1,538.13	1,544.11	1,600.04	1,602.49	1,602.14	1,599.57
20	1,593.16	1,586.12	1,586.56	1,578.79	1,567.66	1,552.34	1,537.05	1,546.69	1,600.09	1,602.49	1,602.44	1,599.65
21	1,592.75	1,585.49	1,586.82	1,578.74	1,567.33	1,551.71	1,536.38	1,549.91	1,600.01	1,602.48	1,602.40	1,599.55
22	1,592.55	1,584.79	1,587.06	1,578.55	1,566.97	1,551.27	1,536.88	1,552.85	1,600.02	1,602.47	1,602.28	1,599.56
23	1,593.15	1,584.17	1,587.04	1,577.84	1,566.52	1,551.12	1,535.85	1,555.39	1,600.04	1,602.49	1,602.14	1,599.55
24	1,593.46	1,584.02	1,587.30	1,577.42	1,565.92	1,550.72	1,534.90	1,557.15	1,600.04	1,602.49	1,602.14	1,599.57
25	1,593.87	1,583.87	1,587.50	1,576.72	1,565.60	1,550.65	1,534.13	1,558.57	1,600.00	1,602.49	1,602.10	1,599.41
26	1,594.22	1,583.64	1,587.60	1,576.19	1,565.38	1,550.60	1,533.52	1,559.80	1,600.08	1,602.46	1,602.31	1,599.16
27	1,594.33	1,583.58	1,587.20	1,575.90	1,564.80	1,550.08	1,532.70	1,561.45	1,600.05	1,602.49	1,602.48	1,598.90
28	1,594.25	1,583.23	1,586.73	1,575.85	1,564.22	1,549.34	1,531.95	1,563.28	1,600.00	1,602.43	1,602.43	1,598.98
29	1,594.61	1,582.89	1,586.42	1,575.91	1,564.77	1,549.77	1,531.73	1,564.98	1,599.96	1,602.48	1,602.45	1,598.85
30	1,594.93	1,582.68	1,586.00	1,575.61	1,564.12	1,548.12	1,531.85	1,566.89	1,599.96	1,602.44	1,602.42	1,598.79
31	1,594.90	-----	1,586.00	1,575.20	1,564.12	1,547.51	1,531.85	1,566.89	1,599.96	1,602.44	1,602.42	1,598.79
MEAN	1,595.13	1,588.13	1,583.47	1,580.34	1,570.22	1,555.23	1,539.91	1,564.17	1,592.66	1,601.28	1,602.39	1,600.63
MAX	1,597.82	1,594.63	1,587.60	1,586.06	1,574.86	1,563.65	1,547.15	1,568.12	1,600.09	1,602.49	1,602.51	1,602.36
MIN	1,592.55	1,582.68	1,578.88	1,575.20	1,564.22	1,547.51	1,531.73	1,530.24	1,569.65	1,599.84	1,602.14	1,598.79
(*)	1,346.7	1,211.7	2,247.5	1,132.3	1,021.8	866.09	732.7	1,059.7	1,405.3	1,434.8	1,434.8	1,391.4
(*)	-34,300	-135,000	+35,800	-115,200	-111,100	-155,100	-133,400	+327,000	+345,600	+29,500	0	-43,400
CAL YR 1966	MEAN	1,565.25	MAX	1,600.01	MIN	1,497.34	+	+137,000				
WTR YR 1967	MEAN	1,579.53	MAX	1,602.51	MIN	1,530.24	+	+10,400				

† TOTAL CONTENTS, IN THOUSANDS OF ACRE-Feet, AT END OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-Feet.

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,598.70	1,598.92	1,591.43	1,583.56	1,582.86	1,582.52	1,577.00	1,561.01	1,592.19	1,602.43	1,602.40	1,602.19
2	1,598.55	1,598.56	1,591.03	1,582.87	1,582.83	1,582.60	1,576.83	1,561.45	1,596.34	1,602.11	1,602.30	1,602.35
3	1,598.20	1,598.38	1,590.55	1,582.33	1,583.30	1,582.78	1,576.54	1,561.60	1,599.20	1,602.24	1,602.46	1,602.13
4	1,598.10	1,598.56	1,589.91	1,581.61	1,584.10	1,582.85	1,576.20	1,561.91	1,601.01	1,602.27	1,602.40	1,601.94
5	1,597.87	1,598.48	1,589.61	1,581.01	1,583.97	1,583.26	1,575.88	1,562.02	1,601.78	1,602.20	1,602.25	1,601.95
6	1,597.80	1,598.29	1,589.11	1,580.81	1,583.97	1,583.69	1,575.74	1,562.17	1,602.05	1,602.20	1,602.20	1,601.92
7	1,598.04	1,598.01	1,588.60	1,580.28	1,583.56	1,583.66	1,575.75	1,562.07	1,602.06	1,602.32	1,602.00	1,602.19
8	1,598.36	1,597.86	1,588.24	1,579.57	1,583.21	1,583.69	1,575.50	1,562.10	1,601.97	1,602.38	1,601.85	1,602.39
9	1,598.30	1,597.77	1,588.00	1,578.82	1,583.03	1,583.76	1,575.08	1,562.26	1,602.40	1,602.32	1,601.68	1,602.36
10	1,598.50	1,597.78	1,588.14	1,577.72	1,582.90	1,583.81	1,574.86	1,562.58	1,602.25	1,602.19	1,601.79	1,602.22
11	1,599.40	1,597.73	1,588.24	1,577.06	1,582.27	1,583.34	1,574.58	1,563.61	1,602.19	1,602.29	1,602.04	1,602.00
12	1,599.72	1,597.63	1,588.16	1,576.13	1,581.89	1,583.03	1,574.39	1,564.88	1,601.99	1,602.15	1,602.01	1,601.77
13	1,599.85	1,597.59	1,587.65	1,575.86	1,581.46	1,582.72	1,574.59	1,565.45	1,601.78	1,602.23	1,601.97	1,601.36
14	1,599.93	1,597.52	1,586.99	1,575.86	1,580.65	1,582.12	1,574.56	1,566.21	1,601.90	1,602.41	1,602.02	1,601.41
15	1,599.91	1,597.13	1,586.40	1,575.23	1,580.28	1,581.42	1,573.75	1,566.75	1,602.09	1,602.21	1,602.03	1,601.77
16	1,599.66	1,596.69	1,585.80	1,574.82	1,579.67	1,581.24	1,573.03	1,567.36	1,602.12	1,602.34	1,601.79	1,601.72
17	1,599.32	1,596.39	1,585.22	1,574.41	1,579.12	1,580.98	1,572.20	1,568.27	1,602.14	1,602.48	1,601.75	1,602.10
18	1,598.70	1,596.16	1,584.25	1,574.16	1,579.07	1,580.44	1,570.99	1,570.86	1,602.25	1,601.90	1,601.83	1,602.18
19	1,598.45	1,595.86	1,583.40	1,574.64	1,579.29	1,579.94	1,569.95	1,572.42	1,601.90	1,601.54	1,601.69	1,602.05
20	1,597.95	1,595.43	1,582.34	1,576.00	1,579.62	1,579.44	1,569.43	1,574.98	1,601.88	1,601.77	1,601.64	1,601.73
21	1,598.15	1,595.20	1,581.73	1,578.15	1,579.93	1,579.26	1,568.63	1,577.60	1,602.23	1,602.15	1,601.59	1,601.52
22	1,598.31	1,594.87	1,581.42	1,579.41	1,580.31	1,578.83	1,567.46	1,579.29	1,602.15	1,601.79	1,601.44	1,601.59
23	1,598.21	1,594.53	1,581.15	1,580.29	1,580.82	1,578.70	1,566.80	1,580.69	1,602.18	1,601.54	1,601.24	1,601.36
24	1,597.70	1,594.15	1,581.25	1,581.50	1,581.42	1,578.66	1,566.21	1,581.90	1,602.35	1,601.76	1,601.30	1,601.08
25	1,597.36	1,593.80	1,582.20	1,582.50	1,581.87	1,578.56	1,565.46	1,583.36	1,602.34	1,601.87	1,601.56	1,600.83
26	1,596.97	1,593.37	1,582.70	1,582.94	1,582.08	1,578.23	1,565.12	1,584.83	1,602.23	1,602.03	1,601.75	1,600.41
27	1,597.32	1,592.78	1,583.31	1,583.34	1,582.18	1,577.88	1,563.65	1,585.75	1,602.12	1,602.18	1,601.86	1,600.17
28	1,598.72	1,592.34	1,583.53	1,583.74	1,582.22	1,577.69	1,561.81	1,586.75	1,601.74	1,602.40	1,601.80	1,599.94
29	1,599.52	1,592.00	1,583.53	1,583.28	1,582.36	1,577.48	1,561.66	1,587.77	1,601.98	1,602.30	1,601.87	1,599.83
30	1,599.42	1,591.61	1,583.70	1,583.04	1,582.35	1,577.35	1,561.25	1,589.01	1,602.48	1,602.29	1,601.88	1,599.36
31	1,599.86	-----	1,583.45	1,582.81	1,581.42	1,577.37	1,565.46	1,589.94	1,602.48	1,602.34	1,602.00	1,599.86
MEAN	1,598.61	1,596.18	1,585.84	1,579.47	1,581.73	1,580.88	1,571.16	1,571.81	1,601.44	1,602.15	1,601.88	1,601.53
MAX	1,599.93	1,598.92	1,591.43	1,583.74	1,584.10	1,583.81	1,577.00	1,589.94	1,602.48	1,602.48	1,602.46	1,602.39
MIN	1,596.97	1,591.61	1,581.15	1,574.16	1,579.07	1,577.35	1,561.25	1,561.01	1,592.19	1,601.54	1,601.24	1,599.36
(+)	1,404.1	1,309.5	1,219.2	1,212.7	1,208.4	1,155.3	992.1	1,290.6	1,434.8	1,432.4	1,428.8	1,398.3
(-)	-12,700	-94,600	-90,300	-6,500	-4,300	-53,100	-163,200	+298,500	+144,200	-2,400	-3,600	-30,500
CAL YR 1967	MEAN	1,580.69	MAX	1,602.51	MIN	1,530.24	+	-28,300				
WTR YR 1968	MEAN	1,589.40	MAX	1,602.48	MIN	1,561.01	+	+6,900				

12175000 ROSS RESERVOIR NEAR NEWHALEM, WASH.--CONTINUED

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,599.11	1,594.73	1,591.74	1,570.28	1,543.23	1,515.68	1,494.40	1,506.33	1,574.35	1,602.46	1,602.36	1,601.50
2	1,598.80	1,594.67	1,590.81	1,569.31	1,542.74	1,515.06	1,493.81	1,506.46	1,576.72	1,602.46	1,602.39	1,601.31
3	1,598.44	1,594.76	1,590.26	1,568.28	1,541.91	1,513.48	1,493.19	1,505.82	1,579.30	1,602.44	1,602.49	1,601.04
4	1,598.36	1,594.30	1,589.87	1,568.20	1,540.64	1,512.14	1,493.07	1,505.74	1,581.94	1,602.42	1,602.30	1,600.82
5	1,598.23	1,593.80	1,589.45	1,568.79	1,539.71	1,511.16	1,493.06	1,505.50	1,584.72	1,602.30	1,602.12	1,600.61
6	1,598.17	1,593.43	1,589.01	1,568.70	1,538.40	1,509.81	1,493.65	1,505.78	1,587.42	1,602.46	1,602.16	1,600.52
7	1,597.86	1,593.04	1,588.98	1,567.87	1,537.07	1,508.40	1,493.10	1,506.69	1,589.95	1,602.43	1,602.13	1,600.54
8	1,597.40	1,592.80	1,588.92	1,567.49	1,536.41	1,507.55	1,492.70	1,508.84	1,592.45	1,602.46	1,602.21	1,600.37
9	1,596.91	1,592.77	1,588.34	1,566.58	1,535.67	1,506.61	1,492.25	1,511.74	1,594.77	1,602.40	1,602.33	1,600.36
10	1,596.53	1,592.88	1,587.83	1,565.94	1,535.03	1,505.52	1,492.12	1,515.70	1,597.01	1,602.43	1,602.49	1,600.27
11	1,596.18	1,592.88	1,587.31	1,565.42	1,534.12	1,504.36	1,492.18	1,519.74	1,598.87	1,602.43	1,602.32	1,600.25
12	1,596.04	1,592.80	1,586.80	1,565.12	1,533.14	1,503.35	1,492.45	1,523.28	1,599.96	1,602.41	1,602.21	1,600.23
13	1,596.15	1,592.54	1,586.22	1,564.10	1,532.21	1,502.20	1,493.47	1,526.74	1,600.87	1,602.48	1,602.03	1,600.31
14	1,595.86	1,592.31	1,585.98	1,563.06	1,531.39	1,501.06	1,493.33	1,529.74	1,601.36	1,602.44	1,601.88	1,600.39
15	1,595.70	1,592.13	1,585.76	1,562.62	1,530.84	1,500.37	1,493.32	1,532.46	1,601.74	1,602.47	1,601.93	1,600.19
16	1,595.29	1,591.98	1,585.09	1,561.61	1,530.63	1,500.27	1,493.81	1,534.65	1,601.97	1,602.46	1,602.11	1,599.92
17	1,595.11	1,592.00	1,584.01	1,560.92	1,529.81	1,499.55	1,494.58	1,536.83	1,602.12	1,602.44	1,602.21	1,599.86
18	1,594.87	1,591.83	1,583.04	1,560.49	1,528.78	1,498.73	1,495.19	1,539.18	1,602.16	1,602.47	1,602.20	1,599.81
19	1,594.74	1,592.00	1,581.82	1,560.32	1,527.66	1,498.20	1,496.57	1,541.20	1,602.29	1,602.49	1,602.21	1,599.68
20	1,594.73	1,592.30	1,580.60	1,559.29	1,526.49	1,497.32	1,497.50	1,543.94	1,602.22	1,602.48	1,602.30	1,599.61
21	1,594.47	1,592.80	1,580.16	1,557.59	1,525.47	1,496.77	1,498.20	1,546.91	1,602.25	1,602.45	1,602.32	1,599.64
22	1,594.20	1,593.36	1,579.60	1,555.91	1,524.34	1,496.55	1,499.10	1,549.93	1,602.20	1,602.48	1,602.26	1,599.58
23	1,593.90	1,593.73	1,578.91	1,554.17	1,523.64	1,496.55	1,500.34	1,553.44	1,602.21	1,602.46	1,602.34	1,600.11
24	1,593.98	1,593.94	1,578.43	1,552.67	1,522.08	1,496.10	1,502.30	1,557.30	1,602.36	1,602.43	1,602.27	1,600.20
25	1,594.23	1,593.62	1,578.33	1,551.79	1,520.99	1,495.54	1,503.60	1,560.67	1,602.32	1,602.40	1,602.31	1,600.01
26	1,594.40	1,593.11	1,577.63	1,550.90	1,519.53	1,495.25	1,504.64	1,563.17	1,602.44	1,602.39	1,602.24	1,599.90
27	1,594.38	1,592.69	1,576.34	1,549.05	1,518.20	1,495.07	1,505.63	1,565.06	1,602.39	1,602.50	1,602.08	1,600.01
28	1,594.66	1,592.71	1,574.96	1,547.52	1,516.58	1,494.53	1,505.70	1,566.61	1,602.49	1,602.49	1,601.73	1,600.11
29	1,594.70	1,592.39	1,573.77	1,546.11	-----	1,494.85	1,506.12	1,568.47	1,602.32	1,602.44	1,601.46	1,600.23
30	1,594.75	1,592.03	1,571.93	1,544.84	-----	1,495.27	1,506.12	1,570.63	1,602.49	1,602.47	1,601.43	1,600.38
31	1,594.86	-----	1,570.76	1,544.05	-----	1,494.95	-----	1,572.46	-----	1,602.47	1,601.50	-----
MEAN	1,599.11	1,593.01	1,583.31	1,559.97	1,530.95	1,502.01	1,496.85	1,534.87	1,596.52	1,602.45	1,602.14	1,600.26
MAX	1,599.11	1,594.76	1,591.74	1,570.28	1,543.23	1,515.68	1,506.12	1,572.46	1,602.49	1,602.50	1,602.49	1,601.50
MIN	1,593.90	1,591.83	1,570.76	1,544.05	1,516.58	1,494.53	1,492.12	1,505.50	1,574.35	1,602.30	1,601.43	1,599.58
(+)	1,346.7	1,314	1,087	835.4	616.6	481.1	546	1,104.4	1,434.8	1,434.8	1,422.9	1,410
(*)	-51,600	-32,700	-227,000	-251,600	-218,800	-135,500	+64,900	+558,400	+330,400	0	-11,900	-12,900

CAL YR 1968 MEAN 1,588.69 MAX 1,602.48 MIN 1,561.01 + -132,200

WTR YR 1968 MEAN 1,566.76 MAX 1,602.50 MIN 1,492.12 + -117,700

* TOTAL CONTENTS, IN THOUSANDS OF ACRE-FEET, AT END OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-FEET.

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,600.55	1,595.20	1,585.70	1,568.44	1,545.22	1,530.59	1,508.22	1,505.50	1,552.12	1,600.21	1,602.50	1,597.09
2	1,600.65	1,595.08	1,584.96	1,567.69	1,544.36	1,529.05	1,507.03	1,505.70	1,555.02	1,600.60	1,602.52	1,596.88
3	1,600.66	1,594.61	1,584.09	1,567.04	1,543.49	1,528.05	1,505.71	1,506.28	1,558.78	1,601.19	1,602.49	1,596.77
4	1,600.73	1,594.70	1,583.82	1,566.47	1,542.48	1,527.18	1,505.11	1,507.05	1,562.66	1,601.89	1,602.50	1,596.54
5	1,600.94	1,594.45	1,582.72	1,565.37	1,541.41	1,525.89	1,504.73	1,508.35	1,565.76	1,602.29	1,602.45	1,596.43
6	1,600.78	1,594.14	1,582.20	1,564.40	1,540.84	1,524.83	1,503.75	1,509.48	1,568.66	1,602.36	1,602.44	1,596.55
7	1,600.65	1,593.77	1,582.00	1,563.40	1,540.52	1,524.92	1,502.54	1,510.74	1,571.52	1,602.36	1,602.38	1,596.53
8	1,600.64	1,593.81	1,581.15	1,562.43	1,540.28	1,524.44	1,501.76	1,511.93	1,573.82	1,602.32	1,602.23	1,596.28
9	1,600.54	1,593.84	1,580.29	1,561.49	1,539.45	1,523.49	1,501.78	1,513.19	1,575.77	1,602.37	1,602.26	1,596.01
10	1,600.41	1,593.57	1,579.36	1,560.58	1,538.78	1,523.01	1,502.25	1,514.27	1,577.48	1,602.39	1,602.03	1,595.81
11	1,600.38	1,593.26	1,578.57	1,559.94	1,538.16	1,522.20	1,502.44	1,515.11	1,578.75	1,602.34	1,601.82	1,595.56
12	1,600.51	1,592.98	1,577.88	1,559.31	1,537.46	1,521.48	1,502.77	1,515.76	1,579.79	1,602.35	1,601.71	1,595.48
13	1,600.23	1,592.64	1,577.59	1,557.79	1,536.96	1,520.85	1,502.37	1,516.49	1,580.92	1,602.15	1,601.69	1,595.50
14	1,599.90	1,592.23	1,577.36	1,556.75	1,536.78	1,520.27	1,502.20	1,517.18	1,582.14	1,602.04	1,601.51	1,595.22
15	1,599.59	1,592.22	1,576.93	1,555.70	1,536.68	1,520.21	1,502.02	1,518.00	1,583.62	1,602.23	1,601.55	1,594.92
16	1,599.24	1,592.02	1,576.12	1,554.58	1,536.08	1,519.47	1,501.90	1,519.62	1,584.88	1,602.46	1,601.66	1,594.61
17	1,598.92	1,591.58	1,575.48	1,554.01	1,535.20	1,518.76	1,502.20	1,522.17	1,586.24	1,602.49	1,601.54	1,594.57
18	1,598.76	1,590.92	1,575.94	1,553.62	1,534.81	1,518.07	1,502.62	1,524.20	1,587.84	1,602.48	1,601.38	1,594.83
19	1,598.70	1,590.58	1,574.37	1,552.69	1,534.43	1,517.36	1,502.99	1,526.03	1,589.46	1,602.41	1,601.05	1,594.69
20	1,598.39	1,590.18	1,573.93	1,551.73	1,533.90	1,516.76	1,503.09	1,527.88	1,591.20	1,602.38	1,600.78	1,594.86
21	1,598.08	1,589.69	1,573.80	1,551.16	1,533.78	1,516.68	1,503.53	1,529.94	1,592.93	1,602.22	1,600.53	1,594.36
22	1,597.74	1,589.32	1,573.06	1,550.59	1,533.83	1,516.69	1,503.86	1,532.10	1,594.55	1,602.28	1,600.56	1,594.09
23	1,597.48	1,589.29	1,572.51	1,550.31	1,533.60	1,515.42	1,504.09	1,534.20	1,595.70	1,602.43	1,598.31	1,593.85
24	1,597.13	1,588.76	1,572.09	1,550.15	1,533.10	1,514.37	1,504.10	1,536.30	1,596.53	1,601.92	1,600.30	1,593.50
25	1,597.05	1,588.01	1,571.91	1,549.75	1,532.49	1,513.86	1,504.03	1,538.85	1,597.30	1,601.94	1,599.74	1,593.21
26	1,596.98	1,587.48	1,571.54	1,549.01	1,531.78	1,512.90	1,504.27	1,541.95	1,598.19	1,602.27	1,599.37	1,593.17
27	1,596.59	1,587.22	1,571.15	1,548.04	1,531.08	1,512.14	1,504.50	1,544.34	1,599.00	1,602.42	1,598.82	1,593.12
28	1,596.25	1,586.81	1,570.96	1,547.27	1,530.80	1,511.17	1,504.76	1,546.19	1,599.58	1,602.43	1,598.31	1,592.88
29	1,595.87	1,586.56	1,570.15	1,546.47	-----	1,511.17	1,504.94	1,547.69	1,599.80	1,602.40	1,595.00	1,592.64
30	1,595.53	1,586.32	1,569.48	1,545.71	-----	1,510.28	1,505.25	1,548.93	1,599.98	1,602.46	1,597.82	1,592.30
31	1,595.31	-----	1,565.57	1,545.62	-----	1,509.54	-----	1,550.24	-----	1,602.48	1,597.19	-----
MEAN	1,598.88	1,591.37	1,576.49	1,556.04	1,537.06	1,519.41	1,503.69	1,524.05	1,582.67	1,602.14	1,600.96	1,594.94
MAX	1,600.94	1,595.20	1,585.70	1,568.44	1,545.22	1,530.59	1,508.22	1,505.50	1,555.02	1,600.60	1,602.52	1,597.09
MIN	1,595.31	1,586.32	1,565.57	1,545.62	1,530.80	1,509.54	1,501.76	1,505.50	1,552.12	1,600.21	1,597.19	1,592.30
(+)	1,351.3	1,251	1,067	849.5	724.6	56.1	540.7	890.5	1,405.1	1,434.6	1,372.8	1,317.4
(*)	-58,700	-100,300	-183,600	-217,900	-124,900	-156,500	-27,400	+349,800	+514,600	+29,500	-61,800	-55,400

12175500 THUNDER CREEK NEAR NEWHALEM, WASH.

LOCATION.--Lat 48°04'22", long 121°04'18", in Sec. 23, T. 37 N., R. 13 E. (unsurveyed), Whatcom County, Ross Lake National Recreation Area, on right bank 0.4 mile upstream from high waterline of Diablo Reservoir at elevation 1,205 ft, 9.0 miles (revised) east of Newhalem, and at mile 3.4.

DRAINAGE AREA.--105 sq mi.

PERIOD OF RECORD.--October 1930 to September 1970. Published as "above Colonial Creek, near Marblemount" 1930-31.

GAGE.--Water-stage recorder. Altitude of gage is 1,220 ft (from river-profile map).

AVERAGE DISCHARGE.--40 years, 619 cfs (80.06 inches per year, 448,500 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (cfs) and peak discharges above base (2,400 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
June 28, 1966	0930	*2,200	6.79	Oct. 27, 1967	1800	4,700	9.07	June 4, 1969	2400	*2,700	7.33
				Oct. 31, 1967	1530	4,520	8.93	Sept. 23, 1969	0430	2,580	7.21
Oct. 23, 1966	1430	2,630	7.26	Jan. 20, 1968	1945	3,060	7.69	Sept. 29, 1969	1300	2,630	7.26
Dec. 16, 1966	0700	2,680	7.31	June 2, 1968	2100	*6,020	10.00				
June 21, 1967	1200	*3,620	8.20	June 26, 1968	2030	3,050	7.68	June 3, 1970	2300	*3,200	7.82
				July 9, 1968	0045	2,520	7.15	June 21, 1970	2300	2,670	7.30
Oct. 11, 1967	0145	3,010	7.64	Sept. 17, 1968	1115	2,560	7.19	Sept. 17, 1970	2230	2,630	7.26

a About.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Feb. 15, 1966	88	2.04	1969	Mar. 12, 1969	71	2.41
1967	Mar. 15, 1967	128	2.29	1970	Jan. 13, 1970	97	2.25
1968	Dec. 21, 1967	150	2.49				

Period of record: Maximum discharge, 10,800 cfs Oct. 25, 1955 (gage height, 12.68 ft), from rating curve extended above 3,500 cfs; minimum not determined, probably less than 50 cfs during period of ice effect or no gage-height record in February 1936.

Records for floods prior to establishment of station are given in WSP 1527.

REMARKS.--Records excellent except those for period of no gage-height record Dec. 28, 1968, to Jan. 29, 1969, which are good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1012: 1943. WSP 1286: 1931(M), 1932, 1933(M), 1935(M), 1938-39(M), 1941-42(M), 1944-46(M), 1950(M), 1952 (annual runoff in acre-feet). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	274	376	192	125	118	105	526	283	666	780	1,080	472
2	297	554	224	122	110	99	490	356	654	825	1,130	574
3	299	536	274	122	111	97	439	566	610	925	1,220	594
4	345	760	506	120	110	96	427	746	534	920	1,250	690
5	466	510	342	120	110	96	445	975	610	1,030	1,100	780
6	1,450	397	362	135	108	94	481	1,470	920	975	1,070	742
7	658	345	359	140	110	92	526	1,300	1,180	1,030	1,150	634
8	638	356	321	167	110	97	606	1,150	1,300	1,180	1,140	650
9	646	337	285	156	110	127	638	1,270	1,300	1,250	1,050	690
10	445	290	262	146	108	130	602	1,120	1,260	1,250	990	638
11	382	262	241	143	110	128	566	830	1,070	1,140	875	690
12	373	243	224	144	107	125	490	775	850	1,160	790	610
13	367	228	208	208	103	141	427	690	790	1,620	1,120	714
14	342	260	190	236	102	165	412	578	835	1,480	1,100	770
15	329	484	182	212	97	178	409	494	1,020	1,650	1,040	734
16	269	382	173	192	99	171	409	469	1,480	1,490	970	654
17	260	297	167	174	97	163	388	409	1,650	1,260	840	602
18	243	262	171	165	96	156	364	397	1,310	1,190	800	775
19	234	276	176	154	94	148	342	442	1,260	1,100	770	574
20	297	287	186	144	96	144	319	550	1,070	975	730	562
21	367	292	173	141	94	139	304	678	850	930	746	694
22	339	287	158	135	97	134	290	574	775	985	734	950
23	339	251	148	132	100	130	287	464	770	1,030	810	1,070
24	316	232	148	123	100	128	292	464	730	1,040	970	746
25	316	222	143	123	102	128	316	730	670	985	1,050	642
26	367	210	139	122	107	144	304	1,190	734	900	920	570
27	329	202	137	125	108	176	287	1,190	875	955	975	530
28	367	190	135	125	108	216	276	910	1,790	1,040	795	646
29	469	184	135	123	-----	319	274	865	1,230	1,130	650	710
30	809	178	130	123	-----	570	274	880	890	1,190	566	566
31	415	-----	128	122	-----	622	-----	766	-----	1,130	481	-----
TOTAL	13,047	9,690	6,619	4,521	2,922	5,258	12,210	23,581	29,683	34,545	28,912	20,273
MEAN	421	323	214	146	104	170	407	761	989	1,114	933	676
MAX	1,450	760	506	236	118	622	638	1,470	1,790	1,650	1,250	1,070
MIN	234	178	128	120	94	92	274	283	534	780	481	472
CFSM	4.01	3.08	2.04	1.39	.99	1.62	3.88	7.25	9.42	10.6	8.89	6.44
IN.	4.62	3.43	2.35	1.60	1.04	1.86	4.33	8.35	10.52	12.24	10.24	7.18
AC-FT	25,880	19,220	13,130	8,970	5,800	10,430	24,220	46,770	58,880	68,520	57,350	40,210
CAL YR 1965	TOTAL	209,724	MEAN	575	MAX	1,910	MIN	110	CFSM	5.48	IN	74.30
WTR YR 1966	TOTAL	191,261	MEAN	524	MAX	1,790	MIN	92	CFSM	4.99	IN	67.76
									AC-FT	416,000		
									AC-FT	379,400		

12175500 THUNDER CREEK NEAR NEWHALEM, WASH.---CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	680	448	460	247	292	152	152	188	992	1,560	1,040	1,250
2	715	400	427	241	271	150	150	210	1,490	1,330	1,130	1,690
3	358	353	370	251	290	146	152	247	1,490	2,140	1,070	1,120
4	460	316	339	249	406	143	163	299	1,490	2,100	1,180	1,070
5	490	299	311	239	370	144	167	345	1,510	1,890	1,130	1,070
6	445	278	287	228	324	139	169	430	1,720	1,560	1,100	1,020
7	606	256	267	220	292	139	178	554	1,650	1,310	1,130	770
8	656	236	249	218	267	144	184	674	1,390	1,370	1,030	815
9	373	232	232	210	251	148	186	654	1,260	1,200	1,170	820
10	316	222	232	214	245	146	182	574	1,260	1,100	1,310	1,080
11	302	206	249	269	232	143	182	514	1,180	1,350	1,420	1,160
12	254	218	304	251	230	137	186	457	1,210	1,810	1,400	678
13	222	216	920	239	226	132	184	430	1,360	1,890	1,350	530
14	202	243	780	236	212	130	178	436	1,680	1,560	1,350	538
15	184	247	863	311	204	130	171	490	1,830	1,400	1,480	650
16	175	234	2,120	294	196	139	167	710	2,040	1,460	1,420	775
17	171	220	1,170	267	192	146	165	960	2,340	1,480	1,290	870
18	156	218	1,330	245	186	146	163	970	2,570	1,310	1,200	810
19	518	226	1,180	280	176	143	165	970	2,710	1,160	1,150	970
20	481	234	1,010	311	167	141	169	1,140	3,160	1,130	1,090	1,110
21	292	232	746	326	161	139	173	1,520	3,420	1,220	1,150	1,190
22	222	222	614	302	156	167	171	1,550	2,050	1,160	1,040	1,040
23	1,780	208	526	231	152	247	171	1,300	2,660	1,280	1,020	726
24	1,280	202	460	228	148	247	173	985	2,450	1,400	840	766
25	850	324	403	210	146	224	182	775	2,490	1,430	742	726
26	1,020	292	359	200	143	208	182	726	2,440	1,490	770	666
27	710	290	321	220	139	196	175	2,190	1,370	1,370	1,820	815
28	487	353	297	339	148	186	187	1,980	1,230	920	770	770
29	1,010	367	285	373	-----	178	186	980	1,910	1,140	1,090	690
30	831	412	267	382	-----	167	186	895	1,680	1,120	1,180	622
31	534	-----	262	321	-----	161	-----	762	-----	1,100	1,300	-----
TOTAL	16,993	8,204	17,940	8,172	6,220	4,958	5,203	22,349	58,602	44,520	35,162	26,807
MEAN	547	273	579	264	222	140	173	721	1,953	1,436	1,134	894
MAX	1,780	448	2,120	382	406	247	186	1,550	3,420	2,140	1,480	1,690
MIN	156	202	232	200	139	130	150	188	992	1,100	742	530
CFSM	5.21	2.60	5.51	2.51	2.11	1.52	1.65	6.87	18.6	13.7	10.8	8.51
IN.	6.01	2.91	6.36	2.90	2.20	1.76	1.84	7.92	20.76	15.77	12.46	9.50
AC-FY	35,630	16,270	35,580	16,210	12,340	9,830	10,320	44,330	116,200	88,310	69,740	53,170

CAL YR 1966	TOTAL	205,002	MEAN	562	MAX	2,120	MIN	92	CFSM	5.35	IN	72.63	AC-FY	406,400
WTR YR 1967	TOTAL	255,090	MEAN	699	MAX	3,420	MIN	130	CFSM	6.66	IN	90.37	AC-FY	506,600

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	570	1,830	202	339	345	457	234	475	2,280	1,040	1,320	905
2	498	1,070	208	292	382	484	234	403	5,180	1,380	1,370	815
3	427	815	218	267	457	502	222	400	2,780	1,810	1,430	690
4	385	862	198	254	638	640	220	454	1,750	2,090	1,320	694
5	337	554	192	236	481	945	218	418	1,510	2,140	1,180	830
6	367	494	186	222	412	780	212	373	1,540	2,010	960	955
7	1,150	534	176	214	362	638	204	339	1,510	1,940	840	905
8	1,060	522	169	208	332	538	202	350	1,220	1,980	795	785
9	666	538	171	200	309	466	202	400	1,170	2,170	850	780
10	958	638	364	196	287	415	216	542	1,270	1,860	1,030	775
11	1,800	574	403	186	269	373	239	702	1,200	1,810	1,090	820
12	1,000	490	285	176	258	345	226	770	1,030	2,110	960	780
13	722	475	234	192	247	324	214	678	900	1,530	850	630
14	650	657	222	302	234	299	214	658	780	1,290	860	958
15	484	654	212	385	220	294	214	582	750	1,100	840	1,040
16	421	550	204	321	212	285	206	618	850	950	750	1,020
17	376	463	196	267	212	271	200	770	990	960	815	1,820
18	409	430	182	265	312	256	196	1,020	1,200	990	790	1,060
19	400	370	171	782	676	676	239	1,330	1,540	1,110	658	686
20	339	345	156	1,760	234	234	180	1,990	1,330	1,220	598	526
21	698	316	156	2,030	582	232	176	1,440	1,110	1,020	542	436
22	646	294	208	1,130	562	220	175	1,060	1,090	925	534	427
23	566	278	322	895	658	226	182	970	1,230	945	599	670
24	448	276	820	1,730	775	222	180	920	1,440	1,080	754	534
25	469	258	965	1,170	634	218	180	915	1,780	1,250	927	546
26	397	234	900	820	538	216	178	840	2,390	1,410	1,260	570
27	2,130	230	734	638	481	239	176	800	2,280	1,670	1,220	534
28	1,990	218	622	522	454	247	206	770	1,400	1,700	840	430
29	1,020	218	502	466	357	287	180	920	1,000	1,000	714	421
30	1,620	206	436	427	-----	260	522	734	870	1,470	714	427
31	3,500	-----	376	385	-----	243	-----	694	-----	1,310	795	-----
TOTAL	26,503	15,193	10,390	17,277	12,416	11,375	6,572	23,200	45,370	45,960	28,205	22,469
MEAN	845	506	335	557	428	367	219	748	1,512	1,485	910	749
MAX	3,500	1,830	945	2,030	775	945	522	1,990	5,180	2,110	1,430	1,820
MIN	337	206	156	176	212	216	175	339	750	925	534	421
CFSM	8.14	4.82	3.19	5.30	4.08	3.50	2.09	7.12	14.4	14.1	8.67	7.13
IN.	9.39	5.38	3.68	6.12	4.40	4.03	2.33	8.22	16.07	16.28	9.99	7.96
AC-FY	52,570	30,140	20,610	34,270	24,630	22,560	13,040	46,020	89,990	91,160	55,940	44,570

CAL YR 1967	TOTAL	264,079	MEAN	724	MAX	3,500	MIN	130	CFSM	6.90	IN	93.56	AC-FY	523,800
WTR YR 1968	TOTAL	264,930	MEAN	724	MAX	3,180	MIN	156	CFSM	6.90	IN	93.86	AC-FY	523,500

12175500 THUNDER CREEK NEAR NEWHALEM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	385	299	316	130	120	76	359	433	1,390	805	935	606		
2	321	283	302	145	125	76	342	391	1,740	1,110	880	742		
3	294	283	479	170	125	76	311	364	1,930	1,310	820	550		
4	385	256	475	320	127	76	287	348	2,240	1,060	785	427		
5	324	243	397	900	125	79	278	370	2,460	915	606	342		
6	388	228	348	780	120	79	278	472	2,320	855	570	326		
7	329	220	319	650	115	76	274	682	2,310	910	610	448		
8	290	245	308	550	110	75	271	1,040	2,340	1,020	640	654		
9	269	299	297	470	110	74	292	1,460	2,440	1,290	730	840		
10	262	262	297	400	113	74	332	1,690	2,440	1,460	740	920		
11	251	412	283	355	115	72	353	1,610	2,400	1,600	680	1,020		
12	249	445	267	320	115	72	394	1,500	2,350	1,300	560	985		
13	251	348	249	300	110	72	466	1,500	2,400	955	580	905		
14	236	304	245	280	103	74	442	1,460	2,190	754	780	582		
15	236	283	239	260	99	81	409	1,320	1,830	694	820	421		
16	230	260	230	250	99	94	391	1,140	1,920	726	680	350		
17	226	245	216	240	97	141	415	1,020	2,090	795	560	570		
18	256	426	214	230	94	163	445	1,060	2,330	865	580	965		
19	266	642	198	220	91	156	439	1,290	2,260	1,050	560	835		
20	262	741	180	200	89	148	403	1,550	1,930	1,130	770	638		
21	258	690	160	190	88	141	397	1,620	1,570	1,000	1,000	484		
22	251	714	160	175	86	143	487	1,770	1,390	1,050	830	1,260		
23	262	574	175	165	85	144	790	2,030	1,260	1,170	935	1,760		
24	415	475	196	155	83	143	780	2,340	1,270	1,280	1,030	1,090		
25	494	415	184	145	82	143	646	1,910	1,020	1,160	855	970		
26	433	367	176	135	82	152	550	1,540	880	920	726	642		
27	332	353	155	130	81	204	494	1,370	825	1,020	654	534		
28	409	324	140	125	79	236	494	1,080	718	1,050	542	586		
29	451	367	125	120	-----	251	494	1,250	674	920	457	1,540		
30	433	342	120	120	-----	284	448	1,770	674	910	448	1,340		
31	345	-----	120	120	-----	359	-----	1,490	-----	955	494	-----		
TOTAL	9,783	11,345	7,570	8,750	2,868	4,034	12,761	38,870	53,591	32,039	21,857	23,332		
MEAN	316	378	244	282	102	130	425	1,254	1,786	1,034	705	778		
MAX	494	741	479	900	127	359	790	2,340	2,460	1,600	1,030	1,760		
MIN	226	220	120	120	79	72	271	348	674	694	448	326		
CFSM	3.01	3.60	2.32	2.69	.97	1.24	4.05	11.9	17.0	9.85	6.71	7.41		
IN.	3.47	4.02	2.68	3.10	1.02	1.43	4.52	13.77	18.99	11.35	7.74	8.27		
AC-FT	19,400	22,500	15,020	17,360	5,690	8,000	25,310	77,100	106,300	63,550	43,350	46,280		
CAL YR 1968	TOTAL	241,542	MEAN	660	MAX	5,180	MIN	120	CFSM	6.29	IN	85.57	AC-FT	479,100
WTR YR 1969	TOTAL	226,800	MEAN	621	MAX	2,460	MIN	72	CFSM	5.91	IN	80.35	AC-FT	449,900

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	955	185	159	121	170	165	127	168	1,000	630	770	825		
2	698	191	152	118	160	156	127	195	1,820	762	905	662		
3	530	305	147	114	160	152	122	259	2,580	1,240	970	905		
4	432	671	147	110	150	147	124	405	2,530	1,790	1,190	642		
5	402	423	142	106	145	140	152	570	1,940	1,540	1,180	522		
6	426	310	140	106	140	149	201	542	2,030	1,190	1,030	880		
7	494	262	135	104	142	193	189	502	2,050	1,210	920	935		
8	642	252	133	103	150	174	176	494	1,540	1,440	714	562		
9	466	232	129	103	157	166	326	494	1,310	1,370	618	411		
10	378	211	125	101	170	157	402	429	1,020	1,250	702	369		
11	330	213	129	103	182	152	327	372	800	1,130	810	348		
12	299	234	147	103	200	152	308	336	754	1,020	870	264		
13	266	222	161	101	220	150	245	316	835	965	865	230		
14	243	241	203	132	210	159	224	302	985	945	730	211		
15	226	308	195	125	200	165	211	402	1,160	1,120	815	193		
16	211	248	174	110	250	174	203	788	970	1,430	840	203		
17	199	217	163	108	220	166	197	1,110	1,180	1,280	666	1,220		
18	191	201	165	112	208	157	195	840	1,590	1,210	614	1,120		
19	183	189	163	119	202	154	191	775	1,590	1,340	670	662		
20	191	203	163	130	198	152	183	790	1,760	1,320	710	426		
21	252	201	170	159	195	149	178	880	2,290	1,130	780	324		
22	305	185	172	207	190	145	176	965	2,070	890	895	925		
23	274	254	191	333	188	145	174	885	1,640	820	970	615		
24	215	220	180	279	185	149	178	935	1,450	820	1,120	372		
25	191	199	163	243	183	142	180	1,230	1,400	920	955	310		
26	181	183	154	217	181	138	176	1,540	1,780	1,540	810	351		
27	174	178	144	205	176	137	172	1,060	1,710	1,470	750	393		
28	165	170	140	189	170	135	165	805	1,230	1,020	694	414		
29	161	170	133	172	-----	133	161	702	885	800	578	423		
30	161	167	129	160	-----	130	159	622	706	714	610	360		
31	201	-----	127	165	-----	129	-----	682	-----	690	734	-----		
TOTAL	10,042	7,245	4,775	4,558	5,102	4,712	5,949	20,395	44,605	34,996	25,485	16,077		
MEAN	324	242	154	147	182	152	198	658	1,487	1,129	822	536		
MAX	955	671	203	333	250	193	402	1,540	2,580	1,790	1,190	1,220		
MIN	161	167	125	101	140	129	122	168	706	630	378	193		
CFSM	3.09	2.30	1.47	1.40	1.73	1.45	1.89	6.27	14.2	10.8	7.83	5.10		
IN.	3.56	2.57	1.69	1.61	1.81	1.67	2.11	7.23	15.80	12.40	9.03	5.70		
AC-FT	19,920	14,370	9,470	9,040	10,120	9,350	11,800	40,450	88,470	69,410	50,550	31,890		
CAL YR 1969	TOTAL	220,164	MEAN	603	MAX	2,460	MIN	72	CFSM	5.74	IN	78.00	AC-FT	436,700
WTR YR 1970	TOTAL	183,941	MEAN	504	MAX	2,580	MIN	101	CFSM	4.80	IN	65.17	AC-FT	364,800

SKAGIT RIVER BASIN

12176500 DIABLO RESERVOIR NEAR NEWHALEM, WASH.

LOCATION.--Lat 48°42'56", long 121°07'52", in SEK sec.5, T.37 N., R.13 E. (unsurveyed), Whatcom County, Ross Lake National Recreation Area, in Diablo Dam on Skagit River, 1.2 miles downstream from Thunder Creek, 6.0 miles northeast of Newhalem, and at mile 101.0.

DRAINAGE AREA.--1,125 sq mi, includes 400 sq mi in Canada.

PERIOD OF RECORD.--October 1929 to September 1970. October 1929 to September 1938 monthly change in reservoir contents published with records for Skagit River at Newhalem.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (city of Seattle datum). Prior to Oct. 1, 1964, at present site at datum 0.28 ft higher.

EXTREMES.--Maximums and minimums (contents in acre-feet, elevation in feet) for the water years 1966-70 are contained in the following table:

		Maximum				Minimum	
Wtr yr	Date	Contents	Elevation	Date	Contents	Elevation	
1966	Aug. 8, 1966	90,070	1,206.20	Mar. 9, 1966	81,510	1,196.50	
1967	Aug. 28, 1967	90,250	1,206.40	Apr. 25, 1967	81,800	1,196.84	
1968	Jan. 10, 1968	90,250	1,206.40	Jan. 18, 1968	81,290	1,196.25	
1969	July 3, 1969	90,160	1,206.30	Oct. 15, 1968, Jan. 6, 1969	81,800	1,196.85	
1970	Aug. 3, 1970	89,880	1,206.00	Dec. 10, 1969	81,890	1,196.95	

a Also occurred during period of missing record Jan. 28 to Mar. 3, 1969.

Period of record: Maximum contents, 90,600 acre-ft July 14, 1933 (elevation, 1,206.5 ft); minimum not determined.

REMARKS.--Reservoir is formed by a concrete-arch dam, completed in 1930; storage began in October 1929. Usable storage, 8,720 acre-ft between elevations 1,195 (normal lower limit of operation) and 1,205 ft (top of taintor gates). Dead storage below elevation 1,040 ft, 12,900 acre-ft (corrected). Crest of spillway is at elevation 1,187 ft. Water used by city of Seattle for power development at Diablo and Gorge powerplants. Capacity table furnished by city of Seattle. Figures given herein represent total contents.

COOPERATION.--Gage-height record collected in cooperation with city of Seattle.

MONTHEND ELEVATION AND CONTENTS, WATER YEARS OCTOBER 1966 TO SEPTEMBER 1970

DATE	ELEVATION (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)	DATE	ELEVATION (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
OCT. 31, 1965.....	1,199.3	83,890	+1,550	OCT. 31, 1968.....	1,197.0	81,920	-1,450
NOV. 30.....	1,200.3	84,760	+870	NOV. 30.....	1,201.8	86,080	+4,160
DEC. 31.....	1,202.2	86,430	+1,670	DEC. 31.....	1,199.5	84,060	-2,020
CAL YR 1965.....	-	-	+2,880	CAL YR 1968.....	-	-	-1,320
JAN. 31, 1966.....	1,200.9	85,290	-1,140	JAN. 31, 1969.....	1,197.4	82,260	-1,800
FEB. 28.....	1,201.7	85,990	+700	FEB. 28.....	1,203.4	87,500	+5,240
MAR. 31.....	1,199.4	83,980	-2,010	MAR. 31.....	1,204.0	86,040	+540
APR. 30.....	1,201.1	85,460	+1,480	APR. 30.....	1,202.5	86,700	-1,340
MAY 31.....	1,199.2	83,800	-1,660	MAY 31.....	1,203.2	87,320	+620
JUNE 30.....	1,199.8	84,320	+520	JUNE 30.....	1,204.3	88,310	+990
JULY 31.....	1,205.6	89,500	+5,180	JULY 31.....	1,203.3	87,430	-900
AUG. 31.....	1,199.4	83,980	-5,520	AUG. 31.....	1,199.0	83,630	-3,780
SEPT. 30.....	1,197.4	82,260	-1,720	SEPT. 30.....	1,202.0	86,260	+2,630
WTR YR 1966.....	-	-	-80	WTR YR 1969.....	-	-	+2,890
OCT. 31.....	1,198.8	83,460	+1,200	OCT. 31.....	1,199.85	84,390	-1,870
NOV. 30.....	1,199.6	84,150	+690	NOV. 30.....	1,202.12	86,380	+1,990
DEC. 31.....	1,200.2	84,670	+520	DEC. 31.....	1,200.17	84,660	-1,720
CAL YR 1966.....	-	-	-1,760	CAL YR 1969.....	-	-	+600
JAN. 31, 1967.....	1,199.9	84,410	-260	JAN. 31, 1970.....	1,198.47	83,190	-1,470
FEB. 28.....	1,198.4	83,120	-1,290	FEB. 28.....	1,200.66	85,090	+1,900
MAR. 31.....	1,199.1	83,720	+600	MAR. 31.....	1,202.24	86,480	+1,390
APR. 30.....	1,197.9	82,690	-1,030	APR. 30.....	1,201.90	86,190	-290
MAY 31.....	1,199.4	83,980	+1,290	MAY 31.....	1,201.87	86,160	-30
JUNE 30.....	1,205.6	89,500	+5,520	JUNE 30.....	1,203.32	87,450	+1,290
JULY 31.....	1,205.9	89,770	+270	JULY 31.....	1,205.10	89,060	+1,610
AUG. 31.....	1,202.3	86,520	-3,250	AUG. 31.....	1,203.76	87,840	-1,220
SEPT. 30.....	1,201.8	86,080	-440	SEPT. 30.....	1,202.36	86,590	-1,250
WTR YR 1967.....	-	-	+3,820	WTR YR 1970.....	-	-	+330
OCT. 31.....	1,205.6	89,500	+3,420	† ELEVATION AT 2400 HOURS.			
NOV. 30.....	1,200.3	84,760	-4,740				
DEC. 31.....	1,201.0	85,380	+620				
CAL YR 1967.....	-	-	+710				
JAN. 31, 1968.....	1,201.3	85,640	+260				
FEB. 29.....	1,199.4	83,980	-1,660				
MAR. 31.....	1,199.4	83,980	0				
APR. 30.....	1,203.9	87,950	+3,970				
MAY 31.....	1,202.7	86,880	-1,070				
JUNE 30.....	1,206.0	89,860	+2,980				
JULY 31.....	1,203.0	87,140	-2,720				
AUG. 31.....	1,201.4	85,730	-1,410				
SEPT. 30.....	1,198.7	83,370	-2,360				
WTR YR 1968.....	-	-	-2,710				

12177500 STETATTLE CREEK NEAR NEWHALEM, WASH.

LOCATION (REVISED).--Lat 48°43'20", long 121°08'58", in NE¼ sec. 6, T.37 N., R.13 E., Whatcom County, Ross Lake National Recreation Area, on left bank 5.5 miles northeast of Newhalem and at mile 0.4.

DRAINAGE AREA.--22.0 sq mi.

PERIOD OF RECORD.--December 1913 to November 1915 (fragmentary, published as "near Marblemount"), September 1933 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 906.53 ft (revised) above mean sea level (city of Seattle datum). See WSP 1932 for history of changes prior to Nov. 21, 1957.

AVERAGE DISCHARGE.--37 years (1933-70), 182 cfs (112.34 inches per year, 131,900 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (970 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1965	0600	*1,550	3.81	Dec. 16, 1966	0400	*1,980	4.17	Nov. 20, 1968	0930	1,030	3.28
Oct. 29, 1965	2100	1,010	5.25					Jan. 5, 1969	0130	1,070	5.33
Nov. 2, 1965	0430	970	3.20	Oct. 11, 1967	2130	1,380	3.65	May 29, 1969	1200	1,000	3.25
Dec. 3, 1965	2130	1,030	3.27	Oct. 27, 1967	1900	*3,660	5.25	Sept. 23, 1969	0300	*1,130	3.43
June 28, 1966	0700	1,100	3.35	Oct. 31, 1967	1400	1,900	4.11	Sept. 29, 1969	1030	1,080	3.37
				Jan. 20, 1968	1700	2,260	4.38				
Oct. 23, 1966	1330	1,730	3.97	Jan. 24, 1968	0600	1,230	3.50	June 3, 1970	2000	*901	3.19
Oct. 29, 1966	1230	1,020	3.26	June 2, 1968	0900	2,220	4.35				
Dec. 13, 1966	0830	1,120	3.38	Sept. 17, 1968	0630	1,410	3.68				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Jan. 2, 1966	24	.55	1969	Feb. 11, 1969	11	.23
1967	Oct. 16, 1966	38	.78	1970	Jan. 13, 1970	24	.58
1968	Jan. 13, 1968	24	.54				

Period of record: Maximum discharge, 8,580 cfs Nov. 26, 1949 (gage height, 9.70 ft), from rating curve extended above 1,600 cfs on basis of slope-area measurement of peak flow; minimum, 9 cfs Nov. 9-11, 1936.

REMARKS.--Records excellent. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1316: 1935(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	140	144	44	66	48	305	120	195	218	208	73
2	41	406	255	48	60	44	260	205	210	264	210	76
3	41	394	403	50	56	40	210	370	179	338	220	77
4	54	602	572	45	56	38	205	442	168	338	208	82
5	319	343	282	44	57	37	229	548	250	330	186	87
6	804	215	325	71	58	36	268	670	418	297	177	86
7	176	166	257	142	59	37	301	523	475	350	179	82
8	236	177	198	164	57	51	334	511	470	375	174	80
9	243	157	151	117	56	92	325	517	436	390	155	80
10	122	120	125	97	52	114	309	366	529	361	164	80
11	93	106	106	92	54	93	325	268	366	330	147	92
12	81	92	92	97	51	80	229	301	257	329	124	102
13	81	85	81	260	48	108	168	235	244	505	196	95
14	126	121	73	285	45	136	170	181	287	370	159	94
15	159	250	67	177	41	149	188	159	407	390	145	89
16	109	174	61	132	39	138	190	147	529	356	132	80
17	98	127	57	110	38	114	164	129	505	282	120	74
18	100	108	56	93	38	98	142	130	390	271	118	110
19	109	194	81	81	36	92	127	174	426	260	110	82
20	158	257	103	73	38	86	118	220	285	220	104	74
21	177	268	90	66	39	74	112	285	212	218	100	77
22	168	208	74	61	41	66	110	218	247	232	100	89
23	138	149	67	57	47	60	114	164	220	238	104	117
24	110	120	66	51	50	58	124	170	208	220	118	90
25	97	103	62	50	49	67	143	359	220	226	129	81
26	95	93	57	47	50	90	132	517	250	202	110	72
27	90	86	56	50	51	122	118	405	366	215	127	69
28	140	81	58	50	49	164	115	293	732	229	108	69
29	419	77	56	61	-----	274	114	293	320	236	89	73
30	289	74	51	68	-----	542	115	289	232	229	80	63
31	147	-----	48	71	-----	420	-----	220	-----	210	73	-----
TOTAL	5,059	5,493	4,174	2,854	1,381	3,568	5,764	9,429	10,043	9,031	4,374	2,495
MEAN	163	183	135	92.1	49.3	115	192	304	335	291	141	83.2
MAX	804	602	572	285	66	542	334	670	732	505	220	117
MIN	39	74	48	44	36	74	110	168	202	73	63	-----
CFSM	7.41	8.32	6.14	4.19	2.24	5.23	8.73	13.8	15.2	13.2	6.41	3.78
IN.	8.55	9.29	7.06	4.83	2.34	6.03	9.75	15.94	16.98	15.27	7.40	4.22
AC-FT	10,030	10,900	8,280	5,660	2,740	7,080	11,430	18,700	19,920	17,910	8,680	4,950

CAL YR	1965	TOTAL	63,986	MEAN	175	MAX	804	MIN	28	CFSM	7.95	IN	108.19	AC-FT	126,900
WTR YR	1966	TOTAL	63,665	MEAN	174	MAX	804	MIN	36	CFSM	7.91	IN	107.65	AC-FT	126,300

12177500 STETATTLE CREEK NEAR NEMHALEM, WASH.---CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	125	301	85	130	72	63	104	568	400	184	137
2	94	112	232	83	132	63	61	127	656	487	179	166
3	68	97	172	109	212	56	69	181	568	554	188	101
4	63	89	147	104	334	53	78	226	542	505	195	100
5	61	89	129	90	220	51	78	247	548	436	186	99
6	58	81	117	77	159	49	82	289	600	348	174	104
7	100	73	106	77	124	49	89	343	517	274	188	85
8	181	66	77	104	77	104	90	375	392	342	162	80
9	78	62	81	81	96	54	89	317	361	297	174	78
10	65	59	83	104	96	52	83	250	375	260	188	165
11	57	53	134	166	93	50	81	210	361	356	208	170
12	54	74	266	130	97	48	86	177	415	448	200	99
13	49	87	911	115	90	46	83	172	450	453	195	77
14	45	145	504	129	77	45	78	184	568	375	198	73
15	41	153	599	245	71	46	71	241	587	334	200	74
16	39	132	1,310	177	67	54	66	420	635	338	190	82
17	43	112	1,030	132	71	70	62	548	691	330	181	87
18	41	109	890	108	72	63	64	464	733	264	177	85
19	356	117	705	140	67	65	66	475	740	226	162	85
20	249	124	468	157	62	63	72	587	818	278	149	90
21	145	122	260	159	59	66	81	684	796	257	147	102
22	171	106	177	115	56	119	82	705	705	238	125	100
23	1,180	93	138	96	51	264	85	453	580	254	115	71
24	688	86	117	83	50	200	89	274	587	278	97	68
25	426	182	102	73	51	151	96	220	635	293	92	66
26	494	151	92	80	50	129	97	238	580	289	93	65
27	140	140	82	102	48	108	97	293	511	247	96	67
28	170	233	246	77	66	97	96	385	453	229	102	67
29	393	210	78	285	-----	86	97	436	470	212	112	72
30	212	289	73	257	-----	77	99	305	405	198	118	127
31	145	-----	77	170	-----	68	-----	260	-----	190	122	-----
TOTAL	6,132	3,571	9,551	4,046	2,805	2,470	2,430	10,085	16,858	9,991	4,897	2,847
MEAN	198	119	308	131	100	79.7	81.0	325	562	322	158	94.9
MAX	1,180	289	1,310	285	334	264	99	684	818	554	208	170
MIN	39	53	73	71	48	45	61	104	361	190	92	65
CFSM	9.00	5.41	14.0	5.95	4.55	3.62	3.68	14.8	25.5	14.6	7.18	4.31
IN-	10.37	6.04	16.15	6.84	4.74	4.18	4.11	17.05	28.51	16.89	8.28	4.81
AC-FT	12,160	7,080	18,940	8,030	5,560	4,900	4,820	20,000	33,440	19,820	9,710	5,650

CAL YR 1966 TOTAL 68,193 MEAN 187 MAX 1,310 MIN 36 CFSM 8.50 IN 115.31 AC-FT 135,300
WTR YR 1967 TOTAL 75,683 MEAN 207 MAX 1,310 MIN 39 CFSM 9.41 IN 127.97 AC-FT 150,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	446	58	89	99	226	103	257	1,060	297	198	118
2	184	223	66	74	179	271	100	188	1,580	385	205	100
3	163	159	73	67	329	268	96	195	587	475	205	89
4	162	124	65	60	434	388	96	220	420	505	188	87
5	124	103	62	54	229	580	102	177	410	493	159	97
6	288	90	58	49	162	352	96	145	431	420	125	103
7	588	122	52	46	130	229	93	130	380	420	110	97
8	365	142	49	45	114	174	87	145	305	448	112	87
9	170	177	58	43	106	143	87	200	317	420	117	85
10	316	453	289	42	100	125	110	305	325	356	130	85
11	922	258	254	41	96	112	147	370	317	348	134	90
12	530	170	140	40	92	108	127	334	260	410	120	87
13	334	164	103	56	87	108	110	250	232	278	109	76
14	270	256	84	144	81	103	108	250	200	278	115	347
15	172	356	68	208	76	112	112	212	210	260	112	451
16	151	220	66	166	69	122	102	260	241	210	97	475
17	115	149	62	122	68	117	90	400	297	212	117	781
18	150	127	58	140	217	103	86	499	370	202	127	289
19	151	108	54	608	568	93	81	529	448	266	97	172
20	115	94	49	1,350	568	89	77	663	321	285	87	125
21	354	83	48	1,010	481	87	73	415	260	205	82	100
22	313	76	103	529	385	92	76	325	265	179	80	103
23	285	73	359	415	558	108	85	305	350	186	114	130
24	798	76	688	880	643	145	110	285	410	205	122	103
25	226	69	649	430	352	114	96	297	470	223	173	97
26	164	61	464	244	241	108	100	268	633	238	202	96
27	1,330	58	334	162	208	134	103	257	635	264	310	87
28	744	56	255	130	198	138	164	274	338	264	153	77
29	317	59	110	110	208	145	392	220	220	220	120	77
30	639	60	129	101	-----	129	395	238	202	210	114	71
31	1,180	-----	104	97	-----	112	-----	220	-----	193	118	-----
TOTAL	11,180	4,612	5,041	7,554	7,078	5,108	3,544	8,898	12,474	9,382	4,252	4,778
MEAN	361	154	163	244	244	165	118	287	416	303	137	159
MAX	1,330	453	698	1,350	643	580	398	663	1,580	505	310	781
MIN	115	56	48	40	68	87	73	130	200	179	80	71
CFSM	16.4	7.00	7.41	11.1	11.1	7.50	5.36	13.0	18.9	13.8	6.23	7.23
IN-	18.90	7.80	8.52	12.77	11.97	8.64	5.99	15.05	21.09	15.86	7.19	8.08
AC-FT	22,180	9,150	10,000	14,980	14,040	10,130	7,030	17,650	24,740	18,610	8,430	9,480

CAL YR 1967 TOTAL 77,262 MEAN 212 MAX 1,330 MIN 45 CFSM 9.64 IN 130.64 AC-FT 153,200
WTR YR 1968 TOTAL 83,901 MEAN 229 MAX 1,580 MIN 40 CFSM 10.4 IN 142.87 AC-FT 166,400

12177500 STETATTLE CREEK NEAR NEWHALEM, WASH.---CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	117	120	42	28	23	215	162	426	184	114	66
2	57	112	109	45	29	24	200	145	561	317	109	83
3	53	112	389	60	30	24	164	130	594	330	104	82
4	96	94	246	279	34	24	140	130	621	257	102	87
5	82	85	168	712	34	24	132	155	635	200	115	65
6	142	76	130	301	30	24	129	232	587	179	102	52
7	108	72	114	198	27	24	124	380	574	177	96	56
8	90	120	118	147	26	24	127	554	568	198	96	67
9	153	115	115	125	31	24	153	684	554	223	102	80
10	97	120	112	106	27	24	184	698	529	263	102	86
11	96	355	118	94	38	24	179	594	517	442	92	90
12	99	348	102	82	36	24	208	568	517	282	78	85
13	112	220	89	74	31	25	238	554	470	184	83	99
14	168	168	85	68	30	27	190	517	395	142	99	82
15	109	140	80	63	28	34	164	410	366	127	102	58
16	100	115	76	58	28	43	155	338	410	127	83	48
17	112	103	69	53	28	102	188	305	420	130	73	112
18	145	383	67	49	27	118	226	370	431	147	77	221
19	571	571	60	46	27	94	212	475	410	166	81	195
20	184	580	54	43	26	82	190	523	338	164	109	145
21	147	480	51	39	26	77	177	523	254	153	124	104
22	143	499	50	37	26	80	254	568	218	153	92	392
23	156	301	57	35	25	80	458	614	244	162	92	680
24	203	205	69	33	25	74	325	691	278	170	170	335
25	340	155	65	31	24	76	229	458	198	145	104	278
26	196	130	58	31	24	92	179	415	172	117	83	166
27	147	124	57	30	24	132	168	356	174	125	80	150
28	217	109	51	30	23	140	195	289	155	124	83	159
29	151	121	29	25	20	143	202	684	114	143	65	451
30	208	142	40	28	-----	172	179	548	153	114	59	493
31	149	-----	41	28	-----	238	-----	375	-----	114	61	-----
TOTAL	4,272	6,342	3,035	2,995	792	2,118	5,884	13,389	11,912	5,730	2,859	5,067
MEAN	138	211	97.9	96.6	28.3	68.3	196	432	397	185	92.2	169
MAX	340	580	389	712	38	238	458	698	635	442	124	680
MIN	53	72	40	28	23	23	124	130	143	114	59	48
CFSM	6.27	9.59	4.45	4.39	1.29	3.10	8.91	19.6	18.0	8.41	4.19	7.68
IN.	7.22	10.72	5.13	5.06	1.34	3.58	9.95	22.64	20.14	9.69	4.83	8.57
AC-FT	8,470	12,580	6,020	5,940	1,570	4,200	11,670	26,560	23,630	11,370	5,670	10,050
CAL YR 1968	TOTAL 76,717	MEAN 210	MAX 1,580	MIN 40	CFSM 9.55	IN 129.72	AC-FT 152,200					
MTR YR 1969	TOTAL 64,395	MEAN 176	MAX 712	MIN 23	CFSM 8.00	IN 108.89	AC-FT 127,700					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	384	59	64	48	96	68	57	78	428	122	120	62
2	313	54	57	44	86	62	56	110	557	206	134	55
3	208	75	54	43	87	56	54	188	657	286	120	114
4	152	352	52	38	78	53	58	285	534	359	132	74
5	132	229	49	36	68	49	140	320	455	288	130	80
6	126	178	45	35	61	58	276	255	501	237	118	144
7	133	142	43	34	59	124	188	205	450	237	105	136
8	200	130	41	34	70	100	144	198	338	264	104	80
9	198	116	39	34	88	87	370	208	324	258	84	60
10	150	99	38	33	102	78	330	158	243	228	87	52
11	124	91	46	37	110	72	212	130	180	190	91	46
12	105	96	80	38	130	72	162	114	202	165	96	38
13	87	90	114	36	158	83	130	114	252	155	90	34
14	75	126	210	65	142	97	110	110	306	152	75	32
15	67	193	158	55	140	116	100	212	338	170	79	31
16	59	114	118	45	190	144	91	450	282	202	78	30
17	54	91	97	43	185	124	87	455	350	192	66	347
18	49	80	112	44	152	105	87	282	437	170	61	310
19	47	72	116	62	126	93	81	270	409	175	62	202
20	69	90	140	91	108	87	79	285	443	172	66	116
21	93	110	140	170	100	78	76	310	512	142	73	87
22	104	90	140	254	96	73	76	313	400	114	80	328
23	99	129	170	387	91	78	80	279	355	108	84	132
24	72	120	134	255	90	81	90	330	306	105	91	126
25	60	97	107	182	87	76	83	450	296	142	84	102
26	52	83	90	146	84	72	76	404	355	404	73	97
27	52	75	78	124	83	67	69	249	320	314	68	83
28	49	70	68	102	75	66	67	190	220	168	65	75
29	49	70	61	86	-----	62	68	165	160	138	56	69
30	52	69	55	74	-----	60	68	162	126	112	56	60
31	74	-----	52	83	-----	58	-----	233	-----	104	60	-----
TOTAL	3,488	3,390	2,768	2,758	2,942	2,499	3,565	7,512	10,736	6,079	2,688	3,202
MEAN	113	113	89.3	89.0	105	80.6	119	242	358	196	86.7	107
MAX	384	352	210	387	190	144	370	455	657	404	134	347
MIN	47	54	38	33	59	49	54	78	126	104	56	30
CFSM	5.14	5.14	4.06	4.05	4.77	3.66	5.41	11.0	16.3	8.91	3.94	4.86
IN.	5.90	5.73	4.68	4.66	4.97	4.23	6.03	12.70	18.15	10.78	4.35	5.41
AC-FT	6,920	6,720	5,490	5,470	5,840	4,960	7,070	14,900	21,290	12,060	5,330	6,350
CAL YR 1969	TOTAL 60,392	MEAN 165	MAX 712	MIN 23	CFSM 7.50	IN 102.12	AC-FT 119,800					
MTR YR 1970	TOTAL 51,627	MEAN 141	MAX 657	MIN 30	CFSM 6.41	IN 87.30	AC-FT 102,400					

12177700 GORGE RESERVOIR NEAR NEWHALEM, WASH.

LOCATION.--Lat 48°41'53", long 121°12'25", in NW¼ sec.14, T.37 N., R.12 E., Whatcom County, Ross Lake National Recreation Area, in Gorge Dam on Skagit River, 2.4 miles (revised) upstream from city of Seattle Gorge powerplant at Newhalem and at mile 96.6.

DRAINAGE AREA.--1,159 sq mi, includes 400 sq mi in Canada.

PERIOD OF RECORD.--June 1960 to September 1970.

GAGE.--Water-stage recorder. Prior to Apr. 1, 1962, reference point on Gorge Dam or dial in powerhouse. Datum of gage is at mean sea level, Gorge High Dam datum, and 1.792 ft below mean sea level (Corps of Engineers bench mark).

EXTREMES.--Maximums and minimums (contents in acre-feet, elevation in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum			Date	Minimum		
		Contents	Elevation			Contents	Elevation	
1966	Aug. 3, 1966	9,572	879.30		July 11, 1966	1,599	820.24	
1967	July 9, 1967	9,525	879.12		Oct. 1, 1966	7,108	868.85	
1968	Apr. 18, 1968	9,604	879.42		Mar. 21, 1968	6,471	865.56	
1969	June 18, 1969	9,620	879.48		Dec. 24, 1968	6,627	866.40	
1970	July 11, 1970	9,514	879.08		Apr. 14, 1970	2,817	836.09	

Period of record: Maximum contents recorded, 9,721 acre-ft July 7, 1963 (elevation, 879.86 ft); minimum since normal low operating level was reached in December 1960, 1,551 acre-ft July 20, 1965 (elevation, 819.40 ft).

REMARKS.--Reservoir is formed by a concrete-arch and gravity dam, completed Dec. 27, 1960; storage began June 27, 1960. Usable storage, 2,115 acre-ft between elevations 865 (normal lower limit of operation) and 875 ft (top of gates). No dead storage below elevation 760 ft. Crest of spillway is at elevation 825 ft. Water used by city of Seattle for power development at Gorge powerplant. Capacity table furnished by city of Seattle. Figures given herein represent total contents.

COOPERATION.--Gage-height record collected in cooperation with city of Seattle.

REVISIONS.--WSP 1932: Drainage area.

MONTHEND ELEVATION AND CONTENTS, WATER YEARS OCTOBER 1966 TO SEPTEMBER 1970

DATE	ELEVATION (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)	DATE	ELEVATION (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
OCT. 31, 1965.....	870.80	7,522	-780	OCT. 31, 1968.....	872.25	7,843	-271
NOV. 30.....	872.00	7,786	+264	NOV. 30.....	873.01	8,016	+173
DEC. 31.....	873.50	8,130	+344	DEC. 31.....	872.17	7,825	-191
CAL YR 1965.....	-	-	+178	CAL YR 1968.....	-	-	-257
JAN. 31, 1966.....	870.45	7,446	-184	JAN. 31, 1969.....	874.03	8,254	+429
FEB. 28.....	873.10	8,037	+591	FEB. 28.....	873.07	8,030	-224
MAR. 31.....	869.35	7,212	-825	MAR. 31.....	873.26	8,075	+45
APR. 30.....	873.60	8,154	+942	APR. 30.....	873.04	8,023	-52
MAY 31.....	873.26	8,075	-79	MAY 31.....	874.54	8,376	+353
JUNE 30.....	872.85	7,980	-95	JUNE 30.....	874.23	8,302	-74
JULY 31.....	875.0	8,485	+505	JULY 31.....	874.87	8,454	+152
AUG. 31.....	872.67	7,939	-546	AUG. 31.....	871.95	7,775	-679
SEPT. 30.....	869.60	7,264	-675	SEPT. 30.....	873.00	8,014	+239
WTR YR 1966.....	-	-	-1,038	WTR YR 1969.....	-	-	-100
OCT. 31.....	873.05	8,026	+762	OCT. 31.....	873.30	8,084	+70
NOV. 30.....	872.32	7,859	-167	NOV. 30.....	874.11	8,273	+199
DEC. 31.....	873.00	8,014	+155	DEC. 31.....	873.16	8,051	+222
CAL YR 1966.....	-	-	-116	CAL YR 1969.....	-	-	+226
JAN. 31, 1967.....	874.76	8,428	+414	JAN. 31, 1970.....	870.57	7,472	-579
FEB. 28.....	874.61	8,392	-36	FEB. 28.....	874.10	8,271	+799
MAR. 31.....	873.84	8,210	-182	MAR. 31.....	874.30	8,318	+47
APR. 30.....	873.80	8,200	-10	APR. 30.....	873.04	8,023	-295
MAY 31.....	871.20	7,609	-591	MAY 31.....	874.30	8,318	+295
JUNE 30.....	876.45	8,841	+1,230	JUNE 30.....	873.81	8,203	-115
JULY 31.....	875.30	8,558	-283	JULY 31.....	874.27	8,311	+108
AUG. 31.....	872.80	7,968	-590	AUG. 31.....	874.30	8,318	+7
SEPT. 30.....	873.73	8,184	+216	SEPT. 30.....	874.67	8,406	+88
WTR YR 1967.....	-	-	+920	WTR YR 1970.....	-	-	+392
OCT. 31.....	877.84	9,192	+1,010	† ELEVATION AT 2400 HOURS.			
NOV. 30.....	872.45	7,889	-1,300				
DEC. 31.....	873.29	8,082	+193				
CAL YR 1967.....	-	-	+68				
JAN. 31, 1968.....	872.18	7,827	-255				
FEB. 29.....	873.60	8,154	+327				
MAR. 31.....	870.10	7,370	-784				
APR. 30.....	876.29	8,801	+1,430				
MAY 31.....	872.79	7,966	-835				
JUNE 30.....	874.08	8,266	+300				
JULY 31.....	871.51	7,678	-588				
AUG. 31.....	872.14	7,818	+140				
SEPT. 30.....	873.43	8,114	+296				
WTR YR 1968.....	-	-	-70				

12178000 SKAGIT RIVER AT NEWHALEM, WASH.

LOCATION.--Lat 48°40'19", long 121°14'48", in SWSEK sec.21, T.37 N., R.12 E., Whatcom County, Ross Lake National Recreation Area, on right bank 0.4 mile (revised) upstream from Newhalem Creek, 0.5 mile downstream from city of Seattle powerplant at Newhalem, 10.8 miles upstream from Bacon Creek, and at mile 93.7.

DRAINAGE AREA.--1,175 sq mi, of which 400 sq mi is in Canada.

PERIOD OF RECORD.--October 1908 to May 1914 and October 1920 to September 1970. June 1914 to September 1920 (monthly discharge only) in State Water-Supply Bulletin 6. Published as "near Marblemount" 1908-14, 1920-31.

GAGE.--Water-stage recorder. Datum of gage is 401.5 ft above mean sea level (river-profile survey). Prior to May 24, 1914, nonrecording gages at site 0.5 mile upstream at datum 91 ft higher. Nov. 15, 1920, to June 4, 1923, nonrecording gage at site about 500 ft upstream at same datum.

AVERAGE DISCHARGE.--62 years (1908-70), 4,451 cfs (3,225,000 acre-ft per year), adjusted for storage in Diablo Reservoir since October 1929, Ross Reservoir since Mar. 11, 1940, and Gorge Reservoir since June 27, 1960.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum Disch.	G.H.	Date	Minimum Disch.	G.H.	Date	Minimum daily Disch.
1966	July 16, 1966	18,800	88.33	Dec. 5, 1965	800	80.33	Aug. 27, 1966	1,010
1967	June 21, 1967	36,700	91.78	Sept. 5, 1967	800	80.40	Aug. 27, 1967	980
1968	Nov. 1, 1967	25,600	89.87	Sept. 21, 1968	830	80.50	Sept. 8, 1968	1,010
1969	Dec. 20, 1968	17,200	88.09	Aug. 24, Sept. 21	865	80.55	Sept. 1, 1969	963
1970	July 8, 1970	11,100	86.51	Oct. 4, 1969	798	80.45	May 29, 1970	1,030

Period of record: Maximum discharge, 63,500 cfs Nov. 29, 1909 (gage height, 22.0 ft, from floodmark, site and datum then in use); minimum, 54 cfs Nov. 1, 1943 (gage height, 78.15 ft); minimum daily, 136 cfs Aug. 24, 1930.

Flood in 1815 reached a stage of approximately 20.5 ft (discharge, about 115,000 cfs). Records for other floods prior to establishment of station are given in WSP 1527.

REMARKS.--Records excellent. Water is diverted 2.9 miles above station and is returned to river at Seattle powerplant 0.5 mile above station. Flow regulated for power since August 1924 by Gorge Reservoir, since October 1929 by Diablo Reservoir, and since Mar. 11, 1940, by Ross Reservoir (see stations 12177700, 12176500, 12175000), having a combined capacity of 1,280,000 acre-ft.

REVISIONS (WATER YEARS).--WSP 512: 1909-14. WSP 1012: 1929. WSP 1316: 1914(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,520	3,940	5,140	5,640	5,820	5,890	4,800	1,800	3,180	3,450	5,300	2,280
2	2,040	4,160	4,470	5,280	5,780	5,640	4,140	3,220	3,310	2,890	4,690	2,520
3	1,550	4,960	5,050	6,110	5,380	5,560	2,410	3,360	3,220	2,630	4,810	1,260
4	3,570	5,030	5,300	6,260	5,460	5,890	4,440	3,710	2,660	2,800	5,010	1,110
5	4,040	4,590	3,410	6,510	4,940	3,740	3,800	4,000	2,210	3,710	4,380	1,270
6	4,740	3,510	4,380	6,770	4,740	3,540	4,270	4,870	3,450	5,020	3,330	3,270
7	3,300	2,690	4,680	6,460	5,620	5,870	4,440	3,130	3,500	3,070	4,040	2,900
8	2,330	4,140	4,900	5,460	5,890	6,150	4,300	2,130	3,620	4,120	4,630	2,680
9	1,710	4,390	4,760	4,060	5,720	6,130	3,570	5,050	3,470	4,680	4,380	2,430
10	1,530	4,730	4,580	5,500	5,870	4,990	2,320	3,800	3,490	3,360	3,580	2,380
11	2,810	4,300	4,360	6,110	5,720	4,520	5,180	2,910	2,950	3,990	3,500	2,110
12	3,650	4,280	3,620	6,260	4,800	3,470	5,740	3,640	2,110	3,740	3,740	3,380
13	3,290	2,810	5,120	5,760	4,460	2,520	4,830	3,220	3,450	4,520	2,840	3,080
14	3,650	2,940	6,310	5,950	5,600	5,030	4,410	3,220	2,800	5,100	3,920	3,360
15	3,820	4,440	6,240	4,660	5,780	5,240	3,810	2,780	2,990	7,280	3,740	3,250
16	2,430	4,000	6,040	3,810	4,910	5,600	3,410	2,800	3,140	11,300	3,750	3,200
17	2,180	4,380	6,280	5,320	5,070	4,870	2,590	3,090	3,440	8,890	3,820	2,550
18	3,650	4,060	5,640	5,820	4,710	4,990	4,140	2,780	2,730	5,540	3,210	1,780
19	2,960	4,280	4,510	6,170	3,860	4,060	4,020	2,950	1,560	6,200	3,220	3,010
20	3,340	3,860	5,700	6,110	2,750	3,650	4,390	3,090	3,220	5,720	2,440	3,120
21	3,070	3,210	5,820	5,950	4,350	4,870	3,760	3,380	2,980	5,120	1,600	2,890
22	2,850	4,810	6,150	5,740	3,410	4,590	3,710	2,190	2,790	5,740	3,450	3,010
23	2,780	5,380	6,370	5,070	4,520	4,220	3,170	3,260	3,080	3,760	3,040	2,990
24	1,990	4,940	5,140	6,020	4,350	4,000	1,920	3,090	2,960	6,440	3,300	2,620
25	3,780	2,780	3,620	6,110	4,540	3,640	4,580	2,860	2,070	5,720	2,910	1,530
26	3,800	3,920	4,510	6,090	4,270	2,860	3,510	3,680	1,480	3,040	3,960	3,450
27	4,220	3,340	5,200	6,090	3,610	2,620	3,690	3,860	3,310	2,300	1,010	3,220
28	4,190	2,940	5,700	5,910	5,340	4,230	3,610	2,300	3,810	3,480	1,420	3,270
29	4,580	4,590	6,020	4,880	-----	3,940	3,340	1,090	3,100	3,720	3,430	3,200
30	3,550	4,640	6,020	4,190	-----	4,900	2,740	2,740	3,140	6,170	2,780	2,730
31	2,670	-----	6,040	5,720	-----	4,630	-----	3,140	-----	3,070	2,260	-----
TOTAL	96,590	122,040	161,080	175,790	137,470	141,850	115,040	97,140	89,220	147,170	107,490	79,650
MEAN	3,116	4,068	5,196	5,671	4,910	4,576	3,835	3,134	2,974	4,747	3,467	2,662
MAX	4,740	5,380	6,370	6,770	5,890	6,150	5,740	5,050	3,810	11,300	5,300	3,450
MIN	1,530	2,690	3,410	3,810	2,750	2,520	1,920	1,090	1,480	2,300	1,010	1,110
AC-FT	191,400	242,100	319,500	348,700	272,700	281,400	228,200	192,700	177,000	291,900	213,200	158,400
(1)	-50,730	-64,870	-162,500	-244,400	-209,700	-156,200	+70,720	+35,400	+365,000	+118,200	-6,070	-26,700
MEAN#	2,922	2,978	2,553	1,696	1,134	2,036	5,023	8,903	9,109	6,670	3,368	2,213
AC-FT#	140,900	177,200	157,000	104,300	63,000	125,200	298,900	547,400	542,000	410,100	207,100	131,700

CAL YR 1965 TOTAL 1,546,550 MEAN 4,237 MAX 12,800 MIN 1,110 AC-FT 3,068,000 MEAN# 4,328 AC-FT# 3,133,000
WTR YR 1966 TOTAL 1,470,730 MEAN 4,029 MAX 11,300 MIN 1,010 AC-FT 2,917,000 MEAN# 4,011 AC-FT# 2,904,000

* CHANGE IN CONTENTS, IN ACRE-FEET, IN ROSS, DIABLO, AND GORGE RESERVOIRS.

ADJUSTED FOR CHANGE IN RESERVOIR CONTENTS.

SKAGIT RIVER BASIN

12178000 SKAGIT RIVER AT NEMHALEM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,000	4,110	4,160	2,570	5,180	4,900	2,660	4,330	3,520	11,900	4,850	3,710
2	1,270	4,150	4,230	3,640	5,120	4,510	2,650	4,960	4,230	13,300	4,390	4,250
3	3,140	4,640	3,360	4,690	5,140	4,360	3,260	4,870	3,980	14,400	4,520	3,780
4	2,850	5,510	2,940	4,880	3,590	2,800	4,360	3,610	3,080	14,300	4,100	2,560
5	2,980	4,970	4,960	5,660	2,730	2,250	4,170	3,430	4,140	12,100	4,010	3,960
6	3,140	3,770	4,920	5,640	5,070	4,760	3,120	2,480	5,300	10,700	3,590	3,930
7	3,310	5,090	5,340	5,010	5,010	4,800	3,680	2,350	6,680	8,960	5,460	2,660
8	2,340	5,620	4,990	3,340	4,870	5,010	3,920	4,750	6,460	7,860	4,170	3,090
9	2,130	5,420	5,260	5,160	5,120	5,260	2,460	3,840	7,370	9,510	3,390	3,210
10	3,660	5,580	4,430	4,940	4,680	4,780	4,300	4,760	7,110	7,320	4,350	4,440
11	2,980	5,500	3,570	5,380	4,590	4,140	3,830	4,870	5,480	9,130	4,520	4,590
12	3,890	4,410	4,900	5,300	4,750	3,810	4,580	3,950	7,280	7,940	4,800	3,480
13	3,610	4,080	5,780	4,760	5,980	5,320	5,120	2,440	7,230	10,400	4,220	3,110
14	3,410	4,580	5,890	3,170	6,220	5,420	5,280	2,560	7,160	8,380	4,990	3,130
15	2,540	4,380	5,560	3,160	5,890	5,340	4,250	4,160	7,550	2,940	4,630	2,610
16	2,140	4,230	7,300	5,010	5,500	4,900	3,860	3,080	10,900	2,110	5,180	2,590
17	3,030	4,690	5,700	5,070	4,900	4,750	5,200	3,000	15,300	3,680	4,250	3,270
18	3,400	3,960	5,180	5,340	3,570	3,370	5,640	3,480	22,800	5,760	3,520	3,570
19	4,800	4,190	5,160	5,520	2,750	2,520	5,010	3,240	24,000	7,080	3,270	4,830
20	4,330	3,520	5,700	5,640	4,430	4,470	4,990	2,770	26,800	5,070	3,240	4,380
21	3,990	4,920	5,680	4,780	3,900	4,520	4,940	2,560	31,600	6,170	4,460	4,960
22	3,050	5,600	5,760	3,780	3,520	4,410	3,410	4,170	30,400	5,680	4,350	1,710
23	4,160	5,780	4,640	5,090	4,360	4,560	2,940	4,350	24,100	6,390	3,040	2,000
24	5,200	3,950	3,680	5,600	4,070	4,660	6,280	4,270	21,900	5,110	3,010	2,090
25	3,830	4,310	2,450	5,010	3,210	3,220	5,140	4,020	20,500	6,370	2,250	3,080
26	4,020	3,950	3,520	5,180	2,630	2,660	4,900	3,330	19,200	6,240	1,530	2,200
27	4,220	3,580	5,050	4,190	4,160	4,730	5,070	2,460	18,200	6,580	980	2,500
28	3,500	5,240	5,260	3,360	4,680	4,960	4,440	2,160	16,000	5,450	2,800	2,630
29	3,500	5,140	4,580	3,610	-----	5,100	3,140	3,650	19,600	4,970	2,770	3,160
30	2,610	-----	5,240	-----	-----	4,410	2,900	2,750	13,300	4,780	3,830	2,000
31	3,840	-----	3,810	4,800	-----	4,510	-----	3,270	-----	4,350	4,080	-----
TOTAL	102,870	139,190	148,450	144,520	125,620	135,210	126,200	109,920	397,170	235,130	119,090	97,680
MEAN	3,318	4,640	4,789	4,662	4,486	4,362	4,207	3,546	13,240	7,585	3,842	3,256
MAX	5,200	5,180	7,300	5,660	6,220	5,420	6,280	4,960	31,600	14,400	4,960	4,960
MIN	1,270	3,520	2,450	2,370	2,630	2,250	2,460	2,160	2,110	2,110	1,710	1,710
AC-FT	204,000	276,100	294,500	286,700	249,200	268,200	250,300	218,000	787,800	466,400	236,200	193,700
(\uparrow)	-32,340	-134,500	364,480	-115,000	-112,400	-154,700	-134,400	+327,700	+352,400	+29,490	-3,840	-43,620
MEAN Φ	2,792	2,380	5,380	2,792	2,463	1,846	1,948	8,875	19,160	8,065	3,780	2,523
AC-FT Φ	171,700	141,600	330,900	171,700	136,800	113,500	115,900	545,700	1,1400	495,900	232,400	150,100

CAL YR 1966 TOTAL 1,481,530 MEAN 4,059 MAX 11,300 MIN 1,010 AC-FT 2,939,000 MEAN Φ 4,246 AC-FT Φ 3,074,000WTR YR 1967 TOTAL 1,881,050 MEAN 5,154 MAX 31,600 MIN 980 AC-FT 3,731,000 MEAN Φ 5,174 AC-FT Φ 3,746,000 Φ CHANGE IN CONTENTS, IN ACRE-FEET, IN ROSS, DIABLO AND GORGE RESERVOIRS. Φ ADJUSTED FOR CHANGE IN RESERVOIR CONTENTS.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,370	22,000	4,090	4,290	5,520	4,600	4,560	6,410	3,640	10,100	4,940	1,490
2	3,660	11,400	4,190	5,900	5,520	5,920	3,680	4,920	8,380	11,000	5,050	2,060
3	3,200	7,880	4,770	5,830	3,790	5,260	3,760	3,390	6,980	11,700	3,560	3,190
4	2,690	5,870	5,620	6,040	3,250	6,570	4,620	2,920	5,160	13,400	7,070	2,830
5	2,800	4,700	5,560	5,880	5,520	6,590	4,440	3,870	9,130	15,200	4,990	3,430
6	2,720	5,390	4,840	4,900	4,500	7,050	2,700	5,150	14,700	13,100	4,610	3,010
7	2,490	5,620	4,570	4,060	5,900	7,690	3,360	3,590	12,400	10,800	4,580	1,610
8	1,620	5,160	4,410	6,320	6,510	7,440	3,830	3,720	14,600	11,200	4,260	1,010
9	2,980	4,510	2,750	6,380	5,770	6,340	3,330	3,640	9,770	11,500	4,140	3,100
10	3,490	4,950	3,320	6,530	4,260	5,090	4,450	3,610	12,700	11,700	2,570	3,270
11	4,750	5,500	5,540	6,530	5,960	5,920	3,690	2,690	13,600	9,680	2,110	3,420
12	4,580	5,540	4,340	6,550	6,320	6,980	3,720	2,840	12,300	10,600	3,990	3,510
13	4,380	4,800	5,450	5,960	5,200	6,510	3,050	4,250	10,800	9,090	3,310	3,500
14	3,060	4,800	5,560	5,240	6,150	6,210	2,470	5,350	7,550	5,210	3,700	3,920
15	3,150	6,620	6,360	5,660	5,850	6,800	4,410	3,610	6,440	5,920	3,660	3,390
16	5,110	7,510	5,660	5,980	5,830	7,560	6,160	3,500	8,200	5,860	4,110	5,250
17	5,280	6,340	4,700	5,580	5,960	5,030	6,760	3,560	9,160	3,980	2,700	5,580
18	4,600	6,150	6,250	4,970	5,090	6,170	7,540	2,720	9,510	9,100	2,060	6,510
19	4,840	4,860	6,440	5,350	5,160	6,590	8,950	2,500	15,700	9,010	2,790	5,520
20	3,750	6,360	6,650	5,660	4,020	5,880	6,630	4,940	13,300	5,330	2,810	4,340
21	4,240	5,470	6,720	5,490	4,430	3,730	4,200	4,780	6,420	3,880	3,320	2,500
22	3,600	4,930	6,210	5,500	4,310	4,060	7,320	3,720	9,820	6,190	2,430	2,840
23	5,390	3,610	4,770	4,950	5,260	4,090	7,800	3,550	9,150	6,270	2,830	4,430
24	5,540	5,070	6,820	5,260	5,830	3,120	5,600	5,330	10,800	5,260	2,850	4,350
25	5,410	5,310	6,250	7,100	4,620	4,700	5,000	2,670	14,400	5,040	2,390	3,790
26	5,900	4,990	4,360	6,380	5,390	4,400	4,700	2,260	17,400	5,580	3,060	4,500
27	6,630	5,850	4,110	6,590	4,510	4,690	6,540	3,680	20,000	5,200	3,590	4,400
28	5,810	5,580	4,650	5,750	4,900	4,780	12,000	3,450	15,500	5,160	3,440	4,240
29	3,850	5,220	5,260	5,280	4,430	4,430	5,390	7,050	6,680	3,340	2,410	4,410
30	5,980	5,920	3,070	6,300	-----	3,520	5,270	1,500	3,460	6,490	2,920	4,410
31	18,900	-----	4,460	6,530	-----	3,700	-----	2,500	-----	5,150	2,100	-----
TOTAL	143,770	188,410	157,750	178,740	149,760	171,550	158,080	112,210	318,020	256,780	109,280	106,810
MEAN	4,638	6,280	5,089	5,766	5,164	5,534	5,269	3,620	10,600	8,283	3,525	3,560
MAX	18,900	22,000	6,620	7,100	6,510	7,690	12,000	6,410	20,000	15,200	7,070	6,510
MIN	1,620	3,610	2,750	4,060	3,250	3,120	2,470	1,500	3,460	3,880	2,060	1,010
AC-FT	285,200	373,700	312,900	354,500	297,000	340,300	313,600	222,600	630,800	509,300	216,800	211,900
(\uparrow)	+17,130	-100,600	-89,490	-6,500	-5,630	-53,880	-157,800	+296,600	+147,500	-5,710	-4,870	-32,560
MEAN Φ	4,916	4,590	3,633	5,660	5,066	4,658	2,617	8,444	13,080	8,190	3,446	3,013
AC-FT Φ	302,300	273,100	223,400	348,000	291,400	286,400	155,700	519,200	778,300	503,600	211,900	179,300
CAL YR 1967 TOTAL 1,980,470 MEAN 5,426 MAX 31,600 MIN 980 AC-FT 3,928,000 MEAN Φ 5,387 AC-FT Φ 3,900,000												
WTR YR 1968 TOTAL 2,051,160 MEAN 5,604 MAX 32,000 MIN 1,010 AC-FT 4,068,000 MEAN Φ 5,609 AC-FT Φ 4,072,000												

 Φ CHANGE IN CONTENTS, IN ACRE-FEET, IN ROSS, DIABLO AND GORGE RESERVOIRS. Φ ADJUSTED FOR CHANGE IN RESERVOIR CONTENTS.

12178000 SKAGIT RIVER AT NEWHALEM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	2,150	3,170	4,650	4,350	3,870	4,940	6,020	4,990	2,030	4,530	3,890	963		
2	3,340	2,390	6,210	5,840	4,220	3,250	6,220	5,370	3,690	5,950	2,740	3,560		
3	3,380	1,850	8,470	5,660	4,990	5,740	6,850	5,870	3,230	7,200	3,020	2,600		
4	3,940	4,040	7,230	4,380	5,340	6,060	5,600	5,640	3,790	4,930	2,850	2,860		
5	2,700	3,690	6,930	4,980	6,350	5,890	3,010	3,080	3,170	6,430	4,060	2,370		
6	1,570	3,980	6,800	4,400	6,030	5,600	2,300	4,040	4,870	4,650	2,840	1,630		
7	3,930	3,520	5,400	6,340	6,130	5,480	4,750	3,920	3,350	3,640	2,200	1,320		
8	3,710	4,290	3,430	6,620	5,530	3,650	4,350	4,680	3,780	5,290	1,950	2,950		
9	4,280	2,090	5,490	6,680	3,780	3,280	4,500	5,510	4,050	5,450	1,310	2,230		
10	3,740	2,320	5,700	6,720	4,930	5,250	4,620	2,770	3,650	6,320	1,560	2,380		
11	3,900	3,270	5,620	5,720	4,360	4,220	4,710	2,600	3,440	6,270	2,860	2,410		
12	2,190	4,680	5,680	4,040	4,520	4,870	3,650	4,290	9,540	6,060	3,550	3,050		
13	2,000	4,330	5,330	5,800	4,810	4,240	3,280	4,250	8,890	4,710	3,270	2,120		
14	3,540	2,950	3,490	6,500	4,430	3,260	5,260	4,710	10,800	3,490	2,890	1,470		
15	2,930	2,880	3,240	5,870	3,220	2,710	4,950	4,830	8,640	3,010	4,160	2,600		
16	1,970	2,920	5,840	5,890	1,980	1,790	2,720	4,180	9,730	3,880	2,140	3,190		
17	3,860	1,860	6,240	6,510	4,400	4,500	3,260	1,580	12,000	3,440	1,960	3,440		
18	3,480	3,430	6,210	3,320	4,760	4,120	3,180	2,530	9,180	3,270	1,730	4,320		
19	2,530	3,490	6,880	3,010	5,090	3,980	2,410	4,890	10,400	4,300	1,990	4,340		
20	1,900	3,440	8,850	5,700	5,650	3,620	1,620	4,660	10,400	3,690	2,060	2,660		
21	4,160	4,370	6,700	6,670	5,980	3,570	2,270	4,150	7,830	4,000	2,250	1,870		
22	2,960	4,500	4,980	8,960	4,800	2,780	2,380	3,240	7,770	4,530	2,460	4,590		
23	2,610	3,180	5,660	10,800	3,170	1,740	2,870	3,400	7,250	4,800	2,190	5,480		
24	2,740	3,340	3,980	7,890	5,700	3,120	4,140	3,020	4,950	3,740	1,580	5,230		
25	2,750	5,170	2,850	5,650	6,420	2,470	2,640	3,300	7,570	4,480	3,410	4,300		
26	2,210	5,670	5,450	6,180	6,140	3,100	2,440	4,440	3,440	3,620	2,900	4,470		
27	1,320	5,960	6,380	6,720	5,460	3,120	1,530	3,880	5,990	2,330	3,030	2,260		
28	2,250	4,260	6,720	7,570	5,680	3,730	4,180	3,730	2,610	5,020	3,910	1,910		
29	2,030	4,610	7,640	9,100	-----	3,400	5,150	4,320	5,480	3,680	3,420	5,090		
30	2,990	5,070	10,800	7,110	-----	2,110	4,630	3,720	2,220	2,060	2,060	5,000		
31	3,350	-----	8,950	6,150	-----	3,180	-----	1,760	-----	2,220	1,120	-----		
TOTAL	90,410	110,720	187,800	191,130	137,740	118,770	115,490	121,970	185,640	137,380	81,360	92,663		
MEAN	2,916	3,691	6,058	6,165	4,919	3,831	3,850	3,935	6,188	4,432	2,625	3,089		
MAX	4,280	5,960	10,800	10,800	6,420	6,060	6,850	5,870	12,000	7,200	4,160	5,480		
MIN	1,320	1,850	2,850	3,010	1,980	1,740	1,530	1,580	2,030	2,200	1,310	863		
AC-FT	179,300	219,000	372,500	379,100	273,200	235,600	229,100	241,900	368,200	272,500	161,400	183,800		
(T)	-53,320	-28,370	-229,200	-253,000	-213,800	-134,900	-63,510	-559,400	-331,300	-748	-16,360	-10,030		
MEAN*	2,049	3,214	2,330	2,050	1,070	1,637	4,919	13,030	11,760	4,419	2,358	2,922		
AC-FT*	126,000	191,200	143,300	126,100	59,400	100,700	292,600	801,300	699,500	271,800	145,000	173,800		
CAL YR 1968	TOTAL	1,950,160	MEAN	5,328	MAX	20,000	MIN	1,010	AC-FT	3,868,000	MEAN*	5,142	AC-FT*	3,734,000
WTR YR 1969	TOTAL	1,371,073	MEAN	4,304	MAX	12,000	MIN	963	AC-FT	3,116,000	MEAN*	4,323	AC-FT*	3,130,000

† CHANGE IN CONTENTS, IN ACRE-FEET, IN ROSS, DIABLO AND GORGE RESERVOIRS.

* ADJUSTED FOR CHANGE IN RESERVOIR CONTENTS.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	3,860	2,290	5,420	2,430	2,790	3,430	5,320	1,060	1,840	2,350	2,690	3,300		
2	3,700	1,400	5,030	4,070	5,530	5,880	6,030	1,060	3,280	2,760	2,700	3,210		
3	3,690	3,860	5,580	4,670	5,210	6,520	5,990	1,060	4,090	2,160	3,200	3,210		
4	2,170	4,510	5,940	4,640	5,410	6,010	3,830	1,070	3,310	2,690	3,000	2,800		
5	1,510	4,590	5,690	6,180	5,880	6,390	3,840	1,770	3,160	4,520	4,510	2,130		
6	2,900	4,830	3,440	6,570	5,040	6,570	6,070	2,280	3,680	4,940	3,610	2,150		
7	3,320	3,920	3,360	6,550	2,900	3,880	5,640	1,540	2,200	5,210	3,200	3,080		
8	3,360	2,410	5,710	5,980	1,930	1,760	5,420	1,250	2,880	7,000	3,180	3,510		
9	3,680	2,420	5,970	5,710	5,080	5,110	5,250	1,190	2,080	5,320	2,760	3,080		
10	3,560	3,750	5,750	5,370	4,560	4,910	4,440	1,270	1,720	4,760	3,130	3,090		
11	2,100	3,530	6,320	4,110	4,390	5,530	3,000	1,150	1,480	5,890	3,180	2,670		
12	1,690	3,510	5,670	6,150	4,170	5,040	2,560	1,280	1,140	3,820	3,200	1,510		
13	3,480	3,880	3,780	6,250	4,720	4,460	5,140	1,260	1,500	6,030	3,350	1,280		
14	3,450	4,340	3,460	6,090	3,450	2,590	2,670	1,070	1,820	4,590	3,540	2,470		
15	3,190	3,170	5,300	6,290	2,850	2,530	2,730	1,160	2,320	3,260	2,390	2,120		
16	3,440	3,150	5,600	6,460	5,310	4,450	1,730	1,310	2,190	2,740	1,680	2,610		
17	3,350	5,150	5,450	5,290	5,530	5,020	1,150	2,150	1,960	4,580	3,120	3,370		
18	2,200	4,970	4,740	3,030	5,980	4,600	1,200	1,520	2,390	3,490	3,090	4,560		
19	1,890	5,320	5,170	5,530	4,740	4,160	1,050	1,510	2,640	5,430	3,220	2,960		
20	3,350	4,570	3,430	5,980	5,000	4,320	1,480	1,720	2,790	4,050	3,350	1,820		
21	2,800	4,900	3,120	4,710	2,800	3,460	1,390	1,660	3,510	5,180	3,680	3,960		
22	3,900	3,040	5,780	5,410	2,050	1,990	1,150	1,580	3,810	3,220	3,320	4,500		
23	3,910	3,040	5,860	5,820	3,120	4,380	1,080	1,190	3,390	3,670	2,360	4,400		
24	3,370	3,820	3,820	4,260	4,290	4,590	1,440	1,300	4,020	4,210	4,680	3,760		
25	2,310	5,770	2,470	3,280	4,260	5,250	2,520	2,360	3,720	3,650	5,190	3,850		
26	1,210	4,870	3,500	5,560	4,450	5,000	1,320	3,550	4,250	2,900	5,490	1,740		
27	3,490	2,500	3,350	6,110	4,940	4,830	1,270	2,600	3,750	5,410	5,240	1,140		
28	3,120	3,680	2,760	6,080	3,330	3,280	1,250	1,690	3,890	2,930	5,130	2,930		
29	3,430	3,500	5,150			3,080	1,120	1,030	4,150	5,840	4,680	2,940		
30	3,450	3,000	5,410	4,260		3,850	1,160	1,070	3,970	2,600	3,090	3,180		
31	4,440		5,060	3,370		3,820		1,070		1,810	5,040			
TOTAL	94,720	115,220	147,090	161,790	119,710	136,690	87,840	46,900	87,130	124,010	109,200	86,850		
MEAN	3,055	3,841	4,745	5,219	4,275	4,409	2,928	1,513	2,904	4,000	3,523	2,895		
MAX	4,440	5,770	6,320	6,710	5,980	6,570	6,070	3,550	4,250	7,000	5,490	4,560		
MIN	1,210	1,400	2,470	2,430	1,930	1,760	1,050	1,030	1,140	1,810	1,680	1,140		
AC-FT	187,900	228,500	291,800	320,900	237,400	271,100	174,200	93,300	172,800	246,000	216,600	172,300		
(T)	-60,500	-98,110	-185,100	-219,900	-122,200	-155,100	-27,980	+350,100	+515,800	+31,220	-63,010	-56,560		
MEAN*	2,072	2,192	1,735	1,642	2,075	1,886	2,458	7,205	11,580	4,507	2,498	1,945		
AC-FT*	127,400	130,400	106,700	101,000	115,200	116,000	146,200	443,100	688,600	277,200	153,600	115,700		
CAL YR 1969	TOTAL	1,539,173	MEAN	4,217	MAX	12,000	MIN	963	AC-FT	3,053,000	MEAN*	4,190	AC-FT*	3,034,000
WTR YR 1970	TOTAL	1,317,150	MEAN	3,609	MAX	7,000	MIN	1,030	AC-FT	2,613,000	MEAN*	3,482	AC-FT*	2,521,000

† CHANGE IN CONTENTS, IN ACRE-FEET, IN ROSS, DIABLO AND GORGE RESERVOIRS.

* ADJUSTED FOR CHANGE IN RESERVOIR CONTENTS.

12178100 NEWHALEM CREEK NEAR NEWHALEM, WASH.

LOCATION (REVISED).--Lat 48°39'22", long 121°14'14", in SE&SE& sec.28, T.37 N., R.12 E., Whatcom County, North Cascades National Park, on left bank 1.2 miles south of Newhalem, 1.5 miles downstream from East Fork, and at mile 1.5.

DRAINAGE AREA.--27.9 sq mi.

PERIOD OF RECORD.--January 1961 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,080 ft (by barometer).

AVERAGE DISCHARGE.--9 years, 173 cfs (84.21 inches per year, 125,300 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (750 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1965	0230	*1,350	4.83	Oct. 11, 1967	0215	1,070	4.58	June 26, 1968	1700	1,030	4.52
June 28, 1966	0800	767	4.11	Oct. 21, 1967	1530	788	4.18	Sept. 17, 1968	0930	1,110	4.63
				Oct. 27, 1967	2030	*2,950	6.10				
Oct. 23, 1966	1000	1,400	4.88	Oct. 31, 1967	1500	2,200	5.60	Jan. 5, 1969	-	*1,570	a5.10
Oct. 29, 1966	1430	994	4.43	Dec. 24, 1967	0500	972	4.45	Sept. 23, 1969	0230	972	4.45
Dec. 13, 1966	0830	1,260	4.74	Jan. 20, 1968	1830	1,750	5.26				
Dec. 16, 1966	0630	*2,260	5.58	Jan. 24, 1968	0700	1,190	4.72	Nov. 4, 1969	1500	820	4.23
June 20, 1967	2100	963	4.39	June 2, 1968	1045	2,320	5.68	June 3, 1970	2000	*958	4.43
								Sept. 22, 1970	1630	806	4.13

a From high watermark in well.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1-4, 1965, Mar. 7, 8, 1966	41	a1.56	1969	Mar. 9, 10, 11, 1969	b29	-
1967	Oct. 18, 1966	42	1.56	1970	Sept. 16, 1970	b32	-
1968	Dec. 8, 1967	49	1.68				

a Occurred Oct. 2-4, 1966.

b Minimum daily.

Period of record: Maximum discharge, 5,600 cfs about Nov. 20, 1962 (gage height, 7.28 ft, from flood-marks), from rating curve extended above 750 cfs on basis of slope-area measurement of peak flow; minimum, 20 cfs Feb. 1, 1963 (gage height, 1.07 ft).

REMARKS.--Records good. No gage-height record Dec. 18, 1968, to Mar. 14, 1969. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	85	94	48	61	47	293	94	174	220	166	61
2	41	211	141	47	57	45	254	143	181	267	164	60
3	41	255	206	46	54	44	200	257	160	318	170	60
4	43	382	373	46	53	43	181	348	141	344	160	61
5	113	303	200	46	58	42	190	490	227	348	139	64
6	703	202	242	56	58	42	220	652	369	318	129	65
7	172	156	214	81	58	41	257	480	422	348	130	61
8	138	168	162	115	55	45	283	440	417	369	127	60
9	174	145	129	90	52	80	270	480	386	377	115	60
10	105	118	112	76	50	74	267	356	460	348	109	60
11	86	103	97	71	49	63	283	257	369	310	100	64
12	79	91	87	73	47	62	204	264	276	310	90	69
13	77	85	79	162	46	94	160	217	260	430	158	64
14	84	180	71	185	45	118	164	168	310	348	121	65
15	102	314	68	127	44	121	177	145	412	356	109	66
16	83	194	64	100	43	100	170	141	555	325	102	62
17	84	139	61	86	43	85	146	121	540	276	95	59
18	82	115	61	79	43	77	126	116	390	260	89	92
19	95	152	69	72	42	71	113	139	390	242	87	68
20	124	181	80	67	45	65	105	190	293	202	82	61
21	122	212	75	64	46	60	100	283	231	200	79	60
22	116	170	65	60	47	56	96	204	245	217	76	64
23	102	127	61	58	53	54	95	158	231	214	76	82
24	88	109	59	55	55	56	100	152	217	223	81	68
25	80	97	55	53	52	64	109	273	210	220	87	60
26	76	87	53	52	52	85	100	435	248	179	83	57
27	73	82	53	52	52	113	92	348	303	188	87	56
28	78	78	53	52	49	150	89	276	596	197	82	56
29	134	75	51	59	-----	231	88	276	337	207	73	56
30	171	72	49	65	-----	470	87	270	242	200	69	55
31	98	-----	49	66	-----	399	-----	197	-----	177	64	-----
TOTAL	3,605	4,688	3,233	2,309	1,409	3,097	5,019	8,370	9,592	8,538	3,299	1,896
MEAN	116	156	104	74.5	50.3	99.9	167	270	320	275	106	63.2
MAX	703	382	373	185	61	470	293	652	596	430	170	92
MIN	41	72	49	46	42	41	87	94	141	177	64	55
CFSM	4.16	5.59	3.73	2.67	1.80	3.58	5.99	9.68	11.5	9.86	3.80	2.27
IN.	4.81	6.25	4.31	3.08	1.88	4.13	6.69	11.16	12.79	11.38	4.40	2.53
AC-FT	7,150	9,300	6,410	4,580	2,790	6,140	9,960	16,400	19,030	16,940	6,540	3,760
CAL YR 1965	TOTAL	59,741	MEAN	164	MAX	703	MIN	40	CFSM	5.88	IN	79.65
WTR YR 1966	TOTAL	55,055	MEAN	131	MAX	703	MIN	41	CFSM	5.41	IN	73.41
									AC-FT	118,500		
									AC-FT	109,200		

12178100 NEMIALEM CREEK NEAR NEMIALEM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	134	356	81	115	62	61	94	423	386	156	79
2	85	116	251	78	110	57	63	106	602	465	145	112
3	60	100	177	91	158	53	68	134	520	495	150	74
4	95	90	146	87	280	52	76	170	495	460	154	68
5	53	92	124	78	190	52	75	207	515	394	141	67
6	54	85	110	71	139	52	75	245	570	337	136	77
7	76	78	98	68	115	52	80	293	500	286	154	64
8	150	69	88	74	101	53	81	344	390	333	124	59
9	71	69	82	81	95	52	81	321	340	260	132	63
10	61	66	85	99	94	50	78	242	333	231	143	158
11	56	64	145	156	87	48	79	200	329	318	150	194
12	53	87	296	113	84	47	82	170	377	390	145	95
13	50	92	945	100	78	46	79	158	435	386	139	73
14	47	177	495	110	72	45	76	160	520	321	134	64
15	45	154	621	230	68	45	73	204	575	300	134	61
16	44	124	1,330	160	66	54	70	344	618	300	127	63
17	44	103	823	121	64	62	69	450	694	300	116	64
18	43	100	670	102	62	60	70	412	767	251	109	63
19	314	113	570	113	59	56	75	430	802	212	102	63
20	239	118	440	118	56	54	82	510	851	220	96	64
21	119	109	303	101	55	55	88	607	830	234	103	74
22	214	96	220	89	53	96	88	560	736	210	91	82
23	1,030	87	172	82	52	223	87	440	560	223	85	60
24	531	83	145	76	52	166	90	310	545	239	78	55
25	356	209	124	70	53	108	96	237	602	245	69	54
26	408	146	110	68	52	91	94	225	560	245	67	52
27	290	129	98	89	52	81	89	264	490	207	67	52
28	174	194	92	214	61	75	89	329	435	192	68	53
29	392	200	90	234	-----	70	90	369	440	181	71	57
30	360	348	88	217	66	92	92	296	394	170	73	58
31	166	-----	84	143	-----	66	-----	248	-----	162	75	-----
TOTAL	5,618	3,632	9,375	3,514	2,523	2,149	2,396	9,079	16,248	8,953	3,534	2,252
MEAN	181	121	302	113	90.1	69.3	79.9	293	542	289	114	75.1
MAX	1,030	348	1,330	234	280	223	96	607	851	495	156	194
MIN	43	64	82	68	52	45	61	94	329	162	67	52
CFSM	6.49	4.34	10.8	4.05	3.23	2.48	2.86	10.5	19.4	10.4	4.09	2.69
IN.	7.49	4.84	12.50	4.69	3.36	2.87	3.19	12.11	21.66	11.94	4.71	3.00
AC-FT	11,140	7,200	18,600	6,970	5,000	4,260	4,750	18,010	32,230	17,760	7,010	4,470

CAL YR 1966 TOTAL 62,154 MEAN 170 MAX 1,330 MIN 41 CFSM 6.09 IN 82.87 AC-FT 123,300
WTR YR 1967 TOTAL 69,273 MEAN 190 MAX 1,330 MIN 43 CFSM 6.81 IN 92.36 AC-FT 137,400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	521	60	106	102	186	88	175	944	282	152	99
2	164	296	61	91	134	197	96	139	1,680	373	148	93
3	175	208	60	83	218	194	90	138	663	467	148	80
4	148	162	59	77	334	317	93	160	449	498	134	75
5	109	132	57	72	194	462	95	136	424	485	120	75
6	174	116	55	68	150	318	86	116	440	444	103	76
7	440	145	53	65	129	220	80	104	408	420	91	75
8	273	148	50	63	116	173	77	112	344	432	88	70
9	158	167	63	61	110	145	78	144	337	400	90	66
10	256	308	276	57	108	128	93	204	351	344	96	66
11	692	208	248	54	102	115	110	267	341	330	96	65
12	462	165	132	54	99	110	93	259	282	358	88	68
13	344	158	103	153	93	104	83	182	254	262	80	62
14	327	234	89	493	86	98	80	162	228	276	94	160
15	208	222	79	440	80	98	78	148	215	248	110	367
16	156	194	72	264	75	103	73	173	248	215	88	355
17	129	145	67	173	75	96	71	267	302	192	99	664
18	150	129	63	152	245	88	71	361	369	182	123	308
19	154	112	57	500	503	80	68	440	458	220	89	192
20	126	100	53	994	420	78	64	580	358	267	83	141
21	434	90	51	914	361	78	64	388	284	188	77	114
22	400	86	115	444	315	79	65	290	305	162	71	126
23	337	82	321	373	388	85	72	262	337	172	93	179
24	228	82	734	806	440	89	70	232	404	192	103	120
25	267	75	615	412	287	84	75	279	503	204	165	102
26	184	69	408	267	215	79	77	254	690	210	225	94
27	1,240	67	312	186	186	83	78	230	565	228	318	89
28	847	65	240	158	173	84	114	230	330	215	158	80
29	396	64	179	135	177	104	204	230	220	204	118	75
30	670	62	143	115	-----	91	240	192	201	171	103	69
31	1,080	-----	121	105	-----	84	-----	184	-----	158	96	-----
TOTAL	10,887	4,612	4,996	7,935	5,915	4,250	2,726	7,038	12,934	8,799	3,647	4,205
MEAN	351	154	161	256	204	137	90.9	227	431	284	118	140
MAX	1,240	521	734	994	503	462	240	580	1,680	498	318	664
MIN	109	62	50	54	75	78	64	104	201	158	71	62
CFSM	12.6	5.52	5.77	9.18	7.31	4.91	3.26	8.14	15.4	10.2	4.23	5.02
IN.	14.52	6.15	6.66	10.58	7.89	5.67	3.63	9.38	17.25	11.73	4.86	5.61
AC-FT	21,590	9,150	9,910	15,740	11,730	8,430	5,410	13,960	25,650	17,450	7,230	8,340
CAL YR 1967 TOTAL	71,143	MEAN 195	MAX 1,240	MIN 45	CFSM 6.99	IN 94.86	AC-FT 141,100					
WTR YR 1968 TOTAL	77,944	MEAN 213	MAX 1,680	MIN 50	CFSM 7.63	IN 103.93	AC-FT 154,600					

SKAGIT RIVER BASIN

12178100 NEMHALEM CREEK NEAR NEMHALEM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	116	121	44	44	30	199	147	369	152	94	51
2	63	115	109	48	45	31	175	136	530	290	89	61
3	58	121	293	60	47	32	147	124	590	377	83	58
4	94	100	237	200	50	34	128	121	641	273	86	68
5	79	90	160	800	50	34	129	132	641	215	103	59
6	178	82	131	350	45	32	126	177	585	197	85	50
7	131	77	120	200	40	31	120	290	555	184	76	49
8	104	134	114	160	39	30	121	458	575	194	73	50
9	90	163	121	130	42	29	139	595	565	228	76	56
10	96	123	121	110	47	29	162	625	550	240	76	58
11	94	339	120	100	51	29	156	512	512	312	74	61
12	98	310	100	92	49	30	177	498	485	259	69	59
13	108	201	91	86	47	31	213	490	449	175	66	67
14	96	156	86	80	42	32	177	449	400	145	73	57
15	104	134	82	72	37	40	154	373	354	132	77	50
16	98	115	80	68	36	48	147	315	392	131	71	45
17	100	108	75	64	36	92	167	284	408	131	63	79
18	128	287	70	60	36	95	201	327	420	136	62	176
19	134	324	62	58	35	79	190	428	384	150	64	189
20	177	427	56	55	35	74	165	467	308	150	69	126
21	139	386	52	52	35	73	163	490	235	132	76	94
22	129	424	53	51	34	75	225	550	218	132	68	311
23	134	293	60	50	34	73	388	595	218	139	65	549
24	190	215	70	48	33	69	308	674	245	145	68	347
25	254	167	65	47	33	69	220	467	173	132	70	279
26	184	143	60	46	32	90	179	384	143	108	62	175
27	139	138	50	45	32	134	163	344	152	108	60	139
28	171	124	45	45	31	138	182	276	132	109	64	132
29	186	162	41	44	-----	139	175	520	99	55	58	380
30	201	143	41	44	-----	177	156	521	132	96	50	424
31	143	-----	45	43	-----	232	-----	341	-----	95	50	-----
TOTAL	3,967	5,717	2,922	3,352	1,117	2,131	5,354	12,110	11,487	5,366	2,217	4,299
MEAN	128	191	94.3	108	39.9	68.7	178	391	383	173	71.5	143
MAX	254	427	293	800	51	232	388	674	641	377	103	549
MIN	58	77	41	43	31	29	120	121	126	95	50	45
CFSM	4.59	6.85	3.38	3.87	1.43	2.46	6.38	14.0	13.7	6.20	2.56	5.13
IN.	5.29	7.62	3.90	4.47	1.49	2.84	7.14	16.15	15.32	7.15	2.96	5.73
AC-FT	7,670	11,340	5,800	6,650	2,220	4,230	10,620	24,020	22,780	10,640	4,400	8,530
CAL YR 1968	TOTAL 70,055			MEAN 191	MAX 1,680	MIN 41	CFSM 6.85	IN 93.41	AC-FT 139,000			
WTR YR 1969	TOTAL 60,039			MEAN 164	MAX 800	MIN 29	CFSM 5.88	IN 80.05	AC-FT 119,100			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	354	60	65	53	72	64	50	64	377	118	83	44
2	264	56	61	50	69	61	49	77	600	167	98	41
3	184	79	58	48	70	58	47	109	776	262	86	64
4	145	384	54	45	64	56	51	177	615	334	89	52
5	123	222	51	44	60	53	103	215	535	262	88	54
6	108	150	49	42	58	60	162	160	595	208	78	107
7	110	121	47	41	62	110	114	132	494	206	75	131
8	192	115	47	41	78	82	94	131	365	240	73	73
9	192	102	45	41	108	71	328	152	330	218	64	59
10	152	90	44	39	131	66	296	120	238	190	62	50
11	126	85	48	39	148	63	167	102	173	162	64	46
12	109	88	68	37	177	64	129	91	184	143	64	41
13	95	80	119	39	192	68	108	88	232	134	65	39
14	86	110	206	80	162	77	95	82	312	131	58	36
15	79	140	139	70	148	88	85	135	321	145	57	34
16	73	100	104	56	186	103	78	319	256	163	56	32
17	68	85	89	52	165	88	73	368	338	147	52	208
18	64	75	110	51	136	76	72	225	440	131	48	202
19	61	70	115	80	116	71	71	220	412	136	48	172
20	75	85	126	123	103	67	68	222	472	128	48	102
21	82	100	121	220	94	64	64	245	540	114	50	77
22	75	90	116	267	89	62	63	282	428	91	52	364
23	75	115	136	380	84	66	64	254	361	84	53	204
24	66	105	108	225	80	70	66	299	312	83	55	128
25	62	95	91	162	77	64	64	449	296	112	52	100
26	57	85	80	131	74	60	61	424	354	254	48	85
27	60	75	73	110	72	57	58	245	315	222	47	75
28	59	72	67	93	67	56	58	177	210	123	46	69
29	56	70	64	82	-----	55	59	152	154	109	42	64
30	57	67	59	74	-----	52	59	141	123	100	41	59
31	70	-----	56	73	-----	50	-----	186	-----	84	42	-----
TOTAL	3,379	3,171	2,616	2,888	2,942	2,102	2,856	6,043	11,158	5,001	1,884	2,812
MEAN	109	106	84.4	93.2	105	67.8	95.2	195	372	161	60.8	93.7
MAX	354	384	206	380	192	110	328	449	776	334	98	364
MIN	56	56	44	37	58	50	47	64	123	83	41	32
CFSM	3.91	3.40	3.03	3.36	3.76	2.43	3.41	6.99	13.3	5.77	2.18	3.36
IN.	4.51	4.23	3.49	3.85	3.92	2.80	3.81	8.06	14.88	6.67	2.51	3.75
AC-FT	6,700	6,290	5,190	5,730	5,840	4,170	5,660	11,990	22,130	9,920	3,740	5,580
CAL YR 1969	TOTAL 56,599			MEAN 155	MAX 800	MIN 29	CFSM 5.56	IN 75.47	AC-FT 112,300			
WTR YR 1970	TOTAL 46,852			MEAN 128	MAX 776	MIN 32	CFSM 4.59	IN 62.47	AC-FT 92,930			

12179000 SKAGIT RIVER ABOVE ALMA CREEK, NEAR MARBLEMOUNT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,280	4,770	6,020	3,390	6,060	5,440	3,040	4,690	5,240	13,600	5,620	4,280
2	1,550	4,870	5,650	4,080	6,050	5,020	3,040	5,490	6,710	15,100	5,160	4,980
3	3,320	5,300	4,440	5,520	6,560	4,890	3,660	5,640	6,240	16,200	5,300	4,480
4	3,130	4,950	3,770	5,740	9,280	3,270	4,850	4,400	5,060	16,000	4,940	2,910
5	3,210	5,520	5,690	6,450	4,130	2,710	4,580	4,430	6,180	13,600	4,820	4,460
6	3,500	4,330	5,690	6,370	5,910	4,980	4,060	3,410	7,530	12,400	4,380	4,520
7	3,690	5,470	6,070	5,760	5,910	5,360	3,990	3,440	8,820	10,000	6,220	3,240
8	3,190	6,070	5,720	4,130	5,670	5,350	4,320	6,010	8,060	9,380	4,880	3,510
9	2,440	5,860	5,810	5,850	5,850	5,770	2,800	5,050	8,880	10,500	4,720	3,590
10	3,970	6,030	5,200	5,770	5,470	5,260	4,640	5,840	8,500	8,580	5,160	5,060
11	3,200	5,940	4,320	6,520	5,190	4,580	4,180	5,790	7,060	10,300	5,360	5,460
12	4,130	5,060	6,370	6,350	5,490	4,180	5,020	4,880	8,830	9,330	5,600	4,180
13	3,850	5,610	9,720	5,840	6,620	5,620	5,560	3,150	8,970	12,000	5,020	3,620
14	3,630	5,550	8,360	4,040	6,820	5,870	5,860	3,390	9,130	9,720	5,820	3,690
15	2,730	5,300	8,330	4,460	6,520	5,680	4,470	4,970	9,740	4,420	5,420	2,940
16	2,290	5,010	13,400	6,050	6,060	5,500	4,240	4,420	13,100	3,460	5,920	2,860
17	3,400	5,460	9,820	6,010	5,600	5,230	5,610	4,660	17,900	5,020	5,040	3,770
18	3,410	4,550	8,760	6,170	4,160	3,910	6,060	5,140	25,200	6,830	4,340	4,050
19	6,000	4,480	8,140	6,340	3,330	3,010	5,520	4,920	26,400	7,900	4,050	5,240
20	5,440	4,120	8,120	6,690	4,770	4,750	5,380	4,780	29,500	6,160	3,920	5,000
21	4,600	5,620	7,420	5,890	4,400	5,020	5,510	4,880	33,800	7,200	5,160	5,440
22	3,840	6,240	7,120	4,520	3,900	5,080	3,910	6,540	33,200	6,580	4,820	2,340
23	7,700	6,390	5,860	5,920	4,800	5,740	3,230	6,260	26,300	7,150	3,750	2,470
24	8,050	4,680	4,780	6,330	4,560	5,720	6,740	5,720	23,300	6,320	3,600	2,500
25	5,600	5,310	3,270	5,690	3,650	4,090	5,650	5,170	22,000	7,300	2,840	3,410
26	5,780	4,760	4,150	5,800	3,080	3,370	5,450	4,520	20,900	7,150	2,000	2,680
27	5,410	4,360	5,860	4,930	4,490	5,310	5,560	3,710	19,400	7,380	1,460	2,860
28	4,440	6,300	6,030	4,460	5,160	5,500	5,030	3,460	17,400	6,320	3,200	3,140
29	4,980	6,330	5,280	4,830	-----	5,570	3,640	5,370	17,000	5,880	3,350	3,480
30	3,600	6,770	5,410	6,600	-----	4,760	3,340	4,040	14,800	5,660	4,340	2,650
31	4,480	-----	4,420	5,860	-----	4,950	-----	4,400	-----	5,220	4,600	-----
TOTAL	126,840	160,400	199,000	172,250	145,490	151,490	138,940	148,580	455,350	272,660	140,810	112,810
MEAN	4,092	5,347	6,419	5,556	5,196	4,887	4,631	4,793	15,180	8,795	4,542	3,760
MAX	8,050	6,770	13,400	6,690	6,820	5,870	6,740	6,540	33,800	16,200	6,220	5,460
MIN	1,550	4,120	3,270	3,390	3,080	2,710	2,800	3,150	5,060	3,460	1,460	2,340
AC-FT	251,600	318,200	394,700	341,700	288,600	300,500	275,600	294,700	903,200	540,800	279,300	223,800
CAL YR 1966	TOTAL 1,798,390			MEAN 4,927		MAX 13,400		MIN 1,360		AC-FT 3,567,000		
WTR YR 1967	TOTAL 2,224,620			MEAN 6,095		MAX 33,800		MIN 1,460		AC-FT 4,413,000		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,010	22,900	4,660	5,060	5,900	5,490	4,980	7,440	6,950	11,300	5,520	2,010
2	4,580	13,500	4,380	6,270	6,100	6,720	4,300	5,740	14,400	12,400	5,730	2,540
3	3,990	8,750	5,120	6,200	4,910	6,190	4,280	4,300	9,770	13,500	4,240	3,590
4	3,570	6,580	5,940	6,390	4,950	7,780	5,000	3,710	6,930	15,000	7,420	3,310
5	3,460	5,240	5,920	6,160	6,250	8,640	5,000	4,560	9,990	17,000	5,680	3,850
6	3,820	6,000	5,260	5,200	5,510	8,280	3,300	5,590	16,400	14,800	5,160	3,460
7	4,600	6,320	4,960	4,480	6,260	8,590	3,800	4,160	14,000	12,700	4,950	2,130
8	3,260	6,000	4,800	6,460	6,980	8,200	4,350	4,400	15,800	12,900	4,700	1,440
9	3,950	5,400	3,440	6,540	6,290	6,900	3,690	4,380	11,100	13,200	4,650	3,450
10	4,780	6,460	4,460	6,620	4,780	5,630	4,880	4,550	14,000	13,100	3,200	3,620
11	7,430	6,540	6,650	6,680	6,410	6,250	4,190	4,030	14,700	11,400	2,640	3,800
12	6,460	6,480	5,160	6,680	6,630	7,370	4,310	4,060	13,700	11,900	4,390	3,890
13	5,800	5,720	5,980	6,470	5,670	6,820	3,600	4,910	11,800	10,700	3,820	3,840
14	4,580	5,920	6,040	7,040	6,450	6,540	3,110	5,930	8,550	6,200	4,140	4,900
15	4,140	9,580	6,700	7,340	6,160	7,100	4,610	4,520	7,320	9,120	4,300	4,840
16	5,620	8,800	6,020	7,230	6,200	7,990	6,370	4,380	9,020	6,910	4,390	6,720
17	5,800	7,100	5,200	6,360	6,120	5,530	6,780	4,890	10,200	4,570	3,340	8,390
18	5,240	6,730	6,400	5,760	5,990	6,420	7,560	4,240	10,700	9,880	2,650	7,720
19	5,520	5,580	6,600	7,480	7,100	6,810	9,300	4,220	16,400	9,730	3,320	6,290
20	4,520	6,730	6,800	9,720	5,980	6,170	6,860	7,150	15,000	6,740	3,260	4,940
21	5,580	6,060	6,900	9,130	6,030	4,320	4,640	6,310	7,340	4,600	3,780	3,120
22	5,160	5,360	6,750	7,550	5,820	4,460	7,190	5,090	11,000	6,750	2,840	3,450
23	6,420	4,180	5,980	6,650	6,900	4,460	8,190	4,570	10,400	6,940	3,330	5,040
24	6,440	5,580	9,520	7,850	7,910	3,780	5,890	4,730	12,300	6,100	3,550	4,840
25	6,280	5,540	8,720	8,530	6,020	5,100	5,360	3,840	15,700	5,830	3,060	4,320
26	6,560	5,440	6,480	7,580	6,470	4,780	5,150	3,440	18,700	6,260	4,140	4,920
27	10,500	6,180	5,610	7,320	5,720	5,240	6,320	4,640	21,100	6,030	4,980	4,850
28	8,980	5,860	5,780	6,460	5,740	5,250	12,800	4,540	17,000	5,990	4,300	3,750
29	5,760	5,540	6,140	5,690	5,430	5,200	6,350	4,580	8,720	7,290	3,980	2,830
30	8,080	5,240	4,210	6,680	-----	4,160	8,080	2,500	4,170	7,250	3,570	4,600
31	21,800	-----	4,870	6,820	-----	4,370	-----	3,440	-----	5,880	2,730	-----
TOTAL	186,690	211,310	181,450	210,400	176,680	190,540	170,240	144,840	363,160	291,970	127,760	126,450
MEAN	6,022	7,044	5,853	6,787	6,092	6,146	5,675	4,672	12,110	9,418	4,121	4,215
MAX	21,800	22,900	9,520	9,720	7,910	8,640	12,800	7,440	21,100	17,000	7,420	8,390
MIN	3,260	4,180	3,440	4,480	4,780	3,780	3,110	2,500	4,170	4,570	2,640	1,440
AC-FT	370,300	419,100	359,900	417,300	350,400	377,900	337,700	287,300	720,300	579,100	253,400	250,800
CAL YR 1967	TOTAL 2,317,830			MEAN 6,350		MAX 33,800		MIN 1,460		AC-FT 4,597,000		
WTR YR 1968	TOTAL 2,381,490			MEAN 6,507		MAX 22,900		MIN 1,440		AC-FT 4,724,000		

12179000 SKAGIT RIVER ABOVE ALMA CREEK, NEAR MARBLEMOUNT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,770	3,810	5,440	4,600	4,200	5,320	6,830	5,740	3,710	5,120	4,360	1,340
2	3,520	3,070	6,780	6,200	4,940	3,660	7,100	5,900	5,800	7,130	3,280	3,710
3	3,730	2,500	9,720	6,200	5,060	5,700	7,580	6,420	5,580	8,630	3,460	3,130
4	4,300	4,130	8,850	4,600	5,600	6,260	6,400	6,280	6,340	6,260	3,550	3,370
5	3,170	4,190	7,830	5,500	6,480	6,080	3,900	3,900	5,760	7,200	4,400	2,730
6	2,280	4,470	7,500	5,940	6,140	5,780	3,150	4,900	7,080	5,780	3,550	2,010
7	4,300	3,780	6,160	7,300	6,260	5,680	5,240	5,120	5,800	4,300	2,640	1,670
8	4,190	4,890	4,280	7,430	5,740	4,140	5,080	6,600	6,120	6,260	2,470	3,300
9	4,720	2,970	6,060	7,350	4,300	3,460	5,120	7,950	6,420	5,980	1,790	2,660
10	4,180	2,940	6,420	7,330	5,120	5,560	5,540	5,420	5,840	7,780	1,960	2,740
11	4,410	4,480	6,400	6,240	4,660	4,540	5,520	4,960	5,600	7,330	3,300	2,810
12	2,820	5,910	6,240	4,780	4,920	5,140	4,700	6,460	11,300	7,380	3,950	3,390
13	2,980	5,330	6,020	6,120	5,120	4,580	4,420	6,320	10,900	5,860	3,710	2,640
14	3,990	3,820	4,300	6,880	4,780	3,710	5,900	6,750	12,500	4,180	3,390	1,940
15	3,540	3,580	3,730	6,280	3,710	3,240	5,760	6,460	10,600	3,730	4,580	2,990
16	2,450	3,570	6,240	6,200	2,350	2,190	3,660	5,780	11,400	4,560	2,700	3,480
17	4,340	2,480	6,600	6,800	4,560	4,880	4,200	3,080	13,900	4,030	2,370	3,990
18	4,130	4,500	6,540	4,010	4,980	4,860	4,240	3,970	11,100	3,950	2,150	5,160
19	3,320	5,340	5,950	3,530	5,380	4,600	3,510	6,540	12,800	4,820	2,410	5,300
20	2,720	5,440	9,480	5,700	5,880	4,340	2,620	6,650	12,100	4,700	2,530	3,600
21	4,800	6,000	7,030	6,800	6,180	4,180	3,130	6,260	9,080	4,520	2,730	2,550
22	3,590	6,520	5,080	8,480	5,000	3,410	3,500	5,440	8,700	5,100	3,020	5,720
23	3,320	4,660	6,400	11,200	3,680	2,460	4,600	6,040	8,580	5,240	2,590	8,180
24	3,780	4,580	4,780	9,200	5,640	3,590	5,500	5,680	5,920	4,580	2,080	6,780
25	3,880	5,880	3,570	6,200	6,540	3,130	3,950	5,380	8,500	5,060	3,780	5,540
26	2,990	6,400	5,600	6,700	6,300	3,640	3,410	6,240	4,500	4,200	3,390	5,400
27	2,180	6,700	6,780	7,200	5,720	3,780	2,440	5,540	6,650	3,040	3,440	3,150
28	3,020	5,280	7,030	7,800	5,820	4,540	4,740	5,040	3,640	5,500	4,320	2,710
29	2,940	5,280	7,930	9,300	-----	4,200	6,100	6,650	6,000	4,160	3,900	6,220
30	3,800	5,880	11,000	8,000	-----	3,240	5,400	4,980	4,640	3,170	2,520	6,730
31	4,240	-----	9,200	5,100	-----	4,240	-----	3,440	-----	2,760	1,550	-----
TOTAL	110,000	138,580	205,940	204,970	144,660	134,130	143,240	175,890	236,860	162,310	95,870	114,940
MEAN	3,548	4,619	6,643	6,612	5,166	4,327	4,775	5,674	7,895	5,236	3,093	3,831
MAX	4,800	6,700	11,000	11,200	6,540	6,260	7,580	7,950	13,900	8,630	4,580	8,180
MIN	2,180	2,480	3,570	3,530	2,350	2,190	2,440	3,080	3,640	2,760	1,550	1,340
AC-FT	218,200	274,900	408,500	406,600	288,900	266,000	284,100	348,900	469,800	321,900	190,200	228,000

CAL YR 1968 TOTAL 2,256,560 MEAN 6,165 MAX 21,100 MIN 1,440 AC-FT 4,476,000
MTR YR 1969 TOTAL 1,867,390 MEAN 5,116 MAX 13,900 MIN 1,340 AC-FT 3,704,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,550	2,970	5,550	3,070	3,410	3,730	5,490	1,460	3,290	3,020	3,110	3,720
2	4,990	1,780	5,370	4,250	5,830	6,090	6,190	1,520	5,370	3,340	3,270	3,540
3	3,690	4,110	5,830	5,030	5,710	6,730	5,890	1,770	6,800	3,400	3,770	3,700
4	3,170	5,790	6,170	4,450	5,810	6,190	4,350	1,990	5,870	3,980	3,570	3,190
5	2,280	5,790	6,070	6,170	6,150	6,550	4,350	2,890	5,170	5,920	4,900	2,510
6	3,500	5,650	3,810	6,730	5,570	6,800	6,930	3,240	5,830	5,820	4,210	2,810
7	3,880	4,770	3,790	6,700	3,550	4,450	6,270	2,340	4,210	6,040	3,700	3,630
8	4,310	3,310	5,750	6,070	2,500	2,340	6,050	2,010	4,410	7,780	3,680	3,940
9	4,670	3,190	6,170	5,870	5,490	5,470	6,650	2,040	3,430	6,610	3,210	3,410
10	4,430	4,250	5,950	5,550	5,190	5,250	5,950	1,940	2,990	5,460	3,560	3,450
11	3,020	4,150	6,550	4,610	5,190	5,810	4,370	1,810	2,380	6,600	3,620	2,990
12	2,380	4,130	6,150	6,070	4,890	5,330	3,450	1,830	1,990	4,490	3,630	1,870
13	3,920	4,370	4,390	6,350	5,670	4,890	5,390	1,800	2,500	6,700	3,740	1,500
14	3,940	4,890	4,670	6,400	4,530	3,210	3,750	1,690	3,100	5,160	3,980	2,740
15	3,750	3,870	5,910	6,580	3,610	3,190	3,340	1,800	3,850	4,090	2,870	2,360
16	3,850	3,850	6,110	6,700	6,090	5,070	2,490	2,620	3,390	3,570	2,130	2,790
17	4,020	5,430	5,970	5,730	6,290	5,490	1,770	3,810	3,330	5,210	3,370	4,450
18	2,690	5,390	5,410	3,460	6,480	5,090	1,650	2,780	4,000	4,190	3,440	5,560
19	2,340	5,690	5,870	5,770	5,470	4,630	1,590	2,620	4,170	5,970	3,570	3,160
20	3,750	5,030	4,310	6,580	5,550	4,810	1,920	2,850	4,590	4,800	3,660	2,460
21	3,340	5,430	3,810	5,830	3,590	3,980	1,800	2,810	5,470	5,690	3,980	4,320
22	3,870	3,750	6,210	6,680	2,640	2,490	1,720	2,890	5,570	4,010	3,960	5,500
23	3,960	3,720	6,650	7,580	3,550	4,610	1,500	2,230	4,890	4,040	2,860	5,200
24	3,870	5,610	4,810	5,870	4,730	4,910	1,670	2,550	5,330	4,700	4,720	4,420
25	2,940	6,150	3,290	4,250	4,650	5,570	3,140	4,040	4,970	4,330	5,330	4,330
26	1,590	5,410	3,960	6,250	4,910	5,350	1,830	5,350	5,650	4,230	5,700	2,340
27	3,720	3,290	3,900	6,780	5,390	5,190	1,680	3,730	5,070	5,690	5,460	1,600
28	3,540	4,040	3,380	6,650	3,830	3,700	1,680	2,700	4,910	3,590	5,390	3,200
29	3,770	4,020	5,390	6,330	-----	3,610	1,520	1,830	4,810	4,530	4,040	3,300
30	3,850	3,480	5,710	4,930	-----	4,150	1,550	1,780	4,790	3,360	3,370	3,530
31	4,770	-----	5,330	3,980	-----	4,040	-----	1,920	-----	2,400	5,120	-----
TOTAL	114,350	133,310	162,440	177,270	136,270	148,680	105,930	76,540	132,130	148,320	120,920	101,520
MEAN	3,689	4,444	5,240	5,718	4,867	4,796	3,531	2,469	4,404	4,785	3,901	3,384
MAX	5,550	6,150	6,650	7,580	6,480	6,800	6,930	5,350	6,800	7,780	5,700	5,560
MIN	1,590	1,780	3,290	3,070	2,500	2,340	1,500	1,460	1,990	2,400	2,130	1,500
AC-FT	226,800	264,400	322,200	351,600	270,300	294,900	210,100	151,800	262,100	294,200	239,800	201,400

CAL YR 1969 TOTAL 1,822,970 MEAN 4,994 MAX 13,900 MIN 1,460 AC-FT 3,616,000
MTR YR 1970 TOTAL 1,557,680 MEAN 4,268 MAX 7,780 MIN 1,340 AC-FT 3,090,000

12181100 SOUTH FORK CASCADE RIVER AT SOUTH CASCADE GLACIER, NEAR MARBLEMOUNT, WASH.

LOCATION.--Lat 48°22'13", long 121°04'23", Skagit County, Mount Baker National Forest, on left bank at outlet of South Cascade Lake, 10.2 miles (revised) upstream from confluence with North Fork, 21 miles southeast of Marblemount, and at mile 28.9.

DRAINAGE AREA.--2.36 sq mi.

PERIOD OF RECORD.--July 1957 to September 1961 (seasonal records only; published as "near Marblemount"), October 1961 to September 1970. Prior to October 1960, monthly discharge only published in WSP 1736; dailies on file in Tacoma district office.

GAGE.--Water-stage recorder. Datum of gage is 5,290.61 ft above mean sea level (from U.S. Coast and Geodetic Survey triangulation point). Prior to Sept. 23, 1960, at datum 0.47 ft lower. Sept. 23, 1960, to Aug. 10, 1964, at datum 1.34 ft lower.

AVERAGE DISCHARGE.--9 years (1961-70), 25.2 cfs (145.01 inches per year, 18,260 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum			Date	Minimum		
		Discharge	G.H.			Discharge	G.H.	
1966	Oct. 6, 1965	103	3.14		Mar. 25, 26, 1966	1.0	.66	
1967	June 21, 1967	114	a5.14		(b)	cl.2	-	
1968	July 12, 1968	141	3.51		(d)	1.6	.83	
1969	June 13, 1969	136	e3.21		Mar. 8-12, 1969	cl.0	-	
1970	Sept. 17, 1970	146	3.10		Apr. 1, 3, 4, 1970	1.3	f.62	

a Occurred May 26, 1967, backwater from ice.

b Apr. 17-21, Apr. 23 to May 4, 1967.

c Minimum daily.

d Sometime Apr. 17 to May 8, 1968.

e Occurred June 14, 1969, backwater from ice.

f Occurred Apr. 3, 4, 1970.

Period of record: Maximum discharge recorded, 194 cfs Oct. 24, 1959; minimum recorded, 0.60 cfs probably sometime Mar. 21-31, 1964 (gage height, 0.16 ft).

REMARKS.--Records good except those for periods of no gage-height record, which are fair. No regulation or diversion above station. Flow originates at South Cascade Glacier.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	21	4.8	3.0	1.6	1.7	3.8	2.5	14	38	73	30
2	18	29	5.5	3.6	1.5	1.6	3.5	2.9	14	38	71	31
3	18	25	5.5	3.5	1.4	1.5	3.2	5.7	14	38	75	32
4	21	29	6.5	3.3	1.4	1.5	2.9	9.6	13	39	76	40
5	28	20	5.5	3.3	1.4	1.5	3.0	16	13	47	69	46
6	84	15	5.5	4.2	1.4	1.4	3.5	29	18	44	70	47
7	60	14	5.5	4.8	1.5	1.4	4.5	27	29	48	71	43
8	53	15	4.8	5.5	1.6	1.5	5.7	22	34	54	68	32
9	58	14	4.1	5.0	1.8	1.7	6.3	25	35	61	61	44
10	42	12	3.8	4.1	1.7	1.7	6.5	18	36	64	57	43
11	34	10	3.5	4.0	1.9	1.6	6.1	13	36	60	58	40
12	28	9.3	3.3	4.0	2.2	1.5	5.5	12	28	63	55	38
13	27	8.4	3.1	5.0	2.1	1.4	4.2	11	27	88	64	43
14	26	9.6	2.9	5.2	2.1	1.4	4.0	9.6	29	85	73	45
15	22	15	2.9	4.1	1.9	1.5	3.4	8.6	36	82	71	44
16	17	14	2.6	3.2	1.8	1.5	3.1	8.8	56	78	68	40
17	16	11	2.5	2.8	1.7	1.5	2.9	7.0	60	71	60	39
18	14	9.1	2.8	2.5	1.6	1.5	2.9	6.5	51	65	57	49
19	13	8.8	3.0	2.3	1.5	1.5	2.9	7.0	57	60	52	43
20	16	8.6	3.4	2.1	1.5	1.5	2.9	9.6	54	55	50	40
21	18	8.8	3.6	2.0	1.4	1.5	2.9	12	49	54	51	46
22	17	9.1	3.2	1.9	1.3	1.4	2.9	11	43	55	53	59
23	17	7.3	3.0	2.1	1.3	1.2	2.6	9.1	37	56	64	70
24	16	6.3	3.0	2.0	1.2	1.2	2.4	6.1	32	58	78	57
25	15	6.1	2.9	1.8	1.2	1.1	2.5	11	26	60	76	45
26	17	5.5	2.6	1.7	1.2	1.0	2.6	21	25	54	63	38
27	16	5.5	3.0	1.7	1.5	1.1	2.5	24	30	55	68	36
28	17	5.2	3.3	1.7	1.7	1.1	2.5	20	57	60	61	37
29	22	4.6	3.4	1.7	-----	1.3	2.5	20	53	66	47	44
30	34	4.4	3.1	1.7	-----	2.2	2.4	20	42	73	38	43
31	23	-----	2.9	1.7	-----	3.6	-----	17	-----	74	32	-----
TOTAL	824	360.6	115.5	95.5	44.4	47.1	106.6	424.0	1,048	1,643	1,930	1,284
MEAN	26.6	12.0	3.73	3.08	1.59	1.52	3.55	13.7	34.9	59.5	62.3	42.8
MAX	84	29	6.5	5.5	2.2	3.6	6.5	29	60	88	78	70
MIN	11.3	5.4	2.5	1.7	1.2	1.0	2.4	2.5	13	38	32	30
CFSM	11.3	5.08	1.58	1.31	.67	.44	1.50	5.81	14.8	25.2	26.4	18.1
IN-	12.90	5.68	1.82	1.51	.70	.74	1.68	6.68	16.52	29.05	30.42	20.24
AC-FT	1,630	715	229	189	88	93	211	841	2,080	3,660	3,830	2,550

CAL YR 1965 TOTAL 8,624.4 MEAN 23.6 MAX 118 MIN 1.5 CFSM 10.0 IN 135.94 AC-FT 17,110
WTR YR 1966 TOTAL 8,122.7 MEAN 22.3 MAX 88 MIN 1.0 CFSM 9.45 IN 128.04 AC-FT 16,110

12181100 SOUTH FORK CASCADE RIVER AT SOUTH CASCADE GLACIER, NEAR MARBLEMOUNT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	14	6.5	3.5	3.4	1.8	1.3	1.2	15	72	59	80
2	51	12	5.9	4.0	3.2	1.7	1.3	1.2	28	76	57	98
3	34	11	4.8	4.8	3.5	1.6	1.4	1.2	28	86	57	74
4	32	9.1	4.4	4.7	4.5	1.6	1.5	1.2	27	89	62	64
5	32		4.1	4.1	4.0	1.7	1.5	1.3	29	86	61	59
6	28	8.4	3.8	3.5	3.7	1.6	1.5	2.0	34	75	59	64
7	39	7.5	3.5	3.2	3.4	1.6	1.5	3.3	34	65	62	54
8	48	6.7	3.4	2.9	3.1	1.7	1.5	5.6	32	67	62	50
9	31	6.7	3.1	2.8	3.0	1.7	1.4	5.2	33	67	68	48
10	24	6.5	3.6	2.5	2.8	1.7	1.4	4.7	36	58	75	58
11	21	5.9	3.8	3.0	2.7	1.7	1.4	4.2	39	62	75	79
12	16	6.1	4.4	3.3	2.6	1.6	1.4	3.8	39	82	78	52
13	13	6.3	10	3.5	2.5	1.6	1.4	3.5	40	92	77	38
14	11	6.5	9.3	3.4	2.5	1.5	1.3	3.5	43	86	77	36
15	9.1	5.7	10	4.4	2.4	1.4	1.3	4.3	48	76	81	46
16	8.2	5.0	23	3.8	2.3	1.5	1.3	5.5	54	72	81	58
17	8.0	4.6	20	3.1	2.2	1.5	1.2	11	62	72	74	60
18	6.9	4.2	16	2.9	2.1	1.5	1.2	11	73	70	54	54
19	16	4.6	13	2.7	2.0	1.5	1.2	11	87	67	48	55
20	17	5.0	9.1	5.4	1.9	1.4	1.2	14	104	62	66	62
21	12	5.0	6.7	4.5	1.9	1.4	1.2	17	112	67	71	70
22	9.6	4.4	5.0	3.6	1.8	1.6	1.3	20	102	66	72	74
23	50	4.1	4.4	3.1	1.8	1.9	1.2	18	94	67	65	53
24	60	3.8	4.2	2.7	1.7	2.2	1.2	15	94	72	56	48
25	38	5.0	3.6	2.4	1.7	2.0	1.2	13	90	75	52	46
26	36	4.7	3.2	2.3	1.7	1.8	1.2	12	88	80	52	48
27	27	4.7	3.0	2.8	1.8	1.7	1.2	13	86	77	50	58
28	17	4.9	2.9	3.6	1.8	1.6	1.2	14	80	72	55	53
29	27	4.1	3.3	4.1	1.5	1.2	1.2	17	77	64	66	46
30	31	5.2	3.1	4.5	-----	1.4	1.2	22	78	61	76	44
31	18	-----	3.3	3.8	-----	1.4	-----	14	-----	59	82	-----
TOTAL	812.8	190.5	204.4	111.6	72.0	50.4	39.3	273.7	1,786	2,242	2,066	1,729
MEAN	26.2	6.35	6.59	3.60	2.37	1.63	1.31	8.83	59.5	72.3	66.4	57.4
MAX	60	14	23	5.7	2.5	1.2	1.5	22	112	92	82	98
MIN	6.9	3.8	2.9	2.3	1.7	1.4	1.2	15	58	50	36	36
CFSM	11.1	2.69	2.79	1.53	1.09	.69	.56	3.74	25.2	30.6	28.2	24.4
IN.	12.81	3.00	3.22	1.76	1.13	.79	.62	4.31	28.15	35.34	32.57	27.25
AC-FT	1,610	378	405	221	143	100	78	543	3,540	4,450	4,100	3,430

CAL YR 1966 TOTAL 8,030.3 MEAN 22.0 MAX 88 MIN 1.0 CFSM 9.32 IN 126.58 AC-FT 15,930
 WTR YR 1967 TOTAL 9,577.7 MEAN 26.2 MAX 112 MIN 1.2 CFSM 11.1 IN 150.97 AC-FT 19,000

NOTE.--NO GAGE-HEIGHT RECORD FEB. 16 TO MAY 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	64	5.2	3.2	6.8	4.8	2.9	5.8	48	40	75	55
2	30	42	5.9	2.8	7.2	5.4	2.8	5.2	113	52	75	61
3	24	30	5.9	2.4	7.5	5.5	2.4	4.3	90	70	78	52
4	19	22	5.4	2.4	7.7	7.0	2.2	4.8	71	85	77	46
5	17	17	5.4	2.3	6.2	13	2.3	4.2	58	93	67	50
6	17	15	5.2	2.1	5.4	12	2.4	3.8	55	96	58	53
7	40	16	4.7	2.1	4.7	8.6	2.5	3.5	50	96	52	58
8	49	19	4.2	3.0	4.2	6.8	2.3	3.8	48	95	49	54
9	35	20	5.0	3.2	3.7	5.7	1.9	4.7	45	102	50	50
10	38	18	6.2	3.2	3.4	4.8	1.9	7.0	46	94	59	46
11	79	15	6.6	3.2	3.1	4.4	2.5	11	44	93	67	46
12	51	12	5.2	3.4	2.9	4.1	2.8	14	40	126	62	46
13	34	14	4.2	3.9	2.8	3.8	2.5	12	34	101	53	40
14	26	26	3.7	6.4	2.6	3.7	2.9	10	30	76	55	54
15	19	25	3.1	8.8	2.5	3.8	4.1	9.1	28	62	61	55
16	16	17	3.1	7.5	2.3	3.8	3.8	8.8	30	50	55	50
17	16	13	3.1	6.2	2.3	3.7	3.0	13	35	50	53	96
18	17	11	2.8	5.7	3.9	3.4	2.2	20	46	49	53	68
19	17	9.9	2.5	8.8	8.3	3.0	2.0	34	58	53	46	44
20	14	8.8	2.4	25	9.6	2.8	1.9	46	56	62	44	30
21	24	8.1	2.4	46	7.9	2.4	1.8	34	50	56	36	21
22	22	7.9	4.2	24	6.4	2.3	1.8	31	50	50	32	20
23	16	7.5	5.0	15	7.2	2.3	2.0	30	55	52	36	32
24	12	7.9	6.2	25	7.9	2.5	1.9	26	66	60	44	28
25	12	7.9	6.2	20	6.2	2.6	1.9	26	79	67	56	28
26	9.9	6.8	5.9	13	5.0	2.6	1.8	24	108	75	79	30
27	52	6.0	5.4	9.6	4.4	4.1	1.8	21	115	87	82	30
28	72	5.9	4.5	7.7	4.1	5.0	3.0	19	70	94	58	26
29	36	5.7	3.8	7.0	4.5	5.5	5.0	20	49	92	48	26
30	36	5.4	3.1	6.6	-----	4.7	7.5	18	38	84	46	25
31	95	-----	3.0	6.8	-----	3.5	-----	17	-----	77	50	-----
TOTAL	982.9	483.8	139.5	286.1	150.7	147.6	79.8	491.0	1,705	2,341	1,756	1,320
MEAN	31.7	16.1	4.50	9.23	5.20	4.76	2.66	15.8	56.8	75.5	56.6	44.0
MAX	95	64	6.6	46	9.6	13	7.5	46	115	126	82	96
MIN	9.9	5.4	2.4	2.1	2.3	2.3	1.8	35	28	40	32	20
CFSM	13.4	6.82	1.91	3.91	2.20	2.02	1.13	6.69	24.1	32.0	24.0	18.6
IN.	15.99	7.63	2.20	4.51	2.38	2.33	1.26	7.74	26.08	36.90	27.68	20.81
AC-FT	1,950	960	277	567	299	293	158	974	3,380	4,640	3,480	2,620

CAL YR 1967 TOTAL 9,976.2 MEAN 27.3 MAX 112 MIN 1.2 CFSM 11.6 IN 157.25 AC-FT 19,790
 WTR YR 1968 TOTAL 9,883.4 MEAN 27.0 MAX 126 MIN 1.8 CFSM 11.4 IN 155.79 AC-FT 19,600

12181100 SOUTH FORK CASCADE RIVER AT SOUTH CASCADE GLACIER, NEAR MARBLEMOUNT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	9.9	6.8	3.9	1.6	1.1	6.0	8.0	37	38	64	42
2	22	8.3	7.0	4.1	1.6	1.1	5.5	7.0	46	47	61	51
3	20	7.9	10	3.9	1.6	1.1	5.0	6.5	55	57	57	46
4	25	7.3	8.8	1.6	1.6	1.1	4.7	6.0	71	59	38	1
5	21	6.4	9.1	32	1.6	1.1	4.4	7.0	83	57	44	30
6	21	5.9	7.5	20	1.6	1.1	4.2	10	83	50	40	27
7	17	5.4	6.4	15	1.5	1.1	4.1	13	93	48	40	32
8	14	6.6	6.2	10	1.5	1.0	4.0	15	110	53	40	41
9	12	10	5.7	7.9	1.5	1.0	4.5	20	114	69	49	47
10	12	8.8	5.4	6.4	1.5	1.0	5.0	28	113	80	55	52
11	11	13	5.0	5.9	1.5	1.0	6.0	30	114	90	51	62
12	9.9	16	4.7	5.2	1.5	1.0	7.0	28	113	82	46	62
13	9.9	12	4.4	4.5	1.5	1.1	8.0	29	118	61	49	69
14	9.6	9.3	4.2	4.4	1.4	1.2	7.5	28	123	47	62	47
15	9.1	7.7	4.2	3.8	1.4	1.4	7.0	26	99	42	71	35
16	8.6	7.0	4.5	3.5	1.3	1.7	6.5	27	91	42	62	28
17	7.5	6.2	4.1	3.8	1.3	2.1	7.0	25	95	45	55	39
18	7.7	16	4.5	3.4	1.3	2.6	7.5	28	101	51	50	61
19	7.7	24	4.1	3.1	1.3	2.5	32	104	62	50	61	61
20	8.3	28	3.5	2.9	1.2	2.4	6.8	34	97	69	51	50
21	7.7	21	3.1	2.5	1.2	2.3	6.6	38	78	67	65	42
22	7.3	17	3.2	2.3	1.2	2.2	9.0	44	69	67	64	71
23	7.9	13	3.8	2.1	1.2	2.1	12	50	68	72	67	107
24	14	10	3.7	1.9	1.2	2.1	15	66	74	82	68	72
25	19	9.3	3.5	1.8	1.2	2.5	13	61	60	90	66	71
26	17	8.8	3.2	1.7	1.2	3.0	11	59	50	69	57	45
27	12	9.1	3.8	1.7	1.2	3.5	10	51	42	66	47	37
28	13	7.9	3.8	1.7	1.1	4.0	9.5	39	36	62	40	36
29	8.3	12	3.2	1.7	1.0	5.0	5.4	34	59	35	49	36
30	15	7.7	2.8	1.7	-----	6.0	8.5	50	34	62	34	86
31	12	-----	3.5	1.7	-----	6.5	-----	39	-----	63	36	-----
TOTAL	421.2	329.8	153.7	178.5	38.8	66.9	221.3	950.5	2,405	1,908	1,627	1,556
MEAN	13.6	11.0	4.96	5.76	1.39	2.16	7.38	30.7	80.2	61.5	52.5	51.9
MAX	27	28	10	32	1.6	3.5	15	66	123	90	71	107
MIN	7.3	5.4	2.8	1.7	1.1	1.0	4.0	6.0	34	38	34	27
CFSM	5.76	4.66	2.10	2.44	.59	.92	3.13	13.0	34.0	26.1	22.2	22.0
IN.	6.64	5.20	2.42	2.81	.61	1.05	3.49	14.98	37.91	30.08	25.65	24.53
AC-FT	835	654	305	354	77	133	439	1,890	4,770	3,780	3,230	3,090

CAL YR 1968 TOTAL 9,181.9 MEAN 25.1 MAX 126 MIN 1.8 CFSM 10.6 IN 144.73 AC-FT 18,210
WTR YR 1969 TOTAL 9,856.7 MEAN 27.0 MAX 123 MIN 1.0 CFSM 11.4 IN 155.37 AC-FT 19,550

NOTE:---NO GAGE-HEIGHT RECORD JAN. 26 TO MAY 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	15	4.2	2.0	3.0	1.6	1.3	1.7	32	36	55	66
2	42	16	4.2	1.9	2.5	1.5	1.4	1.8	52	39	59	56
3	30	24	4.0	1.8	3.2	1.5	1.3	2.2	73	62	62	74
4	24	34	4.2	1.7	3.0	1.5	1.4	3.8	81	88	80	58
5	22	29	4.0	1.7	2.5	1.4	1.7	7.1	73	87	85	48
6	24	19	3.6	1.6	2.2	1.5	2.0	7.3	78	76	75	74
7	33	15	3.4	1.5	2.0	2.1	2.4	6.4	86	75	68	109
8	43	14	3.3	1.5	1.9	2.0	2.3	6.6	73	87	60	64
9	28	12	3.3	1.6	1.8	1.8	3.2	7.1	90	68	50	40
10	21	11	3.2	1.7	1.6	1.7	3.8	6.2	52	85	52	32
11	18	10	3.9	2.0	1.5	1.6	3.3	5.4	40	78	59	28
12	15	12	5.1	2.0	1.5	1.6	2.6	4.7	34	71	66	21
13	13	12	5.4	2.0	1.6	1.6	2.3	4.4	36	66	71	18
14	11	12	5.8	2.8	1.7	1.6	2.0	3.8	38	64	65	18
15	10	19	5.2	2.6	1.8	1.6	1.8	3.9	42	73	68	18
16	8.5	16	4.2	2.4	1.9	1.7	1.7	11	43	90	68	20
17	8.0	12	3.8	2.3	2.2	1.7	1.5	26	52	87	60	75
18	7.8	9.0	3.6	3.4	2.2	1.6	1.5	20	65	86	54	100
19	7.3	7.8	3.3	3.6	2.0	1.5	1.5	18	89	89	54	55
20	7.5	7.5	3.2	3.3	1.8	1.4	1.6	17	80	66	58	38
21	12	8.0	3.2	3.3	1.7	1.4	1.5	17	103	78	64	30
22	19	7.3	3.4	3.4	1.6	1.4	1.4	20	106	64	72	56
23	21	8.2	4.4	3.4	1.5	1.4	1.4	18	91	58	79	47
24	15	7.8	4.4	3.6	1.5	1.6	2.0	22	56	81	56	26
25	11	6.4	3.6	3.4	1.4	1.5	3.2	28	77	67	74	21
26	9.4	5.6	3.2	3.4	1.4	1.5	2.5	34	89	93	65	30
27	8.2	5.1	2.8	3.8	1.5	1.4	2.3	24	88	94	62	40
28	8.0	4.7	2.5	3.6	1.6	1.5	2.0	18	71	72	62	42
29	7.8	4.5	2.3	2.8	1.5	1.5	1.8	16	52	57	49	41
30	7.8	4.4	2.2	2.3	-----	1.4	1.7	14	41	53	55	34
31	12	-----	2.1	2.5	-----	1.4	-----	16	-----	50	64	-----
TOTAL	568.3	368.3	115.0	79.9	54.1	48.5	60.4	391.4	1,966	2,257	1,999	1,379
MEAN	18.3	12.3	3.71	2.58	1.93	1.56	2.01	12.6	65.5	72.8	64.5	46.0
MAX	64	34	5.8	4.4	3.2	2.1	3.8	34	106	94	88	109
MIN	7.3	4.4	2.1	1.5	1.4	1.4	1.3	1.7	32	36	49	18
CFSM	7.75	5.21	1.57	1.09	.82	.66	.85	5.34	27.8	30.8	27.3	19.5
IN.	8.96	5.81	1.81	1.26	.85	.76	.95	6.17	30.99	35.58	31.51	21.74
AC-FT	1,130	731	228	158	107	96	120	776	3,900	4,480	3,970	2,740

CAL YR 1969 TOTAL 10,003.6 MEAN 27.4 MAX 123 MIN 1.0 CFSM 11.6 IN 157.68 AC-FT 19,840
WTR YR 1970 TOTAL 9,286.9 MEAN 25.4 MAX 109 MIN 1.3 CFSM 10.8 IN 146.39 AC-FT 18,420

12181200 SALIX CREEK AT SOUTH CASCADE GLACIER, NEAR MARBLEMOUNT, WASH.

LOCATION.--Lat 48°22'16", long 121°04'35", in SEk sec.2, T.33 N., R.13 E. (unsurveyed), Skagit County, Mount Baker National Forest, on left bank 900 ft west of South Cascade Lake, 0.5 mile upstream from mouth, and 21 miles southeast of Marblemount.

DRAINAGE AREA.--0.078 sq mi.

PERIOD OF RECORD.--June to November 1961, May 1962 to January 1964 (fragmentary), May 1964 to November 1965, March 1966 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 5,200 ft (from topographic map).

AVERAGE DISCHARGE.--5 years (1964-65, 1966-70), 0.59 cfs (102.72 inches per year, 427 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for October to November 1965, March 1966 to September 1970 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	July 12, 1966		9.1	1.68	Many days		.03	a.18
1967	Oct. 23, 1966		10	1.75	Several days		.03	b.18
1968	Oct. 27, 1967		19	2.27	Dec. 19, 20, 1967		c.03	-
1969	June 13, 1969		7.4	1.57	Many days		c.04	-
1970	June 1, 1970		6.8	1.52	Aug. 29, 30, 1970		.02	.17

a Occurred Sept. 9, 22, 1966.

b Occurred Sept. 26-29, 1967.

c Minimum daily.

Period of record: Maximum discharge recorded, 29 cfs Feb. 3, 1963 (gage height, 3.43 ft), from rating curve extended above 9 cfs; minimum discharge, 0.02 cfs between Aug. 24 and 29, 1961, Aug. 29, 30, 1970.

CORRECTIONS.--In WSP 1932, days of zero discharge represent flows between 0.02 and 0.05 cfs.

REMARKS.--Records good except those for winter periods, which are fair. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER TO NOVEMBER 1965, MARCH TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.23					.52	.19	.96	1.5	.22	.06
2	.06	1.3					.29	.65	1.0	1.6	.20	.06
3	.05	1.3					.26	1.6	.77	1.6	.18	.05
4	.08	1.3					.24	2.0	.62	1.8	.16	.04
5	.95	.63					.19	3.4	1.3	1.5	.15	.04
6	2.6	.52					.18	3.8	2.6	1.6	.14	.04
7	.33	.87					.20	2.3	2.8	1.8	.12	.04
8	.26	1.1					.29	2.8	3.0	1.7	.12	.04
9	.28	.63					.39	2.3	2.6	1.6	.11	.03
10	.18	.43					.41	1.6	3.2	1.3	.12	.03
11	.16	.37					.31	1.1	1.6	1.2	.10	.06
12	.18	.31					.23	1.2	1.3	1.4	.09	.07
13	.16	.33					.19	1.0	1.8	1.6	.20	.06
14	.41	.94					.14	.71	2.6	1.1	.12	.04
15	.41	1.7					.14	.54	3.9	.96	.09	.04
16	.31	.66					.15	.45	4.6	.86	.08	.04
17	.43	.43					.18	.39	3.0	.65	.08	.04
18	.30	.39					.18	.47	2.8	.60	.07	.13
19	.26	.35					.18	.83	2.8	.50	.06	.07
20	1.1	.35					.18	1.6	1.8	.43	.06	.04
21	.68	.28					.18	1.4	1.6	.37	.06	.04
22	.43	.25					.18	.83	1.9	.35	.05	.04
23	.31	.25					.12	.60	1.4	.31	.04	.07
24	.25	.25					.12	.70	1.1	.50	.04	.05
25	.22	.20					.14	2.2	1.1	.47	.05	.04
26	.19	.20					.15	2.9	1.5	.37	.06	.06
27	.20	.20					.14	2.0	2.2	.31	.13	.07
28	.22	.20				.06	.14	1.9	3.6	.28	.08	.05
29	.57	.20			-----	.14	.13	2.2	1.6	.26	.06	.04
30	.50	.20			-----	.53	.14	1.6	1.6	.24	.14	.03
31	.28	-----			-----	.83	-----	1.1	-----	.23	.08	-----
TOTAL	12.42	16.37					6.29	46.36	62.65	28.99	3.26	1.51
MEAN	.40	.55					.21	1.50	2.09	.94	.11	.050
MAX	2.6	1.7					.52	3.8	4.6	1.8	.22	.13
MIN	.05	.20					.12	.19	.62	.23	.04	.03
CFSM	5.13	7.05					2.69	19.2	26.8	12.1	1.41	.64
IN.	5.92	7.81					3.00	22.11	29.88	13.83	1.55	.72
AC-FT	25	32					12	92	124	58	6.5	3.0

NOTE.--NO GAGE-HEIGHT RECORD NOV. 22 TO MAR. 27.

12181200 SALIX CREEK AT SOUTH CASCADE GLACIER, NEAR MARBLEMOUNT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.49	.39	.74	.08	.07	.04	.03	.04	2.4	3.0	.43	.08
2	.31	.33	.35	.08	.07	.04	.03	.04	2.4	3.7	.37	.23
3	.10	.24	.24	.10	.07	.04	.03	.16	2.1	3.7	.35	.08
4	.07	.24	.20	.09	.06	.04	.04	.35	2.0	3.0	.35	.06
5	.06	.26	.19	.08	.06	.04	.06	.47	2.4	2.6	.29	.06
6	.06	.24	.16	.07	.06	.04	.06	.54	2.6	2.0	.31	.10
7	.27	.23	.15	.06	.06	.04	.05	.74	2.3	2.0	.37	.07
8	.64	.20	.13	.06	.06	.04	.05	.80	1.7	2.5	.26	.06
9	.14	.19	.12	.06	.04	.05	.05	.54	1.6	1.7	.24	.08
10	.10	.19	.12	.06	.05	.04	.05	.52	1.5	1.9	.22	1.4
11	.12	.18	.15	.07	.04	.04	.05	.41	1.6	2.8	.19	1.4
12	.11	.16	.23	.08	.04	.04	.05	.31	1.9	2.9	.18	.39
13	.08	.19	2.1	.07	.04	.04	.05	.24	2.4	2.8	.15	.18
14	.07	.28	.54	.07	.04	.04	.05	.23	2.9	2.2	.13	.11
15	.06	.22	1.6	.07	.04	.04	.05	.46	3.1	2.0	.12	.08
16	.06	.19	3.5	.07	.04	.04	.05	1.0	3.6	1.9	.10	.06
17	.08	.16	1.8	.07	.04	.04	.05	1.4	4.2	1.8	.09	.06
18	.10	.18	1.4	.06	.04	.04	.04	1.2	4.6	1.5	.09	.06
19	3.1	.39	.86	.04	.04	.04	.04	1.2	5.2	1.2	.08	.05
20	.45	.43	.47	.06	.04	.04	.04	1.8	5.2	1.3	.08	.04
21	.28	.26	.33	.06	.04	.04	.04	2.4	4.0	1.2	.12	.05
22	.82	.22	.23	.06	.04	.04	.04	2.2	3.5	1.0	.08	.06
23	5.5	.18	.18	.06	.04	.08	.04	1.7	3.2	1.2	.08	.04
24	1.0	.16	.16	.06	.04	.09	.04	.92	3.6	1.0	.07	.04
25	.80	.19	.14	.06	.04	.07	.04	.62	3.8	1.0	.06	.04
26	1.1	.18	.13	.06	.04	.05	.04	.74	3.5	.83	.06	.03
27	.62	.15	.12	.06	.04	.04	.04	1.2	2.9	.80	.06	.03
28	.39	.23	.11	.08	.04	.04	.04	1.6	2.6	.65	.05	.03
29	1.3	.13	.10	.04	-----	.04	.04	1.7	3.2	.70	.04	.05
30	.65	.86	.10	.08	-----	.04	.04	1.0	2.5	.50	.04	.24
31	.45	-----	.09	.07	-----	.03	-----	.83	-----	.47	.04	-----
TOTAL	19.38	7.60	16.74	2.15	1.36	1.36	1.32	27.36	88.5	55.75	5.08	5.26
MEAN	.63	.25	.34	.069	.048	.044	.044	.88	2.95	1.80	.16	.18
MAX	5.5	.86	3.5	.10	.07	.09	.06	2.4	5.2	3.7	.43	1.4
MIN	.06	.13	.09	.06	.04	.03	.03	.04	1.5	.47	.04	.03
CFSM	8.08	3.21	6.92	.88	.62	.56	.56	11.3	37.8	23.1	2.05	2.31
IN-	9.24	3.62	7.98	1.03	.64	.65	.63	13.05	42.21	26.59	2.42	2.51
AC-FT	38	15	33	4.3	2.7	2.7	2.6	54	176	111	10	10
MTR YR 1967	TOTAL	231.84	MEAN .64	MAX 5.5	MIN .03	CFSM 8.21	IN 110.57	AC-FT 460				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.55	.99	.06	.06	.15	.42	.15	.66	5.4	2.0	.23	.22
2	.46	.76	.06	.06	.17	.50	.15	.46	7.1	2.0	.22	.22
3	.72	.05	.05	.05	.25	.48	.15	.53	2.9	2.4	.20	.16
4	.40	.29	.05	.05	.40	1.0	.14	.73	2.2	2.4	.19	.14
5	.42	.26	.05	.05	.25	1.3	.14	.55	2.3	2.0	.19	.12
6	.66	.20	.04	.05	.20	.57	.13	.44	2.2	1.8	.16	.11
7	1.4	.29	.04	.05	.15	.34	.13	.40	1.9	1.5	.14	.10
8	.36	.85	.04	.04	.12	.28	.13	.42	1.9	1.5	.13	.09
9	.20	.48	.04	.04	.10	.22	.12	.82	2.2	1.3	.12	.09
10	1.0	.44	.10	.04	.10	.20	.16	1.3	1.9	1.2	.11	.08
11	1.7	.33	.08	.04	.05	.18	.30	1.7	1.7	1.1	.10	.10
12	.85	.38	.06	.05	.09	.16	.20	1.5	1.4	2.6	.10	.10
13	.85	1.0	.05	.07	.08	.15	.15	.92	1.2	1.2	.09	.09
14	.60	1.8	.04	.10	.08	.14	.15	.69	1.3	1.1	.33	1.4
15	.55	.63	.04	.20	.08	.14	.16	.55	1.5	.82	.40	2.0
16	.63	.40	.04	.15	.08	.14	.15	.92	1.8	.73	.20	.95
17	.48	.29	.04	.10	.07	.13	.14	1.4	2.3	.60	.26	1.9
18	.84	.24	.04	.10	.15	.12	.14	2.3	2.6	.50	.38	.99
19	.60	.18	.03	.50	1.2	.12	.14	3.9	2.8	.63	.26	.50
20	.55	.16	.03	2.7	.57	.11	.14	3.6	2.2	.73	.33	.38
21	2.2	.13	.04	2.1	.29	.11	.13	1.9	1.7	.50	.22	.33
22	.64	.82	.85	.36	.23	.10	.13	1.6	2.6	.42	.16	.42
23	.46	.10	.10	.23	.46	.10	.16	1.5	2.6	.36	.36	.42
24	.36	.08	.20	1.2	.38	.10	.15	1.5	2.9	.33	.38	.29
25	.50	.09	.14	.48	.23	.10	.15	1.6	3.6	.33	.97	.24
26	.36	.08	.12	.25	.19	.10	.15	1.5	4.3	.33	.69	.22
27	7.1	.06	.10	.20	.18	.14	.16	1.2	2.8	.33	.89	.20
28	1.4	.06	.09	.15	.24	.20	.27	1.2	1.5	.31	.33	.18
29	.63	.06	.08	.14	.33	.35	.66	1.2	1.0	.31	.23	.16
30	2.5	.06	.07	.13	-----	.20	.89	1.0	1.2	.29	.19	.15
31	3.8	-----	.07	.13	-----	.16	-----	1.2	-----	.26	.16	-----
TOTAL	33.79	11.59	2.04	9.87	6.91	8.36	5.92	39.19	73.0	31.88	8.72	12.35
MEAN	1.09	.39	.066	.32	.24	.27	.20	1.26	2.43	1.03	.28	.41
MAX	7.1	1.8	.20	2.7	1.2	1.3	.89	3.9	7.1	2.6	.97	2.0
MIN	.20	.06	.03	.04	.07	.10	.12	.40	1.0	.26	.09	.08
CFSM	14.0	5.00	.85	4.10	3.08	3.46	2.56	16.2	31.2	13.2	3.59	5.26
IN-	16.12	5.53	.97	4.71	3.30	3.99	2.82	18.49	34.82	15.20	4.16	5.89
AC-FT	87	23	4.0	20	14	17	12	78	165	63	17	24
CAL YR 1967	TOTAL	235.54	MEAN .65	MAX 7.1	MIN .03	CFSM 8.33	IN 112.33	AC-FT 467				
MTR YR 1968	TOTAL	243.62	MEAN .67	MAX 7.1	MIN .03	CFSM 8.59	IN 116.19	AC-FT 483				

NOTE.--NO GAGE-HEIGHT RECORD DEC. 13 TO JAN. 18.

12181200 SALIX CREEK AT SOUTH CASCADE GLACIER, NEAR MARBLEMOUNT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.26	.15	.08	.06	.04	.16	.26	2.1	.61	.11	.04
2	.12	.33	.14	.10	.06	.04	.14	.23	2.7	.63	.11	.15
3	.11	.32	.13	.09	.06	.04	.13	.22	3.1	.73	.10	.21
4	.93	.26	.13	1.5	.06	.04	.12	.20	3.6	.72	.12	.26
5	.52	.22	.12	3.9	.06	.04	.10	.29	3.4	.63	.23	.13
6	.75	.18	.11	1.1	.06	.04	.09	.70	3.0	.59	.14	.08
7	.38	.16	.11	.44	.06	.04	.09	1.5	3.6	.46	.12	.06
8	.31	.71	.11	.28	.06	.04	.09	2.5	4.0	.50	.10	.05
9	.27	.54	.10	.23	.06	.04	.12	2.7	3.2	.53	.09	.05
10	.25	.31	.10	.19	.06	.04	.18	2.6	2.9	.53	.08	.04
11	.19	1.7	.09	.18	.06	.04	.19	2.1	2.7	.76	.08	.04
12	.27	.57	.09	.15	.06	.04	.26	2.2	2.4	.82	.08	.04
13	.22	.36	.08	.14	.05	.04	.44	2.3	3.2	.48	.08	.36
14	.20	.28	.08	.13	.05	.04	.38	2.1	2.3	.38	.07	.21
15	.19	.24	.08	.13	.05	.04	.31	1.8	1.9	.34	.07	.12
16	.18	.20	.08	.12	.05	.04	.28	1.6	1.9	.31	.06	.10
17	.26	.20	.08	.12	.05	.06	.28	1.5	1.8	.29	.06	.35
18	.38	1.6	.08	.11	.05	.08	.28	1.9	1.7	.26	.06	.57
19	.40	1.3	.07	.11	.05	.08	.26	2.0	1.4	.25	.07	.78
20	.41	2.0	.07	.11	.05	.07	.23	2.2	1.1	.24	.08	.38
21	.26	.76	.07	.11	.04	.07	.23	2.6	.94	.22	.08	.24
22	.22	.43	.06	.10	.04	.07	.63	3.2	.79	.22	.06	2.0
23	1.0	.38	.06	.09	.04	.07	1.6	3.3	1.1	.22	.05	2.1
24	1.2	.33	.07	.08	.04	.07	.91	3.5	1.1	.21	.05	1.5
25	1.8	.26	.08	.08	.04	.07	.53	2.1	.94	.24	.05	1.0
26	.65	.22	.07	.08	.04	.08	.38	2.2	.96	.19	.04	.45
27	.59	.20	.07	.07	.04	.09	.34	1.5	.90	.18	.06	.35
28	1.1	.18	.06	.07	.04	.11	.38	.95	.66	.16	.08	.40
29	1.0	.18	.06	.07	-----	.13	.36	3.3	.70	.14	.05	1.9
30	.63	.16	.06	.06	-----	.14	.31	1.8	.59	.15	.04	2.7
31	.40	-----	.06	.06	-----	.16	-----	1.5	-----	.12	.04	-----
TOTAL	14.92	14.84	2.72	10.08	1.44	1.99	9.80	56.85	60.68	12.09	2.51	16.66
MEAN	.48	.49	.088	.33	.051	.064	.33	1.83	2.02	.39	.081	.56
MAX	1.8	2.0	.15	3.9	.06	.16	1.6	3.5	4.0	.82	.23	2.7
MIN	.11	.16	.06	.06	.04	.04	.09	.20	.59	.12	.04	.04
CFSM	6.15	6.8	1.13	4.3	.62	.12	4.13	25.3	25.9	9.02	1.04	7.18
IN-	7.12	7.08	1.30	4.81	.69	.95	4.67	27.11	28.94	9.77	1.20	7.95
AC-FT	30	29	5.4	20	2.9	3.9	19	113	120	24	5.0	33

CAL YR 1968 TOTAL 228.68 MEAN .62 MAX 7.1 MIN .04 CFSM 7.95 IN 109.06 AC-FT 494
WTR YR 1969 TOTAL 204.58 MEAN .56 MAX 4.0 MIN .04 CFSM 7.18 IN 97.57 AC-FT 406

NOTE.--NO GAGE-HEIGHT RECORD JAN. 23 TO MAR. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	.13	.15	.06	.03	.13	.04	.06	4.2	.73	.14	.06
2	1.0	.13	.15	.06	.03	.12	.04	.29	4.2	1.3	.19	.04
3	.89	.24	.15	.06	.03	.11	.04	.63	4.9	1.6	.11	.23
4	.66	1.4	.15	.06	.03	.10	.06	.96	3.8	1.3	.10	.13
5	.57	.44	.14	.05	.03	.08	.04	.92	3.4	.98	.09	.12
6	.42	.26	.13	.04	.03	.11	.04	.60	3.9	.82	.08	.79
7	.66	.22	.13	.04	.03	.22	.04	.53	2.9	.76	.10	1.0
8	.95	.20	.12	.04	.03	.14	.04	.63	2.4	.71	.11	.42
9	.40	.19	.04	.04	.03	.11	.06	.88	2.1	.98	.08	.19
10	.53	.19	.11	.04	.06	.10	.15	.37	1.2	.50	.07	.11
11	.50	.33	.10	.04	.08	.08	.11	.29	.96	.42	.06	.07
12	.42	.44	.10	.04	.10	.08	.08	.28	1.6	.37	.06	.06
13	.34	.33	.16	.04	.16	.08	.06	.23	2.0	.33	.07	.09
14	.31	.42	.26	.04	.15	.06	.06	.22	2.0	.29	.09	.04
15	.24	.48	.16	.04	.12	.06	.06	.69	1.9	.30	.05	.04
16	.22	.36	.13	.04	.10	.06	.06	1.9	1.8	.26	.05	.04
17	.19	.28	.11	.04	.08	.06	.06	2.7	2.9	.22	.05	2.0
18	.16	.23	.10	.04	.08	.06	.08	1.4	3.2	.20	.04	.64
19	.16	.22	.10	.04	.06	.06	.08	1.4	3.6	.19	.04	.38
20	.19	.29	.08	.06	.06	.06	.06	1.3	3.6	.18	.04	.22
21	.16	.29	.08	.08	.06	.06	.06	1.5	3.8	.15	.04	.17
22	.18	.22	.08	.10	.07	.06	.06	1.5	2.8	.14	.03	1.9
23	.18	.20	.08	.11	.08	.06	.04	1.6	2.4	.13	.03	.44
24	.15	.26	.08	.08	.06	.06	.06	1.9	2.0	.12	.04	.21
25	.12	.19	.08	.06	.10	.06	.04	2.6	2.2	.21	.04	.19
26	.11	.16	.07	.06	.11	.06	.04	2.0	2.1	.53	.04	.12
27	.12	.15	.06	.04	.14	.06	.04	1.1	1.6	.39	.03	.10
28	.12	.15	.06	.04	.14	.06	.04	.74	.95	.19	.03	.09
29	.14	.14	.06	.04	-----	.06	.04	.59	.68	.26	.03	.09
30	.13	.15	.06	.04	-----	.04	.04	.77	.56	.27	.03	.09
31	.19	-----	.06	.04	-----	.04	-----	1.4	-----	.17	.03	-----
TOTAL	12.21	8.72	3.41	1.60	2.11	2.48	1.69	31.71	74.85	14.62	1.93	9.59
MEAN	.39	.29	.11	.052	.075	.080	.056	1.02	2.50	.47	.062	.32
MAX	1.6	1.4	.26	.11	.16	.22	.18	2.7	4.9	1.6	.19	2.0
MIN	.11	.13	.06	.04	.03	.04	.04	.06	.56	.12	.03	.04
CFSM	5.00	3.72	1.41	.67	.96	1.03	.72	13.1	32.1	6.03	.79	4.10
IN-	9.82	4.16	1.63	.76	1.01	1.18	.81	15.12	35.70	6.97	.92	4.97
AC-FT	24	17	6.8	3.2	4.2	4.9	3.4	63	148	29	3.8	19

CAL YR 1969 TOTAL 196.44 MEAN .54 MAX 4.0 MIN .04 CFSM 6.92 IN 93.69 AC-FT 390
WTR YR 1970 TOTAL 164.92 MEAN .45 MAX 4.9 MIN .03 CFSM 5.77 IN 78.65 AC-FT 327

12182500 CASCADE RIVER AT MARBLEMOUNT, WASH.

LOCATION (REVISED).--Lat 48°31'26", long 121°22'58", in N $\frac{1}{2}$ sec.16, T.35 N., R.11 E., Skagit County, on right bank 1.1 miles downstream from Boulder Creek, 2.2 miles east of Marblemount, and at mile 2.9.

DRAINAGE AREA.--168 sq mi.

PERIOD OF RECORD.--September 1928 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 380.3 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--42 years, 1,024 cfs (82.77 inches per year, 741,900 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (3,600 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1900	*3,670	5.96	Oct. 31, 1967	1630	7,050	7.68	Jan. 5, 1969	0530	*5,080	6.78
				Dec. 25, 1967	1400	3,860	6.09	May 24, 1969	0030	3,990	6.16
Oct. 23, 1966	2230	4,000	6.17	Jan. 20, 1968	2130	6,380	7.41	June 4, 1969	2330	4,240	6.31
Dec. 15, 1966	1100	3,950	6.14	Jan. 24, 1968	1130	4,070	6.22				
Dec. 16, 1966	0700	*6,220	7.35	May 20, 1968	1200	3,760	6.03	June 3, 1970	2230	*4,750	6.63
June 20, 1967	0100	4,990	6.73	June 2, 1968	1530	8,150	8.05	June 21, 1970	2200	3,640	5.97
				June 26, 1968	2130	4,340	6.38				
Oct. 27, 1967	2115	*10,200	8.72	Sept. 17, 1968	1130	4,290	6.35				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Mar. 7, 8, 1966	237	1.71	1969	Feb. 28, Mar. 1, 2, 1969	227	1.67
1967	Oct. 19, 1966	220	1.64	1970	Jan. 13, 1970	242	1.76
1968	Dec. 21, 1967	364	2.18				

Period of record: Maximum discharge, 18,700 cfs Nov. 20, 1962, from rating curve extended above 5,600 cfs; maximum gage height, 11.47 ft Nov. 27, 1949; minimum discharge, 118 cfs Nov. 30, 1952; minimum gage height, 1.11 ft Feb. 8, 1937.

Flood in about 1815 reached a stage of approximately 22 ft (discharge, 46,000 cfs). Records for other floods prior to establishment of station are given in WSP 1527.

REMARKS.--Records excellent. No regulation or diversion above station. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 832: 1936. WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	310	428	508	282	385	288	1,410	610	1,150	1,400	1,210	436
2	295	775	650	285	360	271	1,260	809	1,180	1,480	1,220	456
3	285	808	700	271	344	260	1,080	1,330	1,100	1,620	1,270	444
4	290	1,510	1,420	266	360	255	988	1,790	981	1,750	1,240	480
5	510	1,180	918	266	360	250	1,020	2,500	1,060	1,900	1,080	527
6	1,690	862	1,050	344	354	247	1,140	3,430	1,760	1,720	1,030	565
7	796	710	1,050	460	350	242	1,250	2,760	2,280	1,850	1,070	480
8	635	700	889	620	347	271	1,410	2,520	2,340	2,070	1,040	476
9	690	660	745	334	492	334	1,390	2,680	2,310	1,120	930	500
10	518	558	665	464	318	452	1,370	2,120	2,280	2,020	894	500
11	448	509	600	460	318	399	1,390	1,550	2,150	1,900	845	500
12	420	460	540	488	303	385	1,150	1,460	1,680	1,860	765	518
13	440	424	460	1,000	288	522	942	1,320	1,520	2,790	1,070	509
14	424	584	440	1,160	282	635	981	1,120	1,660	2,240	981	545
15	522	1,390	413	862	268	665	1,010	974	2,140	2,180	884	522
16	420	1,180	385	715	263	605	988	1,000	2,890	2,030	845	468
17	416	806	368	620	260	527	900	884	2,960	1,780	765	432
18	399	660	368	554	257	492	828	856	2,330	1,650	720	640
19	432	740	416	500	255	464	760	942	2,280	1,520	695	500
20	522	823	460	460	260	436	710	1,150	1,930	1,360	645	456
21	600	900	444	428	266	399	680	1,400	1,570	1,320	640	488
22	545	900	399	399	282	374	650	1,190	1,470	1,360	640	590
23	504	735	374	392	303	354	625	981	1,470	1,380	680	775
24	452	640	354	360	312	350	620	954	1,420	1,430	770	572
25	416	576	334	340	300	385	675	1,530	1,220	1,440	823	480
26	416	518	318	328	312	480	655	2,390	1,300	1,250	740	436
27	388	484	318	334	315	600	605	2,160	1,500	1,250	770	428
28	424	452	324	331	300	740	590	1,650	2,760	1,320	710	440
29	475	428	312	360	-----	1,070	590	1,640	2,060	1,400	572	496
30	823	410	294	388	-----	1,800	590	1,610	1,520	1,390	545	444
31	492	-----	285	399	-----	1,780	-----	1,290	-----	1,280	460	-----
TOTAL	15,997	21,810	16,821	14,672	8,636	16,490	28,237	48,600	54,271	52,060	26,549	15,083
MEAN	516	727	543	475	308	532	941	1,568	1,699	1,679	956	503
MAX	1,690	1,510	1,420	1,160	385	1,800	1,410	3,430	2,960	2,790	1,270	775
MIN	285	410	285	266	255	242	590	610	981	1,250	460	428
CFSM	3.07	4.33	3.23	2.82	1.83	3.17	5.40	9.33	10.8	9.99	5.10	2.99
IN.	3.54	4.83	3.72	3.25	1.91	3.65	6.25	10.76	12.02	11.53	5.88	3.34
AC-FT	31,730	43,260	33,360	29,100	17,130	32,710	56,010	96,400	107,600	103,300	52,660	29,920
CAL YR 1965	TOTAL 356,458	MEAN 977	MAX 3,020	MIN 285	CFSM 5.82	IN 78.93	AC-FT 707,000					
WTR YR 1966	TOTAL 319,226	MEAN 875	MAX 3,430	MIN 242	CFSM 5.21	IN 70.69	AC-FT 633,200					

12182500 CASCADE RIVER AT MARBLEMOUNT, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	538	790	1,660	620	872	522	420	500	2,160	2,400	1,180	845
2	752	690	1,290	600	823	484	420	560	3,010	2,800	1,110	1,220
3	440	615	1,030	680	1,070	444	452	660	2,800	3,070	1,160	806
4	410	554	872	660	1,570	420	488	800	2,650	2,860	1,210	735
5	402	581	785	630	1,260	413	460	970	2,800	2,510	1,140	720
6	385	527	720	590	1,020	413	452	1,200	3,030	2,200	1,100	745
7	492	480	660	570	872	402	472	1,400	2,850	1,930	1,280	610
8	714	436	605	600	785	420	480	1,700	2,370	2,070	1,080	586
9	440	436	550	660	730	416	456	1,600	2,110	1,830	1,160	625
10	371	428	590	800	700	388	440	1,400	2,050	1,630	1,240	916
11	357	399	823	1,000	665	371	436	1,200	1,980	1,990	1,240	1,500
12	318	480	1,190	900	660	350	448	1,100	2,150	2,440	1,240	889
13	291	532	3,240	800	690	344	444	1,020	2,420	2,380	1,200	625
14	266	790	2,350	880	615	328	420	1,100	2,890	2,140	1,180	536
15	252	780	2,360	1,500	576	334	399	1,400	3,160	1,920	1,230	550
16	237	685	4,580	1,300	550	416	385	1,600	3,430	1,930	1,180	625
17	232	590	3,250	960	558	472	382	1,960	3,780	1,920	1,060	640
18	224	572	2,880	820	563	452	382	1,920	4,050	1,720	1,030	610
19	742	625	2,740	1,030	509	420	385	2,070	4,320	1,520	960	620
20	1,180	665	2,410	1,160	472	406	406	2,510	4,660	1,490	900	670
21	695	635	1,770	960	456	402	420	3,020	4,480	1,620	988	740
22	780	572	1,400	840	428	598	416	2,980	3,810	1,500	900	790
23	2,690	540	1,100	740	416	1,140	413	2,580	3,350	1,560	845	572
24	2,470	518	1,000	665	413	924	420	1,910	3,220	1,680	730	540
25	1,620	948	880	605	420	755	444	1,530	3,440	1,700	665	518
26	1,670	790	800	568	410	655	436	1,450	3,420	1,670	650	492
27	1,320	790	750	640	396	590	424	1,570	3,100	1,520	675	540
28	906	960	700	1,290	460	545	430	1,810	2,750	1,420	690	540
29	1,590	960	670	1,380	-----	514	450	2,080	2,700	1,320	775	496
30	1,410	1,410	650	1,330	-----	468	470	1,770	2,590	1,280	845	527
31	942	-----	630	1,030	-----	444	-----	1,530	-----	1,200	878	-----
TOTAL	25,136	19,778	44,935	26,808	18,959	15,250	12,950	48,900	91,530	59,220	31,521	20,828
MEAN	811	659	1,450	865	677	492	432	1,577	3,051	1,910	1,017	694
MAX	2,690	1,410	4,580	1,500	1,570	1,140	488	3,020	4,660	3,070	1,280	1,500
MIN	224	309	550	568	396	328	382	500	1,980	1,200	650	492
CFSM	4.83	3.92	8.63	5.15	4.03	2.93	2.57	9.39	18.2	11.4	6.05	4.13
IN-	5.57	4.38	9.95	5.94	4.20	3.38	2.87	10.83	20.27	13.11	6.98	4.61
AC-FT	49,860	39,230	89,130	53,170	37,610	30,250	25,690	96,990	181,500	117,500	62,520	41,310

CAL YR 1966 TOTAL 354,447 MEAN 971 MAX 4,580 MIN 224 CFSM 5.78 IN 78.48 AC-FT 703,000
WTR YR 1967 TOTAL 415,815 MEAN 1,139 MAX 4,660 MIN 224 CFSM 6.78 IN 92.07 AC-FT 824,800

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	685	2,980	448	889	765	1,200	645	1,040	3,500	1,510	1,260	862
2	750	1,920	496	770	872	1,220	670	862	7,050	2,070	1,250	628
3	635	1,450	527	690	1,220	1,210	645	865	3,870	2,620	1,250	700
4	675	1,160	500	645	2,020	1,520	595	967	2,750	2,840	1,160	655
5	540	970	484	595	1,310	2,390	610	872	2,480	2,790	1,040	685
6	630	890	456	550	1,080	1,790	581	770	2,410	2,680	878	720
7	1,820	940	432	527	936	1,350	568	710	2,290	2,560	801	730
8	1,390	954	404	690	1,112	1,112	727	845	2,120	2,420	770	665
9	840	1,140	518	496	828	948	532	828	1,970	2,560	790	625
10	904	1,540	1,020	464	780	856	590	1,170	2,100	2,250	884	610
11	2,260	1,370	1,130	436	755	785	665	1,500	2,050	2,140	912	615
12	1,850	1,100	785	416	725	760	576	1,580	1,870	2,620	828	660
13	1,410	1,070	635	675	700	715	527	1,220	1,620	2,000	745	545
14	1,630	1,370	563	1,640	660	665	563	1,070	1,390	1,720	818	954
15	1,090	1,370	532	1,760	615	675	576	948	1,350	1,530	1,040	1,570
16	872	1,170	488	1,330	572	700	527	1,030	1,470	1,360	790	1,620
17	745	960	468	1,000	572	655	492	1,380	1,700	1,280	845	3,140
18	790	889	428	906	1,070	605	484	1,900	2,050	1,240	884	2,050
19	828	790	396	2,550	2,070	563	468	2,510	2,540	1,380	725	1,340
20	695	720	378	3,910	1,870	554	444	3,300	2,160	1,700	710	988
21	2,050	670	374	4,580	1,660	532	436	2,530	1,810	1,320	620	806
22	2,070	630	558	2,740	1,590	526	428	1,870	1,820	1,170	563	770
23	1,730	405	1,010	2,220	1,870	527	464	1,710	1,960	1,180	645	1,160
24	1,230	620	2,800	3,390	2,290	550	444	1,550	2,250	1,320	840	834
25	1,390	572	3,370	2,470	1,680	522	448	1,670	2,750	1,410	1,040	745
26	1,060	527	2,850	1,740	1,380	492	460	1,590	3,250	1,510	1,450	705
27	4,370	390	2,300	1,360	1,230	560	446	1,460	3,120	1,670	1,660	670
28	4,180	484	1,920	1,140	1,160	645	610	1,380	2,150	1,660	1,090	590
29	2,220	488	1,460	995	1,160	867	988	1,450	1,600	1,580	850	554
30	2,770	460	1,180	900	-----	760	1,280	1,300	1,340	1,400	780	522
31	4,680	-----	1,000	834	-----	670	-----	1,220	-----	1,280	775	-----
TOTAL	48,789	30,309	30,002	43,094	34,312	26,978	17,274	42,952	70,790	56,890	28,693	28,118
MEAN	1,574	1,010	968	1,390	1,183	870	576	1,386	2,360	1,835	926	937
MAX	4,680	2,980	3,370	4,560	2,290	2,390	1,280	3,300	7,050	2,840	1,660	3,140
MIN	540	460	374	416	572	492	428	710	1,340	1,170	563	522
CFSM	9.37	6.01	5.76	8.27	7.04	5.18	3.43	8.25	14.0	10.9	5.51	5.58
IN-	10.80	6.71	6.64	9.54	7.60	5.97	3.82	9.51	15.67	12.60	6.35	6.23
AC-FT	96,770	60,120	59,510	85,480	68,060	53,510	34,260	85,200	140,400	112,800	56,910	55,770

CAL YR 1967 TOTAL 435,066 MEAN 1,192 MAX 4,680 MIN 328 CFSM 7.10 IN 96.34 AC-FT 863,000
WTR YR 1968 TOTAL 458,201 MEAN 1,252 MAX 7,050 MIN 374 CFSM 7.45 IN 101.46 AC-FT 908,800

12182500 CASCADE RIVER AT MARBLEMOUNT, WASH. -- CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

GAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	496	720	785	340	300	227	1,020	856	2,260	1,190	790	424
2	444	675	735	370	294	227	954	801	2,970	1,640	745	545
3	416	705	1,270	413	285	237	828	740	3,290	2,270	695	504
4	567	615	1,280	1,730	277	237	740	710	3,660	1,780	695	484
5	500	558	1,020	3,990	274	263	735	750	3,700	1,460	745	416
6	845	518	867	2,100	263	263	715	930	3,460	1,310	630	357
7	725	480	796	1,480	255	257	670	1,380	3,350	1,240	576	360
8	610	635	845	1,160	266	247	665	2,270	3,440	1,250	558	420
9	558	912	801	981	266	239	715	3,020	3,440	1,460	625	500
10	581	740	823	856	260	237	812	3,280	3,390	1,540	650	545
11	563	1,400	801	770	331	232	785	2,990	3,260	1,850	615	605
12	568	1,540	710	685	324	232	872	2,880	3,070	1,690	554	590
13	615	1,140	640	640	291	232	1,040	2,880	2,960	1,270	563	695
14	563	930	610	595	282	237	918	2,680	3,070	1,020	675	514
15	610	818	576	550	271	271	818	2,360	2,480	918	750	402
16	605	720	563	509	271	294	770	2,100	2,510	918	645	344
17	586	670	518	492	268	545	840	1,860	2,620	918	554	495
18	715	1,230	500	456	263	630	948	2,050	2,620	974	550	924
19	725	1,540	456	440	263	536	924	2,420	2,600	1,060	540	960
20	948	1,870	428	420	263	488	840	2,460	2,270	1,110	568	780
21	790	1,820	413	392	257	472	828	2,760	1,900	995	730	610
22	740	1,930	406	374	257	480	1,030	3,120	1,850	974	625	1,430
23	710	1,500	432	350	247	484	1,830	3,480	1,710	1,060	625	2,480
24	924	1,220	640	340	242	460	1,640	3,810	2,100	1,130	675	2,240
25	1,160	1,020	605	330	237	452	1,250	3,020	1,560	1,100	610	1,750
26	1,100	906	536	320	234	540	1,040	2,540	1,330	856	540	1,190
27	840	912	480	310	229	710	948	2,390	1,300	872	488	872
28	900	828	400	300	227	730	981	1,900	1,190	884	456	818
29	948	954	340	290	-----	740	1,020	2,450	1,130	801	399	1,900
30	1,060	878	320	280	-----	889	900	2,940	1,130	785	378	2,190
31	850	-----	320	280	-----	1,100	-----	2,210	-----	801	385	-----
TOTAL	22,262	30,384	19,916	22,543	7,497	13,188	28,076	70,037	75,620	37,126	18,634	26,304
MEAN	718	1,013	642	727	268	425	936	2,259	2,521	1,198	601	877
MAX	1,160	1,930	1,280	3,990	331	1,100	1,830	3,810	3,700	2,270	790	2,480
MIN	416	480	320	280	227	227	665	710	1,130	785	378	344
CFSM	4.27	6.05	3.82	4.33	1.60	2.53	5.97	13.4	15.0	7.13	3.58	5.22
IN.	4.93	6.73	4.41	6.99	1.66	2.92	6.42	15.91	16.74	8.22	4.13	5.82
AC-FT	44,160	60,270	39,500	44,710	14,870	26,160	55,690	138,900	150,000	73,640	36,960	52,170

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1,920	402	402	350	576	428	315	432	1,920	872	685	527		
2	1,550	378	385	324	532	410	309	518	3,160	1,030	760	456		
3	1,220	472	371	318	536	392	297	670	4,070	1,630	730	645		
4	988	1,340	364	297	488	374	315	974	3,580	2,170	828	540		
5	862	1,180	344	282	452	357	440	1,210	3,060	1,880	840	472		
6	812	801	331	280	432	382	665	995	3,280	1,520	780	812		
7	705	665	321	280	444	600	568	845	3,020	1,440	710	1,060		
8	1,040	605	318	271	518	468	504	823	2,360	1,660	670	680		
9	981	572	312	271	650	424	1,280	912	2,160	1,600	545	509		
10	862	514	303	260	735	399	1,390	765	1,700	1,440	545	416		
11	765	492	337	260	806	382	948	675	1,300	1,300	600	378		
12	605	536	436	247	889	388	780	615	1,210	1,160	635	324		
13	620	504	573	260	960	402	690	590	1,460	1,080	675	294		
14	558	518	878	543	878	444	625	554	1,790	1,040	576	282		
15	522	625	735	468	828	468	572	680	2,000	1,140	595	260		
16	480	554	605	388	1,010	518	522	1,460	1,660	1,340	615	257		
17	452	444	540	360	924	468	488	2,060	1,880	1,210	536	977		
18	428	444	586	500	812	428	472	1,430	2,410	1,110	496	1,270		
19	410	432	610	780	725	410	468	1,340	2,410	1,160	500	948		
20	436	452	630	912	675	399	444	1,300	2,640	1,140	518	640		
21	509	580	630	1,110	630	382	424	1,320	3,150	995	550	504		
22	484	612	615	1,240	568	368	424	1,570	2,790	812	506	1,370		
23	514	626	670	1,660	568	378	402	1,440	2,370	750	630	1,100		
24	444	630	610	1,220	540	402	444	1,620	2,110	725	690	675		
25	406	532	545	995	518	371	440	2,360	1,970	867	630	536		
26	382	484	496	856	496	354	420	2,680	2,250	1,400	545	496		
27	382	452	464	775	456	347	406	2,450	2,140	1,310	527	492		
28	368	432	428	675	456	350	402	1,250	1,600	936	488	472		
29	347	432	410	600	-----	344	410	1,090	1,220	775	432	452		
30	347	424	382	540	-----	328	406	981	981	765	444	416		
31	464	-----	368	563	-----	318	-----	1,100	-----	665	488	-----		
TOTAL	21,023	17,004	14,999	17,885	18,157	12,483	16,252	35,909	67,651	36,922	18,653	18,220		
MEAN	678	567	484	577	648	403	542	1,158	2,255	1,191	608	607		
MAX	1,920	1,340	878	1,660	1,010	600	1,390	2,680	4,070	2,170	840	1,330		
MIN	347	378	303	247	432	318	297	432	981	665	432	257		
CFSM	4.04	3.38	2.88	3.43	3.86	2.40	3.23	6.89	13.4	7.09	3.62	3.61		
IN.	4.66	3.77	3.32	3.96	4.02	2.76	3.60	7.95	14.98	8.18	4.17	4.03		
AC-FT	41,700	33,730	29,750	35,470	36,010	24,760	32,240	71,230	134,200	73,230	37,390	36,140		
CAL YR 1969	TOTAL	352,051	MEAN	965	MAX	3,990	MIN	227	CFSM	5.74	IN	77.95	AC-FT	698,300
MTR YR 1970	TOTAL	295,358	MEAN	809	MAX	4,070	MIN	247	CFSM	4.82	IN	65.40	AC-FT	585,800

12186000 SAUX RIVER ABOVE WHITE CHUCK RIVER, NEAR DARRINGTON, WASH.

LOCATION (REVISED).--Lat 48°10'08", long 121°28'10", on north line NE¼ sec. 23, T.31 N., R.10 E., Snohomish County, Mount Baker National Forest, on right bank 0.6 mile upstream from White Chuck River, 8.4 miles south-east of Darrington, and at mile 32.5.

DRAINAGE AREA.--152 sq. mi.

PERIOD OF RECORD.--August to November 1910 (fragmentary gage heights only), October 1917 to September 1922, August 1928 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 930 ft (from river-profile map). Prior to Nov. 18, 1910, non-recording gage 0.5 mile downstream at different datum.

AVERAGE DISCHARGE.--47 years (1917-22, 1928-70), 1,139 cfs (101.76 inches per year, 825,200 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (4,500 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1965	0930	4,870	6.36	Oct. 27, 1967	2030	*16,800	10.62	Dec. 3, 1968	1700	4,930	6.55
May 6, 1966	1830	*4,890	6.37	Oct. 31, 1967	1830	4,840	6.60	Jan. 5, 1969	0715	*6,010	7.02
				Dec. 24, 1967	0730	6,070	7.09	May 24, 1969	0315	4,820	6.50
Oct. 23, 1966	1745	4,830	6.34	Jan. 20, 1968	2015	11,700	9.00	May 30, 1969	0445	5,310	6.72
Dec. 13, 1966	1200	*7,410	7.43	Feb. 4, 1968	0500	5,080	6.70	June 5, 1969	0200	5,110	6.63
Dec. 16, 1966	1115	5,290	6.55	Feb. 19, 1968	0415	4,700	6.54				
June 20, 1967	0045	5,330	6.57	Feb. 23, 1968	2345	6,260	7.16	June 3, 1970	2315	*4,970	6.57
				May 20, 1968	0815	4,770	6.57				
Oct. 22, 1967	2245	4,850	6.35	June 2, 1968	0945	10,400	8.48				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 4, 1965	210	a2.67	1969	Sept. 6, 7, 1969	248	2.78
1967	Oct. 16, 1966	174	2.64	1970	Sept. 16, 1970	214	2.68
1968	Sept. 13, 1968	211	2.96				

a Occurred Sept. 30, 1966.

Period of record: Maximum discharge, 30,200 cfs Nov. 27, 1949 (gage height, 14.90 ft, in gage well), from rating curve extended above 15,000 cfs; minimum, 115 cfs Nov. 15, 16, 30, Dec. 1, 1936.

REMARKS.--Records excellent. No gage-height record Oct. 26 to Dec. 6, 1966. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 752: 1932. WSP 1286: 1918(M), 1920(M), 1921, 1922(M), 1932(M), 1934(M), 1946-47(M), 1949.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	270	714	289	518	355	1,800	808	1,480	1,580	1,000	289
2	216	647	1,210	289	458	330	1,700	1,010	1,470	1,710	968	282
3	213	927	1,110	282	405	315	1,440	1,560	1,440	1,710	1,000	289
4	222	2,460	2,200	262	405	300	1,310	2,110	1,350	1,750	1,010	289
5	925	2,030	1,470	303	525	295	1,300	2,980	1,360	1,860	872	310
6	2,920	1,350	1,540	1,030	518	300	1,400	4,410	1,830	1,720	792	324
7	1,270	1,030	1,790	1,440	502	315	1,600	3,740	2,480	1,760	784	303
8	795	955	1,520	1,510	472	385	1,780	3,160	2,770	2,000	784	289
9	726	906	1,200	1,120	442	1,000	1,780	3,350	2,670	2,010	712	289
10	528	760	1,020	888	382	856	1,960	2,840	2,800	1,920	652	282
11	407	721	872	968	435	660	2,460	2,200	3,000	1,790	608	296
12	338	619	768	1,210	405	578	1,960	2,000	2,620	1,710	548	280
13	332	538	690	2,670	390	816	1,520	1,790	2,230	1,780	638	275
14	414	603	615	2,420	370	1,070	1,400	1,560	2,340	1,860	675	275
15	788	1,400	555	1,530	350	1,160	1,370	1,400	2,700	1,860	592	282
16	554	1,440	502	1,150	330	976	1,370	1,430	3,320	1,710	555	275
17	540	1,020	465	936	320	792	1,300	1,260	3,300	1,560	510	268
18	566	823	465	808	315	698	1,180	1,180	2,670	1,470	472	331
19	746	1,170	518	705	310	660	1,080	1,270	2,580	1,440	458	310
20	714	1,350	562	622	320	585	1,000	1,540	2,220	1,310	435	282
21	710	1,660	592	570	335	518	928	1,960	1,840	1,220	412	275
22	641	1,690	495	518	350	458	872	1,830	1,710	1,240	405	296
23	580	1,200	442	488	390	428	832	1,540	1,670	1,260	405	360
24	491	945	412	435	380	412	864	1,480	1,650	1,240	442	317
25	423	810	368	412	350	442	960	1,890	1,460	1,240	480	289
26	381	706	337	382	360	555	936	2,730	1,500	1,080	428	275
27	334	706	337	405	380	736	856	2,630	1,660	1,050	548	268
28	350	626	382	412	370	912	824	2,070	2,750	1,110	518	256
29	316	570	368	555	-----	1,280	808	1,930	2,150	1,140	382	268
30	440	522	317	608	-----	1,960	824	1,930	1,640	1,120	345	262
31	324	-----	289	585	-----	2,200	-----	1,660	-----	1,050	310	-----
TOTAL	18,426	30,454	24,125	25,822	11,087	22,347	39,414	63,238	64,660	47,260	18,740	6,686
MEAN	594	1,015	778	833	396	721	1,314	2,040	2,155	1,525	605	290
MAX	2,920	2,460	2,200	2,670	525	2,200	2,460	4,410	3,320	2,010	1,010	360
MIN	213	270	289	262	310	295	808	808	1,350	1,050	310	256
CFSM	3,91	6,68	5,12	5,48	2,61	4,74	8,64	13,4	14,2	10,0	3,98	1,91
IN	4,51	7,45	5,90	6,32	2,71	5,47	9,65	15,48	18,82	11,57	4,59	2,13
AC-FT	36,550	60,410	47,850	51,220	21,990	44,330	78,180	125,400	128,300	93,740	37,170	17,230
CAL YR 1965	TOTAL	396,625	MEAN	1,087	MAX	3,920	MIN	213	CFSM	7.15	IN	97.07
WTR YR 1966	TOTAL	374,259	MEAN	1,025	MAX	4,410	MIN	213	CFSM	6.74	IN	91.59
									AC-FT	786,700		
									AC-FT	742,300		

12186000 SAUK RIVER ABOVE WHITE CHUCK RIVER, NEAR DARRINGTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	630	2,000	1,040	1,150	698	452	464	2,070	2,540	926	470
2	467	570	1,600	971	1,110	590	444	497	2,920	2,860	872	818
3	304	510	1,350	1,620	1,490	519	467	575	3,010	3,150	872	558
4	273	460	1,020	1,250	2,230	469	515	738	2,830	3,020	881	442
5	261	475	960	971	1,720	436	502	900	3,080	2,580	827	407
6	247	500	910	791	1,310	421	478	1,120	3,500	2,240	764	386
7	351	455	773	694	1,090	406	493	1,330	3,410	2,000	746	344
8	688	420	646	782	945	505	517	1,600	2,820	1,940	694	317
9	397	400	542	818	862	557	515	1,670	2,450	1,730	728	311
10	304	490	678	881	880	457	492	1,410	2,250	1,590	800	534
11	284	410	1,200	1,580	814	410	473	1,220	2,100	1,850	809	1,120
12	273	600	2,150	1,300	861	379	503	1,070	2,200	2,240	818	670
13	252	660	5,860	1,380	1,010	353	522	980	2,500	2,270	800	463
14	225	1,150	3,350	1,390	762	334	479	967	3,170	2,010	800	379
15	194	1,050	2,440	2,420	710	383	445	1,130	3,650	1,810	782	351
16	182	900	4,260	1,720	664	655	422	1,710	3,920	1,770	746	372
17	238	750	3,890	1,250	731	710	425	2,300	4,360	1,740	678	372
18	221	670	3,500	1,030	808	654	410	2,300	4,490	1,540	654	351
19	1,390	640	3,540	2,080	659	557	404	2,390	4,700	1,380	622	337
20	2,000	700	3,390	2,060	550	524	428	2,770	5,070	1,330	590	344
21	977	680	2,320	1,450	552	543	494	3,460	4,870	1,450	606	351
22	1,410	660	1,730	1,110	513	864	455	3,560	3,970	1,360	558	351
23	3,820	600	1,410	917	479	1,770	439	3,170	3,390	1,350	510	285
24	2,540	540	1,290	767	472	1,330	445	2,450	3,350	1,410	456	259
25	1,520	1,000	1,120	694	486	993	480	1,940	3,620	1,400	407	247
26	1,350	1,050	962	644	465	841	486	1,800	3,710	1,390	386	241
27	1,200	980	854	895	448	720	481	1,820	3,310	1,280	386	247
28	740	1,200	782	1,890	600	646	497	1,980	2,950	1,150	393	253
29	880	1,250	908	1,990	593	593	494	2,440	2,950	1,030	435	247
30	1,100	1,650	791	1,910	-----	530	470	2,170	2,770	980	470	324
31	750	-----	755	1,380	-----	485	-----	1,850	-----	953	486	-----
TOTAL	25,098	22,050	56,981	39,697	24,441	19,332	14,105	53,781	99,390	55,333	20,502	12,151
MEAN	810	735	1,838	1,281	873	624	470	1,735	3,313	1,785	661	405
MAX	3,820	1,650	5,860	2,420	2,230	1,770	522	3,560	5,070	3,150	926	1,120
MIN	182	400	542	646	448	334	404	464	2,070	953	386	241
CF5M	5.33	4.84	12.1	8.43	5.74	4.11	3.09	11.4	21.8	11.7	4.35	2.66
IN.	6.14	5.40	13.95	9.72	5.98	4.73	3.45	13.16	24.32	13.54	5.02	2.97
AC-FT	49,780	43,740	113,000	78,740	48,480	38,350	27,980	106,700	197,100	109,800	40,670	24,100
CAL YR 1966	TOTAL 405,383	MEAN 1,111	MAX 5,860	MIN 182	CF5M 7.31	IN 99.21	AC-FT 804,100					
WTR YR 1967	TOTAL 442,861	MEAN 1,213	MAX 5,860	MIN 182	CF5M 7.98	IN 108.38	AC-FT 878,400					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	827	2,910	598	996	906	1,440	874	1,570	3,710	1,370	764	550
2	1,300	1,990	736	840	1,130	1,480	852	1,260	8,550	1,780	755	502
3	1,130	1,560	792	737	1,880	1,470	781	1,170	4,940	2,200	755	421
4	1,210	1,270	712	675	3,820	1,820	740	1,300	3,400	2,420	710	372
5	827	1,080	631	612	2,110	2,500	777	1,230	2,970	2,390	622	358
6	1,200	952	559	551	1,560	2,120	745	1,080	2,750	2,260	526	358
7	2,100	899	520	533	1,290	1,670	713	964	2,500	2,180	456	358
8	1,510	916	484	502	1,140	1,390	652	936	2,230	2,050	414	324
9	990	1,200	701	505	1,040	1,200	622	1,030	2,050	2,040	393	291
10	863	2,810	1,770	475	959	1,070	661	1,350	2,100	1,720	435	278
11	2,070	2,340	2,130	435	893	922	808	1,750	2,070	1,560	470	265
12	2,210	1,650	1,220	409	850	922	724	1,880	1,860	1,960	421	272
13	1,980	1,470	916	878	808	875	652	1,570	1,740	1,520	372	229
14	2,460	1,620	777	1,880	754	843	765	1,370	1,570	1,480	478	686
15	1,490	1,890	701	2,170	698	967	862	1,290	1,500	1,400	694	2,380
16	1,130	1,570	646	1,580	453	1,030	716	1,310	1,590	1,170	518	2,200
17	933	1,280	596	1,120	636	912	639	1,590	1,720	1,070	435	2,560
18	958	1,160	552	1,010	1,770	797	606	2,000	2,010	1,010	502	2,040
19	1,180	1,010	511	4,030	4,190	719	610	2,730	2,250	1,020	442	1,330
20	918	917	473	7,190	3,450	673	553	4,060	2,010	1,190	393	1,000
21	2,230	818	472	6,750	2,990	641	526	3,030	1,800	1,000	344	800
22	3,330	768	1,310	3,590	2,890	620	526	2,330	1,810	890	298	678
23	3,420	728	2,790	2,630	4,060	663	587	2,050	1,850	845	330	710
24	2,030	836	5,300	3,270	4,560	757	606	1,910	2,020	881	654	598
25	2,420	760	5,050	2,700	2,740	718	616	1,980	2,410	935	694	526
26	1,750	672	4,230	2,050	2,050	682	654	1,910	2,940	990	1,140	486
27	7,340	626	3,130	1,630	1,710	1,230	648	1,780	3,130	1,030	1,200	442
28	7,670	612	2,400	1,350	1,520	1,220	791	1,670	2,240	1,040	899	400
29	3,350	672	1,800	1,210	1,440	1,820	1,290	1,720	1,640	1,000	678	365
30	3,850	612	1,400	1,100	-----	1,310	1,660	1,540	1,320	899	566	337
31	2,720	-----	1,150	1,010	-----	1,020	-----	1,450	-----	791	518	-----
TOTAL	67,396	37,598	45,057	54,418	54,497	35,551	22,256	52,810	74,480	44,091	17,876	22,116
MEAN	2,174	1,253	1,453	1,755	1,879	1,147	742	1,704	2,489	1,422	577	737
MAX	7,670	2,910	5,300	7,190	4,560	2,500	1,660	4,060	8,550	2,420	1,200	2,560
MIN	827	612	472	409	636	620	526	936	1,320	791	298	229
CF5M	14.3	8.24	9.56	11.5	12.4	7.55	4.88	11.2	16.4	9.36	3.80	4.85
IN.	16.49	9.20	11.03	13.32	13.34	8.70	5.45	12.92	18.28	10.79	4.37	5.41
AC-FT	133,700	74,580	89,370	107,900	108,100	70,520	44,140	104,700	148,100	87,450	35,460	43,870
CAL YR 1967	TOTAL 488,783	MEAN 1,339	MAX 7,670	MIN 241	CF5M 8.81	IN 119.62	AC-FT 969,500					
WTR YR 1968	TOTAL 528,346	MEAN 1,444	MAX 8,550	MIN 229	CF5M 9.50	IN 129.31	AC-FT 1,048,000					

12186000 SAUK RIVER ABOVE WHITE CHUCK RIVER, NEAR DARRINGTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	310	938	1,033	602	300	255	1,540	1,000	3,020	1,140	590	287
2	278	864	938	641	318	259	1,420	947	3,620	1,410	565	306
3	247	938	3,040	614	322	271	1,150	880	4,160	1,410	519	308
4	400	808	2,350	2,540	309	271	965	824	4,570	1,230	498	293
5	449	725	1,530	5,220	300	365	904	848	4,760	1,090	709	284
6	872	462	1,180	2,990	291	370	872	1,010	4,440	964	569	258
7	816	608	1,010	2,080	283	327	816	1,390	3,940	984	488	251
8	662	784	1,190	1,500	304	304	776	2,230	3,910	1,020	447	264
9	590	1,310	1,140	1,220	318	287	808	3,210	4,080	1,190	453	297
10	732	1,080	1,190	1,030	309	279	929	3,720	4,000	1,280	470	325
11	760	2,660	1,130	896	440	271	929	3,600	3,830	1,440	452	346
12	792	2,900	929	792	430	263	1,030	3,530	3,530	1,260	419	342
13	888	1,880	800	725	380	263	1,400	3,480	3,230	995	410	422
14	832	1,420	732	676	340	263	1,220	3,370	3,230	850	440	394
15	848	1,180	697	620	322	322	1,050	2,890	2,840	780	470	306
16	784	1,000	697	590	318	410	974	2,510	2,760	773	460	266
17	697	888	620	578	313	1,110	1,010	2,920	2,860	777	396	303
18	760	1,180	620	530	309	1,090	1,330	2,350	2,890	797	380	598
19	792	1,640	554	506	304	808	1,360	2,840	2,820	860	381	837
20	1,180	1,980	506	476	300	683	1,190	2,780	2,420	910	375	722
21	1,010	2,030	476	452	291	627	1,080	3,070	1,900	840	400	561
22	947	2,810	464	415	287	641	1,250	3,580	1,720	801	385	1,310
23	888	2,060	524	395	279	683	1,720	4,160	1,660	868	379	2,670
24	1,000	1,580	864	375	275	602	1,750	4,650	1,820	884	411	1,920
25	1,210	1,290	824	350	267	566	1,480	3,850	1,540	849	401	1,460
26	1,220	1,120	690	330	263	608	1,250	3,230	1,310	688	367	1,040
27	938	1,160	608	320	255	792	1,140	3,040	1,190	657	349	787
28	872	1,050	525	305	255	864	1,180	2,700	1,090	680	341	698
29	938	1,320	460	295	-----	872	1,200	3,240	1,040	622	311	1,180
30	1,330	1,220	430	285	-----	1,030	1,070	4,690	1,020	593	289	2,130
31	1,150	-----	470	285	-----	1,410	-----	3,310	-----	593	281	-----
TOTAL	25,192	41,085	26,218	28,633	8,682	17,166	34,793	85,219	85,200	29,237	13,405	21,165
MEAN	813	1,370	910	924	310	554	1,160	2,749	2,840	943	432	706
MAX	1,330	2,900	3,040	5,220	440	1,410	1,750	4,690	4,760	1,440	709	2,670
MIN	247	608	430	285	255	255	776	824	1,020	593	281	251
CFSM	5.35	9.01	5.99	6.08	2.04	3.64	7.63	18.1	18.7	6.20	2.94	4.64
IN.	6.17	10.06	6.91	7.01	2.12	4.20	8.52	20.86	20.85	7.16	3.28	5.18
AC-FT	49,970	81,490	55,970	56,790	17,220	34,050	69,010	169,000	169,000	57,990	26,590	41,980

CAL YR 1968 TOTAL 472,790 MEAN 1,292 MAX 8,550 MIN 229 CFSM 8.50 IN 115.71 AC-FT 937,800
MTR YR 1969 TOTAL 417,995 MEAN 1,145 MAX 5,220 MIN 247 CFSM 7.53 IN 102.30 AC-FT 829,100

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,710	379	464	405	931	524	434	500	2,000	882	512	283
2	2,530	355	440	385	811	496	457	590	3,250	964	616	262
3	1,640	401	425	365	813	476	429	753	4,280	1,420	542	317
4	1,230	1,720	446	345	493	445	457	1,080	4,060	1,820	549	326
5	1,000	1,680	410	322	619	425	869	1,380	3,340	1,630	541	278
6	888	1,130	390	313	593	484	1,370	1,200	3,570	1,340	486	427
7	816	947	370	304	612	1,150	1,060	1,590	3,370	1,230	461	896
8	1,190	784	360	300	692	837	903	992	2,560	1,370	459	569
9	1,400	725	355	309	791	701	2,090	1,160	2,210	1,340	399	438
10	1,270	634	340	295	878	625	2,120	992	1,990	1,200	378	351
11	1,000	596	440	295	945	580	1,420	856	1,580	1,070	392	308
12	862	655	816	783	1,030	577	1,100	768	1,420	947	401	275
13	752	602	1,010	345	1,170	636	912	711	1,580	875	406	253
14	674	578	1,380	1,660	1,050	776	784	662	1,800	839	373	238
15	609	634	1,090	1,080	1,040	960	711	739	1,890	873	354	226
16	562	641	832	732	1,570	1,040	655	1,450	1,640	985	358	220
17	519	572	732	620	1,460	884	608	2,130	1,620	919	334	410
18	481	542	792	1,210	1,180	757	590	1,640	2,100	815	308	1,630
19	450	536	808	1,540	979	682	584	1,520	2,230	838	297	1,060
20	437	566	983	1,650	858	633	560	1,490	2,450	813	297	792
21	472	808	983	1,740	778	595	518	1,430	2,980	724	303	620
22	474	690	1,090	1,970	722	560	494	1,660	2,750	609	321	1,050
23	504	856	1,270	2,950	681	556	500	1,620	2,330	543	332	1,250
24	446	848	956	1,920	650	609	627	1,800	2,040	528	354	737
25	414	697	768	1,540	620	547	578	2,410	1,850	564	341	569
26	386	608	669	1,250	598	516	542	2,860	1,980	913	302	488
27	382	554	590	1,120	584	495	500	2,050	1,900	920	291	436
28	369	518	536	924	555	494	482	1,620	1,490	662	280	400
29	353	506	494	796	-----	491	482	1,450	1,190	554	268	373
30	353	494	458	706	-----	463	476	1,360	991	619	258	344
31	379	-----	430	791	-----	441	-----	1,390	-----	532	265	-----
TOTAL	25,552	21,256	21,127	28,465	23,903	19,455	23,312	41,303	68,441	29,338	11,778	15,826
MEAN	824	709	682	918	854	628	777	1,332	2,281	946	380	528
MAX	2,710	1,720	1,380	2,950	1,570	1,150	2,120	2,860	4,280	1,820	616	1,630
MIN	353	355	340	283	555	425	429	500	991	528	258	220
CFSM	5.42	4.66	4.49	6.04	5.82	4.13	5.11	8.76	15.0	6.22	2.50	3.47
IN.	6.25	5.20	5.17	6.97	5.85	4.76	5.71	10.11	16.75	7.18	2.88	3.87
AC-FT	50,680	42,160	41,910	56,440	47,410	38,590	46,240	81,920	135,800	58,190	23,360	31,390

CAL YR 1969 TOTAL 391,435 MEAN 1,072 MAX 4,220 MIN 251 CFSM 7.05 IN 95.80 AC-FT 776,400
MTR YR 1970 TOTAL 329,756 MEAN 903 MAX 4,280 MIN 220 CFSM 5.94 IN 80.70 AC-FT 654,100

12189500 SAUK RIVER NEAR SAUK, WASH.

LOCATION (REVISED).--Lat 48°25'29", long 121°34'02", in NW1/4 sec.19, T.34 N., R.10 E., Skagit County, on left bank 4.4 miles southeast of Rockport, 7.6 miles southeast of Sauk, 7.8 miles downstream from Suittie River, and at mile 5.4.

DRAINAGE AREA.--714 sq. mi.

PERIOD OF RECORD.--August to October 1910 (fragmentary gage heights), March 1911 to August 1912, July 1928 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 266 ft above mean sea level (from river-profile survey). Prior to Aug. 4, 1912, nonrecording gages at several sites 1 mile downstream to 5 miles upstream from present site at various datums. July 24, 1928, to Sept. 16, 1929, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--42 years (1928-70), 4,326 cfs (82.28 inches per year, 3,134,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (16,000 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	2245	*15,800	8.23	Dec. 25, 1967	1830	23,200	9.56	Dec. 3, 1968	1815	17,200	8.50
				Jan. 20, 1968	2300	36,000	11.57	Jan. 5, 1969	-	*22,200	as.40
Dec. 13, 1966	1615	*27,400	10.26	Feb. 4, 1968	0815	18,600	8.77	May 30, 1969	1045	16,600	8.37
Dec. 16, 1966	1500	22,400	9.43	Feb. 24, 1968	0430	19,700	8.97	June 5, 1969	0245	17,800	8.61
June 21, 1967	0100	20,100	9.04	May 2, 1968	1100	16,000	8.27				
				June 2, 1968	1300	34,300	11.53	June 4, 1970	0130	*17,500	8.52
Oct. 28, 1967	0015	*47,400	13.20								

a From high watermark in well.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1, 1965	1,020	3.13	1969	Sept. 7, 16, 17, 1969	1,270	3.27
1967	Oct. 16, 17, 1966	945	3.05	1970	Sept. 17, 1970	990	3.05
1968	Oct. 1, 1967	1,630	as.60				

a Occurred Sept. 13, 1968.

Period of record: Maximum discharge, 82,400 cfs Nov. 27, 1949 (gage height, 16.93 ft); minimum, 572 cfs Dec. 5, 1929, but may have been less during period of ice effect Jan. 10-27, 1930.

REMARKS.--Records excellent. No gage-height record Jan. 4-13, 1969. No regulation. Small diversion for mill-pond at Darrington and for domestic use. Water-quality records for the water year 1970 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1286: 1929, 1937, 1939.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,080	1,540	2,760	1,570	2,410	1,720	6,260	2,800	5,050	5,400	3,810	1,480
2	1,110	2,250	4,390	1,610	2,190	1,580	5,860	3,330	4,930	5,770	3,650	1,530
3	1,100	2,460	3,640	1,550	2,050	1,510	4,860	5,000	4,840	6,030	3,690	1,540
4	1,120	4,900	8,010	1,490	2,010	1,450	4,810	6,760	4,480	6,190	3,860	1,590
5	2,260	6,110	4,990	1,510	2,420	1,440	4,430	9,170	4,370	6,770	3,420	1,670
6	7,480	4,140	5,240	3,510	2,410	1,460	4,750	14,000	5,890	6,250	3,200	1,740
7	4,080	3,220	5,760	5,120	2,330	1,490	5,340	12,400	7,910	6,180	3,160	1,590
8	2,640	2,970	5,020	5,660	2,230	1,610	6,000	10,300	8,930	7,010	3,190	1,490
9	2,560	2,910	3,970	4,190	2,150	4,400	5,970	11,000	8,950	7,260	2,990	1,520
10	2,090	2,520	3,430	3,350	1,980	3,740	6,340	9,360	8,910	7,090	2,790	1,530
11	1,770	2,490	3,020	3,640	2,080	2,870	7,670	7,080	9,650	6,540	2,690	1,510
12	1,610	2,220	2,750	4,070	2,080	2,540	6,470	6,450	8,020	6,180	2,460	1,460
13	1,700	2,040	2,500	9,650	1,890	3,460	5,030	5,840	6,900	6,980	2,610	1,340
14	1,600	2,260	2,290	9,110	1,830	4,290	4,800	5,110	7,090	6,930	2,950	1,450
15	2,640	4,440	2,130	5,970	1,700	4,480	4,750	4,580	8,290	7,000	2,650	1,470
16	2,140	4,730	2,000	4,450	1,660	3,860	4,730	4,770	10,600	6,630	2,570	1,410
17	1,900	3,430	1,900	3,690	1,600	3,210	4,420	4,230	11,300	5,870	2,370	1,360
18	1,960	2,900	1,900	3,270	1,570	2,900	4,040	3,930	8,970	5,390	2,230	1,600
19	2,690	3,590	2,110	2,930	1,540	2,870	3,700	4,110	6,780	5,190	2,180	1,550
20	2,450	4,500	2,190	2,670	1,600	2,620	3,470	4,880	7,690	4,700	2,080	1,370
21	2,630	5,160	2,380	2,490	1,710	2,380	3,300	5,990	6,410	4,420	2,030	1,400
22	2,280	3,720	2,030	2,330	1,740	2,180	3,150	5,640	5,810	4,450	2,000	1,600
23	2,150	4,100	1,890	2,260	1,870	2,070	4,810	5,750	4,520	4,100	1,980	1,960
24	1,930	3,330	1,840	2,090	1,850	2,000	3,040	4,510	5,760	4,480	2,160	1,630
25	1,770	2,970	1,720	2,000	1,770	2,100	3,310	5,680	4,970	4,460	2,360	1,420
26	1,690	2,650	1,640	1,940	1,790	2,430	3,270	8,720	5,000	3,960	2,260	1,320
27	1,590	2,620	1,700	1,970	1,910	2,980	3,000	8,790	5,490	3,790	2,250	1,280
28	1,620	2,460	1,900	2,010	1,810	2,880	4,830	6,980	4,010	2,310	1,300	
29	1,560	2,330	1,810	2,380	-----	4,560	2,860	6,510	7,690	4,120	1,870	1,500
30	2,070	2,210	1,680	2,750	-----	7,030	2,860	6,640	5,790	4,170	1,670	1,380
31	1,740	-----	1,590	2,670	-----	8,150	-----	5,690	-----	4,010	1,640	-----
TOTAL	67,030	101,170	90,180	103,090	54,180	92,800	133,980	204,910	213,200	171,750	80,980	44,990
MEAN	2,162	3,232	2,909	3,351	1,935	2,994	4,466	6,610	7,107	5,540	2,612	1,500
MAX	7,480	6,900	8,010	9,650	2,420	6,150	7,670	14,000	11,300	7,260	3,860	1,960
MIN	1,080	1,540	1,590	1,490	1,540	1,440	2,860	2,800	4,370	3,790	1,540	1,280
CFSM	3.03	4.72	4.07	4.69	2.71	4.19	6.25	9.26	9.95	7.76	3.66	2.10
IN.	3.44	5.27	4.70	5.41	2.82	4.83	6.98	10.68	11.11	8.95	4.22	2.34
AC-FT	133,000	200,700	178,900	206,100	107,500	184,100	265,700	406,400	422,900	340,700	160,600	89,240
CAL YR 1965	TOTAL 1,499,140	MEAN 4,107	MAX 14,000	MIN 1,080	CFSM 5.75	IN 78.11	AC-FT 2,974,000					
WTR YR 1966	TOTAL 1,359,040	MEAN 3,723	MAX 14,000	MIN 1,080	CFSM 5.21	IN 70.81	AC-FT 2,696,000					

12189500 SAUK RIVER NEAR SAUK, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,280	2,410	8,630	4,200	4,780	3,350	2,230	2,070	7,110	8,800	3,830	2,330
2	2,170	2,160	6,680	3,650	4,510	2,770	2,180	2,150	10,400	9,710	3,590	2,860
3	1,480	1,960	5,230	6,110	6,210	2,490	2,220	2,400	10,300	11,000	3,490	2,360
4	1,260	1,810	4,580	5,050	9,090	2,310	2,360	2,850	9,610	10,900	3,650	2,070
5	1,240	1,850	4,200	4,130	7,180	2,190	2,310	3,310	10,300	9,410	3,500	2,020
6	1,200	1,960	3,930	3,410	5,440	2,130	2,210	4,030	11,700	8,250	3,260	1,970
7	1,320	1,750	3,600	3,030	4,540	2,070	2,230	4,650	11,600	7,140	3,380	1,780
8	2,380	1,620	3,070	3,250	4,030	2,290	2,290	5,570	9,480	7,130	3,100	1,650
9	1,650	1,670	2,690	3,600	3,680	2,200	2,270	5,870	8,290	6,350	3,860	1,680
10	1,310	1,820	3,200	3,530	3,670	2,320	2,180	4,890	7,870	9,600	3,370	1,770
11	1,220	1,660	5,380	6,830	3,470	2,140	2,100	4,260	7,910	6,520	3,340	4,780
12	1,160	2,360	7,790	5,350	3,990	2,020	2,180	3,770	7,740	6,090	3,430	2,580
13	1,090	2,530	21,100	9,400	4,490	1,930	2,240	3,470	8,680	8,480	3,260	1,860
14	1,020	4,680	15,400	5,100	3,600	1,840	2,110	3,430	18,500	7,600	3,230	1,618
15	980	4,380	11,100	8,870	3,260	1,940	2,000	3,840	12,300	6,680	3,210	1,550
16	949	3,460	17,500	7,010	3,130	2,540	1,920	5,600	13,500	6,560	3,170	1,710
17	961	2,840	15,100	5,200	3,280	3,090	1,930	7,900	15,200	4,570	2,870	1,600
18	987	2,530	13,100	4,330	3,910	3,010	1,900	7,430	16,600	5,980	2,750	1,720
19	3,050	2,500	12,000	7,160	3,190	2,600	1,900	7,720	17,300	5,270	2,640	1,750
20	7,080	2,750	13,000	8,720	2,850	2,440	1,940	9,200	18,900	5,020	2,530	1,910
21	3,230	2,680	8,630	6,450	2,680	2,460	2,110	11,500	18,800	9,550	2,610	1,940
22	3,540	2,470	6,680	4,980	2,520	5,610	2,050	12,000	15,500	9,150	2,530	1,560
23	10,000	2,220	5,550	4,100	2,360	7,910	1,970	10,400	12,800	9,120	2,330	1,510
24	8,910	2,080	5,080	3,610	2,330	5,850	1,970	8,140	12,200	5,460	2,150	1,440
25	4,900	4,100	4,550	3,200	2,360	4,430	2,060	6,520	12,900	5,400	1,940	1,490
26	4,300	4,180	3,950	2,970	2,300	3,710	2,060	5,950	13,300	9,430	1,870	1,360
27	4,100	3,850	3,530	3,770	2,220	3,260	2,010	6,140	12,000	9,010	1,870	1,450
28	2,960	4,850	3,250	8,620	2,640	2,930	2,090	6,700	10,500	4,610	1,920	1,480
29	3,340	4,930	3,480	8,010	-----	2,750	2,050	8,110	10,200	4,240	2,050	1,380
30	4,330	7,310	3,310	8,160	-----	2,520	2,100	7,240	9,780	4,060	2,220	1,390
31	2,840	-----	3,070	5,770	-----	2,370	-----	6,200	-----	3,820	2,330	-----
TOTAL	86,237	87,370	228,560	163,660	107,310	89,990	63,170	183,110	352,870	209,010	88,480	97,120
MEAN	2,782	2,912	7,373	5,279	3,833	2,903	2,106	9,907	11,760	6,613	2,854	1,984
MAX	10,000	7,310	21,100	8,870	9,090	7,910	2,360	12,000	18,900	11,000	3,830	4,780
MIN	949	1,620	2,690	2,970	2,220	1,860	1,900	2,070	7,110	3,820	1,870	1,360
CF5N	3,90	4,08	10,3	7,39	5,37	4,07	5,95	8,27	16,9	9,26	4,00	2,67
IN	4,49	4,35	11,91	8,53	5,59	4,69	3,29	9,54	18,38	10,68	4,61	2,96
AC-FT	171,100	173,300	453,300	324,600	212,800	170,500	125,500	363,200	699,900	406,600	175,900	113,300

CAL YR 1966	TOTAL 1,502,847	MEAN 4,117	MAX 21,100	MIN 949	CF5N 5.77	IN 78.30	AC-FT 2,981,000
WTR YR 1967	TOTAL 1,712,887	MEAN 4,693	MAX 21,100	MIN 949	CF5N 6.57	IN 89.24	AC-FT 3,398,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,300	11,900	2,650	4,630	3,830	5,530	3,670	5,400	12,200	4,930	3,730	2,630
2	2,420	7,510	3,310	4,050	4,600	5,580	3,630	4,430	29,600	6,010	3,630	2,690
3	3,130	6,010	3,880	3,670	7,750	5,480	3,370	4,140	17,800	7,570	3,670	2,320
4	4,170	5,030	3,490	3,450	15,960	6,370	3,210	4,580	10,600	8,910	3,610	2,140
5	2,470	4,320	3,090	3,230	8,660	9,050	3,350	4,360	10,100	9,400	3,310	2,130
6	2,850	3,880	2,740	2,950	6,310	7,750	3,250	3,920	9,580	9,010	2,940	2,190
7	5,810	3,710	2,560	2,880	5,300	6,130	3,230	3,590	8,910	8,940	2,670	2,230
8	5,150	3,710	2,390	2,770	4,700	5,280	3,010	3,510	8,000	8,030	2,500	2,090
9	3,090	4,330	3,110	2,860	3,450	4,500	2,900	3,690	7,210	8,400	2,960	1,980
10	2,470	8,800	6,490	2,790	4,050	4,210	3,010	4,600	7,390	7,390	2,580	1,940
11	6,080	8,240	7,750	2,580	3,830	3,920	3,470	5,780	7,210	6,820	2,770	1,930
12	6,550	5,850	4,680	2,470	3,670	3,790	3,150	6,310	6,760	7,360	2,590	1,960
13	5,180	5,230	3,630	5,330	3,530	3,630	2,900	9,330	6,160	6,910	2,390	1,800
14	8,240	5,480	3,190	9,540	3,330	3,530	3,130	4,780	5,630	5,750	2,540	2,440
15	4,790	6,220	2,920	9,740	3,130	3,970	3,750	4,480	9,300	5,530	3,150	6,420
16	3,480	5,400	2,740	7,480	2,970	4,480	3,230	4,930	5,530	4,900	2,630	6,970
17	2,860	4,550	2,580	5,620	2,920	4,030	2,958	5,480	5,900	4,480	2,500	8,840
18	2,630	4,160	2,420	5,130	6,760	3,550	2,830	6,790	6,880	4,270	2,640	7,160
19	3,630	3,770	2,270	15,200	13,900	3,250	2,810	6,980	7,860	4,480	2,380	4,870
20	2,910	3,470	2,150	22,900	11,100	3,090	2,630	13,600	7,270	9,050	2,340	3,770
21	6,490	3,190	2,120	24,300	9,120	2,970	2,520	10,500	6,550	4,410	2,130	3,160
22	10,000	3,030	3,830	13,100	9,290	2,900	2,500	7,930	6,460	3,970	1,950	2,790
23	11,600	2,900	8,000	9,820	10,700	2,970	2,700	7,120	6,920	3,770	2,000	3,230
24	6,710	3,210	17,200	12,400	16,100	3,290	2,740	6,880	7,150	3,960	2,890	2,780
25	7,870	3,070	20,200	10,400	9,820	3,110	2,728	6,700	8,380	4,120	2,890	2,550
26	6,240	2,740	17,700	7,820	7,540	2,950	2,770	6,730	9,470	4,410	4,540	2,430
27	17,200	2,610	12,700	6,250	6,400	4,530	2,700	6,250	10,900	4,630	4,910	2,300
28	26,500	2,520	9,900	5,330	9,750	4,750	3,070	9,830	8,210	4,780	3,710	2,150
29	11,700	1,900	7,420	2,400	5,350	6,970	4,500	6,070	6,340	4,700	2,960	2,040
30	9,940	2,740	5,960	4,480	-----	9,200	5,730	5,930	5,150	4,380	2,640	1,970
31	13,400	-----	5,180	4,140	-----	4,120	-----	5,200	-----	3,810	2,930	-----
TOTAL	209,880	141,050	178,270	222,160	200,410	141,030	95,430	182,720	262,020	181,150	90,170	93,930
MEAN	6,770	4,702	5,751	7,166	6,911	4,549	3,181	5,894	8,734	5,844	2,909	3,131
MAX	26,500	11,900	20,200	24,300	16,100	9,050	9,730	13,600	29,600	9,400	4,910	8,840
MIN	2,300	2,520	2,120	2,470	2,920	2,900	2,500	5,150	5,150	3,770	1,950	1,800
CF5N	9.48	6.59	8.05	10.0	9.68	6.37	4.46	8.25	12.2	8.18	4.07	4.39
IN	10.93	7.35	9.29	11.57	10.44	7.35	4.97	9.52	13.65	9.44	4.70	4.89
AC-FT	416,300	279,800	353,600	440,700	397,500	279,700	189,300	362,400	519,780	359,300	178,900	186,300

CAL YR 1967	TOTAL 1,839,920	MEAN 5,041	MAX 26,500	MIN 1,360	CF5N 7.66	IN 95.86	AC-FT 3,649,000
WTR YR 1968	TOTAL 1,998,220	MEAN 5,460	MAX 29,600	MIN 1,800	CF5N 7.45	IN 104.11	AC-FT 3,963,000

12189500 SAUK RIVER NEAR SAUK, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,900	3,450	4,170	3,120	1,700	1,420	5,950	3,810	9,780	4,250	2,650	1,480
2	1,780	3,160	3,600	3,630	1,660	1,420	5,550	3,650	11,800	3,380	2,560	1,600
3	1,710	3,390	10,700	3,170	1,640	1,460	4,480	3,430	13,600	4,120	2,400	1,570
4	1,960	3,000	10,500	6,000	1,610	1,470	3,790	3,250	15,100	5,400	2,310	1,530
5	2,090	2,730	6,600	18,000	1,580	1,760	3,650	3,290	16,400	4,730	2,770	1,470
6	3,210	2,520	5,200	10,000	1,520	1,900	3,550	3,830	15,200	4,190	2,400	1,340
7	3,230	2,380	4,400	8,000	1,480	1,740	3,330	5,000	13,700	4,120	2,120	1,300
8	2,440	2,960	5,030	7,000	1,590	1,650	3,190	7,750	13,600	4,120	2,610	1,400
9	2,350	4,490	4,960	6,000	1,720	1,580	2,290	10,800	14,100	4,700	2,070	1,550
10	2,740	3,790	5,500	5,000	1,610	1,530	3,690	12,900	13,800	5,130	2,160	1,650
11	2,970	7,530	5,290	4,500	2,160	1,490	3,610	11,900	13,600	5,380	2,120	1,800
12	3,000	10,100	4,370	4,000	2,350	1,460	3,630	11,800	12,400	5,030	1,970	1,830
13	3,320	8,580	3,810	3,500	2,030	1,450	4,000	11,900	11,400	4,080	1,980	2,000
14	3,100	5,110	3,570	3,230	1,850	1,450	4,380	11,500	11,900	3,550	2,150	1,870
15	3,140	4,370	3,380	2,990	1,750	1,550	3,790	10,200	10,000	3,250	2,340	1,510
16	3,030	3,810	3,450	2,830	1,720	1,840	3,590	8,980	9,500	3,210	2,180	1,330
17	2,710	3,450	3,110	2,730	1,690	4,680	3,830	7,960	9,900	3,230	1,920	1,450
18	4,030	4,510	3,080	2,550	1,470	4,800	4,320	9,400	10,000	3,290	1,880	2,790
19	3,090	6,060	2,800	2,470	1,650	3,550	4,900	9,330	9,980	3,510	1,840	3,190
20	4,720	6,780	2,600	2,360	1,610	3,030	4,500	9,150	8,840	3,750	1,830	2,950
21	3,890	6,770	2,500	2,250	1,590	2,790	4,080	10,300	7,210	3,530	2,040	2,290
22	3,670	8,950	2,500	2,130	1,570	2,850	4,630	11,700	6,340	3,330	1,940	4,210
23	3,390	7,090	3,000	2,000	1,540	3,050	6,490	13,800	5,950	3,570	1,920	9,240
24	3,650	5,640	4,200	1,900	1,510	2,740	6,490	15,500	7,060	3,670	2,100	7,510
25	4,130	4,740	4,000	1,800	1,480	2,580	5,350	14,100	5,830	3,690	1,970	5,450
26	4,360	4,190	3,500	1,700	1,450	2,740	4,530	11,200	5,130	3,010	1,810	3,990
27	3,410	4,370	3,190	1,600	1,430	3,470	4,160	10,500	4,730	2,860	1,710	3,070
28	3,270	4,180	2,900	1,590	1,410	3,410	4,320	9,400	4,410	2,970	1,640	2,720
29	3,410	5,040	2,820	1,500	-----	3,590	4,450	9,240	4,210	2,790	1,520	4,480
30	4,630	4,940	2,610	1,500	-----	4,160	4,050	15,100	4,050	2,650	1,450	6,880
31	4,200	-----	2,690	1,500	-----	5,580	-----	11,000	-----	2,670	1,450	-----
TOTAL	97,730	146,080	130,230	120,510	46,580	78,390	131,430	289,680	299,520	121,440	63,210	85,470
MEAN	3,153	4,689	4,201	3,887	1,484	2,459	4,381	9,345	9,317	3,917	2,037	2,649
MAX	4,720	10,100	10,700	18,000	2,350	5,580	6,490	15,500	16,400	4,400	2,770	9,240
MIN	1,710	2,380	2,500	1,500	1,420	1,420	3,190	3,250	4,050	2,650	1,450	1,300
CFSM	4.42	6.82	5.88	5.44	2.33	3.54	6.14	13.1	14.0	5.49	2.86	3.99
IN.	5.09	7.61	6.79	6.28	2.43	4.08	6.85	15.09	15.61	6.33	3.29	4.45
AC-FT	193,800	289,700	258,300	239,000	92,390	155,500	260,700	574,600	594,100	240,900	125,400	169,500

CAL YR 1968 TOTAL 1,843,060 MEAN 5,036 MAX 29,600 MIN 1,710 CFSM 7.05 IN 96.02 AC-FT 3,656,000
WTR YR 1969 TOTAL 1,610,270 MEAN 4,412 MAX 18,000 MIN 1,300 CFSM 6.18 IN 83.90 AC-FT 3,194,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,240	1,650	1,950	1,940	4,330	2,260	1,780	2,340	6,290	3,540	2,280	1,800
2	7,510	1,520	1,860	1,830	3,870	2,160	1,830	2,610	10,500	3,690	2,530	1,540
3	5,450	1,600	1,790	1,780	3,730	2,090	1,750	3,100	14,400	5,210	2,400	1,760
4	4,280	6,140	1,860	1,670	3,290	1,980	1,780	4,080	14,500	6,970	2,550	1,700
5	3,580	4,440	1,760	1,570	2,950	1,910	3,460	5,050	11,600	6,600	2,630	1,380
6	3,210	4,030	1,680	1,560	2,820	1,980	5,180	4,470	12,300	5,420	2,370	2,060
7	2,970	3,480	1,600	1,510	2,850	4,470	3,960	3,870	12,300	4,920	2,270	3,340
8	4,010	2,890	1,580	1,490	3,180	3,210	3,250	3,730	9,430	5,370	2,120	2,360
9	5,030	2,680	1,580	1,550	3,600	2,680	7,280	4,370	8,140	5,380	1,870	1,850
10	4,510	2,390	1,530	1,510	3,870	2,410	8,170	3,730	7,130	4,900	1,840	1,530
11	3,580	2,240	1,620	1,480	4,080	2,260	5,430	3,250	5,730	4,510	1,950	1,420
12	3,120	2,480	3,390	1,430	4,370	2,220	4,280	2,970	5,080	4,050	2,000	1,280
13	2,760	2,290	4,240	1,490	4,900	2,630	3,650	2,800	5,580	3,750	2,080	1,160
14	2,500	2,180	5,990	7,370	4,420	2,970	3,230	2,610	6,290	3,590	1,900	1,100
15	2,310	2,310	4,650	4,930	4,280	3,780	2,950	2,780	6,950	3,630	1,840	1,050
16	2,150	2,430	3,560	3,270	6,260	3,940	2,720	4,780	6,170	4,150	1,900	1,010
17	2,010	2,190	3,230	2,740	5,730	3,330	2,550	7,400	6,140	4,050	1,770	1,620
18	1,910	2,090	3,600	4,930	4,800	2,890	2,450	5,700	7,790	3,610	1,630	4,770
19	1,820	2,090	3,630	6,590	4,080	2,630	2,460	5,300	8,420	3,670	1,610	3,860
20	1,790	2,120	3,960	7,040	3,850	2,460	2,380	5,200	8,800	3,610	1,640	2,780
21	1,940	3,230	4,010	7,070	3,350	2,330	2,220	5,000	10,700	3,320	1,660	2,130
22	1,920	2,740	4,170	7,250	3,120	2,190	2,150	5,900	10,300	2,810	1,780	2,880
23	1,970	3,440	5,180	11,700	2,950	2,160	2,120	5,700	8,700	2,540	1,860	4,320
24	1,790	3,630	4,170	7,650	2,820	2,450	2,570	6,140	7,770	2,640	2,020	2,570
25	1,690	2,850	3,390	6,230	2,680	2,180	2,570	8,070	7,030	2,620	1,960	2,030
26	1,600	2,500	2,990	5,300	2,570	2,070	2,410	9,860	7,620	3,640	1,700	1,770
27	1,620	2,290	2,860	4,900	2,510	2,000	2,280	7,010	7,480	4,050	1,670	1,680
28	1,600	2,150	2,410	4,120	2,380	1,980	2,220	5,530	5,950	3,100	1,580	1,600
29	1,520	2,100	2,260	3,600	-----	1,970	2,260	4,950	4,770	2,540	1,450	1,510
30	1,520	2,060	2,130	3,230	-----	1,880	2,240	4,630	4,630	2,550	1,420	1,420
31	1,640	-----	2,030	3,520	-----	1,810	-----	4,630	-----	2,310	1,510	-----
TOTAL	91,550	80,230	90,660	122,250	103,440	77,280	93,580	147,540	247,890	122,560	59,790	61,280
MEAN	2,953	2,674	2,925	3,944	3,694	2,493	3,119	4,760	8,263	3,954	1,929	2,043
MAX	8,240	6,140	5,990	11,700	6,260	4,470	8,170	9,860	14,500	6,970	2,630	4,770
MIN	1,520	1,520	1,430	1,430	2,980	1,980	2,120	2,360	4,030	2,310	1,420	1,010
CFSM	4.14	3.75	4.10	5.52	5.17	4.49	4.37	6.67	11.6	5.54	2.70	2.86
IN.	4.77	4.18	4.72	6.37	5.39	4.03	4.88	7.69	12.92	6.39	3.12	3.19
AC-FT	181,600	159,100	179,800	242,500	205,200	153,300	185,600	292,700	491,700	243,100	118,600	121,500

CAL YR 1969 TOTAL 1,498,670 MEAN 4,106 MAX 18,000 MIN 1,300 CFSM 5.75 IN 78.08 AC-FT 2,973,000
WTR YR 1970 TOTAL 1,298,070 MEAN 3,556 MAX 14,500 MIN 1,010 CFSM 4.98 IN 67.63 AC-FT 2,575,000

12191600 BAKER LAKE AT UPPER BAKER DAM, NEAR CONCRETE, WASH.

LOCATION.--Lat 48°38'58", long 121°41'22", in NW¼ sec. 31, T.37 N., R.9 E., Whatcom County, at upper Baker Dam on Baker River near center of dam, 0.3 mile upstream from Sulphur Creek, 8.0 miles north of Concrete, and at mile 9.3.

DRAINAGE AREA.--215 sq mi.

PERIOD OF RECORD.--July 1959 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Maximums and minimums (contents in acre-feet, elevation in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum		Date	Minimum	
		Contents	Elevation		Contents	Elevation
1966	June 28, 1966	286,070	724.12	Mar. 25, 1966	143,080	689.30
1967	July 17, Aug. 11, 1967	286,070	724.12	May 14, 1967	110,210	677.85
1968	Sept. 17, 1968	286,370	724.18	May 9, 1968	144,570	689.77
1969	Sept. 23, 1969	286,720	724.25	Mar. 14, 1969	116,220	680.13
1970	July 26, 1970	286,070	724.12	Mar. 27, 1970	107,210	676.67

Period of record: Maximum contents, 286,870 acre-ft June 26, 1962 (elevation, 724.28 ft); minimum since normal high operating level was reached in August 1960, 107,210 acre-ft Mar. 27, 1970 (elevation, 676.67 ft).

REMARKS.--Reservoir is formed by a concrete-gravity dam, completed in June 1959; storage began July 9, 1959. Usable capacity, 220,630 acre-ft between elevations 724 (normal full pool) and 655 ft (minimum operating pool). Dead storage below elevation 655 ft, 64,840 acre-ft. Crest of spillway is at elevation 694 ft. Water used by Puget Sound Power & Light Co. for power development. Capacity table furnished by Puget Sound Power & Light Co. Figures given herein represent total contents.

COOPERATION.--Gage-height records collected in cooperation with Puget Sound Power & Light Co.

MONTHEND ELEVATION AND CONTENTS, WATER YEARS OCTOBER 1965 TO SEPTEMBER 1970

DATE	ELEVATION (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)	DATE	ELEVATION (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
OCT. 31, 1965.....	723.20	281,500	+1,580	OCT. 31, 1968.....	722.13	276,230	-8,000
NOV. 30.....	721.29	272,140	-9,360	NOV. 30.....	720.20	266,870	-9,360
DEC. 31.....	715.15	243,200	-28,940	DEC. 31.....	706.65	210,380	-56,490
CAL YR 1965.....	-	-	+12,180	CAL YR 1968.....	-	-	-28,150
JAN. 31, 1966.....	710.57	222,820	-20,380	JAN. 31, 1969.....	687.73	138,170	-72,210
FEB. 28.....	704.65	199,080	-24,740	FEB. 28.....	681.35	119,550	-18,620
MAR. 31.....	696.85	168,500	-29,580	MAR. 31.....	687.57	137,680	+18,130
APR. 30.....	714.98	242,430	+73,930	APR. 30.....	709.53	218,340	+80,660
MAY 31.....	722.45	277,810	+35,380	MAY 31.....	723.34	282,200	+63,860
JUNE 30.....	723.00	280,510	+2,700	JUNE 30.....	723.23	281,650	-550
JULY 31.....	723.82	284,580	+4,070	JULY 31.....	723.79	284,430	+2,780
AUG. 31.....	723.45	282,740	-1,840	AUG. 31.....	723.67	283,830	-600
SEPT. 30.....	723.75	284,230	+1,490	SEPT. 30.....	723.12	281,110	-2,720
WTR YR 1966.....	-	-	+4,310	WTR YR 1969.....	-	-	-3,120
OCT. 31.....	722.70	279,040	-5,190	OCT. 31.....	718.91	260,700	-20,410
NOV. 30.....	718.07	256,730	-22,310	NOV. 30.....	717.77	255,330	-5,370
DEC. 31.....	715.45	244,580	-12,150	DEC. 31.....	713.08	233,860	-21,470
CAL YR 1966.....	-	-	+1,380	CAL YR 1969.....	-	-	+23,480
JAN. 31, 1967.....	714.74	241,340	-3,240	JAN. 31, 1970.....	701.71	186,540	-47,320
FEB. 28.....	706.77	206,720	-34,620	FEB. 28.....	683.31	125,050	-61,490
MAR. 31.....	700.80	183,060	-23,660	MAR. 31.....	678.00	110,590	-14,460
APR. 30.....	681.86	120,960	-62,100	APR. 30.....	678.43	111,720	+1,130
MAY 31.....	706.80	206,840	+85,880	MAY 31.....	695.22	162,740	+51,020
JUNE 30.....	722.87	279,870	+73,030	JUNE 30.....	723.17	281,350	+118,610
JULY 31.....	723.39	282,450	+2,580	JULY 31.....	724.00	285,470	+4,120
AUG. 31.....	723.41	282,540	+90	AUG. 31.....	724.05	285,720	+250
SEPT. 30.....	722.98	280,410	-2,130	SEPT. 30.....	722.92	280,120	-5,600
WTR YR 1967.....	-	-	-3,820	WTR YR 1970.....	-	-	-990
OCT. 31.....	723.90	284,980	+4,570	† ELEVATION AT 2400 HOURS.			
NOV. 30.....	715.65	245,490	-39,490				
DEC. 31.....	714.12	238,530	-6,960				
CAL YR 1967.....	-	-	-6,050				
JAN. 31, 1968.....	716.59	249,830	+11,300				
FEB. 29.....	717.60	254,530	+4,700				
MAR. 31.....	723.00	280,510	+25,980				
APR. 30.....	702.43	189,320	-91,190				
MAY 31.....	712.17	229,850	+40,510				
JUNE 30.....	722.35	277,310	+47,460				
JULY 31.....	723.12	281,110	+3,800				
AUG. 31.....	723.77	284,330	+3,220				
SEPT. 30.....	723.75	284,230	-100				
WTR YR 1968.....	-	-	+3,820				

SKAGIT RIVER BASIN

12191800 SULPHUR CREEK NEAR CONCRETE, WASH.

LOCATION.--Lat 48°40'04", long 121°45'00", in SE¼ sec.22, T.37 N., R.8 E., Whatcom County, Mount Baker National Forest, on left bank 9.5 miles north of Concrete and at mile 3.5.

DRAINAGE AREA.--8.36 sq mi.

PERIOD OF RECORD.--February 1963 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is about 1,750 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 44.8 cfs (72.77 inches per year, 32,460 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (215 cfs, revised), water years 1966-70												
Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	
Oct. 6, 1965	0430	*263	1.80	Oct. 11, 1967	0530	223	1.53	June 26, 1968	1930	*475	2.30	
Nov. 2, 1965	0300	217	1.64	Oct. 27, 1967	1900	353	1.98	Sept. 17, 1968	0630	328	1.91	
				Oct. 31, 1967	1330	230	1.63					
Dec. 13, 1966	1230	*292	1.82	Nov. 10, 1967	1500	227	1.62		(a)		*885	3.25
Dec. 16, 1966	0400	247	1.69	Jan. 14, 1968	1030	455	2.20	Sept. 17, 1969	2330	227	1.62	
				Jan. 20, 1968	1800	216	1.59	Sept. 23, 1969	0100	322	1.89	
Oct. 6, 1967	1800	234	1.86	June 2, 1968	0700	395	2.10					
								Nov. 4, 1969	1400	*403	2.12	

a About Jan. 4 or 5, 1969.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Mar. 4-8, 21-25, Sept. 1, 1966	18	a.64	1969	Mar. 4, 6-15, 1969	c16	d.50
1967	Apr. 17, 1967	17	b.56	1970	Mar. 3, 4, 1970	18	.52
1968	Apr. 21, 1968	19	b.57				

a Occurred Sept. 1, 1966.

b Occurred Aug. 8, 22, 1968.

c Minimum daily.

d Occurred Mar. 7-15, 1969, but may have been less during period of no gage-height record.

Period of record: Maximum discharge, 885 cfs about Jan. 4 or 5, 1969 (gage height, 3.25 ft), from rating curve extended above 230 cfs on basis of slope-area measurement at gage height 3.05 ft; minimum daily, 16 cfs Mar. 7-10, 22-28, 1964, Mar. 4, 6-15, 1969.

REMARKS.--Records excellent. No gage-height record Dec. 28, 1968, to Feb. 13, 1969. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	69	73	30	28	21	48	28	39	50	46	19
2	29	106	65	29	26	20	43	37	42	63	44	19
3	30	124	84	28	26	19	38	49	37	84	49	20
4	35	137	97	27	26	18	38	65	38	80	41	22
5	81	93	72	35	30	18	42	82	50	76	37	24
6	129	65	107	54	29	18	44	102	72	69	38	23
7	43	55	89	55	27	18	52	89	84	78	39	21
8	41	55	65	60	26	21	55	84	80	86	33	21
9	43	54	54	46	26	35	50	86	74	86	30	21
10	36	49	49	44	24	25	56	71	95	74	28	22
11	33	48	46	44	24	21	60	54	78	67	27	21
12	36	43	43	46	23	22	43	55	56	72	26	21
13	36	43	41	84	23	43	33	48	49	76	41	21
14	57	55	38	76	23	44	41	37	56	72	33	25
15	56	80	37	52	23	42	39	37	80	76	28	26
16	41	56	36	43	23	30	39	35	95	76	27	22
17	38	48	36	41	22	24	36	31	89	60	25	22
18	49	46	37	39	21	23	33	31	72	58	25	28
19	50	83	38	38	21	21	29	37	76	62	25	24
20	52	84	39	37	22	20	28	42	62	52	25	24
21	46	76	37	36	22	19	27	54	54	55	25	26
22	46	60	35	35	22	18	26	42	65	63	25	30
23	43	50	35	35	22	18	26	35	54	55	28	33
24	39	46	33	33	22	18	26	37	48	46	31	28
25	38	44	32	33	21	20	28	54	52	52	30	25
26	38	43	31	32	21	23	28	72	55	52	26	25
27	39	42	32	30	21	26	25	60	58	55	26	26
28	43	41	32	29	20	30	25	49	95	60	26	29
29	50	39	30	35	-----	39	25	54	63	58	21	30
30	50	41	30	36	-----	76	26	50	54	54	20	28
31	41	-----	29	32	-----	67	-----	39	-----	46	20	-----
TOTAL	1,417	1,875	1,502	1,274	664	857	1,109	1,646	1,922	2,013	945	726
MEAN	45.7	62.5	48.5	41.1	23.7	27.6	37.0	53.1	64.1	64.9	30.5	24.2
MAX	129	137	107	84	30	76	60	102	95	86	49	33
MIN	29	39	29	27	20	18	25	28	37	46	20	19
CFSM	5.47	7.48	5.80	4.92	2.83	3.30	4.43	6.35	7.67	7.76	3.65	2.89
IR	4.31	6.34	6.68	5.67	2.95	3.61	4.93	7.32	8.55	8.46	4.21	3.23
AC-FT	2,810	3,720	2,980	2,530	1,320	1,700	2,200	3,260	3,810	3,990	1,870	1,440

CAL YR 1965 TOTAL 14,819 MEAN 40.6 MAX 137 MIN 18 CFSM 4.86 IN 65.94 AC-FT 29,390

WTR YR 1966 TOTAL 15,950 MEAN 43.7 MAX 137 MIN 18 CFSM 5.23 IN 70.97 AC-FT 31,640

12191800 SULPHUR CREEK NEAR CONCRETE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	41	111	36	35	24	19	21	81	85	41	34
2	35	39	86	36	36	22	20	24	95	109	39	40
3	29	38	69	36	34	22	20	27	88	110	40	31
4	30	37	63	35	71	22	22	30	85	95	41	31
5	31	39	54	33	46	21	20	34	90	81	35	31
6	30	38	52	31	37	21	20	34	98	73	32	31
7	32	37	46	31	32	21	21	35	83	62	45	28
8	37	36	43	34	30	21	21	46	63	65	35	28
9	30	37	41	33	30	20	21	45	62	57	37	28
10	29	36	50	40	30	20	20	34	60	55	39	53
11	29	37	74	45	28	18	20	30	59	77	41	45
12	28	49	109	36	28	18	21	28	75	92	37	31
13	28	56	229	33	26	18	19	28	88	81	35	30
14	28	78	108	37	25	18	18	29	98	71	34	31
15	28	67	123	60	24	18	18	37	102	69	34	34
16	30	52	178	41	24	24	18	52	112	73	33	37
17	30	44	140	35	25	23	18	67	125	65	30	39
18	30	43	128	32	24	21	18	63	125	52	30	36
19	74	48	128	44	22	20	18	65	138	48	29	36
20	59	46	92	40	22	20	20	79	140	69	29	39
21	42	44	67	33	22	20	20	88	132	62	30	41
22	54	43	55	30	22	45	20	83	112	54	30	39
23	126	42	51	29	22	63	18	69	90	59	28	35
24	93	41	48	27	22	34	19	48	98	57	28	37
25	67	67	44	26	22	25	20	42	110	62	26	37
26	74	49	41	27	22	23	18	46	102	52	28	40
27	56	48	40	44	22	21	18	54	90	44	29	44
28	46	73	39	77	25	20	20	62	81	45	30	42
29	64	68	39	75	-----	20	20	71	77	40	33	44
30	49	120	36	55	-----	18	20	52	81	41	36	74
31	43	-----	37	40	-----	18	-----	51	-----	42	36	-----
TOTAL	1,394	1,493	2,421	1,211	828	719	585	1,474	2,840	2,043	1,050	1,126
MEAN	45.0	49.8	78.1	39.1	29.6	23.2	19.5	47.5	94.7	65.9	33.9	37.5
MAX	126	120	229	77	71	63	22	88	140	110	45	74
MIN	28	36	26	22	18	18	21	59	40	26	28	28
CFSM	5.38	5.96	9.34	4.68	3.54	2.78	2.33	5.68	11.3	7.88	4.06	4.49
IN-	6.20	6.64	10.77	5.39	3.68	3.20	2.60	6.56	12.64	9.09	4.67	5.01
AC-FT	2,770	2,960	4,800	2,400	1,640	1,430	1,160	2,920	5,630	4,050	2,080	2,230

CAL YR 1966 TOTAL 16,464 MEAN 45.1 MAX 229 MIN 18 CFSM 5.39 IN 73.26 AC-FT 32,660
WTR YR 1967 TOTAL 17,184 MEAN 47.1 MAX 229 MIN 18 CFSM 5.63 IN 76.46 AC-FT 34,080

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	88	44	38	35	54	28	35	184	49	34	31
2	123	68	46	36	62	65	30	29	272	63	36	30
3	67	63	48	35	90	97	28	35	104	74	34	28
4	67	57	44	35	94	104	30	35	78	76	31	28
5	57	56	42	32	52	125	30	29	76	70	29	30
6	142	54	41	31	44	74	28	26	76	62	28	31
7	198	56	41	31	40	52	26	26	74	61	26	31
8	108	66	41	30	38	46	25	27	61	65	26	30
9	67	76	46	30	38	42	25	35	59	56	26	30
10	99	140	70	29	37	38	27	48	57	49	28	30
11	152	78	61	27	36	38	29	54	56	48	29	32
12	98	66	45	29	36	44	26	46	46	65	28	31
13	114	63	42	133	36	44	24	34	48	99	26	30
14	92	122	40	239	34	38	25	32	44	48	26	87
15	67	140	38	125	32	41	23	32	42	45	26	82
16	62	88	37	68	31	41	21	41	44	36	25	68
17	59	66	36	51	32	36	21	56	52	33	26	169
18	67	63	35	50	88	32	21	70	66	33	28	66
19	62	57	34	109	131	31	20	85	76	38	26	44
20	59	56	34	146	90	30	20	120	59	43	26	40
21	116	52	34	115	90	30	20	74	50	35	24	38
22	98	51	46	72	74	30	20	57	57	32	24	40
23	79	51	73	68	147	38	26	51	57	33	32	44
24	75	51	120	102	122	37	25	48	66	35	32	40
25	81	48	142	70	70	35	26	48	88	36	36	39
26	67	46	92	54	54	31	24	45	167	36	43	39
27	74	45	74	48	51	35	24	44	129	39	53	39
28	131	45	61	44	30	32	27	48	54	40	34	38
29	83	45	50	40	51	37	35	50	39	38	28	37
30	125	45	44	38	-----	31	45	44	37	35	28	38
31	151	-----	41	38	-----	29	-----	41	-----	33	29	-----
TOTAL	3,059	2,002	1,642	1,993	1,787	1,397	779	1,440	2,318	1,447	925	1,340
MEAN	98.7	66.7	53.0	64.3	61.6	45.1	26.0	46.5	77.3	46.7	29.8	44.7
MAX	198	140	142	239	147	125	45	120	272	76	53	169
MIN	57	45	34	27	31	29	20	26	37	32	24	28
CFSM	11.6	7.98	6.34	7.69	7.37	5.39	3.11	5.56	9.25	5.59	3.56	5.35
IN-	13.61	8.91	7.31	8.87	7.95	6.22	3.47	6.41	10.31	6.44	4.12	5.96
AC-FT	6,070	3,970	3,260	3,950	3,940	2,770	1,550	2,860	4,600	2,870	1,830	2,660

CAL YR 1967 TOTAL 18,579 MEAN 50.9 MAX 198 MIN 18 CFSM 6.09 IN 82.67 AC-FT 36,850
WTR YR 1968 TOTAL 20,129 MEAN 55.0 MAX 272 MIN 10 CFSM 6.58 IN 89.57 AC-FT 39,930

12191800 SULPHUR CREEK NEAR CONCRETE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	49	47	35	18	17	40	24	81	46	29	29
2	37	57	40	50	20	17	37	22	104	57	28	31
3	37	57	79	150	20	17	28	22	120	50	27	31
4	42	48	54	600	19	16	27	22	125	45	26	30
5	41	45	44	250	18	17	28	25	131	40	26	29
6	58	45	40	120	18	16	26	32	120	36	25	29
7	46	47	40	100	18	16	26	40	110	40	25	30
8	42	58	48	85	19	16	26	58	110	45	26	32
9	43	57	45	70	20	16	28	78	110	54	26	36
10	52	48	47	60	21	16	29	81	110	60	26	38
11	54	108	42	50	23	16	29	78	105	88	26	40
12	54	69	39	45	25	16	32	78	100	49	26	37
13	54	49	38	40	21	16	39	76	100	37	28	37
14	50	45	38	37	20	16	31	71	90	33	29	32
15	53	42	39	34	20	16	27	58	85	32	30	30
16	48	42	37	32	20	18	27	48	100	33	29	31
17	52	41	34	31	20	31	36	46	90	35	26	75
18	53	57	33	30	20	27	40	54	80	39	26	112
19	53	63	32	28	20	22	35	67	75	42	28	125
20	56	94	31	26	20	20	29	71	65	40	32	67
21	52	90	30	25	19	20	29	74	60	36	35	46
22	56	83	30	24	18	20	33	92	50	38	30	132
23	52	63	40	23	18	19	40	104	60	41	31	192
24	62	53	69	22	18	18	36	125	50	40	32	97
25	67	50	45	21	18	20	29	81	44	36	32	71
26	54	45	37	20	17	22	26	65	41	32	29	53
27	48	55	35	19	17	25	27	62	40	32	29	48
28	63	50	33	18	17	25	31	62	39	30	32	48
29	83	60	30	17	-----	26	29	107	38	29	28	44
30	88	55	30	17	-----	30	26	112	41	29	27	69
31	57	-----	32	17	-----	44	-----	76	-----	30	27	-----
TOTAL	1,644	1,725	1,258	2,096	542	631	926	2,011	2,474	1,274	876	1,701
MEAN	53.0	57.5	40.6	67.6	19.4	20.4	30.9	64.9	82.5	41.1	28.3	56.7
MAX	88	108	79	600	25	44	40	125	131	88	35	192
MIN	37	41	30	17	17	16	26	22	38	29	25	29
CFSM	6.34	6.88	4.86	8.09	2.32	2.44	3.70	7.76	9.87	4.92	3.39	6.78
IN	7.32	7.68	5.60	9.33	2.41	2.12	4.12	8.95	11.01	5.67	3.92	7.57
AC-FT	3,260	3,420	2,500	4,160	1,080	1,250	1,840	3,990	4,910	2,530	1,740	3,370

CAL YR 1968 TOTAL 18,053 MEAN 49.3 MAX 272 MIN 20 CFSM 5.90 IN 80.33 AC-FT 35,810
WTR YR 1969 TOTAL 17,158 MEAN 47.0 MAX 600 MIN 16 CFSM 5.62 IN 76.35 AC-FT 34,030

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	35	31	27	27	23	19	20	69	27	23	24
2	65	35	31	27	25	23	18	22	99	37	25	24
3	48	35	31	25	26	22	18	25	112	59	25	32
4	44	175	31	25	24	22	22	29	88	68	29	26
5	42	74	30	25	24	21	55	32	84	55	30	28
6	41	76	29	25	24	31	69	28	95	45	27	39
7	40	56	29	24	25	30	36	25	72	49	27	30
8	51	30	25	20	27	30	28	34	54	54	22	25
9	65	46	29	26	28	27	118	37	53	48	20	22
10	47	42	29	25	28	25	61	28	46	42	20	22
11	42	42	37	24	30	25	40	25	39	36	23	22
12	40	42	46	23	32	26	31	23	43	35	25	21
13	40	40	63	27	39	31	28	23	58	34	25	21
14	38	39	70	47	36	38	26	23	58	32	22	21
15	37	40	46	32	40	40	25	28	56	39	24	22
16	37	39	40	28	54	40	24	43	46	37	25	22
17	36	37	38	26	44	31	23	53	57	30	22	39
18	36	36	54	35	34	28	23	37	77	32	20	43
19	36	36	44	62	31	26	22	38	72	32	20	51
20	38	39	50	48	28	25	21	37	84	29	22	32
21	39	42	50	74	28	24	20	35	99	25	23	28
22	37	37	48	63	27	23	28	42	76	21	26	62
23	36	42	46	74	26	24	21	38	68	21	29	39
24	37	38	39	48	26	24	22	45	58	21	33	32
25	36	35	35	39	25	22	20	60	59	27	31	30
26	36	33	32	34	25	20	19	62	56	63	27	29
27	38	33	31	31	25	20	19	39	56	61	25	31
28	36	32	30	28	24	20	20	32	40	32	23	32
29	36	32	29	27	-----	20	20	32	31	27	22	32
30	36	31	28	26	-----	20	20	31	27	22	22	32
31	36	-----	28	28	-----	19	-----	39	-----	21	25	-----
TOTAL	1,340	1,370	1,184	1,078	832	820	908	1,065	1,932	1,161	762	913
MEAN	43.2	45.7	38.2	34.8	29.7	26.5	30.3	34.4	64.4	37.5	24.6	30.4
MAX	88	175	70	74	54	50	118	62	112	68	33	62
MIN	36	31	28	23	24	19	18	20	27	21	20	21
CFSM	5.17	5.47	4.57	4.16	3.55	3.17	3.62	4.11	7.70	4.49	2.94	3.64
IN	5.96	6.10	5.27	4.80	3.70	3.65	4.04	4.74	8.60	5.17	3.39	4.06
AC-FT	2,660	2,720	2,350	2,140	1,650	1,630	1,800	2,110	3,830	2,300	1,510	1,810

CAL YR 1969 TOTAL 16,425 MEAN 45.0 MAX 600 MIN 16 CFSM 5.38 IN 73.09 AC-FT 32,580
WTR YR 1970 TOTAL 13,365 MEAN 36.6 MAX 175 MIN 18 CFSM 4.38 IN 59.47 AC-FT 26,510

12193000 LAKE SHANNON AT CONCRETE, WASH.

LOCATION.--Lat 48°32'53", long 121°41'22", in SW $\frac{1}{4}$ sec.2., T.35 N., R.8 E., Skagit County, at Baker Dam on Baker River near left bank, 0.7 mile north of Concrete and at mile 1.2.

DRAINAGE AREA.--297 sq mi.

PERIOD OF RECORD.--November 1925 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to March 1959 at datum 1.72 ft lower. Prior to Nov. 11, 1959, water-stage indicator in powerplant at present datum.

EXTREMES.--Maximums and minimums (contents in acre-feet, elevation in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum Contents	Elevation	Date	Minimum Contents	Elevation
1966	Oct. 6, 1965	149,540	434.04	Oct. 4, 1965	132,310	425.70
1967	Dec. 17, 1966	144,580	431.70	Sept. 18, 1967	131,950	425.52
1968	Sept. 17, 1968	161,470	439.50	Jan. 8, 1968	133,550	426.32
1969	Oct. 13, 1968	159,910	438.8	Mar. 6, 1969	28,260	a363.7
1970	Oct. 1, 1969, Sept. 1, 1970	159,640	438.68	Mar. 21, 1970	61,770	386.54

a Estimated by Puget Sound Power & Light Co.

Period of record: Maximum contents, 161,470 acre-ft Sept. 17, 1968 (elevation, 439.50 ft); minimum not determined.

REMARKS.--Reservoir is formed by a concrete-arch and gravity dam, completed in June 1927; storage began in November 1925. Usable capacity, 142,400 acre-ft between elevations 355 (minimum operating pool) and 438.6 ft (normal full pool). Dead storage unknown. Spillway crest is at elevation 424.9 ft. Water used by Puget Sound Power & Light Co. for power development. Figures given herein represent contents above elevation 341.7 ft (centerline of outlet tunnel).

COOPERATION.--Gage-height record collected in cooperation with Puget Sound Power & Light Co.

MONTHEND ELEVATION AND CONTENTS, WATER YEARS OCTOBER 1965 TO SEPTEMBER 1970

DATE	ELEVATION (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)	DATE	ELEVATION (FEET)†	CONTENTS (ACRE-FEET)	CHANGE IN CONTENTS (ACRE-FEET)
OCT. 31, 1965.....	429.03	139,040	+6,240	OCT. 31, 1968.....	434.93	151,450	-7,460
NOV. 30.....	427.70	136,330	-2,710	NOV. 30.....	433.78	148,980	-2,470
DEC. 31.....	428.46	137,870	+1,540	DEC. 31.....	428.99	138,950	-10,030
CAL YR 1965.....	-	-	-8,960	CAL YR 1968.....	-	-	+2,340
JAN. 31, 1966.....	427.25	135,410	-2,460	JAN. 31, 1969.....	415.59	112,910	-26,040
FEB. 28.....	427.76	136,450	+1,040	FEB. 28.....	378.79	49,730	-63,180
MAR. 31.....	427.84	136,610	+160	MAR. 31.....	380.58	52,450	+2,720
APR. 30.....	426.81	134,530	-2,080	APR. 30.....	412.67	107,470	+55,020
MAY 31.....	428.42	137,790	+3,260	MAY 31.....	437.68	157,430	+49,960
JUNE 30.....	429.91	140,850	+3,060	JUNE 30.....	438.19	158,560	+1,130
JULY 31.....	428.61	138,180	-2,670	JULY 31.....	438.09	158,340	-220
AUG. 31.....	426.80	134,510	-3,670	AUG. 31.....	437.07	157,850	-490
SEPT. 30.....	426.93	134,770	+260	SEPT. 30.....	438.53	159,310	+1,460
WTR YR 1966.....	-	-	+1,970	WTR YR 1969.....	-	-	+400
OCT. 31.....	428.26	137,460	+2,690	OCT. 31.....	436.91	155,740	-3,570
NOV. 30.....	430.16	141,370	+3,910	NOV. 30.....	435.00	151,600	-4,140
DEC. 31.....	427.90	136,730	-4,640	DEC. 31.....	434.12	149,710	-1,890
CAL YR 1966.....	-	-	-1,140	CAL YR 1969.....	-	-	+10,760
JAN. 31, 1967.....	427.50	135,920	-810	JAN. 31, 1970.....	433.75	148,920	-790
FEB. 28.....	426.90	134,710	-1,210	FEB. 28.....	421.06	123,200	-25,720
MAR. 31.....	427.80	136,530	+1,820	MAR. 31.....	392.27	71,100	-52,100
APR. 30.....	425.95	132,800	-3,730	APR. 30.....	396.99	79,040	+7,940
MAY 31.....	426.59	134,090	+1,290	MAY 31.....	406.66	96,300	+17,260
JUNE 30.....	428.93	138,830	+4,740	JUNE 30.....	437.27	156,530	+60,230
JULY 31.....	428.03	136,990	-1,840	JULY 31.....	438.61	159,490	+2,960
AUG. 31.....	427.83	136,590	-400	AUG. 31.....	438.61	159,490	0
SEPT. 30.....	428.01	136,950	+360	SEPT. 30.....	438.05	158,250	-1,240
WTR YR 1967.....	-	-	+2,180	WTR YR 1970.....	-	-	-1,060
OCT. 31.....	430.98	143,070	+6,120	† ELEVATION AT 2400 HOURS.			
NOV. 30.....	427.57	136,060	-7,010				
DEC. 31.....	427.84	136,610	+550				
CAL YR 1967.....	-	-	-120				
JAN. 31, 1968.....	428.70	138,360	+1,750				
FEB. 29.....	434.58	150,690	+12,330				
MAR. 31.....	432.98	147,280	-3,410				
APR. 30.....	430.68	142,450	-4,830				
MAY 31.....	427.85	136,630	-5,820				
JUNE 30.....	429.05	139,080	+2,450				
JULY 31.....	429.35	139,700	+620				
AUG. 31.....	438.19	158,560	+18,860				
SEPT. 30.....	438.35	158,910	+350				
WTR YR 1968.....	-	-	+21,960				

SKAGIT RIVER BASIN

12193500 BAKER RIVER AT CONCRETE, WASH.

LOCATION (REVISED).--Lat 48°32'24", long 121°44'31", in NW¼NW¼ sec.11, T.35 N., R.8 E., Skagit County, on left bank just upstream from fish barrier, 0.2 mile northeast of Concrete, 0.3 mile downstream from Baker River powerplant, and at mile 0.7.

DRAINAGE AREA.--297 sq mi.

PERIOD OF RECORD.--September 1910 to March 1915, September 1943 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. See WSP 1932 for history of changes prior to June 12, 1958.

AVERAGE DISCHARGE.--31 years (1910-14, 1943-70), 2,644 cfs (1,916,000 acre-ft per year), adjusted for storage in Lake Shannon since November 1925 and Baker Lake since July 1959.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, elevation in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum			Date	Minimum daily	Discharge	Elevation
		Discharge	Elevation					
1966	Nov. 4, 1965	10,600	178.10		Oct. 4, 1965	278	-	-
1967	June 21, 1967	15,000	179.04		Sept. 17, 1967	457	-	-
1968	Sept. 17, 1968	24,700	183.06		Aug. 31, 1968	109	-	-
1969	Sept. 25, 1969	17,100	180.53		Mar. 6, 1969	54	-	-
1970	Nov. 4, 1969	15,100	179.08		Nov. 27, 30, 1969	75	-	-

Period of record: Maximum discharge, 36,600 cfs Nov. 19, 1962 (elevation, 186.6 ft), computation of peak flow over dam; minimum daily, 54 cfs Mar. 6, 1969.

REMARKS.--Records excellent except those for discharges below 300 cfs, which are fair. No diversions which are not returned to river above gage. Flow completely regulated by Baker River powerplants and Baker and Shannon Lakes (see stations 12191600, 12193000).

REVISIONS (WATER YEARS).--WSP 1286: 1911-15(M), 1944(M), 1945-46, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	1,730	2,570	2,260	1,640	2,420	2,540	1,170	2,900	3,900	2,770	1,160
2	311	3,060	4,000	2,730	1,550	3,210	3,290	1,160	2,500	3,470	2,780	980
3	284	6,240	3,070	3,230	1,600	3,500	2,430	1,310	1,910	3,010	3,240	816
4	278	9,510	5,300	2,320	1,700	3,380	1,590	1,590	1,560	3,360	3,190	652
5	839	6,900	4,990	2,290	2,180	3,190	1,310	2,110	1,470	4,040	2,800	863
6	5,880	4,880	5,240	2,630	2,990	2,530	1,600	2,890	2,570	4,060	1,890	1,220
7	4,430	3,550	4,680	2,430	2,440	3,540	1,870	3,620	4,640	3,830	2,090	1,330
8	2,900	3,410	4,550	2,340	1,970	3,270	1,780	3,620	4,990	4,280	2,190	1,320
9	3,240	2,760	4,060	3,290	1,860	3,080	1,710	4,120	5,090	4,750	2,240	941
10	2,400	2,370	3,270	3,610	1,740	3,710	1,660	4,720	5,410	4,660	2,350	979
11	1,750	3,250	2,590	2,660	1,700	3,550	1,750	4,310	5,690	4,100	2,220	1,310
12	1,640	3,800	2,220	1,960	1,800	2,690	1,780	3,340	5,310	3,870	1,940	1,280
13	1,960	2,380	2,730	1,910	1,980	3,110	1,610	3,430	4,190	3,950	1,610	1,190
14	1,640	1,810	2,770	2,230	2,130	2,800	1,580	3,650	3,190	4,220	1,880	1,200
15	2,400	3,100	2,330	2,560	1,860	2,880	1,360	4,380	3,060	4,180	1,980	1,370
16	2,170	3,920	1,750	3,150	1,590	2,880	999	4,300	4,430	4,540	1,450	1,280
17	1,590	3,770	1,670	3,370	1,410	2,480	831	3,010	5,620	4,100	2,070	1,090
18	1,590	2,580	1,580	2,310	1,270	2,480	722	2,620	5,080	3,710	1,790	1,740
19	1,780	2,950	1,290	1,960	1,120	2,750	743	2,790	4,590	3,360	1,560	1,550
20	1,770	3,300	1,670	2,540	1,020	2,850	826	3,060	4,460	3,550	1,510	1,270
21	2,080	2,970	2,320	2,470	786	2,680	755	3,280	4,340	3,150	1,750	1,180
22	1,700	2,840	2,250	2,260	611	2,310	641	3,270	3,360	2,840	2,080	1,430
23	1,320	2,720	2,120	2,120	636	1,920	587	2,900	3,070	3,080	2,280	1,590
24	1,220	2,690	1,800	2,430	898	1,540	551	2,300	2,980	3,080	1,850	1,580
25	1,260	2,220	1,390	2,090	1,280	1,350	548	2,010	2,600	3,030	1,440	1,420
26	1,330	1,460	1,400	1,450	1,110	1,070	772	3,050	2,630	2,980	1,360	1,220
27	1,990	1,340	2,370	1,230	1,400	774	1,060	3,900	3,100	2,870	1,340	1,070
28	2,750	1,450	2,320	1,060	2,030	907	1,140	2,950	5,930	3,000	1,580	985
29	2,790	1,460	2,340	795	-----	911	1,190	2,450	6,210	2,990	1,620	1,170
30	3,180	1,640	2,280	837	-----	1,610	1,210	2,650	5,190	3,010	1,690	1,240
31	2,340	-----	2,580	1,500	-----	2,030	-----	2,800	-----	2,980	1,370	-----
TOTAL	61,165	96,060	85,500	70,022	44,301	77,402	40,475	92,760	118,070	111,950	61,910	36,426
MEAN	1,973	3,202	2,758	2,259	1,582	2,497	1,349	2,992	3,936	3,611	1,997	1,214
MAX	5,880	9,510	5,300	3,610	2,990	3,710	3,290	4,720	6,210	4,750	3,240	1,740
MIN	278	1,340	1,290	795	611	774	548	1,160	1,470	2,840	1,340	652
AC-FT	121,300	190,500	169,600	138,900	87,870	153,500	80,280	184,000	234,200	222,100	122,800	72,250
(1)	+7,820	-12,070	-27,400	-22,840	-23,700	-29,420	+71,850	+38,640	+5,760	+1,400	-5,510	+1,750
MEAN*	2,100	2,998	2,313	1,888	1,155	2,018	2,556	3,620	4,033	3,633	1,908	1,244
AC-FT*	129,100	178,400	142,200	116,100	64,170	124,100	152,100	222,600	240,000	223,400	117,300	74,000
CAL YR 1965	TOTAL 884,745	MEAN 2,424	MAX 9,510	MIN 111	AC-FT 1,755,000	MEAN* 2,428	AC-FT* 1,758,000					
WTR YR 1966	TOTAL 896,041	MEAN 2,455	MAX 9,510	MIN 278	AC-FT 1,777,000	MEAN* 2,463	AC-FT* 1,783,000					

* CHANGE IN CONTENTS, IN ACRE-FEET, IN BAKER LAKE AND LAKE SHANNON.

* ADJUSTED FOR CHANGE IN CONTENTS IN BAKER LAKE AND LAKE SHANNON.

SKAGIT RIVER BASIN

559

12193500 BAKER RIVER AT CONCRETE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,190	2,320	5,500	2,620	2,980	1,810	2,760	1,130	1,440	8,130	2,380	2,240
2	1,610	2,240	4,900	2,640	3,350	1,940	2,250	1,330	2,020	7,990	1,820	2,260
3	1,690	2,080	3,800	2,880	3,890	2,040	2,040	1,320	2,530	8,490	1,970	2,270
4	1,950	2,060	3,350	3,140	3,520	1,530	2,330	1,370	2,680	7,160	2,150	1,510
5	1,360	2,880	3,450	3,030	2,680	1,060	2,930	1,580	2,900	7,210	2,240	1,520
6	1,280	3,170	3,950	3,780	3,030	1,140	2,410	1,690	2,850	7,170	2,150	1,480
7	1,290	3,290	4,100	3,030	3,510	1,560	2,140	2,300	2,740	6,660	2,420	1,760
8	1,210	2,650	3,850	2,180	3,490	1,850	2,470	3,140	2,560	6,450	2,590	2,470
9	959	2,320	4,000	2,360	3,470	2,060	2,560	3,270	2,620	6,470	1,760	1,870
10	1,250	1,980	4,360	2,700	3,370	1,950	2,920	4,070	2,950	6,820	1,970	1,580
11	1,320	1,600	5,160	2,930	2,770	2,120	3,090	3,980	3,240	7,790	2,280	2,120
12	1,390	1,620	5,410	2,830	2,690	1,630	3,250	3,910	3,700	6,520	2,530	2,560
13	1,800	1,770	7,100	2,670	3,170	1,480	3,510	3,540	4,620	7,160	2,450	2,440
14	2,930	2,810	6,140	2,230	3,800	1,910	4,650	3,850	4,990	7,640	2,590	1,390
15	2,160	3,120	6,620	2,310	3,680	2,820	3,450	2,360	5,200	6,880	2,450	977
16	1,610	3,220	8,120	2,820	3,440	1,950	2,880	1,680	5,270	5,780	2,380	716
17	1,610	2,960	8,680	3,440	3,300	1,810	2,800	2,090	5,350	6,250	2,530	457
18	1,330	2,500	10,500	2,770	2,360	1,540	2,060	1,490	4,220	6,660	2,350	599
19	1,530	2,040	9,120	2,890	1,350	1,050	2,460	1,490	6,330	5,610	2,190	1,030
20	2,520	1,850	7,930	3,750	2,010	1,120	2,460	1,410	10,200	5,510	1,850	1,580
21	2,620	2,800	5,920	3,720	2,510	1,720	1,760	1,310	12,500	5,180	2,180	2,080
22	2,240	2,750	4,610	2,950	2,520	2,880	1,280	1,450	11,800	4,640	1,840	1,650
23	2,970	2,550	4,560	3,050	2,500	3,360	673	1,590	10,100	3,760	1,780	1,490
24	5,620	2,300	4,590	3,020	2,390	3,040	1,000	1,350	9,430	3,750	1,520	1,350
25	5,560	2,450	4,580	2,400	1,500	2,180	1,570	1,200	9,740	4,170	1,650	1,830
26	4,350	2,210	4,490	2,050	849	1,490	1,670	1,140	10,200	3,670	1,630	2,120
27	5,240	1,800	3,850	2,160	1,130	1,640	1,730	1,030	9,570	3,410	1,360	1,770
28	4,000	2,560	3,970	2,690	1,640	2,200	1,810	906	9,240	3,180	1,350	1,350
29	3,200	3,350	4,000	2,490	-----	2,220	1,850	1,130	9,130	2,630	1,530	1,250
30	2,930	4,550	3,200	2,680	-----	2,240	1,150	1,140	8,430	2,040	1,870	1,700
31	2,610	-----	2,950	2,630	-----	2,610	-----	1,180	-----	2,470	2,270	-----
TOTAL	73,129	75,780	162,760	86,940	76,919	59,950	69,893	60,426	178,850	177,250	64,030	49,439
MEAN	2,359	2,526	5,250	2,805	2,747	1,934	2,330	1,949	5,962	5,718	2,065	1,648
MAX	5,560	4,550	10,500	3,780	3,890	3,360	4,650	4,070	12,500	8,490	2,590	2,560
MIN	959	1,600	2,950	2,050	849	1,030	673	906	1,440	2,040	1,350	457
AC-FT	145,100	150,500	322,800	172,400	152,600	118,900	138,600	119,900	354,700	351,600	127,000	98,060
(+)	-2,500	-18,000	-16,790	-35,000	-32,000	-21,890	-65,000	+87,000	+7,700	+3,400	-310	-1,618
MEAN*	2,318	2,217	4,977	2,739	2,103	1,579	1,223	3,368	7,268	5,730	2,061	1,171
AC-FT*	142,500	131,900	306,000	168,400	116,800	97,060	72,770	207,100	432,500	352,300	126,700	96,290

CAL YR 1966 TOTAL 964,985 MEAN 2,644 MAX 10,500 MIN 548 AC-FT 1,914,000 MEAN* 2,644 AC-FT* 1,914,000
WTR YR 1967 TOTAL 1,135,366 MEAN 3,111 MAX 12,500 MIN 457 AC-FT 2,252,000 MEAN* 3,108 AC-FT* 2,250,000

* CHANGE IN CONTENTS, IN ACRE-FEET, IN BAKER LAKE AND LAKE SHANNON.

* ADJUSTED FOR CHANGE IN CONTENTS IN BAKER LAKE AND LAKE SHANNON.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,240	7,340	2,250	2,390	4,100	5,760	1,580	3,540	1,340	3,700	3,320	1,650
2	4,840	6,290	2,360	2,340	4,000	6,270	1,610	3,510	5,310	2,790	3,240	1,120
3	2,840	5,890	1,900	1,980	4,710	4,820	1,590	5,590	5,590	2,850	2,690	1,690
4	3,400	4,120	1,490	1,740	4,040	4,040	1,490	3,380	4,940	4,990	2,590	1,980
5	2,790	3,000	2,070	1,690	4,820	2,360	3,330	5,360	4,390	5,040	1,970	2,150
6	3,120	2,430	2,060	2,190	4,440	4,660	4,590	5,290	3,970	4,680	1,970	2,140
7	7,380	2,030	2,450	1,690	4,330	2,120	2,500	4,600	3,970	4,480	1,890	752
8	7,500	2,060	2,190	1,430	2,870	3,200	691	5,090	4,020	4,410	1,200	139
9	5,780	4,960	1,900	1,760	2,060	4,770	4,850	4,980	3,800	4,710	855	2,320
10	4,460	4,040	2,450	2,340	2,720	2,660	3,640	3,140	3,980	4,240	933	2,350
11	7,260	5,680	4,660	2,490	1,530	920	6,520	2,390	4,140	3,510	863	1,280
12	9,170	3,930	3,860	2,620	1,250	1,250	5,360	1,940	4,100	3,920	800	2,070
13	6,780	3,810	3,180	2,460	1,280	1,310	6,040	1,220	3,900	4,640	375	1,020
14	6,880	3,300	2,740	1,270	1,330	987	3,870	1,480	2,730	4,050	498	4,950
15	6,930	5,320	2,640	4,310	2,140	2,270	1,220	2,120	2,150	4,120	610	6,500
16	3,810	5,850	2,880	4,140	2,450	3,200	1,040	2,750	1,970	4,390	425	5,590
17	3,340	5,110	3,700	3,620	2,720	1,880	1,430	2,410	1,720	2,910	151	11,700
18	2,860	3,960	4,150	3,410	2,630	1,700	1,950	1,960	3,210	2,480	165	6,880
19	3,220	2,660	3,980	3,900	3,920	2,010	1,660	1,310	4,670	2,380	1,977	2,250
20	3,220	2,730	5,070	6,900	3,560	1,940	1,850	1,460	4,680	2,490	910	2,530
21	3,700	3,180	5,160	7,220	3,020	787	1,890	1,940	3,360	2,460	676	117
22	4,070	2,940	5,360	6,680	4,340	778	1,400	1,630	3,800	2,110	1,280	209
23	4,190	2,550	4,140	6,330	5,270	1,300	4,220	1,440	3,140	2,140	1,500	2,760
24	3,620	2,180	3,880	6,370	6,700	1,150	6,010	1,310	2,810	2,350	3,150	2,250
25	3,720	1,870	3,650	6,250	6,100	563	5,840	1,120	4,050	2,410	3,050	1,880
26	4,040	1,900	2,920	5,930	5,780	571	4,710	941	5,950	2,590	3,950	2,270
27	5,180	2,240	2,280	5,220	3,610	839	6,560	973	6,380	2,880	5,050	1,330
28	7,500	2,640	2,520	4,050	1,050	1,270	5,550	1,020	6,370	3,120	3,260	875
29	6,760	2,860	3,880	4,620	3,320	1,450	4,390	875	6,590	2,680	2,530	289
30	6,840	2,490	2,880	3,730	-----	2,530	4,910	912	4,590	1,080	1,720	1,670
31	8,000	-----	2,730	3,540	-----	2,250	-----	952	-----	3,200	109	-----
TOTAL	156,050	106,740	98,320	118,860	101,410	70,915	97,976	78,433	122,460	105,360	51,712	76,861
MEAN	5,034	3,358	3,172	3,834	3,497	2,288	3,266	2,330	4,082	3,399	1,668	2,562
MAX	9,170	7,340	5,360	7,220	6,700	6,270	6,560	5,908	8,380	5,040	7,050	11,700
MIN	2,790	1,870	1,690	1,430	1,050	563	691	875	1,340	2,110	109	117
AC-FT	309,500	211,700	195,000	235,800	201,100	140,700	194,300	155,400	242,900	209,000	102,600	152,500
(+)	+10,690	-46,500	-6,410	+13,050	+17,030	+22,570	-96,020	+34,690	+49,930	+4,420	+22,080	+250
MEAN*	5,208	2,776	3,067	4,046	3,792	2,656	1,652	3,095	4,921	3,471	2,028	2,568
AC-FT*	320,200	165,200	189,600	248,800	218,100	163,300	98,280	190,300	292,800	213,400	126,700	152,600

CAL YR 1967 TOTAL 1,184,807 MEAN 3,246 MAX 12,500 MIN 457 AC-FT 2,350,000 MEAN* 3,238 AC-FT* 2,344,000
WTR YR 1968 TOTAL 1,189,097 MEAN 3,238 MAX 11,700 MIN 109 AC-FT 2,351,000 MEAN* 3,274 AC-FT* 2,377,000

* CHANGE IN CONTENTS, IN ACRE-FEET, IN BAKER LAKE AND LAKE SHANNON.

* ADJUSTED FOR CHANGE IN CONTENTS IN BAKER LAKE AND LAKE SHANNON.

12193500 BAKER RIVER AT CONCRETE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,230	3,520	3,050	3,780	3,820	3,430	1,660	413	4,360	2,200	2,200	900
2	1,860	2,520	2,800	3,280	3,060	3,360	744	420	4,730	2,660	1,990	1,260
3	1,600	2,420	2,500	3,100	1,690	2,390	1,470	129	7,670	5,110	1,270	1,870
4	1,900	2,570	3,470	3,570	92	2,730	521	129	7,650	4,390	2,060	2,310
5	2,090	2,160	3,490	3,710	112	1,820	109	370	7,610	3,030	1,290	2,070
6	2,400	2,450	3,490	3,660	1,560	54	109	129	7,240	2,230	1,300	528
7	3,370	2,010	3,520	3,660	3,350	325	291	121	6,860	2,870	1,820	137
8	3,430	2,600	3,520	3,650	1,920	940	109	129	6,230	2,290	1,190	1,810
9	153	3,550	3,520	3,660	1,060	486	249	240	6,220	2,450	771	810
10	1,570	3,600	3,520	3,660	1,450	1,050	215	2,250	6,500	3,810	1,200	744
11	3,280	2,550	3,220	3,650	1,090	1,220	113	6,100	7,080	6,600	1,600	1,310
12	2,020	3,520	3,530	3,640	1,970	1,510	113	263	6,480	6,010	1,510	1,540
13	2,300	3,490	3,580	3,680	2,780	1,750	113	2,630	6,440	2,590	940	1,480
14	2,650	3,400	3,620	3,690	3,350	830	194	3,170	5,700	1,220	1,750	1,340
15	2,270	2,400	3,660	3,680	870	446	117	3,380	4,870	1,570	1,870	1,990
16	3,050	1,960	3,670	3,750	117	528	121	2,460	5,440	1,610	1,380	1,710
17	3,120	1,790	2,980	3,520	780	1,220	394	1,150	6,390	1,790	1,480	2,490
18	2,950	2,070	3,430	3,670	1,590	610	493	642	6,230	2,060	1,300	5,470
19	3,210	5,590	2,840	3,720	2,190	211	125	2,380	5,850	2,940	1,480	3,680
20	3,100	6,240	3,700	3,740	2,720	1,330	125	3,230	3,300	2,480	1,790	5,900
21	3,400	6,410	3,700	3,740	3,720	1,580	258	4,320	2,880	1,890	2,750	3,540
22	3,430	6,900	2,710	3,740	3,700	1,060	245	6,370	3,170	2,250	2,280	5,090
23	2,750	5,190	3,040	3,750	3,670	109	388	7,280	3,430	2,230	1,810	12,800
24	3,090	3,570	3,300	3,770	3,350	2,140	920	7,880	3,510	2,480	1,120	5,800
25	2,640	3,540	3,020	3,790	3,190	1,600	178	7,690	3,750	2,220	1,610	4,410
26	2,360	3,180	3,200	3,820	3,570	500	125	6,460	3,230	1,320	1,550	3,490
27	1,390	3,490	3,090	3,610	3,540	105	1,190	4,410	1,980	2,340	1,770	2,640
28	2,120	3,570	3,690	3,900	3,170	133	1,540	3,030	2,590	2,360	1,720	3,110
29	3,410	3,570	3,770	3,670	-----	105	1,060	6,100	1,960	2,390	1,700	3,670
30	3,440	3,570	3,770	3,880	-----	105	1,050	8,770	2,420	2,910	1,140	3,670
31	5,690	-----	3,770	3,860	-----	1,410	-----	4,410	-----	1,450	194	-----
TOTAL	83,273	103,400	104,170	114,000	63,581	35,087	14,339	96,455	151,770	81,750	47,835	87,569
MEAN	2,686	3,447	3,360	3,677	2,271	1,132	478	3,111	5,059	2,637	1,543	2,919
MAX	5,690	6,900	3,770	3,900	3,820	3,430	1,660	8,770	7,670	6,600	2,750	12,800
MIN	153	1,790	2,980	3,100	92	54	109	121	1,960	910	164	137
AC-FT	165,200	205,100	206,600	226,100	126,100	69,600	28,400	191,300	301,000	162,200	94,880	173,700
(+)	-15,460	-11,830	-66,520	-98,250	-81,800	+20,850	+135,700	+113,800	+580	+2,560	-1,090	-1,260
MEAN*	2,434	3,249	2,278	2,078	798	1,471	2,759	4,961	5,070	2,678	1,525	2,898
AC-FT*	149,700	193,300	140,100	127,800	44,300	90,440	164,100	305,100	301,600	164,700	93,790	172,400

CAL YR 1968 TOTAL 1,114,830 MEAN 3,046 MAX 11,700 MIN 109 AC-FT 2,211,000 MEAN* 3,009 AC-FT* 2,185,000

WTR YR 1969 TOTAL 983,229 MEAN 2,694 MAX 12,800 MIN 54 AC-FT 1,950,000 MEAN* 2,689 AC-FT* 1,947,000

† CHANGE IN CONTENTS, IN ACRE-FEET, IN BAKER LAKE AND LAKE SHANNON.

* ADJUSTED FOR CHANGE IN CONTENTS IN BAKER LAKE AND LAKE SHANNON.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,070	84	1,850	2,050	3,640	3,640	1,640	1,580	692	591	1,690	2,080
2	4,390	84	1,510	2,260	3,650	3,930	1,370	799	826	1,590	2,150	1,300
3	3,600	1,240	1,670	1,820	3,640	3,920	1,850	97	1,810	2,280	2,660	2,230
4	2,970	5,700	2,010	1,510	3,650	3,920	90	2,250	970	4,590	2,100	2,730
5	1,420	4,440	1,610	2,350	3,650	3,900	94	3,020	920	3,290	2,160	1,990
6	2,060	3,490	745	2,580	3,650	3,880	2,480	3,030	108	3,180	2,410	2,150
7	2,750	3,480	498	2,480	3,670	3,850	2,420	3,020	108	3,640	2,010	3,230
8	2,850	2,450	1,200	2,490	3,670	3,810	3,150	2,320	108	3,400	1,790	2,290
9	3,510	3,460	1,700	2,380	3,720	3,780	3,730	2,450	188	1,990	900	1,550
10	3,430	3,480	2,390	2,670	3,780	3,760	3,760	1,880	134	2,600	2,100	557
11	3,590	3,180	2,280	2,410	3,240	3,600	3,760	2,820	862	3,400	740	603
12	2,430	3,380	2,350	3,410	3,680	2,870	3,030	3,030	101	1,510	673	269
13	3,560	2,450	2,340	2,550	3,780	2,460	3,320	3,080	94	3,290	1,930	364
14	2,810	1,930	2,450	2,450	3,780	2,350	2,910	3,490	94	2,280	1,420	499
15	1,750	1,430	3,480	3,590	3,780	90	3,570	1,170	736	148	1,310	597
16	1,660	2,140	3,460	3,460	3,760	2,730	3,720	97	475	2,540	1,020	112
17	2,110	2,560	3,460	3,620	3,640	3,680	1,660	97	94	3,370	777	2,380
18	325	1,990	2,910	2,870	3,730	3,680	94	234	94	2,860	1,230	3,550
19	1,230	2,110	3,520	2,760	3,410	3,410	94	97	97	1,010	1,020	4,070
20	1,890	1,870	3,520	2,730	3,730	1,600	1,420	257	104	3,430	624	2,550
21	1,590	1,590	3,520	2,760	3,750	1,930	1,750	880	112	2,630	1,310	2,190
22	1,570	1,690	3,520	3,300	3,400	313	1,590	700	1,790	619	1,050	4,020
23	1,710	1,480	3,170	3,080	3,240	2,140	1,220	101	3,180	112	1,600	3,560
24	2,420	1,650	2,790	3,600	3,900	1,470	1,370	101	890	1,800	1,840	2,480
25	1,660	1,420	2,900	3,600	3,410	1,610	173	1,370	364	1,460	1,330	876
26	358	1,720	2,420	3,620	3,380	2,710	94	1,610	2,270	5,130	1,310	706
27	880	75	2,110	3,600	4,000	1,310	1,610	1,590	2,670	5,170	1,370	364
28	1,300	1,570	1,510	3,600	3,980	90	1,100	1,100	3,230	3,300	1,160	1,460
29	1,430	900	2,240	3,600	-----	90	2,250	1,310	3,170	1,840	130	2,310
30	1,660	75	1,640	3,640	-----	126	2,100	104	1,760	714	750	2,240
31	1,080	-----	1,170	3,650	-----	607	-----	104	-----	1,380	800	-----
TOTAL	68,063	63,118	71,943	90,410	102,310	77,254	57,419	43,798	28,051	75,144	43,364	55,307
MEAN	2,196	2,104	2,321	2,916	3,654	2,492	1,914	1,413	935	2,424	1,399	1,844
MAX	4,390	5,700	3,520	3,650	4,000	3,930	3,760	3,490	3,230	5,170	2,660	4,070
MIN	325	75	498	1,510	3,240	90	90	97	94	112	130	112
AC-FT	135,000	125,200	142,700	179,300	202,900	153,200	113,900	86,870	55,640	149,000	86,010	109,700
(+)	-23,980	-9,510	-23,360	-48,110	-87,210	-66,560	+9,070	+88,280	+178,800	+7,080	+250	-840
MEAN*	1,805	1,945	1,940	2,133	2,084	1,409	2,068	2,524	3,940	2,538	1,403	1,730
AC-FT*	111,000	115,700	139,300	131,200	115,700	86,640	123,000	155,200	234,400	156,100	86,260	102,900

CAL YR 1969 TOTAL 895,510 MEAN 2,453 MAX 12,800 MIN 54 AC-FT 1,776,000 MEAN* 2,500 AC-FT* 1,810,000

WTR YR 1970 TOTAL 776,183 MEAN 2,127 MAX 5,700 MIN 75 AC-FT 1,540,000 MEAN* 2,124 AC-FT* 1,538,000

† CHANGE IN CONTENTS, IN ACRE-FEET, IN BAKER LAKE AND LAKE SHANNON.

* ADJUSTED FOR CHANGE IN CONTENTS IN BAKER LAKE AND LAKE SHANNON.

12194000 SKAGIT RIVER NEAR CONCRETE, WASH.

LOCATION.--Lat 48°31'28", long 121°46'11", in SE¼NE¼ sec.16, T.35 N., R.8 E., Skagit County, on right bank at the dallas, 1.3 miles southwest of Concrete, 2.4 miles downstream from Baker River, and at mile 54.1.

DRAINAGE AREA.--2,737 sq mi, of which 400 sq mi is in Canada.

PERIOD OF RECORD.--September 1924 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 130.0 ft above mean sea level. Prior to Dec. 10, 1924, nonrecording gage at site 200 ft upstream and Dec. 10, 1924, to Sept. 30, 1937, water-stage recorder at present site, both at datum 12.7 ft higher.

AVERAGE DISCHARGE.--46 years, 14,980 cfs (10,850,000 acre-ft per year), unadjusted.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Maximum			Minimum		
Wtr yr	Date	Discharge	G.H.	Date	Discharge
1966	May 6, 1966	36,800	23.43	Oct. 3, 4, 1965	3,390
1967	June 21, 1967	72,300	29.59	Oct. 16, 1966	4,500
1968	Oct. 28, 1967	84,200	31.41	Sept. 9, 1968	4,730
1969	Jan. 5, 1969	49,500	25.82	Sept. 8, 1969	5,520
1970	Nov. 4, 1969	38,400	23.77	Sept. 14, 1970	3,280

Period of record: Maximum discharge, 154,000 cfs Nov. 27, 1949 (gage height, 40.8 ft); minimum, probably less than 2,160 cfs during period Oct. 1-24, 1925, when recorder was not operating and gates in Baker River Dam were first closed; minimum daily recorded, 2,610 cfs Nov. 14, 1936.

Flood in about 1815 reached a stage of 69.3 ft, present datum, at site 200 ft upstream, from floodmarks (discharge, about 500,000 cfs). Records of other floods prior to establishment of station are given in WSP 1527.

REMARKS.--Records excellent. Flow regulated for powerplants on Baker and upper Skagit Rivers, by Ross, Diablo, and Gorge Reservoirs, Baker Lake, and Lake Shannon (see elsewhere in this report).

REVISIONS (WATER YEARS).--WSP 1566: 1957. WSP 1736: 1948. WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,350	9,010	12,700	11,200	12,400	11,900	19,300	8,540	15,100	17,200	14,800	6,230
2	4,260	14,100	18,200	11,400	11,800	12,300	19,500	10,000	15,900	16,900	15,600	6,020
3	3,980	17,500	14,800	12,500	11,500	12,300	15,200	13,900	14,000	17,000	14,200	5,640
4	4,640	29,000	27,100	11,700	11,300	12,300	14,000	18,000	12,700	17,900	15,800	4,740
5	8,050	24,200	20,000	11,800	11,900	10,800	14,100	22,600	11,700	20,100	14,000	4,920
6	26,100	17,800	20,000	14,300	12,500	8,910	15,300	31,400	16,800	21,100	11,600	6,770
7	16,600	13,400	20,700	17,000	12,700	12,100	16,700	29,600	23,900	19,600	11,800	7,380
8	11,000	13,100	19,900	17,300	12,400	12,800	17,900	24,500	24,800	21,200	13,300	7,000
9	10,600	13,500	17,300	15,800	12,000	16,700	17,400	28,300	25,000	23,000	12,500	6,230
10	8,530	12,300	15,200	15,500	11,700	16,200	16,500	26,700	24,700	21,800	11,800	5,900
11	7,560	12,700	13,500	15,400	11,600	14,000	19,600	21,000	26,200	20,600	11,100	6,520
12	7,970	12,900	11,800	15,300	11,200	11,500	19,700	18,600	21,700	19,200	10,400	6,990
13	9,060	10,100	12,500	22,400	10,200	12,200	16,500	18,000	19,500	21,900	9,790	7,420
14	8,580	9,350	13,700	24,600	11,300	14,800	15,200	16,600	18,600	22,300	10,800	7,300
15	12,100	15,800	13,000	19,200	11,100	16,700	14,900	15,900	20,400	23,900	11,600	7,720
16	9,880	17,900	12,100	16,400	10,100	16,100	13,500	16,100	26,300	27,400	10,300	7,250
17	7,800	15,200	11,900	16,000	9,550	14,400	12,100	14,300	29,600	24,900	10,500	6,420
18	8,910	12,800	11,300	14,900	9,660	13,100	12,300	12,800	24,100	20,400	9,600	7,050
19	10,500	14,300	10,700	14,000	8,440	13,000	11,900	13,300	22,300	19,400	9,210	7,320
20	10,100	16,600	11,600	14,100	7,100	12,100	11,500	15,400	21,400	18,900	8,200	7,190
21	11,100	16,800	13,400	13,600	7,870	12,200	11,200	17,400	19,100	16,800	7,560	6,690
22	9,900	16,200	12,900	12,800	7,570	11,400	10,400	16,400	17,100	16,700	8,580	7,280
23	8,810	16,500	12,600	11,900	8,330	10,600	9,710	14,800	16,800	16,300	9,420	8,320
24	7,790	14,700	11,600	12,700	9,190	9,750	8,600	13,500	16,400	16,700	9,160	7,690
25	8,380	12,200	9,340	12,300	9,010	9,480	10,300	15,200	14,300	18,700	8,850	6,230
26	9,010	10,100	8,620	11,500	9,240	8,880	11,400	21,400	13,700	14,700	9,330	6,590
27	9,680	10,200	11,100	11,300	8,940	9,130	10,600	23,000	15,900	12,200	7,990	6,850
28	11,200	9,350	11,700	11,000	10,600	11,100	10,300	18,300	27,600	14,600	7,260	6,510
29	10,700	10,000	12,000	10,400	-----	13,800	10,100	15,800	24,900	14,400	7,780	7,210
30	13,200	10,700	11,800	10,300	-----	19,800	9,630	16,600	19,500	16,000	7,970	7,000
31	9,770	-----	11,900	12,300	-----	23,600	-----	16,500	-----	14,800	6,830	-----
TOTAL	300,110	430,310	434,960	441,100	291,200	403,950	415,340	564,400	598,200	586,600	327,630	202,380
MEAN	9,681	14,340	14,030	14,230	10,400	13,030	13,840	18,210	19,940	18,920	10,570	6,746
MAX	26,100	29,000	27,100	24,600	12,700	23,600	19,700	31,400	29,600	27,400	15,800	8,320
MIN	3,980	9,010	8,620	10,300	7,100	8,880	8,600	8,540	11,700	12,200	6,830	4,740
AC-FT	595,300	853,500	862,700	874,900	577,600	801,200	823,800	1,120M	1,187M	1,164M	649,900	401,400
CAL YR 1965	TOTAL 5,296,240			MEAN 14,510	MAX 33,000	MIN 3,790	AC-FT 10,510,000					
WTR YR 1966	TOTAL 4,996,220			MEAN 13,690	MAX 31,400	MIN 3,980	AC-FT 9,910,000					

M EXPRESSED IN THOUSANDS.

12194000 SKAGIT RIVER NEAR CONCRETE, WASH. - CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,960	12,000	26,300	14,000	17,400	13,200	11,000	9,070	18,500	33,900	14,500	10,700
2	7,260	11,300	23,100	12,700	17,500	12,400	9,350	10,300	26,300	35,700	13,400	12,400
3	6,980	11,300	18,100	17,800	21,200	11,800	10,100	11,200	27,100	36,800	13,400	11,800
4	7,020	10,500	15,800	17,700	25,300	9,740	11,000	11,200	24,100	37,900	13,500	8,220
5	6,570	12,000	16,100	16,800	20,500	8,190	12,400	11,900	26,100	33,800	13,500	9,030
6	6,680	11,700	16,800	16,200	18,500	8,960	11,200	12,200	29,000	30,900	12,500	9,640
7	7,280	11,700	16,800	14,200	18,100	10,900	10,300	13,300	30,200	26,700	14,900	8,760
8	6,320	11,800	15,900	12,500	16,800	11,400	11,000	17,700	26,400	25,500	13,300	8,950
9	6,470	11,300	15,000	13,700	16,400	12,800	10,400	19,000	25,300	25,200	12,300	8,190
10	6,960	11,300	15,500	14,400	16,000	11,700	11,100	18,100	24,600	22,600	13,400	9,140
11	6,940	10,600	18,400	19,900	14,500	10,900	11,700	17,600	23,500	25,100	13,800	15,900
12	7,080	11,400	24,200	18,100	15,000	9,730	12,000	16,200	25,000	26,500	14,400	12,400
13	7,600	10,800	47,900	17,400	17,800	10,500	13,100	13,400	28,000	30,100	13,500	9,990
14	8,410	16,600	41,100	15,000	17,600	11,300	14,600	13,400	30,900	28,000	14,500	7,850
15	6,890	16,100	33,700	20,100	16,700	12,200	12,600	13,500	33,700	20,900	13,700	6,830
16	5,770	14,600	53,900	20,300	15,700	12,000	10,500	15,400	37,000	17,800	14,100	6,540
17	6,190	13,900	44,500	18,800	15,100	12,600	11,900	19,800	44,100	19,100	13,300	6,910
18	6,140	11,900	43,100	17,100	14,100	11,400	11,600	19,500	52,200	21,500	12,200	7,400
19	10,700	11,800	38,600	20,700	11,100	9,190	11,700	20,000	58,500	20,800	10,900	8,880
20	20,200	11,400	39,000	25,400	12,000	9,510	11,400	21,800	63,900	18,100	10,200	9,920
21	13,500	13,400	29,800	21,500	12,300	11,300	11,400	25,600	69,500	21,000	11,800	10,900
22	12,000	13,700	24,500	17,000	11,600	13,500	9,300	27,500	67,400	18,900	11,300	8,870
23	26,700	13,300	21,400	16,300	11,800	22,200	7,630	25,900	55,900	17,800	10,300	6,760
24	31,100	11,900	19,000	16,300	11,500	19,900	10,500	21,100	50,500	18,800	9,140	6,480
25	21,400	14,600	17,300	14,300	9,920	15,300	11,000	17,800	50,100	20,000	8,520	7,300
26	19,000	14,800	15,500	13,700	8,490	12,400	11,200	16,100	50,800	19,900	7,100	7,730
27	19,200	13,100	16,400	14,000	9,280	12,400	10,700	15,600	46,300	19,000	6,350	6,970
28	15,300	16,900	16,400	21,100	11,200	13,300	11,200	15,900	41,600	17,600	6,810	6,760
29	14,800	18,800	16,300	21,100	-----	13,300	9,540	20,300	39,600	16,300	8,620	7,180
30	15,600	22,800	14,900	23,700	-----	12,400	8,130	18,200	36,600	14,400	9,600	7,090
31	12,700	-----	13,800	19,300	-----	12,600	-----	16,200	-----	14,400	10,800	-----
TOTAL	336,720	397,300	769,100	541,100	423,590	379,020	329,550	524,720	1,162,771	737,000	365,640	265,490
MEAN	11,510	13,240	24,810	17,450	15,130	12,230	10,990	16,930	38,760	23,770	11,790	8,850
MAX	31,100	22,800	53,900	25,400	25,300	22,200	14,600	27,500	69,500	38,800	14,900	15,900
MIN	5,770	10,500	13,800	12,500	8,490	8,190	7,630	9,020	18,500	14,400	6,350	6,480
AC-FT	707,600	788,000	1,526M	1,073M	840,200	751,800	653,700	1,041M	2,306M	1,462M	725,200	526,600
CAL YR 1966	TOTAL 5,353,960	MEAN 14,670	MAX 53,900	MIN 4,740	AC-FT 10,620,000							
WTR YR 1967	TOTAL 6,251,930	MEAN 17,130	MAX 69,500	MIN 5,770	AC-FT 12,400,000							

M EXPRESSED IN THOUSANDS.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,500	52,000	11,700	16,100	16,800	20,600	12,400	20,900	23,900	22,300	15,100	8,130
2	17,300	36,100	11,700	15,500	17,700	22,500	12,400	17,200	58,700	25,300	15,300	8,080
3	12,600	27,200	13,700	14,800	22,900	20,800	11,500	17,400	44,500	29,500	14,200	8,730
4	14,400	21,700	13,500	14,300	21,100	27,300	11,300	17,300	31,300	32,700	15,300	9,060
5	10,500	15,900	13,500	13,600	24,500	27,300	14,200	17,300	29,100	37,200	13,600	9,210
6	11,900	15,600	12,400	12,800	21,300	26,800	14,100	17,000	35,900	34,000	12,600	9,380
7	23,600	14,900	12,200	11,400	18,200	21,900	11,500	15,300	32,900	32,300	11,500	7,370
8	22,400	15,000	11,400	12,500	18,100	20,800	9,970	15,300	33,400	30,100	10,200	7,340
9	15,700	14,800	11,100	13,600	16,500	20,200	9,640	15,300	27,900	31,900	9,470	7,830
10	13,700	23,300	15,800	13,900	15,000	15,900	13,200	15,500	29,700	29,500	8,490	8,910
11	27,000	26,400	25,500	13,800	14,400	13,600	16,600	16,600	31,100	27,000	8,200	8,280
12	29,800	20,300	18,200	13,700	14,200	15,100	15,500	16,700	30,000	27,700	8,780	9,200
13	22,600	18,700	15,700	17,500	13,400	14,600	14,800	14,600	28,700	28,900	8,470	7,610
14	26,400	18,300	14,400	27,400	13,300	13,600	12,300	15,000	22,400	20,000	8,350	13,500
15	18,000	24,600	14,700	29,500	13,800	15,900	11,200	14,600	19,000	21,800	10,100	21,700
16	15,900	25,900	13,900	26,000	13,900	19,100	12,700	14,600	20,600	20,800	9,080	25,000
17	14,700	20,200	13,800	20,900	13,900	14,800	13,000	16,200	21,900	15,900	8,030	36,500
18	13,700	14,700	18,700	17,800	14,000	13,500	17,600	25,500	18,400	17,300	7,330	28,600
19	15,700	14,900	15,600	35,300	31,900	14,500	15,900	20,200	33,200	19,600	8,090	19,800
20	13,700	15,400	15,800	46,100	26,300	13,500	13,800	28,600	33,700	19,400	8,250	15,000
21	20,400	14,800	16,000	55,700	23,800	10,900	11,300	25,500	23,300	15,300	7,920	9,330
22	26,800	13,700	17,800	37,000	25,800	10,300	11,700	20,300	25,100	14,900	7,510	7,910
23	28,200	11,900	21,600	30,400	26,100	10,400	17,600	17,400	25,000	15,600	8,040	13,800
24	21,300	12,800	40,100	34,700	38,700	11,100	16,900	16,800	26,800	15,800	11,800	12,400
25	22,700	12,800	43,300	32,500	28,500	10,600	16,100	15,900	32,300	15,600	10,600	10,600
26	20,700	12,200	37,400	28,300	24,900	10,100	15,000	15,500	39,900	16,200	16,200	11,300
27	33,000	12,700	29,300	23,900	20,400	12,700	16,100	15,400	48,500	17,100	19,000	10,400
28	60,200	12,900	26,100	20,400	16,500	14,200	22,800	15,200	38,200	17,500	14,700	8,670
29	33,100	13,200	23,300	18,700	18,300	17,200	19,800	15,300	28,100	17,700	11,700	6,690
30	31,600	12,500	18,700	18,300	-----	15,600	22,800	13,100	17,500	18,400	10,200	9,030
31	51,200	-----	16,500	17,800	-----	13,700	-----	12,300	-----	16,300	7,340	-----
TOTAL	698,900	570,500	579,900	705,100	604,100	503,700	428,910	523,500	916,100	704,700	335,450	367,390
MEAN	22,550	18,020	18,710	22,750	20,430	16,250	14,480	16,950	30,640	22,730	10,820	12,250
MAX	60,200	52,000	43,300	55,700	38,700	27,300	22,800	28,600	58,700	37,200	19,000	36,500
MIN	10,500	11,900	11,100	11,400	13,300	10,100	9,640	12,300	17,500	14,900	7,330	5,340
AC-FT	1,386M	1,132M	1,150M	1,399M	1,198M	999,100	850,700	1,042M	1,817M	1,398M	665,400	728,700
CAL YR 1967	TOTAL 6,576,110	MEAN 18,020	MAX 69,500	MIN 6,350	AC-FT 13,050,000							
WTR YR 1968	TOTAL 6,940,250	MEAN 18,960	MAX 69,500	MIN 5,340	AC-FT 13,770,000							

M EXPRESSED IN THOUSANDS.

12194000 SKAGIT RIVER NEAR CONCRETE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,120	13,400	16,200	14,300	11,900	11,600	17,900	12,600	23,300	13,800	10,100	4,510
2	7,790	11,500	16,200	14,300	10,400	9,850	17,700	12,600	28,400	18,500	9,760	5,960
3	8,320	11,200	25,200	14,400	9,040	9,470	17,300	12,500	13,900	24,800	8,550	7,760
4	9,020	11,200	28,200	22,400	8,060	11,700	14,400	12,300	14,800	21,900	9,490	8,090
5	9,430	11,200	22,100	44,100	9,050	10,800	11,000	10,400	17,300	18,700	9,200	7,520
6	10,300	11,200	19,800	29,300	10,100	8,940	9,810	11,100	36,400	16,600	9,810	5,050
7	13,100	10,100	17,800	25,600	12,100	9,010	10,400	13,400	34,200	13,600	8,060	4,010
8	12,600	11,700	16,900	22,300	10,500	8,830	11,000	19,800	32,900	16,100	6,920	6,030
9	8,990	14,800	18,100	20,700	9,160	6,580	10,700	24,000	34,500	15,400	6,080	6,150
10	10,100	13,000	19,400	19,400	8,490	8,640	12,400	29,100	13,000	21,300	6,340	5,970
11	12,600	16,700	19,500	17,400	9,440	8,420	11,800	31,100	33,300	22,200	7,450	6,830
12	10,100	25,700	17,700	15,700	10,900	9,000	11,700	25,700	34,700	24,700	8,390	7,180
13	10,500	20,200	16,700	15,200	11,200	8,650	13,100	28,000	14,700	16,000	7,720	7,880
14	11,500	16,400	14,900	16,300	11,400	6,990	13,000	28,300	35,900	11,400	8,450	6,480
15	11,500	13,200	13,000	15,900	8,100	6,510	12,700	26,200	32,500	11,400	9,730	6,970
16	10,800	12,000	15,500	14,500	5,710	6,000	10,300	23,000	30,700	11,500	8,400	6,620
17	11,400	10,600	15,200	15,100	7,030	11,900	11,100	18,300	35,000	10,900	6,830	8,440
18	12,800	13,500	15,500	13,100	9,170	13,800	13,100	17,200	33,100	11,400	6,400	15,700
19	12,000	22,200	14,700	11,300	10,400	10,900	12,300	24,100	39,700	13,100	6,420	16,600
20	14,300	24,000	17,100	12,600	11,000	11,400	10,900	25,600	29,700	13,800	7,080	13,800
21	14,700	24,500	16,000	14,400	12,600	10,600	10,100	27,300	24,800	12,100	8,960	10,700
22	13,800	29,600	12,500	15,200	11,400	9,440	11,300	30,800	22,600	12,400	8,310	15,900
23	12,000	23,300	13,700	11,100	11,100	15,600	15,600	34,700	22,700	12,700	6,400	15,700
24	13,300	18,400	14,700	16,400	10,500	9,820	18,100	17,400	21,100	13,500	6,450	26,300
25	13,700	17,600	14,600	13,500	12,500	9,560	14,500	34,300	22,200	13,300	7,620	20,600
26	14,100	17,200	14,000	13,500	12,500	8,320	11,200	30,100	17,700	11,000	7,880	16,500
27	10,100	17,900	15,500	13,400	12,000	9,390	11,300	26,300	15,800	10,300	7,920	12,100
28	10,400	17,200	15,700	14,300	11,100	10,500	12,400	22,700	15,000	11,800	8,410	11,000
29	12,700	16,400	14,000	14,000	-----	10,400	13,600	28,100	21,100	11,500	8,200	14,200
30	16,900	18,500	17,000	14,600	-----	10,900	13,600	38,500	14,200	8,930	6,610	22,200
31	17,900	-----	19,500	13,500	-----	14,500	-----	25,500	-----	8,670	4,220	-----
TOTAL	364,870	494,500	531,900	538,600	286,850	300,620	386,010	743,200	854,500	454,000	243,500	345,450
MEAN	11,770	16,460	17,160	17,370	10,240	9,697	12,870	23,970	29,460	14,650	7,855	11,520
MAX	17,900	29,600	29,200	44,100	12,600	14,500	18,100	38,500	37,300	24,800	10,100	36,800
MIN	7,790	10,100	12,500	11,300	5,710	6,000	9,810	10,400	14,200	8,670	4,220	4,010
AC-FT	723,700	980,800	1,055M	1,068M	569,000	596,300	765,700	1,474M	1,695M	900,500	483,000	685,200
CAL YR 1968	TOTAL 6,482,220 MEAN 17,710 MAX 58,700 MIN 5,340 AC-FT 12,860,000											
WTR YR 1969	TOTAL 5,544,000 MEAN 15,190 MAX 44,100 MIN 4,010 AC-FT 11,000,000											

M EXPRESSED IN THOUSANDS.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23,900	6,440	9,560	9,190	14,500	11,200	9,300	6,830	13,000	9,960	7,690	9,390
2	22,000	4,500	10,400	9,090	15,200	12,900	10,500	6,350	21,900	10,300	9,440	7,220
3	17,800	6,900	10,100	9,970	16,100	14,300	11,000	6,610	30,300	13,100	10,100	8,550
4	14,000	16,700	11,300	9,400	15,200	14,000	7,590	10,500	29,800	19,200	10,000	9,380
5	10,000	22,800	10,800	10,500	15,000	13,700	9,040	14,000	24,600	19,300	10,500	6,900
6	10,300	16,200	7,830	12,100	14,800	14,100	17,300	13,800	25,100	18,300	10,800	8,400
7	10,900	14,800	6,920	11,900	12,600	15,300	16,200	11,900	24,700	17,200	9,500	11,600
8	13,500	11,300	8,860	11,400	12,000	12,600	15,000	10,500	19,800	18,300	8,790	10,400
9	16,200	11,400	10,500	11,200	14,400	13,100	21,700	11,500	16,800	17,800	7,220	8,150
10	15,200	11,400	10,900	10,700	15,900	13,000	26,300	10,000	15,100	15,400	8,180	6,300
11	12,900	11,800	11,700	10,500	15,500	13,000	19,000	10,000	12,600	17,000	7,260	5,710
12	10,100	11,800	13,700	11,300	16,000	11,800	14,700	9,740	10,300	12,500	7,370	4,790
13	11,200	10,600	13,400	11,500	18,000	11,700	14,700	9,500	11,200	15,500	8,830	3,840
14	11,100	10,400	17,600	18,400	16,600	11,000	13,600	9,500	12,900	13,000	8,330	4,290
15	9,230	9,740	17,700	18,500	14,700	9,240	12,200	7,380	16,100	10,700	7,400	4,690
16	8,650	10,200	15,900	15,700	19,300	13,000	11,500	9,790	14,000	12,100	6,320	4,140
17	9,460	11,100	15,300	14,200	19,900	14,800	8,330	16,200	13,000	14,000	6,320	7,830
18	6,420	11,300	14,600	13,500	18,500	13,800	6,020	13,200	16,300	13,700	7,190	17,300
19	6,420	11,200	15,800	18,000	17,000	12,800	6,060	11,400	18,200	11,900	6,900	15,400
20	7,750	10,600	15,100	21,000	15,400	10,300	7,290	11,500	18,300	14,400	6,590	10,400
21	8,400	11,900	14,500	20,900	14,000	9,950	7,420	11,800	22,100	13,000	7,530	9,060
22	7,860	10,500	16,100	22,900	11,600	7,150	7,080	13,100	23,800	10,200	8,000	14,200
23	8,730	10,600	18,600	29,000	21,600	8,830	6,290	11,900	22,000	7,850	7,710	17,900
24	9,240	12,500	16,100	23,500	13,400	10,800	7,080	12,300	18,800	10,200	8,270	12,000
25	7,550	12,200	12,600	18,900	12,500	10,200	7,100	17,500	16,400	9,940	9,840	8,560
26	5,070	11,600	11,100	19,000	12,700	11,500	6,350	23,000	19,800	14,900	9,950	6,720
27	5,950	8,060	11,000	19,300	13,600	10,100	7,190	17,200	19,800	18,700	9,530	4,970
28	7,680	8,510	9,450	18,000	12,600	7,830	6,420	13,400	18,000	12,700	9,100	6,420
29	7,290	8,430	11,200	16,600	-----	6,810	7,450	11,200	15,400	10,700	7,000	7,980
30	7,850	7,170	11,300	15,000	-----	7,450	7,330	9,240	13,400	9,130	6,180	8,160
31	7,730	-----	10,500	14,000	-----	7,190	-----	9,270	-----	7,890	7,580	-----
TOTAL	330,380	332,850	390,420	475,150	418,600	353,450	327,040	360,110	553,500	418,890	255,420	260,650
MEAN	10,660	11,100	12,590	15,330	14,950	11,400	10,900	11,620	18,450	13,510	8,239	8,688
MAX	23,900	22,800	18,600	29,000	19,900	15,300	26,300	23,000	30,300	19,300	10,600	17,900
MIN	5,070	4,500	6,920	9,090	11,600	6,810	6,020	6,350	10,300	7,850	6,180	3,840
AC-FT	655,300	660,200	774,400	942,500	830,300	701,100	648,700	714,300	1,099M	830,900	506,600	517,000
CAL YR 1969	TOTAL 5,206,380 MEAN 14,260 MAX 44,100 MIN 4,010 AC-FT 10,330,000											
WTR YR 1970	TOTAL 4,476,460 MEAN 12,260 MAX 30,300 MIN 3,840 AC-FT 8,879,000											

M EXPRESSED IN THOUSANDS.

SKAGIT RIVER BASIN

12196000 ALDER CREEK NEAR HAMILTON, WASH.

LOCATION.--Lat 48°31'42", long 121°56'58", in NW¼ sec.18, T.35 N., R.7 E., Skagit County, on left bank 3 ft downstream from logging road culvert, 0.3 mile upstream from bridge on State Highway 20, 2.0 miles east of Hamilton, and at mile 0.8.

DRAINAGE AREA.--10.7 sq mi.

PERIOD OF RECORD.--August 1943 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 125 ft (by barometer). Prior to Jan. 14, 1960, at several sites within 350 ft downstream of present site at various datums.

AVERAGE DISCHARGE.--27 years, 35.0 cfs (44.42 inches per year, 25,360 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Jan. 14, 1966		148	3.08	Sept. 21-25, 27-30, 1966		8.0	a2.18
1967	Feb. 4, 1967		259	3.36	Sept. 27-29, 1967		7.5	2.19
1968	Dec. 25, 1967		360	3.59	Sept. 10, 11, 1968		10	b2.27
1969	Jan. 5, 1969		327	3.44	Aug. 30, 31, Sept. 1, 1969		8.6	2.17
1970	Apr. 9, 1970		128	2.97	Aug. 15-18, 29-31, Sept. 1, 2		6.8	-

a Occurred Oct. 11, 12, 1965.

b Occurred Oct. 2, 3, 6, 1967.

Period of record: Maximum discharge, 714 cfs Dec. 9, 1956 (gage height, 5.28 ft, site and datum then in use); minimum, 4.3 cfs Sept. 16, 1956.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1286: 1945(M), 1947, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1945 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	18	34	23	59	38	56	28	21	16	11	9.4
2	8.4	19	45	23	52	36	52	27	20	18	11	9.4
3	8.4	18	44	22	48	33	50	26	20	22	11	9.4
4	9.4	20	62	22	46	30	48	25	20	19	11	9.4
5	11	26	57	24	46	32	46	25	18	18	10	9.4
6	14	22	54	33	50	36	45	28	18	18	10	9.4
7	11	20	59	44	51	36	44	28	18	17	10	9.4
8	10	20	61	64	50	42	42	25	18	16	10	8.8
9	10	19	51	57	48	68	41	24	18	16	9.8	8.8
10	9.8	18	46	57	44	64	41	24	18	16	9.8	8.8
11	9.4	18	38	71	50	56	42	23	19	15	9.8	10
12	9.8	18	36	79	48	52	44	23	20	16	9.4	9.4
13	9.8	17	32	120	44	57	39	24	18	15	11	9.4
14	11	20	30	138	41	59	50	23	18	15	9.8	9.4
15	11	23	28	116	38	66	46	26	18	15	9.4	9.4
16	12	23	27	95	37	64	42	30	17	16	9.4	8.4
17	11	21	26	77	38	57	41	28	17	15	9.4	8.8
18	12	20	26	66	37	59	38	26	17	14	9.4	9.4
19	13	21	26	59	36	62	36	25	17	14	9.4	8.4
20	14	26	29	54	39	56	36	24	16	14	9.4	8.4
21	14	48	30	48	39	51	34	30	16	13	8.8	8.0
22	13	62	28	45	41	45	34	27	17	13	8.8	8.0
23	12	45	27	45	42	42	33	25	16	13	8.8	8.0
24	12	38	26	41	41	39	32	25	16	13	8.8	8.0
25	12	32	24	37	38	38	32	23	16	14	8.8	8.0
26	12	29	23	36	38	38	34	22	16	13	9.4	8.4
27	12	33	24	42	39	38	33	22	16	12	10	8.4
28	15	29	25	42	38	38	30	22	16	12	9.8	8.0
29	14	27	24	51	-----	38	29	21	16	12	9.4	8.0
30	14	27	23	61	-----	57	29	21	15	12	9.4	8.0
31	14	-----	23	62	-----	59	-----	21	-----	11	9.4	-----
TOTAL	359.4	777	1,088	1,754	1,218	1,486	1,199	771	526	463	301.4	264.0
MEAN	11.6	25.9	35.1	56.6	43.5	47.9	40.0	24.9	17.5	14.9	9.72	8.80
NAX	16	62	62	138	59	68	56	30	21	22	11	10
MIN	8.4	17	23	22	36	30	29	21	15	11	8.8	8.0
CFSM	1.08	2.42	3.28	5.29	4.07	4.48	3.74	2.33	1.64	1.39	.91	.82
IN.	1.25	2.70	3.78	6.10	4.23	5.17	4.17	2.68	1.83	1.61	1.05	.92
AC-FT	713	1,540	2,160	3,480	2,420	2,950	2,380	1,530	1,040	918	598	524

CAL YR 1965 TOTAL 10,993.4 MEAN 30.1 MAX 194 MIN 6.5 CFSM 2.81 IN 38.22 AC-FT 21,810

WTR YR 1966 TOTAL 10,206.8 MEAN 28.0 MAX 138 MIN 8.0 CFSM 2.62 IN 35.49 AC-FT 20,250

12196000 ALDER CREEK NEAR HAMILTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	8.4	20	58	85	47	62	50	28	22	13	10	8.5		
2	9.8	20	58	73	54	57	46	27	21	13	10	9.5		
3	8.8	20	52	93	134	54	44	27	21	13	10	9.0		
4	8.4	19	49	88	219	51	42	27	21	13	10	9.0		
5	8.4	22	48	75	142	50	42	27	20	13	10	9.0		
6	8.4	22	49	60	102	45	42	27	19	12	10	9.0		
7	8.8	20	48	50	86	44	39	29	19	12	12	9.0		
8	12	20	42	67	73	68	39	33	19	13	10	9.0		
9	9.4	23	35	71	68	71	39	36	19	13	10	9.0		
10	8.8	24	42	82	68	64	38	33	19	12	9.5	12		
11	8.8	22	56	142	68	57	38	36	19	12	9.5	12		
12	8.8	26	72	128	84	54	38	33	19	12	9.5	10		
13	8.4	26	90	117	105	50	39	32	19	12	9.5	9.0		
14	8.4	34	108	107	82	46	38	30	18	12	9.5	9.0		
15	8.4	32	122	165	73	46	36	32	17	12	9.0	8.5		
16	8.4	34	169	161	79	51	36	30	16	11	9.0	8.0		
17	8.4	31	128	110	95	50	41	29	16	11	9.0	8.5		
18	8.4	27	124	80	102	48	37	29	16	11	9.5	8.5		
19	16	26	138	90	88	50	38	29	16	11	9.5	8.5		
20	29	24	149	82	75	50	36	29	16	13	9.5	8.5		
21	21	23	107	75	66	50	34	29	16	12	10	8.5		
22	25	22	80	64	61	66	33	29	16	12	9.5	8.0		
23	48	23	67	54	57	95	32	28	16	12	9.5	8.0		
24	41	22	58	47	54	95	32	28	15	11	9.0	8.0		
25	30	58	50	40	52	84	32	27	15	11	9.0	8.0		
26	27	56	40	38	50	79	32	25	15	11	8.5	8.0		
27	25	51	36	40	45	71	30	24	15	11	8.0	8.0		
28	22	49	35	47	59	66	30	24	14	10	8.0	7.5		
29	25	46	47	58	-----	62	29	25	14	10	8.0	9.0		
30	24	52	40	60	-----	57	29	23	13	10	8.0	13		
31	22	-----	53	50	-----	54	-----	22	-----	10	8.0	-----		
TOTAL	514.2	894	2,250	2,499	2,288	1,847	1,111	887	521	364	290.5	269.5		
MEAN	16.6	29.8	72.6	80.6	81.7	59.6	37.0	28.6	17.4	11.7	9.37	8.98		
MAX	48	58	169	165	219	95	50	36	22	13	12	13		
MIN	8.4	19	35	38	45	44	29	22	13	10	8.0	7.5		
CFSM	1.55	2.79	6.79	7.53	7.64	5.57	3.46	2.67	1.63	1.09	.88	.84		
IN.	1.79	3.11	7.82	8.69	7.95	6.42	3.86	3.08	1.81	1.27	1.01	.94		
AC-FT	1,020	1,770	4,460	8,960	4,540	3,660	2,200	1,760	1,030	722	576	535		
CAL YR 1966	TOTAL	11,640.6	MEAN	31.9	MAX	169	MIN	8.0	CFSM	2.98	IN	40.47	AC-FT	23,090
WTR YR 1967	TOTAL	13,735.2	MEAN	37.6	MAX	219	MIN	7.5	CFSM	3.51	IN	47.75	AC-FT	27,240

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	16	117	45	61	40	48	56	36	30	19	12	12		
2	15	93	78	50	52	46	53	34	53	18	12	12		
3	13	78	117	43	93	40	47	34	40	17	12	11		
4	15	62	102	40	96	42	47	36	35	16	12	11		
5	12	50	88	38	76	46	47	40	33	16	12	11		
6	13	40	75	33	65	44	46	42	30	16	12	11		
7	26	37	73	32	56	39	47	40	28	16	12	11		
8	19	32	64	31	50	38	44	38	27	15	12	11		
9	16	38	124	33	48	35	42	34	26	15	12	11		
10	26	38	153	30	44	33	42	33	24	15	11	11		
11	66	34	124	28	40	34	44	31	24	15	11	11		
12	64	31	93	28	39	35	42	30	23	16	11	11		
13	62	28	74	47	36	33	40	29	23	15	11	11		
14	73	31	62	80	34	34	50	28	25	15	12	17		
15	51	35	54	78	32	38	56	27	22	16	11	19		
16	41	37	49	67	31	48	55	26	21	15	11	19		
17	33	35	41	61	31	50	48	25	20	15	12	52		
18	34	36	36	67	46	47	48	24	19	14	12	35		
19	37	32	34	128	82	44	46	24	19	16	11	29		
20	30	31	30	149	78	42	43	36	19	16	12	24		
21	59	30	28	128	82	38	40	30	19	15	11	22		
22	73	28	45	106	84	36	40	28	21	14	11	22		
23	62	28	69	84	87	35	43	27	19	14	13	27		
24	52	32	205	80	98	34	40	26	19	14	14	23		
25	56	28	301	72	84	34	42	25	19	14	14	22		
26	46	27	225	61	74	32	42	24	22	14	14	20		
27	155	26	181	53	63	61	40	23	22	14	15	19		
28	173	27	165	47	58	74	39	23	20	13	13	18		
29	124	40	115	44	53	87	38	22	20	13	12	17		
30	131	41	90	40	-----	76	38	21	19	13	12	16		
31	138	-----	72	40	-----	65	-----	21	-----	13	11	-----		
TOTAL	1,731	1,222	3,012	1,879	1,752	1,388	1,345	917	741	467	373	546		
MEAN	55.8	40.7	97.2	60.6	60.4	44.8	44.8	29.6	24.7	15.1	12.0	18.2		
MAX	173	117	301	149	98	87	56	42	53	19	15	52		
MIN	12	26	28	28	31	32	38	21	19	13	11	11		
CFSM	5.22	3.80	9.08	5.66	5.64	4.19	4.19	2.77	2.31	1.41	1.12	1.70		
IN.	6.02	4.25	10.47	6.53	6.09	4.83	4.68	3.19	2.58	1.62	1.30	1.90		
AC-FT	3,430	2,420	5,970	3,730	3,480	2,750	2,670	1,820	1,470	926	740	1,080		
CAL YR 1967	TOTAL	16,042.0	MEAN	44.0	MAX	301	MIN	7.5	CFSM	4.11	IN	55.77	AC-FT	31,820
WTR YR 1968	TOTAL	15,373.0	MEAN	42.0	MAX	301	MIN	11	CFSM	3.93	IN	53.45	AC-FT	30,490

12196000 ALDER CREEK NEAR HAMILTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	32	60	43	24	32	52	45	21	14	11	9.1
2	16	33	58	50	24	32	60	46	20	15	11	9.6
3	16	36	103	58	24	35	52	42	20	16	11	9.6
4	17	32	132	179	30	36	49	40	19	18	11	10
5	16	30	109	256	30	58	46	37	18	16	12	9.6
6	33	28	87	180	26	59	44	35	18	14	11	9.6
7	44	27	80	168	24	52	42	35	18	14	11	9.6
8	35	32	119	131	32	48	40	34	18	14	11	9.1
9	31	38	106	107	34	44	40	34	17	13	11	9.6
10	32	34	109	90	34	41	40	34	17	14	11	9.6
11	32	36	109	76	52	40	40	32	17	17	11	9.6
12	32	40	90	66	37	40	32	17	15	11	9.6	
13	34	42	78	59	49	36	46	30	16	14	11	11
14	32	39	72	54	45	36	44	28	17	14	10	9.6
15	42	39	65	49	44	44	40	28	17	14	10	9.6
16	38	38	67	48	44	44	40	26	15	13	10	9.6
17	36	36	61	42	44	51	46	24	15	12	9.6	12
18	36	39	60	41	42	57	49	24	14	12	10	15
19	43	38	55	38	41	57	51	23	14	12	10	11
20	55	46	50	36	40	54	49	22	14	12	9.6	12
21	52	46	46	35	38	51	48	21	14	12	9.6	11
22	55	47	43	32	37	54	45	20	14	11	9.6	20
23	47	46	47	30	36	57	46	20	15	11	9.1	22
24	40	40	56	30	34	51	44	20	18	12	9.1	16
25	38	38	56	30	32	49	42	20	17	11	9.1	14
26	34	35	53	28	32	48	40	19	15	11	9.1	13
27	31	54	50	28	30	49	37	19	15	11	9.6	12
28	30	52	42	28	30	49	37	19	15	11	10	12
29	29	69	33	28	-----	48	49	30	15	11	9.1	12
30	40	72	32	26	-----	49	46	30	15	11	9.1	19
31	42	-----	35	26	-----	51	-----	23	-----	11	8.6	-----
TOTAL	1,074	1,214	2,163	2,094	1,009	1,449	1,342	894	495	406	315.2	355.4
MEAN	34.6	40.5	69.8	67.5	36.0	46.7	44.7	28.8	16.5	13.1	10.2	11.8
MAX	55	72	132	256	57	59	60	46	21	18	12	22
MIN	16	27	32	26	24	32	37	19	14	11	8.6	9.1
CFSM	3.23	3.79	6.52	6.31	3.36	4.36	4.18	2.69	1.94	1.22	.95	1.10
IN.	3.73	4.22	7.32	7.28	3.51	5.04	4.67	3.11	1.72	1.41	1.10	1.24
AC-FT	2,130	2,410	4,290	4,150	2,000	2,870	2,660	1,770	982	805	625	705
CAL YR 1968	TOTAL 13,859.0			MEAN 37.9	MAX 149	MIN 11	CFSM 3.54	IN 48.18		AC-FT 27,490		
WTR YR 1969	TOTAL 12,810.6			MEAN 35.1	MAX 256	MIN 8.6	CFSM 3.28	IN 44.54		AC-FT 25,410		

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	14	19	24	72	28	21	30	14	11	8.6	6.8
2	19	14	18	23	64	26	21	28	14	10	9.6	6.8
3	18	15	17	23	59	26	20	26	13	9.6	9.1	9.6
4	16	17	18	21	56	26	25	26	13	9.6	8.6	11
5	16	36	17	20	51	24	42	24	13	9.6	8.6	10
6	15	42	16	19	48	26	40	24	13	9.6	8.6	14
7	15	36	16	19	45	26	59	24	12	9.1	8.6	12
8	18	32	17	18	44	23	51	26	12	9.1	8.6	10
9	18	28	16	18	42	22	84	26	14	9.1	8.2	9.6
10	17	26	15	18	40	21	110	24	14	9.1	7.8	9.1
11	16	24	18	19	37	20	94	22	13	9.1	7.3	9.1
12	15	23	19	18	35	21	78	21	13	9.1	7.3	9.1
13	15	21	20	20	40	20	86	21	12	8.6	7.3	8.6
14	15	20	34	47	41	22	57	20	12	8.6	7.3	8.6
15	14	20	40	42	44	24	51	20	13	8.6	6.8	8.6
16	14	20	35	36	57	28	46	20	12	8.6	6.8	8.6
17	13	19	34	34	59	26	41	19	12	8.6	6.8	11
18	13	18	34	72	59	24	40	18	12	7.8	6.8	12
19	14	18	32	92	56	23	46	18	12	7.8	7.3	19
20	14	20	30	90	51	22	44	18	11	8.2	7.3	15
21	14	23	40	84	48	21	40	18	11	7.8	7.3	14
22	14	20	45	78	44	21	37	18	11	7.8	7.3	24
23	15	35	54	72	41	24	37	17	11	7.8	7.3	24
24	17	32	49	66	38	26	36	17	11	7.8	7.3	19
25	15	28	44	64	35	23	36	16	11	8.6	7.3	17
26	15	26	40	59	32	22	35	15	11	12	7.3	15
27	15	24	36	62	32	21	35	15	11	13	7.3	14
28	15	32	57	30	32	21	32	15	11	11	7.3	14
29	14	20	30	51	-----	21	32	15	11	10	7.3	13
30	14	20	28	48	-----	20	30	15	11	9.6	6.8	12
31	14	-----	26	59	-----	19	-----	14	-----	9.1	6.8	-----
TOTAL	477	733	889	1,373	1,298	717	1,407	630	364	285.3	236.6	374.5
MEAN	15.4	24.4	28.7	44.3	46.4	23.1	44.7	20.3	12.1	9.20	7.63	12.5
MAX	21	42	54	92	72	28	110	30	14	13	9.6	24
MIN	13	14	15	18	30	19	20	14	11	7.8	6.8	6.8
CFSM	1.44	2.28	2.68	4.14	4.34	2.16	4.38	1.90	1.13	.86	.71	1.17
IN.	1.66	2.55	3.09	4.77	4.51	2.49	4.89	2.19	1.27	.99	.82	1.30
AC-FT	946	1,450	1,760	2,720	2,570	1,420	2,790	1,250	722	566	469	743
CAL YR 1969	TOTAL 10,458.6			MEAN 28.7	MAX 256	MIN 8.6	CFSM 2.68	IN 36.36		AC-FT 20,740		
WTR YR 1970	TOTAL 8,784.4			MEAN 24.1	MAX 110	MIN 6.8	CFSM 2.25	IN 30.54		AC-FT 17,420		

12196200 DAY CREEK BELOW DAY LAKE, NEAR LYMAN, WASH.

LOCATION.--Lat 48°24'32", long 121°58'47", in SE¼NW¼ sec.25, T.34 N., R.6 E., Skagit County, on right bank 1,000 ft downstream from outlet of Day Lake, 8.9 miles southeast of Lyman, and at mile 10.4.

DRAINAGE AREA.--6.56 sq mi.

PERIOD OF RECORD.--August 1963 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,600 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 55.2 cfs (114.27 inches per year, 39,990 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (250 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966a	-	*314	4.02	Feb. 3, 1967	2000	408	4.39	Sept. 17, 1968	1130	406	4.58
Mar. 9, 1966	0700	268	3.82	Mar. 23, 1967	0230	279	3.87				
Oct. 23, 1966	1100	*442	4.51	Oct. 11, 1967	0945	381	4.29	Dec. 3, 1968	-	340	-
Dec. 13, 1966	1430	431	4.47	Dec. 10, 1967	2015	323	4.06	Jan. 4, 1969a	-	*672	5.24
Dec. 16, 1966	0900	316	4.03	Dec. 24, 1967	0500	*486	4.66	May 30, 1969	0030	266	3.81
Jan. 15, 1967	0930	379	4.28	Jan. 20, 1968	1830	302	3.97	Sept. 23, 1969	0830	358	4.20
Jan. 28, 1967	0330	286	3.90	Feb. 4, 1968	0200	411	4.40	Jan. 15, 1970a	-	282	3.88
				Feb. 19, 1968	0515	282	3.88	Apr. 9, 1970	2100	*340	4.13

a. About.

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 10, 1966	5.4	1.49	1969	Aug. 22, 23, 1969	7.0	1.57
1967	Aug. 5, 1967	3.0	1.34	1970	Aug. 30, 1970	3.3	al.44
1968	Aug. 8, 1968	6.6	1.55				

a Occurred July 16-20, Aug. 30, 1970.

Period of record: Maximum discharge, 672 cfs about Jan. 4, 1969 (gage height, 5.24 ft), from rating curve extended above 150 cfs; minimum, 3.0 cfs Aug. 5, 1967 (gage height, 1.34 ft).

REMARKS.--Records excellent except those for periods of no gage-height record, which are fair. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	36	130	30	71	43	110	49	29	16	11	10
2	7.6	69	115	36	53	36	93	58	29	18	9.7	9.4
3	7.6	65	110	32	44	31	75	67	30	39	8.5	8.8
4	8.2	86	150	29	44	20	70	74	30	75	8.0	8.3
5	30	118	75	38	58	28	74	81	28	55	8.0	7.7
6	90	82	95	82	70	32	78	111	28	39	7.7	7.1
7	60	57	85	120	68	35	84	123	28	37	8.0	6.9
8	41	45	72	155	58	58	87	91	27	33	8.0	6.9
9	46	40	62	88	50	235	87	81	26	30	8.0	6.0
10	35	36	55	76	40	153	92	66	42	26	7.7	5.6
11	26	35	47	100	40	91	95	55	56	24	7.5	6.6
12	24	31	41	135	38	72	82	52	48	22	7.5	7.3
13	32	29	37	285	32	131	63	51	41	20	10	7.1
14	81	36	34	160	29	142	85	49	37	19	12	7.1
15	174	90	31	85	27	132	93	61	32	19	11	7.1
16	92	70	29	72	26	106	82	86	29	18	10	6.2
17	58	58	27	63	27	80	66	70	27	21	9.7	6.2
18	60	58	27	56	30	69	57	57	25	19	9.1	13
19	84	80	30	51	31	74	52	50	21	17	8.5	13
20	68	110	35	45	56	61	52	46	21	18	8.0	11
21	52	140	38	40	72	49	53	54	18	17	7.3	9.7
22	40	120	32	36	63	41	53	55	16	16	7.3	8.8
23	34	90	27	38	63	38	52	46	30	15	7.3	8.0
24	29	60	25	33	57	36	52	43	20	14	6.9	7.3
25	24	50	24	35	50	39	54	42	18	16	6.6	6.9
26	22	53	23	38	54	49	52	43	17	23	6.4	10
27	23	70	31	55	55	62	46	40	16	20	12	13
28	41	57	54	45	46	70	45	36	18	17	20	11
29	38	46	45	87	-----	84	46	34	29	14	16	9.4
30	52	55	37	95	-----	158	47	31	21	13	13	8.8
31	40	-----	32	96	-----	153	-----	29	-----	12	11	-----
TOTAL	1,427.0	1,972	1,655	2,336	1,352	2,416	2,077	1,831	837	742	291.7	254.2
MEAN	46.0	65.7	53.4	75.4	48.3	77.9	69.2	59.1	27.9	23.9	9.41	8.47
MAX	174	140	150	285	72	235	110	123	56	75	20	13
MIN	7.6	29	23	29	26	28	45	29	16	12	6.4	5.6
CFSH	7.01	10.0	8.14	11.5	7.36	11.9	10.5	9.01	4.25	3.64	1.43	1.29
IN.	8.09	11.18	9.39	13.25	7.67	13.70	11.78	10.38	4.75	4.21	1.65	1.44
AC-FT	2,830	3,910	3,280	4,630	2,680	4,790	4,120	3,630	1,660	1,470	579	504

CAL YR 1965 TOTAL 18,091.4 MEAN 49.6 MAX 341 MIN 5.8 CFSH 7.56 IN 102.59 AC-FT 35,880
WTR YR 1966 TOTAL 17,190.9 MEAN 47.1 MAX 285 MIN 5.6 CFSH 7.18 IN 97.48 AC-FT 34,100

NOTE.--NO GAGE-HEIGHT RECORD NOV. 11 TO JAN. 28, JUNE 18 TO JULY 27.

SKAGIT RIVER BASIN

12196200 DAY CREEK BELOW DAY LAKE, NEAR LYMAN, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	44	131	156	81	110	33	39	61	16	6.6	5.0
2	19	37	109	113	92	77	33	43	67	15	4.6	5.9
3	16	31	97	164	282	57	36	46	63	14	4.2	6.3
4	13	27	98	128	326	46	45	54	58	13	4.2	6.3
5	11	33	95	91	164	39	49	66	57	12	3.8	6.1
6	9.9	36	91	68	104	36	44	72	56	12	3.6	5.6
7	12	31	84	59	76	34	44	78	51	12	4.4	5.4
8	38	26	66	112	61	66	48	92	44	12	4.8	5.0
9	29	39	51	130	60	78	64	105	40	12	5.0	5.6
10	20	56	80	109	71	55	54	76	37	11	5.0	10
11	16	43	141	146	71	42	48	69	35	11	4.8	30
12	13	86	200	123	86	35	50	66	34	10	4.6	20
13	10	81	368	120	98	31	54	64	39	9.9	4.5	14
14	9.7	124	248	136	72	28	47	65	36	8.5	4.2	11
15	9.1	114	172	295	61	31	39	73	34	7.2	4.2	9.1
16	9.1	89	267	169	53	67	37	87	33	6.8	4.4	7.0
17	11	73	219	106	64	81	39	98	33	7.0	4.8	6.6
18	11	57	191	80	92	67	39	93	31	7.0	4.8	5.2
19	68	47	186	150	67	53	39	92	31	7.5	4.8	4.5
20	183	42	184	179	52	49	40	100	31	9.4	4.8	4.6
21	123	54	121	124	44	61	43	104	32	12	5.0	4.5
22	132	61	89	86	39	146	43	97	39	10	5.0	4.8
23	319	54	69	69	36	249	42	81	35	10	4.8	4.6
24	197	52	86	55	35	152	43	66	29	9.1	4.8	4.5
25	106	161	89	47	43	96	45	58	25	7.7	4.8	4.6
26	81	131	65	50	43	74	43	60	23	7.7	4.6	4.5
27	73	109	52	114	39	60	41	63	22	7.7	4.8	4.4
28	58	138	48	262	86	50	43	66	20	7.7	5.0	4.4
29	146	93	208	-----	-----	47	74	74	18	7.5	5.2	5.0
30	76	130	81	171	-----	39	37	65	17	7.2	5.0	21
31	56	-----	100	107	-----	36	-----	58	-----	7.2	4.6	-----
TOTAL	1,804.0	2,146	3,971	3,927	2,398	2,092	1,301	2,270	1,131	307.1	145.7	235.5
MEAN	58.2	71.5	128	127	85.6	67.5	43.4	73.2	37.7	9.91	4.70	7.85
MAX	319	161	368	295	326	249	64	105	67	16	6.6	30
MIN	9.1	26	48	47	35	28	33	39	17	6.8	3.6	4.4
CFSM	8.87	10.9	19.5	19.4	13.0	10.3	6.62	11.2	5.75	1.51	.72	1.20
IN.	10.23	12.17	22.52	22.27	13.60	11.86	7.38	12.87	6.41	1.74	.83	1.34
AC-FT	3,580	4,260	7,880	7,790	4,760	4,150	2,580	4,500	2,240	609	289	467
CAL YR 1966	TOTAL 20,057.9	MEAN 55.0	MAX 368	MIN 5.6	CFSM 8.38	IN 113.74	AC-FT 39,780					
MTR YR 1967	TOTAL 21,728.3	MEAN 59.5	MAX 368	MIN 3.6	CFSM 9.07	IN 123.22	AC-FT 43,100					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	130	54	54	34	48	61	69	53	22	8.8	21
2	131	84	89	46	94	46	54	54	162	20	8.8	20
3	86	63	124	39	254	43	50	47	118	18	8.5	18
4	78	50	104	37	294	45	55	50	74	16	8.0	17
5	55	40	81	35	136	63	78	59	53	14	7.7	15
6	49	36	62	31	87	67	65	57	43	13	7.5	14
7	125	34	50	29	66	58	61	56	36	13	7.2	13
8	96	34	43	29	54	49	54	50	33	12	7.0	12
9	59	85	99	42	49	40	50	44	30	10	7.7	11
10	57	130	230	49	44	36	47	43	27	9.9	8.0	10
11	282	105	202	39	41	34	50	43	25	10	8.0	11
12	218	71	107	34	39	48	44	41	25	10	7.5	13
13	148	53	71	90	37	51	39	37	25	20	7.2	13
14	144	49	53	204	34	59	65	35	29	39	7.7	39
15	91	54	43	184	31	91	91	34	28	36	8.3	94
16	64	63	38	130	29	132	66	32	25	27	8.3	95
17	49	50	34	92	27	104	53	30	22	20	8.3	271
18	45	45	31	87	76	74	48	29	20	21	20	160
19	58	41	27	160	264	58	46	30	18	28	20	87
20	47	36	24	229	219	50	41	51	17	30	20	59
21	123	32	25	216	172	45	37	53	16	27	18	44
22	166	29	55	131	152	43	36	43	20	22	15	43
23	146	30	137	98	153	50	66	43	20	20	31	80
24	95	70	419	98	150	63	73	41	19	17	44	62
25	104	59	395	85	105	61	106	37	18	15	42	44
26	77	44	250	67	78	64	93	34	24	14	59	36
27	115	36	178	51	65	132	72	30	35	13	72	29
28	167	36	144	43	56	146	68	27	32	12	56	25
29	113	63	102	39	50	155	72	25	31	11	39	23
30	137	58	76	36	-----	110	73	22	25	10	29	21
31	153	-----	62	36	-----	76	-----	22	-----	9.7	24	-----
TOTAL	3,338	1,710	3,409	2,540	2,890	2,141	1,816	1,268	1,103	559.6	623.5	1,400
MEAN	108	57.0	110	81.9	99.7	69.1	60.5	40.9	36.8	18.1	20.1	46.7
MAX	282	130	419	229	294	155	106	69	162	39	72	271
MIN	45	29	24	29	27	34	22	16	9.7	7.7	7.0	10
CFSM	16.5	8.69	16.8	12.5	15.2	10.5	9.22	6.23	5.61	2.76	3.06	7.12
IN.	18.93	9.70	19.33	14.40	16.39	12.14	10.30	7.19	6.29	3.17	3.54	7.94
AC-FT	6,620	3,390	6,760	5,040	5,730	4,250	3,600	2,520	2,190	1,110	1,240	2,780
CAL YR 1967	TOTAL 22,264.3	MEAN 61.0	MAX 419	MIN 3.6	CFSM 9.30	IN 126.25	AC-FT 44,160					
MTR YR 1968	TOTAL 22,798.1	MEAN 62.3	MAX 419	MIN 7.0	CFSM 9.50	IN 129.28	AC-FT 45,220					

12196200 DAY CREEK BELOW DAY LAKE, NEAR LYMAN, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	54	67	50	13	18	147	62	72	29	10	9.7
2	18	50	66	65	14	18	153	61	57	34	10	9.4
3	17	66	230	140	18	21	107	54	50	68	10	9.1
4	18	55	160	450	22	23	85	51	44	96	9.9	9.7
5	21	43	102	160	25	36	90	53	40	70	13	11
6	47	36	72	120	18	41	90	63	37	49	13	10
7	59	34	63	95	17	34	76	82	34	36	12	9.7
8	43	46	116	80	50	29	68	106	31	30	12	9.7
9	34	72	116	72	45	25	72	118	29	27	11	9.1
10	39	59	130	65	40	23	89	118	27	27	10	8.5
11	52	78	121	57	85	22	83	109	26	99	10	8.5
12	60	118	85	50	60	21	91	100	24	100	9.9	8.3
13	95	96	65	43	50	20	150	92	22	63	9.7	9.4
14	74	72	68	38	40	20	120	85	22	45	9.4	9.7
15	82	59	71	35	35	24	84	73	20	36	9.1	9.9
16	71	49	72	32	40	32	72	65	20	29	8.8	9.7
17	55	42	60	29	35	78	98	62	18	25	8.5	33
18	59	83	54	27	32	110	146	63	17	22	8.5	100
19	66	109	44	25	30	102	134	64	16	20	8.3	86
20	121	107	38	23	28	85	106	58	15	19	7.7	81
21	100	104	34	22	26	68	90	56	13	17	7.5	62
22	101	101	33	22	25	67	92	57	13	15	7.5	107
23	77	87	66	20	24	72	117	58	16	14	7.5	277
24	59	68	148	19	22	60	102	60	20	13	7.5	159
25	53	54	125	18	21	53	78	53	25	13	7.2	104
26	52	48	84	17	20	55	65	46	33	12	7.2	74
27	43	98	63	16	19	69	65	47	29	12	7.5	57
28	37	97	45	15	18	72	81	51	28	12	13	50
29	39	92	35	14	-----	74	87	138	31	11	14	48
30	74	83	30	14	-----	91	70	197	36	11	12	72
31	74	-----	28	13	-----	137	-----	106	-----	11	10	-----
TOTAL	1,760	2,160	2,491	1,846	872	1,600	2,908	2,408	865	1,065	301.7	1,461.4
MEAN	56.8	72.0	78.1	59.5	31.1	51.6	96.9	77.7	28.8	34.4	9.73	48.7
MAX	121	118	230	450	85	137	153	197	72	100	14	277
MIN	17	34	28	13	13	18	55	46	13	11	7.2	8.3
CFSM	8.66	11.0	12.3	9.07	4.74	7.87	14.8	11.8	4.39	5.24	1.48	7.42
IN-	9.98	12.25	14.13	10.47	4.94	9.07	16.49	13.66	4.91	6.04	1.71	8.29
AC-FT	3,490	4,280	4,940	3,660	1,730	3,170	5,770	4,780	1,720	2,110	598	2,900

CAL YR 1968 TOTAL 20,752.1 MEAN 56.7 MAX 294 MIN 7.0 CFSM 8.64 IN 117.68 AC-FT 41,160
 WTR YR 1969 TOTAL 19,738.1 MEAN 54.1 MAX 450 MIN 7.2 CFSM 8.25 IN 111.93 AC-FT 39,150

NOTE.--NO GAGE-HEIGHT RECORD DEC. 28 TO FEB. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	21	21	34	80	27	25	55	16	8.5	16	4.2
2	101	20	20	29	84	26	31	53	16	8.5	19	4.0
3	73	22	20	26	66	25	39	53	15	8.3	17	8.0
4	54	92	27	23	52	23	31	53	14	8.3	14	85
5	43	147	28	21	46	22	45	40	13	7.7	13	74
6	36	111	24	20	42	22	110	41	13	7.5	11	158
7	32	91	22	20	70	40	130	35	13	7.2	9.9	131
8	41	67	22	19	110	85	85	39	12	7.0	9.7	76
9	72	57	27	21	100	64	189	62	14	5.9	9.1	49
10	71	46	27	29	94	47	226	53	22	5.4	8.5	35
11	52	39	43	24	86	35	125	42	19	5.4	8.8	27
12	41	36	77	22	82	29	85	36	16	5.0	8.5	19
13	34	32	96	21	80	45	66	32	14	4.8	8.3	16
14	29	29	155	60	220	70	53	30	14	4.6	7.2	14
15	25	27	111	240	120	120	45	27	14	4.5	7.0	12
16	23	27	81	140	160	110	39	27	18	4.5	7.0	11
17	21	25	78	70	150	100	36	29	17	4.4	7.0	25
18	20	24	77	50	120	54	34	25	15	4.4	6.8	56
19	19	25	88	100	95	37	46	23	13	4.5	6.1	158
20	23	27	61	210	88	33	50	22	12	4.5	5.6	120
21	32	39	80	120	86	30	44	20	12	4.5	5.6	74
22	28	36	108	160	70	26	40	20	10	4.5	5.6	110
23	24	54	188	110	58	25	52	20	9.9	4.6	5.6	121
24	27	64	76	82	45	25	71	20	9.7	4.6	5.4	74
25	32	48	64	75	39	36	65	20	9.1	5.2	5.4	51
26	26	39	54	72	36	30	55	19	9.1	37	5.0	39
27	26	31	46	70	33	27	47	18	9.1	100	4.2	32
28	29	27	40	68	30	29	43	17	8.8	59	4.4	27
29	26	25	36	62	-----	34	47	18	8.5	36	4.2	22
30	24	22	35	56	-----	28	51	18	8.8	29	3.9	19
31	22	-----	35	50	-----	26	-----	17	-----	20	3.9	-----
TOTAL	1,211	1,350	1,847	2,104	2,342	1,330	2,005	984	395.0	425.3	252.7	1,651.2
MEAN	39.1	45.0	59.6	67.9	83.6	42.9	66.8	31.7	13.2	13.7	8.15	55.0
MAX	105	147	188	240	220	120	226	62	22	100	19	158
MIN	19	20	20	19	30	22	25	17	8.5	4.4	3.9	4.0
CFSM	5.96	6.86	9.09	10.4	12.7	6.54	10.2	4.83	2.01	2.09	1.24	8.38
IN-	6.87	7.66	10.47	11.93	13.28	7.54	11.37	5.58	2.24	2.41	1.43	9.36
AC-FT	2,400	2,680	3,660	4,170	4,650	2,640	3,980	1,950	783	844	501	3,280

CAL YR 1969 TOTAL 17,735.1 MEAN 48.6 MAX 450 MIN 7.2 CFSM 7.41 IN 100.57 AC-FT 35,180
 WTR YR 1970 TOTAL 15,897.2 MEAN 43.6 MAX 450 MIN 3.9 CFSM 6.65 IN 90.15 AC-FT 31,530

NOTE.--NO GAGE-HEIGHT RECORD DEC. 21 TO FEB. 24, FEB. 27 TO APR. 8.

SKAGIT RIVER BASIN

12196400 DAY CREEK NEAR HAMILTON, WASH.

LOCATION.--Lat 48°29'10", long 122°01'57", in NE¼ sec.33, T.35 N., R.6 E., Skagit County, on left bank 2 miles upstream from mouth and 3.2 miles southwest of Hamilton.

DRAINAGE AREA.--32.3 sq mi.

PERIOD OF RECORD.--September 1962 to September 1969 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 140 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 246 cfs (103.43 inches per year, 178,200 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (3,000 cfs), water years 1966-69

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	0230	*3,760	5.32	Oct. 1, 1967	1945	*3,270	5.36	Dec. 3, 1968	1230	*3,750	5.60
				Oct. 11, 1967	0715	3,190	5.32	Jan. 4, 1969	1430	3,510	5.48
Jan. 15, 1967	0630	*3,040	5.24	Dec. 24, 1967	0245	3,170	5.36	Sept. 23, 1969	0600	3,350	5.50

Annual minimum discharge, water years 1966-69

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 1965	13	1.35	1968	Aug. 13, 1968	17	1.44
1967	Aug. 31, 1967	9.9	1.24	1969	Aug. 24, 25, 1969	20	1.49

Period of record: Maximum discharge, 5,500 cfs Nov. 19, 1962 (gage height, 5.87 ft), from rating curve extended above 1,200 cfs; minimum, 9.9 cfs Aug. 31, 1967 (gage height, 1.24 ft).

REMARKS.--Records excellent. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	175	896	100	254	133	445	215	122	89	32	27
2	14	458	684	119	187	115	370	296	137	201	28	25
3	14	356	662	98	155	101	283	375	126	410	26	23
4	40	514	1,010	90	174	92	283	390	119	288	25	21
5	427	690	447	121	313	103	335	484	137	185	24	20
6	737	254	600	487	351	152	360	880	182	174	23	18
7	180	169	508	776	275	164	390	508	171	130	23	18
8	119	142	399	1,090	210	462	370	425	154	107	23	17
9	129	132	263	433	182	1,520	385	380	137	93	22	16
10	66	126	223	379	147	538	420	245	296	84	22	16
11	65	129	183	471	170	301	405	211	237	81	25	31
12	67	106	152	949	149	288	278	249	174	72	21	29
13	110	92	181	2,080	124	932	201	201	168	67	63	23
14	517	145	114	1,070	112	682	514	165	171	66	43	21
15	580	557	102	474	100	587	425	385	168	61	31	20
16	220	397	93	306	97	405	330	425	165	73	28	18
17	141	208	86	231	98	278	253	241	128	64	25	18
18	315	216	86	194	102	350	208	194	113	58	23	101
19	365	337	107	163	104	325	185	211	117	61	21	90
20	248	718	119	142	269	222	191	218	94	55	19	35
21	161	953	128	130	245	176	194	306	88	49	18	28
22	115	767	98	118	215	150	191	208	165	44	18	25
23	93	356	86	121	236	137	194	168	107	41	18	26
24	78	225	85	107	196	142	201	182	100	45	17	23
25	68	179	78	111	177	171	218	249	91	64	17	21
26	61	196	71	120	202	233	188	241	86	68	17	41
27	61	303	116	228	199	283	168	171	96	54	133	41
28	183	205	209	215	152	320	168	140	162	46	89	31
29	125	169	139	468	-----	440	171	142	106	40	51	24
30	184	197	121	452	-----	1,090	179	130	86	37	38	23
31	108	-----	102	390	-----	550	-----	113	-----	34	32	-----
TOTAL	5,426	9,451	8,098	12,393	5,195	11,624	8,503	8,748	4,203	2,961	995	832
MEAN	181	315	261	400	186	375	283	282	140	95.5	32.1	27.7
MAX	737	953	1,010	2,080	351	1,520	514	880	296	410	133	101
MIN	14	92	71	90	97	92	168	113	86	34	17	16
CFSM	5.60	9.75	8.08	12.4	5.76	11.6	8.76	8.73	4.33	2.96	.99	.86
IN.	6.48	10.88	9.33	14.27	5.98	13.39	9.79	10.08	4.84	3.41	1.15	.96
AC-FT	11,160	18,750	16,060	24,580	10,300	23,060	16,870	17,350	8,340	5,870	1,970	1,650
CAL YR 1965	TOTAL 77,438	MEAN 212	MAX 1,910	MIN 12	CFSM 6.56	IN 89.19	AC-FT 153,600					
WTR YR 1966	TOTAL 78,629	MEAN 215	MAX 2,080	MIN 14	CFSM 6.66	IN 90.56	AC-FT 156,000					

12196400 DAY CREEK NEAR HAMILTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	130	636	601	270	392	122	140	351	68	19	11
2	118	109	713	574	532	243	130	149	394	65	17	28
3	52	96	520	672	1,750	181	146	159	314	61	15	18
4	37	88	678	502	1,520	148	177	227	309	55	14	14
5	31	155	420	306	532	130	166	274	340	50	14	13
6	28	130	526	218	335	120	154	284	312	46	14	14
7	52	104	360	198	241	110	164	332	236	43	20	13
8	254	89	237	608	194	292	168	418	194	48	18	11
9	83	208	182	514	198	246	283	408	186	42	16	12
10	59	179	809	854	233	159	182	235	185	39	15	120
11	48	122	970	818	211	128	174	230	174	37	14	151
12	40	405	1,500	550	455	110	180	233	211	36	13	53
13	34	425	2,320	484	420	100	194	234	248	33	13	35
14	30	728	930	713	237	91	163	243	229	30	12	27
15	28	587	1,050	1,630	208	122	138	342	220	27	12	22
16	31	325	1,430	538	188	387	135	451	228	25	12	18
17	44	229	1,190	340	419	339	146	473	232	25	12	16
18	36	168	900	253	387	253	154	411	208	24	12	14
19	854	150	1,280	1,070	229	200	143	425	214	25	12	13
20	970	140	736	854	178	204	146	507	190	61	11	13
21	380	274	415	490	151	273	161	484	186	53	13	13
22	671	205	292	310	132	1,390	157	420	188	35	13	16
23	1,430	182	225	241	120	1,540	140	304	140	30	12	13
24	538	171	450	191	120	649	146	228	133	27	12	12
25	270	980	330	168	176	383	161	218	125	24	11	12
26	315	365	218	233	148	297	146	263	109	23	11	11
27	237	435	171	1,250	130	238	138	299	94	23	11	11
28	165	784	162	1,460	646	200	140	336	84	23	11	11
29	360	478	472	1,080	-----	175	130	364	78	21	11	40
30	249	800	257	657	-----	151	128	251	69	21	11	508
31	165	-----	580	360	-----	132	-----	226	-----	20	10	-----
TOTAL	7,656	9,241	20,959	18,937	10,360	9,383	4,712	9,568	6,183	1,140	411	1,263
MEAN	247	308	676	611	370	303	157	309	206	36.8	13.3	42.1
MAX	1,430	980	2,320	1,630	1,750	1,540	283	507	394	68	20	508
MIN	28	88	162	168	120	91	122	140	69	20	10	11
CFSM	7.65	9.54	20.9	18.9	11.5	9.38	4.86	9.57	6.38	1.14	.41	1.30
IN-	8.82	10.64	24.14	21.81	11.93	10.81	5.43	11.02	7.12	1.31	.47	1.45
AC-FT	15,190	18,330	41,570	37,560	20,550	18,610	9,350	18,980	12,260	2,260	815	2,510
CAL YR 1966	TOTAL 93,310	MEAN 256	MAX 2,320	MIN 10	CFSM 7.93	IN 107.47	AC-FT 185,100					
WTR YR 1967	TOTAL 99,813	MEAN 273	MAX 2,320	MIN 10	CFSM 8.45	IN 114.95	AC-FT 198,000					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,130	390	222	177	113	241	198	241	550	62	24	57
2	643	233	622	146	940	253	194	177	1,030	55	23	55
3	514	174	685	128	1,480	215	171	171	345	49	23	47
4	340	140	380	123	1,190	306	315	253	211	44	22	43
5	205	115	301	113	450	496	306	241	168	40	21	38
6	355	100	211	97	283	340	218	233	138	38	20	35
7	890	104	182	95	215	229	218	198	120	35	20	33
8	306	106	151	93	185	179	185	185	108	33	19	30
9	455	776	608	215	174	146	171	205	100	31	21	29
10	455	627	1,390	168	165	128	179	222	91	29	22	27
11	1,500	370	692	123	157	140	198	211	84	29	22	30
12	664	218	330	106	151	395	157	188	81	42	20	45
13	836	162	215	643	143	270	133	143	93	34	18	35
14	550	249	171	1,160	120	340	375	135	118	73	25	400
15	261	365	143	809	106	556	350	138	86	168	24	496
16	179	274	128	472	95	608	215	143	76	120	22	337
17	135	177	113	350	104	350	179	157	70	72	24	1,300
18	205	208	97	430	1,110	237	171	171	66	56	102	377
19	208	159	86	1,320	1,450	191	154	185	65	46	91	199
20	140	125	79	1,460	776	179	135	370	57	130	68	138
21	1,160	104	86	845	970	171	125	194	52	76	45	105
22	950	95	484	466	692	177	135	159	87	60	37	138
23	520	113	1,000	420	960	301	375	165	65	91	214	222
24	365	315	2,070	764	706	306	249	151	457	57	140	132
25	496	165	1,740	301	390	274	425	138	52	40	246	94
26	245	123	890	215	306	241	283	123	159	37	242	78
27	1,060	102	685	168	261	845	218	110	128	34	315	67
28	728	130	532	143	237	496	279	108	97	32	147	60
29	390	310	550	130	233	784	315	97	91	30	93	55
30	629	229	249	118	-----	360	360	87	73	27	71	51
31	657	-----	198	113	-----	237	-----	84	-----	26	58	-----
TOTAL	16,881	6,958	15,090	11,631	14,162	9,991	6,986	5,383	4,518	1,689	2,234	4,753
MEAN	545	232	487	375	488	322	233	174	151	54.5	72.1	158
MAX	1,500	927	2,070	1,460	1,480	845	425	370	1,030	168	315	1,300
MIN	9	135	95	79	93	95	125	84	32	26	18	27
CFSM	16.9	7.18	15.1	11.6	15.1	9.97	7.21	5.39	4.67	1.69	2.23	4.89
IN-	19.44	8.01	17.38	13.40	16.31	11.51	8.05	6.20	5.20	1.95	2.57	5.47
AC-FT	33,480	13,800	29,930	23,070	28,090	19,820	13,860	10,680	8,960	3,350	4,430	9,430
CAL YR 1967	TOTAL 100,886	MEAN 276	MAX 2,070	MIN 10	CFSM 8.54	IN 116.19	AC-FT 200,100					
WTR YR 1968	TOTAL 100,276	MEAN 274	MAX 2,070	MIN 18	CFSM 8.48	IN 115.49	AC-FT 198,900					

12196400 DAY CREEK NEAR HAMILTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969											
OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
1	47	170	245	150	46	73	722	216	269	68	28
2	44	220	251	183	50	78	800	216	255	129	28
3	41	321	1,830	365	64	93	384	104	235	204	30
4	76	182	635	1,970	79	95	328	179	224	376	38
5	59	138	362	1,110	89	237	422	217	193	159	39
6	490	114	247	556	62	174	373	290	166	108	32
7	220	102	272	405	55	123	275	427	142	96	32
8	125	304	705	253	237	102	255	550	140	73	26
9	95	379	600	218	208	87	296	577	135	64	24
10	292	198	694	182	123	83	395	531	119	91	23
11	265	550	488	154	601	78	324	460	102	395	26
12	370	582	304	125	410	75	459	434	91	229	21
13	470	331	228	113	225	73	778	404	84	134	55
14	250	227	301	104	165	73	398	357	79	98	36
15	394	188	295	93	138	125	271	275	73	80	35
16	209	156	278	87	151	177	264	260	68	69	30
17	217	144	196	81	143	555	719	271	61	61	336
18	229	494	200	73	125	495	757	325	55	56	538
19	566	413	154	70	113	361	609	314	51	51	517
20	534	477	129	66	104	278	394	265	47	47	482
21	362	373	116	62	95	225	377	307	44	44	208
22	518	414	107	70	89	266	406	343	47	41	22
23	245	364	425	68	84	283	585	361	83	38	1,550
24	173	227	1,060	65	79	204	393	354	100	36	20
25	180	173	560	60	76	186	266	218	78	34	38
26	154	156	304	59	73	233	224	203	83	33	216
27	120	463	208	56	70	310	250	263	73	31	170
28	111	311	155	52	70	288	356	225	86	30	131
29	172	503	130	50	-----	301	321	1,200	99	29	51
30	604	318	105	48	-----	478	231	761	96	28	37
31	270	-----	100	47	-----	683	-----	329	-----	27	31
TOTAL	7,902	8,992	11,684	6,995	3,824	6,892	12,632	11,316	3,378	2,949	1,035
MEAN	255	300	377	226	137	222	421	365	113	95.1	33.4
MAX	604	582	1,830	1,970	601	683	800	1,200	269	395	131
MIN	41	102	100	47	46	73	224	179	44	27	20
CFSM	7.89	9.29	11.7	7.00	4.24	6.87	13.0	11.3	3.50	2.94	1.03
IN-	9.10	10.36	13.46	8.06	4.40	7.94	14.55	13.03	3.89	3.40	1.19
AC-FT	15,670	17,840	23,180	13,870	7,580	13,670	25,060	22,450	6,700	5,850	2,050
CAL YR 1968	TOTAL 89,925		MEAN 246	MAX 1,830	MIN 18	CFSM 7.62	IN 103.57	AC-FT 178,400			
MTR YR 1969	TOTAL 84,792		MEAN 232	MAX 1,970	MIN 20	CFSM 7.18	IN 97.66	AC-FT 168,200			

12199800 EAST FORK NOOKACHAMPS CREEK NEAR BIG LAKE, WASH.

LOCATION.--Lat 48°24'50", long 122°09'25", in SW¼SW¼ sec.22, T.34 N., R.5 E., Skagit County, on right bank 3.0 miles (revised) upstream from Walker Creek, 3.8 miles northeast of town of Big Lake, and at mile 8.5.

DRAINAGE AREA.--3.56 sq mi.

PERIOD OF RECORD.--November 1961 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 1,700 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 22.9 cfs (87.35 inches per year, 16,590 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (270 cfs, revised), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
May 6, 1966	1530	*270	4.69	Oct. 31, 1967	1200	286	4.72	Dec. 3, 1968	1300	375	4.87
				Dec. 10, 1967	1730	275	4.70	Jan. 4, 1969	1400	*382	4.88
Oct. 23, 1966	0500	281	4.71	Dec. 25, 1967	1000	420	4.93				
Feb. 4, 1967	0800	*458	4.98	Jan. 20, 1968	1400	281	4.71	Nov. 4, 1969	1530	*432	4.95
				Feb. 2, 1968	1900	270	4.69	Jan. 14, 1970	0800	289	4.72
Oct. 11, 1967	1900	292	4.73	Sept. 17, 1968	0730	*534	5.07	Apr. 9, 1970	1530	418	4.93
Oct. 27, 1967	1900	281	4.71								

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 1965	1.0	2.63	1969	Aug. 24, 25, 1969	1.6	2.73
1967	Aug. 30, 1967	.28	2.53	1970	July 22-24, 1970	.54	b2.68
1968	Aug. 11-14, 1968	.78	2.65				

a Occurred Aug. 23-25, 1966.

b Occurred Aug. 30, 31, 1970.

Period of record: Maximum discharge, 610 cfs Oct. 21, 1963 (gage height, 5.15 ft), from rating curve extended above 290 cfs; minimum, 0.28 cfs Aug. 30, 1967 (gage height, 2.53 ft).

REMARKS.--Records good. No gage-height record May 9 to June 25, 1969. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	21	72	5.4	18	9.6	54	36	21	9.9	2.4	2.4
2	1.3	53	44	9.0	14	9.3	42	51	27	31	2.2	2.1
3	1.1	22	57	5.6	12	8.2	38	62	23	53	2.1	2.0
4	4.0	31	73	5.8	17	7.7	42	59	25	33	2.0	1.8
5	29	38	32	12	27	7.4	46	73	27	31	1.9	1.6
6	62	16	46	48	22	8.5	47	121	31	31	1.8	1.6
7	13	11	36	76	16	8.0	49	66	28	20	1.7	1.6
8	11	9.7	31	88	12	33	45	60	26	13	1.7	1.5
9	15	10	22	29	11	87	48	48	23	10	1.7	1.4
10	7.7	10	22	22	9.6	32	56	36	56	9.6	2.0	1.5
11	5.8	9.4	16	22	9.3	23	42	34	36	9.3	2.1	5.9
12	9.0	8.0	12	68	9.0	33	27	90	26	8.2	1.7	3.5
13	17	7.3	10	149	8.2	109	22	35	26	6.9	13	2.5
14	38	6.9	9.0	59	7.4	71	58	25	27	7.4	5.0	2.0
15	31	56	8.2	29	7.2	47	51	45	26	6.7	3.0	1.9
16	13	33	7.4	22	6.9	32	40	45	26	9.0	2.6	1.8
17	10	17	6.9	20	6.9	24	34	33	20	6.7	2.2	33
18	18	20	6.7	15	8.2	24	30	39	17	5.6	1.9	22
19	30	21	9.0	12	9.9	22	27	35	20	6.2	1.7	5.4
20	20	51	9.6	11	27	16	26	37	14	5.4	1.6	3.5
21	12	59	9.0	11	29	14	25	60	12	4.4	1.4	2.6
22	8.2	44	6.7	9.6	27	13	33	35	26	3.8	1.4	2.2
23	6.9	21	6.2	9.0	27	13	32	30	13	3.5	1.3	2.9
24	5.8	15	6.2	8.2	22	18	30	35	11	5.4	1.2	2.6
25	5.2	12	5.8	9.9	20	28	35	44	10	9.3	1.3	2.5
26	4.8	13	5.4	11	16	36	28	38	9.9	6.4	1.5	9.0
27	6.6	18	6.7	12	13	40	27	27	12	4.6	24	5.2
28	20	13	8.0	18	11	44	27	26	19	3.6	4.8	3.5
29	15	12	6.2	39	-----	67	27	27	9.9	3.2	4.8	2.8
30	22	15	5.8	33	-----	141	28	22	8.2	2.9	3.4	2.4
31	9.7	-----	5.6	26	-----	56	-----	17	-----	2.6	2.8	-----
TOTAL	453.5	673.3	601.4	894.5	423.6	1,081.7	1,116	1,391	656.0	362.6	109.4	134.7
MEAN	14.6	22.4	19.4	28.9	15.1	34.9	37.2	44.9	21.9	11.7	3.53	4.49
MAX	62	59	73	149	29	141	58	121	56	53	24	33
MIN	1.1	6.9	5.4	9.4	6.9	7.4	22	17	8.2	2.6	1.2	1.4
CFSM	4.10	6.29	5.45	8.12	4.24	9.80	10.4	12.6	6.15	3.29	.99	1.26
IN-	4.74	7.04	6.28	9.35	4.43	11.30	11.66	14.94	6.85	3.79	1.14	1.41
AC-FT	900	1,340	1,190	1,770	840	2,150	2,210	2,760	1,300	719	217	267
CAL YR 1965	TOTAL 7,437.80		MEAN 20.4	MAX 191	MIN 1.40	CFSM 5.73	IN 77.72	AC-FT 14,750				
WTR YR 1966	TOTAL 7,897.70		MEAN 21.6	MAX 149	MIN 1.1	CFSM 6.07	IN 82.53	AC-FT 15,670				

SKAGIT RIVER BASIN

12199800 EAST FORK NOOKACHAMPS CREEK NEAR BIG LAKE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

GAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	8.1	48	51	20	25	11	18	64	7.4	1.1	.37
2	19	6.7	79	39	37	16	19	20	52	6.9	1.0	1.2
3	5.8	6.0	44	63	191	13	20	22	44	6.0	.96	.78
4	3.8	5.4	66	31	158	12	22	34	48	4.9	.96	.61
5	2.9	35	31	23	38	12	17	42	47	4.2	.96	.48
6	2.9	16	26	18	26	13	17	40	39	3.7	.96	.87
7	8.5	11	20	16	21	11	23	56	31	3.4	3.4	.61
8	31	8.4	17	67	19	16	22	70	26	4.9	2.0	.48
9	7.7	41	14	95	19	13	20	47	25	3.5	1.4	.48
10	5.2	24	48	72	24	10	17	31	25	3.1	1.1	17
11	4.6	14	99	77	19	8.6	22	32	24	2.7	.96	14
12	4.1	33	125	35	23	8.1	22	34	28	2.4	.78	3.4
13	3.6	37	161	34	21	7.8	16	34	31	2.2	.78	2.0
14	3.4	56	92	164	7.4	14	24	29	23	2.0	1.1	1.0
15	3.0	46	78	134	13	8.6	12	64	28	1.9	.61	.96
16	3.4	28	105	34	12	47	12	81	29	1.7	.52	.78
17	4.8	22	84	23	30	31	13	80	30	1.7	.52	.70
18	3.6	15	75	29	20	20	17	65	28	1.7	.48	.78
19	60	12	81	53	17	15	14	68	28	1.7	.61	.70
20	71	12	47	36	14	14	14	84	24	7.8	.44	.61
21	22	16	31	23	12	15	19	74	26	4.4	1.0	.70
22	14	15	17	88	11	8.6	27	11	27	2.7	.96	1.5
23	115	25	21	14	10	112	18	37	15	2.0	.70	.78
24	31	25	25	12	13	36	21	33	17	1.7	.61	.70
25	17	101	21	11	18	24	22	35	16	1.6	.52	.61
26	22	28	15	22	12	19	18	45	13	1.5	.44	.52
27	21	31	13	12	15	11	16	45	11	1.6	.37	.48
28	13	66	12	129	39	13	15	49	9.2	1.6	.37	.40
29	20	35	34	95	-----	12	15	46	8.9	1.4	.31	12
30	15	64	24	42	-----	11	15	34	7.6	1.2	.31	29
31	10	-----	68	22	-----	9.8	-----	37	-----	1.2	.31	-----
TOTAL	626.3	842.6	1,590	1,469	871	663.3	520	1,442	829.7	94.8	26.01	94.39
MEAN	20.2	28.1	51.3	47.4	31.1	21.4	17.3	46.5	27.7	3.06	.84	3.15
MAX	115	101	161	134	191	112	23	84	64	7.8	3.4	29
NIN	2.9	5.4	12	11	10	7.4	11	18	7.6	1.2	.31	.37
CFM	5.67	7.89	14.4	13	8.74	6.01	4.86	13.1	7.78	1.62	.48	.68
15	4.4	8.80	16.61	15.35	9.10	6.33	9.43	15.03	8.67	1.99	.52	.87
AC-FT	1,240	1,670	3,150	2,910	1,730	1,320	1,030	2,860	1,650	188	52	187

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	65	33	9.2	16	8.4	26	24	38	63	5.4	1.4	16		
2	28	20	22	13	114	33	28	31	98	4.3	1.3	11		
3	32	15	27	12	103	26	24	36	31	3.8	1.3	5.8		
4	20	12	19	10	68	36	31	40	21	3.4	1.3	4.5		
5	13	9.5	13	8.6	31	47	28	31	18	3.1	1.5	3.8		
6	22	8.4		8.1	22	26	22	43	14	2.8	1.6	3.2		
7	73	8.6	8.9	7.8	19	19	24	38	12	2.8	1.4	3.0		
8	18	9.5	8.1	7.4	18	13	24	41	12	2.4	1.2	2.7		
9	8.9	67	44	9.2	18	12	31	47	11	2.2	1.0	2.7		
10	27	46	132	7.8	18	11	39	47	10	2.1	.96	2.5		
11	99	24	52	6.7	16	17	34	44	9.8	2.3	.87	4.0		
12	46	19	24	7.5	15	95	21	39	10	7.1	.78	5.3		
13	69	11	16	85	14	29	16	28	12	3.7	.78	4.1		
14	39	24	13	126	12	24	21	28	15	3.8	1.9	56		
15	17	29	11	72	10	32	19	30	8.9	11	1.6	43		
16	12	22	10	31	9.2	36	14	31	7.6	6.7	1.4	36		
17	8.9	14	9.2	21	9.5	22	13	31	6.8	3.8	2.9	177		
18	26	29	8.1	22	85	16	13	34	6.5	3.1	7.1	32		
19	22	18	7.4	89	124	17	11	36	6.7	18	3.1	21		
20	13	12	6.5	164	78	22	10	78	5.2	21	6.1	15		
21	99	10	7.1	62	97	22	11	34	4.9	7.8	3.0	12		
22	81	11	35	36	72	23	17	27	12	5.2	2.7	19		
23	40	22	84	38	92	42	42	24	6.7	4.2	32	28		
24	29	43	235	48	54	31	30	22	5.2	3.5	19	14		
25	31	17	240	26	31	26	42	21	4.5	3.0	31	10		
26	18	12	103	17	28	20	34	19	14	2.7	25	8.6		
27	102	190	13	26	34	33	15	12	26	2.3	7.4	7.4		
28	92	9.5	67	12	22	35	60	17	11	2.1	10	6.7		
29	31	12	35	11	24	68	64	14	12	1.9	6.9	6.0		
30	63	9.8	26	9.2	-----	31	66	13	7.6	1.7	5.1	5.2		
31	89	-----	20	8.6	-----	23	-----	12	-----	1.5	4.2	-----		
TOTAL	1,279.8	983.3	1,448.5	1,000.9	1,238.1	913	847	989	468.5	148.4	204.39	585.5		
MEAN	41.3	19.4	46.6.5	32.3	42.7	29.5	28.2	31.9	15.6	4.79	6.59	18.9		
MAX	99	67	240	164	124	73	66	78	98	21	32	177		
MIN	8.9	8.4	6.5	6.7	8.4	11	10	12	4.5	1.5	.78	2.5		
CF5M	11.6	5.45	13.1	9.07	12.0	8.29	7.92	8.96	4.38	1.35	1.85	5.31		
IN.	13.37	6.10	15.14	10.46	12.94	9.54	8.85	10.33	6.90	1.55	2.14	5.91		
AC-FT	2,540	1,160	2,870	1,990	2,460	1,810	1,680	1,960	929	294	405	1,120		
CAL YR 1967	TOTAL	9,321.80	MEAN	25.5	MAX	240	MIN	.31	CF5M	7.16	IN	97.41	AC-FT	18,490
WTR YR 1968	TOTAL	9,686.39	MEAN	26.5	MAX	240	MIN	.78	CF5M	7.44	IN	101.22	AC-FT	19,210

12199800 EAST FORK NOOKACHAMPS CREEK NEAR BIG LAKE, WASH.---CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	16	16	15	4.0	6.6	46	24	30	8.2	2.3	2.3
2	4.9	25	17	18	3.8	6.8	44	22	27	17	2.3	2.7
3	4.3	33	154	59	4.0	7.7	26	20	25	48	2.3	2.8
4	10	19	32	257	4.3	7.3	28	23	23	43	3.4	18
5	6.2	14	22	95	4.0	9.8	42	34	21	18	11	7.6
6	30	11	17	32	3.7	8.4	32	43	18	12	4.8	4.3
7	22	11	21	23	5.0	7.3	27	69	16	10	3.6	3.2
8	12	35	56	18	20	6.8	28	78	14	8.4	3.0	2.7
9	9.2	39	48	16	18	6.6	32	66	13	7.3	2.7	2.2
10	26	21	60	13	12	6.6	46	95	11	10	2.6	2.1
11	22	38	32	12	50	7.3	38	50	10	50	2.4	1.9
12	30	34	21	11	30	7.7	63	47	9.0	22	2.4	2.3
13	33	23	18	9.5	18	8.4	52	45	8.0	13	2.7	14
14	19	17	23	8.4	13	8.9	30	40	7.0	10	2.3	15
15	35	15	26	7.9	11	10	26	32	6.5	8.2	2.6	8.2
16	19	12	23	7.3	12	14	26	30	6.0	7.1	2.7	5.9
17	24	15	16	7.1	11	38	68	32	5.5	6.0	2.2	56
18	25	54	14	6.8	9.5	32	60	37	4.8	5.5	2.4	40
19	58	34	12	6.4	9.0	24	36	35	4.5	4.8	2.4	41
20	38	36	10	6.0	8.5	21	28	30	4.0	4.4	2.3	38
21	29	26	9.8	5.8	7.5	23	36	35	4.0	4.3	2.2	18
22	45	28	9.2	5.5	7.0	23	51	40	6.0	3.8	2.1	82
23	20	23	28	5.3	6.5	21	81	43	8.0	3.6	2.0	118
24	15	17	93	5.0	6.0	19	36	40	11	3.2	1.7	23
25	19	13	34	5.0	6.0	23	27	25	18	3.1	7.9	26
26	15	12	21	4.8	6.0	32	28	23	15	3.0	4.4	16
27	11	32	16	4.6	6.0	34	32	27	12	2.9	6.4	15
28	11	22	13	4.3	6.2	31	41	24	16	2.8	8.7	14
29	16	32	10	4.3	-----	34	28	140	17	2.9	4.2	25
30	93	21	9.5	4.2	-----	72	22	70	12	2.7	3.0	25
31	24	-----	9.0	4.2	-----	75	-----	37	-----	2.3	2.6	-----
TOTAL	730.7	728	890.5	681.4	302.0	632.2	1,160	1,316	382.3	347.5	107.6	619.2
MEAN	23.6	24.3	28.7	22.0	10.8	20.4	38.7	42.5	12.7	11.2	3.47	20.6
MAX	4.3	54	154	257	5.0	75	81	140	30	50	11	118
CFSM	6.63	6.83	6.06	6.18	3.03	5.73	10.9	11.9	3.57	3.15	.97	5.79
IN	7.64	7.61	9.31	7.12	3.16	6.61	12.12	13.75	3.99	3.63	1.12	6.47
AC-FT	1,450	1,440	1,770	1,350	599	1,290	2,300	2,610	758	689	213	1,230

CAL YR 1968 TOTAL 8,723.99 MEAN 23.8 MAX 177 MIN .78 CFM 6.69 IN 91.16 AC-FT 17,300
WTR YR 1969 TOTAL 7,897.40 MEAN 21.6 MAX 257 MIN 1.7 CFM 6.07 IN 82.52 AC-FT 15,660

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	6.4	6.8	8.9	32	13	18	35	12	1.5	2.8	.78
2	18	5.5	6.4	7.9	24	12	21	41	11	1.4	8.2	.84
3	12	16	6.8	7.3	23	11	25	15	4.8	4.3	2.3	26
4	9.5	96	14	6.0	17	10	23	52	7.9	1.2	2.9	75
5	7.9	30	9.8	6.4	15	9.8	61	35	7.1	1.1	2.3	38
6	6.8	78	7.7	6.0	24	24	69	24	6.4	1.0	2.0	78
7	8.2	28	6.8	6.0	46	33	26	21	5.7	1.0	1.9	34
8	24	24	9.8	8.0	40	18	24	78	9.3	.96	2.1	13
9	28	20	9.5	9.2	39	14	188	37	12	.90	1.8	8.2
10	15	16	8.4	7.1	37	13	48	29	11	.90	1.5	5.7
11	10	15	34	6.6	34	12	28	25	5.0	.84	1.3	4.3
12	7.9	16	32	6.2	34	15	22	23	4.0	.78	1.2	3.7
13	6.8	13	67	20	128	27	20	22	3.4	.78	1.1	3.3
14	6.0	11	66	134	48	59	18	21	3.1	.78	1.1	2.9
15	5.3	17	30	27	87	48	16	26	5.0	.72	1.0	2.8
16	4.6	13	22	17	78	57	15	30	5.9	.72	.96	2.6
17	4.3	10	26	14	47	21	14	24	4.0	.72	.90	14
18	4.0	10	37	61	33	16	15	18	2.9	.72	.90	18
19	4.0	11	27	116	32	14	20	17	2.4	.66	.84	58
20	9.1	15	28	52	32	14	17	15	2.1	.66	.84	18
21	9.8	22	62	101	29	13	15	14	1.9	.72	.78	11
22	5.9	13	42	50	26	11	18	20	1.7	.66	.78	71
23	5.5	30	34	51	24	18	15	15	1.6	.54	.72	19
24	9.1	21	23	32	22	20	22	16	1.5	.54	.72	10
25	7.7	15	17	28	20	14	16	17	1.5	2.0	.72	7.3
26	5.5	12	15	29	19	12	14	13	1.4	39	.72	5.7
27	11	9.8	13	29	17	12	13	9.5	1.5	32	.72	4.8
28	8.6	8.9	11	21	14	19	18	8.9	1.5	6.6	.78	4.3
29	7.9	8.4	10	17	-----	14	25	12	1.7	6.2	.72	3.7
30	7.3	7.3	10	16	-----	12	34	11	1.6	6.6	.66	3.6
31	9.2	-----	11	31	-----	11	-----	11	-----	3.9	.66	-----
TOTAL	309.9	592.3	703.0	929.6	1,021	596.8	876	764.4	141.9	117.48	47.92	547.52
MEAN	10.0	19.7	22.7	30.0	36.5	19.3	29.2	24.7	4.73	3.79	1.55	18.3
MAX	31	96	67	134	128	59	188	78	12	39	8.2	78
MIN	4.0	5.5	6.4	6.0	14	9.8	13	8.9	1.4	.54	.66	.78
CFM	2.81	5.53	6.38	8.43	10.3	5.42	8.20	6.94	1.33	1.06	.44	5.14
IN	3.24	6.19	7.35	9.71	10.67	6.24	9.15	7.99	1.48	1.23	.90	5.72
AC-FT	615	1,170	1,390	1,840	2,030	1,180	1,740	1,520	281	233	95	1,090

CAL YR 1969 TOTAL 7,153.40 MEAN 19.6 MAX 257 MIN 1.7 CFM 5.51 IN 74.75 AC-FT 14,190
WTR YR 1970 TOTAL 6,647.74 MEAN 18.2 MAX 188 MIN .54 CFM 5.11 IN 69.47 AC-FT 13,190

SKAGIT RIVER BASIN

12200500 SKAGIT RIVER NEAR MOUNT VERNON, WASH.

LOCATION.--Lat 48°26'42", long 122°20'03", in SE&SE& sec. 7, T.34 N., R.4 E., Skagit County, on drawrest of and 150 ft downstream from bridge on former U.S. Highway 99, 1.5 miles north of Skagit Valley Junior College in Mount Vernon, and at mile 15.7.

DRAINAGE AREA.--3,093 sq mi, of which 400 sq mi is in Canada.

PERIOD OF RECORD.--October 1940 to September 1970. Monthly discharge only October 1940, published in WSP 1316.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is at mean sea level. Supplementary water-stage recorder in bridge pier 0.2 mile downstream from base gage Dec. 3, 1957, to Oct. 15, 1964.

AVERAGE DISCHARGE.--30 years, 16,570 cfs (12,000,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, elevation in feet).

Annual maximum discharge (*) and peak discharges above base (50,000 cfs), water years 1966-70

Date	Time	Disch.	Elev.	Date	Time	Disch.	Elev.	Date	Time	Disch.	Elev.
May 7, 1966	0815	*38,700	22.44	Oct. 28, 1967	1515	*72,700	28.89	June 27, 1968	1615	51,400	24.94
				Nov. 1, 1967	0830	64,800	27.43				
Dec. 14, 1966	0615	65,000	27.65	Dec. 26, 1967	0400	60,200	26.61	Jan. 5, 1969	1930	*54,300	25.67
Dec. 17, 1966	0200	65,400	27.71	Jan. 21, 1968	1315	70,900	28.43				
June 22, 1967	0545	*72,000	28.78	June 3, 1968	0445	68,800	28.09	Apr. 10, 1970	0730	*37,900	22.01

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	Elev.	Wtr yr	Date	Disch.	Elev.
1966	Oct. 4, 1965	4,230	9.84	1969	Sept. 8, 1969	4,210	9.48
1967	Oct. 17, 1966	5,260	10.43	1970	Sept. 14, 1970	3,810	9.11
1968	Sept. 9, 1968	6,120	10.49				

Period of record: Maximum discharge, 144,000 cfs Feb. 11, 1951 (elevation, 36.85 ft); minimum, 2,740 cfs Oct. 26, 1942 (elevation, 7.37 ft).

Flood in 1906 reached a stage of 37 ft, from Great Northern Railway high-water profile (discharge, 180,000 cfs).

CORRECTIONS.--In WSP 1932, the minimum discharge for the water year 1965 is listed in error; it should be minimum daily discharge, 4,900 cfs Sept. 30, 1965 (no gage-height record available).

REMARKS.--Records excellent. Flow regulated for powerplants on Baker and Upper Skagit Rivers by Ross, Diablo, and Gorge Reservoirs, Baker Lake, and Lake Shannon (see elsewhere in this report). Small diversions for domestic and municipal use. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,470	9,670	13,000	12,700	13,900	12,500	22,600	10,500	16,400	18,600	14,300	6,980
2	5,260	13,000	19,900	12,500	13,200	12,900	22,300	10,200	15,800	18,000	15,800	6,790
3	4,850	16,000	17,400	12,700	12,900	13,000	19,300	13,900	15,400	18,700	14,800	6,750
4	4,480	27,400	27,800	13,000	12,200	12,900	15,400	17,900	14,200	19,200	15,600	5,600
5	6,860	28,700	25,900	12,400	13,200	12,700	16,400	21,800	13,000	19,800	15,000	5,380
6	19,300	22,300	21,600	14,700	13,800	10,700	16,300	30,200	14,700	22,700	13,300	5,910
7	22,600	16,300	23,600	19,100	14,100	11,400	16,200	35,500	21,300	21,300	11,900	7,800
8	13,400	13,500	23,300	21,200	13,900	13,900	19,300	28,200	24,800	20,700	12,600	7,550
9	11,500	14,500	20,100	20,500	13,300	19,400	19,400	27,900	25,400	22,800	13,000	7,100
10	10,300	13,200	17,600	17,200	13,000	20,300	19,000	29,700	25,000	23,300	12,600	6,590
11	8,210	13,400	15,600	18,100	12,700	17,000	19,300	24,600	27,800	21,700	11,800	6,840
12	8,370	13,500	13,800	18,400	12,900	14,600	22,200	24,900	24,900	20,700	11,000	7,050
13	9,510	12,100	12,600	25,700	11,800	14,900	19,100	20,400	20,700	20,900	10,600	7,770
14	9,300	9,970	14,500	31,100	11,500	16,500	17,400	17,900	20,100	22,700	11,200	7,530
15	13,700	13,700	13,900	25,300	12,200	19,400	17,700	17,500	20,200	23,600	11,500	8,000
16	12,500	20,200	13,100	20,300	11,700	19,200	16,200	18,200	24,600	25,700	10,900	7,750
17	9,560	17,400	12,400	17,600	10,800	17,400	16,700	16,500	29,200	26,900	11,000	7,490
18	8,890	14,800	12,200	17,500	10,800	15,200	13,300	14,600	27,100	22,800	10,600	7,360
19	11,700	14,200	11,800	15,700	10,100	16,000	13,500	14,200	23,900	19,900	9,800	7,470
20	11,000	18,000	11,400	15,400	9,460	14,600	13,000	15,700	22,100	19,900	9,320	7,720
21	12,000	19,600	13,800	15,100	8,620	13,500	12,900	17,500	20,900	17,800	8,610	7,360
22	11,000	20,700	13,600	14,300	9,630	13,400	11,900	19,300	18,700	17,000	7,990	7,370
23	10,000	19,300	13,100	13,600	9,040	12,400	11,500	16,100	17,700	17,400	9,910	8,140
24	9,270	16,700	12,900	13,200	10,100	11,500	10,800	15,100	17,200	15,400	9,530	8,510
25	8,190	15,000	11,000	13,500	10,300	11,000	10,200	15,300	16,300	19,100	9,550	7,620
26	9,430	11,500	9,400	12,700	10,500	10,900	12,700	19,900	14,800	16,500	9,140	6,180
27	9,760	12,100	10,600	12,500	10,300	10,800	12,000	23,700	14,800	14,100	4,780	7,490
28	11,700	11,100	12,400	12,500	10,600	11,600	11,500	21,200	22,500	13,800	8,140	7,130
29	11,400	10,500	12,800	12,800	-----	14,900	11,300	17,800	28,400	14,700	7,670	7,260
30	13,300	11,400	12,600	12,700	-----	19,600	11,000	16,700	21,900	15,400	8,870	7,530
31	12,000	-----	12,600	13,200	-----	27,800	-----	17,400	-----	16,700	7,990	-----
TOTAL	321,110	469,740	476,300	507,200	326,550	461,900	470,400	605,800	619,800	606,800	343,800	216,020
MEAN	10,430	15,660	15,360	16,360	11,660	14,900	15,680	19,540	20,660	19,570	11,090	7,201
MAX	22,600	28,700	27,800	31,100	14,100	27,800	22,600	35,500	29,200	26,900	15,800	8,510
MIN	4,470	9,670	9,400	12,400	8,620	10,700	10,200	10,700	13,000	13,800	7,670	5,380
AC-FT	641,300	931,700	944,700	1,006,600	647,700	916,200	933,000	1,202,800	1,229,900	1,204,400	681,900	428,500
CAL YR 1965	TOTAL 5,772,550	MEAN 15,820	MAX 45,600	MIN 4,470	AC-FT 11,450,000							
WTR YR 1966	TOTAL 5,427,620	MEAN 14,870	MAX 35,500	MIN 4,470	AC-FT 10,770,000							

M EXPRESSED IN THOUSANDS.

12200500 SKAGIT RIVER NEAR MOUNT VERNON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,920	13,200	29,400	18,300	20,400	15,700	13,500	9,190	18,600	34,700	14,700	11,100
2	7,550	12,200	27,700	15,700	20,100	14,900	11,800	11,200	25,700	34,000	13,800	11,200
3	6,930	11,900	23,200	20,200	25,100	13,900	11,000	11,000	28,900	36,500	13,300	12,300
4	7,690	11,300	19,700	21,200	33,500	12,700	11,800	12,500	26,900	38,700	13,500	9,700
5	7,130	12,600	18,100	20,400	29,800	10,500	13,500	12,700	26,700	35,300	13,400	8,540
6	7,010	12,900	19,200	19,700	21,900	9,340	12,900	13,700	29,700	32,300	13,700	9,800
7	7,150	11,700	19,100	17,800	21,700	12,000	11,900	14,200	31,400	28,300	13,100	9,280
8	8,650	12,300	18,100	17,000	19,700	12,400	12,000	17,200	29,200	25,900	14,500	8,960
9	8,020	12,600	16,500	16,700	18,700	14,600	12,600	21,600	27,700	25,800	12,600	8,900
10	6,530	12,100	17,100	18,200	18,300	13,800	11,600	19,800	26,000	23,400	12,600	8,840
11	7,750	11,500	21,500	24,400	17,500	12,700	12,900	19,200	25,800	23,100	13,400	13,350
12	6,940	12,200	26,400	23,600	17,100	11,900	12,800	18,400	24,900	26,700	14,100	13,700
13	7,810	12,000	43,800	22,000	20,200	10,800	13,900	16,100	28,300	28,000	14,200	10,800
14	8,180	17,700	58,400	20,100	20,400	12,200	15,100	14,800	30,900	29,500	13,400	8,940
15	8,200	19,000	39,700	25,500	19,200	13,000	14,700	14,800	34,100	23,800	13,700	7,940
16	6,560	17,200	52,900	27,000	18,200	13,600	12,300	16,800	36,500	19,300	13,800	7,310
17	6,070	14,800	29,500	22,100	17,700	14,700	12,200	20,400	42,400	18,300	13,600	7,160
18	6,730	14,000	53,400	20,900	18,900	14,000	12,800	22,000	50,600	21,100	12,600	7,500
19	7,920	12,900	46,600	21,900	15,000	12,000	12,600	21,800	56,400	20,600	11,800	8,110
20	22,700	12,900	48,700	30,700	12,800	10,400	12,700	23,400	61,700	18,700	10,700	9,470
21	17,000	12,800	37,000	27,300	14,600	12,400	12,600	26,900	67,500	20,900	10,700	10,300
22	14,000	14,800	29,500	25,300	13,600	14,700	11,800	28,900	71,400	19,500	11,800	10,300
23	22,200	14,300	25,500	18,600	13,100	26,700	9,780	28,800	63,600	18,000	11,200	7,520
24	36,500	13,500	22,800	18,900	13,200	26,900	9,870	24,700	53,200	18,500	9,680	7,020
25	25,700	14,600	21,200	17,000	12,700	20,800	12,000	20,600	50,300	19,100	9,090	6,850
26	20,400	18,700	18,300	15,900	10,900	16,400	12,400	18,400	51,700	20,000	8,360	8,240
27	20,600	15,100	17,400	16,500	9,850	14,000	11,600	17,500	48,700	18,800	7,620	7,310
28	18,000	17,000	18,100	25,500	12,500	15,600	12,900	17,500	43,900	18,300	6,780	7,290
29	14,600	21,500	18,800	27,200	-----	15,400	11,400	20,200	39,900	17,700	8,460	7,080
30	18,600	22,900	17,600	28,500	-----	14,700	10,000	21,300	38,100	14,900	8,920	8,120
31	14,100	-----	16,500	24,200	-----	14,000	-----	18,300	-----	14,100	10,300	-----
TOTAL	384,160	431,700	901,000	666,300	506,650	446,840	368,250	574,490	1,189,990	743,100	368,910	272,880
MEAN	12,390	14,390	29,060	21,490	18,090	14,410	12,280	18,530	39,660	23,970	11,900	9,090
MAX	36,500	22,900	58,600	30,700	33,500	26,900	15,100	28,900	71,400	38,700	14,700	13,700
MIN	6,070	11,300	16,500	15,200	9,850	9,340	9,780	9,190	18,600	14,100	6,780	6,850
AC-FT	762,000	856,300	1,787,700	1,322,800	1,005,500	886,300	730,400	1,140,000	2,360,000	1,474,700	731,700	541,300

CAL YR 1966 TOTAL 5,875,130 MEAN 16,100 MAX 58,600 MIN 5,380 AC-FT 11,650,000
 MYR YR 1967 TOTAL 6,854,180 MEAN 18,780 MAX 71,400 MIN 6,070 AC-FT 13,600,000

M EXPRESSED IN THOUSANDS.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,200	60,500	14,000	19,500	18,800	22,200	14,500	23,600	17,200	20,200	15,600	8,400
2	18,500	47,000	14,200	17,600	19,500	24,400	14,600	19,800	48,700	25,400	15,900	10,100
3	14,000	32,300	17,100	17,400	28,200	23,700	13,700	19,300	60,800	28,200	15,400	8,860
4	15,400	26,400	16,600	16,500	38,300	22,700	13,100	18,400	37,300	31,700	14,900	9,510
5	12,400	19,100	16,100	15,800	32,000	27,300	14,300	18,900	31,600	36,600	15,100	9,870
6	11,000	17,600	15,200	14,900	25,900	30,800	17,200	18,700	34,400	35,800	13,600	10,300
7	19,600	16,400	14,300	14,200	21,800	26,300	14,100	18,200	34,800	33,800	12,400	9,870
8	26,400	16,500	13,600	13,000	20,800	22,000	12,400	16,800	34,000	31,000	11,600	7,100
9	17,800	18,300	13,700	14,900	19,300	23,300	11,400	16,900	31,700	32,300	10,500	6,800
10	14,400	22,700	17,800	15,800	17,900	19,100	12,300	17,200	28,800	31,000	10,000	9,590
11	24,400	31,100	29,600	15,400	16,400	15,700	17,400	17,900	32,000	28,600	9,170	9,550
12	33,000	24,200	23,600	15,100	16,100	16,800	18,700	18,300	31,600	27,000	9,150	9,950
13	26,700	21,200	18,800	17,800	15,800	17,300	16,700	16,800	28,700	30,900	9,660	8,500
14	29,400	19,400	17,300	29,300	14,800	15,600	15,100	15,800	26,200	23,100	8,980	10,900
15	22,800	24,400	16,300	34,800	15,000	16,800	13,900	16,500	21,000	21,900	10,100	19,860
16	17,100	28,900	15,600	32,600	15,400	21,900	14,000	15,600	20,800	23,500	10,100	26,500
17	16,700	23,300	15,800	25,700	15,100	19,200	14,500	16,600	22,000	18,500	9,490	32,800
18	14,600	20,600	15,300	27,500	18,000	16,000	14,900	18,500	24,400	17,600	8,720	36,800
19	16,500	18,100	16,500	30,900	34,500	16,500	16,200	20,600	29,900	20,000	8,340	24,400
20	15,100	16,200	16,800	51,700	35,400	15,600	16,200	26,100	36,200	21,700	9,450	18,400
21	17,400	16,400	16,900	65,800	28,700	14,100	13,900	30,100	28,100	18,200	8,340	13,300
22	29,200	15,400	18,100	50,200	30,600	11,800	12,200	23,500	24,500	15,400	8,960	9,780
23	31,300	14,200	23,600	36,100	29,600	12,700	16,200	19,900	26,400	16,300	8,520	12,300
24	25,300	13,900	41,300	35,200	42,900	13,200	18,800	18,800	26,300	16,500	11,300	14,400
25	23,500	14,400	55,000	38,900	36,100	12,400	18,400	17,500	29,300	16,700	11,800	12,660
26	23,400	13,800	54,400	32,800	28,800	12,000	17,000	17,200	38,000	16,400	14,800	11,600
27	24,100	13,100	39,100	27,600	25,700	14,000	17,300	16,400	48,000	17,600	19,400	12,300
28	62,000	13,800	33,700	23,800	19,800	17,400	21,200	16,500	44,900	17,800	17,400	10,600
29	45,500	15,000	29,000	21,000	19,100	19,300	22,600	16,300	33,600	17,800	13,800	8,900
30	33,800	14,700	24,500	20,600	-----	20,700	23,400	15,400	22,500	18,800	12,500	8,400
31	44,500	-----	20,100	19,700	-----	16,600	-----	13,300	-----	17,600	9,170	-----
TOTAL	735,000	648,900	693,900	806,600	700,300	577,600	476,200	575,400	953,700	726,600	364,150	402,180
MEAN	23,710	21,630	22,380	26,020	24,150	18,630	15,870	18,560	31,790	23,440	11,750	13,140
MAX	62,000	60,500	55,000	65,800	42,900	30,800	23,400	30,100	60,800	36,600	19,400	36,800
MIN	10,200	13,100	13,600	13,000	14,800	11,800	11,400	13,300	17,200	15,400	8,340	6,800
AC-FT	1,459M	1,287M	1,376M	1,600M	1,389M	1,146M	944,500	1,141M	1,892M	1,441M	722,300	797,700

CAL YR 1967 TOTAL 6,942,240 MEAN 19,020 MAX 71,400 MIN 6,780 AC-FT 13,770,000
 MYR YR 1968 TOTAL 7,660,530 MEAN 20,930 MAX 65,800 MIN 6,800 AC-FT 15,190,000

M EXPRESSED IN THOUSANDS.

SKAGIT RIVER BASIN

12200500 SKAGIT RIVER NEAR MOUNT VERNON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,400	16,100	19,600	17,700	13,600	12,400	20,000	14,400	25,900	14,500	9,350	5,340
2	8,010	13,500	17,600	16,000	11,700	11,500	21,700	14,500	27,700	16,800	10,900	5,420
3	9,310	13,700	24,800	16,400	11,100	9,630	19,900	14,200	33,800	23,300	9,510	7,730
4	9,080	12,200	38,700	24,100	10,100	13,000	17,900	14,000	37,200	25,600	9,370	7,840
5	10,700	13,300	27,600	47,300	10,300	11,900	14,500	12,800	39,600	20,100	9,870	8,440
6	10,700	12,200	23,700	42,100	10,500	11,800	12,600	12,100	38,500	18,700	10,400	7,080
7	13,900	11,900	21,200	31,900	13,000	10,200	11,500	14,600	37,000	15,100	8,710	5,370
8	14,000	12,200	21,400	27,300	12,300	10,700	13,100	19,400	34,000	15,600	8,230	4,520
9	11,300	16,900	21,100	24,500	12,500	8,450	12,400	26,600	35,000	15,600	7,200	7,180
10	10,600	15,500	23,700	22,700	10,300	8,430	14,000	30,600	34,600	20,000	6,890	6,350
11	13,600	14,800	24,600	20,800	12,000	9,980	13,700	34,800	34,900	22,100	7,120	6,700
12	12,800	28,200	21,800	18,900	13,900	9,500	13,900	29,300	33,800	26,500	8,530	7,030
13	12,400	24,400	19,900	16,700	13,100	9,860	15,500	29,400	36,400	19,700	8,890	8,070
14	12,700	20,100	18,700	18,100	13,800	9,230	15,300	30,600	36,400	13,800	8,170	7,500
15	13,300	15,900	16,300	17,900	11,500	7,950	15,000	29,100	35,400	12,800	9,240	6,780
16	13,100	14,400	16,900	16,400	9,270	7,790	13,200	25,900	30,600	11,700	9,970	7,170
17	12,600	13,100	17,600	16,800	7,930	10,400	12,400	22,800	34,600	12,000	7,720	7,780
18	14,200	13,100	17,600	15,900	10,400	17,400	16,100	19,300	35,200	11,900	7,330	14,900
19	14,000	21,700	16,600	13,300	11,200	14,300	16,100	22,700	34,400	13,000	6,840	15,800
20	17,400	25,100	17,800	13,900	11,800	12,800	14,200	27,100	32,500	14,100	7,210	17,100
21	16,700	27,400	18,400	15,300	13,500	12,400	12,400	27,900	27,400	12,800	8,410	12,400
22	17,400	31,000	15,400	15,500	13,300	11,300	13,000	31,800	23,900	12,900	8,850	12,200
23	15,200	29,100	14,500	18,200	12,500	11,600	15,900	35,100	23,200	13,000	8,840	35,500
24	14,200	22,300	20,600	17,000	10,900	9,980	20,400	39,100	22,800	14,200	7,930	33,400
25	14,800	19,500	20,000	15,000	13,100	12,400	18,200	39,000	22,800	13,300	7,160	23,800
26	16,600	19,100	16,100	15,000	13,300	9,860	14,000	32,500	20,800	12,900	8,670	19,400
27	12,900	19,700	17,700	15,000	13,200	11,000	13,300	29,600	16,000	11,000	8,100	15,000
28	10,700	20,400	17,500	16,000	12,400	12,100	12,800	26,000	17,900	10,800	8,600	12,600
29	13,800	18,500	18,000	18,000	-----	12,300	17,300	25,300	14,500	13,100	9,020	13,100
30	16,600	22,100	19,000	17,000	-----	12,900	16,200	43,900	15,200	16,400	7,950	4,520
31	21,300	-----	21,500	14,700	-----	15,000	-----	32,600	-----	9,010	6,330	-----
TOTAL	414,300	557,400	625,900	615,400	332,500	348,060	456,500	807,000	892,000	476,310	260,750	363,180
MEAN	13,360	18,580	20,190	19,850	11,880	11,230	15,220	26,030	29,730	15,360	8,411	12,110
MAX	21,300	31,000	38,700	47,300	13,900	14,200	21,700	43,900	39,600	26,500	10,900	35,500
MIN	8,010	11,900	14,500	13,300	7,930	7,790	11,500	12,100	14,500	9,010	6,330	4,520
AC-FT	821,800	1,108M	1,241M	1,221M	659,500	690,400	905,500	1,601M	1,769M	944,800	517,200	720,400

CAL YR 1968 TOTAL 7,180,330 MEAN 19,620 MAX 65,800 MIN 6,800 AC-FT 14,240,000

MTR YR 1969 TOTAL 6,149,300 MEAN 16,850 MAX 47,300 MIN 4,520 AC-FT 12,200,000

M EXPRESSED IN THOUSANDS.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25,900	8,660	8,340	10,700	17,100	12,500	8,430	8,510	11,600	12,500	8,550	9,160
2	25,300	6,040	10,800	9,520	16,200	12,100	11,200	8,140	18,500	10,300	9,930	8,470
3	20,400	5,500	10,500	10,600	17,800	14,500	11,100	7,780	26,800	13,100	10,400	8,090
4	18,000	11,200	11,100	10,300	17,100	14,700	10,000	9,910	31,400	17,400	10,500	11,500
5	12,200	29,600	11,600	10,200	16,200	14,100	10,200	14,100	26,300	19,300	10,500	9,450
6	10,800	19,900	10,200	12,200	16,300	14,300	17,500	14,700	25,200	18,800	11,700	8,820
7	11,400	18,400	7,940	12,600	15,100	16,700	20,100	13,500	26,100	17,700	10,600	12,200
8	13,400	14,200	7,820	11,900	13,900	15,200	16,800	11,900	21,700	18,500	9,400	12,400
9	17,200	12,800	10,600	11,700	14,100	12,700	21,000	12,900	18,700	19,900	9,260	9,820
10	17,200	12,200	11,000	11,900	17,300	13,800	34,100	11,800	17,200	15,900	7,820	7,820
11	14,900	12,900	11,800	11,600	17,100	13,600	24,400	11,000	14,800	16,800	8,950	7,160
12	12,100	12,400	14,700	11,200	17,100	12,300	18,000	10,800	12,300	15,600	8,110	6,060
13	11,000	11,800	15,200	12,100	19,700	13,500	16,000	10,400	11,700	14,700	8,360	4,870
14	11,700	11,300	20,600	18,800	19,800	12,100	16,100	10,200	13,200	14,700	9,220	4,550
15	10,900	11,000	20,400	23,100	17,900	12,500	13,600	9,460	15,200	13,100	8,740	5,450
16	9,400	10,600	18,500	17,900	20,400	12,700	13,200	9,330	16,000	11,600	7,540	4,860
17	9,880	11,000	17,300	16,100	23,600	16,300	11,400	15,100	13,900	14,300	6,880	5,830
18	8,960	12,100	16,400	15,400	21,700	14,800	7,810	15,100	15,500	14,800	7,380	15,600
19	6,880	11,600	17,500	19,800	19,700	13,900	7,790	12,400	18,200	13,300	7,840	18,600
20	7,480	11,800	17,500	25,400	17,400	11,700	8,070	12,100	18,300	14,100	7,560	14,000
21	9,300	12,200	16,800	24,400	16,700	10,900	8,850	12,400	20,600	14,000	7,380	10,100
22	8,350	11,900	17,500	27,300	13,700	9,710	8,370	13,200	23,400	12,700	8,490	12,700
23	9,400	10,600	21,000	30,400	12,500	7,930	7,990	13,100	22,900	9,160	8,320	20,600
24	9,450	13,800	19,900	28,200	13,900	12,100	8,330	12,600	20,400	12,100	9,180	8,340
25	9,400	13,500	15,200	23,100	14,100	10,400	8,680	15,400	17,700	10,900	10,300	10,800
26	7,030	12,600	12,800	20,600	13,600	12,100	8,510	21,700	18,100	12,300	10,100	9,100
27	6,070	10,900	12,900	22,100	14,000	10,700	8,000	19,600	20,500	20,100	10,300	6,620
28	7,930	8,330	11,100	20,600	14,000	10,200	7,980	15,700	19,200	18,200	9,800	6,000
29	7,970	9,600	10,900	18,800	-----	7,770	7,780	12,700	17,000	12,100	9,180	8,340
30	8,150	8,520	12,400	17,400	-----	7,750	8,640	10,800	14,700	11,000	7,040	8,820
31	8,190	-----	11,900	16,100	-----	7,970	-----	9,860	-----	9,310	7,240	-----
TOTAL	365,240	366,950	432,200	532,020	468,000	381,530	379,930	386,190	566,600	443,900	275,500	292,890
MEAN	11,780	12,230	13,940	17,160	16,710	12,310	12,660	12,460	18,880	14,320	8,887	9,783
MAX	25,900	29,600	21,000	30,400	23,600	16,700	34,100	21,700	31,400	20,100	11,700	20,600
MIN	6,070	5,500	7,820	9,520	12,500	7,750	7,780	7,780	11,600	9,160	6,880	4,550
AC-FT	724,500	727,800	857,300	1,059M	928,300	756,800	753,600	766,000	1,124M	880,500	546,500	580,900

CAL YR 1969 TOTAL 5,716,090 MEAN 15,660 MAX 47,300 MIN 4,520 AC-FT 11,340,000

MTR YR 1970 TOTAL 4,890,950 MEAN 13,400 MAX 34,100 MIN 4,550 AC-FT 9,701,000

M EXPRESSED IN THOUSANDS.

SAMISH RIVER BASIN

12201500 SAMISH RIVER NEAR BURLINGTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	124	557	970	364	554	250	160	116	46	27	23
2	44	119	529	804	364	458	232	165	118	45	26	25
3	36	113	445	1,080	1,240	358	224	170	110	44	26	24
4	32	108	532	1,210	1,980	311	229	180	103	42	26	23
5	31	146	529	1,040	1,280	284	229	195	102	41	26	23
6	34	180	484	758	810	261	216	205	97	39	26	22
7	42	155	582	673	630	245	204	220	90	37	32	22
8	54	138	501	940	529	515	199	235	82	39	31	22
9	49	164	424	1,000	480	618	237	197	75	39	27	23
10	43	198	434	830	444	492	242	162	78	39	26	26
11	40	164	498	945	425	407	211	237	76	37	26	44
12	38	216	593	812	514	372	211	224	72	36	25	28
13	36	198	721	768	846	323	270	197	68	36	25	25
14	36	250	721	750	650	299	242	176	70	36	26	24
15	33	287	669	1,180	573	308	216	187	68	35	25	23
16	33	326	799	1,060	532	302	190	187	65	35	25	24
17	42	277	733	835	592	299	170	105	61	33	25	23
18	40	230	804	677	670	273	150	171	55	32	23	23
19	147	200	781	848	543	264	160	160	52	31	23	23
20	410	183	905	975	462	270	180	160	55	38	23	23
21	274	171	685	794	407	293	200	160	58	46	23	23
22	337	168	532	633	362	355	200	147	79	35	24	22
23	396	173	445	540	333	529	190	135	63	32	23	22
24	306	185	598	470	311	451	185	119	59	31	23	22
25	227	425	717	420	317	393	180	112	57	30	23	20
26	193	417	512	392	296	379	190	114	53	29	23	20
27	178	382	420	414	267	375	200	116	53	30	23	20
28	159	382	382	605	450	352	180	119	50	30	23	20
29	148	386	484	529	-----	355	170	127	49	27	23	24
30	146	498	470	487	-----	314	160	116	44	27	23	58
31	134	-----	573	403	-----	278	-----	110	-----	26	23	-----
TOTAL	3,753	6,963	18,059	23,842	16,671	11,287	6,117	5,148	2,182	1,103	773	744
MEAN	121	232	583	769	595	364	204	166	72.7	35.6	24.9	24.8
MAX	410	498	905	1,210	1,980	618	270	237	118	46	32	58
MIN	31	108	382	392	267	245	150	110	44	26	23	20
CFSM	1.38	2.64	6.64	8.76	6.78	4.15	2.32	1.89	.83	.41	.28	.28
1 IN	1.59	2.95	7.45	10.10	7.06	4.78	2.49	2.18	.92	.47	.33	.32
AC-FT	7,440	13,810	35,820	47,290	33,070	22,390	12,130	10,210	4,330	2,190	1,530	1,480

CAL YR 1966 TOTAL 86,445 MEAN 237 MAX 1,180 MIN 20 CF5M 2.70 IN 36.63 AC-FT 171,500
WTR YR 1967 TOTAL 96,642 MEAN 265 MAX 1,980 MIN 24 CF5M 3.02 IN 40.95 AC-FT 191,700

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	577	293	562	299	256	339	240	156	66	38	59
2	97	407	423	488	339	250	320	269	547	62	37	59
3	84	308	469	425	558	240	287	192	403	73	37	55
4	74	253	386	444	468	259	207	206	276	73	37	46
5	57	216	355	469	540	369	296	290	211	70	36	44
6	50	194	317	396	425	484	296	281	185	66	36	42
7	99	189	308	365	365	411	296	281	204	61	35	39
8	95	182	270	372	326	358	278	248	194	57	33	38
9	73	232	436	429	299	311	253	227	185	55	32	37
10	68	302	540	514	276	281	245	211	166	52	32	35
11	351	278	666	429	256	284	323	199	158	53	32	36
12	305	234	484	375	240	466	278	197	149	65	31	43
13	227	206	369	432	227	440	250	182	143	57	30	39
14	290	227	308	588	214	355	267	176	143	97	34	73
15	197	284	273	543	201	326	358	166	131	182	36	156
16	141	308	256	447	192	365	333	149	123	141	32	166
17	114	267	240	382	189	358	281	147	116	95	32	559
18	102	250	219	355	288	311	267	137	110	73	38	384
19	116	229	199	659	670	281	267	131	107	73	35	216
20	102	209	178	790	592	259	245	372	102	93	42	154
21	300	189	173	746	547	242	227	270	97	74	38	127
22	372	178	455	558	562	229	214	192	107	68	36	103
23	336	173	634	462	580	219	273	164	100	62	41	107
24	214	230	1,630	492	525	232	276	152	88	57	49	102
25	253	201	2,840	429	436	224	276	143	73	53	67	90
26	199	182	2,130	389	375	211	267	129	72	51	227	95
27	474	169	1,410	336	333	428	240	118	79	58	158	92
28	730	176	1,110	302	299	558	229	121	76	51	116	85
29	469	403	837	278	278	558	224	110	73	46	85	78
30	429	349	682	264	-----	484	240	103	73	43	69	81
31	544	-----	599	270	-----	389	-----	97	-----	40	59	-----
TOTAL	7,023	7,588	19,489	13,990	11,129	10,438	8,232	5,904	4,647	2,167	1,660	3,240
MEAN	227	253	629	451	384	337	274	190	135	69.9	53.5	108
MAX	730	577	2,840	790	698	558	358	372	547	182	227	559
MIN	50	169	173	264	189	211	214	97	72	40	30	35
CF5M	2.59	2.88	7.16	5.14	4.37	3.84	3.12	2.16	1.77	.80	.61	1.23
1 IN	2.98	3.21	8.26	5.93	4.72	4.42	3.49	2.50	1.97	.92	.70	1.37
AC-FT	13,930	15,050	38,660	27,750	22,070	20,700	16,330	11,710	9,220	4,300	3,290	6,430

CAL YR 1967 TOTAL 101,967 MEAN 279 MAX 2,840 MIN 20 CF5M 3.18 IN 43.20 AC-FT 202,300
WTR YR 1968 TOTAL 95,507 MEAN 261 MAX 2,840 MIN 30 CF5M 2.97 IN 40.47 AC-FT 189,400

WHATCOM CREEK BASIN

12201950 ANDERSON CREEK NEAR BELLINGHAM, WASH.

LOCATION.--Lat 48°40'26", long 122°15'58", in NW1/4 sec.26, T.37 N., R.4 E., Whatcom County, on right bank at upstream side of county bridge, 500 ft upstream from mouth and Lake Whatcom and 11.0 miles southeast of Western Washington College in Bellingham.

DRAINAGE AREA.--4.13 sq mi.

PERIOD OF RECORD.--October 1967 to July 1970 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 315 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for October 1967 to July 1970 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1968	Dec. 25, 1967		159	4.48	Aug. 9, 1968		.57	2.10
1969	Nov. 9, 1968		122	a4.19	May 26, 1969		1.2	2.22
1970	Apr. 9, 1970		150	b4.88	Dec. 3, 1969		4.6	-

a Occurred Sept. 30, 1969.

b Occurred Apr. 26, 1970, backwater from debris.

Period of record: Maximum discharge, 159 cfs Dec. 25, 1967; maximum gage height, 4.88 ft Apr. 26, 1970 (backwater from debris); minimum, 0.57 cfs Aug. 9, 1968 (gage height, 2.10 ft).

REMARKS.--Records excellent. City of Bellingham diverts about 100 cfs at times into Anderson Creek at dam on Middle Fork Nooksack River for municipal use. No regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	34	18	27	17	16	27	11	120	104	1.2	2.7
2	60	26	33	24	22	15	24	10	105	104	1.2	2.3
3	7.7	22	33	21	39	14	21	9.2	24	105	.99	1.7
4	19	19	28	21	45	15	22	12	42	104	.77	1.5
5	101	16	26	19	35	20	20	13	118	102	.91	1.6
6	103	14	22	17	30	26	19	12	117	102	1.1	1.4
7	103	14	21	17	26	22	18	11	115	101	.99	1.4
8	91	13	19	18	24	19	16	10	114	101	.84	1.6
9	90	16	11	23	21	17	15	9.2	112	101	23	1.4
10	98	22	19	22	19	16	16	8.4	112	100	106	1.2
11	88	19	41	20	17	16	17	8.4	111	101	110	25
12	17	17	32	19	16	22	17	8.6	110	102	108	103
13	14	15	27	21	15	19	15	7.9	108	99	108	86
14	16	18	24	24	14	18	37	7.4	107	102	108	106
15	11	18	22	22	12	19	44	7.1	107	72	108	98
16	8.4	17	20	21	11	20	34	6.6	106	8.8	108	14
17	7.4	16	18	20	11	19	27	6.1	106	4.6	108	19
18	6.9	15	17	23	27	17	25	5.4	106	3.3	110	14
19	6.9	14	15	53	38	15	22	5.4	107	3.2	108	10
20	6.4	14	13	52	30	15	20	13	107	3.0	110	7.9
21	18	13	16	46	29	14	17	7.9	106	2.4	108	6.6
22	18	12	48	38	28	13	16	6.9	107	2.2	107	6.1
23	15	12	56	33	31	13	21	34	106	1.7	110	6.1
24	15	12	105	31	29	14	17	101	106	1.6	110	5.0
25	17	11	137	27	26	12	17	102	107	1.6	114	4.1
26	13	10	92	24	24	13	15	102	108	1.5	82	4.0
27	34	9.8	67	21	21	50	14	102	108	1.3	11	30
28	43	13	52	19	19	78	13	105	106	1.2	5.7	108
29	28	20	42	17	17	49	12	107	105	1.1	4.6	110
30	30	18	35	16	-----	38	13	106	104	1.2	3.5	108
31	35	-----	31	17	-----	31	-----	100	-----	1.2	2.9	-----
TOTAL	1,231.7	489.8	1,180	773	693	685	611	1,055.5	3,117	1,539.9	1,881.70	887.6
MEAN	39.7	16.3	38.1	24.9	23.9	22.1	20.4	34.0	104	49.7	60.7	29.6
MAX	111	34	137	53	45	78	44	107	120	105	114	110
MIN	6.6	9.8	13	16	11	12	12	5.4	24	1.1	.77	1.2
AC-FT	2,440	972	2,340	1,530	1,370	1,360	1,210	2,090	6,180	3,050	3,730	1,760

WTR YR 1968 TOTAL 14,145.20 MEAN 38.6 MAX 137 MIN .77 AC-FT 28,060

12201950 ANDERSON CREEK NEAR BELLINGHAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	116	27	21	10	10	15	15	2.6	96	111	102
2	105	117	26	21	10	10	22	14	2.8	79	111	106
3	102	117	77	27	11	10	18	9.2	9.7	78	111	103
4	105	116	69	77	17	9.8	17	12	32	88	111	101
5	105	116	92	77	16	19	19	11	97	97	111	99
6	108	112	40	60	13	16	17	10	98	99	110	80
7	105	99	37	58	13	14	16	9.8	97	99	110	86
8	103	113	45	45	22	13	15	9.2	98	99	110	108
9	103	120	41	42	24	12	14	8.4	98	94	112	78
10	105	117	42	37	22	11	14	7.6	98	112	111	29
11	105	118	41	35	32	11	13	7.1	100	114	111	108
12	106	115	35	27	32	10	14	6.6	100	112	108	108
13	106	113	31	24	28	9.6	28	9.9	100	112	111	108
14	76	112	28	22	24	9.2	22	9.4	100	112	112	103
15	17	115	26	20	22	12	19	5.0	104	112	112	86
16	11	113	24	19	24	11	18	4.4	102	112	111	80
17	15	112	23	17	22	16	22	4.0	100	112	110	76
18	115	115	24	18	21	20	24	3.2	101	111	110	7.9
19	21	113	21	15	19	17	27	2.4	107	111	110	4.4
20	26	90	19	13	17	16	24	2.3	106	111	110	2.7
21	22	45	17	12	15	15	22	2.0	90	111	110	1.9
22	22	34	17	12	14	18	20	1.9	76	111	108	4.4
23	18	27	19	12	14	17	22	1.8	73	111	108	13
24	16	24	25	11	13	15	18	2.3	106	111	110	12
25	15	21	24	11	12	14	16	1.9	81	111	108	8.4
26	14	20	25	11	12	14	15	1.7	59	110	107	6.1
27	12	26	22	10	12	13	14	1.7	43	111	108	5.0
28	12	23	18	9.0	11	12	14	1.7	56	111	110	4.8
29	12	29	15	9.0	-----	12	17	6.1	52	111	109	35
30	14	29	15	9.0	-----	13	15	6.9	50	111	97	116
31	38	-----	17	10	-----	14	-----	3.8	-----	111	102	-----
TOTAL	1,742	2,537	942	788.0	902	413.6	551	189.1	2,331.1	2,994	3,386	1,782.6
MEAN	56.2	81.6	30.4	25.4	17.9	13.3	16.4	6.1	77.7	95.3	109	59.4
MAX	106	120	77	77	32	20	28	15	107	114	112	116
MIN	11	20	15	9.0	10	9.2	13	1.7	7	33	97	1.9
AC-FT	3,460	5,030	1,870	1,560	996	820	1,090	375	4,620	5,860	6,720	3,540
CAL YR 1968	TOTAL	16,464.70	MEAN	45.0	MAX	120	MIN	.77	AC-FT	32,660		
WTR YR 1969	TOTAL	18,118.40	MEAN	49.6	MAX	120	MIN	1.7	AC-FT	35,940		

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1969 TO JULY 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	100	5.2	11	24	9.2	91	116	111	188		
2	114	96	5.0	9.8	23	8.6	91	115	110	108		
3	112	97	6.4	9.6	22	7.9	79	115	110	108		
4	111	90	8.6	8.6	19	7.6	93	113	110	108		
5	110	18	6.4	7.9	19	6.9	118	113	110	108		
6	108	19	5.9	7.4	17	9.6	137	113	110	108		
7	110	15	5.9	7.1	16	9.8	126	112	110	108		
8	121	14	7.6	7.1	14	8.1	121	116	110	108		
9	118	12	7.6	8.1	14	6.9	129	115	112	108		
10	112	11	8.6	7.6	12	6.4	90	113	111	108		
11	110	10	7.6	14	12	6.1	39	115	111	108		
12	107	9.2	9.0	15	11	6.1	22	115	111	108		
13	106	8.6	12	15	15	5.7	17	114	110	108		
14	104	8.1	29	46	13	6.6	14	114	110	108		
15	103	8.4	29	35	15	8.1	12	114	110	108		
16	101	8.6	23	26	18	11	12	114	110	108		
17	97	8.1	20	23	37	9.2	11	113	110	108		
18	95	7.4	17	32	33	8.4	9.6	113	110	108		
19	94	6.9	15	37	27	14	11	112	110	108		
20	101	6.4	14	39	23	36	11	112	108	107		
21	104	6.1	17	37	20	37	42	112	108	107		
22	104	6.6	17	34	18	37	112	113	108	107		
23	105	10	22	30	16	39	124	112	108	107		
24	106	7.9	21	27	14	38	135	112	108	107		
25	105	7.4	19	30	13	37	126	111	108	107		
26	103	6.9	19	29	12	61	126	111	108	108		
27	103	6.4	16	32	10	102	123	111	108	110		
28	102	6.1	15	28	9.6	107	122	111	108	108		
29	100	5.9	14	25	-----	107	120	112	108	108		
30	99	5.4	12	22	-----	95	117	111	108	108		
31	103	-----	11	28	-----	87	-----	111	-----	83		
TOTAL	3,283	622.4	425.8	688.2	496.6	939.2	2,380.6	3,504	3,284	3,319		
MEAN	106	20.7	13.7	22.2	17.7	30.3	79.4	113	109	107		
MAX	121	100	29	46	37	187	137	116	112	110		
MIN	94	5.4	5.0	7.1	9.6	5.7	9.6	111	108	83		
AC-FT	6,510	1,230	845	1,370	985	1,660	4,720	6,950	6,510	6,580		
CAL YR 1969	TOTAL	17,228.6	MEAN	47.2	MAX	121	MIN	1.7	AC-FT	34,170		

12202000 AUSTIN CREEK NEAR BELLINGHAM, WASH.

LOCATION.--Lat 48°42'47", long 122°19'48", in SW¼ sec. 8, T. 37 N., R. 4 E., Whatcom County, on left bank 240 ft upstream from bridge on Lake Whatcom Boulevard, 1.0 mile upstream from mouth and Lake Whatcom, and 7.3 miles southeast of Western Washington State College in Bellingham.

DRAINAGE AREA.--7.73 sq mi (revised).

PERIOD OF RECORD.--July to September 1948, June to October 1954, November 1967 to September 1970 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 350 ft (from topographic map). July to September 1948 at site 260 ft downstream and June to October 1954 at site 60 ft downstream at different datums.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (125 cfs), November 1967 to September 1970

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 10, 1967	1900	138	3.91	Dec. 3, 1968	1630	326	4.66	Nov. 4, 1969	2030	*153	3.92
Dec. 25, 1967	0730	*392	4.83	Jan. 4, 1969	2030	*484	5.06	Jan. 20, 1970	-	151	3.91
Feb. 4, 1968	0050	150	3.98								

a About.

Annual minimum discharge, November 1967 to September 1970

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1968	Aug. 12, 13, 1968	.30	2.22	1970	Aug. 26, 1970	a.02	2.18
1969	Aug. 24, 25, 1969	.11	2.21				

a Minimum recorded.

Period of record: Maximum discharge, 484 cfs Jan. 4, 1969 (gage height, 5.06 ft); minimum recorded, 0.02 cfs Aug. 26, 1970 (gage height, 2.18 ft), but may have been lower during periods of no gage-height record Aug. 27 to Sept. 30, 1970.

REMARKS.--Records excellent except those for periods of no gage-height record, Jan. 4 to Feb. 4 and Aug. 26 to Sept. 30, 1970, which are fair. Minor diversion of 0.01 cfs above station for domestic use. No regulation. A discharge measurement of 112 cfs was made Oct. 31, 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, NOVEMBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	31	28	17	18	31	14	9.7	1.9	.64	2.4	
2	40	60	24	35	16	27	13	42	1.6	.57	2.2	
3	27	80	22	108	15	22	12	33	1.5	.57	1.9	
4	20	64	21	114	16	21	14	23	1.4	.57	1.9	
5	15	48	20	68	26	20	20	18	1.3	.57	1.8	
6	12	37	18	48	60	18	18	15	1.4	.57	1.6	
7	12	33	18	37	46	17	18	12	1.4	.57	1.5	
8	10	28	18	30	36	15	16	10	1.3	.51	1.5	
9	16	49	23	25	30	14	15	9.6	1.2	.45	1.4	
10	24	85	27	22	26	14	13	8.2	1.2	.45	1.3	
11	27	88	23	19	24	18	11	7.8	1.3	.40	1.4	
12	23	56	23	17	40	17	11	6.6	2.7	.35	1.5	
13	19	40	36	15	41	16	9.6	6.2	1.8	.35	1.4	
14	21	31	64	14	35	33	8.7	5.6	2.8	.72	2.7	
15	26	26	53	12	31	55	7.8	5.1	3.4	.72	5.4	
16	29	22	42	12	31	42	7.0	4.6	2.5	.57	5.6	
17	26	19	37	11	27	33	6.2	4.4	2.0	.51	4.3	
18	24	16	38	27	24	28	5.6	3.6	1.8	.51	2.3	
19	20	14	93	67	22	25	5.4	3.6	1.8	.57	1.3	
20	15	12	97	52	20	21	17	3.2	1.9	.98	8.7	
21	14	14	84	46	18	19	14	3.0	1.8	.89	6.6	
22	14	73	57	42	16	18	11	3.6	1.5	.98	5.6	
23	12	101	42	46	16	23	9.6	3.2	1.5	1.4	5.9	
24	12	166	38	49	32	21	9.2	2.8	1.4	4.5	5.6	
25	9.6	236	31	42	26	21	8.2	2.7	1.4	6.8	5.1	
26	8.7	124	27	35	25	20	7.4	2.7	1.3	14	4.4	
27	8.2	83	23	28	87	19	6.6	3.2	1.1	7.4	3.6	
28	11	62	21	23	82	17	7.4	2.7	.98	5.1	3.2	
29	35	47	18	21	63	15	5.6	2.4	.89	3.8	3.0	
30	32	38	17	-----	49	16	5.1	2.0	.80	3.0	2.7	
31	-----	32	16	-----	39	-----	4.8	-----	.72	2.5	-----	
TOTAL	630.5	1,815	1,099	1,082	1,037	676	331.2	259.5	49.59	61.52	168.9	
MEAN	21.0	58.5	35.5	37.3	33.5	22.5	10.7	8.65	1.60	1.98	5.63	
MAX	68	236	97	114	87	55	20	42	3.4	14	4.3	
MIN	8.2	12	16	11	15	14	4.8	2.0	.72	.35	1.3	
CFSM	2.72	7.57	4.59	4.83	4.33	2.91	1.38	1.12	.21	.26	.73	
IN.	3.03	8.73	5.29	5.21	4.99	3.25	1.59	1.25	.24	.30	.81	
AC-FT	1,250	3,600	2,180	2,150	2,060	1,340	657	515	98	122	335	

12202000 AUSTIN CREEK NEAR BELLINGHAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	10	42	25	7.0	14	28	26	4.9	1.5	.25	.25
2	2.4	11	40	35	9.0	16	31	25	4.0	1.8	.34	.76
3	2.2	10	152	46	14	19	49	21	3.6	1.8	.25	1.0
4	3.0	9.2	120	209	21	21	41	19	3.4	2.4	.25	.88
5	3.0	6.2	69	181	26	51	38	17	3.1	1.9	.44	.76
6	5.9	7.8	49	100	23	51	35	16	2.9	1.8	.44	.65
7	6.6	7.4	41	110	20	36	25	14	2.9	1.5	.44	.54
8	5.9	12	79	64	11	29	24	12	1.4	1.4	.34	.44
9	5.6	18	66	64	17	23	21	11	2.6	1.2	.34	.34
10	6.2	19	70	53	41	20	21	11	2.3	1.6	.25	.34
11	7.4	21	75	44	63	18	19	9.0	2.2	2.2	.25	.25
12	16	27	55	35	70	16	18	8.6	2.3	1.8	.25	.34
13	14	28	43	29	52	15	39	7.8	2.2	1.5	.34	.88
14	12	28	35	25	41	14	36	7.0	2.0	1.4	.25	1.0
15	15	30	31	22	35	18	28	6.4	1.9	1.2	.25	.88
16	14	28	29	20	45	22	26	6.1	1.8	1.1	.25	.76
17	14	24	26	18	47	37	26	5.8	1.5	.88	.25	2.0
18	21	28	27	16	39	51	28	5.2	2.0	.76	.25	2.7
19	27	29	24	15	34	36	37	4.9	1.2	.65	.34	2.4
20	45	30	21	14	30	30	38	4.6	1.5	.65	.34	2.4
21	34	28	20	12	26	25	35	4.3	1.2	.65	.34	2.6
22	30	35	18	11	23	28	29	4.0	1.4	.65	.25	10
23	23	36	10	22	21	31	31	3.8	2.0	.76	.17	35
24	20	32	42	9.0	19	26	27	3.8	2.9	.44	.17	17
25	18	26	51	8.0	18	23	24	3.6	2.2	.44	.25	10
26	15	24	45	7.2	16	21	21	3.3	1.8	.44	.44	7.4
27	13	37	35	6.4	15	23	19	2.9	1.8	.34	1.1	6.1
28	12	40	28	5.8	14	22	20	3.1	2.0	.76	1.6	5.5
29	10	44	20	5.5	-----	21	27	6.7	2.0	.34	.76	4.6
30	14	50	17	5.5	-----	23	26	9.8	1.8	.34	.54	8.2
31	12	-----	20	6.0	-----	34	-----	6.1	-----	.34	.34	-----
TOTAL	429.7	737.6	1,397	1,226.4	847.0	814	887	288.8	69.7	33.90	12.07	125.97
MEAN	13.9	24.6	45.1	39.6	30.3	26.3	29.6	9.32	2.32	1.09	.39	4.20
MAX	45	90	152	209	70	51	51	26	4.9	2.4	1.6	35
MIN	2.2	7.4	17	5.5	7.0	14	18	2.9	1.2	.34	.17	.25
CFSM	1.80	3.18	5.83	5.12	3.92	3.40	3.83	1.21	.30	.14	.05	.54
IN.	2.07	3.55	6.72	5.90	4.08	3.92	4.27	1.39	.34	.16	.06	.61
AC-FT	852	1,460	2,770	2,430	1,680	1,610	1,760	573	138	67	24	250

CAL YR 1968 TOTAL 7,329.01 MEAN 20.0 MAX 152 MIN .35 CFSM 2.59 IN 35.27 AC-FT 14,540
WTR YR 1969 TOTAL 6,869.14 MEAN 18.8 MAX 209 MIN .17 CFSM 2.43 IN 33.06 AC-FT 13,620

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	6.1	6.1	16	40	11	8.6	19	2.9	.88	1.2	.50
2	11	5.8	5.8	14	47	11	8.2	17	2.7	.65	1.1	.50
3	8.6	6.7	7.4	14	37	10	7.4	15	2.6	.54	1.1	.75
4	6.7	59	9.4	13	32	9.2	10	14	2.4	.44	.88	1.1
5	5.5	74	7.4	12	28	8.8	17	12	2.4	.44	.54	1.6
6	4.3	47	7.0	12	26	12	52	11	2.2	.44	.34	2.5
7	4.9	39	6.7	11	23	13	46	10	2.0	.44	.65	2.5
8	19	31	10	11	22	10	33	13	2.2	.34	.65	2.4
9	25	26	12	18	22	9.0	49	16	2.4	.34	.44	2.3
10	20	21	13	17	20	8.4	47	12	2.4	.25	.44	2.3
11	14	18	13	23	20	8.0	35	12	2.0	.25	.34	2.3
12	10	16	13	25	18	7.8	28	11	1.9	.25	.25	2.2
13	8.2	14	17	24	25	7.6	23	9.8	1.8	.17	.25	2.1
14	6.7	12	44	60	22	9.0	20	9.0	1.6	.25	.34	2.1
15	5.8	12	99	52	25	13	17	8.6	2.3	.25	.25	2.2
16	4.9	11	38	45	32	20	14	8.2	2.0	.25	.25	2.2
17	4.0	9.8	29	40	60	18	13	8.2	1.8	.34	.17	2.8
18	3.8	9.0	23	60	50	16	12	7.0	1.5	.34	.17	3.0
19	3.6	8.6	20	72	40	15	14	6.4	1.4	.34	.34	3.0
20	4.3	8.6	19	85	32	14	17	6.1	1.1	.25	.11	2.8
21	5.5	7.8	28	76	26	12	17	5.5	1.0	.25	.11	2.7
22	5.2	7.4	33	58	22	11	15	5.5	1.0	.17	.11	2.8
23	5.2	10	55	50	18	13	22	4.9	.88	.17	.07	2.8
24	6.7	10	62	45	16	12	41	4.3	.76	.25	.11	2.7
25	6.4	9.4	44	48	15	11	39	3.8	.76	.54	.07	2.7
26	6.1	9.0	35	48	14	10	35	3.6	.76	2.7	.04	2.8
27	8.6	7.8	28	52	13	9.8	32	3.6	1.0	3.4	.05	2.7
28	9.0	7.4	24	48	12	9.0	29	3.4	.88	2.0	.15	2.6
29	7.4	6.7	22	41	-----	8.6	26	4.0	1.1	1.8	.15	2.6
30	6.7	6.4	20	37	-----	8.2	22	3.8	1.1	2.0	.15	2.6
31	6.4	-----	18	47	-----	7.8	-----	3.3	-----	1.5	.50	-----
TOTAL	255.5	516.5	728.8	1,174	757	363.2	749.2	271.0	50.84	22.23	11.32	68.15
MEAN	8.24	17.2	23.5	37.9	27.0	11.1	25.0	8.74	1.69	.72	.37	2.27
MAX	25	74	62	85	60	20	52	19	2.9	3.4	1.2	3.0
MIN	3.6	5.8	5.8	11	12	7.6	7.4	3.3	.76	.17	.04	.50
CFSM	1.07	2.23	3.04	4.90	3.49	1.44	3.23	1.13	.22	.09	.05	.29
IN.	1.23	2.49	3.51	5.65	3.64	1.65	3.61	1.30	.24	.11	.05	.33
AC-FT	507	1,020	1,450	2,330	1,500	681	1,490	538	101	44	22	135

CAL YR 1969 TOTAL 5,805.64 MEAN 15.9 MAX 209 MIN .17 CFSM 2.06 IN 27.94 AC-FT 11,520
WTR YR 1970 TOTAL 4,947.74 MEAN 13.6 MAX 85 MIN .04 CFSM 1.76 IN 23.81 AC-FT 9,810

WHATCOM CREEK BASIN

12202050 SMITH CREEK NEAR BELLINGHAM, WASH.

LOCATION.--Lat 48°44'01", long 122°18'20", in SW¼SW¼ sec.33, T.38 N., R.4 E., Whatcom County, on left bank 0.6 mile upstream from mouth and Lake Whatcom and 8.9 miles east of Western Washington State College in Bellingham.

DRAINAGE AREA.--5.12 sq mi.

PERIOD OF RECORD.--October 1967 to September 1969 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 430 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (100 cfs), water years 1968-69

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 27, 1967	1730	127	3.63	Dec. 10, 1967	1730	143	5.73	Dec. 3, 1968	1400	*228	4.18
Oct. 31, 1967	1230	102	3.47	Dec. 25, 1967	0630	*206	4.07	Jan. 4, 1969	1630	160	4.29

a Backwater from debris.

Annual minimum discharge, water years 1968-69

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1968	Aug. 11, 12, 1968	.44	1.49	1969	Aug. 24, 25, 1969	.22	-

Period of record: Maximum discharge, 228 cfs Dec. 3, 1968 (gage height, 4.18 ft), from rating curve extended above 50 cfs; maximum gage height, 4.29 ft Jan. 4, 1969 (backwater from debris); minimum discharge, 0.22 cfs Aug. 24, 25, 1969.

REMARKS.--Records fair. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	50	9.5	16	8.3	11	20	7.7	11	1.7	.81	3.2
2	20	26	22	12	31	9.4	15	7.2	51	1.4	.71	2.8
3	10	16	32	9.9	69	8.3	13	6.1	34	1.3	.67	2.4
4	6.0	12	25	9.1	72	9.1	13	7.0	22	1.2	.67	2.1
5	3.5	8.9	20	8.0	44	17	12	8.0	15	1.0	.71	1.8
6	10	6.8	16	7.0	30	38	11	7.7	12	.97	.67	1.7
7	35	6.5	14	6.7	22	29	10	7.7	9.4	.91	.63	1.5
8	10	6.5	12	6.7	18	22	9.1	7.0	8.0	.81	.55	1.4
9	3.5	8.9	28	9.6	14	18	8.5	6.1	6.7	.71	.55	1.3
10	9.6	13	76	11	12	15	9.1	5.5	5.9	.71	.49	1.2
11	64	15	73	9.0	9.9	15	12	4.9	5.3	.86	.46	1.4
12	26	12	36	9.0	8.5	29	12	4.9	4.6	2.4	.46	1.4
13	22	10	22	25	7.4	30	12	4.6	4.1	1.2	.46	1.3
14	28	14	16	32	6.5	24	23	4.1	3.8	6.6	.71	5.6
15	14	20	13	25	5.7	20	34	3.8	3.2	8.0	.63	9.6
16	8.6	20	11	20	5.1	21	26	3.5	3.0	4.9	.55	10
17	6.2	17	9.2	15	5.3	20	20	3.2	2.6	3.6	.55	53
18	6.0	14	8.0	25	18	17	17	2.8	2.4	2.8	.55	30
19	6.5	11	6.5	54	45	14	15	2.7	2.4	2.7	.67	16
20	5.5	9.2	5.5	52	40	13	13	10	2.1	2.7	.97	11
21	24	8.0	6.2	40	36	11	11	6.7	2.0	2.3	.71	8.0
22	34	7.1	46	26	33	9.4	10	5.3	2.4	2.0	.71	6.3
23	27	6.2	50	21	37	8.8	15	5.1	2.2	1.8	1.1	6.5
24	17	6.0	143	25	42	12	15	4.4	1.8	1.7	5.6	5.3
25	18	5.2	151	21	34	11	13	4.2	1.7	1.4	8.4	4.8
26	12	4.8	81	17	25	11	13	3.6	1.9	1.4	34	3.9
27	58	4.8	58	13	20	42	12	3.3	3.0	1.2	14	3.5
28	54	5.5	47	11	15	40	9.9	4.1	2.3	1.1	8.8	3.2
29	28	12	34	9.6	13	42	8.8	3.2	2.0	1.0	5.9	3.0
30	56	9.9	25	9.1	-----	34	8.8	3.0	1.8	.91	4.4	2.7
31	72	-----	20	8.3	-----	25	-----	2.7	-----	.86	3.3	-----
TOTAL	680.4	366.3	1,115.9	563.0	726.7	626.0	423.2	160.1	229.6	62.14	99.39	205.7
MEAN	21.9	12.2	36.0	18.2	25.1	20.2	14.1	5.16	7.05	2.00	3.21	6.86
MAX	72	50	151	54	72	42	36	10	51	8.0	34	53
MIN	3.5	4.8	5.5	6.7	5.1	8.3	8.5	2.7	1.7	.71	.46	1.2
CFSM	4.28	2.38	7.03	3.55	4.90	3.95	2.75	1.01	1.49	.39	.63	1.34
IN.	4.94	2.66	8.11	4.09	5.28	4.55	3.07	1.16	1.67	.45	.72	1.49
AC-FT	1,350	727	2,210	1,120	1,440	1,240	839	318	455	123	197	408

WTR YR 1968 TOTAL 5,258.43 MEAN 14.4 MAX 151 MIN .46 CFSM 2.81 IN 38.21 AC-FT 10,430

12202050 SMITH CREEK NEAR BELLINGHAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	2.5	11	28	16	3.6	8.5	35	18	3.0	1.1	.37	.51		
2	2.5	11	26	25	4.0	9.4	35	20	2.5	1.3	.40	.73		
3	2.3	9.6	136	34	4.5	11	29	17	2.1	1.3	.37	1.1		
4	3.2	8.5	76	120	11	12	30	15	1.8	2.0	.43	1.4		
5	3.0	8.0	44	90	9.0	26	37	12	1.6	1.5	.52	1.4		
6	4.0	7.0	30	60	6.5	28	34	11	1.5	1.3	.59	.92		
7	6.5	6.5	26	50	6.0	22	27	9.4	1.5	1.2	.53	.88		
8	6.0	9.1	46	40	23	18	22	8.3	1.4	1.1	.55	.57		
9	5.5	16	48	30	21	15	19	7.2	1.3	.94	.49	.47		
10	5.5	16	56	25	20	13	18	6.5	1.2	1.4	.45	.38		
11	7.0	16	55	20	30	12	16	5.9	1.1	3.2	.43	.33		
12	20	18	39	15	45	11	15	5.1	1.2	2.5	.51	.42		
13	12	20	30	12	25	11	22	4.7	1.1	2.0	.61	1.5		
14	11	20	24	11	22	10	20	4.2	1.0	1.9	.51	1.5		
15	12	20	22	10	18	12	16	4.0	.95	1.7	.47	1.3		
16	11	17	22	9.0	24	15	14	3.8	.90	1.5	.45	1.0		
17	18	15	18	8.0	24	31	15	3.6	.85	1.4	.37	3.0		
18	25	21	18	7.0	22	35	19	3.4	.85	1.2	.47	4.0		
19	31	22	15	6.5	19	28	25	3.2	.80	1.0	.55	3.3		
20	56	24	12	6.0	16	24	24	3.0	.86	.91	.51	3.7		
21	38	26	11	5.5	14	22	21	2.8	.86	.97	.70	4.3		
22	28	41	9.9	5.2	13	22	18	2.6	.86	.86	.39	13		
23	21	39	14	4.8	12	22	22	2.5	1.7	.81	.33	63		
24	16	31	33	4.6	11	18	18	2.8	2.7	.67	.27	30		
25	14	23	38	4.4	9.6	18	15	2.5	1.7	.67	.49	22		
26	12	19	30	4.2	8.8	23	13	2.2	1.4	.63	.64	16		
27	9.9	24	22	4.0	8.3	27	11	2.1	1.4	.55	1.1	12		
28	9.1	26	14	3.7	8.3	24	12	2.0	1.6	.49	1.8	11		
29	8.5	33	12	3.6	-----	24	16	4.0	1.5	.49	1.0	9.0		
30	13	35	11	3.5	-----	28	16	5.3	1.3	.46	.79	10		
31	13	-----	10	3.5	-----	35	-----	3.5	-----	.40	.61	-----		
TOTAL	426.5	592.7	975.9	641.5	438.6	614.9	634	197.6	42.53	37.45	17.70	218.71		
MEAN	13.8	19.8	31.5	20.7	15.7	19.8	21.1	6.37	1.42	1.21	.57	7.29		
MAX	56	41	136	120	45	35	37	20	3.0	3.2	1.8	63		
MIN	2.3	6.5	9.9	3.5	3.6	8.5	11	2.0	.80	.40	.27	.33		
CFSM	2.70	3.87	6.15	4.04	3.07	3.87	4.12	1.24	.28	.24	.11	1.42		
IN.	3.10	4.31	7.09	4.66	3.19	4.47	4.61	1.44	.31	.27	.13	1.59		
AC-FT	846	1,180	1,940	1,270	870	1,220	1,260	392	84	74	35	434		
CAL YR 1968	TOTAL	5,090.93	MEAN	13.9	MAX	136	MIN	.46	CFSM	2.71	IN	36.99	AC-FT	10,100
WTR YR 1969	TOTAL	4,838.09	MEAN	13.3	MAX	136	MIN	.27	CFSM	2.60	IN	35.15	AC-FT	9,600

WHATCOM CREEK BASIN

12202300 OLSEN CREEK NEAR BELLINGHAM, WASH.

LOCATION.--Lat 48°45'05", long 122°21'08", in NW¼SW¼ sec.30, T.38 N., R.4 E., Whatcom County, on left bank at downstream side of bridge on North Shore Road, 500 ft upstream from mouth and Lake Whatcom and 5.8 miles east of courthouse in Bellingham.

DRAINAGE AREA.--3.78 sq mi.

PERIOD OF RECORD.--November 1967 to September 1969 (discontinued).

GAGE.--Water-stage recorder. Concrete control since July 29, 1968. Altitude of gage is 315 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for November 1967 to September 1969 are contained in the following table:

Annual maximum discharge (*), peak discharges above base (100 cfs), and annual minimum discharge									
		Maximum			Minimum				
Wtr yr	Date	Time	Discharge	G.H.	Date	Discharge	G.H.		
1968	Dec. 10, 1967	1800	134	2.43	Aug. 11-14, 1968	.34	-		
	Dec. 25, 1967	0700	*226	3.12					
	Feb. 3, 1968	2300	126	2.36					
1969	Dec. 3, 1968	1530	*164	3.22	Sept. 11, 1969	.31	.45		
	Jan. 4, 1969	1930	140	3.03					

a Occurred at 1300 hours.

Period of record: Maximum discharge, 226 cfs Dec. 25, 1967 (gage height, 3.12 ft), from rating curve extended above 52 cfs; minimum, 0.31 cfs Sept. 11, 1969.

REMARKS.--Records good. No regulation. Diversion rights above station for irrigation and domestic use total 0.3 cfs.

DISCHARGE, IN CUBIC FEET PER SECOND, NOVEMBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		28	5.4	13	7.8	8.5	13	5.4	6.2	1.7	.80	3.0
2		16	12	11	34	7.8	12	5.0	32	1.5	.80	2.5
3		11	20	9.4	73	6.8	9.7	4.8	21	1.3	.70	2.2
4		8.0	17	8.5	71	7.5	8.8	5.4	12	1.2	.70	2.0
5		6.2	14	7.5	32	12	8.0	6.0	9.4	1.1	.70	1.7
6		5.6	11	6.5	21	22	7.2	6.2	7.2	1.1	.70	1.5
7		5.6	9.7	6.2	15	18	7.0	6.0	6.0	.98	.60	1.3
8		5.4	8.0	6.7	12	14	6.8	5.8	5.4	.88	.60	1.3
9		5.8	20	7.8	10	12	6.5	5.2	5.0	.82	.51	1.2
10		8.5	63	7.8	9.1	11	6.5	4.6	4.6	.82	.42	1.0
11		9.7	46	6.2	8.0	11	7.8	4.2	4.0	1.3	.42	1.3
12		7.8	24	6.8	7.2	21	7.0	4.4	3.6	3.1	.34	1.3
13		6.8	16	24	6.8	20	7.0	4.0	3.4	1.5	.34	1.2
14		8.8	13	38	6.2	16	12	3.6	3.4	5.4	.60	3.5
15		11	11	26	5.6	14	19	3.0	2.8	9.1	.60	7.2
16		11	9.4	19	5.2	13	14	2.8	2.6	5.6	.51	7.5
17		9.1	8.2	14	5.2	12	10	2.6	2.4	4.4	.60	48
18		7.8	7.2	20	15	11	9.4	2.2	2.0	3.5	.60	19
19		6.8	6.5	59	40	10	8.0	2.2	2.0	3.0	.60	10
20		5.8	5.4	54	33	9.1	7.2	8.7	2.0	3.0	.92	6.5
21		5.2	5.6	39	27	8.0	6.2	5.4	1.8	2.6	.80	5.2
22		4.8	21	26	23	7.5	6.0	4.8	2.2	2.2	.80	4.4
23		4.4	32	19	30	7.8	6.8	4.6	2.0	2.0	1.3	5.2
24		4.0	121	21	31	13	7.0	4.0	1.7	1.8	4.9	4.6
25		3.8	170	17	22	12	6.8	3.8	1.7	1.6	6.9	4.0
26		3.4	95	14	17	11	7.0	3.2	1.5	1.5	32	3.4
27		3.4	55	12	13	29	6.8	2.8	4.0	1.3	12	3.2
28		3.6	38	10	11	26	6.0	3.6	3.8	1.2	8.0	2.8
29		5.9	26	9.1	9.4	26	5.4	2.4	2.6	1.0	5.5	2.6
30		5.2	19	8.0	-----	21	5.6	2.2	2.0	.92	4.0	2.4
31		-----	16	8.0	-----	16	-----	2.0	-----	.92	3.2	-----
TOTAL		228.4	925.4	534.0	600.5	434.0	250.5	130.9	160.3	68.34	91.46	161.0
MEAN		7.61	29.9	17.2	20.7	14.0	8.35	4.22	5.34	2.20	2.95	5.37
MAX		28	170	59	73	29	19	8.7	32	9.1	32	48
MIN		3.4	5.4	6.2	5.2	6.8	5.4	2.0	1.5	.82	.34	1.0
AC-FT		453	1,840	1,060	1,190	861	497	260	318	136	181	319

12202300 OLSEN CREEK NEAR BELLINGHAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	6.5	25	8.0	3.0	7.2	30	12	3.6	1.4	.53	.45
2	2.2	6.7	22	15	3.5	8.3	31	14	2.6	1.4	.53	.53
3	2.0	6.2	90	24	4.0	9.4	23	12	2.2	1.4	.45	.68
4	2.4	5.9	55	98	5.5	10	21	10	1.8	2.4	.45	1.0
5	2.2	5.4	30	72	8.0	19	29	8.3	1.5	1.6	.53	1.0
6	3.0	4.7	20	41	4.6	18	27	8.3	1.5	1.6	.53	.68
7	4.5	4.9	17	33	4.3	13	21	7.8	1.5	1.4	.68	.45
8	4.3	7.0	26	25	12	11	16	7.2	1.5	1.4	.68	.45
9	3.6	12	27	21	15	11	14	6.6	1.2	1.2	.53	.45
10	3.6	11	33	17	14	10	16	6.1	1.0	1.4	.53	.38
11	4.3	11	32	14	40	9.4	14	6.1	1.0	2.4	.53	.38
12	11	13	24	11	32	8.8	14	5.6	1.2	2.0	.53	.45
13	7.8	14	19	8.7	22	9.4	21	5.0	1.2	1.6	.53	.85
14	6.5	13	16	7.8	16	9.4	18	4.6	1.2	1.4	.53	1.2
15	7.2	12	14	7.2	14	10	13	4.6	1.0	1.4	.45	1.0
16	6.7	10	14	6.7	17	14	10	4.3	.90	1.4	.45	.85
17	8.5	8.7	13	5.9	15	34	12	4.0	.90	1.2	.45	1.8
18	14	14	11	5.2	13	33	17	3.6	.80	1.2	.45	3.4
19	17	15	7.8	4.9	12	22	23	3.2	.80	1.2	.53	2.4
20	26	13	6.7	4.5	11	18	20	2.9	.80	1.2	.68	3.0
21	18	13	6.2	4.0	9.0	16	17	2.6	.80	1.2	.53	3.8
22	14	39	6.2	3.5	8.0	16	15	2.6	.80	1.1	.45	19
23	11	34	9.0	3.3	7.5	14	19	1.8	1.5	1.0	.45	45
24	8.4	28	29	3.1	6.5	13	16	2.2	4.0	.80	.38	22
25	8.7	21	28	3.0	6.5	12	11	1.8	1.5	.70	.53	13
26	7.5	18	21	2.8	7.0	16	8.8	1.5	1.4	.60	.53	9.6
27	6.7	25	15	2.7	7.2	20	8.8	1.5	2.0	.60	1.0	7.5
28	5.9	26	9.0	2.6	7.2	19	10	1.5	2.0	.53	2.6	6.7
29	5.4	30	6.2	2.5	-----	17	13	4.3	1.6	.53	1.2	5.4
30	7.2	30	5.5	2.5	-----	22	10	6.1	1.6	.53	.68	5.7
31	7.2	-----	6.0	2.7	-----	35	-----	4.3	-----	.53	.53	-----
TOTAL	239.0	458.0	643.6	462.6	324.8	484.9	518.6	166.4	45.40	38.32	19.45	159.10
MEAN	7.71	15.3	20.8	14.9	11.6	15.6	17.3	5.37	1.51	1.24	.63	5.30
MAX	26	39	90	98	40	35	31	14	4.0	2.4	2.6	45
MIN	2.0	4.7	5.5	2.5	3.0	7.2	8.8	1.5	.80	.53	.38	.38
AC-FT	474	908	1,280	918	644	962	1,030	330	90	76	39	316
CAL YR 1968	TOTAL	1,771.60	MEAN	10.3	MAX	90	MIN	.34	AC-FT	7,480		
MTR YR 1969	TOTAL	3,560.17	MEAN	9.75	MAX	98	MIN	.38	AC-FT	7,060		

WHATCOM CREEK BASIN

12203500 WHATCOM CREEK BELOW HATCHERY, NEAR BELLINGHAM, WASH.

LOCATION.--Lat 48°45'06", long 122°25'42", in NW¼SE¼ sec.28, T.38 N., R.3 E., Whatcom County, on right bank in Whatcom Falls Park, 0.9 mile downstream from Lake Whatcom and 2.3 miles east of the city hall in Bellingham.

DRAINAGE AREA.--56.1 sq mi (revised).

PERIOD OF RECORD.--October 1945 to November 1956, December 1967 to September 1969 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 252.55 ft above mean sea level (city of Bellingham datum).

AVERAGE DISCHARGE.--12 years (1945-56, 1968-69), 83.5 cfs (60,500 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for December 1967 to September 1969 are contained in the following table:

Wtr yr	Date	Maximum Discharge	G.H.	Date	Minimum Discharge	G.H.
1968	Dec. 27, 1967	524	4.41	Sept. 10, 1968	5.0	al.71
1969	Dec. 5, 1968	424	4.03	Aug. 5, 1969	3.9	bl.64

a Also occurred Dec. 1, 1967.

b Occurred July 21, 1969.

Period of record: Maximum discharge, 1,350 cfs about Dec. 29, 1949 (gage height, 6.0 ft); minimum, 0.7 cfs Nov. 24, 1952; minimum gage height, 1.31 ft Oct. 11, 1956.

REMARKS.--Records good. Flow completely regulated by Lake Whatcom (usable capacity, about 28,800 acre-ft under normal operating conditions). City of Bellingham diverted about 95 cfs from lake for municipal supply.

DISCHARGE, IN CUBIC FEET PER SECOND, DECEMBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			6.4	376	142	106	205	9.6	10	7.8	7.8	6.7
2			7.0	344	142	105	200	10	10	7.8	7.8	6.7
3			31	320	166	105	193	9.6	9.6	7.8	8.2	6.7
4			102	291	184	105	190	9.6	9.2	7.4	8.2	6.4
5			126	263	186	106	184	9.6	9.2	7.4	7.8	6.0
6			142	241	186	108	179	9.6	8.9	7.4	7.8	6.0
7			141	228	184	109	173	9.6	8.9	7.1	7.8	6.4
8			137	212	184	109	162	9.2	8.5	7.1	8.2	6.0
9			141	205	177	109	64	8.5	8.5	7.1	9.2	5.7
10			142	198	170	108	9.6	8.5	8.2	7.1	7.4	6.0
11			148	186	162	108	9.2	8.2	8.2	7.1	7.1	6.4
12			148	170	150	109	8.9	8.2	8.2	7.1	7.1	6.7
13			148	173	141	109	8.9	7.8	8.9	6.7	7.1	6.7
14			99	177	115	109	33	7.8	8.5	6.7	7.1	7.1
15			8.9	179	98	109	50	7.8	8.5	6.7	7.1	7.4
16			8.2	177	47	109	8.9	8.2	8.9	6.4	7.1	7.8
17			7.4	177	8.2	109	8.9	13	8.5	6.4	7.4	7.4
18			7.1	179	8.2	109	8.9	9.2	8.5	6.4	7.4	7.4
19			7.1	217	8.5	108	9.2	9.2	8.5	6.4	7.1	7.8
20			7.1	244	34	48	11	9.6	8.5	6.4	7.1	8.2
21			95	258	150	9.6	9.6	8.9	8.5	6.4	7.1	7.8
22			198	258	175	9.6	9.6	8.9	8.5	6.4	6.7	7.8
23			220	249	179	9.6	9.6	8.9	8.5	6.7	6.7	7.8
24			288	246	181	9.6	9.6	8.9	8.5	6.7	6.7	7.6
25			436	235	184	9.6	9.6	9.6	8.5	6.7	6.7	7.4
26			516	220	179	9.6	9.6	8.9	8.5	6.7	6.7	7.4
27			520	202	175	104	9.6	8.9	8.5	6.7	6.7	7.1
28			504	184	128	170	9.6	9.2	8.5	6.7	6.7	7.1
29			480	190	106	190	9.6	8.9	8.5	6.7	6.4	6.7
30			448	156	-----	212	9.6	9.2	8.2	7.1	6.7	7.1
31		-----	408	146	-----	207	-----	9.6	-----	7.4	6.7	-----
TOTAL			5,677.2	6,901	3,949.9	3,037.6	1,812.5	282.7	260.9	214.5	225.6	209.3
MEAN			183	223	136	98.0	60.4	9.12	8.70	6.92	7.28	6.98
MAX			520	376	186	212	205	13	10	7.8	9.2	8.2
MIN			6.4	146	8.2	9.6	8.9	7.8	8.2	6.4	6.4	5.7
AC-FT			11,260	13,690	7,830	6,030	3,600	561	518	425	447	415

12203500 WHATCOM CREEK BELOW HATCHERY, NEAR BELLINGHAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	108	300	9.0	9.0	57	45	150	7.1	6.7	6.4	6.7
2	7.4	108	291	80	9.0	56	46	150	7.1	6.7	6.4	6.7
3	6.4	106	330	144	9.0	56	46	150	7.4	6.4	6.4	6.7
4	6.4	106	386	195	9.0	57	44	150	7.8	6.7	7.4	7.1
5	7.1	105	412	272	9.2	53	43	150	7.8	6.4	7.1	7.1
6	7.8	105	404	317	8.9	51	43	120	7.8	6.0	7.1	7.4
7	8.2	105	390	358	8.9	50	42	90	7.8	5.7	7.1	7.4
8	8.2	105	393	376	9.2	50	42	53	7.4	5.7	7.1	7.1
9	8.2	106	390	379	8.9	49	62	52	7.4	5.7	6.7	7.4
10	8.2	105	390	368	9.2	48	106	51	7.4	5.7	6.4	7.4
11	7.8	108	396	358	9.2	48	105	51	7.8	5.5	6.4	7.4
12	7.4	108	390	334	9.2	48	104	33	7.8	5.5	6.4	7.4
13	7.4	108	376	307	9.2	47	104	8.2	7.8	5.5	6.4	7.1
14	7.4	109	358	275	8.9	47	104	8.2	7.8	5.7	6.0	7.1
15	7.4	111	330	222	8.9	47	102	7.4	7.8	5.7	6.4	7.1
16	6.7	109	314	177	8.9	46	101	12	7.8	5.7	6.4	7.1
17	6.7	109	294	135	8.9	46	101	12	7.8	5.7	6.0	7.1
18	6.4	109	272	102	8.9	47	101	8.5	7.8	5.7	6.0	6.7
19	6.7	109	252	102	8.9	47	93	8.2	7.8	5.5	6.4	7.1
20	6.7	112	233	101	8.9	47	89	7.8	7.4	5.5	6.4	7.1
21	6.7	112	212	36	38	47	90	7.8	7.4	5.5	6.4	6.7
22	6.7	112	198	8.9	58	47	90	7.8	7.4	5.5	6.4	7.1
23	6.7	114	193	8.9	60	46	130	8.2	7.4	5.5	6.0	7.1
24	7.1	114	190	8.9	59	46	150	9.6	7.1	5.7	6.4	7.1
25	6.7	114	195	8.9	59	45	150	7.4	7.1	5.7	6.4	7.1
26	7.1	164	200	8.9	58	44	150	7.4	7.4	6.0	7.1	7.1
27	7.1	225	195	8.9	58	44	150	7.1	7.4	6.0	7.1	7.1
28	7.1	222	190	8.9	58	44	150	6.7	7.4	6.0	7.1	7.1
29	7.1	225	190	8.9	-----	43	150	6.7	7.1	6.0	7.1	7.1
30	58	287	100	8.9	-----	43	150	7.1	6.7	6.4	7.1	7.1
31	109	-----	9.0	8.9	-----	45	-----	7.1	-----	6.4	6.7	-----
TOTAL	375.2	3,840	8,773.0	4,736.0	628.2	1,491	2,883	1,355.2	225.0	182.4	204.7	212.8
MEAN	12.1	128	283	153	22.4	48.1	96.1	43.7	7.50	5.88	6.60	7.09
MAX	109	287	412	379	60	57	150	150	7.8	6.7	7.4	7.4
MIN	6.4	105	9.0	8.9	8.9	43	42	6.7	6.7	5.5	6.0	6.7
AC-FT	744	7,620	17,400	9,390	1,250	2,960	5,720	2,690	446	362	406	422
CAL YR 1968	TOTAL	29,882.2	MEAN	81.6	MAX	412	MIN	5.7	AC-FT	59,270		
WTR YR 1969	TOTAL	24,906.5	MEAN	68.2	MAX	412	MIN	5.5	AC-FT	49,400		

12205000 NORTH FORK NOOKSACK RIVER BELOW CASCADE CREEK, NEAR GLACIER, WASH.
(Formerly published as Nooksack River below Cascade Creek, near Glacier)

LOCATION (REVISED).--Lat 48°54'22", long 121°50'35", in SE¼SW¼ sec.36, T.40 N., R.7 E., Whatcom County, Mount Baker National Forest, on right bank 0.2 mile downstream from Cascade Creek, 0.3 mile downstream from Dead-horse Creek, 4.8 miles east of Glacier, 5.5 miles upstream from Glacier Creek, and at mile 63.1.

DRAINAGE AREA.--105 sq mi.

PERIOD OF RECORD.--October 1937 to September 1970. Published as Nooksack River above Cascade Creek, near Glacier 1937-58 and as Nooksack River below Cascade Creek, near Glacier 1958-65.

GAGE.--Water-stage recorder. Altitude of gage is 1,245 ft (from river-profile map). Supplementary water-stage recorder on left bank at datum 1.19 ft lower (used as principal gage prior to Oct. 1, 1953, and Oct. 8, 1958, to Sept. 30, 1959).

AVERAGE DISCHARGE.--33 years, 772 cfs (99.85 inches per year, 559,300 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (3,600 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Nov. 2, 1965	0500	3,950	7.80	Oct. 11, 1967	0445	4,150	7.62	June 26, 1968	2130	3,930	7.12
Nov. 3, 1965	2030	*4,140	7.92	Oct. 27, 1967	1945	5,080	8.20	Sept. 17, 1968	0900	4,480	7.80
				Oct. 31, 1967	1345	5,240	8.30				
Dec. 13, 1966	1030	*4,860	8.06	Jan. 14, 1968	1130	6,470	9.04	Sept. 23, 1969	0500	*5,080	8.20
Dec. 16, 1966	0600	4,650	7.93	Jan. 20, 1968	1900	4,030	7.48				
June 20, 1967	2000	4,230	7.67	June 2, 1968	0830	*8,020	9.87	Nov. 4, 1969	1430	*4,690	7.95

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Mar. 3, 1966	138	3.41	1969	Mar. 12, 1969	60	2.40
1967	Mar. 13, 14, 1967	126	3.43	1970	Apr. 3, 1970	90	2.58
1968	Apr. 22, 1968	93	2.88				

Period of record: Maximum discharge, 10,300 cfs Nov. 26, 1949 (gage height, 10.50 ft, supplementary gage), from rating curve extended above 2,900 cfs on basis of contracted-opening measurement at gage height 8.13 ft (supplementary gage); minimum, 60 cfs Mar. 12, 1969; minimum daily, 110 cfs Feb. 13, 1949.

REMARKS.--Records good. No diversion above station. Some regulation at low flow by powerplant at Excelsior.

REVISIONS (WATER YEARS).--WSP 1092: 1946.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	325	1,260	576	250	301	214	1,030	485	771	1,040	1,140	435
2	356	2,170	709	250	282	196	920	608	810	1,030	1,140	470
3	343	2,400	836	241	271	196	806	894	739	1,420	1,250	470
4	470	2,490	1,390	238	293	190	752	1,190	691	1,440	1,180	495
5	1,010	1,590	882	241	370	196	810	1,570	804	1,460	1,070	520
6	2,180	1,020	1,480	317	348	205	888	2,130	1,300	1,360	989	520
7	739	849	1,350	392	309	205	989	1,880	1,710	1,560	1,010	480
8	852	901	1,020	515	229	1,120	1,730	1,790	1,730	1,730	968	465
9	1,000	1,040	784	425	274	510	1,110	1,900	1,790	1,790	875	485
10	608	661	637	370	260	445	1,100	1,640	2,070	1,750	823	520
11	510	581	559	370	260	397	1,190	1,230	1,650	1,600	758	526
12	515	510	495	361	238	388	875	1,230	1,270	1,560	691	526
13	505	510	475	745	229	643	703	1,100	1,070	1,770	975	510
14	703	673	430	816	223	745	727	856	1,150	1,720	842	532
15	727	1,220	392	554	217	764	745	764	1,490	1,770	816	532
16	554	934	356	470	214	548	745	697	1,960	1,800	752	470
17	515	679	338	397	214	430	667	620	2,010	1,560	685	505
18	537	620	356	352	208	410	614	598	1,660	1,480	679	805
19	537	1,090	425	317	199	388	559	643	1,610	1,580	649	510
20	856	1,010	388	301	199	325	548	778	1,310	1,320	620	455
21	804	901	356	282	199	305	515	975	1,060	1,240	631	465
22	703	810	317	271	202	274	490	842	1,040	1,430	649	564
23	661	637	313	264	217	264	490	715	954	1,320	673	637
24	614	576	309	244	220	260	500	691	888	1,260	745	510
25	570	532	297	241	217	268	548	1,010	875	1,220	764	470
26	614	475	274	238	220	301	537	1,630	1,000	1,100	673	460
27	570	435	285	260	220	309	490	1,600	1,350	1,190	846	450
28	745	425	282	290	217	475	480	1,210	2,260	1,300	691	470
29	1,290	397	274	301	-----	679	475	1,100	1,570	1,400	554	500
30	1,140	370	268	321	-----	1,590	485	1,070	1,160	1,320	480	410
31	679	-----	264	321	-----	1,480	-----	868	-----	1,180	435	-----
TOTAL	22,232	27,766	17,117	10,915	6,918	13,829	21,906	34,254	39,612	44,620	25,053	15,167
MEAN	717	926	552	352	247	446	730	1,105	1,327	1,439	808	506
MAX	2,180	2,490	1,480	816	370	1,590	1,190	2,130	2,260	1,800	1,250	805
MIN	325	370	264	238	199	190	475	485	691	1,030	435	410
CFSM	6.83	8.82	5.26	3.35	2.35	4.25	6.95	10.5	12.6	13.7	7.70	4.82
IN.	7.88	9.84	6.06	3.87	2.45	4.90	7.76	12.14	14.10	15.81	8.88	5.37
AC-FT	44,100	55,070	33,950	21,650	13,720	27,430	43,450	67,940	78,970	88,500	49,690	30,080
CAL YR 1965	TOTAL 280,389			MEAN 768	MAX 2,490	MIN 241	CFSM 7.31	IN 99.34	AC-FT 556,200			
WTR YR 1966	TOTAL 279,589			MEAN 766	MAX 2,490	MIN 190	CFSM 7.30	IN 99.05	AC-FT 554,600			

12205000 NORTH FORK NOOKSACK RIVER BELOW CASCADE CREEK, NEAR GLACIER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	911	479	2,070	450	480	273	264	315	1,620	2,050	994	994
2	546	443	1,560	409	450	255	259	382	2,420	2,340	940	1,270
3	392	403	1,030	462	550	237	268	468	2,380	2,560	958	778
4	398	370	895	426	1,040	224	277	559	2,240	2,460	1,010	746
5	414	414	738	376	700	224	273	636	2,240	2,190	958	754
6	403	370	669	355	566	224	268	708	2,470	1,930	931	750
7	537	340	585	335	486	220	273	768	2,760	1,650	1,040	624
8	655	306	518	374	426	228	282	926	1,810	1,680	922	585
9	386	311	479	398	404	224	282	880	1,640	1,440	1,010	571
10	340	292	518	444	392	208	273	715	1,640	1,290	1,180	1,310
11	315	274	952	594	370	204	277	643	1,600	1,660	1,350	1,290
12	292	386	1,810	480	370	200	282	587	1,700	2,120	1,220	669
13	257	403	3,780	426	360	188	273	552	1,930	2,170	1,160	537
14	235	886	2,070	444	325	188	268	559	2,200	1,870	1,130	511
15	223	802	1,960	664	315	188	255	685	2,370	1,670	1,210	564
16	223	606	3,600	532	292	369	250	990	2,540	1,670	1,190	620
17	219	498	2,740	438	292	387	246	1,430	2,790	1,720	1,100	648
18	203	479	2,470	387	287	325	250	1,380	2,950	1,440	1,050	606
19	520	669	2,190	532	268	292	259	1,420	3,190	1,260	967	641
20	557	690	1,710	538	259	277	268	1,700	3,650	1,450	922	683
21	392	550	1,190	456	250	277	268	2,070	3,460	1,450	931	683
22	425	492	918	392	242	515	268	2,010	3,110	1,270	834	641
23	1,940	449	775	360	237	1,220	268	1,700	2,460	1,320	802	641
24	1,880	431	708	315	228	692	268	1,240	2,540	1,440	698	641
25	1,190	655	608	301	237	493	282	990	2,740	1,530	641	498
26	1,360	550	538	296	228	420	277	974	2,730	1,530	676	485
27	895	564	486	384	224	365	273	1,070	2,580	1,450	706	557
28	620	958	456	692	282	325	277	1,290	2,370	1,310	754	550
29	853	770	456	872	-----	301	301	1,670	2,290	1,160	834	627
30	648	1,440	409	760	-----	277	306	1,330	2,130	1,130	877	1,130
31	554	-----	432	552	-----	273	-----	1,130	-----	1,070	850	-----
TOTAL	18,353	16,280	39,320	14,446	10,660	10,093	8,135	31,777	72,230	51,280	29,845	21,604
MEAN	592	543	1,258	466	381	326	271	1,025	2,408	1,654	963	720
MAX	1,940	1,440	3,780	872	1,040	1,220	306	2,070	3,650	2,560	1,350	1,310
MIN	203	274	409	296	224	188	246	315	1,600	1,070	641	485
CFSM	5.64	5.17	12.1	4.44	3.63	3.10	2.58	9.76	22.9	15.8	9.17	6.86
IN.	6.50	5.77	13.93	5.12	3.78	3.58	2.88	11.26	25.59	18.17	10.57	7.65
AC-FT	36,400	32,290	77,990	28,650	21,140	20,020	16,140	63,030	143,300	101,700	59,200	42,850

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968														
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1,510	1,810	376	608	540	755	400	727	2,900	1,450	1,230	755		
2	1,580	1,150	444	532	741	1,050	390	606	5,800	1,760	1,250	672		
3	802	910	500	493	1,040	1,000	370	576	2,670	2,060	1,230	606		
4	794	752	444	474	1,300	1,420	370	642	2,110	2,260	1,120	606		
5	770	657	409	432	790	2,190	370	588	1,870	2,150	916	646		
6	1,860	594	376	409	666	1,490	360	522	1,750	1,930	727	672		
7	2,360	692	355	404	600	1,040	345	480	1,640	1,880	660	654		
8	1,570	786	330	382	570	825	320	492	1,450	1,910	660	624		
9	886	850	493	387	540	720	315	594	1,400	1,990	678	612		
10	1,490	1,260	964	365	516	630	365	783	1,510	1,830	811	612		
11	3,360	902	902	345	498	594	420	1,000	1,450	1,830	832	678		
12	1,890	775	608	355	492	708	370	1,000	1,220	2,510	727	727		
13	1,570	752	493	1,130	474	720	325	790	1,070	1,730	678	576		
14	1,290	1,630	438	4,100	438	630	330	734	986	1,800	660	1,790		
15	850	1,740	409	2,520	405	624	325	690	937	1,730	642	1,830		
16	746	1,070	382	1,630	385	606	305	797	986	1,330	600	1,900		
17	676	820	360	1,100	375	546	280	1,050	1,090	1,180	672	2,930		
18	698	738	335	1,040	600	498	280	1,370	1,360	1,120	714	1,630		
19	676	629	315	1,950	1,050	456	270	1,700	1,630	1,300	612	1,060		
20	585	545	282	2,680	979	438	256	2,240	1,460	1,480	636	762		
21	913	500	273	2,380	1,100	426	243	1,740	1,220	1,190	552	624		
22	904	474	444	1,600	1,010	420	243	1,410	1,180	1,000	522	650		
23	886	462	671	1,450	1,430	480	266	1,290	1,290	1,010	752	832		
24	778	493	1,970	1,910	1,480	492	270	1,150	1,480	1,140	972	654		
25	904	462	2,110	1,570	1,010	474	275	1,230	1,880	1,290	1,190	618		
26	714	426	1,790	1,140	818	426	295	1,090	2,560	1,300	1,600	612		
27	2,320	414	1,510	874	734	492	295	1,040	2,960	1,460	1,860	564		
28	1,940	398	1,120	741	714	468	375	1,140	2,050	1,500	1,020	492		
29	1,260	432	828	678	720	534	600	1,210	1,480	1,460	762	462		
30	2,140	382	722	624	-----	462	825	1,070	1,250	1,250	708	462		
31	3,390	-----	650	588	-----	420	-----	993	-----	1,200	714	-----		
TOTAL	42,112	23,505	21,303	34,891	22,015	22,034	10,453	30,744	52,639	49,030	26,707	26,308		
MEAN	1,358	784	687	1,126	759	711	348	992	1,755	1,582	862	877		
MAX	3,390	1,810	2,110	4,100	1,480	2,190	825	2,240	5,800	2,510	1,860	2,930		
MIN	585	362	273	345	375	420	243	480	937	1,000	522	462		
CFSM	12.9	7.47	6.54	10.7	7.23	6.77	3.31	9.45	16.7	15.1	8.35	8.35		
IN.	14.92	8.33	7.55	12.36	7.80	7.81	3.70	10.89	18.65	17.37	9.46	9.32		
AC-FT	83,530	46,620	42,250	69,210	43,670	43,700	20,730	60,980	104,400	97,250	52,970	52,180		
CAL YR 1967	TOTAL 336,990		MEAN 923		MAX 3,650		MIN 188		CFSM 8.79		IN 119.39		AC-FT 668,400	
WTR YR 1968	TOTAL 361,741		MEAN 988		MAX 5,800		MIN 243		CFSM 9.41		IN 128.16		AC-FT 717,500	

12205000 NORTH FORK NOOKSACK RIVER BELOW CASCADE CREEK, NEAR GLACIER, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	426	780	540	290	200	173	852	550	1,790	996	748	465
2	376	840	500	310	190	166	822	520	2,170	1,480	724	546
3	362	876	936	340	200	166	570	490	2,440	1,390	678	505
4	490	630	780	866	200	166	535	575	2,630	1,180	645	495
5	426	555	590	1,720	190	187	545	410	2,720	1,010	623	420
6	560	505	510	972	176	173	535	605	2,580	989	596	380
7	485	465	505	666	173	166	500	905	2,570	1,010	590	425
8	421	565	648	540	223	166	490	1,490	2,590	1,010	590	505
9	398	610	648	500	215	159	520	1,980	2,650	1,240	634	574
10	426	505	732	455	204	159	570	2,110	2,650	1,570	640	606
11	450	1,430	630	416	403	156	575	2,000	2,590	2,130	612	645
12	515	1,380	515	385	367	156	642	1,910	2,490	1,680	590	623
13	505	888	475	376	295	159	798	1,860	2,390	1,110	634	718
14	470	702	490	362	259	162	666	1,790	2,310	856	694	530
15	480	615	475	356	247	198	560	1,490	2,120	790	718	450
16	450	545	460	326	239	227	545	1,360	2,240	772	606	400
17	518	510	416	308	227	360	656	1,260	2,320	772	557	1,490
18	636	951	394	291	219	390	774	1,370	2,340	814	579	2,570
19	530	1,500	358	283	208	320	708	1,640	2,280	874	584	2,380
20	530	1,560	336	275	204	290	590	1,780	2,040	967	816	1,400
21	495	1,360	322	250	201	280	600	1,840	1,680	904	1,020	874
22	525	1,420	308	235	198	280	876	2,040	1,420	898	650	1,770
23	535	1,120	419	230	194	280	1,240	2,370	1,380	1,050	656	3,640
24	1,070	852	792	270	187	270	1,060	2,810	1,630	1,160	694	2,050
25	1,050	678	595	210	184	270	774	2,320	1,240	1,020	724	1,400
26	744	615	470	200	176	290	642	1,980	1,020	772	601	910
27	595	600	408	200	173	350	595	1,770	954	814	606	778
28	1,230	550	340	190	173	390	648	1,640	856	838	662	736
29	1,020	702	300	190	-----	416	672	2,090	826	748	505	672
30	1,670	600	270	190	-----	510	575	2,140	850	730	465	910
31	1,060	-----	280	200	-----	912	-----	1,710	-----	736	455	-----
TOTAL	20,248	24,909	15,442	12,312	6,125	8,347	20,155	48,805	59,766	32,290	19,896	29,867
MEAN	653	830	498	397	219	269	672	1,574	1,992	1,042	642	996
MAX	1,620	1,560	936	1,720	403	912	1,240	2,810	2,720	2,130	1,020	3,640
MIN	362	465	270	190	173	156	490	475	626	730	455	380
CFSM	6.22	7.90	4.76	3.78	2.39	2.56	6.40	15.0	19.0	9.92	6.11	9.49
IN.	7.17	8.82	5.47	4.36	2.17	2.96	7.14	17.29	21.17	11.44	7.05	10.58
AC-FT	40,160	49,410	30,630	24,420	12,150	16,560	39,980	96,800	118,500	64,050	39,460	59,240
CAL YR 1968	TOTAL	335,420	MEAN 916	MAX 5,800	MIN 243	CFSM 8.72	IN 118.03	AC-FT 665,300				
WTR YR 1969	TOTAL	298,162	MEAN 817	MAX 3,640	MIN 156	CFSM 7.78	IN 105.63	AC-FT 591,400				

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	982	395	313	308	358	295	241	263	1,340	760	724	535
2	880	400	295	304	295	304	295	304	2,120	996	838	475
3	594	455	295	291	344	247	220	390	2,760	1,480	856	750
4	590	1,480	295	263	313	259	238	557	2,290	1,830	975	525
5	540	1,360	279	252	295	255	349	662	2,010	1,600	940	635
6	546	1,110	263	248	291	300	618	379	2,180	1,390	850	590
7	702	862	241	287	482	510	408	510	2,080	1,360	808	485
8	1,630	772	255	241	326	344	354	515	1,620	1,440	742	395
9	1,120	656	252	295	362	304	960	590	1,440	1,400	684	331
10	790	574	244	252	410	291	826	500	1,210	1,280	712	304
11	650	546	367	248	470	275	584	450	954	1,130	772	279
12	596	584	606	234	335	308	485	420	934	982	814	238
13	535	540	948	248	662	376	435	415	1,100	928	754	224
14	500	584	1,370	440	623	435	385	385	1,300	916	672	202
15	470	694	862	340	606	440	367	470	1,380	1,080	694	196
16	435	552	628	300	772	430	340	948	1,170	1,290	700	196
17	405	480	546	279	672	367	340	2,160	1,320	1,180	612	606
18	385	440	650	385	562	340	322	862	1,680	1,120	590	874
19	372	430	606	584	495	318	326	772	1,710	1,180	590	684
20	480	460	623	618	460	308	313	718	1,890	1,150	606	420
21	540	485	678	790	425	291	291	760	2,230	960	623	344
22	552	420	689	808	995	283	287	961	1,990	772	667	906
23	525	490	772	996	385	318	291	898	1,800	748	684	579
24	470	450	584	718	367	308	322	1,030	1,640	736	724	415
25	420	405	510	579	349	287	295	1,460	1,540	820	667	358
26	390	372	470	500	340	275	283	1,500	1,760	1,560	606	358
27	420	354	420	450	336	275	267	982	1,740	1,870	574	367
28	390	356	390	390	318	291	255	790	1,360	1,120	562	367
29	376	331	367	367	-----	275	263	684	1,040	874	520	367
30	385	326	358	340	-----	252	255	667	790	778	510	336
31	430	-----	336	376	-----	248	-----	802	-----	730	530	-----
TOTAL	18,200	17,343	15,523	12,685	12,098	9,790	11,155	22,994	48,358	35,440	21,400	13,141
MEAN	587	578	501	409	432	316	372	742	1,612	1,143	697	438
MAX	1,630	1,480	1,370	996	772	480	960	2,160	2,760	1,870	975	906
MIN	372	326	244	234	287	248	220	263	790	730	510	196
CFSM	5.99	5.50	4.77	3.90	4.11	3.01	3.54	7.07	15.4	10.9	6.64	4.17
IN.	6.45	6.14	5.50	4.49	4.29	3.47	3.95	8.15	17.13	12.56	7.45	4.66
AC-FT	36,100	34,400	30,790	25,160	26,000	19,420	22,130	45,610	95,920	70,300	42,840	26,070
CAL YR 1969	TOTAL	280,629	MEAN 791	MAX 3,640	MIN 156	CFSM 7.53	IN 102.26	AC-FT 572,500				
WTR YR 1970	TOTAL	238,327	MEAN 653	MAX 2,760	MIN 106	CFSM 6.22	IN 84.44	AC-FT 472,700				

12207200 NORTH FORK NOOKSACK RIVER NEAR DEMING, WASH.
(Formerly published as Nooksack River near Deming)

LOCATION.--Lat 48°52'24", long 122°08'56", in NW¼NW¼ sec.15, T.39 N., R.5 E., Whatcom County, on left bank 1.0 mile downstream from Coal Creek, 3.6 miles (revised) upstream from confluence with Middle Fork, 4.5 miles northeast of Deming, and at mile 44.1.

DRAINAGE AREA.--282 sq mi.

PERIOD OF RECORD.--September 1964 to September 1970. Formerly published as Nooksack River near Deming.

GAGE.--Water-stage recorder. Altitude of gage is 345 ft (from river-profile map).

AVERAGE DISCHARGE.--6 years, 1,615 cfs (77.77 inches per year, 1,170,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (6,000 cfs, revised), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Nov. 2, 1965	0800	*6,400	5.99	Oct. 27, 1967	2300	11,900	7.75	Sept. 17, 1968	1030	15,200	8.61
Dec. 4, 1965	0200	6,350	5.97	Oct. 31, 1967	1700	10,400	7.40				
Mar. 30, 1966	1600	6,220	5.92	Dec. 24, 1967	1100	8,350	6.80	Dec. 3, 1968	1700	6,450	6.74
				Jan. 14, 1968	1300	12,600	7.94	Jan. 4, 1969	2400	*8,960	7.72
Dec. 13, 1966	1700	8,820	6.95	Jan. 20, 1968	2000	10,800	7.50	Sept. 23, 1969	0800	7,620	7.21
Dec. 16, 1966	0600	*10,100	7.33	Jan. 24, 1968	1030	6,320	6.14				
				June 2, 1968	0930	*17,000	8.96				
Oct. 11, 1967	0600	8,700	6.90	Sept. 15, 1968	2130	6,830	6.31	Nov. 4, 1969	1900	*10,100	8.10

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 1, 1965	417	2.16	1969	Feb. 7, 1969	534	2.92
1967	Oct. 15, 16, 17, 18, 1966	472	2.18	1970	Sept. 15, 16, 1970	334	2.68
1968	Jan. 11, 1968	664	3.08				

Period of record: Maximum discharge, 17,000 cfs June 2, 1968 (gage height, 8.96 ft), from rating curve extended above 6,800 cfs; minimum, 334 cfs Sept. 15, 16, 1970; minimum gage height, 2.13 ft Sept. 29, 1965.

REMARKS.--Records good. Slight regulation by powerplant at Excelsior. No diversion above station. Water-quality records for the water years 1968-70 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	430	2,280	1,120	624	1,030	576	2,840	1,050	1,520	1,780	1,520	698
2	451	3,820	1,740	624	931	536	2,480	1,240	1,520	1,880	1,540	762
3	458	3,290	1,700	592	859	512	2,120	1,740	1,440	2,450	1,610	770
4	572	4,510	4,230	576	859	488	1,980	2,210	1,400	2,440	1,620	828
5	1,200	3,340	2,490	584	1,000	504	2,040	2,770	1,460	2,550	1,460	864
6	3,370	2,280	3,640	1,010	976	552	2,170	4,380	2,080	2,380	1,350	864
7	1,330	1,800	3,450	1,280	940	552	2,290	3,930	2,690	2,410	1,360	794
8	1,270	1,700	2,750	2,020	895	723	2,400	3,420	2,760	2,640	1,380	762
9	1,700	1,570	2,120	1,530	841	2,120	2,360	3,680	2,740	2,740	1,280	810
10	924	1,300	1,790	1,420	760	1,540	2,310	3,290	3,290	2,760	1,220	864
11	710	1,150	1,550	1,460	859	1,150	2,670	2,610	3,340	2,550	1,150	936
12	652	1,010	1,370	1,530	814	1,050	2,170	2,580	2,660	2,430	1,070	936
13	680	935	1,250	3,280	744	1,690	1,840	2,360	2,270	2,570	1,410	882
14	941	1,230	1,130	3,300	704	1,870	2,180	1,930	2,230	2,550	1,300	927
15	1,320	2,490	1,030	2,220	656	1,860	2,280	1,690	2,640	2,570	1,240	909
16	891	2,010	958	1,730	640	1,520	2,140	1,570	3,320	2,580	1,190	810
17	760	1,500	904	1,470	624	1,230	1,910	1,410	3,420	2,340	1,110	828
18	825	1,320	904	1,300	624	1,150	1,720	1,350	2,960	2,150	1,070	1,380
19	1,040	1,820	1,110	1,150	608	1,170	1,560	1,400	2,800	2,170	1,030	954
20	1,260	1,890	1,110	1,050	624	1,010	1,460	1,550	2,440	1,900	981	802
21	1,280	2,120	1,030	967	632	904	1,330	2,230	2,040	1,710	1,000	819
22	1,030	1,920	904	895	624	814	1,260	1,900	2,060	1,840	1,030	981
23	924	1,560	841	886	656	752	1,210	1,550	1,870	1,840	1,080	1,150
24	781	1,300	832	787	648	728	1,200	1,460	1,760	1,740	1,200	945
25	710	1,120	778	752	624	736	1,320	1,840	1,690	1,740	1,260	846
26	740	990	736	728	616	823	1,240	2,810	1,860	1,620	1,150	810
27	672	902	736	886	616	994	1,160	2,920	2,230	1,640	1,270	778
28	1,050	825	744	877	592	1,200	1,110	2,300	3,200	1,760	1,200	837
29	1,710	770	680	1,050	-----	1,710	1,070	2,090	2,610	1,860	936	900
30	2,420	720	664	1,140	-----	4,330	1,040	2,000	1,990	1,800	786	738
31	1,170	-----	640	1,130	-----	3,940	-----	1,690	-----	1,610	706	-----
TOTAL	33,269	53,472	44,931	38,848	20,996	38,734	54,860	68,950	70,290	67,000	37,459	26,184
MEAN	1,073	1,782	1,449	1,253	750	1,249	1,829	2,224	2,343	2,161	1,208	873
MAX	3,370	4,510	4,230	3,300	1,030	4,330	2,840	4,380	3,420	2,760	1,620	1,380
MIN	430	720	640	576	592	488	1,040	1,050	1,400	1,610	706	698
CFSM	3.81	6.32	5.14	4.44	2.66	4.43	6.49	7.89	8.31	7.66	4.28	3.10
IN	4.39	7.05	5.93	5.12	2.77	5.11	7.24	9.10	9.27	8.84	4.94	3.45
AC-FT	65,990	106,100	89,120	77,060	41,650	76,830	108,800	136,800	139,400	132,900	74,300	51,940
CAL YR 1965	TOTAL 547,580			MEAN 1,500	MAX 4,820	MIN 410	CFSM 5.32	IN 72.23	AC-FT 1,086,000			
WTR YR 1966	TOTAL 554,993			MEAN 1,521	MAX 4,510	MIN 430	CFSM 5.39	IN 73.21	AC-FT 1,101,000			

NOOKSACK RIVER BASIN

12207200 NORTH FORK NOOKSACK RIVER NEAR DEMING, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	741	1,160	3,490	1,590	1,540	1,050	847	760	2,730	2,670	1,380	1,330
2	1,010	1,070	2,740	1,400	1,520	891	825	891	4,050	2,930	1,300	1,660
3	696	967	2,000	1,630	2,820	814	825	1,030	4,100	3,210	1,300	1,150
4	664	886	1,680	1,540	4,120	750	858	1,210	3,780	3,110	1,360	1,070
5	688	1,040	1,560	1,380	2,680	720	825	1,360	3,620	2,710	1,340	1,100
6	656	994	1,480	1,260	2,020	700	781	1,500	3,980	2,390	1,300	1,060
7	895	859	1,440	1,200	1,690	670	792	1,690	3,650	2,140	1,470	850
8	1,150	752	1,330	1,670	1,480	902	825	2,020	2,850	2,100	1,330	814
9	744	769	1,220	1,750	1,370	891	847	1,950	2,420	1,930	1,350	796
10	616	744	1,410	1,710	1,310	792	792	1,570	2,390	1,740	1,490	1,420
11	568	664	2,080	2,240	1,240	730	760	1,390	2,340	1,940	1,630	1,920
12	512	1,060	3,350	1,870	1,480	700	814	1,270	2,420	2,400	1,560	1,100
13	504	1,990	6,780	1,690	1,740	652	803	1,210	2,810	2,470	1,520	823
14	488	1,800	4,120	1,740	1,370	634	770	1,230	3,110	2,240	1,480	778
15	480	1,650	4,850	2,890	1,230	643	720	1,480	3,250	2,320	1,520	787
16	472	1,430	8,010	2,220	1,130	935	700	1,980	3,480	1,990	1,500	859
17	480	1,250	5,190	1,820	1,160	1,060	710	2,680	3,950	2,020	1,430	886
18	472	1,140	5,030	1,610	1,180	935	700	2,640	4,150	1,810	1,380	832
19	1,840	1,250	4,600	2,470	1,050	858	730	2,680	4,420	1,660	1,330	866
20	2,300	1,410	4,180	2,420	979	924	730	3,240	5,060	1,800	1,250	1,000
21	1,240	1,210	2,860	2,010	924	935	750	3,730	5,030	1,870	1,330	1,000
22	1,200	1,120	2,260	1,710	858	1,640	730	3,630	4,200	1,650	1,200	990
23	3,830	1,050	1,930	1,510	825	3,040	700	3,130	3,390	1,700	1,120	832
24	3,570	985	1,830	1,360	792	2,180	720	2,390	3,170	1,740	1,000	866
25	2,380	2,000	1,630	1,250	792	1,670	760	1,980	3,450	1,800	886	712
26	2,320	1,540	1,450	1,190	750	1,460	730	1,920	3,820	1,820	913	672
27	1,910	1,500	1,350	1,530	710	1,280	700	2,040	3,700	1,770	970	760
28	1,460	1,930	1,290	2,430	1,040	1,170	710	2,280	3,790	1,660	1,030	796
29	1,670	1,990	1,330	2,380	-----	1,100	720	2,860	3,090	1,830	1,170	922
30	1,500	2,710	1,240	2,190	-----	990	730	2,440	2,870	1,490	1,270	1,460
31	1,280	-----	1,320	1,720	-----	913	-----	2,150	-----	1,440	1,350	-----
TOTAL	38,336	38,720	85,430	55,380	39,800	32,629	22,904	62,331	104,570	63,750	40,459	30,083
MEAN	1,237	1,291	2,756	1,786	1,421	1,053	763	2,011	3,486	2,056	1,305	1,003
MAX	3,830	2,710	8,010	2,890	4,120	3,040	858	3,730	5,060	3,210	1,630	1,920
MIN	472	664	1,220	1,190	710	634	700	760	2,340	1,440	886	672
CFSM	4.39	4.58	9.77	6.33	5.04	3.73	2.71	7.13	12.4	7.29	4.63	3.56
IN.	5.06	5.11	11.27	7.31	5.25	4.30	3.02	8.22	13.79	8.41	5.34	3.97
AC-FT	76,040	76,800	169,500	109,800	78,940	64,720	45,430	123,600	207,400	126,400	80,250	59,670

CAL YR 1966 TOTAL 585,807 MEAN 1,605 MAX 8,010 MIN 472 CFSM 5.69 IN 77.28 AC-FT 1,162,000
WTR YR 1967 TOTAL 614,392 MEAN 1,603 MAX 8,010 MIN 472 CFSM 5.97 IN 81.05 AC-FT 1,219,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,980	4,620	859	1,380	1,080	1,760	1,260	1,690	4,680	1,890	1,900	1,380
2	2,570	3,050	1,030	1,210	1,330	2,040	1,170	1,330	13,000	2,270	1,930	1,280
3	1,430	2,360	1,130	1,110	2,240	2,040	1,120	1,270	5,840	2,910	1,930	1,100
4	1,400	1,990	1,020	1,030	3,370	2,590	1,120	1,420	3,310	3,350	1,830	1,070
5	1,170	1,720	940	931	2,000	4,380	1,120	1,350	2,690	3,290	1,610	1,150
6	1,750	1,590	869	868	1,630	3,190	1,070	1,250	2,530	3,010	1,370	1,210
7	3,270	1,600	823	832	1,460	2,360	1,010	1,150	2,390	2,910	1,210	1,170
8	2,380	1,420	769	787	1,320	1,930	960	1,160	2,090	2,970	1,180	1,090
9	1,600	1,780	1,520	832	1,240	1,720	922	1,300	1,970	3,230	1,210	1,090
10	2,250	2,320	3,290	787	1,170	1,550	1,010	1,680	2,060	2,790	1,400	1,070
11	7,430	1,960	3,050	712	1,120	1,440	1,170	1,960	2,060	2,790	1,490	1,160
12	4,520	1,600	1,770	728	1,080	1,690	1,040	2,080	1,850	4,370	1,340	1,350
13	3,420	1,500	1,380	2,950	1,050	1,720	960	1,660	1,680	2,870	1,270	1,030
14	3,440	2,640	1,210	8,690	990	1,480	1,040	1,700	1,560	3,220	1,170	2,920
15	2,160	3,330	1,090	5,990	931	1,470	1,080	1,440	1,460	3,450	1,170	4,310
16	1,770	2,340	1,010	3,250	886	1,550	990	1,530	1,520	2,440	1,090	4,400
17	1,500	1,820	931	2,210	868	1,420	922	1,870	1,590	2,120	1,150	9,160
18	1,580	1,640	877	2,270	1,660	1,270	913	2,300	1,830	1,990	1,280	4,110
19	1,640	1,460	796	6,690	3,780	1,160	904	2,950	2,210	2,120	1,100	2,160
20	1,350	1,300	728	7,070	3,480	1,120	859	4,300	2,060	2,550	1,140	1,590
21	2,520	1,200	728	6,080	3,170	1,090	823	3,150	1,850	2,100	1,010	1,320
22	2,530	1,130	1,390	3,450	3,030	1,060	805	2,470	1,740	1,820	980	1,260
23	2,590	1,080	2,000	2,870	3,850	1,090	913	2,280	1,810	1,800	1,130	1,800
24	2,030	1,160	7,100	4,850	3,980	1,180	895	2,080	1,970	1,890	1,690	1,380
25	2,390	1,020	6,950	3,050	2,750	1,130	931	2,120	2,380	2,080	1,630	1,260
26	1,860	931	4,760	2,200	2,240	1,080	970	1,960	2,960	2,090	3,090	1,210
27	4,980	904	3,720	1,760	1,970	1,740	950	1,850	4,420	2,220	3,250	1,110
28	6,450	886	3,090	1,520	1,820	1,680	1,040	2,030	3,310	2,380	1,960	980
29	3,680	1,030	2,200	1,370	1,740	1,960	1,460	2,060	2,220	2,270	1,520	940
30	4,970	913	1,780	1,280	-----	1,630	1,890	1,900	1,780	2,080	1,350	913
31	7,290	-----	1,540	1,200	-----	1,380	-----	1,740	-----	1,890	1,340	-----
TOTAL	89,900	52,494	60,349	79,957	57,235	52,900	31,317	59,030	82,820	79,160	46,720	55,973
MEAN	2,900	1,750	1,947	2,579	1,974	1,706	1,044	1,904	2,761	2,554	1,507	1,866
MAX	7,430	4,820	7,100	8,690	3,980	4,380	1,890	4,300	13,000	4,370	3,250	9,160
MIN	1,170	886	728	712	868	1,060	805	1,150	1,460	1,800	980	913
CFSM	10.3	6.21	6.90	9.15	7.00	6.05	3.70	6.75	9.79	9.06	5.34	6.62
IN.	11.86	6.92	7.96	10.55	7.55	6.98	4.13	7.79	10.93	10.44	6.16	7.38
AC-FT	178,300	104,100	119,700	158,600	113,500	104,900	62,120	117,100	164,300	157,000	92,670	111,000

CAL YR 1967 TOTAL 654,649 MEAN 1,794 MAX 7,430 MIN 634 CFSM 6.36 IN 86.36 AC-FT 1,298,000
WTR YR 1968 TOTAL 747,855 MEAN 2,043 MAX 13,000 MIN 712 CFSM 7.24 IN 98.65 AC-FT 1,483,000

12207200 NORTH FORK NOOKSACK RIVER NEAR DEMING, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	832	1,700	1,620	880	560	562	1,990	1,390	2,920	1,570	1,240	796
2	760	1,690	1,540	1,040	590	562	1,940	1,330	3,430	2,050	1,210	884
3	728	1,910	3,820	1,080	590	569	1,520	1,250	3,850	2,050	1,140	892
4	922	1,510	2,980	3,990	625	576	1,480	1,190	4,210	1,920	1,090	852
5	841	1,340	2,150	5,730	604	708	1,580	1,200	4,230	1,640	1,050	780
6	1,260	1,270	1,740	2,860	562	772	1,520	1,360	4,030	1,600	1,010	676
7	1,290	1,160	1,610	2,150	541	700	1,370	1,740	3,890	1,610	1,010	732
8	1,070	1,370	2,260	1,850	639	668	1,310	2,760	3,970	1,620	972	828
9	990	1,570	2,020	1,680	692	632	1,340	3,670	4,030	1,840	1,060	963
10	1,040	1,320	2,090	1,500	639	611	1,450	4,130	3,990	2,170	1,090	1,040
11	1,110	2,280	2,010	1,380	1,110	597	1,420	3,610	3,870	3,170	1,040	1,110
12	1,290	2,660	1,640	1,260	1,120	590	1,540	3,630	3,650	2,500	990	1,090
13	1,240	1,960	1,460	1,190	918	576	1,870	3,510	3,350	1,780	1,060	1,240
14	1,140	1,640	1,480	1,130	820	576	1,570	3,410	3,290	1,500	1,170	972
15	1,260	1,560	1,420	1,060	780	868	1,350	3,040	3,040	1,380	1,260	804
16	1,160	1,390	1,600	1,010	764	981	1,300	2,690	3,110	1,340	1,100	716
17	1,220	1,310	1,260	963	748	1,390	1,510	2,540	3,230	1,330	963	1,730
18	1,660	2,010	1,210	909	716	1,510	1,890	2,700	3,240	1,370	1,020	3,260
19	1,500	2,920	1,090	884	692	1,250	1,780	3,170	3,220	1,440	1,020	3,080
20	1,750	3,120	1,010	852	653	1,120	1,600	3,400	2,930	1,480	1,190	2,080
21	1,440	2,820	963	796	646	1,040	1,540	3,410	2,460	1,440	1,600	1,480
22	1,480	3,430	936	748	618	1,040	1,880	3,750	2,130	1,440	1,150	2,560
23	1,360	2,760	1,260	690	604	1,030	2,450	4,330	2,030	1,610	1,120	6,390
24	1,990	2,190	2,570	660	604	954	2,240	5,190	2,510	1,680	1,210	4,080
25	2,090	1,850	2,020	630	597	927	1,750	4,070	1,960	1,520	1,190	2,820
26	1,720	1,670	1,580	600	576	990	1,510	3,240	1,700	1,320	1,040	1,920
27	1,390	1,730	1,310	580	562	1,150	1,400	2,920	1,640	1,350	1,040	1,540
28	2,000	1,570	1,060	560	555	1,170	1,520	3,510	1,550	1,380	1,190	1,440
29	2,690	2,020	910	550	-----	1,180	1,690	3,710	1,460	1,260	884	1,270
30	3,100	1,850	870	550	-----	1,350	1,480	4,070	1,460	1,250	788	1,640
31	2,190	-----	840	550	-----	2,170	-----	2,960	-----	1,260	772	-----
TOTAL	44,513	57,580	50,129	40,312	19,125	28,819	48,790	93,080	90,380	50,870	33,669	49,665
MEAN	1,436	1,919	1,617	1,300	683	930	1,626	3,003	3,013	1,641	1,086	1,656
MAX	3,100	3,430	3,820	5,730	1,120	2,170	2,450	5,190	4,230	3,170	1,600	6,390
MIN	728	1,160	840	550	541	562	1,300	1,190	1,460	1,250	772	676
CFSM	5.0 ^c	6.81	5.73	4.61	2.42	3.30	5.77	10.6	10.7	5.82	3.85	5.87
IN-	5.87	7.60	6.61	5.32	2.52	3.80	6.44	12.28	11.92	6.71	4.44	6.55
AC-FT	88,290	114,200	99,430	79,960	37,930	57,160	96,770	184,600	179,300	100,900	66,780	98,510

CAL YR 1968 TOTAL 697,334 MEAN 1,905 MAX 13,000 MIN 712 CFSM 6.76 IN 91.99 AC-FT 1,383,000
WTR YR 1969 TOTAL 606,932 MEAN 1,663 MAX 6,390 MIN 541 CFSM 5.90 IN 80.06 AC-FT 1,204,000

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,820	748	780	820	1,240	760	584	780	2,090	1,240	1,150	790
2	1,720	732	730	770	1,130	720	566	800	3,110	1,360	1,230	720
3	1,380	876	710	740	1,140	680	539	975	4,090	1,840	1,260	1,160
4	1,180	4,150	780	660	1,020	640	740	1,300	3,520	2,330	1,370	1,030
5	1,040	3,130	680	640	931	660	1,380	1,580	2,960	2,170	1,350	790
6	1,020	2,500	640	620	890	710	2,430	1,350	3,140	1,880	1,240	1,420
7	1,300	2,090	584	584	880	1,170	1,610	1,160	3,000	1,810	1,210	1,160
8	2,540	1,830	670	575	975	890	1,330	1,180	2,400	1,910	1,060	890
9	2,290	1,640	690	780	1,080	770	3,000	1,470	2,140	1,880	900	740
10	1,680	1,440	620	670	1,180	710	2,730	1,180	1,950	1,770	942	640
11	1,330	1,330	817	650	1,240	670	1,960	1,030	1,590	1,610	1,050	575
12	1,170	1,380	1,390	650	1,350	700	1,600	964	1,480	1,460	1,120	476
13	1,030	1,270	1,640	660	1,760	850	1,380	964	1,690	1,390	1,060	422
14	936	1,270	3,060	1,680	1,670	1,030	1,230	890	1,930	1,370	910	395
15	868	1,520	2,340	1,310	1,660	1,140	1,130	1,030	2,050	1,480	953	368
16	812	1,320	1,710	1,010	2,060	1,260	1,030	1,720	1,780	1,690	997	350
17	772	1,160	1,460	880	2,030	1,130	975	2,420	1,810	1,570	840	850
18	724	1,110	1,590	1,240	1,710	900	931	1,770	2,280	1,510	780	1,580
19	692	1,030	1,520	1,910	1,470	830	920	1,610	2,410	1,610	800	1,570
20	820	1,140	1,520	2,240	1,340	790	910	1,480	2,520	1,590	830	997
21	1,040	1,270	1,790	2,580	1,230	740	840	1,490	2,920	1,400	870	770
22	972	1,100	1,710	2,660	1,140	700	800	1,720	2,720	1,160	975	1,620
23	1,020	1,420	1,960	2,730	1,060	820	850	1,710	2,420	1,120	1,050	1,450
24	909	1,340	1,640	2,190	1,010	890	1,010	1,830	2,230	1,100	1,120	1,010
25	836	1,140	1,400	1,880	953	770	920	2,340	2,050	1,160	1,080	820
26	772	1,030	1,290	1,670	900	720	850	2,590	2,300	1,860	900	790
27	820	953	1,160	1,540	870	690	810	1,900	2,560	2,470	850	790
28	780	890	1,050	1,340	810	720	790	1,580	2,050	1,700	840	770
29	732	850	986	1,220	-----	670	780	1,420	1,690	1,350	760	760
30	724	830	920	1,120	-----	620	750	1,340	1,380	1,250	750	690
31	796	-----	880	1,250	-----	593	-----	1,450	-----	1,100	740	-----
TOTAL	34,525	42,489	38,717	39,269	34,729	24,943	35,375	45,023	70,260	49,140	30,987	26,393
MEAN	1,114	1,416	1,249	1,267	1,240	805	1,179	1,452	2,342	1,585	1,000	880
MAX	2,540	4,150	3,060	2,730	2,060	1,260	3,000	2,590	4,090	2,470	1,370	1,620
MIN	692	732	584	575	810	593	539	780	1,380	1,100	740	350
CFSM	3.95	5.02	4.43	4.49	4.40	2.95	4.18	5.15	8.31	5.62	3.55	3.12
IN-	4.55	5.60	5.11	5.18	4.58	3.29	4.67	5.94	9.47	6.48	4.09	3.68
AC-FT	68,480	84,280	76,800	77,890	68,880	49,470	70,170	89,300	139,400	97,470	61,460	52,350

CAL YR 1969 TOTAL 570,441 MEAN 1,563 MAX 6,390 MIN 541 CFSM 5.54 IN 75.25 AC-FT 1,131,000
WTR YR 1970 TOTAL 471,850 MEAN 1,293 MAX 4,150 MIN 350 CFSM 4.59 IN 62.24 AC-FT 935,900

NOOKSACK RIVER BASIN

12208000 MIDDLE FORK NOOKSACK RIVER NEAR DEMING, WASH.

LOCATION.--Lat 48°46'43", long 122°06'20", in lot 7 or 8, in SW¼ sec.13, T.38 N., R.5 E., Whatcom County, on left bank 0.5 mile upstream from Heislens Creek, 6.0 miles southeast of Deming, and at mile 5.6.

DRAINAGE AREA.--73.3 sq mi. Area at site 1910-11, 1920-21, 1954, 75.4 sq mi.

PERIOD OF RECORD.--October 1910 to March 1911 (fragmentary gage heights and discharge measurements only), August 1920 to September 1921, February 1934 to September 1935, June to October 1954, October 1964 to November 1968, July 1969 to July 1970 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 580 ft (from river-profile map). See WSP 1932 for history of changes prior to Oct. 1, 1935.

AVERAGE DISCHARGE.--6 years (1920-21, 1934-35, 1964-68), 521 cfs (377,200 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (3,800 cfs, revised), October 1966 to November 1968, July 1969 to July 1970

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1965	0600	4,450	8.19	Oct. 11, 1967	0350	5,700	8.68	June 2, 1968	0800	5,000	8.41
Nov. 2, 1965	0500	4,180	8.08	Oct. 27, 1967	1900	6,980	9.11	Sept. 17, 1968	0830	*7,250	9.20
Dec. 3, 1965	2330	*5,230	8.50	Oct. 31, 1967	1230	3,820	7.93				
				Dec. 24, 1967	0400	5,750	8.70	Sept. 23, 1969	0300	4,850	8.40
Dec. 13, 1966	0800	4,010	8.08	Jan. 14, 1968	-	6,710	9.02				
Dec. 16, 1966	0400	*4,160	8.14	Jan. 20, 1968a	-	3,850	7.94	Nov. 4, 1969	1500	7,250	9.20

a About.

Annual minimum discharge, October 1966 to November 1968, July 1969 to July 1970

Ntr yr	Date	Disch.	G.H.	Ntr yr	Date	Disch.	G.H.
1966	Oct. 3, 1965	30	4.04	1969	Sept. 16, 1969	103	4.26
1967	Oct. 17, 18, 1966	90	4.35	1970	Oct. 19, 1969	134	-
1968	Aug. 22, 1968	111	4.05				

Period of record: Maximum discharge not determined, probably occurred Nov. 5, 1934 (gage height, 15.0 ft, from floodmarks, present site and datum); minimum, 30 cfs Oct. 3, 1965 (gage height, 4.04 ft).

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Since February 1962, the city of Bellingham diverts up to about 100 cfs at times at dam, about 1.8 miles upstream, for municipal use. No regulation.

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REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	784	833	175	296	128	1,130	500	376	388	368	122
2	32	1,680	945	172	252	122	1,000	680	410	520	372	124
3	33	1,340	1,330	168	231	120	796	970	376	796	400	132
4	207	1,440	1,750	162	255	116	769	1,090	380	673	384	165
5	525	1,260	1,050	212	368	120	877	1,270	475	666	348	170
6	1,570	712	1,520	617	348	132	970	1,360	736	598	336	155
7	466	528	1,350	624	288	132	1,010	1,140	832	598	356	134
8	563	455	931	1,010	255	193	1,010	1,040	769	638	332	132
9	590	340	915	218	680	96.0	1,080	704	652	310	146	
10	320	273	485	455	205	306	940	832	1,060	645	282	158
11	247	247	396	470	220	220	1,060	631	895	610	231	212
12	258	212	348	499	200	215	760	728	680	556	202	162
13	288	205	310	1,270	185	732	624	596	586	580	495	138
14	618	429	276	1,110	178	659	986	455	631	574	372	162
15	735	1,200	258	586	162	666	990	430	796	562	340	158
16	387	670	240	415	165	372	850	435	940	562	282	132
17	336	374	231	348	144	255	696	356	841	490	240	162
18	400	320	246	302	130	249	598	340	688	470	237	368
19	460	737	340	270	128	249	540	410	696	475	228	182
20	445	642	313	246	136	212	520	525	545	388	218	148
21	316	860	285	231	140	192	510	769	475	384	225	172
22	243	670	237	220	150	182	510	545	568	415	225	231
23	215	369	228	215	165	190	495	430	480	392	234	276
24	186	273	220	192	152	169	495	430	465	368	282	188
25	176	222	208	192	144	132	610	659	445	448	288	144
26	170	202	195	195	142	222	550	913	480	405	225	140
27	167	205	210	264	140	320	500	736	545	396	321	138
28	268	202	225	261	134	440	475	525	720	420	269	168
29	525	239	200	460	-----	746	465	525	505	435	161	185
30	592	288	188	440	-----	1,990	470	510	415	410	130	146
31	258	-----	180	368	-----	1,420	-----	405	-----	384	122	-----
TOTAL	11,669	17,378	16,138	12,664	5,541	11,879	22,166	21,317	18,514	15,898	8,815	5,050
MEAN	376	579	521	409	198	383	739	688	617	513	284	166
MAX	1,570	1,680	1,750	1,270	368	1,990	1,130	1,360	1,060	796	495	388
MIN	32	202	160	162	128	116	465	340	376	368	122	122
CFSM	5.13	7.90	7.11	5.58	2.70	5.23	10.1	9.39	8.42	7.00	3.87	2.29
IN.	5.92	8.82	8.19	6.43	2.61	6.03	11.25	10.82	9.40	8.07	4.47	2.56
AC-FT	23,150	34,470	32,010	25,120	10,990	23,560	43,970	42,280	36,720	31,530	17,480	10,020
CAL YR 1965	TOTAL 144,162	MEAN 450	MAX 2,130	MIN 32	CFSM 6.14	IN 83.31	AC-FT 325,600					
WTR YR 1966	TOTAL 167,029	MEAN 458	MAX 1,990	MIN 32	CFSM 6.25	IN 84.77	AC-FT 331,300					

12208000 MIDDLE FORK NOOKSACK RIVER NEAR DEMING, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	223	299	1,220	486	348	310	124	132	988	580	249	283
2	283	270	922	378	360	252	126	180	1,290	673	249	338
3	152	213	659	533	1,120	225	138	205	1,160	712	249	220
4	146	144	645	396	1,500	212	152	261	1,060	638	261	220
5	144	259	490	316	796	205	136	348	1,110	525	249	234
6	138	220	490	282	530	205	128	410	1,120	450	243	210
7	171	175	388	267	430	198	140	510	913	392	360	150
8	414	144	302	449	368	249	146	720	680	420	267	146
9	162	162	264	500	360	240	142	562	598	348	285	134
10	120	170	521	564	364	208	128	364	592	324	313	454
11	107	138	1,010	738	340	190	128	310	580	449	316	468
12	100	427	1,260	475	434	182	136	285	680	556	296	292
13	96	458	2,710	415	425	175	128	276	877	510	285	201
14	95	883	1,280	672	316	170	122	306	950	420	276	155
15	93	645	1,500	1,130	285	188	116	505	1,010	392	292	172
16	93	450	2,430	550	264	380	114	805	1,080	400	282	188
17	93	324	1,430	384	325	340	118	1,040	1,200	392	267	190
18	93	282	1,300	316	324	267	112	886	1,160	328	249	170
19	860	452	1,350	732	273	234	114	922	1,270	299	243	220
20	778	389	1,180	610	249	246	118	1,140	1,330	445	231	231
21	392	299	728	425	234	205	128	1,300	1,220	380	270	212
22	528	270	550	324	222	696	122	1,170	1,110	328	220	165
23	1,540	270	460	282	215	1,210	116	868	859	336	195	142
24	1,110	249	460	252	215	506	130	550	841	344	158	152
25	704	987	400	231	237	296	150	445	931	352	146	146
26	688	427	344	231	222	234	130	500	904	348	162	144
27	562	348	313	434	212	195	116	610	859	328	182	178
28	410	590	302	980	355	168	116	769	696	302	200	160
29	526	400	348	985	-----	148	116	913	631	279	234	206
30	410	1,060	313	694	-----	136	114	604	574	270	258	453
31	328	-----	393	435	-----	126	-----	530	-----	261	270	-----
TOTAL	11,559	11,494	25,962	15,466	11,323	8,596	3,804	18,426	28,273	12,781	7,757	6,634
MEAN	373	383	837	499	404	277	127	594	942	412	250	221
MAX	1,540	1,060	2,710	1,130	1,500	1,210	152	1,300	1,330	712	360	468
MIN	93	138	264	231	212	126	112	132	574	261	146	134
CFSM	549	523	11.4	6.81	5.51	3.78	1.73	8.10	12.9	5.62	3.41	5.02
IN-	5.87	5.83	13.18	7.85	5.75	4.36	1.93	9.35	14.35	6.49	3.94	3.35
AC-FT	22,930	22,800	51,500	30,680	22,460	17,050	7,550	36,550	56,080	25,350	15,390	13,160

CAL YR 1966 TOTAL 170,859 MEAN 468 MAX 2,710 MIN 93 CFSM 6.38 IN 86.71 AC-FT 338,900
 MTR YR 1967 TOTAL 162,075 MEAN 444 MAX 2,710 MIN 93 CFSM 6.06 IN 82.25 AC-FT 321,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,190	994	238	438	310	555	313	560	1,310	514	430	361
2	1,230	367	347	375	400	325	415	320	3,200	610	426	319
3	673	522	400	350	780	605	298	406	1,600	724	422	292
4	490	422	295	334	1,200	963	325	506	1,000	714	382	292
5	310	364	271	310	800	1,270	331	442	900	666	347	319
6	665	331	228	289	500	848	313	403	760	620	298	319
7	1,680	208	265	283	450	304	384	306	700	555	262	301
8	768	486	190	274	380	474	277	406	640	535	262	289
9	384	678	648	304	350	403	280	486	560	580	250	295
10	876	1,120	1,420	283	330	361	340	636	540	514	218	283
11	2,890	610	898	253	310	358	422	714	560	540	230	286
12	1,260	470	454	280	300	605	316	775	500	799	185	220
13	1,410	414	344	1,750	290	518	274	454	490	430	178	178
14	1,310	996	295	4,600	270	422	313	434	410	784	178	878
15	696	1,100	265	3,000	250	450	322	406	380	970	178	1,730
16	515	778	245	1,100	242	474	274	474	390	600	139	1,280
17	405	506	222	800	248	406	250	642	410	474	170	3,380
18	591	442	208	700	1,010	337	240	757	450	430	225	1,110
19	590	361	195	1,500	1,790	301	230	962	500	536	157	690
20	392	316	180	2,900	1,280	292	220	1,350	540	660	225	502
21	1,340	283	202	1,500	1,280	289	210	841	510	498	137	426
22	1,140	644	1,000	904	1,010	301	218	625	430	410	121	442
23	940	271	960	820	1,590	364	307	530	490	403	274	752
24	704	396	3,800	1,300	1,230	375	286	454	460	430	353	486
25	832	283	3,300	840	778	344	325	438	500	454	476	434
26	515	245	1,600	600	610	307	325	396	1,100	454	494	422
27	2,890	274	1,350	500	568	322	320	1,170	502	968	320	320
28	1,590	235	1,100	420	516	482	479	550	799	510	496	228
29	890	307	744	370	526	660	696	418	526	498	382	225
30	1,460	250	575	350	-----	418	785	358	438	450	364	208
31	1,890	-----	486	320	-----	334	-----	328	-----	430	350	-----
TOTAL	32,516	14,738	22,314	28,143	19,572	15,375	9,920	16,807	22,213	17,316	10,027	17,287
MEAN	1,049	491	720	908	675	496	331	542	740	559	323	576
MAX	2,890	1,120	3,800	4,600	1,790	1,270	785	1,350	3,200	970	968	3,380
MIN	310	235	180	253	242	289	210	328	380	403	121	178
CFSM	14.3	6.70	9.82	12.4	9.21	6.77	4.52	7.39	10.2	7.63	4.41	7.86
IN-	16.50	7.48	11.32	14.28	9.93	7.80	5.03	8.53	11.27	8.79	5.09	8.77
AC-FT	64,500	29,230	44,260	55,820	38,820	30,500	19,680	33,340	44,060	34,350	19,890	34,290
CAL YR 1967 TOTAL 182,628 MEAN 500 MAX 3,800 MIN 112 CFSM 6.82 IN 92.68 AC-FT 362,200												
MTR YR 1968 TOTAL 226,228 MEAN 618 MAX 4,600 MIN 121 CFSM 8.43 IN 114.81 AC-FT 448,700												

NOTE.--NO GAGE-HEIGHT RECORD JAN. 14 TO FEB. 15.

NOOKSACK RIVER BASIN

12208000 MIDDLE FORK NOOKSACK RIVER NEAR DEMING, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER TO NOVEMBER 1968, JULY TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	350								350	215	130
2	152	478								450	198	145
3	146	579								450	183	132
4	266	344								400	175	151
5	188	274								350	190	126
6	612	235								300	163	118
7	526	222								310	157	121
8	347	439								330	145	141
9	289	540								400	177	216
10	340	340								600	173	248
11	410	1,020								900	155	220
12	502	771								500	155	190
13	466	486								350	179	227
14	410	361								250	218	149
15	578	301								230	228	136
16	442	248								220	169	123
17	616	230								235	147	681
18	673	912								245	171	1,040
19	750	1,010								268	173	930
20	835	1,330								280	185	626
21	555	1,160								252	232	440
22	625	1,240								270	177	1,290
23	522	841								328	188	2,700
24	750	550								325	220	1,410
25	720	414								268	218	820
26	502	320								218	165	530
27	422	400								252	175	452
28	569	350								245	203	432
29	758	550			-----					220	136	322
30	1,090	400			-----					222	119	506
31	572	-----			-----					232	118	-----
TOTAL	15,811	16,695								10,250	5,587	14,752
MEAN	510	557								331	180	492
MAX	1,090	1,330								900	203	2,700
MIN	146	222								218	118	118
CFSM	6.96	7.40								4.52	2.46	6.71
IN.	8.02	8.47								5.26	2.84	7.49
AC-FT	31,360	33,110								20,330	11,080	29,260

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1969 TO JULY 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	593	171	240	250	500	202	170	173	716	185		
2	492	161	235	240	440	192	175	242	1,140	284		
3	361	252	230	225	420	181	160	342	1,360	481		
4	280	2,510	290	210	370	175	215	545	903	565		
5	242	1,240	265	195	330	169	823	535	829	448		
6	225	1,250	250	195	310	244	1,240	346	930	358		
7	270	767	230	190	300	611	376	260	707	372		
8	1,090	590	240	180	380	272	260	328	508	416		
9	892	472	300	210	460	230	2,210	470	492	370		
10	500	582	285	200	480	208	1,090	292	439	328		
11	355	358	290	210	510	202	620	225	298	285		
12	288	394	560	200	540	275	472	192	294	255		
13	242	349	640	220	804	300	388	185	382	242		
14	208	367	1,300	1,100	626	564	349	181	444	240		
15	181	440	800	800	626	488	325	327	444	292		
16	165	349	600	400	1,050	537	302	730	358	325		
17	155	300	500	330	748	328	290	763	430	268		
18	145	282	530	580	492	275	290	440	579	272		
19	137	280	500	950	376	232	305	408	564	298		
20	205	334	480	960	334	205	316	355	653	272		
21	242	412	600	1,000	316	183	230	343	788	200		
22	222	310	580	990	295	171	159	504	615	150		
23	210	385	660	900	280	232	217	472	530	140		
24	225	375	580	800	262	245	328	510	459	140		
25	188	345	500	700	252	188	222	828	462	150		
26	159	310	430	610	250	175	175	720	555	400		
27	215	290	370	580	238	175	155	432	565	600		
28	173	270	330	500	218	180	155	331	474	450		
29	157	260	300	420	-----	185	161	295	290	300		
30	153	255	280	380	-----	160	153	285	228	310		
31	210	-----	260	460	-----	155	-----	358	-----	250		-----
TOTAL	9,180	14,460	13,655	15,185	12,207	7,919	12,331	12,417	17,436	9,646		
MEAN	296	482	440	490	436	255	411	401	581	311		
MAX	1,090	2,510	1,300	1,100	1,050	611	2,210	828	1,360	600		
MIN	137	161	230	180	218	155	153	173	228	140		
CFSM	4.04	6.58	6.00	6.68	5.95	3.48	5.61	5.47	7.93	4.24		
IN.	4.66	7.34	6.93	7.71	6.20	4.02	6.26	6.30	8.85	4.90		
AC-FT	18,210	28,680	27,080	30,120	24,210	15,710	24,460	24,630	34,580	19,130		

NOTE.--NO GAGE-HEIGHT RECORD NOV. 23 TO FEB. 12.

12209000 SOUTH FORK NOOKSACK RIVER NEAR WICKERSHAM, WASH.

LOCATION.--Lat 48°39'52", long 122°07'56", in lot 2, SW¼SW¼ sec.26, T.37 N., R.5 E., Whatcom County, on left bank 0.5 mile upstream from Skookum Creek, 3.7 miles east of Wickersham, and at mile 14.8.

DRAINAGE AREA.--103 sq mi.

PERIOD OF RECORD.--October 1933 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 385 ft (from river-profile map). Prior to July 9, 1934, nonre-cording gage at present site and datum.

AVERAGE DISCHARGE.--37 years, 735 cfs (96.91 inches per year, 532,500 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (5,200 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1965	0445	*6,550	8.04	Oct. 2, 1967	0330	8,010	8.73	Sept. 17, 1968	0830	8,210	8.82
Nov. 2, 1965	0515	5,850	7.68	Oct. 13, 1967	2130	6,630	8.08				
				Oct. 27, 1967	2030	*13,300	10.78	Dec. 3, 1968	1400	*7,500	8.50
Dec. 13, 1966	1600	*9,470	9.36	Dec. 25, 1967	0830	7,180	8.35	Jan. 4, 1969	-	7,310	8.41
Dec. 16, 1966	0300	7,570	8.53	Jan. 20, 1968	1800	5,980	7.75				
Feb. 4, 1967	-	5,270	7.36	June 2, 1968	0730	5,590	7.54	Nov. 4, 1969	1700	*7,720	8.60
								Apr. 9, 1970	1300	7,160	8.34

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 1965	95	1.93	1969	Sept. 12, 1969	106	1.99
1967	Sept. 27-29, 1967	93	1.90	1970	Aug. 31 to Sept. 3, 1970	84	1.87
1968	Aug. 13, 14, 1968	123	2.07				

Period of record: Maximum discharge, 19,300 cfs Nov. 3, 1955 (gage height, 13.40 ft), from rating curve extended above 11,000 cfs; minimum, 66 cfs Oct. 9, 1940, Sept. 11-13, 1944; minimum gage height, 1.87 ft Aug. 31 to Sept. 3, 1970.

REMARKS.--Records excellent except those for periods of no gage-height record, which are fair.

REVISIONS (WATER YEARS).--WSP 832: 1935-36.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	1,220	2,000	290	612	372	1,300	630	666	515	290	136
2	98	2,610	1,500	270	505	322	1,180	932	726	684	286	129
3	97	1,320	1,700	260	456	304	953	1,290	672	1,100	286	127
4	154	2,350	2,500	240	505	283	932	1,480	684	1,080	276	125
5	904	2,340	1,500	500	548	286	1,060	1,810	785	862	249	123
6	3,010	1,100	2,500	1,200	630	345	1,180	2,450	1,140	799	236	121
7	640	785	2,200	1,700	582	380	1,260	2,010	1,200	750	233	118
8	456	684	1,500	2,100	512	557	1,270	1,730	1,140	778	230	114
9	606	642	1,100	1,500	470	1,900	1,170	1,760	1,080	750	208	112
10	376	554	800	900	430	1,060	1,280	1,320	1,390	684	205	112
11	304	526	700	850	485	690	1,290	1,080	1,320	636	208	170
12	304	452	600	1,400	429	618	953	1,270	1,050	594	183	174
13	412	408	520	2,700	380	1,340	750	1,130	876	594	350	149
14	857	702	470	1,500	353	1,310	1,150	855	904	559	283	129
15	1,620	1,340	430	1,000	319	1,290	1,050	925	1,100	542	230	125
16	678	1,000	400	800	315	1,000	960	1,060	1,230	559	205	118
17	505	680	360	650	330	764	827	792	1,060	490	180	121
18	841	900	360	588	349	690	738	726	862	452	174	265
19	960	1,800	380	510	341	708	678	799	897	460	164	180
20	792	1,600	450	460	400	582	654	939	757	396	154	147
21	636	1,650	400	420	442	505	650	1,270	648	364	150	129
22	500	1,400	350	392	434	452	690	976	799	394	147	123
23	424	850	320	392	475	420	684	764	684	372	145	140
24	364	650	320	349	438	412	666	799	618	360	143	157
25	326	580	300	337	416	427	792	1,140	600	537	145	138
26	297	580	280	334	424	564	720	1,370	648	460	143	150
27	590	580	330	470	429	738	630	1,110	636	390	232	152
28	640	550	380	470	388	883	588	883	376	276	140	140
29	515	500	300	813	-----	1,210	588	890	672	360	183	152
30	841	500	310	897	-----	2,790	594	876	548	334	160	134
31	475	-----	280	778	-----	1,900	-----	708	-----	304	147	-----
TOTAL	19,064	30,853	25,540	25,070	12,397	25,102	27,237	35,774	26,285	17,515	6,501	4,206
MEAN	615	1,028	824	809	443	810	908	1,154	876	565	210	140
MAX	3,010	2,610	2,500	2,700	630	2,790	1,300	2,450	1,390	1,100	350	265
MIN	97	408	280	240	315	283	588	630	548	304	143	112
CFSM	5.97	9.98	8.00	7.85	4.30	7.86	8.82	11.2	8.50	5.49	2.04	1.36
IN.	6.89	11.14	9.22	9.05	4.48	9.07	9.84	12.92	9.49	6.33	2.35	1.52
AC-FT	37,810	61,200	50,660	49,730	24,590	49,790	54,020	70,960	52,140	34,740	12,890	8,340
CAL YR 1965	TOTAL	250,944	MEAN	688	MAX	3,760	MIN	88	CFSM	6.68	IN	90.63
WTR YR 1966	TOTAL	255,544	MEAN	700	MAX	3,010	MIN	97	CFSM	6.80	IN	92.29
									AC-FT	497,730		
										506,900		

NOTE.--NO GAGE-HEIGHT RECORD NOV. 17 TO JAN. 17.

12209000 SOUTH FORK NOOKSACK RIVER NEAR WICKERSHAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	143	424	2,600	1,000	820	778	392	447	1,540	778	246	121
2	383	376	1,830	854	880	570	396	510	1,910	862	233	220
3	205	341	1,350	1,280	3,000	480	424	588	1,590	883	220	143
4	140	322	1,260	1,020	3,400	428	456	624	1,540	778	220	123
5	143	460	1,070	750	1,700	404	460	869	1,680	654	214	118
6	134	452	1,060	606	1,100	388	429	976	1,720	576	199	123
7	157	376	946	554	850	376	452	1,100	1,430	515	336	114
8	359	374	931	720	517	456	456	1,320	1,120	554	256	110
9	262	372	824	984	690	526	505	1,280	1,040	470	211	108
10	199	396	1,300	1,240	720	434	456	918	1,030	424	214	256
11	177	345	1,950	1,820	684	388	438	820	992	500	211	578
12	164	980	2,890	1,280	878	364	475	744	1,130	559	202	243
13	150	810	7,150	1,100	392	341	456	732	1,380	526	194	170
14	140	1,710	2,540	1,260	702	330	412	792	1,440	460	183	140
15	134	1,360	2,740	3,010	636	353	380	1,110	1,500	434	180	127
16	131	1,010	4,270	1,440	576	505	368	1,480	1,540	424	172	121
17	150	785	3,460	1,000	736	618	408	1,740	1,670	420	170	116
18	138	660	3,620	800	765	505	412	1,540	1,600	372	162	114
19	1,780	654	3,560	2,700	612	470	438	1,640	1,630	337	152	112
20	2,010	660	2,480	1,800	520	505	434	1,950	1,670	539	147	110
21	785	582	1,450	1,300	470	594	442	2,080	1,520	553	172	108
22	1,040	564	1,080	900	438	1,510	429	1,890	1,380	380	160	108
23	2,870	594	876	750	412	2,390	420	1,510	1,100	357	143	106
24	1,730	548	904	650	400	1,390	424	1,060	1,100	349	129	102
25	992	2,090	813	600	452	918	460	897	1,230	345	125	98
26	904	1,100	660	650	420	750	429	1,030	1,140	330	121	97
27	750	1,030	570	1,400	392	642	416	1,190	1,070	297	121	95
28	542	1,360	584	2,190	672	550	434	1,380	890	280	118	93
29	824	1,340	738	2,000	-----	500	424	1,590	834	269	116	125
30	702	2,870	624	1,800	-----	452	416	1,180	778	259	116	686
31	500	-----	854	1,100	-----	416	-----	1,040	-----	252	118	-----
TOTAL	18,908	24,925	56,355	39,479	24,857	19,422	12,962	36,049	40,214	14,736	5,563	4,885
MEAN	600	831	1,818	1,274	808	627	432	1,163	1,344	475	179	163
MAX	2,870	2,870	7,150	3,400	3,400	2,390	505	2,080	1,910	883	336	686
MIN	131	322	554	554	392	330	368	447	778	252	116	93
CFSM	5.92	8.67	17.7	12.4	8.62	6.09	4.19	11.3	13.0	4.61	1.74	1.58
IN.	6.83	9.00	20.35	14.26	8.98	7.01	4.68	13.02	14.52	5.32	2.01	1.76
AC-FT	37,500	49,440	111,800	78,310	49,300	38,520	25,710	71,500	79,760	29,230	11,030	9,690

CAL YR 1966 TOTAL 280,275 MEAN 768 MAX 7,150 MIN 112 CFSM 7.46 IN 101.23 AC-FT 555,900
WTR YR 1967 TOTAL 298,355 MEAN 817 MAX 7,150 MIN 93 CFSM 7.93 IN 107.76 AC-FT 591,800

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,080	1,490	510	684	490	1,050	636	925	1,790	559	205	236
2	3,940	1,000	742	576	743	1,180	630	708	3,920	582	191	236
3	1,090	785	890	515	2,010	1,070	576	696	1,620	588	185	202
4	1,030	648	666	495	2,650	1,530	678	841	1,240	570	183	180
5	600	554	576	442	1,190	2,190	714	792	1,080	505	177	167
6	1,380	490	495	404	869	1,530	618	750	1,020	475	167	160
7	3,010	510	456	400	726	1,100	588	690	939	442	154	152
8	1,350	520	412	392	642	883	520	708	841	404	147	147
9	738	996	830	412	606	757	505	813	785	392	143	145
10	2,020	2,510	2,300	396	588	678	594	984	792	372	136	140
11	3,430	1,240	1,850	353	559	654	720	1,100	771	357	131	145
12	2,020	799	890	345	554	827	576	984	690	533	129	174
13	2,780	666	660	1,820	532	799	505	757	738	368	127	154
14	2,430	1,590	554	2,940	480	778	695	702	848	519	152	1,330
15	1,070	2,040	480	2,340	438	890	757	678	684	756	152	1,960
16	771	1,440	434	1,370	412	1,080	594	771	678	495	136	1,480
17	612	918	400	925	412	946	505	918	678	368	138	3,880
18	710	785	372	984	2,390	771	490	1,060	750	326	211	1,190
19	848	648	349	3,850	3,670	672	475	1,220	813	366	162	792
20	600	554	334	3,780	2,360	624	434	1,960	678	542	211	600
21	2,470	495	341	2,490	2,440	612	400	1,240	594	400	174	490
22	2,050	460	1,480	1,540	2,060	612	408	890	702	341	157	475
23	1,530	438	2,390	1,380	2,940	744	606	834	654	311	296	996
24	1,070	684	5,010	1,750	2,790	827	588	757	648	294	469	582
25	1,480	505	5,270	1,190	1,540	684	654	750	744	276	359	456
26	918	420	2,660	897	1,230	642	648	696	1,400	272	636	400
27	4,770	400	2,100	732	1,070	1,540	600	672	1,740	269	678	360
28	3,140	400	1,680	648	1,000	1,140	771	702	876	262	452	337
29	1,600	582	1,180	582	1,010	1,590	1,060	702	660	243	330	311
30	2,290	510	904	562	932	1,190	630	630	630	230	269	290
31	2,550	-----	264	510	-----	714	-----	576	-----	208	224	-----
TOTAL	55,977	25,037	37,479	35,664	38,361	30,046	18,735	26,506	29,910	12,625	7,281	18,167
MEAN	1,806	835	1,209	1,151	1,233	969	625	855	997	407	235	606
MAX	4,770	2,510	5,270	3,850	3,670	2,190	1,190	1,960	3,920	756	678	3,880
MIN	600	400	400	345	412	400	576	537	288	127	140	93
CFSM	17.5	8.11	11.7	11.2	12.8	9.41	6.07	8.30	9.68	3.95	2.28	5.88
IN.	20.22	9.04	13.54	12.89	13.85	10.85	6.77	9.57	10.80	4.56	2.63	6.56
AC-FT	111,000	49,660	74,340	70,780	76,090	59,600	37,160	52,570	59,330	25,040	14,440	36,030

CAL YR 1967 TOTAL 316,440 MEAN 868 MAX 5,270 MIN 93 CFSM 6.43 IN 114.37 AC-FT 628,100
WTR YR 1968 TOTAL 335,808 MEAN 918 MAX 5,270 MIN 127 CFSM 6.91 IN 121.28 AC-FT 666,100

12209000 SOUTH FORK NOOKSACK RIVER NEAR WICKERSHAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	269	696	764	400	210	266	1,350	714	1,200	396	172	123
2	252	863	684	450	220	272	1,240	690	1,350	475	164	118
3	239	1,140	3,400	600	240	290	702	1,750	1,080	312	154	112
4	357	750	1,710	4,500	290	300	792	570	1,470	606	157	154
5	364	618	1,140	3,000	260	510	655	636	1,400	456	205	170
6	1,240	542	848	2,200	250	495	834	841	1,210	380	224	140
7	939	500	799	1,500	220	400	726	1,260	1,060	349	170	123
8	624	897	1,400	510	283	702	1,580	1,450	1,020	312	154	112
9	490	1,150	1,180	700	400	330	813	1,970	1,130	357	147	108
10	690	806	1,220	600	349	304	946	1,920	1,100	420	145	108
11	855	1,200	1,140	550	717	290	876	1,750	1,020	1,100	143	106
12	918	1,380	841	500	744	280	1,060	1,720	883	684	154	108
13	960	984	702	450	510	283	1,580	1,450	827	456	160	164
14	778	785	708	430	420	283	1,100	1,540	806	376	147	131
15	960	720	708	400	380	364	820	1,250	750	345	143	136
16	750	642	744	380	408	424	764	1,140	757	319	140	123
17	740	594	600	360	404	1,130	1,240	1,100	757	297	129	592
18	984	1,160	340	360	364	1,210	1,210	1,240	200	129	1,020	1,020
19	978	1,380	510	320	349	785	1,430	1,420	678	294	145	1,940
20	1,320	1,980	460	310	334	642	1,030	1,340	582	283	145	976
21	1,060	2,010	434	300	322	576	939	1,400	475	262	174	594
22	1,220	1,840	412	280	308	612	1,040	1,650	447	252	145	1,460
23	918	1,370	756	260	297	612	1,460	1,790	480	249	129	3,050
24	960	1,040	2,460	250	286	520	1,170	1,910	738	252	123	1,320
25	1,000	764	1,400	240	276	485	862	1,290	526	230	147	1,060
26	785	684	925	230	266	570	726	1,100	438	208	157	744
27	612	883	708	230	259	750	720	1,130	400	194	157	588
28	720	540	220	262	718	918	1,130	1,130	400	194	286	618
29	757	1,160	470	220	757	960	2,180	438	185	185	500	500
30	1,390	968	400	210	776	778	1,910	412	177	150	623	623
31	946	-----	370	210	-----	1,430	-----	1,210	-----	174	131	-----
TOTAL	25,075	30,298	29,453	21,540	9,799	17,233	30,075	41,913	24,934	11,112	4,914	16,765
MEAN	809	1,010	935	695	350	556	1,032	1,351	835	356	159	559
MAX	1,390	2,010	3,800	4,500	744	1,430	1,580	2,180	1,470	1,100	286	3,050
MIN	239	500	370	210	210	266	702	570	400	174	123	106
CFSM	7.85	9.81	9.22	6.75	3.40	5.40	9.74	13.1	8.07	3.48	1.54	5.43
IN.	9.06	10.94	10.64	7.78	3.54	6.22	10.86	15.14	9.01	4.01	1.77	6.05
AC-FT	49,740	60,100	58,420	42,720	19,440	34,180	59,650	83,130	49,460	22,040	9,750	33,250

CAL YR 1968 TOTAL 302,141 MEAN 826 MAX 3,920 MIN 127 CFMS 8.02 IN 109.12 AC-FT 599,300
 WTR YR 1969 TOTAL 263,111 MEAN 721 MAX 4,500 MIN 106 CFMS 7.30 IN 95.03 AC-FT 521,900

NOTE.--NO GAGE-HEIGHT RECORD DEC. 28 TO FEB. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,280	337	337	368	750	372	360	520	669	239	202	84
2	1,120	294	326	341	612	349	368	559	1,110	239	202	84
3	726	345	322	334	618	326	326	702	1,250	311	188	228
4	770	2,460	404	308	520	311	479	897	953	364	147	268
5	475	1,610	360	290	475	294	1,760	883	855	315	167	202
6	412	2,200	334	286	447	345	2,730	690	911	272	152	979
7	368	1,320	304	280	447	1,050	1,110	564	757	243	150	582
8	1,030	992	334	269	606	600	834	794	588	259	174	326
9	1,780	817	392	315	684	465	3,600	1,060	636	259	147	252
10	1,100	636	368	300	714	412	1,910	684	708	239	136	194
11	720	576	372	304	738	380	1,230	548	470	217	129	167
12	554	606	750	297	799	388	932	495	434	194	125	145
13	490	532	823	322	1,190	515	744	460	495	185	123	136
14	429	510	1,830	1,700	1,020	946	624	447	542	177	121	145
15	388	554	1,150	911	1,180	1,100	559	544	532	174	116	121
16	349	485	806	576	1,840	1,280	532	932	470	188	112	116
17	322	424	841	490	1,610	813	505	1,010	452	180	108	318
18	304	400	1,200	1,070	1,110	648	495	714	570	164	108	630
19	280	392	1,200	1,550	881	542	542	564	564	167	106	1,190
20	308	456	900	1,550	714	500	582	648	570	164	102	570
21	400	778	1,220	1,640	636	447	515	606	636	152	100	392
22	341	554	1,080	1,620	576	412	485	799	520	140	98	1,100
23	319	672	1,140	1,680	532	475	570	738	480	127	97	785
24	330	666	890	1,220	505	566	776	776	776	420	97	465
25	388	510	715	1,010	470	438	624	1,000	376	145	97	349
26	322	456	624	883	456	404	554	946	400	567	95	297
27	360	412	537	855	422	384	505	642	396	946	91	259
28	412	384	490	690	400	392	490	532	319	412	89	230
29	336	452	588	588	432	376	495	500	308	304	89	205
30	326	360	412	526	-----	345	500	500	308	315	87	188
31	396	-----	396	732	-----	330	-----	559	-----	236	86	-----
TOTAL	16,933	21,110	21,309	23,305	20,912	16,203	25,938	21,438	17,899	8,017	3,866	11,006
MEAN	546	704	687	752	747	523	865	692	597	259	125	367
MAX	1,780	2,460	1,830	1,700	1,680	1,280	3,600	1,060	1,250	946	202	1,190
MIN	280	294	304	269	400	294	326	467	308	123	86	84
CFSM	5.30	6.84	6.67	7.30	7.25	5.08	8.40	6.72	5.80	2.51	1.21	3.56
IN.	6.12	7.62	7.70	8.42	7.55	5.85	9.37	7.74	6.46	2.90	1.40	3.97
AC-FT	37,590	41,870	42,270	46,230	41,480	32,140	51,450	42,520	35,500	15,900	7,670	21,830

CAL YR 1969 TOTAL 237,637 MEAN 651 MAX 4,500 MIN 106 CFMS 6.32 IN 85.83 AC-FT 471,400
 WTR YR 1970 TOTAL 207,936 MEAN 570 MAX 3,800 MIN 84 CFMS 5.53 IN 75.10 AC-FT 412,400

12209500 SKOOKUM CREEK NEAR WICKERSHAM, WASH.

LOCATION.--Lat 48°40'20", long 122°08'24", in NE¼NE¼ sec.27, T.37 N., R.5 E., Whatcom County, on left bank 10 ft downstream (corrected) from private road crossing, 3.5 miles northeast of Wickersham, and at mile 0.1.

DRAINAGE AREA.--23.1 sq mi.

PERIOD OF RECORD.--July 1948 to September 1969 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 400 ft (from river-profile map). Prior to May 8, 1953, at site 100 ft upstream at present datum.

AVERAGE DISCHARGE.--21 years, 135 cfs (79.36 inches per year, 97,810 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (850 cfs), water years 1966-69

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 3, 1965	2330	*904	4.96	Oct. 13, 1967	1945	856	4.82	Sept. 17, 1968	0845	892	4.93
Dec. 13, 1966	0700	*1,050	5.30	Oct. 27, 1967	1815	924	4.99	Dec. 3, 1968	1400	*892	4.93
Oct. 1, 1967	2000	*1,100	5.40	Dec. 25, 1967	0815	916	4.97	Jan. 4, 1969	2030	864	4.86
				Jan. 14, 1968	0945	920	4.98	Sept. 23, 1969	-	-	-
				June 2, 1968a	-	-	-				

a About.

Annual minimum discharge, water years 1966-69

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 1965	20	1.80	1968	Aug. 12, 13, 14, 16, 17, 1968	33	1.97
1967	Sept. 27, 28, 1967	19	1.83	1969	Sept. 11, 12, 1969	28	a1.89

a Occurred Sept. 12, 1969.

Period of record: Maximum discharge, 3,050 cfs Nov. 27 or Dec. 1, 1949 (gage height, 9.0 ft, from flood-mark), from rating curve extended above 530 cfs; minimum, 17 cfs Feb. 9, 10, 1949, Sept. 23, 24, 1951; minimum gage height, 1.70 ft Oct. 19, 20, 1952.

REMARKS.--Records excellent except those for periods of no gage-height record, which are fair. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1182: 1949. WSP 1286: 1950(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	212	360	53	97	58	284	109	102	94	60	36
2	22	388	287	51	83	53	220	181	112	145	61	34
3	21	320	320	78	78	80	177	256	107	231	62	32
4	81	408	440	44	87	47	184	278	121	174	62	32
5	178	402	248	91	111	59	220	364	141	163	57	31
6	363	196	436	245	121	71	237	448	194	143	53	31
7	99	149	485	269	96	65	234	342	191	129	54	31
8	104	133	257	380	88	147	242	326	167	123	53	30
9	121	121	179	177	76	370	217	320	145	120	50	29
10	72	112	149	165	66	172	239	237	245	118	49	31
11	58	104	123	158	80	114	231	194	201	118	47	56
12	66	88	107	220	64	121	158	220	156	107	44	46
13	80	81	96	472	61	342	128	177	141	105	91	37
14	228	160	85	346	58	278	263	135	149	101	62	34
15	237	225	77	199	54	257	217	160	179	99	53	33
16	116	169	72	145	54	179	181	167	209	104	49	31
17	93	118	67	121	57	131	149	129	172	94	45	32
18	137	120	67	105	59	129	129	121	145	88	43	92
19	137	320	69	94	57	131	114	143	145	90	42	47
20	129	272	77	85	67	105	114	163	121	83	41	38
21	97	278	71	78	70	91	114	239	105	77	40	34
22	78	234	60	72	77	84	114	156	123	77	39	33
23	69	149	57	72	88	78	109	123	109	72	39	40
24	61	123	58	64	77	80	109	135	109	72	39	38
25	56	107	54	63	72	87	145	204	101	101	39	34
26	93	107	51	64	71	114	118	228	101	85	38	37
27	97	109	58	93	67	149	105	179	111	75	64	34
28	129	97	69	90	63	184	99	133	137	75	77	35
29	118	90	56	181	-----	272	99	139	104	73	48	35
30	135	93	57	156	-----	576	99	133	93	69	41	32
31	84	-----	51	120	-----	323	-----	104	-----	65	38	-----
TOTAL	3,301	5,481	4,563	4,520	2,095	4,917	5,066	6,240	4,236	3,270	1,580	1,115
MEAN	106	183	147	146	74.8	159	169	201	141	105	51.0	37.2
MAX	363	408	440	472	121	576	284	448	245	231	91	92
MIN	21	81	51	44	54	47	99	104	93	65	38	29
CFSM	4.59	7.92	6.38	6.32	3.24	6.88	7.32	8.70	6.10	4.35	2.21	1.61
IN.	5.32	8.83	7.35	7.28	3.37	7.92	8.16	10.05	6.82	5.27	2.54	1.80
AC-FT	6,550	10,870	9,050	8,970	4,160	9,750	10,050	12,380	8,400	6,490	3,130	2,210
CAL YR 1965	TOTAL 44,214	MEAN 121	MAX 626	MIN 21	CFSM 5.24	IN 71.20	AC-FT 87,700					
WTR YR 1966	TOTAL 46,384	MEAN 127	MAX 576	MIN 21	CFSM 5.50	IN 74.70	AC-FT 92,000					

12209500 SKOOKUM CREEK NEAR WICKERSHAM, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	72	403	162	140	109	76	66	263	115	45	32
2	77	65	290	136	144	66	76	80	327	125	43	47
3	44	60	219	160	465	77	61	67	270	129	42	34
4	37	55	213	132	932	69	67	110	256	114	42	26
5	34	60	176	110	258	64	60	136	284	100	41	26
6	35	75	169	97	176	65	73	157	277	93	41	31
7	39	65	153	91	140	63	76	175	271	84	102	28
8	75	60	116	165	119	90	62	231	171	67	54	26
9	44	65	104	166	117	76	67	196	159	77	47	25
10	39	70	239	226	114	68	73	136	157	72	46	114
11	36	60	419	264	105	53	72	127	153	62	45	93
12	33	170	525	166	125	59	76	115	173	91	44	47
13	31	140	624	144	132	57	72	110	206	87	42	36
14	36	290	404	220	102	55	65	127	220	76	41	32
15	26	220	420	444	96	65	60	203	220	73	41	29
16	29	170	540	209	90	126	59	263	231	72	41	26
17	26	140	464	153	112	114	66	316	249	72	39	27
18	26	110	436	127	112	91	65	267	234	65	36	27
19	300	110	380	383	91	80	9	280	235	60	36	26
20	350	110	362	277	84	99	74	346	243	97	35	25
21	140	100	223	198	77	96	76	376	214	82	41	25
22	170	98	171	147	72	408	72	330	216	65	37	25
23	500	100	142	123	68	516	68	234	169	61	34	23
24	250	95	167	107	67	240	72	144	164	60	32	22
25	160	340	123	102	60	155	76	142	171	59	30	21
26	150	180	105	103	68	125	70	175	169	59	29	21
27	130	170	96	226	65	109	67	209	173	56	28	20
28	90	230	94	456	132	97	66	240	154	54	28	20
29	140	230	114	-----	-----	60	62	258	125	52	28	24
30	120	460	97	274	-----	62	63	178	117	50	29	129
31	85	-----	130	171	-----	76	-----	164	-----	46	29	-----
TOTAL	3,307	4,210	6,440	6,217	3,888	3,580	2,180	6,026	6,241	2,413	1,250	1,101
MEAN	176	140	272	201	135	115	72	184	263	125	60.3	36.7
MAX	500	480	624	486	502	514	67	376	327	77	102	129
MIN	26	55	94	91	65	55	59	66	117	48	28	20
CFSH	4.63	6.06	11.8	8.70	6.02	4.98	3.15	8.40	9.00	3.37	1.74	1.59
IN.	5.33	6.78	13.59	10.01	6.26	5.77	3.51	9.70	10.05	3.69	2.01	1.77
AC-FT	6,560	6,350	16,740	12,330	7,710	7,100	4,320	11,950	12,380	4,790	2,480	2,180
CAL YR 1966	TOTAL 46,996	MEAN 134	MAX 624	MIN 26	CFSH 5.80	IN 76.90	AC-FT 97,180					
WTR YR 1967	TOTAL 46,653	MEAN 134	MAX 624	MIN 20	CFSH 5.80	IN 76.67	AC-FT 96,900					

NOTE.--NO GAGE-HEIGHT RECORD OCT. 18 TO NOV. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	416	264	80	121	86	146	102	144	250	86	49	57
2	452	193	133	101	238	171	106	109	900	87	48	54
3	193	144	138	91	426	142	94	114	370	91	47	48
4	151	121	103	67	476	249	110	144	190	90	45	44
5	109	107	94	79	216	317	104	123	170	84	44	42
6	217	96	80	72	156	211	94	119	160	76	42	40
7	412	102	74	70	134	149	91	115	150	73	40	40
8	201	126	67	67	125	122	82	125	130	71	38	38
9	123	163	85	122	106	82	146	146	120	70	36	36
10	183	300	313	71	115	95	109	173	120	67	35	35
11	600	210	320	62	109	102	123	175	120	67	35	39
12	323	130	156	73	106	161	94	147	110	109	34	43
13	436	110	117	568	99	144	82	107	120	71	33	37
14	376	270	182	708	68	124	102	100	130	169	43	209
15	196	300	91	551	79	144	100	96	110	234	38	317
16	144	230	64	286	73	153	64	114	105	120	34	237
17	117	140	77	197	74	130	76	138	105	87	39	520
18	175	130	71	266	333	105	74	153	120	73	90	214
19	166	110	64	661	469	94	69	163	125	103	137	137
20	121	96	63	632	326	92	65	363	110	123	71	105
21	424	86	65	443	396	93	62	161	95	90	45	88
22	355	82	334	295	301	96	66	149	110	76	41	86
23	255	80	395	311	438	129	107	160	100	67	67	123
24	201	120	708	376	332	126	90	131	100	63	77	69
25	234	90	758	216	202	104	97	127	115	61	97	76
26	149	80	508	161	167	94	100	114	270	60	199	69
27	432	76	432	130	151	188	97	112	350	59	186	63
28	412	76	337	115	144	142	151	118	160	58	96	59
29	246	96	220	104	143	128	121	111	100	56	71	55
30	408	64	165	95	-----	132	220	97	65	53	60	52
31	379	-----	137	91	-----	106	-----	91	-----	56	54	-----
TOTAL	6,611	4,191	6,413	7,167	6,126	4,417	3,045	4,277	5,205	2,644	1,635	3,052
MEAN	216	140	207	232	211	142	102	138	174	85.3	59.2	102
MAX	600	300	758	708	476	317	220	363	900	234	199	520
MIN	109	76	63	62	73	92	62	91	85	50	33	35
CFSH	12.0	6.06	6.96	10.0	9.13	6.15	4.42	5.97	7.53	3.69	2.56	4.42
IN.	13.87	6.75	10.33	11.57	9.87	7.11	4.90	6.89	8.38	4.26	2.96	4.91
AC-FT	17,080	6,310	12,720	14,260	12,150	8,760	6,040	8,480	10,320	5,240	3,640	6,050
CAL YR 1967	TOTAL 52,111	MEAN 143	MAX 758	MIN 20	CFSH 6.19	IN 83.92	AC-FT 103,400					
WTR YR 1968	TOTAL 57,003	MEAN 140	MAX 900	MIN 33	CFSH 6.75	IN 91.80	AC-FT 113,100					

NOTE.--NO GAGE-HEIGHT RECORD JUNE 1 TO JULY 2.

12210500 NOOKSACK RIVER AT DEMING, WASH.

LOCATION.--Lat 48°48'38", long 122°12'13", in lot 12, NE¼SE¼ sec.6, T.38 N., R.5 E., Whatcom County, on left bank 800 ft downstream from South Fork, 1.1 miles southeast of Deming, and at mile 36.6.

DRAINAGE AREA.--584 sq mi, includes 5 sq mi in Canada.

PERIOD OF RECORD.--September 1910 to March 1911 (gage heights only), July 1935 to September 1957, October 1957 to September 1964 (discharges above 3,500 cfs only), October 1964 to September 1970. Published as "near Deming" 1910-11.

GAGE.--Water-stage recorder. Datum of gage is 203.6 ft above mean sea level. See WSP 1932 for history of changes prior to Sept. 20, 1935.

AVERAGE DISCHARGE.--28 years (1935-57, 1964-70), 3,313 cfs (77.04 inches per year, 2,400,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (16,000 cfs, revised), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Oct. 6, 1965	1000	16,100	10.77	Oct. 11, 1967	1400	17,100	11.41	Dec. 3, 1968	1800	21,500	12.30
Dec. 4, 1965	0230	*18,500	11.40	Oct. 27, 1967	2300	27,200	13.43	Jan. 5, 1969	0030	*25,900	13.18
				Oct. 31, 1967	1700	18,900	11.75	Sept. 23, 1969	0730	17,800	11.34
Dec. 13, 1966	1600	*21,600	12.76	Dec. 25, 1967	1300	22,800	12.55				
Dec. 16, 1966	0730	19,300	12.21	Jan. 14, 1968	1300	20,500	12.10	Nov. 4, 1969	1930	*25,200	13.04
Feb. 4, 1967	1100	17,000	11.02	Jan. 20, 1968	2030	21,600	12.33	Apr. 9, 1970	1800	17,900	11.48
				June 2, 1968	1130	24,000	12.80				
Oct. 2, 1967	0300	16,300	11.20	Sept. 17, 1968	1200	24,500	12.90				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Oct. 3, 4, 1965	736	3.26	1969	Sept. 6, 1969	1,080	4.36
1967	Oct. 18, 1966	742	3.66	1970	Sept. 16, 1970	772	4.06
1968	Dec. 21, 1967	1,570	4.72				

a Occurred Aug. 22, 1968.

Period of record: Maximum discharge, 43,200 cfs Feb. 10, 1951 (gage height, 15.69 ft), from rating curve extended above 25,000 cfs; minimum recorded, 502 cfs Nov. 29, 1952.

Peak of Mar. 15, 1908, reportedly reached a stage of 20 ft. Peak of Feb. 27, 1932, reached a stage of 16.8 ft, from floodmarks (discharge, 49,300 cfs). Peak in November 1909 reached a stage about equal to that in 1932.

REMARKS.--Records excellent. Slight regulation by powerplant at Excelsior. Since February 1962, city of Bellingham diverts about 100 cfs from the Middle Fork for municipal use. Water-quality records for the water years 1966-70 are published in reports of the Geological Survey.

REVISIONS (WATER YEARS).--WSP 1286: 1951. WSP 1736: 1937(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	760	4,970	3,800	1,470	2,800	1,610	6,320	2,460	2,620	3,140	2,710	1,130	
2	742	8,880	6,200	1,570	2,400	1,450	5,440	3,200	2,770	3,560	2,460	1,180	
3	742	7,040	4,840	1,460	2,150	1,300	4,440	4,480	2,600	4,800	2,460	1,190	
4	873	9,620	12,900	1,390	2,050	1,200	4,140	5,340	2,550	4,840	2,450	1,270	
5	2,200	8,600	7,240	1,440	2,350	1,530	4,390	6,480	2,600	4,580	2,450	1,330	
6	8,930	5,440	9,170	3,340	2,600	1,540	4,780	8,900	3,930	4,390	2,320	1,330	
7	3,620	4,110	8,360	4,390	2,600	1,650	5,050	9,090	4,900	4,210	2,360	1,210	
8	2,610	3,680	6,500	6,880	2,400	2,040	5,280	7,330	5,000	4,540	2,380	1,160	
9	3,600	3,370	4,610	5,060	2,200	6,450	5,020	7,440	4,860	4,500	2,200	1,200	
10	2,210	2,900	3,900	4,140	2,000	4,490	5,010	6,040	6,280	4,580	2,080	1,280	
11	1,750	2,680	3,370	4,320	2,350	3,140	5,930	4,410	6,200	4,270	1,930	1,500	
12	1,620	2,380	2,970	4,290	2,220	2,710	4,660	4,600	4,900	3,960	1,770	1,510	
13	1,830	2,230	2,650	9,710	1,930	4,690	3,890	4,210	4,210	4,880	2,600	1,350	
14	2,640	2,920	2,300	9,920	1,800	4,970	5,220	3,340	4,140	4,090	2,530	1,390	
15	5,200	5,670	2,170	6,160	1,660	4,820	5,440	3,090	4,940	4,010	2,240	1,380	
16	3,240	4,680	2,020	4,360	1,640	3,940	4,970	3,300	6,130	4,040	2,070	1,240	
17	2,650	3,440	1,900	3,600	1,620	3,100	4,310	2,440	6,130	3,720	1,090	1,230	
18	2,840	3,010	1,988	3,190	1,620	2,860	3,800	2,300	5,140	3,420	1,770	2,370	
19	3,820	4,290	2,230	2,770	1,600	3,100	3,470	2,570	4,960	3,500	1,710	1,660	
20	3,460	4,980	2,290	2,500	1,680	2,730	3,290	3,070	4,300	3,140	1,640	1,350	
21	3,340	5,800	2,360	2,300	1,810	2,370	3,110	4,530	3,720	2,860	1,630	1,320	
22	2,730	5,890	1,980	2,200	1,750	2,140	3,000	3,000	2,970	2,970	1,640	1,500	
23	2,420	4,110	1,830	2,100	1,920	1,990	2,980	2,970	3,660	3,800	1,690	1,910	
24	2,160	3,290	1,810	1,950	1,830	1,910	2,900	2,750	3,420	2,860	1,870	1,600	
25	1,960	2,830	1,710	1,850	1,720	1,910	3,360	3,640	3,220	3,090	1,960	1,370	
26	1,930	2,590	1,610	1,000	1,720	2,200	3,150	5,360	3,420	3,010	1,700	1,300	
27	1,810	2,650	1,610	2,050	1,730	2,720	2,840	5,220	3,720	2,040	2,000	1,280	
28	2,890	2,450	1,760	2,300	1,640	3,120	2,730	3,040	5,900	2,910	2,120	1,388	
29	3,190	2,330	1,620	2,700	-----	4,240	2,650	3,590	4,250	3,020	1,550	1,450	
30	5,010	2,310	1,590	3,400	-----	9,700	2,650	3,530	3,410	2,940	1,320	1,230	
31	2,890	-----	1,510	3,250	-----	9,480	-----	2,930	-----	2,730	1,190	-----	
TOTAL	85,747	129,140	110,790	107,820	55,810	100,900	124,340	134,790	127,520	113,600	63,290	41,580	
MEAN	2,766	4,305	3,574	3,478	1,993	3,257	4,145	4,413	4,251	3,665	2,042	1,306	
MAX	8,930	9,620	12,900	9,920	2,800	9,700	6,320	9,090	6,200	4,040	2,710	2,370	
MIN	742	2,230	1,510	1,390	1,600	1,200	2,650	2,388	2,550	2,730	1,190	1,130	
CFSM	4.74	7.37	6.12	5.96	3.41	5.58	7.10	7.56	7.28	6.20	3.50	2.37	
IN	5.46	8.23	7.86	6.87	3.56	6.43	7.92	8.71	8.12	7.24	4.03	2.65	
AC-FT	170,100	256,100	219,800	213,900	110,700	200,900	246,600	271,300	252,900	225,900	125,500	82,470	
CAL YR 1965	TOTAL	1,201,977		MEAN	3,293	MAX	14,900	MIN	742	CFSM	5.64	IN	76.56
MTR YR 1966	TOTAL	1,197,407		MEAN	3,281	MAX	12,900	MIN	742	CFSM	5.62	IN	76.27
										AC-FT	2,384,000		
											2,375,000		

12210500 NOOKSACK RIVER AT DENING, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,220	2,110	8,780	4,270	3,820	3,290	2,000	1,730	5,080	4,320	2,190	1,990
2	2,020	1,910	6,740	3,640	3,790	2,650	1,950	1,990	7,280	4,620	2,490	2,350
3	1,320	1,720	5,040	4,590	9,100	2,330	1,980	2,240	7,070	5,200	2,060	1,820
4	1,190	1,540	4,410	4,230	14,100	2,140	2,110	2,530	6,660	4,950	2,140	1,690
5	1,180	1,900	3,930	3,700	8,960	2,030	2,030	3,110	6,660	4,300	2,100	1,700
6	1,140	1,990	3,720	3,290	6,110	1,950	1,910	3,520	7,250	3,970	2,040	1,650
7	1,410	1,680	3,660	3,160	4,920	1,890	1,930	3,900	6,850	3,570	2,490	1,320
8	2,440	1,500	2,980	4,450	4,180	2,490	2,000	4,700	5,550	3,570	2,000	1,250
9	1,500	1,550	2,610	5,020	3,850	2,640	2,100	4,720	4,920	3,270	2,140	1,210
10	1,200	1,640	3,540	4,720	3,710	2,240	1,940	3,530	4,800	2,870	2,320	2,110
11	1,080	1,450	5,880	6,530	3,540	2,100	1,850	3,140	4,600	3,290	2,460	3,530
12	984	2,640	8,210	5,080	4,140	2,000	1,940	2,880	4,760	3,870	2,400	2,020
13	896	2,670	16,800	4,560	5,100	1,880	1,950	2,800	5,600	3,910	2,320	1,440
14	833	5,691	12,300	4,680	3,790	1,820	1,840	2,910	6,180	3,530	2,250	1,260
15	791	4,900	10,800	9,170	3,400	1,830	1,730	3,770	6,350	3,210	2,280	1,320
16	784	3,920	15,600	6,660	3,080	2,520	1,700	5,000	6,990	3,170	2,280	1,390
17	798	3,190	12,200	5,880	3,220	3,010	1,820	6,130	7,340	3,230	2,190	1,450
18	770	2,780	12,000	4,200	3,640	2,510	1,860	5,840	8,060	2,870	2,100	1,370
19	4,540	3,190	11,200	6,940	3,010	2,320	1,850	5,770	8,570	2,660	2,020	1,440
20	7,530	3,150	10,400	7,460	2,700	2,440	1,830	6,640	9,140	2,930	1,930	1,590
21	3,480	2,640	6,960	5,730	2,490	2,610	1,860	8,210	9,280	3,350	2,060	1,590
22	3,650	2,440	5,220	4,990	2,330	4,480	1,820	7,870	8,500	2,740	1,880	1,450
23	8,610	2,370	4,410	7,320	2,200	8,930	1,750	6,280	6,900	2,730	1,760	1,130
24	7,400	2,230	4,210	3,220	2,120	6,020	1,760	4,720	5,920	2,760	1,560	1,170
25	4,800	5,710	3,920	2,880	2,210	4,200	1,870	3,870	6,520	2,800	1,420	1,130
26	4,250	4,340	3,420	2,780	2,110	3,560	1,790	3,870	6,600	2,820	1,440	1,030
27	8,720	3,820	3,120	3,640	2,000	3,050	1,710	4,280	6,280	2,720	1,490	1,210
28	2,840	4,600	2,980	7,970	3,080	3,480	2,710	4,580	5,580	2,580	1,570	1,220
29	3,100	4,600	3,290	7,400	-----	2,530	1,700	5,490	5,000	2,620	1,770	1,420
30	3,080	6,700	3,040	6,510	-----	2,290	1,690	4,640	4,680	2,340	1,920	2,700
31	2,370	-----	3,230	4,520	-----	2,120	-----	3,920	-----	2,240	2,030	-----
TOTAL	80,926	90,570	204,540	154,150	116,740	88,400	55,940	134,420	194,900	102,830	62,900	48,150
MEAN	2,611	3,019	6,598	4,973	3,169	2,858	1,865	4,334	6,497	3,317	2,029	1,605
MAX	6,610	6,700	16,800	9,170	14,100	9,930	2,110	8,210	9,280	5,000	3,530	3,530
MIN	770	1,450	2,610	2,780	2,000	1,820	1,690	1,730	4,600	2,260	1,420	1,030
CFSM	4.47	5.17	11.3	8.52	7.14	4.89	3.19	7.42	11.1	5.68	3.47	2.75
IN.	5.15	5.77	13.03	9.82	7.44	5.64	3.56	8.56	12.41	6.55	4.01	3.07
AC-FT	160,500	179,600	405,700	305,800	231,600	175,700	111,000	266,600	386,600	204,000	124,800	95,510

CAL YR 1966 TOTAL 1,247,766 MEAN 3,419 MAX 16,800 MIN 770 CFSM 5.25 IN 79.48 AC-FT 2,475,000
 NTR YR 1967 TOTAL 1,334,666 MEAN 3,637 MAX 16,800 MIN 770 CFSM 6.48 IN 85.02 AC-FT 2,647,000

DISCHARGE, IN CUBIC FEET PER SECND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,800	10,200	2,060	4,010	2,620	3,960	2,790	3,720	6,450	3,620	2,770	2,350
2	11,300	7,390	2,610	3,590	3,410	4,360	2,730	2,940	18,500	4,040	2,750	2,240
3	3,790	5,950	3,090	3,340	6,910	4,260	2,550	2,780	10,800	4,390	2,750	2,050
4	5,350	4,920	2,610	3,210	10,200	4,940	2,600	3,150	7,020	4,650	2,640	1,950
5	3,790	4,320	2,310	3,010	6,360	7,980	2,740	3,130	5,880	4,560	2,540	2,050
6	4,780	3,810	2,030	2,820	4,680	6,470	2,540	2,860	5,500	4,170	2,130	2,080
7	10,000	3,890	1,890	2,750	3,960	4,790	2,430	2,740	5,120	3,980	2,050	2,040
8	6,950	3,870	1,720	2,690	3,520	3,940	2,270	2,740	4,410	3,880	2,000	1,930
9	4,350	4,900	3,400	2,830	3,280	3,450	2,200	2,960	4,200	4,020	2,020	1,910
10	4,640	7,390	7,230	2,820	3,100	3,110	2,360	3,560	4,300	3,690	2,070	1,890
11	15,100	5,200	8,710	2,550	2,950	2,940	2,880	4,070	4,170	3,640	2,110	1,980
12	10,500	4,250	4,900	2,490	2,830	3,640	2,480	4,060	3,770	4,770	2,020	2,130
13	8,280	3,750	3,630	6,890	2,740	3,610	2,260	3,240	3,490	3,580	1,920	1,790
14	10,100	5,270	3,030	15,400	2,550	3,220	2,500	3,010	3,520	3,990	1,930	4,330
15	5,790	7,750	2,670	12,600	2,410	3,310	2,910	2,860	3,220	5,250	1,930	7,720
16	4,480	6,050	2,440	8,860	2,270	3,620	2,470	2,990	3,220	3,860	1,780	7,740
17	3,610	4,210	2,220	6,690	2,210	3,360	2,250	3,590	3,290	3,250	1,860	15,300
18	3,530	3,670	2,040	6,400	5,100	2,940	2,160	4,220	3,690	2,990	2,060	8,580
19	4,070	3,130	1,830	13,500	11,800	2,660	2,110	5,140	4,230	3,130	1,840	5,640
20	3,070	2,720	1,660	14,700	9,440	2,530	1,990	7,120	4,010	3,860	2,000	4,310
21	6,990	2,460	1,650	13,400	8,320	2,450	1,900	5,640	3,430	3,280	1,760	3,640
22	6,850	2,280	4,380	8,920	7,880	2,420	1,890	4,360	3,420	2,910	1,660	3,380
23	6,100	2,160	6,220	7,330	8,920	2,560	2,250	4,040	3,480	2,780	2,030	4,980
24	4,250	2,628	17,700	9,550	9,750	2,880	2,290	3,620	3,530	2,870	2,880	3,820
25	5,280	2,220	19,000	7,120	6,510	2,650	2,370	3,560	4,150	2,950	2,660	3,360
26	3,790	1,960	13,500	5,340	5,160	2,480	2,450	3,350	5,300	2,970	4,660	3,180
27	11,400	1,850	10,500	4,230	4,420	4,330	2,350	3,170	8,240	3,100	4,720	2,940
28	15,600	1,850	8,600	3,670	4,090	4,120	2,570	3,380	5,900	3,210	3,350	2,600
29	9,400	2,430	6,400	3,310	3,930	5,040	3,550	3,420	4,360	3,150	2,680	2,470
30	11,300	2,140	5,210	3,010	-----	3,820	4,230	3,130	3,580	2,910	2,410	2,410
31	13,300	-----	4,390	2,840	-----	3,110	-----	2,880	-----	2,790	2,300	-----
TOTAL	224,460	124,610	159,630	189,870	151,320	114,950	75,070	111,430	154,180	112,240	74,190	112,790
MEAN	7,241	4,154	5,149	6,125	5,218	3,708	2,502	3,595	5,139	3,621	2,393	3,760
MAX	15,600	10,200	19,000	15,400	11,800	7,980	4,230	7,120	18,500	5,250	4,720	15,300
MIN	3,070	1,850	1,650	2,490	2,210	2,420	1,890	2,740	3,220	2,780	1,660	1,790
CFSM	12.4	7.11	8.82	10.5	8.93	6.35	4.28	6.16	8.80	6.20	4.10	6.44
IN.	14.30	7.94	10.17	12.09	9.64	7.32	4.78	7.10	9.82	7.15	4.73	7.18
AC-FT	445,200	247,200	316,600	376,600	300,100	228,000	148,900	221,000	305,800	222,600	147,200	223,700
CAL YR 1967 TOTAL 1,467,330 MEAN 4,020 MAX 19,000 MIN 1,030 CFSM 6.88 IN 93.47 AC-FT 2,910,000												
NTR YR 1968 TOTAL 1,604,740 MEAN 4,385 MAX 19,000 MIN 1,650 CFSM 7.51 IN 102.22 AC-FT 3,183,000												

NOOKSACK RIVER BASIN

12211500 NOOKSACK RIVER NEAR LYNDEN, WASH.

LOCATION (REVISED).--Lat 48°55'14", long 122°29'04", in NE¼NE¼ sec.36, T.40 N., R.2 E., Whatcom County, on right bank 150 ft downstream from bridge on U.S. Highway 99 alternate, 2.1 miles upstream from Fishtrap Creek, 2.3 miles southwest of Lynden, and at mile 15.3.

DRAINAGE AREA.--648 sq mi, of which 5.0 sq mi is in Canada.

PERIOD OF RECORD.--October 1944 to September 1967 (discontinued). Monthly discharge only for some periods, published in WSP 1316.

GAGE.--Water-stage recorder. Datum of gage is 24.4 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--23 years, 3,693 cfs (77.39 inches per year, 2,674,000 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-67 are contained in the following table:

Annual maximum discharge (*), peak discharges above base (16,000 cfs), and annual minimum discharge

Wtr. yr	Date	Maximum	Time	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Dec. 4, 1965		0900	*17,500	15.75	Oct. 2, 3, 1965	a760	-	-
1967	Dec. 14, 1966		0230	*25,100	18.48	Oct. 18, 1966	a718	718	4.93
	Dec. 16, 1966		1300	22,500	17.72				
	Feb. 4, 1967		1730	17,200	15.62				

* Minimum daily.

Period of record: Maximum discharge, 46,200 cfs Feb. 10, 1951 (gage height, 21.76 ft); minimum, 595 cfs Nov. 30, 1952; minimum gage height, 4.93 ft Oct. 18, 1966.

REMARKS.--Records excellent. Slight regulation by powerplant at Excelsior. Since February 1962, the city of Bellingham diverts about 100 cfs from Middle Fork Nooksack River for municipal use.

REVISIONS (WATER YEARS).--WSP 1286: 1945(P), 1947-48(P), 1950-51(P), 1952(M). WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	770	4,420	3,080	1,610	3,050	1,800	6,250	2,580	3,120	3,120	2,480	1,130
2	760	8,760	6,910	1,850	2,610	1,650	5,800	3,060	3,240	3,300	2,470	1,140
3	760	6,370	4,510	1,690	2,290	1,580	4,710	4,400	3,100	4,500	2,540	1,160
4	950	9,860	12,000	1,600	2,210	1,500	4,290	5,360	2,990	5,030	2,620	1,200
5	1,810	9,110	6,920	1,630	2,550	1,520	4,430	6,170	3,050	4,580	2,390	1,280
6		7,850	5,640	8,500	3,420	2,770	4,800	8,340	4,160	4,720	2,250	1,290
7		3,870	4,310	8,440	5,040	2,790	1,890	9,040	5,300	4,210	2,230	1,210
8		2,310	3,530	7,340	7,690	2,590	1,970	5,460	7,010	5,510	4,550	2,320
9		3,660	3,370	5,240	5,770	2,610	6,370	5,200	7,380	9,300	4,590	2,120
10		2,300	2,830	4,560	4,590	2,160	5,750	5,080	6,620	5,860	6,640	1,220
11	1,800	2,600	3,720	5,040	2,310	3,830	6,250	5,030	6,690	4,500	1,890	1,400
12	1,600	2,250	3,240	4,780	2,550	3,120	5,280	5,040	9,330	4,070	1,720	1,510
13	1,840	2,050	2,850	9,500	2,140	4,100	4,310	4,970	4,380	4,130	2,120	1,320
14	1,960	2,370	2,560	10,400	1,990	5,500	5,320	4,040	4,210	4,170	2,680	1,340
15	4,780	5,270	2,300	6,920	1,850	5,320	6,010	3,550	4,790	4,040	2,170	1,340
16	3,180	5,260	2,130	4,900	1,800	4,570	5,680	4,070	5,910	4,090	2,050	1,240
17	2,330	3,730	2,020	3,950	1,800	3,600	4,610	3,200	6,230	3,900	1,810	1,190
18	2,160	3,120	1,970	3,430	1,770	3,130	4,010	2,890	5,330	3,430	1,720	2,130
19	3,600	4,060	2,190	2,990	1,760	3,470	3,600	3,000	4,970	3,480	1,640	1,810
20	2,980	5,330	2,310	2,570	1,770	3,160	3,360	3,520	4,580	3,210	1,560	1,380
21	3,290	5,918	2,560	2,470	1,970	2,720	3,190	4,710	3,870	2,790	1,530	1,290
22	2,910	6,580	2,140	2,290	1,900	2,450	3,110	6,290	3,900	2,850	1,570	1,440
23	2,210	4,660	1,960	2,280	2,000	2,250	3,000	3,680	3,700	2,910	1,560	1,760
24	1,960	3,570	1,950	2,090	2,020	2,170	2,910	3,270	3,410	2,770	1,730	1,710
25	1,780	3,070	1,850	1,940	1,900	2,110	3,220	3,770	3,170	2,800	1,880	1,410
26	1,700	2,680	1,730	1,920	1,850	2,290	3,270	5,570	3,370	3,070	1,770	1,300
27	1,610	2,700	1,690	2,130	1,870	2,810	2,930	5,850	3,830	2,710	1,730	1,290
28	2,170	2,610	1,850	2,430	1,840	3,210	2,700	4,510	5,000	2,800	2,180	1,230
29	2,290	2,450	1,700	2,950	-----	4,200	2,620	4,130	4,610	2,910	1,620	1,420
30	5,080	2,390	1,690	3,650	-----	8,190	2,590	4,120	3,530	2,890	1,340	1,260
31	2,920	-----	1,670	3,490	-----	10,200	-----	3,570	-----	2,680	1,200	-----
TOTAL	76,870	130,940	115,400	117,818	60,520	106,210	126,890	148,820	132,180	113,520	60,870	40,720
MEAN	2,544	4,365	3,658	3,775	2,161	3,491	4,296	4,801	4,406	3,662	1,964	1,357
MAX	7,850	9,860	12,000	10,400	3,050	10,200	6,250	9,040	6,690	5,030	2,680	2,130
MIN	760	2,050	1,670	1,600	1,760	1,500	2,590	2,580	2,990	2,680	1,200	1,138
CFSM	3.93	6.74	5.65	5.83	3.33	5.39	6.43	7.41	6.80	5.65	3.03	2.09
IN.	4.53	7.52	6.91	6.72	3.47	6.21	7.68	8.54	7.59	6.52	3.49	2.34
AC-FT	156,400	259,700	224,980	232,180	120,000	214,600	255,700	295,200	262,200	225,200	120,700	80,770
CAL YR 1965	TOTAL	1,254,410	MEAN	3,497	MAX	16,300	MIN	760	CFSM	5.30	IN	72.01
WTR YR 1966	TOTAL	1,233,950	MEAN	3,381	MAX	12,000	MIN	760	CFSM	5.22	IN	70.84
											AC-FT	2,488,000
											AC-FT	2,448,000

NOOKSACK RIVER BASIN

12212000 FISHTRAP CREEK AT LYNDEN, WASH.

LOCATION (REVISED).--Lat 48°57'52", long 122°25'50", on north line of sec.16, T.40 N., R.3 E., Whatcom County, on right bank on downstream side of bridge on State Highway 546, 1.7 miles north of Lynden and at mile 6.9.

DRAINAGE AREA.--22.3 sq mi, of which 17.4 sq mi is in Canada.

PERIOD OF RECORD.--July 1948 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 110 ft (from topographic map).

AVERAGE DISCHARGE.--22 years, 37.8 cfs (27,390 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (220 cfs), water years 1966-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Jan. 13, 1966	1200	*359	6.42	Jan. 28, 1967	0200	359	5.54	Feb. 23, 1968	2300	261	5.14
Dec. 13, 1966	2230	371	5.61	Feb. 3, 1967	2230	313	5.26	Dec. 3, 1968	1830	270	5.20
Dec. 16, 1966	0730	352	5.50	Mar. 22, 1967	2300	313	5.26	Jan. 5, 1969	0030	*368	5.84
Jan. 3, 1967	0300	222	4.64	Dec. 25, 1967	1000	309	5.24	Jan. 7, 1969	0230	290	5.33
Jan. 6, 1967	2330	314	5.27	Jan. 13, 1968	1100	232	4.94				
Jan. 8, 1967	1030	306	5.22	Jan. 19, 1968	1700	*454	6.27	Nov. 5, 1969	0230	*204	4.70
Jan. 19, 1967	1800	*398	5.76	Feb. 19, 1968	0900	290	5.33				

Annual minimum discharge, water years 1966-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1966	Sept. 9, 10, 1966	4.6	al.36	1969	Aug. 1, 1969	4.0	1.42
1967	Sept. 27, 28, 1967	3.6	1.36	1970	Aug. 31, 1970	2.8	1.33
1968	Oct. 1, 6, 1967	6.8	1.51				

a Occurred about Jan. 5, 1966, result of freezeup.

Period of record: Maximum discharge, 550 cfs Feb. 11, 1951 (gage height, 6.59 ft); minimum, 0.4 cfs Sept. 10, 1949 (gage height, 1.00 ft).

REMARKS.--Records good. Small diversions for irrigation and domestic use above station. Regulation from unknown source.

REVISIONS.--WSP 1932: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	22	31	19	60	42	39	21	14	11	8.5	5.9
2	6.5	56	40	17	51	38	37	22	14	11	8.4	5.7
3	6.4	39	34	15	46	35	34	22	14	14	8.4	5.6
4	7.1	75	67	13	44	32	32	21	14	15	8.4	5.6
5	7.6	41	51	12	44	40	31	20	14	13	8.4	5.4
6	12	28	139	30	84	50	29	21	14	14	8.2	5.2
7	10	23	142	100	91	52	29	27	13	12	8.4	5.1
8	8.5	21	94	200	80	46	27	22	13	12	8.0	5.1
9	8.4	21	58	115	85	190	28	20	13	11	8.0	4.8
10	7.6	21	57	150	62	120	32	19	13	11	7.8	5.1
11	7.6	27	48	160	84	90	73	18	13	12	7.8	6.6
12	7.8	22	40	180	77	70	67	19	13	11	7.6	7.3
13	9.1	20	35	333	60	80	49	20	13	11	8.0	6.8
14	12	24	31	262	55	76	84	20	13	10	8.2	6.1
15	15	36	29	158	48	70	60	20	12	10	7.8	5.9
16	11	30	27	114	54	74	46	25	12	10	7.6	5.7
17	9.8	26	25	95	57	83	40	20	12	10	7.6	6.6
18	9.8	25	26	79	49	83	36	18	12	9.8	7.5	13
19	11	25	29	70	45	91	33	18	12	9.8	7.1	9.5
20	11	34	34	62	45	71	34	17	11	9.7	6.9	8.0
21	11	44	40	57	45	59	32	20	12	9.5	6.9	7.6
22	9.6	81	31	54	43	52	31	19	11	9.3	6.8	7.3
23	9.3	42	28	59	40	48	30	17	11	9.3	6.4	7.5
24	8.9	31	27	52	37	44	28	16	11	9.3	6.2	7.5
25	8.5	26	26	48	35	42	26	16	11	9.3	6.2	7.1
26	9.8	25	24	46	35	40	25	16	10	9.3	6.1	7.1
27	9.3	26	25	60	35	38	24	16	11	9.1	6.9	6.9
28	8.9	25	26	58	38	36	23	15	12	8.9	6.9	6.9
29	10	24	21	61	-----	35	22	15	11	8.9	6.8	6.9
30	14	26	22	81	-----	45	22	15	11	8.7	6.4	6.8
31	11	-----	18	77	-----	42	-----	14	-----	8.5	6.1	-----
TOTAL	295.4	966	1,325	2,837	1,529	1,896	1,103	589	370	327.4	230.3	200.6
MEAN	9.53	32.2	42.7	91.5	54.6	61.2	36.8	19.0	12.3	10.6	7.43	6.69
MAX	15	81	142	333	91	190	84	27	14	15	8.5	13
MIN	6.4	20	18	12	35	32	22	14	10	8.5	6.1	4.8
AC-FT	586	1,920	2,630	5,630	3,030	3,760	2,190	1,170	734	649	457	398

CAL YR 1965 TOTAL 15,233.1 MEAN 41.7 MAX 504 MIN 6.4 AC-FT 30,210

WTR YR 1966 TOTAL 11,668.7 MEAN 32.0 MAX 333 MIN 4.8 AC-FT 23,140

12212000 FISHTRAP CREEK AT LYNDEN, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	17	121	149	91	82	47	30	21	12	8.1	4.8
2	7.3	16	77	110	109	65	45	28	18	12	7.7	5.6
3	6.9	15	52	165	248	56	42	28	18	11	7.5	5.2
4	6.6	14	47	169	279	52	43	27	18	11	6.8	4.8
5	6.6	17	84	142	146	50	44	26	17	11	7.0	4.7
6	6.8	27	72	95	108	47	41	25	16	10	7.7	4.5
7	9.7	21	57	101	90	46	39	25	16	10	7.3	4.5
8	9.5	18	49	234	80	74	38	29	16	11	7.3	4.5
9	8.2	21	42	214	79	70	56	28	16	11	7.0	4.5
10	7.3	25	68	130	73	59	56	26	16	9.8	6.6	5.4
11	7.1	20	110	166	80	61	46	28	16	9.3	6.4	6.6
12	6.8	31	128	137	107	61	44	26	16	9.6	6.6	5.8
13	6.6	27	291	142	147	56	46	25	15	10	6.6	5.2
14	6.8	72	220	126	95	52	49	24	15	9.3	6.2	5.0
15	6.6	70	206	252	114	50	43	25	14	9.0	6.0	4.7
16	6.6	42	313	133	103	69	41	24	14	9.3	5.6	4.9
17	6.6	35	246	101	107	74	51	23	14	9.0	5.6	4.7
18	6.8	30	291	90	103	62	44	22	13	8.8	5.4	4.6
19	42	28	185	300	78	54	48	21	13	9.0	5.6	4.6
20	62	29	137	235	70	62	42	21	12	12	5.4	4.4
21	30	27	94	150	65	64	39	20	14	11	5.4	4.4
22	33	33	75	116	61	193	38	20	16	9.8	5.4	4.4
23	76	29	65	91	58	188	36	19	15	9.6	5.4	4.4
24	52	26	84	79	56	95	34	19	14	8.6	5.4	4.6
25	32	48	95	70	56	77	34	18	15	8.6	5.4	4.4
26	27	42	65	82	51	71	33	18	14	8.6	5.4	4.3
27	24	101	54	190	50	62	32	18	14	8.4	5.4	4.1
28	20	134	53	269	87	61	33	18	14	8.4	5.6	4.3
29	20	79	83	179	-----	61	32	14	8.4	4.8	5.8	5.8
30	21	65	150	70	50	56	30	19	13	8.6	4.4	7.5
31	18	-----	78	104	-----	50	-----	25	-----	6.4	4.4	-----
TOTAL	586.6	1,177	3,607	4,671	2,791	2,180	1,246	724	457	302.7	188.8	147.2
MEAN	18.9	39.2	116	151	99.7	70.3	41.5	23.4	15.2	9.76	6.09	4.91
MAX	76	134	313	300	279	193	56	30	21	12	8.1	7.5
MIN	6.6	14	42	70	46	36	32	18	12	8.4	4.1	-----
AC-FT	1,160	2,330	7,150	9,260	5,540	4,320	2,470	1,440	906	600	374	292
CAL YR 1966	TOTAL	14,452.9	MEAN	39.6	MAX	333	MIN	4.8	AC-FT	28,670		
WTR YR 1967	TOTAL	18,078.3	MEAN	49.5	MAX	313	MIN	4.1	AC-FT	35,860		

DISCHARGE, IN CUBIC FEET PER SECONO, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	93	65	55	54	57	54	36	31	15	9.2	9.8
2	20	56	62	46	69	56	30	31	101	14	9.2	9.5
3	10	44	69	40	123	56	46	29	46	14	9.2	9.2
4	8.6	38	59	39	156	97	49	29	32	13	9.0	9.0
5	7.9	34	48	40	87	167	49	31	27	13	9.0	9.2
6	7.7	31	44	36	72	139	44	32	25	12	9.0	9.2
7	28	32	40	36	64	93	41	33	23	12	9.2	9.2
8	27	32	36	38	58	79	39	29	23	11	9.6	8.8
9	15	42	60	44	54	68	38	27	22	11	9.0	8.5
10	13	120	130	47	50	61	38	26	21	12	8.5	8.5
11	20	85	77	40	48	65	44	25	21	14	8.8	9.0
12	15	51	64	46	46	164	39	24	20	14	8.3	9.0
13	17	41	50	206	45	126	37	24	20	14	8.3	9.0
14	42	39	45	168	43	93	73	24	21	14	9.2	10
15	21	48	37	112	41	91	74	23	20	15	8.8	12
16	17	66	33	89	40	91	51	23	19	14	8.5	10
17	16	46	30	88	40	76	44	22	18	13	8.5	28
18	15	38	28	101	100	66	41	21	18	12	9.2	27
19	16	34	26	418	241	59	40	23	19	13	8.8	18
20	14	31	24	380	116	55	37	28	17	14	9.2	14
21	32	28	23	250	128	52	36	25	17	13	9.2	13
22	50	27	71	155	105	50	34	23	18	12	9.5	12
23	44	26	188	109	174	36	48	36	22	18	12	9.8
24	29	40	231	113	180	46	35	21	17	12	12	12
25	57	33	288	93	106	54	38	21	17	12	11	12
26	33	28	199	82	86	52	36	20	18	11	16	11
27	93	28	144	67	74	143	33	19	18	10	14	11
28	112	32	105	59	66	100	31	23	18	11	13	10
29	48	87	76	53	61	102	30	20	17	10	11	10
30	142	71	62	50	-----	105	34	20	16	10	11	9.8
31	123	-----	61	52	-----	61	-----	19	-----	9.8	10	-----
TOTAL	1,102.8	1,401	2,475	3,152	2,527	2,572	1,271	773	718	386.4	304.4	350.7
MEAN	35.6	46.7	77.8	102	87.1	83.0	42.4	24.9	23.9	12.5	9.82	11.7
MAX	142	120	288	418	241	167	74	36	101	15	16	28
MIN	7.7	26	23	36	40	46	30	19	16	9.8	8.3	8.5
AC-FT	2,190	2,780	4,910	6,250	5,010	5,100	2,520	1,530	1,420	767	604	696
CAL YR 1967	TOTAL	17,686.5	MEAN	48.5	MAX	300	MIN	4.1	AC-FT	35,080		
WTR YR 1968	TOTAL	17,033.7	MEAN	46.5	MAX	418	MIN	7.7	AC-FT	33,790		

12212000 FISHTRAP CREEK AT LYNDEN, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	33	44	35	22	52	74	48	17	12	5.9	6.1
2	9.8	32	57	37	25	52	115	47	16	14	7.1	5.9
3	10	33	134	40	70	51	80	43	16	14	7.9	5.9
4	11	28	125	183	80	50	70	39	15	14	7.7	6.5
5	14	26	84	251	82	91	87	37	14	13	7.5	6.3
6	22	24	71	133	61	74	84	34	14	13	8.1	6.3
7	26	23	70	198	50	59	62	32	14	12	8.1	6.1
8	24	37	145	96	63	52	53	29	14	12	7.1	5.9
9	21	54	102	78	98	47	48	27	13	12	6.9	8.1
10	19	40	111	71	92	44	49	26	13	12	7.3	9.1
11	23	60	114	64	125	43	44	25	13	12	6.5	6.1
12	24	82	76	58	105	40	44	24	13	12	5.9	6.7
13	36	53	65	54	82	39	51	23	13	12	6.9	8.3
14	23	50	64	50	73	38	45	22	12	12	7.8	7.1
15	26	68	61	49	71	70	44	22	13	11	7.5	6.7
16	21	54	71	47	144	69	43	21	11	11	7.3	6.7
17	22	41	59	46	114	79	50	20	11	10	6.7	9.0
18	36	54	70	44	84	70	99	20	12	9.8	6.7	12
19	40	55	56	41	73	63	69	19	12	9.2	7.1	12
20	70	54	49	36	65	54	57	18	12	9.0	7.1	17
21	42	47	45	39	60	48	52	18	12	9.2	7.1	12
22	48	49	43	35	57	48	49	17	12	8.5	6.7	28
23	36	48	55	32	53	48	62	17	13	8.5	6.7	42
24	56	41	165	30	52	44	56	18	13	8.5	6.5	22
25	43	35	120	28	52	41	46	17	12	8.3	6.5	22
26	37	33	84	27	50	39	43	17	13	8.3	6.5	16
27	29	32	65	25	53	38	40	16	13	9.2	6.5	14
28	29	53	50	24	52	36	42	18	15	7.9	7.3	13
29	34	42	40	22	-----	35	53	25	14	7.3	7.8	12
30	36	60	37	22	-----	34	51	23	10	6.9	14	20
31	43	35	22	22	-----	50	-----	20	-----	6.3	6.5	-----
TOTAL	922.3	1,341	2,387	1,917	2,008	1,598	1,762	782	395	324.9	225.2	358.8
MEAN	29.8	44.7	77.0	61.8	71.7	51.5	58.7	25.2	13.2	10.5	7.26	12.0
MAX	70	82	165	251	144	91	115	48	17	14	14	42
MIN	9.5	23	35	22	22	34	40	16	10	6.3	5.9	5.9
AC-FT	1,830	2,660	4,730	3,800	3,980	3,170	3,490	1,550	783	644	447	712

CAL YR 1968 TOTAL 16,705.2 MEAN 45.6 MAX 418 MIN 8.3 AC-FT 33,130
 WTR YR 1969 TOTAL 14,021.2 MEAN 38.4 MAX 251 MIN 5.9 AC-FT 27,810

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	14	23	29	58	26	22	28	14	11	8.2	3.1
2	23	14	21	27	49	25	22	27	14	11	7.7	3.2
3	21	13	22	27	50	25	21	26	14	9.8	7.4	5.6
4	15	65	29	26	44	24	46	24	14	8.5	7.4	5.9
5	13	125	27	24	42	24	79	23	13	8.5	7.2	6.4
6	12	54	25	24	50	28	94	22	13	7.7	6.1	10
7	12	39	23	23	42	43	51	21	12	6.9	6.9	6.9
8	21	40	27	23	38	31	61	24	12	7.4	6.9	6.1
9	23	42	43	31	36	28	92	32	12	6.9	6.9	6.1
10	18	39	34	31	34	26	56	25	12	6.6	5.6	5.9
11	15	31	51	36	32	25	43	23	12	6.4	5.9	5.9
12	14	31	48	48	31	28	37	23	12	7.4	6.1	5.9
13	14	37	48	46	40	30	34	21	12	6.9	5.9	5.6
14	19	28	54	94	44	39	31	20	12	5.6	5.4	5.4
15	13	27	45	58	54	62	29	20	12	6.3	5.6	5.1
16	12	26	36	41	103	78	27	19	12	4.2	6.1	5.2
17	11	29	40	33	90	53	27	19	11	5.6	6.1	8.9
18	10	24	38	35	64	41	27	18	10	6.1	5.2	10
19	10	24	34	62	52	36	33	18	9.8	6.6	5.2	8.9
20	13	25	33	87	46	33	31	18	11	5.4	5.1	7.7
21	15	39	59	145	41	30	29	18	11	5.9	4.7	5.6
22	15	28	52	108	37	29	27	18	9.5	5.6	4.7	7.7
23	19	49	54	112	35	32	32	18	9.8	5.4	5.1	8.5
24	17	58	72	33	30	36	46	17	9.5	5.4	4.5	6.6
25	16	36	42	64	31	28	50	17	8.9	6.4	4.5	6.9
26	14	38	42	66	30	27	45	16	8.5	11	4.7	6.9
27	16	28	44	86	29	26	39	16	11	12	4.7	6.1
28	20	26	36	68	27	25	33	17	11	9.2	5.1	5.6
29	22	24	33	95	-----	25	31	16	11	8.5	4.8	5.6
30	17	23	31	49	-----	23	29	15	11	8.9	4.3	5.6
31	16	-----	31	67	-----	23	-----	15	-----	8.2	3.4	-----
TOTAL	502	1,064	1,183	1,697	1,262	1,003	1,224	634	345.0	229.3	177.6	192.9
MEAN	16.2	39.5	38.2	54.7	45.1	32.4	40.8	20.5	11.5	7.40	5.73	6.43
MAX	24	128	59	145	103	78	94	32	14	12	8.2	10
MIN	10	13	21	23	27	23	21	15	8.5	4.2	3.4	3.1
AC-FT	996	2,110	2,350	3,370	2,500	1,990	2,430	1,260	684	455	352	383

CAL YR 1969 TOTAL 12,119.9 MEAN 33.2 MAX 251 MIN 5.9 AC-FT 24,040
 WTR YR 1970 TOTAL 9,513.8 MEAN 26.1 MAX 145 MIN 3.1 AC-FT 18,870

12212900 TENMILE CREEK AT LAUREL, WASH.

LOCATION.--Lat 48°51'49", long 122°29'45", in SE¼SW¼ sec.13, T.39 N., R.2 E., Whatcom County, on left bank on downstream side of county road bridge, 0.6 mile downstream from Fourmile Creek, 0.6 mile northwest of Laurel, and at mile 5.8.

DRAINAGE AREA.--23.6 sq mi.

PERIOD OF RECORD.--May 1968 to September 1970.

GAGE.--Water-stage recorder. Wooden control since July 30, 1968. Altitude of gage is 55 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for May 1968 to September 1970 are contained in the following table:

Annual maximum discharge (*), peak discharges above base (160 cfs), and annual minimum discharge

Wtr yr	Date	Maximum Time	Discharge	G.H.	Date	Minimum Discharge	G.H.
1968	June 2, 1968	2400	61	4.02	July 29, 1968	1.4	1.49
1969	Dec. 4, 1968	0830	172	5.59	Aug. 1, 1969	2.4	1.84
	Jan. 5, 1969a	-	*279	b6.3			
1970	Jan. 20, 1970	0400	*173	5.60	Aug. 21, 23, 27, 1970	2.5	cl.85

a About.

b From outside high watermark.

c Occurred July 24, 25, 1970.

Period of record: Maximum discharge, 279 cfs about Jan. 5, 1969 (gage height, 6.3 ft, from outside flood-mark); minimum, 1.4 cfs July 29, 1968.

REMARKS.--Records good. No gage-height record Dec. 27, 1968, to Jan. 7, 1969. No regulation. Some diversion for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								20	16	7.0	2.8	6.4
2								20	47	6.0	2.7	6.3
3								19	52	5.0	2.7	6.3
4								20	30	4.5	3.2	6.1
5								22	22	4.0	3.8	6.1
6								20	18	4.0	3.0	6.1
7								20	16	4.0	3.1	6.1
8								19	15	3.7	3.0	5.9
9								18	15	3.5	2.8	5.9
10								17	14	3.5	2.7	5.9
11								16	14	3.8	2.5	5.9
12								16	13	4.0	2.8	5.9
13								16	13	4.4	2.5	5.9
14								16	12	5.5	3.0	6.4
15								15	12	8.6	3.2	7.2
16								15	12	7.5	3.1	7.2
17								15	11	4.6	3.2	11
18								14	11	5.0	4.0	11
19								14	11	5.8	4.8	9.3
20								21	11	5.7	4.8	8.4
21								20	9.6	6.3	5.3	7.7
22								17	10	5.5	5.3	7.4
23								16	10	4.8	5.7	7.4
24								15	9.0	3.8	7.4	7.8
25								14	9.0	3.6	8.1	7.0
26								14	9.5	2.8	9.6	6.8
27								14	9.5	2.3	8.8	6.6
28								14	9.5	2.5	7.5	6.6
29								13	8.5	2.4	7.0	6.4
30								13	8.0	2.6	6.6	6.4
31								12	-----	3.0	6.6	-----
TOTAL								515	457.6	138.9	141.6	208.6
MEAN								16.6	15.3	4.48	4.57	6.95
MAX								22	52	8.6	9.6	11
MIN								12	8.0	2.3	2.5	5.9
CF SW								.70	.65	.19	.19	.29
IN.								.81	.72	.22	.22	.33
AC-FT								1.020	.908	.276	.281	.414

12212900 TENMILE CREEK AT LAUREL, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	15	64	30	17	24	54	33	15	8.6	2.7	4.4
2	6.3	14	56	35	20	24	98	32	15	8.1	3.0	4.2
3	6.3	15	94	50	40	23	116	30	14	8.1	3.2	4.4
4	6.1	14	154	110	70	24	71	27	13	8.4	3.2	4.8
5	6.1	13	113	250	90	67	58	25	12	7.9	3.5	5.2
6	6.1	12	89	190	75	86	59	23	11	7.9	3.7	5.2
7	6.4	12	66	200	48	51	43	22	10	6.8	3.7	5.2
8	6.4	16	86	139	54	39	35	20	9.8	5.9	3.5	4.8
9	6.4	29	96	107	78	32	31	19	9.6	6.1	3.2	5.0
10	6.8	33	115	99	65	29	36	18	8.6	6.1	3.4	4.4
11	8.1	33	149	91	72	26	31	17	8.4	6.6	3.8	4.4
12	9.3	39	113	73	72	25	29	17	8.1	6.6	3.4	4.6
13	9.3	40	82	54	58	23	37	16	7.9	6.4	3.8	5.5
14	8.1	39	60	45	50	23	36	15	7.4	5.9	3.2	5.7
15	8.1	47	48	41	44	34	28	15	7.9	5.7	3.2	6.1
16	8.6	54	45	38	53	45	27	14	7.5	5.3	3.2	6.1
17	8.6	42	42	36	53	41	32	14	6.8	5.3	3.4	7.4
18	11	35	40	34	43	46	54	13	6.8	5.2	3.6	8.4
19	12	39	44	27	38	57	39	12	6.6	5.0	3.6	8.3
20	20	32	33	25	34	34	47	12	6.4	5.3	3.8	9.0
21	22	32	29	23	31	30	40	12	6.4	5.3	3.6	9.1
22	20	36	27	22	30	29	35	12	6.4	4.6	4.2	15
23	18	40	29	21	29	34	45	12	7.4	5.0	4.0	19
24	16	41	81	20	28	40	12	10	7.6	4.6	3.6	15
25	16	33	99	18	27	26	35	12	9.8	4.2	4.0	13
26	15	27	81	17	26	24	30	12	8.1	3.8	4.2	12
27	14	28	40	16	25	23	28	11	7.5	4.2	4.4	10
28	13	32	30	16	24	21	30	12	11	4.0	4.4	9.6
29	14	27	42	15	22	20	35	11	10	3.4	4.4	9.5
30	14	74	25	15	-----	20	35	21	10	3.1	4.6	13
31	16	-----	27	16	-----	36	-----	17	-----	3.0	4.4	-----
TOTAL	344.6	953	2,079	1,873	1,294	1,026	1,332	544	279.4	176.4	114.3	238.3
MEAN	11.1	31.8	67.1	60.4	46.2	33.1	44.4	17.5	9.31	5.69	3.69	7.94
MAX	22	74	154	250	90	86	116	33	15	8.6	4.6	19
MIN	6.1	12	25	15	17	20	27	11	6.4	3.0	2.7	4.2
CFSM	.47	1.35	2.84	2.56	1.96	1.40	1.88	.74	.39	.24	.16	.34
IN-	.54	1.50	3.28	2.95	2.04	1.62	2.10	.86	.44	.28	.18	.38
AC-FT	684	1,890	4,120	3,720	2,570	2,040	2,640	1,080	554	350	227	473

WTR YR 1969 TOTAL 10,254.0 MEAN 28.1 MAX 250 MIN 2.7 CFSM 1.19 IN 16.16 AC-FT 20,340

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	11	13	23	53	24	16	19	9.5	5.9	4.6	3.6
2	12	11	12	22	45	23	16	18	9.3	5.5	4.6	3.6
3	11	11	13	23	49	23	15	17	8.8	5.3	4.6	4.2
4	10	17	17	24	41	22	16	16	8.6	5.2	3.6	4.6
5	10	36	17	21	39	22	40	15	8.3	5.3	3.4	4.6
6	9.8	22	16	20	47	24	81	15	7.5	5.5	3.4	5.3
7	9.8	19	15	19	41	26	68	14	7.4	5.0	3.4	5.3
8	12	21	19	19	38	24	43	15	7.4	4.8	3.4	5.2
9	13	26	30	56	34	23	44	22	7.4	4.8	3.6	5.0
10	12	20	27	55	32	22	44	18	7.4	4.8	3.8	5.0
11	11	18	23	86	30	21	37	16	7.4	4.6	3.0	5.0
12	10	16	21	99	28	22	31	15	6.8	4.8	3.1	4.8
13	9.5	16	22	73	52	22	27	13	6.8	4.8	3.1	4.6
14	9.1	15	55	110	62	24	24	13	7.2	4.2	3.1	4.6
15	9.1	16	52	79	48	34	21	12	8.3	3.8	3.0	4.8
16	9.0	16	48	39	103	40	19	12	7.7	3.8	3.4	4.8
17	8.4	16	38	31	92	33	18	12	6.8	4.0	3.6	5.7
18	8.3	14	32	44	70	28	17	12	6.4	4.0	3.0	6.1
19	8.3	14	27	104	50	26	20	11	6.4	3.8	3.0	6.1
20	9.0	14	28	170	42	24	22	11	6.3	4.2	3.0	5.7
21	9.0	16	64	157	38	22	22	11	6.4	3.2	3.0	5.5
22	9.1	15	66	122	34	21	20	11	5.9	3.1	3.1	5.7
23	9.6	19	60	101	32	23	19	11	5.7	3.2	3.0	5.7
24	9.5	23	65	75	29	25	25	11	5.7	3.1	3.1	5.5
25	9.4	19	41	72	28	22	32	10	5.5	3.4	2.8	5.5
26	9.3	17	40	74	27	20	43	10	5.5	5.9	2.8	5.7
27	11	15	50	140	26	19	34	10	6.3	6.4	2.8	5.5
28	13	14	36	112	25	18	27	10	6.3	5.5	3.2	5.3
29	12	14	31	74	-----	18	24	10	6.8	5.2	3.2	5.3
30	11	13	28	54	-----	17	22	10	6.3	5.2	3.4	5.3
31	11	-----	25	56	-----	16	-----	9.5	-----	5.2	3.6	-----
TOTAL	319.2	514	1,031	2,152	1,235	727	887	409.5	212.1	143.5	103.7	153.6
MEAN	10.3	17.1	33.3	69.4	44.1	23.5	29.6	13.2	7.07	4.63	3.35	5.12
MAX	14	36	66	170	103	40	81	22	9.5	6.4	4.6	6.1
MIN	8.3	11	12	19	25	16	15	9.5	5.5	3.1	2.8	3.6
CFSM	.44	.72	1.41	2.94	1.87	1.00	1.25	.56	.30	.20	.14	.22
IN-	.30	.81	1.63	3.39	1.95	1.15	1.40	.65	.33	.23	.16	.24
AC-FT	633	1,020	2,040	4,270	2,450	1,440	1,760	812	421	285	206	305

CAL YR 1969 TOTAL 8,741.6 MEAN 23.9 MAX 250 MIN 2.7 CFSM 1.01 IN 13.78 AC-FT 17,340
WTR YR 1970 TOTAL 7,887.6 MEAN 21.6 MAX 170 MIN 2.8 CFSM .92 IN 12.43 AC-FT 15,652

12213100 NOOKSACK RIVER AT FERNDAL, WASH.

LOCATION.--Lat 48°50'42", long 122°35'17", in NE1/4NW sec.29, T.39 N., R.2 E., Whatcom County, on right bank 300 ft downstream from highway bridge at Ferndale and 5.8 miles upstream from mouth.

DRAINAGE AREA.--786 sq mi, of which 48.9 sq mi is in Canada.

PERIOD OF RECORD.--October 1966 to September 1970.

GAGE.--Water-stage recorder. Datum of gage is 4.61 ft above mean sea level. Prior to July 18, 1968, at site 220 ft upstream at datum 4.21 ft higher.

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (16,000 cfs), water years 1967-70

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Dec. 14, 1966	0830	*21,400	12.31	Oct. 28, 1967	0930	19,100	15.59	Sept. 17, 1968	2230	18,800	15.35
Dec. 16, 1966	2200	21,300	12.27	Nov. 1, 1967	0130	17,000	14.68				
Feb. 4, 1967	2000	17,400	10.63	Dec. 26, 1967	0130	*23,900	17.48	Dec. 4, 1968	0300	18,200	15.12
				Jan. 14, 1968	2300	17,900	15.08	Jan. 5, 1969	1100	*28,100	19.42
				Jan. 21, 1968	0730	20,100	16.02				
Oct. 11, 1967	2200	16,100	14.24	June 2, 1968	2130	19,100	15.60	Nov. 5, 1969	0700	*17,300	14.77

a Occurred at 0600 hours, backwater from ice.

Annual minimum discharge, water years 1967-70

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1967	Oct. 16-18, 1966	a800	-	1969	Sept. 7, 1969	1,140	3.69
1968	Aug. 23, 1968	1,370	3.96	1970	Sept. 16, 17, 1970	936	3.46

a Minimum daily.

Period of record: Maximum discharge, 28,100 cfs Jan. 5, 1969 (gage height, 18.73 ft); maximum gage height, 19.42 ft Jan. 5, 1969 (backwater from ice); minimum daily discharge, 800 cfs Oct. 16-18, 1966.

REMARKS.--Records excellent. No gage-height record Oct. 1, to Nov. 16, 1966. Slight regulation by powerplant at Excelsior. City of Bellingham diverts up to about 100 cfs at times from Middle Fork Nooksack River for municipal use. Water-quality records for the water years 1967-70 are published in reports of the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,180	2,350	10,600	6,100	5,210	4,270	2,490	1,870	5,130	4,720	2,260	1,900
2	1,950	2,100	9,120	5,000	4,660	3,240	2,400	2,000	7,760	4,890	2,160	2,280
3	1,500	2,000	6,960	6,400	8,740	2,790	2,360	2,210	7,920	5,390	2,080	1,990
4	1,280	1,800	5,690	6,000	15,700	2,540	2,430	2,430	7,490	5,390	2,130	1,710
5	1,200	2,000	5,520	5,200	12,500	2,390	2,470	2,910	7,300	4,870	2,120	1,680
6	1,180	2,400	4,940	4,500	8,050	2,280	2,340	3,350	7,720	4,360	2,060	1,680
7	1,400	1,900	5,100	4,200	5,970	2,210	2,270	3,620	7,460	3,920	2,260	1,450
8	2,300	1,750	4,200	3,950	4,900	2,540	2,300	4,390	6,020	3,670	2,360	1,320
9	1,700	1,700	3,500	7,000	4,350	3,560	2,440	5,330	5,240	3,610	2,110	1,280
10	1,300	2,000	4,200	6,000	4,180	2,890	2,540	4,040	5,020	3,170	2,210	1,500
11	1,140	1,700	6,200	8,500	3,930	2,620	2,310	3,500	4,890	3,190	2,370	3,440
12	1,020	2,700	10,500	6,800	4,080	2,480	2,270	3,190	4,860	3,680	2,410	2,300
13	940	2,600	15,500	6,310	6,250	2,350	2,350	3,020	5,630	4,230	2,280	1,680
14	870	7,200	18,800	5,720	4,840	2,250	2,340	2,990	6,270	3,910	2,200	1,300
15	820	5,700	13,200	10,600	4,170	2,190	2,200	3,400	6,600	3,490	2,180	1,300
16	800	4,600	18,700	9,730	3,840	2,550	2,080	4,450	6,940	3,340	2,260	1,340
17	800	3,740	17,200	6,690	3,620	3,540	2,170	6,110	7,480	3,400	2,150	1,420
18	800	3,130	17,300	5,480	4,500	3,070	2,200	6,280	7,980	3,170	2,070	1,400
19	3,200	2,870	14,600	7,320	3,740	2,740	2,200	6,000	7,980	2,870	2,000	1,380
20	9,500	3,590	15,200	11,600	3,300	2,660	2,180	6,630	8,930	2,910	1,920	1,530
21	4,000	2,920	10,300	9,020	3,050	3,130	2,140	8,140	9,020	3,640	1,950	1,560
22	3,500	2,730	7,660	6,660	2,830	3,690	2,090	6,210	8,750	2,980	1,950	1,540
23	8,400	2,630	6,130	5,360	2,690	9,660	2,010	7,380	7,310	2,850	1,790	1,310
24	9,700	2,490	5,410	4,580	2,550	7,740	1,980	5,580	6,310	2,860	1,670	1,240
25	6,000	4,370	5,460	3,990	2,540	5,290	2,020	4,520	6,600	2,900	1,450	1,270
26	5,000	5,910	4,500	3,770	2,500	4,330	1,980	4,270	6,880	2,960	1,380	1,220
27	4,500	4,020	3,920	4,350	2,370	3,760	1,900	4,600	6,520	2,850	1,420	1,240
28	3,400	4,900	3,610	9,380	2,650	3,350	1,900	4,960	5,790	2,720	1,500	1,310
29	3,100	5,850	4,020	9,680	-----	3,180	1,900	6,130	5,340	2,550	1,640	1,330
30	3,750	6,720	3,810	9,600	-----	2,930	1,840	5,640	5,120	2,420	1,780	2,000
31	2,700	-----	4,000	6,510	-----	2,680	-----	4,630	-----	2,340	1,880	-----
TOTAL	88,930	100,370	265,850	206,000	137,910	104,900	66,100	141,780	202,280	109,450	62,000	47,920
MEAN	2,869	3,346	8,576	6,645	4,925	3,384	2,203	4,574	6,743	3,531	2,000	1,597
MAX	9,700	7,200	18,800	11,600	15,700	9,660	2,540	8,210	9,020	5,390	2,410	3,440
MIN	800	1,700	3,500	3,770	2,370	2,190	1,840	1,870	4,860	2,340	1,380	1,220
CFSM	3.65	4.26	10.9	8.45	6.27	4.31	2.80	5.62	8.58	4.49	2.54	2.03
IN.	4.21	4.75	12.58	9.75	6.53	4.96	3.13	6.71	9.57	5.18	2.93	2.27
AC-FT	176,400	199,100	527,900	408,600	273,500	208,100	131,100	281,200	401,200	217,100	123,000	95,050
WTR YR 1967	TOTAL	1,533,490	MEAN	4,201	MAX	18,800	MIN	800	CFSM	5.34	IN	72.58
									AC-FT	3,042,000		

12213100 NOOKSACK RIVER AT FERNDALE, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968										
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	SEP
1	3,460	12,900	2,860	4,950	3,660	4,730	3,630	4,540	4,470	2,590
2	9,800	7,840	2,990	4,270	3,770	4,950	3,460	3,470	15,400	2,570
3	4,560	9,950	3,990	3,790	7,830	5,260	3,240	3,100	14,700	2,590
4	4,280	4,840	3,710	3,560	11,800	5,080	3,090	3,210	9,120	2,490
5	3,010	4,160	3,120	3,410	8,270	9,600	3,410	3,630	6,880	2,340
6	2,760	3,690	2,770	3,100	5,720	9,250	3,110	3,200	6,110	2,090
7	8,630	3,570	2,570	2,950	4,820	6,770	2,990	3,110	5,620	1,870
8	8,090	3,600	2,390	2,910	4,300	5,460	2,790	2,990	5,020	1,750
9	4,350	4,450	3,240	2,870	3,960	4,650	2,640	3,090	4,630	1,740
10	3,380	6,510	6,790	3,150	3,730	4,120	2,670	3,630	4,590	1,710
11	11,700	7,450	10,900	2,770	3,540	3,810	3,220	4,230	4,500	3,690
12	12,100	4,740	5,900	2,600	3,360	4,680	3,090	4,470	4,170	1,780
13	7,180	4,110	4,280	5,810	3,240	5,320	2,740	3,760	3,770	1,620
14	11,200	4,050	3,580	13,800	3,080	4,460	2,840	3,320	3,720	1,620
15	6,240	8,740	3,170	15,200	2,990	4,180	5,610	3,170	3,470	1,630
16	4,570	7,560	2,940	10,700	2,720	4,540	3,200	3,160	3,300	1,540
17	3,770	5,260	2,730	7,460	2,630	4,410	2,820	3,590	3,360	1,500
18	3,300	4,440	2,540	6,250	3,880	3,820	2,620	4,220	3,640	1,690
19	4,320	3,900	2,300	13,000	12,700	3,420	2,540	5,080	4,110	2,980
20	3,370	3,440	2,200	16,500	11,500	3,220	2,410	7,360	4,200	3,810
21	5,330	3,100	2,150	18,100	9,340	3,080	2,260	7,300	3,640	3,540
22	7,840	2,900	3,500	11,800	10,300	2,980	2,180	5,120	3,400	2,970
23	7,620	2,790	8,020	8,940	9,500	2,970	2,330	4,590	3,630	2,750
24	5,290	3,030	14,700	10,500	12,800	3,420	2,720	4,140	3,690	2,720
25	5,890	2,940	21,200	9,360	9,100	3,280	2,590	3,920	3,970	2,850
26	4,820	2,540	20,400	7,070	6,770	3,170	2,780	3,800	4,870	2,870
27	5,980	2,410	13,500	5,500	5,680	4,470	2,650	3,540	4,800	2,880
28	16,800	2,360	11,400	4,800	5,120	6,230	2,660	3,630	6,310	3,080
29	10,080	3,050	8,420	4,400	4,820	5,880	3,510	3,830	4,810	3,080
30	9,840	3,060	6,530	4,000	-----	5,430	4,340	3,540	3,650	2,860
31	12,000	-----	5,520	3,800	-----	4,180	-----	3,340	-----	2,630
TOTAL	211,280	139,380	190,310	217,320	180,830	146,820	88,340	123,080	161,260	67,880
MEAN	6,815	4,646	6,139	7,010	6,236	4,736	2,965	3,970	5,375	3,685
MAX	16,800	12,900	21,200	18,100	12,800	9,600	4,340	7,360	15,400	5,820
MIN	2,760	2,360	2,150	2,600	2,630	2,710	2,180	2,990	3,360	2,570
CFSM	8.67	5.91	7.81	8.92	7.93	6.03	3.75	5.05	6.49	4.38
IN.	10.00	6.60	9.01	10.29	8.56	6.95	4.18	5.83	7.63	5.41
AC-FT	419,100	276,500	377,500	431,100	358,700	291,200	175,200	244,100	319,900	226,600
CAL YR 1967	TOTAL 1,619,310			MEAN 4,436	MAX 21,200	MIN 1,220	CFSM 5.64	IN 76.64	AC-FT 3,212,000	
WTR YR 1968	TOTAL 1,743,690			MEAN 4,765	MAX 21,200	MIN 1,410	CFSM 6.06	IN 82.54	AC-FT 3,459,000	

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969										
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	SEP
1	1,870	4,200	4,900	2,590	1,600	1,770	5,860	3,810	5,870	1,870
2	1,720	3,680	4,340	3,000	1,600	1,750	5,890	3,740	6,570	1,790
3	1,630	5,080	7,700	5,000	1,700	1,770	5,160	3,440	7,140	1,710
4	1,670	3,960	13,800	10,800	2,100	1,810	4,190	3,140	7,820	1,630
5	2,060	3,350	7,980	22,000	2,000	2,220	4,640	3,070	7,740	1,600
6	2,400	2,960	5,850	13,300	1,800	2,970	4,810	3,380	7,490	1,610
7	3,910	2,710	4,950	10,500	1,600	2,430	4,070	4,050	6,820	1,530
8	3,040	3,200	7,320	7,790	2,000	2,150	3,660	5,920	6,780	1,480
9	2,420	4,540	6,980	6,160	2,700	1,980	3,590	6,030	7,060	1,510
10	2,380	4,110	6,960	5,510	2,300	1,860	3,950	6,790	7,160	1,550
11	3,020	3,810	7,700	4,840	3,500	1,790	3,900	8,900	6,960	1,540
12	3,430	7,790	5,870	4,240	4,910	1,730	3,910	8,140	6,520	1,450
13	3,560	5,660	4,790	3,830	3,710	1,680	5,340	7,970	5,950	1,500
14	3,200	4,530	4,490	3,600	3,130	1,670	4,910	7,790	5,860	1,580
15	3,170	4,160	4,340	3,350	2,780	1,880	3,850	6,790	5,460	1,710
16	3,420	3,940	4,420	3,140	2,860	2,750	3,470	5,850	5,420	1,660
17	2,810	3,360	3,910	2,980	3,040	3,430	3,790	5,560	5,570	1,460
18	4,430	4,100	3,740	2,780	2,660	5,300	6,510	5,700	5,640	1,440
19	3,730	7,190	3,380	2,640	2,450	5,930	5,810	6,620	5,510	1,470
20	6,260	7,560	3,830	2,500	2,510	3,340	5,040	6,720	5,090	1,470
21	4,920	2,260	2,830	2,300	2,190	2,970	4,360	6,920	4,310	2,380
22	4,730	9,990	2,680	2,200	2,110	2,850	4,700	7,590	3,800	2,270
23	4,060	7,970	2,740	2,100	2,040	2,990	5,910	8,560	3,520	2,400
24	4,610	6,160	7,970	2,000	1,960	2,700	6,360	9,740	4,490	2,570
25	4,830	6,960	8,730	1,800	1,900	2,500	4,820	9,180	3,990	2,470
26	4,740	4,320	5,890	1,700	1,840	2,490	4,040	6,790	3,340	2,100
27	3,618	4,420	4,580	1,650	1,820	2,950	3,730	6,190	3,030	2,050
28	3,480	4,700	3,500	1,600	1,770	3,160	3,850	6,100	3,090	2,110
29	4,640	5,010	3,000	1,600	-----	3,070	4,620	6,620	2,880	1,950
30	6,240	6,400	2,500	-----	-----	3,390	4,220	10,400	2,910	1,660
31	6,120	-----	2,400	1,600	-----	5,250	-----	6,800	-----	1,880
TOTAL	112,110	151,080	163,250	139,810	66,380	82,530	138,960	202,300	163,790	86,820
MEAN	3,616	5,036	5,266	4,510	2,371	2,662	4,632	6,526	5,460	2,801
MAX	6,260	9,990	13,800	22,000	4,910	5,300	6,510	10,400	7,820	5,860
MIN	1,630	2,710	2,400	1,600	1,600	1,670	3,470	3,070	2,880	1,660
CFSM	4.60	6.41	6.70	5.74	3.02	3.39	5.89	8.30	6.95	3.56
IN.	5.31	7.15	7.73	6.62	3.14	3.91	6.58	9.57	7.75	4.11
AC-FT	222,400	299,700	323,800	277,300	131,700	163,700	275,600	401,980	324,900	172,200
CAL YR 1968	TOTAL 1,629,360			MEAN 4,452	MAX 18,100	MIN 1,410	CFSM 5.66	IN 77.11	AC-FT 3,232,000	
WTR YR 1969	TOTAL 1,453,690			MEAN 3,983	MAX 22,000	MIN 1,160	CFSM 5.07	IN 68.81	AC-FT 2,884,000	

12215100 SUMAS RIVER NEAR HUNTINGDON, BRITISH COLUMBIA

LOCATION.--Lat 49°00'09", long 122°13'50", on highway bridge at international boundary, 1.5 miles east of Huntingdon.

DRAINAGE AREA.--57.6 sq mi.

PERIOD OF RECORD.--October 1960 to December 1968, January to September 1970. October 1935 to June 1949 (fragmentary gage heights only), October 1950 to September 1952 (gage heights only), and October 1952 to September 1960 in reports of Department of Northern Affairs and National Resources, Canada.

GAGE.--Water-stage recorder.

AVERAGE DISCHARGE.--16 years (1952-68), 112 cfs (81,080 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for October 1965 to December 1968, January to September 1970 are contained in the following table:

Wtr yr	Date	Maximum			Date	Minimum		
		Discharge	G.H.			Discharge	G.H.	
1966	Jan. 14, 1966	943	9.27		Sept. 30, 1966	19.0	1.90	
1967	Dec. 16, 1966	714	8.17		Oct. 6, 1966	18.0	1.83	
1968	Jan. 20, 1968	1,070	10.02		Oct. 6, 1967	29.1	1.88	
1969	Dec. 4, 1968	442	-		Oct. 2-5, 1968	b49	-	
1970	Jan. 22, 1970	432	-		July 10,17,Sept.16,30,1970	b31	-	

a Maximum daily.

b Minimum daily.

Period of record: Maximum discharge, 1,130 cfs Feb. 6, 1965; maximum gage height, 13.50 ft Feb. 11, 1951 (from high watermark); minimum discharge, 1.1 cfs Aug. 28, 1958 (gage height, 1.72 ft).

COOPERATION.--Records furnished by Department of Energy, Mines and Resources, Canada.

Discharge measurements, in cubic feet per second, water year 1969

Jan. 7, 1969..... 582 Feb. 21, 1969..... 141 June 18, 1969..... 36.6 Sept.23, 1969..... 151

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	65	84	56	188	112	132	105	79	42	39	24
2	36	113	93	55	157	115	161	102	79	47	36	24
3	35	120	104	54	140	107	167	99	79	57	35	23
4	37	120	143	54	130	101	135	96	78	68	34	23
5	40	142	185	54	120	115	125	94	75	61	34	23
6	43	126	249	55	180	151	124	94	73	60	34	22
7	45	87	288	60	195	171	121	122	69	56	34	22
8	44	69	238	90	191	167	118	127	67	51	36	21
9	41	68	179	200	179	494	117	106	65	49	34	20
10	42	64	152	458	158	760	120	97	64	47	32	20
11	41	68	147	582	161	447	228	92	63	48	32	23
12	40	65	126	570	237	314	401	90	61	49	32	29
13	44	59	110	750	193	313	329	94	60	47	34	28
14	49	59	99	843	162	418	282	93	60	45	37	23
15	53	89	90	558	139	345	383	91	58	44	37	22
16	64	109	82	387	132	322	307	101	55	45	34	21
17	60	106	77	303	145	301	234	96	53	44	33	21
18	50	90	75	257	135	255	194	90	52	44	32	29
19	53	83	79	220	120	282	168	88	51	45	30	34
20	71	95	84	189	119	272	153	86	50	46	29	25
21	61	101	94	174	134	233	148	97	48	43	28	22
22	53	174	94	163	129	204	137	142	47	43	29	21
23	47	229	84	167	117	188	129	114	46	42	27	22
24	44	144	84	174	110	175	125	99	46	43	25	25
25	42	102	87	144	104	166	124	93	46	43	24	23
26	41	86	84	133	101	154	126	90	45	43	25	22
27	40	84	83	141	97	152	120	96	47	42	28	22
28	42	94	70	155	99	148	115	94	47	41	30	22
29	48	88	66	153	-----	144	111	88	47	39	29	20
30	55	83	61	195	-----	165	108	84	44	38	26	19
31	58	-----	59	220	-----	166	-----	81	-----	38	25	-----
TOTAL	1,455	2,982	3,550	7,614	4,072	7,457	5,224	3,041	1,754	1,480	974	695
MEAN	46.9	99.4	115	246	145	241	174	98.1	58.5	46.8	31.4	23.2
MAX	71	229	288	843	237	760	401	142	79	68	39	34
MIN	35	59	59	54	97	101	108	81	44	38	24	19
AC-FT	2,890	5,910	7,040	15,100	8,080	14,790	10,360	6,030	3,480	2,880	1,930	1,380
CAL YR 1965	TOTAL 46,426	MEAN 127	NAX 1,060	MIN 20	AC-FT 92,090							
WTR YR 1966	TOTAL 40,268	MEAN 110	NAX 843	MIN 19	AC-FT 75,870							

NOTE.--DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

12215100 SUMAS RIVER NEAR HUNTINGDON, BRITISH COLUMBIA--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	49	273	332	298	333	177	115	95	46	43	31
2	28	45	276	392	282	290	165	112	88	45	41	33
3	19	45	218	394	385	234	158	111	87	46	40	32
4	19	43	179	464	669	205	155	109	86	43	39	29
5	18	48	177	578	600	187	157	106	84	43	37	30
6	18	60	169	461	409	178	155	105	78	42	40	29
7	21	67	174	317	337	167	103	75	42	47	29	
8	23	59	187	404	288	193	142	108	71	44	48	30
9	22	58	157	591	262	308	158	119	68	47	54	29
18	21	62	156	501	244	275	206	112	65	48	41	32
11	28	64	237	444	233	232	189	111	61	44	40	33
12	19	78	303	419	250	214	170	109	57	43	37	32
13	19	90	389	403	343	205	176	108	53	43	37	31
14	19	119	524	367	335	196	186	101	48	43	39	30
15	19	142	486	522	287	188	177	103	43	42	35	29
16	19	131	658	584	272	208	163	103	41	43	34	27
17	20	115	620	418	251	246	174	99	40	47	33	27
18	20	100	598	352	277	257	184	97	39	42	32	27
19	44	89	540	454	261	218	183	94	40	42	31	26
20	157	81	466	651	228	209	181	91	37	54	31	25
21	217	77	386	511	210	257	165	90	40	70	35	25
22	115	81	298	408	195	316	155	89	52	65	33	25
23	121	86	249	335	187	494	146	87	55	55	30	24
24	152	81	228	285	177	397	138	86	49	52	31	24
25	130	88	264	253	174	334	132	85	67	45	31	23
26	85	119	250	233	170	289	129	84	47	45	30	23
27	72	145	208	301	152	257	126	82	49	45	30	23
28	61	205	188	592	196	230	123	83	49	46	31	22
29	58	211	211	542	-----	220	122	87	47	47	27	24
30	55	217	224	441	-----	208	119	90	47	45	25	31
31	52	-----	210	359	-----	191	-----	99	-----	48	26	-----
TOTAL	1,674	2,855	9,503	13,328	7,982	7,756	4,758	3,078	1,738	1,452	1,108	835
MEAN	54.0	95.2	307	430	285	250	159	99.3	57.9	46.8	35.7	27.8
MAX	217	217	658	651	669	494	206	119	95	70	54	33
MIN	18	43	156	233	162	167	119	82	37	42	25	22
AC-FT	3,320	5,660	18,850	26,440	15,830	15,380	9,440	6,110	3,450	2,880	2,200	1,680
CAL YR 1966	TOTAL 46,313	MEAN 127	MAX 843	MIN 18	AC-FT 91,860							
WTR YR 1967	TOTAL 56,067	MEAN 154	MAX 669	MIN 18	AC-FT 111,200							

NOTE---DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	367	124	160	144	165	187	114	95	72	47	53
2	54	283	119	150	150	160	168	111	225	71	46	51
3	34	170	158	140	198	162	152	104	360	64	61	49
4	42	128	200	130	300	178	167	103	217	64	42	48
5	34	110	178	120	284	302	153	110	142	65	45	51
6	30	97	142	110	210	361	145	112	118	65	41	50
7	46	91	120	100	176	322	135	111	104	65	39	49
8	87	92	109	92	162	272	128	105	99	65	37	48
9	81	98	140	86	150	232	126	100	97	35	38	47
10	55	146	269	81	140	199	122	95	94	62	35	46
11	63	169	283	78	133	182	139	91	87	58	35	45
12	93	139	215	76	127	208	144	92	84	65	42	46
13	79	114	158	280	121	253	131	91	89	71	38	51
14	96	102	121	480	117	229	136	89	92	72	39	53
15	101	110	110	480	111	199	185	88	87	104	44	63
16	69	135	101	320	107	203	189	85	83	128	43	69
17	56	133	97	240	104	215	153	84	82	94	42	84
18	90	114	95	232	144	192	138	81	75	79	43	135
19	51	101	95	232	374	170	131	80	75	69	47	121
20	56	92	77	641	492	158	125	91	75	71	53	80
21	67	85	74	540	362	147	121	105	74	69	53	72
22	131	80	84	406	350	140	114	95	76	66	52	63
23	155	77	117	316	355	137	115	93	80	64	54	61
24	125	76	480	306	434	142	121	89	76	63	45	59
25	100	74	430	293	353	151	121	85	75	62	81	56
26	86	71	370	255	279	154	127	83	72	55	103	54
27	106	69	330	221	234	198	120	81	76	55	138	51
28	268	73	260	200	200	333	114	84	76	54	98	49
29	268	105	240	150	180	294	116	86	76	51	77	47
30	208	144	210	160	-----	265	112	80	74	51	65	47
31	287	-----	160	142	-----	206	-----	80	-----	49	58	-----
TOTAL	3,062	3,645	5,696	7,437	6,491	6,529	4,113	2,896	3,115	2,109	1,678	1,798
MEAN	98.8	122	184	240	224	211	137	93.4	104	68.0	54.1	59.9
MAX	287	367	480	641	492	361	189	114	360	128	138	135
MIN	30	69	74	76	104	137	112	80	72	49	35	45
AC-FT	6,070	7,230	11,300	14,750	12,870	12,950	8,160	5,740	6,180	4,180	3,330	3,570
CAL YR 1967	TOTAL 54,438	MEAN 149	MAX 669	MIN 22	AC-FT 108,000							
WTR YR 1968	TOTAL 48,569	MEAN 133	MAX 661	MIN 30	AC-FT 96,340							

NOTE---DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

12215100 SUMAS RIVER NEAR HUNTINGDON, BRITISH COLUMBIA--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER TO DECEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	156	222									
2	49	138	209									
3	49	137	275									
4	49	128	462									
5	49	115	392									
6	59	102	382									
7	59	95	241									
8	70	105	292									
9	67	155	367									
10	70	194	341									
11	89	184	406									
12	121	209	360									
13	121	200	282									
14	105	162	233									
15	94	169	210									
16	90	196	214									
17	88	185	283									
18	116	162	195									
19	139	162	181									
20	185	192	158									
21	260	175	143									
22	202	162	134									
23	158	162	138									
24	142	157	254									
25	138	144	353									
26	134	150	312									
27	120	125	260									
28	118	125	210									
29	115	135	160		-----							
30	119	195	190		-----							
31	141	-----	110		-----		-----		-----			-----
TOTAL	3,952	4,692	7,723									
MEAN	108	156	249									
MAX	268	203	462									
MIN	49	95	110									
AC-FT	6,650	9,310	15,320									

CAL YR 1968 TOTAL 51,933 MEAN 142 MAX 641 MIN 35 AC-FT 103,000

NOTE.--DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

DISCHARGE, IN CUBIC FEET PER SECOND, JANUARY TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				114	105	89	67	80	47	38	46	34
2				108	170	86	66	76	45	37	45	34
3				106	166	83	64	73	44	36	45	37
4				106	160	80	70	69	44	35	44	40
5				97	146	79	129	66	43	35	43	38
6				91	152	80	208	63	42	36	43	38
7				87	150	100	274	62	42	33	42	40
8				85	141	93	181	64	41	32	43	39
9				95	134	84	164	93	42	32	42	39
10				112	126	79	188	84	44	31	42	37
11				109	119	78	152	78	43	32	40	35
12				131	113	79	127	72	42	34	38	33
13				150	119	80	112	66	42	37	38	32
14				210	151	90	101	63	40	33	38	32
15				206	149	147	92	62	42	33	37	32
16				201	202	176	86	60	42	32	38	31
17				162	266	162	81	61	41	31	39	30
18				162	231	128	78	59	38	32	37	46
19				186	189	111	82	56	37	33	36	48
20				306	162	102	91	54	36	36	35	43
21				388	145	95	91	52	37	32	34	38
22				414	131	91	85	55	38	32	34	37
23				364	121	90	80	56	35	32	35	38
24				299	114	93	91	52	35	32	37	37
25				251	108	87	110	50	33	35	34	35
26				299	103	82	120	48	33	47	35	34
27				280	99	79	112	48	36	59	34	34
28				311	93	77	99	47	40	57	34	32
29				245	-----	75	90	47	40	48	35	32
30				202	-----	72	85	50	39	48	35	31
31		-----		183	-----	69	-----	48	-----	47	35	-----
TOTAL				6,080	4,145	2,916	3,376	1,914	1,203	1,147	1,193	1,094
MEAN				196	148	94.1	113	61.7	40.1	37.0	38.5	36.5
MAX				414	266	176	274	93	47	59	46	48
MIN				85	93	69	64	47	33	31	34	31
AC-FT				12,060	8,220	5,780	6,700	3,600	2,390	2,280	2,370	2,170

12215700 (REVISED) CHILLIWACK RIVER NEAR VEDDER CROSSING, BRITISH COLUMBIA

LOCATION.--Lat 49°05'02", long 121°27'24", at outlet of Chilliwack Lake, 30 miles upstream from Vedder Crossing.

DRAINAGE AREA.--131 sq mi.

PERIOD OF RECORD.--October 1960 to September 1970. May 1923 to June 1951 and May 1957 to September 1960 in reports of Department of Northern Affairs and National Resources, Canada.

GAGE.--Water-stage recorder.

AVERAGE DISCHARGE.--38 years (1923-47, 1948-50, 1958-70), 661 cfs (478,900 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	June 18, 1966		1,880	6.75	Mar. 6, 1966		187	1.39
1967	June 22, 1967		3,360	9.27	Mar. 20, 1967		212	1.72
1968	June 3, 1968		3,080	8.84	Apr. 25, 1968		299	2.22
1969	May 25, 1969		2,640	8.10	Mar. 14, 1969		158	1.13
1970	June 4, 1970		a2,110		Sept. 16, 1970		b228	

a Maximum daily.

b Minimum daily.

Period of record: Maximum discharge, 3,550 cfs May 24, 1951 (gage height, 10.19 ft); minimum daily, 104 cfs Oct. 21, 1923, and for many days during February and March 1929, December 1936, February 1937.

COOPERATION.--Records furnished by Department of Energy, Mines and Resources, Canada.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	226	636	433	313	269	199	675	443	1,180	1,420	930	405
2	221	756	462	320	263	197	729	443	1,140	1,340	910	389
3	216	876	478	308	258	193	741	482	1,090	1,360	892	375
4	215	1,210	615	306	256	192	738	573	1,030	1,380	885	365
5	228	1,410	690	304	256	191	735	720	986	1,400	868	355
6	339	1,360	750	311	252	191	750	997	1,010	1,430	832	347
7	431	1,240	840	311	251	192	780	1,280	1,170	1,410	804	339
8	445	1,120	882	329	250	198	840	1,430	1,350	1,450	780	329
9	480	1,040	846	339	248	211	902	1,580	1,500	1,500	762	325
10	485	955	794	339	244	221	938	1,700	1,620	1,540	735	320
11	466	871	738	339	244	221	986	1,640	1,750	1,530	708	329
12	447	787	687	337	242	222	986	1,550	1,700	1,500	672	345
13	429	720	633	357	236	232	930	1,480	1,580	1,500	660	351
14	417	672	585	403	233	251	874	1,370	1,450	1,540	663	357
15	435	696	540	421	227	278	829	1,250	1,440	1,560	654	359
16	429	717	505	419	222	290	790	1,140	1,580	1,600	636	353
17	415	696	470	413	219	296	753	1,030	1,780	1,580	609	349
18	405	663	441	401	216	298	720	938	1,860	1,480	582	353
19	399	648	441	389	213	305	678	878	1,840	1,420	555	359
20	395	660	429	377	209	306	645	857	1,780	1,360	530	357
21	409	684	417	363	207	299	609	902	1,650	1,270	508	351
22	419	696	399	349	204	290	573	944	1,500	1,200	488	349
23	427	666	385	339	200	282	545	924	1,390	1,160	470	367
24	429	630	373	324	199	274	522	885	1,320	1,130	460	377
25	421	591	359	311	197	266	518	882	1,230	1,100	460	379
26	415	558	341	300	197	263	510	1,020	1,180	1,050	440	379
27	405	530	337	292	198	266	495	1,230	1,170	1,000	460	379
28	409	500	339	282	199	281	480	1,300	1,390	980	466	373
29	433	468	343	278	-----	311	464	1,300	1,600	969	455	369
30	579	443	331	276	-----	417	449	1,290	1,540	969	439	361
31	612	-----	320	274	-----	579	-----	1,260	-----	955	425	-----
TOTAL	12,481	23,501	16,203	10,424	6,409	8,212	21,184	39,718	42,806	41,083	19,758	10,745
MEAN	403	783	523	336	229	265	706	1,088	1,427	1,325	637	358
MAX	612	1,410	882	421	269	579	986	1,700	1,860	1,600	930	405
MIN	215	443	320	274	197	191	449	443	986	955	425	320
AC-FT	24,760	46,610	32,140	20,680	12,710	16,290	42,020	66,880	84,910	81,490	39,190	21,310

CAL YR 1965 TOTAL 241,460 MEAN 662 MAX 1,880 MIN 215 AC-FT 478,900

WTR YR 1966 TOTAL 246,524 MEAN 675 MAX 1,860 MIN 191 AC-FT 489,000

NOTE.--DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

12215700 CHILLIWACK RIVER NEAR VEDDER CROSSING, BRITISH COLUMBIA--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	348	672	555	570	538	266	291	253	1,390	2,080	877	442
2	364	618	627	532	528	263	280	260	1,640	2,000	836	478
3	360	570	642	525	542	256	274	274	1,930	2,010	798	485
4	350	530	630	508	585	250	269	304	2,130	2,040	768	472
5	340	500	615	490	615	243	266	348	2,210	2,010	753	462
6	328	468	600	460	612	239	263	396	2,290	1,920	738	458
7	330	435	585	435	588	235	260	458	2,350	1,780	738	442
8	346	408	550	420	560	239	258	532	2,280	1,670	726	422
9	344	386	518	410	538	242	258	624	2,130	1,580	705	404
10	336	370	490	400	515	239	256	675	2,020	1,460	702	404
11	326	350	488	416	492	233	255	699	1,950	1,380	711	470
12	314	340	550	420	482	230	253	702	1,900	1,400	720	482
13	300	335	798	418	482	225	255	684	1,890	1,480	717	460
14	286	345	1,170	416	462	220	256	669	1,940	1,500	714	438
15	274	370	1,260	432	432	217	253	672	2,040	1,450	708	416
16	266	440	1,640	442	412	220	250	717	2,170	1,400	708	404
17	253	455	1,950	438	396	221	246	850	2,320	1,360	696	390
18	240	440	2,130	422	384	220	243	1,010	2,520	1,320	681	380
19	250	400	2,120	440	366	222	243	1,140	2,680	1,250	663	372
20	289	395	2,030	482	348	218	240	1,280	2,910	1,190	645	368
21	304	400	1,800	490	334	217	239	1,520	3,150	1,160	624	366
22	306	405	1,580	480	316	223	239	1,780	3,320	1,110	603	368
23	364	400	1,360	462	302	268	237	1,920	3,210	1,060	576	360
24	350	390	1,190	440	289	318	237	1,840	3,000	1,040	550	352
25	681	390	1,050	414	280	336	239	1,680	2,860	1,030	522	340
26	753	540	934	400	274	344	242	1,520	2,790	1,030	495	328
27	815	570	832	390	264	342	242	1,420	2,670	1,040	470	320
28	794	520	750	416	264	332	244	1,380	2,520	1,020	455	312
29	759	484	693	475	-----	324	247	1,420	2,360	990	442	306
30	762	520	636	532	-----	312	282	1,440	2,230	952	435	312
31	726	-----	597	545	-----	300	-----	1,400	-----	916	432	-----
TOTAL	12,858	13,446	31,370	14,120	12,200	8,014	7,587	29,867	70,800	43,628	20,208	12,013
MEAN	415	448	1,012	455	436	259	253	963	2,360	1,407	652	400
MAX	815	672	2,130	570	615	344	291	1,920	3,320	2,080	877	485
MIN	240	335	488	390	265	217	233	1,390	1,450	1,190	432	304
AC-FT	25,500	26,670	62,220	28,010	24,200	15,900	15,050	59,240	140,400	86,540	40,080	23,630

CAL YR 1966 TOTAL 252,013 MEAN 690 MAX 2,130 MIN 191 AC-FT 499,900
 MTR YR 1967 TOTAL 276,111 MEAN 756 MAX 3,320 MIN 217 AC-FT 547,700

NOTE---DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	332	2,080	416	759	920	843	433	447	1,280	1,630	920	563
2	386	1,890	422	699	868	843	421	478	2,230	1,590	692	545
3	406	1,640	435	639	902	861	411	495	3,040	1,640	878	518
4	420	1,400	425	591	997	892	399	518	2,820	1,770	861	493
5	418	1,210	412	552	1,010	1,060	395	545	2,550	1,880	833	468
6	428	1,060	400	518	962	1,210	389	548	2,350	1,930	784	453
7	505	952	380	482	1,902	1,190	381	540	2,230	1,890	758	445
8	600	864	366	462	836	1,130	369	530	2,100	1,840	690	433
9	618	818	364	448	771	1,030	361	528	1,960	1,850	648	425
10	612	832	400	443	723	948	353	555	1,870	1,800	618	413
11	850	899	492	408	678	875	369	627	1,810	1,740	603	407
12	1,130	871	512	390	608	819	373	729	1,740	1,840	582	409
13	1,150	832	508	430	600	780	369	777	1,610	1,830	560	409
14	1,160	836	495	615	568	735	367	808	1,480	1,690	545	441
15	1,100	1,000	475	930	540	699	369	819	1,360	1,600	530	594
16	1,000	1,070	458	1,080	510	681	365	815	1,280	1,470	510	774
17	916	1,020	435	1,080	485	648	355	861	1,240	1,350	500	1,040
18	840	976	414	1,030	485	609	343	973	1,270	1,250	495	1,240
19	801	910	394	1,110	555	570	339	1,180	1,380	1,190	483	1,200
20	750	836	374	1,340	642	540	329	1,470	1,470	1,180	462	1,090
21	732	765	360	1,850	705	515	320	1,680	1,470	1,150	447	972
22	765	708	364	1,900	765	490	311	1,650	1,410	1,080	435	871
23	801	660	392	1,780	822	475	307	1,560	1,360	1,010	427	808
24	798	618	535	1,940	983	470	304	1,460	1,380	966	435	750
25	787	576	714	2,070	1,030	462	304	1,400	1,500	945	443	690
26	765	535	871	1,880	1,000	449	305	1,340	1,760	941	513	642
27	801	500	938	1,450	955	433	302	1,280	2,250	945	615	680
28	1,210	472	958	1,430	906	462	302	1,230	2,290	973	663	555
29	1,240	455	934	1,250	868	464	320	1,220	2,070	987	648	520
30	1,240	430	878	1,110	-----	460	381	1,190	1,810	983	618	485
31	1,740	-----	815	1,010	-----	445	-----	1,150	-----	952	588	-----
TOTAL	25,301	27,715	16,336	31,876	22,627	22,108	10,646	29,403	54,510	43,882	18,964	19,253
MEAN	816	924	527	1,028	780	713	355	948	1,817	1,416	612	642
MAX	1,740	2,080	958	2,070	1,030	1,210	433	1,680	3,040	1,930	920	1,240
MIN	332	430	360	390	485	445	302	447	1,240	941	427	407
AC-FT	50,180	54,970	32,400	63,230	44,880	43,850	21,120	58,320	108,100	87,040	37,620	38,190

CAL YR 1967 TOTAL 287,789 MEAN 788 MAX 3,320 MIN 217 AC-FT 570,800
 WTR YR 1968 TOTAL 322,621 MEAN 881 MAX 3,040 MIN 302 AC-FT 639,800

NOTE---DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

12215700 CHILLIWACK RIVER NEAR VEDDER CROSSING, BRITISH COLUMBIA--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	457	588	657	335	280	160	368	723	1,890	879	564	320
2	431	567	615	333	228	161	431	703	1,930	929	550	317
3	409	555	645	326	225	164	459	673	2,070	1,050	534	315
4	399	533	711	342	220	165	465	641	2,240	1,090	519	315
5	389	508	714	469	215	167	465	619	2,370	1,080	505	309
6	389	480	684	558	212	168	465	618	2,460	1,070	488	298
7	389	455	645	590	212	167	460	653	2,510	1,050	473	289
8	379	445	642	580	207	165	452	779	2,590	1,010	454	282
9	369	441	621	570	204	164	451	1,060	2,600	996	443	281
10	357	435	612	550	202	162	462	1,430	2,590	1,010	433	281
11	349	440	597	530	200	161	473	1,720	2,560	1,090	425	285
12	345	520	565	510	199	160	488	1,900	2,520	1,160	415	290
13	343	600	538	490	198	159	522	2,010	2,450	1,120	407	305
14	337	590	510	460	197	158	549	2,080	2,390	1,050	404	316
15	337	585	485	430	195	159	556	2,050	2,250	963	402	317
16	331	560	466	410	192	162	558	1,940	2,130	888	401	309
17	324	533	443	385	188	170	566	1,810	2,060	832	394	328
18	331	525	425	370	185	180	590	1,710	2,020	792	381	471
19	331	585	405	355	185	188	621	1,720	1,980	764	374	557
20	339	681	385	345	183	194	627	1,830	1,900	749	370	602
21	339	777	367	335	180	198	617	1,960	1,770	733	394	606
22	339	920	353	320	177	202	632	2,080	1,610	717	399	621
23	339	987	353	310	175	207	699	2,240	1,480	706	394	884
24	359	962	377	290	174	208	787	2,470	1,420	703	391	1,250
25	403	906	397	280	174	208	812	2,620	1,340	705	386	1,290
26	439	834	395	275	170	212	801	2,480	1,240	687	378	1,230
27	443	794	391	265	167	218	777	2,300	1,150	660	369	1,130
28	462	735	377	260	162	231	757	2,100	1,070	641	371	1,030
29	513	717	367	250	-----	244	761	1,990	995	621	359	937
30	576	702	357	245	-----	263	746	2,100	927	599	342	891
31	603	-----	347	235	-----	308	-----	2,000	-----	581	331	-----
TOTAL	12,150	18,962	15,446	12,003	5,506	5,833	17,417	51,009	58,512	26,925	13,050	16,566
MEAN	392	632	498	387	197	188	581	1,645	1,950	869	421	555
MAX	603	987	714	590	280	308	812	2,620	2,600	1,160	564	1,290
MIN	324	435	347	235	162	158	368	618	927	581	331	281
AC-FT	24,100	37,610	30,640	23,810	10,920	11,570	34,550	101,200	116,100	53,410	25,880	33,040
CAL YR 1968	TOTAL 299,827 MEAN 819 MAX 3,040 MIN 302 AC-FT 594,700											
WTR YR 1969	TOTAL 253,469 MEAN 694 MAX 2,620 MIN 158 AC-FT 502,700											

NOTE.--DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	902	342	337	354	455	378	265	289	1,200	1,100	541	277
2	917	350	326	337	434	359	260	283	1,410	1,000	522	272
3	885	380	318	324	417	342	254	288	1,580	978	510	280
4	835	500	309	312	398	330	251	314	2,110	1,040	500	292
5	780	670	301	299	375	319	258	380	2,020	1,100	496	291
6	727	705	293	288	354	314	295	444	2,100	1,100	488	297
7	689	695	284	278	337	340	318	485	2,000	1,060	478	308
8	700	660	275	269	326	347	321	514	1,890	1,050	467	310
9	728	610	268	262	321	343	371	548	1,800	1,030	446	304
10	726	570	270	258	322	336	475	564	1,740	1,010	428	292
11	701	550	276	262	330	328	515	565	1,600	966	409	281
12	669	540	298	259	347	324	520	557	1,320	905	396	267
13	630	540	326	254	389	325	511	547	1,170	854	386	255
14	591	550	412	266	431	326	498	532	1,220	811	373	245
15	562	555	468	272	456	330	480	525	1,330	775	362	237
16	530	540	477	267	496	338	459	560	1,340	763	351	228
17	500	520	473	265	537	340	439	630	1,320	760	341	232
18	470	506	469	274	551	337	420	700	1,400	744	330	270
19	440	486	469	282	548	331	407	770	1,500	730	320	310
20	420	474	471	302	536	327	394	850	1,580	720	312	321
21	425	467	478	326	519	321	376	930	1,720	700	306	317
22	430	453	488	372	501	314	363	1,000	1,840	669	302	334
23	425	448	522	449	482	313	350	1,060	1,810	634	301	381
24	420	444	522	520	463	313	351	1,130	1,720	599	300	385
25	410	430	504	552	445	307	347	1,240	1,610	576	302	368
26	390	413	484	562	429	300	335	1,410	1,550	578	301	351
27	375	394	463	563	413	293	325	1,260	1,560	619	297	337
28	360	377	441	544	395	291	315	1,140	1,500	632	296	324
29	350	362	418	517	-----	285	306	1,020	1,380	618	294	311
30	345	348	396	490	-----	278	297	950	1,240	596	287	298
31	342	-----	374	471	-----	271	-----	980	-----	567	282	-----
TOTAL	17,674	14,881	12,210	11,050	12,007	10,000	11,076	22,465	47,560	25,284	11,724	8,975
MEAN	570	496	394	356	429	323	369	725	1,585	816	378	299
MAX	917	705	522	563	551	378	520	1,410	2,110	1,100	541	385
MIN	342	342	268	254	321	271	251	283	1,170	567	282	228
AC-FT	35,060	29,520	24,220	21,920	23,820	19,840	21,970	44,560	94,340	50,150	23,250	17,800
CAL YR 1969	TOTAL 251,676 MEAN 690 MAX 2,620 MIN 162 AC-FT 499,200											
WTR YR 1970	TOTAL 204,906 MEAN 561 MAX 2,110 MIN 228 AC-FT 406,400											

NOTE.--DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

FRASER RIVER BASIN

12215900 (REVISED) SLEEE CREEK NEAR VEDDER CROSSING, BRITISH COLUMBIA

LOCATION.--Lat 49°04'21", long 121°41'58", approximately 200 ft upstream from unnamed creek, 0.8 mile upstream from mouth, and 13.5 miles east of Vedder Crossing.

DRAINAGE AREA.--62.7 sq mi.

PERIOD OF RECORD.--October 1960 to November 1962, August 1963 to March 1964, May 1964 to September 1970. March 1957 to September 1960 in reports of Department of Northern Affairs and National Resources, Canada.

GAGE.--Water-stage recorder. Prior to Aug. 1, 1963, at site 0.7 mile downstream at present datum.

AVERAGE DISCHARGE.--9 years (1959-62, 1964-70), 350 cfs (253,600 acre-ft per year).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet) for the water years 1966-70 are contained in the following table:

Wtr yr	Date	Maximum	Discharge	G.H.	Date	Minimum	Discharge	G.H.
1966	Oct. 29, 1965		1,550	5.78	Oct. 2, 1965		74.2	2.44
1967	Oct. 23, 1966		2,540	6.81	Oct. 18, 1966		87.2	2.54
1968	June 2, 1968		3,260	7.38	Dec. 7, 1967, Apr. 21, 22, 1968		a133	-
1969	May 24, 1969		1,650	6.01	Mar. 9, 10, 1969		a56	-
1970	June 3, 1970		2,140		Sept. 16, 1970		a70	-

a Minimum daily.

Period of record: Maximum discharge, 3,860 cfs Oct. 21, 1963; minimum, 19.8 cfs Oct. 5, 1960 (gage height, 2.24 ft).

COOPERATION.--Records furnished by Department of Energy, Mines and Resources, Canada.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1965 TO SEPTEMBER 1966

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	498	218	108	143	108	640	222	460	484	432	130
2	76	948	333	105	135	103	561	291	456	507	432	129
3	76	816	372	103	130	100	468	525	425	708	448	129
4	92	1,300	840	102	129	98	436	725	395	703	456	130
5	96	942	534	98	150	96	468	948	421	730	402	134
6	698	645	725	111	146	104	525	1,390	698	698	354	135
7	265	502	736	130	141	100	600	1,210	930	708	351	130
8	281	456	630	227	136	145	660	1,090	948	840	361	126
9	406	425	472	198	132	209	630	1,180	930	864	326	128
10	234	354	380	168	126	164	580	1,040	1,020	840	301	134
11	184	308	308	162	130	145	570	725	967	752	275	153
12	171	265	259	159	126	143	452	698	703	714	244	160
13	164	239	229	312	118	236	365	635	580	792	336	155
14	196	268	202	432	116	268	347	502	575	792	347	155
15	304	600	186	322	110	268	372	417	725	786	291	152
16	218	507	171	249	107	241	387	369	1,090	780	268	134
17	194	391	160	213	103	205	351	318	1,120	665	234	134
18	190	336	152	190	102	188	315	301	852	595	220	209
19	200	410	192	171	99	182	284	347	786	625	209	152
20	252	429	222	157	98	171	259	452	670	552	196	136
21	329	456	205	148	100	159	241	570	534	489	188	138
22	291	425	179	138	103	146	227	512	502	520	186	155
23	268	340	162	134	110	138	218	413	489	543	186	205
24	231	294	155	123	112	134	220	372	468	534	200	159
25	209	259	149	118	111	136	249	543	460	507	213	146
26	202	236	138	116	111	164	244	960	525	468	205	138
27	192	222	129	114	110	209	224	906	580	456	205	138
28	236	202	128	114	110	262	218	676	1,060	498	218	146
29	476	192	122	126	-----	464	213	615	764	530	179	145
30	714	182	118	138	-----	1,040	218	615	543	520	155	124
31	376	-----	114	146	-----	954	-----	534	-----	476	138	-----
TOTAL	7,897	13,447	8,916	5,132	3,344	7,080	11,542	20,101	20,676	19,676	8,556	4,339
MEAN	255	448	288	166	119	228	385	648	689	635	276	145
MAX	714	1,300	840	432	150	1,040	660	1,390	1,120	864	456	209
MIN	76	182	114	98	98	96	213	222	395	454	138	124
AC-FT	19,660	26,670	17,680	10,180	6,630	14,040	22,890	39,870	41,010	39,030	16,970	8,610

CAL YR 1965 TOTAL 127,866 MEAN 350 MAX 1,300 MIN 75 AC-FT 253,600

WTR YR 1966 TOTAL 130,706 MEAN 358 MAX 1,390 MIN 76 AC-FT 259,300

NOTE.--DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

12215900 SLESSE CREEK NEAR VEDDER CROSSING, BRITISH COLUMBIA--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1966 TO SEPTEMBER 1967

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	275	635	246	284	136	145	180	908	878	370	253
2	240	341	524	220	228	119	154	230	1,570	922	359	160
3	138	218	395	249	332	120	158	314	1,350	1,110	353	228
4	130	198	347	234	730	116	168	395	1,280	1,060	356	204
5	126	209	298	215	523	116	158	454	1,260	914	346	197
6	126	198	268	198	393	119	152	506	1,330	770	330	202
7	182	249	241	184	321	119	164	538	1,220	680	366	160
8	268	164	215	213	282	130	168	625	957	675	336	150
9	166	160	186	252	249	124	162	597	830	615	327	139
10	146	160	188	268	223	114	150	486	842	550	370	283
11	135	146	288	425	206	109	149	418	854	650	392	414
12	126	205	580	351	215	104	158	373	902	848	377	253
13	114	194	1,390	308	216	100	152	353	922	854	359	192
14	107	440	930	278	190	97	141	349	1,150	715	353	174
15	100	440	930	456	174	95	133	446	1,220	635	359	174
16	100	351	1,780	391	166	136	127	675	1,290	630	353	180
17	284	1,350	1,688	321	119	154	158	958	1,456	656	339	187
18	92	252	1,280	249	160	136	124	878	1,500	570	317	170
19	241	284	1,120	343	147	127	125	896	1,600	506	297	174
20	336	336	924	361	139	125	128	1,100	1,820	494	283	190
21	209	272	655	298	135	122	135	1,370	1,850	542	294	202
22	241	231	525	249	128	180	133	1,200	1,650	486	264	172
23	1,590	209	440	224	125	490	133	1,060	1,330	494	246	138
24	1,140	190	387	202	120	349	139	737	1,220	522	211	133
25	708	417	347	188	125	272	156	570	1,340	542	197	125
26	676	326	304	182	118	240	152	558	1,320	550	199	122
27	930	301	205	121	105	131	150	511	1,170	511	204	130
28	180	413	254	365	138	192	154	742	1,030	470	211	125
29	436	384	250	444	-----	178	160	878	978	430	230	147
30	376	525	231	452	-----	162	164	715	932	410	240	214
31	315	-----	224	336	-----	152	-----	615	-----	384	248	-----
TOTAL	9,680	8,202	17,774	8,874	8,485	4,952	4,411	19,896	37,055	20,134	9,480	5,765
MEAN	312	273	573	286	232	160	147	642	1,235	649	306	192
MAX	1,590	525	1,780	456	730	490	168	1,370	1,850	1,110	392	414
MIN	92	146	186	182	114	95	124	180	830	384	197	122
AC-FT	19,200	16,270	35,250	17,600	12,860	9,820	8,750	39,460	73,500	39,940	18,800	11,430

CAL YR 1966 TOTAL 136,102 MEAN 373 MAX 1,780 MIN 92 AC-FT 270,000

MTR YR 1967 TOTAL 152,708 MEAN 418 MAX 1,850 MIN 92 AC-FT 302,900

NOTE.--DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1967 TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	321	1,120	158	280	270	422	204	506	1,220	651	383	252
2	410	675	180	246	336	470	201	394	2,500	830	387	220
3	293	506	192	228	474	496	194	354	1,420	763	197	164
4	413	172	110	414	677	560	191	378	1,010	1,040	337	192
5	241	349	160	194	466	964	191	370	945	993	296	199
6	353	180	151	178	382	716	183	323	981	904	260	203
7	866	333	141	168	336	560	175	246	915	820	237	190
8	724	330	160	308	474	476	163	458	810	856	227	177
9	370	370	249	162	292	414	160	390	760	835	232	168
10	566	506	788	151	279	370	183	537	785	745	255	168
11	1,540	450	562	136	267	333	225	677	765	735	252	192
12	1,060	377	356	139	261	319	204	683	670	927	232	194
13	776	363	286	508	240	325	183	533	591	615	212	180
14	710	613	253	1,460	237	306	180	482	527	638	212	483
15	530	737	228	1,200	228	285	180	454	499	611	203	764
16	438	554	214	770	272	282	168	458	523	503	190	888
17	377	430	192	538	208	270	160	595	583	459	227	1,680
18	393	392	172	530	313	252	155	815	710	444	210	775
19	377	353	156	1,190	655	237	150	1,010	864	507	183	487
20	327	300	139	1,710	650	228	143	1,280	785	555	188	367
21	478	275	139	1,490	625	222	133	944	675	463	172	304
22	522	261	209	978	585	217	135	740	603	401	164	321
23	597	243	350	920	672	217	145	655	638	390	208	411
24	486	246	985	1,560	758	219	153	600	770	429	237	312
25	562	221	999	920	580	217	150	625	981	455	282	287
26	470	199	848	630	490	209	163	565	1,290	463	444	268
27	7,080	190	690	494	446	222	170	533	1,390	507	567	247
28	1,030	178	566	440	418	231	206	565	945	507	337	222
29	558	174	442	380	410	240	382	595	670	475	276	210
30	1,390	162	359	320	-----	234	560	542	571	415	255	194
31	2,100	-----	314	280	-----	217	-----	486	-----	387	252	-----
TOTAL	20,264	11,479	10,783	18,664	12,083	10,723	5,794	17,604	26,398	19,552	8,273	10,732
MEAN	654	363	346	602	437	346	193	571	880	631	267	358
MAX	2,100	1,120	999	1,710	758	964	560	1,280	2,500	1,040	547	1,680
MIN	241	162	133	136	206	209	133	296	499	387	164	160
AC-FT	40,190	22,770	21,390	37,020	23,970	21,270	11,490	35,100	52,360	38,780	16,410	21,290

CAL YR 1967 TOTAL 159,578 MEAN 437 MAX 2,100 MIN 95 AC-FT 316,560

MTR YR 1968 TOTAL 172,439 MEAN 471 MAX 2,500 MIN 133 AC-FT 342,000

NOTE.--DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

12215900 SLESSE CREEK NEAR VEDDER CROSSING, BRITISH COLUMBIA--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177	331	270	120	84	74	401	306	787	350	214	95
2	164	321	250	116	80	76	374	284	1,010	536	202	124
3	155	328	573	103	78	80	306	263	1,180	549	186	123
4	194	273	467	132	75	80	273	247	1,260	441	183	116
5	177	242	350	179	73	63	274	255	1,250	407	179	98
6	242	225	293	188	72	62	264	323	1,180	410	165	86
7	227	208	268	199	72	59	249	402	1,160	389	161	94
8	203	232	304	210	75	58	245	877	1,200	389	159	107
9	186	250	293	205	81	56	272	1,220	1,250	434	169	126
10	177	222	298	186	80	56	314	1,240	1,210	466	170	134
11	175	450	282	171	84	57	311	1,190	1,150	662	155	141
12	194	523	247	163	86	57	342	1,100	1,110	509	153	134
13	199	370	230	155	59	396	346	727	1,000	384	158	173
14	181	315	225	149	82	63	340	1,020	943	330	170	124
15	190	287	217	143	80	83	302	839	856	302	185	96
16	190	255	210	137	79	106	286	699	915	292	154	84
17	222	240	192	132	78	180	304	629	925	292	141	270
18	401	183	183	98	74	194	367	939	929	299	138	582
19	242	531	164	123	76	169	332	888	858	312	142	424
20	250	633	149	119	75	153	298	1,000	696	319	170	303
21	230	633	146	115	74	148	292	1,080	550	302	206	234
22	240	685	144	113	74	152	399	1,250	485	299	152	442
23	250	959	186	110	74	146	573	1,360	476	319	145	1,280
24	394	444	334	106	74	138	545	1,530	535	322	149	935
25	471	367	279	104	74	141	428	1,110	411	296	141	589
26	373	324	240	100	72	175	360	887	360	245	122	424
27	301	312	205	96	72	233	328	753	345	246	121	351
28	459	279	175	93	72	232	337	641	317	249	145	315
29	599	353	150	92	-----	256	365	912	306	223	110	274
30	607	301	135	90	-----	302	329	895	309	217	98	358
31	415	-----	125	86	-----	474	-----	722	-----	222	96	-----
TOTAL	8,349	10,894	7,584	4,163	2,155	4,204	10,206	25,789	24,973	11,008	4,852	8,636
MEAN	259	343	245	134	77.0	132	332	832	762	355	157	268
MAX	607	685	573	210	86	174	573	1,530	1,260	662	214	1,280
MIN	155	208	125	86	72	56	245	247	306	217	96	84
AC-FT	16,560	21,610	15,040	8,260	4,270	8,340	20,240	51,150	49,530	21,830	9,620	17,130
CAL YR 1968	TOTAL 156,740 MEAN 428 MAX 2,500 MIN 125 AC-FT 330,900											
WTR YR 1969	TOTAL 122,813 MEAN 336 MAX 1,530 MIN 56 AC-FT 243,600											

NOTE.--DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	383	138	160	133	163	144	98	121	786	252	176	94
2	132	132	152	125	154	135	150	150	1,340	305	181	88
3	343	168	114	148	128	93	214	1,700	491	179	171	171
4	295	763	140	110	142	120	95	352	1,370	639	193	114
5	271	572	135	104	134	113	152	431	1,140	521	186	112
6	257	432	126	102	128	109	296	345	1,230	444	171	204
7	259	385	110	100	124	197	217	289	1,090	437	164	173
8	474	324	109	98	138	157	183	286	814	460	150	125
9	423	287	104	101	172	138	456	315	666	436	134	109
10	349	259	97	103	207	128	474	257	537	384	134	99
11	301	247	137	99	234	121	313	223	426	338	141	94
12	266	274	238	96	241	119	250	205	403	296	144	86
13	237	254	364	93	347	139	215	202	496	279	135	80
14	213	277	559	144	340	146	191	192	641	270	124	76
15	194	351	401	140	297	164	176	272	665	296	131	73
16	179	286	313	122	331	168	166	641	555	324	125	70
17	162	249	270	113	330	159	158	828	640	294	111	137
18	147	225	302	120	283	144	152	505	863	279	105	215
19	140	212	296	195	246	134	148	463	879	284	106	225
20	203	214	288	244	220	129	145	452	964	271	106	151
21	221	232	305	350	205	124	139	494	1,090	231	113	124
22	226	209	302	192	118	134	544	868	190	118	511	111
23	213	239	343	465	187	119	133	516	734	180	121	357
24	184	236	286	390	178	137	142	601	657	177	125	215
25	165	209	251	313	172	125	133	894	584	194	117	171
26	150	195	230	272	166	117	125	910	683	281	109	156
27	151	185	209	243	162	111	119	556	658	317	102	142
28	139	177	193	216	155	109	116	419	465	224	109	131
29	133	171	179	193	-----	106	120	350	346	199	99	124
30	131	166	167	176	-----	103	116	328	276	182	96	109
31	145	-----	157	165	-----	101	-----	394	-----	167	96	-----
TOTAL	7,359	8,038	7,067	5,675	5,829	4,062	5,350	12,749	23,606	9,640	4,101	4,536
MEAN	237	268	228	183	208	131	178	411	787	311	132	151
MAX	474	763	559	465	347	197	474	910	1,700	639	193	511
MIN	131	132	97	93	124	101	93	121	276	167	96	70
AC-FT	14,600	15,940	14,020	11,260	11,560	8,060	10,610	25,290	46,820	19,120	8,130	9,000
CAL YR 1969	TOTAL 118,450 MEAN 325 MAX 1,530 MIN 56 AC-FT 234,900											
WTR YR 1970	TOTAL 98,012 MEAN 269 MAX 1,700 MIN 70 AC-FT 194,400											

NOTE.--DIFFERENCES BETWEEN FIGURES PUBLISHED HEREIN AND CORRESPONDING FIGURES IN REPORTS OF THE WATER SURVEY OF CANADA ARE DUE TO VARIATIONS IN AUTOMATED PROGRAM TECHNIQUES.

12250000 JUDD CREEK NEAR BURTON, WASH.

LOCATION.--Lat 47°24'40", long 122°28'18", in NE¼SW¼ sec.7, T.22 N., R.3 E., King County, on right bank at upstream side of culvert at 216th Street SW., 1.0 mile upstream from mouth and 1.5 miles north of Burton.

DRAINAGE AREA.--4.41 sq mi.

PERIOD OF RECORD.--March 1968 to September 1970.

GAGE.--Water-stage recorder. Altitude of gage is 80 ft (from topographic map).

EXTREMES.--Maximums and minimums (discharge in cubic feet per second, gage height in feet).

Annual maximum discharge (*) and peak discharges above base (60 cfs), March 1968 to September 1970

Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.	Date	Time	Disch.	G.H.
Mar. 27, 1968	1430	31	2.70	Dec. 24, 1968	0630	66	3.69	Jan. 14, 1970	0130	60	3.54
				Feb. 8, 1969	2000	*87	4.22	Jan. 27, 1970	0030	*78	4.00
Dec. 3, 1968	2030	61	3.58								

Annual minimum discharge, March 1968 to September 1970

Wtr yr	Date	Disch.	G.H.	Wtr yr	Date	Disch.	G.H.
1968	July 31, Aug. 1, 1968	.58	1.08	1970	Aug. 26, 30, 1970	.88	1.09
1969	Aug. 21, 24, 1969	.88	1.10				

Period of record: Maximum discharge, 87 cfs Feb. 8, 1969 (gage height, 4.22 ft); minimum, 0.58 cfs July 31, Aug. 1, 1968 (gage height, 1.08 ft).

REMARKS.--Records good. No gage-height record Apr. 16 to May 29, 1969. Some small diversions for irrigation and domestic use. Slight regulation through small stock ponds.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1968

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							5.4	2.5	9.5	1.5	.73	1.7
2							5.0	2.5	7.9	1.2	.79	1.6
3							4.5	2.4	3.2	1.3	.85	1.3
4							4.7	2.5	2.3	1.3	.85	1.1
5							4.6	2.6	2.0	1.3	.79	.92
6							4.4	2.8	2.0	1.2	.79	1.0
7							4.3	2.5	1.9	1.2	.79	.92
8							4.0	2.4	2.0	1.1	.79	1.0
9							3.8	2.2	1.8	1.1	.79	1.0
10							3.7	2.2	1.8	1.0	.73	1.0
11							3.5	2.2	1.8	1.1	.73	1.3
12							3.4	2.2	1.8	1.7	.79	1.5
13							3.4	2.3	2.1	1.3	.85	1.4
14							6.0	2.1	1.9	1.4	1.7	2.4
15							5.8	2.0	1.7	1.3	3.2	1.7
16							4.3	2.0	1.7	1.1	1.6	1.4
17							3.7	1.9	1.7	1.0	1.4	3.4
18							3.7	1.9	1.6	.92	1.2	4.6
19						7.9	3.6	2.3	1.8	1.2	1.3	2.5
20						6.7	3.5	4.5	1.6	1.0	1.6	2.0
21							5.8	3.3	3.0	1.7	1.0	1.3
22							5.2	3.2	2.3	2.0	1.1	1.1
23							6.0	4.2	2.0	1.7	1.0	2.3
24							6.2	3.5	2.0	1.5	.85	4.9
25						11	3.3	2.4	1.4	.85	3.7	1.4
26						8.2	3.1	2.1	1.8	.92	3.4	1.5
27						24	2.8	2.2	2.1	.85	5.6	1.3
28						16	2.8	2.0	3.0	.79	2.1	1.3
29						11	2.6	2.0	2.2	.79	1.6	1.3
30						7.7	2.6	2.0	1.7	.79	1.4	1.3
31						6.2		2.1		.73	1.1	
TOTAL							116.7	72.1	71.2	33.89	50.77	48.14
MEAN							3.89	2.33	2.37	1.09	1.64	1.60
MAX							6.0	4.5	9.5	1.7	5.6	4.6
MIN							2.6	1.9	1.4	.73	.73	.92
CFSM							.88	.53	.54	.25	.37	.36
IN.							.98	.61	.60	.29	.43	.41
AC-FT							231	143	141	67	101	95

12250000 JUDD CREEK NEAR BURTON, WASH.--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1968 TO SEPTEMBER 1969

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.2	6.1	7.7	7.3	3.9	5.0	2.8	2.4	1.7	1.2	1.1
2	1.4	4.7	5.6	14	12	3.7	7.0	2.8	2.0	1.6	1.2	1.1
3	1.3	3.3	30	16	28	3.7	5.5	2.8	2.0	1.6	1.2	1.1
4	2.5	2.5	24	33	33	3.7	11	2.7	1.8	1.9	1.2	1.2
5	1.8	2.4	14	26	21	8.8	12	2.6	1.8	1.7	1.3	1.2
6	2.3	2.2	8.4	37	12	6.0	9.5	2.6	1.9	1.6	1.2	1.2
7	1.6	2.2	15	26	13	4.8	7.0	2.5	2.0	1.6	1.2	1.1
8	1.6	7.5	28	16	54	4.3	5.5	2.4	2.0	1.5	1.2	1.1
9	1.6	5.5	20	26	42	3.9	4.8	2.4	1.9	1.5	1.1	1.1
10	3.1	4.5	3.1	23	30	3.7	4.3	2.4	1.9	1.8	1.1	1.1
11	2.8	25	29	22	33	3.6	4.0	2.4	2.0	1.9	1.2	1.1
12	3.2	14	13	15	20	3.5	3.7	2.3	1.9	1.5	1.2	1.2
13	6.3	6.7	9.4	16	15	3.3	3.5	2.2	1.9	1.5	1.2	1.2
14	3.4	4.5	11	20	12	3.3	3.4	2.1	1.9	1.5	1.1	1.2
15	3.2	3.7	9.9	19	11	3.5	3.3	2.0	1.8	1.4	1.1	1.2
16	2.3	3.3	8.5	19	11	5.4	3.3	2.0	1.6	1.3	1.1	1.3
17	4.0	3.0	6.6	15	8.5	13	3.7	2.0	1.5	1.3	1.1	5.3
18	3.7	3.4	7.4	11	7.1	9.5	4.0	2.0	1.5	1.3	1.1	5.2
19	4.8	3.2	7.0	9.4	6.4	5.9	8.0	2.0	1.4	1.3	1.1	7.1
20	4.3	4.2	5.9	8.0	5.9	4.7	6.0	2.0	1.6	1.3	1.1	3.9
21	3.4	8.0	5.5	7.0	5.6	3.9	3.5	1.8	1.7	1.3	1.1	2.0
22	3.7	8.8	7.4	5.9	5.2	3.9	3.5	1.7	1.9	1.3	1.1	7.8
23	2.9	7.3	27	5.2	5.6	3.5	7.0	1.6	5.4	1.2	1.1	5.6
24	2.4	5.9	4.7	4.5	5.4	3.0	4.0	1.6	3.9	1.2	1.1	2.6
25	2.4	4.8	21	4.0	4.8	3.0	3.3	1.6	2.5	1.2	1.1	2.6
26	2.3	5.0	12	3.7	4.5	2.9	3.1	1.7	2.3	1.2	1.1	1.7
27	2.2	4.7	8.5	3.4	4.1	2.8	3.0	3.5	2.0	1.2	1.3	1.5
28	2.1	4.0	6.6	3.2	4.0	2.7	2.8	3.0	2.0	1.2	1.3	1.6
29	2.8	14	5.2	3.0	-----	2.8	2.8	10.7	2.0	1.2	1.2	1.9
30	3.5	9.7	4.1	2.8	-----	2.8	2.7	6.5	2.0	1.2	1.1	2.7
31	2.4	-----	3.6	6.0	-----	3.0	-----	2.9	-----	1.2	1.1	-----
TOTAL	86.6	180.2	409.8	427.8	421.4	136.5	150.2	82.9	62.7	44.2	35.8	70.0
MEAN	2.79	6.01	13.2	13.8	13.1	4.40	5.01	2.67	2.09	1.43	1.15	2.33
MAX	6.3	25	47	37	54	13	12	10	5.4	1.9	1.3	7.8
MIN	1.3	2.2	3.1	2.8	4.0	2.7	2.7	1.6	1.5	1.2	1.1	1.1
CFSM	.63	1.36	2.99	3.13	3.42	1.00	1.14	.61	.47	.32	.26	.53
IN-	.73	1.52	3.46	3.61	3.55	1.15	1.27	.70	.53	.37	.30	.59
AC-FT	172	357	813	849	836	271	298	164	124	88	71	139

MTR YR 1969 TOTAL 2,108.1 MEAN 5.78 MAX 54 MIN 1.1 CFSM 1.31 IN 17.78 AC-FT 4,180

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1969 TO SEPTEMBER 1970

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	1.5	2.5	5.5	4.2	4.5	3.2	1.6	1.5	1.2	1.1	1.1
2	1.9	1.5	2.5	5.3	7.9	4.1	5.1	2.9	1.5	1.3	2.0	1.0
3	1.6	1.5	3.0	5.2	7.3	4.5	4.6	2.7	1.5	1.2	1.5	1.6
4	1.6	12	3.5	5.1	6.4	4.2	4.0	2.6	1.5	1.1	1.3	1.2
5	1.6	4.9	3.0	5.0	7.4	4.1	4.1	2.5	1.5	1.2	1.2	1.2
6	1.6	3.4	2.8	4.8	7.1	22	4.6	2.4	1.4	1.2	1.1	1.4
7	2.2	2.8	2.6	4.7	6.7	23	4.1	2.3	1.5	1.2	1.2	2.0
8	4.6	2.5	3.5	6.6	5.9	10	3.7	3.2	1.5	1.2	1.2	1.4
9	2.8	2.4	4.5	10	5.5	7.1	15	2.9	1.8	1.2	1.1	1.2
10	2.0	2.4	4.0	8.0	5.0	6.0	7.7	3.3	1.6	1.1	1.1	1.2
11	1.8	2.2	10	7.0	4.8	6.1	5.9	2.8	1.6	1.1	1.1	1.1
12	1.6	2.1	18	6.0	4.7	9.9	5.2	2.5	1.5	1.1	1.1	1.0
13	1.5	2.1	13	19	5.7	9.2	4.5	2.3	1.5	1.1	1.1	1.1
14	1.5	2.0	15	43	4.8	20	3.9	2.3	1.5	1.1	1.1	1.1
15	1.5	2.1	8.0	16	17	11	3.4	2.2	1.6	1.1	1.1	1.1
16	1.5	2.2	7.6	9.5	28	7.9	3.3	2.1	1.6	1.1	1.1	1.1
17	1.5	1.9	7.1	14	23	6.0	3.3	2.0	1.5	1.1	1.2	2.8
18	1.5	1.9	12	22	15	5.6	3.6	2.0	1.3	1.1	1.2	2.4
19	1.5	1.8	11	40	9.2	5.5	5.6	2.1	1.2	1.1	1.2	1.8
20	1.5	2.6	10	20	7.3	6.3	3.7	2.1	1.2	1.2	1.2	1.7
21	1.5	3.5	13	24	7.3	5.7	3.5	2.1	1.2	1.2	1.2	1.5
22	1.6	3.0	19	26	6.1	5.4	4.0	2.2	1.2	1.2	1.2	1.5
23	1.5	5.0	30	27	5.6	4.6	3.6	2.1	1.2	1.2	1.1	1.4
24	1.5	4.0	18	28	5.2	4.2	5.2	2.0	1.2	1.2	1.1	1.3
25	1.5	3.5	10	37	4.8	4.0	4.2	1.9	1.2	1.3	1.0	1.2
26	1.5	3.0	9.4	39	4.6	4.0	3.9	1.9	1.2	1.5	.94	1.1
27	2.2	2.8	6.8	45	4.5	4.1	3.9	2.0	1.3	1.3	1.0	1.1
28	1.7	2.7	5.7	18	4.3	4.2	3.6	2.0	1.5	1.2	1.1	1.1
29	1.8	2.6	6.1	13	-----	3.9	3.7	4.6	1.5	1.3	1.0	1.1
30	1.7	2.6	5.9	9.5	-----	3.6	3.6	2.8	1.5	1.3	1.0	1.2
31	1.6	-----	5.7	14	-----	3.6	-----	1.9	-----	1.2	1.1	-----
TOTAL	55.8	88.5	273.2	537.2	231.1	224.0	139.0	75.9	42.9	37.2	36.04	41.0
MEAN	1.80	2.95	8.81	17.3	8.25	7.23	4.63	2.45	1.43	1.20	1.16	1.37
MAX	4.6	12	30	45	28	23	15	4.6	1.8	1.5	2.0	2.8
MIN	1.5	1.5	2.5	4.7	4.3	3.6	3.3	1.9	1.2	1.1	.94	1.0
CFSM	.41	.67	2.00	3.92	1.87	1.44	1.05	.56	.32	.27	.26	.31
IN-	.47	.75	2.30	4.33	1.95	1.89	1.17	.64	.36	.31	.30	.35
AC-FT	111	176	542	1,070	458	444	276	151	85	74	71	81

CAL YR 1969 TOTAL 1,849.00 MEAN 5.07 MAX 54 MIN 1.1 CFSM 1.15 IN 15.60 AC-FT 3,670
MTR YR 1970 TOTAL 1,781.84 MEAN 4.88 MAX 45 MIN .94 CFSM 1.11 IN 15.03 AC-FT 3,530

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected.

Records collected at partial-record stations are ordinarily presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations; however, no records at low-flow partial-record stations are available for the water years 1966-70.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharges 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 during water years 1966-70

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Date	Annual maximum Gage height (feet)	Discharge (cfs)
NASELLE RIVER BASIN							
12010600	LANE CREEK NEAR NASELLE, WASH. (station discontinued).	Lat 46°22'20", long 123°47'00", in SW¼ sec. 3, T.10 N., R. 9 W., Pacific County, at U.S. Highway 830, 1.5 miles north-east of Nassele.	2.15	1950-70	12-27-65 12-13-66 1-19-68 12-24-68 2-15-70	13.89 14.77 14.22 14.86 15.01	133 185 148 183 182
SOUTH NEMAH RIVER BASIN							
12010800	SOUTH NEMAH RIVER NEAR NASELLE, WASH.	Lat 46°26'27", long 123°51'38", in NE¼ sec. 13, T.11 N., R. 10 W., Pacific County, at U.S. Highway 101, 6.0 miles north-west of Nassele.	1.99	1962-70	1- 5-66 12-13-66 12- 3-67 12- 3-68 2-15-70	6.23 7.76 8.21 6.51 8.14	131 261 298 293 293
NORTH NEMAH RIVER BASIN							
12011100	NORTH NEMAH RIVER TRIBUTARY NEAR SOUTH BEND, WASH. (station discontinued).	Lat 46°30'44", long 123°51'39", in NW¼ sec. 24, T.12 N., R. 10 W., Pacific County, at Nemah Road, 1.2 miles east of U.S. Highway 101 and 10.8 miles south of South Bend.	.46	1949-66	3- 9-66	4.06	22
WILLAPA RIVER BASIN							
12012200	GREEN CREEK NEAR LEBAM, WASH. (station discontinued).	Lat 46°35'15", long 123°35'30", in NE¼ sec. 30, T.13 N., R. 7 W., Pacific County, at county road 2.5 miles northwest of Lebam.	1.79	1950-69	1- 5-66 12-13-66 2- 3-68 12- 3-68	16.84 18.44 17.08 16.58	90 191 120 78
NORTH RIVER BASIN							
12016700	JOE CREEK NEAR COSMOPOLIS, WASH. (station discontinued).	Lat 46°50'19", long 123°43'05", in SE¼ sec. 30, T.16 N., R. 8 W., Grays Harbor County, at U.S. Highway 101, 8.5 miles southeast of Cosmopolis.	2.05	1949-70	3- 8-66 12-13-66 1-19-68 12- 3-68 2-15-70	5.32 6.12 6.69 5.81 6.31	74 126 174 104 142
CHEHALIS RIVER BASIN							
12019600	WATER MILL CREEK NEAR PE ELL, WASH. (station discontinued).	Lat 46°33'49", long 123°18'31", in SE¼ sec. 33, T.13 N., R. 5 W., Lewis County, at State Highway 6, 1.0 mile south-west of Pe Ell.	1.98	1950-70	1- 5-66 12-13-66 2- 3-68 2-11-69 1-14-70	21.53 21.02 18.12 18.92 19.05	146 134 45 88 80
12026300	SKOOKUMCHUCK RIVER TRIBUTARY NEAR BUCODA, WASH.	Lat 46°47'40", long 122°53'45", in SW¼ sec. 11, T.15 N., R. 2 W., Thurston County, at State Highway 507, 1.5 miles west of Bucoda.	.58	1960-70	1- 5-66 12-13-66 1-19-68 2- 9-69 1-14-70	4.48 4.75 4.51 4.18 4.74	27 33 28 20 33
12031890	EAST FORK WILDCAT CREEK AT MCCLEARY, WASH.	Lat 47°03'51", long 123°15'57", in SE¼ sec. 11, T.18 N., R. 5 W., Grays Harbor County, at State Highway 108, 0.5 mile north of McCleary.	4.45	1970	1-27-70	17.08	174
12034700	WEST FORK SATSOP RIVER TRIBUTARY NEAR MATLOCK, WASH.	Lat 47°18'50", long 123°35'25", in NE¼ sec. 17, T.21 N., R. 7 W., Grays Harbor County, at Simpson logging road, 3.0 miles south of Camp Grisdale, 10.5 miles northwest of Matlock, and 24 miles north of Montesano.	.33	1958-70	1-12-66 12-13-66 1-19-68 1- 4-69 1-19-70	7.53 7.63 7.96 7.67 6.29	61 64 77 67 24
HUMPTULIPS RIVER BASIN							
12038750	GIBSON CREEK NEAR QUINAULT, WASH.	Lat 47°28'30", long 123°41'50", in SE¼ sec. 16, T.23 N., R. 8 W., Grays Harbor County, at logging road 6.5 miles east of Quinalt.	1.16	1965-70	11-30-64 10- 5-65 12-13-66 1-19-68 12- 3-68 1-14-70	8.8 7.65 7.91 9.51 7.99 11.55	297 196 220 375 226 495

NOTE---See footnotes at end of table.

CREST-STAGE PARTIAL-RECORD STATIONS

Annual maximum discharge at crest-stage partial-record stations during water years 1966-70--Continued

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Date	Annual maximum Gage height (feet)	Discharge (cfs)
HUMPTULIPS RIVER BASIN--CONTINUED							
12039050	BIG CREEK NEAR HOQUIAM, WASH. (station discontinued).	Lat 47°08'40", long 123°53'10", in SE¼ sec.11, T.19 N., R.10 W., Grays Harbor County, at Larson Road, 300 ft east of U.S. Highway 101 and 11.4 miles north of Hoquiam.	.56	1949-70	1-12-66 12-12-66 1-19-68 1-4-69 1-14-70	10.67 9.37 9.11 8.76 8.74	75 52 47 40 40
12039100	BIG CREEK TRIBUTARY NEAR HOQUIAM, WASH. (station discontinued).	Lat 47°08'55", long 123°53'09", in SE¼ sec.11, T.19 N., R.10 W., Grays Harbor County, at U.S. Highway 101, 11.6 miles north of Hoquiam.	.15	1949-68	1-12-66 12-12-66 1-19-68	5.57 5.16 5.10	20 15 15
QUINULT RIVER BASIN							
12039400	HIGLEY CREEK NEAR AMANDA PARK, WASH.	Lat 47°20'55", long 123°53'45", in SW¼ sec.13, T.23 N., R.10 W., Grays Harbor County, at road 300 ft downstream from North Shore Road, 1.5 miles north of Amanda Park, and 1.6 miles east of U.S. Highway 101.	.77	1955-70	1-12-66 12-12-66 1-19-68 12-3-68 4-9-70	b7.76 b7.53 12.76 9.85 10.10	168 156 270 98 111
QUEETS RIVER BASIN							
12040000	CLEARWATER RIVER NEAR CLEARWATER, WASH. (station discontinued).	Lat 47°35'26", long 124°17'40", in lot 4, NW¼ sec.18, T.24 N., R.12 W., Jefferson County, 1.5 miles north of Clearwater and 3.0 miles upstream from mouth.	140	1932*, 1935*, 1938-49*, 1950-67	1-13-66 12-13-66	15.23 13.58	19,800 15,600
12040500	QUEETS RIVER NEAR CLEARWATER, WASH. (station discontinued).	Lat 47°32'16", long 124°18'50", in SW¼ sec.36, T.24 N., R.13 W., Jefferson County, on Quinalt Indian Reservation, 2.0 miles downstream from Clearwater River and 2.8 miles southeast of Clearwater.	445	1931-49*, 1950-67	1-13-66 12-13-66	19.80 19.79	59,600 59,500
QUILLAYUTE RIVER BASIN							
12041600	SOLEDUCK RIVER TRIBUTARY NEAR FAIRHOLM, WASH.	Lat 48°02'45", long 123°57'35", in SE¼SW¼ sec.35, T.30 N., R.10 W., Clallam County, at National Park road, 2.6 miles southwest of Fairholm.	.42	1956-70	1-12-66 12-13-66 1-19-68 1-4-69 4-9-70	9.83 9.82 10.50 9.21 9.18	28 28 38 18 16
12042700	MAY CREEK NEAR FORKS, WASH. (station discontinued).	Lat 47°52'55", long 124°21'00", in SW¼ sec.35, T.28 N., R.13 W., Clallam County, at U.S. Highway 101, 5.0 miles southeast of Forks, Wash.	2.03	1950-68	1-12-66 1-19-67 1-19-68	23.59 21.92 30.72	465 395 711
12042900	GRADER CREEK NEAR FORKS, WASH.	Lat 47°55'40", long 124°24'25", in SW¼ sec.17, T.28 N., R.13 W., Clallam County, at U.S. Highway 101, 2 miles southwest of Forks.	1.67	1950-70	1-12-66 1-19-67 1-19-68 1-4-69 4-9-70	20.30 20.14 22.68 20.40 20.69	264 250 521 244 274
LEES CREEK BASIN							
12047100	LEES CREEK AT PORT ANGELES, WASH. (station discontinued).	Lat 48°06'20", long 123°22'55", in SE¼ sec.12, T.30 N., R.6 W., Clallam County, at U.S. Highway 101, 1 mile east of Port Angeles city limits.	4.77	1949-70	1-13-66 1-19-67 2-3-68 1-4-69 12-13-69	15.76 18.02 16.40 15.53 15.16	<20 137 77 50 38
DUNGENESS RIVER BASIN							
12047700	GOLD CREEK NEAR BLYN, WASH.	Lat 47°55'15", long 123°02'30", near center of E¼ sec.15, T.28 N., R.3 W., Clallam County, at logging road 7.5 miles southwest of Blyn.	2.28	1965-70	1-30-65 11-19-65 12-13-66 1-14-68 12-3-68 12-13-69	5.32 4.97 6.40 7.64 6.03 6.16	a40 24 92 173 73 75
DEAN CREEK BASIN							
12049400	DEAN CREEK AT BLYN, WASH. (station discontinued).	Lat 48°01'30", long 123°00'55", in NW¼ sec.12, T.29 N., R.3 W., Clallam County, at old highway 50 ft east of U.S. Highway 101 at west edge of Blyn.	2.96	1949-70	12-27-65 1-19-67 1-14-68 2-11-69 1-23-70	7.78 8.99 8.04 7.98 7.75	12 49 21 21 11
QUILCENE RIVER BASIN							
12052400	PENNY CREEK NEAR QUILCENE, WASH. (station discontinued).	Lat 47°48'40", long 122°54'50", in SE¼ sec.22, T.27 N., R.2 W., Jefferson County, at county road 200 ft upstream from mouth and 2.0 miles southwest of Quilcene.	6.78	1949-68	3-14-66 12-1-66 1-14-68	20.04 22.52 22.13	82 245 216

NOTE.--See footnotes at end of table.

Annual maximum discharge at crest-stage partial-record stations during water years 1966-70--Continued

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Date	Annual maximum Gage height (feet)	Discharge (cfs)
DOSEWALLIPS RIVER BASIN							
12053000	DOSEWALLIPS RIVER NEAR BRINNON, WASH. (station discontinued).	Lat 47°41'30", long 122°54'10", in SW¼ sec.24, T.26 N., R.3 W., Jefferson County, 0.5 mile west of Corrigena ranger station, 5.5 miles northwest of Brinnon, and 7.5 miles upstream from mouth.	93.5	1931-50a, 1951-68	5- 6-66 12- 1-66 1-14-68	5.54 7.49 8.33	2,740 6,130 8,220
12053400	DOSEWALLIPS RIVER TRIBUTARY NEAR BRINNON, WASH. (station discontinued).	Lat 47°43'00", long 122°56'20", in NW¼ sec.28, T.26 N., R.2 W., Jefferson County, at Dosewallips River road, 2.9 miles west of U.S. Highway 101 and 3.2 miles northwest of Brinnon.	.62	1951-70	1-13-66 12- 1-66 1-14-68 12-24-68 12-13-69	6.29 6.72 6.80 7.32 6.40	28 39 41 55 30
UNNAMED TRIBUTARY TO HOOD CANAL							
12056300	ANNAS BAY TRIBUTARY NEAR POTLATCH, WASH. (station discontinued).	Lat 47°20'50", long 123°09'35", in SW¼ sec.35, T.22 N., R.4 W., Mason County, at U.S. Highway 101, 2.5 miles south of Potlatch.	.82	1950-70	1-13-66 12-13-66 2- 3-68 12-24-68 4- 9-70	16.78 16.14 16.39 16.31 15.47	62 38 46 43 18
SKOKOMISH RIVER BASIN							
12061200	FIR CREEK TRIBUTARY NEAR POTLATCH, WASH.	Lat 47°20'15", long 123°18'00", in SWNE¼ sec.3, T.21 N., R.5 W., Mason County, at private logging road 8.0 miles southwest of Potlatch.	.76	1955-70	1-13-66 12-13-66 2- 3-68 12- 3-68 4- 9-70	19.00 19.47 18.99 18.09 18.08	137 156 137 98 97
BEAVER CREEK BASIN							
12072600	BEAVER CREEK NEAR MANCHESTER, WASH.	Lat 47°34'15", long 122°33'30", in SE¼NW¼ sec.16, T.24 N., R.2 E., Kitsap County, at Drive, 0.4 mile upstream from mouth and 1.2 miles northwest of Manchester.	1.61	1967-70	12-13-66 2- 3-68 12-24-68 12-22-69	4.20 3.32 2.60 2.75	74 47 28 32
SCHNEIDER CREEK BASIN							
12078600	SCHNEIDER CREEK TRIBUTARY NEAR SHELTON, WASH. (station discontinued).	Lat 47°05'25", long 123°04'30", in SE¼ sec.32, T.19 N., R.3 W., Mason County, at old U.S. Highway 101, 8.5 miles south of Shelton.	1.12	1924-49c, 1950-69	1-13-66 1-19-67 1-19-68 2-11-69	18.45 18.98 18.26 18.06	47 62 41 36
MCALLISTER CREEK BASIN							
12081300	EATON CREEK NEAR YELM, WASH.	Lat 46°58'05", long 122°43'30", in S¼ sec.7, T.17 N., R.1 E., Thurston County, at County road 6.0 miles northwest of Yelm.	2.28	1960-70	1- 6-66 1-20-67 2-19-68 2-11-69 4- 9-70	4.86 5.08 4.85 4.96 5.38	20 27 20 23 38
NISQUALLY RIVER BASIN							
12089700	YELM CREEK NEAR YELM, WASH.	Lat 46°53'18", long 122°36'14", in SE¼NW¼ sec.7, T.16 N., R.2 E., Thurston County, at Morris Road, 3.7 miles south of Yelm.	1.72	1968-70	2-19-68 1- 7-69 1-14-70	2.67 2.96 3.00	15 22 22
CHAMBERS CREEK BASIN							
12090400	NORTH FORK CLOVER CREEK NEAR PARKLAND, WASH.	Lat 47°08'05", long 122°24'50", in SE¼NW¼ sec.15, T.19 N., R.3 E., Pierce County, at entrance to Mayfair Estates, 1.5 miles southeast of Parkland.	5.26	1960-70	1- 5-66 1-19-67 2-19-68 11-11-68 1-19-70	12.00 13.75 12.09 13.05 12.58	130 152 133 175 106
12090500	CLOVER CREEK NEAR TILLCUM, WASH. (station discontinued).	Lat 47°08'40", long 122°30'10", on west line of sec.12, T.19 N., R.2 E., Pierce County, 1.5 miles upstream from mouth, 2.5 miles northeast of Tillicum, and 7.9 miles southeast of Tacoma.	73.8	1950-54a, 1960-70	1-13-66 1-28-67 2-19-68 1- 8-69 1-27-70	3.17 3.93 3.91 4.01 4.05	89 180 113 192 198
PUYALLUP RIVER BASIN							
12092100	ALLISON CREEK NEAR ELECTRON, WASH.	Lat 46°56'47", long 120°03'43", in SW¼NW¼ sec.21, T.17 N., R.6 E., Pierce County, at road crossing 500 ft upstream from mouth and 7.0 miles southeast of Electron.	1.78	1969-70	1- 5-69 1-19-70	7.58 6.96	86 61
12093000	KAPOWSIN CREEK NEAR KAPOWSIN, WASH. (station discontinued).	Lat 46°59'44", long 122°11'44", in NE¼ sec.5, T.17 N., R.5 E., Pierce County, 0.5 mile downstream from Kapowsin Lake and 1.5 miles east of Kapowsin.	25.9	1928-32a, 1942-57a, 1958-70	1- 5-66 1-19-67 2-24-68 1- 9-69 1-20-70	3.19 4.25 3.81 4.98 4.09	136 344 287 545 340

NOTE.--See footnotes at end of table.

CREST-STAGE PARTIAL-RECORD STATIONS

Annual maximum discharge at crest-stage partial-record stations during water years 1966-70--Continued

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Date	Annual maximum Gage height (feet)	Discharge (cfs)
PUYALLUP RIVER BASIN--CONTINUED							
12096800	DRY CREEK NEAR GREENWATER, WASH.	Lat 47°00'40", long 121°31'45", in NW¼ sec.34, T.18 N., R.10 E. (unsurveyed), Pierce County, at forest service road, 200 ft downstream from U.S. Highway 410, 10.0 miles north of Chinook Pass, and 12.0 miles south-east of Greenwater.	1.01	1957-70	5- 6-66 5-20-67 12-25-67 1- 5-69 1-22-70	4.56 5.04 6.20 5.12 4.64	14 21 39 23 15
12096950	JIM CREEK NEAR GREENWATER, WASH.	Lat 47°02'45", long 121°41'20", in SE¼ sec.17, T.18 N., R.9 E., Pierce County, at logging road 500 ft upstream from mouth and 8.0 miles south of Greenwater.	4.31	1965-70	1-29-65 5- 6-66 5-20-67d 12-25-67 1- 5-69 1-22-70	16.11 14.20 14.19 15.29 14.63 14.35	a291 106 104 204 141 118
12097700	CYCLONE CREEK NEAR ENUMCLAW, WASH.	Lat 47°10'30", long 121°46'40", in SW¼ sec.34, T.20 N., R.8 E., King County, at U.S. Highway 410, 10.0 miles east of Enumclaw.	2.35	1950-70	1-13-66 1-19-67 1-20-68 1- 5-69 1-22-70	23.98 26.09 26.94 24.69 22.28	199 470 465 256 86
12102200	SWAN CREEK NEAR TACOMA, WASH.	Lat 47°11'30", long 122°23'35", in center of W¼ sec.26, T.20 N., R.3 E., Pierce County, at South 72nd Street, 1.8 miles east of Pacific Avenue and 4.8 miles southeast of Tacoma city center.	2.15	1951-70	2- 9-51 2- 4-52 1-31-53 1- 6-54 2- 8-55 12-11-55 12- 9-56 1-10-58 1-24-59 2- 6-60 11-24-60 3- 5-62 2- 3-63 1- 1-64 1-29-65 1- 5-66 1-19-67 2-19-68 11-11-68 1-19-70	16.10 14.30 14.20 14.90 14.58 15.41 16.24 14.42 14.72 15.16 15.02 14.32 14.74 15.34 14.80 14.60 15.25 14.46 14.66 14.45	e216 e75 e67 e117 e94 e158 e229 e83 e104 e138 e128 e76 e106 e152 e110 95 144 85 99 85
HYLEBOS CREEK BASIN							
12102800	SOUTH FORK HYLEBOS CREEK NEAR PUYALLUP, WASH. (station discontinued).	Lat 47°15'35", long 122°17'40", in SE¼ sec.33, T.21 N., R.4 E., King County, at State Highway 161, 5.0 miles north of Puyallup.	.27	1949-66	1- 5-66	3.57	3.6
JOES CREEK BASIN							
12103200	JOES CREEK AT TACOMA, WASH.	Lat 47°18'40", long 122°23'20", in NW¼ sec.14, T.21 N., R.3 E., King County, at Duvas Road, 0.6 mile north of Tacoma city limits.	.78	1958-70	1- 5-66 1-19-67 2-19-68 1- 6-69 1-19-70	3.86 4.63 3.98 3.80 3.79	8.0 17 9.2 7.3 7.1
DUNAMISH RIVER BASIN							
12107200	DEEP CREEK AT CUMBERLAND, WASH. (station discontinued).	Lat 47°17'25", long 121°55'00", in SE¼ sec.21, T.21 N., R.7 E., King County, at the Burlington-Northern Railroad crossing, 0.6 mile northeast of Cumberland.	2.17	1950-70	1- 5-66 1-19-67 6- 2-68 1- 6-69 1-19-70	7.40 7.92 8.50 9.25 7.75	26 43 65 83 37
12113200	MILL CREEK NEAR AUBURN, WASH. (station discontinued).	Lat 47°18'15", long 122°16'00", in SW¼SW¼ sec.14, T.21 N., R.4 E., King County, at private driveway off State Highway 18, 2.0 miles west of Auburn.	3.14	1949-70	12-28-65 1-19-67 2-19-68 1- 6-69 1-19-70	5.10 5.25 4.38 5.48 5.32	43 46 19 55 52
12113300	MILL CREEK TRIBUTARY NEAR AUBURN, WASH.	Lat 47°20'10", long 122°15'10", in NE¼SE¼ sec.2, T.21 N., R.4 E., King County, at county road 2.0 miles northwest of Auburn.	.30	1959-70	1- 5-66 1-19-67 2-19-68 12- 3-68 1-19-70	11.03 11.16 10.98 10.82 10.81	4.6 5.6 4.7 3.4 3.4
LAKE WASHINGTON BASIN							
12115300	GREEN POINT CREEK NEAR CEDAR FALLS, WASH.	Lat 47°23'20", long 121°40'30", in SE¼ sec.17, T.22 N., R.9 E., King County, at road crossing near mouth, 5.0 miles southeast of Cedar Falls.	.89	1957-70	4- 1-66 12-13-66 12-25-67 1- 5-69 1-19-70	10.57 10.97 12.38 15.98 11.05	27 36 65 125 37
12119800	NORTH BRANCH MERCER CREEK, NEAR BELLEVUE, WASH.	Lat 47°32'42", long 122°09'06", in NW¼NE¼ sec.27, T.25 N., R.5 E., King County, at Northrup Way and 140th Avenue NE., 2.5 miles northeast of Bellevue.	3.05	1949-67, 1970	1- 6-66 1-19-67 1-14-70	9.52 11.10 11.85	44 49 39
12123300	EVANS CREEK TRIBUTARY NEAR REDMOND, WASH. (station discontinued).	Lat 47°39'05", long 122°02'45", in NW¼ sec.16, T.25 N., R.6 E., King County, at Redmond-Fall City highway, 3.8 miles southeast of Redmond.	2.46	1949-69	1- 6-66 1-19-67 12-25-67 12- 3-68	5.18 5.43 5.27 5.47	19 30 23 32

NOTE.--See footnotes at end of table.

Annual maximum discharge at crest-stage partial-record stations during water years 1966-70--Continued

Station number	Station name	Location	Drainage area of (sq mi)	Period of record	Date	Annual maximum stage height (feet)	Discharge (cfs)
SNOHOMISH RIVER BASIN							
12128900	TYE RIVER NEAR SCENIC, WASH.	Lat 47°43'35", long 121°08'30", in NW¼ sec.21, T.26 N., R. 13 E., King County, at road crossing 0.6 mile upstream from Tunnel Creek and 1.0 mile northwest of Scenic.	7.60	1967-70	12-13-66 10-27-67f 5-30-69 6- 3-70	1b.26 11.81 11.24 11.20	337 402 334 330
12130500	SOUTH FORK SKYKOMISH RIVER NEAR SKYKOMISH, WASH. (station discontinued).	Lat 47°42'20", long 121°18'30", in NW¼ sec.31, T.26 N., R. 12 E., King County, on left bank 0.2 mile downstream from confluence of Tye and Foss Rivers and 2.5 miles east of Skykomish.	135	1930-31a, 1947-50a, 1951-70	5- 6-66 12-13-66 1-20-68 1- 5-69 6- 3-70	7.37 7.18 9.69 7.71 7.53	4,800 4,480 9,720 5,420 5,080
12131000	BECKLER RIVER NEAR SKYKOMISH, WASH. (station discontinued).	Lat 47°44'20", long 121°19'10", in SW¼ sec.18, T.26 N., R. 12 E., King County, on left bank 0.2 mile downstream from Eagle Creek and 3.0 miles northeast of Skykomish.	96.5	1930-33a, 1947-49a, 1950-70	5- 6-66 12-13-66 10-27-67 1- 5-69 6- 3-70	6.73 6.98 8.39 7.57 6.53	3,690 4,110 6,980 5,210 3,370
12132700	SOUTH FORK SKYKOMISH RIVER TRIBUTARY AT BARING, WASH. (station discontinued).	Lat 47°46'14", long 121°28'51", in NW¼ sec.2, T.26 N., R.10 E., King County, at Burlington Northern Railroad crossing, 200 ft north of U.S. Highway 2 and 0.2 mile east of Baring Post Office.	1.25	1951-70	1-13-66 1-15-67 1-20-68 1- 5-69 1-14-70	14.28 14.39 15.00 14.99 13.85	86 92 122 121 68
12135500	OLNEY CREEK NEAR GOLD BAR, WASH. (station discontinued).	Lat 47°56'25", long 121°42'35", in SW¼ sec.6, T.28 N., R.9 E., Snohomish County, 5.8 miles north of Gold Bar and 7.8 miles upstream from mouth.	8.31	1947-50a, 1951, 1953-68	1-13-66 3-23-67 1-20-68	3.59 3.82 3.84	441 561 572
12143300	SOUTH FORK SNOQUALMIE RIVER TRIBUTARY NEAR NORTH BEND, WASH. (station discontinued).	Lat 47°23'47", long 121°28'33", in NW¼ sec.13, T.22 N., R. 10 E., King County, at U.S. Highway 10, 600 ft west of Denny Creek Road and 15 miles southeast of North Bend.	.15	1951-70	3-30-66 1-15-67 12-25-67 12- 3-68 1-22-70	13.08 13.58 14.04 13.99 13.56	7.4 15 31 28 12
12143310	SOUTH FORK SNOQUALMIE RIVER TRIBUTARY NO. 9 (formerly No. 2) NEAR NORTH BEND, WASH.	Lat 47°23'48", long 121°28'38", in NW¼ sec.13, T.22 N., R. 10 E., King County, at U.S. Highway 10, 900 ft west of Denny Creek Road and 15 miles southeast of North Bend.	.34	1962-70	5- 6-66 1-15-67 1-20-68 1- 5-69 1-22-70	4.82 4.70 5.56 5.99 4.77	9.9 8.7 21 29 9.5
12148100	SOUTH FORK TOLT RIVER TRIBUTARY NEAR CARNATION, WASH.	Lat 47°41'50", long 121°44'00", in NW¼ sec.36, T.26 N., R.8 E., King County, at Weyerhaeuser Timber Co. road, 9 miles northeast of Carnation and 12 miles southeast of Duvall.	2.19	1955-70	12- 4-65 1-15-67 12-25-67 1- 4-69 9- 7-70	14.32 15.22 17.38 16.57 14.36	53 92 189 158 81
12152500	PILCHUCK RIVER NEAR GRANITE FALLS, WASH. (station discontinued).	Lat 48°03'15", long 121°57'25", in SE¼ sec.30, T.30 N., R.7 E., Snohomish County, on right bank 200 ft upstream from county road bridge and 2 miles southeast of Granite Falls.	54.5	1944-57a, 1958-70	1- 8-66 2- 3-67 12-25-67 1- 4-69 1-14-70	7.33 6.82 7.98 8.78 5.98	4,060 3,290 5,160 6,720 2,240
12156400	MUNSON CREEK NEAR MARYSVILLE, WASH. (station discontinued).	Lat 48°03'50", long 122°08'10", in NW¼ sec.26, T.30 N., R.5 E., Snohomish County, at south edge of Cedarcrest Golf Course, 2 miles northeast of Marysville.	.97	1949-69	1- 8-66 12- 4-66 12-25-67 2- 8-69	9.30 8.98 10.60 8.89	27 22 42 21
STILLAGUAMISH RIVER BASIN							
12158300	DEER CREEK NEAR SILVERTON, WASH.	Lat 48°06'40", long 121°34'50", in SW¼ sec.6, T.30 N., R.10 E., Snohomish County, at logging road 2 miles north of Silverton.	1.07	1965-70	11-30-64 10- 6-65 12-16-66 10-27-67 12- 3-68 1-22-70	20.32 19.15 20.48 21.71 20.55 19.30	a193 106 204 304 213 115
12164000	JIM CREEK NEAR ARLINGTON, WASH. (station discontinued).	Lat 48°10'25", long 122°04'05", in SE¼ sec.17, T.31 N., R. 6 E., Snohomish County, on right bank at abandoned bridge, 1.2 miles upstream from mouth and 3 miles southeast of Arlington.	46.2	1938-57a, 1958-69	1- 8-66 2- 3-67 12-25-67 1- 4-69	7.04 6.10 8.28 8.18	2,530 1,840 3,630 3,530
12169500	FISH CREEK NEAR ARLINGTON, WASH.	Lat 48°10'35", long 122°13'25", in NW¼ sec.18, T.31 N., R.5 E., Snohomish County, 300 ft upstream from former gaging station and 4.5 miles west of Arlington.	7.52	1951-53a, 1955-70	3-18-66 2-18-67 12-25-67 2-11-69 1-27-70	10.29 11.09 12.59 9.16 8.67	70 86 245 114 90
SKAGIT RIVER BASIN							
12184300	IRON CREEK NEAR ROCKPORT, WASH.	Lat 48°26'05", long 121°27'55", in NE¼ sec.14, T.34 N., R.10 E., Skagit County, at logging road 1 mile upstream from mouth and 7 miles southeast of Rockport.	1.70	1965-70	11-30-64 3-30-66 12-16-66 10-27-67 1- 4-69 11- 4-69	16.40 14.39 16.04 16.04 14.55 15.66	a270 116 240 240 127 209

NOTE.--See footnotes at end of table.

CREST-STAGE PARTIAL-RECORD STATIONS

Annual maximum discharge at crest-stage partial-record stations during water years 1966-70--Continued

Station number	Station name	Location	Drainage area (sq mi)	Period of record	Date	Annual maximum Gage height (feet)	Discharge (cfs)
SKAGIT RIVER BASIN--CONTINUED							
12188300	STRAIGHT CREEK NEAR DARRINGTON, WASH.	Lat 48°14'05", long 121°23'10", in E½ sec.28, T.32 N., R.11 E., Snohomish County, at logging road 2.5 miles upstream from mouth and 10 miles east of Darrington.	4.32	1965-70	11-30-64 5- 6-66 12-16-66 6- 2-68 5-29-69 11- 4-69	23.00 22.26 22.93 24.06 23.53 23.70	a243 163 235 274 301 330
12189400	SAUK RIVER TRIBUTARY NEAR DARRINGTON, WASH. (station discontinued).	Lat 48°20'30", long 121°33'00", in SE¼ sec.18, T.33 N., R.10 E., Whatcom County, at Darrington-Concrete road, 6.5 miles northeast of Darrington.	ei.30	1951-70	1-13-66 12-16-66 12-24-67 1- 4-69 1-22-70	73.94 74.48 76.22 74.58 73.12	68 82 119 83 48
12190700	MOROVITZ CREEK NEAR CONCRETE, WASH.	Lat 48°45'35", long 121°40'25", in SE¼ sec.19, T.38 N., R.9 E., Whatcom County, at logging road 0.4 mile southwest of Baker Hot Spring and 16 miles north of Concrete.	.55	1966-70	11- 1-65 2- 4-67 10-27-67 1- 4-69 11- 4-69	14.50 15.71 17.26 15.33 15.31	32 79 163 62 61
12197200	PARKER CREEK NEAR LYMAN, WASH. (station discontinued).	Lat 48°29'25", long 122°05'50", in SE¼ sec.23, T.35 N., R.5 E., Skagit County, at county road on south side of Skagit River, 3.0 miles southwest of Lyman.	1.82	1951-70	1- 8-66 3-22-67 10-27-67 12- 3-68 11- 4-69	17.94 18.36 18.47 19.42 17.89	94 116 118 161 91
12200700	CARPENTER CREEK TRIBUTARY NEAR MOUNT VERNON, WASH. (station discontinued).	Lat 48°17'10", long 122°17'25", in SE¼ sec.4, T.32 N., R.4 E., Snohomish County, at U.S. Highway 99, 0.8 mile south of Skagit County line and 9.5 miles south of Mount Vernon.	2.58	1949-70	1- 8-66 3-22-67 12-25-67 1- 4-69 1-27-70	7.16 7.06 8.93 7.33 7.00	26 23 86 32 24
SAMISH RIVER BASIN							
12200800	LAKE CREEK NEAR BELLINGHAM, WASH. (station discontinued).	Lat 48°41'05", long 122°25'30", in SW¼ sec.23, T.37 N., R.3 E., Whatcom County, at U.S. Highway 99, 6.5 miles southeast of Bellingham.	2.35	1949-63, 1965-68	1- 8-66 2- 3-67 12-25-67	16.72 16.98 17.47	88 78 91
NOOKSACK RIVER BASIN							
12204400	NOOKSACK RIVER TRIBUTARY NEAR GLACIER, WASH.	Lat 48°54'30", long 121°48'20", in SW¼ sec.32 (unsurveyed), T.40 N., R.8 E., Whatcom County, at State Highway 542, 6.5 miles east of Glacier.	1.15	1956-60, 1962-70	5- 6-66 6-19-67 9-17-68 1- 4-69 6- 3-70	15.60 15.71 15.98 15.64 15.80	34 38 49 36 42
12205750	KIDNEY CREEK NEAR GLACIER, WASH.	Lat 48°56'40", long 121°55'20", in NE¼ sec.20, T.40 N., R.7 E., Whatcom County, at logging road 0.5 mile upstream from mouth and 4.0 miles north of Glacier.	2.66	1966-70	5- 6-66 5-20-67 9-17-68 6- 3-69 6- 3-70	14.77 14.58 14.89 14.66 14.42	138 85 122 97 64
12212700	TENMILE CREEK TRIBUTARY NEAR BELLINGHAM, WASH. (station discontinued).	Lat 48°50'30", long 122°24'30", 0.1 mile north of center of sec.27, T.39 N., R.3 E., Whatcom County, at Starry Road, 2.7 miles northwest of Noon and 7.0 miles northeast of Bellingham.	.74	1949-67	1- 6-66 1-19-67	9.16 9.22	25 26
12212800	TENMILE CREEK TRIBUTARY NO. 2 NEAR BELLINGHAM, WASH.	Lat 48°50'35", long 122°24'30", 0.2 mile north of center of sec.27, T.39 N., R.3 E., Whatcom County, at Starry Road, 2.8 miles northwest of Noon and 7.0 miles northeast of Bellingham.	.24	1956-70	1- 6-66 1-19-67 12-25-67 1- 4-69 1-19-70	6.72 6.70 7.06 8.07 5.97	22 21 27 44 10

* Operated as a continuous-record gaging station.

a Not previously published.

b At site 300 ft upstream at different datum.

c Maximum stage observed.

d Occurred also June 19, 1967.

e Revised.

f Occurred also Jan. 20, 1968.

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