

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STREAMFLOW STATISTICS AND DRAINAGE-BASIN CHARACTERISTICS
FOR THE PUGET SOUND REGION, WASHINGTON

Volume I: Western and Southern Puget Sound

By J. R. Williams, H. E. Pearson, J. D. Wilson

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METRIC (SI) CONVERSION FACTORS

<u>Multiply</u>	<u>By</u>	<u>To obtain</u>
inches (in.)	25.4	millimeters (mm)
feet (ft)	0.3048	meters (m)
miles (mi)	1.609	kilometers (km)
square miles (mi ²)	2.590	square kilometers (km ²)
cubic feet per second(ft ³ /s)	0.02832	cubic meters per second (m ³ /s)
	28.32	liters per second (L/s)

Temperature

To convert degree Fahrenheit (°F) to degree Celsius (°C):
°C = 5/9 (°F-32)

National Geodetic Vertical Datum of 1929 (NGVD of 1929): A geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "mean sea level." NGVD of 1929 is referred to as sea level in this report.

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ABSTRACT

This report presents streamflow data and drainage-basin characteristics for 133 sites from Cape Flattery through the Green River basin near Seattle, Washington. All gaging stations with 5 or more years of record (through 1979) are included. The data include monthly and annual mean discharges and their statistics, low-flow and high-flow analyses, flow duration, and flood frequency.

INTRODUCTION

This report presents a summary of historic streamflow records for specific areas of the State. Volumes I and II cover the Puget Sound region of Washington. Because there are 299 specific sites in the Puget Sound Region at which 5 years or more of data have been collected, the report has been divided into two volumes. Volume I contains data for sites 1 through 133—the area from Cape Flattery through the Green River basin near Seattle, and Volume II contains data for sites 134 through 299—the area from the Cedar River basin near Seattle to the Canadian border (see fig. 1).

This report was prepared at the request of Bruce L. Foxworthy, Project Leader, U.S. Geological Survey, Puget Sound Earth Sciences Applications Project Office. The report has been prepared under the general supervision of Charles R. Collier, former District Chief.

A similar report (U.S. Geological Survey Open-File Report 84-145A and B) presents historic streamflow data for the remainder of the State in two volumes—Volume I, southwestern Washington, and Volume II, eastern Washington.

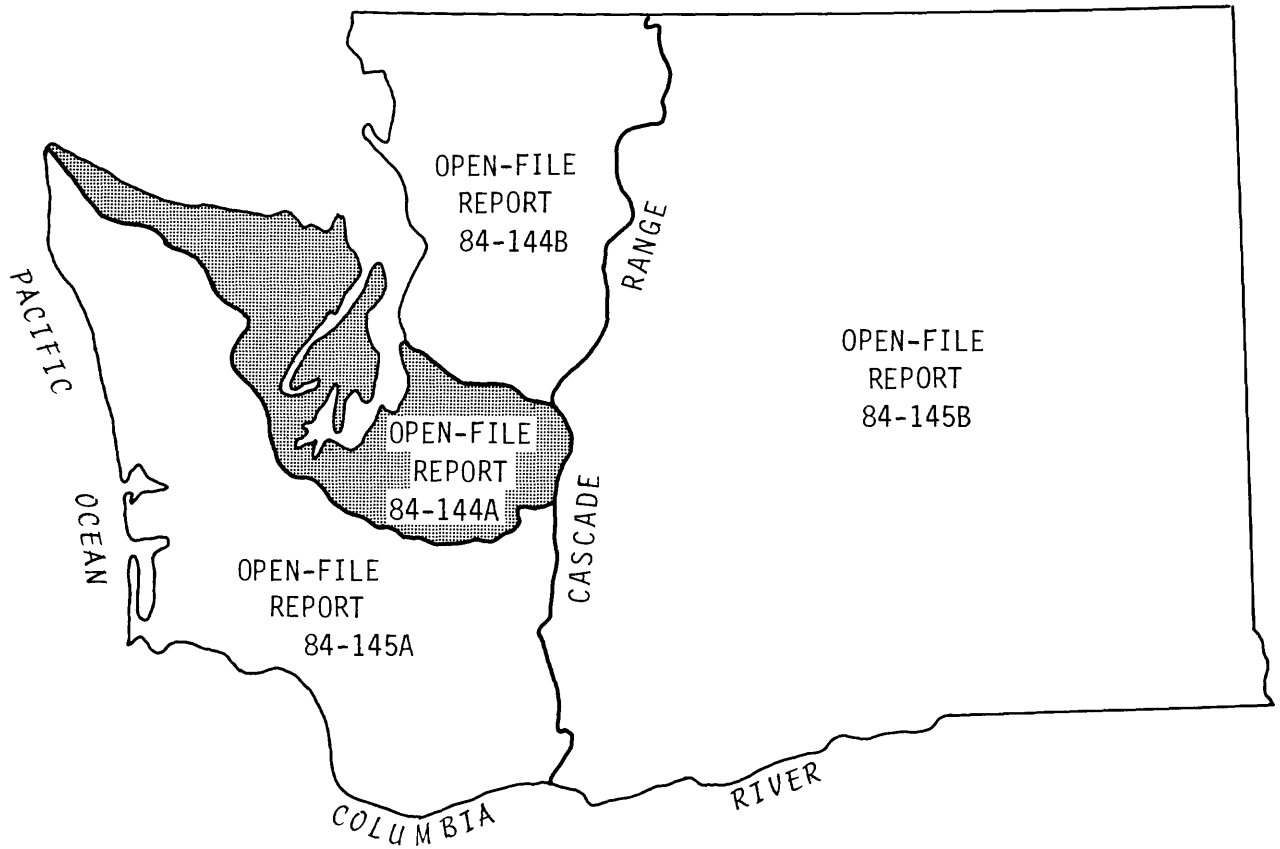


FIGURE 1.--Map showing areas in Washington State for which open-file reports containing streamflow statistics and drainage-basin characteristics are available. Shaded area is covered in this report.

PART A

General Explanation of Data

When the U.S. Geological Survey (USGS) operates a recording gaging station on a stream, it publishes daily mean discharges in its annual State Water-Data Reports. Although these daily discharges are not repeated in this report, they are the basis for most of the data in this report. The summary tables of monthly and annual mean discharges, as well as the tables of highest and lowest mean flows, were obtained from the daily mean figures at each site.

Annual instantaneous peak flows are also included in this report. These values were obtained at regular recording gaging stations and also at some special sites and partial-record stations where these data are the only data available. The annual peak-flow data were used to compute estimates of the magnitude and frequency of floods on the streams.

This report also contains drainage-basin and climatic characteristics for each site, either obtained from U.S. Weather Bureau data or computed from standard USGS topographic quadrangle maps. A more detailed explanation of the methods used to compute the various characteristics is given in the next section of this report.

Most of the water resources data collected by the U.S. Geological Survey is stored in several computer files maintained at the central computer facilities in Reston, Virginia. As a part of the Survey's program of releasing water data to the public, a large-scale computerized system for WATER data STORage and REtrieval (WATSTORE-1975) has been developed. Much of the data presented in this report was retrieved from four WATSTORE computer files—the station header file, the daily values file, the peak flow file, and the streamflow and basin characteristics file. The station header file was used to list the gaging station name and standard USGS downstream order number for each site, along with the location by county and latitude and longitude, as shown in table 1. The other three files were used to make retrievals from which the streamflow-summary tables, peak-flow tables, and basin-characteristics tables were made.

Only data for gaging stations having 5 or more years of record are included in this report. For those stations having 5 to 9 years of record, only listings of the monthly and annual mean flows and annual peak flows are presented. For stations with 10 or more years of record, additional statistics are presented.

The data for sites with less than 5 years of continuous record can be obtained by consulting either the annual USGS State Water-Data Reports or Washington State Department of Conservation Water-Supply Bulletin No. 23 (1964), or by contacting the USGS office in Tacoma.

The first column of table 2 (the table of basin characteristics) lists the gaging-station numbers, which follow the standard U.S. Geological Survey method for numbering surface-water stations that has been used since 1950. Each station has an 8-digit number, such as 12114000, which includes a 2-digit part number ("12") plus a 6-digit downstream order number ("114000"). The downstream order numbers increase 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. No distinction is made between station numbers for recording gaging stations and partial-record stations.

For other supplemental information about a site, such as the period of record, a narrative-type location, or notes concerning diversion and regulation, the user is referred to the annual USGS State Water-Data Reports for the years when that station was in operation.

The State of Washington, in cooperation with the U.S. Geological Survey, has published three reports concerned with the water resources of three of the larger areas in the Puget Sound region: Water-Supply Bulletin 47, "Water in the Skagit River Basin, Washington"; Water-Supply Bulletin 12, "Water Resources of the Nooksack River Basin and Certain Adjacent Streams"; and Water-Supply Bulletin 18, "Water Resources and Geology of the Kitsap Peninsula and Certain Adjacent Islands." All three reports contain hydrologic data collected at gaging stations, and also contain information on ground water, geology, chemical quality of the water, water use, and climatological data within their respective basins.

Table 1 lists the page on which the data for each of the 133 sites can be found. The gaging stations are ordered by station number—the standard downstream order number used by the Geological Survey (an explanation of the numbering system was previously given in the description of table 2).

The gaging-station name is the name used in the header file. It agrees with the name under which the data have been published most recently by the USGS.

Following the station name, a county code and the latitude and longitude are given for each site. The county codes are those used by the Geological Survey's WATSTORE programs as defined by Federal Information Processing Standards (FIPS) and are the ones used by all Federal agencies. The codes for the counties or parts of counties in the Puget Sound region as defined in this report are as follows:

Clallam-----	009	Pierce-----	053
Island-----	029	San Juan-----	055
Jefferson-----	031	Skagit-----	057
King-----	033	Snohomish-----	061
Kitsap-----	035	Thurston-----	067
Lewis-----	041	Whatcom-----	073
Mason-----	045		

Table 1 also lists a map-site number for each station for which data are included in this report. Station locations and site numbers are plotted on plate 1, in the pocket at the end of the report. The numbers increase in the same order that the sites are presented in the report, that is, beginning with site number 1 near Neah Bay on the Olympic Peninsula and ending with site number 133 on the Green River near Seattle.

The users of the statistical data found in this report should be aware of the possibility of significant regulations or diversions of the flows at the site. For stations with two or more levels of regulation, separate tabulations and statistical summaries are given for each homogeneous segment of the record. It should be remembered that statistics of regulated record segments include both natural hydrological fluctuations and the manmade operating policies at the regulating structure. Because the operating policies are subject to changes in our society and our economic needs (the price of hydropower, especially), the streamflow statistics of regulated records, although descriptive of the past, may be unrepresentative of the future. Regulated records should, therefore, be carefully considered when using monthly and annual mean flows, high and low mean flows, and annual peak flows. One can determine the years of record which were regulated at all sites in this report by observing which years of annual peak flows are coded with an R.

Drainage Basin and Climatic Characteristics

There are times when analytical studies require the use of various streamflow and drainage basin characteristics. As a part of the WATSTORE system, the Geological Survey has created a computer file in which about 200 characteristics for any particular site may be stored, including some physical characteristics for the specific sites themselves, and also characteristics for the drainage basin above the sites. These characteristics were computed in accordance with the National Handbook of Recommended Methods for Water-Data Acquisition.

Many streamflow characteristics in the file are computed from statistical analyses of the gaging-station records. These are shown in the summary tables presented in part B of this report. Eleven basin characteristics were selected for retrieval for each site and are presented in table 2. A brief description of each of the 11 characteristics is given below.

AREA - The total drainage area above the stream-gaging site, in square miles, including non-contributing area.

SLOPE - The main channel slope, in feet per mile. It was computed by first extending the main stream upstream to the basin divide and then locating on the stream a point that was 10 percent of the distance from the gage to the divide and another point on the stream that was 85 percent of the distance from the gage to the divide. The slope between those points was then computed by dividing the difference in elevation between the points by the distance between the points.

LENGTH - The stream length, in miles, measured along the channel from the gage to the basin divide.

ELEVATION - The mean basin elevation, in feet above mean sea level. It was computed from topographic maps by using a grid-sampling method. A grid size was selected that had between 20 and 80 points inside the drainage-area boundary. The elevation of each grid point was then determined, and the mean of the points was considered to be the mean basin elevation.

STORAGE - The percentage of the contributing drainage area that is made up of lakes, ponds, and swamps, as measured by the grid-sampling method.

LAKE AREA - The area of lakes and ponds, as a percentage of contributing drainage area, measured by the grid-sampling method. It differs from STORAGE only in that it does not include swamp area.

FOREST - The area covered by trees, as a percentage of the contributing drainage area. It is measured by the grid-sampling method and is based on the color code and map symbols on standard U.S. Geological Survey topographic maps.

PRECIP. - The mean annual precipitation in the basin, in inches, taken from U.S. Weather Bureau series, "Climates of the States--Washington." Grid-sampling method is used with an isohyetal map.

I 24,2 - The precipitation intensity within the basin. It is the 24-hour rainfall, in inches, that can be expected on the average once every 2 years. It is estimated from U.S. Weather Bureau Technical Paper 40.

SNOFALL - The mean annual snowfall for the basin, in inches, taken from U.S. Weather Bureau series, "Climates of the States--Washington."

JANMIN - The mean minimum January temperature for the basin, in degrees Fahrenheit, taken from U.S. Weather Bureau series, "Climates of the States--Washington."

Monthly and Annual Mean Discharges

The monthly and annual mean discharge tables (part B of this report) are based on data from the daily-values file in the WATSTORE system and are listed on a water-year basis. A water year begins on October 1st of a year and ends on September 30th of the next year—for example, the 1979 water year began on October 1, 1978, and ended on September 30, 1979.

Monthly and annual mean discharges are listed for each station for its period of record. (These, together with annual peak flows, are the only data presented for stations with 5 to 9 years of record.) The mean values are arithmetic means of individual daily mean discharges.

For stations having 10 or more years of monthly mean discharges, results of additional statistical analyses are given. The statistics, computed from the monthly and annual mean discharges, are the mean, maximum, minimum, standard deviation, coefficient of skewness, coefficient of variation, percentage of the average discharge, and the statistics of the logarithms of the flows. Note that due to the method of rounding off the numbers, the sum of the monthly percentage of the average discharges does not always equal the 100.0 shown under the "Annual" column.

Also listed are monthly and annual mean discharge exceedence probabilities based on log-Pearson Type III analyses. The magnitudes of the monthly and annual mean discharges for each year are assumed to be independent random variables that follow the log-Pearson Type III probability distribution; that is, the logarithms of the discharges follow a Pearson Type III distribution. This distribution defines the probability that any single monthly mean flow will exceed a specified discharge. For example, a monthly mean flow with a probability of 0.04 would be expected to be exceeded four times in 100 years on the average, and the chance of its being exceeded in any one year is 4 percent. This should not be construed to indicate that a monthly mean flow of that magnitude would occur on a regular basis. It is quite possible that the given flow could be exceeded several times within a few years, and then not be exceeded again for many years.

Highest Mean Flows and Annual Peak Flows

The highest mean flow table (Part B) lists the highest n-day mean flow for nine selected periods of n-consecutive days for each year of record that has no missing values. These values are listed only for those stations that have 10 years or more of record. Statistics computed from these flows are also shown. These statistics are the mean, maximum, minimum, standard deviation, skewness, standard error of skewness, serial correlation coefficient, coefficient of variation, and the statistics of the logarithms of the flows.

The date and magnitude of annual peak flows are listed. When a peak is considered to be affected significantly by upstream regulation, it is coded with an R. Uncoded peaks may be assumed to be natural flow or not significantly affected by regulation. The user of these data should be aware that some stations have had varying degrees of regulation with time, such as construction of several dams upstream from a station. In such cases, the user would probably want to investigate the effect of changes in regulation on an individual station basis.

For some stations, 10 years or more of record have been gathered both before and after significant regulation on the stream. In those cases, the statistics have been computed using the unregulated or natural flow first, and then using the regulated years only. A comparison of the two sets of statistics gives a good measure of the effect of regulation. The years of the historical data that were used in each statistical computation are shown in parentheses; the user must be aware of the possibility of significant regulation during those years.

For some stations, annual peaks were obtained for several years after the station was discontinued as a recording streamflow station. Therefore, the statistics for the high mean flow and low mean flow were based on a different span of years than were those of the annual peak-flow statistics. The total span of years for the annual peak-flow statistics is shown in parentheses, but only those years for which daily flows are available were used for computing the high- and low-flow statistics.

For all stations with 10 or more years of data, flow exceedence probabilities based on log-Pearson Type III analyses are listed both for the highest mean flows for the various consecutive days and for the annual peak flows. This listing states the probability that in any year the flow will equal or exceed a specified discharge. For example, a flow with an exceedence probability of 0.04 would be expected to be exceeded four times in 100 years on the average. However, this should not be construed to indicate that flows of those magnitudes would occur on a regular basis.

Because the term "recurrence interval" is a more familiar term to many people than "exceedence probability", it is appropriate to explain their relationship. An annual peak flow with an exceedence probability of 0.10 is expected to occur or be exceeded 10 times in 100 years on the average, or it can be said to have a 10-percent chance of being equaled or exceeded in any year on the average. This same peak flow can be said to have a recurrence interval of 10 years since it can be expected to occur once in 10 years on the average. It should be noted, however, that recurrence intervals cannot be thought of as indicating that floods occur on a regular schedule and cannot be used to predict the timing of floods. This is avoided by stating that the flow for a flood with a 10-year recurrence interval has, instead, an exceedence probability of 0.10. A table of exceedence probabilities and their corresponding recurrence intervals follows.

<u>Exceedence probability</u>	<u>Recurrence interval (years)</u>
0.99	1.01
.95	1.05
.90	1.11
.80	1.25
.50	2
.20	5
.10	10
.05	20
.04	25
.02	50
.01	100

For the annual peak-flow data, two sets of values are given for both the statistics and the exceedence probabilities-- "Systematic Record" and the other "WRC Estimate." Both sets of values were computed by using the "log-Pearson Type III" distribution method, as recommended by the Water Resources Council (1976). The two sets of values may differ because the mean of the logarithms of discharges and the skew coefficient used in the computations may differ depending on the length of record available. The skew coefficient used for the "Systematic Record" set of values was computed directly from the peak-flow data for that station. The skew coefficient used in the "WRC Estimate" set of values has been determined by the Water Resources Council by using a generalized skew coefficient for the area and certain guidelines for its application.

The skew coefficient for a station with a short-term record is greatly affected by extremely high or low values. The effect can be overcome somewhat by using the skew-coefficient-weighting formula specified in the WRC guidelines. That formula gives more weight to the generalized skew coefficient when the station record is short term and more weight to the calculated station skew coefficient when the record is long. For stations having less than 25 years of record, the generalized skew coefficient is used, and for stations having more than 75 years of record, the systematic-record skew coefficient is used; a weighted value is used between these limits.

At some sites, one or more peak discharges are known to be the highest in a period that is longer than the period of gaging-station record. At such sites, the "WRC Estimate" takes this into account by making an historic adjustment. The mean of the logarithms after the adjustment differs from that used in the "Systematic Record" computations. The "WRC Estimate" of flood frequency, with its appropriate generalized skew coefficients and adjustments for outliers and historic peaks, is the one that should be adopted. The "Systematic Record" flood-frequency values are an intermediate step and diagnostic check of the "WRC Estimate" and show what would have resulted had not a generalized skew been used or adjustments been made.

The user is reminded that the flood frequency discharges listed in this report for each station are the results of statistical analyses of the data collected at that station for the specified period of record and under the hydrologic condition of that time, and that the discharges necessarily will change as more records become available in the future and as hydrologic conditions change. There is no substitute for the personal judgment of an experienced hydrologist in analyzing flood-frequency data.

Lowest Mean Flows and Flow-Duration Data

The source of the lowest mean flow and flow-duration data is the daily mean discharge published for each gaging station. For most streams, minimum discharges usually occur during the period July-October. Because that period straddles the end of a water year (September 30), the lowest mean-flow table is based on a climatic year, beginning April 1 and ending the following March 31.

For all gaging stations with 10 or more complete years of record, a lowest mean-flow table is presented that lists the lowest n-day mean flow for nine selected periods of n-consecutive days for each year of record. Also included are the mean, maximum, minimum, standard deviation, skewness, standard error of skewness, serial correlation coefficient, coefficient of variation, and the statistics of the logarithms of the flows.

The probability of an n-day low mean flow being equal to, or less than, a specified discharge was computed by using a log-Pearson type III analysis. The probabilities and corresponding discharges are given in the "Lowest mean flow non-exceedence probabilities" table for each station. The n-day low mean discharge corresponding to a probability of 0.10 has a 10-percent chance of occurring in any given year and would occur on the average, over a long period of time, 10 times in 100 years. Such a mean discharge has a recurrence interval of 10 years. For example, the 7-day low mean flow corresponding to a probability of 0.10 for Hoko River near Sekiu is 14.6 ft³/s. On an average of once in 10 years, the low mean flow for 7 consecutive days will be equal to or less than 14.6 ft³/s. The recurrence interval should not be construed to indicate that flows of that magnitude would occur on a regular basis. The relationship between recurrence intervals and probabilities has been explained in the "Highest Mean Flows and Annual Peak Flows" section of this report.

Also included are the annual flow-duration data for all stations having 10 or more years of daily record. These data help indicate the availability of streamflow and are useful for investigating problems of water supply, power development, waste disposal, and administration of water rights. The flow-duration data list discharges that were equaled or exceeded for specified percentages of time for each station for its period of record. (Monthly flow-duration tables can also be useful, as they show a chronological sequence of flows, but they are beyond the scope of this report.)

There are many natural factors that influence the low-flow characteristics of streams, including precipitation within the basin, geographical position, elevation, and geology. A discussion of the influence of these factors on streams in the Puget Sound region can be found in Hidaka (1973).

TABLE 1.--Numerical listing of stations

STATION NUMBER	STATION NAME	COUNTY	LAT- 1- TUDE	LONG- 1- TUDE	MAP SITE NUMBER	PAGE NUMBER
12043270	HOKO RIVER TRIB NR SEKIU, WASH.	009	48 12 14	124 25 08	1	24
12043300	HOKO RIVER NEAR SEKIU, WASH.	009	48 14 30	124 22 55	2	24
12043430	EAST TWIN RIVER NEAR PYSHT, WASH.	009	48 09 49	123 56 33	3	26
12043450	CROSS CR NR FAIRHOLM, WASH.	009	48 03 20	123 52 35	4	29
12044000	LYRE RIVER AT PIEDMONT, WASH.	009	48 05 35	123 47 30	5	29
12045500	ELWHA RIVER AT McDONALD BR NR PRT ANGELES, WASH.	009	48 03 18	123 34 55	6	32
12046800	EAST VALLEY CREEK AT PORT ANGELES, WASH.	009	48 06 10	123 26 20	7	39
12047100	LEES CREEK AT PORT ANGELES, WASH.	009	48 06 20	123 22 55	8	39
12047300	MOHSE CREEK NEAR PORT ANGELES, WASH.	009	48 02 17	123 20 57	9	39
12047500	SIEBERT CREEK NEAR PORT ANGELES, WASH.	009	48 05 00	123 16 52	10	42
12047700	GOLD CREEK NR BLYN, WASH.	009	47 55 15	123 02 30	11	45
12048000	DUNGENESS RIVER NEAR SEQUIM, WASH.	009	48 00 52	123 07 53	12	46
12049400	DEAN CREEK AT BLYN, WASH.	009	48 01 30	123 00 35	13	51
12050500	SNOW CREEK NEAR MAYNARD, WASH.	031	47 56 25	122 53 10	14	52
12051500	CHIMACUM CREEK NR CHIMACUM, WASH.	031	47 58 27	122 46 35	15	55
12052000	LITTLE QUILCENE RIVER NR QUILCENE, WASH.	031	47 50 15	122 53 10	16	55
12052400	PENNY CREEK NEAR QUILCENE, WASH.	031	47 48 40	122 54 50	17	56
12053000	DOSEWALLIPS RIVER NR BRINNON, WASH.	031	47 43 35	123 00 30	18	57
12053400	DOSEWALLIPS R TRIBUTARY NEAR BRINNON, WASH.	031	47 43 00	122 56 20	19	60
12054000	DUCKABUSH RIVER NEAR BRINNON, WASH.	031	47 41 03	123 00 37	20	61
12054500	HAMMA HAMMA RIVER NEAR ELDON, WASH.	045	47 35 18	123 06 57	21	65
12054600	JEFFERSON CREEK NEAR ELDON, WASH.	045	47 35 00	123 06 18	22	68
12056300	ANNAS BAY TRIBUTARY NEAR POTLATCH, WASH.	045	47 20 50	123 09 35	23	71
12056500	NF SKOKOMISH R BLW STRCSE RPDS NR HODSPRT, WASH.	045	47 30 52	123 19 43	24	72
12057500	NORTH FORK SKOKOMISH RIVER NR HOODSPORT, WASH.	045	47 25 24	123 13 16	25	78
12058000	DEER MEADOW CREEK NEAR HOODSPORT, WASH.	045	47 24 56	123 13 36	26	83
12059500	N.F. SKOKOMISH RIVER NEAR POTLATCH, WASH.	045	47 19 40	123 14 30	27	86
12059800	S.F. SKOKOMISH RIVER NR HOODSPORT, WASH.	045	47 26 45	123 24 54	28	90
12060000	S.F. SKOKOMISH RIVER NR POTLATCH, WASH.	045	47 23 10	123 18 30	29	91
12060500	SOUTH FORK SKOKOMISH RIVER NEAR UNION, WASH.	045	47 20 26	123 16 44	30	94
12061200	FIR CREEK TRIBUTARY NEAR POTLATCH, WASH.	045	47 20 15	123 18 00	31	100
12061500	SKOKOMISH RIVER NEAR POTLATCH, WASH.	045	47 18 36	123 10 33	32	101
12062500	PURDY CREEK NEAR UNION, WASH.	045	47 18 05	123 10 50	33	104
12063000	UNION RIVER NEAR BREMERTON, WASH.	035	47 31 45	122 47 05	34	105
12063500	UNION RIVER NEAR BELFAIR, WASH.	045	47 28 20	122 49 40	35	108
12064500	MISSION CREEK NEAR BREMERTON, WASH.	035	47 32 00	122 50 05	36	111
12065000	MISSION CREEK NR BELFAIR, WASH.	045	47 29 20	122 51 45	37	111
12065500	GOLD CREEK NEAR BREMERTON, WASH.	035	47 33 20	122 48 35	38	112
12066000	TAHUYA RIVER NEAR BREMERTON, WASH.	035	47 33 00	122 50 50	39	115
12067000	PANTHER CREEK NEAR BREMERTON, WASH.	035	47 31 50	122 51 30	40	117

TABLE 1.--Continued

STATION NUMBER	STATION NAME	COUNTY	LAT- I- TUDE	LONG- I- TUDE	MAP SITE NUMBER	PAGE NUMBER
12067500	TAHUYA RIVER NEAR BELFAIR, WASH.	045	47 29 40	122 54 20	41	118
12068500	DEWATTO RIVER NEAR DEWATTO, WASH.	045	47 28 10	123 01 33	42	120
12069550	BIG BEEF CREEK NEAR SEABECK, WASH.	035	47 38 27	122 47 02	43	123
12070000	DOG FISH CREEK NEAR POULSBOROUGH, WASH.	035	47 45 11	122 38 36	44	126
12072000	CHICO CREEK NEAR BREMERTON, WASH.	035	47 35 25	122 42 30	45	129
12072600	BEAVER CR NR MANCHESTER, WASH.	035	47 34 15	122 33 30	46	132
12073000	BURLEY CREEK AT BURLEY, WASH.	035	47 24 55	122 37 50	47	132
12073500	HUGE CREEK NEAR WAUNA, WASH.	035	47 23 20	122 41 50	48	133
12075000	DEER CREEK NEAR SHELTON, WASH.	045	47 16 00	123 00 15	49	136
12075500	CRANBERRY CREEK NEAR SHELTON, WASH.	045	47 16 00	123 00 30	50	136
12076000	JOHNS CREEK NEAR SHELTON, WASH.	045	47 15 00	123 05 15	51	136
12076500	GOLDSBOROUGH CREEK NEAR SHELTON, WASH.	045	47 12 56	123 10 52	52	137
12078000	SKOOKUM CREEK AT KAMILCHE, WASH.	045	47 03 30	123 06 50	53	140
12078400	KENNEDY CREEK NEAR KAMILCHE, WASH.	045	47 04 37	123 07 33	54	140
12078600	SCHNEIDER CREEK TRIBUTARY NEAR SHELTON, WASH.	045	47 05 25	123 04 30	55	143
12079000	DESCHUTES RIVER NR RAINIER, WASH.	067	46 51 08	122 40 03	56	143
12080000	DESCHUTES RIVER NEAR OLYMPIA, WASH.	067	47 00 05	122 53 40	57	146
12081000	WOODLAND CREEK NEAR OLYMPIA, WASH.	067	47 04 20	122 49 00	58	149
12081300	EATON CREEK NEAR YELM, WASH.	067	46 58 05	122 43 30	59	152
12081500	MCALLISTER SPRINGS NEAR OLYMPIA, WASH.	067	47 01 45	122 43 25	60	152
12082500	NISQUALLY RIVER NEAR NATIONAL, WASH.	053	46 45 10	122 04 57	61	155
12083000	MINERAL CREEK NEAR MINERAL, WASH.	041	46 44 19	122 08 33	62	158
12083500	EAST CREEK NR ELBE, WASH.	041	46 44 40	122 12 20	63	162
12084000	NISQUALLY RIVER NEAR ALDER, WASH.	053	46 46 05	122 16 05	64	162
12084500	LITTLE NISQUALLY RIVER NEAR ALDER, WASH.	067	46 47 20	122 18 45	65	165
12086500	NISQUALLY RIVER AT LA GRANDE, WASH.	053	46 50 37	122 19 46	66	168
12087000	MASHEL RIVER NEAR LA GRANDE, WASH.	053	46 51 25	122 18 05	67	174
12088000	OHOP CREEK NEAR EATONVILLE, WASH.	053	46 52 35	122 16 50	68	177
12088400	NISQUALLY R ABV POWELL C NR MCKENNA, WASH.	067	46 51 04	122 26 03	69	180
12088500	NISQUALLY RIVER NEAR MCKENNA, WASH.	053	46 51 20	122 27 10	70	183
12089000	TANWAX CREEK NR MCKENNA, WASH.	053	46 51 55	122 27 05	71	186
12089500	NISQUALLY RIVER AT MCKENNA, WASH.	053	46 56 01	122 33 33	72	186
12089700	YELM CREEK NR YELM, WASH.	067	46 53 18	122 36 14	73	189
12090200	MUCK CREEK AT ROY, WASH.	053	47 00 20	122 32 32	74	189
12090400	NORTH FORK CLOVER CREEK NEAR PARKLAND, WASH.	053	47 08 05	122 24 50	75	192
12090500	CLOVER CREEK NEAR TILLCUM, WASH.	053	47 08 40	122 30 10	76	192
12091040	CHAMBERS CR ABV FLETT CR NEAR STEILACOOM, WASH.	053	47 11 28	122 31 37	77	192
12091050	FLETT CREEK AT 74TH ST., AT TACOMA, WASH.	053	47 11 26	122 29 08	78	193
12091060	FLETT CREEK AT MT. VIEW MEMORIAL PARK, WASH.	053	47 11 06	122 29 17	79	193
12091070	FLETT CREEK BELOW FLETT SPRINGS AT TACOMA, WASH.	053	47 10 50	122 30 10	80	194

TABLE 1.--Continued

STATION NUMBER	STATION NAME	COUNTY	LAT- I- TUOE	LONG- I- TUOE	MAP SITE NUMBER	PAGE NUMBER
12091100	FLETT CREEK AT TACOMA, WASH.	053	47 11 23	122 31 08	81	195
12091180	LEACH CREEK AT HOLDING POND, AT FIRCREST, WASH.	053	47 13 29	122 30 32	82	198
12091200	LEACH CREEK NR FIRCREST, WASH.	053	47 13 18	122 30 29	83	201
12091300	LEACH CREEK NEAR STEILACOOM, WASH.	053	47 11 55	122 31 15	84	204
12091500	CHAMBERS C BW LEACH C, NR STEILACOOM, WASH.	053	47 11 55	122 31 45	85	207
12091700	JUDD CREEK NEAR BURTON, WASH.	033	47 24 40	122 28 18	86	210
12092000	PUYALLUP RIVER NR. ELECTRON, WASH.	053	46 54 14	122 02 02	87	211
12092100	ALLISON CREEK NR ELECTRON, WASH.	053	46 56 47	120 03 43	88	216
12093000	KAPOWSIN CREEK NEAR KAPOWSIN, WASH.	053	46 59 44	122 11 44	89	217
12093500	PUYALLUP RIVER NEAR ORTING, WASH.	053	47 02 22	122 12 24	90	220
12093900	CARBON RIVER AT FAIRFAX, WASH.	053	47 00 47	122 00 42	91	226
12094000	CARBON RIVER NR FAIRFAX, WASH.	053	47 01 40	122 01 50	92	229
12094400	SO PRAIRIE CREEK NR ENUMCLAW, WASH.	053	47 05 30	121 57 05	93	233
12095000	SOUTH PRAIRIE CREEK AT SOUTH PRAIRIE, WASH.	053	47 08 23	122 05 28	94	234
12096500	PUYALLUP RIVER AT ALDERTON, WASH.	053	47 11 05	122 13 45	95	237
12096600	WHITE RIVER NEAR GREENWATER, WASH.	053	46 53 50	121 31 38	96	240
12096800	DRY CREEK NEAR GREENWATER, WASH.	053	47 00 40	121 31 45	97	240
12096950	JIM CREEK NEAR GREENWATER, WASH.	053	47 02 45	121 41 20	98	241
12097000	WHITE RIVER AT GREENWATER, WASH.	053	47 08 48	121 38 44	99	242
12097500	GREENWATER RIVER AT GREENWATER, WASH.	053	47 09 13	121 38 04	100	248
12097700	CYCLONE CREEK NEAR ENUMCLAW, WASH.	033	47 10 30	121 46 40	101	253
12098500	WHITE RIVER NEAR BUCKLEY, WASH.	033	47 09 05	121 56 55	102	254
12099500	BOISE CREEK NEAR ENUMCLAW, WASH.	033	47 11 20	121 58 20	103	259
12100000	WHITE RIVER AT BUCKLEY, WASH.	053	47 10 28	122 01 09	104	260
12100500	WHITE RIVER NR SUMNER, WASH.	053	47 15 01	122 14 33	105	261
12101500	PUYALLUP RIVER AT PUYALLUP, WASH.	053	47 12 52	122 20 25	106	264
12102200	SWAN CREEK NEAR TACOMA, WASH.	053	47 11 30	122 23 35	107	271
12102800	SOUTH FORK HYLEBOS CREEK NR PUYALLUP, WASH.	033	47 15 35	122 17 40	108	271
12103200	JOES CREEK AT TACOMA, WASH.	033	47 18 44	122 23 20	109	272
12103400	GREEN RIVER BLW INTAKE CR NR LESTER, WASH.	033	47 12 44	121 25 13	110	272
12103500	SNOW CREEK NEAR LESTER, WASH.	033	47 15 10	121 24 10	111	275
12104000	FRIDAY CREEK NEAR LESTER, WASH.	033	47 13 17	121 27 22	112	278
12104500	GREEN RIVER NEAR LESTER, WASH.	033	47 12 28	121 33 07	113	281
12104700	GREEN CANYON CREEK NEAR LESTER, WASH.	033	47 13 08	121 34 28	114	284
12105000	SMAY CREEK NEAR LESTER, WASH.	033	47 15 43	121 33 52	115	287
12105500	CHARLEY CREEK NR EAGLE GORGE, WASH.	033	47 15 00	121 47 00	116	290
12105700	N.F. GREEN RIVER NR PALMER, WASH.	033	47 18 30	121 46 20	117	291
12105710	NORTH FORK GREEN RIVER NEAR LEMOLO, WASH.	033	47 18 21	121 46 20	118	292
12105900	GREEN RIVER BELOW HOWARD A. HANSON DAM, WASH.	033	47 17 02	121 47 48	119	295
12106000	BEAR CREEK NR EAGLE GORGE, WASH.	033	47 17 00	121 48 10	120	298
12106500	GREEN RIVER NEAR PALMER, WASH.	033	47 17 40	121 49 20	121	299
12106700	GREEN RIVER AT PURIFICATION PNT NR PALMER, WASH.	033	47 18 19	121 50 58	122	307
12107200	DEEP CREEK NEAR CUMBERLAND, WASH.	033	47 17 25	121 55 00	123	305
12107300	ICY CREEK NR BLACK DIAMOND, WASH.	033	47 16 40	121 58 25	124	305
12107500	GREEN RIVER NR BLACK DIAMOND, WASH.	033	47 17 00	122 03 10	125	306
12108500	NEWAUKUM CREEK NEAR BLACK DIAMOND, WASH.	033	47 16 33	122 03 30	126	307
12111500	COVINGTON CREEK NR BLACK DIAMOND, WASH.	033	47 20 10	122 02 40	127	310
12112500	BIG SOOS CREEK NEAR AUBURN, WASH.	033	47 19 00	122 08 40	128	311
12112600	BIG SOOS CREEK AB. HATCHERY, NR. AUBURN, WASH.	033	47 18 35	122 10 05	129	314
12113000	GREEN RIVER NEAR AUBURN, WASH.	033	47 18 05	122 10 25	130	317
12113200	MILL CREEK NEAR AUBURN, WASH.	033	47 18 15	122 16 00	131	323
12113300	MILL CREEK TRIBUTARY NEAR AUBURN, WASH.	033	47 20 10	122 15 10	132	323
12113350	GREEN RIVER AT TUKWILA, WASH.	033	47 27 55	122 14 50	133	324

TABLE 2.--Drainage-basin and climatic characteristics at sites

STATION NUMBER	AREA (SQ-MI)	SLOPE (FT/MI)	LENGTH (MI)	ELEV (FT)	STORAGE (%)	LAKEAREA (%)	FOREST (%)	PRECIP (IN)	I24+2 (IN)	SNOFALL (IN)	JANMIN (FAHR)
12043270	0.67	--	--	--	--	--	--	--	--	--	--
12043300	51.20	30	18.4	805	0.00	1.00	100.0	124.0	5.0	--	32.0
12043430	14.00	297	6.5	1280	0.00	--	100.0	90.0	3.5	--	32.0
12043450	0.92	--	--	3110	--	0.00	99.0	98.0	--	--	--
12044000	48.60	242	16.7	2190	16.69	16.69	98.0	91.0	3.0	65	29.0
12045500	269.00	64	36.6	3700	0.23	0.23	82.0	112.0	4.0	225	25.0
12046800	0.69	590	2.4	1110	0.00	0.00	85.0	27.0	3.5	10	31.0
12047100	4.77	274	5.0	780	0.00	0.00	65.0	23.0	3.5	24	29.0
12047300	46.60	381	9.9	3000	1.00	--	99.0	60.0	3.0	--	28.0
12047500	15.50	298	9.0	1550	0.00	0.00	97.0	41.0	2.5	50	28.0
12047700	2.28	358	4.6	2740	0.00	--	100.0	55.0	3.0	--	29.0
12048000	156.00	196	22.4	4500	6.00	6.00	83.0	62.0	3.5	205	26.0
12049400	2.96	583	4.0	1490	0.00	0.00	95.0	35.0	2.0	22	29.0
12050500	11.20	435	6.5	1800	0.00	0.00	91.0	43.0	2.5	25	29.0
12051500	13.80	--	--	--	--	--	--	28.0	--	--	--
12052000	23.70	--	--	--	--	--	--	51.0	--	--	--
12052400	6.78	127	4.8	1450	1.02	0.99	95.0	60.0	3.0	9	28.0
12053000	93.50	204	21.6	4700	0.11	0.11	80.0	97.0	5.0	255	25.0
12053400	0.62	1840	1.6	1770	0.00	0.00	95.0	60.0	2.5	15	29.0
12054000	66.50	150	19.7	4700	0.30	0.29	95.0	113.0	3.5	175	26.0
12054500	51.30	325	11.8	3830	0.49	0.49	89.0	110.0	5.0	120	27.0
12054600	21.60	384	10.0	2660	0.28	0.28	88.0	103.0	4.0	75	28.0
12056300	0.82	341	2.0	500	0.00	0.00	95.0	78.0	2.6	22	34.0
12056500	57.20	190	13.9	3700	0.17	0.17	92.0	161.0	6.0	300	26.0
12057500	93.70	94	23.5	3100	6.40	6.30	93.0	145.0	5.0	210	27.0
12058000	1.83	--	--	--	--	--	--	99.0	--	--	--

TABLE 2.--Continued

STATION NUMBER	AREA (SQ-MI)	SLOPE (FT/MI)	LENGTH (MI)	ELEV (FT)	STORAGE (%)	LAKEAREA (%)	FOREST (%)	PRECIP (IN)	I2+2 (IN)	SNOWFALL (IN)	JANMIN (FAHR)
12059500	117.00	--	--	--	--	--	--	--	--	--	--
12059800	26.00	220	8.8	2450	0.40	--	99.5	160.0	7.7	--	24.0
12060000	65.60	80	18.0	2505	0.16	0.16	98.0	161.0	5.5	175	27.0
12060500	76.30	64	24.5	2100	0.26	0.26	98.0	153.0	5.5	160	28.0
12061200	0.76	408	1.8	870	0.00	0.00	95.0	110.0	2.6	50	30.0
12061500	128.00	--	--	--	--	--	--	131.0	--	--	--
12062500	3.73	--	--	--	--	--	--	85.0	--	--	--
12063000	3.16	118	3.4	924	0.00	0.00	100.0	57.0	3.5	7	34.0
12063500	19.80	--	--	--	--	--	--	60.0	--	--	--
12064500	1.83	--	--	--	--	--	--	62.0	--	--	--
12065000	4.43	--	--	--	--	--	--	--	--	--	--
12065500	1.51	295	1.8	1120	0.00	0.00	99.0	61.0	3.5	7	34.0
12066000	5.99	153	4.4	930	1.67	1.67	96.0	61.0	3.5	7	34.0
12067000	0.98	--	--	--	--	--	--	--	--	--	--
12067500	15.00	39	10.1	684	3.53	3.53	97.0	62.0	3.5	8	34.0
12068500	18.40	36	7.6	376	0.71	0.70	98.0	61.0	4.0	8	34.0
12069550	13.80	43	9.3	490	3.35	--	88.0	55.0	3.0	--	32.0
12070000	5.01	43	3.7	289	0.00	0.00	80.0	37.0	3.0	8	34.0
12072000	15.30	100	6.1	400	4.58	4.58	98.0	50.0	3.0	7	34.0
12072600	1.61	108	2.4	280	0.33	--	80.0	50.0	2.3	--	32.0
12073000	10.70	--	--	--	--	--	--	54.0	--	--	--
12073500	6.47	58	7.6	316	0.15	0.15	77.0	54.0	3.0	8	34.0
12075000	13.60	--	--	--	--	--	--	--	--	--	--
12075500	15.20	--	--	--	--	--	--	64.0	--	--	--
12076000	13.50	--	--	--	--	--	--	64.0	--	--	--
12076500	39.30	26	8.4	420	1.07	1.07	96.0	84.0	4.0	40	30.0

TABLE 2.--Continued

STATION NUMBER	AREA (SQ-MI)	SLOPE (FT/MI)	LENGTH (MI)	ELEV (FT)	STORAGE (%)	LAKEAREA (%)	FOREST (%)	PRECIP (IN)	I2+2 (IN)	SNOFALL (IN)	JANMIN (FAHR)
12078000	16.10	--	--	--	--	--	--	59.0	--	--	--
12078400	17.40	54	8.6	600	4.85	--	98.0	59.0	3.0	--	31.0
12078600	1.12	289	1.9	470	0.00	0.00	95.0	57.0	3.3	16	31.0
12079000	89.80	50	27.8	1340	0.62	0.62	88.0	61.0	3.0	25	29.0
12080000	160.00	24	50.3	950	0.69	0.66	78.0	57.0	3.0	20	31.0
12081000	24.60	16	9.0	189	6.83	6.83	61.0	47.0	3.0	10	31.0
12081300	2.28	37	2.5	280	0.00	--	80.0	42.0	3.0	--	31.0
12081500	--	--	--	--	--	--	--	--	--	--	--
12082500	133.00	192	25.9	4020	0.38	0.37	82.0	94.0	3.5	335	25.0
12083000	75.20	155	13.0	2740	0.66	0.66	92.0	98.0	3.5	85	27.0
12083500	11.50	--	--	--	--	--	--	--	--	--	--
12084000	252.00	120	32.6	3300	0.33	0.33	85.0	92.0	3.5	215	26.0
12084500	28.00	145	8.6	2600	0.36	0.36	99.0	81.0	3.5	40	28.0
12086500	292.00	73	43.3	3200	1.75	1.75	85.0	89.0	3.5	190	26.0
12087000	80.70	117	18.4	2300	0.00	0.00	93.0	71.0	3.5	120	27.0
12088000	34.50	177	11.4	1600	1.77	1.77	97.0	54.0	3.5	70	28.0
12088400	431.00	--	--	--	--	--	--	80.0	--	--	--
12088500	445.00	--	--	--	--	--	--	--	--	--	--
12089000	26.00	--	--	--	--	--	--	44.0	--	--	--
12089500	517.00	--	--	--	--	--	--	--	--	--	--
12089700	1.72	--	--	--	--	--	--	43.0	--	--	--
12090200	86.80	17	24.6	350	1.00	--	45.0	37.0	3.0	--	34.0
12090400	5.26	14	4.4	410	0.00	--	15.0	35.0	2.5	--	33.0
12090500	73.80	13	20.7	420	2.00	--	15.0	36.0	2.5	--	33.0
12091040	90.40	--	--	--	--	--	--	38.0	--	--	--
12091050	4.23	--	--	--	--	--	--	--	--	--	--

TABLE 2.--Continued

STATION NUMBER	AREA (SQ-MI)	SLOPE (FT/MI)	LENGTH (MI)	ELEV (FT)	STORAGE (%)	LAKEAREA (%)	FOREST (%)	PRECIP (IN)	12+2 (IN)	SNOFALL (IN)	JANMIN (FAHR)
12100500	470.00	--	--	--	--	--	--	--	--	--	--
12101500	948.00	84	50.9	2500	0.31	0.31	79.0	74.0	3.0	225	25.0
12102200	2.15	10	3.2	430	0.00	0.00	10.0	37.0	2.8	11	32.0
12102800	0.27	215	0.9	350	3.00	--	70.0	42.0	--	--	--
12103200	0.78	117	1.6	350	0.00	0.00	95.0	39.0	2.7	11	33.0
12103400	34.80	309	8.3	3500	0.00	--	100.0	95.0	2.5	--	18.0
12103500	11.50	557	4.6	3370	0.00	0.00	61.0	97.0	3.0	525	20.0
12104000	4.67	630	3.6	3190	0.43	0.43	99.0	84.0	3.0	525	20.0
12104500	96.20	120	16.2	3190	2.00	1.00	91.0	88.0	3.0	500	20.0
12104700	3.23	760	3.1	3200	0.00	--	100.0	70.0	3.0	--	24.0
12105000	8.56	377	4.6	3220	0.00	0.00	82.0	99.0	3.0	380	23.0
12105500	11.30	--	--	--	--	--	--	--	--	--	--
12105700	16.50	--	--	--	--	--	--	--	--	--	--
12105710	16.70	198	10.1	2890	0.78	--	61.0	101.0	3.0	--	24.0
12105900	221.00	--	--	--	--	--	--	--	--	--	--
12106000	4.10	627	4.0	2400	0.00	--	100.0	85.0	3.0	--	29.0
12106500	230.00	41	34.2	3100	9.00	0.00	90.0	85.0	3.0	375	25.0
12106700	231.00	--	--	--	--	--	--	95.0	--	--	--
12107200	2.17	352	3.6	1330	0.00	0.00	95.0	70.0	2.9	48	30.0
12107300	3.29	--	--	--	--	--	--	--	--	--	--
12107500	285.00	--	--	--	--	--	--	--	--	--	--
12108500	27.40	54	14.1	883	0.00	0.00	47.0	48.0	2.5	25	30.0
12111500	13.00	--	--	--	--	--	--	--	--	--	--
12112500	59.20	19	12.5	496	4.00	4.00	81.0	48.0	2.5	35	30.0
12112600	66.70	3	34.1	450	1.70	--	80.0	47.0	--	--	34.0
12113000	399.00	33	64.3	2400	0.60	--	70.0	70.0	3.0	--	28.0
12113200	3.14	110	2.8	420	2.54	2.54	70.0	41.0	2.6	10	31.0
12113300	0.30	25	0.8	420	0.00	0.00	50.0	40.0	2.6	10	31.0
12113350	440.00	--	--	--	--	--	--	69.0	--	--	--

TABLE 2.---Continued

STATION NUMBER	AREA (SQ-MI)	SLOPE (FT/MI)	LENGTH (MI)	ELEV (FT)	STORAGE (%)	LAKEAREA (%)	FOREST (%)	PRECIP (IN)	I24+2 (IN)	SNOWFALL (IN)	JANMIN (FAHR)
12091060	5.91	27	3.2	275	0.12	--	15.0	38.0	2.0	--	32.0
12091070	6.72	--	--	--	--	--	--	37.0	--	--	--
12091100	8.01	8	5.6	265	5.00	--	20.0	38.0	2.0	--	32.0
12091180	4.59	56	1.8	285	0.00	--	40.0	38.0	2.0	--	32.0
12091200	4.05	73	3.1	325	0.00	0.00	14.0	35.0	2.5	10	33.0
12091300	5.88	65	4.0	315	0.00	0.00	23.0	35.0	2.5	10	33.0
12091500	104.00	12	25.9	385	1.68	1.68	23.0	38.0	2.5	10	31.0
12091700	4.41	128	2.4	325	5.00	--	60.0	43.0	2.3	--	32.0
12092000	92.80	630	15.5	4100	0.54	0.54	70.0	105.0	3.5	385	24.0
12092100	1.78	--	--	--	--	--	--	70.0	--	--	--
12093000	25.90	126	12.9	1500	2.70	2.70	94.0	53.0	3.0	55	27.0
12093500	172.00	214	31.1	3000	0.82	0.70	90.0	85.0	3.5	--	26.0
12093900	76.20	--	--	--	--	--	--	93.0	--	--	--
12094000	78.90	289	22.6	4000	0.25	0.25	68.0	92.0	3.5	265	24.0
12094400	22.40	--	--	--	--	--	--	73.0	--	--	--
12095000	79.50	174	16.5	2300	0.63	0.63	97.0	65.0	3.0	35	28.0
12096500	438.00	105	45.3	2200	0.78	--	84.0	75.0	3.0	--	28.0
12096600	16.20	--	--	--	--	--	--	118.0	--	--	--
12096800	1.01	1480	2.4	4410	0.00	0.00	95.0	80.0	2.8	450	21.0
12096950	4.31	873	2.6	4150	2.00	--	99.0	65.0	3.5	--	26.0
12097000	216.00	139	32.7	4700	0.46	0.46	77.0	80.0	3.0	400	22.0
12097500	73.50	143	20.3	4200	0.27	0.27	93.0	94.0	3.0	390	22.0
12097700	2.35	860	2.3	2810	0.00	0.00	25.0	70.0	2.8	60	27.0
12098500	401.00	83	48.7	3800	0.30	0.30	84.0	60.0	3.0	300	24.0
12099500	12.30	--	--	--	--	--	--	--	--	--	--
12100000	427.00	--	--	--	--	--	--	78.0	--	--	--

PART B

Statistics and Characteristics for Specific Sites

This section of the report presents the streamflow statistics and drainage-basin characteristics for specific sites in western and southern Puget Sound.

STATION 12043270 HOKO RIVER TRIB NR SEKIUI, WASH.

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1971	62.0	1-24-1971
1972	100.0	12- 8-1971
1973	149.0	12-25-1972
1974	73.0	2- 3-1974
1975	109.0	12-21-1974

STATION 12043300 HOKO RIVER NEAR SEKIUI, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1962	336	892	728	427	529	302	321	204	45.1	91.4	67.8	69.3	327
1963	469	920	717	965	432	634	290	144	128	160	86.2	28.6	425
1964	271	471	519	969	964	177	198	236	48.6	24.9	29.3	151	324
1965	258	592	691	1054	399	623	183	94.3	74.1	65.5	34.8	54.3	344
1966	365	600	1376	1257	948	655	230	121	51.4	22.0	14.6	33.1	472
1967	907	503	980	1208	792	556	325	130	94.6	60.6	54.7	322	495
1968	544	584	890	609	652	456	451	132	78.7	41.9	28.6	217	393
1969	277	323	563	611	428	300	625	136	46.7	32.9	25.0	149	292
1970	281	492	898	1156	743	745	287	121	100	88.6	32.9	78.4	416
1971	379	801	778	966	949	897	515	106	35.3	188	22.7	70.6	475
1972	40.2	416	1335	988	326	399	146	187	174	57.4	26.0	28.6	345
1973	464	1052	1111	1177	1063	965	460	383	175	134	36.8	29.5	585
1974													
1975													

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MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1962-1975)

MEAN	386.8	637.2	882.2	948.9	685.4	559.1	335.9	166.2	87.5	78.6	38.9	96.9	407.7
MAXIMUM	907.0	1052.0	1376.0	1257.0	1063.0	965.0	625.0	383.0	173.0	180.0	86.2	322.0	585.0
MINIMUM	40.2	323.0	519.0	427.0	326.0	177.0	146.0	94.3	35.3	22.0	14.6	28.6	292.0
STD DEVIATION	213.79	226.52	276.90	265.02	259.47	242.69	147.35	80.06	48.83	54.35	19.60	89.89	86.97
SKWENESS	1.147	0.589	0.666	-0.897	0.038	0.138	0.644	2.061	0.325	1.033	1.461	1.598	0.603
STD ERR SKEW	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.616	0.616	0.637
SER CORR COEFF	0.133	-0.122	0.200	0.149	-0.584	-0.259	-0.012	0.174	0.001	-0.097	-0.098	0.264	-0.164
COEFF OF VAR	0.553	0.356	0.314	0.279	0.379	0.434	0.339	0.482	0.558	0.591	0.504	0.927	0.213
MEAN LOGS	2.506	2.779	2.926	2.957	2.804	2.703	2.487	2.186	1.883	1.801	1.546	1.836	2.602
STD DEV LOGS	0.326	0.154	0.134	0.146	0.177	0.218	0.194	0.171	0.235	0.303	0.200	0.367	0.091
SKWENESS LOGS	-1.931	0.040	0.146	-1.315	-0.303	-0.752	-0.050	1.215	0.283	0.074	0.335	0.518	0.247
STD ERR SKEW LOGS	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.616	0.616	0.637
SER CORR LOGS	-0.076	-0.151	0.227	0.140	-0.591	-0.287	-0.043	0.128	-0.306	-0.092	-0.142	0.166	-0.160
COEFF OF VAR LOGS	0.130	0.055	0.046	0.049	0.063	0.081	0.078	0.078	0.078	0.078	0.129	0.200	0.035
% OF AVE FLOW	7.9	13.0	18.0	19.4	14.0	11.4	6.9	3.4	1.8	1.6	0.8	2.0	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1962-1975)

0.99	21.9	266.2	425.5	307.6	225.4	120.0	107.0	87.1	24.3	13.0	13.5	13.3	255.2
0.95	71.8	336.9	514.7	474.8	315.0	201.3	146.5	94.3	32.8	20.4	17.3	19.6	287.6
0.90	120.0	382.3	571.2	578.5	373.4	258.0	172.9	100.2	38.9	26.0	19.9	24.6	307.5
0.80	201.1	445.9	649.7	712.7	455.4	340.1	211.2	110.1	48.2	35.1	23.7	33.3	334.4
0.50	401.5	600.1	837.9	973.8	650.7	536.8	308.3	141.9	74.5	62.7	34.3	63.8	396.1
0.20	578.8	810.4	1092.1	1201.1	902.9	775.3	447.7	204.4	113.4	51.3	13.6	135.6	475.0
0.10	637.0	949.5	1259.7	1294.5	1059.6	909.5	543.0	254.7	155.3	64.2	20.9	209.9	524.9
0.04	673.0	1125.4	1471.8	1372.0	1246.3	1053.8	666.1	348.7	201.3	218.0	82.6	345.8	586.2
0.02	685.5	1256.7	1630.3	1410.3	1377.8	1145.4	759.4	431.4	251.7	271.9	97.8	486.4	630.8
0.01	692.1	1388.4	1789.7	1437.5	1503.5	1225.4	853.9	530.5	300.9	332.2	114.4	669.7	674.8

STATION 120+3300 HOKO RIVER NEAR SEKI, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1964	22.0	22.0	22.0	24.0	28.0	30.0	51.0	49.0	88.0
1965	47.0	47.0	52.0	59.0	67.0	93.0	111.0	119.0	156.0
1966	16.0	17.0	17.0	17.0	20.0	25.0	27.0	31.0	92.0
1967	24.0	24.0	25.0	31.0	32.0	37.0	47.0	56.0	72.0
1968	13.0	13.0	13.0	14.0	15.0	18.0	22.0	28.0	78.0
1969	23.0	23.0	25.0	28.0	38.0	56.0	62.0	70.0	159.0
1970	20.0	20.0	21.0	23.0	25.0	28.0	37.0	56.0	126.0
1971	17.0	17.0	18.0	19.0	24.0	28.0	33.0	44.0	97.0
1972	22.0	23.0	24.0	26.0	32.0	47.0	57.0	69.0	93.0
1973	15.0	16.0	17.0	18.0	21.0	31.0	46.0	72.0	78.0
1974	15.0	15.0	16.0	17.0	19.0	25.0	30.0	60.0	97.0

LOWEST MEAN FLOW STATISTICS (YEARS 1964-1974)

MEAN	21.3	21.5	22.7	25.1	29.1	38.0	47.5	59.4	103.3
MAXIMUM	47.0	47.0	52.0	59.0	67.0	93.0	111.0	119.0	159.0
MINIMUM	15.0	13.0	13.0	14.0	15.0	18.0	22.0	28.0	72.0
STANDARD DEVIATION	9.32	9.21	10.49	12.41	14.27	21.17	24.59	24.61	30.34
SKEWNESS	2.382	2.383	2.478	2.313	2.095	2.031	1.846	1.291	1.147
STD ERROR OF SKEWNESS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
SERIAL CORR COEFF	-0.157	-0.148	-0.202	-0.270	-0.278	-0.375	-0.264	-0.407	-0.008
COEFF OF VARIATION	0.438	0.428	0.462	0.495	0.491	0.557	0.517	0.415	0.294
MEAN LOGS	1.300	1.307	1.326	1.364	1.427	1.534	1.634	1.742	1.999
STD DEVIATION LOGS	0.152	0.149	0.158	0.171	0.177	0.197	0.196	0.175	0.117
SKEWNESS LOGS	1.419	1.404	1.447	1.283	1.003	1.058	0.600	-0.035	0.852
STD ERR SKEWNESS LOGS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
SER CORR COEFF LOGS	-0.209	-0.193	-0.273	-0.373	-0.368	-0.481	-0.366	-0.422	0.039
COEFF OF VAR LOGS	0.117	0.114	0.119	0.126	0.124	0.129	0.120	0.101	0.059

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1964-1974)

0.99	63.0	62.4	70.3	81.8	91.5	137.3	149.5	139.5	219.6
0.98	51.6	51.4	57.0	66.1	75.3	109.8	125.3	125.3	194.5
0.96	42.1	42.1	46.1	53.1	61.4	87.0	103.4	111.2	171.3
0.90	31.9	32.1	34.4	39.3	46.1	62.9	78.5	92.3	143.1
0.80	25.5	25.8	27.3	30.8	36.4	48.1	61.8	77.5	122.9
0.50	18.4	18.8	19.5	21.3	25.0	31.6	41.2	55.3	96.0
0.20	14.9	15.2	15.7	16.6	18.9	23.2	29.2	39.3	79.2
0.10	13.9	14.2	14.6	15.2	16.9	20.6	25.0	32.8	73.0
0.05	13.3	13.6	14.0	14.3	15.7	19.0	22.3	28.3	68.9
0.02	12.6	13.1	13.5	13.7	14.6	17.6	19.8	23.9	65.2
0.01	12.6	12.9	13.3	13.3	14.0	16.9	18.4	21.4	63.1

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1964-1974)

P95	P90	P75	P50	P25	P10
23.0	30.0	68.0	200.0	520.0	1000.0

STATION 12043300 HOKO RIVER NEAR SEKI, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30										ANNUAL PEAK-FLOW DATA		
	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW (CFS)	DATE	REG. (R)	
1963	6340.	3600.	2020.	1350.	1060.	943.	751.	653.	548.	11200.	11/19/62		
1964	3840.	2520.	1590.	1290.	1140.	917.	905.	840.	716.	5970.	11/26/63		
1965	3790.	2400.	1640.	1260.	1140.	960.	856.	731.	554.	5370.	11/30/64		
1966	5360.	3450.	2580.	1800.	1400.	1360.	936.	716.	608.	7060.	01/13/66		
1967	3910.	2840.	2230.	1840.	1600.	1360.	1270.	1110.	877.	4820.	02/04/67		
1968	8490.	5370.	3300.	2180.	1510.	1130.	1010.	928.	827.	11500.	01/19/68		
1969	3660.	2370.	1680.	1210.	980.	915.	823.	744.	650.	5860.	01/04/69		
1970	2820.	1730.	1560.	972.	737.	658.	554.	555.	475.	4710.	04/19/70		
1971	4870.	3210.	2190.	1770.	1280.	1050.	939.	894.	747.	6330.	01/26/71		
1972	4330.	3200.	1960.	1660.	1360.	1090.	974.	934.	839.	7740.	03/05/72		
1973	6890.	4940.	3410.	2470.	1700.	1220.	935.	787.	604.	14100.	12/25/72		
1974	6010.	3800.	2850.	2210.	1730.	1300.	1270.	1140.	1020.	6570.	02/03/74		
1975										9690.	12/21/74		
1976										9690.	12/01/75		
1977										3620.	03/08/77		
1978										5950.	11/25/77		

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1963-1978)

MEAN	5025.8	3240.0	2284.2	1701.0	1294.7	1039.9	923.2	836.0	705.4			
MAXIMUM	8490.0	5370.0	3410.0	2470.0	1740.0	1360.0	1270.0	1140.0	1020.0			
MINIMUM	2820.0	1730.0	1560.0	972.0	737.0	658.0	554.0	555.0	475.0			
STANDARD DEVIATION	1643.20	1054.26	627.02	444.44	301.70	194.56	202.06	175.21	161.39			
SKWENESS	0.405	0.739	0.743	0.101	-0.140	-0.074	0.332	0.375	0.485			
STD ERROR OF SKWENESS	0.637	0.637	0.637	0.262	0.233	0.187	0.187	0.219	0.229			
SERIAL CORR COEFF	-0.198	-0.033	0.102	0.358	0.467	0.313	0.086	-0.015	-0.108			
COEFF OF VARIATION	0.327	0.320	0.275	0.262	0.233	0.187	0.187	0.219	0.229			
MEAN LOGS	3.681	3.497	3.344	3.216	3.100	2.956	2.913	2.838	2.783	3.8380		
STD DEVIATION LOGS	0.138	0.138	0.115	0.119	0.108	0.085	0.094	0.091	0.099	0.1573		
SKWENESS LOGS	0.223	-0.016	0.378	-0.420	-0.695	-0.666	-0.425	-0.079	0.100	0.1010		
STD ERR SKWENESS LOGS	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637			
SER CORR COEFF LOGS	-0.148	0.034	0.138	0.347	0.412	0.283	0.085	-0.104	-0.104			
COEFF OF VAR LOGS	0.037	0.039	0.034	0.037	0.035	0.028	0.033	0.031	0.035			

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1963-1978)

0.99	2412.9	1493.4	1285.7	799.9	624.7	590.8	499.6	436.0	413.1	3326.8		
0.95	2903.4	1859.2	1473.7	1016.7	801.7	717.1	608.4	477.3	3835.5	3978.5		
0.90	3218.1	2088.9	1594.0	1146.2	904.5	787.8	671.3	624.5	516.3	4346.6		
0.80	3659.7	2408.5	1762.7	1315.9	1035.2	875.3	751.8	686.9	568.5	5051.1		
0.50	4739.4	3144.4	2173.9	1677.2	1296.8	1044.7	917.1	821.5	686.3	6844.4		
0.20	6240.8	4106.8	2745.0	2080.4	1559.8	1209.3	1093.9	974.8	833.0	9322.8		
0.10	7255.5	4719.6	3131.2	2304.3	1692.1	1290.5	1189.2	1071.0	923.7	10995.6		
0.04	8564.5	5476.3	3630.2	2550.4	1826.0	1372.1	1291.9	1177.6	1033.0	13146.0		
0.02	9560.8	6020.0	4010.9	2712.1	1907.5	1421.4	1358.3	1251.2	1111.5	14775.5		
0.01	10576.2	6558.4	4399.9	2858.8	1977.0	1463.5	1417.9	1320.8	1187.8	16429.3		

STATION 12043430 EAST TWIN RIVER NEAR PYSHT, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1962													
1963	35.9	151	115	91.9	106	60.5	57.0	45.5	9.60	9.34	5.59	6.01	57.3
1964	65.8	183	95.3	186	74.2	98.8	55.9	31.7	25.4	11.6	8.63	10.6	70.5
1965	24.1	57.3	68.0	150	143	42.2	43.4	42.5	12.6	5.32	4.61	4.28	49.2
1966	12.5	80.8	109	188	124	116	63.2	25.6	13.0	8.76	4.69	5.21	59.3
1967	30.7	89.0	246	219	125	116	40.9	36.3	11.9	4.73	3.25	5.41	77.4
1968	102	64.3	162	167	123	104	51.3	23.2	16.2	7.15	6.22	14.7	70.2
1969	58.7	101	174	107	95.0	117	92.1	37.5	13.7	6.43	4.15	9.83	67.8
1970	13.8	38.5	105	100	88.9	42.5	82.9	25.0	9.40	4.88	3.37	8.69	43.4
1971	17.7	65.4	153	204	112	157	59.0	36.7	18.3	10.6	5.49	6.00	70.5
1972	17.6	136	123	188	207	159	81.8	25.0	11.7	12.2	5.24	11.6	81.0
1973													

STATION 12043430 EAST TWIN RIVER NEAR PYSHT, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1962-1973)

MEAN	37.9	96.6	135.0	160.1	115.1	102.1	62.8	32.9	14.2	8.1	5.1	8.0	64.7
MAXIMUM	102.0	183.0	246.0	219.0	207.0	159.0	92.1	45.5	25.4	12.2	8.8	14.7	81.0
MINIMUM	12.5	38.5	68.0	91.9	74.2	42.2	40.9	23.2	9.4	4.7	3.3	4.3	43.4
STD DEVIATION	29.08	46.28	50.84	45.77	39.01	42.21	17.35	7.97	4.79	2.80	1.61	3.38	12.07
STANDARD DEVIATION	1.361	0.759	1.105	0.884	1.516	1.245	0.549	0.216	1.586	0.195	1.263	0.802	-0.539
SKEWNESS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
STD ERR SKEW	0.184	0.134	0.193	0.087	0.285	0.105	0.211	-0.638	-0.518	0.040	-0.050	-0.055	-0.100
SER CORR COEFF	0.768	0.478	0.375	0.286	0.339	0.413	0.276	0.343	0.338	0.345	0.313	0.425	0.187
COEFF OF VAR	1.475	1.940	2.105	2.186	2.042	1.967	1.783	1.506	1.133	0.884	0.694	0.867	1.803
MEAN LOGS	0.310	0.210	0.157	0.138	0.133	0.214	0.118	0.106	0.131	0.056	0.128	0.178	0.087
STD DEV LOGS	0.476	-0.008	0.163	-0.722	0.736	-0.796	0.174	-0.009	0.923	-0.120	0.412	0.354	-0.841
SKEWNESS LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
STD ERR SKEW LOGS	0.266	0.019	0.290	0.091	-0.321	-0.245	0.185	-0.657	-0.559	-0.064	-0.062	-0.031	-0.135
SER CORR LOGS	0.210	0.108	0.075	0.063	0.065	0.109	0.066	0.071	0.115	0.176	0.184	0.206	0.048
COEFF OF VAR LOGS	4.9	12.4	17.4	20.6	14.8	13.1	8.1	4.2	1.8	1.0	0.7	1.0	100.0
% OF AVE FLOW													

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1962-1973)

0.99	7.3	28.3	57.4	62.2	63.7	22.3	33.3	18.1	8.3	3.2	2.7	3.2	35.5
0.95	10.3	39.4	71.5	85.9	71.3	37.5	39.3	21.4	9.1	4.2	3.2	3.9	43.9
0.90	12.5	46.9	80.7	100.4	76.7	48.0	43.0	23.4	9.6	4.8	3.4	4.4	48.6
0.80	16.2	58.1	93.7	119.4	84.6	63.1	48.1	26.1	10.5	5.7	3.8	5.2	54.4
0.50	28.2	87.2	126.0	159.4	106.0	98.9	60.2	32.0	13.0	7.7	4.8	7.2	65.3
0.20	53.2	130.9	171.9	201.5	140.1	141.3	76.1	39.4	17.1	10.4	6.3	10.3	75.4
0.10	76.6	161.7	203.3	223.3	165.8	164.7	86.5	43.8	20.3	12.1	7.3	12.6	80.1
0.04	116.0	202.6	244.2	245.7	201.9	189.3	99.4	49.1	25.0	14.1	8.6	15.8	84.6
0.02	153.9	234.4	275.6	259.4	231.6	204.7	108.9	52.9	28.9	15.6	9.6	18.4	87.2
0.01	200.3	267.1	307.7	271.2	263.9	218.0	118.5	56.5	33.2	17.1	10.7	21.2	89.3

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1964	4.2	4.2	4.3	4.4	4.9	5.0	6.1	6.6	15.0
1965	7.2	7.2	7.4	7.6	7.9	8.7	9.6	13.0	18.0
1966	3.8	3.8	3.9	3.9	4.3	4.4	4.6	5.9	14.0
1967	3.5	3.5	3.6	4.1	4.4	4.9	5.2	6.6	13.0
1968	2.3	2.3	2.7	3.0	3.2	3.7	4.3	6.0	17.0
1969	3.8	3.8	4.0	4.4	5.4	6.1	7.3	9.9	18.0
1970	3.1	3.1	3.2	3.3	3.7	4.1	5.6	8.1	14.0
1971	3.0	3.0	3.1	3.1	3.3	3.9	4.8	5.8	11.0
1972	4.4	4.4	4.5	4.4	5.4	5.6	6.2	8.2	16.0

LOWEST MEAN FLOW STATISTICS (YEARS 1964-1972)

MEAN	3.9	3.9	4.1	4.3	4.7	5.2	6.0	7.8	15.1
MAXIMUM	7.2	7.2	7.4	7.6	7.9	8.7	9.6	13.0	18.0
MINIMUM	2.3	2.3	2.7	3.0	3.2	3.7	4.3	5.8	11.0
STANDARD DEVIATION	1.39	1.39	1.38	1.39	1.44	1.55	1.65	2.38	2.37
SKEWNESS	1.782	1.782	1.996	1.884	1.338	1.686	1.470	1.512	-0.314
STD ERROR OF SKEWNESS	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717
SERIAL CORR COEFF	0.121	0.121	0.100	-0.019	-0.085	-0.224	-0.217	-0.363	-0.045
COEFF OF VARIATION	0.354	0.354	0.338	0.324	0.306	0.300	0.277	0.306	0.157
MEAN LOGS	0.573	0.573	0.593	0.616	0.658	0.698	0.763	0.876	1.174
STD DEVIATION LOGS	0.137	0.137	0.126	0.123	0.123	0.116	0.109	0.119	0.071
SKEWNESS LOGS	0.787	0.787	1.245	1.169	0.656	1.126	0.964	1.091	-0.612
STD ERR SKEWNESS LOGS	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717
SER CORR COEFF LOGS	0.143	0.143	0.136	-0.013	-0.100	-0.252	-0.233	-0.384	-0.045
COEFF OF VAR LOGS	0.239	0.239	0.213	0.200	0.187	0.166	0.143	0.136	0.060

STATION 12043450 CROSS CR NR FAIRHOLM, WASH.

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1950	112.0	11-26-1949
1951	59.7	2-9-1951
1952	15.8	11-27-1951
1953	36.0	1-9-1953
1954	55.0	1-5-1954
1955	27.1	11-18-1954
1956	208.0	11-3-1955

STATION 12044000 LYRE RIVER AT PIEDMONT, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1918	65.6	71.4	388	642	457	350	316	217	143	81.3	61.2	42.1	235
1919	134	251	500	434	518	367	313	277	229	171	90.0	53.5	277
1920	37.4	102	163	258	261	192	157	126	135	64.1	53.8	96.0	137
1921	232	204	311	485	509	377	228	227	262	181	94.2	76.7	264
1922	201	408	675	328	238	198	169	230	272	137	139	83.1	257
1923	70.9	88.3	230	850	342	272	208	209	184	126	64.5	50.9	225
1924	63.8	77.0	330	243	634	286	163	127	95.1	55.7	35.2	53.8	179
1925	177	436	323	364	608	316	208	203	167	89.5	47.6	35.9	245
1926	28.6	56.4	202	291	321	216	154	141	86.5	55.4	38.5	33.1	134
1927	113	161	267	405	352	324	239	268	252	158	72.9	60.7	222

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MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1918-1927)

MEAN	112.3	185.5	338.9	430.0	424.0	289.8	215.5	202.5	182.3	111.9	69.7	58.6	217.5
MAXIMUM	232.0	436.0	675.0	850.0	634.0	371.0	316.0	272.0	272.0	181.0	139.0	96.0	277.0
MINIMUM	28.6	56.4	163.0	243.0	238.0	192.0	154.0	126.0	86.5	55.4	35.2	33.1	134.0
STD DEVIATION	71.27	139.59	152.44	189.63	140.94	68.97	60.14	54.55	68.94	48.64	31.32	20.76	50.92
SKWENESS	0.536	1.051	1.277	1.387	0.208	-0.304	0.816	-0.323	-0.046	0.176	1.217	0.617	-0.801
STD ERR SKEW	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SER CORR COEFF	-0.253	-0.466	-0.234	-0.372	-0.094	-0.561	0.102	-0.427	-0.107	-0.335	0.226	0.403	-0.405
CDEFF OF VAH	0.634	0.752	0.450	0.441	0.332	0.238	0.279	0.269	0.378	0.435	0.449	0.354	0.234
MEAN LDGS	1.960	2.161	2.494	2.601	2.505	2.450	2.319	2.291	2.229	2.008	1.807	1.743	2.325
STD DEV LOGS	0.309	0.320	0.183	0.173	0.150	0.110	0.116	0.127	0.182	0.202	0.184	0.153	0.114
SKWENESS LOGS	-0.267	0.361	0.344	0.677	-0.167	-0.532	0.491	-0.631	-0.506	-0.160	0.327	0.090	-1.046
STD ERR SKEW LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SER CORR LOGS	-0.428	-0.518	-0.255	-0.444	-0.155	-0.582	-0.066	-0.440	-0.180	-0.342	0.262	0.430	-0.411
CDEFF OF VAR LOGS	0.148	0.148	0.073	0.066	0.058	0.045	0.050	0.056	0.081	0.100	0.102	0.088	0.049
% OF AVE FLOW	4.3	7.1	12.9	18.4	16.2	11.1	8.2	7.7	7.0	4.3	2.7	2.2	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1918-1927)

0.99	15.1	31.9	130.4	192.9	173.0	141.9	123.5	86.6	55.0	32.8	26.5	25.0	94.6
0.95	26.8	46.8	163.0	225.5	224.6	179.5	139.9	111.1	80.6	46.5	33.3	31.3	128.7
0.90	35.9	58.3	185.2	248.5	257.2	201.5	150.6	132.3	97.4	55.8	37.9	35.4	148.5
0.80	50.6	77.3	217.8	283.4	302.0	229.8	165.9	154.6	120.8	69.3	44.7	41.1	173.4
0.50	94.1	138.7	304.7	381.2	406.3	288.2	204.0	201.3	175.4	103.2	62.7	55.1	221.1
0.20	167.3	264.9	441.0	546.4	539.3	350.2	258.4	251.0	242.3	151.2	90.9	74.4	264.3
0.10	222.1	381.2	542.6	677.4	622.0	383.1	296.8	277.1	281.5	183.3	111.9	87.3	283.6
0.04	296.6	573.3	684.3	869.9	721.4	418.0	347.0	304.4	325.9	224.0	141.0	103.8	304.2
0.02	355.0	754.5	799.7	1034.6	792.2	440.2	386.0	321.5	355.6	254.2	164.8	116.2	310.8
0.01	415.5	973.4	923.8	1219.0	860.5	459.9	426.4	336.4	382.9	284.4	190.3	128.8	318.3

STATION 12044000 LYRE RIVER AT PLEUMONT, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1919	32.0	32.0	33.0	36.0	42.0	52.0	60.0	74.0	110.0
1920	28.0	24.0	24.0	31.0	35.0	42.0	50.0	68.0	100.0
1921	21.0	21.0	23.0	29.0	40.0	50.0	68.0	86.0	104.0
1922	49.0	51.0	53.0	61.0	71.0	85.0	100.0	128.0	167.0
1923	33.0	37.0	44.0	50.0	69.0	75.0	79.0	82.0	107.0
1924	39.0	39.0	42.0	45.0	51.0	55.0	59.0	61.0	92.0
1925	20.0	21.0	22.0	22.0	33.0	33.0	43.0	57.0	84.0
1926	26.0	26.0	26.0	27.0	28.0	31.0	35.0	42.0	66.0
1927	26.0	26.0	27.0	28.0	33.0	36.0	40.0	48.0	77.0

LOWEST MEAN FLOW STATISTICS (YEARS 1919-1927)

MEAN	30.4	31.2	33.2	36.6	43.9	51.0	59.3	71.8	100.8
MAXIMUM	49.0	51.0	53.0	61.0	71.0	85.0	100.0	128.0	167.0
MINIMUM	20.0	21.0	22.0	22.0	28.0	31.0	35.0	42.0	66.0
STANDARD DEVIATION	9.15	9.74	10.74	12.82	16.60	18.64	20.72	25.68	28.84
SKEWNESS	1.019	1.033	0.841	0.951	0.854	0.875	0.879	1.304	1.545
STD ERROR OF SKEWNESS	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717
SERIAL CORR COEFF	-0.166	0.312	0.146	0.314	0.531	0.554	0.601	0.509	0.342
COEFF OF VARIATION	0.301	0.312	0.323	0.351	0.378	0.366	0.349	0.358	0.286
MEAN LOGS	1.467	1.477	1.502	1.541	1.616	1.683	1.751	1.834	1.989
STD DEVIATION LOGS	0.124	0.124	0.134	0.144	0.157	0.152	0.147	0.145	0.114
SKEWNESS LOGS	0.438	0.500	0.500	0.503	0.431	0.382	0.269	0.453	0.721
STD ERR SKEWNESS LOGS	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717
SER CORR COEFF LOGS	-0.176	-0.035	0.164	0.311	0.532	0.604	0.673	0.637	0.482
COEFF OF VAR LOGS	0.085	0.047	0.049	0.094	0.097	0.091	0.084	0.079	0.057

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITY BASED ON LOG-PEARSON III ANALYSIS (YEARS 1919-1927)

	P=99	P=98	P=96	P=90	P=75	P=50	P=25	P=10	
0.99	62.5	66.3	72.8	84.8	107.3	120.3	132.3	165.5	205.5
0.98	56.3	59.4	64.9	74.9	94.2	106.3	118.4	146.5	184.0
0.96	50.4	52.8	57.3	65.9	81.9	93.1	105.0	128.5	163.8
0.90	42.8	44.3	47.8	53.9	66.6	76.5	87.7	106.0	138.5
0.80	37.0	38.1	40.8	45.4	55.5	64.2	74.5	89.4	120.0
0.50	28.7	29.3	31.0	33.8	40.3	47.2	55.5	66.5	94.6
0.20	23.0	23.3	24.4	26.1	30.3	35.7	42.2	51.2	77.9
0.10	20.6	20.9	21.9	23.2	26.5	31.3	36.9	45.3	71.6
0.05	19.0	19.3	20.1	21.2	23.9	28.2	33.2	41.2	67.3
0.02	17.5	17.7	18.4	19.3	21.4	25.3	29.6	37.3	63.3
0.01	16.5	16.8	17.4	18.2	20.0	23.6	27.4	35.1	61.0

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1919-1927)

P=95	P=90	P=75	P=50	P=25	P=10
37.0	50.0	44.0	110.0	290.0	440.0

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA FLOW (CFS)	DATE	REG. (R)
1918	1020.	1010.	994.	893.	751.	617.	522.	488.	396.	1080.	01/04/18	
1919	692.	674.	644.	582.	562.	490.	448.	455.	400.	692.	12/14/18	
1920	320.	320.	316.	307.	291.	269.	245.	228.	196.	320.	01/30/20	
1921	696.	673.	642.	595.	528.	502.	458.	420.	355.	718.	02/14/21	
1922	974.	959.	908.	792.	686.	545.	483.	426.	347.	985.	12/13/21	
1923	1140.	1130.	1070.	901.	842.	642.	529.	450.	365.	1180.	01/11/23	
1924	860.	847.	811.	713.	628.	464.	419.	375.	295.	862.	02/12/24	
1925	804.	796.	784.	713.	610.	499.	436.	428.	376.	827.	02/05/25	
1926	376.	370.	359.	347.	325.	310.	287.	261.	219.	376.	02/10/26	
1927	560.	560.	545.	448.	407.	381.	362.	337.	309.	560.	01/03/27	

STATION 12044000 LYRE RIVER AT PIEDMONT, WASH.
HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1916-1927)

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STATION 12045500 ELWHA RIVER AT McDONALD BR NR PRT ANGELES, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1927	1163	1343	1916	1812	1464	1143	727	1656	2971	1899	932	828	1488
1928	1300	2115	1298	2746	1144	1501	1363	2328	1666	1047	620	434	1466
1929	830	1080	1001	813	476	511	900	1793	2138	1389	753	424	1012
1930	485	328	642	609	2197	1190	2045	1235	1489	996	550	423	1005
1931	638	717	780	1915	1557	1554	1463	1925	1949	1159	508	532	1223
1932	608	1584	1472	1346	1894	1976	1765	2044	2836	1709	588	495	1543
1933	706	2466	1933	1702	770	1097	1050	1722	2999	2821	1525	1048	1658
1934	1424	1738	4713	3445	1923	2234	2065	1898	1362	917	635	503	1910
1935	1005	3105	1487	3513	2793	1671	1028	1610	2249	1575	867	829	1803
1936	604	565	921	1592	635	1270	1435	2682	2469	1279	687	617	1232
1937	400	219	1141	638	538	1044	1306	2077	3155	1757	773	536	1135
1938	802	2481	2902	1800	871	1245	1546	2219	2533	1393	729	435	1584
1939	625	945	1639	2391	1102	944	1396	1880	1460	1262	695	473	1237
1940	510	1029	3619	2262	2029	2094	1371	1968	1285	675	539	361	1481
1941	1327	1097	2009	1769	1652	1057	980	1521	1285	777	483	581	1210
1942	1060	1380	2832	974	981	656	832	1091	1578	1059	525	376	1114
1943	321	1076	1433	1067	1275	990	2210	1530	1827	1532	696	490	1201
1944	534	633	1194	1549	883	705	744	1156	1370	696	434	406	859
1945	477	1452	1272	1896	1878	1149	904	2265	1841	1101	640	524	1279
1946	659	1429	1825	1679	1080	1138	1471	2950	2669	2101	1068	570	1557
1947	543	785	2254	1351	3068	1144	1198	1856	1582	1065	544	345	1300
1948	1527	1452	2050	1758	1229	899	903	2557	3512	1586	968	768	1602
1949	1002	1474	1298	692	1235	1477	1564	3164	2562	1714	1053	761	1501
1950	738	2660	2592	1559	1820	1852	1474	2020	4096	2917	1405	660	1981
1951	1379	2276	3617	1976	3106	1074	1617	2208	2305	1484	720	488	1846
1952	1246	1274	1245	714	1320	763	1281	2238	2110	1701	894	560	1278
1953	387	417	988	4033	2215	950	991	2200	2080	2203	1133	773	1530
1954	1167	2502	3035	2107	3211	1517	1292	2219	2418	2701	1544	980	2051
1955	1307	3560	2062	1124	1259	654	1218	1452	3126	2110	1142	696	1840
1956	1254	3240	1940	1541	746	1005	1731	3333	3754	2802	1288	884	1960
1957	1834	1574	2592	939	1984	1661	1334	2329	1751	1077	654	508	1519
1958	526	769	1428	2560	2549	1264	1125	2413	2160	1060	573	506	1405
1959	901	2209	2939	2638	1093	1060	1943	2324	2372	1566	703	806	1717
1960	963	2136	2112	1530	2227	1210	1746	1949	2436	1486	759	465	1580
1961	839	1658	1800	3683	3306	1877	1391	1954	2833	1584	803	531	1846
1962	723	1167	1598	1989	1136	659	1221	1323	1912	1340	796	524	1199
1963	1226	2528	2895	1618	2957	1045	1076	1462	1522	1015	623	484	1527
1964	1268	2371	2016	2277	1281	1007	1046	1429	3070	2242	1103	674	1549
1965	715	1013	1265	1593	2056	1095	1273	1723	1984	1168	683	405	1225
1966	762	1554	1655	1736	984	1116	1772	2261	2324	1802	1004	562	1484
1967	824	1360	4174	2446	1604	1345	819	1944	3439	1953	998	597	1796
1968	2800	1937	2428	3786	2843	1933	1083	1541	2106	1503	820	808	1966
1969	1129	1757	2074	1569	1007	1132	1577	3084	3847	1391	769	930	1662
1970	868	1106	1510	1649	1580	1164	1342	1353	2114	1159	593	565	1247
1971	481	1238	1503	2003	2294	1524	1398	2818	2818	2876	1642	788	1780
1972	657	1611	1161	1372	1894	3307	1753	2601	3022	2470	1202	788	1820
1973	538	930	2368	2064	958	1028	695	1670	1757	1181	661	462	1197
1974	715	1490	2717	3717	1560	2122	1537	1965	3752	2759	1593	827	2069
1975	468	1083	1934	1789	1137	1188	782	1726	2641	2018	1111	707	1385
1976	2209	3573	4014	2644	1481	972	1112	2323	2268	2357	1283	721	2085
1977	504	574	681	781	893	929	1183	1301	1589	779	680	596	873
1978	707	2746	3191	1595	1327	1220	1067	1372	2041	1335	743	1035	1531
1979	524	878	764	424	1232	1819	876	1843	1603	1097	542	682	1022

STATION 12045500 ELWHA RIVER AT McDONALD BR NR PRT ANGELES, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1927-1979)

MEAN	904.6	1578.9	1998.7	1859.9	1617.6	1286.4	1302.3	1990.7	2333.7	1597.1	858.7	617.8	1495.3
MAXIMUM	2800.0	3573.0	4713.0	4033.0	3306.0	3307.0	2210.0	3333.0	4096.0	2917.0	1642.0	1048.0	2085.0
MINIMUM	321.0	219.0	642.0	424.0	476.0	511.0	895.0	1091.0	1285.0	675.0	434.0	345.0	859.0
STD DEVIATION	471.30	816.15	933.99	863.06	738.00	491.77	365.54	522.31	710.04	610.63	307.85	170.02	317.52
SKWENESS	1.763	0.685	0.911	0.794	0.737	1.606	0.433	0.564	0.544	0.711	1.007	0.640	0.016
STD ERR SKEW	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327
SER CORR COEFF	0.046	0.033	-0.079	0.054	-0.085	0.0	-0.222	0.087	0.089	0.131	0.217	0.132	0.114
COEFF OF VAR	0.518	0.517	0.467	0.464	0.456	0.382	0.281	0.262	0.304	0.382	0.358	0.290	0.212
MEAN LOGS	2.911	3.134	3.255	3.221	3.164	3.082	3.098	3.284	3.348	3.173	2.909	2.774	3.165
STD DEV LOGS	0.200	0.256	0.205	0.217	0.202	0.153	0.124	0.114	0.132	0.165	0.146	0.123	0.096
SKWENESS LOGS	0.378	-0.780	-0.139	-0.536	-0.166	0.220	-0.159	-0.052	0.010	0.013	0.422	0.167	-0.422
STD ERR SKEW LOGS	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327
SER CORR LOGS	0.083	0.025	0.031	0.043	-0.033	0.014	-0.211	0.121	0.154	0.151	0.251	0.157	0.127
COEFF OF VAR LOGS	0.069	0.062	0.063	0.067	0.064	0.050	0.040	0.035	0.039	0.052	0.050	0.044	0.030
% OF AVE FLOW	5.1	8.8	11.1	10.4	9.0	7.2	7.3	11.1	13.0	8.9	4.8	3.4	100.0

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MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1927-1979)

0.99	317.5	248.6	572.2	429.9	466.6	564.1	623.5	1035.7	1102.9	618.0	413.0	317.8	816.1
0.95	402.6	460.1	812.8	683.1	663.9	692.8	773.2	1246.0	1354.7	798.6	487.8	377.5	990.5
0.90	461.5	618.0	976.0	858.2	797.1	776.6	864.6	1373.9	1512.0	915.9	537.3	415.0	1091.2
0.80	549.8	857.1	1213.1	1112.3	990.1	895.6	987.2	1545.1	1727.3	1081.5	608.8	466.7	1219.9
0.50	791.9	1467.5	1817.4	1737.6	1478.1	1192.8	1261.7	1929.5	2229.7	1487.5	792.1	589.0	1483.7
0.20	1188.6	2255.0	2680.9	2548.9	2169.9	1618.0	1595.2	2401.8	2880.4	2048.5	1065.6	751.8	1765.3
0.10	1494.8	2715.8	3265.2	3041.0	2627.7	1911.6	1795.8	2689.6	3294.0	2422.6	1261.5	858.0	1917.0
0.04	1933.8	3213.5	4011.0	3606.5	3210.4	2296.8	2031.1	3031.7	3801.4	2896.1	1526.5	991.1	2080.4
0.02	2300.5	3534.4	4569.7	3994.1	3643.3	2594.2	2195.6	3273.8	4170.5	3254.5	1736.9	1090.0	2186.1
0.01	2702.8	3816.1	5130.1	4350.4	4074.5	2900.6	2352.1	3506.8	4533.5	3612.9	1958.7	1188.9	2280.8

STATION 12045500 ELWHA RIVER AT McDONALD BR NR PRT ANGELES, WASH		LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31											
YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS				
1928	203.0	345.0	405.0	514.0	682.0	794.0	992.0	1130.0	1380.0				
1929	36.0	281.0	319.0	342.0	411.0	464.0	604.0	690.0	770.0				
1930	31.0	152.0	220.0	234.0	256.0	356.0	384.0	419.0	536.0				
1931	29.0	87.0	296.0	366.0	403.0	463.0	524.0	581.0	655.0				
1932	68.0	91.0	215.0	250.0	440.0	454.0	531.0	676.0	944.0				
1933	11.0	50.0	239.0	378.0	427.0	541.0	660.0	884.0	1330.0				
1934	54.0	57.0	394.0	764.0	894.0	1020.0	1270.0	1390.0	1860.0				
1935	75.0	295.0	400.0	416.0	420.0	480.0	557.0	670.0	1040.0				
1936	36.0	324.0	459.0	475.0	543.0	570.0	624.0	676.0	849.0				
1937	40.0	81.0	129.0	187.0	219.0	280.0	369.0	443.0	591.0				
1938	101.0	326.0	376.0	444.0	491.0	536.0	642.0	880.0	1410.0				
1939	54.0	238.0	368.0	393.0	386.0	488.0	554.0	674.0	946.0				
1940	22.0	45.0	219.0	285.0	361.0	438.0	523.0	662.0	904.0				
1941	76.0	406.0	442.0	466.0	473.0	532.0	574.0	709.0	907.0				
1942	12.0	146.0	211.0	251.0	287.0	341.0	402.0	498.0	779.0				
1943	34.0	277.0	267.0	308.0	396.0	454.0	550.0	584.0	767.0				
1944	44.0	173.0	267.0	320.0	362.0	405.0	428.0	488.0	753.0				
1945	44.0	173.0	267.0	320.0	362.0	405.0	428.0	488.0	753.0				
1946	224.0	356.0	413.0	435.0	452.0	497.0	556.0	673.0	984.0				
1947	168.0	277.0	350.0	403.0	442.0	525.0	566.0	713.0	1060.0				
1948	98.0	247.0	260.0	285.0	345.0	436.0	564.0	733.0	1020.0				
1949	168.0	404.0	467.0	485.0	538.0	708.0	890.0	970.0	986.0				
1950	171.0	460.0	587.0	618.0	698.0	730.0	779.0	937.0	1420.0				
1951	356.0	458.0	539.0	566.0	602.0	928.0	1130.0	1250.0	1870.0				
1952	266.0	362.0	394.0	415.0	468.0	596.0	742.0	874.0	933.0				
1953	248.0	276.0	276.0	346.0	357.0	395.0	441.0	514.0	819.0				
1954	454.0	495.0	514.0	540.0	633.0	900.0	989.0	1210.0	1560.0				
1955	538.0	544.0	555.0	593.0	646.0	900.0	1000.0	1270.0	1650.0				
1956	401.0	431.0	471.0	499.0	618.0	731.0	828.0	1260.0	1550.0				
1957	360.0	534.0	543.0	570.0	600.0	889.0	1240.0	1370.0	1430.0				
1958	280.0	325.0	364.0	386.0	394.0	464.0	545.0	609.0	777.0				
1959	306.0	330.0	372.0	401.0	483.0	509.0	627.0	731.0	1230.0				
1960	426.0	426.0	469.0	518.0	622.0	703.0	798.0	846.0	1260.0				
1961	304.0	330.0	365.0	401.0	431.0	525.0	631.0	806.0	1150.0				
1962	366.0	359.0	384.0	401.0	431.0	584.0	661.0	780.0	1060.0				
1963	255.0	358.0	404.0	450.0	467.0	630.0	806.0	924.0	1170.0				
1964	345.0	365.0	370.0	381.0	440.0	483.0	589.0	708.0	964.0				
1965	242.0	297.0	335.0	356.0	366.0	611.0	717.0	820.0	988.0				
1966	282.0	335.0	356.0	356.0	366.0	513.0	614.0	737.0	1020.0				
1967	196.0	274.0	364.0	413.0	456.0	561.0	712.0	877.0	1290.0				
1968	428.0	436.0	442.0	490.0	497.0	792.0	1120.0	1450.0	1630.0				
1969	271.0	386.0	538.0	608.0	673.0	765.0	852.0	1000.0	1280.0				
1970	259.0	430.0	497.0	522.0	588.0	765.0	842.0	907.0	1040.0				
1971	270.0	295.0	318.0	343.0	441.0	494.0	531.0	622.0	895.0				
1972	466.0	478.0	435.0	554.0	579.0	704.0	958.0	1020.0	1200.0				
1973	385.0	395.0	435.0	443.0	522.0	653.0	736.0	747.0	1240.0				
1974	330.0	337.0	341.0	353.0	423.0	463.0	583.0	696.0	1020.0				
1975	352.0	399.0	420.0	435.0	437.0	524.0	698.0	910.0	1210.0				
1976	451.0	472.0	476.0	520.0	658.0	880.0	1040.0	1370.0	1500.0				
1977	365.0	412.0	426.0	441.0	687.0	800.0	930.0	1080.0	1280.0				
1978	342.0	363.0	383.0	441.0	460.0	520.0	585.0	654.0	931.0				
1979	346.0	352.0	377.0	396.0	418.0	553.0	612.0	635.0	713.0				

STATION 12045500 ELWHA RIVER AT McDONALD BR NR PRT ANGELES, WASH.

LOWEST MEAN FLOW STATISTICS (YEARS 1928-1979)

MEAN	223.7	313.0	378.6	425.9	486.1	590.8	697.9	824.1	1091.4
MAXIMUM	538.0	544.0	587.0	764.0	894.0	1020.0	1270.0	1450.0	1870.0
MINIMUM	10.0	14.0	129.0	187.0	219.0	280.0	369.0	419.0	536.0
STANDARD DEVIATION	151.11	132.24	104.88	111.05	125.18	170.08	219.56	262.42	314.97
SKWENESS	0.044	-0.657	-0.214	0.375	0.651	0.736	0.914	0.864	0.614
STD ERROR OF SKWENESS	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
SERIAL CORR COEFF	0.812	0.465	0.272	0.143	0.111	0.199	0.196	0.290	0.327
COEFF OF VARIATION	0.675	0.422	0.277	0.261	0.258	0.288	0.315	0.318	0.289
MEAN LOGS	2.169	2.421	2.559	2.614	2.673	2.755	2.824	2.896	3.020
STD DEVIATION LOGS	0.483	0.318	0.137	0.118	0.113	0.122	0.130	0.133	0.125
SKWENESS LOGS	-0.959	-2.132	-1.056	-0.514	-0.314	0.116	0.310	0.256	-0.033
STD ERR SKWENESS LOGS	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
SER CORR COEFF LOGS	0.739	0.311	0.175	0.121	0.107	0.201	0.229	0.298	0.344
COEFF OF VAR LOGS	0.223	0.131	0.054	0.045	0.042	0.044	0.046	0.046	0.041

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1928-1979)

0.99	890.5	522.1	591.3	698.9	812.2	1118.7	1432.1	1693.0	2031.4
0.98	794.7	519.5	574.9	666.3	766.5	1029.5	1295.2	1533.4	1881.9
0.96	686.0	514.0	553.9	629.7	721.2	939.5	1161.8	1377.0	1728.1
0.90	521.2	495.4	515.6	572.6	650.6	817.1	987.6	1171.5	1513.5
0.80	380.6	460.3	473.9	519.5	587.7	718.5	853.6	1012.2	1335.8
0.50	175.8	334.1	382.6	420.9	476.9	565.1	656.9	776.4	1050.0
0.20	63.3	172.0	285.6	330.0	379.6	447.9	516.8	606.6	823.5
0.10	33.3	102.7	237.0	286.6	334.3	397.9	459.7	537.0	724.6
0.05	18.5	61.0	199.4	253.3	299.7	361.4	419.2	487.3	651.6
0.02	8.9	30.5	160.8	218.6	263.8	324.8	379.5	438.6	576.0
0.01	5.3	18.0	137.6	197.2	241.7	302.8	356.1	409.8	533.4

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM"		PERCENT OF THE TIME (YEARS 1928-1979)			
P95	P90	P75	P70	P50	P10
410.0	510.0	770.0	860.0	1200.0	2800.0

STATION	12045500	ELMHA RIVER AT MCDONALD BR NR PRT ANGELES, WASH	HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30										ANNUAL PEAK-FLOW DATA	
			YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW (CFS)	DATE REG. (R)
1927			1927	5890.	4650.	3800.	3380.	3010.	2450.	2180.	1900.	1650.	7600.	12/02/26 R
1928			1928	7100.	5480.	4670.	4070.	2830.	2310.	2080.	1950.	1800.	10700.	01/12/28 R
1929			1929	4010.	2860.	2600.	2380.	2190.	2050.	1800.	1580.	1250.	9800.	10/09/28 R
1930			1930	4980.	4390.	3420.	3420.	2460.	1760.	1620.	1660.	1500.	7150.	02/18/30 R
1931			1931	7080.	5090.	4630.	3450.	2470.	2010.	1840.	1830.	1770.	12100.	01/23/31 R
1932			1932	12100.	10000.	6180.	4020.	2910.	2480.	2250.	2340.	2040.	16200.	02/26/32 R
1933			1933	5820.	4310.	3900.	3310.	3170.	2940.	2580.	2320.	1880.	9640.	11/12/32 R
1934			1934	16000.	11800.	7890.	6320.	5370.	4290.	3550.	3160.	2730.	26700.	12/21/33 R
1935			1935	16000.	11400.	8860.	6760.	4600.	3250.	2750.	2730.	2310.	25200.	11/05/34 R
1936			1936	4240.	3770.	3070.	2850.	2730.	2600.	2340.	1990.	1690.	4680.	01/04/36 R
1937			1937	5480.	3680.	3420.	3200.	3160.	2720.	2370.	2110.	1690.	8870.	12/22/36 R
1938			1938	11700.	10300.	6030.	3750.	3040.	2880.	2470.	2090.	1860.	18600.	12/28/37 R
1939			1939	11600.	8110.	5320.	3470.	2560.	2040.	1730.	1550.	1570.	17100.	01/01/39 R
1940			1940	8900.	7310.	5630.	4970.	4000.	2970.	2690.	2520.	2230.	15600.	12/15/39 R
1941			1941	5660.	4400.	3030.	2340.	2250.	2000.	1820.	1770.	1520.	10800.	01/17/41 R
1942			1942	11100.	7180.	4970.	3440.	3010.	2200.	1830.	1620.	1320.	17100.	12/02/41 R
1943			1943	4930.	3880.	2870.	2360.	2310.	1870.	1870.	1830.	1550.	6770.	04/02/43 R
1944			1944	6340.	4620.	3290.	2370.	1750.	1390.	1220.	1100.	1070.	10000.	12/03/43 R
1945			1945	8020.	6790.	4120.	2790.	2330.	2070.	1770.	1620.	1660.	14000.	02/07/45 R
1946			1946	4490.	3780.	3560.	3300.	3120.	2860.	2590.	2360.	1940.	5910.	12/28/45 R
1947			1947	11200.	9910.	6910.	4320.	3280.	2260.	2230.	1970.	1800.	13000.	02/13/47 R
1948			1948	6960.	5620.	4920.	4740.	4090.	3160.	2580.	2220.	1850.	18000.	10/18/47 R
1949			1949	4920.	4680.	4450.	3900.	3410.	2920.	2580.	2300.	2020.	5370.	11/28/48 R
1950			1950	14200.	10800.	7780.	5510.	4240.	3580.	3090.	2690.	2390.	30000.	11/26/49 R
1951			1951	11800.	10200.	6820.	4400.	3870.	3110.	3160.	2770.	2360.	14300.	02/09/51 R
1952			1952	3860.	3260.	2890.	2760.	2600.	2250.	2070.	1870.	1580.	5380.	10/19/51 R
1953			1953	9150.	7170.	6300.	4820.	4340.	3140.	2450.	2060.	2090.	11100.	01/31/53 R
1954			1954	6640.	5690.	5190.	4360.	3410.	3120.	2800.	2730.	2270.	9820.	12/11/53 R
1955			1955	10700.	9070.	6900.	5570.	3890.	2880.	2390.	2070.	1680.	14300.	11/18/54 R
1956			1956	19100.	12800.	7630.	5070.	4310.	3780.	3340.	2940.	2320.	21400.	11/03/55 R
1957			1957	10800.	9670.	6310.	4210.	2870.	2240.	2110.	2070.	1860.	22100.	12/09/56 R
1958			1958	6780.	5510.	4190.	3530.	2780.	2580.	2260.	1950.	2030.	10500.	01/16/58 R
1959			1959	10100.	8010.	5110.	3910.	3250.	2820.	2660.	2270.	2070.	15400.	04/29/59 R
1960			1960	11300.	8500.	6140.	3820.	3250.	2200.	2350.	2050.	1960.	22900.	11/22/59 R
1961			1961	18600.	11200.	7870.	5530.	4250.	3550.	3010.	2710.	2500.	22100.	01/15/61 R
1962			1962	7080.	4830.	3990.	3100.	2400.	1860.	1650.	1500.	1390.	8140.	01/03/62 R
1963			1963	10300.	8470.	6470.	4110.	3870.	3030.	2840.	2510.	2030.	21700.	11/19/62 R
1964			1964	9410.	4500.	3730.	3620.	3130.	2700.	2310.	2160.	1770.	12400.	10/21/63 R
1965			1965	7120.	5050.	3460.	3000.	2290.	1940.	1780.	1570.	1630.	9190.	11/30/64 R
1966			1966	5400.	4300.	3270.	2660.	2360.	2330.	2090.	2060.	1740.	8110.	01/13/66 R
1967			1967	14000.	9170.	8000.	5780.	4390.	3320.	2900.	2470.	2090.	16300.	12/13/66 R
1968			1968	11200.	9060.	7550.	5940.	4290.	3510.	3200.	2850.	2620.	17300.	10/27/67 R
1969			1969	5440.	5180.	4710.	4400.	4090.	3360.	2750.	2450.	2000.	10300.	01/04/69 R
1970			1970	4830.	3860.	3170.	2420.	2150.	1810.	1640.	1550.	1360.	8070.	12/13/69 R
1971			1971	5490.	4370.	3720.	3450.	2960.	2860.	2600.	2320.	2020.	7270.	02/14/71 R
1972			1972	6420.	5300.	4410.	4370.	3740.	3020.	2730.	2740.	2540.	9790.	03/05/72 R
1973			1973	10300.	7190.	5390.	4330.	3310.	2350.	1950.	1640.	1580.	12900.	12/19/72 R
1974			1974	18100.	14700.	9980.	6240.	4170.	3340.	2880.	2580.	2580.	22600.	01/15/74 R
1975			1975	8240.	4880.	3380.	3040.	2740.	2480.	2160.	1890.	1650.	14200.	12/21/74 R
1976			1976	14200.	12000.	8160.	5370.	4650.	3920.	3470.	3190.	2490.	19500.	12/04/75 R
1977			1977	3870.	2390.	1970.	1780.	1590.	1510.	1370.	1260.	1140.	5340.	01/18/77 R
1978			1978	8160.	6950.	5940.	4650.	3740.	3040.	2570.	2270.	1880.	18500.	11/01/77 R
1979			1979	5340.	4840.	3420.	2690.	2070.	1730.	1550.	1580.	1410.	8180.	11/04/78 R

STATION 12045500 ELMHA RIVER AT McDONALD BR NR PRT ANGELES, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1927-1979)

W R C
ESTIMATE

SYSTEMATIC
RECORD

MEAN	8857.5	6858.1	5120.2	3931.1	3221.7	2657.4	2365.8	2142.8	1891.1
MAXIMUM	19100.0	14700.0	9980.0	6760.0	5370.0	4590.0	3550.0	3190.0	2730.0
MINIMUM	3860.0	2390.0	1970.0	1780.0	1590.0	1390.0	1220.0	1100.0	1070.0
STANDARD DEVIATION	4039.58	2967.03	1869.71	1185.91	849.34	647.52	542.90	481.59	393.35
SKWENESS	0.898	0.682	0.570	0.465	0.275	0.220	0.122	0.158	0.186
STD ERROR OF SKEWNESS	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327
SERIAL CORR COEFF	0.057	-0.046	-0.032	0.092	0.073	0.045	0.026	-0.028	0.021
COEFF OF VARIATION	0.456	0.433	0.365	0.302	0.264	0.244	0.229	0.225	0.208
MEAN LOGS	3.905	3.797	3.681	3.575	3.493	3.411	3.362	3.320	3.267
STD DEVIATION LOGS	0.191	0.188	0.160	0.133	0.118	0.109	0.104	0.101	0.093
SKWENESS LOGS	0.208	0.042	-0.048	-0.141	-0.262	-0.314	-0.410	-0.380	-0.321
STD ERR SKEWNESS LOGS	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327
SER CORR COEFF LOGS	0.026	-0.075	-0.057	0.065	0.065	0.054	0.034	-0.024	0.035
COEFF OF VAR LOGS	0.049	0.049	0.043	0.037	0.034	0.032	0.031	0.030	0.028

4.0888
0.2021
-0.1420

4.0888
0.2021
-0.1420

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1927-1979)

0.99	3088.7	2323.6	2009.6	1785.1	1570.2	1355.3	1230.6	1140.0	1071.2
0.95	4003.5	3093.5	2603.7	2243.2	1951.8	1688.2	1514.8	1391.1	1278.5
0.90	4622.7	3607.5	2985.7	2526.5	2181.4	1853.6	1680.8	1537.6	1398.5
0.80	5530.6	4350.2	3520.5	2910.3	2465.1	2095.8	1844.9	1726.3	1552.3
0.50	7921.6	6243.8	4809.3	3784.5	3147.2	2612.3	2340.4	2119.1	1871.5
0.20	11593.1	9000.5	6542.6	4871.4	3919.4	3195.9	2824.6	2547.7	2220.0
0.10	14271.1	10915.4	7672.0	5536.4	4367.1	3525.7	3088.9	2782.9	2412.2
0.04	17931.9	13426.0	9080.6	6326.8	4877.4	3894.3	3376.2	3039.8	2623.4
0.02	20859.7	15358.3	10118.4	6885.3	5224.7	4140.8	3563.6	3208.1	2762.8
0.01	23959.5	17341.4	11147.9	7421.6	5548.7	4367.6	3732.6	3360.6	2889.7

3959.0
5602.6
6712.9
8322.7
12405.5
18205.7
22111.4
27079.1
30789.9
34502.8

3959.0
5602.6
6712.9
8322.7
12405.5
18205.7
22111.4
27079.1
30789.9
34502.8

STATION 12045500 ELWHA RIVER AT MCDONALD BR NR PRT ANGELES, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1898	635	2398	2961	1591	2157	1249	1227	2007	2232	1755	1200	695	1672
1899	889	1066	1218	1469	1370	684	163	1249	2124	2037	999	570	1203
1900	742	4667	2908	2518	920	3163	1744	1918	2789	1253	941	672	2024
1901	1327	1649	4410	1819	1659	1448	957	2183	2159	1641	1173	711	1766
1902	664	3208	2092										
1912			1439										
1919	1300	1600	2468	2075	1839	990	1746	2102	2313	2302	1301	657	1725
1920	381	1138	1439	1693	1234	864	689	962	1537	1224	720	1331	1099
1921	2774	1879	1861	2163	2324	1486	1118	2009	3669	2289	1299	1111	1996
1922	2711	2602	3545	919	765	559	691	2002	2993	1397	726	594	1632
1923	695	596	1671	2816	1104	884	1214	2066	2278	1613	752	505	1354
1924	494	673	2311	1660	3826	992	751	1771	1357	1840	562	739	1323
1925	2069	2607	2019	1488	2354	1003	1569	2596	2175	1545	751	454	1712
1926	313	409	1857	1443	1676	1059	1170	1138	922	595	444	330	943

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1899	330.0	342.0	390.0	510.0	661.0	739.0	858.0	860.0	1050.0
1900	475.0	477.0	498.0	504.0	531.0	580.0	715.0	988.0	1260.0
1901	495.0	498.0	521.0	539.0	606.0	686.0	811.0	1020.0	1390.0
1920	288.0	311.0	329.0	374.0	374.0	439.0	609.0	734.0	1050.0
1921	548.0	549.0	569.0	611.0	650.0	790.0	1050.0	1080.0	1080.0
1922	458.0	462.0	475.0	503.0	554.0	554.0	747.0	1430.0	1860.0
1923	374.0	377.0	392.0	410.0	480.0	550.0	600.0	601.0	841.0
1924	344.0	350.0	366.0	406.0	445.0	484.0	506.0	589.0	976.0
1925	310.0	335.0	354.0	374.0	428.0	526.0	657.0	805.0	1000.0
1926	254.0	255.0	264.0	278.0	301.0	343.0	389.0	474.0	857.0

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HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
1898	24400.	12500.	6390.	3820.	3290.	2930.	2530.	2350.	2010.	FLOW(CFS) DATE REG.(R)
1899	3320.	3170.	2560.	2300.	2170.	2090.	1970.	1820.	1390.	41600. 11/18/97
1900	22400.	13200.	9480.	7620.	5340.	4990.	3830.	3060.	2730.	5820. 02/16/99
1901	17300.	11000.	8480.	6000.	4350.	3360.	2820.	2530.	2110.	30200. 03/11/00
1902										20600. 12/20/00
1919	6660.	5730.	4270.	3650.	2870.	2440.	2270.	2150.	2000.	33600. 11/27/01
1920	5660.	4210.	3200.	2520.	2070.	1860.	1620.	1410.	1240.	11000. 11/15/19
1921	7580.	6020.	4620.	3980.	3670.	3170.	2730.	2350.	2150.	11700. 02/11/21
1922	13300.	10700.	7520.	5010.	4260.	3610.	3030.	2490.	21400.	12/12/21
1923	7330.	5600.	5050.	4550.	3830.	2470.	2020.	1810.	1850.	1660. 12/24/22
1924	12000.	8590.	6310.	5730.	4200.	2760.	2630.	2230.	1900.	9880. 01/31/24
1925	6810.	5480.	4290.	3550.	3100.	2710.	2250.	2280.	1940.	14200. 11/19/24
1926	4700.	3720.	2800.	2420.	2020.	1720.	1660.	1510.	1380.	9500. 12/11/25

STATION 12047100 LEES CREEK AT PORT ANGELES, WASH.

STATION 12047300 MORSE CREEK NEAR PORT ANGELES, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)[illegible]

STATION 12047300 MORSE CREEK NEAR PORT ANGELES, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1966-1977)

MEAN	58.1	115.6	205.4	208.4	148.1	138.9	96.5	168.9	190.0	103.7	51.4	34.7	126.6
MAXIMUM	155.0	313.0	370.0	364.0	269.0	337.0	138.0	253.0	272.0	159.0	73.9	41.7	170.0
MINIMUM	20.3	40.1	104.0	108.0	72.9	62.8	49.6	108.0	95.7	48.7	26.8	20.1	83.1
STD DEVIATION	48.21	75.18	91.24	84.76	60.34	76.93	31.36	50.57	55.18	36.82	15.68	6.99	29.23
SKWENESS	1.602	2.290	0.510	0.909	0.856	2.130	-0.272	0.255	-0.190	-0.020	0.045	-0.967	-0.401
STD ERR SKEW	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.661	0.687
SER CORR COEFF	0.0	-0.504	0.186	-0.281	-0.194	-0.250	-0.145	-0.482	-0.766	-0.302	-0.134	-0.219	-0.636
COEFF OF VAR	0.830	0.650	0.444	0.407	0.554	0.554	0.325	0.299	0.290	0.355	0.305	0.201	0.231
MEAN LOGS	1.660	2.001	2.273	2.288	2.139	2.097	1.961	2.210	2.260	1.988	1.691	1.531	2.091
STD DEV LOGS	0.297	0.236	0.199	0.170	0.174	0.201	0.159	0.132	0.139	0.169	0.141	0.099	0.108
SKWENESS LOGS	1.008	0.516	-0.036	0.304	0.133	0.781	-0.765	0.014	-0.790	-0.519	-0.484	-1.348	-0.661
STD ERR SKEW LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.661	0.687
SER CORR LOGS	0.113	-0.541	-0.164	-0.321	-0.197	-0.363	-0.201	-0.485	-0.710	-0.343	-0.178	-0.236	-0.618
COEFF OF VAR LOGS	0.179	0.118	0.088	0.074	0.081	0.096	0.081	0.060	0.061	0.085	0.084	0.065	0.052
% OF AVE FLOW	3.8	7.6	13.5	13.7	9.7	9.1	6.4	11.1	12.5	6.8	3.4	2.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1966-1977)

0.99	15.5	34.9	63.7	85.4	56.5	55.6	32.0	80.2	72.3	34.1	20.5	16.2	61.6
0.95	18.6	44.7	87.7	105.8	72.5	65.4	46.7	98.4	101.1	48.7	27.6	21.9	78.7
0.90	21.2	51.9	103.9	119.4	83.0	72.7	56.0	109.9	118.7	58.1	31.9	25.0	88.6
0.80	25.5	62.9	127.4	139.2	98.2	84.0	68.6	125.5	141.8	71.1	37.7	28.9	101.3
0.50	40.8	95.6	187.8	190.5	136.5	117.7	95.6	162.0	189.7	100.6	50.4	35.7	126.7
0.20	76.6	155.2	275.7	268.1	192.3	179.4	124.9	209.3	239.4	135.7	64.9	41.1	152.6
0.10	114.1	205.4	336.4	324.2	231.2	232.0	140.2	239.4	264.4	155.9	73.0	43.1	165.7
0.04	184.7	283.0	415.6	400.6	282.5	313.8	155.9	276.3	289.6	178.4	82.0	44.8	179.2
0.02	260.1	352.3	476.0	461.6	322.2	387.7	163.5	303.2	304.8	193.3	87.8	45.6	187.4
0.01	361.6	432.5	537.7	526.0	363.2	474.0	173.7	329.7	317.6	206.9	93.2	46.2	194.5

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1968	19.0	20.0	21.0	23.0	28.0	38.0	57.0	76.0	97.0
1969	27.0	28.0	28.0	31.0	36.0	38.0	40.0	48.0	72.0
1970	23.0	24.0	25.0	27.0	32.0	38.0	38.0	46.0	68.0
1971	7.9	8.3	9.2	10.0	17.0	22.0	25.0	30.0	54.0
1972	23.0	26.0	27.0	28.0	30.0	38.0	48.0	69.0	83.0
1973	23.0	23.0	25.0	25.0	28.0	34.0	36.0	37.0	66.0
1974	16.0	17.0	18.0	18.0	20.0	21.0	24.0	30.0	51.0
1975	21.0	22.0	22.0	23.0	24.0	26.0	26.0	47.0	67.0
1976	26.0	27.0	29.0	31.0	38.0	49.0	55.0	73.0	94.0

LOWEST MEAN FLOW STATISTICS (YEARS 1968-1976)

MEAN	20.7	21.7	22.6	24.0	28.1	33.8	39.6	50.7	72.4
MAXIMUM	27.0	28.0	29.0	31.0	38.0	49.0	57.0	76.0	97.0
MINIMUM	7.9	8.3	9.2	10.0	17.0	21.0	24.0	30.0	51.0
STANDARD DEVIATION	5.84	6.10	6.27	6.69	6.94	9.12	11.86	17.89	16.09
SKWENESS	-1.402	-1.430	-1.323	-1.173	-0.217	-0.077	0.233	0.370	0.361
STD ERROR OF SKEWNESS	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717
SERIAL CORR COEFF	-0.234	-0.299	-0.308	-0.262	-0.126	-0.181	-0.123	-0.200	-0.081
COEFF OF VARIATION	0.283	0.281	0.279	0.279	0.247	0.300	0.353	0.353	0.222
MEAN LOGS	1.293	1.314	1.333	1.360	1.436	1.513	1.579	1.680	1.850
STD DEVIATION LOGS	0.163	0.163	0.156	0.154	0.115	0.125	0.135	0.156	0.097
SKWENESS LOGS	-2.096	-2.116	-1.951	-1.858	-0.660	-0.515	-0.216	0.008	0.015
STD ERR SKEWNESS LOGS	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717
SER CORR COEFF LOGS	-0.230	-0.279	-0.292	-0.269	-0.159	-0.157	-0.183	-0.183	-0.080
COEFF OF VAR LOGS	0.126	0.124	0.117	0.113	0.080	0.082	0.085	0.093	0.052

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1968-1976)

0.99	28.0	29.3	31.0	33.3	44.3	57.0	74.2	110.4	119.2
0.98	27.9	29.3	30.8	33.1	42.6	54.2	69.1	100.1	112.1
0.96	27.8	29.1	30.6	32.8	40.6	51.1	63.7	89.8	104.7
0.90	27.2	28.5	29.8	31.8	37.4	46.2	56.0	75.9	94.3
0.80	26.2	27.4	28.5	30.3	34.2	41.7	49.4	62.8	85.4
0.50	22.1	23.4	24.0	25.4	28.1	33.4	38.4	47.9	60.8
0.20	15.7	16.5	17.2	18.3	22.1	25.9	29.3	35.4	58.8
0.10	12.1	12.7	13.5	14.4	19.2	22.3	25.3	30.2	53.3
0.05	9.2	9.7	10.5	11.3	16.9	19.6	22.4	26.5	49.2
0.02	6.5	6.8	7.6	8.3	14.5	16.8	19.4	22.9	45.0
0.01	5.0	5.2	5.9	6.6	13.0	15.0	17.6	20.8	42.4

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1968-1976)

P95	P90	P75	P70	P50	P25	P10
26.0	32.0	53.0	61.0	96.0	160.0	250.0

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT-30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA FLOW(CFS)	DATE	REG.(R)
1967	1240.	879.	660.	457.	326.	276.	236.	207.	189.	1910.	01/19/67	
1968	1010.	772.	681.	524.	399.	329.	291.	247.	204.	1470.	01/14/68	
1969	502.	392.	328.	307.	301.	243.	210.	192.	168.	760.	12/03/68	
1970	508.	383.	284.	207.	173.	148.	130.	131.	130.	854.	04/09/70	
1971	511.	445.	316.	268.	203.	200.	186.	178.	179.	780.	03/29/71	
1972	1160.	818.	554.	473.	386.	293.	252.	241.	219.	2490.	03/05/72	
1973	1680.	1070.	652.	486.	347.	234.	181.	148.	129.	3140.	12/26/72	
1974	1940.	1670.	1060.	633.	401.	236.	257.	228.	192.	2350.	01/16/74	
1975	555.	320.	255.	215.	187.	167.	139.	119.	113.	818.	12/21/74	
1976	1640.	1350.	818.	519.	456.	345.	305.	281.	225.	3160.	12/04/75	
1977										441.	03/08/77	
1978										914.	11/01/77	
1979										987.	03/04/79	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1967-1979)

	MEAN	MAXIMUM	MINIMUM	STANDARD DEVIATION	STDEV	STD ERROR OF SKEWNESS	SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	SKEWNESS LOGS	STD ERR SKEWNESS LOGS	SER CORR COEFF LOGS	COEFF OF VAR LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
	1074.6	807.9	560.8	408.9	321.9	255.1	219.7	197.2	174.8							
	1940.0	1670.0	1080.0	633.0	456.0	345.0	305.0	281.0	225.0							
	582.0	320.0	255.0	147.8	95.43	68.30	58.36	53.52	39.17							
	0.308	0.750	0.506	0.191	-0.417	-0.293	-0.039	-0.062	-0.488							
	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687							
	0.177	-0.067	-0.121	-0.050	-0.235	-0.265	-0.378	-0.546	-0.535							
	0.511	0.556	0.473	0.361	0.296	0.268	0.266	0.271	0.224							
	2.975	2.845	2.702	2.582	2.488	2.391	2.327	2.279	2.232							
	-0.090	0.022	-0.109	-0.543	-0.807	-0.643	-0.401	-0.439	-0.658							
	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687							
	0.185	-0.091	-0.104	-0.026	-0.184	-0.215	-0.368	-0.532	-0.531							
	0.080	0.087	0.080	0.068	0.058	0.053	0.052	0.055	0.047							

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1967-1979)

0.99	253.5	186.4	152.5	127.8	117.2	109.6	102.2	89.0	87.1	304.8	310.2
0.95	377.0	273.8	219.3	186.0	166.6	145.6	130.2	114.8	110.4	460.3	463.5
0.90	464.3	336.4	265.1	223.8	197.0	167.2	147.0	130.3	123.8	574.9	576.5
0.80	595.9	432.0	332.7	276.2	237.2	195.3	169.0	150.6	140.9	754.5	753.7
0.50	951.7	698.4	508.5	396.2	321.3	253.8	216.4	194.3	175.0	1278.9	1273.8
0.20	1502.5	1132.6	767.4	539.7	408.8	315.7	269.7	243.3	209.5	2189.7	2186.9
0.10	1898.8	1459.8	946.8	622.2	453.0	348.0	299.6	270.6	227.0	2812.4	2819.2
0.04	2428.8	1915.4	1180.1	774.6	497.4	381.7	332.7	300.6	244.8	3959.8	3991.4
0.02	2842.2	2283.9	1357.7	774.6	524.0	402.7	354.5	320.2	255.8	4837.3	4898.2
0.01	3269.7	2676.5	1538.2	829.5	546.4	421.0	374.5	338.1	265.1	5798.2	5899.2

STATION 12047500 SIEBERT CREEK NEAR PORT ANGELES, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1952													
1953	2.23	2.52	6.71	69.1	29.2	12.0	8.83	7.16	5.36	3.53	2.57	2.26	13.8
1954	5.45	11.5	31.2	141	185	20.0	8.87	7.93	15.3	6.34	3.50	3.88	35.6
1955	11.0	36.3	33.7	17.4	37.3	18.5	31.3	14.9	7.56	6.77	4.82	8.86	19.9
1956	7.14	121	78.5	54.7	25.6	47.4	27.4	11.0	12.5	17.4	4.90	3.71	33.1
1957	16.8	13.7	45.9	9.43	56.4	40.0	20.9	11.6	6.06	5.35	3.81	3.36	19.2
1958	3.45	4.51	19.7	23.3	25.8	13.8	14.0	6.36	6.57	3.22	2.51	2.93	10.4
1959	5.43	20.7	29.2	40.4	14.8	14.5	16.7	17.6	7.50	3.86	2.61	3.05	18.7
1960	4.23	12.6	29.4	42.7	54.2	28.3	14.4	14.7	6.49	3.37	3.25	3.71	17.9
1961	3.23	10.4	10.5	51.5	46.7	31.0	11.1	21.6	6.15	4.03	2.83	2.49	16.7
1962	3.38	4.91	11.3	13.0	6.18	9.93	7.03	11.4	7.22	3.42	3.07	2.59	6.97
1963	8.05	36.2	28.2	16.3	29.8	9.09	11.7	10.1	5.64	7.65	6.41	4.61	14.4
1964	18.3	30.0	24.5	39.5	19.5	20.2	11.7	6.44	12.4	4.92	3.64	3.36	16.2
1965	3.68	8.21	9.16	35.8	38.6	11.2	16.9	7.80	4.43	2.89	2.85	2.78	11.9
1966	2.94	5.34	10.8	45.8	14.5	27.8	11.3	7.24	5.27	5.66	2.79	3.42	11.9
1967	5.55	9.80	39.9	67.1	20.9	17.5	19.5	13.4	6.67	3.58	2.63	2.60	17.5
1968	9.58	6.89	19.2	50.3	45.1	25.4	8.49	5.47	5.45	2.91	4.04	3.54	15.5
1969	3.82	12.0	37.1	23.3	22.4	30.4	22.4	11.2	7.51	4.36	2.74	3.14	15.0

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1952-1969)

MEAN	6.7	20.4	27.4	43.6	39.5	22.2	15.4	10.9	7.9	5.2	3.5	3.5	17.1
MAXIMUM	18.3	121.0	78.5	141.0	185.0	47.4	31.3	21.6	15.3	17.4	6.4	8.9	35.6
MINIMUM	2.2	2.5	6.7	9.4	6.2	9.1	7.0	5.5	4.4	2.9	2.5	2.3	7.0
STD DEVIATION	4.75	28.01	17.65	31.00	40.10	10.89	6.92	4.43	3.37	3.34	1.07	1.46	7.27
SKENESS	1.550	3.229	1.472	1.981	3.288	0.862	0.963	0.921	1.348	3.166	1.338	3.187	1.617
STD ERR SKEW	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.536	0.536	0.536	0.536	0.550
SER CORR COEFF	-0.057	0.135	0.268	0.057	-0.063	0.187	0.234	0.136	-0.007	0.163	0.118	0.116	0.161
COEFF OF VAR	0.707	1.375	0.645	0.711	1.014	0.491	0.448	0.405	0.424	0.641	0.303	0.417	0.425
MEAN LOGS	0.744	1.094	1.353	1.547	1.475	1.297	1.150	1.007	0.869	0.668	0.532	0.417	1.201
STD DEV LOGS	0.266	0.410	0.288	0.299	0.317	0.213	0.187	0.170	0.150	0.190	0.119	0.133	0.167
SKENESS LOGS	0.637	0.696	-0.223	-0.165	0.354	0.044	0.247	0.206	0.953	1.676	0.852	1.995	0.307
STD ERR SKEW LOGS	0.450	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.536	0.536	0.536	0.536	0.550
SER CORR LOGS	0.030	0.200	0.212	0.032	-0.108	0.141	0.158	0.071	-0.025	0.244	0.164	0.175	0.173
COEFF OF VAR LOGS	0.357	0.375	0.213	0.193	0.215	0.164	0.163	0.159	0.184	0.285	0.223	0.254	0.139
% OF AVE FLOW	3.3	9.9	13.3	21.1	19.2	10.8	7.5	5.3	3.8	2.5	1.7	1.7	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1952-1969)

0.99	1.8	2.2	4.3	6.5	6.6	6.4	5.6	4.3	4.1	2.8	2.1	2.5	7.1
0.95	2.3	3.2	7.3	11.0	9.7	8.9	7.2	5.5	4.5	2.9	2.3	2.5	8.8
0.90	2.7	4.1	9.5	14.4	12.1	10.6	8.2	6.2	4.9	3.0	2.5	2.5	9.9
0.80	3.3	5.5	13.0	19.9	16.0	13.1	9.8	7.3	5.4	3.3	2.7	2.6	11.5
0.50	5.2	11.1	23.1	35.9	28.6	19.8	13.9	10.0	7.0	4.1	3.3	3.0	15.6
0.20	9.0	26.2	39.6	63.1	54.3	29.9	20.2	14.1	9.8	6.2	4.2	4.0	21.8
0.10	12.5	43.8	51.7	83.8	77.8	37.3	24.8	16.9	12.1	8.3	4.9	4.9	26.3
0.04	18.3	79.6	68.2	112.7	116.4	47.2	31.1	20.7	15.7	12.1	5.9	6.5	32.4
0.02	23.8	120.5	81.0	135.8	152.7	54.9	36.2	23.7	18.8	15.9	6.7	8.1	37.3
0.01	30.5	178.6	94.3	160.2	196.3	63.1	41.6	26.8	22.3	21.0	7.6	10.0	42.4

STATION 12047500 STEWART CREEK NEAR PORT ANGELES, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1954	2.4	2.4	2.4	2.4	2.7	3.1	4.1	4.6	6.9
1955	3.8	3.8	3.8	4.0	4.2	5.2	6.1	6.6	7.2
1956	3.6	3.6	3.6	3.6	3.7	4.0	4.8	7.6	10.0
1957	2.9	2.9	2.9	3.0	3.3	3.7	4.0	5.0	8.4
1958	2.9	3.0	3.0	3.1	3.1	3.3	3.6	3.9	4.3
1959	2.0	2.0	2.0	2.1	2.4	2.6	2.8	3.3	4.4
1960	2.2	2.2	2.3	2.6	2.7	2.7	2.9	3.4	4.8
1961	2.4	2.4	2.5	2.5	2.6	2.9	3.0	3.1	4.7
1962	2.1	2.1	2.1	2.2	2.4	2.6	2.8	3.0	3.9
1963	2.2	2.2	2.3	2.4	2.5	2.7	2.9	3.3	5.5
1964	3.6	3.7	3.8	4.0	4.3	5.3	5.3	6.0	6.9
1965	2.8	2.8	2.9	2.9	3.0	3.3	3.5	3.8	5.5
1966	2.1	2.1	2.2	2.3	2.5	2.7	2.8	2.9	3.5
1967	2.3	2.5	2.6	2.7	2.7	2.9	3.2	3.9	4.7
1968	2.4	2.4	2.6	2.5	2.6	2.9	2.9	3.6	5.3
1969	2.4	2.4	2.4	2.5	2.7	3.2	3.5	3.5	4.2

LOWEST MEAN FLOW STATISTICS (YEARS 1954-1969)

MEAN	2.6	2.7	2.7	2.8	3.0	3.3	3.6	4.2	5.6
MAXIMUM	3.4	3.8	3.8	4.0	4.3	5.3	6.1	7.6	10.0
MINIMUM	2.0	2.0	2.0	2.1	2.4	2.6	2.8	2.9	3.5
STANDARD DEVIATION	0.58	0.59	0.58	0.60	0.61	0.86	1.00	1.39	1.79
SKWENESS	0.994	0.976	0.989	1.094	1.343	1.593	1.866	1.406	1.168
STD ERROR OF SKWENESS	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564
SERIAL CORR COEFF	0.315	0.284	0.233	0.164	0.238	0.177	0.415	0.523	0.552
COEFF OF VARIATION	0.216	0.222	0.215	0.214	0.208	0.262	0.274	0.330	0.317
MEAN LOGS	0.413	0.415	0.423	0.439	0.483	0.507	0.548	0.606	0.733
STD DEVIATION LOGS	0.089	0.091	0.088	0.087	0.082	0.100	0.107	0.127	0.127
SKWENESS LOGS	0.753	0.739	0.718	0.817	1.132	1.269	1.025	1.029	0.842
STD ERR SKWENESS LOGS	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564
SER CORR COEFF LOGS	0.312	0.286	0.234	0.165	0.277	0.241	0.456	0.538	0.508
COEFF OF VAR LOGS	0.215	0.219	0.208	0.198	0.178	0.198	0.195	0.209	0.173

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITY BASED ON LOG-PEARSON III ANALYSIS (YEARS 1954-1969)

0.99	4.5	4.7	4.7	4.9	5.2	6.7	7.5	9.8	12.2
0.98	4.3	4.3	4.3	4.5	4.8	5.9	6.6	8.5	10.8
0.96	3.9	3.9	3.9	4.1	4.3	5.2	5.8	7.4	9.6
0.90	3.4	3.4	3.4	3.6	3.7	4.4	4.9	6.0	8.0
0.80	3.0	3.1	3.1	3.2	3.3	3.8	4.2	5.0	6.8
0.50	2.5	2.5	2.6	2.7	2.8	3.1	3.4	3.8	5.2
0.20	2.2	2.2	2.2	2.3	2.5	2.6	2.9	3.2	4.2
0.10	2.0	2.0	2.1	2.2	2.4	2.5	2.7	2.9	3.8
0.05	1.9	1.9	2.0	2.1	2.3	2.4	2.6	2.8	3.5
0.02	1.9	1.8	1.9	2.0	2.2	2.4	2.5	2.6	3.3
0.01	1.8	1.8	1.8	1.9	2.2	2.3	2.4	2.6	3.1

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1954-1969)

P95	P90	P75	P70	P50	P25	P10
2.6	2.9	4.2	4.8	8.3	17.0	34.0

STATION 12047500 SIERBET CREEK NEAR PORT ANGELES, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30											
YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA	REG. (R)
										FLOW (CFS)	DATE
1953	285.	179.	147.	92.	76.	50.	37.	30.	24.	303.	01/09/53
1954	660.	495.	315.	242.	177.	160.	118.	93.	64.	1400.	01/05/54
1955	267.	166.	101.	63.	43.	39.	37.	32.	29.	480.	02/07/55
1956	1050.	914.	453.	218.	122.	101.	86.	71.	59.	1620.	11/03/55
1957	604.	357.	202.	123.	82.	51.	40.	38.	31.	1230.	12/09/56
1958	101.	82.	53.	35.	28.	26.	25.	21.	17.	304.	12/25/57
1959	95.	81.	54.	43.	41.	35.	31.	27.	23.	137.	01/24/59
1960	450.	323.	194.	122.	84.	56.	44.	39.	31.	924.	01/29/60
1961	506.	283.	151.	92.	63.	52.	43.	37.	29.	1120.	01/15/61
1962	57.	39.	29.	20.	18.	13.	10.	10.	10.	72.	01/03/62
1963	220.	146.	95.	70.	52.	37.	33.	28.	22.	487.	11/25/62
1964	113.	76.	59.	47.	40.	34.	33.	32.	26.	153.	10/22/63
1965	188.	148.	99.	80.	56.	38.	28.	25.	20.	284.	01/30/65
1966	216.	140.	98.	79.	48.	31.	30.	25.	20.	336.	01/14/66
1967	454.	322.	170.	103.	69.	54.	44.	37.	30.	756.	01/19/67
1968	232.	160.	131.	86.	69.	51.	42.	35.	26.	385.	01/18/68
1969	121.	93.	60.	48.	40.	34.	29.	29.	25.	206.	12/09/68

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1953-1969)

	W R C ESTIMATE	SYSTEMATIC RECORD
MEAN	330.5	2.6293
MAXIMUM	1050.0	0.3880
MINIMUM	57.0	-0.1900
STANDARD DEVIATION	261.84	
SKEWNESS	1.442	
STD ERROR OF SKEWNESS	0.550	
SERIAL CORR COEFF	0.137	
COEFF OF VARIATION	0.792	
MEAN LOGS	2.395	
STD DEVIATION LOGS	0.347	
SKEWNESS LOGS	-0.032	
STD ERR SKEWNESS LOGS	0.550	
SER CORR COEFF LOGS	0.093	
COEFF OF VAR LOGS	0.145	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1953-1969)

0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.05	0.02	0.01
37.9	66.1	86.8	126.8	249.1	486.7	689.0	996.5	1263.5	1563.2
31.8	50.2	64.8	89.1	169.1	334.7	486.6	734.9	966.4	1242.3
23.1	36.3	46.3	62.4	111.5	202.3	277.6	390.8	488.5	598.1
16.8	26.8	34.1	45.5	77.8	130.6	169.8	223.5	266.0	310.5
16.4	23.5	28.6	36.1	56.7	89.3	113.3	146.1	172.2	199.8
14.3	19.0	22.4	27.5	42.3	68.0	88.9	120.0	146.8	177.0
10.9	15.6	18.9	23.8	36.8	56.7	71.0	90.0	104.8	120.2
10.7	14.7	17.5	21.5	32.1	47.9	59.0	73.8	85.3	97.1
10.5	13.4	15.4	18.3	25.8	37.2	45.5	56.8	65.8	75.3
55.2	99.3	136.3	200.4	422.6	901.1	1344.7	2067.7	2735.3	3522.5
47.1	93.5	133.3	202.7	438.0	909.7	1312.1	1916.6	2432.8	3002.2

STATION 12047700 GOLD CREEK NR BLYN, WASH.

ANNUAL PEAK FLOW DATA			ANNUAL PEAK FLOW STATISTICS (YEARS 1965-1975)		
WATER YEAR	FLOW (CFS)	DATE	MEAN LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
1965	40.0	1-30-1965		1.8115	1.8115
1966	24.0	11-19-1965		0.2464	0.2464
1967	92.0	12-13-1966		0.011	-0.211
1968	173.0	1-14-1968	STANDARD DEVIATION LOGS		
1969	73.0	12-3-1968	SKEWNESS LOGS		
1970	75.0	12-13-1969			
1971	31.0	1-31-1971			
1972	65.0	3-5-1972			
1973	61.0	12-19-1972			
1974	114.0	1-16-1974			
1975	72.0	12-21-1974			
			ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES		
			LOG-PEARSON III ANALYSIS (YEARS 1965-1975)		
			0.99	17.4	15.9
			0.95	25.5	24.7
			0.90	31.3	30.9
			0.80	40.2	40.5
			0.50	64.7	66.1
			0.20	104.4	105.0
			0.10	134.1	132.2
			0.04	175.3	167.7
			0.02	208.4	194.7
			0.01	243.6	222.0

STATION 120+8000 DUNGENESS RIVER NEAR SEQUIM, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1923	178	169	392	368	1042	233	210	490	733	553	341	210	
1924	379	636	470	344	473	253	519	800	390	291	176	167	340
1925	125	148	293	224	243	197	279	307	289	487	266	172	452
1926	262	301	515	449	403	306	331	517	269	179	134	105	210
1927	243	333	264	609	268	284	314	561	979	624	334	223	437
1928	185	206	186	133	106	134	201	525	438	292	143	93.8	321
1929	96.7	86.6	187	105	297	211	374	361	666	447	228	129	263
1930	156	392	575	393	218	261	438	713	880	555	228	134	232
1931	170	160	256	459	202	229	329	448	879	537	229	138	413
1932	120	169	740	586	597	400	344	666	454	375	229	152	284
1933	348	261	434	393	359	240	276	416	535	308	188	156	385
1934	209	364	715	251	217	163	271	477	508	344	174	152	325
1935	106	225	281	235	255	194	461	449	586	457	201	120	341
1936	149	137	207	195	136	161	185	343	412	495	231	137	304
1937	110	237	219	276	417	231	240	609	479	220	129	108	199
1938	127	215	310	283	194	201	318	684	579	409	200	150	306
1939	133	173	336	269	652	306	347	622	696	631	324	165	347
1940	349	265	414	333	284	214	265	772	551	346	186	130	336
1941	234	305	333	141	381	318	385	772	1196	584	308	216	434
1942	145	597	529	313	379	408	321	596	697	477	294	225	380
1943	296	551	842	495	754	294	441	596	1103	813	412	201	485
1944	242	228	234	133	250	182	377	612	602	502	243	158	493
1945	106	103	174	736	439	209	305	675	689	527	271	149	317
1946	290	581	571	493	815	384	311	638	747	758	393	233	402
1947	429	866	468	259	271	166	265	464	913	840	521	364	545
1948	259	773	460	351	181	213	509	893	1151	652	351	215	443
1949	452	344	524	201	451	387	312	829	1151	837	401	235	522
1950	174	174	246	436	583	290	254	869	642	373	235	180	411
1951	210	393	561	567	235	205	404	661	894	432	223	160	393
1952	188	387	490	388	533	282	364	566	727	511	246	198	411
1953	145	249	313	703	612	453	354	566	786	456	230	137	400
1954	147	189	208	408	218	133	261	354	1082	664	325	175	475
1955	376	561	664	491	733	249	243	472	627	419	243	151	280
1956	357	565	491	527	278	211	258	412	593	446	275	191	428
1957	153	207	236	373	445	220	332	460	907	604	283	171	422
1958	160	297	283	290	172	239	405	666	611	388	228	129	314
1959	210	295	879	485	300	344	222	658	675	600	320	189	359
1960	561	389	491	1075	675	437	227	639	1181	730	367	217	492
1961	217	309	447	332	246	255	379	892	639	464	257	196	488
1962	187	232	326	354	307	223	239	892	1033	451	236	233	420
1963	119	193	254	414	507	300	298	445	800	424	200	147	324
1964	151	286	220	285	429	819	412	666	783	424	464	220	417
1965	136	186	502	429	199	182	187	666	941	715	378	220	468
1966	173	347	537	772	296	424	301	477	556	391	220	157	303
1967	145	192	352	320	209	204	171	518	1031	835	465	234	496
1968	442	727	917	535	339	234	297	468	719	593	315	198	325
1969	129	119	117	133	121	134	266	627	589	593	337	200	488
1970	162	456	551	314	284	270	271	292	706	517	276	168	197
1971	149	194	142	74.3	181	347	224	503	456	301	161	166	242

STATION 12046000 DUNGENESS RIVER NEAR SEQUIM, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1923-1979)

MEAN	216.1	321.9	411.3	379.5	367.1	270.1	312.2	574.0	717.1	505.0	269.6	179.3	376.5
MAXIMUM	561.0	866.0	917.0	1075.0	1042.0	819.0	519.0	893.0	1196.0	840.0	521.0	364.0	545.0
MINIMUM	96.7	86.6	117.0	74.3	106.0	133.0	171.0	292.0	289.0	179.0	129.0	93.8	197.0
STD DEVIATION	107.80	183.30	195.41	189.38	199.38	111.38	82.12	154.90	218.74	169.29	89.27	51.79	88.61
SKEWNESS	1.356	1.240	0.775	1.214	1.327	2.510	0.569	0.266	0.497	0.304	0.790	1.383	-0.212
STD ERR SKEW	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.333	0.333	0.333	0.333	0.340
SER CORR COEFF	0.032	0.140	-0.169	0.049	-0.058	-0.072	-0.163	0.105	-0.047	0.068	0.215	0.215	0.019
COEFF OF VAR	0.499	0.564	0.475	0.499	0.543	0.424	0.263	0.270	0.305	0.335	0.331	0.289	0.235
MEAN LOGS	2.290	2.446	2.565	2.524	2.508	2.402	2.480	2.743	2.835	2.677	2.408	2.237	2.563
STD DEV LOGS	0.192	0.233	0.213	0.231	0.222	0.154	0.114	0.121	0.135	0.156	0.141	0.117	0.111
SKEWNESS LOGS	0.617	0.179	-0.181	-0.621	0.151	0.684	-0.040	-0.281	-0.250	-0.532	0.050	0.298	-0.721
STD ERR SKEW LOGS	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.333	0.333	0.333	0.333	0.340
SER CORR LOGS	0.069	-0.033	-0.141	0.067	-0.066	-0.077	-0.149	0.078	-0.030	0.001	0.173	0.234	0.006
COEFF OF VAR LOGS	0.084	0.095	0.083	0.092	0.088	0.064	0.046	0.044	0.048	0.058	0.059	0.052	0.043
% OF AVE FLOW	4.8	7.1	9.1	8.4	8.1	6.0	6.9	12.7	15.9	11.2	6.0	4.0	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1923-1979)

0.99	85.5	86.0	110.2	76.5	103.9	132.7	162.7	273.1	313.3	179.5	121.6	97.8	176.9
0.95	102.8	118.8	160.2	128.1	142.2	152.3	195.5	342.3	401.4	250.5	150.7	113.4	229.3
0.90	115.0	141.9	194.4	164.7	168.9	166.0	215.4	384.1	455.8	295.3	169.1	123.4	259.8
0.80	133.6	176.9	244.5	218.7	209.0	186.5	242.2	439.4	529.0	356.0	194.6	137.2	298.7
0.50	186.5	274.5	372.9	353.3	318.3	242.7	302.4	560.4	693.5	491.1	255.3	170.5	376.6
0.20	277.4	435.7	557.0	528.1	493.6	334.3	376.7	701.5	892.6	647.5	336.3	215.9	454.7
0.10	350.7	559.8	681.3	632.8	625.6	404.9	422.1	783.3	1011.3	735.6	389.0	246.2	493.8
0.04	460.0	735.5	837.6	751.7	809.5	506.0	476.2	876.4	1149.1	832.5	456.8	284.8	533.2
0.02	554.5	882.9	957.6	831.1	959.3	590.7	514.6	939.6	1244.4	895.9	583.5	314.1	551.0
0.01	661.4	1041.7	1075.6	903.4	1119.9	683.9	551.6	998.5	1334.4	953.1	552.0	343.6	577.2

STATION	1204R000	DUNGENESS RIVER NEAR SEQUIM, WASH.	LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31									
			YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1925			1925	96.0	100.0	109.0	123.0	139.0	171.0	195.0	229.0	288.0
1926			1926	112.0	112.0	115.0	118.0	122.0	134.0	148.0	169.0	199.0
1927			1927	82.0	86.0	92.0	97.0	104.0	117.0	127.0	155.0	196.0
1928			1928	125.0	132.0	157.0	168.0	193.0	222.0	241.0	262.0	319.0
1929			1929	77.0	80.0	84.0	86.0	93.0	112.0	125.0	140.0	152.0
1930			1930	71.0	71.0	80.0	82.0	84.0	89.0	95.0	112.0	133.0
1939			1939	112.0	113.0	116.0	125.0	135.0	146.0	160.0	175.0	232.0
1940			1940	96.0	99.0	102.0	109.0	119.0	119.0	131.0	148.0	239.0
1941			1941	117.0	118.0	121.0	136.0	148.0	158.0	180.0	231.0	276.0
1942			1942	117.0	118.0	123.0	128.0	139.0	154.0	176.0	195.0	284.0
1943			1943	87.0	88.0	89.0	93.0	99.0	110.0	131.0	158.0	193.0
1944			1944	97.0	98.0	101.0	106.0	119.0	136.0	141.0	156.0	158.0
1945			1945	80.0	80.0	82.0	85.0	92.0	100.0	110.0	136.0	165.0
1946			1946	84.0	84.0	85.0	89.0	102.0	129.0	144.0	170.0	208.0
1947			1947	93.0	97.0	100.0	103.0	121.0	124.0	149.0	193.0	236.0
1948			1948	110.0	111.0	115.0	117.0	129.0	150.0	185.0	231.0	270.0
1949			1949	96.0	99.0	105.0	106.0	115.0	149.0	222.0	230.0	235.0
1950			1950	106.0	108.0	111.0	117.0	129.0	163.0	193.0	237.0	341.0
1951			1951	132.0	138.0	145.0	166.0	178.0	238.0	276.0	323.0	465.0
1952			1952	105.0	106.0	108.0	112.0	123.0	171.0	179.0	193.0	206.0
1953			1953	84.0	85.0	87.0	92.0	100.0	103.0	114.0	131.0	216.0
1954			1954	153.0	156.0	163.0	176.0	213.0	255.0	293.0	357.0	425.0
1955			1955	146.0	147.0	148.0	152.0	161.0	215.0	231.0	289.0	409.0
1956			1956	139.0	139.0	140.0	148.0	157.0	187.0	249.0	302.0	363.0
1957			1957	130.0	132.0	133.0	136.0	141.0	191.0	298.0	320.0	325.0
1958			1958	118.0	118.0	124.0	130.0	143.0	164.0	169.0	176.0	220.0
1959			1959	110.0	113.0	117.0	126.0	148.0	170.0	192.0	228.0	325.0
1960			1960	113.0	120.0	123.0	135.0	167.0	183.0	184.0	217.0	287.0
1961			1961	102.0	103.0	104.0	113.0	123.0	138.0	157.0	181.0	241.0
1962			1962	119.0	123.0	126.0	128.0	133.0	146.0	165.0	176.0	217.0
1963			1963	121.0	123.0	127.0	134.0	143.0	177.0	236.0	276.0	341.0
1964			1964	140.0	141.0	145.0	148.0	167.0	195.0	234.0	295.0	363.0
1965			1965	115.0	117.0	119.0	124.0	145.0	160.0	163.0	190.0	226.0
1966			1966	103.0	104.0	105.0	110.0	123.0	169.0	202.0	221.0	221.0
1967			1967	119.0	121.0	126.0	132.0	153.0	185.0	207.0	248.0	380.0
1968			1968	158.0	160.0	168.0	186.0	217.0	290.0	353.0	425.0	425.0
1969			1969	131.0	134.0	138.0	145.0	157.0	187.0	216.0	239.0	286.0
1970			1970	132.0	133.0	137.0	142.0	171.0	194.0	211.0	248.0	248.0
1971			1971	94.0	95.0	101.0	109.0	151.0	177.0	203.0	240.0	240.0
1972			1972	126.0	129.0	136.0	143.0	155.0	152.0	172.0	210.0	274.0
1973			1973	68.0	69.0	72.0	90.0	115.0	145.0	160.0	184.0	184.0
1974			1974	90.0	95.0	99.0	108.0	138.0	151.0	176.0	212.0	291.0
1975			1975	117.0	124.0	129.0	129.0	171.0	246.0	286.0	355.0	411.0
1976			1976	132.0	133.0	136.0	147.0	171.0	109.0	113.0	120.0	126.0
1977			1977	76.0	78.0	82.0	86.0	94.0	109.0	113.0	120.0	126.0
1978			1978	98.0	99.0	103.0	108.0	132.0	156.0	170.0	187.0	250.0
1979			1979	65.0	65.0	65.0	69.0	73.0	90.0	115.0	131.0	177.0

STATION 12048000 DUNGENESS RIVER NEAR SEQUIM, WASH.

LOWEST MEAN FLOW STATISTICS (YEARS 1925-1979)

MEAN	108.4	110.6	114.6	121.6	135.5	160.1	184.8	212.7	266.3
MAXIMUM	158.0	160.0	168.0	196.0	217.0	290.0	353.0	357.0	465.0
MINIMUM	65.0	65.0	65.0	69.0	73.0	89.0	95.0	112.0	126.0
STANDARD DEVIATION	22.48	22.72	24.02	26.03	31.15	43.59	55.96	63.97	82.13
SKWNESS	0.100	0.056	0.121	0.311	0.492	0.802	0.885	0.733	0.590
STD ERROR OF SKEWNESS	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347
SERIAL CORR COEFF	0.268	0.254	0.179	0.161	0.073	0.124	0.169	0.198	0.236
COEFF OF VARIATION	0.207	0.206	0.210	0.214	0.230	0.272	0.303	0.301	0.308
MEAN LOGS	2.026	2.034	2.050	2.075	2.121	2.189	2.248	2.309	2.405
STD DEVIATION LOGS	0.093	0.093	0.094	0.095	0.101	0.116	0.127	0.128	0.134
SKWNESS LOGS	-0.333	-0.393	-0.376	-0.227	-0.209	0.043	0.152	0.128	-0.096
STD ERR SKEWNESS LOGS	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347
SER CORR COEFF LOGS	0.235	0.229	0.176	0.181	0.092	0.126	0.183	0.207	0.232
COEFF OF VAR LOGS	0.046	0.046	0.046	0.046	0.048	0.053	0.057	0.055	0.056

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1925-1979)

0.99	165.5	166.9	174.7	190.1	218.6	290.3	361.9	415.1	511.1
0.98	158.3	160.0	167.3	180.9	207.2	269.3	331.1	380.2	472.5
0.96	150.4	152.4	159.1	170.9	194.9	247.8	300.3	345.3	432.7
0.90	138.3	140.7	146.5	156.2	176.8	218.0	259.0	298.2	376.8
0.80	127.4	129.8	134.9	143.0	160.8	193.5	226.1	260.5	330.4
0.50	107.4	109.7	113.6	119.8	133.1	154.3	175.8	202.6	255.5
0.20	89.0	90.9	93.9	98.2	108.8	123.4	138.1	159.0	196.2
0.10	80.1	81.7	84.3	89.4	97.5	110.0	122.2	140.5	170.5
0.05	73.2	74.5	76.8	81.9	88.9	100.0	110.7	127.1	151.5
0.02	65.9	66.9	68.9	74.0	79.8	89.9	99.3	113.8	132.5
0.01	61.3	62.0	63.8	69.0	74.2	83.8	92.5	105.8	121.1

FLOW DURATION DATA

OAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1925-1979)

P95	P90	P75	P70	P50	P25	P10
120.0	140.0	190.0	200.0	290.0	480.0	730.0

STATION 1204+000 DUNGENESS RIVER NEAR SEQUIM, WASH.													
HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30													
YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA			
										FLOW(CFS)	DATE	REG.(R)	
1924	5140.	3620.	2140.	1830.	1170.	713.	603.	526.	464.	6340.	02/11/24		
1925	2400.	1790.	1170.	1000.	618.	744.	666.	614.	530.	3120.	11/19/24		
1926	740.	559.	398.	347.	338.	317.	274.	274.	263.	740.	12/23/25		
1927	2150.	1440.	1250.	1070.	807.	803.	715.	637.	528.	2860.	12/01/26		
1928	1400.	1070.	994.	880.	628.	505.	448.	416.	416.	1400.	01/12/28		
1929	1000.	922.	821.	744.	653.	628.	550.	479.	369.	1000.	06/15/29		
1930	920.	762.	672.	564.	466.	424.	409.	385.	335.	920.	02/20/30		
1938	3240.	2560.	1470.	1020.	927.	824.	737.	653.	518.	5380.	12/28/37		
1939	2560.	1630.	943.	657.	463.	464.	431.	406.	357.	3850.	01/01/39		
1940	2320.	1880.	1340.	1020.	890.	675.	584.	536.	529.	4010.	12/15/39		
1941	1420.	1090.	802.	567.	535.	485.	434.	402.	377.	2400.	01/17/41		
1942	2860.	1870.	1360.	914.	742.	627.	528.	466.	371.	4120.	12/02/41		
1943	930.	874.	793.	644.	637.	594.	521.	500.	410.	1010.	05/26/43		
1944	884.	577.	501.	486.	439.	381.	331.	292.	248.	1520.	12/03/43		
1945	1600.	1260.	851.	702.	633.	597.	539.	471.	413.	3380.	02/07/45		
1946	1020.	728.	829.	772.	710.	677.	607.	480.	480.	1200.	06/14/46		
1947	2050.	1960.	1390.	893.	679.	593.	531.	502.	478.	2530.	02/12/47		
1948	2200.	2050.	1760.	1660.	1400.	1060.	867.	733.	566.	2790.	10/19/47		
1949	1910.	1240.	1110.	958.	878.	749.	661.	595.	523.	2820.	12/01/48		
1950	3800.	2570.	1730.	1250.	1130.	979.	864.	740.	624.	6820.	11/27/49		
1951	3020.	2570.	1610.	1040.	927.	758.	759.	660.	601.	4600.	02/09/51		
1952	1260.	911.	806.	737.	717.	643.	597.	542.	430.	1860.	04/30/52		
1953	2090.	1570.	1240.	943.	806.	756.	725.	654.	532.	2480.	01/12/53		
1954	1940.	1500.	1180.	1040.	942.	817.	768.	701.	625.	3990.	01/05/54		
1955	2440.	2110.	1620.	1270.	924.	804.	703.	604.	478.	3570.	11/18/54		
1956	5060.	5290.	1860.	1310.	1240.	1110.	970.	877.	676.	6750.	11/03/55		
1957	2560.	2240.	1460.	953.	854.	749.	631.	600.	511.	3880.	12/09/56		
1958	2030.	1540.	1400.	1250.	1080.	900.	739.	625.	569.	2330.	02/24/58		
1959	2100.	1540.	1000.	759.	745.	737.	672.	580.	475.	2900.	04/29/59		
1960	3300.	2110.	1300.	1020.	792.	691.	608.	553.	525.	4800.	01/29/60		
1961	3830.	2460.	1530.	1160.	1100.	940.	803.	694.	661.	5900.	01/15/61		
1962	1190.	907.	828.	668.	629.	547.	479.	427.	342.	1380.	01/03/62		
1963	2180.	2030.	1580.	1040.	841.	666.	651.	576.	485.	3670.	02/04/63		
1964	1620.	1270.	1100.	1040.	928.	778.	654.	558.	446.	3630.	10/22/63		
1965	1300.	1060.	857.	731.	698.	564.	523.	461.	430.	1850.	11/30/64		
1966	1130.	1040.	948.	762.	711.	687.	654.	591.	487.	1370.	05/06/66		
1967	2630.	1900.	1680.	1300.	1190.	1030.	871.	742.	588.	2960.	12/13/66		
1968	3160.	2650.	2300.	1750.	1230.	936.	815.	679.	605.	3920.	01/14/68		
1969	1640.	1440.	1390.	1280.	1180.	992.	808.	698.	548.	1660.	05/24/69		
1970	1410.	1270.	1100.	852.	800.	674.	561.	485.	424.	1850.	12/13/69		
1971	1340.	1230.	1020.	967.	822.	794.	756.	689.	566.	1480.	06/23/71		
1972	2090.	1600.	1190.	1140.	996.	907.	815.	739.	698.	3500.	03/05/72		
1973	2590.	1650.	1130.	916.	693.	554.	482.	419.	370.	3630.	12/26/72		
1974	3400.	2940.	2060.	1300.	1090.	937.	811.	719.	608.	4320.	01/16/74		
1975	1700.	1100.	946.	828.	768.	686.	606.	531.	412.	2170.	12/21/74		
1976	3900.	3100.	1950.	1270.	1090.	834.	734.	673.	537.	5150.	12/03/75		
1977	849.	753.	596.	522.	454.	380.	346.	315.	268.	973.	06/07/77		
1978	1350.	987.	792.	711.	618.	546.	485.	426.	341.	1460.	11/04/78		
1979	990.	884.	712.	624.	575.	481.	429.	388.					

STATION 12048000 DUNGENESS RIVER NEAR SEQUIM, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1924-1979)

W R C
ESTIMATE SYSTEMATIC
RECORD

MEAN	2135.4	1643.7	1220.9	964.4	831.1	710.7	630.7	561.2	478.8	
MAXIMUM	5140.0	3620.0	2300.0	1630.0	1400.0	1110.0	970.0	877.0	698.0	
MINIMUM	740.0	559.0	398.0	347.0	338.0	317.0	293.0	274.0	248.0	
STANDARD DEVIATION	1052.08	735.12	435.32	313.15	239.09	185.50	155.87	132.12	108.34	
SKENNESS	1.010	0.736	0.493	0.683	0.221	0.051	-0.132	-0.144	-0.124	
STD ERROR OF SKENNESS	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340	
SERIAL CORR COEFF	0.136	0.044	0.078	0.342	0.055	0.082	0.082	0.052	0.061	
COEFF OF VARIATION	0.493	0.447	0.357	0.345	0.288	0.261	0.247	0.235	0.226	
MEAN LOGS	3.280	3.173	3.059	2.961	2.901	2.836	2.736	2.668	2.568	3.4178
STD DEVIATION LOGS	0.612	0.196	0.163	0.145	0.133	0.122	0.117	0.111	0.106	0.2490
SKENNESS LOGS	0.003	-0.030	-0.444	-0.375	-0.222	-0.650	-0.734	-0.757	-0.692	-0.0970
STD ERR SKENNESS LOGS	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340	
SER CORR COEFF LOGS	0.151	0.055	0.077	0.104	0.028	0.050	0.055	0.029	0.050	
COEFF OF VAR LOGS	0.065	0.062	0.053	0.049	0.046	0.043	0.042	0.041	0.040	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1924-1979)

0.99	612.6	506.1	422.2	384.5	348.8	313.2	283.9	262.2	234.9	662.1	594.3
0.95	853.7	701.3	589.4	511.3	467.2	412.8	373.5	341.3	299.6	1003.5	965.0
0.90	1018.9	842.3	696.0	590.0	531.1	471.9	426.3	387.3	337.0	1248.1	1232.3
0.80	1262.6	1024.6	842.3	696.4	622.1	548.4	493.9	445.8	384.5	1620.0	1635.9
0.50	1903.1	1501.0	1175.8	934.3	817.1	706.3	630.3	562.3	479.0	2641.2	2707.9
0.20	2869.4	2184.2	1577.4	1217.0	1033.8	871.4	768.1	677.8	573.7	4250.1	4270.3
0.10	3556.8	2847.4	1811.6	1381.5	1152.5	957.2	837.2	734.9	621.3	5421.8	5318.3
0.04	4472.7	3240.8	2076.9	1568.5	1281.1	1046.0	906.9	791.8	669.4	7001.8	6629.2
0.02	5186.4	3687.4	2255.3	1694.9	1384.2	1101.2	949.0	825.9	698.7	8242.1	7587.4
0.01	5925.3	4137.1	2419.6	1812.1	1438.6	1148.9	984.7	854.6	723.6	9530.9	8525.8

STATION 12049400 DEAN CREEK AT BLYN, WASH.

ANNUAL PEAK FLOW DATA

ANNUAL PEAK FLOW STATISTICS (YEARS 1949-1970)

W R C SYSTEMATIC
ESTIMATE RECORD

WATER YEAR	FLOW (CFS)	DATE	MEAN LOGS	STANDARD DEVIATION LOGS	SKENNESS LOGS
1949	47.0	2-22-1949	1.4342	1.4342	1.4342
1950	33.0	2-25-1950	0.2665	0.2665	0.2665
1951	35.0	12-24-1950	0.002	0.002	0.007
1952	32.0	12-5-1951			
1953	21.0	1-8-1953			
1954	45.0	2-13-1954			
1955	34.0	2-8-1955			
1956	49.0	3-3-1956			
1957	108.0	2-24-1957			
1958	16.0	12-25-1957	0.99	0.95	6.5
1959	16.0	11-24-1958	0.90	0.90	9.9
1960	44.0	1-29-1960	0.80	0.80	12.4
1961	20.0	3-15-1961	0.50	0.50	16.2
1962	8.0	4-27-1962	0.20	0.20	27.2
1963	46.0	11-25-1962	0.10	0.10	45.5
1964	17.0	3-21-1964	0.04	0.04	59.7
1965	30.0	1-30-1965	0.02	0.02	79.7
1966	12.0	12-27-1965	0.01	0.01	95.9
1967	49.0	1-19-1967			113.4
1968	21.0	1-14-1968			
1969	21.0	2-11-1969			
1970	11.0	1-23-1970			

ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES
LOG-PEARSON III ANALYSIS (YEARS 1949-1970)

0.99	6.5
0.95	9.9
0.90	12.4
0.80	16.2
0.50	27.2
0.20	45.5
0.10	59.7
0.04	79.7
0.02	95.9
0.01	113.4

STATION 12050500 SNOW CREEK NEAR MAYNARD, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1952													
1953	2.38	4.43	19.9	53.0	19.8	12.7	16.5	18.2	11.9	7.17	2.94	2.41	2.41
1954	6.73	20.4	21.3	37.4	68.5	20.6	18.0	14.2	15.9	8.63	6.04	4.27	16.0
1955	7.45	26.3	28.0	16.6	18.6	15.1	32.1	24.2	24.0	13.8	5.77	9.41	20.7
1956	4.71	24.1	47.9	45.3	16.5	30.2	46.0	19.7	20.6	19.9	5.99	3.89	18.5
1957	11.3	8.17	16.9	6.55	21.4	33.0	27.4	13.3	7.50	8.21	4.25	3.67	22.5
1958	3.31	4.70	16.0	24.2	46.7	15.4	18.1	8.14	10.2	3.70	2.54	2.80	13.4
1959	3.45	7.41	15.7	94.7	22.8	23.0	21.9	33.6	12.7	4.85	2.13	2.51	12.7
1960	3.00	9.05	18.9	29.0	37.7	14.4	16.7	30.6	11.2	3.85	2.74	2.79	20.5
1961	3.24	9.25	12.3	21.0	39.9	46.9	24.6	27.1	6.63	3.09	1.88	1.88	14.9
1962	3.45	5.52	11.0	8.85	7.36	7.97	11.9	24.4	16.8	3.54	2.76	2.58	16.4
1963	17.3	24.5	24.4	10.5	24.6	7.49	13.4	25.4	12.4	22.8	5.77	3.79	16.0
1964	7.91	19.3	15.7	24.5	14.4	11.0	15.1	18.1	28.8	7.43	7.05	4.13	14.4
1965	3.65	8.90	14.2	39.9	33.0	12.5	18.6	10.3	4.55	3.22	3.17	2.59	12.8
1966	2.90	7.72	6.71	25.6	18.2	37.6	18.2	12.3	10.5	11.2	2.96	3.66	13.1
1967	5.71	12.8	59.1	38.8	20.0	48.7	25.6	24.8	7.55	3.55	2.16	2.03	21.0
1968	5.27	4.88	25.6	58.5	29.7	26.8	13.4	9.73	7.53	3.92	2.92	2.70	15.9
1969	2.89	10.1	35.2	14.8	28.7	16.4	26.4	12.5	5.32	8.73	3.45	3.41	14.0
1970	3.38	6.83	34.7	29.9	17.5	10.4	15.8	24.5	7.11	3.39	2.47	4.01	13.3
1971	9.35	9.01	29.2	40.8	24.4	37.0	27.6	13.7	12.2	9.26	2.49	4.44	18.3
1972	3.98	14.7	23.4	23.3	36.6	56.1	36.5	21.1	11.0	5.41	3.11	3.59	19.8
1973													

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MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1952-1973)

MEAN	5.6	11.9	23.8	32.2	27.3	24.2	22.2	19.3	12.9	7.7	3.7	3.5	16.2
MAXIMUM	17.3	26.3	59.1	94.7	68.5	56.1	46.0	33.6	28.8	22.8	7.1	9.4	22.5
MINIMUM	2.4	4.4	6.7	6.6	7.4	7.5	11.9	8.1	4.6	3.1	1.9	1.9	8.9
STD DEVIATION	3.69	7.11	12.76	20.54	13.73	14.70	8.70	7.36	6.92	5.43	1.55	1.56	3.54
SKWENESS	0.974	1.392	1.511	1.498	0.826	0.826	1.257	0.216	1.095	1.694	0.939	2.895	0.080
STD ERR SKEW	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.501	0.501	0.501	0.501	0.512
SER CORR COEFF	-0.038	0.332	0.060	-0.067	-0.248	0.186	0.319	0.170	0.119	0.041	0.506	0.244	0.018
COEFF OF VAR	0.663	0.598	0.536	0.639	0.503	0.608	0.392	0.381	0.536	0.706	0.423	0.447	0.219
MEAN LOGS	0.678	1.007	1.323	1.424	1.389	1.306	1.318	1.253	1.056	0.804	0.531	0.514	1.198
STD DEV LOGS	0.235	0.247	0.223	0.287	0.211	0.267	0.157	0.178	0.222	0.263	0.171	0.151	0.099
SKWENESS LOGS	0.840	0.336	-0.026	-0.385	-0.199	0.091	0.499	-0.332	0.191	0.621	0.524	1.191	-0.508
STD ERR SKEW LOGS	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.501	0.501	0.501	0.501	0.512
SER CORR LOGS	-0.030	0.177	0.128	0.030	-0.429	0.218	0.256	0.102	0.145	0.058	0.522	0.344	0.011
COEFF OF VAR LOGS	0.346	0.245	0.168	0.202	0.152	0.205	0.119	0.142	0.211	0.327	0.321	0.294	0.083
% OF AVE FLOW	2.9	6.1	12.3	16.6	14.1	12.4	11.4	9.9	6.7	4.0	1.9	1.8	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1952-1973)

0.99	1.9	3.1	6.3	4.7	7.4	5.0	10.3	6.3	3.7	2.1	1.6	2.0	8.5
0.95	2.3	4.2	9.0	8.4	10.7	7.5	12.1	8.8	5.0	2.6	1.9	2.1	10.5
0.90	2.6	5.0	10.9	11.1	13.0	9.3	13.4	10.5	6.0	3.1	2.1	2.2	11.7
0.80	3.0	6.3	13.7	15.5	16.4	12.0	15.3	12.8	7.4	3.8	2.4	2.4	13.1
0.50	4.4	9.9	21.1	27.7	24.9	20.1	20.2	18.3	11.2	6.0	3.3	3.1	16.1
0.20	7.2	16.2	32.4	46.7	37.0	33.9	27.8	25.4	17.4	10.3	4.7	4.2	18.2
0.10	9.8	21.4	40.5	60.0	45.1	44.8	33.5	29.7	22.1	14.2	5.7	5.2	20.8
0.04	14.1	29.3	51.4	77.1	55.4	60.6	41.4	34.9	28.8	20.7	7.2	6.7	25.5
0.02	18.1	36.1	59.8	89.8	63.0	73.9	47.8	38.5	34.3	26.7	8.5	8.1	26.6
0.01	23.0	43.8	68.6	102.4	70.5	88.3	54.8	41.9	40.2	34.1	9.8	9.7	24.6

STATION 12050500 SNO-CREEK NEAR MAYNARD, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1954	2.9	2.9	2.9	3.0	3.9	5.0	5.4	6.0	11.0
1955	3.4	3.5	3.7	4.2	5.2	7.0	7.2	7.5	11.0
1956	3.1	3.1	3.3	3.4	3.8	4.0	4.7	7.1	13.0
1957	2.7	2.7	2.9	3.4	3.6	3.7	4.0	6.1	8.3
1958	2.2	2.3	2.4	2.4	2.5	3.0	3.3	3.7	4.8
1959	2.1	2.1	2.2	2.2	2.3	2.4	2.6	2.9	4.8
1960	1.1	1.1	1.5	1.6	2.1	2.1	2.5	2.6	4.9
1961	1.4	1.4	1.4	1.5	2.1	2.6	2.7	3.0	5.4
1962	1.6	1.6	1.6	1.6	1.8	1.9	2.1	2.5	3.5
1963	1.9	1.9	2.0	2.1	2.4	2.6	2.9	3.8	9.2
1964	2.8	2.8	2.9	3.3	3.8	4.5	5.5	7.1	10.0
1965	2.6	2.7	2.7	3.0	3.6	3.9	4.7	5.4	7.5
1966	1.8	1.8	1.9	2.1	2.6	2.7	2.9	3.0	4.0
1967	1.8	1.9	2.1	2.5	2.7	3.3	3.7	4.7	7.1
1968	1.7	1.7	1.7	1.8	1.9	2.1	2.5	3.2	4.2
1969	2.1	2.1	2.4	2.6	2.7	2.8	3.1	3.2	4.7
1970	1.9	1.9	2.0	2.1	2.3	2.9	3.0	4.9	4.9
1971	2.1	2.1	2.1	2.2	2.4	2.8	3.2	4.0	5.8
1972	2.1	2.1	2.2	2.3	2.5	3.3	3.3	4.4	6.8

LOWEST MEAN FLOW STATISTICS (YEARS 1954-1972)

MEAN	2.2	2.2	2.3	2.5	2.9	3.3	3.6	4.4	6.9
MAXIMUM	3.4	3.5	3.7	4.2	5.2	7.0	7.2	7.5	13.0
MINIMUM	1.1	1.1	1.5	1.6	1.8	1.9	2.1	2.5	3.5
STANDARD DEVIATION	0.60	0.61	0.62	0.68	0.87	1.22	1.31	1.63	2.79
SKEWNESS	0.386	0.405	0.602	0.911	1.198	1.718	1.356	0.711	0.800
STD ERROR OF SKEWNESS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SERIAL CORR COEFF	0.704	0.695	0.564	0.539	0.611	0.544	0.573	0.601	0.572
COEFF OF VARIATION	0.276	0.280	0.268	0.270	0.304	0.370	0.358	0.368	0.405
MEAN LOGS	0.321	0.325	0.352	0.388	0.441	0.494	0.539	0.619	0.806
STD DEVIATION LOGS	0.123	0.125	0.114	0.112	0.122	0.141	0.140	0.154	0.169
SKEWNESS LOGS	-0.299	-0.308	0.137	0.430	0.643	0.773	0.728	0.329	0.328
STD ERR SKEWNESS LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SER CORR COEFF LOGS	0.651	0.646	0.648	0.520	0.591	0.555	0.582	0.585	0.456
COEFF OF VAR LOGS	0.384	0.384	0.325	0.288	0.276	0.286	0.260	0.249	0.210

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1954-1972)

0.99	3.8	3.9	4.3	4.8	6.0	7.9	8.7	10.4	17.4
0.98	3.6	3.6	3.9	4.4	5.4	6.9	7.6	9.2	15.2
0.96	3.3	3.4	3.6	4.0	4.8	6.0	6.5	8.1	13.2
0.90	3.0	3.0	3.2	3.4	4.0	4.8	5.3	6.6	10.7
0.80	2.7	2.7	2.8	3.0	3.4	4.0	4.5	5.6	8.8
0.50	2.1	2.1	2.2	2.2	2.7	3.0	3.3	4.1	6.3
0.20	1.7	1.7	1.8	2.0	2.2	2.4	2.6	3.1	4.6
0.10	1.4	1.4	1.6	1.8	2.0	2.1	2.4	2.7	3.9
0.05	1.3	1.3	1.5	1.7	1.8	2.0	2.2	2.4	3.5
0.02	1.1	1.1	1.3	1.5	1.7	1.8	2.0	2.1	3.1
0.01	1.0	1.0	1.3	1.5	1.6	1.8	1.9	2.0	2.8

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1954-1972)

P95	P90	P75	P70	P50	P25	P10
2.4	2.8	4.4	5.2	10.0	20.0	36.0

STATION 12051500 CHIMACUM CREEK NR CHIMACUM, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1952									3.16	2.69	2.24	2.60	
1953	3.25	5.10	22.8	36.3	13.4	13.5	9.45	7.64	11.7	4.54	3.73	3.17	11.2
1954	4.49	12.0	13.0	42.1	69.0	19.6	10.5	7.10	7.49	5.22	4.36	5.89	16.4
1955	5.22	15.8	23.7	18.2	15.4	19.4	23.8	11.3	10.3	9.10	3.39	3.71	13.3
1956	6.23	20.1	61.0	70.0	32.7	36.2	11.0	5.15	8.06	3.53	3.56	4.21	21.9
1957	9.66	6.39	13.5	12.5	33.1	43.2	20.0	7.78	4.82	5.37	4.40	3.88	13.6
1958	6.31	7.37	25.2										

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1953	102.0	1- 9-1953
1954	213.0	2-13-1954
1955	125.0	4-12-1955
1956	222.0	1- 6-1956
1957	167.0	2-26-1957

STATION 12052000 LITTLE QUILCENE RIVER NR QUILCENE, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1926									39.8	20.2	13.0	7.48	46.7
1927	27.7	41.2	74.8	90.4	76.2	60.0	45.2	55.4	13.4	13.4	9.46	17.5	
1951									38.9	20.8	13.7	7.28	44.9
1952	17.0	40.4	63.3	43.0	89.7	51.8	78.3	65.7	85.6	40.0	26.9	19.4	52.4
1953	7.43	13.5	66.5	164	62.6	38.3	47.9	56.5	47.6	43.5	26.4	29.1	66.7
1954	26.3	79.0	71.3	122	207	68.5	46.1	45.3	65.1	65.5	25.3	16.0	51.6
1955	30.8	90.4	87.5	46.3	44.6	33.1	60.0	54.4	94.6	41.1	23.2	16.6	69.7
1956	17.7	80.7	115	122	45.1	82.9	113	83.8	33.4	32.8	22.3	9.84	45.5
1957	37.4	32.8	49.7	25.9	69.6	102	74.9	57.1					
1958	10.6	14.0	43.1										

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1927	271.0	1- 2-1927
1952	565.0	4-30-1952
1953	524.0	1- 9-1953
1954	820.0	2-13-1954
1955	407.0	11-19-1954
1956	545.0	1- 5-1956
1957	480.0	2-24-1957

STATION 12052400 PENNY CREEK NEAR QUILCENE, WASH.		ANNUAL PEAK FLOW STATISTICS (YEARS 1949-1968)				W R C	SYSTEMATIC
ANNUAL PEAK FLOW DATA		ANNUAL PEAK FLOW DATA				ESTIMATE	RECORD
WATER YEAR	FLOW(CFS)	DATE	MEAN LOGS				
1949	332.0	2-22-1949	STANDARD DEVIATION LOGS		2.2977	2.2977	2.2977
1950	232.0	2-25-1950	SKEWNESS LOGS		0.2963	0.2963	0.2963
1951	352.0	12-16-1950			0.005	0.005	-0.761
1952	376.0	11-27-1951					
1953	223.0	1- 9-1953					
1954	456.0	2-13-1954	ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES				
1955	191.0	11-18-1954	LOG-PEARSON III ANALYSIS (YEARS 1949-1968)				
1956	348.0	1- 6-1956					
1957	281.0	2-24-1957		0.99	40.7	40.7	28.1
1958	135.0	12-25-1957		0.95	64.7	64.7	56.9
1959	557.0	1- 8-1959		0.90	82.8	82.8	79.8
1960	277.0	1-29-1960		0.80	111.8	111.8	116.3
1961	150.0	2-11-1961		0.50	198.4	198.4	216.2
1962	93.0	11-30-1961		0.20	352.4	352.4	356.0
1963	133.0	11-25-1962		0.10	476.0	476.0	441.7
1964	71.0	0- 0-1964		0.04	656.0	656.0	538.8
1965	39.0	1-30-1965		0.02	807.3	807.3	602.8
1966	82.0	3-14-1966		0.01	973.0	973.0	660.0
1967	245.0	12- 1-1966					
1968	216.0	1-14-1968					

STATION 12053000 DOSEWALLIPS RIVER NR BRINNON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1931	167	189	171	662	424	359	401	676	664	368	182	200	372
1932	172	395	426	371	558	520	521	732	981	535	278	154	469
1933	161	630	383	354	158	280	369	637	1190	1076	482	315	504
1934	385	479	1203	811	480	583	648	637	1490	1076	482	315	504
1935	409	1080	543	1091	692	422	326	625	760	519	265	248	581
1936	173	149	298	401	205	279	468	899	943	424	214	154	384
1937	107	79.4	264	106	111	340	406	808	1272	602	265	159	386
1938	258	762	738	496	293	412	551	935	1116	602	235	159	547
1939	244	251	409	587	246	278	429	603	546	397	198	127	361
1940	131	244	1068	826	611	579	489	827	607	325	187	154	505
1941	523	372	618	552	564	413	482	594	565	355	191	208	453
1942	271	510	858	328	326	185	360	564	669	445	208	132	405
1943	122	340	397	293	342	280	677	551	685	528	235	145	382
1944	243	228	369	373	243	224	262	477	508	251	147	135	289
1945	161	541	412	522	628	334	293	863	750	477	223	180	447
1946	181	381	562	434	291	296	451	1078	1039	832	392	204	513
1947	164	239	570	323	806	381	423	703	587	350	184	132	403
1948	545	353	483	400	294	218	306	903	1273	593	292	259	494
1949	349	370	332	167	332	426	477	1008	837	531	281	205	440
1951	306	370	332	167	332	426	477	1008	889	524	233	172	

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1931-1951)

MEAN	248.6	399.6	531.8	478.8	400.2	358.4	438.9	742.9	817.4	507.0	244.1	179.0	445.5
MAXIMUM	545.0	1080.0	1203.0	1091.0	806.0	583.0	677.0	1078.0	1273.0	1076.0	482.0	315.0	581.0
MINIMUM	107.0	79.4	171.0	106.0	111.0	185.0	262.0	477.0	467.0	251.0	147.0	127.0	289.0
STD DEVIATION	130.52	236.27	269.07	239.08	194.64	114.97	111.43	169.98	257.88	193.07	77.88	49.83	75.27
SKEDNESS	1.212	1.436	1.272	0.976	0.536	0.594	0.518	0.401	0.493	1.499	1.842	1.318	-0.103
STD ERR SKEW	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.512	0.512	0.512	0.512	0.524
SER CORR COEFF	-0.011	-0.179	-0.043	0.284	-0.178	-0.107	-0.440	0.257	0.079	-0.174	-0.017	-0.306	-0.012
COEFF OF VAR	0.525	0.591	0.506	0.499	0.486	0.321	0.254	0.229	0.315	0.381	0.319	0.278	0.169
MEAN LOGS	2.346	2.532	2.678	2.625	2.549	2.533	2.629	2.860	2.892	2.679	2.370	2.239	2.643
STD DEV LOGS	0.208	0.262	0.208	0.237	0.229	0.140	0.111	0.099	0.136	0.151	0.120	0.110	0.076
SKEDNESS LOGS	0.512	-0.428	0.094	-0.741	-0.401	-0.038	-0.086	0.065	0.112	0.433	1.000	0.807	-0.508
STD ERR SKEW LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.512	0.512	0.512	0.512	0.524
SER CORR LOGS	-0.034	-0.099	0.043	0.179	-0.073	-0.112	-0.372	0.278	0.065	-0.171	-0.110	-0.316	0.005
COEFF OF VAR LOGS	0.089	0.103	0.078	0.090	0.090	0.055	0.042	0.035	0.047	0.056	0.051	0.049	0.029
% OF AVE FLOW	4.6	7.5	9.9	9.0	7.5	6.7	8.2	13.9	15.3	9.5	4.6	3.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1931-1951)

0.99	87.4	69.5	161.3	89.3	89.3	160.2	231.6	431.1	385.9	237.9	151.1	111.8	274.1
0.95	108.9	117.9	219.2	156.0	140.9	200.6	278.2	500.3	470.4	282.3	162.9	121.9	321.8
0.90	124.1	153.7	258.9	204.0	177.1	225.9	306.4	542.1	523.9	311.8	171.6	129.0	348.3
0.80	147.2	208.3	317.4	275.1	230.5	260.7	343.9	597.9	598.1	354.7	185.3	139.5	381.3
0.50	212.9	355.1	472.8	451.1	366.9	342.1	427.3	723.0	775.5	465.7	224.2	167.5	445.8
0.20	326.2	569.9	711.7	672.9	555.7	447.7	528.1	877.4	1013.8	633.5	289.3	211.2	510.3
0.10	417.6	713.0	885.1	800.9	677.4	514.7	588.7	972.2	1170.1	755.1	340.0	243.2	543.4
0.04	553.7	890.2	1120.4	940.9	825.0	660.0	660.0	1085.7	1366.9	920.9	413.0	287.4	577.7
0.02	671.4	1018.3	1307.0	1030.9	930.1	656.3	710.0	1166.7	1513.5	1053.7	474.3	323.1	599.1
0.01	804.2	1142.4	1503.2	1110.4	1031.0	714.7	757.7	1245.2	1660.3	1194.5	541.8	361.1	617.9

STATION 12053000 DOSEWALLIPS RIVER NR BRINNON, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1932	106.0	108.0	109.0	114.0	138.0	170.0	179.0	221.0	280.0
1933	107.0	108.0	114.0	122.0	130.0	157.0	194.0	247.0	306.0
1934	180.0	188.0	196.0	222.0	275.0	294.0	384.0	398.0	608.0
1935	101.0	102.0	104.0	107.0	121.0	135.0	165.0	210.0	347.0
1936	112.0	114.0	114.0	118.0	135.0	158.0	177.0	198.0	243.0
1937	67.0	67.0	69.0	73.0	78.0	89.0	101.0	121.0	138.0
1938	120.0	125.0	126.0	139.0	161.0	172.0	209.0	285.0	446.0
1939	104.0	105.0	110.0	126.0	146.0	157.0	187.0	218.0	312.0
1940	94.0	96.0	98.0	110.0	114.0	125.0	140.0	170.0	273.0
1941	115.0	116.0	117.0	127.0	146.0	156.0	186.0	242.0	341.0
1942	135.0	137.0	146.0	148.0	176.0	191.0	222.0	235.0	337.0
1943	80.0	81.0	84.0	93.0	104.0	118.0	147.0	181.0	248.0
1944	112.0	115.0	121.0	128.0	134.0	153.0	193.0	209.0	260.0
1945	86.0	86.0	88.0	96.0	116.0	126.0	133.0	162.0	271.0
1946	97.0	107.0	108.0	110.0	120.0	154.0	184.0	218.0	323.0
1947	97.0	102.0	106.0	111.0	136.0	147.0	180.0	244.0	311.0
1948	101.0	104.0	110.0	112.0	131.0	154.0	196.0	260.0	323.0
1949	112.0	114.0	121.0	122.0	132.0	176.0	262.0	263.0	270.0

LOWEST MEAN FLOW STATISTICS (YEARS 1932-1949)

MEAN	107.0	109.6	113.4	121.0	138.5	157.3	191.1	226.8	313.2
MINIMUM	180.0	188.0	196.0	222.0	275.0	294.0	384.0	398.0	608.0
STANDARD DEVIATION	67.0	67.0	69.0	73.0	78.0	89.0	101.0	121.0	138.0
STANDARD DEVIATION	23.82	25.19	26.69	30.44	40.20	41.61	59.82	58.63	95.90
SKWENESS	1.550	1.610	1.626	2.113	2.350	1.971	1.980	1.165	1.624
STD ERR OF SKWENESS	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SERIAL CORR COEFF	-0.174	-0.221	-0.203	-0.161	-0.184	-0.174	-0.086	0.015	-0.017
COEFF OF VARIATION	0.223	0.230	0.235	0.252	0.290	0.264	0.313	0.259	0.306
MEAN LOGS	2.020	2.030	2.044	2.072	2.128	2.184	2.284	2.343	2.478
STD DEVIATION LOGS	0.090	0.093	0.095	0.097	0.109	0.104	0.122	0.110	0.127
SKWENESS LOGS	0.442	0.396	0.436	0.794	0.889	0.490	0.525	-0.119	-0.208
STD ERR SKWENESS LOGS	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SER CORR COEFF LOGS	-0.224	-0.271	-0.248	-0.201	-0.226	-0.214	-0.111	-0.001	-0.024
COEFF OF VAR LOGS	0.045	0.046	0.046	0.047	0.051	0.048	0.054	0.047	0.051

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1932-1949)

0.99	181.7	187.7	197.4	225.3	281.1	290.9	391.6	387.6	568.5
0.98	188.4	174.0	182.4	204.3	250.6	266.0	352.0	363.9	531.2
0.96	155.3	160.4	167.6	184.3	222.4	241.7	314.3	339.0	491.7
0.90	137.9	142.2	147.8	159.2	187.6	210.1	266.2	303.2	434.7
0.80	124.1	127.7	132.3	140.5	162.7	185.7	230.3	272.6	365.8
0.50	103.2	105.7	109.0	114.6	129.3	150.3	179.3	221.2	303.8
0.20	87.7	89.2	91.9	97.4	108.3	124.5	144.6	178.1	235.8
0.10	81.2	82.3	84.7	90.9	100.5	114.2	130.9	158.6	205.3
0.05	76.5	77.3	79.6	86.4	95.4	106.8	121.3	143.9	182.6
0.02	71.9	72.3	74.5	82.3	90.8	99.7	112.2	128.8	159.5
0.01	69.1	69.3	71.5	80.0	88.3	95.5	106.9	119.5	145.5

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "PPM" PERCENT OF THE TIME (YEARS 1932-1949)

	P95	P90	P75	P70	P50	P25	P10
120.0	120.0	140.0	210.0	230.0	350.0	570.0	860.0

STATION 12053000 DOSEWALLIPS RIVER NR BRINNON, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW (CFS) DATE REG. (H)
1931	3360.	2180.	1810.	1220.	817.	684.	599.	546.	551.	4860. 01/23/31
1932	3960.	3310.	1960.	1200.	989.	863.	769.	749.	655.	4790. 02/26/32
1933	2180.	1980.	1610.	1370.	1290.	1150.	981.	878.	678.	4050. 11/13/32
1934	3700.	2860.	1880.	1610.	1340.	1050.	873.	788.	734.	5980. 12/21/33
1935	5510.	3950.	2990.	2070.	1330.	917.	908.	885.	720.	10900. 11/05/34
1936	1910.	1640.	1250.	1100.	1040.	926.	823.	699.	544.	2460. 06/16/36
1937	1800.	1480.	1390.	1300.	1270.	1070.	931.	808.	631.	1980. 12/22/36
1938	2670.	2520.	1500.	1320.	1190.	1050.	937.	812.	664.	3870. 12/28/37
1939	3070.	2130.	1350.	1480.	1310.	957.	854.	507.	453.	4220. 01/01/39
1940	3020.	2380.	1760.	1380.	1300.	656.	585.	779.	736.	4310. 12/08/39
1941	2160.	1730.	1380.	903.	730.	600.	517.	552.	552.	3400. 10/20/40
1942	4050.	2520.	1850.	1190.	962.	701.	600.	517.	451.	6370. 12/02/41
1943	1300.	1010.	914.	766.	750.	677.	641.	622.	511.	1580. 12/02/43
1944	2000.	1290.	824.	607.	551.	495.	426.	379.	354.	3410. 12/03/43
1945	2760.	2190.	1360.	933.	879.	812.	708.	607.	576.	4950. 02/07/45
1946	1620.	1390.	1310.	1240.	1160.	1090.	993.	880.	691.	1780. 06/14/46
1947	3010.	2850.	1890.	1170.	834.	657.	590.	601.	552.	3650. 02/12/47
1948	2410.	2060.	1790.	1740.	1490.	1150.	937.	793.	608.	5740. 10/18/47
1949	1670.	1620.	1530.	1280.	1120.	941.	824.	726.	620.	1830. 05/12/49
1950										13200. 11/26/49
1951										3990. 02/09/51
1952										2230. 04/30/52
1953										3200. 01/09/53
1954										3230. 11/13/53
1955										5330. 11/19/54
1956										8050. 11/03/55
1957										5430. 12/09/56
1958										5180. 02/24/58
1959										4300. 01/08/59
1960										6800. 01/29/60
1961										7520. 01/15/61
1962										2790. 01/03/62
1963										7980. 02/04/63
1964										5610. 10/21/63
1965										3570. 11/30/64
1966										2740. 05/06/66
1967										6130. 12/01/66
1968										8220. 01/14/68

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1931-1968)

	W R C ESTIMATE	SYSTEMATIC RECORD
MEAN	2734.7	2152.1
MAXIMUM	5510.0	3950.0
MINIMUM	1300.0	1010.0
STANDARD DEVIATION	1059.77	731.11
STANDARD ERROR OF SKEWNESS	0.958	0.776
SERIAL CORR COEFF	0.524	0.524
COEFF OF VARIATION	-0.041	-0.001
MEAN LOGS	3.407	3.309
STD DEVIATION LOGS	0.164	0.148
SKEWNESS LOGS	0.105	-0.101
STD ERR SKEWNESS LOGS	0.524	0.524
SER CORR COEFF LOGS	-0.060	0.028
COEFF OF VAR LOGS	0.048	0.045
MEAN	692.9	593.7
MAXIMUM	885.0	736.0
MINIMUM	379.0	354.0
STANDARD DEVIATION	145.17	104.35
STANDARD ERROR OF SKEWNESS	-0.471	-0.578
SERIAL CORR COEFF	0.524	0.524
COEFF OF VARIATION	0.127	0.137
MEAN LOGS	2.831	2.767
STD DEVIATION LOGS	0.099	0.083
SKEWNESS LOGS	-0.918	-1.044
STD ERR SKEWNESS LOGS	0.524	0.524
SER CORR COEFF LOGS	0.136	0.139
COEFF OF VAR LOGS	0.037	0.030
MEAN	3.6369	3.6369
MAXIMUM	0.2159	0.2159
MINIMUM	-0.0030	-0.0630

STATION 12053000 DOSEWALLIPS RIVER NR BRINNON, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1931-1968)

0.99	1092.7	902.3	764.9	551.1	458.9	427.5	374.9	343.0	326.3	1362.3	1332.6
0.95	1386.6	1155.2	948.6	710.1	601.0	538.3	478.1	442.0	407.7	1912.9	1896.7
0.90	1581.6	1314.9	1060.8	806.1	645.8	603.3	537.8	498.1	452.3	2292.0	2284.9
0.80	1856.0	1534.9	1211.3	933.0	795.2	685.8	613.5	567.9	506.0	2852.9	2857.3
0.50	2538.4	2050.8	1548.6	1205.8	1026.7	858.8	764.9	700.7	603.5	4355.5	4357.3
0.20	3504.3	2718.0	1958.9	1517.4	1273.2	1041.5	916.9	823.1	687.0	6586.5	6595.6
0.10	4163.4	3139.1	2205.8	1691.9	1404.0	1138.6	993.4	879.6	753.2	8194.6	8167.4
0.04	5017.8	3651.4	2495.6	1885.2	1542.0	1241.8	1071.0	932.8	755.4	10235.6	10235.6
0.02	5669.9	4020.8	2698.3	2013.2	1629.3	1307.6	1118.4	962.9	772.9	12021.5	11828.1
0.01	6335.2	4381.0	2891.4	2129.8	1705.9	1365.8	1158.8	987.1	786.3	13762.0	13460.2

STATION 12053400 DOSEWALLIPS R TRIBUTARY NEAR BRINNON, WASH.

ANNUAL PEAK FLOW DATA

WATER YEAR	ANNUAL PEAK FLOW (CFS)	DATE
1951	52.0	2-10-1951
1952	30.0	1-30-1952
1953	26.0	1- 9-1953
1954	53.0	2-13-1954
1955	53.0	11-19-1954
1956	47.0	11- 5-1956
1957	57.0	2-24-1957
1958	36.0	2-24-1958
1959	66.0	1- 8-1959
1960	32.0	1-29-1960
1961	26.0	1-15-1961
1962	32.0	11-30-1961
1963	40.0	11-25-1962
1964	23.0	11-23-1963
1965	11.0	1-30-1965
1966	28.0	1-13-1966
1967	39.0	12-11-1966
1968	41.0	1-14-1968
1969	55.0	12-24-1968
1970	30.0	12-13-1969

ANNUAL PEAK FLOW STATISTICS (YEARS 1951-1970)

W R C	SYSTEMATIC
ESTIMATE	RECORD
1.5748	1.5580
0.1423	0.1803
0.008	-1.072

MEAN LOGS
STANDARD DEVIATION LOGS
SKEWNESS LOGS

ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES
LOG-PEARSON III ANALYSIS (YEARS 1951-1970)

0.99	--	10.1
0.95	0.0	16.5
0.90	24.7	20.7
0.80	28.5	26.5
0.50	37.6	38.9
0.20	49.5	51.4
0.10	57.2	57.4
0.04	66.7	62.9
0.02	73.8	66.0
0.01	80.7	68.4

STATION 12054000 DUCKABUSH RIVER NEAR BRINNON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1938	258	301	450	656	220	254	318	411	370	343	113	68.3	304
1939	89.0	217	1266	811	598	547	402	594	358	154	96.9	63.3	432
1940	513	384	672	569	539	357	374	507	380	180	82.2	70.6	400
1941	254	617	951	335	334	162	287	430	486	272	107	226	357
1942	71.9	413	382	256	277	656	334	396	463	308	115	98.8	311
1943	321	249	375	452	246	198	232	354	453	145	75.1	73.0	257
1944	115	704	342	518	648	300	251	717	499	301	120	119	384
1945	129	474	690	459	326	300	457	810	586	240	118	118	448
1946	136	282	650	292	878	297	290	349	349	180	95.8	77.3	324
1947	662	324	521	370	340	223	325	796	861	364	169	208	431
1948	275	400	302	129	323	495	405	323	520	323	156	132	353
1949	132	822	596	351	547	482	398	569	903	592	267	116	480
1950	477	631	1059	470	698	239	484	576	548	287	112	90.5	471
1951	428	479	349	214	434	240	560	772	626	484	206	96.8	407
1952	65.8	155	477	1140	486	383	408	669	584	598	280	183	448
1953	392	967	662	448	868	362	362	546	544	595	203	188	448
1954	400	1254	625	266	330	162	323	412	737	512	234	143	518
1955	329	714	500	451	148	297	626	1043	1088	766	294	182	537
1956	455	348	540	170	541	490	459	742	290	428	203	110	406
1957	266	284	482	711	1015	357	396	720	608	240	163	109	396
1958	242	531	690	919	262	265	516	609	625	369	102	81.7	435
1959	235	525	565	516	621	327	479	516	573	341	137	293	456
1960	195	409	887	927	681	435	725	725	847	420	147	86.1	410
1961	187	411	448	457	409	177	337	391	509	337	160	130	326
1962	586	735	743	380	842	266	443	538	419	272	135	95.3	456
1963	442	843	554	575	290	234	244	393	758	479	214	114	428
1964	120	329	324	435	490	237	425	383	452	237	118	66.7	305
1965	150	560	411	438	308	411	507	674	457	428	203	110	406
1966	177	654	1470	589	395	477	240	473	949	536	230	123	541
1967	803	440	585	1052	777	587	237	473	577	363	169	157	519
1968	334	477	646	346	324	361	534	394	964	368	164	300	483
1969	240	452	591	527	379	349	311	394	580	268	104	92.1	357
1970	226	471	449	477	548	376	444	483	686	708	239	216	479
1971	172	469	324	353	501	883	480	650	668	528	190	125	336
1972	98.8	503	631	516	273	281	214	483	483	273	126	163	564
1973	196	628	949	883	335	704	424	515	889	686	364	163	382
1974	85.1	361	631	436	283	336	232	556	689	502	297	161	453
1975	817	452	800	478	266	233	268	325	427	445	228	116	453
1976	85.8	120	167	156	228	238	332	314	375	136	111	191	204
1977	269	604	704	575	531	469	404	468	482	326	291	523	475
1978	145	234	175	116	379	473	250	525	361	227	95.2	207	265

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1938-1979)

MEAN	282.3	504.9	594.9	493.2	470.2	358.0	383.5	580.1	595.1	379.9	178.7	143.6	413.7
MAXIMUM	817.0	1254.0	1470.0	1180.0	1015.0	883.0	656.0	1043.0	1088.0	766.0	376.0	523.0	564.0
MINIMUM	65.8	120.0	167.0	116.0	148.0	162.0	214.0	314.0	349.0	136.0	75.1	57.6	204.0
STD DEVIATION	190.35	231.97	262.32	241.33	216.09	157.30	111.38	170.00	192.39	160.03	79.93	84.52	83.56
SKEWNESS	1.276	0.969	1.308	0.935	0.927	1.389	0.416	0.725	0.766	0.590	0.795	2.500	-0.448
STD ERR SKEW	0.369	0.369	0.369	0.369	0.369	0.369	0.369	0.369	0.369	0.369	0.365	0.365	0.369
SER CORR CDEFF	-0.158	0.065	-0.106	-0.012	-0.147	-0.011	-0.135	-0.020	-0.017	0.164	0.189	0.139	-0.088
COEFF OF VAR	0.674	0.459	0.441	0.489	0.460	0.439	0.290	0.293	0.323	0.421	0.447	0.588	0.202
MEAN LOGS	2.359	2.657	2.735	2.639	2.630	2.518	2.566	2.746	2.754	2.541	2.211	2.103	2.607
STD DEV LOGS	0.288	0.210	0.193	0.230	0.194	0.174	0.128	0.124	0.136	0.190	0.189	0.209	0.097
SKEWNESS LOGS	0.018	-0.509	-0.430	-0.605	0.088	-0.388	-0.131	0.138	0.237	-0.243	0.198	0.607	-1.013
STD ERR SKEW LOGS	0.369	0.369	0.369	0.369	0.369	0.369	0.369	0.369	0.369	0.365	0.365	0.365	0.369
SER CORR LOGS	-0.197	-0.108	-0.124	-0.030	-0.110	-0.038	-0.116	-0.003	0.064	0.174	0.213	0.194	-0.088
COEFF OF VAR LOGS	0.079	0.070	0.070	0.087	0.074	0.069	0.050	0.045	0.049	0.075	0.086	0.099	0.037
% OF AVE FLOW	5.7	10.2	12.0	9.9	9.5	7.2	7.7	11.7	12.0	7.7	3.6	2.9	100.0

STATION 12054000 DUCKABUSH RIVER NEAR BRINNON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1938-1979)

0.99	49.2	123.2	168.6	101.3	155.1	145.6	179.7	294.5	289.4	115.9	62.9	51.5	206.3
0.95	77.0	192.0	248.9	168.3	206.7	178.8	223.7	351.7	346.5	164.1	81.5	63.0	266.4
0.90	97.8	239.1	302.5	215.7	241.4	201.2	250.8	387.6	383.1	196.1	94.0	71.2	300.3
0.80	130.7	307.0	378.3	285.5	292.1	234.1	287.3	437.0	434.5	241.6	112.3	84.0	342.0
0.50	228.3	472.9	560.4	459.4	423.6	321.5	370.1	553.5	560.0	353.5	160.4	120.9	419.7
0.20	399.8	687.3	793.5	685.6	619.9	457.9	472.5	707.6	734.5	504.3	233.7	186.4	488.8
0.10	536.5	817.4	935.4	821.7	759.3	559.2	534.8	807.7	852.5	601.3	286.9	240.5	519.4
0.04	734.9	968.0	1101.1	978.8	945.4	700.3	608.8	932.6	1004.6	720.1	359.3	322.9	547.3
0.02	900.8	1070.6	1215.3	1080.8	1090.8	815.1	660.9	1025.1	1120.5	806.0	417.0	395.6	562.6
0.01	1082.3	1165.8	1322.3	1175.8	1242.0	938.5	710.9	1117.3	1238.6	889.6	477.9	479.0	574.6

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1940	50.0	51.0	52.0	54.0	61.0	67.0	79.0	104.0	176.0
1941	50.0	50.0	51.0	54.0	68.0	69.0	87.0	117.0	244.0
1942	81.0	82.0	83.0	85.0	93.0	135.0	157.0	187.0	268.0
1943	46.0	46.0	47.0	49.0	54.0	56.0	70.0	111.0	209.0
1944	54.0	55.0	56.0	59.0	61.0	78.0	108.0	170.0	227.0
1945	49.0	50.0	52.0	55.0	62.0	71.0	73.0	90.0	181.0
1946	53.0	54.0	54.0	56.0	66.0	94.0	109.0	141.0	265.0
1947	59.0	60.0	63.0	68.0	79.0	115.0	124.0	170.0	280.0
1948	58.0	58.0	59.0	61.0	77.0	85.0	114.0	154.0	230.0
1949	80.0	81.0	81.0	86.0	97.0	142.0	214.0	231.0	292.0
1950	76.0	80.0	85.0	97.0	111.0	122.0	131.0	166.0	292.0
1951	76.0	77.0	88.0	99.0	107.0	175.0	253.0	318.0	467.0
1952	52.0	53.0	55.0	59.0	71.0	94.0	154.0	218.0	267.0
1953	55.0	57.0	57.0	59.0	63.0	72.0	101.0	125.0	242.0
1954	89.0	93.0	98.0	106.0	136.0	212.0	277.0	343.0	442.0
1955	91.0	95.0	102.0	123.0	136.0	216.0	250.0	338.0	413.0
1956	87.0	88.0	93.0	99.0	131.0	160.0	219.0	299.0	377.0
1957	91.0	92.0	97.0	97.0	110.0	163.0	286.0	310.0	308.0
1958	79.0	80.0	83.0	92.0	101.0	115.0	138.0	183.0	236.0
1959	63.0	63.0	65.0	72.0	79.0	86.0	114.0	159.0	299.0
1960	96.0	100.0	102.0	106.0	124.0	164.0	216.0	214.0	324.0
1961	64.0	65.0	67.0	72.0	79.0	105.0	125.0	165.0	272.0
1962	73.0	74.0	78.0	79.0	85.0	114.0	142.0	186.0	285.0
1963	71.0	72.0	74.0	86.0	88.0	129.0	182.0	254.0	301.0
1964	70.0	72.0	74.0	79.0	92.0	101.0	136.0	175.0	278.0
1965	74.0	74.0	77.0	85.0	103.0	117.0	145.0	172.0	230.0
1966	52.0	53.0	54.0	57.0	64.0	86.0	110.0	135.0	238.0
1967	61.0	63.0	65.0	70.0	84.0	106.0	144.0	189.0	313.0
1968	81.0	82.0	86.0	95.0	123.0	175.0	288.0	401.0	430.0
1969	90.0	93.0	97.0	109.0	146.0	154.0	179.0	240.0	321.0
1970	93.0	96.0	102.0	104.0	123.0	180.0	234.0	255.0	336.0
1971	50.0	50.0	53.0	56.0	77.0	81.0	100.0	159.0	258.0
1972	92.0	93.0	95.0	106.0	121.0	181.0	240.0	281.0	298.0
1973	76.0	77.0	79.0	82.0	95.0	142.0	168.0	238.0	319.0
1974	72.0	75.0	78.0	82.0	87.0	111.0	136.0	166.0	276.0
1975	68.0	69.0	72.0	75.0	79.0	104.0	144.0	227.0	326.0
1976	96.0	97.0	101.0	109.0	145.0	225.0	276.0	375.0	406.0
1977	52.0	53.0	56.0	64.0	76.0	93.0	101.0	108.0	136.0
1978	70.0	70.0	73.0	81.0	91.0	109.0	134.0	141.0	217.0
1979	92.0	93.0	96.0	103.0	114.0	137.0	151.0	163.0	243.0

STATION 12054000 DUCKABUSH RIVER NEAR BRINNON, WASH

LOWEST MEAN FLOW STATISTICS (YEARS 1940-1979)

MEAN	70.8	72.1	74.9	80.8	94.0	123.5	160.2	204.4	286.7
MAXIMUM	96.0	100.0	102.0	123.0	146.0	225.0	288.0	401.0	467.0
MINIMUM	46.0	46.0	47.0	49.0	54.0	56.0	70.0	90.0	136.0
STANDARD DEVIATION	15.78	16.38	17.44	19.87	25.57	43.60	63.14	78.29	136.9
SKENNESS	0.051	0.075	0.064	0.133	0.454	0.654	0.691	0.859	0.650
STD ERROR OF SKENNESS	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374
SERIAL CORR COEFF	0.154	0.157	0.191	0.254	0.310	0.131	0.097	0.219	0.280
COEFF OF VARIATION	0.223	0.227	0.233	0.246	0.272	0.353	0.394	0.383	0.254
MEAN LOGS	1.839	1.847	1.863	1.894	1.957	2.066	2.173	2.281	2.444
STD DEVIATION LOGS	0.099	0.101	0.104	0.115	0.118	0.152	0.169	0.162	0.111
SKENNESS LOGS	-0.185	-0.176	-0.185	-0.175	0.050	0.021	0.083	0.133	0.206
STD ERR SKENNESS LOGS	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374
SER CORR COEFF LOGS	0.175	0.173	0.206	0.265	0.332	0.150	0.149	0.240	0.275
COEFF OF VAR LOGS	0.054	0.055	0.056	0.058	0.060	0.074	0.078	0.071	0.045

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LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1940-1979)

0.99	114.0	117.3	123.1	136.5	172.1	264.8	376.7	470.9	483.8
0.98	108.0	110.9	116.4	128.5	159.4	240.3	336.6	421.3	455.9
0.96	101.6	104.2	109.1	120.0	146.5	215.7	297.3	372.7	426.3
0.90	92.1	94.3	98.5	107.7	128.5	182.6	245.8	309.3	382.9
0.80	83.9	85.7	89.3	97.1	113.8	156.3	206.1	260.6	345.2
0.50	69.5	70.8	73.4	78.9	90.5	116.2	148.0	189.4	280.3
0.20	57.1	57.9	59.7	63.5	72.1	86.6	107.1	139.3	224.9
0.10	51.3	51.9	53.4	56.4	64.1	74.3	90.7	119.2	199.4
0.05	46.8	47.4	48.6	51.0	58.3	65.4	79.2	105.0	180.1
0.02	42.2	42.6	43.5	45.5	52.3	56.8	68.1	91.3	160.1
0.01	39.3	39.7	40.4	42.1	48.7	51.7	61.7	83.3	147.8

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1940-1979)

P95	P90	P75	P70	P50	P25	P10
83.0	100.0	180.0	200.0	320.0	530.0	800.0

STATION 12054000 DUCKABUSH RIVER NEAR BRINNON, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

ANNUAL PEAK-FLOW DATA
FLOW (CFS) DATE REG. (R)

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	
1939	4200.	2780.	1690.	1020.	699.	584.	523.	454.	394.	4960.
1940	4050.	3170.	2150.	1870.	1560.	1050.	909.	812.	703.	6080.
1941	2480.	1840.	1570.	980.	777.	712.	610.	625.	534.	4750.
1942	4710.	2970.	2110.	1290.	1090.	800.	679.	575.	453.	6080.
1943	1960.	1330.	996.	792.	721.	548.	526.	486.	404.	2700.
1944	2280.	1710.	1090.	709.	530.	435.	410.	385.	318.	3790.
1945	3000.	2430.	1520.	986.	730.	615.	538.	559.	491.	5500.
1946	1900.	1730.	1220.	1020.	848.	812.	738.	673.	552.	2530.
1947	4200.	3770.	2340.	1330.	924.	620.	634.	557.	475.	5370.
1948	2750.	2070.	1450.	1250.	1070.	847.	701.	595.	504.	5970.
1949	2060.	1410.	1110.	917.	761.	657.	586.	571.	481.	2410.
1950	3670.	3050.	2040.	1440.	1030.	817.	697.	625.	584.	8960.
1951	3670.	2910.	1780.	1360.	1170.	867.	833.	750.	617.	4190.
1952	2100.	1390.	1210.	903.	826.	744.	688.	617.	528.	2940.
1953	2640.	2050.	1820.	1420.	1220.	917.	724.	616.	609.	3240.
1954	2880.	2420.	1810.	1240.	998.	855.	735.	737.	616.	3560.
1955	3910.	3220.	2920.	1940.	1390.	958.	782.	650.	514.	5260.
1956	4890.	3040.	1740.	1370.	1320.	1110.	1000.	898.	687.	5800.
1957	3410.	3000.	1910.	1250.	996.	644.	663.	625.	507.	4290.
1958	3640.	2340.	1650.	1400.	996.	860.	747.	645.	640.	4910.
1959	3210.	2630.	1830.	1190.	962.	816.	730.	620.	549.	4750.
1960	4390.	2530.	1650.	1310.	944.	684.	674.	569.	543.	6500.
1961	4430.	2760.	1970.	1350.	1050.	920.	845.	753.	569.	5280.
1962	2110.	1410.	1040.	783.	617.	535.	480.	441.	384.	2550.
1963	3720.	3150.	2120.	1240.	1070.	843.	777.	725.	606.	5980.
1964	3260.	2320.	1480.	1090.	930.	736.	723.	641.	502.	4980.
1965	2240.	1680.	993.	811.	658.	511.	443.	424.	421.	2720.
1966	2050.	1620.	1190.	801.	702.	631.	593.	565.	497.	2570.
1967	4900.	3550.	2500.	2070.	1650.	1150.	974.	796.	661.	6920.
1968	4990.	3610.	2490.	1790.	1230.	1000.	880.	757.	708.	6750.
1969	2120.	1440.	1340.	1240.	1160.	982.	834.	741.	594.	2920.
1970	2130.	1630.	1160.	974.	618.	593.	536.	492.	450.	3630.
1971	2000.	1350.	1010.	952.	856.	777.	745.	676.	597.	2800.
1972	2040.	1710.	1390.	1210.	1030.	795.	693.	700.	631.	3020.
1973	2310.	1720.	1300.	1130.	864.	595.	559.	497.	433.	3330.
1974	4670.	3860.	2570.	1520.	1070.	984.	859.	729.	678.	5650.
1975	2000.	1230.	968.	803.	726.	664.	588.	513.	453.	6090.
1976	3380.	2700.	1630.	1140.	1020.	997.	841.	750.	572.	5780.
1977	1020.	663.	519.	479.	399.	377.	341.	321.	280.	1360.
1978	3200.	1950.	1400.	1010.	798.	751.	694.	649.	573.	5750.
1979	1580.	1430.	995.	733.	581.	455.	428.	432.	367.	2160.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1939-1979)

W R C
ESTIMATE
SYSTEMATIC
RECORD

MEAN	3081.7	2282.3	1606.6	1173.5	937.0	761.6	682.2	615.9	533.4	
MAXIMUM	4990.0	3860.0	2920.0	2070.0	1650.0	1150.0	1000.0	898.0	753.0	
MINIMUM	1020.0	663.0	519.0	479.0	399.0	377.0	343.0	321.0	280.0	
STANDARD DEVIATION	1073.37	807.52	527.62	343.85	267.88	187.83	152.93	126.54	109.39	
SKWENESS	0.229	0.199	0.420	0.641	0.564	0.026	-0.111	-0.188	-0.185	
STD ERROR OF SKWENESS	0.369	0.369	0.369	0.369	0.369	0.369	0.369	0.369	0.369	
SERIAL CORR COEFF	-0.014	-0.089	0.009	0.112	0.014	-0.072	-0.080	-0.164	-0.121	
COEFF OF VARIATION	0.348	0.354	0.328	0.293	0.286	0.247	0.224	0.205	0.205	
MEAN LOGS	3.461	3.329	3.182	3.051	2.954	2.868	2.822	2.780	2.717	
STD DEVIATION LOGS	0.161	0.167	0.151	0.130	0.127	0.114	0.104	0.096	0.095	
SKWENESS LOGS	-0.409	-0.588	-0.539	-0.312	-0.337	-0.534	-0.707	-0.754	-0.750	
STD ERR SKWENESS LOGS	0.369	0.369	0.369	0.369	0.369	0.369	0.369	0.369	0.369	
SER CORR COEFF LOGS	-0.052	-0.095	0.011	0.105	0.018	-0.072	-0.077	-0.160	-0.098	
COEFF OF VAR LOGS	0.047	0.050	0.047	0.042	0.043	0.040	0.037	0.034	0.035	
										3.6226
										0.1750
										-0.1160
										-0.5840

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1939-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
1951	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1952	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1953	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1954	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1955	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1956	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1957	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1958	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1959	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1960	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1961	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1962	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1963	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1964	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1965	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1966	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1967	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1968	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1969	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1970	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0
1971	1092.8	1508.8	1773.4	2136.2	2965.3	3971.5	4563.8	5240.4	5699.3	6125.0

STATION 12054500 HAMMA HAMMA RIVER NEAR ELOON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1951	404	433	310	181	405	423.9	362.4	336.3	320.8	278.5	1587.4	1387.9	
1952	47.5	122	446	1068	438	541.4	462.5	428.7	402.5	349.1	2133.6	2035.8	
1953	287	720	560	392	728	612.8	521.5	481.9	448.9	389.1	2490.4	2456.1	
1954	343	1038	502	233	281	707.5	597.6	549.3	506.7	439.0	2994.8	3036.8	
1955	285	633	433	391	115	914.7	755.3	683.1	619.0	536.0	4226.0	4360.3	
1956	393	330	495	150	449	1155.2	923.2	816.2	727.2	629.5	5898.4	5923.1	
1957	226	296	448	685	1011	1293.5	1012.4	882.6	779.9	675.1	6991.0	6808.4	
1958	177	434	617	795	1221	1449.6	1107.0	949.5	831.8	720.0	8352.8	7781.7	
1959	201	476	488	463	595	1652.2	1220.3	989.9	862.7	746.8	9353.9	8417.0	
1960	155	399	489	818	863	1316	430	420	422	225	10344.3	8987.1	
1961	123	362	430	399	369	178	298	325	335	192			
1962	494	669	653	331	667	248	376	417	269	184			
1963	363	757	490	523	265	211	212	302	580	295			
1964	90.3	286	330	379	464	251	365	356	312	154			
1965	101	456	478	394	281	386	440	522	409	272			
1966	128	569	1280	524	340	408	210	480	693	327			
1967	657	387	454	1005	731	530	216	356	403	219			
1968	330	467	588	302	277	314	461	773	711	246			
1969	226	391	580	504	386	351	294	284	371	172			
1970	202	472	420	424	495	320	348	726	555				

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1951-1971)

MEAN	261.6	484.9	524.8	498.1	470.4	317.7	358.7	499.7	472.4	263.9	123.8	99.8	364.4
MAXIMUM	657.0	1038.0	1280.0	1068.0	1011.0	599.0	591.0	903.0	900.0	612.0	245.0	233.0	459.0
MINIMUM	47.5	122.0	310.0	150.0	115.0	141.0	210.0	284.0	269.0	146.0	70.0	48.2	258.0
STD DEVIATION	151.65	202.18	197.34	254.55	229.79	117.30	95.54	168.05	159.51	109.32	43.02	52.07	55.05
SKEWNESS	0.923	1.004	3.139	0.955	0.935	0.865	0.389	0.831	1.166	1.757	1.117	1.646	-0.154
STD ERR SKEW	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.524
SER CORR COEFF	-0.016	0.189	-0.111	-0.239	-0.234	0.016	-0.102	-0.281	-0.280	0.157	0.351	-0.090	-0.115
COEFF OF VAR	0.580	0.417	0.376	0.511	0.489	0.369	0.266	0.338	0.338	0.414	0.348	0.521	0.151
MEAN LOGS	2.341	2.648	2.700	2.644	2.621	2.475	2.540	2.677	2.653	2.392	2.069	1.955	2.557
STD DEV LOGS	0.280	0.194	0.125	0.266	0.223	0.158	0.120	0.141	0.137	0.158	0.144	0.192	0.068
SKEWNESS LOGS	-0.561	-0.884	1.622	-0.205	-0.447	-0.001	-0.357	0.221	0.442	0.462	0.200	0.865	-0.529
STD ERR SKEW LOGS	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.524
SER CORR LOGS	0.0	-0.099	-0.160	-0.234	-0.160	0.064	-0.068	-0.292	-0.290	0.172	0.325	-0.058	-0.104
COEFF OF VAR LOGS	0.119	0.073	0.046	0.085	0.085	0.042	0.047	0.053	0.052	0.066	0.070	0.098	0.027
% OF AVE FLOW	6.0	11.1	12.0	11.4	10.7	7.3	8.2	11.4	10.8	6.0	2.8	2.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1951-1971)

0.99	37.9	118.8	356.6	121.6	107.3	128.0	170.1	234.7	239.7	126.5	56.9	42.9	236.0
0.95	69.4	193.7	366.9	181.9	169.2	164.0	214.6	283.9	279.6	146.2	69.3	49.3	272.7
0.90	93.4	244.2	377.2	223.9	212.3	187.2	241.4	315.5	305.8	159.9	77.2	54.2	292.9
0.80	130.9	314.9	396.5	286.1	275.5	219.7	276.5	360.0	343.5	180.5	88.5	61.8	317.6
0.50	233.0	474.6	465.5	448.1	434.6	298.4	352.2	469.2	439.5	237.0	116.1	84.6	365.2
0.20	381.0	652.0	608.1	684.7	649.3	405.4	438.2	625.0	581.1	329.4	154.7	126.8	411.9
0.10	477.2	746.2	734.4	846.1	784.5	487.0	487.0	757.8	681.5	400.6	180.9	162.7	435.4
0.04	592.9	837.5	934.6	1052.6	945.6	564.3	564.3	860.2	816.5	503.0	214.8	218.8	459.5
0.02	673.9	893.4	1117.4	1207.3	1054.6	630.0	577.7	965.7	923.0	588.9	240.6	249.5	474.4
0.01	750.3	940.0	1332.8	1362.2	1165.2	695.7	611.0	1067.5	1034.8	683.5	267.0	329.0	487.4

STATION 12054500 HAMMA HAMMA RIVER NEAR ELDON, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1953	42.0	43.0	43.0	44.0	46.0	53.0	75.0	94.0	185.0
1954	67.0	68.0	70.0	75.0	93.0	128.0	178.0	223.0	304.0
1955	88.0	90.0	97.0	105.0	115.0	145.0	205.0	243.0	293.0
1956	75.0	77.0	79.0	83.0	103.0	116.0	171.0	217.0	280.0
1957	78.0	78.0	79.0	82.0	95.0	147.0	230.0	269.0	272.0
1958	64.0	64.0	67.0	71.0	73.0	85.0	101.0	122.0	187.0
1959	48.0	48.0	49.0	50.0	52.0	58.0	72.0	108.0	211.0
1960	70.0	70.0	71.0	74.0	79.0	104.0	164.0	166.0	240.0
1961	50.0	51.0	53.0	55.0	60.0	74.0	88.0	125.0	208.0
1962	50.0	50.0	50.0	51.0	55.0	70.0	88.0	122.0	216.0
1963	61.0	61.0	63.0	69.0	71.0	98.0	128.0	171.0	223.0
1964	52.0	53.0	56.0	61.0	66.0	75.0	103.0	123.0	202.0
1965	54.0	55.0	57.0	62.0	70.0	81.0	98.0	123.0	187.0
1966	39.0	39.0	40.0	42.0	46.0	60.0	76.0	91.0	171.0
1967	50.0	50.0	52.0	55.0	64.0	76.0	107.0	131.0	222.0
1968	56.0	57.0	59.0	64.0	77.0	107.0	135.0	285.0	321.0
1969	85.0	86.0	89.0	100.0	118.0	127.0	179.0	145.0	235.0
1970	63.0	63.0	64.0	66.0	80.0	116.0	188.0	195.0	274.0
1971	39.0	40.0	40.0	42.0	52.0	55.0	68.0	109.0	176.0

LOWEST MEAN FLOW STATISTICS (YEARS 1953-1971)

MEAN	59.5	60.2	62.0	65.9	74.5	93.4	129.2	163.3	231.9
MAXIMUM	88.0	90.0	97.0	105.0	118.0	147.0	230.0	285.0	321.0
MINIMUM	39.0	39.0	40.0	42.0	46.0	53.0	68.0	91.0	171.0
STANDARD DEVIATION	14.71	14.94	15.99	17.96	21.87	30.25	50.57	60.34	45.97
SKEWNESS	0.466	0.520	0.602	0.677	0.631	0.355	0.504	0.708	0.521
STD ERROR OF SKEWNESS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SERIAL CORR COEFF	0.274	0.302	0.294	0.245	0.355	0.239	0.128	0.220	0.203
COEFF OF VARIATION	0.247	0.248	0.258	0.273	0.294	0.324	0.392	0.370	0.198
MEAN LOGS	1.762	1.767	1.779	1.804	1.855	1.948	2.080	2.186	2.358
STD DEVIATION LOGS	0.107	0.107	0.111	0.116	0.125	0.143	0.170	0.155	0.084
SKEWNESS LOGS	0.060	0.103	0.102	0.124	0.154	-0.042	0.115	0.304	0.280
SER CORR COEFF LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
COEFF OF VAR LOGS	0.245	0.249	0.254	0.216	0.288	0.157	0.087	0.222	0.205
	0.041	0.040	0.062	0.065	0.068	0.073	0.082	0.071	0.036

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1953-1971)

0.99	103.6	105.5	110.8	121.6	144.7	189.1	309.2	381.7	372.3
0.98	90.6	98.2	102.8	112.3	132.5	173.4	275.4	338.7	348.2
0.96	89.4	90.7	94.7	102.9	120.4	157.3	242.4	297.5	325.8
0.90	79.4	80.3	83.5	90.0	104.1	135.2	199.5	245.2	293.6
0.80	71.1	71.8	74.4	79.6	91.0	117.2	166.7	206.1	267.4
0.50	57.7	58.2	59.9	63.3	71.0	89.0	119.2	150.7	225.7
0.20	47.0	47.5	48.5	50.7	56.0	67.4	86.2	113.1	193.0
0.10	42.3	42.8	43.5	45.3	49.7	58.1	73.0	98.3	178.8
0.05	38.8	39.3	39.9	41.3	45.1	51.5	63.8	88.0	168.2
0.02	35.2	35.8	36.1	37.4	40.5	44.8	55.0	78.1	157.5
0.01	33.0	33.6	33.9	35.0	37.8	40.9	49.8	72.4	151.0

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1953-1971)

P95	P90	P75	P70	P50	P25	P10
88.0	89.0	160.0	180.0	290.0	460.0	710.0

STATION 12054600 JEFFERSON CREEK NEAR ELDON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1958	116	133	197	426	478	142	158	101	80.5	34.6	17.5	14.0	156
1959	57.3	186	287	457	159	145	180	156	92.9	47.8	22.7	102	156
1960	69.9	206	257	248	328	153	197	120	82.0	42.4	22.6	14.1	144
1961	71.2	216	244	464	457	331	141	182	110	51.5	24.2	16.4	191
1962	53.7	209	260	160	169	94.5	108	111	69.6	37.7	27.0	37.8	111
1963	238	297	184	150	264	107	194	135	66.6	60.8	31.4	18.6	153
1964	182	394	232	203	132	114	79.9	67.4	152	63.9	36.5	18.2	146
1965	29.2	155	166	205	256	111	156	90.5	59.3	30.3	14.8	12.2	106
1966	38.3	230	241	257	157	251	191	144	80.0	55.6	27.8	19.7	141
1967	45.2	265	627	295	177	225	101	128	132	67.9	28.0	17.7	176
1968	310	487	223	487	393	276	71.2	176.6	193.2	44.3	37.4	48.9	184
1969	157	242	378	150	187	206	255	191	155	52.5	24.4	111	172
1970	90.9	187	350	303	188	164	141	57.5	66.4	33.3	15.7	14.6	134
1971	147	249	247	231	267	222	208	284	142				

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1958-1971)

MEAN	114.7	222.4	285.2	294.0	253.0	181.5	155.8	131.7	94.7	47.9	25.7	34.2	151.5
MAXIMUM	310.0	394.0	627.0	487.0	478.0	331.0	255.0	284.0	155.0	67.9	37.4	111.0	191.0
MINIMUM	29.2	133.0	166.0	150.0	129.0	94.5	71.2	57.5	59.3	30.3	15.7	12.2	106.0
STD DEVIATION	83.26	67.69	112.62	119.34	119.40	71.74	52.77	59.41	33.53	12.12	6.68	33.79	25.85
SKEWNESS	1.201	1.152	2.386	0.488	0.843	0.683	-0.012	1.254	0.667	0.149	0.377	1.813	-0.287
SER CORR COEFF	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.616	0.616	0.616	0.616
COEFF OF VAR	0.077	-0.040	-0.157	-0.117	-0.350	0.077	-0.332	-0.628	-0.502	-0.267	0.089	-0.150	-0.052
MEAN LOGS	1.957	2.330	2.432	2.434	2.361	2.228	2.166	2.082	1.972	1.667	1.396	1.396	2.174
STD DEV LOGS	0.311	0.126	0.139	0.180	0.197	0.170	0.163	0.188	0.143	0.113	0.114	0.328	0.077
SKEWNESS LOGS	0.169	0.283	1.347	-0.020	0.361	0.143	-0.661	0.099	0.360	-0.195	-0.140	1.248	-0.655
SER CORR LOGS	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.616	0.616	0.616	0.616
COEFF OF VAR LOGS	0.148	-0.107	-0.120	-0.110	-0.446	0.192	-0.263	-0.616	-0.501	-0.326	0.092	-0.178	-0.059
COEFF OF VAR LOGS	0.159	0.054	0.057	0.074	0.083	0.076	0.075	0.090	0.072	0.068	0.082	0.235	0.035
% OF AVE FLOW	8.2	12.1	15.5	15.9	13.7	9.8	8.4	7.1	5.3	2.6	1.4	1.9	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1958-1971)

0.99	18.8	115.4	175.4	103.3	90.4	71.0	51.2	45.4	47.7	24.4	13.1	8.6	91.0
0.95	29.0	136.0	184.9	137.4	114.5	90.3	74.2	59.9	56.6	29.9	16.0	9.9	108.4
0.90	36.8	148.9	193.0	159.9	131.1	103.1	88.8	69.6	62.5	33.1	17.7	11.1	118.0
0.80	49.4	167.0	207.0	192.1	155.9	121.4	108.7	83.6	70.8	37.4	20.0	13.2	129.8
0.50	88.8	210.9	252.1	272.3	223.3	167.5	152.8	119.8	91.9	46.8	25.0	21.4	152.3
0.20	164.4	271.4	339.4	385.3	332.5	234.2	202.4	173.4	122.7	57.9	31.1	43.1	174.0
0.10	229.3	312.2	414.4	461.6	416.0	280.6	229.4	211.2	144.3	64.4	34.7	68.5	184.6
0.04	330.1	384.6	531.6	559.3	534.8	341.6	258.2	261.5	173.1	71.9	39.0	121.2	195.2
0.02	419.6	404.5	637.3	633.0	633.2	388.8	276.5	300.6	195.7	77.1	41.9	183.3	201.6
0.01	522.5	445.0	760.9	707.4	740.7	437.4	292.5	341.3	219.3	81.9	44.7	274.2	207.1

STATION 12054600 JEFFERSON CREEK NEAR ELDON, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1959	13.0	13.0	13.0	14.0	14.0	15.0	18.0	26.0	50.0
1960	17.0	17.0	17.0	19.0	20.0	25.0	37.0	53.0	67.0
1961	9.7	9.7	9.8	10.0	12.0	17.0	23.0	29.0	55.0
1962	10.0	10.0	10.0	11.0	13.0	17.0	22.0	31.0	63.0
1963	14.0	14.0	14.0	15.0	18.0	23.0	32.0	39.0	63.0
1964	14.0	14.0	14.0	14.0	16.0	20.0	32.0	37.0	62.0
1965	14.0	14.0	14.0	15.0	17.0	24.0	36.0	40.0	61.0
1966	8.9	9.1	9.4	9.7	11.0	15.0	19.0	25.0	40.0
1967	13.0	13.0	14.0	14.0	17.0	19.0	24.0	34.0	52.0
1968	13.0	13.0	14.0	15.0	18.0	23.0	37.0	60.0	79.0
1969	19.0	19.0	20.0	20.0	24.0	36.0	41.0	47.0	58.0
1970	15.0	15.0	16.0	16.0	19.0	26.0	44.0	69.0	95.0
1971	11.0	12.0	12.0	13.0	13.0	14.0	16.0	23.0	37.0

LOWEST MEAN FLOW STATISTICS (YEARS 1959-1971)

MEAN	13.2	13.3	13.6	14.3	16.3	21.1	28.3	39.2	60.2
MAXIMUM	19.0	19.0	20.0	20.0	24.0	36.0	44.0	69.0	95.0
MINIMUM	8.9	9.1	9.4	9.7	11.0	14.0	16.0	23.0	37.0
STANDARD DEVIATION	2.89	2.80	2.99	3.05	3.66	6.06	9.15	14.21	15.22
SKEWNESS	0.379	0.382	0.465	0.296	0.444	1.147	0.349	0.950	0.756
STD ERROR OF SKEWNESS	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616
SERIAL CORR COEFF	-0.014	0.003	0.079	-0.007	0.010	0.079	0.017	-0.148	-0.435
COEFF OF VARIATION	0.214	0.211	0.219	0.213	0.224	0.288	0.323	0.363	0.253
MEAN LOGS	1.111	1.115	1.125	1.146	1.202	1.309	1.431	1.568	1.767
STD DEVIATION LOGS	0.095	0.092	0.095	0.094	0.098	0.118	0.142	0.149	0.109
SKEWNESS LOGS	-0.115	-0.110	-0.094	-0.218	-0.023	0.475	-0.013	0.442	-0.060
STD ERR SKEWNESS LOGS	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616
SER CORR COEFF LOGS	-0.013	0.011	0.071	-0.002	-0.028	-0.032	-0.075	-0.183	-0.422
COEFF OF VAR LOGS	0.086	0.083	0.085	0.082	0.081	0.090	0.099	0.095	0.062

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1959-1971)

	0.99	0.98	0.96	0.90	0.80	0.50	0.20	0.10	0.05	0.02	0.01
1959	21.1	20.0	18.8	17.1	15.6	13.0	10.7	9.7	8.9	8.1	7.6
1960	20.0	19.8	18.7	17.0	15.6	13.1	10.9	9.9	9.1	8.3	7.8
1961	20.0	19.8	18.7	17.0	15.6	13.1	10.9	9.9	9.1	8.3	7.8
1962	20.0	19.8	18.7	17.0	15.6	13.1	10.9	9.9	9.1	8.3	7.8
1963	20.0	19.8	18.7	17.0	15.6	13.1	10.9	9.9	9.1	8.3	7.8
1964	20.0	19.8	18.7	17.0	15.6	13.1	10.9	9.9	9.1	8.3	7.8
1965	20.0	19.8	18.7	17.0	15.6	13.1	10.9	9.9	9.1	8.3	7.8
1966	20.0	19.8	18.7	17.0	15.6	13.1	10.9	9.9	9.1	8.3	7.8
1967	20.0	19.8	18.7	17.0	15.6	13.1	10.9	9.9	9.1	8.3	7.8
1968	20.0	19.8	18.7	17.0	15.6	13.1	10.9	9.9	9.1	8.3	7.8
1969	20.0	19.8	18.7	17.0	15.6	13.1	10.9	9.9	9.1	8.3	7.8
1970	20.0	19.8	18.7	17.0	15.6	13.1	10.9	9.9	9.1	8.3	7.8
1971	20.0	19.8	18.7	17.0	15.6	13.1	10.9	9.9	9.1	8.3	7.8

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1959-1971)

P95	P90	P75	P70	P50	P25	P10
16.0	21.0	47.0	56.0	93.0	190.0	330.0

STATION 12054600 JEFFERSON CREEK NEAR ELDON, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW (CFS)	DATE	REG. (R)
1958	1540.	953.	697.	573.	491.	450.	373.	315.	262.	2270.	02/18/58	
1959	1870.	1330.	949.	606.	482.	377.	320.	272.	239.	2660.	01/08/59	
1960	1670.	1000.	836.	691.	505.	319.	320.	270.	239.	2190.	01/29/60	
1961	2200.	1310.	992.	713.	532.	472.	422.	375.	316.	2880.	01/15/61	
1962	1170.	862.	665.	431.	329.	276.	229.	205.	172.	1710.	11/30/61	
1963	1450.	1020.	632.	420.	364.	330.	290.	266.	230.	3100.	11/25/62	
1964	1140.	864.	575.	483.	328.	325.	330.	296.	229.	2050.	11/14/63	
1965	902.	643.	456.	402.	327.	285.	219.	202.	174.	1200.	11/30/64	
1966	1140.	760.	539.	393.	329.	271.	249.	235.	222.	1360.	12/06/65	
1967	2050.	1500.	1080.	945.	685.	489.	425.	351.	287.	3160.	12/13/66	
1968	1980.	1450.	1140.	842.	601.	470.	410.	348.	306.	3030.	01/14/68	
1969	1710.	988.	586.	435.	391.	331.	289.	237.	231.	2390.	12/24/68	
1970	1210.	993.	699.	600.	375.	354.	292.	265.	222.	2330.	12/13/69	
1971										2490.	12/07/70	
1972										2500.	03/05/72	
1973										2560.	12/26/72	
1974										2820.	01/15/74	
1975										2170.	12/21/74	
1976										2070.	12/03/75	
1977										820.	12/26/76	
1978										2300.	11/01/77	
1979										2320.	03/04/79	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1958-1979)

	W	R	C	SYSTEMATIC
	ESTIMATE			RECORD
MEAN	1540.9	1051.8	757.4	579.5
MAXIMUM	2200.0	1500.0	1140.0	945.0
MINIMUM	902.0	643.0	456.0	327.0
STANDARD DEVIATION	410.78	265.84	220.02	177.46
SKWENESS	0.096	0.439	0.536	0.834
STD ERROR OF SKWENESS	0.516	0.616	0.616	0.616
SERIAL CORR COEFF	0.256	0.154	0.284	0.196
COEFF OF VARIATION	0.267	0.253	0.290	0.306
MEAN LOGS	3.173	3.009	2.863	2.745
STD DEVIATION LOGS	0.120	0.110	0.124	0.105
SKWENESS LOGS	-0.259	-0.007	0.175	0.444
STD ERR SKWENESS LOGS	0.616	0.616	0.616	0.616
SER CORR COEFF LOGS	0.318	0.202	0.313	0.193
COEFF OF VAR LOGS	0.034	0.037	0.043	0.046

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1958-1979)

0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
743.0	926.8	1037.7	1184.8	1506.7	1884.1	2103.8	2354.9	2526.2	2686.2
566.3	673.4	738.4	825.6	1021.6	1263.7	1412.0	1589.2	1715.3	1837.1
388.4	461.7	507.9	571.6	723.0	925.3	1057.7	1224.4	1348.4	1472.8
310.4	357.9	389.0	433.3	544.6	705.8	818.5	968.1	1084.9	1206.5
266.9	302.0	324.3	355.4	430.2	532.4	600.6	687.7	753.5	820.3
212.7	245.5	265.4	292.2	352.5	427.8	474.4	530.7	571.1	610.5
184.1	216.9	236.3	261.6	316.0	379.2	415.9	458.1	487.1	514.3
173.5	198.6	213.4	232.8	274.9	324.4	353.7	387.8	411.6	434.1
149.9	173.2	186.6	203.6	238.7	277.1	298.4	321.9	337.6	351.9
0.0	1849.0	1954.6	2091.2	2382.0	2716.3	2910.7	3134.5	3288.8	3434.5
714.3	1152.5	1423.3	1767.0	2392.0	2856.1	3012.6	3163.5	3289.8	3489.4

STATION 12056300 ANNAS BAY TRIBUTARY NEAR POTLATCH, WASH.

ANNUAL PEAK FLOW DATA			ANNUAL PEAK FLOW STATISTICS (YEARS 1950-1970)		W R C	SYSTEMATIC
WATER YEAR	FLOW(CFS)	DATE	MEAN LOGS	STANDARD DEVIATION LOGS	ESTIMATE	RECORD
1950	228.0	12-28-1949			1.7099	1.6735
1951	113.0	2-10-1951			0.3277	0.4125
1952	93.0	1-30-1952			0.048	-1.082
1953	87.0	1-9-1953				
1954						
1955	52.0	11-18-1954				
1956	44.0	11-3-1955				
1957	173.0	12-9-1956				
1958	20.0	12-25-1957				
1959	57.0	4-29-1959				
1960	92.0	11-20-1959				
1961	69.0	1-15-1961			--	2.5
1962	3.0	12-22-1961	0.99	0.95	0.0	7.8
1963	23.0	11-19-1962	0.90	0.80	19.6	13.2
1964	19.0	0-0-1964	0.50	0.50	27.1	23.2
1965	45.0	11-30-1964	0.20	0.20	51.0	55.8
1966	62.0	1-13-1966	0.10	0.10	96.6	105.6
1967	38.0	12-13-1966	0.04	0.04	135.4	135.5
1968	46.0	2-3-1968	0.02	0.02	194.5	167.0
1969	43.0	12-24-1968	0.01	0.01	246.3	186.1
1970	18.0	4-9-1970			304.7	201.8

ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES
LOG-PEARSON III ANALYSIS (YEARS 1950-1970)

0.99	--	2.5
0.95	0.0	7.8
0.90	19.6	13.2
0.80	27.1	23.2
0.50	51.0	55.8
0.20	96.6	105.6
0.10	135.4	135.5
0.04	194.5	167.0
0.02	246.3	186.1
0.01	304.7	201.8

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1924	1022	916	598	669	1031	337	565	770	541	289	63.6	122	573
1925	47.5	396	1000	547	743	372	382	402	211	88.5	54.9	69.2	356
1926	782	930	795	704	508	310	344	606	848	404	210	50.2	550
1927	449	792	354	968	470	642	412	688	403	172	69.1	54.8	457
1928	268	544	391	194	111	306	294	601	598	258	112	58.4	310
1929	75.5	48.9	396	150	686	331	585	333	242	135	64.2	60.1	256
1930	154	240	255	922	475	583	611	539	518	216	70.8	113	391
1931	207	587	585	420	566	661	682	766	835	427	185	85.3	500
1932	155	927	535	480	186	366	433	699	984	817	308	380	524
1933	494	484	1778	1204	571	661	419	438	188	188	109	86.1	552
1934	673	1320	665	1235	744	431	338	610	604	334	140	197	606
1935	181	213	583	688	348	406	473	848	771	334	115	82.2	421
1936	44.5	40.0	603	124	128	507	637	923	1091	438	139	95.9	399
1937	396	1169	1052	569	267	486	602	727	610	266	94.8	60.6	526
1938	323	467	706	851	283	335	438	489	338	202	95.2	60.1	384
1939	364	514	366	153	386	633	634	1036	636	351	164	148	449
1940	166	1215	929	507	629	620	537	759	1099	661	286	123	626
1941	726	914	1464	617	1087	303	642	663	534	234	229	134	615
1942	599	614	465	290	602	253	639	939	719	497	229	115	496
1943	68.7	201	576	1915	719	332	472	812	647	589	230	198	564
1944	44.1	1134	928	571	1017	515	494	674	625	616	250	173	617
1945	519	1655	808	360	430	190	412	525	886	524	224	143	555
1946	584	1131	677	558	182	314	738	1304	1332	915	321	206	688
1947	630	500	826	233	713	632	611	737	369	224	159	104	477
1948	297	398	693	1027	1381	480	625	772	506	178	83.9	81.1	530
1949	310	737	987	1047	1381	342	684	703	652	304	114	341	548
1950	337	730	767	758	838	438	625	654	763	312	140	87.5	528
1951	343	626	749	1390	1294	790	523	815	785	316	119	88.7	649
1952	225	566	650	605	521	230	498	489	508	271	165	164	406
1953	671	942	966	462	1025	358	502	561	312	213	107	74.8	513
1954	621	1071	790	755	374	297	325	504	860	524	238	125	542
1955	179	477	495	481	631	349	376	564	466	211	110	80.8	381
1956	244	752	726	593	371	481	651	750	613	392	177	100	488
1957	236	758	1687	825	509	533	280	674	959	442	170	112	600
1958	1136	603	686	1291	1165	790	316	526	602	304	165	114	650
1959	485	677	785	430	300	409	665	1122	1028	323	145	420	567
1960	347	504	749	743	601	532	541	416	460	201	111	93.5	441
1961	288	759	626	694	696	434	496	1143	883	873	376	252	627
1962	252	781	932	507	770	1325	674	814	728	542	191	235	603
1963	105	677	992	764	433	393	300	621	526	250	113	129	442
1964	320	823	1349	1349	496	905	616	726	1147	861	384	168	755
1965	85.7	64.9	959	525	346	471	268	705	804	500	322	196	487
1966	1060	1248	1246	769	404	279	398	740	618	555	242	119	645
1967	105	173	1309	286	410	330	474	461	466	140	114	251	292
1968	369	1024	1100	823	669	593	482	557	524	256	255	682	607
1969	169	277	244	147	498	696	363	659	379	261	99.5	303	340

STATION 12056500 R BLW STRCSE RPD5 NEAR HDSPT, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1924-1979)

MEAN	375.7	673.9	779.7	665.5	588.7	464.4	500.4	686.7	630.0	358.9	157.4	152.8	502.5
MAXIMUM	1136.0	1655.0	1778.0	1915.0	1381.0	1325.0	901.0	1304.0	1332.0	915.0	384.0	624.0	755.0
MINIMUM	44.5	40.0	244.0	124.0	111.0	190.0	268.0	333.0	184.0	88.5	54.9	50.2	256.0
STD DEVIATION	269.94	333.20	362.40	352.66	293.64	199.43	137.32	209.33	261.59	202.18	81.59	107.57	107.81
SKEWNESS	1.106	0.469	0.996	1.061	0.826	1.787	0.315	0.746	0.492	1.170	1.104	2.119	-0.194
STD ERR SKEW	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.319	0.319	0.322
SER CORR COEFF	-0.145	-0.027	-0.040	-0.027	-0.021	-0.044	-0.073	-0.003	-0.018	0.115	0.215	0.169	0.051
COEFF OF VAR	0.719	0.494	0.439	0.530	0.494	0.429	0.274	0.305	0.415	0.563	0.518	0.704	0.215
MEAN LOGS	2.457	2.754	2.851	2.757	2.713	2.634	2.683	2.817	2.759	2.492	2.144	2.103	2.690
STD DEV LOGS	0.343	0.304	0.194	0.258	0.235	0.167	0.123	0.131	0.196	0.236	0.214	0.257	0.100
SKEWNESS LOGS	-0.385	-1.871	-0.267	-0.743	-0.596	0.389	-0.253	0.011	-0.493	0.055	0.215	0.510	-0.744
STD ERR SKEW LOGS	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.319	0.319	0.322
SER CORR LOGS	-0.194	0.032	0.038	-0.008	0.039	-0.004	-0.046	-0.002	-0.001	0.137	0.225	0.180	0.098
COEFF OF VAR LOGS	0.139	0.110	0.068	0.093	0.087	0.063	0.046	0.046	0.071	0.095	0.100	0.122	0.037
% OF AVE FLOW	6.2	11.2	12.9	11.0	9.8	7.7	8.3	11.4	10.4	5.9	2.6	2.5	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1924-1979)

0.99	36.7	47.6	230.9	105.2	116.7	196.5	236.6	326.9	171.7	89.5	48.0	40.0	253.6
0.95	72.1	141.0	330.3	193.3	195.7	239.2	296.5	400.7	258.5	128.0	64.1	52.6	321.4
0.90	101.4	226.2	396.6	259.0	252.0	267.8	332.8	446.8	316.6	155.1	75.2	61.8	360.2
0.80	150.2	364.5	491.3	358.7	335.3	309.7	381.1	509.8	399.0	196.2	91.8	76.4	408.9
0.50	301.0	695.3	724.1	615.1	545.1	419.8	487.4	656.5	596.0	309.0	137.0	120.7	504.4
0.20	561.6	987.3	1037.6	950.9	821.4	589.3	612.9	846.1	844.8	490.1	209.7	204.6	597.5
0.10	757.1	1085.9	1238.7	1149.3	989.2	713.9	686.4	966.4	993.9	625.5	264.7	277.8	643.2
0.04	1020.3	1149.2	1484.2	1369.6	1181.7	885.8	770.7	1113.9	1165.1	813.1	341.8	393.8	688.6
0.02	1224.0	1172.2	1660.9	1512.8	1311.4	1024.7	828.4	1221.1	1281.2	964.3	405.0	498.8	715.7
0.01	1431.6	1184.8	1832.4	1640.0	1430.4	1173.1	882.5	1326.4	1388.7	1125.2	473.1	624.8	738.5

STATION 12056500 NF SKOKOMISH R BLW STRCSE RPOS NR HDSPT, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1926	35.0	35.0	36.0	38.0	45.0	53.0	66.0	103.0	241.0
1927	28.0	29.0	30.0	33.0	40.0	48.0	63.0	93.0	194.0
1928	93.0	94.0	99.0	112.0	157.0	182.0	218.0	291.0	391.0
1929	38.0	38.0	40.0	45.0	52.0	62.0	92.0	136.0	237.0
1930	31.0	32.0	34.0	34.0	44.0	54.0	54.0	63.0	141.0
1931	17.0	18.0	20.0	26.0	34.0	52.0	67.0	96.0	146.0
1932	46.0	48.0	48.0	53.0	62.0	84.0	103.0	146.0	268.0
1933	42.0	44.0	44.0	53.0	65.0	98.0	139.0	203.0	376.0
1934	138.0	156.0	173.0	184.0	288.0	332.0	406.0	561.0	561.0
1935	53.0	55.0	59.0	82.0	85.0	106.0	126.0	207.0	207.0
1936	75.0	79.0	85.0	108.0	155.0	165.0	176.0	246.0	246.0
1937	33.0	33.0	34.0	35.0	38.0	40.0	49.0	63.0	164.0
1938	49.0	50.0	52.0	57.0	72.0	106.0	157.0	235.0	481.0
1939	43.0	44.0	46.0	49.0	55.0	67.0	101.0	144.0	300.0
1940	40.0	41.0	42.0	46.0	57.0	67.0	86.0	107.0	186.0
1941	42.0	43.0	45.0	47.0	56.0	58.0	71.0	100.0	234.0
1942	63.0	65.0	68.0	70.0	81.0	110.0	166.0	187.0	280.0
1943	43.0	45.0	46.0	48.0	53.0	57.0	70.0	112.0	233.0
1944	50.0	51.0	55.0	58.0	59.0	75.0	105.0	159.0	253.0
1945	42.0	42.0	43.0	45.0	51.0	69.0	81.0	92.0	187.0
1946	53.0	54.0	55.0	57.0	71.0	107.0	115.0	162.0	293.0
1947	58.0	59.0	62.0	69.0	79.0	114.0	158.0	191.0	379.0
1948	58.0	59.0	60.0	63.0	83.0	87.0	120.0	159.0	246.0
1949	96.0	98.0	100.0	104.0	115.0	171.0	252.0	278.0	300.0
1950	76.0	78.0	85.0	96.0	117.0	141.0	151.0	186.0	344.0
1951	82.0	85.0	95.0	104.0	115.0	192.0	305.0	412.0	573.0
1952	53.0	54.0	57.0	61.0	71.0	88.0	138.0	229.0	343.0
1953	47.0	50.0	54.0	57.0	63.0	78.0	119.0	149.0	275.0
1954	76.0	78.0	81.0	88.0	115.0	179.0	273.0	347.0	475.0
1955	102.0	103.0	104.0	126.0	160.0	187.0	295.0	359.0	456.0
1956	90.0	91.0	94.0	103.0	134.0	158.0	252.0	327.0	438.0
1957	120.0	121.0	123.0	128.0	144.0	209.0	330.0	408.0	429.0
1958	80.0	81.0	82.0	87.0	95.0	110.0	130.0	158.0	251.0
1959	58.0	59.0	61.0	67.0	73.0	79.0	99.0	154.0	311.0
1960	81.0	86.0	87.0	90.0	105.0	142.0	228.0	247.0	355.0
1961	55.0	57.0	61.0	71.0	78.0	105.0	131.0	192.0	337.0
1962	52.0	54.0	58.0	60.0	66.0	92.0	122.0	172.0	308.0
1963	75.0	76.0	80.0	85.0	100.0	137.0	185.0	257.0	336.0
1964	59.0	59.0	61.0	64.0	73.0	82.0	116.0	145.0	255.0
1965	74.0	77.0	85.0	92.0	100.0	152.0	173.0	209.0	304.0
1966	48.0	49.0	49.0	51.0	59.0	81.0	113.0	151.0	273.0
1967	55.0	56.0	57.0	62.0	74.0	96.0	146.0	193.0	326.0
1968	69.0	70.0	75.0	83.0	107.0	139.0	232.0	410.0	439.0
1969	95.0	100.0	103.0	119.0	151.0	167.0	197.0	268.0	344.0
1970	77.0	80.0	86.0	88.0	108.0	153.0	255.0	297.0	388.0
1971	57.0	58.0	60.0	64.0	77.0	91.0	101.0	146.0	242.0
1972	109.0	112.0	120.0	132.0	154.0	220.0	282.0	406.0	419.0
1973	77.0	80.0	83.0	85.0	103.0	170.0	173.0	254.0	358.0
1974	63.0	63.0	67.0	71.0	79.0	111.0	133.0	190.0	311.0
1975	67.0	68.0	69.0	72.0	82.0	114.0	166.0	262.0	448.0
1976	115.0	116.0	120.0	130.0	178.0	257.0	305.0	414.0	466.0
1977	55.0	55.0	57.0	64.0	76.0	104.0	129.0	143.0	201.0
1978	71.0	71.0	77.0	77.0	87.0	120.0	146.0	163.0	280.0
1979	100.0	101.0	105.0	116.0	144.0	183.0	200.0	204.0	284.0

STATION 12056500 NF SKOKOMISH R BLW STRCSE RPDS NR HDSPT, WASH.

LOWEST MEAN FLOW STATISTICS (YEAR 1926-1979)

MEAN	64.9	66.4	69.5	75.2	89.5	119.0	158.6	208.9	316.9
MAXIMUM	138.0	144.0	156.0	173.0	184.0	288.0	332.0	414.0	573.0
MINIMUM	17.0	18.0	20.0	25.0	34.0	40.0	45.0	63.0	141.0
STANDARD DEVIATION	25.16	25.82	27.44	30.36	37.34	55.10	76.14	98.45	100.56
SKWENESS	0.732	0.752	0.797	0.882	0.819	0.929	0.761	0.809	0.536
STD ERROR OF SKWENESS	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325
SERIAL CORR COEFF	0.210	0.190	0.172	0.155	0.197	0.084	0.138	0.183	0.204
COEFF OF VARIATION	0.388	0.389	0.395	0.404	0.417	0.463	0.480	0.471	0.317
MEAN LOGS	1.779	1.789	1.809	1.842	1.916	2.031	2.151	2.273	2.479
STD DEVIATION LOGS	0.175	0.174	0.176	0.175	0.179	0.200	0.211	0.207	0.141
SKWENESS LOGS	-0.423	-0.340	-0.308	-0.102	0.029	-0.014	-0.085	-0.117	-0.228
STD ERR SKWENESS LOGS	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325	0.325
SER CORR COEFF LOGS	0.325	0.308	0.306	0.285	0.292	0.178	0.204	0.237	0.251
COEFF OF VAR LOGS	0.098	0.097	0.097	0.095	0.093	0.098	0.098	0.091	0.057

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1926-1979)

0.99	135.2	139.9	150.3	172.3	216.6	311.6	426.3	543.8	606.6
0.98	125.2	129.1	137.9	155.6	193.1	275.3	376.3	483.0	563.3
0.96	114.4	117.7	124.9	138.8	170.1	239.7	327.3	422.7	517.9
0.90	98.6	101.0	106.4	116.0	139.8	193.5	263.0	342.7	452.6
0.80	84.9	86.6	90.9	97.8	116.5	158.2	213.7	280.4	397.1
0.50	61.9	63.2	65.7	70.1	82.3	107.5	142.6	189.2	305.1
0.20	43.4	44.3	46.2	49.7	58.3	73.0	94.2	126.0	230.4
0.10	35.4	36.3	37.9	41.4	48.7	59.5	75.6	101.4	197.5
0.05	29.7	30.6	32.0	35.5	42.0	50.3	62.9	84.4	173.3
0.02	24.1	24.9	26.3	29.8	35.6	41.6	51.0	68.5	148.9
0.01	20.9	21.7	23.0	26.5	31.9	36.7	44.3	59.5	134.3

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1926-1979)									
P95	P90	P75	P70	P50	P25	P10			
71.0	97.0	200.0	230.0	370.0	640.0	1000.0			

STATION	12056500	NF SKOKOMISH R BLW STRCSE RPOS NR HUSPRT, WASH.	HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30													ANNUAL PEAK-FLOW DATA	
			YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW(CFS)	DATE	REG. (R)		
1925			1925	3800.	3300.	2280.	1740.	1320.	1040.	859.	920.	760.	4400.	02/02/25			
1926			1926	2520.	2110.	1480.	1280.	1020.	791.	764.	694.	588.	4250.	12/11/25			
1927			1927	3310.	2760.	2190.	1970.	1260.	1040.	931.	836.	673.	5350.	12/01/26			
1928			1928	3100.	2270.	1750.	1460.	999.	796.	752.	692.	622.	4100.	01/03/28			
1929			1929	1960.	1600.	1340.	822.	654.	605.	519.	469.	364.	2540.	11/09/28			
1930			1930	2220.	1640.	1110.	745.	659.	526.	527.	478.	423.	4050.	12/14/29			
1931			1931	4270.	3290.	2480.	1560.	1030.	793.	725.	687.	609.	8830.	01/22/31			
1932			1932	4310.	3080.	1930.	1240.	952.	813.	804.	806.	667.	5950.	12/19/31			
1933			1933	2230.	1740.	1460.	1100.	1020.	944.	849.	748.	608.	4940.	11/12/32			
1934			1934	6100.	4440.	2680.	2410.	2010.	1560.	1250.	1080.	894.	10900.	12/21/33			
1935			1935	7000.	4680.	3460.	2360.	1520.	1140.	1080.	1080.	856.	27000.	11/05/34			
1936			1936	2410.	1810.	1310.	895.	829.	742.	640.	620.	2410.	2410.	06/17/36			
1937			1937	4740.	2820.	1690.	1210.	1090.	1020.	909.	798.	629.	5150.	12/22/36			
1938			1938	3960.	3160.	2060.	1640.	1280.	1160.	987.	810.	710.	10200.	10/28/37			
1939			1939	5360.	3380.	2120.	1290.	931.	805.	733.	628.	541.	8580.	01/01/39			
1940			1940	7000.	4130.	2860.	2390.	1960.	1340.	1160.	1040.	878.	9000.	12/15/39			
1941			1941	3960.	3730.	2420.	1530.	1100.	863.	796.	829.	714.	6830.	01/17/41			
1942			1942	5580.	3230.	2220.	1470.	1290.	949.	817.	704.	557.	9700.	12/02/41			
1943			1943	2880.	1960.	1500.	1160.	1020.	742.	668.	586.	534.	4400.	04/02/43			
1944			1944	2820.	2370.	1630.	1020.	763.	599.	527.	502.	420.	5540.	12/03/43			
1945			1945	5160.	3410.	2100.	1330.	997.	766.	720.	731.	610.	12900.	02/07/45			
1946			1946	2380.	1900.	1550.	1190.	1050.	963.	908.	802.	701.	3140.	11/14/45			
1947			1947	4700.	4450.	2890.	1700.	1240.	841.	907.	795.	660.	6500.	02/13/47			
1948			1948	3180.	2510.	1800.	1420.	1270.	1000.	840.	708.	632.	10100.	10/18/47			
1949			1949	2160.	1700.	1270.	1520.	1100.	932.	829.	770.	619.	2530.	02/22/49			
1950			1950	9950.	5810.	3730.	2380.	1580.	1130.	905.	886.	761.	24200.	11/26/49			
1951			1951	5220.	4330.	2780.	1830.	1660.	1230.	1190.	1070.	854.	7030.	02/10/51			
1952			1952	2260.	1880.	1470.	1110.	997.	887.	800.	707.	625.	3810.	11/30/51			
1953			1953	4790.	3240.	2940.	2350.	1960.	1410.	1080.	899.	825.	6730.	01/09/53			
1954			1954	3000.	2410.	1850.	1390.	1210.	1100.	920.	916.	774.	4510.	03/09/54			
1955			1955	5630.	4930.	3880.	2610.	1810.	1260.	1030.	855.	668.	9400.	11/18/54			
1956			1956	9940.	5400.	2950.	1970.	1610.	1360.	1240.	1090.	822.	13600.	11/03/55			
1957			1957	4920.	4000.	2510.	1670.	1080.	838.	810.	722.	632.	9430.	12/09/56			
1958			1958	4360.	2870.	2330.	1810.	1360.	1200.	1040.	894.	816.	6690.	02/24/58			
1959			1959	4060.	2890.	1770.	1280.	1110.	1030.	943.	802.	709.	7210.	12/01/58			
1960			1960	6430.	3520.	2340.	1910.	1330.	923.	938.	789.	739.	8850.	01/29/60			
1961			1961	7800.	4370.	3140.	2080.	1660.	1360.	1170.	1060.	949.	10500.	01/15/61			
1962			1962	2780.	1800.	1400.	1050.	837.	743.	654.	600.	525.	3500.	01/03/62			
1963			1963	4960.	3500.	2410.	1440.	1290.	1050.	947.	878.	742.	9010.	11/25/62			
1964			1964	3970.	2540.	1830.	1330.	1210.	970.	973.	860.	671.	7210.	10/21/63			
1965			1965	3070.	2270.	1460.	1010.	755.	655.	580.	551.	533.	4070.	11/29/64			
1966			1966	2560.	2000.	1640.	1140.	957.	749.	698.	642.	609.	3490.	12/06/65			
1967			1967	5190.	3760.	3020.	2200.	1870.	1340.	1180.	971.	786.	7580.	12/13/66			
1968			1968	5460.	3790.	2910.	2200.	1570.	1350.	1160.	996.	945.	8120.	01/14/68			
1969			1969	2440.	1670.	1490.	1440.	1340.	1100.	963.	939.	680.	3640.	12/03/68			
1970			1970	2610.	1940.	1600.	1210.	897.	805.	727.	707.	617.	5170.	12/13/69			
1971			1971	2710.	2070.	1360.	1290.	1150.	1020.	972.	862.	767.	4010.	12/07/70			
1972			1972	3330.	2790.	2200.	1830.	1580.	1200.	993.	963.	841.	4530.	02/27/72			
1973			1973	2980.	2450.	2140.	1790.	1330.	909.	825.	735.	613.	5420.	12/18/72			
1974			1974	7780.	6230.	3890.	2330.	1490.	1360.	1190.	1010.	931.	9200.	01/15/74			
1975			1975	3050.	2030.	1760.	1270.	1120.	881.	742.	685.	587.	7800.	12/21/74			
1976			1976	4810.	4040.	2450.	1630.	1470.	1400.	1220.	1100.	838.	9590.	12/03/75			
1977			1977	2150.	1220.	777.	661.	543.	523.	470.	459.	420.	2760.	12/26/76			
1978			1978	3740.	2360.	2140.	1620.	1240.	1150.	1040.	950.	804.	9760.	11/01/77			
1979			1979	2320.	2020.	1440.	1010.	777.	610.	589.	577.	475.	4010.	11/03/78			

STATION 12056500 NF SKOKOMISH R BLW STCRSE RPD5 NR HDSPT, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1925-1979)

W R C
ESTIMATE
SYSTEMATIC
RECORD

MEAN	4207.6	3011.3	2135.6	1551.2	1223.1	989.1	843.5	798.3	680.9
MAXIMUM	9940.0	6230.0	3690.0	2610.0	2010.0	1560.0	1250.0	1100.0	949.0
MINIMUM	1960.0	1220.0	777.0	661.0	543.0	523.0	470.0	459.0	364.0
STANDARD DEVIATION	1888.74	1154.01	713.88	474.56	345.50	249.93	200.75	170.11	138.85
SKWENESS	1.247	0.792	0.691	0.464	0.440	0.207	-0.016	-0.049	-0.067
STD ERROR OF SKWENESS	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322
SERIAL CORR COEFF	0.029	-0.007	-0.023	0.061	0.047	0.021	-0.008	-0.039	0.009
COEFF OF VARIATION	0.449	0.383	0.334	0.306	0.282	0.253	0.227	0.213	0.204
MEAN LOGS	3.586	3.448	3.306	3.170	3.070	2.981	2.934	2.892	2.824
STD DEVIATION LOGS	0.180	0.164	0.145	0.135	0.126	0.114	0.104	0.097	0.094
SKWENESS LOGS	0.365	0.045	-0.122	-0.206	-0.299	-0.339	-0.541	-0.536	-0.631
STD ERR SKWENESS LOGS	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322
SER CORR COEFF LOGS	-0.004	-0.044	-0.047	0.069	0.072	0.064	0.035	0.007	0.060
COEFF OF VAR LOGS	0.050	0.047	0.044	0.043	0.041	0.036	0.036	0.034	0.033

3.8000
0.2264
0.1950
0.3740

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1925-1979)

0.99	1640.3	1197.2	901.0	683.7	562.0	487.9	448.0	424.2	366.1
0.95	2036.6	1525.6	1153.1	870.8	712.4	607.5	560.2	522.5	451.5
0.90	2305.7	1739.4	1311.7	986.4	803.8	678.7	625.4	579.0	500.1
0.80	2702.0	2042.6	1529.5	1142.7	925.3	772.0	708.7	650.7	561.0
0.50	3757.4	2793.6	2036.7	1496.3	1192.1	971.5	878.6	795.3	681.3
0.20	5415.2	3849.5	2886.0	1930.0	1504.7	1197.3	1056.3	944.9	801.3
0.10	6652.0	4555.7	3092.2	2191.6	1686.2	1324.8	1149.8	1023.0	861.9
0.04	8378.3	5489.4	3583.1	2498.8	1892.7	1467.0	1248.1	1104.8	923.6
0.02	9786.8	6191.1	3934.8	2713.2	2033.0	1561.9	1310.3	1156.5	961.6
0.01	11303.5	6904.5	4276.1	2917.2	2163.6	1649.0	1365.0	1201.8	994.2

2168.4
2838.9
3314.3
4051.4
4041.0
6107.8
6203.5
9728.7
12428.7
12521.6
16258.9
19419.9
16745.4
20369.7
24430.0

STATION 12057500 NORTH FORK SKOKOMISH RIVER NR HOODSPORT, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1913	511	1619	925	2414	666	546	704	1000	1200	845	383	561	
1914	1267	1499	566	867	727	1011	1191	973	809	506	215	464	948
1915	428	834	566	545	949	989	1349	806	515	1058	165	128	771
1916	195	684	536	491	564	394	948	1084	1302	1058	517	238	934
1917	168	500	2289	1532	1112	1013	806	577	447	221	158	104	596
1918	475	906	1590	1494	1166	684	1889	975	857	683	298	168	864
1919	133	812	1309	1060	569	556	338	365	661	263	163	821	587
1920	1635	1287	1293	1208	1119	805	610	961	1311	741	378	467	984
1921	1850	1563	1815	380	397	339	490	973	1081	405	210	220	813
1922	486	393	1303	1841	549	499	690	682	624	372	168	168	651
1923	268	410	1219	1078	2268	521	312	489	287	157	115	428	623
1924	1494	1574	929	992	1790	613	786	910	691	410	191	138	870
1925	72.2	10.0	10.0	10.0	14.1	54.9	80.1	106	128	127	209	824	137
1926	1540	1306	1632	1384	552	326	235	196	143	463	452	324	716
1927	436	1749	1242	1167	834	751	562	857	524	215	263	618	768
1928	651	922	1037	1416	1452	624	526	96.4	48.3	218	511	730	681
1929	721	978	265	405	95.6	66.6	32.9	42.4	155	114	69.8	507	288
1930	812	758	789	1135	1217	841	572	321	340	548	607	574	707
1942	716	785	1057	916	919	934	217	159	194	268	200	137	541
1943	586	830	1124	770	796	413	619	430	504	140	161	508	571
1944	660	1168	873	654	1216	426	118	112	76.2	89.7	92.2	263	476
1945	643	1308	1184	876	1162	1155	440	253	429	143	135	570	688
1946	584	852	1420	1306	1131	944	542	566	805	617	431	452	804
1947	806	633	1551	1259	1336	724	258	207	89.3	113	105	365	601
1948	1353	963	1141	1292	815	713	442	556	985	323	225	481	774
1949	843	1009	1078	770	615	654	404	1260	489	257	262	277	661
1950	572	1279	1778	1209	877	1573	589	542	1083	585	426	311	903
1951	1167	1402	2268	1498	1596	1166	633	340	100	160	184	315	900
1952	1266	1154	1498	781	790	578	159	639	634	456	305	485	730
1953	573	750	993	1869	1373	783	325	810	590	555	367	448	786
1954	1024	1409	1317	1231	1507	797	705	649	592	693	385	434	891
1955	990	2151	1353	995	721	910	427	55.7	524	578	422	616	811
1956	611	1879	1149	1114	924	938	426	997	1551	951	396	789	975
1957	1070	897	1175	870	505	645	789	747	443	310	429	871	739
1958	652	946	807	981	1800	766	754	732	539	205	365	490	759
1959	1130	1005	708	1788	958	435	635	868	795	368	442	503	802
1960	497	1137	1277	1436	1438	799	544	668	716	295	355	334	789
1961	902	1135	1299	1584	2006	1314	729	971	827	347	157	732	994
1962	706	1735	1301	1150	451	165	88.8	404	298	216	234	483	603
1963	1312	1358	1483	1809	963	268	511	727	431	263	176	190	791
1964	1306	1756	1301	1841	1192	936	261	6.45	305	501	296	400	842
1965	551	1042	960	944	671	990	626	265	344	188	128	377	590
1966	1047	1662	1939	783	486	891	230	255	677	437	199	907	795
1967	1683	1129	1270	1410	1105	1472	693	45.0	680	491	196	368	878
1968	1773	1372	1468	1489	1756	1223	954	236	672	363	307	532	1009
1969	1101	940	1393	1522	658	345	999	236	1146	369	295	987	866
1970	963	1435	1788	1646	677	382	999	252	8.93	1.52	603	1109	755
1971	1153	1275	1777	1534	411	182	115	762	987	892	568	1360	922
1972	1261	776	1725	1698	449	409	1189	361	890	385	322	754	853
1973	601	1861	1593	1452	1376	959	406	81.7	22.8	151	508	32.5	1019
1974	704	1001	1220	2020	1323	1251	1140	795	985	929	528	349	727
1975	1195	1110	1279	1086	485	440	994	361	482	291	396	588	1019
1976	1367	2215	1967	1386	1675	1074	472	50.1	226	360	417	543	977
1977	968	835	674	1282	662	1019	265	13.6	66.5	0.00	489	12.0	480
1978	699	1427	1796	1664	890	1101	352	223	0.00	275	0.00	1064	838

STATION 12057500 NORTH FORK SKOKOMISH RIVER NR HOODSPORT, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1913-1978)

MEAN	872.3	1153.4	1274.4	1220.8	986.1	745.3	559.0	526.1	587.3	401.9	307.5	484.7	755.9
MAXIMUM	1850.0	2215.0	2229.0	2414.0	2263.0	1573.0	1349.0	1260.0	1551.0	1058.0	607.0	1360.0	1019.0
MINIMUM	72.2	10.0	10.0	10.0	14.1	54.9	32.9	6.4	0.0	0.0	0.0	12.0	137.0
STD DEVIATION	433.28	440.80	447.47	453.44	481.78	354.25	314.82	345.80	376.43	249.76	142.64	281.61	172.50
SKEWNESS	0.341	0.163	-0.255	-0.135	0.700	0.124	0.441	0.128	0.405	0.914	0.316	0.813	-1.150
STD ERR SKEW	0.322	0.322	0.322	0.322	0.319	0.419	0.319	0.319	0.322	0.322	0.322	0.319	0.322
SEM CORR COEFF	0.050	0.051	0.045	0.075	-0.118	0.197	0.189	0.284	0.027	-0.035	0.160	0.249	-0.003
COEFF OF VAR	0.497	0.482	0.450	0.470	0.490	0.475	0.503	0.657	0.639	0.622	0.464	0.581	0.228
MEAN LOGS	2.870	3.004	3.051	3.040	2.915	2.801	2.855	2.847	2.819	2.492	2.435	2.586	2.862
STD DEV LOGS	0.283	0.320	0.326	0.326	0.335	0.293	0.327	0.497	0.458	0.414	0.226	0.357	0.140
SKEWNESS LOGS	-1.389	-4.704	-4.081	-4.022	-3.029	-1.498	-1.237	-1.513	-1.609	-3.244	-0.493	-1.890	-3.109
STD ERR SKEW LOGS	0.322	0.322	0.322	0.322	0.319	0.319	0.319	0.319	0.322	0.322	0.322	0.319	0.322
SEM CORR LOGS	0.017	-0.051	0.012	0.006	-0.110	0.168	0.017	0.221	-0.096	-0.124	0.127	-0.019	-0.016
COEFF OF VAR LOGS	0.099	0.106	0.107	0.107	0.115	0.105	0.123	0.195	0.175	0.166	0.093	0.138	0.049
% OF AVE FLOW	9.6	12.6	14.6	13.4	10.8	4.2	6.1	5.8	6.5	4.4	3.4	5.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1913-1978)

0.99	88.2	99999.0	99999.0	99999.0	99999.0	61.7	41.4	7.7	11.6	99999.0	67.4	20.8	99999.0
0.95	209.7	99999.0	99999.0	99999.0	99999.0	168.8	106.7	37.6	52.5	99999.0	108.2	75.1	99999.0
0.90	310.7	99999.0	99999.0	99999.0	99999.0	258.5	189.6	76.5	102.5	99999.0	136.8	131.1	99999.0
0.80	467.7	99999.0	99999.0	99999.0	99999.0	404.8	281.0	160.1	204.4	99999.0	178.8	229.8	99999.0
0.50	857.8	99999.0	99999.0	99999.0	99999.0	757.8	525.2	484.7	544.9	99999.0	284.3	440.1	99999.0
0.20	1276.2	99999.0	99999.0	99999.0	99999.0	1097.0	851.1	905.4	1145.8	99999.0	425.6	736.9	99999.0
0.10	1464.4	99999.0	99999.0	99999.0	99999.0	1214.1	1016.8	1126.5	1145.2	99999.0	513.6	822.1	99999.0
0.04	1624.6	99999.0	99999.0	99999.0	99999.0	1308.3	1172.2	1317.0	1345.3	99999.0	617.2	876.6	99999.0
0.02	1703.7	99999.0	99999.0	99999.0	99999.0	1345.3	1256.4	1409.1	1417.2	99999.0	688.9	896.3	99999.0
0.01	1759.4	99999.0	99999.0	99999.0	99999.0	1367.6	1320.3	1471.5	1463.4	99999.0	756.1	906.9	99999.0

STATION 12057500 NORTH FORK SKOKOMISH RIVER NR HOODSPORT, WASH.

LDWEST MEAN FLOW IN CFS FOR THE FOLLWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1914	217.0	222.0	227.0	250.0	298.0	422.0	471.0	546.0	741.0
1915	136.0	142.0	149.0	150.0	164.0	227.0	353.0	448.0	621.0
1916	100.0	110.0	106.0	110.0	123.0	137.0	153.0	195.0	364.0
1917	124.0	124.0	128.0	132.0	143.0	197.0	303.0	401.0	436.0
1918	130.0	131.0	132.0	136.0	163.0	193.0	230.0	302.0	493.0
1919	89.0	90.0	91.0	94.0	101.0	127.0	151.0	185.0	303.0
1920	111.0	113.0	114.0	114.0	127.0	149.0	179.0	248.0	440.0
1921	124.0	124.0	126.0	133.0	149.0	181.0	292.0	342.0	432.0
1922	176.0	180.0	187.0	206.0	253.0	345.0	371.0	602.0	732.0
1923	128.0	130.0	134.0	142.0	159.0	190.0	225.0	290.0	363.0
1924	105.0	106.0	110.0	113.0	131.0	159.0	180.0	209.0	322.0
1925	79.0	81.0	83.0	86.0	93.0	108.0	131.0	181.0	297.0
1926	0.0	2.0	2.6	4.8	7.6	8.8	9.2	9.5	29.0
1927	2.0	2.7	16.0	21.0	62.0	86.0	99.0	107.0	244.0
1928	47.0	73.0	118.0	124.0	123.0	164.0	188.0	258.0	303.0
1929	2.0	103.0	148.0	159.0	175.0	219.0	291.0	391.0	494.0
1930	3.0	3.0	3.0	3.6	5.6	43.0	88.0	178.0	353.0
1942	77.0	99.0	230.0	255.0	276.0	327.0	377.0	435.0	490.0
1943	0.0	24.0	57.0	90.0	121.0	146.0	179.0	185.0	195.0
1944	0.0	52.0	68.0	91.0	115.0	137.0	243.0	303.0	389.0
1945	0.0	46.0	67.0	70.0	74.0	82.0	83.0	90.0	125.0
1946	60.0	108.0	116.0	120.0	127.0	138.0	228.0	234.0	311.0
1947	0.0	150.0	224.0	265.0	265.0	435.0	457.0	510.0	540.0
1948	0.0	0.0	30.0	40.0	53.0	84.0	93.0	118.0	189.0
1949	0.0	27.0	67.0	103.0	175.0	249.0	331.0	439.0	497.0
1950	0.0	19.0	66.0	151.0	228.0	239.0	255.0	302.0	437.0
1951	0.0	140.0	182.0	202.0	283.0	354.0	408.0	573.0	587.0
1952	0.0	21.0	38.0	45.0	57.0	122.0	140.0	166.0	288.0
1953	0.0	36.0	122.0	128.0	132.0	335.0	391.0	430.0	447.0
1954	0.0	0.0	177.0	236.0	312.0	349.0	419.0	478.0	517.0
1955	0.0	35.0	176.0	276.0	297.0	381.0	470.0	517.0	562.0
1956	0.0	0.0	0.0	0.0	29.0	179.0	328.0	379.0	433.0
1957	0.0	99.0	251.0	297.0	318.0	522.0	655.0	765.0	844.0
1958	0.0	35.0	78.0	172.0	244.0	321.0	374.0	469.0	569.0
1959	0.0	0.0	0.0	0.0	107.0	327.0	297.0	383.0	513.0
1960	0.0	0.0	0.0	0.0	189.0	303.0	386.0	441.0	548.0
1961	0.0	0.0	92.0	201.0	283.0	295.0	321.0	384.0	481.0
1962	0.0	0.0	0.0	32.0	151.0	249.0	373.0	439.0	587.0
1963	0.0	0.0	0.0	0.0	89.0	192.0	220.0	246.0	287.0
1964	0.0	0.0	0.0	0.0	32.0	121.0	204.0	242.0	370.0
1965	0.0	0.0	0.0	0.0	3.4	63.0	178.0	257.0	294.0
1966	0.0	0.0	32.0	76.0	125.0	140.0	172.0	208.0	308.0
1967	0.0	0.0	0.0	52.0	184.0	236.0	382.0	396.0	448.0
1968	0.0	0.0	0.0	0.0	24.0	128.0	334.0	351.0	409.0
1969	0.0	0.0	0.0	0.0	189.0	281.0	387.0	386.0	476.0
1970	0.0	0.0	0.0	27.0	218.0	239.0	352.0	571.0	710.0
1971	0.0	0.0	0.0	0.0	1.6	3.2	13.0	113.0	358.0
1972	0.0	0.0	0.0	76.0	93.0	427.0	622.0	687.0	780.0
1973	0.0	0.0	0.0	4.4	103.0	274.0	436.0	469.0	544.0
1974	0.0	0.0	0.0	0.0	0.0	11.0	57.0	145.0	190.0
1975	0.0	0.0	20.0	113.0	298.0	326.0	559.0	656.0	740.0
1976	0.0	0.0	0.0	5.5	154.0	322.0	362.0	374.0	491.0
1977	0.0	0.0	0.0	0.0	0.0	62.0	192.0	262.0	341.0

STATION 12057500 NORTH FORK SKOKOMISH RIVER NR HOODSPORT, WASH.

LOWEST MEAN FLOW STATISTICS (YEARS 1914-1977)

MEAN	95.0	84.5	110.2	121.6	149.6	212.4	282.9	345.2	438.9
MINIMUM	217.0	222.0	251.0	297.0	318.0	522.0	655.0	765.0	844.0
STANDARD DEVIATION	0.0	0.0	0.0	0.0	0.0	3.2	9.2	9.5	129.0
SKENNESS	58.11	56.08	66.77	79.58	89.89	119.60	145.97	165.99	169.63
STD ERROR OF SKEWNESS	-0.001	0.292	0.322	0.463	0.251	0.370	0.305	0.332	0.197
SERIAL CORR COEFF	0.536	0.421	0.393	0.365	0.333	0.327	0.327	0.327	0.327
COEFF OF VARIATION	0.687	0.328	0.051	0.253	0.005	0.007	0.041	0.016	0.118
MEAN LOGS	0.612	0.664	0.606	0.655	0.601	0.563	0.516	0.479	0.386
STD DEVIATION LOGS	1.747	1.742	1.900	1.917	2.019	2.209	2.360	2.467	2.598
SKENNESS LOGS	0.658	0.530	0.461	0.494	0.500	0.419	0.352	0.303	0.232
STD ERR SKEWNESS LOGS	-1.732	-1.579	-1.914	-1.581	-2.053	-2.235	-2.140	-2.436	-2.446
SER CORR COEFF LOGS	0.536	0.421	0.393	0.365	0.333	0.327	0.327	0.327	0.327
COEFF OF VAR LOGS	0.409	0.233	0.083	0.064	-0.012	-0.071	0.013	0.152	0.155
	0.377	0.304	0.242	0.258	0.248	0.190	0.149	0.123	0.089

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1914-1977)

0.99	306.6	241.3	236.8	327.1	317.6	382.1	487.2	519.5	613.1
0.98	296.4	231.9	233.5	315.3	314.4	380.4	484.6	518.7	612.4
0.96	279.6	217.5	227.2	297.1	308.0	376.5	479.0	516.6	610.6
0.90	240.0	186.7	209.8	257.8	287.8	361.9	460.1	507.3	602.3
0.80	189.4	149.9	182.8	210.0	253.4	332.5	424.4	484.4	581.7
0.50	84.5	75.0	108.7	110.1	149.7	223.1	297.8	375.3	478.9
0.20	20.7	24.1	40.9	38.2	52.3	93.6	142.6	202.6	298.7
0.10	7.5	10.9	19.8	18.2	23.4	47.1	80.5	122.0	202.3
0.05	2.8	5.0	9.6	8.9	10.5	23.4	45.1	72.1	135.1
0.02	0.8	1.9	3.7	3.5	3.6	9.1	20.9	35.4	78.2
0.01	0.3	0.9	1.8	1.8	1.6	4.5	11.6	20.5	51.4

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1914-1977)									
P95	P90	P75	P70	P50	P25	P10			
1.4	69.0	270.0	340.0	630.0	1100.0	1600.0			

STATION 12057500 NORTH FORK SKOKOMISH RIVER NR HOODSPORT, WASH.									
HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30									
YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1914	12000.	9590.	6320.	3840.	2460.	2040.	1690.	1490.	1340.
1915	5190.	4650.	3270.	2080.	1490.	1480.	1230.	1110.	1120.
1916	6200.	4090.	2940.	1690.	1690.	1380.	1270.	1210.	1170.
1917	2010.	1650.	1400.	1210.	1160.	1100.	1030.	944.	783.
1918	7770.	6320.	4630.	3480.	3040.	2700.	1660.	1540.	1230.
1919	6150.	4030.	3360.	2500.	1970.	1570.	1430.	1340.	1170.
1920	5500.	4620.	3670.	2500.	1530.	1300.	1160.	975.	787.
1921	4440.	3580.	2880.	2190.	1730.	1530.	1410.	1370.	1220.
1922	9450.	7210.	4320.	3000.	2500.	2270.	1750.	1430.	1070.
1923	6610.	5100.	4130.	3330.	2770.	1670.	1310.	1140.	980.
1924	10300.	7200.	4730.	3870.	2700.	1700.	1560.	1310.	992.
1925	5020.	4310.	3250.	2740.	2130.	1640.	1360.	1440.	1220.
1926	1510.	1380.	1280.	1210.	824.	520.	389.	324.	244.
1927	2780.	2770.	2700.	2380.	1870.	1690.	1620.	1480.	1130.
1928	2800.	2700.	2620.	2530.	2070.	1540.	1450.	1270.	1060.
1929	1880.	1850.	1780.	1720.	1630.	1440.	1310.	1200.	1010.
1930	1270.	1210.	1060.	1070.	1030.	857.	666.	589.	422.
1941	2050.	2030.	1930.	1520.	1470.	1200.	1090.	993.	921.
1942	1420.	1390.	1260.	1210.	1120.	1020.	984.	959.	888.
1943	1800.	1540.	1390.	1260.	1220.	1090.	964.	919.	759.
1944	1620.	1610.	1530.	1410.	1260.	1070.	925.	983.	827.
1945	1570.	1490.	1470.	1410.	1380.	1270.	1120.	1140.	1060.
1946	1620.	1580.	1540.	1520.	1460.	1390.	1310.	1220.	1070.
1947	2060.	2060.	2060.	1950.	1610.	1430.	1410.	1270.	1010.
1948	2590.	2370.	2200.	2000.	1750.	1260.	1330.	1230.	1060.
1949	1610.	1580.	1560.	1550.	1290.	1060.	1020.	938.	830.
1950	4870.	4410.	3870.	2970.	2190.	1750.	1480.	1500.	1220.
1951	3120.	3070.	2880.	2530.	2320.	1960.	1850.	1720.	1530.
1952	2180.	2090.	2030.	1740.	1520.	1390.	1370.	1190.	1010.
1953	2740.	2630.	2440.	2360.	2130.	1670.	1460.	1300.	1050.
1954	2440.	2430.	2400.	2110.	1620.	1470.	1350.	1360.	1210.
1955	6410.	5510.	3950.	3110.	2380.	1760.	1540.	1400.	1190.
1956	6860.	5150.	3760.	2700.	1900.	1520.	1390.	1270.	1110.
1957	2240.	2170.	1990.	1760.	1300.	1120.	1060.	1030.	893.
1958	4010.	3780.	2830.	2410.	1980.	1540.	1250.	1180.	1030.
1959	4010.	3610.	2800.	2170.	1690.	1440.	1180.	1160.	1010.
1960	3180.	2710.	1970.	1710.	1660.	1480.	1420.	1350.	1110.
1961	3480.	3180.	2570.	2180.	1980.	1810.	1640.	1550.	1380.
1962	2140.	2090.	2030.	1920.	1780.	1550.	1450.	1240.	916.
1963	3460.	2750.	2230.	1970.	1820.	1710.	1580.	1500.	1200.
1964	2370.	2320.	2250.	2200.	1970.	1770.	1620.	1680.	1400.
1965	1910.	1830.	1730.	1510.	1320.	1110.	1000.	941.	890.
1966	2160.	2090.	2070.	2040.	1970.	1820.	1600.	1380.	1140.
1967	2150.	2030.	2000.	1870.	1700.	1430.	1370.	1260.	1350.
1968	2360.	2270.	2250.	2090.	1780.	1700.	1570.	1550.	1310.
1969	2280.	2270.	2090.	1790.	1560.	1480.	1280.	1260.	1020.
1970	2210.	2170.	2050.	1940.	1830.	1770.	1640.	1500.	1150.
1971	2220.	2120.	2020.	1980.	1950.	1800.	1620.	1450.	1060.
1972	2210.	2200.	2160.	1990.	1930.	1760.	1430.	1380.	1060.
1973	2120.	2000.	2040.	1970.	1940.	1780.	1680.	1580.	1310.
1974	4320.	4060.	3310.	2580.	2080.	1730.	1590.	1510.	1340.
1975	2240.	2050.	2000.	1770.	1320.	1380.	1200.	978.	
1976	5040.	4110.	3230.	2640.	2370.	2150.	1980.	1840.	1610.
1978	2510.	2240.	2060.	1950.	1870.	1860.	1650.	1510.	1270.

ANNUAL PEAK-FLOW DATA

FLOW(CFS)

DATE

REG.(R)

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1914-1978)

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1914-1978)

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1950	3.40	6.84	9.62	8.15	9.99	3.77	2.48	1.78	1.19	0.91	0.81	0.73	
1951	0.33	0.49	4.65	14.3	6.86	3.74	2.58	2.29	1.81	1.33	0.97	0.81	
1952	1.60	8.16	13.2	15.9	33.3	7.55	5.12	2.22	1.86	1.48	1.16	0.89	3.34
1953	1.81	20.8	9.65	8.05	11.8	4.85	11.9	2.55	1.84	1.40	0.92	0.84	7.56
1954	3.29	34.2	26.7	26.4	8.87	23.9	11.7	2.45	2.22	1.66	1.22	0.80	12.0
1955	4.35	5.81	11.9	3.29	19.3	18.8	6.55	2.88	2.18	1.33	1.00	0.58	6.42
1956	0.98	3.25	14.8	27.7	27.8	7.50	6.20	3.21	1.75	1.27	0.56	0.85	7.86
1957	0.46	4.99	15.3	25.3	25.1	6.09	9.61	6.04	2.55	1.84	1.06	0.85	6.93
1958	1.49	1.88	14.8	15.9	22.3	7.83	12.2	4.79	2.00	1.34	0.97	0.85	7.86
1959	0.94	8.43	12.1	28.8	36.5	28.9	5.74	3.70	2.21	1.47	1.08	0.99	10.88
1960	0.97	3.14	18.0	8.33	4.05	6.36	4.17	4.42	1.91	1.45	1.41	1.19	4.31
1961	3.58	14.0	14.2	9.36	10.7	4.48	10.5	4.68	2.12	1.56	1.00	1.06	6.40
1962	3.86	19.5	12.7	22.4	11.5	8.38	2.80	1.22	1.14	1.11	0.82	0.72	7.25
1963	0.49	3.53	9.65	9.73	18.8	7.00	5.16	3.08	1.67	1.23	0.87	0.75	5.08
1964	0.84	3.83	11.5	21.8	12.4	18.5	4.74	1.62	1.29	0.96	0.75	0.61	6.57
1965	0.48	2.54	37.2	26.3	14.7	15.2	4.47	1.87	1.21	0.88	1.01	0.76	8.89
1966	5.97	8.37	22.7	35.2	25.2	16.7	5.35	1.86	1.63	1.11	1.00	0.99	10.5
1967	1.99	6.92	22.2	10.7	8.42	12.4	13.1	2.92	1.71	1.06	0.79	1.16	6.91
1968	1.93	2.86	17.8	17.6	10.0	7.36	6.59	2.17	1.01	0.77	0.69	0.55	5.52
1969	0.89	4.92	21.9	18.6	13.5	21.9	14.0	4.06	1.93	1.17	0.97	0.87	8.81
1970	0.57	6.45	8.05	18.6	21.7	32.8	14.3	2.72	1.57	1.28	0.93	0.97	9.13
1971	0.66	4.33	25.2	18.9	5.42	6.43	2.45	1.36	1.28	0.87	0.55		

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1950-1973)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
MEAN	1.9	8.5	15.8	17.8	35.2	36.5	12.3	7.4	2.9	1.7	1.2	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
MAXIMUM	6.0	34.2	37.2	35.2	36.5	36.5	14.3	6.0	6.0	2.6	1.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
MINIMUM	0.3	0.5	4.6	3.3	4.1	4.1	3.7	2.4	1.2	0.8	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
STD DEVIATION	1.55	7.87	7.44	8.42	9.01	9.01	4.02	4.83	0.889	0.076	0.130	0.258	0.168	0.168	0.168	0.168	0.168	0.168	0.168	0.168	0.168	0.168	0.168	0.168
SKENNESS	1.205	2.069	1.281	0.205	0.964	0.964	1.078	0.483	0.483	0.483	0.483	0.483	0.483	0.483	0.483	0.483	0.483	0.483	0.483	0.483	0.483	0.483	0.483	0.483
STD ERR SKEW	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491
SER CORR COEFF	0.040	0.274	0.039	-0.247	-0.261	-0.261	0.133	0.380	0.244	0.394	0.156	0.156	0.156	0.156	0.156	0.156	0.156	0.156	0.156	0.156	0.156	0.156	0.156	0.156
COEFF OF VAR	0.833	0.927	0.472	0.473	0.582	0.582	0.696	0.426	0.426	0.426	0.426	0.426	0.426	0.426	0.426	0.426	0.426	0.426	0.426	0.426	0.426	0.426	0.426	0.426
MEAN LOGS	0.126	0.778	1.155	1.192	1.121	1.121	0.995	0.799	0.426	0.226	0.086	0.098	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083	0.083
STD DEV LOGS	0.366	0.388	0.199	0.249	0.254	0.254	0.290	0.255	0.184	0.109	0.099	0.098	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113	0.113
SKENNESS LOGS	0.135	-0.538	-0.128	-0.927	-0.034	-0.034	-0.315	-0.156	0.065	-0.500	-0.335	-0.500	-0.661	-0.661	-0.661	-0.661	-0.661	-0.661	-0.661	-0.661	-0.661	-0.661	-0.661	-0.661
STD ERR SKEW LOGS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491
SER CORR LOGS	0.028	0.101	0.058	-0.311	-0.309	-0.309	0.197	0.174	0.262	0.193	0.402	0.105	0.146	0.146	0.146	0.146	0.146	0.146	0.146	0.146	0.146	0.146	0.146	0.146
COEFF OF VAR LOGS	2.901	0.499	0.172	0.209	0.227	0.227	0.292	0.319	0.433	0.484	1.148	2.154	1.363	1.363	1.363	1.363	1.363	1.363	1.363	1.363	1.363	1.363	1.363	1.363
% OF AVE FLOW	2.1	9.8	18.2	20.5	17.9	17.9	14.2	8.5	3.3	2.0	1.4	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1950-1973)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
0.99	0.2	0.5	4.7	2.8	3.3	3.3	2.4	1.5	1.0	0.9	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
0.95	0.3	1.2	6.6	5.4	5.0	5.0	3.5	2.3	1.3	1.1	0.8	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.90	0.5	1.8	7.9	7.2	6.2	6.2	4.3	2.9	1.6	1.2	0.9	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
0.80	0.7	2.9	9.7	10.0	8.1	8.1	5.6	3.9	1.9	1.4	1.0	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
0.50	1.3	6.5	14.4	17.0	13.2	13.2	9.6	6.4	2.7	1.7	1.2	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
0.20	2.7	12.9	21.1	25.4	21.6	21.6	17.1	10.4	3.8	2.1	1.5	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
0.10	4.0	17.7	25.5	29.9	27.9	27.9	23.8	13.2	4.6	2.3	1.6	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
0.04	6.1	24.0	31.2	34.6	36.5	36.5	34.2	17.0	5.7	2.5	1.8	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
0.02	8.0	28.8	35.5	37.5	43.5	43.5	43.6	20.0	6.5	2.6	1.9	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
0.01	10.3	33.5	39.7	39.8	50.8	50.8	54.6	23.1	7.3	2.7	2.0	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1954	0.5	0.5	0.7	0.8	0.8	0.9	1.0	1.1	1.5
1955	0.8	0.8	0.8	0.9	0.9	1.1	1.2	1.3	1.6
1956	0.6	0.6	0.7	0.7	0.8	0.8	1.0	1.1	1.7
1957	0.4	0.4	0.4	0.4	0.6	0.8	1.0	1.2	1.9
1958	0.3	0.3	0.3	0.4	0.4	0.6	0.7	0.9	1.4
1959	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.6	1.1
1960	0.6	0.6	0.6	0.6	0.8	0.8	1.1	1.3	1.7
1961	0.4	0.4	0.4	0.5	0.6	0.8	0.9	1.0	1.4
1962	0.5	0.5	0.5	0.6	0.6	0.8	0.9	1.0	1.4
1963	0.9	1.0	1.0	1.1	1.1	1.3	1.3	1.4	2.2
1964	0.5	0.7	0.7	0.8	0.9	1.0	1.1	1.2	2.1
1965	0.2	0.3	0.3	0.4	0.5	0.6	0.6	0.8	0.9
1966	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.2
1967	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.9	1.4
1968	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.9	1.4
1969	0.8	0.8	0.8	0.8	0.9	1.0	1.0	1.1	1.4
1970	0.5	0.6	0.6	0.7	0.7	0.8	0.8	1.0	1.5
1971	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.9
1972	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.9
1973	0.6	0.6	0.6	0.6	0.7	0.8	0.9	0.9	1.3

LOWEST MEAN FLOW STATISTICS (YEARS 1954-1973)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973
MEAN	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MAXIMUM	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
MINIMUM	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
STANDARD DEVIATION	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
SKENNESS	0.399	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542	0.542
STD ERROR OF SKENNESS	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512
SERIAL CORR COEFF	0.133	0.165	0.165	0.165	0.165	0.165	0.165	0.165	0.165	0.165	0.165	0.165	0.165	0.165	0.165	0.165	0.165	0.165	0.165	0.165
COEFF OF VARIATION	0.421	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352	0.352
MEAN LOGS	-0.357	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323	-0.323
STD DEVIATION LOGS	0.197	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175
SKENNESS LOGS	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365	-0.365
STD ERR SKENNESS LOGS	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512
SER CORR COEFF LOGS	0.096	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126	0.126
COEFF OF VAR LOGS	-0.552	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542	-0.542

STATION 12058000 DEER MEADOW CREEK NEAR HOODSPORT, WASH.

LOWEST MEAN FLOW NDN-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1954-1973)

	0.99	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.5	2.4
0.98	1.0	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.5	2.4
0.96	0.9	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.5	2.3
0.90	0.8	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.3	2.1
0.80	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9	1.2	1.9
0.50	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	1.0	1.8
0.20	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.8	1.4
0.10	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.7	1.1
0.05	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.6	1.0
0.02	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.9
0.01	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.7

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1954-1973)

	P95	P90	P75	P70	P50	P25	P10
	0.6	0.8	1.2	1.4	2.9	8.7	20.0

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

ANNUAL PEAK-FLOW DATA

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW(CFS)	DATE	REG.(R)
1953	23.	19.	16.	15.	15.	11.	9.	8.	6.	26.	01/02/53	
1954	83.	79.	71.	54.	32.	24.	20.	18.	14.	167.	01/05/54	
1955	143.	101.	62.	38.	22.	17.	15.	13.	11.	244.	11/19/54	
1956	211.	151.	82.	45.	35.	31.	30.	24.	22.	355.	11/03/55	
1957	120.	112.	74.	42.	33.	29.	25.	15.	14.	150.	02/26/57	
1958	68.	57.	44.	35.	31.	24.	24.	19.	14.	111.	12/25/57	
1959	50.	47.	45.	31.	27.	21.	17.	14.	12.	78.	04/29/59	
1960	92.	66.	46.	40.	31.	19.	20.	17.	14.	108.	11/20/59	
1961	190.	110.	69.	48.	36.	35.	32.	27.	20.	445.	01/15/61	
1962	33.	24.	23.	20.	15.	12.	9.	7.	7.	43.	11/30/61	
1963	60.	41.	30.	25.	21.	17.	14.	12.	11.	76.	11/25/62	
1964	39.	34.	31.	26.	23.	20.	17.	13.	9.	41.	11/14/63	
1965	46.	38.	31.	26.	21.	15.	13.	12.	9.	52.	11/30/64	
1966	72.	63.	46.	34.	31.	17.	18.	16.	12.	82.	01/13/66	
1967	129.	88.	64.	48.	39.	31.	27.	24.	17.	163.	12/13/66	
1968	142.	118.	87.	61.	44.	31.	28.	25.	19.	175.	01/19/68	
1969	69.	51.	36.	26.	23.	18.	14.	14.	12.	80.	12/24/68	
1970	49.	40.	35.	29.	20.	18.	15.	13.	10.	64.	12/22/69	
1971	93.	58.	44.	35.	28.	22.	20.	20.	16.	124.	12/07/70	
1972	118.	85.	59.	42.	32.	27.	22.	22.	17.	216.	01/20/72	
1973										172.	12/26/72	
1974										187.	01/15/74	
1975										169.	08/30/75	
1976										272.	12/03/75	
1977										71.	03/07/77	
1978										101.	11/01/77	
1979										151.	03/04/79	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1953-1979)

W R C SYSTEMATIC ESTIMATE RECORD

	MEAN	MAXIMUM	MINIMUM	STANDARD DEVIATION	SKENNESS	STD ERROR OF SKENNESS	SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	SKENNESS LOGS	STD ERR SKENNESS LOGS	SER CORR COEFF LOGS	COEFF OF VAR LOGS
	91.5	69.4	49.6	37.1	27.9	22.0	19.4	16.9	13.3					
	211.0	151.0	85.0	61.0	44.0	35.0	32.0	27.0	22.0					
	23.0	19.0	16.0	15.0	15.0	11.0	8.7	7.5	5.7					
	51.85	35.05	20.00	12.54	8.46	7.11	6.74	5.49	4.20					
	0.860	0.687	0.228	0.317	0.317	0.409	0.353	0.242	0.309					
	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512					
	0.251	0.366	0.227	0.026	0.103	-0.179	-0.206	-0.169	-0.169					
	1.893	1.786	1.658	1.474	1.320	1.260	1.203	1.103	1.103					
	0.258	0.233	0.194	0.154	0.136	0.143	0.150	0.146	0.146					
	-0.212	-0.301	-0.573	-0.522	-0.222	-0.122	-0.316	-0.461	-0.575					
	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512					
	0.239	0.308	0.186	0.025	0.083	-0.167	-0.196	-0.141	-0.165					
	0.136	0.130	0.117	0.102	0.095	0.108	0.126	0.125	0.132					

2-0491
0.2764
-0.3970
0.0530

STATION 12058000 DEER MEADOW CREEK NEAR HOODSPORT, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1953-1979)

0.99	17.9	15.6	13.4	13.1	12.3	9.4	7.2	6.4	5.1	26.1	21.2
0.95	24.4	24.2	20.5	18.3	15.7	12.0	9.7	8.7	6.9	39.7	36.8
0.90	36.1	30.3	25.2	21.6	17.8	13.7	11.3	10.1	8.1	49.7	48.4
0.80	47.7	39.3	31.8	26.1	20.6	15.9	13.5	12.0	9.7	65.4	66.6
0.50	79.8	62.8	47.5	36.1	27.0	21.1	18.6	16.4	13.1	111.3	116.8
0.20	129.4	96.5	66.7	47.8	34.8	27.6	24.9	21.5	16.9	191.0	192.9
0.10	164.7	119.0	77.9	54.4	39.5	31.7	28.7	24.4	19.0	254.0	245.2
0.04	211.2	147.3	90.4	61.7	45.0	36.7	33.1	27.6	21.3	345.2	311.4
0.02	246.8	168.0	98.7	66.5	48.9	40.2	36.2	29.8	22.7	421.3	360.1
0.01	283.1	188.4	106.2	70.8	52.5	43.7	39.1	31.8	24.0	504.5	408.0

STATION 12059500 N.F. SKOKOMISH RIVER NEAR POILATCH, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1944	5.37	96.7	80.5	180	222	191	59.5	30.5	20.6	9.22	7.85	4.52	78.4
1945	10.3	154	217	199	169	150	145	251	320	215	14.0	10.8	154
1946	18.7	57.1	134	127	187	56.2	41.4	22.2	16.2	12.2	7.21	9.49	56.6
1947	35.6	167	126	157	134	98.2	85.7	139	28.9	13.3	12.0	19.2	112
1948	35.5	134	85.6	53.5	254	164	58.6	45.1	24.3	8.52	7.52	8.87	72.1
1949	234	306	1262	732	982	162	44.7	38.3	18.2	9.87	7.65	8.35	311
1950	94.3	133	422	158	232	78.8	47.9	28.1	10.1	5.30	2.83	4.98	174
1951	5.38	12.9	186	697	399	85.6	48.8	37.5	21.2	10.1	6.20	6.15	125
1952	25.9	141	235	279	436	106	83.3	24.0	14.7	22.2	8.86	7.32	118
1953	29.1	852	229	122	121	83.7	147	43.6	23.1	26.1	10.9	10.2	140
1954	87.1	936	250	257	89.0	227	88.2	31.9	39.0	18.9	14.8	11.8	170
1955	82.7	77.2	189	68.9	185	140	75.2	37.0	23.2	16.8	10.2	6.06	75.4
1956	22.2	60.4	154	224	508	85.3	103	41.5	21.0	14.3	6.45	7.59	101
1957	15.7	109	174	509	107	83.0	240	136	32.9	18.7	9.26	22.4	122
1958	41.7	256	225	182	226	117	148	59.5	29.7	17.6	13.8	10.6	111
1959	25.7	116	155	466	502	570	58.5	49.2	21.8	11.9	9.67	10.8	170
1960	69.4	80.7	197	106	73.6	107	60.7	69.4	26.1	15.3	12.7	13.5	65.5
1961	298	344	205	205	142	74.5	124	131	23.2	23.6	9.43	8.37	121
1962	79.4	253	187	292	121	112	40.4	22.2	17.2	13.0	11.6	9.97	96.6
1963	13.1	99.3	150	143	209	75.3	74.7	48.8	22.6	12.9	9.96	7.90	71.4
1964	16.4	83.9	146	286	132	186	48.6	24.8	16.5	11.7	8.32	8.41	80.7
1965	16.7	71.6	370	284	147	158	68.1	32.2	17.8	11.2	8.46	9.82	99.8
1966	126	113	270	302	264	175	73.2	33.3	30.5	15.6	15.3	18.1	120
1967	52.9	132	251	121	125	157	123	43.3	30.0	15.7	13.5	30.4	113
1968	54.5	67.0	181	220	152	105	108	36.5	17.9	12.7	8.73	12.8	81.1
1969	32.3	128	274	234	135	265	142	42.0	10.3	10.2	12.4	15.3	124
1970	24.9	130	158	207	195	248	115	40.6	21.4	36.3	130	16.3	110
1971	14.9	84.1	265	191	76.6	85.4	32.7	24.6	21.2	14.9	12.1	11.1	69.7
1972	29.4	234	352	938	191	239	122	60.9	34.8	22.2	15.9	12.3	189
1973	7.82	88.2	182	172	153	137	56.2	48.8	21.2	14.2	14.6	8.13	75.0
1974	306	1005	744	215	141	135	70.2	35.6	23.4	15.6	12.3	8.16	226
1975	8.67	12.6	32.9	47.6	65.7	154	37.2	22.9	21.3	10.2	9.79	16.8	36.6
1976	31.3	207	251	167	132	84.1	80.7	66.5	34.8	19.4	12.0	35.6	93.2
1977	20.4	46.1	62.7	41.3	224	138	41.7	32.2	16.1	10.9	6.00	12.0	53.2

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1944-1979)

MEAN	84.3	200.1	251.2	252.7	220.5	148.0	85.2	53.1	40.9	23.0	13.7	11.9	115.2
MAXIMUM	943.0	1005.0	1262.0	938.0	982.0	570.0	240.0	251.0	320.0	215.0	130.0	35.6	311.0
MINIMUM	5.4	12.6	32.9	41.3	65.7	56.2	32.7	22.2	10.1	5.3	2.8	4.5	36.6
STD DEVIATION	172.51	242.89	218.74	199.57	177.76	92.04	43.57	45.02	67.87	36.44	20.17	6.64	54.48
SKWENESS	4.147	2.605	3.457	2.021	2.826	3.109	1.452	3.040	3.786	4.713	5.790	2.036	1.651
STD ERR SKEW	0.403	0.403	0.403	0.403	0.403	0.403	0.393	0.393	0.393	0.393	0.393	0.393	0.403
SER CORR COEFF	0.053	0.113	-0.060	-0.191	0.067	-0.061	0.135	-0.081	-0.084	-0.035	0.003	0.256	-0.179
COEFF OF VAR	2.047	1.214	0.871	0.790	0.806	0.622	0.511	0.848	1.660	1.586	1.475	0.558	0.473
MEAN LOGS	1.541	2.103	2.304	2.296	2.257	2.117	1.882	1.640	1.421	1.203	1.024	1.025	2.020
STD DEV LOGS	0.518	0.413	0.284	0.310	0.257	0.204	0.202	0.244	0.311	0.289	0.238	0.203	0.190
SKWENESS LOGS	0.878	-0.036	0.034	-0.087	0.849	0.833	0.262	1.375	2.523	2.273	2.405	0.581	0.108
STD ERR SKEW LOGS	0.403	0.403	0.403	0.403	0.403	0.403	0.393	0.393	0.393	0.393	0.393	0.393	0.403
SER CORR LOGS	-0.043	-0.152	-0.224	-0.176	0.084	-0.009	0.016	-0.110	-0.084	0.128	0.102	0.402	-0.271
COEFF OF VAR LOGS	0.196	0.123	0.123	0.135	0.114	0.097	0.110	0.149	0.219	0.240	0.233	0.198	0.094
% OF AVE FLOW	6.1	14.4	18.1	18.3	15.9	10.7	6.2	3.8	3.0	1.7	1.0	0.9	100.0

STATION 12059500 N.F. SKOKOMISH RIVER NEAR POTLATCH, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1944-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01			
YEAR	4.7	13.5	44.7	35.9	66.3	58.6	27.7	20.7	15.0	8.9	6.7	4.4	39.2
1945	6.9	26.3	69.1	60.0	80.4	68.5	36.2	22.6	15.1	9.0	6.7	5.3	51.7
1946	8.8	37.4	87.3	78.7	91.3	75.9	42.1	24.3	15.3	9.2	6.8	6.0	60.1
1947	12.5	57.1	116.0	108.8	109.1	87.5	50.8	27.4	15.9	9.7	7.1	7.1	72.4
1948	29.2	127.6	200.5	199.9	166.5	122.7	74.6	38.6	20.4	12.7	8.7	10.1	104.0
1949	87.1	282.8	348.4	361.8	285.8	188.6	112.7	65.1	38.1	23.2	14.2	15.4	151.0
1950	171.3	427.4	466.1	490.6	398.7	245.6	141.5	92.6	64.4	37.3	21.1	19.7	184.4
1951	382.6	652.3	636.8	675.6	591.6	335.7	182.1	143.9	133.1	71.1	36.4	26.2	229.0
1952	877.7	1779.6	1779.6	829.1	180.8	418.1	215.4	198.6	234.2	116.6	55.5	31.8	263.9
1953	1160.3	1129.8	935.9	994.9	1017.7	515.5	251.4	272.0	415.7	192.1	85.1	38.2	300.1

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1945	3.2	3.3	3.5	4.1	4.5	4.6	5.7	6.5	13.0
1946	4.4	4.9	5.0	5.4	5.9	7.5	8.0	9.4	19.0
1947	7.3	7.5	7.8	8.2	9.5	11.0	12.0	16.0	44.0
1948	4.4	4.9	4.9	5.2	6.3	8.3	9.6	11.0	17.0
1949	9.0	9.0	9.2	10.0	11.0	12.0	13.0	17.0	40.0
1950	5.7	6.0	6.2	6.7	7.2	7.6	8.5	10.0	30.0
1951	1.4	1.5	1.8	1.8	2.3	2.6	3.5	5.2	14.0
1952	4.4	4.5	4.6	4.7	4.9	5.1	7.4	7.3	9.4
1953	3.2	3.3	3.5	3.5	4.2	5.2	6.9	9.5	17.0
1954	5.8	5.8	5.9	6.0	6.9	7.6	9.1	13.0	17.0
1955	6.4	6.7	7.0	7.3	8.5	10.0	15.0	17.0	28.0
1956	9.1	9.6	9.9	11.0	11.0	12.0	16.0	25.0	25.0
1957	4.6	4.7	5.0	5.3	5.7	6.7	8.8	11.0	18.0
1958	4.6	4.7	4.9	5.2	6.1	6.9	8.8	11.0	17.0
1959	7.0	7.3	7.7	8.4	8.6	13.0	16.0	27.0	27.0
1960	6.2	6.7	7.2	8.5	9.9	11.0	12.0	24.0	24.0
1961	8.0	8.3	8.4	8.7	9.4	10.0	10.0	19.0	19.0
1962	8.9	8.9	9.0	9.5	10.0	12.0	13.0	31.0	31.0
1963	6.7	7.1	7.5	7.8	8.2	8.7	11.0	38.0	38.0
1964	7.8	8.2	8.5	8.7	8.9	10.0	12.0	14.0	14.0
1965	6.7	6.9	7.2	7.5	7.9	8.8	9.9	11.0	19.0
1966	6.7	7.0	7.3	7.7	7.8	8.2	8.5	9.7	14.0
1967	7.2	7.6	7.7	7.8	8.3	8.8	9.6	12.0	24.0
1968	11.0	11.0	12.0	12.0	13.0	15.0	16.0	27.0	27.0
1969	10.0	10.0	11.0	12.0	13.0	15.0	16.0	26.0	44.0
1970	6.8	6.8	7.4	7.7	8.5	9.7	11.0	12.0	19.0
1971	11.0	11.0	12.0	12.0	12.0	14.0	15.0	36.0	50.0
1972	7.3	7.7	8.0	8.2	10.0	15.0	21.0	43.0	43.0
1973	8.4	8.8	9.0	9.1	9.7	11.0	12.0	18.0	18.0
1974	6.7	6.7	6.8	6.8	7.6	9.8	11.0	13.0	23.0
1975	6.1	6.1	6.5	6.7	7.6	11.0	12.0	14.0	24.0
1976	5.8	6.2	6.4	6.8	7.1	8.0	9.0	10.0	12.0
1977	6.2	6.2	6.4	6.6	7.0	9.4	11.0	13.0	16.0
1978	8.0	8.2	8.8	10.0	12.0	15.0	16.0	22.0	28.0

LOWEST MEAN FLOW STATISTICS (YEARS 1945-1979)

MEAN	6.6	6.9	7.2	7.6	8.3	9.7	11.4	14.4	24.2
MAXIMUM	11.0	11.0	12.0	12.0	13.0	15.0	27.0	36.0	50.0
MINIMUM	1.4	1.5	1.8	2.4	2.5	3.0	3.5	5.2	9.4
STANDARD DEVIATION	2.15	2.15	2.30	2.41	2.51	3.04	4.23	6.68	10.49
SKWENESS	-0.082	-0.213	0.027	-0.062	-0.079	-0.105	1.489	1.862	0.946
STD ERROR OF SKWENESS	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403
SERIAL CORR COEFF	0.329	0.345	0.368	0.333	0.384	0.384	0.291	0.391	0.092
COEFF OF VARIATION	0.324	0.324	0.313	0.318	0.304	0.315	0.370	0.463	0.434
MEAN LOGS	0.794	0.809	0.830	0.852	0.893	0.960	1.032	1.123	1.347
STD DEVIATION LOGS	0.175	0.170	0.165	0.167	0.155	0.162	0.158	0.176	0.181
SKWENESS LOGS	-1.676	-1.732	-1.391	-1.493	-1.314	-1.302	-0.436	0.383	0.208
STD ERR SKWENESS LOGS	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403
SER CORR COEFF LOGS	0.317	0.332	0.368	0.346	0.402	0.458	0.380	0.426	0.127
COEFF OF VAR LOGS	0.220	0.210	0.199	0.196	0.173	0.169	0.153	0.157	0.134

STATION 12059500 N.F. SKOKOMISH RIVER NEAR POTLATCH, WASH.

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1945-1979)

	0.99	0.98	0.96	0.90	0.80	0.50	0.20	0.10	0.05	0.02	0.01
	9.9	9.8	9.6	9.2	8.6	6.9	4.8	3.7	2.8	2.0	1.6
	10.0	9.9	9.8	9.4	8.8	7.2	5.0	3.8	3.0	2.1	1.7
	11.2	11.0	10.7	10.0	9.3	7.4	5.2	4.1	3.2	2.4	1.9
	11.5	11.4	11.1	10.5	9.8	7.8	5.4	4.3	3.4	2.5	2.0
	12.8	12.5	12.1	11.4	10.5	8.4	6.1	4.8	3.9	3.0	2.5
	15.3	14.9	14.5	13.5	12.5	9.9	7.0	5.5	4.4	3.4	2.7
	22.3	20.8	19.2	16.8	14.7	11.0	8.0	6.6	5.7	4.7	4.1
	38.1	33.1	28.4	22.6	18.5	12.9	9.4	8.0	7.1	6.3	5.8
	62.2	54.6	47.3	38.2	31.4	21.9	15.6	13.2	11.5	9.9	9.0

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1945-1979)

	P95	P90	P75	P70	P50	P25	P10
	6.9	9.0	16.0	19.0	46.0	120.0	250.0

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW(CFS) DATE REG.(R)
1945	1260.	823.	516.	332.	243.	204.	197.	168.	138.	2160. 02/07/45 R
1946	1110.	987.	678.	554.	432.	376.	282.	251.	221.	1530. 06/03/46 R
1947	1200.	814.	473.	291.	257.	181.	155.	132.	99.	1730. 02/14/47 R
1948	2020.	1560.	1100.	737.	501.	268.	253.	207.	177.	2500. 10/19/47 R
1949	1760.	1020.	667.	453.	300.	207.	160.	141.	123.	2030. 02/22/49 R
1950										4800. 11/27/49 R
1951	2830.	2580.	1990.	1510.	1330.	1050.	1040.	832.	607.	3280. 02/10/51 R
1952	2500.	2320.	2220.	1860.	1650.	1400.	1240.	1080.	920.	2920. 10/19/51 R
1953	1580.	1500.	1220.	1100.	848.	558.	429.	344.	240.	2580. 01/23/53 R
1954	1680.	1500.	1240.	827.	488.	378.	332.	291.	219.	2770. 02/21/54 R
1955	5660.	4250.	2680.	1640.	945.	556.	418.	333.	257.	6100. 11/19/54 R
1956	6630.	4740.	2970.	1620.	939.	597.	467.	391.	313.	7740. 11/04/55 R
1957	1490.	940.	555.	359.	248.	166.	157.	148.	129.	3060. 12/09/56 R
1958	2160.	1750.	1080.	784.	503.	356.	291.	238.	185.	3300. 02/25/58 R
1959	2990.	2260.	1160.	660.	531.	387.	276.	256.	220.	3980. 04/29/59 R
1960	1690.	1160.	902.	488.	410.	253.	277.	237.	196.	2680. 11/20/59 R
1961	2610.	2250.	1290.	929.	593.	541.	514.	424.	318.	4610. 01/15/61 R
1962	529.	433.	347.	268.	210.	170.	136.	127.	109.	715. 12/01/61 R
1963	2520.	1820.	890.	534.	529.	401.	305.	251.	200.	3570. 12/16/62 R
1964	540.	410.	378.	340.	289.	256.	253.	227.	178.	662. 01/01/64 R
1965	975.	706.	415.	334.	246.	179.	176.	158.	126.	1180. 11/30/64 R
1966	1290.	970.	634.	462.	296.	218.	204.	189.	147.	1590. 01/13/66 R
1967	1270.	892.	600.	512.	391.	328.	278.	247.	185.	1740. 12/13/66 R
1968	1390.	997.	723.	509.	386.	293.	252.	255.	211.	1780. 01/19/68 R
1969	1140.	987.	676.	577.	412.	214.	178.	168.	153.	2780. 06/10/69 R
1970	520.	452.	347.	257.	223.	173.	192.	173.	138.	713. 04/09/70 R
1971	985.	754.	514.	410.	294.	234.	227.	234.	197.	1750. 06/27/71 R
1972	1200.	774.	483.	320.	264.	222.	208.	175.	1990.	03/05/72 R
1973	1280.	841.	663.	498.	340.	244.	192.	160.	123.	1920. 12/26/72 R
1974	3760.	3410.	2630.	1810.	1010.	664.	537.	448.	347.	4100. 01/16/74 R
1975	844.	511.	341.	244.	151.	130.	180.	167.	135.	1250. 12/21/74 R
1976	5020.	3600.	2350.	1500.	1230.	969.	732.	565.	429.	5540. 12/04/75 R
1977	638.	610.	395.	247.	166.	112.	93.	80.	61.	858. 03/07/77 R
1978	826.	736.	587.	380.	244.	235.	214.	193.	155.	1060. 11/01/77 R
1979	706.	534.	345.	326.	265.	177.	134.	115.	90.	1050. 03/04/79 R

STATION 12059500 N.F. SKOKOMISH RIVER NEAR POTLATCH, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1945-1979)

	MEAN	1894.8	1469.7	1003.1	701.9	488.8	355.0	303.6	259.9	204.2	SYSTEMATIC RECORD
MAXIMUM		6630.0	4740.0	2970.0	1860.0	1330.0	1050.0	1040.0	832.0	607.0	
MINIMUM		520.0	410.0	341.0	244.0	166.0	112.0	93.0	80.0	61.0	
STANDARD DEVIATION		1457.64	1116.64	755.13	492.10	312.10	224.05	192.40	150.83	107.58	
SKENNESS		1.876	1.562	1.434	1.310	1.371	1.685	2.162	2.077	1.937	
STD ERROR OF SKENNESS		0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	
SERIAL CORR COEFF		0.173	0.127	0.171	0.176	0.069	-0.028	-0.033	-0.027	-0.079	
COEFF OF VARIATION		0.767	0.760	0.753	0.701	0.639	0.631	0.634	0.580	0.527	
MEAN LOGS		3.182	3.067	2.904	2.760	2.618	2.484	2.419	2.360	2.262	3.3354
STD DEVIATION LOGS		0.286	0.290	0.283	0.266	0.242	0.234	0.226	0.213	0.202	0.2713
SKENNESS LOGS		0.406	0.472	0.623	0.636	0.640	0.612	0.623	0.501	0.275	-0.0880
SER ERR SKENNESS LOGS		0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	
SER CORR COEFF LOGS		0.099	0.038	0.111	0.065	-0.017	-0.110	-0.123	-0.127	-0.171	
COEFF OF VAR LOGS		0.090	0.095	0.096	0.096	0.092	0.094	0.094	0.090	0.089	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1945-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01	W R C ESTIMATE	SYSTEMATIC RECORD
	401.0	427.8	310.9	237.2	184.7	148.1	111.0	99.5	87.9	68.2	486.3	486.3
	558.3	615.8	427.8	310.9	237.2	184.7	148.1	111.0	99.5	87.9	486.3	763.0
	676.2	748.8	515.8	366.9	276.7	213.5	159.6	140.8	126.2	102.4	966.8	966.8
	865.4	958.1	658.1	457.8	340.3	257.5	191.8	168.0	150.6	123.2	1283.3	1283.3
	1453.0	1107.0	748.8	539.7	391.3	288.3	248.9	220.0	179.2	158.6	2184.6	2184.6
	2597.9	2005.8	1347.8	938.0	646.5	468.2	397.8	340.5	268.6	236.0	3671.4	3671.4
	3612.5	2622.2	1907.4	1301.4	870.7	623.3	524.9	438.4	336.0	271.3	4791.3	4791.3
	5238.9	4160.6	2850.8	1901.9	1229.6	867.5	723.4	584.7	430.7	334.0	6340.1	6340.1
	6736.1	5418.3	3761.7	2471.7	1560.8	1089.5	902.6	711.7	508.2	358.7	7581.7	7581.7
	8509.7	6934.3	4885.8	3165.3	1954.9	1350.5	1112.1	855.4	592.0	438.7	8892.5	8892.5

STATION 12059800 S.F. SKOKOMISH RIVER NR HOODSPORT, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1964	385	691	490	536	264	229	228	253	332	192	128	76.7	317
1965	183	382	358	360	497	220	361	285	142	64.2	42.3	30.9	237
1966	186	434	497	501	268	358	359	323	213	125	59.3	45.5	281
1967	168	416	1030	640	395	368	175	301	306	123	54.5	50.2	336
1968	674	358	501	748	756	493	203	244	241	103	97.6	163	381
1969	331	432	544	276	180	303	458	535	354	109	61.7	291	323
1970	236	307	491	517	392	336	368	176	108	53.0	33.0	81.6	258

ANNUAL PEAK FLOW DATA		ANNUAL PEAK FLOW STATISTICS (YEARS 1964-1979)		W R C		SYSTEMATIC	
WATER YEAR	FLOW(CFS)	DATE	MEAN LOGS	ESTIMATE	RECORD	ESTIMATE	RECORD
1964	4110.0	10-21-1963		3.5585		3.5585	
1965	4440.0	11-25-1964		0.1517		0.1517	
1966	2800.0	1-13-1966		0.093		-1.172	
1967	5100.0	12-12-1966					
1968	3580.0	1-20-1968					
1969	3390.0	12- 3-1968					
1970	2960.0	12-13-1969					
1972	4170.0	1-20-1972					
1973	1700.0	12-26-1972					
1974	4720.0	1-15-1974	0.99	1644.3		1211.7	
1975	4140.0	12-21-1974	0.95	2056.1		1859.6	
1976	5340.0	12- 3-1975	0.90	2320.9		2265.3	
1977	1820.0	12-26-1976	0.80	2692.7		2797.8	
1978	5100.0	11- 1-1977	0.50	3598.8		3867.6	
1979	3710.0	3- 4-1979	0.20	4846.5		4860.4	
			0.10	5679.9		5298.5	
			0.04	6742.7		5685.6	
			0.02	7542.6		5889.5	
			0.01	8350.1		6042.7	
ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES			LOG-PEARSON III ANALYSIS (YEARS 1964-1979)				

STATION 12060000 S.F. SKOKOMISH RIVER NR POTLATCH, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1924	189	366	1025	953	1820	422	247	178	97.7	68.7	62.1	317	465
1925	1232	1328	804	1110	1495	457	445	419	296	137	86.9	74.6	651
1926	66.1	542	1346	760	1077	407	269	419	155	203	51.2	63.5	426
1927	812	1025	1022	1323	1054	598	465	725	471	132	109	236	668
1928	551	1148	544	1276	569	1041	731	549	276	202	82.2	92.1	583
1929	371	745	588	304	200	510	570	463	471	179	114	77.1	391
1930	103	77.1	694	382	1161	437	546	283	189	106	71.8	89.3	333
1931	251	403	453	1484	716	950	815	301	369	177	82.7	159	513
1932	496	808	1075	841	1009	1150	1000	500	389	240	148	88.3	644
1946	269	745	1293	799	1506	439	423	275	204	179	101	105	522
1947	1109	490	1007	754	638	491	552	1024	510	186	120	367	613
1948	425	951	702	236	850	1033	734	783	340	186	121	145	540
1949	241	1495	1377	816	1133	1132	862	695	600	266	186	118	740
1950	942	1206	1835	1197	1717	481	656	478	258	134	85.0	156	756
1951	850	883	757	584	1107	502	789	761	419	211	176	117	594
1952	93.0	299	1077	2954	1077	535	507	631	333	217	119	176	668
1953	497	1291	1321	995	1796	768	758	470	352	308	141	147	729
1954	554	1932	1004	588	782	364	773	563	486	293	183	150	636
1955	782	1831	1314	1223	353	828	992	981	867	427	181	200	833
1956	756	519	1109	308	1077	937	705	405	208	185	163	108	537
1957	322	485	1094	1583	1704	588	764	379	194	111	77.4	90.3	610
1958	362	1077	1279	1489	554	642	941	587	351	157	98.9	400	662
1959	433	1019	986	958	1195	688	909	624	372	160	111	102	627
1960	474	945	960	2081	1998	1260	546	644	282	141	95.6	106	788
1961	338	706	1103	755	616	439	615	544	289	156	145	186	490
1962	717	1390	1171	638	1108	511	762	515	182	181	113	96.3	611
1963	746	1470	1066	1271	673	607	482	424	480	282	216	141	655

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1924-1964)

MEAN	517.8	932.4	1037.3	1020.8	1073.1	674.7	665.1	539.3	349.4	188.4	120.0	150.6	603.1
MAXIMUM	1232.0	1932.0	1835.0	2954.0	1998.0	1260.0	1000.0	1024.0	867.0	427.0	216.0	400.0	833.0
MINIMUM	66.1	77.1	453.0	236.0	200.0	364.0	247.0	178.0	97.7	64.8	51.2	63.5	333.0
STD DEVIATION	308.01	466.49	298.92	583.32	470.82	267.31	201.80	203.16	160.83	77.91	42.59	85.45	119.31
SKENNESS	0.580	0.308	0.204	1.483	0.249	0.859	-0.288	0.616	1.233	1.106	0.548	1.789	-0.318
STD ERR SKEW	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.441	0.448
SER CORR COEFF	-0.292	0.275	0.195	-0.162	-0.021	-0.001	0.304	0.126	-0.142	0.361	0.194	-0.246	0.137
COEFF OF VAR	0.595	0.500	0.288	0.571	0.439	0.396	0.303	0.377	0.460	0.413	0.355	0.567	0.198
MEAN LOGS	2.619	2.897	2.997	2.942	2.981	2.799	2.799	2.700	2.500	2.240	2.053	2.126	2.771
STD DEV LOGS	0.324	0.295	0.137	0.256	0.230	0.161	0.154	0.173	0.203	0.183	0.157	0.204	0.093
SKENNESS LOGS	-0.689	-1.613	-0.766	-0.425	-1.080	0.493	-1.117	-0.517	-0.349	-0.402	-0.145	0.835	-0.895
STD ERR SKEW LOGS	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.441	0.448
SER CORR LOGS	-0.297	0.189	0.266	-0.117	0.029	0.0	0.370	0.168	-0.173	0.301	0.208	-0.227	0.207
COEFF OF VAR LOGS	0.124	0.102	0.046	0.087	0.077	0.058	0.055	0.064	0.081	0.082	0.076	0.096	0.034
% OF AVE FLOW	7.1	12.8	14.3	14.0	14.8	9.3	9.1	7.4	4.8	2.6	1.7	2.1	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1924-1964)

0.99	46.0	78.8	402.7	185.7	188.3	303.8	209.6	170.9	94.8	57.7	46.9	60.0	313.9
0.95	104.1	208.2	557.8	311.0	352.2	361.4	321.2	246.7	140.4	83.1	61.4	70.0	396.9
0.90	153.2	320.3	652.1	402.5	471.0	400.4	391.3	295.7	171.2	99.8	70.7	77.6	443.6
0.80	234.2	499.5	775.7	541.5	644.5	457.9	483.9	363.6	215.5	123.2	83.5	89.5	501.0
0.50	464.2	938.3	1032.6	911.5	1050.8	610.6	672.4	519.3	324.7	178.6	113.9	125.4	609.6
0.20	787.5	1371.9	1299.0	1446.7	1499.4	850.3	851.6	706.4	470.9	248.9	153.3	192.6	709.2
0.10	981.2	1544.7	1344.4	1800.7	1722.7	1029.2	932.8	814.5	563.5	291.6	178.2	250.7	755.2
0.04	1193.6	1675.0	1571.4	2237.2	1936.4	1279.4	1006.3	935.6	675.1	341.4	208.5	342.5	798.7
0.02	1328.4	1731.7	1654.3	2551.5	2056.8	1484.1	1046.0	1016.1	754.2	375.7	230.3	426.5	823.4
0.01	1445.1	1767.3	1724.5	2855.4	2152.0	1705.0	1076.4	1089.5	830.1	407.9	251.6	525.8	843.3

STATION 12060000 S.F. SKOKOMISH RIVER NR PUTLATCH, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1925	44.0	45.0	46.0	47.0	52.0	57.0	64.0	75.0	161.0
1926	58.0	58.0	59.0	60.0	65.0	68.0	73.0	84.0	162.0
1927	39.0	40.0	40.0	42.0	49.0	50.0	57.0	81.0	157.0
1928	95.0	95.0	96.0	97.0	108.0	150.0	177.0	216.0	355.0
1929	73.0	74.0	74.0	76.0	78.0	87.0	99.0	133.0	235.0
1930	66.0	66.0	67.0	69.0	74.0	85.0	84.0	97.0	151.0
1931	53.0	55.0	56.0	56.0	59.0	67.0	83.0	89.0	161.0
1932	66.0	66.0	67.0	70.0	77.0	99.0	129.0	189.0	232.0
1938	81.0	83.0	82.0	86.0	94.0	104.0	129.0	147.0	212.0
1948	103.0	107.0	111.0	115.0	119.0	136.0	183.0	265.0	400.0
1949	79.0	80.0	82.0	87.0	99.0	128.0	145.0	159.0	264.0
1950	90.0	90.0	95.0	100.0	115.0	149.0	173.0	264.0	431.0
1952	64.0	64.0	66.0	68.0	74.0	81.0	100.0	140.0	287.0
1953	80.0	81.0	86.0	82.0	86.0	99.0	127.0	135.0	215.0
1954	78.0	78.0	79.0	80.0	89.0	105.0	144.0	193.0	320.0
1955	107.0	108.0	111.0	123.0	130.0	138.0	186.0	222.0	323.0
1956	99.0	100.0	103.0	108.0	125.0	150.0	197.0	248.0	358.0
1957	116.0	120.0	120.0	126.0	133.0	168.0	217.0	302.0	463.0
1958	88.0	93.0	96.0	97.0	103.0	117.0	137.0	150.0	218.0
1959	68.0	68.0	69.0	69.0	71.0	80.0	89.0	107.0	200.0
1960	84.0	84.0	85.0	87.0	96.0	119.0	158.0	217.0	293.0
1961	78.0	79.0	81.0	81.0	94.0	104.0	115.0	143.0	287.0
1962	78.0	78.0	80.0	81.0	85.0	98.0	106.0	130.0	237.0
1963	87.0	88.0	90.0	93.0	108.0	130.0	140.0	178.0	307.0
1964	84.0	84.0	86.0	89.0	95.0	99.0	124.0	131.0	228.0

LOWEST MEAN FLOW STATISTICS (YEARS 1925-1964)

MEAN	78.3	79.2	80.9	83.6	91.1	106.7	129.4	163.8	266.3
MAXIMUM	116.0	120.0	120.0	126.0	133.0	168.0	217.0	302.0	463.0
MINIMUM	39.0	40.0	40.0	42.0	49.0	50.0	57.0	75.0	151.0
STANDARD DEVIATION	18.66	19.34	19.85	21.45	23.31	31.39	43.33	63.58	87.65
SKEWNESS	-0.171	-0.040	-0.076	0.084	0.033	0.097	0.204	0.524	0.621
STD ERROR OF SKEWNESS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SERIAL CORR COEFF	0.380	0.395	0.399	0.414	0.437	0.295	0.375	0.222	0.214
COEFF OF VARIATION	0.238	0.244	0.245	0.256	0.256	0.294	0.335	0.388	0.329
MEAN LOGS	1.881	1.885	1.894	1.904	1.945	2.009	2.087	2.182	2.403
STD DEVIATION LOGS	0.113	0.115	0.116	0.119	0.118	0.137	0.156	0.173	0.142
SKEWNESS LOGS	-0.891	-0.756	-0.781	-0.636	-0.509	-0.523	-0.438	-0.125	0.056
STD ERR SKEWNESS LOGS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SER CORR COEFF LOGS	0.368	0.385	0.388	0.411	0.425	0.311	0.392	0.319	0.311
COEFF OF VAR LOGS	0.060	0.061	0.061	0.062	0.061	0.068	0.075	0.079	0.059

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1925-1964)

0.99	117.4	122.3	124.7	134.4	149.4	187.8	250.1	370.3	548.6
0.98	114.0	118.0	120.5	128.9	142.4	177.8	233.7	335.4	500.0
0.96	109.8	113.0	115.4	122.5	134.6	166.7	215.9	300.1	451.2
0.90	102.5	104.6	106.9	112.3	122.5	149.5	189.4	251.9	385.4
0.80	95.0	96.2	98.4	102.4	111.1	133.6	165.9	213.1	332.8
0.50	78.9	79.3	81.1	83.4	90.1	104.8	125.3	153.4	252.2
0.20	62.1	62.4	63.6	65.2	70.8	79.1	91.2	109.1	192.0
0.10	53.6	54.0	54.9	56.3	61.5	67.2	76.1	90.9	166.7
0.05	46.8	47.4	48.1	49.5	54.4	58.2	65.0	77.9	148.5
0.02	39.6	40.4	40.9	42.3	47.0	49.1	53.9	65.4	130.5
0.01	35.1	36.1	36.4	37.9	42.5	43.6	47.4	58.1	119.8

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1925-1964)

P95	P90	P75	P70	P50	P25	P10
74.0	98.0	180.0	220.0	400.0	750.0	1300.0

STATION 12070000 S.F. SKOKOMISH RIVER NR PUTLATCH, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30										ANNUAL PEAK-FLOW DATA	
	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW(CFS)	DATE	REG.(R)
1924	7150.	4500.	3230.	2720.	2130.	1360.	1240.	1070.	783.	9950.	01/31/24	
1925	5040.	4210.	3210.	2530.	1770.	1370.	1160.	1280.	1060.	7700.	02/01/25	
1926	3270.	2730.	2000.	1730.	1380.	1070.	1060.	959.	743.	4560.	12/11/25	
1927	3720.	3080.	2630.	2150.	1490.	1410.	1250.	1150.	975.	4960.	12/01/26	
1928	3840.	2890.	2260.	1950.	1310.	1140.	1060.	959.	894.	5070.	01/12/28	
1929	2400.	2040.	1800.	1160.	759.	722.	594.	530.	513.	3010.	03/28/29	
1930	2740.	2250.	1740.	1210.	1110.	772.	749.	709.	569.	4570.	12/22/29	
1931	5220.	4210.	3470.	2130.	1530.	1180.	1110.	1000.	810.	9110.	01/22/31	
1932	6060.	4100.	2510.	1710.	1350.	1220.	1090.	1090.	984.	11500.	02/26/32	
1947	5550.	5480.	3420.	2200.	1450.	1180.	1130.	867.	7800.	02/13/47		
1948	3890.	3160.	2160.	1610.	1430.	906.	972.	858.	792.	8760.	10/18/47	
1949	4710.	3050.	1970.	1520.	1340.	1030.	1010.	879.	784.	5330.	02/22/49	
1950	7630.	6020.	4250.	2730.	1950.	1520.	1260.	1320.	1150.	19300.	11/26/49	
1951	9020.	7220.	4410.	2630.	2040.	1780.	1780.	1540.	1230.	11500.	02/09/51	
1952	4560.	3580.	2830.	2000.	1350.	990.	914.	883.	795.	6120.	01/30/52	
1953	5590.	4250.	3900.	3360.	3020.	2210.	1730.	1430.	1130.	10000.	01/02/53	
1954	4480.	3880.	3210.	2570.	1840.	1490.	1380.	1360.	1150.	8470.	01/05/54	
1955	9090.	6800.	4760.	3090.	2020.	1520.	1250.	1100.	908.	14800.	11/18/54	
1956	14400.	7890.	4250.	2840.	1850.	1630.	1540.	1320.	1120.	17800.	11/03/55	
1957	7000.	5770.	3550.	2370.	1580.	1170.	936.	878.	828.	16700.	12/09/56	
1958	4620.	3070.	2340.	1990.	1760.	1640.	1470.	1250.	1030.	9060.	12/25/57	
1959	5860.	3930.	2370.	1670.	1600.	1400.	1310.	1120.	1020.	8880.	04/29/59	
1960	7240.	4610.	3080.	2430.	1820.	1190.	1250.	1080.	994.	11300.	11/20/59	
1961	13500.	7500.	4760.	3130.	2510.	2090.	1790.	1580.	1310.	15800.	01/15/61	
1962	3680.	2570.	2020.	1690.	1250.	1090.	917.	823.	733.	5070.	01/03/62	
1963	5000.	4000.	2580.	2120.	1770.	1440.	1230.	1090.	943.	9260.	11/25/62	
1964	3730.	2910.	2270.	1860.	1560.	1330.	1350.	1250.	1010.	7480.	10/21/63	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1924-1964)

W R C
ESTIMATESYSTEMATIC
RECORD

MEAN	5889.3	4285.2	2999.3	2181.5	1680.3	1327.8	1212.3	1097.7	930.6			
MAXIMUM	14400.0	7890.0	4760.0	3360.0	3020.0	2210.0	1790.0	1580.0	1310.0			
MINIMUM	2400.0	2040.0	1740.0	1160.0	750.0	722.0	594.0	530.0	513.0			
STANDARD DEVIATION	2898.46	1661.74	924.36	572.61	447.25	350.50	290.79	247.13	190.81			
SKEWNESS	1.675	0.847	0.517	0.233	0.093	0.690	0.229	-0.068	-0.160			
STD ERROR OF SKEWNESS	0.4448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448			
SERIAL CORR COEFF	0.291	0.298	0.230	0.310	0.112	0.038	-0.020	0.057	0.117			
COEFF OF VARIATION	0.492	0.383	0.308	0.262	0.266	0.284	0.240	0.225	0.205			
MEAN LOGS	3.728	3.603	3.457	3.324	3.211	3.109	3.071	3.029	2.959			
STD DEVIATION LOGS	0.187	0.160	0.133	0.118	0.116	0.114	0.109	0.105	0.095			
SKEWNESS LOGS	0.519	0.225	0.120	-0.361	-0.374	-0.124	-0.593	-0.836	-0.772			
STD ERR SKEWNESS LOGS	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448			
SER CORR COEFF LOGS	0.394	0.320	0.240	0.336	0.219	0.146	0.083	0.144	0.196			
COEFF OF VAR LOGS	0.050	0.045	0.038	0.036	0.036	0.037	0.036	0.035	0.032			

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1924-1964)

W R C
ESTIMATESYSTEMATIC
RECORD

0.99	2316.1	1805.7	1447.2	1040.6	810.5	679.2	588.9	527.0	485.0	2913.0	2700.6	
0.95	2819.8	2238.1	1753.2	1310.9	1018.4	825.1	749.0	682.9	609.0	3954.3	3841.5	
0.90	3170.4	2522.0	1946.3	1472.7	1142.4	913.3	842.6	772.7	679.2	4663.4	4614.0	
0.80	3697.7	2928.1	2213.5	1685.3	1304.9	1030.7	962.4	885.4	766.8	5704.9	5735.4	
0.50	5156.5	3953.6	2849.7	2141.9	1651.9	1291.5	1206.8	1105.1	936.1	8437.8	8584.0	
0.20	7580.2	5443.6	3700.4	2659.9	2021.3	1605.8	1461.1	1315.3	1098.3	12574.6	12633.9	
0.10	9476.9	6885.7	4256.7	2952.2	2261.2	1794.0	1593.5	1415.8	1176.7	15537.7	15360.6	
0.04	12234.0	7465.5	4955.5	3278.1	2503.9	2014.5	1731.5	1513.4	1253.6	19515.5	18826.3	
0.02	14565.2	8939.6	5474.8	3495.1	2664.9	2168.4	1817.9	1570.2	1299.1	22640.3	21413.2	
0.01	17152.1	10053.5	5994.2	3694.1	2812.0	2314.9	1893.2	1617.0	1337.1	25698.3	23999.3	

STATION 12060500 SOUTH FORK SKOKOMISH RIVER NEAR UNION, WASH.
MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1931													
1932	584	915	1249	1031	1231	1326	1113	588	407	260	109	190	747
1933	209	1410	1019	1142	523	1106	830	937	717	421	163	107	744
1934	807	697	2998	2112	739	845	371	415	161	205	185	446	806
1935	680	1912	1082	1888	1115	842	584	532	361	180	108	242	876
1936	223	405	1074	1684	705	874	430	634	598	276	128	116	597
1937	85.3	76.8	1116	269	450	1074	1397	997	821	301	156	129	573
1938	534	1976	1746	992	693	1044	941	502	274	144	91.8	69.0	752
1939	415	729	1107	1696	702	620	463	361	228	145	89.6	84.8	554
1940	194	626	2583	1292	1472	1123	599	547	170	107	116	97.6	654
1941	1098	857	1279	1161	965	632	439	584	239	131	116	356	654
1942	629	996	1722	570	786	446	376	361	398	236	121	86.8	560
1943	126	964	1007	570	827	780	1112	407	308	168	106	82.5	535
1944	346	370	778	1107	681	496	515	331	197	105	81.7	106	426
1945	202	1246	642	1137	1515	926	566	875	275	145	94.0	155	642
1946	240	1180	1490	1366	987	929	954	638	452	334	135	114	738
1947	278	877	1528	954	1738	502	455	298	198	183	102	112	595
1948	1222	616	1153	930	781	633	789	1259	549	191	132	401	722
1949	465	1110	855	243	1084	1247	813	915	266	202	130	150	620
1950	248	1708	2010	1124	1404	1375	1016	741	624	314	226	148	908
1951	977	1413	2129	1323	1899	546	861	490	270	137	87.6	159	835
1952	1009	1028	918	724	1466	593	888	844	474	252	199	132	707
1953	98.7	372	1339	4030	1484	662	576	683	371	240	142	192	874
1954	522	1470	1835	1326	2248	624	831	480	369	322	148	158	874
1955	598	2337	1284	752	954	463	914	598	505	309	195	167	752
1956	895	2162	1569	1472	414	1075	1146	1012	909	442	185	197	957
1957	898	597	1291	350	1299	1122	788	470	233	201	180	115	625
1958	360	574	1309	1805	1939	859	815	405	210	117	84.0	97.9	691
1959	369	1294	1600	1949	887	761	1185	621	337	173	91.5	455	794
1960	493	1395	1292	1288	1583	780	1045	652	378	173	124	105	772
1961	508	1138	1173	2527	2594	1540	592	684	324	154	104	122	946
1962	360	856	1463	959	703	524	656	585	317	170	160	197	579
1963	844	1670	1553	901	1625	592	879	575	204	211	129	107	768
1964	937	1919	1363	1679	811	710	520	451	499	292	229	146	797
1965	276	967	1027	1042	1432	577	828	533	249	132	97.2	75.7	597
1966	339	1083	1254	1665	925	1227	781	513	318	201	116	96.8	714
1967	963	963	3330	2113	1107	1226	494	525	435	189	110	100	914
1968	1727	890	1541	2303	2290	1480	544	424	423	183	191	322	1025
1969	781	1081	1656	864	684	1047	1302	912	543	203	127	618	818
1970	538	700	1343	1436	968	822	885	376	219	125	196.0	150	640
1971	500	997	1341	1541	1143	1195	966	1060	579	415	211	304	853
1972	362	1230	804	1299	1631	2138	994	588	330	332	138	316	844
1973	169	1067	1768	1285	683	756	343	487	377	182	111	171	617
1974	498	1512	2228	2250	1164	1607	989	734	680	479	198	137	1041
1975	104	1058	1577	1077	818	970	552	752	454	213	262	185	669
1976	1568	1928	2002	1400	871	742	714	620	404	310	172	119	906
1977	124	284	550	530	719	884	544	459	400	137	147	331	424
1978	516	1709	1915	1382	1113	809	675	634	326	152	235	795	853
1979	210	457	538	323	1460	1145	447	484	204	186	99.6	322	483

STATION 12060500 SOUTH FORK SKOKOMISH RIVER NEAR UNION, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1931-1979)

MEAN	532.6	1100.5	1447.3	1330.1	1148.2	925.3	756.6	614.0	389.2	222.5	140.1	198.0	732.0
MAXIMUM	1727.0	2337.0	3330.0	4030.0	2594.0	2138.0	1397.0	1259.0	909.0	479.0	262.0	795.0	1041.0
MINIMUM	85.3	76.8	538.0	243.0	414.0	446.0	343.0	299.0	161.0	105.0	80.1	69.0	424.0
STD DEVIATION	372.04	518.40	563.47	707.57	501.18	346.98	261.40	209.08	169.32	91.63	46.17	145.92	147.70
SKENNESS	1.303	0.402	1.223	1.355	0.943	1.093	0.398	1.031	1.099	1.101	0.802	2.235	-0.037
STD ERR SKEW	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.340	0.343	0.343
SER CORR COEFF	-0.103	-0.088	-0.165	0.025	-0.010	0.095	-0.032	-0.153	-0.026	0.112	0.340	0.146	-0.026
COEFF OF VAR	0.698	0.471	0.389	0.532	0.437	0.375	0.345	0.341	0.435	0.412	0.330	0.737	0.202
MEAN LOGS	2.621	2.980	3.130	3.060	3.021	2.938	2.853	2.765	2.553	2.315	2.125	2.216	2.855
STD DEV LOGS	0.319	0.267	0.166	0.253	0.185	0.157	0.155	0.141	0.181	0.167	0.137	0.248	0.092
SKENNESS LOGS	-0.280	-1.654	-0.182	-0.786	0.053	0.143	-0.191	0.248	0.131	0.371	0.312	0.899	-0.529
STD ERR SKEW LOGS	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.340	0.340	0.343
SER CORR LOGS	-0.160	-0.090	-0.161	0.005	0.011	0.111	-0.049	-0.156	-0.013	0.162	0.124	0.152	-0.015
COEFF OF VAR LOGS	0.122	0.090	0.053	0.043	0.061	0.053	0.054	0.051	0.071	0.072	0.065	0.112	0.032
% OF AVE FLOW	6.0	12.5	16.4	15.1	13.0	10.5	8.6	7.0	4.4	2.5	1.6	2.2	100.0

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MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1931-1979)

0.99	65.3	116.8	527.0	213.8	395.5	389.7	294.8	291.1	140.7	94.0	66.7	63.7	404.3
0.95	118.3	284.9	705.9	393.5	523.7	486.9	388.1	350.3	182.5	114.7	81.6	76.0	491.7
0.90	160.1	422.5	821.0	526.9	609.2	550.0	447.3	388.5	210.4	128.5	90.0	85.5	541.5
0.80	228.2	633.4	981.8	728.2	732.4	639.2	529.0	442.3	250.7	148.7	101.8	101.0	604.3
0.50	432.5	1120.3	1364.7	1239.0	1046.3	860.3	720.2	574.9	353.9	201.6	131.1	151.3	730.1
0.20	781.2	1571.2	1866.2	1893.2	1502.7	1171.9	964.8	761.6	506.0	282.7	172.8	255.5	859.1
0.10	1044.3	1742.6	2183.8	2271.2	1819.6	1384.2	1117.1	889.0	613.3	342.0	201.6	353.8	926.0
0.04	1403.5	1867.5	2569.9	2683.0	2235.3	1659.3	1299.9	1054.7	755.8	423.4	239.3	521.5	996.0
0.02	1686.2	1920.1	2847.5	2946.1	2555.3	1869.4	1430.0	1181.7	865.9	489.1	268.4	685.9	1040.1
0.01	1979.0	1952.6	3117.3	3176.3	2883.9	2083.9	1555.4	1311.8	982.2	559.0	298.5	891.5	1076.8

STATION 12060500 SOUTH FORK SKOKOMISH RIVER NEAR UNION, #ASH.

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1933	74.0	75.0	78.0	83.0	93.0	113.0	146.0	180.0	287.0
1934	120.0	121.0	125.0	137.0	146.0	195.0	300.0	368.0	537.0
1935	89.0	89.0	91.0	95.0	112.0	119.0	137.0	150.0	206.0
1936	63.0	65.0	66.0	91.0	97.0	118.0	161.0	182.0	246.0
1937	71.0	71.0	72.0	73.0	77.0	79.0	87.0	98.0	198.0
1938	100.0	100.0	100.0	104.0	115.0	135.0	179.0	231.0	466.0
1939	63.0	63.0	64.0	67.0	67.0	74.0	90.0	119.0	218.0
1940	69.0	69.0	71.0	75.0	82.0	86.0	99.0	115.0	178.0
1941	66.0	66.0	69.0	76.0	77.0	84.0	91.0	104.0	228.0
1942	85.0	85.0	87.0	91.0	100.0	115.0	155.0	206.0	292.0
1943	78.0	79.0	79.0	81.0	84.0	88.0	99.0	133.0	216.0
1944	74.0	74.0	75.0	77.0	80.0	88.0	103.0	133.0	229.0
1945	71.0	71.0	72.0	72.0	76.0	83.0	96.0	111.0	165.0
1946	78.0	79.0	79.0	81.0	88.0	114.0	126.0	142.0	242.0
1947	84.0	84.0	85.0	88.0	94.0	106.0	127.0	187.0	271.0
1948	83.0	84.0	86.0	88.0	95.0	106.0	132.0	147.0	222.0
1949	117.0	118.0	120.0	126.0	130.0	145.0	192.0	245.0	443.0
1950	145.0	146.0	148.0	153.0	166.0	182.0	211.0	299.0	470.0
1951	121.0	123.0	124.0	136.0	144.0	182.0	211.0	299.0	470.0
1952	70.0	70.0	71.0	73.0	78.0	83.0	103.0	145.0	299.0
1953	84.0	84.0	84.0	86.0	92.0	106.0	141.0	153.0	250.0
1954	86.0	86.0	90.0	92.0	104.0	124.0	165.0	218.0	348.0
1955	118.0	118.0	122.0	132.0	135.0	147.0	197.0	234.0	339.0
1956	112.0	114.0	117.0	121.0	137.0	163.0	211.0	264.0	383.0
1957	114.0	117.0	120.0	128.0	135.0	171.0	219.0	310.0	509.0
1958	101.0	101.0	101.0	102.0	109.0	128.0	150.0	164.0	245.0
1959	69.0	70.0	72.0	74.0	77.0	86.0	95.0	114.0	211.0
1960	84.0	84.0	84.0	87.0	89.0	123.0	162.0	210.0	309.0
1961	81.0	81.0	83.0	86.0	96.0	111.0	123.0	150.0	301.0
1962	80.0	81.0	84.0	85.0	91.0	110.0	123.0	150.0	260.0
1963	92.0	95.0	98.0	103.0	119.0	143.0	154.0	196.0	332.0
1964	90.0	92.0	93.0	97.0	105.0	110.0	141.0	148.0	255.0
1965	100.0	105.0	109.0	115.0	119.0	175.0	212.0	235.0	315.0
1966	68.0	69.0	70.0	71.0	74.0	84.0	97.0	127.0	243.0
1967	78.0	78.0	80.0	84.0	91.0	95.0	106.0	143.0	237.0
1968	84.0	84.0	86.0	87.0	97.0	104.0	130.0	202.0	308.0
1969	122.0	123.0	125.0	127.0	136.0	176.0	205.0	251.0	325.0
1970	97.0	97.0	99.0	102.0	114.0	128.0	175.0	333.0	425.0
1971	78.0	79.0	83.0	89.0	91.0	101.0	115.0	124.0	204.0
1972	154.0	157.0	160.0	170.0	194.0	245.0	254.0	315.0	478.0
1973	101.0	101.0	103.0	108.0	114.0	139.0	207.0	238.0	308.0
1974	82.0	83.0	84.0	87.0	93.0	110.0	142.0	187.0	264.0
1975	91.0	92.0	94.0	95.0	101.0	117.0	142.0	194.0	365.0
1976	112.0	113.0	117.0	124.0	135.0	182.0	215.0	258.0	397.0
1977	79.0	80.0	81.0	85.0	91.0	111.0	133.0	157.0	223.0
1978	87.0	87.0	88.0	90.0	98.0	126.0	169.0	200.0	294.0
1979	97.0	99.0	102.0	107.0	112.0	142.0	232.0	329.0	360.0

STATION 12060500 SOUTH FORK SKOKOMISH RIVER NEAR UNION, WASH.

LOWEST MEAN FLOW STATISTICS (YEARS 1933-1979)

MEAN	69.8	90.7	92.7	96.7	104.0	123.6	152.8	193.4	301.6
MAXIMUM	154.0	157.0	160.0	170.0	194.0	245.0	300.0	368.0	537.0
MINIMUM	63.0	63.0	64.0	67.0	67.0	74.0	87.0	98.0	165.0
STANDARD DEVIATION	18.74	19.23	19.86	21.68	24.40	35.58	48.96	69.08	91.43
SKEWNESS	1.164	1.169	1.163	1.222	1.278	1.163	0.801	0.774	0.915
STD ERROR OF SKEWNESS	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347
SERIAL CORR COEFF	0.082	0.086	0.107	0.100	0.133	0.054	0.101	0.003	-0.088
COEFF OF VARIATION	0.209	0.212	0.214	0.224	0.235	0.288	0.320	0.357	0.303
MEAN LOGS	1.945	1.949	1.958	1.976	2.007	2.076	2.163	2.261	2.461
STD DEVIATION LOGS	0.085	0.086	0.087	0.090	0.095	0.117	0.135	0.150	0.125
SKEWNESS LOGS	0.644	0.634	0.653	0.711	0.564	0.432	0.185	0.214	0.370
STD ERR SKEWNESS LOGS	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347
SER CORR COEFF LOGS	0.112	0.121	0.144	0.137	0.172	0.106	0.138	0.041	-0.037
COEFF OF VAR LOGS	0.044	0.044	0.044	0.046	0.047	0.056	0.062	0.066	0.051

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1933-1979)

0.99	151.8	154.3	158.8	170.3	184.4	242.5	313.3	430.3	609.9
0.98	140.2	142.4	146.4	156.1	169.4	220.0	284.5	385.7	551.8
0.96	124.0	130.9	134.3	142.4	154.8	198.2	256.0	342.3	495.4
0.90	114.2	115.7	118.5	124.8	135.7	170.0	218.2	285.9	422.1
0.80	102.9	104.1	106.4	111.4	121.0	148.3	188.6	242.8	366.0
0.50	86.3	87.0	88.8	92.3	99.5	116.8	144.2	180.0	284.2
0.20	74.5	75.0	76.5	79.1	84.2	94.6	111.8	135.7	226.2
0.10	69.8	70.1	71.5	73.9	78.0	85.6	98.4	117.9	202.8
0.05	66.5	66.7	68.0	70.4	73.6	79.2	88.7	105.4	186.1
0.02	63.3	63.4	64.7	67.0	69.4	73.0	79.3	93.2	169.9
0.01	61.4	61.5	62.8	65.0	66.9	69.4	73.7	86.0	160.3

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1933-1979)

P95	P90	P75	P70	P50	P25	P10
94.0	110.0	210.0	260.0	460.0	870.0	1600.0

STATION 12060500 SOUTH FORK SKOKOMISH RIVER NEAR UNION, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW (CFS) DATE REG. (R)
1932	9260.	6460.	3840.	2500.	1910.	1570.	1280.	1290.	1150.	13000. 02/26/32
1933	4120.	3400.	2690.	1820.	1480.	1290.	1200.	1030.	1010.	6740. 11/13/32
1934	10500.	8160.	5110.	3990.	3320.	2650.	2070.	1770.	1380.	20800. 12/21/33
1935	14300.	11500.	8210.	4800.	2930.	2110.	1960.	1800.	1460.	21600. 01/22/35
1936	4420.	3400.	3120.	2570.	2130.	1420.	1250.	1100.	910.	5830. 02/27/36
1937	6120.	4010.	2750.	1940.	1500.	1260.	1190.	1080.	911.	10000. 12/22/36
1938	9460.	7160.	4170.	2810.	2040.	1950.	1640.	1400.	1260.	16000. 12/28/37
1939	9030.	6530.	4270.	2630.	1850.	1430.	1240.	1120.	922.	13900. 01/01/39
1940	9160.	6310.	4300.	3660.	2880.	1970.	1820.	1630.	1320.	17200. 12/15/39
1941	4830.	4230.	3080.	2020.	1540.	1330.	1170.	1230.	1020.	12500. 01/17/41
1942	9510.	4590.	3070.	1990.	1840.	1390.	1200.	1060.	863.	17600. 12/02/41
1943	4210.	3170.	2750.	2000.	1450.	1040.	904.	870.	875.	8540. 03/27/43
1944	4890.	3430.	2550.	1710.	1350.	958.	870.	777.	673.	8470. 12/03/43
1945	9010.	5850.	3780.	2380.	1740.	1300.	1190.	1130.	997.	19400. 02/07/45
1946	4100.	3440.	2810.	2230.	1740.	1630.	1400.	1350.	1180.	4920. 02/26/46
1947	6400.	6250.	3870.	2610.	2150.	1370.	1570.	1320.	1010.	8160. 02/13/47
1948	4340.	3550.	2410.	1880.	1680.	1090.	1140.	1000.	958.	9730. 10/18/47
1949	5690.	4010.	2610.	1990.	1670.	1260.	1190.	1020.	922.	6290. 02/22/49
1950	8110.	6840.	5010.	3380.	2390.	2000.	1660.	1710.	1450.	21600. 11/26/49
1951	9740.	8030.	4970.	2900.	2420.	1970.	2020.	1740.	1380.	12300. 02/09/51
1952	5970.	4870.	3900.	2710.	1790.	1190.	1150.	1100.	957.	8090. 01/30/52
1953	7730.	5990.	5380.	4650.	4120.	2990.	2320.	1910.	1460.	13600. 01/02/53
1954	5630.	4840.	4080.	3230.	2260.	1950.	1810.	1740.	1420.	10600. 01/05/54
1955	10600.	8110.	5700.	3820.	2520.	1880.	1560.	1350.	1110.	15500. 11/18/54
1956	14900.	8730.	6810.	3250.	2190.	1940.	1830.	1560.	1350.	17900. 11/03/55
1957	8480.	6960.	4300.	2880.	1900.	1380.	1100.	1040.	975.	16700. 12/09/56
1958	5860.	3680.	2730.	2280.	2000.	1880.	1700.	1440.	1180.	9490. 12/25/57
1959	8320.	5570.	3230.	2160.	2090.	1800.	1650.	1410.	1270.	13500. 04/29/59
1960	9930.	6690.	4410.	3370.	2470.	1600.	1690.	1440.	1260.	16100. 11/20/59
1961	15800.	8570.	5800.	3460.	3030.	2630.	2230.	1990.	1610.	20400. 01/15/61
1962	5200.	3660.	2810.	2180.	1590.	1410.	1170.	1030.	891.	7120. 01/03/62
1963	6560.	5910.	3950.	2610.	2220.	1880.	1640.	1440.	1220.	12200. 11/25/62
1964	5900.	4120.	3010.	2500.	2030.	1740.	1270.	1140.	980.	10100. 10/21/63
1965	8660.	5830.	3390.	2330.	1690.	1300.	1270.	1140.	9220.	11400. 11/30/64
1966	8180.	5710.	3570.	2580.	1770.	1520.	1360.	1300.	1160.	9220. 01/13/66
1967	11600.	8170.	6030.	4500.	3590.	2720.	2350.	2020.	1560.	15600. 12/12/66
1968	9560.	7590.	5800.	4120.	3000.	2450.	2160.	1920.	1700.	11200. 01/19/68
1969	5560.	3550.	2320.	1970.	1700.	1520.	1330.	1120.	1110.	9840. 12/03/68
1970	4840.	3460.	2810.	2320.	1630.	1530.	1320.	1240.	1030.	7880. 04/09/70
1971	6840.	4740.	3110.	2470.	1800.	1510.	1390.	1340.	1240.	9560. 12/07/70
1972	8440.	5650.	3500.	3470.	2710.	2130.	1800.	1540.	1340.	13700. 01/20/72
1973	6780.	4810.	4040.	3260.	2290.	1600.	1400.	1240.	984.	10100. 12/26/72
1974	10200.	9550.	6180.	3930.	2700.	2390.	2150.	1860.	1630.	13200. 01/14/74
1975	5930.	3630.	2920.	1960.	1750.	1550.	1350.	1260.	1060.	11500. 11/20/74
1976	7500.	6710.	3990.	2680.	2340.	2170.	1920.	1760.	1430.	13700. 12/03/75
1977	3510.	2470.	1660.	1240.	1060.	842.	761.	709.	635.	4820. 12/26/76
1978	6110.	4960.	4140.	2680.	2230.	1930.	1760.	1600.	1300.	11600. 11/01/77
1979	4980.	4300.	2810.	2330.	1950.	1290.	1030.	885.	728.	9960. 03/04/79

STATION 12060500 SOUTH FORK SKOKOMISH RIVER NEAR UNION, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1932-1979)

SYSTEMATIC
RECORDW R C
ESTIMATE

MEAN	7620.2	5009.4	3869.8	2774.5	2134.0	1701.9	1518.9	1362.9	1156.7
MAXIMUM	15800.0	11500.0	8210.0	4800.0	4120.0	2990.0	2350.0	2020.0	1700.0
MINIMUM	3510.0	2470.0	1660.0	1240.0	1050.0	842.0	761.0	709.0	635.0
STANDARD DEVIATION	2857.90	1769.54	1265.68	824.42	607.03	482.22	397.62	335.84	253.85
SKENNESS	0.941	0.722	1.070	0.725	1.149	0.709	0.341	0.212	0.122
STD ERROR OF SKENNESS	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343
SERIAL CORR COEFF	0.063	0.001	0.112	0.214	0.051	-0.012	-0.026	-0.028	-0.042
COEFF OF VARIATION	0.375	0.351	0.327	0.296	0.284	0.283	0.262	0.246	0.219
MEAN LOGS	3.854	3.723	3.567	3.426	3.313	3.214	3.167	3.121	3.053
STD DEVIATION LOGS	0.158	0.151	0.136	0.127	0.116	0.121	0.116	0.110	0.099
SKENNESS LOGS	0.129	0.029	0.158	0.068	0.332	0.025	-0.186	-0.276	-0.392
STD ERR SKENNESS LOGS	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343
SER CORR COEFF LOGS	0.015	-0.041	0.087	0.184	0.043	0.008	-0.015	-0.025	-0.046
COEFF OF VAR LOGS	0.041	0.041	0.038	0.037	0.035	0.038	0.037	0.035	0.032

4.0587
0.1629
-0.3280

99

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1932-1979)

0.99	3159.6	2369.2	1844.8	1369.7	1174.6	859.6	760.9	695.9	623.2	4716.8
0.95	3477.6	2490.2	2233.9	1856.7	1460.3	1036.6	933.5	854.2	758.1	5977.9
0.90	4502.2	3387.4	2481.2	1855.9	1476.0	1036.6	933.5	854.2	758.1	7000.7
0.80	5244.9	3942.0	2825.7	2081.3	1637.3	1294.4	1175.8	1071.9	937.1	8412.1
0.50	7083.1	5278.2	3655.5	2655.4	2027.9	1636.2	1480.0	1337.2	1145.4	11684.9
0.20	9671.3	7084.4	4784.3	3403.8	2564.9	2071.5	1841.1	1640.7	1370.9	15766.8
0.10	11432.2	8270.5	5533.0	3882.9	2925.0	2344.8	2054.2	1814.3	1493.8	18234.5
0.04	13711.2	9762.3	6484.4	4474.8	3387.3	2677.6	2300.8	2010.0	1627.4	21118.1
0.02	15448.6	10870.5	7198.6	4908.2	3737.9	2918.0	2471.1	2142.0	1714.6	23116.3
0.01	17220.4	11977.7	7918.7	5336.7	4094.4	3153.2	2631.7	2264.4	1793.3	25001.6

4376.4
5977.9
7000.7
8412.1
11684.9
15766.8
18234.5
21118.1
23116.3
25001.6

STATION 12061200 FIR CREEK TRIBUTARY NEAR POTLATCH, WASH.

ANNUAL PEAK FLOW DATA			ANNUAL PEAK FLOW STATISTICS (YEARS 1955-1974)		W R C ESTIMATE	SYSTEMATIC RECORD
WATER YEAR	FLOW(CFS)	DATE	MEAN LOGS	STANDARD DEVIATION LOGS		
1955	216.0	11-18-1954			2.1460	2.1460
1956	200.0	11- 3-1955			0.1643	0.1643
1957	280.0	12- 9-1956			0.074	0.183
1958	79.0	12-25-1957				
1959	172.0	4-29-1959				
1960	256.0	11-20-1959				
1961	208.0	1-15-1961				
1962	87.0	11-30-1961				
1963	185.0	11-19-1962				
1964	83.0	1- 1-1964			59.3	61.1
1965	121.0	11-30-1964			75.7	76.7
1966	137.0	1-13-1966			86.5	86.9
1967	156.0	12-13-1966			101.7	101.5
1968	137.0	2- 3-1968			139.3	138.4
1969	98.0	12- 3-1968			192.2	191.7
1970	97.0	4- 9-1970			227.9	228.8
1971	102.0	12- 7-1970			274.0	277.8
1972	173.0	1-20-1972			309.0	315.8
1973	147.0	12-26-1972			344.4	355.0
1974	104.0	1-14-1974				

ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES
LOG-PEARSON III ANALYSIS (YEARS 1955-1974)

0.99
0.95
0.90
0.80
0.50
0.20
0.10
0.04
0.02
0.01

STATION 12061500 SKOKOMISH RIVER NEAR POTLATCH, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1943													
1944	470	557	1324	1660	1012	789	833	504	308	296	197	161	662
1945	284	1761	999	1715	2316	1725	959	1125	426	189	144	150	144
1946	377	1981	2467	2147	1776	1722	1666	1221	1146	217	225	194	225
1947	427	1386	2674	1578	3048	1772	1643	497	341	237	219	202	1301
1948	2436	1279	2034	1903	1306	1033	1184	1675	692	310	229	201	1228
1949	739	1924	1807	524	2112	2151	1181	1147	506	307	225	287	1068
1950	476	2802	3179	1910	2648	3241	1624	1049	837	462	313	213	1556
1951	1574	2273	4330	2834	4002	1076	1019	751	421	274	198	213	1571
1952	2162	1485	1728	1219	2143	1002	1221	1040	533	347	225	225	1116
1953	169	453	1863	5540	2399	1041	868	970	543	347	210	304	1223
1954	772	2255	2752	3760	1340	1237	1237	675	543	470	261	266	1366
1955	883	3710	1754	1190	1511	815	1520	812	618	436	305	244	1143
1956	1332	3768	2341	2419	780	1958	1762	1309	1213	557	224	327	1502
1957	1956	1364	2433	729	2167	1948	1201	642	322	314	263	196	1129
1958	482	1773	2061	2980	3373	1039	1424	683	322	225	186	174	1130
1959	508	1898	2356	3176	1126	1181	1976	1102	618	351	229	620	1268
1960	711	2151	2009	1774	2262	1359	1659	1015	608	320	250	221	1189
1961	755	1816	1896	3961	4045	3025	994	1048	535	294	207	223	1554
1962	576	1248	2465	1459	1099	1016	1044	928	451	277	283	308	930
1963	1332	2606	2272	1458	2037	971	1489	998	362	346	219	186	1183
1964	1297	2735	1956	2699	1358	1320	846	666	681	439	375	241	1218
1965	495	1483	1655	1608	2324	938	1226	845	433	250	190	160	958
1966	526	1501	1744	2601	1397	1914	1043	685	448	307	189	175	1044
1967	527	1298	4432	3011	1878	1866	881	795	598	314	199	187	1334
1968	2172	1307	2521	3304	3168	2151	2055	662	635	327	324	503	1498
1969	1087	1637	2529	1345	1124	1666	2005	1288	1057	333	222	884	1264
1970	786	963	2207	2213	1474	1217	1413	532	233	233	178	259	966
1971	753	1613	2294	2554	1764	2143	1553	1387	899	674	313	450	1366
1972	577	1918	1488	2313	2810	3432	1635	859	500	528	376	492	1406
1973	262	1536	3261	2188	1024	1155	487	650	550	302	199	283	994
1974	726	2553	3754	3973	2159	2789	1615	1132	961	783	365	250	1756
1975	186	1620	2406	1751	1378	1464	855	1036	575	316	388	314	1023
1976	2570	3518	3626	2178	1513	1322	1130	874	600	459	297	225	1528
1977	220	464	807	811	1039	1464	735	606	565	226	238	481	635
1978	682	2470	2712	1829	1513	1076	977	894	499	274	341	1039	1189
1979	383	689	851	526	2148	1694	662	659	316	285	185	425	726

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1943-1979)

MEAN	879.7	1800.4	2300.7	2148.2	2027.6	1578.2	1208.1	911.7	585.2	362.6	249.4	322.7	1194.5
MAXIMUM	2570.0	3788.0	4432.0	5540.0	4045.0	3432.0	2005.0	1675.0	1213.0	783.0	388.0	1039.0	1756.0
MINIMUM	169.0	453.0	807.0	524.0	780.0	772.0	487.0	407.0	308.0	189.0	144.0	150.0	635.0
STD DEVIATION	656.70	840.79	843.76	1031.23	872.84	690.12	384.37	274.04	229.39	139.86	65.37	197.40	260.02
SKEWNESS	1.332	0.640	0.706	1.054	0.813	1.216	0.281	0.599	1.255	1.610	0.686	2.165	-0.116
STD ERR SKEW	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.388	0.388	0.388	0.393
SER CORR COEFF	-0.112	0.033	-0.058	-0.156	-0.117	-0.002	-0.010	-0.302	-0.292	-0.078	0.016	0.221	-0.220
COEFF OF VAR	0.746	0.467	0.367	0.480	0.430	0.437	0.318	0.301	0.392	0.386	0.262	0.612	0.218
MEAN LOGS	2.838	3.203	3.332	3.280	3.269	3.163	3.059	2.941	2.739	2.534	2.383	2.453	3.066
STD DEV LOGS	0.310	0.230	0.169	0.228	0.185	0.174	0.146	0.131	0.157	0.145	0.110	0.207	0.102
SKEWNESS LOGS	0.093	-0.750	-0.600	-0.714	0.038	0.458	-0.396	-0.038	0.424	0.833	0.311	1.063	-0.789
STD ERR SKEW LOGS	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.388	0.388	0.388	0.393
SER CORR LOGS	-0.116	-0.116	-0.100	-0.145	-0.143	0.009	-0.075	-0.283	-0.283	-0.042	0.032	0.287	-0.194
COEFF OF VAR LOGS	0.072	0.051	0.051	0.069	0.057	0.055	0.048	0.044	0.057	0.057	0.046	0.084	0.033
% OF AVE FLOW	6.1	12.5	16.0	14.9	14.1	11.0	8.4	6.3	4.1	2.5	1.7	2.2	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1943-1979)

0.99	137.6	351.6	735.6	431.6	697.1	656.1	477.5	429.8	265.4	193.0	142.1	136.1	592.9
0.95	217.1	606.1	1067.9	733.4	925.4	795.6	637.8	530.3	317.3	215.7	163.1	153.3	757.6
0.90	278.0	787.3	1281.3	947.2	1077.4	890.9	737.4	592.8	352.0	231.9	176.3	166.9	851.9
0.80	376.4	1053.3	1574.0	1260.3	1296.3	1031.9	872.0	677.9	402.5	256.7	194.7	189.4	970.1
0.50	680.4	1704.0	2232.7	2027.1	1852.2	1410.5	1172.2	874.4	534.1	326.4	238.5	261.3	1200.9
0.20	1249.3	2511.4	2997.6	2985.8	2656.5	2013.2	1527.2	1124.9	734.8	443.0	297.6	405.8	1423.4
0.10	1727.2	2971.9	3425.4	3538.6	3213.2	2468.6	1732.7	1281.8	881.1	534.4	336.7	537.7	1531.1
0.04	2451.6	3471.8	3891.3	4145.2	3938.9	3111.2	1965.2	1472.1	1081.8	667.2	386.3	756.3	1636.7
0.02	3082.2	3791.3	4192.9	4537.1	4496.1	3641.1	2121.7	1609.2	1243.1	779.8	423.5	965.1	1699.0
0.01	3793.7	4071.8	4461.9	4884.3	5066.6	4216.6	2266.1	1742.8	1414.9	904.8	461.1	1221.1	1750.9

STATION 12061500 SKOKOMISH RIVER NEAR POTLATCH, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1945	126.0	127.0	130.0	131.0	133.0	144.0	160.0	180.0	257.0
1946	150.0	152.0	153.0	155.0	160.0	188.0	189.0	202.0	371.0
1947	164.0	167.0	170.0	175.0	179.0	187.0	213.0	297.0	559.0
1948	169.0	170.0	171.0	174.0	189.0	200.0	232.0	257.0	360.0
1949	204.0	209.0	217.0	224.0	228.0	244.0	305.0	434.0	638.0
1950	160.0	161.0	168.0	177.0	195.0	231.0	269.0	304.0	429.0
1951	165.0	170.0	173.0	180.0	210.0	258.0	306.0	419.0	694.0
1952	156.0	157.0	161.0	167.0	177.0	189.0	218.0	269.0	470.0
1953	152.0	152.0	154.0	157.0	164.0	186.0	226.0	238.0	337.0
1954	156.0	159.0	160.0	161.0	173.0	192.0	247.0	318.0	509.0
1955	218.0	219.0	226.0	241.0	254.0	258.0	316.0	364.0	505.0
1956	159.0	166.0	174.0	183.0	216.0	252.0	314.0	370.0	543.0
1957	200.0	203.0	203.0	205.0	212.0	231.0	304.0	427.0	785.0
1958	171.0	175.0	177.0	181.0	182.0	208.0	237.0	258.0	362.0
1959	128.0	131.0	137.0	150.0	164.0	172.0	187.0	209.0	340.0
1960	204.0	204.0	209.0	215.0	226.0	266.0	322.0	410.0	518.0
1961	180.0	180.0	183.0	198.0	205.0	229.0	250.0	280.0	502.0
1962	176.0	177.0	180.0	182.0	189.0	209.0	224.0	271.0	436.0
1963	176.0	176.0	179.0	182.0	211.0	250.0	264.0	312.0	526.0
1964	174.0	174.0	175.0	180.0	185.0	191.0	236.0	254.0	440.0
1965	198.0	198.0	201.0	207.0	214.0	297.0	344.0	388.0	481.0
1966	150.0	150.0	151.0	153.0	158.0	172.0	192.0	238.0	395.0
1967	160.0	165.0	167.0	169.0	173.0	176.0	188.0	231.0	360.0
1968	167.0	167.0	167.0	172.0	186.0	192.0	230.0	317.0	495.0
1969	230.0	230.0	234.0	239.0	257.0	310.0	351.0	411.0	525.0
1970	186.0	188.0	190.0	196.0	205.0	227.0	294.0	554.0	650.0
1971	153.0	154.0	158.0	162.0	171.0	187.0	212.0	224.0	329.0
1972	253.0	257.0	265.0	280.0	306.0	372.0	385.0	492.0	707.0
1973	208.0	208.0	211.0	218.0	228.0	325.0	374.0	414.0	494.0
1974	155.0	158.0	159.0	162.0	170.0	196.0	243.0	305.0	394.0
1975	166.0	166.0	168.0	171.0	182.0	211.0	240.0	352.0	580.0
1976	208.0	208.0	211.0	222.0	233.0	284.0	333.0	375.0	571.0
1977	169.0	169.0	171.0	176.0	185.0	213.0	242.0	272.0	361.0
1978	164.0	164.0	165.0	168.0	178.0	211.0	268.0	310.0	420.0
1979	210.0	212.0	215.0	221.0	226.0	263.0	363.0	498.0	534.0

LOWEST MEAN FLOW STATISTICS (YEARS 1945-1979)

MEAN	176.2	177.8	180.9	186.7	197.8	226.3	265.1	327.3	482.2
MAXIMUM	253.0	257.0	265.0	280.0	306.0	372.0	385.0	554.0	785.0
MINIMUM	126.0	127.0	130.0	131.0	133.0	144.0	160.0	180.0	257.0
STANDARD DEVIATION	27.92	27.91	28.79	30.92	33.77	49.13	59.23	91.63	119.95
SKEWNESS	0.726	0.766	0.881	0.975	0.999	1.026	0.363	0.582	0.514
STD ERROR OF SKEWNESS	0.398	0.398	0.398	0.398	0.398	0.398	0.398	0.398	0.398
SERIAL CORR COEFF	-0.059	-0.067	-0.057	-0.028	0.055	0.052	0.125	-0.011	-0.199
COEFF OF VARIATION	0.158	0.157	0.159	0.166	0.171	0.217	0.223	0.280	0.249
MEAN LOGS	2.241	2.245	2.252	2.266	2.290	2.345	2.413	2.499	2.670
STD DEVIATION LOGS	0.067	0.066	0.067	0.069	0.071	0.089	0.097	0.120	0.108
SKEWNESS LOGS	0.295	0.322	0.448	0.518	0.398	0.486	-0.017	0.057	-0.105
STD ERR SKEWNESS LOGS	0.398	0.398	0.398	0.398	0.398	0.398	0.398	0.398	0.398
SER CORR COEFF LOGS	-0.047	-0.057	-0.042	-0.003	0.095	0.054	0.168	0.031	-0.169
COEFF OF VAR LOGS	0.030	0.030	0.030	0.030	0.031	0.038	0.040	0.048	0.041

STATION 12061500 SKOKOMISH RIVER NEAR POTLATCH, WASH.

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1945-1979)

	0.99	257.8	259.8	268.4	282.7	299.7	384.3	434.3	608.1	820.6
0.98	244.9	246.7	253.9	266.3	282.8	296.0	408.9	489.9	562.0	770.5
0.96	231.6	233.3	239.1	249.8	265.7	328.0	382.3	458.0	515.1	718.0
0.90	213.1	214.7	219.0	227.4	242.3	290.8	344.5	408.6	450.6	642.6
0.80	197.8	199.3	202.6	209.5	223.2	261.7	312.4	378.1	397.8	578.1
0.50	172.8	174.3	176.8	181.9	193.1	217.9	258.9	314.4	314.4	470.0
0.20	152.7	154.3	156.8	161.0	169.7	185.8	214.4	249.4	249.4	379.8
0.10	142.7	145.4	148.2	152.1	159.5	172.4	194.1	221.3	221.3	338.9
0.05	136.9	138.8	141.9	145.7	152.0	162.9	178.9	200.7	200.7	308.1
0.02	130.0	132.0	135.6	139.3	144.5	153.5	163.0	179.8	179.8	276.3
0.01	125.8	127.8	131.7	135.5	139.9	147.9	153.3	167.3	167.3	256.8

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1945-1979)

	P95	P90	P75	P70	P50	P25	P10
	180.0	210.0	350.0	430.0	760.0	1400.0	2600.0

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW(CFS) DATE REG.(R)
1934	7960.	5470.	3640.	2460.	1930.	1520.	1350.	1210.	1050.	18600. 12/ /33 R
1944	10300.	8540.	5390.	3460.	2530.	2000.	1930.	1690.	1570.	11400. 12/03/43 R
1945	7330.	5520.	4360.	3550.	2960.	2690.	2300.	2250.	1990.	16700. 02/07/45 R
1946	12700.	9940.	6760.	4380.	3640.	3320.	2650.	2240.	1680.	9320. 04/11/46 R
1947	9640.	6790.	4900.	3820.	3260.	2040.	2310.	1970.	1680.	14100. 02/14/47 R
1948	10300.	7570.	4920.	3810.	2970.	2250.	1980.	1730.	1640.	15100. 10/19/47 R
1949	15900.	11500.	8950.	5870.	4000.	3280.	2910.	3060.	2580.	11900. 02/22/49 R
1950	17600.	15100.	9660.	5950.	4520.	4150.	4040.	3420.	2680.	21400. 11/27/49 R
1951	8310.	6850.	5680.	3940.	2650.	2170.	1850.	1910.	1640.	19200. 02/10/51 R
1952	10900.	7990.	6690.	6110.	5750.	4220.	3310.	2750.	2110.	11300. 01/30/52 R
1953	9410.	8810.	7440.	5620.	3750.	3030.	2930.	2770.	2240.	15500. 01/03/53 R
1954	16800.	14300.	9440.	6140.	3880.	2840.	2390.	2060.	1740.	15000. 01/05/54 R
1955	24200.	17200.	9460.	5910.	3820.	3170.	2970.	2540.	2240.	20000. 11/18/54 R
1956	13000.	11100.	6900.	4730.	3200.	2270.	2030.	1860.	1840.	27000. 11/03/55 R
1957	7610.	6030.	4580.	4090.	3450.	3150.	2830.	2370.	1940.	17200. 12/09/56 R
1958	14600.	10600.	5890.	3590.	3390.	2800.	2540.	2190.	1920.	12400. 12/25/57 R
1959	14700.	9460.	6650.	4290.	3340.	2240.	2460.	2150.	2020.	23600. 04/30/59 R
1960	21800.	13700.	8960.	6140.	4640.	4120.	3700.	3240.	2640.	22100. 11/20/59 R
1961	7100.	5300.	4160.	3430.	2590.	2220.	1830.	1610.	1440.	26400. 01/15/61 R
1962	6840.	5360.	4080.	3570.	3000.	2550.	2520.	2410.	1960.	9680. 12/01/61 R
1963	9590.	6840.	4980.	4020.	3390.	2840.	2390.	2110.	1830.	18300. 11/20/62 R
1964	6840.	5360.	4080.	3570.	3000.	2550.	2520.	2410.	1960.	10600. 10/22/63 R
1965	13400.	9430.	5310.	3710.	2730.	2070.	2000.	1810.	1540.	15600. 11/30/64 R
1966	12000.	9130.	5700.	4080.	2740.	2250.	2020.	1950.	1700.	14800. 01/13/66 R
1967	16300.	10600.	7650.	5890.	4730.	3720.	3270.	2880.	2250.	17700. 12/13/66 R
1968	11600.	10100.	7460.	5570.	4140.	3340.	3070.	2800.	2440.	12500. 01/19/68 R
1969	8410.	5250.	3370.	2840.	2610.	2310.	1980.	1700.	1730.	11200. 12/03/68 R
1970	6850.	4800.	4250.	3450.	2500.	2300.	1980.	1860.	1550.	10700. 04/09/70 R
1971	10100.	7170.	4820.	4000.	2850.	2520.	2290.	2250.	2030.	11700. 12/07/70 R
1972	12500.	9550.	5980.	5720.	4500.	3570.	3000.	2580.	2260.	19700. 03/05/72 R
1973	15500.	9710.	7880.	6060.	4160.	2850.	2380.	2070.	1610.	19900. 12/26/72 R
1974	16000.	14800.	10800.	6890.	4810.	4130.	3710.	3240.	2820.	21000. 01/15/74 R
1975	10800.	6020.	4390.	3110.	2640.	2390.	2110.	1970.	1640.	15200. 12/21/74 R
1976	15900.	12900.	8300.	5050.	4490.	3980.	3430.	3040.	2480.	20200. 12/04/75 R
1977	4550.	4180.	2870.	2050.	1630.	1300.	1160.	1070.	930.	20200. 03/07/77 R
1978	9700.	7620.	6000.	4140.	3190.	2730.	2440.	2210.	1800.	16500. 11/01/77 R
1979	8920.	6430.	4160.	3470.	2890.	1890.	1500.	1300.	1090.	14300. 03/05/79 R

STATION 12061500 SKOKOMISH RIVER NEAR POTLATCH, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1934-1979)

	MEAN	MAXIMUM	MINIMUM	STANDARD DEVIATION	SKWENESS	STD ERROR OF SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	SKWENESS LOGS	STD ERR SKWENESS LOGS	SER CORR COEFF LOGS	CDEFF OF VAR LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
	11947.8	24200.0	4550.0	4331.67	0.831	0.147	0.363	4.050	0.157	-0.103	0.393	0.100	0.039		
	8937.8	17200.0	4180.0	3279.93	0.734	0.104	0.367	3.924	0.157	0.086	0.393	0.058	0.040		
	6178.6	10800.0	2870.0	2025.26	0.521	0.162	0.328	3.768	0.143	-0.041	0.365	0.113	0.038		
	4469.7	6890.0	2050.0	1230.02	0.191	0.239	0.275	3.520	0.125	-0.314	-0.365	0.188	0.034		
	3424.2	4220.0	1630.0	892.78	0.434	0.393	0.261	3.424	0.122	-0.314	-0.365	0.188	0.034		
	2756.1	4040.0	1300.0	763.43	0.462	0.393	0.277	3.380	0.118	-0.398	-0.505	0.195	0.036		
	2229.7	3420.0	1070.0	577.77	0.208	0.393	0.259	3.333	0.110	-0.505	-0.704	0.137	0.035		
	1897.4	2820.0	936.0	448.56	0.061	0.393	0.239	3.265	0.110	-0.505	-0.704	0.137	0.035		
	4.1832	0.1384	-0.4040												

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1934-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
	4711.0	6129.2	7035.4	8295.4	11292.2	15237.7	17759.8	20856.6	23105.9	25311.7
	3700.2	4668.5	5294.6	6177.3	8343.3	11351.8	13737.7	15964.2	17920.8	19901.6
	2696.2	3396.3	3837.6	4446.0	5877.0	7744.1	9934.2	10395.6	11458.6	12503.0
	2044.5	2608.3	2948.9	3399.3	4375.7	5495.2	6131.8	6844.2	7320.6	7758.3
	1674.3	2086.7	2333.5	2657.8	3357.0	4157.1	4613.2	5125.9	5470.4	5788.5
	1325.2	1646.4	1841.4	2101.7	2679.0	3370.1	3780.1	4256.0	4585.2	4896.3
	1153.3	1468.9	1658.5	1907.7	2442.7	3046.5	3385.2	3760.1	4008.2	4234.5
	1035.7	1328.3	1502.3	1726.7	2203.7	2719.9	2999.1	3299.1	3492.3	3664.5
	903.0	1164.2	1316.2	1509.6	1897.4	2287.4	2483.4	2681.6	2802.0	2904.6
	6619.4	8725.4	10021.3	11756.0	15578.6	20027.4	22573.7	25430.0	27340.1	29094.0

STATION 12062500 PURDY CREEK NEAR UNION, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES* IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1954													
1955	12.4	21.8	22.1	24.5	31.4	27.3	30.2	25.7	22.9	20.0	16.1	15.7	22.4
1956	17.0	29.2	41.4	49.8	36.3	43.8	37.2	26.4	21.9	18.8	18.2	15.5	29.6
1957	17.2	16.1	30.4	20.9	25.6	34.9	26.5	22.5	19.8	18.3	16.4	15.0	22.0
1958	13.2	13.4	16.9	28.4	32.7	28.6	26.4	22.9	20.6	18.4	15.2	13.0	20.7
1959	11.8	13.9	19.6	35.4	28.8	26.4	31.2	31.3	22.0	19.5	16.5	15.5	22.6
1960	14.8	20.2	22.3	25.1	41.2	33.2	38.5	36.7	25.2	19.4			

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1955	70.0	2-7-1955
1956	81.0	12-22-1955
1957	106.0	12-10-1956
1958	60.0	1-16-1958
1959	99.0	4-30-1959

STATION 12063000 UNION RIVER NEAR BREMERTON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1946	1.05	17.8	24.6	27.6	26.2	19.9	19.8	3.35	2.42	1.71	0.79	0.80	12.1
1947	1.66	19.2	23.9	20.7	34.0	9.45	4.37	2.62	1.79	0.94	0.65	0.85	9.86
1948	18.6	11.2	18.4	23.7	22.1	14.6	10.5	15.5	5.35	1.70	0.81	1.88	12.0
1949	3.84	21.3	24.6	10.2	38.3	14.4	5.79	3.66	1.56	0.81	0.56	0.69	10.5
1950	1.25	30.3	27.9	34.7	41.5	32.7	12.4	3.66	1.56	0.76	0.62	0.50	15.5
1951	8.54	31.1	42.6	38.1	44.8	13.0	4.77	2.14	1.17	0.64	0.46	0.64	15.5
1952	12.9	18.4	23.0	30.7	26.6	9.04	4.87	3.10	1.72	0.83	0.61	0.51	11.0
1953	0.58	0.97	14.6	78.5	23.7	13.8	7.23	3.37	2.37	1.35	0.89	0.90	12.4
1954	6.85	24.3	27.5	32.5	52.3	12.6	10.5	3.16	1.95	1.29	0.88	0.98	14.3
1955	1.18	30.9	22.7	14.9	14.6	10.0	15.9	3.55	2.23	2.08	1.49	1.14	9.99
1956	9.45	47.1	36.3	50.8	14.1	29.4	8.48	1.70	3.44	1.79	1.24	0.96	17.1
1957	3.71	14.3	8.89	8.42	5.24	8.96	7.75	9.22	10.5	10.6	12.0	18.9	9.96
1958	6.84	4.86	5.01	5.87	17.0	10.7	7.75	10.7	11.1	14.9	9.08	6.05	9.11
1959	7.06	20.1	12.5	7.75	7.70	8.81	14.5	16.3	9.62	12.8	10.6	10.6	11.5

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1946-1959)

MEAN	6.0	20.8	22.3	27.5	26.3	14.8	9.7	6.0	4.1	3.7	2.9	3.2	12.2
MAXIMUM	18.6	47.1	42.6	78.5	52.3	32.7	19.8	16.3	11.1	14.9	12.0	18.9	17.1
MINIMUM	0.6	1.0	5.0	5.9	5.2	8.8	4.4	1.7	1.2	0.6	0.5	0.5	9.1
STD DEVIATION	5.23	11.77	10.11	19.78	14.25	7.55	4.60	4.93	3.60	4.99	4.19	5.33	2.48
SKENNESS	1.143	0.435	0.202	1.338	0.296	1.670	0.866	1.341	1.320	1.649	1.624	2.435	0.747
STD ERR SKEW	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597
SER CORR COEFF	-0.339	0.176	0.241	0.110	0.320	-0.200	-0.315	0.323	0.745	0.840	0.698	0.254	-0.186
COEFF DF VAR	0.877	0.565	0.453	0.720	0.542	0.510	0.475	0.819	0.886	1.338	1.434	1.643	0.203
MEAN LOGS	0.581	1.202	1.295	1.330	1.344	1.130	0.942	0.664	0.477	0.291	0.138	0.159	1.078
STD DEV LOGS	0.467	0.421	0.247	0.333	0.291	0.184	0.205	0.315	0.332	0.267	0.498	0.502	0.085
SKENNESS LOGS	-0.336	-2.101	-1.177	-0.232	-0.843	1.101	0.095	0.678	0.845	1.139	1.284	1.402	0.496
STD ERR SKEW LOGS	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597
SER CORR LOGS	-0.354	-0.024	0.420	0.331	0.428	-0.212	-0.293	0.306	0.685	0.825	0.804	0.598	-0.180
COEFF OF VAR LOGS	0.804	0.350	0.190	0.250	0.216	0.163	0.217	0.474	0.696	1.608	3.602	3.155	0.079
% OF AVE FLOW	4.0	14.1	15.1	18.6	17.8	10.1	6.6	4.1	2.8	2.5	2.0	2.2	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1959)

0.99	0.2	0.5	3.3	3.2	3.1	7.1	3.0	1.2	0.8	0.4	0.3	0.3	8.2
0.95	0.6	2.3	6.7	5.8	6.4	7.8	4.1	1.6	1.1	0.5	0.3	0.4	8.9
0.90	0.9	4.5	9.2	7.9	9.0	8.4	4.8	2.0	1.2	0.6	0.4	0.4	9.4
0.80	1.6	9.0	13.0	11.3	13.1	9.4	5.9	2.5	1.6	0.8	0.5	0.6	10.1
0.50	4.0	21.7	22.0	22.0	24.2	12.5	8.7	4.3	2.7	1.6	1.1	1.1	11.8
0.20	9.5	33.5	31.8	41.0	39.1	18.5	13.0	8.2	5.4	4.3	3.1	3.3	14.0
0.10	14.5	37.0	36.6	55.9	47.9	23.8	16.1	12.1	8.3	6.4	6.4	6.8	15.5
0.04	22.0	39.0	41.1	76.8	57.5	32.4	20.2	19.1	13.9	18.2	15.4	16.9	17.4
0.02	28.5	39.6	43.5	93.6	63.6	40.4	23.5	26.2	19.9	32.1	29.0	32.9	18.8
0.01	35.6	39.9	45.3	111.5	68.9	49.9	27.0	35.4	28.0	55.6	54.0	63.2	20.3

STATION 12063000 UNION RIVER NEAR BREMERTON, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1947	0.70	0.70	0.70	0.73	0.76	0.79	0.84	1.19	1.60
1948	0.50	0.57	0.59	0.60	0.63	0.74	0.80	0.99	1.60
1949	0.70	0.73	0.77	0.82	0.92	1.10	1.40	2.10	3.90
1950	0.50	0.50	0.50	0.50	0.52	0.66	0.66	0.77	1.30
1951	0.30	0.33	0.37	0.38	0.41	0.55	0.61	0.79	2.00
1952	0.30	0.37	0.39	0.39	0.43	0.46	0.52	0.69	1.40
1953	0.40	0.40	0.40	0.45	0.50	0.54	0.56	0.59	0.86
1954	0.60	0.60	0.60	0.61	0.70	0.80	0.99	1.30	2.20
1955	0.70	0.73	0.76	0.79	0.88	0.90	0.93	1.10	1.50
1956	0.20	0.37	0.46	0.54	1.10	1.30	1.50	1.70	2.90

LOWEST MEAN FLOW STATISTICS (YEARS 1947-1956)

MEAN	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1.1	1.9
MAXIMUM	0.7	0.7	0.8	0.8	1.1	1.3	1.5	2.1	3.9
MINIMUM	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.9
STANDARD DEVIATION	0.19	0.16	0.15	0.16	0.23	0.27	0.34	0.48	0.89
SKENNESS	-0.212	0.102	0.265	0.285	0.501	0.848	0.957	1.050	1.358
STD ERROR OF SKEWNESS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SERIAL CORR COEFF	0.070	0.224	0.266	0.292	0.504	0.391	0.157	-0.058	-0.320
COEFF OF VARIATION	0.378	0.298	0.276	0.273	0.336	0.341	0.384	0.425	0.462
MEAN LOGS	-0.343	-0.294	-0.272	-0.251	-0.186	-0.131	-0.082	0.017	0.248
STD DEVIATION LOGS	0.188	0.134	0.121	0.120	0.146	0.143	0.158	0.175	0.186
SKENNESS LOGS	-0.727	-0.120	0.018	-0.049	0.062	0.289	0.460	0.375	0.363
STD ERR SKEWNESS LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SER CORR COEFF LOGS	0.067	0.283	0.355	0.408	0.548	0.469	0.282	0.063	-0.320
COEFF OF VAR LOGS	-0.548	-0.455	-0.446	-0.480	-0.785	-1.097	-1.932	10.126	0.751

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1956)

0.99	1.0	1.0	1.0	1.1	1.4	1.7	2.2	3.0	5.4
0.98	0.9	0.9	1.0	1.0	1.3	1.5	1.9	2.6	4.6
0.96	0.9	0.9	0.9	0.9	1.2	1.4	1.7	2.2	3.9
0.90	0.8	0.8	0.8	0.8	1.0	1.1	1.3	1.8	3.1
0.80	0.7	0.7	0.7	0.7	0.9	1.0	1.1	1.4	2.5
0.50	0.5	0.5	0.5	0.6	0.6	0.7	0.8	1.0	1.7
0.20	0.3	0.4	0.4	0.4	0.5	0.6	0.6	0.7	1.2
0.10	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	1.0
0.05	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.9
0.02	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.8
0.01	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.7

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1947-1956)

P95	P90	P75	P70	P50	P25	P10
0.6	0.7	1.3	1.7	4.8	15.0	34.0

STATION 12063000 UNION RIVER NEAR BREWERTON, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW(CFS) DATE REG.(R)
1946	115.	86.	65.	53.	36.	30.	27.	26.	23.	142. 04/11/46
1947	142.	99.	67.	54.	46.	28.	31.	26.	18.	218. 02/02/47
1948	132.	100.	60.	41.	35.	23.	22.	20.	19.	332. 10/18/47
1949	260.	152.	101.	64.	39.	26.	25.	24.	19.	476. 02/22/49
1950	282.	206.	113.	59.	55.	46.	39.	38.	30.	465. 11/26/49
1951	269.	193.	114.	68.	61.	48.	47.	40.	30.	378. 02/09/51
1952	190.	143.	106.	75.	46.	31.	30.	26.	20.	190. 01/30/52
1953	169.	129.	117.	100.	80.	52.	40.	33.	24.	212. 01/03/53
1954	151.	123.	98.	74.	51.	41.	37.	34.	26.	254. 01/05/54
1955	218.	163.	94.	57.	39.	30.	26.	21.	18.	348. 11/19/54
1956	279.	193.	101.	63.	59.	47.	45.	38.	32.	386. 11/03/55
1957										52. 11/01/56
1958										26. 02/25/58
1959										46. 05/03/59.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1946-1956)

W R C SYSTEMATIC
ESTIMATE RECORD

MEAN	202.5	144.5	94.2	64.4	49.7	36.5	33.5	29.6	23.5	
MAXIMUM	282.0	206.0	117.0	100.0	80.0	52.0	47.0	40.0	32.0	
MINIMUM	115.0	88.0	60.0	41.0	35.0	23.0	22.0	20.0	18.0	
STANDARD DEVIATION	65.62	41.03	20.67	15.35	13.50	10.36	8.49	7.19	5.26	
SKENNESS	0.130	0.165	-0.778	1.065	1.082	0.661	0.295	0.178	0.490	
STD ERROR OF SKENNESS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	
SERIAL CORR COEFF	0.503	0.636	0.693	0.460	0.300	0.154	0.029	0.0	-0.095	
COEFF OF VARIATION	0.324	0.284	0.219	0.239	0.271	0.283	0.253	0.243	0.223	
MEAN LOGS	2.285	2.143	1.963	1.798	1.683	1.547	1.513	1.460	1.362	2.4611
STD DEVIATION LOGS	0.146	0.127	0.106	0.100	0.111	0.124	0.111	0.107	0.095	0.1714
SKENNESS LOGS	-0.121	-0.181	-0.948	0.241	0.556	0.041	0.013	-0.055	0.319	-0.4070
STD ERR SKENNESS LOGS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.0110
SER CORR COEFF LOGS	0.515	0.684	0.688	0.455	0.076	0.223	0.060	-0.013	-0.109	
COEFF OF VAR LOGS	0.064	0.059	0.054	0.056	0.066	0.080	0.073	0.073	0.070	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1956)

0.99	85.6	67.7	44.4	38.3	29.5	18.3	18.1	16.1	14.6	115.8
0.95	109.6	84.7	58.3	43.8	33.1	22.1	21.4	19.2	16.4	102.8
0.90	124.7	95.0	66.3	47.1	35.4	24.4	23.5	21.0	17.5	151.3
0.80	145.5	109.0	76.3	51.7	38.7	27.7	26.3	23.5	19.1	174.4
0.50	193.9	140.3	95.4	62.2	47.1	35.1	32.6	28.9	22.8	207.6
0.20	255.9	174.3	113.0	76.0	59.2	44.8	40.4	35.5	27.6	288.9
0.10	294.8	201.1	121.1	84.8	67.7	50.9	45.2	39.5	30.7	403.0
0.04	341.8	227.9	128.7	95.7	79.0	58.4	50.9	44.2	34.6	479.7
0.02	375.4	240.5	133.0	103.7	87.7	63.8	55.1	47.4	37.5	577.9
0.01	408.2	264.3	136.4	111.6	96.9	69.1	59.1	50.6	40.3	651.9
										726.6

STATION 12063500 UNION RIVER NEAR BELFAIR, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1947	66.8	36.8	60.2	89.3	79.7	60.5	43.6	57.9	30.4	18.6	16.2	16.7	
1948	27.2	67.3	90.1	38.5	187	64.1	40.2	33.9	25.9	24.9	22.8	24.8	49.8
1949	19.5	90.6	106	123	147	130	60.7	37.1	32.9	22.5	20.4	20.7	52.2
1950	35.7	91.2	151	149	194	77.3	49.2	38.1	32.2	26.7	21.5	18.0	67.2
1951	46.5	62.2	80.2	93.1	90.2	42.5	33.9	27.4	30.6	25.1	23.2	24.7	73.4
1952	26.9	17.4	49.6	250	97.2	51.6	38.7	29.4	22.4	18.9	16.5	15.5	45.7
1953	25.8	61.2	87.5	123	179	61.7	53.6	34.8	24.6	19.6	17.0	17.2	53.3
1954	21.2	92.9	69.9	47.6	55.0	45.3	66.9	33.8	29.1	26.1	22.4	21.2	59.7
1955	50.2	145	141	156	73.3	134	66.9	37.9	26.0	23.3	20.5	19.0	43.2
1956	39.9	37.6	78.1	43.2	76.9	85.4	43.5	34.5	29.1	25.1	22.8	21.7	75.6
1957	24.3	29.7	66.1	92.9	94.2	49.4	48.2	33.3	26.4	19.6	16.2	15.9	42.7
1958	22.7	51.1	73.4	112	63.2	43.8	64.9	56.3	30.8	22.2	19.1	25.3	48.7
1959													

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1947-1959)

MEAN	33.9	65.3	87.8	109.8	111.4	70.5	50.3	37.9	28.7	23.0	20.2	20.3	54.7
MAXIMUM	66.8	145.0	151.0	250.0	194.0	134.0	66.9	57.9	37.7	26.7	24.1	25.3	75.6
MINIMUM	19.5	17.4	49.6	38.5	55.0	42.5	33.9	27.4	22.4	18.6	16.2	15.5	42.7
STD DEVIATION	14.43	35.42	30.94	58.82	50.88	31.61	10.86	9.52	4.16	2.96	2.91	3.49	11.84
SKEWNESS	1.223	0.885	1.154	1.074	0.757	1.368	0.188	1.550	0.607	-0.346	-0.323	0.088	0.864
STD ERR SKEW	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.616	0.616	0.616	0.637
SER CORR COEFF	-0.053	0.170	-0.002	-0.153	0.066	0.037	0.226	-	-0.193	-0.053	-0.131	-0.532	-0.181
COEFF OF VAR	0.426	0.543	0.353	0.536	0.457	0.449	0.216	0.251	0.145	0.129	0.144	0.172	0.213
MEAN LOGS	1.498	1.751	1.921	1.982	2.008	1.814	1.692	1.567	1.453	1.358	1.301	1.301	1.730
STD DEV LOGS	0.168	0.255	0.142	0.244	0.190	0.171	0.095	0.098	0.062	0.058	0.064	0.076	0.088
SKEWNESS LOGS	0.673	-0.458	0.542	-0.304	0.401	0.892	-0.096	1.191	0.226	-0.445	-0.433	-0.082	0.667
STD ERR SKEW LOGS	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.616	0.616	0.616	0.637
SER CORR LOGS	-0.024	0.141	0.013	-0.214	0.107	0.082	0.237	-0.054	-0.183	-0.045	-0.120	-0.511	-0.180
COEFF OF VAR LOGS	0.112	0.146	0.074	0.123	0.095	0.094	0.056	0.062	0.043	0.042	0.050	0.058	0.051
% OF AVE FLOW	5.1	9.9	13.3	16.7	16.9	10.7	7.6	5.7	4.3	3.5	3.1	3.1	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1959)

0.99	15.5	11.9	44.4	23.0	41.8	33.8	29.1	26.6	20.9	16.1	13.5	13.2	37.0
0.95	18.1	20.0	51.4	36.4	52.2	38.2	34.1	27.9	22.7	18.0	15.4	15.0	40.1
0.90	19.9	26.0	56.1	46.0	59.3	41.5	37.1	28.9	23.7	19.1	16.4	16.0	42.2
0.80	22.6	35.0	63.0	60.4	69.9	46.6	40.9	30.5	25.1	20.5	17.7	17.3	45.1
0.50	30.2	59.0	81.0	98.6	98.8	61.5	49.3	35.4	28.2	23.0	20.2	20.1	52.5
0.20	42.8	93.3	108.5	154.7	145.5	88.4	59.2	43.6	32.0	25.5	22.7	23.2	63.0
0.10	52.8	115.7	128.6	192.7	181.2	110.6	65.0	49.9	34.2	26.8	24.0	25.0	70.2
0.04	67.3	143.0	156.4	240.8	232.1	144.5	71.6	59.1	36.8	28.1	25.3	27.0	79.7
0.02	79.7	162.5	178.8	276.4	274.3	174.4	76.2	66.6	38.7	29.0	26.2	28.4	87.0
0.01	93.5	181.2	202.7	311.6	320.3	208.9	80.6	74.9	40.5	29.7	26.9	29.7	94.5

STATION 12063500 UNION RIVER NEAR BELFAIR, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1949	20.0	21.0	21.0	21.0	22.0	23.0	24.0	25.0	28.0
1950	17.0	17.0	17.0	18.0	19.0	20.0	20.0	20.0	22.0
1951	17.0	17.0	17.0	17.0	18.0	19.0	21.0	23.0	27.0
1952	21.0	21.0	22.0	22.0	23.0	23.0	24.0	25.0	30.0
1953	15.0	15.0	15.0	15.0	16.0	16.0	16.0	18.0	19.0
1954	15.0	15.0	15.0	15.0	16.0	16.0	18.0	19.0	22.0
1955	18.0	18.0	18.0	19.0	20.0	21.0	21.0	22.0	25.0
1956	17.0	17.0	17.0	17.0	18.0	19.0	21.0	22.0	26.0
1957	20.0	20.0	20.0	21.0	21.0	21.0	22.0	24.0	30.0
1958	20.0	20.0	20.0	21.0	22.0	23.0	23.0	24.0	26.0
1959	14.0	14.0	14.0	14.0	15.0	16.0	17.0	18.0	22.0

LOWEST MEAN FLOW STATISTICS (YEARS 1949-1959)

MEAN	17.6	17.7	17.8	18.2	19.1	19.7	20.6	21.8	25.2
MAXIMUM	21.0	21.0	22.0	22.0	23.0	23.0	24.0	25.0	30.0
MINIMUM	14.0	14.0	14.0	14.0	15.0	16.0	16.0	16.0	19.0
STANDARD DEVIATION	2.38	2.49	2.64	2.82	2.74	2.80	2.69	2.68	3.57
SKEWNESS	-0.071	0.001	0.160	-0.095	-0.080	-0.262	-0.465	-0.337	-0.214
STD ERROR OF SKEWNESS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
SERIAL CORR COEFF	-0.217	-0.214	-0.250	-0.251	-0.296	-0.207	-0.152	-0.138	-0.081
COEFF OF VARIATION	0.135	0.141	0.148	0.155	0.143	0.142	0.131	0.123	0.142
MEAN LOGS	1.243	1.245	1.247	1.255	1.277	1.291	1.311	1.336	1.397
STD DEVIATION LOGS	0.059	0.062	0.065	0.069	0.063	0.063	0.059	0.055	0.063
SKEWNESS LOGS	-0.234	-0.165	-0.037	-0.254	-0.245	-0.407	-0.659	-0.445	-0.448
STD ERR SKEWNESS LOGS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
SER CORR COEFF LOGS	-0.205	-0.201	-0.233	-0.236	-0.277	-0.172	-0.126	-0.125	-0.074
COEFF OF VAR LOGS	0.048	0.050	0.052	0.055	0.050	0.049	0.045	0.041	0.045

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1949-1959)

0.99	23.5	24.0	24.8	25.2	25.9	26.2	26.3	27.8	33.4
0.98	22.8	23.2	23.9	24.3	25.0	25.5	25.7	27.2	32.5
0.96	22.0	22.4	22.8	23.4	24.1	24.7	25.1	26.5	31.4
0.90	20.8	21.0	21.3	21.9	22.7	23.4	24.1	25.3	29.8
0.80	19.6	19.8	20.0	20.6	21.4	22.1	23.0	24.1	28.3
0.50	17.6	17.6	17.7	18.1	19.0	19.7	20.8	21.9	25.2
0.20	15.6	15.6	15.6	15.8	16.8	17.4	18.4	19.6	22.2
0.10	14.6	14.6	14.6	14.6	15.6	16.1	17.1	18.4	20.6
0.05	13.8	13.8	13.8	13.7	14.7	15.1	16.0	17.4	19.3
0.02	13.0	13.0	13.0	12.7	13.8	14.1	14.8	16.3	17.9
0.01	12.4	12.4	12.4	12.1	13.1	13.3	14.0	15.5	17.0

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1949-1959)

P95	P90	P75	P70	P50	P25	P10
17.0	20.0	24.0	26.0	35.0	58.0	110.0

STATION 12063500 UNION RIVER NEAR BELFAIR, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA FLOW(CFS)	DATE	REG.(R)
1948	585.	342.	200.	147.	119.	85.	79.	75.	68.	1090.	10/19/47	
1949	1270.	757.	510.	317.	188.	124.	105.	97.	80.	1610.	02/22/49	
1950	894.	628.	356.	198.	139.	84.	139.	135.	110.	1160.	01/21/50	
1951	948.	654.	418.	239.	239.	186.	171.	135.	118.	1230.	02/09/51	
1952	391.	336.	276.	206.	136.	97.	94.	84.	70.	616.	01/30/52	
1953	438.	369.	334.	294.	256.	177.	135.	114.	86.	702.	01/03/53	
1954	545.	458.	348.	261.	173.	148.	129.	116.	93.	834.	01/05/54	
1955	538.	418.	246.	156.	113.	87.	78.	68.	64.	665.	11/19/54	
1956	903.	582.	317.	204.	193.	160.	150.	130.	121.	1040.	11/03/55	
1957	461.	299.	196.	154.	118.	83.	72.	72.	62.	788.	12/09/56	
1958	250.	210.	163.	118.	100.	89.	84.	78.	64.	340.	12/25/57	R
1959	369.	242.	176.	128.	116.	95.	84.	77.	71.	499.	04/30/59	R

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1948-1959)

W R C
ESTIMATESYSTEMATIC
RECORD

MEAN	632.7	441.2	295.0	204.9	161.6	125.4	110.4	99.8	83.9			
MAXIMUM	1270.0	757.0	510.0	317.0	256.0	186.0	171.0	151.0	121.0			
MINIMUM	250.0	210.0	163.0	118.0	104.0	83.0	72.0	68.0	62.0			
STANDARD DEVIATION	302.66	175.82	105.77	67.79	51.65	39.01	32.99	28.43	21.76			
SKEWNESS	0.886	0.496	0.582	0.383	0.426	0.366	0.530	0.564	0.782			
STD. ERROR OF SKEWNESS	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637			
SERIAL CORR COEFF.	0.318	0.335	0.191	0.120	-0.022	0.037	-0.116	-0.035	-0.139			
COEFF OF VARIATION	0.478	0.398	0.359	0.331	0.320	0.311	0.299	0.285	0.259			
MEAN LOGS	2.757	2.612	2.444	2.290	2.189	2.079	2.026	1.983	1.911			
STD DEVIATION LOGS	0.205	0.177	0.157	0.145	0.135	0.128	0.128	0.121	0.107			
SKEWNESS LOGS	0.095	-0.054	-0.006	0.021	0.299	0.191	0.253	0.327	0.583	2.9692	2.9692	
STD ERR SKEWNESS LOGS	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.1348	0.1348	
SER CORR COEFF LOGS	0.403	0.438	0.330	0.249	0.046	-0.130	-0.125	-0.067	-0.135	0.0130	0.0130	
COEFF OF VAR LOGS	0.074	0.068	0.064	0.063	0.062	0.065	0.063	0.061	0.056			

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1948-1959)

0.99	197.2	156.5	119.8	89.9	80.1	61.0	56.6	53.9	51.1	454.0	484.3	
0.95	266.6	208.5	153.4	112.6	95.1	73.3	66.9	62.6	56.8	559.8	574.6	
0.90	313.9	242.7	174.9	127.0	104.7	81.2	73.5	68.1	60.6	626.2	632.9	
0.80	383.5	291.2	205.1	146.9	118.4	92.2	82.6	75.9	66.0	717.3	715.0	
0.50	567.3	411.1	278.1	194.5	152.1	118.8	104.8	94.8	79.6	930.9	917.5	
0.20	847.9	577.4	376.9	258.0	199.7	155.2	135.3	120.9	99.4	1209.3	1203.0	
0.10	1050.6	688.2	441.7	299.2	232.3	179.5	155.7	138.6	113.1	1387.0	1398.2	
0.04	1324.7	828.6	523.1	350.6	274.9	210.5	181.8	161.3	131.4	1605.9	1652.7	
0.02	1541.5	933.4	583.4	388.5	307.7	233.9	201.6	178.6	145.7	1765.6	1848.1	
0.01	1768.7	1038.3	643.5	426.2	341.4	257.6	221.8	196.3	160.5	1923.0	2048.7	

STATION 12064500 MISSION CREEK NEAR BREMERTON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1945													
1946	0.19	5.78	18.0	18.6	14.6	13.9	13.0	2.66	1.71	0.30	0.00	0.04	7.36
1947	0.23	4.35	12.6	9.53	20.2	6.21	2.86	1.15	1.08	0.83	0.06	0.00	4.74
1948	5.70	6.57	8.79	15.7	11.0	8.66	6.26	9.77	0.69	0.14	0.00	0.00	6.46
1949	1.05	8.52	15.4	6.21	21.8	8.48	3.54	2.27	3.41	0.83	0.33	0.47	5.57
1950	0.02	11.4	16.8	18.5	22.4	19.4	7.14	2.19	0.67	0.10	0.00	0.00	8.14
1951	2.70	18.2	24.6	21.9	22.9	7.57	3.34	0.67	0.01	0.00	0.00	0.00	8.40
1952	2.63	8.00	16.9	14.6	11.6	4.38	4.63	2.24	0.66	0.20	0.00	0.00	6.02
1953	0.00	0.00	8.06	37.6	15.3	8.99	3.80	2.53	0.27	0.32	0.00	0.01	6.38

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1946	38.0	1-4-1946
1947	51.0	2-14-1947
1948	38.0	1-2-1948
1949	96.0	2-22-1949
1950	90.0	1-22-1950
1951	90.0	2-9-1951
1952	69.0	1-31-1952
1953	67.0	1-9-1953

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STATION 12065000 MISSION CREEK NR BELFAIR, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1946	0.60	12.8	36.9	35.7	27.4	24.6	20.5	2.97	0.86	0.63	0.50	0.39	13.6
1947	0.42	7.86	22.4	15.9	41.8	10.5	3.48	1.03	0.47	0.23	0.22	0.27	8.51
1948	11.6	12.0	17.4	30.2	20.5	15.6	11.0	17.6	4.24	0.91	0.59	0.56	11.8
1949	0.61	12.8	31.0	9.47	50.0	16.8	5.56	3.48	0.91	0.64	0.43	0.33	10.7
1950	0.30	21.7	29.9	35.9	38.7	34.6	12.7	3.53	0.99	0.68	0.39	0.23	14.8
1951	0.88	29.9	50.3	43.8	55.8	13.2	3.94	1.33	0.68	0.45	0.22	0.10	16.5
1952	6.37	17.8	28.8	25.9	31.6	9.88	4.70	1.52	0.62	0.53	0.45	0.30	10.6
1953	0.21	0.36	20.2	91.7	31.3	13.4							

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1946	93.0	1-4-1946
1947	140.0	2-14-1947
1948	96.0	1-2-1948
1949	403.0	2-22-1949
1950	230.0	1-22-1950
1951	278.0	2-9-1951
1952	120.0	2-1-1952
1953	159.0	1-9-1953

STATION 12065500 GOLD CREEK NEAR BREWERTON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1946	0.80	10.5	13.9	13.0	11.6	11.3	9.72	2.92	1.77	1.50	0.86	0.65	6.52
1947	1.02	8.36	9.54	11.7	16.3	5.20	2.55	1.53	1.23	0.69	0.56	0.77	4.99
1948	8.70	6.26	9.58	11.2	10.4	6.90	5.97	7.68	1.23	0.69	0.56	0.77	4.99
1949	1.99	8.67	9.75	13.84	17.6	8.34	3.85	3.34	1.85	1.18	0.73	1.18	6.10
1950	0.83	13.6	12.8	15.9	17.0	15.2	6.63	2.73	1.28	0.79	0.56	0.52	5.06
1951	3.52	13.4	18.2	16.6	19.2	6.47	2.84	1.40	0.79	0.56	0.44	0.49	6.92
1952	4.97	7.75	10.1	12.3	10.2	5.18	2.91	1.80	1.07	0.62	0.44	0.38	4.79
1953	0.50	0.94	7.65	29.3	11.9	7.03	3.79	2.15	1.52	0.92	0.71	0.91	5.60
1954	2.73	9.83	12.1	16.2	25.4	8.13	5.67	2.14	1.47	1.00	0.65	0.69	7.05
1955	0.80	12.1	10.6	7.95	7.35	5.68	8.84	2.74	1.45	1.24	0.78	0.82	5.00
1956	5.00	22.7	17.8	18.5	17.1	12.0	6.31	2.46	2.75	1.36	0.85	0.82	8.74
1957	4.76	6.83	15.0	6.47	13.0	19.1	5.38	2.55	1.42	0.77	0.65	0.44	5.74
1958	0.97	3.94	9.97	14.5	14.7	5.24	7.22	2.46	1.19	0.72	0.43	0.61	5.10
1959	1.34	6.57	10.7	15.9	7.88	5.85	6.96	4.37	1.78	0.96	0.57	1.03	5.32
1960	1.59	10.1	11.5	12.6	13.8	8.89	9.77	4.54	1.92	0.83	0.75	0.66	6.39
1961	1.49	10.5	8.08	18.8	24.1	16.1	3.81	3.74	1.54	0.79	0.68	0.67	7.42
1962	1.30	4.20	12.1	7.97	5.45	7.12	3.28	2.83	1.37	0.80	0.58	0.76	3.99
1963	3.61	12.2	10.1	7.89	9.64	6.39	7.67	3.95	1.62	1.10	0.67	0.52	5.41
1964	3.02	13.7	9.88	17.8	6.49	8.55	2.73	1.59	1.63	1.01	0.74	0.71	5.65
1965	0.79	7.19	8.50	11.8	10.7	3.83	4.11	2.69	1.29	0.72	0.53	0.47	4.35
1966	0.93	3.60	7.14	23.1	7.32	13.3	2.82	1.38	0.95	0.79	0.38	0.47	5.20
1967	1.23	4.08	23.4	19.6	7.93	9.71	3.85	2.09	1.04	0.56	0.29	0.30	6.20
1968	3.89	5.00	16.1	18.8	17.1	12.0	4.45	1.83	1.87	0.76	0.70	0.98	6.94
1969	3.07	7.37	16.6	7.55	12.5	7.63	5.95	2.45	1.44	0.83	0.57	1.69	5.59
1970	2.65	3.76	10.2	13.6	8.05	6.35	5.47	2.23	1.13	0.54	0.41	0.50	4.56
1971													

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MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1946-1971)

MEAN	2.45	8.5	12.1	14.1	12.5	8.9	5.3	2.8	1.5	0.9	0.6	0.7	5.8
MAXIMUM	8.7	22.7	23.4	29.3	25.4	19.1	9.8	7.7	3.1	1.5	1.0	1.7	8.7
MINIMUM	0.5	0.9	7.1	3.8	5.4	3.8	2.6	1.4	0.8	0.5	0.3	0.3	4.0
STD DEVIATION	1.93	4.60	3.89	5.71	5.35	3.87	2.19	1.34	0.51	0.25	0.17	0.30	1.12
SKWENESS	1.575	1.093	1.289	0.530	0.901	1.155	0.618	2.222	1.558	0.747	0.197	1.575	0.687
STD ERR SKEW	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SER CORR COEFF	-0.100	0.217	0.123	-0.071	-0.080	-0.066	0.004	0.096	0.076	0.286	0.241	0.075	-0.176
COEFF OF VAR	0.786	0.539	0.323	0.405	0.428	0.436	0.413	0.480	0.333	0.286	0.275	0.413	0.191
MEAN LOGS	0.273	0.861	1.062	1.111	1.061	0.912	0.689	0.408	0.167	-0.066	-0.223	-0.177	0.758
STD DEV LOGS	0.327	0.278	0.128	0.196	0.172	0.176	0.180	0.174	0.132	0.121	0.127	0.165	0.081
SKWENESS LOGS	0.188	-1.235	0.631	-0.772	0.152	0.405	0.040	0.724	0.465	0.207	-0.569	0.235	0.232
STD ERR SKEW LOGS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SER CORR LOGS	-0.130	0.116	0.121	-0.101	-0.040	-0.087	0.009	0.121	0.167	0.218	0.282	0.089	-0.180
COEFF OF VAR LOGS	1.200	0.323	0.121	0.177	0.170	0.193	0.262	0.427	0.788	-1.813	-0.570	-0.935	0.107
% OF AVE FLOW	3.5	12.1	17.1	20.1	17.8	12.6	7.5	4.0	2.2	1.3	0.9	1.0	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1971)

0.99	0.4	1.0	6.7	3.5	4.6	3.6	1.9	1.2	0.8	0.5	0.3	0.3	3.8
0.95	0.6	2.1	7.5	5.6	5.9	4.4	2.5	1.4	0.9	0.6	0.4	0.4	4.3
0.90	0.7	3.1	8.1	7.1	6.8	5.0	2.9	1.6	1.0	0.6	0.4	0.4	4.5
0.80	1.0	4.6	9.0	9.1	8.1	5.8	3.4	1.8	1.1	0.7	0.5	0.5	4.9
0.70	1.8	8.2	11.2	13.7	11.4	7.9	4.9	2.4	1.4	0.9	0.6	0.7	5.7
0.60	3.5	12.4	14.6	19.0	16.3	11.4	6.9	3.5	1.9	1.1	0.8	0.9	6.7
0.50	5.0	14.5	17.1	21.9	19.7	13.9	8.3	4.4	2.2	1.2	0.9	1.1	7.3
0.40	7.4	16.3	20.5	24.4	24.4	17.5	10.2	5.6	2.6	1.4	0.9	1.3	8.1
0.30	9.5	17.3	23.2	26.9	28.0	20.4	11.6	6.7	2.9	1.6	1.0	1.5	8.6
0.20	12.0	18.1	26.1	28.5	31.7	23.5	13.0	8.0	3.3	1.7	1.0	1.7	9.1

STATION 12065500 GOLD CREEK NEAR BREMERTON, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1947	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.3
1948	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.8	1.1
1949	0.7	0.7	0.8	0.8	0.9	1.0	1.1	1.3	2.2
1950	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1.3
1951	0.5	0.4	0.4	0.4	0.4	0.5	0.6	0.7	1.4
1952	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.6	0.9
1953	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.7
1954	0.6	0.6	0.6	0.6	0.7	0.7	0.8	1.0	1.4
1955	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.8	1.1
1956	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.8	1.1
1957	0.5	0.3	0.4	0.4	0.4	0.4	0.5	0.6	1.0
1958	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.8	1.4
1959	0.3	0.4	0.4	0.4	0.4	0.5	0.6	0.8	1.4
1960	0.4	0.4	0.4	0.4	0.5	0.6	0.7	0.8	1.3
1961	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	1.5
1962	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.8	1.5
1963	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.8	1.6
1964	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.8	1.1
1965	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	1.0
1966	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.7	1.0
1967	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.6	0.8
1968	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5	1.1
1969	0.4	0.4	0.4	0.4	0.5	0.5	0.8	0.9	1.4
1970	0.4	0.4	0.4	0.5	0.5	0.6	0.8	1.0	1.6

LOWEST MEAN FLOW STATISTICS (YEARS 1947-1970)

MEAN	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.8	1.3
MAXIMUM	0.7	0.7	0.8	0.8	0.9	1.0	1.1	1.3	2.2
MINIMUM	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.7
STANDARD DEVIATION	0.13	0.12	0.12	0.13	0.14	0.15	0.17	0.21	0.34
SKEWNESS	0.284	0.245	0.268	0.359	0.367	0.197	0.217	0.498	0.519
STD ERROR OF SKEWNESS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472
SERIAL CORR COEFF	0.407	0.409	0.394	0.349	0.342	0.301	0.222	0.118	0.109
COEFF OF VARIATION	0.296	0.277	0.262	0.260	0.264	0.252	0.252	0.254	0.262
MEAN LOGS	-0.389	-0.365	-0.342	-0.320	-0.280	-0.231	-0.178	-0.105	0.101
STD DEVIATION LOGS	0.134	0.126	0.119	0.116	0.120	0.116	0.114	0.111	0.116
SKEWNESS LOGS	-0.308	-0.390	-0.424	-0.337	-0.505	-0.664	-0.419	-0.092	-0.327
STD ERR SKEWNESS LOGS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472
SER CORR COEFF LOGS	0.447	0.446	0.425	0.425	0.360	0.307	0.266	0.168	0.169
COEFF OF VAR LOGS	-0.343	-0.344	-0.347	-0.364	-0.429	-0.504	-0.640	-1.058	1.158

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1970)

0.99	0.8	0.8	0.8	0.8	0.9	1.0	1.1	1.4	2.2
0.98	0.7	0.7	0.7	0.8	0.9	0.9	1.1	1.3	2.1
0.96	0.7	0.7	0.7	0.7	0.8	0.9	1.0	1.2	2.0
0.90	0.6	0.6	0.6	0.7	0.7	0.8	0.9	1.1	1.8
0.80	0.5	0.6	0.6	0.6	0.7	0.7	0.8	1.0	1.6
0.50	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.8	1.3
0.20	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	1.0
0.10	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.9
0.05	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.8
0.02	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.7
0.01	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.6

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1947-1970)

P	P95	P90	P/5	P70	P50	P25	P10
0.5	0.5	0.6	1.0	1.2	3.0	7.1	14.0

STATION 12U65500 GOLD CREEK NEAR BREMERTON, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

ANNUAL PEAK-FLOW DATA
FLOW (CFS) DATE REG. (R)

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	
1946	53.	34.	26.	22.	17.	16.	14.	13.	12.	65.
1947	72.	47.	34.	27.	23.	14.	14.	12.	9.	122.
1948	58.	45.	26.	19.	17.	11.	11.	10.	9.	148.
1949	127.	77.	48.	31.	19.	13.	10.	10.	9.	203.
1950	120.	87.	47.	25.	23.	19.	17.	13.	13.	194.
1951	99.	74.	44.	28.	25.	20.	20.	17.	13.	153.
1952	68.	48.	35.	27.	17.	12.	12.	11.	9.	97.
1953	56.	43.	40.	34.	30.	21.	17.	14.	10.	106.
1954	85.	62.	47.	36.	25.	20.	18.	16.	13.	189.
1955	67.	55.	33.	21.	16.	13.	10.	10.	9.	97.
1956	155.	87.	46.	28.	23.	20.	20.	17.	16.	175.
1957	95.	65.	41.	25.	18.	13.	12.	12.	10.	157.
1958	41.	34.	26.	17.	13.	13.	12.	10.	9.	77.
1959	65.	40.	27.	18.	17.	13.	12.	10.	9.	77.
1960	86.	58.	37.	28.	24.	23.	20.	18.	13.	138.
1961	121.	68.	42.	29.	24.	23.	20.	18.	13.	191.
1962	38.	30.	24.	18.	14.	11.	9.	8.	7.	55.
1963	45.	38.	25.	19.	15.	13.	12.	10.	9.	85.
1964	36.	31.	26.	22.	18.	15.	14.	12.	10.	41.
1965	72.	45.	27.	21.	16.	12.	12.	10.	8.	83.
1966	130.	88.	52.	38.	24.	16.	15.	13.	10.	156.
1967	130.	79.	47.	35.	24.	21.	18.	16.	12.	198.
1968	70.	58.	43.	32.	26.	18.	17.	16.	13.	130.
1969	80.	47.	27.	19.	17.	13.	12.	11.	10.	96.
1970	32.	28.	26.	22.	15.	13.	11.	10.	8.	42.
1972										242.
1973										01/20/72
1974										12/26/72
1975										168.
1976										01/16/74
1977										178.
1978										12/21/74
1979										79.
										202.
										12/03/75
										58.
										03/07/77
										161.
										11/11/77
										91.
										02/25/79

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1946-1979)

W R C
ESTIMATE SYSTEMATIC
RECORD

MEAN	80.0	54.7	35.8	25.7	20.0	15.6	14.2	12.7	10.4	
MAXIMUM	155.0	88.0	52.0	34.0	30.0	24.0	20.0	18.0	16.0	
MINIMUM	32.0	28.0	24.0	18.0	14.0	11.0	8.9	8.3	6.8	
STANDARD DEVIATION	34.20	19.08	9.30	6.11	4.30	3.58	3.30	2.90	2.20	
SKWENESS	0.555	0.409	0.157	0.452	0.522	0.569	0.436	0.492	0.738	
STD ERROR OF SKWENESS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	
SERIAL CORR COEFF	0.203	0.379	0.299	0.222	0.056	-0.099	-0.119	-0.023	-0.111	
COEFF OF VARIATION	0.427	0.349	0.259	0.237	0.214	0.229	0.232	0.229	0.213	
MEAN LOGS	1.864	1.712	1.540	1.399	1.293	1.184	1.142	1.092	1.007	
STD DEVIATION LOGS	0.192	0.154	0.114	0.102	0.091	0.097	0.100	0.097	0.089	
SKWENESS LOGS	-0.155	-0.049	-0.012	0.158	0.254	0.329	0.106	0.243	0.306	2.0623
STD ERR SKWENESS LOGS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.2078
SER CORR COEFF LOGS	0.213	0.369	0.312	0.197	0.058	-0.104	-0.116	-0.021	-0.107	-0.0490
COEFF OF VAR LOGS	0.103	0.090	0.074	0.073	0.071	0.082	0.087	0.089	0.089	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1979)

0.99	24.9	22.3	18.7	14.9	12.5	9.6	8.3	7.0	6.6	37.3
0.95	34.7	28.6	22.5	17.2	14.1	10.8	9.6	8.7	7.4	31.4
0.90	41.2	32.7	24.7	18.6	15.1	11.6	10.4	9.3	7.9	52.2
0.80	50.6	38.3	27.8	20.5	16.4	12.6	11.4	10.2	8.5	61.2
0.50	73.9	51.7	34.7	24.9	19.4	15.1	13.8	12.3	10.0	77.3
0.20	106.4	69.6	43.3	30.5	23.3	18.3	16.8	14.9	12.0	115.9
0.10	127.8	81.1	48.5	34.0	25.8	20.4	18.7	16.6	13.3	172.9
0.04	154.7	95.4	54.9	38.2	28.4	23.1	20.9	18.6	14.9	212.6
0.02	174.6	105.9	59.5	41.4	31.1	25.1	22.5	20.2	16.0	242.6
0.01	194.3	116.3	63.9	44.4	33.2	27.0	24.1	21.7	17.2	266.7
										289.2

STATION 12066000 TAHUYA RIVER NEAR BREMERTON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1945	1.45	32.8	50.7	50.7	44.4	38.9	31.8	6.53	4.82	1.77	0.76	1.03	
1946	2.37	29.1	37.6	32.7	63.2	15.9	6.93	4.51	3.28	3.65	1.17	0.68	22.0
1947	27.1	20.1	36.3	43.9	40.6	24.1	21.2	31.9	7.84	1.39	0.47	0.67	16.2
1948	6.11	42.5	48.5	18.8	68.7	25.4	19.8	7.86	2.61	2.34	1.14	2.33	21.6
1949	1.22	51.1	49.5	57.8	70.4	57.8	19.8	6.11	2.16	0.95	0.60	0.38	19.0
1950	8.83	66.3	81.5	64.3	80.7	25.0	7.93	2.78	1.15	0.68	0.41	0.36	26.1
1951	20.1	38.0	39.7	42.9	41.1	17.9	8.33	6.40	2.28	0.99	0.39	0.28	28.0
1952	0.18	0.42	29.0	120	43.7	25.1	11.7	4.86	3.13	1.65	0.88	0.20	18.1
1953	5.12	34.7	44.5	71.5	116	27.1	20.2	5.33	2.58	1.87	1.02	0.78	20.1
1954	1.71	42.8	36.9	25.8	25.0	18.0	26.9	6.64	3.11	2.17	1.80	1.17	27.0
1955	14.6	84.0	76.3	75.8	22.4	66.8	19.3	5.20	5.76	2.13	1.05	2.62	16.0
1956												0.82	31.3

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1945-1956)

MEAN	8.1	40.2	48.2	54.9	56.0	31.1	16.7	8.0	3.5	1.7	0.8	0.9	22.3
MAXIMUM	27.1	84.0	81.5	120.0	116.0	66.8	31.8	31.9	7.8	3.6	1.8	2.6	31.3
MINIMUM	0.2	0.4	29.0	18.8	22.4	15.9	6.9	2.8	1.1	0.4	0.3	0.2	16.0
STD DEVIATION	8.88	22.20	16.56	23.24	27.32	16.72	8.35	8.03	1.82	0.88	0.44	0.79	5.11
SKEWNESS	1.279	0.342	1.260	1.108	0.946	1.464	0.421	3.147	1.386	0.776	0.819	1.472	0.429
STD ERR SKEW	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.637	0.637	0.637	0.637	0.661
SER CORR COEFF	-0.244	0.256	-0.084	-0.031	-0.242	-0.281	-0.209	-0.087	0.064	0.251	0.298	0.019	-0.441
COEFF OF VAR	1.100	0.553	0.343	0.514	0.488	0.538	0.500	1.003	0.521	0.525	0.522	0.847	0.229
MEAN LOGS	0.587	1.431	1.653	1.688	1.701	1.446	1.169	0.805	0.495	0.160	-0.136	-0.162	1.338
STD DEV LOGS	0.643	0.623	0.136	0.228	0.215	0.202	0.232	0.260	0.216	0.256	0.237	0.347	0.099
SKEWNESS LOGS	-2.878	0.732	-0.239	-0.122	-0.122	0.887	-0.126	1.996	-0.004	-0.632	-0.153	0.265	0.146
STD ERR SKEW LOGS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.637	0.637	0.637	0.637	0.661
SER CORR LOGS	-0.334	-0.042	-0.059	-0.121	-0.045	-0.328	-0.230	-0.048	0.259	0.466	0.403	0.252	-0.471
COEFF OF VAR LOGS	1.094	0.435	0.082	0.135	0.126	0.140	0.198	0.323	0.466	1.598	-1.738	-2.148	0.074
% OF AVE FLOW	3.0	14.9	17.9	20.3	20.7	11.5	6.2	3.0	1.3	0.6	0.3	0.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1945-1956)

0.99	0.1	26.3	13.1	15.2	12.8	4.1	3.5	1.0	0.3	0.2	0.1	13.2
0.95	0.3	1.5	29.6	19.8	21.9	14.8	6.0	3.6	1.4	0.5	0.3	15.1
0.90	0.5	4.8	31.8	24.5	26.5	16.4	7.4	3.7	1.7	0.7	0.4	16.4
0.80	1.2	14.3	35.2	31.5	33.3	18.8	9.4	4.0	2.1	0.9	0.5	18.0
0.50	4.5	47.1	44.3	49.7	50.8	26.1	14.9	5.3	3.1	1.5	0.7	21.7
0.20	13.7	68.9	58.9	76.2	76.5	39.9	23.2	9.2	4.7	2.4	1.2	26.3
0.10	22.5	72.1	69.9	94.1	94.2	52.0	29.1	13.9	5.9	2.9	1.5	29.2
0.04	36.0	72.5	85.4	116.9	117.1	71.3	36.7	24.1	7.5	3.5	1.8	32.4
0.02	47.3	73.1	98.2	133.8	134.4	89.0	42.6	36.6	8.7	4.0	2.1	35.4
0.01	59.3	73.1	112.2	150.7	152.0	110.0	48.7	55.4	9.9	4.3	2.4	37.9

STATION 12066000 TAHUYA RIVER NEAR BREMERTON, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1947	0.4	0.4	0.4	0.6	0.7	0.9	1.1	1.7	2.5
1948	0.1	0.1	0.2	0.3	0.4	0.5	0.6	1.0	2.3
1949	0.4	0.4	0.5	0.8	1.0	1.2	1.8	2.7	6.5
1950	0.1	0.1	0.1	0.1	0.2	0.4	0.6	0.7	1.8
1951	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.7	2.4
1952	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	1.5
1953	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.7
1954	0.6	0.6	0.6	0.6	0.7	0.8	1.0	1.4	2.7
1955	0.8	0.8	0.8	0.9	1.0	1.1	1.2	1.4	2.0
1956	1.4	1.4	1.5	1.6	1.7	1.9	2.1	2.3	3.9

LOWEST MEAN FLOW STATISTICS (YEARS 1947-1956)

MEAN	0.4	0.4	0.5	0.6	0.6	0.6	0.8	0.9	1.3	2.6
MINIMUM	1.4	1.4	1.5	1.6	1.6	1.7	1.9	2.1	2.7	6.5
STANDARD DEVIATION	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.7
SKEWNESS	1.639	1.639	1.774	1.364	1.257	1.130	0.816	0.666	0.79	1.59
STD ERROR OF SKEWNESS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	1.744
SERIAL CORR COEFF	0.691	0.691	0.688	0.456	0.445	0.445	0.182	0.041	0.041	-0.128
COEFF OF VARIATION	0.962	0.962	0.941	0.827	0.747	0.697	0.664	0.620	0.605	0.605
MEAN LOGS	-0.537	-0.537	-0.490	-0.391	-0.301	-0.217	-0.121	0.018	0.356	0.356
STD DEVIATION LOGS	0.407	0.407	0.379	0.373	0.325	0.313	0.314	0.303	0.251	0.251
SKEWNESS LOGS	0.273	0.273	0.380	0.014	0.152	-0.053	-0.220	-0.417	-0.202	-0.202
STD ERR SKEWNESS LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SER CORR COEFF LOGS	0.222	0.222	0.325	0.240	0.359	0.379	0.268	0.213	0.213	-0.030
COEFF DF VAR LOGS	-0.759	-0.759	-0.773	-0.593	-1.080	-1.442	-2.598	16.907	0.704	0.704

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1956)

0.99	3.1	3.1	3.1	3.0	3.1	3.2	3.6	4.3	8.0
0.98	2.3	2.3	2.3	2.4	2.5	2.6	3.1	3.7	7.0
0.96	1.6	1.6	1.7	1.8	1.9	2.1	2.5	3.2	6.0
0.90	1.0	1.0	1.0	1.2	1.3	1.5	1.9	2.5	4.7
0.80	0.6	0.6	0.7	0.8	0.9	1.1	1.4	1.9	3.7
0.50	0.3	0.3	0.3	0.4	0.5	0.6	0.8	1.1	2.3
0.20	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.6	1.4
0.10	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	1.1
0.05	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.9
0.02	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.7
0.01	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.5

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1947-1956)

P95	P90	P75	P70	P50	P25	P10
0.3	0.6	1.6	2.1	7.3	27.0	63.0

STATION 12066000 TAHUYA RIVER NEAR BREMERTON, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL FLOW(CFS)	PEAK-FLOW DATA DATE	REG.(R)
1946	143.	122.	106.	90.	62.	57.	50.	49.	42.	161.	04/11/46	
1947	275.	187.	119.	94.	79.	49.	51.	43.	30.	314.	02/14/47	
1948	212.	144.	98.	78.	70.	44.	42.	38.	34.	248.	10/19/47	
1949	385.	259.	176.	116.	70.	49.	46.	45.	35.	424.	02/22/49	
1950	391.	280.	180.	107.	91.	76.	66.	64.	51.	431.	01/21/50	
1951	397.	280.	184.	116.	100.	82.	86.	74.	54.	460.	02/09/51	
1952	201.	167.	136.	112.	69.	44.	43.	34.	34.	265.	01/30/52	
1953	200.	177.	159.	137.	122.	84.	65.	56.	39.	224.	01/08/53	
1954	374.	315.	227.	172.	111.	92.	76.	68.	51.	424.	01/05/54	
1955	294.	224.	133.	80.	60.	45.	40.	34.	29.	330.	11/19/54	
1956	448.	307.	177.	107.	99.	84.	80.	66.	59.	504.	11/03/55	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1946-1956)

	W R C ESTIMATE	SYSTEMATIC RECORD
MEAN	301.8	
MAXIMUM	448.0	
MINIMUM	143.0	
STANDARD DEVIATION	102.52	
SKENNESS	-0.134	
STD ERROR OF SKENNESS	0.661	
SERIAL CORR COEFF	0.114	
COEFF OF VARIATION	0.340	
MEAN LOGS	2.454	
STD DEVIATION LOGS	0.162	
SKENNESS LOGS	-0.530	
STD ERR SKENNESS LOGS	0.661	
SER CORR COEFF LOGS	0.112	
COEFF OF VARI LOGS	0.066	
	2.5131	2.5131
	0.1555	0.1555
	0.0110	-0.6680

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1956)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.05	0.02	0.01
1946	103.6	146.4	173.5	210.6	293.9	391.6	447.0	508.2	548.5	584.9
1947	90.9	120.7	139.2	164.1	220.2	287.1	326.2	370.7	401.0	429.1
1948	78.0	95.7	106.4	120.4	150.9	186.7	207.5	231.3	247.6	262.9
1949	69.0	81.1	88.0	98.0	109.9	125.0	145.6	167.3	184.1	201.3
1950	61.0	70.4	76.4	81.1	88.0	98.0	109.9	125.0	145.6	167.3
1951	53.0	61.0	66.0	70.4	76.4	81.1	88.0	98.0	109.9	125.0
1952	45.0	53.0	58.0	61.0	66.0	70.4	76.4	81.1	88.0	98.0
1953	37.0	45.0	50.0	53.0	58.0	61.0	66.0	70.4	76.4	81.1
1954	29.0	37.0	42.0	45.0	50.0	53.0	58.0	61.0	66.0	70.4
1955	21.0	29.0	34.0	37.0	42.0	45.0	50.0	53.0	58.0	61.0
1956	13.0	21.0	26.0	29.0	34.0	37.0	42.0	45.0	50.0	53.0

STATION 12067000 PANTHER CREEK NEAR BREMERTON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1945													
1946	0.00	1.67	8.87	9.01	7.82	6.29	4.10	1.69	0.16	0.05	0.00	0.00	3.32
1947	0.05	3.02	6.85	4.74	11.6	2.42	0.86	0.28	0.23	0.27	0.07	0.00	0.00
1948	3.58	3.00	5.04	7.55	5.27	3.64	2.50	4.62	0.11	0.00	0.00	0.00	2.43
1949	0.12	4.40	7.62	3.56	10.7	3.92	0.97	0.87	0.91	0.08	0.00	0.01	3.02
1950	0.00	4.33	6.99	7.31	10.6	9.19	3.06	0.58	0.13	0.01	0.00	0.00	2.64
1951	0.32	7.11	11.8	9.94	11.7	2.72	0.74	0.18	0.09	0.00	0.00	0.00	3.47
1952	0.70	4.21	7.74	7.42	6.94	2.43	1.00	0.37	0.00	0.00	0.00	0.00	3.66
1953	0.00	0.00	2.66	19.5	7.06	3.12	1.34	0.45	0.02	0.02	0.00	0.00	2.56
									0.10	0.02	0.00	0.00	2.85

STATION 12067000 PANTHER CREEK NEAR BREMERTON, WASH.

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1946	30.0	4-11-1946
1947	43.0	2-16-1947
1948	43.0	10-18-1947
1949	88.0	2-22-1949
1950	49.0	11-26-1949
1951	63.0	2- 9-1951
1952	31.0	1-30-1952
1953	36.0	1- 8-1953

STATION 12067500 TAHUYA RIVER NEAR BELFAIR, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1945													
1946	0.29	67.9	121	118	98.7	82.9	71.9	12.8	7.40	0.83	0.26	0.20	48.3
1947	0.43	56.5	86.8	69.6	136	35.6	12.0	6.36	4.22	4.16	0.55	0.17	33.4
1948	63.2	44.4	87.5	113	58.3	58.3	44.5	78.2	13.3	0.73	0.18	0.15	49.6
1949	6.34	83.1	115	39.2	159	57.8	18.1	13.3	2.34	0.42	0.16	0.14	40.4
1950	0.05	78.6	87.0	144	180	131	43.9	11.2	2.50	0.37	0.12	0.00	55.8
1951	13.3	132	181	154	158	47.0	15.0	5.35	0.86	0.08	0.00	0.00	58.3
1952	35.5	86.2	102	104	98.2	36.2	16.0	10.2	2.22	0.78	0.23	0.04	40.8
1953	0.00	0.00	70.1	294	101	52.8	23.0	8.29	2.60	1.69	0.36	0.00	46.2
1954	8.30	83.4	105	142	215	51.7	39.4	7.11	2.22	1.41	0.37	0.19	53.6
1955	0.21	107	90.7	65.4	57.9	41.5	66.7	11.1	2.98	1.55	0.43	0.12	36.8
1956	28.5	202	172	177	44.2	153	38.1	6.02	7.91	1.78	0.53	0.35	69.4

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1945-1956)

MEAN	15.6	94.1	110.7	128.9	121.5	68.0	35.3	15.4	4.4	1.3	0.3	0.3	48.4
MAXIMUM	63.2	202.0	181.0	294.0	215.0	153.0	71.9	78.2	13.3	4.2	0.6	1.8	69.4
MINIMUM	0.0	0.0	70.1	39.2	44.2	35.6	12.0	5.4	0.9	0.1	0.0	0.0	33.4
STD DEVIATION	20.86	45.16	35.57	68.88	52.60	39.13	20.70	21.00	3.51	1.10	0.15	0.56	10.53
SKWENESS	1.362	1.876	1.256	1.270	0.278	1.559	0.634	3.212	1.731	1.609	0.091	2.869	0.505
STD ERR SKEW	0.687	0.687	0.661	0.661	0.661	0.661	0.661	0.661	0.637	0.637	0.661	0.717	0.661
SER CORR COEFF	-0.272	0.444	-0.267	-0.097	-0.050	-0.245	-0.220	-0.093	0.021	-0.118	-0.001	-0.159	-0.463
COEFF OF VAR	1.336	0.480	0.321	0.534	0.433	0.576	0.586	1.359	0.799	0.827	0.452	1.552	0.217
MEAN LOGS	0.477	1.936	2.026	2.054	2.043	1.780	1.475	1.028	0.535	-0.039	-0.530	-0.710	1.676
STD DEV LOGS	1.096	0.185	0.127	0.239	0.209	0.211	0.270	0.318	0.317	0.448	0.222	0.438	0.094
SKWENESS LOGS	-0.413	0.571	0.808	-0.363	-0.577	1.019	-0.061	0.661	0.637	-1.077	-0.486	1.065	0.049
STD ERR SKEW LOGS	0.687	0.687	0.661	0.661	0.661	0.661	0.661	0.661	0.637	0.637	0.661	0.717	0.661
SER CORR LOGS	-0.198	0.496	-0.288	-0.165	0.149	-0.270	-0.267	-0.115	0.241	0.238	0.117	-0.124	-0.476
COEFF OF VAR LOGS	2.299	0.096	0.063	0.116	0.102	0.118	0.183	0.309	0.591	-11.347	-0.419	-0.617	0.056
% OF AVE FLOW	2.6	15.8	18.6	21.6	20.4	11.4	5.9	2.6	0.7	0.2	0.1	0.1	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1945-1956)

0.99	0.0	38.3	64.1	27.3	29.5	28.1	6.8	5.6	0.7	0.0	0.1	0.0	28.9
0.95	0.0	46.1	70.8	43.5	46.5	31.9	10.6	5.6	1.1	0.1	0.1	0.1	33.3
0.90	0.1	51.6	75.6	55.0	58.2	35.0	13.4	5.8	1.4	0.2	0.1	0.1	36.0
0.80	0.4	59.8	82.7	72.2	75.0	39.9	17.7	6.2	1.8	0.4	0.2	0.1	39.5
0.50	3.6	82.8	102.2	117.1	115.5	55.6	30.1	8.4	3.4	1.1	0.3	0.2	47.3
0.20	26.0	121.5	133.5	181.1	166.8	87.0	50.5	16.1	6.3	2.2	0.5	0.4	56.8
0.10	66.7	152.0	157.1	223.4	197.1	115.6	66.0	27.2	8.8	2.9	0.6	0.8	62.6
0.04	170.5	196.7	190.6	275.8	231.5	162.8	87.7	55.1	12.8	3.6	0.7	1.6	69.5
0.02	301.2	234.7	218.1	313.8	254.4	207.9	105.1	94.5	16.4	4.1	0.7	2.6	74.3
0.01	490.7	277.2	248.1	350.7	275.4	262.9	123.6	162.9	20.5	4.4	0.8	4.3	79.0

STATION 12067500 TAHUYA RIVER NEAR BELFAIR, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1947	0.0	0.0	0.0	0.03	0.07	0.18	0.31	0.83	2.30
1948	0.0	0.07	0.09	0.10	0.14	0.16	0.23	0.62	2.80
1949	0.0	0.40	0.40	0.40	0.41	0.56	1.30	2.60	10.00
1950	0.0	0.0	0.0	0.0	0.05	0.09	0.10	0.15	1.40
1951	0.0	0.0	0.0	0.0	0.0	0.04	0.10	0.38	3.40
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.09	1.90
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.06	0.48
1954	0.0	0.0	0.0	0.0	0.0	0.17	0.62	0.95	3.40
1955	0.10	0.10	0.13	0.16	0.19	0.20	0.25	0.45	1.40
1956	0.10	0.10	0.10	0.10	0.12	0.20	0.46	0.92	4.40

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1947-1956)

P95	P90	P75	P70	P50	P25	P10
0.1	0.2	0.7	1.5	13.0	59.0	140.0

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
1946	338.	287.	245.	213.	147.	132.	116.	112.	94.	FLOW(CFS) DATE REG.(R)
1947	563.	386.	256.	195.	172.	108.	110.	94.	65.	428. 04/11/46
1948	473.	319.	247.	198.	172.	108.	101.	91.	80.	622. 02/14/47
1949	840.	579.	399.	270.	164.	110.	106.	101.	77.	544. 10/19/47
1950	1000.	733.	421.	251.	154.	109.	104.	110.	110.	900. 02/22/49
1951	700.	427.	374.	236.	220.	185.	157.	144.	110.	
1952	480.	427.	344.	278.	166.	108.	119.	104.	78.	780. 02/09/51
1953	514.	448.	401.	347.	300.	204.	158.	133.	91.	642. 01/30/52
1954	667.	570.	417.	322.	206.	175.	153.	139.	104.	616. 01/08/53
1955	662.	531.	324.	203.	147.	113.	100.	83.	71.	845. 01/05/54
1956	1010.	755.	427.	254.	234.	195.	187.	152.	135.	794. 11/19/54
										1210. 11/03/55

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1946-1956)

MEAN	MAXIMUM	MINIMUM	STANDARD DEVIATION	SKWENESS	STD. ERROR OF SKWENESS	SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	SKWENESS LOGS	STD ERR SKWENESS LOGS	SER CORR COEFF LOGS	COEFF OF VAR LOGS	# R C ESTIMATE	SYSTEMATIC RECORD
658.8	1010.0	338.0	217.70	0.474	0.561	0.345	2.797	2.797	-0.146	-0.286	0.661	0.345	0.052		
507.6	755.0	287.0	152.21	0.255	0.661	0.415	2.687	2.687	0.135	-0.148	0.661	0.450	0.050		
350.5	427.0	245.0	72.26	-0.580	0.661	0.461	2.535	2.535	0.096	-0.720	0.661	0.519	0.038		
251.5	347.0	195.0	50.27	0.707	0.661	0.390	2.393	2.393	0.084	0.410	0.661	0.375	0.035		
196.5	300.0	147.0	46.68	1.059	0.661	0.390	2.283	2.283	0.097	0.637	0.661	-0.159	0.043		
147.6	204.0	105.0	41.35	0.221	0.661	0.390	2.154	2.154	0.122	0.143	0.661	-0.041	0.057		
136.0	189.0	100.0	33.78	0.505	0.661	0.390	2.122	2.122	0.106	0.098	0.661	-0.012	0.050		
119.1	157.0	83.0	26.57	0.140	0.661	0.390	2.066	2.066	0.098	0.084	0.661	-0.095	0.047		
92.7	135.0	65.0	21.40	0.654	0.661	0.390	1.957	1.957	0.098	0.084	0.661	-0.253	0.050		
2.8514	2.8514	0.1268	0.0140	2.8514	0.1268	0.0140	2.8514	0.1268	0.0140	2.8514	0.1268	0.0140	2.8514		

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1956)

0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
276.0	355.1	404.9	473.1	631.6	833.3	958.8	1109.6	1217.2	1321.2
182.7	228.9	255.1	323.7	436.2	558.0	682.7	812.7	939.6	1066.0
167.0	184.1	209.4	244.0	289.6	349.2	414.9	476.5	510.6	558.0
126.7	138.8	158.4	187.5	225.4	265.6	319.2	356.2	383.6	411.1
76.3	90.7	107.5	141.5	181.6	220.0	263.2	297.2	327.1	358.0
68.3	80.0	97.8	112.2	140.8	175.3	205.0	236.2	267.2	282.1
56.2	63.7	74.7	89.6	109.1	126.6	145.6	162.2	184.1	195.4
361.2	439.9	488.7	554.8	706.9	907.8	1032.9	1185.6	1312.7	1404.7
367.5	442.9	490.0	554.8	706.9	907.8	1032.9	1185.6	1312.7	1404.7

STATION 12060500 DEMATTO RIVER NEAR DEMATTO, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1947	82.1	53.1	101	128	99.6	69.3	62.3	84.1	33.2	15.4	13.2	13.6	
1948	25.5	110	135	58.6	213	96.3	42.8	35.1	21.4	21.1	18.4	21.2	64.5
1949	16.0	131	123	142	221	165	75.8	37.0	23.5	17.0	15.0	16.0	64.6
1950	44.0	133	188	170	213	176.4	42.9	32.5	21.2	17.2	14.7	12.1	80.6
1951	61.3	92.6	120	141	127	60.2	39.2	29.5	20.9	16.5	14.8	13.8	79.6
1952	12.2	13.4	95.0	295	123	75.9	43.4	29.3	21.5	16.4	14.2	14.1	63.0
1953	20.1	88.0	124	185	263	80.4	66.7	30.9	23.9	19.4	16.7	16.5	76.7
1954													
1958	17.4	59.0	126	188	94.4	69.7	81.0	54.1	26.6	18.1	17.2	15.7	63.9
1959	20.2	116	119	138	160	91.9	101	48.8	28.7	18.9	17.5	15.9	72.6
1960	21.6	111	89.3	185	298	193	58.0	54.7	26.4	19.4	15.1	14.2	89.2
1961	22.1	51.9	150	73.5	49.0	74.9	38.2	35.9	21.6	15.5	14.4	16.3	47.1
1962	45.4	151	125	95.7	102	67.6	89.6	47.5	26.9	20.7	15.5	15.2	66.5
1963	50.6	162	122	212	83.3	91.4	38.5	26.8	25.7	17.5	14.0	13.2	71.4
1964	12.7	62.0	122	123	122	44.7	44.9	31.4	21.1	16.6	14.1	11.7	49.5
1965	15.5	40.4	91.8	228	83.8	157	40.6	27.4	22.0	16.8	13.6	13.5	62.6
1966	17.4	43.9	263	207	89.4	126	53.0	32.1	22.0	16.8	14.4	14.1	75.2
1967	62.4	66.5	194	244	221	155	58.7	33.5	28.3	18.2	17.6	18.2	92.9
1968	31.7	85.1	205	105	141	104	81.7	37.5	23.5	17.1	13.8	20.9	71.8
1969	25.7	38.0	152	176	108	83.9	79.6	36.8	22.6	16.3	13.9	15.0	63.5
1970	23.4	64.3	222	159	83.0	195	83.2	36.3	27.4	20.1	16.4	19.7	79.5
1971	23.9	71.8	120	129	122	183	95.4	36.2	24.9	20.0	15.7	19.0	71.6
1972	14.6	42.2	188	136	58.4	64.6	30.7	25.9	21.0	16.1	13.8	14.5	52.3
1973	18.2	196	289	214	164	166	67.3	37.5	31.0	25.7	18.2	15.1	103
1974													
1975													

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1947-1975)

MEAN	29.7	86.3	149.4	162.3	140.8	104.3	61.5	38.1	24.4	18.0	15.2	15.4	70.6
MAXIMUM	82.1	196.0	289.0	295.0	298.0	195.0	101.0	84.1	33.2	25.7	18.4	21.2	103.0
MINIMUM	12.2	15.8	89.3	58.6	49.0	44.7	30.7	25.9	20.1	15.4	12.9	11.7	47.1
STD DEVIATION	18.79	45.77	55.18	56.42	67.16	47.62	20.96	12.84	8.91	2.29	1.62	2.63	13.40
SKWENESS	1.484	0.736	1.164	0.297	0.852	0.684	0.320	2.366	0.472	0.464	0.464	0.464	0.482
STD ERR SKEW	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481
SER CORR COEFF	0.059	0.085	0.256	0.026	-0.029	-0.005	0.088	0.185	-0.054	-0.233	-0.205	0.239	-0.233
COEFF OF VAR	0.632	0.530	0.369	0.348	0.477	0.440	0.341	0.337	0.143	0.127	0.107	0.171	0.190
MEAN LOGS	1.406	1.872	2.149	2.182	2.103	1.996	1.764	1.563	1.384	1.252	1.178	1.182	1.841
STD DEV LOGS	0.235	0.254	0.147	0.166	0.206	0.186	0.152	0.119	0.060	0.051	0.045	0.071	0.082
SKWENESS LOGS	0.739	-0.594	0.616	-0.735	0.018	0.243	-0.065	1.468	0.652	1.348	0.591	0.525	-0.087
STD ERR SKEW LOGS	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.472	0.464	0.464	0.464	0.481
SER CORR LOGS	0.083	-0.004	0.267	0.065	-0.046	-0.015	0.042	0.221	-0.028	-0.353	-0.204	0.263	-0.228
COEFF OF VAR LOGS	0.167	0.135	0.068	0.076	0.098	0.093	0.086	0.076	0.043	0.041	0.038	0.060	0.045
% OF AVE FLOW	3.5	10.2	17.6	19.1	16.6	12.7	7.2	4.5	2.9	2.1	1.8	1.9	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1975)

0.99	9.7	15.0	75.1	51.1	42.4	39.5	25.4	25.8	18.8	15.2	12.4	11.1	44.1
0.95	11.9	26.1	86.4	75.6	58.3	50.5	32.5	26.7	19.9	15.5	13.0	11.9	50.5
0.90	13.5	34.3	94.2	91.3	69.1	57.9	37.1	27.6	20.6	15.8	13.3	12.5	54.3
0.80	16.0	46.7	105.6	112.6	85.0	68.8	43.4	29.2	21.5	16.2	13.8	13.2	59.2
0.50	23.9	78.9	136.3	159.4	128.5	97.4	58.3	34.3	23.9	17.4	14.9	15.0	69.6
0.20	39.0	122.8	184.7	211.3	188.5	141.3	78.0	44.3	27.0	19.4	16.4	17.3	81.4
0.10	52.5	150.2	221.0	238.9	200.5	173.3	90.7	52.8	29.1	20.9	17.3	18.9	88.3
0.04	74.4	182.0	271.9	267.7	290.8	173.2	106.2	65.9	31.7	22.9	18.4	20.8	96.1
0.02	94.9	203.8	313.7	285.6	332.4	252.4	117.5	77.5	33.6	24.5	19.3	22.2	101.5
0.01	119.5	223.8	358.9	301.0	383.2	289.7	128.7	90.9	35.5	26.2	20.1	23.7	106.6

STATION 1206R500 DEWATTO RIVER NEAR DEWATTO, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1949	16.0	16.0	16.0	16.0	17.0	18.0	20.0	21.0	30.0
1950	13.0	13.0	13.0	13.0	13.0	15.0	15.0	15.0	18.0
1951	10.0	10.0	11.0	11.0	12.0	13.0	14.0	14.0	16.0
1952	11.0	11.0	11.0	12.0	12.0	13.0	14.0	16.0	21.0
1953	11.0	11.0	11.0	12.0	12.0	13.0	13.0	13.0	15.0
1954	12.0	12.0	12.0	12.0	13.0	14.0	15.0	16.0	19.0
1960	9.5	9.9	10.0	13.0	15.0	16.0	17.0	17.0	20.0
1961	15.0	15.0	15.0	15.0	15.0	16.0	17.0	18.0	23.0
1962	13.0	13.0	13.0	13.0	14.0	15.0	15.0	17.0	22.0
1963	9.0	9.5	11.0	12.0	13.0	14.0	15.0	16.0	23.0
1964	11.0	11.0	12.0	12.0	12.0	13.0	13.0	14.0	18.0
1965	11.0	11.0	11.0	11.0	12.0	13.0	14.0	14.0	18.0
1966	10.0	10.0	13.0	13.0	13.0	14.0	15.0	15.0	17.0
1967	12.0	12.0	13.0	13.0	14.0	14.0	15.0	15.0	23.0
1968	12.0	12.0	13.0	13.0	14.0	14.0	15.0	15.0	19.0
1969	14.0	14.0	15.0	15.0	16.0	17.0	18.0	18.0	24.0
1970	12.0	12.0	12.0	12.0	13.0	14.0	15.0	16.0	22.0
1971	12.0	13.0	13.0	13.0	14.0	14.0	15.0	16.0	20.0
1972	14.0	14.0	15.0	15.0	16.0	18.0	18.0	20.0	24.0
1973	12.0	13.0	13.0	13.0	14.0	15.0	16.0	17.0	21.0
1974	12.0	12.0	12.0	13.0	13.0	14.0	14.0	15.0	18.0

LOWEST MEAN FLOW STATISTICS (YEARS 1949-1974)

MEAN	12.0	12.2	12.5	12.9	13.7	14.6	15.4	16.6	21.1
MAXIMUM	16.0	16.0	16.0	16.0	17.0	18.0	20.0	21.0	30.0
MINIMUM	9.0	9.5	10.0	11.0	12.0	13.0	13.0	13.0	15.0
STANDARD DEVIATION	1.76	1.73	1.63	1.38	1.45	1.66	1.78	1.94	3.37
SKEWNESS	0.527	0.401	0.640	0.498	0.560	0.767	0.928	0.450	0.559
STD ERROR OF SKEWNESS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501
SERIAL CORR COEFF	0.071	0.131	0.154	0.170	0.327	0.252	0.219	0.230	-0.007
COEFF OF VARIATION	0.147	0.143	0.130	0.107	0.106	0.114	0.115	0.117	0.159
MEAN LOGS	1.074	1.081	1.094	1.108	1.135	1.161	1.186	1.217	1.320
STD DEVIATION LOGS	0.063	0.061	0.055	0.045	0.045	0.048	0.048	0.050	0.069
SKEWNESS LOGS	0.150	0.109	0.414	0.461	0.466	0.550	0.662	0.099	0.040
STD ERR SKEWNESS LOGS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501
SER CORR COEFF LOGS	0.052	0.122	0.159	0.190	0.358	0.290	0.247	0.251	0.026
COEFF OF VAR LOGS	0.059	0.057	0.050	0.041	0.040	0.041	0.041	0.041	0.052

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1949-1974)

0.99	16.9	16.9	17.4	16.9	18.0	19.6	20.9	21.7	30.3
0.98	16.2	16.2	16.6	16.3	17.3	18.8	20.9	21.0	29.0
0.96	15.4	15.5	15.8	15.6	16.6	17.9	19.1	20.3	27.6
0.90	14.3	14.5	14.7	14.7	15.6	16.8	17.8	19.1	25.6
0.80	13.4	13.6	13.8	13.8	14.0	15.8	16.8	18.1	23.9
0.50	11.8	12.0	12.3	12.7	13.5	14.3	15.1	16.4	20.9
0.20	10.5	10.7	11.1	11.7	12.5	13.2	13.9	14.9	18.3
0.10	9.9	10.1	10.6	11.3	12.0	12.7	13.4	14.2	17.1
0.05	9.4	9.6	10.2	11.0	11.7	12.3	13.1	13.6	16.1
0.02	8.9	9.1	9.9	10.6	11.3	11.9	12.7	13.1	15.2
0.01	8.6	8.8	9.6	10.4	11.1	11.7	12.5	12.7	14.5

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1949-1974)

P95	P90	P75	P70	P50	P25	P10
13.0	15.0	19.0	21.0	36.0	79.0	170.0

STATION 12069550 BIG BEEF CREEK NEAR SEABECK, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1969	10.6	19.9	96.5	117	63.1	46.9	38.7	14.2	6.98	4.30	4.60	7.79	35.5
1970	8.50	28.0	143	109	54.4	143	58.1	15.4	9.57	6.11	3.37	4.25	49.3
1971	9.79	49.2	78.0	85.8	76.6	124	61.8	16.3	11.2	9.60	5.04	10.4	44.6
1972	4.92	20.7	122	86.5	29.2	32.7	13.8	11.5	7.87	4.49	3.73	4.67	28.7
1973	11.1	122	171	137	94.5	89.8	48.3	18.1	10.1	6.14	3.57	3.87	59.5
1974	6.03	22.7	43.0	103	82.7	67.4	28.7	23.8	8.58	5.45	8.41	4.91	33.5
1975	66.7	136	106	84.5	88.3	85.0	35.4	16.8	10.9	7.19	6.18	5.41	53.9
1976	8.76	7.10	8.03	9.65	15.0	87.5	11.1	9.32	9.11	4.61	4.30	5.91	14.9
1977	8.06	67.5	127	104	91.2	50.2	38.0	26.0	12.3	6.17	5.09	21.0	46.1
1978	9.51	20.2	26.2	18.3	130	61.0	16.3	10.2	5.59	4.27	3.66	5.52	25.2
1979													

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1969-1979)

MEAN	14.2	49.3	92.1	85.5	72.5	79.8	35.0	16.2	9.2	5.8	4.9	7.4	39.1
MAXIMUM	66.7	136.0	171.0	137.0	130.0	143.0	61.8	26.0	12.3	9.6	8.4	21.0	59.5
MINIMUM	4.9	7.1	8.0	9.6	15.0	32.7	11.1	9.3	5.6	4.3	3.4	3.9	14.9
STD DEVIATION	18.55	45.47	52.87	40.98	33.51	34.65	17.83	5.45	2.04	1.65	1.48	4.90	13.94
SKWENESS	3.093	1.276	-0.286	-1.102	-0.242	0.687	0.095	0.653	-0.315	1.366	1.459	2.520	-0.267
STD ERR SKEW	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.661	0.661	0.687
SER CORR COEFF	-0.197	-0.609	-0.419	-0.095	-0.187	-0.167	-0.136	-0.490	-0.672	-0.382	-0.005	-0.126	-0.661
COEFF OF VAR	1.307	0.922	0.574	0.479	0.462	0.440	0.509	0.338	0.222	0.283	0.304	0.663	0.356
MEAN LOGS	1.000	1.532	1.844	1.842	1.797	1.857	1.491	1.187	0.954	0.752	0.671	0.812	1.562
STD DEV LOGS	0.311	0.400	0.413	0.385	0.279	0.197	0.263	0.146	0.103	0.113	0.120	0.211	0.182
SKWENESS LOGS	2.380	0.140	-1.543	-1.775	-1.461	-0.174	-0.601	0.059	-0.791	0.807	0.835	1.555	-1.050
STD ERR SKEW LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.661	0.661	0.687
SER CORR LOGS	-0.375	-0.752	-0.333	-0.129	-0.304	-0.310	-0.277	-0.526	-0.645	-0.444	-0.041	-0.073	-0.555
COEFF OF VAR LOGS	0.311	0.261	0.224	0.210	0.155	0.106	0.178	0.123	0.108	0.150	0.179	0.260	0.117
% OF AVE FLOW	3.0	10.5	19.6	18.2	15.4	16.7	7.4	3.4	2.0	1.2	1.0	1.6	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1969-1979)

0.99	5.5	4.4	2.9	3.1	7.5	23.7	5.7	7.1	4.5	3.6	2.9	3.6	10.1
0.95	5.5	7.8	10.9	11.8	17.9	33.4	10.2	8.9	5.8	3.9	3.2	3.8	16.5
0.90	5.6	10.6	19.7	21.1	26.6	40.0	13.5	10.0	6.5	4.2	3.4	4.0	20.8
0.80	5.9	15.6	36.4	38.3	40.1	49.4	18.7	11.6	7.5	4.5	3.7	4.4	26.6
0.50	7.8	33.3	88.2	86.8	72.9	73.0	32.2	15.3	9.3	5.5	4.5	5.7	39.2
0.20	14.7	73.3	152.5	137.9	106.8	50.9	20.4	11.0	6.9	5.8	5.8	9.0	52.1
0.10	24.7	112.0	182.1	157.5	121.4	127.6	62.6	23.7	11.9	8.0	6.8	12.4	58.3
0.04	50.2	177.8	206.3	171.2	133.4	154.9	76.4	27.8	12.7	9.5	8.1	18.5	64.1
0.02	86.6	240.9	217.6	176.7	139.1	175.0	85.8	30.9	13.2	10.7	9.3	24.8	67.4
0.01	150.5	317.7	225.1	179.8	142.9	195.0	94.5	34.0	13.6	12.0	10.5	33.2	69.9

STATION 12069550 BIG BEEF CREEK NEAR SEABECK, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1971	2.6	2.9	3.1	3.2	3.3	3.6	3.8	4.1	6.5
1972	4.5	4.5	4.5	4.5	5.0	5.5	6.8	7.2	9.3
1973	3.1	3.1	3.4	3.5	3.9	5.5	5.9	6.8	8.7
1974	2.7	2.7	2.9	3.1	3.4	3.6	4.1	4.8	6.9
1975	2.3	2.5	2.7	2.8	3.2	3.6	3.9	4.7	7.3
1976	2.7	2.8	3.2	3.9	4.7	5.8	6.2	6.6	11.0
1977	4.7	4.8	5.1	5.2	5.4	5.7	5.9	6.3	6.5
1978	3.0	3.2	3.4	3.6	3.7	4.3	4.7	5.0	6.6
1979	3.5	3.7	3.8	3.9	4.2	5.5	7.4	10.0	12.0

LOWEST MEAN FLOW STATISTICS (YEARS 1971-1979)

MEAN	3.2	3.4	3.6	3.7	4.1	4.8	5.4	6.2	8.3
MAXIMUM	4.7	4.4	5.1	5.2	5.4	5.8	7.4	10.0	12.0
MINIMUM	2.3	2.5	2.7	2.8	3.2	3.6	3.8	4.1	6.5
STANDARD DEVIATION	0.85	0.81	0.78	0.74	0.79	0.99	1.33	1.80	2.08
SKEWNESS	1.010	1.006	1.121	0.873	0.537	-0.379	0.071	1.141	0.897
STD ERROR OF SKEWNESS	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717
SERIAL CORR COEFF	-0.196	-0.132	-0.090	0.007	-0.093	-0.110	-0.230	-0.321	-0.432
COEFF OF VARIATION	0.262	0.242	0.219	0.199	0.194	0.207	0.245	0.292	0.250
MEAN LOGS	0.497	0.515	0.544	0.566	0.605	0.671	0.721	0.775	0.908
STD DEVIATION LOGS	0.107	0.099	0.089	0.083	0.082	0.094	0.109	0.120	0.130
STD ERR SKEWNESS LOGS	0.732	0.771	0.808	0.479	0.340	-0.435	-0.151	0.530	0.696
SER CORR COEFF LOGS	-0.128	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717
COEFF DF VAR LOGS	0.215	-0.052	-0.018	0.048	-0.087	-0.091	-0.199	-0.317	-0.424
		0.192	0.164	0.147	0.136	0.140	0.151	0.155	0.113

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1971-1979)

0.99	6.3	6.3	6.3	6.1	6.6	7.2	9.2	12.6	15.8
0.98	5.7	5.7	5.8	5.7	6.1	7.0	8.6	11.3	14.3
0.96	5.1	5.1	5.3	5.3	5.7	6.6	8.1	10.1	12.9
0.90	4.4	4.4	4.6	4.7	5.2	6.1	7.2	8.6	11.1
0.80	3.8	3.9	4.1	4.3	4.7	5.6	6.5	7.4	9.8
0.50	3.1	3.2	3.4	3.6	4.0	4.8	5.3	5.8	7.9
0.20	2.5	2.7	2.9	3.1	3.4	3.9	4.3	4.7	6.6
0.10	2.4	2.5	2.8	2.9	3.2	3.5	3.8	4.3	6.1
0.05	2.2	2.4	2.6	2.8	3.0	3.2	3.4	4.0	5.8
0.02	2.1	2.3	2.5	2.6	2.8	2.9	3.1	3.7	5.5
0.01	2.0	2.2	2.5	2.5	2.7	2.6	2.9	3.5	5.3

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1971-1979)

P95	P90	P75	P70	P50	P25	P10
3.7	4.4	6.3	7.4	15.0	46.0	100.0

STATION 12069550 BIG BEEF CREEK NEAR SEAROCK, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA FLOW (CFS)	DATE	REG. (H)
1970	318.	245.	229.	187.	128.	117.	97.	84.	64.	384.	12/22/69	
1971	610.	452.	273.	192.	153.	128.	107.	115.	90.	757.	12/07/70	
1972	408.	313.	223.	212.	148.	118.	102.	94.	79.	572.	01/20/72	
1973	611.	420.	317.	236.	154.	111.	87.	69.	51.	712.	12/26/72	
1974	658.	584.	470.	264.	196.	170.	153.	135.	110.	742.	01/16/74	
1975	277.	206.	143.	129.	106.	96.	88.	75.	59.	322.	02/12/75	
1976	546.	426.	253.	203.	178.	135.	124.	110.	97.	688.	10/29/75	
1977	488.	437.	282.	157.	92.	53.	39.	32.	24.	592.	03/08/77	
1978	428.	391.	295.	196.	151.	128.	111.	98.	79.	500.	12/11/77	
1979	379.	317.	211.	199.	159.	93.	68.	58.	44.	459.	02/25/79	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1970-1979)

W R C SYSTEMATIC
ESTIMATE RECORD

MEAN	472.3	379.1	269.6	197.5	146.5	114.9	97.6	87.0	69.7			
MAXIMUM	658.0	584.0	470.0	264.0	196.0	170.0	153.0	135.0	110.0			
MINIMUM	277.0	206.0	143.0	129.0	92.0	53.0	39.0	32.0	24.0			
STANDARD DEVIATION	131.28	110.97	86.14	37.45	31.04	30.70	30.85	30.05	26.25			
SKWENESS	-0.012	0.125	1.254	-0.092	-0.364	-0.358	-0.177	-0.266	-0.189			
STD ERROR OF SKWENESS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687			
SERIAL CORR COEFF	-0.445	-0.516	-0.280	-0.159	-0.582	-0.477	-0.510	-0.514	-0.504			
COEFF OF VARIATION	0.278	0.293	0.319	0.190	0.212	0.267	0.316	0.345	0.377			
MEAN LOGS	2.658	2.561	2.412	2.288	2.156	2.044	1.966	1.910	1.809			
STD DEVIATION LOGS	0.127	0.136	0.134	0.086	0.099	0.135	0.162	0.180	0.196			
SKWENESS LOGS	-0.381	-0.552	0.033	-0.715	-0.849	-1.447	-1.354	-1.267	-1.135			
STD ERR SKWENESS LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	2.7422	2.7422	0.1273
SER CORR COEFF LOGS	-0.472	-0.519	-0.343	-0.218	-0.552	-0.410	-0.434	-0.425	-0.499	0.0080	0.0080	-0.7080
COEFF OF VAR LOGS	0.048	0.053	0.056	0.038	0.046	0.066	0.082	0.094	0.108			

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1970-1979)

0.99	212.5	155.5	127.0	110.4	73.5	39.7	27.6	21.7	15.8	279.9	241.1	
0.95	273.0	208.2	156.0	135.1	93.9	60.5	44.9	36.7	27.3	341.4	324.0	
0.90	309.7	240.4	174.1	148.9	105.6	73.1	56.1	46.7	35.1	379.5	373.7	
0.80	358.2	282.9	199.1	165.9	120.1	89.0	70.8	60.3	44.1	431.6	438.3	
0.50	463.6	374.2	257.8	198.8	147.9	118.8	100.2	88.6	70.0	552.1	571.6	
0.20	584.4	475.1	334.6	230.2	174.2	143.0	126.1	115.2	94.3	706.8	710.0	
0.10	653.0	530.1	383.8	245.6	186.6	152.2	136.8	126.8	105.7	804.3	801.0	
0.04	729.5	589.4	444.6	260.8	198.5	159.3	145.7	136.7	116.2	923.4	853.6	
0.02	780.6	627.4	489.1	269.9	205.4	162.7	149.7	141.8	121.9	1009.6	898.1	
0.01	827.5	661.3	533.1	277.5	211.1	164.9	152.7	145.5	126.3	1094.1	936.1	

STATION 12070000 DODFISH CREEK NEAR POULSBORO, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	DCT	NDV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1947	7.38	6.34	12.6	13.5	14.7	8.15	8.57	10.2	5.00	2.54	2.51	3.05	6.19
1948	5.30	11.2	11.9	6.92	30.9	14.1	6.13	3.83	3.68	3.68	3.61	4.47	8.49
1949	4.45	8.62	10.0	16.2	24.5	17.1	7.35	4.51	3.55	3.55	2.93	3.61	8.73
1950	5.54	13.4	16.0	15.3	20.5	9.03	5.71	5.09	3.76	3.12	3.20	3.30	8.63
1951	7.06	11.9	16.7	18.1	11.6	6.89	5.36	4.65	3.75	3.22	3.57	2.99	7.98
1952	4.05	6.08	11.5	27.5	8.89	9.18	6.06	5.11	4.99	3.14	2.85	3.48	7.75
1953	6.10	10.1	9.50	25.1	37.4	10.2	8.52	5.15	5.30	3.94	4.02	5.17	10.7
1954	4.87	12.5	13.0	8.88	7.72	7.94	7.76	5.20	4.63	4.38	3.23	3.47	6.95
1955	6.52	16.8	28.6	29.5	11.4	17.5	7.97	5.30	7.05	4.12	4.15	4.88	12.0
1956	8.03	7.08	8.56	8.69	19.6	17.9	10.1	5.87	4.80	3.91	3.46	3.92	8.55
1957	7.27	7.66	13.4	24.4	23.9	10.1	9.28	5.18	4.12	3.20	3.18	4.34	9.85
1958	7.17	9.34	11.3	14.4	12.3	11.5	10.8	8.89	4.25	2.87	2.97	5.10	8.23
1959	6.12	9.67	13.4	17.0	17.0	11.2	10.8	7.35	4.46	3.46	4.86	4.96	9.20
1960	5.86	11.8	10.8	19.0	25.2	19.0	9.32	9.55	6.25	4.60	3.00	3.72	10.6
1961	5.08	7.91	13.6	7.55	7.87	10.1	5.85	5.41	4.43	3.02	3.17	4.05	6.50
1962	5.97	12.4	9.79	7.91	14.2	11.2	10.6	5.74	4.23	3.96	4.23	4.06	7.80
1963	9.73	19.5	13.3	21.2	8.27	12.3	6.29	5.26	5.99	3.85	4.38	4.34	9.55
1964	4.64	9.73	12.0	13.4	13.5	6.42	8.34	5.43	3.48	2.78	3.29	4.35	7.24
1965	5.15	7.84	13.1	21.9	14.6	20.4	7.15	5.36	4.08	3.98	2.99	3.61	8.74
1966	4.72	7.96	23.8	24.3	18.5	17.1	8.29	5.46	4.16	3.05	2.99	3.40	10.1
1967	6.76	6.26	16.1	23.5	21.6	21.3	9.12	6.85	5.62	3.46	4.75	5.56	10.9
1968	7.06	11.5	27.4	15.6	21.1	14.1	15.3	6.27	3.87	3.40	2.79	4.89	11.1
1969	5.83	6.99	13.9	17.6	11.4	9.69	8.59	5.56	3.62	3.03	3.16	4.58	7.85
1970	6.25	7.71	16.6	16.7	9.76	22.6	9.12	4.66	5.78	4.45	3.12	6.23	9.44
1971													
1972													

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MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1947-1972)

MEAN	6.1	10.1	14.5	17.3	16.5	13.1	8.5	5.9	4.6	3.5	3.4	4.2	9.0
MAXIMUM	9.7	19.5	28.6	29.5	37.4	22.6	15.3	10.2	7.1	4.6	4.9	6.2	12.0
MINIMUM	4.1	6.1	8.6	6.9	7.7	6.4	5.4	3.8	3.4	2.5	2.5	3.0	6.5
STD DEVIATION	1.30	3.25	5.22	6.51	7.81	4.83	2.24	1.59	0.97	0.57	0.63	0.82	1.41
SKWENESS	0.777	1.188	1.725	0.055	1.021	0.517	1.135	1.641	0.833	0.169	0.981	0.592	0.395
STD ERR SKEW	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.464	0.464	0.464	0.472
SER CORR COEFF	-0.019	0.013	-0.040	-0.151	-0.096	0.046	0.208	0.125	0.016	-0.055	-0.301	0.114	-0.239
COEFF OF VAR	0.213	0.323	0.361	0.377	0.472	0.368	0.264	0.268	0.211	0.164	0.182	0.194	0.157
MEAN LOGS	0.778	0.983	1.138	1.203	1.175	1.090	0.914	0.759	0.556	0.538	0.530	0.617	0.947
STD DEV LOGS	0.090	0.131	0.134	0.185	0.197	0.160	0.109	0.102	0.088	0.072	0.075	0.083	0.068
SKWENESS LOGS	0.185	0.413	1.043	-0.625	0.235	0.056	0.286	1.147	0.70	-0.158	0.700	0.197	0.072
STD ERR SKEW LOGS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.464	0.464	0.464	0.472
SER CORR LOGS	-0.013	-0.039	-0.027	-0.116	-0.076	0.041	0.262	0.147	0.056	-0.072	-0.319	0.117	-0.252
COEFF OF VAR LOGS	0.116	0.134	0.118	0.167	0.167	0.147	0.120	0.135	0.134	0.134	0.141	0.134	0.072
% OF AVE FLOW	5.7	9.3	13.4	16.0	15.4	12.2	7.9	5.5	4.3	3.2	3.2	3.9	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1972)

0.99	3.8	5.2	8.5	4.9	5.6	5.3	4.8	4.0	3.0	2.3	2.5	2.7	6.2
0.95	4.3	6.1	9.2	7.4	7.3	6.7	5.5	4.3	3.3	2.6	2.6	3.1	6.9
0.90	4.6	6.6	9.7	7.4	8.5	7.7	6.0	4.4	3.5	2.8	2.8	3.3	7.3
0.80	5.0	7.4	10.6	11.4	10.2	9.0	6.6	4.7	3.8	3.0	2.9	3.5	7.8
0.50	6.0	9.4	13.0	16.7	14.7	12.3	8.1	5.5	4.5	3.5	3.3	4.1	8.8
0.20	7.1	12.3	17.3	23.0	21.8	16.8	10.1	5.8	5.3	4.0	3.9	4.8	10.1
0.10	7.9	14.3	20.8	26.5	27.0	19.8	11.4	7.9	5.9	4.3	4.3	5.3	10.8
0.04	8.7	17.0	25.9	30.4	34.3	23.6	13.1	9.4	6.6	4.6	4.8	5.8	11.7
0.02	9.4	19.1	30.3	32.9	40.2	26.5	14.3	10.6	7.2	4.8	5.1	6.2	12.3
0.01	10.0	21.3	35.3	35.2	46.4	29.5	15.5	12.0	7.8	5.0	5.5	6.6	12.8

STATION 12070000 DUGFISH CREEK NEAR POULSBY, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1949	3.1	3.2	3.3	3.4	3.6	3.7	3.7	4.2	5.1
1950	2.7	2.7	2.8	2.8	2.9	3.1	3.3	3.3	3.6
1951	2.4	2.9	2.9	2.9	3.0	3.1	3.2	3.3	3.8
1952	2.6	2.6	2.8	2.9	3.0	3.1	3.2	3.4	4.1
1953	2.6	2.6	2.7	2.7	3.0	3.2	3.2	3.3	3.7
1954	2.4	2.5	2.5	2.5	2.7	2.8	3.0	3.5	4.2
1955	2.7	2.7	2.9	3.0	3.1	3.7	4.1	4.4	4.7
1956	2.7	2.7	2.9	3.0	3.0	3.3	3.5	3.8	4.4
1957	3.5	3.6	3.6	3.7	4.0	4.1	4.3	4.6	5.2
1958	3.0	3.0	3.1	3.2	3.4	3.5	3.7	4.0	4.8
1959	2.8	2.8	2.9	3.0	3.0	3.2	3.4	3.6	4.5
1960	1.4	1.4	1.8	1.9	2.1	2.6	3.0	3.6	4.6
1961	3.0	3.1	3.2	3.2	3.4	3.9	4.3	4.5	5.1
1962	2.5	2.6	2.7	2.8	3.0	3.4	3.6	4.0	4.9
1963	2.3	2.4	2.5	2.5	2.8	3.0	3.3	3.6	4.3
1964	2.8	2.9	3.2	3.6	3.9	3.9	4.0	4.1	4.6
1965	3.0	3.2	3.3	3.6	3.8	4.1	4.2	4.7	4.7
1966	2.1	2.2	2.4	2.6	2.8	3.2	3.5	3.5	4.1
1967	2.9	2.9	3.0	3.1	3.2	3.2	3.5	3.6	4.1
1968	2.7	2.7	2.8	2.9	3.0	3.0	3.1	3.4	4.3
1969	3.1	3.2	3.3	3.4	3.4	3.8	4.3	4.7	5.5
1970	2.4	2.4	2.5	2.6	2.6	2.8	3.2	3.4	4.4
1971	2.6	2.7	2.8	2.8	3.0	3.1	3.2	3.6	4.4

LOWEST MEAN FLOW STATISTICS (YEARS 1949-1971)

MEAN	2.7	2.7	2.9	3.0	3.1	3.3	3.5	3.8	4.5
MAXIMUM	3.5	3.6	3.6	3.7	4.0	4.1	4.3	4.7	5.5
MINIMUM	1.2	1.4	1.8	1.9	2.1	2.6	3.0	3.6	3.6
STANDARD DEVIATION	0.45	0.43	0.34	0.42	0.43	0.44	0.44	0.45	0.49
SKEWNESS	-1.552	-1.022	-0.647	-0.268	0.191	0.354	0.663	0.666	0.145
STD ERROR OF SKEWNESS	0.491	0.491	0.481	0.481	0.481	0.481	0.481	0.481	0.481
SERIAL CORR COEFF	-0.166	-0.207	-0.161	-0.070	-0.029	-0.166	-0.135	-0.004	0.215
COEFF OF VARIATION	0.166	0.158	0.134	0.141	0.139	0.131	0.126	0.117	0.108
MEAN LOGS	0.420	0.431	0.453	0.467	0.490	0.518	0.546	0.578	0.649
STD DEVIATION LOGS	0.090	0.079	0.063	0.064	0.061	0.056	0.053	0.050	0.047
SKEWNESS LOGS	-2.698	-2.093	-1.296	-0.859	-0.384	0.151	0.549	0.545	-0.113
STD ERR SKEWNESS LOGS	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481
SER CORR COEFF LOGS	-0.167	-0.204	-0.193	-0.098	-0.062	-0.187	-0.129	0.027	0.246
COEFF OF VAR LOGS	0.213	0.183	0.138	0.138	0.126	0.109	0.097	0.086	0.073

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1949-1971)

0.99	3.1	3.2	3.5	3.4	4.1	4.5	4.9	5.2	5.7
0.98	3.1	3.2	3.4	3.7	4.0	4.4	4.7	4.9	5.4
0.96	3.1	3.2	3.4	3.6	3.9	4.2	4.4	4.7	5.4
0.90	3.1	3.2	3.3	3.5	3.7	3.9	4.1	4.4	5.1
0.80	3.0	3.1	3.2	3.3	3.5	3.7	3.9	4.1	4.9
0.50	2.8	2.9	2.9	3.0	3.1	3.3	3.5	3.7	4.5
0.20	2.4	2.4	2.6	2.6	2.8	3.0	3.2	3.4	4.1
0.10	2.0	2.1	2.3	2.4	2.6	2.8	3.0	3.3	3.9
0.05	1.7	1.9	2.2	2.2	2.4	2.7	2.9	3.2	3.7
0.02	1.4	1.6	1.9	2.0	2.2	2.6	2.8	3.1	3.5
0.01	1.2	1.4	1.6	1.9	2.1	2.5	2.8	3.0	3.4

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "PPM" PERCENT OF THE TIME (YEARS 1949-1971)

PPM	P99	P90	P75	P70	P50	P25	P10
3.0	3.0	3.3	4.2	4.5	6.0	9.8	18.0

STATION 12U70000 DOUGFISH CREEK NEAR POULSDO, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL FLOW (CFS)	PEAK-FLOW DATA DATE	REG. (R)
1948	56.	38.	29.	22.	20.	14.	14.	13.	11.	108.	01/01/48	
1949	150.	129.	80.	53.	44.	22.	17.	16.	13.	333.	02/22/49	
1950	73.	60.	41.	30.	28.	24.	19.	17.	14.	127.	01/21/50	
1951	72.	58.	40.	28.	24.	18.	18.	17.	13.	104.	02/09/51	
1952	47.	43.	35.	29.	21.	18.	17.	15.	12.	77.	11/30/51	
1953	74.	64.	47.	37.	29.	20.	16.	14.	12.	126.	01/08/53	
1954	100.	89.	71.	56.	38.	31.	24.	21.	16.	159.	02/21/54	
1955	58.	39.	26.	18.	16.	13.	12.	11.	10.	102.	11/19/54	
1956	150.	117.	76.	49.	45.	31.	25.	22.	19.	269.	12/20/55	
1957	93.	81.	53.	37.	28.	20.	16.	14.	12.	130.	02/25/57	
1958	65.	54.	40.	32.	27.	25.	21.	18.	15.	109.	12/25/57	
1959	50.	43.	25.	17.	15.	14.	13.	13.	11.	124.	01/24/59	
1960	121.	69.	47.	36.	26.	18.	17.	15.	13.	193.	01/29/60	
1961	66.	45.	36.	29.	26.	23.	21.	19.	16.	86.	02/24/61	
1962	39.	26.	24.	17.	15.	12.	10.	10.	9.	72.	12/20/61	
1963	76.	47.	33.	23.	16.	13.	12.	11.	11.	133.	11/25/62	
1964	65.	42.	34.	26.	21.	18.	18.	17.	14.	98.	10/21/63	
1965	53.	33.	24.	21.	16.	15.	14.	12.	10.	78.	02/05/65	
1966	95.	70.	47.	37.	26.	16.	19.	16.	13.	137.	01/05/66	
1967	104.	80.	48.	39.	27.	24.	21.	20.	16.	198.	12/12/66	
1968	121.	94.	56.	36.	30.	23.	23.	21.	16.	189.	01/14/68	
1969	118.	83.	48.	33.	29.	23.	22.	20.	17.	170.	12/23/68	
1970	49.	34.	32.	26.	19.	17.	15.	14.	11.	120.	12/22/69	
1971	106.	75.	45.	27.	23.	18.	17.	17.	14.	185.	01/15/71	
1972										182.	01/20/72	
1973										76.	12/26/72	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1948-1973)

	MEAN	83.4	62.7	43.2	31.7	25.0	19.7	17.5	16.0	13.2	
	MAXIMUM	150.0	129.0	80.0	56.0	45.0	31.0	25.0	22.0	19.0	
	MINIMUM	39.0	26.0	24.0	17.0	15.0	12.0	10.0	10.0	8.9	
	STANDARD DEVIATION	32.04	27.04	15.56	10.56	7.45	5.19	3.98	3.42	2.56	
	SKEWNESS	0.674	0.825	0.973	0.739	0.774	0.609	0.068	0.067	0.356	
	STD ERROR OF SKEWNESS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	
	SERIAL CORR. COEFF.	-0.127	-0.035	-0.125	-0.134	-0.062	-0.184	-0.202	-0.196	-0.300	
	COEFF OF VARIATION	0.384	0.431	0.360	0.333	0.299	0.264	0.227	0.214	0.193	
	MEAN LOGS	1.691	1.751	1.610	1.479	1.379	1.280	1.233	1.193	1.114	
	STD DEVIATION LOGS	0.165	0.186	0.150	0.144	0.128	0.114	0.103	0.096	0.084	
	SKEWNESS LOGS	0.192	0.040	0.239	-0.005	0.015	0.048	-0.419	-0.306	-0.037	
	STD ERR SKEWNESS LOGS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	
	SER CORR COEFF LOGS	-0.126	-0.113	-0.126	-0.132	-0.044	-0.147	-0.166	-0.183	-0.306	
	COEFF OF VAR LOGS	0.087	0.106	0.093	0.097	0.093	0.089	0.083	0.080	0.075	
								2.1177			
								0.1703			
								0.4640			

STATION 12072000 CHICO CREEK NEAR BREMERTON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1947													
1948	34.5	25.0	43.7	92.0	71.8	51.3	39.4	42.2	15.8	1.81	0.31	1.58	35.8
1949	7.72	45.9	82.4	40.4	175	51.4	21.7	15.1	5.49	6.02	3.65	5.26	36.5
1950	2.70	55.7	72.7	94.2	121	105	44.0	17.2	7.07	3.47	2.46	1.61	43.5
1961								26.0	5.79	3.46	1.74	1.32	
1962	3.81	14.4	65.2	37.6	24.2	42.9	19.0	15.8	7.33	3.00	2.03	1.80	19.8
1963	13.4	71.9	70.8	47.8	60.9	37.9	50.8	22.8	9.15	5.10	2.85	2.05	32.6
1964	10.9	69.9	47.8	122	45.7	61.8	18.0	9.63	11.6	4.49	2.54	2.02	33.9
1965	3.05	31.7	58.5	73.6	68.6	25.1	27.6	15.2	4.32	2.49	2.50	1.41	26.1
1966	3.42	15.0	34.4	150	38.9	89.5	21.2	9.12	4.32	3.49	1.11	0.53	31.1
1967	3.28	19.2	153	143	66.0	70.1	31.3	13.9	6.33	1.89	1.10	0.70	42.6
1968	13.7	19.1	101	133	122	90.5	29.8	13.1	11.6	3.78	3.12	5.65	45.4
1969	11.9	33.6	107	67.1	91.3	44.4	40.8	13.9	7.85	3.91	1.85	7.84	35.6
1970	12.0	15.3	61.6	89.5	58.0	47.5	37.1	15.7	5.86	1.91	1.09	1.19	28.8
1971	5.02	18.1	120	93.8	40.6	113	56.3	13.0	7.58	4.36	1.54	4.75	40.0
1972	8.47	36.9	66.7	80.1	71.8	132	55.4	17.5	8.76	4.81	2.53	4.40	40.8
1973	4.03	13.5	83.9	68.5	28.0	37.8	15.0	9.16	7.91	3.10	1.42	2.37	23.0
1974	11.1	93.7	162	143	97.9	97.3	48.8	18.8	13.0	9.92	2.83	1.71	58.2
1975													

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1947-1975)

MEAN	9.3	36.2	83.2	92.2	73.9	68.6	34.5	16.9	8.3	3.9	2.0	2.6	35.9
MAXIMUM	34.5	93.7	162.0	150.0	175.0	132.0	56.3	42.2	15.8	9.9	3.6	7.8	58.2
MINIMUM	2.7	13.5	34.4	37.6	24.2	25.1	15.0	9.1	4.3	1.8	0.3	0.5	19.8
STD DEVIATION	7.85	24.67	36.93	36.87	39.88	31.81	13.41	7.87	3.06	1.92	0.88	2.07	9.46
SKWENESS	2.336	1.140	0.968	0.185	1.132	0.574	0.223	2.253	1.185	1.937	0.005	1.279	0.475
STD ERR SKEW	0.584	0.584	0.584	0.584	0.584	0.584	0.550	0.550	0.550	0.536	0.536	0.536	0.504
SER CORR COEFF	0.061	-0.020	-0.027	0.126	0.153	-0.121	-0.220	-0.083	-0.370	-0.317	-0.471	0.121	-0.309
COEFF OF VAR	0.843	0.682	0.444	0.400	0.540	0.464	0.389	0.464	0.370	0.498	0.444	0.785	0.284
MEAN LOGS	0.857	1.472	1.882	1.928	1.811	1.791	1.504	1.196	0.892	0.544	0.242	0.306	1.540
STD DEV LOGS	0.315	0.279	0.187	0.191	0.235	0.207	0.181	0.166	0.149	0.190	0.254	0.325	0.118
SKWENESS LOGS	0.364	0.417	0.109	-0.488	-0.099	-0.059	-0.291	0.889	0.504	0.420	-1.511	0.220	-0.345
STD ERR SKEW LOGS	0.564	0.564	0.564	0.564	0.564	0.564	0.550	0.550	0.550	0.536	0.536	0.536	0.504
SER CORR LOGS	0.131	-0.114	-0.027	0.078	-0.026	-0.198	-0.329	-0.124	-0.044	-0.378	-0.451	0.132	-0.305
COEFF OF VAR LOGS	0.190	0.190	0.100	0.099	0.130	0.115	0.120	0.139	0.167	0.309	1.048	1.063	0.076
% DF AVE FLOW	2.2	8.4	19.3	21.4	17.1	15.9	8.0	3.9	1.9	0.9	0.5	0.6	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1975)

0.99	1.6	8.1	28.9	26.1	17.7	20.0	11.1	8.3	4.0	1.4	0.2	0.4	17.3
0.95	2.4	11.2	38.0	38.9	26.2	28.0	15.6	9.3	4.7	1.8	0.6	0.6	21.7
0.90	2.9	13.4	44.0	47.4	32.2	33.5	18.5	10.1	5.1	2.0	0.8	0.8	24.3
0.80	3.9	17.1	52.9	59.4	41.1	41.5	22.6	11.3	5.8	2.4	1.2	1.1	27.8
0.50	6.9	28.3	75.6	87.9	65.2	62.1	32.6	14.8	7.6	3.4	2.0	2.0	35.2
0.20	13.0	50.0	109.3	123.5	102.1	92.4	45.5	21.1	10.3	5.0	2.8	3.8	43.7
0.10	18.7	69.1	133.1	144.8	128.5	113.5	53.6	26.2	12.3	6.2	3.2	5.4	48.5
0.04	27.9	99.5	164.8	169.2	163.4	140.9	63.3	34.0	15.0	8.0	3.4	7.9	53.9
0.02	36.6	127.4	189.5	185.8	190.6	161.9	70.1	40.8	17.2	9.5	3.6	10.3	57.4
0.01	47.1	160.4	215.2	201.1	218.5	183.3	76.7	48.6	19.5	11.1	3.6	13.0	60.7

STATION 120172000 CHICO CREEK NEAR WHELFERTON, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1949	1.9	2.0	2.0	2.2	2.8	3.6	4.7	5.6	10.0
1950	0.2	0.3	0.4	0.5	0.7	1.0	1.3	1.7	3.5
1962	0.9	0.9	1.0	1.1	1.2	1.4	1.8	2.3	4.5
1963	0.9	0.9	1.0	1.1	1.2	1.6	2.1	3.1	6.6
1964	1.7	1.7	1.7	1.8	2.0	2.2	2.6	3.5	8.0
1965	1.1	1.2	1.3	1.5	1.8	2.2	2.5	2.9	5.3
1966	0.8	0.8	0.9	0.9	1.2	1.9	2.0	2.4	4.4
1967	0.1	0.1	0.2	0.3	0.5	0.6	1.0	1.7	3.1
1968	0.4	0.4	0.5	0.6	0.7	0.9	1.2	2.4	5.8
1969	1.3	1.3	1.4	1.7	2.2	3.4	4.0	4.8	8.1
1970	0.8	0.9	1.0	1.1	1.4	1.8	3.2	4.6	7.5
1971	0.7	0.8	0.8	0.8	1.0	1.1	1.2	1.7	4.4
1972	0.9	0.9	1.0	1.2	1.5	2.9	3.2	3.8	6.4
1973	1.3	1.3	1.4	1.5	2.1	2.3	3.5	4.0	5.8
1974	0.5	0.6	0.6	0.8	0.9	1.4	2.1	3.1	5.4

LOWEST MEAN FLOW STATISTICS (YEARS 1949-1974)

MEAN	0.9	0.9	1.0	1.1	1.4	1.9	2.4	3.2	5.9
MAXIMUM	1.9	2.0	2.0	2.2	2.8	3.6	4.7	5.6	10.0
MINIMUM	0.1	0.1	0.2	0.3	0.5	0.6	1.0	1.7	3.1
STANDARD DEVIATION	0.51	0.51	0.50	0.53	0.66	0.90	1.11	1.20	1.89
SKEWNESS	0.367	0.432	0.269	0.334	0.579	0.561	0.568	0.525	0.566
STD ERROR OF SKEWNESS	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580
SERIAL CORR COEFF	-0.154	-0.154	-0.094	-0.157	-0.182	-0.182	-0.104	-0.079	-0.038
COEFF OF VARIATION	0.574	0.537	0.493	0.464	0.468	0.479	0.457	0.380	0.319
MEAN LOGS	-0.157	-0.107	-0.066	0.004	0.100	0.224	0.340	0.472	0.751
STD DEVIATION LOGS	0.374	0.313	0.279	0.236	0.217	0.227	0.207	0.168	0.141
SKEWNESS LOGS	-1.555	-1.351	-1.202	-0.835	-0.348	-0.468	-0.155	-0.068	-0.145
STD ERR SKEWNESS LOGS	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580
SER CORR COEFF LOGS	-0.007	0.038	0.034	0.023	-0.027	-0.052	-0.062	-0.090	-0.004
COEFF OF VAR LOGS	-2.386	-2.930	-4.200	6.713	2.167	1.014	0.608	0.356	0.187

LOWEST MEAN FLOW NON-EXCEEDED PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1949-1974)

0.99	0.9	0.1	2.2	2.5	3.5	4.7	6.3	7.1	11.6
0.98	1.9	2.0	2.1	2.4	3.2	4.3	5.6	6.5	10.7
0.96	1.9	1.9	2.0	2.2	2.8	3.6	4.9	5.8	9.8
0.90	1.7	1.7	1.7	1.9	2.3	3.2	4.0	4.9	8.5
0.80	1.4	1.4	1.5	1.6	1.9	2.6	3.3	4.1	7.4
0.50	0.9	0.9	1.0	1.1	1.3	1.7	2.2	3.0	5.7
0.20	0.4	0.5	0.5	0.7	0.8	1.1	1.5	2.1	4.3
0.10	0.2	0.3	0.4	0.5	0.7	0.8	1.2	1.8	3.7
0.05	0.1	0.2	0.3	0.4	0.5	0.7	1.0	1.6	3.3
0.02	0.1	0.1	0.2	0.3	0.4	0.5	0.8	1.3	2.8
0.01	0.0	0.1	0.1	0.2	0.3	0.4	0.7	1.2	2.6

DAILY MEAN DISCHARGE III CFS EXCEEDED MM PERCENT OF THE TIME (YEARS 1949-1974)

P95	P90	P75	P50	P25	P10
1.2	1.1	4.2	16.0	45.0	93.0

FLOW DURATION DATA

STATION 12072000 CHICO CREEK NEAR BREMERTON, WASH.

HIGHEST MEAN FLOW III CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL FLOW (CFS)	DATE	REG. (K)
1944	304.	252.	199.	154.	113.	83.	73.	69.	57.	738.	10/18/47	
1949	1250.	823.	479.	299.	175.	110.	98.	89.	68.	1640.	02/22/49	
1950	437.	350.	233.	155.	109.	74.	64.	58.	48.	865.	11/26/49	
1962	157.	130.	100.	78.	54.	44.	43.	43.	35.	258.	12/20/61	
1963	275.	230.	178.	132.	101.	74.	64.	58.	48.	454.	11/25/62	
1964	222.	214.	184.	156.	122.	96.	86.	75.	62.	267.	01/17/64	
1965	307.	224.	144.	117.	96.	72.	62.	48.	48.	358.	11/30/64	
1966	567.	436.	312.	248.	156.	99.	96.	80.	59.	639.	01/13/66	
1967	571.	407.	288.	242.	148.	123.	110.	81.	41.	723.	12/13/66	
1968	343.	253.	205.	219.	174.	131.	120.	112.	83.	512.	02/03/68	
1969	344.	243.	182.	141.	108.	91.	89.	79.	64.	373.	12/24/68	
1970	250.	216.	196.	184.	106.	86.	75.	57.	52.	281.	01/27/70	
1971	394.	324.	217.	160.	129.	109.	84.	95.	74.	463.	12/07/70	
1972	390.	306.	233.	225.	156.	118.	100.	90.	74.	604.	01/20/72	
1973	450.	297.	226.	166.	109.	85.	69.	57.	41.	521.	12/26/72	
1974	540.	443.	394.	243.	175.	161.	142.	131.	107.	624.	01/16/74	
1975										327.	01/13/75	
1976										589.	12/03/75	
1977										351.	03/07/77	
1978										402.	12/11/77	
1979										393.	02/25/79	

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HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1948-1979)

	W R C ESTIMATE	SYSTEMATIC RECORD
MEAN		
MAXIMUM		
MINIMUM		
STANDARD DEVIATION		
SKEWNESS		
STD. ERROR OF SKEWNESS		
SERIAL CORR. COEFF.		
COEFF. OF VARIATION		
MEAN LOGS		
STD. DEVIATION LOGS		
SKEWNESS LOGS		
STD. ERR. SKEWNESS LOGS		
SER. CORR. COEFF. LOGS		
COEFF. OF VAR. LOGS		

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1948-1979)

0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
174.5	189.5	214.7	253.7	365.8	562.3	723.2	965.9	1178.2	1420.2
170.5	174.7	191.9	218.3	293.2	421.5	524.5	677.4	809.5	958.5
118.2	137.6	151.1	170.6	222.0	302.0	361.2	443.6	516.6	592.6
86.4	105.3	117.2	133.6	172.4	223.8	257.2	296.8	326.2	360.2
68.6	83.6	92.5	104.2	129.3	154.2	174.8	193.5	206.2	218.0
50.1	64.5	70.0	79.9	101.5	126.5	141.0	157.5	169.7	179.1
40.4	53.0	60.5	70.2	90.5	112.0	123.3	135.1	142.6	149.1
38.4	48.5	54.7	62.9	80.9	102.1	114.5	128.6	138.2	147.1
30.4	38.5	43.4	49.8	63.9	80.2	89.6	100.2	107.3	113.9
174.0	235.1	276.1	335.5	487.3	708.6	862.1	1062.8	1216.9	1374.6
229.4	265.2	291.7	333.5	458.3	688.0	883.5	1188.7	1464.3	1786.9

STATION 12072600 REAVER CR NR MANCHESTER WASH.

ANNUAL PEAK FLOW DATA			ANNUAL PEAK FLOW STATISTICS (YEARS 1967-1976)			
WATER YEAR	FLOW(CFS)	DATE	MEAN LOGS	STANDARD DEVIATION LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
1967	74.0	12-13-1966			1.6744	1.6744
1968	47.0	2- 3-1968			0.1438	0.1438
1969	28.0	12-24-1968			0.007	-0.072
1970	32.0	12-22-1969				
1971	37.0	12- 6-1970				
1972	63.0	1-20-1972				
1973	44.0	12-26-1972				
1974	54.0	1-16-1974				
1975	44.0	1-18-1975				
1976	73.0	12- 4-1975				
			0.99		21.9	21.5
			0.95		27.4	27.2
			0.90		30.9	30.8
			0.80		35.8	35.8
			0.50		47.2	47.4
			0.20		62.4	62.5
			0.10		72.2	72.0
			0.04		84.4	83.7
			0.02		93.4	92.1
			0.01		102.3	100.3

ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES
LOG-PEARSON III ANALYSIS (YEARS 1967-1976)

STATION 12073000 BURLEY CREEK AT BURLEY, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1947													
1948	29.5	26.5	31.4	33.1	38.4	34.2	28.3	29.2	20.0	13.5	13.8	14.9	
1949	21.0	34.0	42.3	27.5	50.8	30.3	24.1	20.0	16.9	15.8	16.0	19.4	26.8
1950	19.2	32.7	34.9	43.1	50.4	58.9	31.9	21.1	18.1	15.9	15.5	15.5	26.0
1960			42.0	37.6	38.9	39.4	37.7	31.0	21.2	16.4	16.8	16.8	29.9
1961	25.9	43.9	33.3	52.5	78.7	56.2	37.0	34.1	24.1	21.0	17.6	19.6	36.7
1962	25.8	31.3	40.2	29.6	26.2	29.3	25.7	22.8	14.9	12.4	13.3	16.0	24.0
1963	21.9	29.1	30.4	28.1	34.6	26.8	26.5	19.1	16.8	16.4	14.5	14.9	23.2
1964	31.24.5	45.2	32.4	55.0	30.4	31.7	22.6	19.6	20.0	15.5	15.2	16.5	27.4
1965	18.8	40.2	54.3	44.0	44.9	23.5	27.6	19.1	16.8	14.5	14.6	13.7	27.6

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1948	255.0	10-18-1947
1949	264.0	2-10-1949
1950	291.0	3- 3-1950
1961	233.0	2-21-1961
1962	97.0	12-19-1961
1963	100.0	11-26-1962
1964	233.0	1- 1-1964
1965	223.0	12- 1-1964

STATION 12073500 HUGO CREEK NEAR WAUNA, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1947													
1948	6.95	5.94	9.25	17.2	16.1	14.0	9.87	11.2	6.20	4.28	4.24	4.36	9.30
1949	4.92	9.24	21.8	10.3	28.6	13.6	8.77	6.83	5.17	4.56	4.54	5.90	10.1
1950	5.13	11.4	17.6	29.5	35.4	38.9	14.1	8.25	6.99	4.44	4.20	4.30	10.1
1951	6.50	15.1	34.1	34.5	51.7	17.7	9.30	7.55	6.71	5.55	4.50	4.50	16.4
1952	6.47	7.80	12.2	13.1	18.7	18.93	6.17	4.77	4.62	4.45	4.32	4.21	7.95
1953	4.09	4.13	4.97	42.8	25.9	10.8	8.16	6.10	5.15	4.50	4.44	4.72	10.4
1954	6.00	10.1	24.4	37.0	36.7	13.4	10.3	7.08	6.03	5.20	4.65	4.59	13.7
1955	4.55	13.8	11.8	10.9	12.9	9.74	10.7	6.15	4.90	4.67	4.35	4.49	8.20
1956	5.91	23.0	36.9	43.4	13.5	32.2	13.8	8.89	8.25	5.94	5.48	5.37	16.9
1957	8.91	10.0	20.9	10.5	17.1	10.4	10.4	7.25	6.45	6.03	5.64	5.30	10.8
1958	5.57	5.74	9.76	23.8	23.2	10.3	9.65	6.34	4.59	4.44	4.56	4.57	9.30
1959	5.36	9.52	15.3	37.2	15.6	10.2	16.5	12.4	7.27	5.76	4.83	5.39	12.1
1960	5.69	12.1	22.2	21.8	25.3	16.0	15.6	9.76	7.25	5.73	5.33	5.00	12.6
1961	7.23	13.8	10.5	37.9	54.6	33.1	12.7	11.0	8.38	7.31	6.07	5.55	17.1
1962	6.46	7.22	13.2	12.0	8.07	9.96	7.35	6.61	5.11	4.68	4.81	4.73	7.53
1963	6.05	17.5	18.3	14.5	17.2	8.79	11.3	6.74	5.58	4.94	4.54	4.29	9.92
1964	5.05	15.3	11.9	38.9	15.9	13.2	7.64	6.54	6.56	5.29	5.16	4.93	11.4
1965	5.05	8.31	19.4	19.9	17.6	8.43	7.67	6.48	4.82	4.31	4.17	3.79	8.13
1966	4.23	5.66	9.27	47.1	9.97	22.3	8.07	5.98	5.67	4.62	4.22	4.26	11.0
1967	4.51	6.06	26.2	35.2	16.9	14.0	9.16	7.32	5.89	5.05	4.38	4.47	11.6
1968	6.53	6.03	14.0	30.6	35.3	22.5	12.4	8.59	8.01	5.82	6.18	5.75	13.4
1969	6.19	7.91	21.3	24.3	24.6	11.5	10.6	7.34	5.96	5.27	4.44	5.44	11.2
1978	6.05	15.1	29.9	20.3	16.5	8.93	9.18	8.59	5.06	4.80	4.41	6.68	11.3
1979	4.35	5.38	5.34	5.37	19.5	15.8	6.54	5.80	4.91	4.74	4.40	3.75	7.08

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1947-1979)

MEAN	5.8	10.3	17.5	25.8	23.2	16.1	10.2	7.6	6.1	5.1	4.7	4.8	11.4
MAXIMUM	8.9	23.0	36.9	47.1	54.6	38.9	16.5	12.4	8.4	7.3	6.2	6.7	17.1
MINIMUM	4.1	4.1	5.0	5.4	8.1	8.4	6.2	4.8	4.6	4.3	4.2	3.8	7.1
STD DEVIATION	1.11	4.66	8.54	12.48	11.99	8.39	2.76	1.88	1.16	0.73	0.57	0.70	2.85
SKWENESS	0.775	0.970	0.657	0.067	1.377	1.520	0.730	1.094	0.612	1.177	1.345	0.701	0.614
STD ERR SKEW	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.464	0.464	0.464	0.472
SER CORR COEFF	0.035	0.163	-0.324	-0.247	0.047	-0.035	0.312	0.165	-0.036	0.104	0.129	-0.089	-0.207
COEFF DF VAR	0.192	0.455	0.487	0.485	0.517	0.522	0.269	0.246	0.191	0.141	0.121	0.144	0.250
MEAN LOGS	0.753	0.970	1.190	1.350	1.317	1.160	0.996	0.872	0.775	0.706	0.674	0.682	1.044
STD DEV LOGS	0.082	0.192	0.229	0.252	0.206	0.194	0.114	0.100	0.081	0.058	0.049	0.061	0.107
SKWENESS LOGS	0.174	0.131	-0.433	-0.696	0.307	0.822	0.202	0.580	0.355	0.822	1.183	0.347	0.123
STD ERR SKEW LOGS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.464	0.464	0.464	0.472
SER CORR LOGS	0.044	0.182	-0.336	-0.205	0.053	-0.012	0.294	0.164	-0.052	0.111	0.145	-0.091	-0.231
COEFF OF VAR LOGS	0.108	0.198	0.192	0.187	0.156	0.167	0.114	0.115	0.104	0.083	0.073	0.089	0.102
% OF AVE FLOW	4.2	7.5	12.8	18.8	16.9	11.7	7.5	5.6	4.4	3.7	3.5	3.5	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1979)

0.99	3.7	3.5	3.9	4.3	7.7	6.7	5.6	4.8	4.1	4.0	4.0	3.6	6.4
0.95	4.2	4.6	6.1	7.8	9.9	7.8	6.5	5.3	4.5	4.2	4.1	3.9	7.4
0.90	4.5	5.3	7.7	10.3	11.5	8.6	7.1	5.6	4.7	4.3	4.2	4.0	8.1
0.80	4.8	6.4	10.1	14.1	13.9	9.9	7.9	6.1	5.1	4.5	4.3	4.3	9.0
0.50	5.6	9.2	16.1	23.9	20.3	13.6	9.8	7.3	5.9	5.0	4.6	4.8	11.0
0.20	6.6	13.5	24.3	36.8	30.7	20.5	12.3	9.0	6.9	5.6	5.1	5.4	13.6
0.10	7.2	16.6	29.6	44.5	38.6	26.3	13.9	10.1	7.6	6.1	5.5	5.8	15.2
0.04	7.9	20.7	35.9	53.2	49.9	35.3	16.0	11.6	8.4	6.6	6.0	6.2	17.2
0.02	8.5	23.9	40.3	58.8	59.2	43.5	17.4	12.8	9.0	7.1	6.4	6.6	18.6
0.01	9.0	27.3	44.5	64.0	69.4	53.0	18.9	14.0	9.6	7.5	6.7	6.9	20.1

STATION 12073500 HUGO CREEK NEAR WAUNA, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1949	4.1	4.2	4.3	4.3	4.4	4.5	4.8	5.0	5.6
1950	3.9	3.9	4.0	4.2	4.2	4.1	4.3	4.4	4.8
1951	3.6	3.6	3.7	3.7	3.9	4.4	4.7	5.1	5.8
1952	4.4	4.5	4.6	4.7	4.8	4.9	5.2	5.5	6.0
1953	3.6	3.6	3.7	3.8	4.0	4.1	4.1	4.2	4.3
1954	4.2	4.2	4.2	4.3	4.4	4.4	4.4	4.6	5.1
1955	4.0	4.0	4.0	4.0	4.2	4.5	4.6	4.7	5.2
1956	4.0	4.0	4.1	4.1	4.2	4.4	4.6	4.6	5.1
1957	4.1	4.2	4.5	4.9	5.1	5.3	5.6	6.0	7.1
1958	4.5	4.8	4.9	5.0	5.3	5.4	5.4	5.5	5.7
1959	4.0	4.1	4.1	4.2	4.4	4.5	4.5	4.9	4.9
1960	4.5	4.6	4.7	4.7	4.8	5.0	5.2	5.3	6.0
1961	4.6	4.8	4.8	4.9	5.0	5.1	5.2	5.4	6.5
1962	5.3	5.3	5.4	5.5	5.5	5.7	6.0	6.2	6.7
1963	4.3	4.3	4.4	4.4	4.5	4.6	4.7	4.8	5.2
1964	3.9	4.1	4.2	4.2	4.3	4.3	4.4	4.6	5.2
1965	4.4	4.5	4.6	4.7	4.8	5.0	5.0	5.1	5.4
1966	3.4	3.5	3.6	3.6	3.8	3.9	4.0	4.1	4.5
1967	3.7	3.7	3.8	3.9	4.1	4.2	4.2	4.4	4.8
1968	3.9	3.9	4.0	4.1	4.2	4.4	4.6	4.9	5.4
1969	4.8	4.9	5.0	5.1	5.5	5.9	5.8	5.9	6.6
1979	3.7	3.7	3.9	4.0	4.0	4.5	4.7	5.0	5.1

LOWEST MEAN FLOW STATISTICS (YEARS 1949-1979)

MEAN	4.1	4.2	4.3	4.4	4.5	4.7	4.8	5.0	5.5
MAXIMUM	5.3	5.3	5.4	5.5	5.5	5.9	6.0	6.2	7.1
MINIMUM	3.4	3.5	3.6	3.6	3.8	3.9	4.0	4.1	4.3
STANDARD DEVIATION	0.44	0.48	0.48	0.50	0.51	0.53	0.55	0.58	0.74
SKWENESS	0.735	0.548	0.549	0.515	0.491	0.850	0.637	0.529	0.594
STD ERROR OF SKWENESS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491
SERIAL CORR COEFF	0.075	0.099	0.079	0.096	0.037	0.079	0.112	0.095	0.091
COEFF OF VARIATION	0.108	0.113	0.112	0.114	0.113	0.113	0.114	0.116	0.134
MEAN LOGS	0.614	0.621	0.630	0.638	0.652	0.669	0.680	0.695	0.737
STD DEVIATION LOGS	0.046	0.048	0.048	0.049	0.048	0.047	0.048	0.050	0.057
SKWENESS LOGS	0.430	0.325	0.327	0.310	0.495	0.653	0.438	0.320	0.329
STD ERR SKWENESS LOGS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491
SER CORR COEFF LOGS	0.060	0.089	0.074	0.088	0.037	0.082	0.123	0.098	0.090
COEFF OF VAR LOGS	0.075	0.078	0.076	0.077	0.073	0.071	0.071	0.071	0.077

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1949-1979)

0.99	5.4	5.6	5.6	5.8	6.0	6.3	6.4	6.6	7.6
0.98	5.2	5.3	5.4	5.6	5.8	6.0	6.2	6.4	7.3
0.96	5.0	5.1	5.2	5.4	5.5	5.8	5.9	6.1	7.0
0.90	4.7	4.8	4.9	5.0	5.2	5.4	5.5	5.8	6.5
0.80	4.5	4.6	4.7	4.8	4.9	5.1	5.2	5.4	6.1
0.50	4.1	4.1	4.2	4.3	4.5	4.6	4.7	4.9	5.4
0.20	3.8	3.8	3.9	3.9	4.1	4.2	4.4	4.5	4.9
0.10	3.6	3.6	3.7	3.8	3.9	4.1	4.2	4.3	4.6
0.05	3.5	3.5	3.6	3.6	3.8	4.0	4.0	4.2	4.5
0.02	3.4	3.4	3.5	3.5	3.7	3.9	3.9	4.0	4.3
0.01	3.3	3.3	3.4	3.4	3.6	3.8	3.8	3.9	4.1

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1949-1979)

P95	P90	P75	P70	P50	P25	P10
4.2	4.5	5.1	5.4	7.1	12.0	23.0

STATION 12073500 HUGO CREEK NEAR WAUNA, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA FLOW(CFS)	DATE	REG.(R)
1948	51.	37.	33.	28.	21.	17.	16.	15.	13.	59.	03/22/48	
1949	90.	79.	58.	44.	29.	21.	20.	19.	15.	115.	02/22/49	
1950	200.	140.	79.	50.	46.	45.	36.	31.	24.	286.	01/21/50	
1951	250.	176.	111.	73.	58.	45.	41.	36.	27.	391.	02/09/51	
1952	63.	46.	40.	29.	21.	16.	15.	13.	11.	68.	02/04/52	
1953	100.	79.	65.	59.	53.	34.	27.	22.	16.	128.	01/31/53	
1954	120.	104.	78.	55.	38.	37.	33.	28.	22.	138.	02/21/54	
1955	167.	145.	29.	55.	17.	14.	13.	12.	12.	137.	02/08/55	
1956	124.	105.	76.	55.	51.	42.	35.	32.	27.	154.	12/21/55	
1957	81.	66.	46.	37.	28.	20.	18.	15.	15.	106.	12/10/56	
1958	67.	53.	39.	32.	28.	24.	20.	17.	14.	85.	01/16/58	
1959	149.	84.	59.	46.	38.	28.	23.	20.	18.	205.	04/30/59	
1960	162.	93.	62.	48.	37.	27.	24.	22.	19.	212.	12/15/59	
1961	195.	145.	89.	64.	55.	51.	42.	35.	27.	323.	01/15/61	
1962	35.	28.	24.	19.	18.	13.	12.	11.	10.	42.	12/19/61	
1963	78.	65.	47.	34.	26.	22.	20.	17.	15.	88.	11/26/62	
1964	72.	61.	54.	49.	39.	29.	24.	21.	17.	81.	01/25/64	
1965	73.	53.	33.	28.	21.	21.	19.	17.	14.	86.	12/01/64	
1966	264.	155.	98.	81.	50.	30.	28.	23.	17.	373.	01/13/66	
1967	158.	96.	62.	51.	36.	32.	26.	23.	18.	189.	12/13/66	
1968	123.	99.	66.	50.	42.	34.	30.	26.	20.	138.	01/20/68	
1969	58.	53.	45.	35.	29.	26.	23.	20.	17.	62.	12/24/68	
1978	85.	73.	46.	33.	27.	24.	21.	18.	10.	103.	12/11/77	
1979	64.	51.	36.	32.	27.	17.	14.	12.	10.	69.	03/04/79	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1948-1979)

W R C SYSTEMATIC
ESTIMATE RECORD

MEAN	114.0	83.3	58.4	44.4	35.0	27.9	24.3	21.3	17.3			
MAXIMUM	264.0	176.0	111.0	81.0	58.0	51.0	42.0	36.0	27.0			
MINIMUM	35.0	28.0	24.0	19.0	17.0	13.0	12.0	11.0	9.6			
STANDARD DEVIATION	62.76	39.14	22.62	15.68	12.27	10.24	8.40	7.01	5.12			
SKEWNESS	1.089	0.869	0.540	0.469	0.346	0.262	0.619	0.633	0.618			
STD ERROR OF SKEWNESS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472			
SERIAL CORR COEFF	0.137	-0.053	-0.253	-0.285	-0.336	-0.298	-0.255	-0.222	-0.225			
COEFF OF VARIATION	0.551	0.470	0.387	0.353	0.350	0.367	0.345	0.329	0.297			
MEAN LOGS	1.998	1.875	1.734	1.620	1.518	1.417	1.362	1.307	1.219			
STD DEVIATION LOGS	0.228	0.204	0.174	0.161	0.158	0.163	0.150	0.143	0.128			
SKEWNESS LOGS	0.212	-0.047	-0.217	-0.354	-0.178	-0.119	-0.021	-0.019	-0.015			
STD ERR SKEWNESS LOGS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472			
SER CORR COEFF LOGS	0.075	-0.143	-0.295	-0.304	-0.351	-0.334	-0.300	-0.265	-0.252			
COEFF OF VAR LOGS	0.114	0.109	0.101	0.099	0.104	0.115	0.110	0.109	0.105			
										2.0930	2.0930	
										0.2657	0.2657	
										0.0130	0.0130	
												0.4140

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1948-1979)

0.99	31.9	24.7	20.0	16.0	13.5	10.6	10.2	9.4	8.3	30.0		
0.95	43.4	34.4	27.4	21.9	17.8	13.9	13.0	11.8	10.2	45.4		
0.90	51.5	41.0	32.1	25.7	20.6	16.1	14.8	13.3	11.3	56.6		
0.80	63.8	50.6	38.9	30.8	24.4	19.1	17.2	15.4	12.9	74.0		
0.50	97.8	75.3	55.0	42.6	33.3	26.3	23.0	20.3	16.6	123.7		
0.20	154.1	111.5	76.3	57.2	44.9	35.8	30.8	26.7	21.2	207.2		
0.10	197.4	136.7	89.8	65.9	52.1	42.0	35.8	30.8	24.2	277.4		
0.04	259.4	169.5	106.1	76.1	60.8	49.5	42.0	35.9	27.7	362.5		
0.02	310.7	194.7	117.9	83.0	67.0	55.0	46.6	39.6	30.3	437.0		
0.01	366.7	220.3	129.3	89.5	73.1	60.3	51.1	43.3	32.8	517.2		

STATION 12075000 DEER CREEK NEAR SHELTON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1943				43.1	94.3	52.0	60.8	33.6	26.5	20.7	20.4	18.3	
1948											22.2	29.2	
1949	32.9	57.3	106	46.7	110	59.2	37.0	29.7	23.6	20.1	22.0	21.4	46.8
1950	29.0	73.4	73.5	86.8	121	129	65.1	39.4	28.8	23.1	23.1	22.7	59.2
1951									24.7	21.2	19.3	22.5	

STATION 12075500 CRANBERRY CREEK NEAR SHELTON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1943				36.4	86.5	36.4	56.7	22.2	15.2	9.90	8.55	7.47	
1948											8.81	11.2	
1949	13.1	40.0	102	39.3	112	59.5	29.3	20.4	11.2	7.75	6.82	6.68	36.9
1950	10.5	61.5	91.3	130	127	167	61.7	26.1	15.7	10.7	9.82	9.16	59.7
1951	22.8	77.3	115	134	200	61.7	29.5	21.0	13.6	8.79	7.64	8.92	57.5

STATION 12076000 JOHNS CREEK NEAR SHELTON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1943				37.2	70.6	32.9	47.7	24.2	15.3	10.3	8.24	6.73	
1948											8.86	10.9	
1949	12.2	27.6	69.1	35.5	74.7	55.2	31.6	20.2	11.9	8.15	5.95	6.01	29.6
1950	7.66	26.3	48.9	64.9	90.1	116	59.8	29.6	17.3	12.3	10.8	7.68	40.7
1951									12.3	8.42	6.54	6.34	

STATION 12074500 GOLDSBOROUGH CREEK NEAR SHELTON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1951													
1952	69.5	108	172	155	186	104	71.5	51.3	35.5	24.4	20.2	23.2	23.2
1953	18.6	24.9	100	376	324	122	91.7	77.4	47.2	29.3	24.3	17.3	24.3
1954	44.9	144	265	283	396	205	175	58.7	46.1	34.5	23.0	23.6	104
1955	48.7	217	156	159	162	156	175	66.9	39.8	36.9	27.1	27.9	141
1956	110	290	351	367	167	321	150	62.6	54.1	32.5	26.3	23.0	105
1957	87.1	91.9	196	223	171	227	116	63.5	40.5	29.6	25.5	20.9	163
1958	34.3	70.4	180	223	245	120	124	57.6	36.0	23.2	19.5	20.3	96.8
1959	36.0	177	218	313	174	138	184	152	59.4	34.1	24.0	30.9	95.2
1960	46.8	211	238	212	326	174	188	108	60.1	32.7	29.5	26.3	137
1961	37.1	168	138	252	519	382	128	88.5	47.6	32.5	24.4	23.7	151
1962	44.3	97.0	159	128	92.2	130	97.6	79.1	42.2	27.9	28.0	23.6	79.2
1963	58.4	233	201	176	170	126	150	80.0	40.8	34.6	28.4	25.7	110
1964	63.7	269	182	398	197	203	90.6	56.5	47.5	32.5	28.4	23.2	132
1965	30.0	106	194	241	265	115	97.8	82.8	41.1	27.4	24.2	21.7	103
1966	32.0	91.4	113	291	125	226	84.0	45.9	33.3	28.6	20.5	22.5	129
1967	41.5	82.2	305	330	280	220	127	63.8	38.7	27.6	20.9	21.0	129
1968	94.9	103	209	366	363	249	150	68.2	58.2	31.6	32.5	37.3	146
1969	69.9	128	198	208	174	137	137	63.5	41.4	29.4	22.4	33.3	103
1970	39.4	64.0	142	231	155	130	137	61.7	34.0	26.1	21.3	27.9	88.9
1971	31.6	89.3	222	312	219	308	188	74.9	52.1	34.9	24.7	26.0	132

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1951-1971)

MEAN	51.9	138.3	196.9	255.9	235.5	189.6	133.1	73.1	44.8	30.1	24.8	24.9	116.1
MAXIMUM	110.0	290.0	351.0	398.0	519.0	382.0	188.0	152.0	60.1	34.9	32.5	37.3	163.0
MINIMUM	18.6	24.9	100.0	96.2	92.2	104.0	71.5	45.9	33.3	23.2	19.5	17.3	79.2
STD DEVIATION	23.91	72.86	60.77	87.94	105.35	78.19	36.77	23.39	9.37	3.72	3.46	4.60	24.37
SKEWNESS	1.073	0.709	0.862	-0.060	1.191	1.062	0.034	2.241	0.555	-0.237	0.337	1.145	0.287
STD ERR SKEW	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.501	0.501	0.501	0.512
SER CORR COEFF	0.214	0.277	-0.319	-0.262	-0.036	-0.118	0.360	0.231	-0.006	0.141	0.064	0.306	-0.179
COEFF OF VAR	0.460	0.527	0.309	0.344	0.447	0.412	0.276	0.320	0.187	0.124	0.139	0.184	0.210
MEAN LOGS	1.675	2.078	2.275	2.380	2.334	2.246	2.107	1.848	1.644	1.476	1.391	1.390	2.056
STD DEV LOGS	0.191	0.253	0.133	0.168	0.183	0.166	0.126	0.117	0.079	0.056	0.060	0.076	0.091
SKEWNESS LOGS	0.142	-0.698	-0.083	-0.742	0.227	0.500	-0.373	1.248	0.287	-0.508	0.077	0.593	0.019
STD ERR SKEW LOGS	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.501	0.501	0.501	0.512
SER CORR LOGS	0.135	0.183	-0.336	-0.219	-0.101	-0.077	0.383	0.182	-0.024	0.139	0.097	0.288	-0.168
COEFF OF VAR LOGS	0.114	0.122	0.058	0.071	0.079	0.074	0.060	0.063	0.048	0.038	0.043	0.055	0.044
% OF AVE FLOW	3.7	9.9	14.1	18.3	16.8	13.6	9.5	5.2	3.2	2.2	1.8	1.8	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1951-1971)

0.99	17.8	23.1	90.9	79.4	86.9	83.4	60.1	48.1	29.9	21.2	17.9	17.7	69.9
0.95	23.3	41.4	113.2	118.1	111.0	99.6	77.1	50.7	33.1	23.8	19.6	19.0	80.5
0.90	27.1	55.0	127.1	142.9	127.2	110.7	87.3	52.8	35.1	25.2	20.6	19.9	86.8
0.80	32.6	75.5	145.9	176.8	150.9	127.0	100.9	56.2	37.7	27.0	21.9	21.1	95.2
0.50	46.8	128.0	189.3	251.4	212.6	170.8	130.4	66.7	43.7	30.2	24.5	24.1	113.6
0.20	68.3	197.2	244.0	334.1	308.4	240.3	164.2	85.6	51.2	33.4	27.6	28.2	135.7
0.10	83.7	238.6	278.0	378.1	374.4	292.7	183.5	100.9	56.0	34.9	29.4	31.0	148.9
0.04	104.5	285.2	318.9	424.0	466.8	366.5	205.0	123.6	61.8	34.5	31.4	34.0	164.5
0.02	120.9	315.8	348.2	452.5	540.2	427.2	219.4	143.2	65.9	37.5	32.9	37.1	175.5
0.01	138.1	343.4	376.5	477.0	618.2	493.2	232.6	165.2	70.1	38.4	34.2	39.7	186.0

STATION 12076500 GOLDSBOROUGH CREEK NEAR SHELTON, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1953	16.0	16.0	16.0	16.0	17.0	18.0	19.0	20.0	24.0
1954	19.0	19.0	20.0	21.0	20.0	22.0	25.0	29.0	40.0
1955	23.0	23.0	24.0	24.0	26.0	27.0	28.0	32.0	40.0
1956	22.0	22.0	22.0	22.0	23.0	24.0	25.0	30.0	44.0
1957	21.0	21.0	21.0	22.0	23.0	24.0	26.0	30.0	44.0
1958	20.0	20.0	20.0	21.0	21.0	22.0	24.0	26.0	33.0
1959	16.0	16.0	16.0	16.0	18.0	19.0	20.0	23.0	31.0
1960	22.0	22.0	22.0	23.0	24.0	26.0	28.0	31.0	43.0
1961	22.0	22.0	23.0	24.0	25.0	27.0	28.0	30.0	45.0
1962	20.0	20.0	21.0	21.0	22.0	24.0	25.0	29.0	40.0
1963	20.0	20.0	20.0	20.0	20.0	20.0	25.0	29.0	40.0
1964	23.0	23.0	24.0	24.0	26.0	26.0	27.0	30.0	43.0
1965	20.0	21.0	21.0	22.0	22.0	25.0	28.0	28.0	35.0
1966	19.0	19.0	20.0	21.0	21.0	23.0	24.0	26.0	36.0
1967	18.0	19.0	18.0	19.0	20.0	21.0	22.0	24.0	31.0
1968	18.0	18.0	18.0	19.0	20.0	21.0	23.0	27.0	40.0
1969	24.0	24.0	25.0	25.0	27.0	30.0	33.0	36.0	49.0
1970	19.0	20.0	20.0	20.0	21.0	22.0	27.0	31.0	37.0
1971	19.0	19.0	19.0	19.0	21.0	23.0	24.0	25.0	32.0

LOWEST MEAN FLOW STATISTICS (YEARS 1953-1971)

MEAN	20.0	20.2	20.6	21.1	22.2	23.7	25.4	28.2	38.3
MAXIMUM	24.0	24.0	25.0	25.0	27.0	30.0	30.0	36.0	49.0
MINIMUM	16.0	16.0	16.0	16.0	16.0	16.0	19.0	20.0	24.0
STANDARD DEVIATION	2.21	2.24	2.46	2.35	2.57	2.94	3.19	3.65	6.15
SKEWNESS	-0.069	-0.253	-0.131	-0.186	0.223	0.040	0.031	-0.296	-0.521
STD ERROR OF SKEWNESS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SERIAL CORR COEFF	-0.054	0.043	-0.031	-0.012	-0.017	0.015	0.069	0.124	0.098
COEFF OF VARIATION	0.111	0.111	0.119	0.111	0.116	0.125	0.125	0.129	0.161
MEAN LOGS	1.298	1.302	1.310	1.321	1.343	1.371	1.402	1.447	1.577
STD DEVIATION LOGS	0.049	0.050	0.053	0.049	0.050	0.055	0.056	0.058	0.075
SKEWNESS LOGS	-0.333	-0.498	-0.450	-0.469	-0.090	-0.305	-0.445	-0.743	-0.977
STD ERR SKEWNESS LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SER CORR COEFF LOGS	-0.037	0.053	-0.018	0.010	0.016	0.048	0.081	0.119	0.088
COEFF OF VAR LOGS	0.038	0.038	0.040	0.037	0.038	0.040	0.040	0.040	0.047

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1953-1971)

0.99	25.1	25.0	26.1	26.2	28.6	30.6	32.6	35.5	49.8
0.98	24.5	24.5	25.5	25.7	27.8	29.8	31.8	34.9	48.9
0.96	23.9	24.0	24.8	25.0	26.9	28.9	30.9	34.1	47.8
0.90	22.9	23.0	23.7	24.0	25.9	27.9	29.5	32.8	45.9
0.80	21.9	22.1	22.7	23.1	24.3	26.2	28.1	31.4	43.7
0.50	20.0	20.2	20.6	21.1	22.1	23.7	25.5	28.4	38.8
0.20	18.1	18.3	18.5	19.1	20.0	21.2	22.7	25.2	33.1
0.10	17.2	17.2	17.4	18.0	19.0	19.9	21.3	23.6	30.0
0.05	16.4	16.4	16.5	17.1	18.1	18.9	20.1	21.9	27.4
0.02	15.5	15.4	15.5	16.1	17.3	17.8	18.8	20.2	24.4
0.01	14.9	14.8	14.8	15.5	16.7	17.0	18.0	19.1	22.5

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1953-1971)

P95	P90	P75	P70	P50	P25	P10
22.0	24.0	32.0	37.0	73.0	150.0	270.0

STATION 12U76500 GOLDSBOROUGH CREEK NEAR SHELTON, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL FLOW(CFS)	PEAK-FLOW DATA DATE	REG.(R)
1952	448.	404.	376.	306.	231.	182.	176.	159.	135.	468.	01/31/52	
1953	945.	820.	665.	563.	470.	348.	273.	232.	180.	1090.	01/31/53	
1954	904.	821.	684.	575.	426.	314.	293.	242.	180.	972.	02/22/54	
1955	734.	617.	439.	333.	232.	207.	197.	180.	171.	775.	11/19/54	
1956	683.	604.	493.	410.	332.	373.	340.	309.	283.	712.	11/03/55	
1957	778.	382.	329.	329.	279.	244.	171.	178.	153.	977.	12/10/56	
1958	544.	518.	384.	287.	256.	240.	222.	192.	161.	552.	01/17/58	
1959	796.	626.	513.	358.	323.	268.	246.	226.	208.	871.	04/30/59	
1960	1100.	946.	645.	465.	408.	293.	266.	229.	229.	1390.	12/15/59	
1961	1230.	978.	772.	598.	532.	446.	384.	325.	263.	1420.	02/21/61	
1962	500.	350.	246.	219.	190.	155.	135.	130.	121.	528.	12/23/61	
1963	1040.	693.	485.	410.	305.	261.	223.	200.	178.	1160.	11/20/62	
1964	878.	684.	568.	518.	404.	331.	297.	266.	227.	972.	01/25/64	
1965	770.	632.	551.	436.	336.	253.	237.	215.	173.	832.	12/01/64	
1966	742.	651.	466.	357.	286.	212.	218.	191.	155.	861.	01/06/66	
1967	935.	686.	494.	418.	368.	327.	307.	285.	225.	1070.	12/13/66	
1968	1360.	1190.	804.	581.	463.	378.	335.	299.	243.	1430.	01/19/68	
1969	438.	424.	378.	296.	232.	213.	196.	182.	163.	458.	01/05/69	
1970	450.	424.	378.	296.	232.	213.	196.	182.	163.	498.	01/20/70	
1971	818.	678.	514.	468.	364.	270.	187.	175.	144.	884.	01/26/71	
1972						307.	296.	273.	225.	1410.	01/20/72	
1973										560.	12/26/72	
1974										700.	01/15/74	
1975										485.	12/21/74	
1976										1070.	12/03/75	
1977										397.	03/07/77	
1978										715.	12/02/77	
1979										690.	03/04/79	

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HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1952-1979)

	W R C ESTIMATE	SYSTEMATIC RECORD
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MEAN	804.6	664.2	515.2	418.6	337.9	277.3	252.1	228.8	193.9		
MAXIMUM	1360.0	1190.0	804.0	598.0	532.0	446.0	384.0	325.0	283.0		
MINIMUM	438.0	350.0	246.0	219.0	190.0	155.0	135.0	130.0	121.0		
STANDARD DEVIATION	257.31	209.35	142.29	109.07	93.27	77.05	66.60	56.72	45.77		
SKWENESS	0.363	0.793	0.419	0.131	0.363	0.412	0.173	0.142	0.285		
STD ERROR OF SKWENESS	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512		
SERIAL CORR COEFF	-0.082	-0.099	-0.123	-0.133	-0.203	-0.338	-0.286	-0.253	-0.220		
COEFF OF VARIATION	0.320	0.315	0.276	0.261	0.276	0.278	0.264	0.246	0.236		
MEAN LOGS	2.883	2.802	2.696	2.607	2.513	2.427	2.387	2.346	2.276		
STD DEVIATION LOGS	0.145	0.136	0.124	0.118	0.122	0.122	0.119	0.111	0.103		
SKWENESS LOGS	-0.303	-0.029	-0.384	-0.390	-0.109	-0.075	-0.314	-0.224	-0.057		
STD ERR SKWENESS LOGS	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512		
SER CORR COEFF LOGS	-0.077	-0.121	-0.141	-0.145	-0.234	-0.352	-0.285	-0.249	-0.205		
COEFF OF VAR LOGS	0.050	0.048	0.046	0.045	0.048	0.050	0.050	0.047	0.045		
										2.9026	2.9026
										0.1652	0.1652
										0.0480	-0.1280

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1952-1979)

0.99	327.2	304.7	236.4	198.9	166.0	137.0	120.9	117.7	107.4	334.4	318.3
0.95	430.0	378.5	301.8	251.4	203.7	167.4	151.6	147.7	127.1	429.8	421.7
0.90	494.1	424.7	341.2	282.7	226.8	186.1	170.0	159.2	139.0	491.8	488.4
0.80	581.1	487.9	393.3	323.9	257.7	211.2	194.4	179.7	154.6	579.7	561.7
0.50	777.7	635.3	505.5	411.8	327.4	268.2	247.1	224.1	189.3	796.7	805.6
0.20	1016.3	825.3	633.2	510.6	412.9	338.8	307.7	275.8	230.9	1099.5	1102.9
0.10	1158.1	945.5	705.3	565.8	464.9	382.0	342.5	308.7	258.9	1303.5	1293.8
0.05	1322.2	1092.3	785.5	627.0	526.3	433.6	381.6	339.9	285.2	1564.8	1528.7
0.02	1435.1	1198.7	836.9	667.4	569.6	470.2	408.0	363.3	305.8	1762.2	1699.6
0.01	1541.1	1302.8	887.7	704.3	611.1	505.5	432.4	385.1	325.4	1961.8	1867.2

STATION 12078000 SKOOKUM CREEK AT KAMILCHE, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1951													
1952	35.2	65.9	108	85.4	94.6	44.0	31.6	16.8	6.24	2.14	1.65	2.33	41.1
1953	2.39	3.39	43.0	31.8	160	39.6	35.8	29.6	13.1	2.56	2.29	2.19	54.2
1954	13.1	87.6	194	167	181	67.4	64.3	15.5	10.5	4.47	2.62	3.04	67.5
1955	16.3	94.8	85.9	90.3	89.5	82.6	88.1	22.6	11.3	5.75	3.52	2.69	48.9
1956	53.9	180	191	157	69.8	149	53.2	12.4	11.3	4.87	3.02	2.47	78.1
1957	39.3	58.0	139	48.5	96.9	107	45.4	13.4	5.04	2.89	2.70	2.17	46.5
1958	5.90	25.1	117	123	125	57.1	72.0	17.1	6.63	3.05	1.60	2.50	46.0
1959	8.27												

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1952	294.0	2- 4-1952
1953	795.0	1-31-1953
1954	676.0	12-12-1953
1955	429.0	2- 8-1955
1956	621.0	12-12-1955
1957	715.0	12-10-1956
1958	332.0	12-26-1957

STATION 12078400 KENNEDY CREEK NEAR KAMILCHE, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1960													
1961	6.45	99.8	70.6	147	185	87.6	104	41.8	17.1	6.34	3.76	3.28	72.3
1962	8.66	37.6	135	96.5	252	201	39.1	44.2	9.43	4.56	2.98	3.00	47.0
1963	21.4	176	127	77.0	92.1	65.9	72.9	44.3	11.8	4.51	5.18	4.25	59.0
1964	16.7	155	93.3	261	100.0	130	93.4	36.8	8.29	5.75	3.99	4.07	69.6
1965	8.27	64.0	150.3	191	141	45.8	34.3	16.4	13.4	7.37	4.68	4.27	56.7
1966	6.92	44.4	80.9	180	71.2	158	39.8	14.0	10.6	4.29	3.48	2.95	51.3
1967	10.7	35.7	197	212	130	110	47.8	17.9	6.41	3.14	2.31	2.51	66.5
1968	36.3	56.5	135	149	177	111	56.0	22.7	25.5	6.76	7.73	11.3	61.4
1969	42.9	92.6	157	149	134	62.7	56.2	18.7	9.67	6.34	3.66	7.48	48.3
1970	20.0	29.3	95.2	162	111	54.8	65.4	25.8	7.95	3.85	2.35	5.41	78.0
1971	10.9	52.6	227	240	103	184	72.4	17.3	11.2	6.15	3.25	4.85	

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1960-1971)

MEAN	17.2	76.7	133.5	169.5	129.5	108.0	59.6	27.4	11.5	5.4	3.9	4.8	61.3
MAXIMUM	42.9	176.0	227.0	261.0	252.0	201.0	104.0	44.3	25.5	7.4	7.7	11.3	78.0
MINIMUM	6.4	29.3	70.6	77.0	57.7	45.8	33.6	14.0	6.4	3.1	2.3	2.5	47.0
STD DEVIATION	12.28	49.42	46.43	55.69	54.24	51.24	22.92	11.53	5.30	1.29	1.48	2.45	10.01
SKENNESS	1.312	1.198	0.622	-0.004	0.989	0.648	0.719	0.489	1.889	-0.196	1.732	2.013	0.064
STD ERR SKEW	0.661	0.661	0.661	0.661	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.661
SER CORR COEFF	0.444	0.197	-0.522	0.068	0.051	-0.394	-0.036	0.614	-0.283	-0.357	-0.208	0.218	-0.502
COEFF OF VAR	0.714	0.645	0.363	0.329	0.419	0.474	0.385	0.420	0.460	0.341	0.384	0.516	0.163
MEAN LOGS	1.147	1.611	2.099	2.205	2.079	1.988	1.746	1.403	1.028	0.717	0.563	0.637	1.782
STD DEV LOGS	0.283	0.259	0.159	0.159	0.179	0.209	0.164	0.183	0.169	0.112	0.147	0.184	0.072
SKENNESS LOGS	0.558	0.494	-0.027	-0.789	-0.002	0.019	0.178	0.174	0.960	-0.592	0.793	1.090	-0.188
STD ERR SKEW LOGS	0.661	0.661	0.661	0.661	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.661
SER CORR LOGS	0.469	0.069	-0.536	0.153	-0.030	-0.391	0.038	0.446	-0.290	-0.386	-0.181	0.213	-0.494
COEFF OF VAR LOGS	0.247	0.143	0.076	0.072	0.086	0.105	0.094	0.130	0.165	0.156	0.261	0.288	0.040
% OF AVE FLOW	2.3	10.3	17.9	22.7	17.3	14.5	8.0	3.7	1.5	0.7	0.5	0.6	100.0

STATION 12078400 KENNEDY CREEK NEAR KAMILCHE, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1960-1971)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
4.0	20.1	53.3	68.7	81.9	95.9	105.8	119.8	134.6	150.4	167.1
5.4	26.6	68.7	81.9	95.9	105.8	119.8	134.6	150.4	167.1	184.8
6.4	31.3	76.6	92.5	105.8	119.8	134.6	150.4	167.1	184.8	203.6
8.0	38.8	92.5	105.8	119.8	134.6	150.4	167.1	184.8	203.6	223.4
13.2	61.6	125.9	168.1	219.2	283.6	359.9	437.7	516.4	596.1	676.8
23.7	104.9	171.0	219.2	283.6	359.9	437.7	516.4	596.1	676.8	757.5
33.3	142.5	200.5	245.6	293.4	359.9	437.7	516.4	596.1	676.8	757.5
49.2	202.1	272.6	327.5	382.4	437.7	516.4	596.1	676.8	757.5	838.2
64.4	256.5	326.8	382.4	437.7	516.4	596.1	676.8	757.5	838.2	918.9
82.8	320.6	382.4	437.7	516.4	596.1	676.8	757.5	838.2	918.9	999.6

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1961	3.0	3.0	3.0	3.1	3.2	3.5	3.7	4.7	11.0
1962	2.4	2.4	2.5	2.5	2.7	2.9	3.2	4.0	8.0
1963	2.5	2.5	2.6	2.7	2.7	2.9	3.2	4.0	8.0
1964	2.9	2.9	3.1	3.3	3.3	3.9	4.1	4.7	12.0
1965	3.0	3.2	3.5	3.9	4.0	4.4	5.2	6.0	8.8
1966	2.4	2.4	2.5	2.7	2.9	3.2	3.4	4.3	9.0
1967	2.3	2.4	2.7	2.8	3.0	3.3	3.4	4.0	6.7
1968	1.8	1.8	1.9	2.0	2.1	2.4	2.6	3.5	9.0
1969	3.4	3.5	3.7	4.0	4.8	6.7	8.1	9.9	19.0
1970	2.9	2.9	3.0	3.0	3.2	3.7	5.1	6.6	11.0
1971	1.6	1.7	1.8	1.9	2.2	2.9	3.5	4.1	8.0

LOWEST MEAN FLOW STATISTICS (YEARS 1961-1971)

MEAN	2.6	2.6	2.7	2.9	3.2	3.8	4.3	5.2	10.4
MAXIMUM	3.4	3.5	3.7	4.0	4.8	6.7	8.1	9.9	19.0
MINIMUM	1.6	1.7	1.8	1.9	2.1	2.4	2.6	3.5	6.7
STANDARD DEVIATION	0.54	0.56	0.59	0.67	0.80	1.15	1.51	1.82	3.34
SKEWNESS	-0.413	-0.204	-0.071	0.242	0.474	1.747	1.818	1.893	1.818
STD ERROR OF SKEWNESS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
SERIAL CORR COEFF	-0.175	-0.206	-0.252	-0.188	-0.198	-0.277	-0.104	-0.041	-0.008
COEFF OF VARIATION	0.212	0.213	0.214	0.231	0.247	0.307	0.354	0.349	0.321
MEAN LOGS	0.399	0.407	0.429	0.452	0.497	0.559	0.608	0.699	1.000
STD DEVIATION LOGS	0.099	0.098	0.097	0.103	0.108	0.119	0.134	0.130	0.122
SKEWNESS LOGS	-0.834	-0.626	-0.542	-0.256	-0.090	0.911	1.004	1.240	1.008
STD ERR SKEWNESS LOGS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
SER CORR COEFF LOGS	-0.186	-0.218	-0.265	-0.205	-0.201	-0.297	-0.126	-0.068	0.026
COEFF OF VAR LOGS	0.249	0.241	0.227	0.227	0.217	0.213	0.220	0.185	0.122

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1961-1971)

0.99	3.7	3.9	4.1	4.7	5.5	8.1	10.3	12.9	23.5
0.98	3.6	3.7	4.0	4.4	5.2	7.2	8.9	11.0	20.5
0.96	3.5	3.6	3.8	4.2	4.8	6.3	7.6	9.3	17.8
0.90	3.3	3.3	3.5	3.8	4.3	5.2	6.1	7.5	14.6
0.80	3.0	3.0	3.1	3.5	3.9	4.5	5.1	6.2	12.4
0.50	2.6	2.6	2.7	2.9	3.1	3.5	3.9	4.7	9.6
0.20	2.1	2.1	2.2	2.3	2.5	2.9	3.1	3.9	7.9
0.10	1.8	1.9	2.0	2.1	2.3	2.6	2.9	3.6	7.3
0.05	1.6	1.7	1.8	1.9	2.1	2.5	2.7	3.5	6.9
0.02	1.4	1.5	1.6	1.7	2.1	2.5	2.7	3.5	6.6
0.01	1.3	1.4	1.5	1.6	1.7	2.3	2.6	3.3	6.4

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1961-1971)

P95	P90	P75	P70	P50	P25	P10
2.9	3.5	6.1	8.3	27.0	82.0	170.0

STATION 12078400 KENNEDY CREEK NEAR KAMILCHE, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30										ANNUAL PEAK-FLOW DATA	
YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW(CFS)	DATE REG.(R)
1961	893.	582.	441.	327.	298.	231.	199.	175.	137.	1090.	02/21/61
1962	350.	300.	239.	197.	166.	121.	100.	95.	85.	466.	12/23/61
1963	754.	511.	383.	342.	242.	176.	139.	122.	107.	1110.	11/20/62
1964	844.	528.	433.	354.	272.	198.	183.	162.	129.	1100.	01/25/64
1965	587.	522.	426.	299.	219.	181.	169.	144.	105.	707.	01/27/65
1966	451.	377.	309.	274.	198.	134.	143.	125.	96.	545.	03/09/66
1967	617.	432.	314.	258.	216.	204.	182.	164.	123.	820.	12/13/66
1968	434.	349.	286.	223.	194.	164.	154.	143.	116.	560.	02/04/68
1969	432.	355.	320.	236.	170.	166.	152.	135.	108.	507.	01/07/69
1970	411.	332.	285.	259.	186.	145.	127.	110.	86.	487.	01/27/70
1971	743.	640.	441.	360.	259.	238.	194.	192.	147.	1060.	01/26/71
1972										1160.	01/20/72
1973										1100.	12/26/72
1974										478.	01/16/74
1976										1180.	12/03/75
1977										518.	03/07/77
1978										1380.	12/11/77
1979										532.	03/04/79

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1961-1979)

MEAN	592.4	452.5	352.5	284.5	220.0	178.0	158.4	142.5	112.6		
MAXIMUM	893.0	640.0	441.0	360.0	298.0	238.0	199.0	192.0	147.0		
MINIMUM	350.0	300.0	239.0	197.0	166.0	121.0	100.0	95.0	85.0		
STANDARD DEVIATION	191.20	118.34	74.01	55.77	43.06	37.57	30.43	29.06	20.06		
SKWENESS	0.343	0.257	0.031	-0.009	0.513	0.184	-0.430	0.091	0.231		
STD ERROR OF SKWENESS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661		
SERIAL CORR COEFF	-0.188	-0.156	-0.141	-0.001	-0.193	-0.592	-0.408	-0.443	-0.540		
COEFF OF VARIATION	0.323	0.261	0.210	0.196	0.196	0.211	0.192	0.204	0.178		
MEAN LOGS	2.752	2.642	2.538	2.446	2.335	2.241	2.192	2.145	2.045	2.8831	2.8831
STD DEVIATION LOGS	0.141	0.114	0.093	0.087	0.084	0.093	0.089	0.091	0.078	0.1728	0.1728
SKWENESS LOGS	0.059	0.036	-0.183	-0.266	0.245	-0.188	-0.862	-0.318	-0.064	0.0490	0.0490
STD ERR SKWENESS LOGS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661		
SER CORR COEFF LOGS	-0.245	-0.181	-0.190	-0.043	-0.192	-0.589	-0.359	-0.403	-0.529		
COEFF OF VAR LOGS	0.051	0.043	0.037	0.036	0.036	0.042	0.041	0.042	0.038		
HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1961-1979)											
0.99	268.4	239.2	203.6	168.3	143.1	102.7	85.0	81.8	72.6	307.2	305.8
0.95	332.3	285.1	240.0	197.8	159.8	121.1	106.2	97.2	82.4	399.3	398.6
0.90	372.7	313.2	261.2	214.8	169.9	131.9	118.0	106.2	88.1	459.8	459.5
0.80	428.9	351.2	288.8	236.6	183.6	145.9	132.6	117.6	95.5	546.1	546.3
0.50	562.8	437.8	347.5	281.9	214.6	175.5	160.1	141.3	111.2	761.5	762.3
0.20	742.0	547.2	414.3	331.6	253.6	209.2	185.4	167.0	129.1	1066.7	1067.1
0.10	858.9	615.3	452.5	359.2	278.1	228.5	197.2	181.2	139.5	1273.8	1273.8
0.04	1005.3	697.9	495.8	389.7	307.8	250.3	208.4	196.8	151.3	1540.1	1540.1
0.02	1113.7	757.3	525.2	410.0	329.3	265.1	214.9	207.1	159.4	1747.7	1741.9
0.01	1221.8	815.3	552.5	428.6	350.4	278.9	220.1	216.5	167.0	1955.6	1946.6

STATION 12078600 SCHNEIDER CREEK TRIBUTARY NEAR SHELTON, WASH.

ANNUAL PEAK FLOW DATA			ANNUAL PEAK FLOW STATISTICS (YEARS 1950-1969)			W R C		SYSTEMATIC RECORD
WATER YEAR	FLOW (CFS)	DATE	MEAN LOGS	STANDARD DEVIATION LOGS	SKWENESS LOGS	ESTIMATE		
1950	97.0	12-28-1949				1.7300	1.7234	
1951	96.0	2-10-1951				0.1693	0.1678	
1952	24.0	12-4-1951				-0.0029	-0.0250	
1953	54.0	1-31-1953						
1954	55.0	1-6-1954						
1955	47.0	2-8-1955						
1956	73.0	12-11-1955						
1957	106.0	12-9-1956						
1958	35.0	12-25-1957	0.99					
1959	39.0	1-24-1959	0.95					
1960	86.0	12-15-1959	0.90			21.5	20.1	
1961	57.0	2-21-1961	0.90			28.2	27.3	
1962	30.0	12-23-1961	0.80			32.5	31.9	
1963	65.0	11-19-1962	0.50			38.7	38.4	
1964	68.0	1-25-1964	0.20			53.8	53.8	
1965	64.0	11-30-1964	0.10			74.6	73.5	
1966	47.0	1-13-1966	0.04			88.4	85.8	
1967	62.0	1-19-1967	0.02			105.9	100.5	
1968	41.0	1-19-1968	0.01			118.9	111.0	
1969	36.0	2-11-1969				131.9	121.0	

STATION 12079000 DESCHUTES RIVER NR RAINIER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)											
YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	ANNUAL
1949	60.0	325	537	671	855	755	421	193	61.2	43.8	35.4
1950	191	570	639	672	809	385	266	122	109	53.3	335
1951	175	353	480	353	510	248	232	166	57.1	40.8	312
1952	135	280	709	1071	478	273	182	173	70.8	45.5	223
1953	135	280	709	1071	478	273	182	173	119	63.6	224
1954	135	280	709	1071	478	273	182	173	137	77.6	328
1955	90.9	332	373	327	381	355	517	248	141	79.6	244
1956	274	719	1063	784	303	735	366	129	118	53.6	387
1957	138	188	461	162	614	576	267	139	80.3	47.3	226
1958	58.1	149	522	552	566	232	345	106	66.9	39.9	223
1959	68.9	536	435	752	306	328	297	191	116	53.4	267
1960	172	391	351	246	551	415	455	287	103	53.5	258
1961	105	725	290	588	918	634	277	255	80.1	50.7	329
1962	113	512	491	260	169	235	254	192	86.2	44.7	175
1963	95.3	501	284	902	361	243	373	189	67.9	60.9	225
1964	59.0	314	725	709	483	373	227	156	133	64.3	265
1965	43.1	130	264	607	263	196	185	117	60.0	41.5	246
1966	77.9	212	769	832	385	622	281	117	67.9	64.2	211
1967	175	180	398	438	697	369	228	107	83.1	45.5	275
1968	166	370	600	495	457	352	211	168	92.3	54.6	242
1969	119	171	454	756	433	243	310	138	62.6	39.7	267
1970	80.7	209	798	1056	433	642	232	206	130	64.5	228
1971	107	313	446	868	832	839	413	178	86.6	79.2	346
1972	42.7	114	624	425	160	218	118	107	86.3	43.2	351
1973	85.2	606	753	1004	628	401	189	192	161	50.9	169
1974	37.3	306	473	870	532	390	189	192	73.5	110	385
1975										46.6	267

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1949-1975)

MEAN	106.8	336.2	520.6	630.1	520.0	425.2	300.2	167.7	97.2	56.6	41.8	269.7
MAXIMUM	274.0	725.0	1063.0	1071.0	943.0	839.0	517.0	287.0	175.0	110.0	74.1	389.0
MINIMUM	25.4	35.9	189.0	162.0	160.0	136.0	118.0	106.0	57.1	37.6	29.5	189.0
STD DEVIATION	58.34	186.95	196.46	266.19	215.68	189.30	100.01	48.68	32.79	15.90	9.58	60.08
SKENNESS	0.999	0.621	0.749	-0.142	0.420	0.743	0.327	0.710	0.772	1.646	1.466	0.477
STD ERR SKEW	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.448	0.448	0.448	0.456
SER CORR COEFF	0.054	-0.085	-0.349	-0.049	-0.193	-0.048	-0.055	0.206	-0.095	-0.090	-0.039	-0.288
COEFF OF VAR	0.546	0.556	0.381	0.422	0.415	0.445	0.333	0.290	0.337	0.329	0.358	0.223
MEAN LOGS	1.965	2.449	2.686	2.751	2.676	2.589	2.453	2.207	1.965	1.739	1.612	2.421
STD DEV LOGS	0.248	0.291	0.171	0.226	0.201	0.189	0.152	0.123	0.141	0.109	0.092	0.096
SKENNESS LOGS	-0.298	-1.048	-0.327	-0.895	-0.689	0.225	-0.386	0.191	0.318	0.859	0.670	0.034
STD ERR SKEW LOGS	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.448	0.448	0.448	0.456
SER CORR LOGS	-0.013	-0.069	-0.328	-0.069	-0.249	-0.097	-0.136	0.138	-0.087	-0.101	-0.022	-0.303
COEFF OF VAR LOGS	0.119	0.119	0.064	0.082	0.075	0.073	0.062	0.056	0.072	0.063	0.057	0.040
* OF AVE FLOW	3.3	10.4	16.0	19.4	16.0	13.1	9.2	5.2	3.0	1.7	1.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1949-1975)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
21.6	36.3	177.1	121.5	129.1	151.8	113.9	86.8	46.9	35.9	27.8
34.4	79.4	245.5	214.8	204.9	195.4	153.8	102.8	55.8	38.9	30.2
43.7	114.4	289.7	281.2	256.1	224.9	178.9	112.8	61.7	41.0	31.8
57.6	169.8	351.1	377.9	328.9	268.1	213.1	126.7	70.0	44.2	34.1
94.9	315.3	495.3	608.5	499.5	381.6	290.2	159.8	90.7	52.9	39.9
150.0	496.9	677.9	878.6	703.9	555.9	382.6	204.0	120.5	66.5	48.4
187.7	594.6	749.5	1023.5	819.1	683.1	437.1	233.1	141.2	76.7	54.2
235.7	692.8	920.8	1172.2	944.1	857.1	499.0	289.7	185.5	90.7	61.9
271.3	750.3	1012.3	1262.4	1028.4	950.9	540.9	297.0	189.7	102.1	69.2
306.7	797.0	1099.0	1337.8	1095.2	1143.9	579.9	324.3	211.6	114.3	74.0
										106.5
										158.2
										183.4
										198.5
										218.5
										263.1
										317.2
										350.1
										389.1
										416.7
										443.3

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1951	28.0	29.0	30.0	30.0	33.0	38.0	42.0	54.0	94.0
1952	26.0	26.0	27.0	27.0	30.0	32.0	35.0	40.0	69.0
1953	22.0	23.0	23.0	23.0	24.0	25.0	27.0	29.0	38.0
1954	33.0	33.0	33.0	34.0	38.0	41.0	48.0	66.0	93.0
1955	39.0	39.0	39.0	41.0	49.0	50.0	53.0	65.0	85.0
1956	36.0	36.0	36.0	37.0	39.0	48.0	56.0	71.0	132.0
1957	33.0	33.0	34.0	34.0	35.0	37.0	40.0	49.0	84.0
1958	29.0	29.0	31.0	31.0	32.0	34.0	37.0	40.0	61.0
1959	28.0	28.0	28.0	28.0	29.0	30.0	32.0	37.0	54.0
1960	36.0	36.0	37.0	38.0	39.0	44.0	55.0	69.0	95.0
1961	33.0	34.0	34.0	36.0	40.0	46.0	46.0	49.0	104.0
1962	28.0	28.0	29.0	30.0	33.0	34.0	37.0	43.0	66.0
1963	29.0	29.0	30.0	31.0	33.0	36.0	39.0	48.0	75.0
1964	30.0	31.0	33.0	34.0	36.0	41.0	42.0	47.0	80.0
1965	34.0	34.0	36.0	39.0	40.0	45.0	49.0	53.0	79.0
1966	25.0	25.0	26.0	27.0	29.0	33.0	36.0	44.0	51.0
1967	27.0	28.0	28.0	30.0	32.0	33.0	34.0	44.0	60.0
1968	25.0	26.0	26.0	27.0	32.0	33.0	34.0	48.0	78.0
1969	36.0	37.0	38.0	40.0	44.0	53.0	67.0	74.0	107.0
1970	31.0	31.0	31.0	32.0	34.0	40.0	53.0	63.0	88.0
1971	24.0	25.0	26.0	27.0	29.0	33.0	34.0	36.0	59.0
1972	37.0	38.0	38.0	40.0	43.0	48.0	53.0	67.0	104.0
1973	31.0	31.0	32.0	34.0	37.0	42.0	48.0	51.0	67.0
1974	25.0	25.0	26.0	27.0	28.0	32.0	39.0	49.0	65.0
1975	31.0	31.0	32.0	33.0	33.0	36.0	42.0	53.0	91.0

LOWEST MEAN FLOW STATISTICS (YEARS 1951-1975)

MEAN	30.2	30.6	31.3	32.4	34.8	38.6	43.2	51.3	79.2
MAXIMUM	39.0	39.0	39.0	41.0	49.0	53.0	67.0	74.0	132.0
MINIMUM	22.0	23.0	23.0	23.0	24.0	25.0	27.0	36.0	21.02
STANDARD DEVIATION	4.55	4.48	4.46	4.93	5.71	7.02	9.32	12.19	0.366
SKEWNESS	0.140	0.229	0.070	0.146	0.338	0.319	0.625	0.299	0.464
STD ERROR OF SKEWNESS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SERIAL CORR COEFF	0.100	0.080	0.051	0.034	0.097	0.127	0.102	0.036	0.022
COEFF OF VARIATION	0.150	0.146	0.142	0.152	0.164	0.182	0.216	0.237	0.266
MEAN LOGS	1.476	1.481	1.476	1.506	1.537	1.580	1.626	1.698	1.883
STD DEVIATION LOGS	0.066	0.064	0.063	0.067	0.070	0.079	0.092	0.105	0.120
SKEWNESS LOGS	-0.119	-0.003	-0.163	-0.124	0.087	-0.068	0.125	-0.042	-0.442
STD ERR SKEWNESS LOGS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SER CORR COEFF LOGS	0.082	0.070	0.052	0.041	0.089	0.129	0.095	0.014	0.012
COEFF OF VAR LOGS	0.045	0.043	0.042	0.044	0.046	0.050	0.057	0.062	0.064

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1951-1975)

0.99	42.0	42.6	42.6	45.2	50.7	57.6	70.7	84.9	132.7
0.98	40.4	40.9	41.2	43.5	48.4	54.9	66.3	80.1	125.9
0.96	38.8	39.1	39.6	41.6	45.9	52.1	61.9	75.1	118.5
0.90	36.3	36.5	37.2	38.9	42.4	47.9	55.7	67.7	107.2
0.80	34.0	34.3	35.0	36.5	39.4	44.3	50.5	61.3	96.8
0.50	30.0	30.3	31.1	32.1	34.3	38.1	42.1	50.3	78.0
0.20	26.4	26.8	27.5	28.2	30.0	32.6	35.4	40.8	61.1
0.10	24.6	25.1	25.7	26.3	28.0	30.0	32.3	36.5	53.1
0.05	23.2	23.6	24.3	24.8	26.5	28.0	30.1	33.2	47.0
0.02	21.7	22.4	22.8	23.1	24.8	25.9	27.8	29.8	40.7
0.01	20.7	21.5	21.8	22.1	23.8	24.6	26.3	27.6	36.8

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1951-1975)

FLOW DURATION DATA

P95	P90	P75	P70	P50	P25	P10
32.0	37.0	57.0	68.0	150.0	330.0	640.0

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

ANNUAL PEAK-FLOW DATA

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW(CFS)	DATE	REG.(R)
1950	3080.	2660.	1690.	1420.	1100.	925.	828.	741.	597.	3940.	12/28/49	
1951	2660.	2520.	1750.	1180.	978.	777.	782.	683.	555.	3570.	02/09/51	
1952	2250.	1530.	1400.	928.	632.	463.	485.	435.	388.	3160.	01/30/52	
1953	1980.	1590.	1310.	1260.	1200.	830.	612.	511.	394.	2770.	01/09/53	
1954	2560.	2120.	1450.	1260.	922.	830.	791.	700.	560.	4740.	12/09/53	
1955	2380.	1360.	843.	711.	585.	442.	417.	413.	391.	3260.	02/08/55	
1956	3560.	2840.	1960.	1490.	1230.	1040.	877.	741.	675.	5620.	12/12/55	
1957	3160.	2620.	1620.	1230.	878.	605.	480.	467.	379.	3760.	02/24/57	
1958	2100.	1440.	1110.	859.	642.	620.	554.	469.	395.	2620.	12/26/57	
1959	2190.	1580.	1380.	875.	779.	604.	597.	520.	451.	3050.	11/12/58	
1960	2430.	1690.	1200.	787.	651.	488.	497.	452.	417.	3360.	11/21/59	
1961	2590.	2110.	1780.	1250.	938.	787.	714.	689.	579.	4070.	11/25/60	
1962	1740.	1200.	1020.	759.	573.	453.	339.	299.	280.	2360.	12/21/61	
1963	3040.	1990.	1340.	1030.	739.	522.	475.	405.	377.	4340.	11/26/62	
1964	3930.	2320.	1610.	1280.	940.	673.	594.	523.	443.	5160.	01/25/64	
1965	2990.	2240.	1580.	1030.	778.	738.	682.	581.	435.	4610.	12/23/64	
1966	2540.	1720.	1190.	943.	690.	620.	519.	474.	367.	3110.	01/06/66	
1967	3390.	2250.	1360.	1160.	872.	808.	685.	622.	487.	3940.	12/13/66	
1968	2510.	1840.	1130.	675.	666.	544.	494.	433.	381.	3200.	02/04/68	
1969	1760.	1430.	1080.	825.	671.	609.	545.	493.	435.	2480.	12/04/68	
1970	2560.	1620.	1330.	1300.	871.	673.	579.	490.	387.	3060.	01/14/70	
1971	3720.	2860.	1860.	1600.	1140.	944.	779.	782.	603.	4350.	12/07/70	
1972	4600.	3570.	2280.	1540.	1230.	1070.	875.	761.	614.	7420.	01/21/72	
1973	2100.	1770.	1610.	1180.	822.	553.	437.	364.	278.	3800.	12/21/72	
1974	4870.	3950.	2550.	1550.	1230.	956.	868.	787.	667.	7780.	01/15/74	
1975	2900.	2240.	1650.	1230.	952.	760.	659.	598.	473.	3740.	01/14/75	
1976										5650.	12/04/75	
1977										3380.	03/09/77	
1978										7360.	12/02/77	
1979										3670.	02/06/79	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1950-1979)

M R C SYSTEMATIC
ESTIMATE RECORD

MEAN	2844.2	2132.7	1514.0	1130.8	873.4	697.7	621.7	555.3	461.1
MAXIMUM	4870.0	3950.0	2550.0	1600.0	1230.0	1070.0	877.0	787.0	675.0
MINIMUM	1740.0	1200.0	843.0	675.0	573.0	425.0	339.0	299.0	278.0
STANDARD DEVIATION	788.67	667.39	385.44	274.61	212.58	189.31	155.13	138.30	111.45
SKEWNESS	1.051	1.069	0.775	-0.015	0.395	0.390	0.218	0.216	0.441
STD ERROR OF SKEWNESS	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
SERIAL CORR COEFF	0.030	0.040	0.150	0.171	-0.001	-0.158	-0.259	-0.215	-0.295
COEFF OF VARIATION	0.277	0.313	0.255	0.243	0.243	0.271	0.250	0.249	0.242
MEAN LOGS	3.439	3.310	3.167	3.040	2.929	2.828	2.780	2.731	2.652
STD DEVIATION LOGS	0.114	0.129	0.109	0.111	0.105	0.118	0.111	0.111	0.105
SKEWNESS LOGS	0.422	0.348	0.004	-0.366	0.076	-0.008	-0.210	-0.013	0.0760
STD ERR SKEWNESS LOGS	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
SER CORR COEFF LOGS	0.039	0.028	0.118	-0.118	-0.026	-0.201	-0.266	-0.222	-0.321
COEFF OF VAR LOGS	0.033	0.039	0.034	0.036	0.036	0.042	0.040	0.041	0.040
									3.5923
									0.1352
									0.0760

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1950-1979)

0.99	1623.8	1107.6	819.9	567.6	489.6	356.4	319.8	285.5	255.1	1920.0	2228.3
0.95	1849.0	1294.9	972.3	704.4	572.8	429.6	390.1	348.6	301.1	2359.6	2510.5
0.90	1994.0	1415.7	1065.0	785.4	623.5	474.6	432.2	386.2	338.1	2631.1	2705.4
0.80	2198.1	1586.3	1189.1	890.9	691.7	535.2	487.6	435.8	366.0	3006.1	2995.0
0.50	2699.3	2007.6	1468.6	1114.4	846.5	673.5	608.2	543.6	448.6	3895.4	3772.5
0.20	3402.1	2603.3	1814.1	1363.7	1040.3	847.1	749.2	669.1	545.5	5076.2	5001.5
0.10	3881.1	3011.9	2026.1	1502.8	1160.7	954.8	831.3	742.0	610.8	5842.8	5922.4
0.04	4503.7	3545.7	2279.8	1656.5	1306.3	1084.7	925.3	825.3	683.6	6799.8	7213.5
0.02	4981.3	3956.9	2460.4	1758.2	1410.9	1177.7	989.7	882.2	735.1	7507.0	8272.4
0.01	5471.2	4380.0	2635.1	1850.9	1512.9	1268.1	1050.0	935.5	784.6	8210.9	9418.5

STATION 12080000 DESCHUTES RIVER NEAR OLYMPIA, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1945													
1946	82.8	482	626	846	875	636	390	327	139	94.8	79.2	91.5	391
1947	144	511	952	616	712	371	337	179	197	163	105	98.0	352
1948	315	451	549	834	711	619	527	499	246	146	122	128	428
1949	169	516	1051	352	1027	613	359	333	165	119	100	92.7	404
1950	119	392	728	1002	1215	1176	664	346	221	149	127	116	517
1951	263	742	934	1021	1344	717	413	260	164	127	111	104	512
1952	247	419	620	466	713	376	328	244	146	115	91.7	81.3	319
1953	76.8	85.6	242	1308	794	424	305	277	211	136	106	94.4	336
1954	196	357	893	1015	1246	583	604	262	246	162	118	115	478
1955	156												
1957													
1958	129	226	658	732	780	408	497	217	193	130	115	96.1	338
1959	130	709	630	990	579	517	489	346	207	137	106	152	415
1960	238	554	581	419	799	626	676	423	212	148	127	116	408
1961	170	919	451	792	1302	981	486	433	207	147	117	115	504
1962	163	286	612	423	303	377	382	309	177	116	101	98.0	279
1963	195	709	743	465	707	404	616	333	182	147	123	125	393
1964	177	651	436	1305	741	581	379	274	230				

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1945-1964)

MEAN	174.7	500.6	669.1	786.6	865.5	588.1	465.7	311.1	190.8	132.5	107.3	105.8	404.9
MAXIMUM	315.0	919.0	1051.0	1308.0	1344.0	1176.0	676.0	499.0	246.0	163.0	127.0	152.0	517.0
MINIMUM	76.8	85.6	242.0	352.0	303.0	371.0	305.0	179.0	136.0	94.8	79.2	81.3	279.0
STD DEVIATION	63.39	213.16	211.47	309.39	287.43	224.65	122.94	83.58	34.81	20.03	14.62	18.35	73.40
STANDARD SKW	0.551	0.016	0.039	0.189	0.241	1.480	0.470	0.676	-0.042	-0.228	-0.383	0.965	0.125
STD ERR SKW	0.550	0.564	0.564	0.564	0.564	0.564	0.564	0.550	0.536	0.550	0.550	0.550	0.580
SER CORR COEFF	-0.175	-0.064	-0.204	-0.280	-0.019	0.087	-0.194	0.119	-0.598	-0.533	-0.143	-0.166	-0.175
COEFF OF VAR	0.363	0.426	0.316	0.393	0.332	0.382	0.264	0.269	0.182	0.151	0.136	0.173	0.181
MEAN LOGS	2.214	2.648	2.802	2.861	2.912	2.744	2.654	2.579	2.273	2.117	2.027	2.019	2.601
STD DEV LOGS	0.165	0.248	0.157	0.185	0.161	0.148	0.113	0.115	0.081	0.068	0.061	0.072	0.080
SKWNESS LOGS	-0.382	-1.662	-1.114	-0.329	-0.281	0.710	0.182	0.041	-0.305	-0.478	-0.603	0.582	-0.203
STD ERR SKW LOGS	0.550	0.564	0.564	0.564	0.564	0.564	0.564	0.550	0.536	0.550	0.550	0.550	0.580
SER CORR LOGS	-0.190	0.022	-0.181	-0.307	-0.058	0.073	-0.143	0.126	-0.297	-0.531	-0.138	-0.164	-0.198
COEFF OF VAR LOGS	0.074	0.094	0.056	0.065	0.054	0.054	0.043	0.047	0.036	0.032	0.030	0.036	0.031
% OF AVE FLOW	3.6	10.2	13.7	16.1	17.7	12.0	9.5	6.4	3.9	2.7	2.2	2.2	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1945-1964)

0.99	61.0	62.8	207.7	244.1	268.3	300.1	254.7	163.6	116.4	86.3	72.0	76.2	252.7
0.95	84.5	144.2	319.9	347.7	408.5	341.5	297.9	195.1	135.8	99.3	82.5	81.9	291.4
0.90	99.5	208.2	390.8	415.9	497.5	370.5	324.7	214.4	145.8	106.5	88.1	85.5	313.7
0.80	120.1	303.6	484.7	512.1	616.6	414.0	361.4	240.6	160.8	115.4	95.0	90.5	342.1
0.50	167.8	516.2	676.5	743.2	866.6	532.9	447.5	300.4	189.5	132.6	107.9	102.7	401.1
0.20	226.5	706.5	859.9	1043.7	1119.0	726.3	560.2	376.1	220.3	149.7	120.1	119.2	466.2
0.10	261.5	777.4	943.3	1230.5	1240.7	874.7	632.9	423.4	237.0	158.5	126.0	130.1	502.6
0.04	302.0	828.6	1018.9	1453.2	1357.0	1086.8	723.4	480.8	255.4	167.6	132.0	143.9	543.1
0.02	329.6	850.0	1059.8	1609.8	1423.3	1263.9	790.1	522.2	267.4	173.3	135.6	154.2	570.2
0.01	355.5	863.1	1091.2	1759.3	1476.5	1458.3	856.5	562.6	278.3	178.3	138.7	164.5	595.2

STATION 12080000 DESCHUTES RIVER NEAR OLYMPIA, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1947	85.0	87.0	88.0	91.0	92.0	96.0	101.0	124.0	149.0
1948	78.0	79.0	80.0	82.0	87.0	89.0	94.0	102.0	136.0
1949	103.0	104.0	105.0	108.0	113.0	119.0	129.0	141.0	190.0
1950	85.0	86.0	86.0	88.0	92.0	95.0	100.0	105.0	133.0
1951	106.0	107.0	108.0	109.0	113.0	120.0	127.0	143.0	196.0
1952	96.0	96.0	97.0	99.0	104.0	108.0	114.0	125.0	161.0
1953	74.0	75.0	75.0	75.0	76.0	78.0	81.0	84.0	98.0
1954	86.0	86.0	87.0	87.0	93.0	99.0	111.0	132.0	165.0
1959	77.0	78.0	78.0	80.0	82.0	84.0	90.0	99.0	125.0
1960	99.0	100.0	102.0	103.0	105.0	117.0	129.0	142.0	171.0
1961	102.0	103.0	104.0	108.0	110.0	118.0	129.0	142.0	190.0
1962	103.0	104.0	105.0	107.0	108.0	113.0	119.0	129.0	162.0
1963	84.0	85.0	86.0	88.0	91.0	97.0	117.0	130.0	153.0
1964	103.0	104.0	107.0	108.0	112.0	121.0	121.0	130.0	175.0

LOWEST MEAN FLOW STATISTICS (YEARS 1947-1964)

MEAN	91.5	92.4	93.4	95.2	98.4	103.9	109.9	121.6	157.4
MAXIMUM	106.0	107.0	108.0	109.0	113.0	121.0	129.0	143.0	196.0
MINIMUM	74.0	75.0	75.0	75.0	76.0	78.0	81.0	84.0	98.0
STANDARD DEVIATION	11.31	11.28	11.77	12.08	12.34	14.55	15.34	17.89	27.63
SKENNESS	-0.169	-0.151	-0.168	-0.225	-0.322	-0.331	-0.402	-0.458	-0.571
STD ERROR OF SKENNESS	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597
SERIAL CORR COEFF	-0.096	-0.083	-0.103	-0.044	-0.108	-0.125	-0.288	-0.514	-0.305
COEFF OF VARIATION	0.124	0.122	0.126	0.127	0.125	0.140	0.139	0.147	0.175
MEAN LOGS	1.958	1.963	1.967	1.975	1.990	2.012	2.037	2.080	2.190
STD DEVIATION LOGS	0.055	0.054	0.056	0.056	0.056	0.063	0.063	0.068	0.082
SKENNESS LOGS	-0.266	-0.250	-0.272	-0.343	-0.485	-0.502	-0.615	-1.021	-1.035
STD ERR SKENNESS LOGS	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597
SER CORR COEFF LOGS	-0.094	-0.081	-0.099	-0.039	-0.101	-0.122	-0.280	-0.481	-0.286
COEFF OF VAR LOGS	0.028	0.027	0.028	0.029	0.028	0.031	0.031	0.033	0.038

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1964)

0.99	118.7	119.7	121.8	123.6	125.9	136.5	142.8	154.1	208.5
0.98	115.5	116.4	118.4	120.3	123.0	133.0	139.6	151.8	204.9
0.96	111.9	112.8	114.6	116.7	119.6	129.1	135.8	148.9	200.3
0.90	106.3	107.2	108.8	111.0	114.3	122.7	129.5	143.5	191.7
0.80	101.1	102.0	103.4	105.5	109.1	116.5	123.3	137.5	182.1
0.50	91.3	92.3	93.3	95.2	98.7	104.1	110.5	123.5	160.0
0.20	81.9	82.8	83.4	84.9	88.0	91.5	97.0	106.8	134.3
0.10	77.1	78.1	78.4	79.7	82.4	84.9	89.8	97.3	120.1
0.05	73.2	74.2	74.4	75.4	77.7	79.6	83.9	89.4	108.4
0.02	68.9	70.0	70.0	70.7	72.6	73.6	77.2	80.4	95.4
0.01	66.2	67.2	67.1	67.7	69.2	69.7	72.9	74.5	86.9

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1947-1964)

P95	P90	P75	P70	P50	P25	P10
91.0	100.0	130.0	150.0	270.0	500.0	900.0

STATION 12081000 WOODLAND CREEK NEAR OLYMPIA, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1949	13.1	17.0	24.2	50.8	61.2	84.1	59.9	40.0	30.6	17.1	15.0	13.0	36.8
1950	17.5	23.6	44.6	67.3	102	77.1	51.3	38.4	30.3	27.4	20.5	17.4	36.8
1951	17.0	18.6	26.6	26.8	30.5	24.2	20.0	17.9	15.9	12.8	16.6	14.4	41.7
1952	9.25	9.36	9.60	26.2	40.9	26.4	21.7	16.2	15.8	11.1	10.2	9.41	19.1
1953	11.3	18.4	31.4	52.0	58.9	50.3	39.4	30.3	25.6	21.4	18.3	15.6	30.9
1954	14.6	20.7	24.6	24.0	27.8	28.2	27.7	22.6	18.0	14.8	14.1	12.2	20.7
1955	14.9	29.5	68.4	92.5	62.9	68.2	52.2	38.7	32.4	26.5	21.6	18.9	43.9
1956	19.7	20.6	30.0	26.2	31.2	44.7	35.0	26.0	22.1	18.2	15.7	13.7	25.1
1957	13.4	12.9	16.6	25.5	31.5	30.1	26.5	20.4	15.6	11.6	9.05	9.18	18.5
1958	9.74	18.2	25.9	37.9	41.4	34.9	30.6	24.0	20.0	16.0	14.0	13.0	23.7
1959	21.0	15.5	27.3	44.2	44.2	38.8	35.5	32.0	24.1	18.7	17.1	15.3	26.6
1960	15.1	27.5	31.8	39.4	65.4	80.1	53.7	45.6	29.3	22.7	18.8	16.3	37.0
1961	16.2	19.7	27.4	28.7	24.9	26.4	24.4	20.2	15.4	12.0	11.5	11.2	19.8
1962	11.6	22.2	31.6	30.7	41.6	35.3	34.9	28.7	21.9	16.9	14.6	13.1	25.5
1963	14.3	24.9	28.1	56.4	57.7	47.9	35.8	26.3	18.0	15.1	12.7	12.7	30.1
1964	12.7	14.4	28.5	39.0	47.0	35.9	31.0	26.3	18.7	12.2	11.5	11.7	23.9
1965	10.4	12.0	16.6	31.4	23.5	31.9	25.5	20.5	15.9	12.6	10.4	11.1	18.5
1966	9.79	11.6	30.5	46.2	44.6	38.0	31.8	24.3	18.7	14.9	11.6	11.6	24.4
1967	13.3	12.9	18.2	27.2	39.9	36.5	31.2	24.7	20.1	16.1	15.3	14.8	22.5
1968	16.1	22.9	41.1	56.3	58.5	41.6	34.6	29.1	22.4	16.9	15.9	15.2	30.9

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MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1949-1969)

MEAN	14.0	18.6	29.1	40.6	46.8	44.0	35.5	27.8	21.7	17.1	14.7	13.4	26.9
MAXIMUM	21.0	29.5	68.4	92.5	102.0	84.1	59.9	45.6	32.4	26.5	21.6	18.9	43.9
MINIMUM	9.3	9.4	9.6	24.0	23.5	24.2	20.0	17.9	15.4	11.6	9.1	9.2	17.5
STD DEVIATION	3.26	5.51	12.21	17.72	18.55	18.63	11.17	7.77	5.47	4.33	3.45	2.53	7.88
SKWENESS	0.417	0.192	1.706	1.820	1.322	1.192	0.789	0.826	0.674	0.585	0.262	0.358	0.863
STD ERR SKEW	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.501	0.501	0.501	0.512
SER CORR COEFF	0.022	0.176	-0.144	-0.334	-0.150	0.020	0.048	0.006	-0.027	0.001	0.111	0.033	-0.083
COEFF OF VAR	0.232	0.296	0.419	0.437	0.397	0.423	0.314	0.280	0.252	0.253	0.235	0.189	0.293
MEAN LOGS	1.137	1.251	1.431	1.576	1.641	1.612	1.531	1.429	1.324	1.221	1.155	1.119	1.412
STD DEV LOGS	0.101	0.135	0.176	0.167	0.162	0.165	0.132	0.116	0.106	0.108	0.104	0.082	0.121
SKWENESS LOGS	-0.040	-0.371	-0.331	0.764	0.226	0.700	0.229	0.355	0.362	0.183	-0.172	-0.067	0.450
STD ERR SKEW LOGS	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.501	0.501	0.501	0.512
SER CORR LOGS	0.048	0.198	-0.173	-0.391	-0.230	-0.073	0.006	-0.007	-0.045	0.005	0.122	0.045	-0.096
COEFF OF VAR LOGS	0.089	0.104	0.123	0.106	0.099	0.102	0.086	0.081	0.080	0.088	0.090	0.074	0.086
% OF AVE FLOW	4.3	5.8	9.0	12.5	14.5	13.6	11.0	8.6	6.7	5.3	4.5	4.1	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1949-1969)

0.99	7.9	8.0	9.5	19.2	19.5	20.6	17.6	15.4	12.8	9.7	7.9	8.4	14.8
0.95	9.3	10.4	13.4	22.0	24.2	23.8	21.0	17.8	15.4	11.2	9.5	9.6	17.0
0.90	10.1	11.9	15.9	24.0	27.3	26.1	23.2	19.3	15.6	10.5	10.5	10.3	18.4
0.80	11.3	13.8	19.3	27.1	31.8	29.5	26.2	21.4	17.1	11.5	11.7	11.2	20.4
0.50	13.7	18.2	27.6	35.9	43.1	39.1	33.6	26.4	20.8	16.5	14.4	13.2	25.3
0.20	16.7	23.3	38.1	50.8	59.6	55.2	43.7	33.5	25.7	20.5	17.5	15.4	32.4
0.10	18.4	26.2	44.6	62.8	71.2	67.9	50.5	38.2	29.0	23.0	19.3	16.7	37.3
0.04	20.5	29.5	52.3	80.6	86.5	86.4	59.3	44.3	33.2	26.1	21.4	18.2	43.8
0.02	22.0	31.7	57.6	95.9	98.5	102.2	65.9	48.9	36.4	28.4	22.8	19.3	48.9
0.01	23.4	33.7	62.7	113.1	111.0	119.7	72.6	53.7	39.6	30.6	24.2	20.2	54.1

STATION 12081000

WOODLAND CREEK NEAR OLYMPIA, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1951	15.0	15.0	16.0	16.0	17.0	17.0	18.0	19.0	22.0
1952	13.0	13.0	13.0	14.0	14.0	15.0	16.0	16.0	19.0
1953	8.0	8.2	8.4	8.7	9.1	9.2	9.3	9.4	10.0
1954	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	13.0
1955	13.0	13.0	13.0	13.0	14.0	15.0	16.0	17.0	19.0
1956	12.0	12.0	12.0	12.0	12.0	13.0	13.0	14.0	16.0
1957	17.0	17.0	17.0	17.0	18.0	19.0	19.0	20.0	23.0
1958	11.0	11.0	12.0	12.0	12.0	13.0	13.0	13.0	15.0
1959	8.7	8.7	8.8	8.8	8.9	9.1	9.3	9.7	12.0
1960	8.3	8.3	8.4	8.6	13.0	14.0	14.0	15.0	16.0
1961	14.0	14.0	14.0	15.0	15.0	15.0	16.0	16.0	18.0
1962	15.0	15.0	15.0	16.0	16.0	16.0	17.0	18.0	20.0
1963	9.7	9.9	9.9	10.0	11.0	11.0	11.0	11.0	13.0
1964	12.0	12.0	12.0	13.0	13.0	13.0	14.0	15.0	17.0
1965	11.0	11.0	11.0	12.0	12.0	13.0	13.0	13.0	16.0
1966	9.3	9.3	9.4	9.9	10.0	11.0	11.0	11.0	12.0
1967	8.6	9.0	9.1	9.3	9.6	9.8	10.0	10.0	12.0
1968	10.0	10.0	10.0	11.0	11.0	11.0	12.0	12.0	14.0
1969	14.0	14.0	14.0	14.0	15.0	15.0	15.0	16.0	17.0

LOWEST MEAN FLOW STATISTICS (YEARS 1951-1969)

MEAN	11.6	11.7	11.8	12.2	12.7	13.1	13.6	14.0	16.1
MAXIMUM	17.0	17.0	17.0	17.0	18.0	19.0	19.0	20.0	23.0
MINIMUM	8.0	8.2	8.4	8.6	8.9	9.1	9.3	9.4	10.0
STANDARD DEVIATION	2.60	2.55	2.59	2.66	2.65	2.73	2.92	3.24	3.63
SKEWNESS	0.380	0.416	0.440	0.287	0.403	0.350	0.206	0.225	0.257
STD ERROR OF SKEWNESS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SERIAL CORR COEFF	0.119	0.120	0.120	0.110	0.098	0.104	0.077	0.070	0.115
COEFF OF VARIATION	0.224	0.219	0.220	0.217	0.208	0.209	0.215	0.231	0.226
MEAN LOGS	1.055	1.057	1.062	1.076	1.096	1.109	1.122	1.135	1.195
STD DEVIATION LOGS	0.097	0.095	0.095	0.095	0.090	0.091	0.095	0.102	0.100
SKEWNESS LOGS	0.046	0.087	0.116	-0.006	0.057	-0.031	-0.116	-0.082	-0.145
STD ERR SKEWNESS LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SER CORR COEFF LOGS	0.133	0.136	0.136	0.116	0.112	0.103	0.077	0.084	0.119
COEFF OF VAR LOGS	0.092	0.090	0.089	0.088	0.082	0.082	0.085	0.090	0.083

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1951-1969)

0.99	19.2	19.2	19.5	19.8	20.4	20.8	21.6	23.2	26.1
0.98	18.1	18.0	18.3	18.6	19.2	19.7	20.5	21.9	24.6
0.96	16.8	16.8	17.0	17.4	18.0	18.5	19.3	20.4	23.1
0.90	15.1	15.1	15.3	15.7	16.3	16.8	17.5	18.4	20.9
0.80	13.7	13.7	13.8	14.3	14.8	15.3	16.0	16.6	19.0
0.50	11.3	11.4	11.5	11.9	12.4	12.9	13.3	13.7	15.7
0.20	9.4	9.5	9.6	9.9	10.5	10.8	11.0	11.2	12.9
0.10	8.5	8.6	8.7	9.0	9.6	9.8	10.0	10.1	11.6
0.05	7.9	8.0	8.1	8.3	8.9	9.1	9.2	9.6	10.6
0.02	7.2	7.4	7.5	7.6	8.2	8.3	8.4	8.4	9.6
0.01	6.8	7.0	7.1	7.2	7.8	7.9	7.8	7.8	9.0

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1951-1969)

P95	P90	P75	P70	P50	P25	P10
10.0	12.0	15.0	17.0	23.0	34.0	49.0

STATION 12081000 WOODLAND CREEK NEAR OLYMPIA, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL FLOW (CFS)	PEAK-FLOW DATA DATE	REG. (R)
1950	113.	108.	96.	89.	86.	76.	71.	65.	55.	120.	03/05/50	
1951	175.	166.	146.	121.	101.	91.	82.	75.	63.	204.	02/09/51	
1952	52.	43.	39.	35.	32.	29.	28.	27.	25.	59.	02/04/52	
1953	61.	58.	56.	49.	43.	36.	32.	29.	25.	68.	01/31/53	
1954	96.	86.	78.	68.	62.	57.	54.	50.	44.	105.	02/21/54	
1955	51.	40.	35.	31.	29.	28.	27.	26.	24.	64.	02/08/55	
1956	124.	116.	108.	99.	95.	85.	78.	75.	64.	150.	12/21/55	
1957	58.	55.	53.	49.	46.	41.	37.	35.	32.	91.	12/09/56	
1958	47.	44.	40.	36.	33.	32.	30.	29.	25.	54.	03/21/58	
1959	61.	53.	49.	45.	44.	41.	39.	36.	32.	152.	11/18/58	
1960	66.	55.	50.	48.	46.	42.	41.	39.	35.	101.	12/15/59	
1961	111.	101.	97.	91.	87.	74.	67.	62.	53.	130.	02/21/61	
1962	36.	34.	33.	32.	31.	29.	28.	27.	25.	42.	12/17/61	
1963	65.	59.	51.	45.	41.	38.	38.	36.	35.	71.	02/03/63	
1964	107.	89.	82.	75.	68.	59.	54.	50.	43.	121.	01/25/64	
1965	70.	64.	59.	55.	49.	44.	42.	39.	34.	86.	01/27/65	
1966	50.	46.	39.	36.	33.	29.	29.	29.	25.	70.	01/05/66	
1967	90.	78.	64.	61.	53.	46.	43.	41.	36.	114.	01/19/67	
1968	62.	54.	46.	41.	40.	38.	36.	34.	30.	76.	02/04/68	
1969	78.	75.	71.	65.	58.	57.	52.	49.	43.	85.	02/08/69	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1950-1969)

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	MEAN	MAXIMUM	MINIMUM	STANDARD DEVIATION	SKEWNESS	STD ERROR OF SKEWNESS	SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	SKEWNESS LOGS	STD ERR SKEWNESS LOGS	SER CORR COEFF LOGS	COEFF OF VAR LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
	78.6	175.0	36.0	33.0	1.350	0.512	-0.115	0.429	1.862	0.171	0.454	0.512	-0.192	0.092	1.9596	1.9596
	71.2	166.0	34.0	29.10	1.490	0.512	-0.106	0.454	1.816	0.177	0.542	0.512	-0.226	0.097	0.1717	0.1717
	64.6	146.0	33.0	29.10	1.353	0.512	-0.133	0.450	1.774	0.177	0.542	0.512	-0.246	0.100	0.0820	0.0820
	58.6	121.0	31.0	25.07	1.072	0.512	-0.157	0.428	1.733	0.169	0.447	0.512	-0.262	0.100	0.0230	0.0230
	53.9	101.0	29.0	22.41	0.955	0.512	-0.153	0.416	1.699	0.167	0.457	0.512	-0.246	0.098	1.9596	1.9596
	48.6	91.0	28.0	19.45	0.970	0.512	-0.144	0.400	1.657	0.162	0.486	0.512	-0.230	0.094	0.1717	0.1717
	45.4	82.0	26.0	17.17	0.956	0.512	-0.135	0.378	1.631	0.153	0.514	0.512	-0.212	0.092	0.0820	0.0820
	42.7	75.0	27.0	15.66	0.998	0.512	-0.146	0.367	1.605	0.148	0.571	0.512	-0.211	0.089	0.0230	0.0230
	37.5	64.0	25.0	12.69	0.938	0.512	-0.131	0.338	1.552	0.138	0.520	0.512	-0.177	0.089	1.9596	1.9596
	36.6	64.0	25.0	12.69	0.938	0.512	-0.131	0.338	1.552	0.138	0.520	0.512	-0.177	0.089	0.1717	0.1717
	37.2	64.0	25.0	12.69	0.938	0.512	-0.131	0.338	1.552	0.138	0.520	0.512	-0.177	0.089	0.0820	0.0820

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1950-1969)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
	33.3	40.3	45.1	52.0	70.7	100.2	122.3	153.4	178.9	206.5
	30.1	36.0	40.1	46.2	63.1	90.8	112.4	143.5	169.6	198.5
	27.1	32.5	36.3	41.9	57.3	82.5	102.0	130.2	159.8	179.8
	24.4	29.6	33.2	38.5	52.5	74.8	91.6	115.2	145.7	155.7
	23.0	27.8	31.0	35.8	48.5	68.5	83.6	104.6	121.9	140.6
	21.7	25.9	28.8	32.9	44.0	61.4	74.4	92.5	107.3	123.3
	21.5	25.3	27.8	31.6	41.5	56.8	68.2	84.0	96.8	110.6
	21.1	24.5	26.8	30.1	39.0	53.0	63.3	77.7	89.5	102.2
	19.3	22.3	24.3	27.2	34.7	46.1	54.3	65.5	74.5	84.0
	36.6	47.7	54.9	65.3	91.0	127.0	151.4	182.6	208.8	230.0
	37.2	48.0	55.1	65.2	90.6	126.9	151.7	182.6	208.8	230.0

152

23.8
30.9
19.4
3.55
0.777
0.687
-0.362
0.149
1.372
0.063
0.507
0.687
-0.363
0.046
100.0

§ 1951-1964)

STATION 12081500 MCALLISTER SPRINGS NEAR OLYMPIA, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1952	23.0	24.0	24.0	24.0	25.0	25.0	26.0	26.0	26.0
1953	18.0	19.0	19.0	19.0	20.0	20.0	20.0	21.0	21.0
1954	18.0	18.0	18.0	19.0	19.0	19.0	20.0	20.0	20.0
1955	21.0	22.0	22.0	22.0	23.0	23.0	23.0	24.0	24.0
1956	19.0	20.0	20.0	20.0	21.0	21.0	21.0	22.0	23.0
1962	19.0	20.0	20.0	21.0	21.0	22.0	22.0	22.0	22.0
1963	15.0	15.0	16.0	17.0	18.0	18.0	18.0	18.0	18.0
1964	15.0	17.0	17.0	17.0	18.0	19.0	19.0	19.0	19.0

LOWEST MEAN FLOW STATISTICS (YEARS 1952-1964)

MEAN	18.5	19.4	19.5	19.9	20.6	20.9	21.1	21.5	21.6
MAXIMUM	23.0	24.0	24.0	24.0	25.0	25.0	26.0	26.0	26.0
MINIMUM	15.0	15.0	16.0	17.0	18.0	18.0	18.0	18.0	18.0
STANDARD DEVIATION	2.73	2.82	2.62	2.42	2.45	2.36	2.53	2.62	2.67
SKEWNESS	0.198	0.150	0.477	0.437	0.736	0.634	0.941	0.477	0.296
STD ERROR OF SKEWNESS	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752
SERIAL CORR COEFF	0.332	0.163	0.134	0.122	0.119	-0.086	-0.048	0.152	0.233
COEFF OF VARIATION	0.147	0.146	1.287	1.296	1.312	1.317	1.322	1.330	1.332
MEAN LOGS	1.263	1.283	1.287	1.296	1.312	1.317	1.322	1.330	1.332
STD DEVIATION LOGS	0.064	0.064	0.058	0.052	0.050	0.048	0.050	0.052	0.053
SKEWNESS LOGS	-0.099	-0.191	0.225	0.224	0.549	0.465	0.694	0.248	0.091
STD ERR SKEWNESS LOGS	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752	0.752
SER CORR COEFF LOGS	0.390	0.182	0.184	0.141	0.150	-0.069	-0.020	0.181	0.257
COEFF OF VAR LOGS	0.051	0.050	0.045	0.040	0.038	0.037	0.038	0.039	0.040

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1952-1964)

0.99	25.6	26.5	26.9	26.7	28.1	27.9	29.1	28.9	28.8
0.98	24.6	25.6	25.8	25.7	26.9	26.8	27.8	27.8	27.8
0.96	23.6	24.6	24.7	24.6	25.6	25.6	26.4	26.6	26.7
0.90	22.1	23.1	23.0	23.1	23.9	24.0	24.5	25.0	25.2
0.80	20.8	21.8	21.6	21.8	22.5	22.7	23.0	23.6	23.8
0.50	18.4	19.3	19.3	19.7	20.3	20.6	20.7	21.3	21.4
0.20	16.2	17.0	17.3	17.8	18.6	18.9	19.0	19.3	19.4
0.10	15.1	15.9	16.4	17.0	17.8	18.1	18.3	18.4	18.4
0.05	14.3	14.9	15.7	16.3	17.3	17.6	17.8	17.7	17.6
0.02	13.4	14.0	15.0	15.6	16.7	17.0	17.3	17.0	16.8
0.01	12.8	13.4	14.5	15.2	16.4	16.7	17.0	16.5	16.3

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1952-1964)

P95	P90	P75	P70	P50	P25	P10
18.0	19.0	21.0	22.0	23.0	27.0	31.0

STATION 12081500 MCALLISTER SPRINGS NEAR OLYMPIA, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA FLOW(CFS) DATE REG.(R)
1952	30.	30.	30.	29.	29.	29.	28.	28.	27.	
1953	35.	33.	30.	29.	28.	27.	27.	26.	25.	
1954	36.	35.	35.	34.	33.	33.	32.	31.	30.	
1955	30.	29.	29.	28.	27.	27.	26.	26.	26.	
1956	46.	44.	43.	43.	41.	41.	39.	38.	36.	
1958	25.	24.	24.	23.	23.	23.	22.	21.	21.	
1961	36.	36.	35.	35.	34.	33.	33.	32.	30.	
1962	25.	24.	23.	23.	23.	22.	22.	22.	22.	
1963	25.	24.	24.	24.	23.	23.	23.	23.	22.	
1964	29.	28.	28.	28.	28.	27.	27.	26.	24.	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1952-1964)

W R C
ESTIMATE
SYSTEMATIC
RECORD

MEAN	31.7	30.7	30.1	29.6	28.9	28.5	27.9	27.3	26.3
MAXIMUM	46.0	44.0	43.0	43.0	41.0	41.0	39.0	38.0	36.0
MINIMUM	25.0	24.0	23.0	23.0	23.0	22.0	22.0	21.0	21.0
STANDARD DEVIATION	6.67	6.45	6.19	6.26	5.76	5.84	5.43	5.19	4.64
SKENNESS	1.025	0.863	0.913	1.071	0.979	1.061	0.898	0.891	0.960
STD ERROR OF SKENNESS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SERIAL CORR COEFF	-0.289	-0.322	-0.313	-0.412	-0.422	-0.366	-0.473	-0.489	-0.357
COEFF OF VARIATION	0.210	0.210	0.206	0.211	0.199	0.205	0.194	0.190	0.177
MEAN LOGS	1.493	1.471	1.471	1.463	1.454	1.447	1.439	1.429	1.414
STD DEVIATION LOGS	0.087	0.086	0.086	0.087	0.083	0.084	0.081	0.079	0.073
SKENNESS LOGS	0.618	0.477	0.507	0.657	0.599	0.659	0.547	0.515	0.634
STD ERR SKENNESS LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SER CORR COEFF LOGS	-0.261	-0.290	-0.286	-0.409	-0.413	-0.353	-0.471	-0.499	-0.354
COEFF OF VAR LOGS	0.058	0.059	0.058	0.059	0.057	0.058	0.056	0.056	0.052

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1952-1964)

0.99	21.4	20.2	20.1	20.1	19.9	19.6	19.2	18.8	19.0
0.95	23.3	22.3	22.0	21.8	21.5	21.2	20.8	20.5	20.3
0.90	24.5	23.5	23.3	22.9	22.6	22.2	21.9	21.5	21.2
0.80	26.2	25.3	25.0	24.5	24.1	23.7	23.4	23.0	22.5
0.50	30.5	29.6	29.1	28.4	27.9	27.4	27.0	26.5	25.5
0.20	36.5	35.5	34.7	34.1	33.1	32.7	31.9	31.2	29.7
0.10	40.6	39.4	38.4	37.9	36.6	36.3	35.2	34.2	32.5
0.04	45.9	44.3	43.1	43.0	41.1	41.0	39.3	38.2	36.1
0.02	50.0	48.0	46.7	46.9	44.5	44.5	42.4	41.1	38.8
0.01	54.1	51.7	50.3	50.9	48.0	48.2	45.6	44.0	41.5

STATION 12082500 NISQUALLY RIVER NEAR NATIONAL, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1942	230	915	963	523	683	583	1129	844	1039	774	519	357	
1943	315	343	657	521	500	355	495	766	1003	810	422	378	705
1944	297	356	515	880	880	501	632	681	931	525	381	399	496
1945	367	868	939	868	578	658	1052	1485	1364	1052	536	297	820
1946	547	848	1491	705	881	639	827	874	773	601	426	418	752
1947	1333	1400	904	826	671	568	675	1373	1577	732	492	351	909
1948	396	591	471	287	469	776	973	1681	1221	911	554	369	726
1949	465	979	751	725	867	1041	789	1145	1721	1277	707	496	913
1950	708	1263	1452	745	1354	475	930	1024	867	649	468	395	853
1951	714	630	584	334	722	418	930	1051	821	789	533	412	661
1952	311	140	246	1535	991	432	627	949	1032	1165	598	474	709
1953	389	645	1436	761	1080	617	764	1128	1179	1092	666	464	851
1954	388	752	540	520	656	296	608	949	1695	1217	726	467	733
1955	1034	1522	1372	763	331	537	1111	1594	1410	627	627	429	991
1956	541	707	1211	351	599	878	863	1164	862	551	405	440	715
1957	541	399	765	903	1072	504	857	1101	1041	828	669	437	738
1958	483	1440	1243	1209	495	526	806	914	1026	741	488	437	844
1959	1155	1634	821	435	772	619	909	1179	1092	804	532	470	867
1960	475	1265	761	1050	1547	887	907	1140	1198	722	558	288	894
1961	369	500	1081	1176	510	392	1030	735	893	676	498	404	690
1962	505	1200	1078	548	1144	486	797	782	644	542	485	431	716
1963	357	774	685	987	619	486	715	1139	1780	1227	712	453	828
1964	485	619	1510	1479	1067	576	817	822	857	712	533	331	817
1965	295	411	440	557	318	638	970	1123	889	758	508	383	609
1966	360	591	1240	1159	794	562	394	1137	1409	835	567	417	790
1967	660	625	889	1169	1510	679	537	734	1049	642	592	637	812
1968	670	1103	880	981	373	454	817	1426	1169	624	493	518	795
1969	445	436	652	1355	909	586	580	802	1009	684	496	410	696
1970	364	669	828	1127	1161	612	712	1569	1346	1302	788	455	910
1971	376	656	634	901	1269	1784	871	1637	1548	1232	761	549	1018
1972	332	481	1255	795	327	384	425	771	757	687	516	417	599
1973	362	801	1201	1805	667	734	924	1233	2010	1334	870	521	1041
1974	259	461	1032	1374	687	632	362	1109	1198	1159	637	498	787
1975	547	1073	2344	1461	621	455	726	1268	970	975	676	546	975
1976	342	374	314	367	320	398	791	742	897	588	733	590	538
1977	385	1331	2171	712	560	505	541	728	797	575	532	532	800
1978	358	426	605	285	699	900	661	1091	810	716	562	470	632

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1942-1979)

MEAN	484.3	789.9	971.9	871.3	775.8	610.1	763.8	1100.0	1120.8	855.1	572.4	451.2	781.2
MAXIMUM	1333.0	1634.0	2344.0	1805.0	1547.0	1784.0	1129.0	1681.0	2010.0	1334.0	870.0	739.0	1041.0
MINIMUM	230.0	140.0	246.0	285.0	318.0	296.0	362.0	728.0	644.0	525.0	381.0	286.0	496.0
STD DEVIATION	243.12	381.56	460.07	387.50	328.36	256.85	187.91	281.95	330.63	245.13	114.67	92.62	128.10
SKENESS	2.112	0.607	1.079	0.404	0.670	2.875	-0.291	0.478	0.923	0.647	0.638	1.088	-0.015
STD ERR SKEW	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.383	0.383	0.383	0.383	0.388
SER CORR COEFF	0.081	0.010	-0.406	0.068	-0.161	-0.092	-0.120	-0.036	-0.131	0.140	0.214	0.239	-0.201
COEFF OF VAR	0.502	0.483	0.473	0.445	0.423	0.421	0.246	0.256	0.295	0.287	0.200	0.205	0.164
MEAN LOGS	2.646	2.844	2.940	2.893	2.851	2.759	2.868	3.028	3.032	2.915	2.750	2.646	2.887
STD DEV LOGS	0.174	0.229	0.211	0.214	0.189	0.145	0.119	0.110	0.122	0.120	0.085	0.085	0.074
SKENESS LOGS	1.092	-0.582	-0.376	-0.481	-1.190	1.026	-0.927	0.089	0.387	0.345	0.221	0.297	-0.479
STD ERR SKEW LOGS	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.383	0.383	0.383	0.383	0.388
SER CORR LOGS	0.168	-0.031	-0.403	-0.094	-0.170	-0.084	-0.116	-0.066	-0.121	0.110	0.240	0.263	-0.174
COEFF OF VAR LOGS	0.066	0.080	0.072	0.074	0.066	0.053	0.041	0.036	0.040	0.041	0.031	0.032	0.025
% OF AVE FLOW	5.2	8.4	10.4	9.3	8.3	6.5	8.2	11.7	12.0	9.1	6.1	4.8	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1942-1979)

0.99	240.9	164.9	246.1	209.7	242.6	339.7	326.8	599.7	609.2	464.3	367.8	292.6	490.2
0.95	265.2	271.9	372.9	327.1	338.9	370.8	443.1	706.0	702.9	537.5	412.3	325.9	571.1
0.90	284.4	347.3	459.6	407.9	402.8	394.5	511.6	771.3	763.3	584.4	439.3	346.5	616.1
0.80	315.6	458.2	585.3	524.8	494.1	431.9	598.6	859.5	848.4	650.0	475.6	374.3	671.9
0.50	412.5	734.8	898.4	813.4	719.5	542.5	769.9	1061.8	1058.4	810.2	557.7	438.3	781.1
0.20	597.2	1096.6	1320.9	1192.0	1027.3	738.2	933.1	1318.7	1350.5	1032.8	660.7	520.4	890.9
0.10	757.5	1315.7	1589.1	1425.1	1228.2	897.9	1009.8	1480.1	1557.2	1183.3	724.9	572.5	947.4
0.04	1011.5	1567.1	1912.0	1697.8	1477.4	1137.4	1082.6	1676.6	1821.7	1377.9	802.8	636.5	1006.3
0.02	1244.0	1736.8	2140.7	1885.6	1659.5	1346.2	1124.1	1818.9	2025.1	1526.4	859.0	683.3	1043.4
0.01	1519.5	1892.6	2359.7	2061.3	1838.7	1583.5	1157.7	1958.4	2234.3	1678.1	914.1	729.5	1075.9

STATION 12082500 NISQUALLY RIVER NEAR NATIONAL, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1944	185.0	202.0	220.0	250.0	292.0	328.0	344.0	360.0	438.0
1945	185.0	188.0	203.0	251.0	265.0	301.0	335.0	352.0	405.0
1946	210.0	227.0	242.0	290.0	334.0	384.0	413.0	474.0	573.0
1947	154.0	156.0	176.0	182.0	217.0	294.0	392.0	489.0	704.0
1948	299.0	310.0	351.0	382.0	403.0	421.0	474.0	549.0	651.0
1949	210.0	212.0	213.0	219.0	238.0	284.0	386.0	405.0	603.0
1950	270.0	280.0	290.0	336.0	357.0	383.0	418.0	498.0	609.0
1951	270.0	276.0	321.0	358.0	450.0	571.0	629.0	688.0	894.0
1952	220.0	222.0	225.0	237.0	268.0	424.0	452.0	495.0	512.0
1953	110.0	114.0	116.0	120.0	137.0	182.0	227.0	271.0	391.0
1954	283.0	287.0	304.0	347.0	364.0	389.0	432.0	492.0	706.0
1955	231.0	236.0	238.0	254.0	273.0	397.0	446.0	498.0	519.0
1956	257.0	257.0	259.0	280.0	296.0	371.0	532.0	749.0	893.0
1957	188.0	192.0	207.0	219.0	239.0	345.0	532.0	570.0	595.0
1958	179.0	181.0	203.0	226.0	290.0	339.0	386.0	459.0	459.0
1959	293.0	296.0	304.0	335.0	434.0	455.0	510.0	582.0	749.0
1960	266.0	269.0	275.0	290.0	340.0	565.0	530.0	642.0	761.0
1961	258.0	267.0	289.0	315.0	392.0	425.0	478.0	551.0	709.0
1962	200.0	208.0	226.0	233.0	261.0	324.0	364.0	421.0	525.0
1963	277.0	290.0	313.0	342.0	385.0	423.0	452.0	493.0	587.0
1964	244.0	246.0	251.0	284.0	341.0	384.0	416.0	446.0	523.0
1965	266.0	267.0	274.0	301.0	335.0	440.0	444.0	531.0	757.0
1966	195.0	211.0	230.0	263.0	290.0	305.0	338.0	367.0	390.0
1967	115.0	123.0	132.0	202.0	306.0	347.0	380.0	430.0	578.0
1968	275.0	300.0	340.0	363.0	434.0	489.0	547.0	628.0	700.0
1969	275.0	285.0	303.0	321.0	367.0	400.0	457.0	508.0	557.0
1970	268.0	278.0	299.0	328.0	344.0	361.0	404.0	436.0	457.0
1971	238.0	250.0	264.0	302.0	326.0	358.0	401.0	436.0	502.0
1972	213.0	226.0	240.0	264.0	318.0	358.0	411.0	481.0	581.0
1973	202.0	210.0	228.0	261.0	300.0	363.0	411.0	481.0	581.0
1974	218.0	222.0	251.0	282.0	300.0	363.0	411.0	481.0	581.0
1975	177.0	182.0	192.0	202.0	224.0	288.0	388.0	465.0	696.0
1976	252.0	255.0	269.0	311.0	362.0	470.0	528.0	619.0	830.0
1977	210.0	214.0	220.0	244.0	265.0	310.0	324.0	339.0	354.0
1978	288.0	297.0	323.0	332.0	483.0	566.0	653.0	712.0	848.0
1979	200.0	205.0	218.0	249.0	271.0	366.0	424.0	410.0	448.0

LOWEST MEAN FLOW STATISTICS (YEARS 1944-1979)

MEAN	227.2	234.7	251.4	277.4	315.3	379.4	438.6	491.9	596.9
MAXIMUM	299.0	310.0	351.0	382.0	450.0	571.0	629.0	749.0	894.0
MINIMUM	110.0	114.0	116.0	120.0	137.0	182.0	227.0	271.0	354.0
STANDARD DEVIATION	47.97	49.15	54.23	57.15	64.95	75.78	82.61	103.03	140.34
SKWENESS	-0.595	-0.575	-0.389	-0.432	-0.270	0.329	0.082	0.339	0.267
STD ERROR OF SKWENESS	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393
SERIAL CORR COEFF	-0.108	-0.149	-0.218	-0.296	-0.226	-0.079	-0.036	-0.022	-0.179
COEFF OF VARIATION	0.211	0.209	0.216	0.206	0.206	0.200	0.188	0.209	0.235
MEAN LOGS	2.346	2.360	2.389	2.433	2.489	2.570	2.634	2.682	2.764
STD DEVIATION LOGS	0.104	0.102	0.105	0.100	0.099	0.091	0.086	0.093	0.104
SKWENESS LOGS	-1.241	-1.209	-1.170	-1.290	-1.228	-0.780	-0.722	-0.325	-0.224
STD ERR SKWENESS LOGS	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393
SER CORR COEFF LOGS	-0.103	-0.142	-0.191	-0.246	-0.189	-0.125	-0.040	-0.036	-0.182
COEFF OF VAR LOGS	0.044	0.043	0.044	0.041	0.040	0.035	0.033	0.035	0.038

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1944-1979)

0.99	311.2	321.8	349.1	373.3	426.8	535.5	613.4	751.7	976.1
0.98	306.3	316.6	343.0	368.2	420.4	521.2	596.7	718.7	923.8
0.96	299.7	309.6	334.7	361.0	411.5	503.9	576.9	682.5	861.8
0.90	286.6	295.7	318.8	346.5	394.0	474.6	543.7	627.6	785.2
0.80	270.9	279.4	300.3	328.7	373.2	444.6	510.1	577.7	712.6
0.50	232.5	239.8	256.5	284.3	322.3	381.9	440.9	486.9	585.9
0.20	186.3	192.7	205.2	229.4	260.9	315.7	368.6	403.8	475.8
0.10	160.9	166.9	177.4	198.9	226.9	281.3	330.9	363.7	424.5
0.05	140.2	145.9	154.8	173.8	199.1	253.4	300.4	332.4	385.3
0.02	117.9	123.1	130.5	146.8	168.8	223.2	267.2	299.2	344.5
0.01	103.6	108.8	115.2	129.3	149.6	203.8	245.8	278.3	319.1

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1944-1979)

P95	P90	P75	P70	P50	P25	P10
280.0	320.0	440.0	480.0	630.0	950.0	1400.0

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW (CFS) DATE REG. (R)
1943	5040.	3340.	2120.	1500.	1300.	1030.	1030.	995.	840.	7500. 11/23/42
1944	3540.	2200.	1450.	952.	800.	730.	667.	623.	560.	4830. 12/03/43
1945	4080.	2900.	2080.	1660.	1500.	1230.	1090.	952.	915.	5280. 01/07/45
1946	4080.	3280.	2360.	1730.	1440.	1350.	1200.	1000.	1000.	5000. 12/28/45
1947	5540.	4750.	3610.	2340.	1830.	1300.	1120.	1040.	937.	8100. 12/11/46
1948	4180.	3160.	2410.	2030.	1830.	1500.	1270.	1130.	951.	5560. 01/08/47
1949	2790.	2130.	2520.	2010.	1700.	1510.	1340.	1220.	1050.	3010. 05/13/49
1950	5000.	3230.	2300.	1830.	1740.	1610.	1400.	1240.	1160.	7310. 11/27/49
1951	5450.	4910.	3340.	2540.	1680.	1370.	1360.	1220.	1050.	6050. 02/11/51
1952	2350.	1730.	1440.	1250.	1170.	1060.	969.	912.	795.	2700. 02/04/52
1953	3350.	2810.	2240.	2020.	1920.	1260.	1090.	1000.	975.	4760. 01/31/53
1954	3770.	2990.	2290.	1950.	1510.	1230.	1160.	1060.	976.	6640. 12/09/53
1955	3470.	3290.	2710.	2100.	1720.	1490.	1330.	1160.	946.	3740. 06/10/55
1956	5100.	3410.	2480.	2100.	1790.	1580.	1460.	1330.	1090.	7470. 12/12/55
1957	3230.	2630.	2200.	1840.	1240.	1050.	1040.	1010.	878.	3680. 02/26/57
1958	2600.	2130.	1670.	1390.	1180.	1100.	1060.	989.	924.	2790. 04/20/58
1959	4240.	2900.	2250.	1880.	1610.	1390.	1330.	1120.	971.	5450. 11/12/58
1960	7220.	5900.	4220.	2640.	1750.	1430.	1220.	1040.	933.	10900. 11/23/59
1961	3650.	2660.	2120.	1780.	1540.	1320.	1190.	1160.	1120.	4350. 02/21/61
1962	3890.	3180.	2830.	2300.	1760.	1180.	963.	877.	853.	4350. 01/07/62
1963	6520.	4250.	2750.	2060.	1740.	1230.	1140.	996.	896.	10400. 11/20/62
1964	2760.	2370.	2260.	2070.	1860.	1650.	1420.	1230.	1020.	3560. 01/25/64
1965	9200.	6780.	4290.	2590.	1800.	1490.	1410.	1240.	1070.	11000. 01/29/65
1966	2840.	2320.	1930.	1390.	1140.	1060.	1000.	957.	822.	3080. 05/06/66
1967	5030.	3430.	2330.	1670.	1410.	1350.	1140.	1000.	925.	5870. 12/13/66
1968	4670.	3550.	2810.	1920.	1500.	1410.	1240.	1080.	1000.	8070. 12/25/67
1969	5000.	3670.	2460.	1690.	1620.	1320.	1150.	1030.	875.	6620. 01/04/69
1970	3680.	3350.	2590.	2260.	1570.	1180.	1010.	913.	900.	4350. 01/23/70
1971	3540.	2900.	1990.	1740.	1590.	1470.	1410.	1270.	1130.	4460. 01/19/71
1972	4340.	3620.	2460.	2430.	2070.	1660.	1490.	1530.	1430.	7460. 01/20/72
1973	5100.	3840.	2950.	2190.	1550.	1080.	860.	731.	688.	7700. 12/21/72
1974	9540.	7810.	4800.	3060.	2050.	1690.	1540.	1400.	1300.	15000. 01/15/74
1975	5740.	4080.	2940.	2160.	1420.	1300.	1180.	1040.	969.	7660. 01/18/75
1976	8720.	8130.	5480.	3460.	2370.	1960.	1660.	1430.	1160.	13200. 12/04/75
1977	1410.	1320.	1200.	1040.	904.	869.	817.	769.	723.	1910. 09/04/77
1978	12500.	6820.	4270.	3530.	2640.	1780.	1430.	1210.	973.	17100. 12/02/77
1979	2500.	2220.	1660.	1250.	1140.	968.	902.	882.	823.	2790. 03/07/79

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1943-1979)

MEAN	4742.2	3644.1	2654.3	1988.7	1607.1	1331.8	1195.8	1080.7	963.1	W R C ESTIMATE	SYSTEMATIC RECORD
MAXIMUM	12500.0	8130.0	5480.0	3530.0	2640.0	1960.0	1660.0	1530.0	1430.0		
MINIMUM	1410.0	1320.0	1200.0	952.0	800.0	730.0	667.0	623.0	560.0		
STANDARD DEVIATION	2257.75	1593.33	946.53	563.20	365.34	261.53	220.52	192.24	160.89		
SKEWNESS	1.634	1.468	1.245	0.843	0.296	0.029	-0.173	0.031	0.374		
STD ERROR OF SKEWNESS	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388		
SERIAL CORR COEFF	-0.347	-0.282	-0.252	-0.260	-0.347	-0.220	-0.205	-0.222	-0.164		
COEFF OF VARIATION	0.476	0.437	0.357	0.283	0.227	0.196	0.184	0.178	0.167		
MEAN LOGS	3.635	3.527	3.400	3.282	3.195	3.116	3.070	3.027	2.978		
STD DEVIATION LOGS	0.188	0.171	0.145	0.123	0.104	0.089	0.085	0.081	0.076		
SKEWNESS LOGS	0.185	0.366	0.275	-0.241	-0.465	-0.594	-0.699	-0.607	-0.502		
STD ERR SKEWNESS LOGS	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388		
SER CORR COEFF LOGS	-0.445	-0.366	-0.284	-0.229	-0.277	-0.167	-0.179	-0.209	-0.156		
COEFF OF VAR LOGS	0.052	0.049	0.043	0.038	0.033	0.029	0.028	0.027	0.025		
										3.7562	3.7562
										0.2211	0.2211
										0.0220	0.1110

STATION 12082500 NISQUALLY RIVER NEAR NATIONAL, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1943-1979)

0.99	1673.7	1497.2	1238.0	941.1	801.2	741.5	677.4	637.5	600.4	1759.3	1819.2
0.95	2169.0	1836.2	1491.8	1178.0	1011.9	902.5	826.0	761.9	701.6	2476.6	2509.5
0.90	2502.4	2067.7	1656.6	1321.8	1138.3	993.6	905.9	831.2	757.8	2974.0	2989.4
0.80	2989.2	2403.5	1890.4	1513.2	1294.6	1107.6	1007.0	917.0	827.5	3714.3	3706.9
0.50	4259.8	3286.4	2472.9	1935.6	1608.8	1332.4	1201.6	1083.4	963.5	5694.0	5651.2
0.20	6186.0	4649.4	3305.4	2436.2	1921.0	1557.4	1388.4	1246.5	1099.4	8751.9	8730.7
0.10	7575.7	5652.4	3880.9	2730.3	2079.8	1671.6	1479.7	1328.0	1168.9	10968.3	11018.6
0.04	9458.6	7037.4	4636.6	3068.8	2241.4	1788.8	1570.5	1410.9	1241.1	13964.8	14180.5
0.02	10952.5	8156.8	5221.0	3301.1	2340.4	1861.3	1624.9	1461.7	1286.2	16329.9	16728.1
0.01	12524.2	9353.3	5824.2	3519.2	2425.2	1924.0	1670.9	1505.3	1325.7	18803.2	19438.1

STATION 12083000 MINERAL CREEK NEAR MINERAL, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1942													
1943	59.5	759	724	349	608	483	723	276	343	139	56.6	35.7	360
1944	83.7	143	393	388	325	227	290	208	203	85.3	44.5	32.8	360
1945	65.9	210	216	603	653	466	444	657	107	53.0	33.0	48.3	191
1946	83.7	557	724	862	565	616	644	538	164	54.6	35.8	81.4	302
1947	149	610	1289	691	721	362	395	142	373	177	53.7	43.6	436
1948	472	581	460	646	564	395	484	696	109	64.7	46.5	68.2	386
1949	161	516	561	172	631	620	611	745	288	93.4	60.1	74.2	401
1950	161	576	627	616	774	838	611	570	215	74.3	43.7	43.4	364
1951	312	768	860	624	1067	357	509	332	429	110	55.1	48.1	449
1952	390	442	531	346	626	292	580	388	128	39.5	29.0	39.3	414
1953	23.1	35.9	195	1568	698	319	361	404	249	63.8	33.2	23.7	319
1954	148	423	1006	624	1063	390	673	468	382	154	55.2	46.9	337
1955	194	633	474	390	600	257	562	656	553	187	89.8	91.0	455
1956	527	1219	1122	730	192	590	814	647	266	94.1	62.6	65.0	384
1957	252	350	922	202	577	773	522	291	129	58.9	40.7	40.9	525
1958	79.1	242	689	768	796	285	671	205	115	60.0	34.6	40.8	329
1959	90.6	946	681	981	320	416	587	405	235	69.7	37.0	192	413
1960	421	763	530	308	621	450	559	560	214	67.1	76.1	76.7	386
1961	180	1146	543	873	1259	813	501	439	115	46.9	29.4	34.6	493
1962	118	286	795	508	277	352	576	468	203	62.1	48.9	49.0	313
1963	201	695	689	352	689	276	603	357	453	95.5	53.9	53.3	344
1964	142	780	455	921	441	423	519	624	101	116	84.0	67.4	418
1965	117	534	1102	851	658	309	409	275	453	39.4	37.9	32.0	371
1966	57.9	211	325	584	286	602	658	390	145	117	34.8	22.9	367
1967	120	312	899	1009	541	463	280	464	194	59.9	29.6	142	379
1968	273	338	537	682	1125	476	312	189	350	65.4	94.5	77.5	386
1969	359	554	766	683	300	430	611	515	189	92.8	44.0	34.1	343
1970	189	216	412	1302	765	428	377	260	92.5	38.9	23.6	42.4	468
1971	84.5	370	836	1174	819	566	546	686	304	136	47.4	62.2	468
1972	140	465	474	938	987	1358	506	518	195	82.6	44.2	99.9	483
1973	63.7	208	1054	646	224	313	226	240	151	136	35.3	48.3	276
1974	116	647	1101	1367	573	639	623	568	466	134	51.6	31.7	527
1975	29.9	330	693	977	583	482	289	470	188	78.5	63.3	62.6	352
1976	289	555	1463	1053	446	385	550	568	176	78.4	60.7	55.1	475
1977	53.7	105	128	138	146	339	427	333	232	60.7	50.1	157	181
1978	159	981	1308	540	393	263	332	351	124	58.1	45.1	113	389
1979	61.3	168	366	152	752	567	342	290	77.2	56.5	30.9	59.2	240

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1942-1979)

MEAN	173.2	504.7	701.4	692.4	612.6	476.2	505.6	437.6	222.3	85.2	49.1	62.1	375.4
MAXIMUM	527.0	1219.0	1463.0	1568.0	1259.0	1358.0	814.0	745.0	553.0	187.0	94.5	192.0	527.0
MINIMUM	23.1	35.9	128.0	138.0	146.0	227.0	226.0	142.0	77.2	38.9	23.6	22.9	181.0
STD DEVIATION	126.79	286.65	323.40	346.37	266.36	214.93	161.36	162.91	120.89	37.10	17.47	37.13	81.40
SKEDNESS	1.277	0.627	0.449	0.459	0.408	2.165	-0.195	0.074	1.089	1.155	1.044	1.904	-0.327
STD ERR SKEW	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.383	0.383	0.388	0.388
SER CORR COEFF	0.109	-0.067	-0.407	0.047	-0.122	-0.037	-0.144	-0.061	-0.067	0.034	0.028	0.112	-0.194
COEFF OF VAR	0.732	0.568	0.461	0.568	0.435	0.280	0.280	0.372	0.344	0.345	0.356	0.598	0.217
MEAN LOGS	2.128	2.616	2.793	2.775	2.740	2.644	2.685	2.608	2.288	1.666	1.735	1.735	2.563
STD DEV LOGS	0.324	0.314	0.234	0.263	0.218	0.166	0.135	0.181	0.228	0.176	0.146	0.218	0.105
SKEDNESS LOGS	-0.184	-1.199	-0.907	-0.865	-0.791	0.684	-0.744	-0.606	0.181	0.536	0.304	0.534	-1.127
STD ERR SKEW LGS	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.383	0.383	0.383	0.388
SER CORR LOGS	0.041	-0.095	-0.392	-0.018	-0.106	-0.041	-0.128	-0.136	-0.099	-0.039	0.046	0.157	-0.155
COEFF OF VAR LGS	0.152	0.120	0.084	0.084	0.080	0.063	0.050	0.069	0.100	0.093	0.088	0.125	0.041
% OF AVE FLOW	3.8	11.2	15.5	15.3	13.5	10.5	11.2	9.7	4.9	1.9	1.1	1.4	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1942-1979)

0.99	21.5	42.4	125.5	100.8	129.2	220.2	199.6	128.4	61.4	33.8	22.9	21.4	172.9
0.95	38.0	103.7	227.4	194.1	218.7	255.4	274.4	191.5	84.1	41.9	27.5	26.3	231.3
0.90	51.0	156.6	301.2	264.9	281.2	280.2	319.9	232.9	100.1	47.4	30.5	29.9	264.6
0.80	72.3	243.0	409.9	372.9	371.6	317.8	379.3	290.4	124.3	55.5	34.8	35.4	305.7
0.50	137.4	475.2	672.4	649.0	587.1	422.2	502.9	422.4	191.1	76.7	45.6	51.5	382.3
0.20	252.8	759.7	983.7	998.9	844.9	596.4	631.6	578.9	300.5	109.4	61.2	81.0	448.6
0.10	343.3	905.3	1151.4	1197.0	987.7	733.3	697.4	667.5	384.2	133.5	72.0	105.8	477.0
0.04	471.4	1043.5	1323.8	1407.8	1139.2	932.7	764.3	764.8	502.8	166.8	86.4	144.2	502.0
0.02	575.6	1119.5	1428.1	1539.1	1234.0	1102.2	805.0	828.2	600.5	193.7	97.6	178.6	515.1
0.01	686.5	1177.8	1515.6	1651.7	1315.9	1290.8	839.7	884.9	706.4	222.4	109.2	218.6	525.1

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

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ANNUAL PEAK-FLOW DATA

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW(CFS)	DATE	REG.(R)
1943	3750.	2450.	1850.	1300.	960.	781.	655.	614.	607.	4750.	11/23/42	
1944	2370.	1530.	934.	561.	461.	396.	372.	335.	305.	2860.	12/03/43	
1945	3100.	2520.	1660.	1010.	752.	627.	584.	574.	505.	4610.	02/07/45	
1946	3190.	2730.	2030.	1590.	1120.	832.	768.	730.	687.	4130.	12/28/45	
1947	4280.	4170.	3300.	2110.	1570.	1030.	1000.	858.	676.	5240.	12/11/46	
1948	2050.	1570.	1410.	1080.	857.	607.	651.	562.	550.	2640.	01/01/48	
1949	2370.	1720.	1360.	1080.	873.	730.	760.	669.	580.	3340.	02/17/49	
1950	3340.	2540.	1690.	1560.	1140.	919.	815.	781.	707.	4790.	11/27/49	
1951	4650.	4160.	2730.	1670.	1190.	937.	948.	838.	694.	5390.	02/09/51	
1952	2770.	1850.	1630.	1130.	740.	520.	565.	519.	479.	3420.	02/04/52	
1953	2880.	2560.	2120.	1620.	1800.	1140.	869.	742.	598.	4070.	01/31/53	
1954	4140.	2790.	1950.	1430.	1110.	877.	893.	817.	720.	7600.	12/09/53	
1955	3470.	2290.	1590.	1080.	761.	633.	614.	529.	522.	5000.	02/08/55	
1956	3860.	2920.	1880.	1630.	1410.	1240.	1080.	919.	796.	7400.	12/11/55	
1957	4080.	2700.	2000.	1540.	1070.	806.	656.	653.	562.	5360.	12/10/56	
1958	2200.	1970.	1520.	1060.	908.	836.	753.	652.	581.	2400.	12/25/57	
1959	3450.	2460.	1820.	1390.	1070.	850.	898.	752.	674.	4860.	01/24/59	
1960	3420.	3030.	2260.	1350.	1050.	697.	657.	578.	569.	4880.	11/20/59	
1961	3960.	2850.	2550.	1920.	1260.	1100.	993.	1010.	862.	5720.	11/24/60	
1962	2640.	1900.	1670.	1290.	989.	709.	571.	528.	508.	3030.	12/24/61	
1963	6000.	3330.	1860.	1310.	1050.	793.	719.	612.	568.	8040.	02/03/63	
1964	4280.	2570.	1840.	1290.	909.	756.	732.	659.	591.	6270.	01/25/64	
1965	4980.	3470.	2230.	1660.	1270.	945.	969.	829.	698.	8310.	12/22/64	
1966	1680.	1240.	998.	880.	717.	673.	561.	547.	479.	2070.	03/09/66	
1967	5200.	3150.	2260.	1310.	1030.	974.	831.	711.	614.	6500.	12/13/66	
1968	3980.	2750.	2260.	1460.	1110.	912.	787.	710.	594.	4460.	02/19/68	
1969	2500.	2130.	1570.	1080.	828.	813.	697.	609.	574.	5480.	12/03/68	
1970	4650.	3900.	3120.	2320.	1470.	1100.	979.	759.	587.	5680.	01/20/70	
1971	4190.	2760.	1950.	1660.	1300.	1070.	973.	863.	782.	4650.	01/19/71	
1972	7540.	5240.	2930.	2210.	1740.	1390.	1140.	984.	804.	9740.	01/20/72	
1973	4230.	3190.	2730.	1960.	1360.	878.	684.	572.	5620.	12/21/72		
1974	6940.	5110.	3540.	2230.	1570.	1300.	1120.	951.	846.	8920.	01/15/74	
1975	3130.	2450.	2130.	1510.	1020.	883.	808.	726.	602.	3700.	01/14/75	
1976	5580.	4870.	3300.	2080.	1480.	1280.	1060.	916.	771.	8020.	12/04/75	
1977	860.	769.	623.	495.	346.	392.	379.	343.	275.	902.	04/08/77	
1978	3460.	2980.	2440.	2140.	1650.	1170.	965.	822.	640.	4840.	11/25/77	
1979	2120.	1760.	1480.	1080.	933.	657.	566.	485.	409.	3260.	02/06/79	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1943-1979)

MEAN	3710.8	2767.3	2026.1	1471.0	1107.4	871.7	783.6	697.0	606.3		
MAXIMUM	7540.0	5240.0	3560.0	2320.0	1800.0	1390.0	1140.0	1010.0	862.0		
MINIMUM	860.0	769.0	623.0	495.0	436.0	392.0	372.0	335.0	275.0		
STANDARD DEVIATION	1394.45	1017.21	664.84	456.00	329.15	240.18	195.01	165.52	133.25		
SKENNESS	0.679	0.701	0.436	0.055	0.218	0.164	0.095	0.123	0.279		
STD ERROR OF SKEWNESS	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388		
SERIAL CORR COEFF	-0.102	-0.225	-0.094	-0.091	-0.160	-0.204	-0.282	-0.301	-0.263		
COEFF OF VARIATION	0.376	0.368	0.328	0.310	0.297	0.276	0.249	0.237	0.220		
MEAN LOGS	3.537	3.412	3.282	3.144	3.024	2.923	2.880	2.830	2.771		
STD DEVIATION LOGS	0.179	0.170	0.155	0.152	0.140	0.129	0.117	0.112	0.107		
SKENNESS LOGS	-0.924	-0.674	-0.827	-0.977	-0.746	-0.672	-0.769	-0.837	-1.193		
STD ERR SKEWNESS LOGS	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388		
SER CORR COEFF LOGS	-0.155	-0.257	-0.146	-0.111	-0.155	-0.193	-0.234	-0.261	-0.229		
COEFF OF VAR LOGS	0.051	0.050	0.047	0.048	0.046	0.044	0.041	0.040	0.038		
										3.6673	3.6670
										0.1545	0.2011
										-0.0350	-1.2390

W R C.
ESTIMATE
SYSTEMATIC
RECORD

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1943-1979)

0.99	1010.1	862.4	677.4	487.1	420.7	365.1	348.7	318.2	272.8	0.0	1068.9
0.95	1596.7	1271.3	990.6	724.3	585.9	489.7	461.6	419.5	369.4	2702.3	1913.5
0.90	1981.7	1534.4	1187.3	872.6	687.0	564.6	528.1	478.5	424.7	3081.8	2498.1
0.80	2510.0	1894.5	1450.2	1068.7	820.1	662.3	613.2	553.2	493.0	3610.8	3317.3
0.50	3665.9	2697.4	2009.1	1474.4	1099.3	865.5	784.3	700.6	619.0	4877.9	5098.9
0.20	4896.9	3610.0	2597.2	1877.8	1392.6	1079.2	955.4	843.4	726.0	6570.5	6859.3
0.10	5516.7	4108.2	2896.1	2070.8	1543.4	1190.3	1040.3	912.2	770.7	7668.6	7650.8
0.04	6128.5	4639.3	3196.3	2254.5	1697.2	1305.3	1125.0	979.2	809.1	9034.7	8347.7
0.02	6487.5	4976.0	3376.3	2359.0	1791.2	1376.5	1175.7	1018.4	828.8	10039.1	8710.0
0.01	6782.3	5271.0	3527.1	2442.8	1871.2	1438.0	1218.3	1050.7	843.4	11034.1	8978.2

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1944	25.0	26.0	27.0	27.0	29.0	34.0	42.0	59.0	98.0
1945	23.0	23.0	24.0	24.0	27.0	34.0	44.0	49.0	77.0
1946	30.0	30.0	31.0	33.0	35.0	42.0	54.0	57.0	142.0
1947	31.0	33.0	34.0	36.0	39.0	43.0	51.0	97.0	184.0
1948	41.0	41.0	42.0	43.0	45.0	49.0	58.0	72.0	119.0
1949	46.0	47.0	50.0	50.0	56.0	59.0	73.0	96.0	183.0
1950	32.0	32.0	33.0	34.0	37.0	43.0	51.0	72.0	139.0
1951	31.0	31.0	32.0	33.0	35.0	40.0	48.0	116.0	239.0
1952	24.0	24.0	24.0	25.0	28.0	33.0	40.0	46.0	140.0
1953	20.0	20.0	20.0	20.0	21.0	23.0	26.0	29.0	48.0
1954	34.0	35.0	35.0	36.0	42.0	49.0	64.0	86.0	149.0
1955	65.0	65.0	67.0	71.0	83.0	90.0	94.0	126.0	202.0
1956	43.0	43.0	44.0	45.0	50.0	62.0	63.0	162.0	312.0
1957	34.0	35.0	37.0	38.0	40.0	48.0	48.0	78.0	169.0
1958	29.0	29.0	30.0	31.0	32.0	35.0	39.0	47.0	86.0
1959	25.0	26.0	27.0	29.0	30.0	36.0	41.0	55.0	84.0
1960	30.0	31.0	32.0	34.0	36.0	48.0	64.0	123.0	197.0
1961	24.0	25.0	27.0	28.0	31.0	38.0	49.0	76.0	182.0
1962	30.0	31.0	32.0	33.0	35.0	40.0	44.0	44.0	89.0
1963	30.0	30.0	30.0	30.0	32.0	36.0	44.0	50.0	143.0
1964	37.0	38.0	39.0	40.0	46.0	50.0	55.0	65.0	126.0
1965	53.0	54.0	58.0	62.0	63.0	74.0	84.0	93.0	186.0
1966	25.0	26.0	26.0	28.0	32.0	35.0	35.0	41.0	75.0
1967	28.0	28.0	28.0	31.0	33.0	33.0	37.0	109.0	109.0
1968	19.0	19.0	19.0	20.0	23.0	26.0	36.0	56.0	152.0
1969	35.0	35.0	37.0	40.0	46.0	63.0	87.0	108.0	175.0
1970	29.0	30.0	30.0	31.0	34.0	45.0	68.0	95.0	126.0
1971	16.0	17.0	18.0	19.0	22.0	28.0	30.0	35.0	76.0
1972	33.0	34.0	35.0	41.0	47.0	53.0	58.0	94.0	187.0
1973	32.0	32.0	33.0	35.0	38.0	45.0	67.0	71.0	110.0
1974	20.0	21.0	22.0	26.0	29.0	35.0	48.0	64.0	110.0
1975	24.0	24.0	25.0	26.0	26.0	30.0	36.0	50.0	149.0
1976	34.0	34.0	36.0	36.0	40.0	46.0	64.0	79.0	171.0
1977	30.0	30.0	31.0	35.0	38.0	50.0	59.0	66.0	78.0
1978	24.0	25.0	25.0	27.0	33.0	33.0	27.0	73.0	161.0
1979	30.0	31.0	33.0	36.0	42.0	51.0	62.0	68.0	91.0

STATION 1208300 MINERAL CREEK NEAR MINERAL, WASH.

LOWEST MEAN FLOW STATISTICS (YEARS 1944-1979)

MEAN	30.8	31.4	32.5	34.5	38.1	45.6	55.8	75.0	140.7
MAXIMUM	65.0	65.0	67.0	71.0	83.0	90.0	94.0	162.0	312.0
MINIMUM	16.0	17.0	18.0	19.0	21.0	23.0	26.0	29.0	48.0
STANDARD DEVIATION	9.63	9.60	10.15	10.58	12.08	14.32	18.39	28.44	53.75
SKENNESS	1.606	1.578	1.570	1.563	1.637	0.936	0.433	0.933	0.832
STD ERROR OF SKENNESS	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393
SERIAL CORR COEFF	0.290	0.299	0.271	0.202	0.211	0.128	0.144	0.103	0.053
COEFF OF VARIATION	0.312	0.306	0.313	0.307	0.317	0.314	0.329	0.379	0.382
MEAN LOGS	1.471	1.460	1.494	1.520	1.562	1.633	1.723	1.846	2.117
STD DEVIATION LOGS	0.123	0.121	0.123	0.122	0.126	0.133	0.167	0.164	0.171
SKENNESS LOGS	0.486	0.500	0.523	0.416	0.440	0.079	-0.151	-0.316	-0.316
STD ERR SKENNESS LOGS	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393
SER CORR COEFF LOGS	0.254	0.267	0.252	0.188	0.195	0.133	0.125	0.039	-0.022
COEFF OF VAR LOGS	0.084	0.082	0.083	0.080	0.080	0.081	0.085	0.089	0.081

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1944-1979)

0.99	63.2	63.7	67.1	69.4	78.4	90.3	111.6	163.3	297.9
0.98	56.9	57.4	60.2	62.8	70.6	82.7	102.8	148.6	274.1
0.96	50.8	51.4	53.7	56.3	63.1	75.0	93.7	135.6	249.1
0.90	43.1	43.6	45.4	48.0	53.5	64.6	81.0	113.1	213.3
0.80	37.2	37.8	39.2	41.7	46.2	56.2	70.4	96.4	183.0
0.50	28.9	29.5	30.4	32.5	35.7	43.3	53.3	70.6	133.6
0.20	23.2	23.8	24.4	26.1	28.5	33.6	39.9	51.2	94.7
0.10	20.9	21.5	22.1	23.5	25.6	29.5	34.1	43.1	78.2
0.05	19.4	19.9	20.5	21.6	23.6	26.5	29.9	37.3	66.3
0.02	17.8	18.4	18.9	19.8	21.6	23.5	25.7	31.6	54.7
0.01	16.9	17.5	18.0	18.8	20.5	21.7	23.2	28.3	47.9

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1944-1979)

P95	P90	P75	P70	P50	P25	P10
33.0	41.0	81.0	110.0	250.0	490.0	830.0

STATION 12063500 EAST CREEK NE ELHE, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1918	13.2	87.1	125	258	95.5	48.8	117	46.0	19.1	5.17	2.60	1.81	72.4
1919	8.06	54.9	119	80.8	33.5	58.0	56.1	26.8	26.5	7.92	4.93	54.0	44.5
1920	115	79.1	132	135	127	129	67.1	55.8	26.9	7.81	7.78	73.8	73.8
1922	39.5	113	133	28.4	30.9	48.6	65.7	107	37.0	4.30	3.58	3.64	51.3
1949										5.69	3.47	4.64	
1950	18.9	108	110	87.8	134	114	92.6	76.5	35.2	7.12	7.08	5.70	65.9
1951	76.6												

STATION 12084000 NISQUALLY RIVER NEAR ALDER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1931	756	1210	1412	1431	1636	2401	1979	1701	1601	1050	631	399	1353
1932	549	3196	1861	1932	643	1533	1182	1637	2458	1408	849	731	1501
1933	1502	1546	6512	3404	1052	1624	1201	946	634	605	552	393	1677
1934	1357	2678	1803	2282	1511	991	975	1306	1203	817	537	462	1325
1935	297	378	886	2139	959	1407	1526	2232	1846	857	574	448	1114
1936	353	189	1264	332	774	1528	2050	1872	2258	1021	547	502	1058
1937	486	2675	2263	1999	816	1200	1750	1471	1041	1732	478	393	1277
1938	353	741	1462	1845	1229	1241	1327	1346	1062	823	556	413	1033
1939	406	486	2180	1073	2025	1755	1071	1240	682	544	460	392	1025
1940	443	720	1061	1129	671	575	675	905	644	576	422	578	701
1942	962	1121	2318	800	1023	729	845	958	1422	921	576	387	1004
1943	287	1946	1876	1108	1708	1359	2241	1215	1248	912	491	432	1230
1944	446	557	1187	1003	954	688	895	1027	842	601	439	482	760
1945	378												

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MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1931-1945)

MEAN	612.5	1341.8	1991.2	1575.2	1153.9	1310.1	1362.8	1373.5	1303.2	835.9	547.1	461.4	1158.3
MAXIMUM	1502.0	3196.0	6512.0	3404.0	2025.0	2401.0	2241.0	2232.0	2458.0	1408.0	849.0	731.0	1677.0
MINIMUM	287.0	189.0	686.0	332.0	643.0	575.0	675.0	905.0	634.0	544.0	422.0	387.0	701.0
STD DEVIATION	392.48	992.79	1445.67	801.35	439.49	498.27	504.60	399.47	596.07	240.39	109.08	94.28	275.15
SKENNESS	1.526	0.740	2.874	0.746	0.753	0.455	0.499	0.788	0.764	0.961	1.804	2.088	0.123
STD ERR SKEW	0.597	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.597	0.616
SER CORR COEFF	0.265	-0.134	-0.044	0.297	-0.276	0.122	0.003	0.452	0.104	0.048	0.263	-0.293	0.521
COEFF OF VAR	0.641	0.740	0.726	0.509	0.381	0.380	0.370	0.291	0.457	0.298	0.199	0.204	0.238
MEAN LOGS	2.722	2.999	3.233	3.137	3.034	3.086	3.107	3.122	3.074	2.907	2.731	2.657	3.052
STD DEV LOGS	0.233	0.371	0.231	0.256	0.160	0.178	0.163	0.162	0.198	0.150	0.078	0.078	0.108
SKENNESS LOGS	0.959	-0.355	0.992	-0.950	0.279	-0.491	-0.002	0.299	0.098	0.279	1.166	1.678	-0.467
STD ERR SKEW LOGS	0.597	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.597	0.616
SER CORR LOGS	0.179	0.0	-0.013	0.055	-0.275	0.124	0.090	0.455	0.112	0.049	0.315	-0.325	0.445
COEFF OF VAR LOGS	0.086	0.124	0.071	0.082	0.053	0.058	0.052	0.039	0.064	0.041	0.029	0.029	0.035
% OF AVE FLOW	4.4	9.7	14.4	11.4	8.3	9.4	9.4	9.9	9.4	6.0	3.9	3.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1931-1945)

0.99	221.1	109.8	732.6	235.0	494.6	406.9	534.9	731.7	424.9	448.5	412.6	369.3	582.4
0.95	257.8	225.7	847.6	455.6	607.8	589.9	690.5	854.1	523.3	523.3	429.1	375.2	727.3
0.90	286.4	324.8	937.9	622.1	682.5	709.1	791.2	932.0	664.6	570.8	441.9	381.2	812.2
0.80	333.4	495.1	1086.8	874.0	789.9	675.0	933.0	1040.9	806.3	636.9	462.2	392.7	921.7
0.50	484.3	1048.8	1567.1	1503.3	1063.9	1259.8	1278.6	1305.0	1176.1	796.0	520.2	432.9	1148.8
0.20	793.5	2068.1	2555.9	2267.9	1468.2	1729.9	1733.8	1669.7	1303.3	615.0	361.5	243.2	1393.5
0.10	1082.0	2869.3	3481.2	2682.4	1754.7	2005.4	2065.4	1913.0	1312.8	615.0	361.5	243.2	1393.5
0.04	1569.6	3987.1	5049.7	3107.3	2138.5	2317.3	2461.5	2226.9	1482.6	784.0	670.0	575.4	1525.5
0.02	2043.4	4878.1	6577.4	3362.7	2440.3	2526.7	2756.8	2465.1	1309.7	1482.6	863.1	750.2	1759.2
0.01	2632.5	5807.1	8481.4	3575.3	2755.9	2718.9	3052.5	2707.4	1624.1	1624.1	947.4	839.0	1841.1

STATION 12084000 NISQUALLY RIVER NEAR ALDER, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31										
YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	
1933	285.0	302.0	354.0	398.0	423.0	470.0	535.0	642.0	985.0	
1934	450.0	458.0	476.0	527.0	598.0	705.0	816.0	1020.0	1340.0	
1935	190.0	199.0	226.0	251.0	294.0	409.0	454.0	484.0	613.0	
1936	158.0	163.0	166.0	198.0	235.0	298.0	363.0	409.0	524.0	
1937	150.0	154.0	160.0	169.0	185.0	248.0	303.0	363.0	509.0	
1938	271.0	274.0	292.0	307.0	358.0	450.0	492.0	575.0	1050.0	
1939	219.0	223.0	255.0	284.0	336.0	362.0	403.0	465.0	621.0	
1940	252.0	283.0	311.0	338.0	371.0	394.0	433.0	463.0	617.0	
1941	203.0	210.0	217.0	281.0	343.0	389.0	418.0	452.0	516.0	
1942	275.0	293.0	338.0	384.0	421.0	483.0	522.0	550.0	629.0	
1943	171.0	188.0	198.0	214.0	235.0	311.0	399.0	519.0	751.0	
1944	265.0	290.0	317.0	354.0	366.0	404.0	450.0	479.0	655.0	

LOWEST MEAN FLOW STATISTICS (YEARS 1933-1944)

MEAN	240.7	253.1	275.8	308.7	347.1	410.2	465.7	535.1	734.2
MAXIMUM	450.0	456.0	476.0	527.0	598.0	705.0	816.0	1020.0	1340.0
MINIMUM	150.0	154.0	160.0	169.0	185.0	248.0	303.0	363.0	509.0
STANDARD DEVIATION	81.45	83.41	91.03	99.85	108.54	116.46	128.10	169.74	257.79
SKENNESS	1.511	1.246	0.747	0.711	0.805	1.345	1.944	2.378	1.478
STD ERROR OF SKENNESS	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637
SERIAL CORR COEFF	0.011	0.013	0.079	0.131	0.133	0.138	0.171	0.183	0.152
COEFF OF VARIATION	0.338	0.330	0.330	0.323	0.313	0.284	0.275	0.317	0.351
MEAN LOGS	2.362	2.384	2.419	2.469	2.521	2.598	2.655	2.713	2.845
STD DEVIATION LOGS	0.134	0.134	0.142	0.141	0.136	0.116	0.106	0.114	0.134
SKENNESS LOGS	0.594	0.404	0.047	-0.057	-0.176	0.358	1.023	1.607	1.065
STD ERR SKENNESS LOGS	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637
SER CORR COEFF LOGS	0.034	0.047	0.103	0.156	0.160	0.150	0.199	0.237	0.169
COEFF OF VAR LOGS	0.057	0.056	0.059	0.057	0.054	0.045	0.040	0.042	0.047

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1933-1944)

0.99	537.9	544.0	568.2	616.4	661.9	791.6	946.4	1256.1	1803.9
0.98	476.2	487.4	518.2	566.5	614.2	721.8	841.1	1070.6	1548.5
0.96	418.3	433.1	468.0	515.4	564.3	653.4	744.1	910.5	1321.9
0.90	346.6	363.6	400.1	444.8	493.4	563.5	626.6	731.5	1059.3
0.80	294.4	311.4	345.7	386.9	433.4	493.8	543.4	616.3	882.5
0.50	223.0	236.9	262.0	295.3	335.0	390.4	434.3	483.0	563.4
0.20	176.4	185.6	199.3	224.5	255.6	315.7	367.8	416.9	538.5
0.10	158.7	165.2	173.0	194.1	220.8	280.0	344.2	398.2	496.2
0.05	146.5	151.0	154.0	172.0	195.0	263.0	329.1	388.0	469.5
0.02	135.0	137.2	135.2	150.0	169.1	241.4	315.7	380.8	446.6
0.01	128.5	129.1	124.0	136.8	153.5	228.7	308.6	377.8	434.6

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1933-1944)

P95	P90	P75	P70	P50	P25	P10
310.0	390.0	550.0	600.0	840.0	1400.0	2200.0

STATION 1208+000 NISQUALLY RIVER NEAR ALDER, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW (CFS) DATE REG. (R)
1932	11500.	8590.	5320.	3810.	3030.	2600.	2320.	2130.	1850.	14600. 02/26/32
1933	9740.	6910.	6270.	4450.	3550.	2710.	2360.	1930.	1740.	12600. 11/13/32
1934	22200.	17200.	12200.	9470.	7050.	5130.	3920.	3400.	2690.	25000. 12/22/33
1935	12000.	8470.	5760.	4630.	3240.	2500.	2250.	2260.	1830.	14400. 10/25/34
1936	5330.	4230.	3120.	3020.	2320.	2250.	1920.	1810.	1690.	6230. 01/12/36
1937	5850.	5170.	3760.	2730.	2300.	2100.	2070.	1930.	1600.	8100. 04/14/37
1938	8350.	6700.	4560.	3590.	2900.	2650.	2380.	2000.	1820.	9620. 04/18/38
1939	5840.	4630.	3300.	2370.	1900.	1670.	1520.	1450.	1410.	6660. 01/02/39
1940	7850.	6940.	4720.	3210.	2510.	1920.	1920.	1790.	1560.	9880. 12/15/39
1941	4290.	3100.	2170.	1620.	1240.	1160.	1020.	914.	865.	5010. 01/18/41
1942	8250.	6260.	4250.	2850.	2370.	1760.	1510.	1330.	1160.	9520. 12/19/41
1943	9250.	6610.	4800.	3500.	2820.	2000.	1780.	1670.	1710.	12900. 11/23/42
1944	6510.	4320.	2700.	1710.	1240.	1110.	1060.	964.	982.	8500. 12/03/43

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1932-1944)

W R C SYSTEMATIC
ESTIMATE RECORD

MEAN	8996.9	6856.2	4840.8	3612.3	2805.4	2273.8	2003.1	1813.7	1606.7	
MAXIMUM	22200.0	17200.0	12200.0	9470.0	7050.0	5130.0	3920.0	3400.0	2690.0	
MINIMUM	4290.0	3100.0	2170.0	1620.0	1240.0	1110.0	1020.0	914.0	865.0	
STANDARD DEVIATION	4602.25	3515.35	2515.59	1981.28	1452.24	1004.23	736.06	632.21	462.75	
SKEWNESS	2.133	2.296	2.247	2.337	2.193	1.954	1.274	1.020	0.535	
STD ERROR OF SKEWNESS	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	
SERIAL CORR COEFF	0.275	0.147	0.290	0.314	0.271	0.302	0.340	0.360	0.290	
COEFF OF VARIATION	0.512	0.513	0.520	0.548	0.518	0.442	0.367	0.349	0.288	
MEAN LOGS	3.914	3.796	3.644	3.513	3.405	3.324	3.276	3.235	3.189	
STD DEVIATION LOGS	0.185	0.184	0.188	0.197	0.195	0.171	0.155	0.152	0.130	
SKEWNESS LOGS	0.819	0.782	0.715	0.699	0.385	0.397	-0.045	-0.244	-0.490	
STD ERR SKEWNESS LOGS	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	
SER CORR COEFF LOGS	0.286	0.123	0.270	0.343	0.274	0.393	0.372	0.373	0.300	
COEFF OF VAR LOGS	0.047	0.048	0.052	0.056	0.057	0.051	0.047	0.047	0.041	
										4.0034
										0.1849
										0.0160
										0.4250

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1932-1944)

0.99	3937.7	2986.9	2022.6	1432.2	1019.4	950.2	813.1	714.7	691.1	3761.5	4281.8
0.95	4547.2	3465.7	2381.4	1706.6	1282.4	1159.6	1044.8	943.1	907.2	5012.7	5286.5
0.90	4994.0	3813.7	2639.4	1904.1	1463.7	1301.0	1193.0	1087.2	1038.2	5844.3	5976.2
0.80	5691.9	4353.8	3037.1	2209.2	1734.2	1508.3	1399.5	1284.8	1211.0	7040.9	7001.6
0.50	7741.7	5924.4	4182.6	3092.4	2471.4	2056.1	1893.9	1740.7	1582.0	10067.0	9779.4
0.20	11429.3	8714.0	6195.4	4658.0	3668.3	2907.8	2553.2	2311.6	1996.3	14415.9	14254.6
0.10	14508.8	11019.9	7845.5	5951.3	4585.4	3538.3	2980.2	2660.2	2224.9	17403.1	17665.9
0.04	19237.2	14329.8	10339.9	7918.8	5893.4	4413.6	3510.5	3072.1	2474.0	21283.7	22513.5
0.02	23445.5	17629.2	12528.4	9654.5	6980.9	5124.4	3899.9	3361.0	2636.2	24245.5	26533.0
0.01	28312.7	21190.5	15029.5	11646.9	8169.5	5887.1	4285.1	3636.5	2782.1	27264.9	30918.0

STATION 12084500 LITTLE NISQUALLY RIVER NEAR ALDER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1920	224	187	305	274	308	277	161	130	60.0	22.8	17.1	124	164
1921	86.6	260	308	56.7	71.5	99.5	166	235	92.2	17.6	11.8	20.0	120
1922	48.3	41.6	237	502	93.9	102	136	95.8	57.6	20.8	14.7	14.2	114
1923	67.6	60.0	212	170	324	53.8	58.9	28.1	10.6	7.29	7.03	9.25	83.2
1924	146	327	149	358	336	85.0	123	75.9	45.2	13.2	10.9	6.54	138
1925	5.44	56.0	223	135	247	77.7	31.2	50.3	17.9	5.70	6.66	17.1	71.8
1926	103	177	252	320	334	163	141	187	74.9	21.6	10.8	37.5	151
1927	125	381	115	262	63.7	265	217	118	23.1	9.71	9.43	135	135
1928	61.3	97.0	163	108	40.0	194	213	153	84.5	22.9	11.7	7.84	96.7
1929	6.51	5.71	187	65.5	326	136	84.8	76.1	31.6	14.1	9.21	8.38	77.7
1930	11.7	37.6	49.2	250	161	228	220	36.7	72.4	23.1	7.27	8.99	91.6
1931	80.1	151	245	236	224	358	231	104	52.4	29.5	12.8	7.56	144
1932	22.8	321	266	248	78.1	293	165	197	183	40.6	16.3	58.9	158
1933	133	120	879	473	96.2	178	81.4	85.6	23.7	16.2	9.14	10.8	177
1934	158	375	216	362	191	121	123	100	43.4	13.9	17.4	13.9	144
1935	15.8	60.7	130	379	176	186	320	146	181	30.0	11.9	13.0	118
1936	7.95	5.86	184	25.8	128	259	320	146	181	35.2	16.0	18.6	110
1937	31.6	374	321	244	94.1	176	191	75.2	25.5	11.3	7.72	5.70	130
1938	33.7	109	154	251	174	167	110	55.6	36.5	16.5	9.54	9.27	93.5
1939	25.7	40.8	339	134	323	242	119	85.9	20.5	11.3	8.35	9.55	114
1940	35.6	98.5	145	196	87.7	73.1	51.0	86.6	37.7	15.6	10.9	40.9	73.3
1941	73.7	150	337	93.9	160	88.9	60.2	53.2	102	41.1	17.1	10.4	98.6
1942	24.4	323	256	124	253	160	206	59.2					
1943													

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1920-1943)

MEAN	66.4	163.4	246.6	229.0	186.5	173.2	145.7	105.1	63.5	20.7	11.0	20.5	118.3
MAXIMUM	224.0	381.0	879.0	502.0	336.0	358.0	320.0	255.0	183.0	41.1	17.1	124.0	177.0
MINIMUM	5.4	5.7	49.2	25.8	40.0	53.8	31.2	28.1	10.6	5.7	6.1	5.7	71.8
STD DEVIATION	58.23	128.91	157.45	129.32	101.57	81.64	69.88	56.02	48.21	9.80	3.40	25.99	30.60
SKEDNESS	1.126	0.573	3.059	0.424	0.258	0.480	0.456	1.022	1.408	0.679	0.490	3.274	0.158
STD ERR SKEW	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.491	0.491	0.481	0.481	0.491
SER CORR COEFF	0.117	-0.192	0.004	-0.110	-0.022	0.424	0.209	0.132	-0.065	0.119	-0.087	-0.019	0.232
COEFF OF VAR	0.877	0.769	0.638	0.555	0.555	0.471	0.480	0.533	0.759	0.475	0.309	1.265	0.259
MEAN LOGS	1.626	2.012	2.332	2.271	2.197	2.188	2.106	1.963	1.690	1.265	1.021	1.150	2.059
STD DEV LOGS	0.464	0.516	0.232	0.317	0.274	0.222	0.245	0.237	0.326	0.222	0.135	0.329	0.116
SKEDNESS LOGS	-0.417	-1.142	-0.184	-1.046	-0.436	-0.338	-0.815	-0.224	-0.036	-0.873	0.016	1.503	-0.239
STD ERR SKEW LOGS	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.491	0.491	0.481	0.481	0.491
SER CORR LOGS	0.041	0.009	0.010	-0.185	0.001	0.464	0.151	0.174	-0.123	0.108	-0.105	0.021	0.157
COEFF OF VAR LOGS	0.286	0.256	0.099	0.140	0.125	0.101	0.117	0.121	0.193	0.176	0.132	0.286	0.056
% OF AVE FLOW	4.6	11.4	17.2	16.0	13.0	12.1	10.2	7.3	4.4	1.4	0.8	1.4	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1920-1943)

0.99	2.5	2.6	57.7	20.1	29.8	41.4	24.8	23.6	8.4	4.7	5.1	5.5	58.7
0.95	6.5	10.8	86.8	47.1	51.9	63.5	45.0	36.2	18.1	7.5	6.3	6.0	72.5
0.90	10.3	20.9	107.2	70.2	68.5	78.8	59.9	45.1	18.7	9.4	7.1	6.5	80.8
0.80	17.7	42.7	137.6	107.9	94.2	101.3	82.2	58.4	26.1	12.2	8.1	7.6	91.8
0.50	45.6	128.3	218.1	211.7	164.7	158.6	137.7	93.6	49.2	19.2	10.5	11.8	115.7
0.20	105.6	281.0	337.7	347.5	269.8	238.4	207.0	145.9	92.3	28.5	13.6	23.8	143.7
0.10	157.4	379.1	420.6	422.8	340.8	290.5	246.2	181.9	127.9	34.3	15.6	36.8	160.0
0.04	233.9	485.4	527.8	499.5	429.2	354.4	288.3	228.3	180.8	41.2	18.1	71.8	178.6
0.02	297.4	550.0	609.0	544.9	493.5	400.6	314.8	263.1	225.8	46.0	19.9	113.0	191.3
0.01	365.4	603.0	691.0	582.0	556.1	445.4	337.7	298.1	275.6	50.5	21.7	176.3	203.2

STATION 12084500 LITTLE NISQUALLY RIVER NEAR ALDER+ WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1922	8.2	8.6	8.9	9.6	10.0	12.0	16.0	21.0	46.0
1923	9.0	9.7	10.0	10.0	12.0	12.0	14.0	16.0	28.0
1924	8.0	8.0	8.0	8.2	9.7	12.0	13.0	17.0	35.0
1925	5.2	5.4	5.5	5.6	5.7	6.5	6.9	8.2	18.0
1926	3.5	3.9	4.5	4.7	5.0	5.8	7.1	8.2	20.0
1927	3.4	3.8	3.9	4.7	5.7	5.9	7.0	11.0	21.0
1928	9.2	9.2	9.5	9.7	11.0	15.0	19.0	34.0	70.0
1929	5.0	5.7	6.0	7.4	8.1	9.4	14.0	17.0	32.0
1930	3.1	3.3	3.4	4.0	5.1	5.8	6.4	7.4	20.0
1931	5.9	6.4	7.2	8.1	8.3	8.6	9.1	10.4	18.0
1932	5.0	5.0	5.0	5.4	6.5	7.9	8.8	22.0	29.0
1933	5.7	6.0	6.1	6.4	7.1	8.5	12.0	17.0	37.0
1934	8.4	8.4	9.0	10.0	13.0	18.0	33.0	44.0	89.0
1935	3.3	3.4	3.6	4.0	4.8	7.8	8.4	9.9	26.0
1936	4.4	4.4	4.7	5.5	6.2	8.5	11.0	13.0	24.0
1937	4.1	4.4	4.5	4.9	5.7	6.6	7.9	9.1	22.0
1938	10.0	11.0	11.0	12.0	16.0	17.0	19.0	24.0	66.0
1939	4.8	4.8	5.0	5.2	5.7	6.6	7.8	11.0	23.0
1940	7.0	7.0	7.1	7.5	8.3	9.3	11.0	14.0	25.0
1941	7.0	7.3	7.5	7.6	8.0	8.8	9.4	11.0	40.0
1942	8.0	8.1	8.4	9.0	10.0	13.0	19.0	25.0	39.0
1943	5.9	6.2	6.6	7.7	8.0	9.5	12.0	19.0	

LOWEST MEAN FLOW STATISTICS (YEARS 1922-1943)

MEAN	6.1	6.4	6.6	7.1	8.2	9.8	12.4	16.8	34.3
MAXIMUM	10.0	11.0	11.0	12.0	16.0	18.0	33.0	44.0	89.0
MINIMUM	3.1	3.3	3.4	4.0	4.8	5.8	6.4	7.4	18.0
STANDARD DEVIATION	2.12	2.19	2.21	2.27	2.92	3.54	6.14	9.04	18.61
SKEWNESS	0.255	0.399	0.286	0.347	1.070	1.013	1.972	1.606	1.788
STD ERROR OF SKEWNESS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491
SERIAL CORR COEFF	0.010	0.008	-0.046	-0.124	-0.172	-0.186	-0.116	-0.101	-0.064
COEFF OF VARIATION	0.348	0.345	0.333	0.317	0.358	0.363	0.497	0.539	0.543
MEAN LOGS	0.758	0.778	0.798	0.833	0.888	0.964	1.052	1.174	1.488
STD DEVIATION LOGS	0.158	0.154	0.150	0.141	0.146	0.148	0.182	0.208	0.194
SKEWNESS LOGS	-0.188	-0.113	-0.189	-0.096	0.422	0.444	0.764	0.510	0.985
STD ERR SKEWNESS LOGS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491
SER CORR COEFF LOGS	0.057	0.042	-0.032	-0.105	-0.126	-0.121	-0.076	-0.025	0.025
COEFF OF VAR LOGS	0.208	0.197	0.188	0.169	0.164	0.153	0.174	0.177	0.130

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1922-1943)

0.99	12.7	13.3	13.4	14.1	18.7	22.7	37.6	54.1	118.2
0.98	11.7	12.1	12.3	13.0	16.6	20.0	31.4	45.2	95.5
0.96	10.6	11.0	11.2	11.9	14.6	17.5	25.9	37.3	76.5
0.90	9.1	9.4	9.7	10.3	12.0	14.4	19.7	28.1	56.0
0.80	7.8	8.1	8.4	8.9	10.2	12.1	15.7	22.0	43.2
0.50	5.8	6.0	6.3	6.8	7.6	9.0	10.7	14.3	28.6
0.20	4.2	4.5	4.7	5.2	5.8	6.9	7.9	9.9	21.0
0.10	3.6	3.8	4.0	4.5	5.1	6.1	6.9	8.3	18.6
0.05	3.1	3.3	3.5	4.0	4.7	5.5	6.3	7.3	17.1
0.02	2.6	2.8	3.0	3.4	4.2	5.0	5.7	6.4	15.8
0.01	2.3	2.6	2.7	3.1	3.9	4.7	5.4	5.9	15.1

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1922-1943)

P95	P90	P75	P70	P50	P25	P10
6.8	8.7	18.0	25.0	58.0	140.0	290.0

STATION 12084500 LITTLE NISQUALLY RIVER NEAR ALDER, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

ANNUAL PEAK-FLOW DATA
FLOW(CFS) DATE REG.(R)

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	
1921	1920.	1260.	975.	660.	440.	345.	334.	304.	261.	2390.
1922	1520.	1220.	800.	624.	518.	316.	288.	189.	188.	2560.
1923	1800.	1440.	1150.	855.	686.	386.	297.	257.	201.	2560.
1924	1200.	875.	655.	549.	374.	260.	238.	200.	150.	1990.
1925	1140.	900.	684.	507.	340.	244.	206.	174.	129.	1530.
1926	810.	638.	430.	320.	244.	206.	174.	129.	925.	1750.
1927	1460.	1080.	888.	564.	389.	344.	313.	290.	245.	1790.
1928	1210.	931.	641.	589.	409.	317.	256.	223.	172.	1270.
1929	901.	560.	400.	313.	255.	224.	189.	164.	147.	1270.
1930	998.	572.	433.	391.	309.	224.	194.	184.	144.	1880.
1931	1180.	800.	539.	424.	343.	259.	216.	160.	150.	2740.
1932	1950.	1250.	772.	560.	455.	367.	288.	284.	245.	1600.
1933	1100.	854.	700.	440.	371.	338.	283.	237.	231.	2920.
1934	2250.	2070.	1700.	1280.	950.	699.	511.	423.	323.	2170.
1935	1650.	1320.	956.	634.	411.	325.	318.	307.	247.	1510.
1936	1140.	949.	668.	623.	422.	282.	229.	201.	182.	2090.
1937	1350.	1140.	698.	441.	327.	307.	262.	230.	182.	1950.
1938	1570.	1410.	850.	522.	403.	369.	322.	268.	235.	1480.
1939	1080.	850.	547.	352.	261.	222.	202.	187.	160.	2250.
1940	1270.	1150.	744.	528.	369.	298.	287.	264.	209.	1510.
1941	1130.	744.	437.	307.	220.	176.	154.	136.	111.	1810.
1942	1560.	994.	694.	440.	346.	249.	222.	191.	151.	2250.
1943										

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1921-1943)

W R C SYSTEMATIC
ESTIMATE RECORD

MEAN	1372.2	1049.9	753.9	550.0	410.5	311.7	268.7	239.1	199.3	
MAXIMUM	2250.0	2070.0	1700.0	1280.0	950.0	699.0	511.0	423.0	323.0	
MINIMUM	810.0	560.0	400.0	307.0	220.0	176.0	154.0	136.0	111.0	
STANDARD DEVIATION	370.10	342.37	289.30	213.98	159.05	104.40	73.39	64.30	52.12	
SKEWNESS	0.739	1.105	1.665	1.951	2.074	2.428	1.547	0.969	0.328	
STD ERROR OF SKEWNESS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	
SERIAL CORR COEFF	0.045	0.141	0.121	0.071	0.046	0.097	0.090	0.009	0.122	
COEFF OF VARIATION	0.270	0.326	0.384	0.389	0.388	0.335	0.273	0.269	0.262	
MEAN LOGS	3.123	3.000	2.851	2.715	2.588	2.475	2.415	2.364	2.285	
STD DEVIATION LOGS	0.114	0.138	0.152	0.149	0.144	0.124	0.110	0.113	0.116	
SKEWNESS LOGS	0.212	0.033	0.349	0.575	0.742	0.851	0.352	0.161	-0.225	3.2672
STD ERR SKEWNESS LOGS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.1229
SER CORR COEFF LOGS	0.071	0.209	0.155	0.098	0.072	0.128	0.076	-0.019	0.089	-0.5250
COEFF OF VAR LOGS	0.036	0.046	0.053	0.055	0.056	0.050	0.046	0.048	0.051	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1921-1943)

0.99	751.4	482.6	343.8	270.7	214.8	184.3	153.9	130.3	98.9	961.4
0.95	876.5	596.1	413.6	313.9	242.7	202.2	176.0	152.7	122.0	1163.3
0.90	954.6	667.5	459.7	343.3	262.2	214.9	190.0	166.6	135.9	1288.1
0.80	1062.0	766.1	526.0	386.6	291.6	234.2	209.5	185.6	154.3	1457.7
0.50	1315.1	998.9	695.1	501.6	373.2	287.1	256.4	229.8	194.6	1848.6
0.20	1650.0	1305.6	945.5	681.7	503.4	372.6	320.7	287.4	242.0	2346.9
0.10	1867.7	1503.3	1123.7	815.9	604.1	437.5	363.6	324.4	269.7	2659.9
0.04	2140.3	1748.6	1363.2	1003.3	748.2	529.3	418.4	370.1	301.5	3041.0
0.02	2342.5	1928.7	1552.4	1156.5	868.4	605.1	459.9	403.8	323.3	3316.3
0.01	2544.6	2107.1	1750.9	1321.7	1000.5	687.7	502.0	437.1	343.7	3585.7

STATION 12086500 NISQUALLY RIVER AT LA GRANDE, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1907	1148	3503	2567	1550	2875	954	1813	1507	1078	1001	718	662	1603
1908	520	1372	1802	1739	1231	1917	1995	1667	1752	1773	967	551	1442
1909	568	1228	1209	1430	680	501	1915	1573	1941	1184	731	560	1046
1910	386	3549	1915	1530	1643	3206	2102	1656	2167	1589	755	751	1513
1911	1313	2866	1818	1320	680	1023	1127	2691	2167	1589	755	751	1513
1912	1128												
1920	419	1285	1806	1946	1052	905	1302	1357	1314	888	662	1284	1184
1921	2163	2219	2646	3100	2498	2498	1705	1879	1879	1024	650	454	1808
1922	728	1695	3251	598	575	739	1167	2156	1739	780	636	547	1222
1923	514	514	1717	3872	836	983	1471	1562	1335	998	732	497	1259
1924	602	653	1663	1470	3153	736	823	1121	1752	691	564	445	1099
1925	812	2172	1858	2467	3038	992	1528	1615	1014	794	556	383	1424
1926	311	467	2012	1340	1907	1055	1266	898	699	650	543	446	920
1927	1133	1371	1829	2171	2089	1394	1206	1861	1771	1002	588	716	1424
1928	1587	3216	1517	2445	757	1903	1718	1792	860	861	553	450	1475
1929	742	747	963	738	440	1292	1419	2083	1723	874	633	404	1009
1930	290	207	1271	656	2398	1237	1275	1083	785	677	544	404	893
1944	465	620	1405	1338	1082	761	1032	1124	896	632	453	491	858
1945	370	435	154	89.5	1706	1366	1233	2708	638	730	387	638	866
1946	1615	1318	1769	2177	1561	1813	1544	2169	1741	1233	655	681	1525
1947	1214	1590	3956	1618	2203	1146	1355	779	742	741	482	921	1352
1948	1453	2398	1763	2384	1997	2015	1339	1973	1606	1047	771	689	1619
1949	1050	1217	2054	1431	1620	1746	1685	2599	1370	921	684	815	1433
1950	923	1754	2831	2467	1746	2658	1722	1846	2117	1381	969	906	1778
1951	1262	2974	3235	2253	3543	1621	1661	1475	853	490	452	710	1697
1952	1364	1774	2033	1715	1577	1573	893	1214	1205	662	804	688	1265
1953	1240	593	925	2702	2351	1475	1484	1124	1205	887	860	805	1299
1954	1355	1182	2939	2320	3209	1511	1758	2020	1716	1394	883	788	1749
1955	1161	1533	1281	1783	1906	1523	1658	1682	1748	1535	1104	928	1484
1956	1831	4000	3964	2537	1693	1702	2024	2383	2000	1360	828	903	2103
1957	1215	1620	2159	1976	1613	1790	1751	1473	1163	587	663	784	1398
1958	1374	1316	1497	1835	2555	1497	1473	1570	1110	780	907	1448	1445
1959	1170	1741	2813	3779	1785	1793	1665	1306	1471	1047	907	1233	1728
1960	1796	3047	2104	1698	1780	1611	1563	1641	1490	840	1077	970	1633
1961	1333	2208	1887	2271	3748	2302	1845	1976	965	811	617	1274	1756
1962	743	1526	1735	2187	1612	630	1441	1295	872	527	620	639	1149
1963	1436	1870	2137	2021	2001	927	883	1265	814	644	602	1085	1303
1964	905	1607	1797	2500	2226	2093	1578	1117	1410	1157	841	859	1505
1965	1064	1518	2994	3538	2051	2185	1137	979	701	516	681	596	1498
1966	1177	1476	1488	1830	1211	1438	1469	1236	945	921	645	802	1221
1967	1898	1296	1922	1941	1951	1924	1827	964	990	679	602	688	1473
1968	1207	2027	1804	2943	2986	1552	1563	894	1426	771	868	1113	1504
1969	1668	1730	2541	2597	2105	1509	1390	1098	1159	786	653	920	1511
1970	1357	1298	1571	2401	2328	2054	1578	1041	588	488	675	910	1352
1971	1201	1457	2050	2256	2385	2085	2135	2237	1771	1219	998	934	1739
1972	1748	1832	1915	1756	2754	5047	1998	2166	1574	1005	977	1021	1974
1973	1136	1402	2399	2315	2063	1203	1988	580	458	662	877	829	1217
1974	1021	1956	2559	4858	2539	2153	2287	2175	1736	1613	719	953	2047
1975	1158	1050	1755	3373	3124	2143	2450	678	1229	997	722	884	1461
1976	1250	2336	5199	3402	2288	2273	1247	1410	970	1058	985	933	1950
1977	1681	939	729	607	543	1170	1143	531	1187	644	909	1745	986
1978	1399	2586	5235	1951	1688	1284	586	536	876	886	806	901	1564
1979	919	1271	1677	1144	1108	1642	1197	1659	1158	1074	1031	912	1235

STATION 12086500 NISQUALLY RIVER AT LA GRANDE, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1907-1979)

MEAN	1123.1	1672.2	2109.5	2075.2	1928.7	1626.0	1452.7	1527.4	1255.9	928.3	735.8	796.8	1433.8
MAXIMUM	2163.0	4000.0	5235.0	4858.0	3748.0	5047.0	2287.0	2708.0	2167.0	1773.0	1104.0	1745.0	2103.0
MINIMUM	290.0	207.0	154.0	89.5	440.0	501.0	586.0	531.0	458.0	488.0	387.0	383.0	858.0
STD DEVIATION	442.24	837.77	952.71	883.71	794.91	736.59	388.07	550.90	441.21	304.19	173.64	280.87	299.87
SKEWNESS	-0.080	0.811	1.437	0.554	0.113	2.058	-0.206	0.213	0.273	0.902	0.278	0.934	0.032
STD ERR SKEW	0.327	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
SER CORR COEFF	0.190	0.062	-0.243	0.051	0.047	-0.050	-0.054	0.081	-0.073	0.328	0.360	0.430	0.082
COEFF OF VAR	0.394	0.501	0.452	0.426	0.412	0.453	0.267	0.361	0.351	0.328	0.236	0.353	0.209
MEAN LOGS	3.008	3.162	3.278	3.266	3.240	3.173	3.144	3.153	3.071	2.946	2.855	2.876	3.147
STD DEV LOGS	0.211	0.252	0.227	0.266	0.218	0.184	0.131	0.174	0.161	0.137	0.105	0.152	0.095
SKEWNESS LOGS	-1.022	-0.973	-2.011	-2.607	-0.997	-0.109	-0.994	-0.670	-0.307	0.203	-0.227	-0.053	-0.504
STD ERR SKEW LOGS	0.327	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330
SER CORR LOGS	0.293	0.230	-0.105	0.038	0.123	-0.028	-0.076	0.084	-0.113	0.026	0.380	0.563	0.152
COEFF OF VAR LOGS	0.080	0.089	0.069	0.081	0.067	0.058	0.042	0.055	0.052	0.046	0.037	0.053	0.030
% OF AVE FLOW	6.5	9.7	12.2	12.0	11.2	9.4	8.4	8.9	7.3	5.4	4.3	4.6	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1907-1979)

0.99	232.4	254.4	287.4	169.1	381.9	537.4	560.7	462.2	457.6	444.9	392.6	329.1	777.9
0.95	407.7	490.7	667.9	533.8	677.8	732.5	791.7	687.5	620.7	536.0	474.3	420.9	950.1
0.90	530.2	667.9	960.0	858.0	886.7	861.4	930.6	833.5	724.6	594.3	522.7	479.4	1049.0
0.80	705.0	934.6	1379.5	1348.6	1187.4	1045.3	1109.4	1034.3	867.8	675.8	586.0	560.5	1174.3
0.50	1103.9	1593.4	2225.5	2291.0	1884.4	1500.9	1465.1	1485.6	1200.1	874.1	722.1	753.3	1427.5
0.20	1539.1	2380.6	2840.9	2706.3	2660.9	2131.8	1803.7	2003.5	1615.5	1147.7	876.3	1008.2	1690.8
0.10	1756.9	2500.9	3018.9	2864.0	3056.7	2550.0	1960.9	2288.0	1861.5	1331.4	968.1	1172.0	1829.1
0.04	1968.1	3226.5	3120.5	2914.5	3445.7	3076.8	2107.9	2592.7	2163.1	1567.2	1070.0	1374.3	1974.8
0.02	2089.2	3479.5	3153.4	2920.2	3671.4	3467.5	2190.3	2786.6	2368.7	1745.7	1139.2	1522.2	2067.3
0.01	2186.3	3688.0	3169.7	2921.9	3854.4	3856.6	2255.6	2957.0	2563.3	1927.1	1203.6	1668.0	2148.9

STATION 12086500 NISQUALLY RIVER AT LA GRANDE, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1908	380.0	390.0	397.0	421.0	483.0	507.0	575.0	627.0	787.0
1909	350.0	350.0	361.0	435.0	450.0	546.0	651.0	760.0	929.0
1910	305.0	315.0	340.0	369.0	385.0	463.0	553.0	695.0	1050.0
1911	380.0	395.0	400.0	430.0	475.0	561.0	630.0	704.0	956.0
1921	418.0	447.0	466.0	496.0	573.0	670.0	817.0	944.0	1138.0
1922	282.0	308.0	324.0	352.0	436.0	474.0	545.0	630.0	959.0
1923	265.0	297.0	302.0	337.0	385.0	494.0	477.0	513.0	615.0
1924	267.0	276.0	286.0	306.0	364.0	469.0	510.0	570.0	782.0
1925	207.0	216.0	280.0	307.0	376.0	446.0	493.0	543.0	684.0
1926	184.0	201.0	216.0	238.0	270.0	313.0	358.0	423.0	587.0
1927	306.0	326.0	371.0	401.0	439.0	491.0	521.0	562.0	658.0
1928	480.0	487.0	494.0	549.0	586.0	618.0	754.0	972.0	1190.0
1929	322.0	353.0	357.0	367.0	415.0	487.0	566.0	612.0	680.0
1930	115.0	150.0	167.0	180.0	200.0	232.0	278.0	343.0	578.0
1945	4.0	10.0	10.0	20.0	78.0	117.0	180.0	241.0	321.0
1946	82.0	328.0	354.0	368.0	379.0	383.0	512.0	575.0	874.0
1947	448.0	459.0	565.0	627.0	638.0	786.0	916.0	916.0	1180.0
1948	364.0	382.0	405.0	426.0	459.0	576.0	650.0	688.0	809.0
1949	170.0	475.0	592.0	650.0	676.0	725.0	786.0	860.0	1050.0
1950	315.0	433.0	470.0	525.0	623.0	721.0	783.0	821.0	965.0
1951	389.0	637.0	745.0	826.0	892.0	934.0	967.0	1080.0	1380.0
1952	414.0	416.0	424.0	442.0	443.0	458.0	492.0	585.0	877.0
1953	204.0	310.0	436.0	487.0	568.0	665.0	689.0	740.0	782.0
1954	440.0	461.0	513.0	536.0	713.0	760.0	841.0	930.0	1010.0
1955	460.0	580.0	626.0	685.0	768.0	832.0	923.0	993.0	1160.0
1956	532.0	669.0	808.0	832.0	883.0	1010.0	1150.0	1260.0	1420.0
1957	455.0	545.0	573.0	675.0	755.0	848.0	942.0	1050.0	1260.0
1958	392.0	409.0	449.0	528.0	576.0	617.0	671.0	752.0	979.0
1959	432.0	501.0	615.0	659.0	777.0	847.0	938.0	1050.0	1140.0
1960	524.0	557.0	700.0	843.0	873.0	951.0	1050.0	1150.0	1240.0
1961	540.0	604.0	739.0	759.0	818.0	949.0	946.0	1040.0	1210.0
1962	352.0	359.0	411.0	472.0	604.0	712.0	701.0	824.0	985.0
1963	398.0	398.0	423.0	427.0	494.0	577.0	592.0	660.0	888.0
1964	365.0	400.0	450.0	490.0	597.0	614.0	671.0	749.0	855.0
1965	424.0	426.0	429.0	544.0	575.0	789.0	893.0	963.0	1060.0
1966	357.0	381.0	389.0	425.0	488.0	585.0	584.0	608.0	703.0
1967	505.0	530.0	556.0	592.0	635.0	695.0	780.0	821.0	995.0
1968	328.0	328.0	332.0	478.0	590.0	597.0	637.0	734.0	836.0
1969	514.0	550.0	595.0	625.0	660.0	738.0	830.0	930.0	1040.0
1970	473.0	481.0	506.0	575.0	651.0	674.0	766.0	847.0	988.0
1971	442.0	444.0	447.0	470.0	488.0	529.0	574.0	634.0	803.0
1972	798.0	810.0	813.0	840.0	897.0	955.0	1050.0	1150.0	1410.0
1973	458.0	590.0	716.0	770.0	825.0	856.0	934.0	980.0	1160.0
1974	358.0	367.0	401.0	426.0	455.0	495.0	527.0	571.0	688.0
1975	468.0	468.0	476.0	516.0	643.0	824.0	932.0	959.0	1180.0
1976	570.0	570.0	571.0	593.0	671.0	784.0	839.0	902.0	912.0
1977	540.0	540.0	540.0	540.0	543.0	576.0	606.0	687.0	897.0
1978	391.0	403.0	405.0	411.0	499.0	769.0	774.0	812.0	1020.0
1979	398.0	401.0	403.0	405.0	443.0	556.0	665.0	718.0	765.0

STATION 12086500 NISQUALLY RIVER AT LA GRANDE, WASH.

LOWEST MEAN FLOW STATISTICS (YEARS 1908-1979)

MEAN	378.9	422.9	462.2	503.6	561.5	635.6	701.8	778.7	947.5
MAXIMUM	798.0	810.0	813.0	843.0	897.0	1010.0	1150.0	1260.0	1420.0
MINIMUM	4.0	10.0	10.0	20.0	78.0	117.0	180.0	241.0	321.0
STANDARD DEVIATION	137.55	138.95	160.07	171.51	179.27	191.29	203.16	216.64	231.68
SKEWNESS	-0.201	-0.111	0.075	0.011	-0.092	-0.208	-0.112	-0.065	-0.115
STD ERROR OF SKEWNESS	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340
SERIAL CORR COEFF	0.488	0.492	0.480	0.522	0.555	0.518	0.440	0.394	0.277
COEFF OF VARIATION	0.363	0.329	0.346	0.341	0.319	0.301	0.289	0.278	0.245
MEAN LOGS	2.518	2.582	2.618	2.661	2.720	2.778	2.825	2.872	2.962
STD DEVIATION LOGS	0.330	0.268	0.274	0.242	0.181	0.165	0.148	0.137	0.119
SKEWNESS LOGS	-4.381	-4.489	-4.427	-3.832	-2.207	-1.943	-1.441	-1.147	-0.840
STD ERR SKEWNESS LOGS	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340
SER CORR COEFF LOGS	0.472	0.345	0.335	0.408	0.551	0.557	0.486	0.455	0.308
COEFF OF VAR LOGS	0.131	0.104	0.105	0.091	0.066	0.059	0.053	0.048	0.040

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1908-1979)

0.99	999999.0	999999.0	999999.0	999999.0	764.5	882.6	1038.4	1191.8	1364.2
0.98	999999.0	999999.0	999999.0	999999.0	762.9	878.5	1022.7	1163.2	1338.0
0.96	999999.0	999999.0	999999.0	999999.0	759.2	870.6	999.6	1125.4	1302.7
0.90	999999.0	999999.0	999999.0	999999.0	745.7	847.2	949.9	1054.1	1234.2
0.80	999999.0	999999.0	999999.0	999999.0	717.9	807.7	886.4	973.6	1154.6
0.50	999999.0	999999.0	999999.0	999999.0	602.7	672.2	722.7	790.5	966.4
0.20	999999.0	999999.0	999999.0	999999.0	413.8	474.1	525.9	589.9	749.6
0.10	999999.0	999999.0	999999.0	999999.0	307.9	365.1	423.2	487.9	634.7
0.05	999999.0	999999.0	999999.0	999999.0	227.9	281.5	343.9	408.6	543.1
0.02	999999.0	999999.0	999999.0	999999.0	152.5	199.8	263.7	327.3	446.5
0.01	999999.0	999999.0	999999.0	999999.0	112.2	154.3	216.7	278.4	386.9

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1908-1979)

P95	P90	P75	P70	P50	P25	P10
430.0	520.0	770.0	850.0	1200.0	1800.0	2300.0

STATION 12086500 NISQUALLY RIVER AT LA GRANDE, WASH.										ANNUAL PEAK-FLOW DATA		
HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30										FLOW (CFS)	DATE	REG. (R)
YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS			
1907	16600.	13200.	8610.	5770.	3630.	3170.	2750.	2640.	2210.	16600.	11/15/06	R
1908	7020.	5870.	4240.	3020.	2320.	2130.	1990.	1950.	1820.	7020.	04/19/08	R
1909	4060.	3700.	2950.	2470.	2120.	1760.	1570.	1410.	1240.	10600.	03/02/10	R
1910	10600.	7460.	6150.	5270.	3800.	2440.	2410.	2320.	2320.	10500.	11/21/10	R
1911	10500.	7090.	4850.	3990.	3210.	2440.	2200.	1930.	1570.	12500.	12/24/19	R
1920	5870.	4570.	4000.	3150.	2350.	2110.	1760.	1550.	1480.	12500.	12/30/20	R
1921	10900.	8120.	7400.	5130.	3540.	3110.	2970.	2640.	2380.	19500.	12/12/21	R
1922	16700.	12100.	7140.	5730.	4330.	2620.	1960.	1620.	1540.	16800.	01/07/23	R
1923	13900.	11600.	9150.	6310.	5000.	2940.	2310.	2080.	1870.	13100.	02/12/24	R
1924	10300.	7150.	5500.	4820.	3380.	2320.	2110.	1820.	1510.	9410.	02/03/25	R
1925	8550.	7880.	7020.	5080.	2880.	2800.	2550.	2390.	2030.	6700.	12/23/25	R
1926	5490.	4430.	3300.	2560.	2040.	1770.	1750.	1580.	1320.	9200.	01/02/27	R
1927	8100.	6230.	4430.	3080.	2220.	2080.	2080.	1960.	1810.	13900.	11/25/27	R
1928	11300.	7360.	5410.	4560.	3500.	2830.	2420.	2210.	1960.	4590.	12/10/28	R
1929	3500.	2870.	2650.	2440.	2150.	1940.	1800.	1670.	1340.	6070.	12/14/29	R
1930	5000.	3570.	2890.	2780.	2300.	1780.	1610.	1480.	1340.	10700.	03/31/31	R
1931												
1944	5200.	4300.	2920.	1900.	1500.	1390.	1290.	1160.	1130.	12000.	02/08/45	R
1945	11000.	6930.	6440.	3240.	2860.	2060.	1850.	1820.	1390.	10600.	12/31/45	R
1946	6800.	6230.	5290.	4010.	2780.	2050.	1970.	1870.	1900.	11600.	12/14/46	R
1947	10300.	10200.	8790.	6090.	4090.	2860.	2630.	2360.	1970.	8360.	01/02/48	R
1948	6490.	5400.	4330.	3630.	2860.	2240.	2330.	2130.	2080.	6640.	05/13/49	R
1949	4970.	4670.	4450.	3450.	2640.	2160.	2020.	1920.	1860.	15000.	05/14/50	R
1950	8580.	7770.	5610.	3710.	3210.	2940.	2580.	2650.	2330.	9350.	02/10/51	R
1951	14100.	11800.	8640.	5290.	3890.	3270.	3370.	3030.	2550.	10600.	02/01/53	R
1952	4300.	3320.	2490.	2250.	2080.	1990.	1900.	1800.	1680.	14500.	12/12/53	R
1953	9270.	7480.	5190.	4750.	3700.	2590.	2240.	2000.	1710.	6740.	11/21/54	R
1954	8810.	7400.	5610.	4400.	3540.	2730.	2840.	2500.	2290.	16900.	12/12/55	R
1955	5830.	4000.	2720.	2170.	1430.	1860.	1750.	1730.	1720.	6160.	03/04/57	R
1956	15000.	9980.	7040.	5880.	4800.	4130.	3620.	3150.	2690.	6900.	02/17/58	R
1957	3000.	2950.	2930.	2630.	2470.	2110.	1980.	1950.	1830.	13300.	01/23/59	R
1958	5000.	4370.	3230.	2970.	2530.	2180.	1970.	1850.	1730.	13200.	02/21/61	R
1959	13200.	9750.	6910.	4410.	3900.	3340.	2920.	2640.	2270.	2900.	02/03/62	R
1960	14000.	10300.	6690.	4250.	3320.	2650.	2370.	2180.	2000.	9600.	12/06/62	R
1961	9370.	7400.	5690.	4300.	3650.	3060.	2750.	2640.	2410.	8820.	01/25/64	R
1962	2330.	2290.	2290.	2270.	2210.	2080.	2100.	2010.	1730.	16000.	04/22/66	R
1963	3790.	3180.	2550.	2460.	2330.	2130.	2100.	2160.	2280.	12300.	01/28/67	R
1964	8150.	6980.	4740.	3590.	2830.	2460.	2310.	2160.	1490.	8540.	02/20/68	R
1965	16900.	15200.	8930.	5280.	3640.	3340.	2920.	2710.	2030.	7470.	12/09/68	R
1966	2270.	2160.	2070.	1950.	1870.	1780.	1610.	1580.	1490.	8150.	01/27/70	R
1967	11800.	8450.	5090.	3950.	3000.	2500.	2210.	2020.	1830.	6210.	02/15/71	R
1968	8200.	6470.	5860.	3890.	2980.	2450.	2240.	2180.	2000.	13900.	02/29/72	R
1969	6720.	5760.	4080.	3070.	2760.	2590.	2430.	2270.	2030.	7190.	01/16/74	R
1970	5990.	4530.	3830.	2970.	2720.	2420.	2280.	2130.	1880.	9210.	01/19/75	R
1971	5640.	4540.	3740.	3090.	2930.	2510.	2370.	2330.	2220.	27100.	12/04/75	R
1972	11100.	9120.	7530.	3090.	2930.	2510.	2370.	2330.	2220.	2380.	12/03/77	R
1973	6960.	5770.	4290.	3250.	2800.	2500.	2370.	2050.	1740.	2920.	01/06/79	R
1974	17000.	13000.	10200.	7380.	5210.	3910.	3350.	3050.	2780.			
1975	7840.	6750.	5860.	4660.	3510.	2860.	2450.	2000.	18100.			
1976	22500.	16900.	12400.	7710.	5290.	4400.	3710.	3360.	2850.			
1977	2390.	2250.	2230.	2140.	1750.	1330.	1130.	1130.	1020.			
1978	9670.	9300.	8430.	7620.	5820.	4340.	3310.	2910.	2360.			
1979	2250.	2240.	2220.	2200.	1900.	1590.	1500.	1480.	1420.			

STATION 12066500 NISQUALLY RIVER AT LA GRANDE, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1907-1979)

W R C
ESTIMATE RECORD

MEAN	8750.4	6968.1	5292.3	4042.3	3170.8	2560.8	2315.0	2144.4	1906.1	
MAXIMUM	22500.0	16900.0	12400.0	7710.0	5820.0	4400.0	3710.0	3360.0	2850.0	
MINIMUM	2250.0	2160.0	2070.0	1900.0	1500.0	1330.0	1130.0	1130.0	1020.0	
STANDARD DEVIATION	4534.82	3428.96	2356.94	1554.96	1036.75	697.88	581.09	513.17	429.04	
SKWENESS	0.754	0.818	0.770	0.717	0.805	0.754	0.496	0.327	0.152	
STD ERROR OF SKWENESS	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	
SERIAL CORR COEFF	-0.175	-0.187	-0.101	-0.177	-0.195	-0.252	-0.255	-0.194	-0.143	
COEFF OF VARIATION	0.518	0.492	0.445	0.385	0.327	0.273	0.231	0.239	0.225	
MEAN LOGS	3.879	3.789	3.661	3.576	3.479	3.393	3.351	3.319	3.269	
STD DEVIATION LOGS	0.247	0.224	0.197	0.165	0.139	0.116	0.110	0.106	0.101	
SKWENESS LOGS	-0.474	-0.289	-0.089	0.075	0.107	0.039	-0.214	-0.286	-0.387	
STD ERR SKWENESS LOGS	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	
SER CORR COEFF LOGS	-0.183	-0.178	-0.154	-0.175	-0.193	-0.238	-0.240	-0.178	-0.112	
COEFF OF VAR LOGS	0.064	0.059	0.053	0.046	0.040	0.034	0.033	0.032	0.031	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1907-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
MEAN	1659.9	2769.2	3570.7	4775.8	7921.1	12328.4	15164.7	18583.3	20995.0	23289.3
MAXIMUM	1660.3	2527.8	3131.4	4021.2	6312.9	9568.0	11730.0	14430.5	16407.8	18351.0
MINIMUM	1587.1	2030.7	2320.0	2730.4	3747.9	5179.2	6149.9	7401.5	8351.9	9317.7
STANDARD DEVIATION	1626.1	2254.2	2876.1	3285.9	4831.2	7036.3	8532.3	10450.2	11894.4	13349.5
SKWENESS	1587.1	2030.7	2320.0	2730.4	3747.9	5179.2	6149.9	7401.5	8351.9	9317.7
STD ERROR OF SKWENESS	1472.1	1801.8	2011.0	2301.7	2998.2	3937.2	4554.6	5333.2	5913.6	6495.6
SERIAL CORR COEFF	1194.8	1456.2	1612.3	1817.9	2264.5	2784.9	3087.4	3433.5	3670.0	3891.4
COEFF OF VARIATION	1119.9	1366.4	1512.2	1702.4	2108.0	2567.5	2828.1	3120.4	3316.7	3497.8
MEAN LOGS	1012.6	1237.1	1368.1	1536.7	1887.4	2269.4	2478.6	2706.8	2856.0	2991.1
STD DEVIATION LOGS	2081.2	3656.7	4777.1	6408.3	10302.9	14893.0	17372.5	19937.0	21500.6	22820.5
SKWENESS LOGS	2081.2	3656.7	4777.1	6408.3	10302.9	14893.0	17372.5	19937.0	21500.6	22820.5
STD ERR SKWENESS LOGS	2081.2	3656.7	4777.1	6408.3	10302.9	14893.0	17372.5	19937.0	21500.6	22820.5
SER CORR COEFF LOGS	2081.2	3656.7	4777.1	6408.3	10302.9	14893.0	17372.5	19937.0	21500.6	22820.5
COEFF OF VAR LOGS	2081.2	3656.7	4777.1	6408.3	10302.9	14893.0	17372.5	19937.0	21500.6	22820.5

STATION 12087000 MASHSEL RIVER NEAR LA GRANDE, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1941	63.4	201	242	222	98.7	88.2	162	157	114	26.2	20.9	108	125
1942	194	244	575	178	253	163	132	206	294	98.1	25.3	13.2	198
1943	22.0	339	484	243	421	245	342	145	159	42.2	19.2	16.2	205
1944	74.1	98.4	250	234	207	154	203	141	83.3	20.6	14.1	53.3	127
1945	36.1	105	142	322	350	411	409	441	101	20.3	14.1	67.2	201
1946	73.0	476	431	503	441	414	258	204	329	135	26.0	32.1	276
1947	148	450	890	478	409	182	232	67.2	90.7	42.9	19.4	30.9	253
1948	198	585	445	521	471	295	341	422	193	63.5	58.8	83.3	305
1949	126	471	494	149	499	423	337	285	72.1	32.0	16.5	17.9	242
1950	96.5	224	379	334	670	567	332	267	191	61.3	28.2	31.3	263
1951	188	518	519	529	567	295	253	166	52.7	14.7	12.7	23.1	259
1952	229	335	353	198	409	245	139	139	66.3	44.4	13.3	11.3	191
1953	10.0	12.9	83.2	694	368	266	245	255	246	71.5	40.3	40.3	194
1954	137	293	697	612	703	228	356	172	294	111	70.6	115	313
1955	121	254	235	231	356	233	475	340	255	173	39.5	49.9	229
1956	307	688	832	489	195	531	440	216	224	45.8	27.8	24.5	337
1957	176	241	411	113	530	544	295	220	89.7	35.2	21.5	16.9	223

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1941-1957)

MEAN	129.4	325.6	439.0	355.9	408.7	312.0	298.6	226.1	167.9	61.0	27.5	43.2	231.8
MAXIMUM	307.0	688.0	890.0	694.0	703.0	567.0	475.0	441.0	329.0	173.0	70.6	115.0	337.0
MINIMUM	10.0	12.9	83.2	113.0	98.7	88.2	132.0	67.2	52.7	14.7	12.7	11.3	125.0
STD DEVIATION	80.08	183.55	223.21	178.98	162.49	147.40	93.76	100.78	91.93	44.26	16.33	32.44	58.96
SKENESS	0.425	0.263	0.497	0.397	-0.030	0.523	0.121	0.878	0.371	1.345	1.629	1.221	-0.119
STD ERR SKEW	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550
SER CORR COEFF	0.033	0.060	-0.247	-0.033	0.235	0.390	0.249	-0.221	-0.070	0.042	0.198	-0.055	0.192
COEFF OF VAR	0.619	0.564	0.509	0.503	0.398	0.472	0.314	0.446	0.547	0.725	0.593	0.751	0.254
MEAN LOGS	1.992	2.400	2.577	2.495	2.569	2.445	2.431	2.313	2.157	1.687	1.382	1.528	2.350
STD DEV LOGS	0.390	0.408	0.267	0.235	0.215	0.221	0.148	0.200	0.259	0.302	0.221	0.313	0.120
STD ERR SKEW LOGS	-1.269	-2.128	-0.968	-0.207	-1.281	-0.430	-0.1657	-0.422	-0.135	0.158	0.272	0.272	-0.800
SER CORR LOGS	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550
COEFF OF VAR LOGS	-0.091	0.106	-0.177	-0.109	0.279	0.402	0.258	-0.236	-0.046	0.023	0.208	0.005	0.253
COEFF OF VAR LOGS	0.196	0.170	0.104	0.094	0.084	0.091	0.061	0.087	0.120	0.179	0.160	0.205	0.051
% OF AVE FLOW	4.6	11.7	15.7	12.7	14.6	11.2	10.7	8.1	6.0	2.2	1.0	1.5	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1941-1957)

0.99	5.6	8.0	59.7	81.5	75.9	72.6	109.1	61.1	33.8	10.5	9.7	7.3	100.6
0.95	17.5	38.3	119.7	124.1	143.1	113.7	152.8	91.5	52.6	16.0	11.8	10.9	134.6
0.90	29.4	74.7	165.9	154.2	191.0	142.2	180.0	112.0	66.2	20.2	13.3	13.7	154.7
0.80	51.2	144.7	236.7	199.2	259.4	183.9	216.2	141.3	87.2	26.9	15.6	18.3	180.5
0.50	118.1	339.7	416.6	318.2	411.2	288.8	294.4	212.4	145.4	47.7	22.7	32.7	232.5
0.20	208.9	513.3	637.9	495.2	562.5	430.7	380.2	305.0	237.8	86.8	36.0	61.2	284.1
0.10	257.0	564.4	758.3	617.5	630.1	520.4	426.1	362.1	219.8	119.8	47.5	86.5	309.6
0.04	302.8	592.0	881.6	775.4	689.0	627.6	474.5	429.3	396.2	170.5	65.7	127.0	334.8
0.02	327.7	600.3	955.5	894.6	719.1	703.0	505.0	476.0	467.4	215.0	82.4	164.2	349.8
0.01	346.5	604.1	1016.7	1014.5	741.1	774.7	531.6	519.9	541.3	265.7	102.1	207.8	362.3

STATION 12087000

MASHIEL RIVER NEAR LA GRANDE, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1942	13.0	13.0	14.0	15.0	17.0	22.0	46.0	63.0	92.0
1943	10.0	11.0	11.0	12.0	12.0	13.0	17.0	37.0	104.0
1944	10.0	11.0	11.0	12.0	13.0	16.0	19.0	35.0	68.0
1945	9.2	9.4	10.0	11.0	13.0	15.0	23.0	31.0	48.0
1946	9.2	9.2	10.0	11.0	12.0	16.0	23.0	34.0	112.0
1947	17.0	17.0	18.0	19.0	24.0	29.0	33.0	79.0	139.0
1948	13.0	13.0	14.0	15.0	17.0	24.0	29.0	41.0	63.0
1949	23.0	23.0	26.0	27.0	45.0	49.0	56.0	83.0	129.0
1950	10.0	11.0	11.0	12.0	14.0	17.0	21.0	30.0	60.0
1951	13.0	13.0	14.0	14.0	17.0	26.0	36.0	62.0	120.0
1952	6.6	6.8	7.6	9.5	10.0	12.0	14.0	23.0	68.0
1953	6.8	7.2	7.8	7.9	8.1	10.0	11.0	12.0	26.0
1954	19.0	21.0	22.0	26.0	36.0	38.0	48.0	70.0	128.0
1955	40.0	40.0	41.0	44.0	50.0	67.0	82.0	95.0	142.0
1956	29.0	30.0	30.0	31.0	32.0	43.0	66.0	108.0	180.0
1957	17.0	17.0	17.0	18.0	22.0	25.0	26.0	46.0	117.0

LOWEST MEAN FLOW STATISTICS (YEARS 1942-1957)

MEAN	15.4	15.8	16.5	17.8	21.4	26.4	34.4	53.1	99.8
MAXIMUM	40.0	40.0	41.0	44.0	50.0	67.0	82.0	108.0	180.0
MINIMUM	6.6	6.8	7.6	7.9	8.1	10.0	11.0	12.0	26.0
STANDARD DEVIATION	8.94	8.95	9.15	9.68	12.77	15.69	20.16	27.76	41.17
SKWENESS	1.676	1.625	1.558	1.587	1.232	1.389	1.094	0.564	0.001
STD ERROR OF SKWENESS	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564
SERIAL CORR COEFF	0.473	0.503	0.456	0.473	0.297	0.356	0.332	0.156	0.096
COEFF OF VARIATION	0.582	0.567	0.553	0.544	0.597	0.595	0.587	0.523	0.413
MEAN LOGS	1.130	1.145	1.167	1.201	1.267	1.358	1.470	1.662	1.955
STD DEVIATION LOGS	0.219	0.214	0.210	0.205	0.235	0.236	0.248	0.254	0.217
STD ERR SKWENESS LOGS	0.627	0.624	0.667	0.724	0.532	0.429	0.149	-0.550	-1.035
SKWENESS LOGS	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564
SER CORR COEFF LOGS	0.464	0.480	0.440	0.439	0.307	0.348	0.247	0.124	0.011
COEFF OF VAR LOGS	0.194	0.187	0.180	0.171	0.186	0.173	0.168	0.153	0.111

LOWEST MEAN FLOW NDN-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1942-1957)

0.99	54.8	54.9	56.8	60.6	80.2	95.4	118.2	140.6	196.9
0.98	44.7	45.0	46.6	49.7	65.2	78.5	99.5	127.5	188.1
0.96	36.1	36.5	37.8	40.3	52.3	63.6	82.4	113.4	177.1
0.90	26.4	26.9	27.9	29.8	37.9	46.7	61.8	93.0	157.8
0.80	20.2	20.7	21.5	23.0	28.6	35.5	47.5	75.7	137.9
0.50	12.8	13.3	13.9	15.0	17.6	22.0	29.1	48.4	98.2
0.20	8.8	9.1	9.7	10.6	11.6	14.3	18.2	28.7	61.9
0.10	7.4	7.7	8.3	9.1	9.6	11.7	14.4	21.2	46.2
0.05	6.5	6.8	7.3	8.1	8.3	10.0	11.8	16.2	35.2
0.02	5.7	6.0	6.5	7.3	7.1	8.5	9.6	11.8	25.2
0.01	5.3	5.6	6.1	6.8	6.5	7.7	8.3	9.4	19.7

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1942-1957)

P95	P90	P75	P70	P50	P25	P10
14.0	19.0	52.0	67.0	150.0	300.0	530.0

STATION 12087000 MASHSEL RIVER NEAR LA GRANDE, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW (CFS) DATE REG. (R)
1941	1100.	712.	480.	373.	285.	259.	225.	198.	173.	1320. 01/18/41
1942	2720.	1970.	1260.	801.	590.	421.	368.	320.	269.	4040. 12/19/41
1943	1760.	1210.	1040.	705.	521.	457.	428.	372.	345.	2660. 03/28/43
1944	1250.	868.	585.	374.	288.	245.	232.	213.	198.	1720. 12/03/43
1945	1200.	967.	715.	593.	455.	446.	446.	406.	345.	1910. 02/07/45
1946	1670.	1490.	1100.	950.	648.	539.	496.	475.	419.	2460. 11/26/45
1947	5570.	3770.	2580.	1560.	1140.	723.	682.	577.	450.	7980. 12/11/46
1948	2740.	1960.	1280.	921.	766.	566.	550.	505.	450.	3800. 11/07/47
1949	2080.	1450.	1070.	839.	762.	498.	460.	435.	411.	2660. 02/17/49
1950	2310.	2070.	1370.	1210.	890.	671.	570.	511.	432.	2770. 02/24/50
1951	2220.	1930.	1390.	886.	727.	603.	623.	547.	450.	2880. 02/11/51
1952	1660.	1130.	1060.	733.	490.	370.	364.	342.	310.	2070. 01/30/52
1953	1430.	1170.	956.	841.	826.	533.	447.	396.	345.	1890. 01/31/53
1954	2760.	1810.	1290.	947.	791.	663.	670.	597.	478.	4640. 12/09/53
1955	2060.	1390.	846.	633.	515.	428.	377.	353.	324.	2960. 02/08/55
1956	2500.	2150.	1520.	1180.	1010.	791.	707.	592.	548.	3760. 12/21/55
1957	2630.	2490.	1650.	1280.	857.	586.	465.	421.	363.	3110. 03/07/57

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1941-1957)

	MEAN	MINIMUM	STANDARD DEVIATION	SKEWNESS	STD ERROR OF SKEWNESS	SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	SKEWNESS LOGS	STD ERR SKEWNESS LOGS	SER CORR COEFF LOGS	COEFF DF VAR LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
	2215.3	5570.0	1100.0	1031.43	2.197	0.466	3.311	0.173	0.600	0.550	0.152	0.052			
	1678.6	3770.0	712.0	479.50	1.355	0.550	0.146	0.182	0.094	0.550	0.210	0.057			
	1187.8	2580.0	480.0	311.20	0.402	0.550	0.112	0.282	-0.224	0.550	0.173	0.057			
	872.1	1560.0	373.0	237.31	0.038	0.550	0.288	0.357	-0.645	0.550	0.310	0.058			
	678.9	1140.0	285.0	151.27	-0.125	0.550	0.179	0.292	0.168	0.550	0.237	0.054			
	517.6	791.0	245.0	98.96	-0.326	0.550	0.075	0.303	0.142	0.550	0.144	0.054			
	475.8	707.0	225.0	144.14	0.030	0.550	0.284	2.694	0.145	-0.760	0.550	0.292			
	426.5	597.0	198.0	121.27	0.550	0.550	0.267	2.610	0.141	-0.992	0.550	0.292			
	371.2	548.0	173.0	98.96	0.550	0.550	0.267	2.552	0.133	-1.121	0.550	0.292			
	345.09	3.4509	0.1848	0.0140											

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1941-1957)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
	967.7	1144.9	1268.3	1453.7	1965.1	2810.1	3468.4	4422.0	5227.1	6118.8
	599.6	783.9	906.4	1083.3	1534.3	2193.3	2653.7	3260.8	3731.0	4215.9
	410.2	560.3	657.7	794.2	1120.8	1548.8	1819.2	2146.5	2380.8	2607.6
	277.4	405.5	487.7	600.1	851.2	1138.5	1296.6	1466.5	1575.0	1670.8
	204.2	308.0	375.0	466.5	666.1	890.4	1007.6	1128.7	1203.0	1266.5
	190.2	270.3	319.5	384.0	517.6	653.3	720.6	786.9	826.0	858.4
	173.9	243.7	290.0	348.7	472.6	603.5	670.8	739.5	781.4	816.9
	153.5	222.2	264.2	319.0	429.8	537.3	587.8	635.3	662.0	683.3
	138.2	199.6	236.7	284.2	377.2	462.2	496.8	533.3	551.3	564.9
	1054.3	1405.1	1638.3	1973.7	2821.7	4039.7	4876.0	5962.0	6790.5	7634.9
	1256.6	1512.3	1691.2	1961.3	2713.3	3973.9	4967.9	5962.0	6421.7	7659.5
	1512.3	1891.2	236.7	319.0	429.8	537.3	587.8	635.3	662.0	683.3

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1927	90.8	191	99.7	169	39.9	135	141	59.9	32.7	11.3	8.13	35.4	82.1
1928	30.6	24.8	52.7	58.7	52.0	127	104	81.5	22.2	18.1	8.25	8.51	51.2
1929	7.69	11.0	69.4	39.4	153	85.7	44.3	66.0	22.7	14.6	7.49	6.67	40.1
1930	12.4	41.3	27.4	87.4	64.2	70.3	121	29.9	61.3	8.52	5.31	6.08	45.9
1931	49.0	73.7	56.5	86.4	111	191	98.6	32.4	12.2	20.1	7.51	9.69	62.0
1941	49.4	72.5	174	66.9	71.0	54.9	41.9	66.4	114	47.2	13.8	36.7	65.0
1942	8.26	111	131	76.5	122	58.4	99.9	43.7	47.5	15.3	8.10	11.9	60.2
1943	26.3	28.2	68.4	63.8	67.9	58.2	55.5	33.1	28.1	6.04	5.90	16.0	54.7
1944	12.8	23.8	37.8	93.3	101	113	125	101	25.1	6.99	4.97	12.8	78.7
1946	18.7	120	118	162	151	133	60.6	26.8	79.9	53.0	8.51	19.0	79.3
1947	48.1	148	268	155	96.7	59.0	92.1	15.4	29.1	17.3	10.2	9.74	88.5
1948	57.2	132	117	128	121	123	123	115	68.7	29.4	23.7	29.3	71.7
1949	49.7	112	237	53.8	144	104	67.5	51.2	15.1	12.2	9.07	9.43	80.0
1950	28.4	67.9	114	139	200	172	108	65.2	22.2	12.3	13.9	12.7	78.9
1951	58.1	145	162	183	202	102	43.8	30.8	15.6	8.49	5.30	12.4	80.0
1952	59.6	77.5	102	49.5	92.0	78.1	62.4	42.7	18.7	13.9	6.20	4.44	50.5
1953	33.8	8.81	26.5	142	122	75.5	71.3	70.5	90.8	27.6	12.0	14.7	55.4
1954	33.8	82.1	224	191	160	84.5	88.4	31.7	80.8	35.6	23.6	49.4	90.1
1955	38.1	59.4	70.5	101	97.6	87.8	141	63.4	42.4	47.7	13.2	19.7	64.8
1956	86.7	185	267	169	90.6	170	88.6	33.9	48.0	16.2	11.0	13.3	98.4
1957	54.6	60.9	134	44.2	135	175	76.9	62.8	31.8	14.2	12.9	8.22	67.2
1958	20.3	56.3	113	112	143	69.7	114	34.4	33.0	14.7	6.25	9.52	59.9
1959	25.9	151	143	160	87.8	88.6	71.1	76.7	69.2	18.4	10.8	25.5	77.1
1960	76.0	156	115	62.3	103	78.0	96.9	138	44.0	14.1	14.8	17.5	76.1
1961	28.1	235	87.0	109	212	126	88.5	76.7	25.6	13.9	7.62	9.81	83.9
1962	20.8	39.2	101	86.9	39.6	60.5	75.5	73.5	44.4	15.0	14.7	13.7	48.9
1963	22.9	96.1	93.6	42.2	106	64.6	123.5	53.4	22.1	28.9	12.3	15.4	56.2
1964	22.9	83.0	71.9	216	106	84.8	94.9	66.2	66.6	22.9	17.3	15.2	72.3
1965	35.4	67.8	233	217	165	47.5	56.5	43.5	17.9	10.8	12.0	11.7	76.2
1966	21.5	36.9	54.0	121	51.2	113	75.7	29.1	27.0	37.2	12.0	14.1	49.5
1967	37.6	72.1	139	223	122	91.6	60.6	40.9	24.7	9.81	5.45	5.50	69.3
1968	36.3	36.2	66.4	82.0	130	77.9	70.6	42.2	63.6	12.2	59.6	19.1	62.0
1969	48.3	98.6	151	178	125	75.2	70.5	58.6	46.5	23.4	8.15	74.9	74.9
1970	31.5	43.6	109	226	93.6	47.0	79.7	41.1	13.3	6.25	5.45	14.9	59.4
1971	30.1	53.6	133	258	104	120	86.2	41.4	41.3	30.4	6.12	15.0	76.7
1972													

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MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1927-1972)

MEAN	36.8	85.8	119.0	124.4	113.8	97.1	86.1	54.8	41.7	19.9	11.6	16.8	67.0
MAXIMUM	90.8	235.0	268.0	258.0	212.0	191.0	141.0	138.0	114.0	53.0	59.6	70.9	98.4
MINIMUM	7.7	8.8	24.5	39.4	39.6	47.0	41.9	19.4	12.2	6.0	5.0	4.4	37.8
STD DEVIATION	20.95	54.80	64.43	61.86	43.27	38.23	26.76	26.12	24.61	12.02	9.46	13.07	14.72
SKEDNESS	0.893	0.866	0.875	0.415	0.400	0.398	0.348	0.398	0.393	0.319	0.093	0.388	-0.063
STD ERR SKEW	0.398	0.398	0.398	0.398	0.398	0.398	0.398	0.398	0.393	0.393	0.393	0.388	0.398
SER CORR COEFF	0.122	0.114	-0.143	0.180	-0.074	0.013	-0.198	0.0	-0.169	-0.029	-0.091	-0.092	0.177
COEFF OF VAR	0.569	0.439	0.541	0.497	0.380	0.394	0.311	0.477	0.591	0.604	0.816	0.777	0.220
MEAN LOGS	1.491	1.832	2.009	2.037	2.022	1.957	1.914	1.896	1.849	1.530	0.992	1.142	1.815
STD DEV LOGS	0.272	0.331	0.255	0.236	0.182	0.164	0.140	0.193	0.253	0.244	0.226	0.256	0.101
SKEDNESS LOGS	-0.495	-0.518	-0.518	-0.270	-0.670	-0.233	-0.294	0.247	0.070	0.023	1.253	0.715	-0.528
STD ERR SKEW LOGS	0.398	0.398	0.398	0.398	0.398	0.398	0.398	0.398	0.393	0.393	0.393	0.388	0.398
SER CORR LOGS	0.131	0.129	-0.051	0.086	-0.086	-0.004	-0.028	-0.032	-0.214	-0.019	0.018	-0.083	0.228
COEFF OF VAR LOGS	0.181	0.127	0.116	0.090	0.084	0.073	0.073	0.114	0.164	0.199	0.228	0.224	0.055
% OF AVE FLOW	4.6	10.6	14.7	15.4	14.1	12.0	10.7	6.8	5.2	2.5	1.4	2.1	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1927-1972)

0.99	5.8	7.5	20.9	27.7	32.4	40.1	36.1	19.2	9.4	5.0	4.7	4.8	34.9
0.95	10.2	16.7	35.9	42.8	45.1	49.9	47.0	24.7	13.7	7.0	5.2	6.0	43.2
0.90	13.5	24.5	46.9	55.5	60.1	56.4	53.8	28.5	16.8	8.4	5.6	6.9	48.1
0.80	18.7	37.5	63.6	69.5	75.4	65.6	62.9	34.0	21.6	10.5	6.3	8.4	54.2
0.50	32.6	75.0	107.5	111.5	110.2	89.2	83.3	48.7	35.2	16.6	8.8	12.9	66.7
0.20	53.0	130.2	169.0	172.8	150.8	123.8	108.0	71.7	57.7	27.1	14.3	22.1	79.7
0.10	66.4	164.8	208.5	214.3	173.3	148.1	122.6	88.6	75.1	35.4	19.7	30.4	86.5
0.04	82.8	204.3	255.6	267.1	197.6	180.6	139.5	112.0	99.7	47.5	23.3	44.3	93.7
0.02	94.5	230.4	288.6	306.2	213.1	205.9	151.1	130.9	119.9	57.7	39.0	57.5	98.3
0.01	105.6	253.7	319.7	345.1	226.7	232.4	162.0	151.1	141.7	69.0	51.5	73.6	102.3

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1929	7.0	7.0	7.1	7.3	7.6	8.4	10.0	14.0	18.0
1930	5.5	5.5	5.6	5.7	6.5	6.9	7.2	8.0	15.0
1931	4.0	4.2	4.3	4.4	4.7	5.6	6.2	7.9	14.0
1932	6.0	6.0	6.1	6.3	6.9	8.8	10.0	18.0	25.0
1943	5.0	5.7	5.9	5.9	6.0	7.1	9.3	19.0	42.0
1944	5.0	5.4	5.4	6.5	7.7	8.6	10.0	15.0	23.0
1945	2.5	2.9	3.3	3.5	4.2	5.8	8.2	10.0	14.0
1946	3.2	3.2	3.6	3.9	4.1	5.2	7.5	8.6	28.0
1947	6.5	6.8	6.9	7.7	8.4	14.0	15.0	29.0	36.0
1948	6.0	6.2	6.6	7.3	9.6	9.9	11.0	14.0	22.0
1949	10.0	11.0	12.0	14.0	20.0	21.0	25.0	33.0	45.0
1950	6.5	6.8	7.0	7.4	8.0	9.2	11.0	17.0	17.0
1951	4.3	4.5	4.9	5.8	8.6	11.0	12.0	15.0	29.0
1952	4.0	4.1	4.2	4.5	5.0	6.5	7.3	9.8	18.0
1953	3.6	3.6	3.8	3.9	4.4	5.3	6.3	6.9	10.0
1954	5.2	5.4	5.6	6.5	8.8	13.0	16.0	21.0	41.0
1955	11.0	11.0	11.0	13.0	17.0	25.0	33.0	35.0	43.0
1956	4.8	5.4	6.8	7.1	9.5	16.0	23.0	29.0	43.0
1957	7.9	7.9	7.9	7.9	8.8	11.0	12.0	18.0	27.0
1958	5.9	6.0	6.4	7.2	8.2	10.0	11.0	13.0	24.0
1959	5.2	5.3	5.5	5.6	6.2	7.0	8.8	14.0	19.0
1960	7.5	7.5	7.5	7.9	8.6	14.0	17.0	23.0	41.0
1961	6.0	6.1	6.6	7.4	8.6	14.0	15.0	16.0	42.0
1962	6.1	6.1	6.3	6.5	7.2	8.7	9.6	12.0	18.0
1963	4.8	4.8	4.9	5.6	10.0	12.0	14.0	16.0	27.0
1964	9.0	9.0	9.1	9.9	11.0	13.0	14.0	18.0	25.0
1965	9.0	9.0	9.9	11.0	12.0	16.0	18.0	23.0	34.0
1966	8.5	8.5	8.7	9.3	10.0	11.0	11.0	12.0	17.0
1967	7.8	8.3	10.0	11.0	12.0	13.0	14.0	21.0	24.0
1968	4.0	4.1	4.2	4.3	4.8	5.4	6.7	10.0	19.0
1969	5.8	5.9	6.1	6.7	8.8	14.0	33.0	36.0	49.0
1970	4.8	4.8	5.0	5.3	6.4	8.0	15.0	19.0	28.0
1971	4.5	4.5	4.6	4.8	5.4	5.7	7.0	9.3	16.0

LOWEST MEAN FLOW STATISTICS (YEARS 1929-1971)

MEAN	6.0	6.1	6.4	7.0	8.3	10.6	13.1	17.1	27.1
MAXIMUM	11.0	11.0	12.0	14.0	20.0	25.0	33.0	36.0	49.0
MINIMUM	2.5	2.9	3.3	3.5	4.1	5.2	6.2	6.9	10.0
STANDARD DEVIATION	1.99	2.02	2.14	2.52	3.41	4.60	6.82	7.96	10.94
SKENNESS	0.715	0.797	0.884	1.132	1.651	1.212	1.719	0.984	0.495
STD ERROR OF SKENNESS	0.409	0.409	0.409	0.409	0.409	0.409	0.409	0.409	0.409
SERIAL CORR COEFF	0.218	0.238	0.297	0.255	0.239	0.224	0.151	0.029	0.021
COEFF OF VARIATION	0.334	0.330	0.332	0.359	0.439	0.434	0.520	0.465	0.404
MEAN LOGS	0.753	0.765	0.787	0.820	0.891	0.959	1.073	1.190	1.397
STD DEVIATION LOGS	0.145	0.141	0.139	0.147	0.162	0.178	0.193	0.195	0.180
SKENNESS LOGS	-0.127	0.005	0.159	0.257	0.318	0.216	0.678	0.169	-0.087
STD ERR SKENNESS LOGS	0.409	0.409	0.409	0.409	0.409	0.409	0.409	0.409	0.409
SER CORR COEFF LOGS	0.284	0.308	0.353	0.312	0.318	0.230	0.168	0.054	0.023
COEFF OF VAR LOGS	0.193	0.185	0.177	0.180	0.182	0.180	0.180	0.164	0.129

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1929-1971)

0.99	11.9	12.4	13.4	15.5	20.1	27.1	41.2	46.5	63.6
0.98	11.0	11.4	12.2	13.9	17.8	23.8	34.3	40.5	57.2
0.96	10.0	10.3	10.9	12.3	15.5	20.6	28.3	34.9	50.8
0.90	8.6	8.8	9.3	10.3	12.7	16.7	21.4	27.7	42.2
0.80	7.5	7.7	8.0	8.8	10.6	13.7	16.8	22.5	35.4
0.50	5.7	5.8	6.1	6.5	7.6	9.6	11.3	15.3	25.1
0.20	4.3	4.4	4.7	5.0	5.7	6.9	8.1	10.6	17.7
0.10	3.7	3.8	4.1	4.3	4.9	5.8	7.0	8.8	14.6
0.05	3.2	3.4	3.7	3.9	4.4	5.1	6.3	7.6	12.5
0.02	2.8	3.0	3.3	3.5	3.9	4.4	5.6	6.4	10.5
0.01	2.5	2.7	3.0	3.2	3.6	4.0	5.3	5.8	9.3

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1929-1971)

P95	P90	P75	P70	P50	P25	P10
6.5	8.7	18.0	22.0	44.0	89.0	150.0

STATION 1208R000 OHOP CREEK NEAR EATONVILLE, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL FLOW(CFS)	DATE	REG. (H)
1928	472.	403.	307.	270.	210.	172.	155.	139.	132.	511.	01/03/28	
1929	251.	244.	190.	151.	128.	117.	109.	96.	81.	288.	12/10/28	
1930	365.	298.	231.	195.	147.	117.	93.	86.	71.	416.	03/24/30	
1931	569.	460.	302.	222.	146.	105.	98.	86.	72.	666.	04/01/31	
1932	586.	475.	312.	292.	220.	172.	138.	124.	105.	732.	03/05/32	
1942	783.	685.	470.	287.	181.	132.	112.	99.	85.	840.	12/20/41	
1943	356.	306.	248.	179.	154.	133.	126.	110.	98.	485.	11/23/42	
1944	216.	196.	143.	95.	79.	72.	67.	65.	58.	286.	12/03/43	
1945	307.	278.	222.	165.	129.	119.	115.	110.	95.	344.	04/12/45	
1946	591.	469.	345.	314.	206.	169.	160.	145.	124.	659.	01/05/46	
1947	1110.	939.	660.	431.	326.	218.	206.	174.	139.	1600.	12/11/46	
1948	414.	320.	262.	198.	164.	138.	139.	124.	125.	429.	02/26/48	
1949	596.	541.	447.	351.	262.	181.	145.	143.	136.	892.	12/09/48	
1950	578.	549.	402.	350.	254.	207.	180.	163.	136.	615.	02/25/50	
1951	654.	567.	422.	283.	232.	200.	200.	178.	142.	1020.	02/11/51	
1952	266.	208.	178.	143.	117.	92.	87.	83.	79.	350.	10/23/51	
1953	350.	319.	274.	236.	193.	132.	115.	103.	95.	456.	01/31/53	
1954	824.	650.	439.	312.	248.	212.	193.	172.	137.	1740.	12/09/53	
1955	373.	294.	213.	177.	150.	117.	109.	110.	95.	480.	02/08/55	
1956	705.	525.	374.	336.	305.	249.	213.	184.	166.	824.	12/12/55	
1957	450.	410.	319.	277.	220.	162.	128.	128.	107.	605.	03/07/57	
1958	300.	256.	225.	176.	143.	130.	123.	114.	102.	339.	12/26/57	
1959	512.	425.	290.	226.	169.	157.	158.	139.	119.	720.	11/12/58	
1960	610.	592.	436.	275.	204.	145.	126.	115.	107.	805.	11/22/59	
1961	729.	579.	491.	380.	249.	172.	155.	169.	145.	948.	11/24/60	
1962	363.	288.	228.	172.	147.	97.	88.	81.	76.	419.	12/24/61	
1963	388.	298.	220.	189.	150.	102.	98.	88.	91.	529.	02/03/63	
1964	867.	582.	414.	305.	226.	164.	137.	126.	110.	1240.	01/25/64	
1965	1180.	895.	634.	395.	276.	237.	210.	174.	131.	1530.	01/29/65	
1966	332.	286.	217.	182.	137.	96.	98.	95.	76.	552.	01/05/66	
1967	550.	449.	316.	261.	225.	185.	164.	146.	119.	700.	01/19/67	
1968	442.	362.	240.	146.	128.	108.	101.	94.	81.	534.	02/19/68	
1969	696.	633.	452.	305.	212.	177.	157.	141.	117.	884.	01/07/69	
1970	619.	458.	447.	392.	250.	182.	147.	124.	101.	784.	01/14/70	
1971	700.	592.	427.	343.	266.	203.	170.	158.	127.	880.	01/26/71	
1972										585.	01/20/72	
1973										570.	12/21/72	
1974										684.	01/16/74	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1928-1974)

	MEAN	MINIMUM	STANDARD DEVIATION	SKWENESS	STD ERROR OF SKWENESS	SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	SKWENESS LOGS	STD ERR SKWENESS LOGS	SER CORR CDEFF LOGS	COEFF OF VAR LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
	545.8	452.3	337.1	257.5	195.9	153.5	137.5	125.4	107.6						
	1180.0	939.0	680.0	431.0	326.0	249.0	213.0	184.0	166.0						
	216.0	196.0	143.0	95.0	79.0	72.0	67.0	65.0	58.0						
	0.948	0.850	0.750	0.145	0.222	0.248	0.342	0.186	0.114						
	0.398	0.398	0.398	0.398	0.398	0.398	0.398	0.398	0.398						
	0.032	-0.038	0.021	0.101	0.050	-0.059	-0.057	-0.012	0.038						
	0.418	0.398	0.370	0.330	0.299	0.290	0.282	0.259	0.237						
	2.701	2.623	2.499	2.385	2.272	2.167	2.121	2.083	2.019						
	0.179	0.171	0.160	0.155	0.137	0.131	0.125	0.116	0.107						
	-0.017	0.006	0.005	-0.494	-0.453	-0.300	-0.228	-0.248	-0.365						
	0.398	0.398	0.398	0.398	0.398	0.398	0.398	0.398	0.398						
	0.086	0.023	0.065	0.116	0.087	-0.036	-0.022	0.026	0.069						
	0.066	0.065	0.064	0.065	0.060	0.060	0.059	0.056	0.053						

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1928-1974)

	0.99	0.95	0.90	0.80	0.70	0.60	0.50	0.40	0.30	0.20	0.10	0.05	0.01
	191.4	167.8	134.5	93.4	80.9	68.3	64.3	62.0	55.3	230.5	249.2		
	254.4	219.3	172.6	129.2	107.1	87.4	80.7	76.7	68.1	309.1	319.0		
	295.9	253.1	197.2	151.6	123.2	99.1	90.7	85.5	75.7	362.1	366.8		
	355.3	301.0	231.8	182.1	144.7	114.7	104.0	97.1	85.5	439.2	437.6		
	501.4	419.4	315.7	250.1	191.5	149.3	133.6	122.5	106.1	638.7	627.7		
	712.1	584.9	430.2	329.6	245.1	190.1	169.0	152.2	129.0	934.9	928.8		
	853.0	696.1	505.8	374.8	275.3	214.0	189.9	169.4	141.7	1143.8	1154.6		
	1033.7	838.1	601.2	425.0	308.6	251.2	214.1	189.0	155.7	1421.2	1470.6		
	1170.0	945.1	672.3	458.2	330.7	259.9	230.8	202.4	164.9	1636.9	1728.8		
	1307.6	1052.9	743.4	488.3	350.7	277.1	246.5	214.9	173.3	1860.2	2006.9		

STATION 12088400 NISQUALLY R ABV POWELL C NR MCKENNA, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1969						1918	1755	1412	1366	868	646	964	
1970	1503	1497	2036	3436	2944	2340	1992	1268	625	480	650	936	1636
1971	1366	1777	2768	3545	3719	2771	2611	2555	2032	1374	1039	1007	2164
1972	1895	2227	3253	2881	2348	6544	2863	2738	1181	1166	982	1100	2537
1973	1194	1669	3253	2881	2348	1483	784	741	599	696	947	847	1451
1974	1109	2642	3385	5749	3076	2965	2948	2439	1890	1890	693	895	2572
1975	1256	1407	2450	4611	2956	2896	1945	1049	1542	1189	764	943	1914
1976	1518	2728	6230	4299	2600	2633	1657	1498	1053	1051	1051	1012	2283
1977	1658	994	866	789	724	1561	1417	945	1350	732	832	1817	1150
1978	1537	2986	6366	2254	1818	1417	1488	774	936	887	933	1000	1814
1979	952	1497	2029	1279	1724	1859	1488	1653	1084	994	933	897	1364

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1969-1979)

MEAN	1398.8	1462.4	3190.8	3149.2	2516.0	2580.6	1864.1	1598.3	1364.3	1029.7	861.5	1038.0	1888.5
MAXIMUM	1895.0	2986.0	6366.0	5749.0	3791.0	6544.0	3079.0	2948.0	2439.0	1890.0	1051.0	1817.0	2572.0
MINIMUM	952.0	994.0	866.0	789.0	724.0	1417.0	784.0	741.0	599.0	480.0	646.0	847.0	1150.0
STD DEVIATION	279.80	663.47	1783.23	1514.69	849.23	1435.64	742.97	795.97	591.95	381.18	151.81	267.49	494.54
SKENNESS	0.127	0.370	1.069	0.070	-0.769	2.384	0.280	0.760	0.469	0.987	-0.336	2.924	0.031
STD ERR SKEW	0.687	0.687	0.687	0.687	0.687	0.687	0.661	0.661	0.661	0.661	0.661	0.661	0.687
SER CORR COEFF	-0.047	-0.871	-0.735	0.321	0.420	-0.092	-0.112	-0.226	-0.321	-0.143	0.176	-0.007	-0.328
COEFF OF VAR	0.200	0.342	0.559	0.481	0.353	0.556	0.399	0.498	0.434	0.370	0.176	0.258	0.262
MEAN LOGS	3.138	3.265	3.443	3.434	3.365	3.368	3.236	3.166	3.095	2.986	2.929	3.006	3.262
STD DEV LOGS	0.089	0.152	0.250	0.263	0.207	0.190	0.189	0.213	0.199	0.160	0.080	0.089	0.119
SKENNESS LOGS	-0.307	-0.139	-0.377	-1.070	-1.801	1.198	-0.1512	0.232	-0.275	-0.126	-0.483	2.616	-0.325
STD ERR SKEW LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.661	0.661	0.661	0.661	0.661	0.661	0.687
SER CORR LOGS	-0.010	-0.850	-0.794	0.189	0.288	-0.031	-0.155	-0.287	-0.426	-0.172	0.216	0.032	-0.312
COEFF OF VAR LOGS	0.047	0.073	0.073	0.077	0.062	0.056	0.058	0.067	0.064	0.053	0.027	0.030	0.036
% OF AVE FLOW	6.2	8.6	14.2	14.0	11.2	11.5	8.3	7.1	6.1	4.6	3.8	4.6	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1969-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01			
0.99	814.6	786.3	620.7	426.5	435.7	1236.9	534.0	498.8	390.4	398.1	519.4	867.2	908.6
0.95	963.9	1020.6	1015.1	872.0	899.7	1354.1	795.2	662.0	565.6	522.4	613.1	868.2	1139.6
0.90	1050.0	1169.1	1300.0	1216.0	1235.3	1450.7	968.3	775.1	683.3	602.0	665.8	870.9	1278.2
0.80	1160.0	1374.1	1730.6	1714.2	1704.6	1613.3	1211.8	944.3	852.5	712.8	731.5	879.9	1460.7
0.50	1387.6	1855.2	2873.6	3050.1	2651.1	2143.4	1795.5	1495.3	1271.7	976.6	861.4	940.6	1855.2
0.20	1635.2	2476.2	4533.0	4591.1	3393.3	3217.6	2496.5	2148.2	1841.4	1323.4	993.4	1124.1	2307.4
0.10	1771.6	2866.7	5640.7	5389.1	3638.6	4198.6	2916.2	2711.2	2208.9	1544.6	1061.8	1309.2	2565.4
0.04	1921.5	3339.9	7019.4	6170.5	3799.0	5822.6	3392.8	3504.1	2659.0	1815.6	1133.4	1619.5	2855.3
0.02	2020.3	3678.5	8043.1	6618.6	3859.6	7370.8	3713.0	4154.9	2983.7	2011.8	1178.5	1912.2	3050.1
0.01	2110.4	4009.6	9001.9	6976.6	3893.7	9266.9	4007.1	4858.2	3294.4	2203.9	1218.5	2264.7	3229.8

STATION 1208R400 NISQUALLY R ABV POWELL C NR MCKENNA, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1970	434.0	438.0	461.0	557.0	642.0	678.0	813.0	944.0	1110.0
1971	434.0	434.0	441.0	480.0	479.0	532.0	581.0	650.0	873.0
1972	855.0	861.0	869.0	888.0	888.0	1010.0	1130.0	1260.0	1590.0
1973	702.0	732.0	779.0	798.0	851.0	941.0	1030.0	1070.0	1340.0
1974	554.0	563.0	570.0	574.0	589.0	610.0	659.0	699.0	767.0
1975	644.0	470.0	479.0	511.0	610.0	785.0	930.0	1060.0	1360.0
1976	545.0	582.0	649.0	677.0	749.0	851.0	913.0	1020.0	1120.0
1977	676.0	676.0	683.0	706.0	735.0	758.0	795.0	843.0	1010.0
1978	570.0	572.0	581.0	609.0	713.0	823.0	959.0	985.0	1190.0
1979	686.0	695.0	699.0	726.0	764.0	840.0	864.0	854.0	890.0

LOWEST MEAN FLOW STATISTICS (YEARS 1970-1979)

MEAN	592.0	602.4	621.1	650.6	708.4	782.8	867.4	938.5	1125.0
MAXIMUM	855.0	861.0	869.0	888.0	962.0	1010.0	1130.0	1260.0	1590.0
MINIMUM	434.0	435.0	441.0	460.0	479.0	532.0	581.0	650.0	767.0
STANDARD DEVIATION	136.47	138.70	141.24	133.21	137.69	145.51	164.47	182.91	254.35
SKWENESS	0.590	0.474	0.340	0.365	0.236	-0.264	-0.299	-0.029	0.400
STD ERRDR OF SKWENESS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SERIAL CORR COEFF	0.086	0.103	0.099	0.001	-0.088	-0.121	-0.295	-0.400	-0.360
CDEFF OF VARIATION	0.231	0.230	0.227	0.205	0.194	0.186	0.190	0.195	0.226
MEAN LOGS	2.762	2.770	2.783	2.805	2.843	2.886	2.931	2.965	3.041
STD DEVIATION LOGS	0.098	0.099	0.099	0.089	0.086	0.085	0.087	0.088	0.098
SKWENESS LOGS	0.208	0.096	0.0	0.004	-0.298	-0.654	-0.724	-0.458	-0.011
STD ERR SKWENESS LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SER CORR COEFF LOGS	0.130	0.138	0.115	-0.014	-0.112	-0.128	-0.310	-0.428	-0.416
CDEFF OF VAR LOGS	0.036	0.036	0.036	0.032	0.030	0.029	0.030	0.030	0.032

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LDG-PEARSON III ANALYSIS (YEARS 1970-1979)

0.99	1014.5	1018.2	1031.9	1029.0	1056.3	1103.0	1220.1	1376.8	1859.0
0.98	944.6	952.4	969.6	972.9	1012.3	1071.0	1186.6	1326.2	1748.5
0.96	873.9	884.8	904.8	914.2	964.1	1033.5	1146.7	1269.3	1633.2
0.90	776.9	790.6	813.0	830.2	890.9	971.7	1079.8	1180.0	1469.4
0.80	698.1	712.5	735.3	758.6	824.3	910.3	1012.2	1095.8	1330.5
0.50	573.8	586.2	606.8	638.4	703.1	786.4	873.2	936.1	1099.8
0.20	476.9	484.8	500.7	537.3	591.4	659.2	727.9	782.5	908.7
0.10	434.9	439.9	452.9	491.0	537.2	593.6	652.4	706.1	822.2
0.05	403.9	406.4	416.8	455.9	494.8	540.7	591.4	645.6	756.9
0.02	372.5	372.1	379.7	419.3	449.5	483.1	524.9	580.5	689.5
0.01	353.4	351.1	356.7	396.6	420.8	446.2	482.3	539.2	647.9

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1970-1979)

P95	P90	P75	P70	P50	P25	P10
660.0	770.0	950.0	990.0	1500.0	2500.0	3100.0

STATION 12088400 NISQUALLY R ABV POWELL C NR MCKENNA, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW(CFS) DATE REG.(R)
1942										16000. 12/19/41 R
1943										16400. 11/23/42 R
1944										10800. 12/03/43 R
1945										14400. 02/08/45 R
1946										10500. 12/31/45 R
1947										17000. 12/11/46 R
1948										10300. 01/02/48 R
1949										8460. 12/09/48 R
1950										11100. 11/27/49 R
1951										17700. 02/11/51 R
1952										6520. 12/18/51 R
1953										10700. 02/01/53 R
1954										16700. 12/09/53 R
1955										6620. 01/01/55 R
1956										20800. 12/12/55 R
1957										5890. 03/07/57 R
1958										5820. 02/26/58 R
1959										14100. 01/24/59 R
1960										19300. 11/23/59 R
1961										14000. 02/21/61 R
1962										4220. 12/24/61 R
1963										7340. 12/06/62 R
1970	7650.	6310.	5260.	4460.	3740.	3230.	2970.	2730.	2380.	10400. 01/27/70 R
1971	8130.	6340.	5170.	4570.	4000.	3450.	3240.	3080.	2900.	9070. 01/26/71 R
1972	16200.	12200.	9630.	9520.	7420.	5280.	4530.	4120.	3520.	17400. 02/29/72 R
1973	8540.	7390.	5690.	4730.	3620.	2780.	2640.	2550.	2130.	9160. 12/27/72 R
1974	22100.	16700.	12400.	8640.	6180.	4780.	4140.	3840.	3560.	23200. 01/16/74 R
1975	11900.	9670.	7750.	6330.	4740.	3940.	3610.	3360.	2710.	12900. 01/18/75 R
1976	26500.	20800.	14800.	9300.	6330.	5390.	4510.	4020.	3430.	30700. 12/04/75 R
1977	2420.	2300.	2170.	2080.	1820.	1510.	1350.	1320.	1190.	2590. 03/09/77 R
1978	13200.	12600.	11100.	9660.	7110.	4820.	3930.	3400.	2730.	14900. 12/02/77 R
1979	2890.	2700.	2500.	2300.	2100.	1870.	1740.	1770.	1690.	4130. 02/07/79 R

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1942-1979)

	MEAN	MINIMUM	STANDARD DEVIATION	SKWENESS	STD ERROR OF SKWENESS	SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	STD ERR SKWENESS LOGS	SER CORR COEFF LOGS	COEFF OF VAR LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
11953.0	11953.0	26500.0	20800.0	9701.0	7647.0	6159.0	4726.0	3750.0	3286.0	3019.0	2624.0	2624.0		
2420.0	2420.0	2300.0	2170.0	2080.0	1820.0	1510.0	1350.0	1190.0	1092.08	937.10	792.72	792.72		
7831.32	7831.32	5951.18	4239.69	2954.99	1980.15	1352.17	1092.08	937.10	792.72	792.72	792.72	792.72		
0.699	0.699	0.601	0.338	-0.054	-0.079	-0.442	-0.681	-0.687	-0.687	-0.687	-0.687	-0.687		
0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687		
-0.437	-0.437	-0.514	-0.615	-0.751	-0.751	-0.655	-0.537	-0.446	-0.392	-0.392	-0.392	-0.392		
0.655	0.655	0.613	0.554	0.480	0.419	0.361	0.332	0.310	0.302	0.302	0.302	0.302		
3.974	3.974	3.898	3.811	3.733	3.633	3.542	3.489	3.456	3.397	3.397	3.397	3.397		
0.342	0.342	0.315	0.282	0.247	0.211	0.188	0.176	0.161	0.153	0.153	0.153	0.153		
-0.640	-0.640	-0.592	-0.562	-0.658	-0.729	-1.035	-1.228	-1.217	-1.115	-1.115	-1.115	-1.115		
0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687		
-0.431	-0.431	-0.517	-0.598	-0.660	-0.658	-0.558	-0.454	-0.389	-0.341	-0.341	-0.341	-0.341		
0.086	0.086	0.081	0.074	0.066	0.058	0.053	0.051	0.047	0.045	0.045	0.045	0.045		

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1942-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
1054.7	1054.7	2151.9	3014.6	4424.9	8483.2	14701.3	24120.8	31005.0	35871.3	40470.4
1077.7	1077.7	2023.3	2731.5	3638.1	6869.1	11280.4	18867.4	23960.2	27564.2	30981.7
1098.3	1098.3	1930.2	2535.1	3442.8	5759.0	9454.3	14153.7	17614.4	20041.0	22331.1
1100.9	1100.9	1767.1	2247.9	2927.9	4554.3	6517.7	9665.6	12760.0	14154.1	15417.7
1076.4	1076.4	1543.4	1951.0	2514.8	3749.4	5029.8	6722.4	8814.9	9575.1	10242.0
851.7	851.7	1416.4	1788.1	2291.8	3340.7	4336.6	4775.8	5159.8	5358.9	5506.3
884.2	884.2	1405.1	1737.8	2179.5	3076.1	3908.4	4271.9	4598.8	4753.1	4874.9
841.2	841.2	1282.3	1558.6	1922.6	2661.3	3362.1	3679.2	3966.0	4120.8	4239.9
2373.6	2373.6	4058.5	5269.3	7067.4	11597.3	17521.0	21077.9	25112.6	27800.3	30239.9
4058.5	4058.5	5269.3	7067.4	11597.3	17521.0	21077.9	25112.6	27800.3	30239.9	30239.9

STATION 12088500 NISQUALLY RIVER NEAR MCKENNA, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1941	1295	1761	3577	1273	1635	1117	1128	1363	2080	1142	461	828	
1942	313	2721	2914	1907	2629	1889	3065	1621	1561	1014	595	367	1444
1943	594	777	1727	1601	1451	1070	1342	1303	1004	620	508	436	1705
1944	456	601	370	592	2298	2214	2261	3954	770	741	428	521	1036
1945	1759	1983	2461	3214	2272	2214	1859	2349	2204	1488	659	710	1271
1946	1467	2252	5370	2465	2972	1570	1938	920	908	795	486	1096	1949
1947	1922	3260	2565	3031	2519	2477	1943	920	2028	1023	814	807	2085
1948	1326	1904	2906	1681	2329	2188	2110	2864	1365	880	677	804	1750
1949	928	2008	3399	3060	2656	3346	2177	2159	2214	1435	955	931	2104
1950	1576	3450	4002	2943	4284	2133	1953	1650	891	498	766	766	2037
1951	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520
1952	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520
1953	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520
1954	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520
1955	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520
1956	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520
1957	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520
1958	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520
1959	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520
1960	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520
1961	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520
1962	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520
1963	1281	1645	2241	1976	2120	1929	1948	1409	951	706	845	692	1520

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1941-1963)

MEAN	1361.0	2206.9	2787.2	2474.3	2606.9	2016.1	2007.0	1976.3	1500.5	986.8	729.5	858.6	1794.3
MAXIMUM	2238.0	4586.0	5370.0	4193.0	4446.0	3346.0	3065.0	3954.0	2267.0	1780.0	1142.0	1422.0	2540.0
MINIMUM	313.0	578.0	370.0	592.0	1451.0	931.0	1128.0	920.0	770.0	498.0	365.0	367.0	1036.0
STD DEVIATION	491.38	994.37	1150.21	813.74	779.50	592.30	435.73	659.71	506.58	358.06	228.36	254.35	348.94
STDEV	0.530	0.441	0.286	0.228	1.094	0.053	0.023	1.247	0.182	0.694	0.202	0.291	-0.193
SKEWNESS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.501
SER CORR COEFF	0.210	0.091	-0.108	-0.066	-0.205	0.032	-0.372	-0.008	-0.050	0.194	0.358	0.431	0.127
COEFF OF VAR	0.361	0.451	0.413	0.329	0.299	0.284	0.217	0.334	0.338	0.363	0.313	0.308	0.194
STD DEV LOGS	0.212	0.234	0.283	0.181	0.123	0.141	0.101	0.138	0.152	0.155	0.142	0.144	0.090
SKEWNESS LOGS	-1.597	-0.992	-1.973	-1.723	0.345	-0.767	-0.796	0.138	-0.122	0.099	-0.275	-0.667	-0.793
STD ERR SKEW LOGS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.501
SER CORR LOGS	0.318	0.195	0.013	0.026	-0.202	0.058	-0.356	-0.051	-0.029	0.120	0.392	0.506	0.199
COEFF OF VAR LOGS	0.069	0.071	0.072	0.054	0.036	0.043	0.031	0.042	0.048	0.052	0.050	0.049	0.028
% DF AVE FLOW	6.3	10.3	13.0	11.5	12.1	9.4	9.3	9.2	7.0	4.6	3.4	4.0	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1941-1963)

0.99	237.6	386.9	332.3	546.6	1397.2	760.8	1001.6	928.0	607.8	414.4	303.4	322.9	967.0
0.95	476.6	715.1	613.6	1014.4	1622.5	1063.9	1278.1	1130.0	786.8	520.5	395.3	448.3	1201.9
0.90	649.2	953.6	1197.4	1331.3	1767.0	1249.6	1436.2	1258.5	900.5	589.0	452.4	525.6	1333.7
0.80	893.4	1304.1	1763.6	1757.8	1969.9	1494.0	1634.1	1437.4	1057.5	685.7	529.8	628.3	1496.6
0.50	1407.0	2140.5	2949.9	2587.5	2466.6	2005.4	2019.3	1868.2	1427.3	922.8	704.8	847.9	1808.0
0.20	1853.1	3101.0	3852.9	3234.3	3160.2	2539.3	2389.3	2453.2	1907.1	1252.3	917.9	1086.1	2101.5
0.10	2020.9	3600.0	4124.5	3454.5	3631.3	2812.2	2567.8	2840.5	2210.2	1474.0	1045.2	1212.5	2241.5
0.04	2145.0	4095.9	4284.4	3604.6	4242.1	3088.7	2742.4	3331.7	2579.0	1758.3	1193.1	1345.0	2377.6
0.02	2198.6	4386.2	4338.0	3664.2	4709.3	3256.5	2845.2	3699.9	2844.9	1973.4	1295.4	1428.0	2457.4
0.01	2232.3	4622.7	4365.2	3699.2	5187.6	3398.6	2930.6	4070.5	3103.9	2191.2	1391.8	1500.1	2523.5

STATION 12088500 NISQUALLY RIVER NEAR MCKENNA, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1943	196.0	202.0	216.0	226.0	256.0	311.0	405.0	577.0	968.0
1944	300.0	313.0	349.0	359.0	402.0	428.0	489.0	577.0	809.0
1945	176.0	330.0	343.0	343.0	358.0	438.0	456.0	483.0	488.0
1946	248.0	338.0	346.0	349.0	357.0	367.0	510.0	614.0	1050.0
1947	458.0	467.0	592.0	609.0	636.0	673.0	831.0	1040.0	1430.0
1948	314.0	342.0	376.0	404.0	464.0	601.0	722.0	741.0	947.0
1949	336.0	527.0	651.0	708.0	748.0	782.0	863.0	964.0	1290.0
1950	312.0	434.0	464.0	524.0	616.0	710.0	861.0	842.0	982.0
1951	350.0	472.0	505.0	705.0	914.0	940.0	1010.0	1170.0	1510.0
1952	416.0	521.0	437.0	466.0	468.0	479.0	508.0	629.0	963.0
1953	197.0	197.0	284.0	410.0	563.0	716.0	726.0	781.0	820.0
1954	516.0	537.0	557.0	598.0	815.0	846.0	948.0	1080.0	1250.0
1955	498.0	622.0	656.0	724.0	880.0	911.0	1000.0	1100.0	1340.0
1956	526.0	648.0	777.0	837.0	910.0	1050.0	1260.0	1420.0	1660.0
1957	520.0	563.0	581.0	751.0	808.0	928.0	1010.0	1180.0	1420.0
1958	348.0	367.0	414.0	517.0	561.0	594.0	649.0	747.0	1030.0
1959	424.0	521.0	639.0	681.0	784.0	854.0	979.0	1070.0	1210.0
1960	438.0	469.0	613.0	799.0	813.0	900.0	1030.0	1170.0	1340.0
1961	529.0	599.0	760.0	792.0	852.0	1000.0	994.0	1110.0	1410.0
1962	400.0	417.0	486.0	518.0	633.0	736.0	738.0	859.0	1060.0
1963	430.0	434.0	455.0	464.0	541.0	617.0	631.0	739.0	1040.0

LOWEST MEAN FLOW STATISTICS (YEARS 1943-1963)

MEAN	377.7	441.3	515.0	568.0	637.1	708.6	786.7	898.2	1144.6
MAXIMUM	529.0	648.0	777.0	837.0	914.0	1050.0	1260.0	1420.0	1660.0
MINIMUM	176.0	190.0	216.0	226.0	256.0	311.0	405.0	483.0	488.0
STANDARD DEVIATION	113.28	131.38	153.88	180.08	202.29	216.88	233.90	254.91	278.50
SKEWNESS	-0.319	-0.325	0.006	-0.006	-0.091	-0.250	0.023	0.141	-0.288
STD ERROR OF SKEWNESS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501
SERIAL CORR COEFF	0.344	0.404	0.266	0.428	0.318	0.480	0.495	0.414	0.254
COEFF OF VARIATION	0.300	0.298	0.299	0.317	0.306	0.332	0.297	0.284	0.243
MEAN LOGS	2.555	2.623	2.691	2.731	2.780	2.828	2.876	2.936	3.044
STD DEVIATION LOGS	0.148	0.149	0.141	0.153	0.156	0.158	0.138	0.129	0.119
STD ERR SKEWNESS LOGS	-0.816	-0.978	-0.668	-0.705	-0.786	-0.787	-0.453	-0.290	-1.222
SER CORR COEFF LOGS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501
COEFF OF VAR LOGS	0.304	0.410	0.351	0.498	0.544	0.573	0.538	0.463	0.277
	0.058	0.057	0.053	0.056	0.056	0.053	0.048	0.044	0.039

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1943-1963)

	0.99	0.98	0.96	0.90	0.80	0.70	0.60	0.50	0.40	0.30	0.20	0.10	0.05	0.02	0.01
MEAN	644.8	726.8	891.4	1014.1	1127.8	1229.3	1416.2	1612.5	1843.0	2144.6	2549.1	3044.4	3644.4	4344.4	5144.6
MAXIMUM	618.2	702.4	849.3	964.6	1076.7	1175.7	1334.7	1512.4	1712.7	1944.6	2244.6	2644.4	3144.4	3744.4	4444.6
MINIMUM	586.4	672.0	800.9	907.4	1016.3	1112.3	1245.0	1405.2	1571.6	1751.6	1944.9	2194.9	2494.9	2844.9	3244.9
STANDARD DEVIATION	533.3	618.3	723.4	815.4	917.0	1007.7	1109.3	1248.0	1400.9	1569.3	1759.3	1969.3	2219.3	2519.3	2869.3
SKEWNESS	480.5	561.8	649.3	727.2	819.6	904.6	986.8	1110.5	1248.0	1396.3	1569.3	1759.3	1969.3	2219.3	2519.3
COEFF OF VARIATION	376.0	443.3	509.2	560.5	631.0	703.5	769.6	875.0	969.6	1069.6	1169.6	1269.6	1369.6	1469.6	1569.6
MEAN LOGS	275.7	323.4	379.4	407.5	454.6	513.2	580.1	652.7	726.7	806.7	896.7	986.7	1086.7	1186.7	1286.7
STD DEVIATION LOGS	228.0	265.2	316.4	336.6	372.3	423.5	493.4	565.4	645.4	725.4	805.4	885.4	965.4	1045.4	1125.4
STD ERR SKEWNESS LOGS	192.0	221.0	272.3	283.6	311.0	356.2	428.5	517.7	605.0	695.0	785.0	875.0	965.0	1055.0	1145.0
SER CORR COEFF LOGS	155.6	176.3	225.5	230.5	249.7	288.3	362.5	448.8	537.2	625.2	715.2	805.2	895.2	985.2	1075.2
COEFF OF VAR LOGS	133.9	149.8	197.3	199.0	213.5	248.0	322.7	406.8	494.8	582.8	672.8	762.8	852.8	942.8	1032.8

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1943-1963)

P95	P90	P75	P70	P50	P25	P10
450.0	570.0	930.0	1100.0	1600.0	2200.0	2900.0

STATION 12088500 NISQUALLY RIVER NEAR MCKENNA, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
1942	12100.	9910.	6710.	4530.	3650.	2750.	2400.	2100.	1780.	FLOW(CFS)
1943	11100.	8510.	6630.	4860.	3810.	2770.	2470.	2100.	1780.	DATE
1944	7160.	5710.	3870.	2470.	1930.	1680.	1610.	1470.	1420.	REG.(R)
1945	12900.	8250.	5790.	4680.	4210.	3190.	2900.	2760.	2040.	
1946	8700.	8470.	7600.	6000.	5790.	3000.	2830.	2610.	2480.	
1947	14400.	13900.	12400.	8280.	5560.	4020.	3700.	3290.	2750.	
1948	8640.	7160.	5830.	4820.	3860.	3080.	3190.	2840.	2740.	
1949	6760.	6330.	4950.	4130.	3550.	2520.	2330.	2380.	2380.	
1950	9300.	8460.	6280.	4840.	3830.	3550.	3310.	3350.	2930.	
1951	16100.	13900.	10100.	6280.	4730.	4030.	4190.	3700.	3130.	
1952	4970.	4090.	3310.	2650.	2430.	2310.	2230.	2080.	2080.	
1953	10300.	8570.	6370.	5560.	4530.	3260.	2830.	2560.	2210.	
1954	11400.	8640.	6990.	5480.	4560.	3660.	3690.	3280.	2850.	
1955	6130.	4790.	3430.	2720.	2470.	2410.	2280.	2300.	2230.	
1956	17000.	10600.	7980.	6980.	5850.	4910.	4380.	3830.	3390.	
1957	4610.	4510.	3840.	3480.	3010.	2570.	2530.	2510.	2280.	
1958	5540.	5080.	3910.	3600.	3110.	2740.	2540.	2330.	2160.	
1959	12600.	9550.	6870.	4810.	4290.	3780.	3420.	3070.	2700.	
1960	14700.	10900.	7590.	5090.	4050.	3170.	2800.	2650.	2480.	
1961	9850.	8010.	6300.	4940.	4380.	3740.	3380.	3360.	3060.	
1962	3670.	3440.	3180.	2870.	2790.	2490.	2330.	2090.	1880.	
1963										

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HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1942-1963)

W R C SYSTEMATIC
ESTIMATE RECORD

MEAN	9901.4	8046.7	6187.1	4734.8	3830.0	3145.7	2948.1	2726.2	2451.9	
MAXIMUM	17000.0	13900.0	12400.0	8280.0	5850.0	4910.0	4380.0	3830.0	3390.0	
MINIMUM	3670.0	3440.0	3180.0	2470.0	1930.0	1680.0	1610.0	1470.0	1420.0	
STANDARD DEVIATION	3887.17	2908.57	2297.02	1448.38	980.07	725.34	679.78	588.31	485.56	
SKWENESS	0.148	0.388	0.916	0.501	0.109	0.405	0.413	0.094	-0.080	
STD ERROR OF SKWENESS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	
SERIAL CORR COEFF	-0.353	-0.223	-0.115	-0.167	-0.349	-0.357	-0.293	-0.205	-0.098	
COEFF OF VARIATION	0.393	0.361	0.371	0.306	0.256	0.231	0.231	0.216	0.198	
MEAN LOGS	3.940	3.877	3.764	3.655	3.569	3.486	3.458	3.426	3.381	
STD DEVIATION LOGS	0.189	0.167	0.160	0.137	0.118	0.103	0.102	0.098	0.091	
SKWENESS LOGS	-0.512	-0.405	-0.049	-0.290	-0.594	-0.400	-0.277	-0.579	-0.641	
STD ERR SKWENESS LOGS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	
SER CORR COEFF LOGS	-0.290	-0.222	-0.165	-0.222	-0.368	-0.315	-0.256	-0.171	-0.049	
COEFF OF VAR LOGS	0.048	0.043	0.043	0.037	0.033	0.029	0.029	0.029	0.027	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1942-1963)

0.99	2822.1	2749.5	2427.3	2032.5	1753.1	1651.5	1589.1	1434.2	1345.1	3272.2
0.95	4205.7	3837.7	3146.8	2627.0	2273.0	2026.2	1920.3	1776.7	1649.3	4934.7
0.90	5122.4	4535.8	3609.7	2993.7	2581.1	2245.1	2115.1	1973.4	1821.2	6048.5
0.80	6412.8	5999.6	4857.8	3487.3	2797.7	2527.0	2368.1	2222.3	2036.1	7630.3
0.50	9453.6	7724.3	5820.2	4591.7	3804.2	3113.7	2904.6	2721.5	2457.4	11413.1
0.20	13223.3	10458.3	7922.4	5916.9	4675.8	3752.1	3508.5	3231.9	2874.0	16195.0
0.10	15448.7	12082.2	9292.4	6699.3	5134.4	4101.1	3895.1	3682.8	3294.6	19060.6
0.04	17975.9	13948.9	11001.5	7600.9	5615.5	4481.0	4231.5	3768.0	3294.6	22351.5
0.02	19674.3	15221.7	12260.8	8219.6	5918.2	4729.2	4487.5	3938.4	3424.1	24584.2
0.01	21233.7	16406.5	13510.0	8799.6	6183.1	4953.3	4723.5	4086.7	3535.1	26649.4

STATION 12089000 TANMAX CREEK NR MCKENNA, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1945			5.06	30.1	53.5	44.5	61.0	42.4	15.5	3.70	1.60	2.50	
1946	2.67	22.0	44.0	70.8	79.5	70.6	32.2	12.2	13.4	13.4	2.57	1.92	30.2
1947	4.64	49.2	120	59.1	53.0	37.1	39.2	13.0	6.67	6.90	1.49	1.55	32.2
1948	4.25	28.9	53.2	81.3	70.0	68.9	50.8	46.4	16.6	6.90	3.87	5.65	36.3
1949	9.09	40.2	127	31.3	78.4	51.5	26.0	16.6	4.15	1.84	1.35	1.44	32.1
1950	1.92	17.4	51.1	101	108	101	42.7	17.5	4.78	1.84	1.83	1.47	37.2

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1945	181.0	4-11-1945
1946	282.0	12-28-1945
1947	328.0	12-15-1946
1948	206.0	2-26-1948
1949	310.0	12-10-1948
1950	288.0	1-23-1950

STATION 12089500 NISQUALLY RIVER AT MCKENNA, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1948	1582	2887	2126	2861	2279	2330	1667	2351	1854	686	493	449	1795
1949	971	1621	2990	1449	2269	2096	1798	2659	1174	629	647	508	1548
1950	672	1872	3336	3132	2741	3398	1910	1837	1894	1135	448	635	1931
1951	1220	3012	3561	2656	4091	1827	1591	1293	586	181	148	380	1696
1952	1228	1795	2183	1647	1772	1552	910	1128	597	364	477	334	1165
1953	872	272	655	2983	2659	1568	1534	1124	1252	817	685	518	1237
1954	1194	1258	3595	3070	3816	1646	1879	1765	1717	1302	743	988	1904
1955	1299	1797	1611	1963	2105	1611	2028	1845	1652	1308	646	531	1526
1956	1693	4071	4675	2902	1730	2177	2119	2001	1684	843	391	453	2063
1957	910	1290	2142	1521	1737	2089	1550	1129	669	248	249	328	1153
1958	859	1023	1671	1910	2611	1284	1575	1219	762	333	498	884	1209
1959	744	1875	2717	3708	1593	1576	1396	1096	1125	479	340	715	1448
1960	1459	3068	2072	1445	1855	1556	1630	1754	1170	295	731	521	1459
1961	983	3020	1831	2448	4422	2421	1695	1747	534	292	175	742	1672
1962	298	1151	1746	1974	1182	405	1251	1025	532	91.8	194	185	834
1963	1116	1978	2320	1757	2214	757	1014	1072	468	245	137	626	1135
1964	460	1491	1550	3104	2177	1793	1378	838	1090	652	390	394	1274
1965	645	1175	3609	4264	2499	1889	935	638	254	85.5	193	148	1360
1966	657	1029	1094	1828	866	1490	1235	799	479	509	145	255	867
1967	1369	1007	2102	3541	1991	1863	1524	692	536	581	202	222	1302
1968	850	1778	1671	1914	3141	1466	1391	565	1126	294	609	847	1295
1977									688	469	410	1167	
1978	826	2214	5516	1593	1161	905	553	499	553	508	436	591	1284
1979	564	833	1341	705	1173	1308	822	942	478	429	397	401	781

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1948-1979)

MEAN	977.0	1805.1	2439.7	2364.1	2264.5	1696.0	1451.5	1305.1	953.0	532.3	407.7	533.1	1388.6
MAXIMUM	1693.0	4071.0	5516.0	4264.0	4422.0	3398.0	2119.0	2659.0	1894.0	1308.0	743.0	1167.0	2063.0
MINIMUM	298.0	272.0	655.0	705.0	866.0	405.0	553.0	499.0	254.0	85.5	137.0	148.0	781.0
STD DEVIATION	362.07	897.17	1164.51	881.11	924.33	607.99	401.09	583.79	505.53	344.06	197.80	257.96	345.25
SKEDNESS	0.206	0.806	1.052	0.323	0.839	0.484	-0.488	0.687	0.626	1.026	0.181	0.727	0.168
STD ERR SKEW	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481
SER CORR COEFF	0.054	0.091	-0.376	-0.194	-0.152	0.218	0.538	0.744	0.387	0.422	0.472	0.173	0.185
COEFF OF VAR	0.371	0.497	0.477	0.373	0.408	0.358	0.276	0.447	0.530	0.466	0.485	0.484	0.249
MEAN LOGS	2.957	3.199	3.341	3.342	3.321	3.197	3.142	3.073	2.919	2.832	2.552	2.674	3.129
STD DEV LOGS	0.181	0.248	0.209	0.178	0.179	0.187	0.141	0.199	0.238	0.312	0.242	0.227	0.113
SKEDNESS LOGS	-0.807	-1.088	-0.291	-0.722	-0.180	-1.491	-1.243	-0.110	-0.061	-0.367	-0.435	-0.454	-0.431
STD ERR SKEW LOGS	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481
SER CORR LOGS	0.018	0.101	-0.381	-0.127	-0.111	0.236	0.468	0.771	0.364	0.212	0.472	0.184	0.174
COEFF OF VAR LOGS	0.061	0.078	0.063	0.053	0.054	0.058	0.045	0.065	0.082	0.119	0.095	0.085	0.036
% OF AVE FLOW	5.8	10.8	14.6	14.1	13.5	10.1	8.7	7.8	5.7	3.2	2.4	3.2	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1948-1979)

0.99	270.9	272.3	666.2	759.2	376.5	494.0	394.1	226.3	61.4	83.0	678.8
0.95	420.7	533.3	955.3	1040.2	680.3	744.2	490.2	333.7	18.4	183.0	852.8
0.90	519.0	733.6	1166.7	1271.3	1224.3	897.6	655.8	409.5	165.1	171.1	955.9
0.80	654.8	1031.2	1473.5	1590.0	1484.7	1186.8	808.1	523.8	240.6	226.7	1085.7
0.50	951.9	1748.3	2244.3	2306.1	2118.0	1744.1	1482.0	871.1	458.0	371.8	1371.4
0.20	1294.9	2563.9	3307.0	3120.1	2969.2	2245.2	1824.7	1316.9	792.3	573.5	1680.8
0.10	1472.6	2976.2	3561.5	3518.4	2440.9	1969.7	2115.7	1017.6	705.1	894.3	1850.9
0.04	1655.6	3373.3	3849.0	4027.7	2532.7	2093.6	2550.9	2138.6	864.6	1080.2	2035.9
0.02	1767.5	3598.0	5464.7	4320.3	4686.6	2662.0	2156.7	2947.6	1452.7	1210.3	2156.8
0.01	1862.6	3775.6	6064.4	4574.4	5188.4	2767.9	2202.8	2893.8	1681.3	1086.6	2245.9

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1949	128.0	269.0	335.0	372.0	406.0	447.0	522.0	622.0	989.0
1950	109.0	190.0	205.0	290.0	359.0	451.0	506.0	554.0	741.0
1951	158.0	289.0	409.0	508.0	615.0	637.0	706.0	859.0	1200.0
1952	58.0	105.0	119.0	133.0	136.0	153.0	193.0	294.0	615.0
1953	58.0	102.0	151.0	180.0	254.0	367.0	376.0	421.0	643.0
1954	180.0	197.0	319.0	399.0	434.0	547.0	667.0	784.0	921.0
1955	362.0	422.0	500.0	527.0	660.0	832.0	918.0	1040.0	1270.0
1956	118.0	263.0	361.0	394.0	453.0	564.0	782.0	940.0	1230.0
1957	75.0	103.0	166.0	214.0	322.0	407.0	476.0	637.0	877.0
1958	64.0	68.0	71.0	102.0	216.0	245.0	274.0	324.0	560.0
1959	99.0	148.0	212.0	235.0	320.0	394.0	512.0	580.0	720.0
1960	51.0	67.0	173.0	281.0	308.0	385.0	502.0	624.0	803.0
1961	46.0	110.0	185.0	210.0	263.0	507.0	501.0	601.0	897.0
1962	26.0	29.0	42.0	77.0	156.0	227.0	237.0	338.0	518.0
1963	29.0	25.0	29.0	30.0	66.0	141.0	155.0	234.0	518.0
1964	29.0	30.0	50.0	62.0	132.0	177.0	237.0	317.0	476.0
1965	55.0	55.0	59.0	115.0	151.0	334.0	450.0	508.0	654.0
1966	22.0	24.0	27.0	40.0	73.0	137.0	133.0	162.0	300.0
1967	35.0	58.0	77.0	99.0	138.0	183.0	268.0	337.0	550.0
1968	165.0	167.0	184.0	184.0	192.0	201.0	284.0	390.0	522.0
1969	383.0	386.0	390.0	397.0	432.0	463.0	489.0	498.0	522.0

LOWEST MEAN FLOW STATISTICS (YEARS 1949-1979)

	108.7	148.0	192.8	230.9	289.8	371.4	437.2	526.5	729.2
MEAN	383.0	422.0	500.0	527.0	660.0	832.0	918.0	1040.0	1270.0
MAXIMUM	22.0	24.0	27.0	30.0	66.0	137.0	133.0	165.0	300.0
MINIMUM	99.98	118.26	140.98	152.38	166.42	185.43	212.00	235.93	275.03
STANDARD DEVIATION	1.880	1.015	0.687	0.521	0.700	0.639	0.530	0.599	0.672
SKEWNESS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501
STD ERROR OF SKEWNESS	0.435	0.497	0.489	0.506	0.465	0.405	0.448	0.465	0.452
SERIAL CORR COEFF	0.920	0.799	0.731	0.660	0.574	0.499	0.448	0.448	0.377
COEFF OF VARIATION	1.891	2.022	2.146	2.247	2.385	2.512	2.587	2.677	2.834
MEAN LOGS	0.361	0.390	0.388	0.356	0.278	0.232	0.231	0.207	0.164
STD DEVIATION LOGS	0.252	0.216	0.388	0.356	0.278	0.232	0.231	0.207	0.164
SKEWNESS LOGS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501
STD ERR SKEWNESS LOGS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501
SER CORR COEFF LOGS	0.619	0.619	0.619	0.591	0.542	0.378	0.378	0.378	0.378
COEFF OF VAR LOGS	0.191	0.193	0.181	0.159	0.117	0.092	0.089	0.077	0.058

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1949-1979)

624.9	733.8	832.7	812.0	876.6	1030.7	1131.4	1264.2	1655.5
377.6	596.8	704.0	715.2	776.5	913.6	1020.9	1148.5	1470.0
356.7	471.8	578.3	613.5	673.8	796.1	905.9	1027.5	1314.1
229.9	324.3	417.6	437.2	482.9	532.9	638.6	743.1	1104.1
154.5	225.3	300.3	357.2	420.4	515.1	603.0	714.4	937.0
75.1	108.5	149.3	192.6	254.5	333.8	400.5	489.7	683.3
38.3	49.9	67.7	91.9	124.2	154.2	209.8	322.1	496.9
27.5	32.7	43.0	59.3	104.3	131.3	191.3	254.4	420.3
21.1	22.8	29.0	40.2	78.7	130.8	151.6	207.5	365.8
15.8	15.0	18.2	25.2	56.3	101.7	117.7	163.3	312.7
13.1	11.3	13.2	18.1	44.7	85.7	95.2	138.4	281.5

STATION 120B9700 YELM CREEK NR YELM, WASH.

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1968	15.0	2-19-1968
1969	22.0	1-7-1969
1970	22.0	1-14-1970
1971	30.0	1-9-1971
1972	58.0	3-5-1972
1973	19.0	12-26-1972
1974	39.0	1-15-1974
1975	42.0	1-13-1975
1976	37.0	1-15-1976

STATION 120G0200 MUCK CREEK AT ROY, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1956	0.00	0.00	0.00	26.7	49.0	65.4	191	75.1	21.2	6.55	1.10	0.00	36.2
1957	0.05	1.60	29.1	107	213	108	77.9	38.6	16.5	1.00	0.06	0.00	48.7
1959	0.00	25.0	143	204	170	78.8	55.4	36.4	13.8	3.28	1.71	0.00	61.2
1960	1.05	139.7	130	101	182	124	85.5	86.6	52.6	6.64	3.62	2.74	69.7
1961	4.30	104	163	188	284	256	112	100	38.1	17.9	12.4	7.37	105
1962	1.44	1.93	16.7	63.6	48.1	68.5	61.9	43.8	27.1	15.8	6.95	2.68	28.8
1963	0.87	27.6	143	110	163	99.2	130	69.8	28.2	14.7	4.66	1.03	65.5
1964	2.14	27.9	75.5	262	217	104	65.0	34.7	22.3	7.82	2.01	0.43	68.0
1965	0.76	10.1	171	224	296	110	79.3	51.0	16.9	6.42	1.54	0.10	79.4
1966	0.00	1.00	110.8	125	75.7	124	99.0	46.9	22.2	10.2	2.55	0.62	43.0
1967	0.55	1.38	143	316	244	131	82.4	40.5	18.3	7.54	1.51	0.00	81.5
1968	0.00	1.51	7.91	56.3	172	147	99.2	31.7	39.1	6.96	2.23	2.99	46.7
1969	7.27	114	234	287	194	88.7	59.8	27.8	7.99	1.64	0.44	0.60	84.9
1970	2.90	3.41	84.8	248	255	100	60.0	29.5	3.25	1.33	2.82	0.29	65.0
1971	0.03	0.68	57.3	258	210	176	130	48.4	21.9	14.2	3.30	1.57	76.1

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1956-1971)

MEAN	1.9	25.7	95.7	173.3	185.9	127.1	84.8	47.1	21.3	7.8	3.3	1.7	64.0
MINIMUM	7.3	114.0	234.0	316.0	296.0	256.0	130.0	100.0	52.6	17.9	12.4	7.4	105.0
STD DEVIATION	0.0	0.0	7.9	49.0	48.1	66.5	55.4	22.2	3.3	1.0	0.0	0.0	28.8
SKWENESS	1.704	1.798	0.296	0.044	75.06	48.89	24.54	1.387	0.801	0.392	2.081	2.103	20.45
STD ERR SKEW	0.661	0.597	0.580	0.580	0.580	0.580	0.580	0.580	0.564	0.564	0.580	0.637	0.061
SER CORR COEFF	-0.100	-0.160	-0.516	-0.162	-0.408	-0.220	-0.437	0.325	0.270	0.418	0.442	0.318	-0.381
COEFF OF VAR	1.124	1.465	0.736	0.523	0.404	0.385	0.289	0.470	0.634	0.703	0.914	1.184	0.320
MEAN LOGS	-0.072	0.867	1.800	2.169	2.221	2.078	1.912	1.635	1.228	0.742	0.323	-0.024	1.783
STD DEV LOGS	0.744	0.782	0.476	0.272	0.238	0.150	0.121	0.184	0.332	0.428	0.540	0.526	0.152
SKWENESS LOGS	-1.045	0.214	-0.738	-0.542	-1.340	0.625	0.349	0.552	-0.709	-0.715	-1.729	-0.094	-0.675
STD ERR SKEW LOGS	0.661	0.597	0.580	0.580	0.580	0.580	0.580	0.580	0.564	0.564	0.580	0.637	0.061
SER CORR LOGS	-0.147	0.053	-0.467	-0.139	-0.332	-0.471	-0.437	0.334	0.340	0.549	0.351	0.321	-0.354
COEFF DF VAR LOGS	-0.33	0.902	0.264	0.125	0.107	0.072	0.063	0.112	0.470	0.577	1.676	-21.571	0.085
% OF AVE FLOW	0.3	3.3	12.3	22.3	24.0	16.4	10.9	6.1	2.7	1.0	0.4	0.2	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1956-1971)

0.99	0.0	0.1	2.8	27.1	28.3	62.8	45.9	19.2	1.9	0.3	0.0	0.1	22.6
0.95	0.0	0.4	8.5	48.4	57.7	72.5	53.2	23.1	4.2	0.9	0.2	0.1	32.1
0.90	0.1	0.8	14.6	64.4	79.9	79.1	57.9	25.9	6.1	1.5	0.4	0.2	38.0
0.80	0.2	1.6	26.7	89.1	112.4	89.0	64.4	30.0	9.3	2.5	0.9	0.3	45.9
0.50	1.1	6.9	72.2	155.9	181.1	115.5	80.4	41.5	18.5	6.2	2.9	1.0	63.1
0.20	2.6	32.8	181.4	252.2	262.6	157.8	102.8	60.6	32.5	12.9	5.7	2.6	81.9
0.10	5.7	76.8	229.2	314.8	296.1	189.8	117.9	75.6	41.7	17.7	7.0	4.4	92.0
0.04	8.5	195.9	317.1	390.4	324.8	234.9	137.6	52.6	28.2	23.8	7.9	7.6	102.6
0.02	10.4	364.3	381.3	443.6	339.1	272.2	152.6	115.8	60.0	28.2	8.3	10.7	109.3
0.01	12.2	643.4	442.9	494.0	349.4	312.8	167.9	136.4	66.8	32.4	8.5	14.5	115.1

STATION 12U90200 MUCK CREEK AT ROY, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.09	1.40
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.32	0.84	5.70
1960	0.0	0.0	0.0	0.0	0.0	0.0	1.80	2.70	6.10
1961	3.20	3.20	3.30	3.90	4.30	4.80	7.40	8.60	24.00
1962	0.90	0.97	1.00	1.10	1.30	1.60	1.90	2.40	6.60
1963	0.0	0.0	0.0	0.07	0.24	0.61	1.19	2.30	9.30
1964	0.10	0.10	0.10	0.24	0.53	1.30	2.40	4.20	12.00
1965	0.10	0.10	0.10	0.16	0.41	0.57	0.87	1.50	6.80
1966	0.0	0.0	0.0	0.0	0.0	0.01	0.23	0.63	2.40
1967	0.0	0.0	0.0	0.0	0.0	0.01	0.73	1.19	3.00
1968	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.70	1.40
1969	0.40	0.52	0.70	0.84	1.70	2.50	4.60	14.00	2.40
1970	0.0	0.0	0.0	0.01	0.13	0.42	0.85	1.40	2.40
1971	0.0	0.0	0.0	0.0	0.01	0.05	0.31	0.94	1.40

LOWEST MEAN FLOW STATISTICS (YEARS 1958-1971)

MEAN	0.9	1.0	1.0	0.8	1.0	1.2	1.5	2.3	7.2
MAXIMUM	3.2	3.2	3.3	3.9	4.3	4.8	7.4	8.6	24.0
MINIMUM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.4
STANDARD DEVIATION	1.31	1.29	1.32	1.29	1.29	1.39	1.90	2.25	6.15
SKEWNESS	1.912	1.835	1.775	2.372	2.247	1.946	2.596	1.921	1.709
STD ERROR OF SKEWNESS	0.913	0.913	0.913	0.752	0.687	0.661	0.597	0.597	0.597
SERIAL CORR COEFF	0.848	0.777	0.658	0.011	0.072	0.066	0.131	0.073	-0.081
COEFF OF VARIATION	1.388	1.322	1.271	1.535	1.345	1.141	1.271	0.960	0.850
MEAN LOGS	-0.388	-0.358	-0.327	-0.549	-0.406	-0.274	-0.137	0.163	0.721
STD DEVIATION LOGS	0.645	0.651	0.663	0.786	0.734	0.768	0.628	0.481	0.371
SKEWNESS LOGS	0.454	0.238	0.052	-0.564	-0.936	-1.310	-0.962	-0.928	-0.078
STD ERR SKEWNESS LOGS	0.913	0.913	0.913	0.752	0.687	0.661	0.597	0.597	0.597
SER CORR COEFF LOGS	0.455	0.374	0.293	-0.065	0.326	0.169	0.327	0.296	0.059
COEFF OF VAR LOGS	-1.664	-1.816	-2.025	-1.451	-1.807	-2.799	-4.579	2.945	0.515

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1958-1971)

0.99	21.1	18.5	17.4	9.3	6.2	6.1	7.5	9.0	36.5
0.98	12.3	11.5	11.3	6.9	5.2	5.5	6.5	8.0	29.3
0.96	6.8	6.8	7.0	4.8	4.1	4.7	5.4	6.8	22.9
0.90	2.9	3.1	3.4	2.6	2.7	3.5	3.8	5.2	15.6
0.80	1.4	1.5	1.7	1.4	1.7	2.3	2.5	3.8	10.8
0.50	0.4	0.4	0.5	0.3	0.5	0.8	0.9	1.7	5.3
0.20	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.6	2.6
0.10	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.3	1.7
0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.3
0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9
0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1958-1971)

P95	P90	P75	P70	P50	P25	P10
0.0	0.3	2.5	4.0	26.0	98.0	180.0

STATION 12090200 MUCK CREEK AT ROY, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30											ANNUAL PEAK-FLOW DATA	
YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW(CFS)	DATE	REG.(R)
1957	332.	324.	299.	254.	195.	142.	112.	97.	71.	332.	03/11/57	
1958	308.	296.	270.	246.	218.	174.	142.	125.	95.	308.	02/27/58	
1959	351.	347.	328.	285.	240.	200.	175.	150.	115.	351.	01/25/59	
1960	226.	214.	212.	203.	183.	157.	139.	136.	119.	226.	02/16/60	
1961	428.	425.	409.	374.	323.	268.	242.	230.	193.	428.	02/26/61	
1962	94.	91.	86.	79.	71.	67.	61.	61.	53.	94.	01/07/62	
1963	267.	259.	239.	195.	163.	138.	138.	129.	120.	267.	02/05/63	
1964	495.	476.	455.	394.	319.	240.	197.	167.	127.	500.	01/27/64	
1965	560.	545.	487.	412.	322.	287.	240.	199.	153.	584.	02/01/65	
1966	193.	193.	178.	155.	129.	113.	110.	107.	82.	193.	03/23/66	
1967	453.	431.	388.	373.	337.	284.	245.	211.	158.	453.	01/30/67	
1968	325.	318.	291.	243.	192.	162.	142.	120.	90.	325.	02/24/68	
1969	527.	507.	463.	391.	297.	266.	243.	216.	163.	551.	01/09/69	
1970	557.	544.	497.	433.	338.	258.	211.	175.	127.	569.	01/28/70	
1971	600.	587.	516.	412.	314.	247.	220.	195.	146.	606.	01/27/71	
1972										692.	03/07/72	
1973										288.	12/26/72	
1974										484.	01/18/74	
1975										584.	01/13/75	
1976										502.	12/05/75	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1957-1976)

	MEAN	MAXIMUM	MINIMUM	STANDARD DEVIATION	STD ERROR OF SKEWNESS	SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	SKEWNESS LOGS	STD ERR SKEWNESS LOGS	SER CORR COEFF LOGS	COEFF OF VAR LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
	381.1	600.0	94.0	150.99	-0.227	0.122	0.396	2.539	0.217	-1.301	0.580	0.009	0.085		
	370.8	587.0	91.0	146.35	-0.222	0.121	0.395	2.527	0.216	-1.322	0.580	0.008	0.086		
	516.0	86.0	130.69	109.98	-0.439	0.079	0.383	2.493	0.204	-1.368	0.580	-0.018	0.085		
	296.6	433.0	79.0	85.50	-0.505	-0.026	0.371	2.435	0.192	-1.354	0.580	-0.059	0.084		
	242.7	338.0	71.0	85.50	-0.505	-0.189	0.352	2.352	0.179	-1.100	0.580	-0.179	0.082		
	200.2	287.0	67.0	69.29	-0.352	-0.234	0.346	2.271	0.171	-0.070	0.580	-0.219	0.079		
	174.5	245.0	61.0	58.60	-0.294	-0.272	0.336	2.214	0.157	0.151	0.580	-0.273	0.073		
	154.5	230.0	61.0	49.46	-0.136	-0.333	0.320	2.165	0.151	-0.897	0.580	-0.273	0.073		
	120.8	193.0	53.0	38.13	0.019	-0.427	0.316	2.059	0.151	-0.722	0.580	-0.273	0.073		
	2.6136	2.5785	0.1385	0.0160	-1.3220										

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1957-1976)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
	69.5	132.2	172.9	241.5	384.1	525.6	588.2	642.3	689.7	689.5
	67.6	128.9	172.9	235.7	374.5	510.8	570.5	621.5	647.1	665.5
	64.0	121.5	162.4	220.4	346.5	467.1	518.4	561.2	596.9	596.9
	58.9	109.5	145.0	194.8	301.8	402.9	445.8	481.5	499.0	511.3
	53.6	95.7	124.4	164.1	247.5	325.1	357.8	385.0	398.3	407.8
	52.1	85.3	107.3	137.2	201.1	265.1	295.0	322.7	337.9	349.6
	48.7	77.6	96.4	121.7	175.3	228.7	253.9	277.3	290.2	300.3
	50.1	74.6	90.0	110.6	154.2	199.2	221.5	243.4	256.2	266.8
	42.7	60.8	72.1	87.1	119.5	154.5	172.8	191.8	203.6	213.7
	0.0	273.1	314.0	410.4	537.1	618.5	688.0	719.2	792.9	865.8
	79.5	148.9	198.1	267.8	420.2	568.5	633.0	688.0	715.6	735.4

STATION 12090400 NORTH FORK CLOVER CREEK NEAR PARKLAND, WASH.

ANNUAL PEAK FLOW DATA		ANNUAL PEAK FLOW STATISTICS (YEARS 1960-1975)		W R C	SYSTEMATIC
WATER YEAR	FLOW(CFS)	DATE	MEAN LOGS	ESTIMATE	RECORD
1960	153.0	12-16-1959		2.1730	2.1550
1961	174.0	11-24-1960		0.0572	0.0959
1962	76.0	3- 5-1962	STANDARD DEVIATION LOGS	0.011	-1.629
1963	161.0	11-25-1962	SKENNESS LOGS		
1964	143.0	1-25-1964			
1965	152.0	11-22-1964			
1966	130.0	1- 5-1966			
1967	152.0	1-19-1967			
1968	133.0	2-19-1968			
1969	175.0	11-11-1968	ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES	--	67.4
1970	106.0	1-19-1970	LOG-PEARSON III ANALYSIS (YEARS 1960-1975)	--	92.6
1971	174.0	1-26-1971		125.8	106.6
1972	190.0	2-28-1972		133.3	123.2
1973	139.0	12-26-1972		148.9	151.3
1974	136.0	1-16-1974		166.4	171.1
1975	140.0	1-13-1975		176.4	177.7
				187.7	182.4
				195.4	184.3
				202.6	185.5

STATION 12090500 CLOVER CREEK NEAR TILLICUM, WASH.

ANNUAL PEAK FLOW DATA		ANNUAL PEAK FLOW STATISTICS (YEARS 1950-1970)		W R C	SYSTEMATIC
WATER YEAR	FLOW(CFS)	DATE	MEAN LOGS	ESTIMATE	RECORD
1950	290.0	3- 6-1950		2.2508	2.2508
1951	568.0	2-12-1951		0.2403	0.2403
1952	66.0	2- 4-1952	STANDARD DEVIATION LOGS	0.013	-0.132
1953	164.0	2- 5-1953	SKENNESS LOGS		
1954	263.0	1- 7-1954			
1960	163.0	2-16-1960			
1961	275.0	2-26-1961	ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES		
1962	72.0	12-23-1961	LOG-PEARSON III ANALYSIS (YEARS 1950-1970)		
1963	217.0	2- 3-1963		49.4	46.6
1964	246.0	1-31-1964		71.8	70.2
1965	185.0	2-26-1965		87.7	87.0
1966	89.0	1-13-1966		111.8	112.2
1967	180.0	1-28-1967		177.9	180.3
1968	113.0	2-19-1968		283.7	284.7
1969	192.0	1- 8-1969		362.3	359.1
1970	198.0	1-27-1970		470.5	457.5
				557.2	533.6
				648.9	611.6

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1949										8.53	3.05	1.07	
1950	0.23	4.01	27.4	124	128	192	121	65.7	37.5	19.9	11.4	6.37	61.1
1951	10.4	24.5	119	158	279	173	88.0	46.9	26.2	12.5	3.79	1.40	71.4
1952	3.99	6.27	19.5	25.2	47.1	40.6	29.6	20.8	12.0	4.47	0.56	0.08	17.4
1953	0.00	0.00	0.00	30.1	103	47.8	40.7	31.5	21.4	10.7	3.65	2.40	23.7
1954	4.00	14.5	88.1	155	138	103	73.5	44.2	29.5	18.0	8.42	9.35	56.7

STATION 12091040 CHAMBERS CR ADV FLETT CR NEAR STEILACOOM, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1966										39.9	24.0	19.3	
1967	30.3	34.1	39.2	129	97.8	105	100	72.1	52.0	32.8	27.5	21.3	82.8
1968	36.8	31.1	109	175	156	153	115	82.0	64.1	37.3	31.4	21.3	70.4
1969	49.0	37.7	36.3	66.8	166	138	112	80.1	67.6	39.3	31.4	37.7	82.8
1970	42.3	71.4	168	223	192	130	98.3	87.1	54.6	37.8	26.4	32.0	98.3
1971	23.9	35.2	44.1	115	184	126	99.5	75.2	54.4	49.2	37.8	23.2	71.2
		34.2	77.3	159	155	173	152	88.3	64.9	49.2	37.2	31.3	86.8

STATION 12091040 CHAMBERS CR ABV FLETT CR NEAR STEILACOOM, WASH.

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1966	175.0	1-16-1966
1967	271.0	1-19-1967
1968	222.0	2-24-1968
1969	326.0	1-14-1969
1970	429.0	2-5-1970
1971	552.0	1-28-1971
1972		

STATION 12091050 FLETT CREEK AT 14TH ST., AT TACOMA, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1959													
1960	0.00	0.40	0.61	0.67	1.38	0.46	0.23	0.14	0.17	0.03	0.00	0.00	0.37
1961	0.00	0.12	0.01	0.07	0.97	0.16	0.01	0.01	0.00	0.00	0.00	0.00	0.11
1962	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1963	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATION 12091060 FLETT CREEK AT MT. VIEW MEMORIAL PARK, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1968	0.06	0.00	0.00	0.01	5.98	3.86	1.61	0.02	0.74	0.00	0.00	0.01	1.02
1969	1.33	7.38	17.1	16.2	13.4	1.65	1.76	0.13	0.00	0.00	0.00	0.00	4.86
1970	0.01	0.21	7.84	14.4	9.79	4.00	2.52	0.16	0.00	0.00	0.00	0.00	3.22
1971	0.00	0.23	14.1	23.3	12.3	16.6	8.25	0.13	0.00	0.00	0.00	0.00	6.23
1972	0.05	4.61	9.03	16.1	21.9	29.2	7.64	0.92	0.01	0.15	0.00	0.29	7.46
1973	0.00	0.10	11.5	7.53	0.92	2.11	0.01	0.01	0.15	0.00	0.00	0.00	1.89
1974	0.00	8.51	21.8	14.5	16.5	13.5	9.35	1.50	0.40	0.00	0.00	0.00	7.12
1975	0.00	2.61	10.7	25.9	15.1	8.45	0.85	0.42	0.00	0.00	0.01	0.00	5.29
1976	2.49	6.88	17.8	14.6	7.50	5.11	2.99	0.49	0.00	0.01	0.06	0.19	4.85
1977	0.03	0.06	0.98	0.10	0.07	5.37	0.05	0.19	1.16	0.00	0.00	0.15	0.69
1978	0.00	3.52	15.0	11.2	6.77	2.21	4.47	1.19	0.59	0.00	0.00	1.86	3.89
1979	0.01	3.41	5.50	3.01	16.6	5.57	1.11	0.10	0.00	0.06	0.00	0.00	2.85

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1968-1979)

MEAN	0.6	3.4	11.9	12.2	10.6	8.1	3.4	0.4	0.5	0.1	0.1	0.5	4.1
MAXIMUM	2.5	8.5	21.8	25.9	21.9	29.2	9.4	1.5	1.2	0.1	0.1	1.9	7.5
MINIMUM	0.0	0.0	0.0	0.0	0.1	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.7
STD DEVIATION	0.98	3.14	6.01	8.31	6.61	8.07	3.31	0.50	0.42	0.07	0.12	0.77	2.25
SKEWNESS	1.697	0.392	-0.194	-0.085	-0.088	1.908	0.885	1.277	0.488	0.816	1.405	2.140	-0.067
STD ERR SKEW	0.794	0.661	0.661	0.637	0.637	0.637	0.637	0.637	0.845	1.225	1.225	0.913	0.637
SER CORR COEFF	-0.428	-0.515	-0.535	0.070	-0.220	0.111	-0.293	-0.387	0.097	-1.000	-1.000	-0.114	-0.188
COEFF OF VAR	1.716	0.920	0.503	0.679	0.625	0.992	0.982	1.136	0.822	0.967	1.171	1.534	0.548
MEAN LOGS	-1.075	0.114	0.984	0.674	0.788	0.750	0.109	-0.705	-0.586	-1.349	-1.281	-0.763	0.524
STD DEV LOGS	0.965	0.821	0.372	1.065	0.710	0.380	0.908	0.669	0.755	0.598	0.692	0.814	0.330
SKEWNESS LOGS	0.837	-0.663	-2.137	-2.018	-2.268	0.452	-1.509	-0.597	-1.686	-0.911	-0.379	-0.605	-1.091
STD ERR SKEW LOGS	0.794	0.661	0.661	0.637	0.637	0.637	0.637	0.637	0.845	1.225	1.225	0.913	0.637
SER CORR LOGS	-0.332	-0.453	-0.368	-0.145	-0.101	0.023	-0.465	-0.411	-0.011	-1.000	-1.000	-0.016	-0.221
COEFF OF VAR LOGS	0.897	7.179	0.378	1.581	0.901	0.507	8.332	-0.949	-1.288	-0.444	-0.540	-0.086	0.630
% OF AVE FLOW	1.1	6.6	23.0	23.6	20.4	15.7	6.5	0.8	1.0	0.1	0.2	1.0	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1968-1979)

0.99	0.0	0.0	0.4	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
0.95	0.0	0.0	1.7	0.0	0.2	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.8
0.90	0.0	0.1	3.2	0.0	0.8	1.9	0.1	0.0	0.0	0.0	0.0	0.0	1.2
0.80	0.0	0.3	5.8	1.1	2.5	2.7	0.3	0.1	0.0	0.0	0.0	0.0	1.9
0.50	0.1	1.6	12.7	10.1	10.6	5.3	2.1	0.2	0.4	0.1	0.1	0.2	3.8
0.20	0.5	6.6	18.5	31.6	20.7	11.4	7.2	0.7	1.1	0.1	0.2	0.9	6.4
0.10	1.6	12.3	20.1	41.9	23.7	17.9	10.7	1.3	1.4	0.2	0.4	1.6	7.8
0.04	7.2	22.3	21.0	48.8	25.3	29.6	14.3	2.1	1.7	0.2	0.7	3.0	9.2
0.02	20.3	31.4	21.3	51.3	25.7	41.6	16.2	2.8	1.8	0.4	1.0	4.3	10.0
0.01	54.7	41.6	21.4	52.5	25.8	57.3	17.6	3.6	1.9	0.4	1.4	5.8	10.7

STATION 12091060 FLETT CREEK AT MT. VIEW MEMORIAL PARK, WASH.

ANNUAL PEAK FLOW DATA			ANNUAL PEAK FLOW STATISTICS (YEARS 1968-1979)				W R C		SYSTEMATIC RECORD
WATER YEAR	FLOW(CFS)	DATE					ESTIMATE		
1968	23.0	2-21-1968							
1969	32.0	12-10-1968							
1970	28.0	1-27-1970							
1971	59.0	1-26-1971							
1972	103.0	3- 5-1972							
1973	57.0	12-26-1972							
1974	60.0	12-27-1973							
1975	76.0	1-13-1975							
1976	56.0	12- 4-1975							
1977	27.0	3- 9-1977							
1978	38.0	12-15-1977							
1979	39.0	2- 6-1979							
			ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES						
			LOG-PEARSON III ANALYSIS (YEARS 1968-1979)						
			0.99				15.6		16.5
			0.95				21.3		21.7
			0.90				25.1		25.3
			0.80				30.7		30.6
			0.50				45.2		44.6
			0.20				66.5		66.3
			0.10				81.5		82.1
			0.04				101.2		103.8
			0.02				116.5		121.2
			0.01				132.2		139.7

W R C
ESTIMATESYSTEMATIC
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STATION 12091070 FLETT CREEK BELOW FLETT SPRINGS AT TACOMA, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1959													
1960	2.23	6.22	12.1	11.3	19.5	12.7	10.4	8.57	5.72	2.97	2.02	2.78	7.97
1961	2.31	4.35	12.9	12.2	17.6	17.3	10.5	5.97	3.12	2.93	1.98	2.47	7.55
1962	1.63	2.05	4.21	6.33	4.12	4.44	2.62	2.47	1.71	2.14	1.29	1.43	2.65
1963	1.21	5.15	13.1	9.66	10.4	8.66	9.93	6.66	3.04	0.71	0.77	0.78	6.05
1964	1.22	6.26	9.32	23.5	20.0	11.6	8.13	4.09	1.49	1.60	1.31	1.59	7.47
1965	1.74	2.52	7.27	13.0	12.0	7.56	4.19	4.25	2.66	1.17	1.08	1.09	4.84

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1960	30.0	11-21-1959
1961	37.0	2-24-1961
1962	15.5	12-22-1961
1963	24.0	11-19-1962
1964	66.0	1-25-1964
1965	26.0	1-26-1965

STATION 12091100 FLETT CREEK AT TACOMA, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES* IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1959	3.31	7.49	14.6	13.9	23.1	15.3	12.6	10.8	6.02	3.80	2.95	3.73	9.73
1960	2.52	5.55	13.9	15.1	23.1	23.1	13.2	7.86	6.78	3.80	2.65	3.73	2.95
1961	1.97	2.67	5.95	8.13	5.81	3.81	3.81	3.39	4.05	2.72	1.66	1.99	9.49
1962	1.84	6.31	15.2	11.2	12.6	9.50	11.2	7.32	2.53	1.43	1.32	1.99	3.64
1963	1.95	8.17	11.9	33.0	25.3	14.0	9.19	4.76	3.52	2.52	2.15	2.53	7.08
1964	2.67	3.31	8.50	14.7	14.6	9.47	6.50	5.30	3.26	2.57	1.46	1.46	6.00
1965	2.08	1.83	4.92	15.8	9.59	8.16	6.50	4.35	3.22	2.10	0.96	1.33	5.05
1966	1.93	3.18	14.6	21.7	20.2	12.9	9.47	5.74	3.35	1.63	0.63	0.88	7.95
1967	2.46	3.49	4.36	6.42	16.6	14.4	10.7	5.86	6.05	1.98	1.98	2.60	6.36
1968	4.70	12.1	25.6	27.5	22.1	10.2	7.54	3.27	1.64	0.97	0.53	0.76	9.99
1969	1.68	2.52	13.6	26.8	22.1	12.4	8.47	4.56	2.24	0.68	0.53	1.03	7.98
1970	1.37	2.69	19.9	30.4	23.9	29.5	19.5	4.56	3.29	1.39	0.97	1.03	11.6
1971	1.89	4.16	14.5	29.8	37.7	52.1	25.5	8.00	3.36	3.44	1.61	2.58	15.3
1972	2.64	3.08	16.4	18.7	7.96	7.05	3.89	3.34	2.27	1.14	0.77	0.62	11.6
1973	0.98	11.5	29.4	28.3	23.3	23.3	19.7	8.26	4.06	3.26	1.57	1.35	12.9
1974	0.75	4.78	16.5	36.5	28.0	21.5	10.1	5.78	1.63	1.07	1.36	1.94	11.1
1975	5.52	13.4	24.9	27.4	17.8	15.1	10.8	6.74	4.53	2.57	2.44	2.47	11.1
1976	2.08	2.05	3.14	1.93	1.69	11.0	2.96	2.39	4.02	0.86	0.82	1.37	2.87
1977	1.16	6.16	29.0	24.5	16.3	11.1	16.4	9.60	5.89	2.80	3.20	5.51	11.0
1978	3.05	7.05	11.7	7.53	25.3	15.6	7.13	3.83	1.71	1.22	0.72	1.24	7.06

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1959-1979)

MEAN	2.3	5.6	15.0	20.1	19.0	16.1	10.7	5.8	3.6	2.1	1.5	2.0	8.6
MAXIMUM	5.5	13.4	29.4	38.5	37.7	52.1	25.5	10.8	6.8	3.8	3.2	5.5	15.3
MINIMUM	0.8	1.8	3.1	1.9	1.7	5.8	3.0	2.4	1.6	0.7	0.5	0.6	2.9
STD DEVIATION	1.16	3.47	7.80	10.15	8.64	10.42	5.82	2.27	1.52	0.99	0.80	1.14	3.18
SKEWNESS	1.416	1.072	0.366	-0.070	-0.173	2.410	1.013	0.612	0.707	0.415	0.627	1.570	0.095
STD ERR SKEW	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.501	0.501	0.501	0.501	0.512
SER CORR COEFF	-0.191	-0.245	-0.226	0.061	-0.041	0.117	-0.160	-0.381	0.050	-0.064	-0.037	-0.116	-0.107
COEFF OF VAR	0.498	0.623	0.519	0.506	0.454	0.648	0.541	0.393	0.423	0.480	0.525	0.570	0.370
MEAN LOGS	0.320	0.671	1.107	1.222	1.208	1.144	0.970	0.730	0.518	0.261	0.122	0.240	0.900
STD DEV LOGS	0.208	0.274	0.274	0.315	0.307	0.224	0.244	0.174	0.186	0.223	0.242	0.234	0.184
SKEWNESS LOGS	-0.085	0.252	-0.411	-1.513	-1.986	0.738	-0.308	-0.122	-0.061	-0.218	-0.171	0.058	-0.848
STD ERR SKEW LOGS	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.501	0.501	0.501	0.501	0.512
SER CORR LOGS	-0.120	-0.173	-0.269	-0.111	-0.047	0.025	-0.336	-0.465	-0.075	-0.106	0.015	-0.080	-0.173
COEFF OF VAR LOGS	0.388	0.428	0.458	0.458	0.454	0.196	0.252	0.238	0.358	0.855	1.976	0.978	0.205
% OF AVE FLOW	2.2	5.4	14.5	19.3	18.3	15.5	10.4	5.6	3.5	2.0	1.5	1.9	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1959-1979)

0.99	0.7	1.3	2.1	1.5	1.3	5.6	2.2	2.0	1.2	0.5	0.3	0.5	2.3
0.95	0.9	1.8	4.0	4.0	3.9	6.7	3.5	2.7	1.6	0.8	0.5	0.7	3.6
0.90	1.1	2.2	5.5	6.3	6.4	7.6	4.5	3.2	1.9	0.9	0.6	0.9	4.5
0.80	1.4	2.8	7.8	10.1	10.5	9.0	5.9	3.8	2.3	1.2	0.8	1.1	5.7
0.50	2.1	4.6	13.9	19.9	20.0	13.1	9.6	5.4	3.3	1.9	1.3	1.7	8.4
0.20	3.1	7.7	22.0	30.3	28.0	20.9	15.1	7.5	4.7	2.8	2.1	2.7	11.4
0.10	3.8	10.3	26.7	34.8	30.5	27.8	18.8	8.9	5.7	3.5	2.7	3.5	13.0
0.04	4.8	14.1	31.9	38.4	31.9	27.8	23.5	10.6	6.9	4.3	3.4	4.5	14.6
0.02	5.5	17.4	35.2	40.1	32.4	27.0	23.5	11.9	7.8	4.9	3.9	5.3	15.5
0.01	6.2	21.1	38.0	41.3	32.7	30.4	30.4	13.1	8.7	5.6	4.5	6.2	16.3

STATION 12091100 FLETT CREEK AT TACOMA, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1961	1.2	1.3	1.5	1.7	2.2	2.5	2.6	2.6	3.9
1962	1.1	1.1	1.2	1.3	1.6	1.8	1.9	1.9	2.4
1963	0.6	0.6	0.6	0.7	1.0	1.2	1.3	1.5	1.9
1964	0.9	1.0	1.0	1.4	1.7	1.9	2.0	2.1	2.8
1965	1.4	1.5	1.8	1.8	2.1	2.2	2.3	2.4	2.5
1966	0.5	0.6	0.8	0.8	1.0	1.3	1.4	1.6	1.8
1967	0.7	0.7	0.7	0.8	0.9	1.1	1.3	1.5	2.1
1968	0.4	0.4	0.4	0.4	0.5	0.7	1.0	1.3	2.0
1969	0.6	0.6	0.7	0.7	1.2	1.9	2.1	2.5	3.8
1970	0.4	0.4	0.4	0.5	0.5	0.5	0.7	0.9	1.3
1971	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.9	1.4
1972	0.6	0.7	0.8	0.8	0.8	1.1	1.4	1.4	2.0
1973	1.0	1.1	1.2	1.4	1.5	1.7	2.2	2.4	2.7
1974	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.8	1.4
1975	0.6	0.6	0.6	0.7	0.7	1.0	1.1	1.4	2.4
1976	0.7	0.7	0.8	0.8	0.9	1.2	1.3	1.5	2.7
1977	1.2	1.2	1.2	1.3	1.4	1.8	2.0	2.1	2.2
1978	0.4	0.5	0.5	0.5	0.6	0.8	0.9	1.0	1.8
1979	2.0	2.2	2.4	2.5	2.6	3.0	3.2	3.6	4.4

LOWEST MEAN FLOW STATISTICS (YEARS 1961-1979)

MEAN	0.8	0.8	0.9	1.0	1.2	1.4	1.6	1.8	2.4
MAXIMUM	2.0	2.2	2.4	2.5	2.6	3.0	3.2	3.6	4.4
MINIMUM	0.4	0.4	0.4	0.4	0.5	0.5	0.7	0.8	1.3
STANDARD DEVIATION	0.43	0.47	0.53	0.56	0.63	0.69	0.70	0.86	1.06
SKWENESS	1.376	1.538	1.510	1.202	0.858	0.667	0.638	0.833	1.029
STD ERROR OF SKWENESS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SERIAL CORR COEFF	-0.109	-0.094	-0.047	-0.014	0.061	-0.045	-0.150	-0.265	-0.231
COEFF OF VARIATION	0.539	0.555	0.575	0.563	0.541	0.488	0.439	0.411	0.357
MEAN LOGS	-0.152	-0.128	-0.095	-0.058	0.010	0.100	0.161	0.211	0.355
STD DEVIATION LOGS	0.214	0.215	0.224	0.229	0.234	0.221	0.195	0.179	0.147
SKWENESS LOGS	0.423	0.510	0.479	0.355	0.120	-0.155	-0.069	-0.045	0.297
STD ERR SKWENESS LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SER CORR COEFF LOGS	-0.066	-0.040	0.016	0.022	0.053	0.005	-0.095	-0.198	-0.185
COEFF OF VAR LOGS	-1.414	-1.679	-2.351	-3.954	24.040	2.213	1.213	0.848	0.415

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1961-1979)

0.99	2.6	2.8	3.2	3.4	3.7	3.9	4.0	4.2	5.4
0.98	2.2	2.3	2.6	2.9	3.2	3.4	3.6	3.7	4.8
0.96	1.8	1.9	2.1	2.3	2.7	3.0	3.1	3.3	4.5
0.90	1.4	1.4	1.6	1.8	2.1	2.4	2.6	2.7	3.5
0.80	1.1	1.1	1.2	1.3	1.6	1.9	2.1	2.3	3.0
0.50	0.7	0.7	0.8	0.8	1.0	1.3	1.5	1.6	2.2
0.20	0.5	0.5	0.5	0.6	0.8	1.0	1.1	1.1	1.7
0.10	0.4	0.4	0.4	0.5	0.5	0.6	0.8	1.0	1.5
0.05	0.3	0.4	0.4	0.4	0.4	0.5	0.7	0.8	1.3
0.02	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.7	1.2
0.01	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.6	1.1

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1961-1979)

P95	P90	P75	P70	P50	P25	P10
0.8	1.2	2.1	2.4	4.2	12.0	22.0

STATION 12091100 FLETT CREEK AT TACOMA, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW(CFS) DATE REG.(R)
1960	30.	29.	27.	26.	23.	20.	18.	17.	15.	36. 02/06/60
1961	39.	36.	34.	31.	27.	23.	21.	19.	16.	43. 02/24/61
1962	13.	11.	10.	10.	9.	8.	7.	7.	5.	22. 12/22/61
1963	20.	18.	16.	16.	15.	14.	13.	12.	12.	27. 02/03/63
1964	71.	60.	53.	46.	38.	29.	24.	21.	17.	86. 01/25/64
1965	27.	22.	20.	19.	17.	15.	14.	12.	10.	39. 01/26/65
1966	21.	20.	18.	18.	16.	13.	11.	10.	8.	27. 01/05/66
1967	31.	30.	27.	25.	23.	21.	19.	17.	14.	39. 01/19/67
1968	32.	31.	28.	21.	17.	16.	14.	12.	10.	33. 02/21/68
1969	45.	43.	41.	36.	29.	28.	26.	23.	18.	47. 01/07/69
1970	52.	47.	45.	42.	33.	25.	22.	19.	14.	60. 01/27/70
1971	52.	48.	44.	40.	32.	30.	29.	27.	21.	57. 03/12/71
1972	90.	81.	74.	69.	56.	49.	43.	37.	28.	132. 03/05/72
1973	51.	44.	38.	34.	28.	19.	16.	13.	10.	55. 12/26/72
1974	58.	56.	51.	39.	33.	31.	28.	27.	23.	73. 01/18/74
1975	64.	57.	54.	46.	42.	35.	32.	27.	21.	76. 01/13/75
1976	55.	47.	42.	34.	30.	26.	24.	22.	18.	69. 12/02/75
1977	32.	29.	22.	17.	11.	7.	6.	5.	4.	38. 03/09/77
1978	57.	55.	49.	41.	32.	28.	24.	21.	18.	67. 12/14/77
1979	43.	40.	36.	31.	28.	21.	16.	15.	12.	45. 02/12/79

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1960-1979)

	MEAN	MINIMUM	STANDARD DEVIATION	STD ERROR OF SKEWNESS	SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	STD ERR SKEWNESS LOGS	SER CORR COEFF LOGS	COEFF OF VAR LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
	44.1	90.0	19.12	0.505	0.512	0.433	1.602	0.208	-0.603	0.512	0.335	1.6870	1.6870
	40.2	81.0	17.05	0.400	0.512	0.424	1.561	0.210	-0.779	0.512	0.327	0.1927	0.1927
	36.4	74.0	15.79	0.388	0.512	0.433	1.517	0.214	-0.725	0.512	0.292	0.0130	0.2650
	32.0	69.0	13.83	0.728	0.512	0.433	1.464	0.198	-0.556	0.512	0.238		
	26.9	56.0	11.24	0.620	0.512	0.417	1.391	0.208	-0.733	0.512	0.149		
	22.9	49.0	9.85	0.675	0.512	0.430	1.317	0.208	-0.733	0.512	0.049		
	20.3	43.0	7.2	0.585	0.512	0.441	1.262	0.217	-0.815	0.512	0.024		
	18.1	37.0	5.2	0.471	0.512	0.432	1.214	0.213	-0.751	0.512	0.0		
	14.7	28.0	4.3	0.246	0.512	0.410	1.126	0.206	-0.861	0.512	0.0		
	6.03	6.03	0.03	0.099	0.512	0.432	1.214	0.213	-0.751	0.512	0.0		
	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4
	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.7
	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6	70.6
	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8	86.8
	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9
	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3	121.3
	148.7	148.7	148.7	148.7	148.7	148.7	148.7	148.7	148.7	148.7	148.7	148.7	148.7

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1960-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
	10.7	16.9	21.2	27.3	41.9	60.2	71.0	83.0	91.0	98.2
	9.1	15.0	19.1	25.0	38.7	55.1	64.1	73.6	79.6	84.7
	8.1	13.4	17.0	22.3	34.9	50.1	58.8	68.1	74.1	79.4
	7.0	10.9	13.4	17.1	25.7	36.4	42.6	49.5	54.1	58.2
	5.3	8.7	11.0	14.2	22.0	31.3	36.5	42.1	45.6	48.7
	4.3	7.3	9.4	12.4	19.6	28.1	32.7	37.6	40.7	43.3
	3.3	6.7	8.5	11.2	17.4	24.9	29.1	33.6	36.4	38.9
	2.5	5.6	7.1	9.3	14.3	20.1	23.2	26.3	28.2	29.8
	1.4	3.3	4.7	6.6	10.6	14.3	16.8	19.9	21.3	22.8
	0.8	2.4	3.3	4.7	7.0	9.6	11.2	13.1	14.3	15.1
	0.4	1.2	1.6	2.2	3.1	4.1	4.8	5.6	6.1	6.5
	0.2	0.6	0.8	1.1	1.6	2.1	2.5	3.0	3.3	3.6
	0.1	0.3	0.4	0.6	0.9	1.2	1.5	1.8	2.0	2.2

STATION 12091180 LEACH CREEK AT HOLDING POND, AT FIRCREST, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1967													
1968	5.80	2.49	3.75	6.38	7.77	4.91	1.98	2.02	2.57	1.22	0.83	1.00	3.71
1969	4.30	4.83	7.30	6.51	5.93	2.91	2.97	2.24	1.15	1.30	3.47	2.30	3.74
1970	2.30	2.92	6.27	10.1	4.41	3.18	2.44	1.58	1.11	1.06	0.79	2.06	3.18
1971	1.80	4.89	7.84	7.95	3.88	6.25	4.33	1.58	2.16	1.45	1.36	2.95	3.86
1972	2.70	6.05	6.63	7.88	9.42	10.9	3.90	1.21	1.34	2.45	2.04	3.59	4.83
1973	1.19	2.52	8.45	4.83	2.42	5.75	2.80	2.62	2.80	1.41	1.42	2.05	2.87
1974	3.10	6.98	9.31	6.96	5.62	2.82	4.15	2.19	2.60	2.47	1.39	1.29	4.31
1975	2.13	6.72	7.00	9.02	8.00	4.34	2.80	2.36	1.61	1.65	1.41	1.58	4.26
1976	6.45	7.21	10.4	8.49	5.93	3.16	2.62	2.39	1.54	1.80	3.14	1.86	4.59
1977	2.56	2.63	3.41	2.79	3.05	4.65	2.07	4.21	2.10	1.55	3.33	3.61	3.00
1978	3.14	5.95	8.55	5.74	4.87	3.36	4.69	2.85	2.23	3.00	2.31	5.78	4.36
1979	1.79	5.83	3.38	3.47	7.55	3.50	2.86	2.14	1.62	2.44	1.91	2.85	3.24

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1967-1979)

MEAN	3.1	4.9	6.8	6.7	5.7	4.6	3.1	2.3	1.9	1.8	2.1	2.7	3.8
MAXIMUM	6.4	7.2	10.4	10.1	9.4	10.9	4.7	4.2	2.8	3.0	4.1	5.8	4.8
MINIMUM	1.2	2.5	3.4	2.8	2.2	2.8	2.0	1.2	1.1	1.1	0.8	1.0	2.9
STD DEVIATION	1.62	1.83	2.31	2.20	2.17	2.27	0.96	0.76	0.58	0.62	1.12	1.40	0.65
SKEWNESS	1.180	-0.323	-0.367	-0.367	0.071	2.127	0.527	1.334	0.122	0.695	0.552	0.951	-0.059
STD ERR SKEW	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.616	0.616	0.637
SER CORR COEFF	-0.017	-0.178	-0.482	0.149	-0.352	-0.045	-0.351	0.332	-0.091	0.151	0.134	0.177	-0.491
COEFF OF VAR	0.523	0.372	0.338	0.330	0.378	0.491	0.313	0.334	0.307	0.341	0.539	0.508	0.170
MEAN LOGS	0.441	0.659	0.808	0.798	0.725	0.630	0.468	0.338	0.260	0.237	0.255	0.388	0.577
STD DEV LOGS	0.214	0.184	0.170	0.168	0.185	0.173	0.134	0.138	0.139	0.144	0.247	0.220	0.076
SKEWNESS LOGS	0.284	-0.566	-0.832	-1.035	-0.693	1.191	0.215	0.151	-0.223	0.312	-0.087	-0.015	-0.256
STD ERR SKEW LOGS	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.616	0.616	0.637
SER CORR LOGS	-0.047	-0.270	-0.452	0.087	-0.344	-0.135	-0.374	0.373	-0.081	0.222	0.170	0.289	-0.503
COEFF OF VAR LOGS	0.484	0.280	0.210	0.211	0.255	0.275	0.286	0.409	0.536	0.605	0.967	0.568	0.131
% OF AVE FLOW	6.8	10.7	14.9	14.6	12.5	10.1	6.7	5.0	4.2	4.0	4.5	6.0	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1967-1979)

0.99	1.0	1.4	2.1	1.9	1.6	2.4	1.5	1.1	0.8	0.9	0.5	0.7	2.4
0.95	1.3	2.1	3.1	3.0	2.5	2.6	1.8	1.3	1.1	1.0	0.7	1.1	2.8
0.90	1.5	2.6	3.8	3.7	3.0	2.8	2.0	1.5	1.2	1.1	0.9	1.3	3.0
0.80	1.8	3.2	4.7	4.7	3.8	3.0	2.3	1.7	1.4	1.3	1.1	1.6	3.3
0.50	2.7	4.7	6.8	6.7	5.6	3.9	2.9	2.2	1.8	1.7	1.8	2.4	3.8
0.20	4.1	6.6	9.0	8.7	7.6	5.7	3.8	2.8	2.4	2.3	2.9	3.7	4.4
0.10	5.3	7.6	10.1	9.7	8.8	7.3	4.4	3.3	2.7	2.7	3.7	4.7	4.7
0.04	6.8	8.8	11.3	10.6	10.0	9.8	5.1	3.9	3.1	3.2	4.8	5.9	5.0
0.02	8.2	9.5	12.0	11.1	10.8	12.2	5.7	4.3	3.4	3.6	5.6	6.9	5.3
0.01	9.6	10.2	12.5	11.5	11.5	15.0	6.3	4.7	3.6	4.0	6.5	7.9	5.5

STATION 12091180 LEACH CREEK AT HOLDING POND, AT FIRCREST, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1969	0.4	0.5	0.5	0.6	1.1	1.3	1.8	1.8	2.2
1970	0.6	0.6	0.6	0.6	0.7	0.9	1.1	1.3	2.1
1971	0.6	0.6	0.6	0.6	0.7	0.9	1.0	1.1	1.3
1972	0.8	0.9	1.0	1.0	1.0	1.4	1.6	1.6	1.9
1973	0.7	0.7	0.7	0.8	1.0	1.2	1.6	1.8	2.0
1974	1.1	1.1	1.2	1.2	1.2	1.4	1.6	1.8	2.0
1975	1.1	1.2	1.2	1.2	1.3	1.3	1.4	1.7	1.9
1976	1.2	1.2	1.3	1.3	1.4	1.6	1.6	2.0	2.3
1977	1.1	1.1	1.2	1.2	1.4	1.6	1.8	2.0	2.1
1978	1.3	1.3	1.4	1.4	1.5	1.5	2.2	2.4	2.8
1979	1.5	1.5	1.6	1.6	1.8	2.3	2.5	2.6	3.0

LOWEST MEAN FLOW STATISTICS (YEARS 1969-1979)

MEAN	0.9	1.0	1.0	1.0	1.0	1.2	1.4	1.7	2.1
MAXIMUM	1.5	1.5	1.6	1.6	1.6	1.8	2.3	2.6	3.0
MINIMUM	0.4	0.5	0.5	0.6	0.7	0.9	1.0	1.1	1.3
STANDARD DEVIATION	0.35	0.34	0.37	0.34	0.33	0.38	0.44	0.43	0.45
SKWENESS	-0.117	-0.048	-0.068	0.018	0.205	1.174	0.428	0.174	0.349
STD ERROR OF SKWENESS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
SERIAL CORR COEFF	0.841	0.822	0.761	0.791	0.831	0.477	0.614	0.751	0.505
COEFF OF VARIATION	0.377	0.354	0.361	0.325	0.275	0.267	0.263	0.236	0.212
MEAN LOGS	-0.061	-0.045	-0.020	-0.003	0.061	0.134	0.204	0.250	0.322
STD DEVIATION LOGS	0.187	0.167	0.171	0.150	0.124	0.111	0.107	0.095	0.095
SKWENESS LOGS	-0.729	-0.402	-0.384	-0.306	-0.330	0.272	-0.304	-0.485	-0.508
STD ERR SKWENESS LOGS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
SER CORR COEFF LOGS	0.825	0.805	0.728	0.768	0.774	0.481	0.552	0.680	0.382
COEFF OF VAR LOGS	-3.068	-3.720	-8.756	-52.482	2.044	0.825	0.573	0.427	0.294

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1969-1979)

0.99	1.9	2.0	2.1	2.1	2.1	2.1	2.6	2.9	3.2
0.98	1.8	1.8	2.0	1.9	2.0	2.4	2.7	2.8	3.1
0.96	1.6	1.7	1.8	1.8	1.8	2.2	2.5	2.6	3.0
0.90	1.4	1.4	1.6	1.5	1.6	1.9	2.2	2.4	2.7
0.80	1.3	1.3	1.3	1.3	1.5	1.7	2.0	2.2	2.5
0.50	0.9	0.9	1.0	1.0	1.2	1.3	1.6	1.8	2.1
0.20	0.6	0.7	0.7	0.7	0.9	1.1	1.3	1.5	1.8
0.10	0.5	0.5	0.6	0.6	0.8	1.0	1.1	1.3	1.6
0.05	0.4	0.5	0.5	0.5	0.7	0.9	1.0	1.2	1.4
0.02	0.3	0.4	0.4	0.5	0.6	0.8	0.9	1.0	1.3
0.01	0.3	0.3	0.3	0.4	0.6	0.8	0.8	0.9	1.2

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1969-1979)

P95	P90	P75	P70	P50	P25	P10
0.9	1.1	1.4	1.5	1.9	3.7	9.4

STATION 12091200 LEACH CREEK NR FIRCREST, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1957						5.54	4.19	4.08	3.52	3.39	3.80	3.27	
1958	4.03	4.47	4.79	5.91	5.12	4.03	3.58	3.63	3.68	3.45	3.26	3.29	4.10
1959	3.85	5.41	6.04	7.48	4.76	4.54	4.28	3.49	3.50	2.87	2.99	3.29	4.38
1960	3.66	5.82	5.52	5.18	5.80	4.42	4.82	3.25	3.02	2.61	2.57	2.56	4.09
1961	3.32	6.45	3.79	6.80	11.7	5.92	2.82	2.85	3.02	2.10	1.99	2.63	4.17
1962	2.49	3.45	4.74	2.80	2.59	2.98	2.63	2.09	1.78	1.63	2.06	2.00	2.60
1963	3.35	8.41	4.91	3.33	4.72	3.08	3.58	2.55	2.18	2.13	2.03	2.28	3.55
1964	4.02	7.29	5.02	11.4	3.88	3.67	3.25	2.95	3.39	2.09	2.29	2.54	4.31
1965	2.45	5.89	6.07	6.97	5.69	2.75	3.98	1.72	1.69	1.51	1.93	2.41	3.49
1966	2.37	3.79	6.03	6.30	3.20	4.59	2.73	2.17	2.00	1.81	1.37	2.11	3.21
1967	2.94	5.17	8.13	11.4	4.07	3.90	3.16	2.32	2.58	1.52	1.42	1.47	4.02
1968	5.77	3.02	4.07	7.10	8.75	5.23	2.31	2.41	2.98	1.62	3.45	2.77	4.11
1969	4.00	5.31	7.70	7.31	6.44	3.68	3.29	2.59	1.40	1.33	1.12	4.51	4.04
1970	2.39	3.02	6.50	10.3	4.47	3.77	3.46	2.61	1.59	1.36	1.13	2.42	3.59
1971	2.57	5.39	9.72	10.6	4.44	6.63	4.03	1.91	1.85	1.39	1.65	3.01	4.45
1972	2.96	6.11	7.35	8.91	11.7	12.4	4.21	1.78	1.75	2.67	2.21	4.48	5.53
1973	1.57	3.32	10.2	5.12	2.53	3.70	2.58	3.09	2.80	1.68	1.45	1.99	3.35
1974	3.29	8.00	10.9	7.66	7.38	7.82	5.57	2.95	1.34	2.73	2.03	1.60	5.18
1975	2.22	6.01	7.80	10.2	8.83	4.79	3.24	2.81	1.87	1.69	3.87	1.89	4.58
1976	7.34	8.08	10.5	8.49	6.09	3.63	2.73	2.42	1.70	2.02	3.13	1.98	4.85
1977	2.83	2.53	3.54	2.81	2.85	4.85	2.09	4.23	2.39	1.54	3.78	3.85	3.11
1978	3.24	6.46	9.42	6.07	5.25	3.65	5.33	3.21	2.72	3.48	2.83	6.92	4.87
1979	2.25	6.66	4.03	4.10	8.70	4.10	3.13	2.94	2.26	3.01	2.18	3.41	3.86

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1957-1979)

MEAN	3.3	5.5	6.7	7.1	5.9	4.8	3.5	2.8	2.4	2.2	2.4	2.8	4.1
MAXIMUM	7.3	8.4	10.9	11.4	11.7	12.4	5.6	4.2	3.7	3.5	3.9	6.9	5.5
MINIMUM	1.6	2.5	3.5	2.8	2.5	2.8	2.1	1.7	1.4	1.3	1.1	1.4	2.6
STD DEVIATION	1.27	1.73	2.33	2.64	2.66	2.05	0.92	0.67	0.68	0.71	0.87	1.27	0.70
SKWENESS	1.802	-0.069	0.470	0.077	0.929	2.627	0.658	0.440	0.495	0.665	0.357	1.636	0.047
STD ERR SKEW	0.491	0.491	0.491	0.491	0.491	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.491
SER CORR COEFF	-0.101	-0.217	0.099	0.154	-0.260	0.072	-0.193	0.454	0.398	0.461	0.422	0.324	-0.123
COEFF OF VAR	0.382	0.317	0.350	0.373	0.454	0.430	0.261	0.241	0.286	0.331	0.366	0.450	0.173
MEAN LOGS	0.495	0.713	0.799	0.816	0.727	0.651	0.533	0.433	0.360	0.312	0.346	0.416	0.603
STD DEV LOGS	0.146	0.152	0.153	0.183	0.193	0.146	0.111	0.106	0.123	0.139	0.165	0.175	0.078
SKWENESS LOGS	0.589	-0.594	0.043	-0.682	0.083	1.368	0.115	-0.107	0.148	0.349	-0.203	0.507	-0.455
STD ERR SKEW LOGS	0.491	0.491	0.491	0.491	0.491	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.491
SER CORR LOGS	-0.081	-0.274	0.039	0.179	-0.288	0.078	-0.164	0.432	0.355	0.428	0.430	0.386	-0.114
COEFF OF VAR LOGS	0.213	0.191	0.191	0.224	0.265	0.224	0.209	0.244	0.341	0.445	0.478	0.420	0.129
% OF AVE FLOW	6.7	11.1	13.6	14.4	11.9	9.7	7.2	5.7	4.8	4.4	4.8	5.7	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1957-1979)

0.99	1.7	2.0	2.8	2.0	1.9	2.9	1.9	1.5	1.2	1.1	0.9	1.2	2.5
0.95	1.9	2.8	3.5	3.0	2.6	3.0	2.3	1.8	1.5	1.3	1.2	1.4	2.9
0.90	2.1	3.3	4.0	3.7	3.0	3.2	2.5	2.0	1.6	1.4	1.4	1.6	3.2
0.80	2.3	3.9	4.7	4.7	3.7	3.4	2.7	2.2	1.8	1.6	1.6	1.8	3.5
0.50	3.0	5.4	6.3	6.9	5.3	4.2	3.4	2.7	2.3	2.0	2.2	2.5	4.1
0.20	4.1	7.0	8.5	9.4	7.7	5.7	4.2	3.3	2.9	2.7	3.1	3.6	5.0
0.10	4.9	7.9	9.9	10.8	9.5	7.0	4.8	3.7	3.3	3.1	3.6	4.4	5.0
0.04	6.0	8.8	11.7	12.3	11.8	9.1	5.4	4.1	3.8	3.7	4.2	5.6	5.3
0.02	6.9	9.4	13.1	13.3	13.5	11.1	5.9	4.4	4.2	4.2	4.6	6.6	5.5
0.01	7.9	10.0	14.4	14.1	15.4	13.3	6.3	4.7	4.6	4.7	5.1	7.7	5.7

STATION 12091200 LEACH CREEK NR FIRCREST, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1958	2.6	2.8	2.9	3.1	3.2	3.4	3.5	3.5	3.7
1959	2.8	2.9	3.1	3.2	3.2	3.3	3.3	3.4	3.5
1960	2.6	2.6	2.7	2.8	2.8	2.9	3.0	3.1	3.3
1961	2.0	2.0	2.0	2.1	2.2	2.5	2.5	2.6	2.9
1962	1.2	1.3	1.4	1.5	1.6	1.8	1.9	1.9	2.1
1963	1.4	1.4	1.4	1.5	1.6	1.7	1.8	1.8	2.0
1964	1.7	1.8	1.8	1.8	2.0	2.0	2.1	2.2	2.3
1965	1.7	1.7	1.7	1.8	2.0	2.1	2.2	2.3	2.6
1966	1.0	1.1	1.1	1.1	1.4	1.5	1.6	1.6	1.8
1967	1.2	1.2	1.2	1.3	1.3	1.4	1.4	1.7	1.9
1968	1.2	1.2	1.2	1.2	1.4	1.4	1.5	1.7	2.1
1969	1.1	1.1	1.2	1.3	1.5	1.7	2.2	2.2	2.6
1970	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.5	2.2
1971	1.0	1.0	1.0	1.0	1.1	1.2	1.3	1.5	1.6
1972	0.8	1.0	1.1	1.2	1.3	1.4	1.5	1.7	1.9
1973	0.5	0.5	0.7	1.1	1.4	1.6	1.9	2.0	2.4
1974	0.9	0.9	0.9	0.9	1.0	1.3	1.6	1.9	2.2
1975	1.0	1.1	1.1	1.3	1.5	1.5	1.7	2.0	2.2
1976	1.2	1.3	1.3	1.5	1.5	1.7	1.8	2.2	2.5
1977	1.5	1.5	1.5	1.6	1.7	1.9	2.0	2.1	2.2
1978	1.3	1.4	1.4	1.5	1.5	1.6	2.4	2.5	3.0
1979	1.8	1.9	2.0	2.1	2.3	2.8	2.9	3.0	3.6

LOWEST MEAN FLOW STATISTICS (YEARS 1958-1979)

MEAN	1.4	1.5	1.5	1.6	1.8	1.9	2.1	2.2	2.5
MAXIMUM	2.8	2.9	3.1	3.2	3.2	3.4	3.5	3.5	3.7
MINIMUM	0.5	0.5	0.7	0.9	1.0	1.2	1.2	1.5	1.8
STANDARD DEVIATION	0.61	0.63	0.65	0.65	0.63	0.67	0.63	0.59	0.59
SKEWNESS	1.015	1.050	1.282	1.376	1.255	1.138	0.904	0.971	0.900
STD ERROR OF SKEWNESS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491
SERIAL CORR COEFF	0.830	0.853	0.860	0.860	0.816	0.773	0.756	0.770	0.683
COEFF OF VARIATION	0.429	0.425	0.426	0.400	0.361	0.351	0.307	0.269	0.236
MEAN LOGS	0.119	0.136	0.152	0.186	0.221	0.256	0.297	0.329	0.387
STD DEVIATION LOGS	0.181	0.179	0.167	0.153	0.162	0.139	0.127	0.110	0.097
SKEWNESS LOGS	0.024	-0.044	0.564	0.803	0.680	0.659	0.570	0.570	0.628
STD ERR SKEWNESS LOGS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491
SER CORR COEFF LOGS	0.766	0.771	0.821	0.814	0.751	0.728	0.685	0.717	0.636
COEFF OF VAR LOGS	1.518	1.321	1.101	0.823	0.642	0.543	0.427	0.334	0.250

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1958-1979)

	P99	P98	P96	P95	P90	P75	P70	P50	P25	P10
0.99	3.5	3.1	2.8	2.6	2.4	2.2	2.0	1.8	1.6	1.4
0.98	3.1	2.7	2.4	2.2	2.0	1.8	1.6	1.4	1.2	1.0
0.96	2.7	2.3	2.0	1.8	1.6	1.4	1.2	1.0	0.8	0.6
0.90	2.2	1.9	1.6	1.4	1.2	1.0	0.8	0.6	0.4	0.3
0.80	1.9	1.6	1.4	1.2	1.0	0.8	0.6	0.4	0.3	0.2
0.50	1.3	1.0	0.8	0.6	0.4	0.3	0.2	0.1	0.1	0.0
0.20	0.9	0.7	0.5	0.4	0.3	0.2	0.1	0.1	0.0	0.0
0.10	0.8	0.6	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0
0.05	0.7	0.5	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0
0.02	0.6	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0
0.01	0.5	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1958-1979)

P95	P90	P75	P70	P50	P25	P10
1.3	1.5	1.8	2.0	2.5	4.1	8.3

STATION 12091200 LEACH CREEK NR FIRCREST, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL FLOW (CFS)	PEAK-FLW DATA DATE	REG. (R)
1958	12.0	9.2	7.7	6.5	6.0	5.6	5.3	5.1	4.7	28.	01/16/58	R
1959	26.0	16.0	11.0	8.9	7.7	6.8	6.4	6.0	5.4	41.	01/24/59	R
1960	30.0	22.0	13.0	9.9	8.1	6.1	6.3	5.8	5.3	66.	11/20/59	R
1961	36.0	25.0	20.0	14.0	12.0	9.1	7.8	7.3	6.1	60.	02/24/61	R
1962	17.0	10.0	9.7	7.1	5.7	4.6	3.9	3.5	3.2	48.	12/22/61	R
1963	40.0	24.0	17.0	13.0	9.1	7.1	5.9	5.3	4.7	69.	11/19/62	R
1964	32.0	26.0	17.0	15.0	11.0	8.6	8.1	7.3	6.0	38.	10/21/63	R
1965	30.0	20.0	15.0	11.0	7.9	7.0	6.7	6.2	5.2	44.	01/26/65	R
1966	33.0	24.0	14.0	12.0	8.9	6.6	5.7	5.2	4.5	47.	01/05/66	R
1967	40.0	31.0	16.0	14.0	12.0	10.0	8.6	7.4	6.0	54.	11/13/66	R
1968	38.0	26.0	18.0	11.0	9.5	8.1	7.1	6.3	5.6	50.	02/18/68	R
1969	27.0	25.0	18.0	12.0	8.5	8.0	7.6	7.0	5.8	47.	12/06/68	R
1970	32.0	25.0	21.0	18.0	11.0	8.7	7.5	6.5	5.3	36.	01/27/70	R
1971	37.0	31.0	20.0	17.0	12.0	10.0	8.8	8.1	7.0	65.	01/26/71	R
1972	112.0	63.0	44.0	33.0	20.0	15.0	12.0	11.0	8.6	198.	02/28/72	R
1973	46.0	32.0	24.0	19.0	13.0	8.0	6.5	5.6	4.6	68.	12/26/72	R
1974	35.0	27.0	17.0	15.0	11.0	10.0	9.5	8.7	7.9	42.	01/31/74	R
1975	33.0	26.0	20.0	15.0	12.0	10.0	9.3	8.5	6.9	64.	02/19/75	R
1976	42.0	35.0	21.0	15.0	12.0	10.0	9.6	8.8	7.4	43.	12/03/75	R
1977	26.0	17.0	9.6	7.9	5.5	4.0	3.8	3.7	3.5	41.	08/23/77	R
1978	47.0	31.0	27.0	15.0	11.0	8.6	7.7	7.0	6.1	57.	12/10/77	R
1979	35.0	21.0	17.0	11.0	9.7	7.1	5.9	5.9	5.0	70.	02/06/79	R

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1958-1979)

MEAN	36.6	25.5	18.0	13.6	10.2	8.1	7.3	6.6	5.7
MAXIMUM	112.0	63.0	44.0	33.0	20.0	15.0	12.0	11.0	8.6
MINIMUM	12.0	9.2	7.7	6.5	5.5	4.0	3.8	3.5	3.2
STANDARD DEVIATION	18.78	10.68	7.48	5.49	3.13	2.33	1.93	1.73	1.32
SKWENESS	3.193	1.925	1.952	2.047	1.205	0.860	0.327	0.437	0.343
STD ERROR OF SKWENESS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491
SERIAL CORR COEFF	0.122	0.261	0.191	0.368	0.236	0.105	0.040	0.010	-0.031
COEFF OF VARIATION	0.512	0.419	0.415	0.402	0.307	0.286	0.266	0.261	0.233
MEAN LOGS	1.526	1.373	1.226	1.107	0.988	0.893	0.846	0.808	0.742
STD DEVIATION LOGS	0.178	0.175	0.164	0.156	0.130	0.126	0.121	0.117	0.104
SKWENESS LOGS	0.293	-0.374	0.149	0.329	-0.069	-0.344	-0.526	-0.451	-0.371
STD ERR SKWENESS LOGS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491
SER CORR COEFF LOGS	0.168	0.297	0.206	0.361	0.164	0.043	-0.008	-0.033	-0.072
COEFF OF VAR LOGS	0.117	0.128	0.134	0.141	0.132	0.141	0.143	0.145	0.140

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1958-1979)

0.99	14.1	8.3	7.3	6.1	4.8	3.7	3.3	3.1	3.0	35.2
0.95	17.7	11.7	9.2	7.3	5.9	4.7	4.3	4.0	3.6	36.0
0.90	20.1	13.9	10.4	8.2	6.6	5.3	4.9	4.5	4.0	37.1
0.80	23.7	17.0	12.2	9.4	7.6	6.2	5.6	5.2	4.5	39.2
0.50	32.9	24.2	16.7	12.6	9.8	8.0	7.2	6.6	5.6	47.6
0.20	47.1	33.3	23.1	17.2	12.5	10.0	8.9	8.1	6.8	67.8
0.10	57.5	38.9	27.5	20.5	14.3	11.2	9.8	8.9	7.4	87.8
0.04	71.7	45.3	33.2	24.9	16.3	12.5	10.8	9.9	8.1	122.9
0.02	83.1	49.8	37.7	28.5	17.8	13.4	11.5	10.5	8.6	158.0
0.01	95.3	54.0	42.2	32.1	19.3	14.3	12.0	11.0	9.0	202.9

STATION 12091300 LEACH CREEK NEAR STEILACOOM, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1957					11.1	13.0	11.4	10.5	9.97	9.79	9.93	9.62	
1958	10.6	9.78	10.1	14.6	14.3	10.0	10.4	10.3	9.88	7.28	7.06	7.61	10.1
1959	8.41	11.4	12.1	17.6	11.3	10.2	9.94	8.50	7.61	6.85	7.32	8.68	10.0
1960	8.88	12.8	13.0	11.4	12.4	10.2	11.4	8.33	7.91	6.81	7.83	7.38	9.87
1961	8.10	14.6	10.5	12.9	21.1	12.8	9.08	8.31	6.97	6.51	6.06	6.50	10.2
1962	7.75	9.22	10.0	8.23	7.92	7.95	7.44	6.30	6.11	5.52	6.84	6.81	7.51
1963	8.57	14.9	11.4	8.75	11.0	9.45	10.1	8.05	7.21	7.10	7.44	7.88	9.30
1964	9.88	15.9	12.2	20.3	10.9	10.8	9.66	8.39	9.18	8.03	6.77	7.58	10.8
1965	8.63	12.1	13.3	14.0	12.7	8.73	10.6	7.08	5.53	5.43	6.53	6.37	9.24
1966	7.21	8.81	12.7	12.3	8.47	10.9	7.74	6.80	6.29	6.25	5.19	6.43	8.27
1967	8.24	10.9	14.8	15.0	10.2	11.5	10.3	8.18	7.62	5.12	5.12	5.89	9.76
1968	11.6	8.45	10.4	15.0	17.8	14.0	9.55	8.58	8.70	6.19	9.15	8.11	10.6
1969	10.3	14.0	16.4	15.6	14.8	9.88	10.6	5.97	5.23	5.05	4.40	9.05	9.89
1970	7.77	7.30	10.1	16.6	9.61	8.22	10.6	8.61	5.80	6.01	5.85	6.30	8.57
1971	6.92	11.3	13.6	15.1	11.4	14.7	9.86	5.78	7.06	6.59	4.92	6.42	9.46
1972	6.63	10.9	11.4	16.8	22.4	25.2	9.97	7.53	6.54	8.56	8.18	9.86	12.0
1973	6.34	10.6	21.3	19.8	6.66	5.12	6.36	9.77	7.98	5.04	5.62	6.26	9.27
1974	6.31	12.2	14.3	29.3	28.1	16.7	9.28	7.03	6.55	5.95	5.40	5.19	12.1
1975	7.25	13.3	14.7	19.4	16.9	11.7	9.24	8.53	6.44	5.28	8.58	5.83	10.6
1976	11.1	12.5	17.4	15.4	11.9	8.4	7.92	7.97	6.28	6.46	8.10	6.55	10.0
1977	7.29	7.74	8.64	8.16	8.44	11.4	7.12	8.60	6.97	5.38	7.61	9.06	8.04
1978	6.62	11.5	15.0	11.5	13.3	9.35	11.8	7.55	6.48	7.52	7.03	10.6	9.84
1979	6.02	15.8	9.45	8.96	16.3	10.4	8.36	6.73	5.59	8.23	6.32	9.18	9.23

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MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1957-1979)

MEAN	8.2	11.6	12.9	15.0	13.4	11.3	9.4	8.0	7.1	6.6	6.8	7.5	9.8
MAXIMUM	11.6	15.9	21.3	29.3	28.1	25.2	11.8	10.5	10.0	9.8	9.9	10.6	12.1
MINIMUM	6.0	7.3	8.6	8.2	6.7	5.1	6.4	5.8	5.2	5.0	4.4	5.2	7.5
STD DEVIATION	1.62	2.48	3.00	4.91	5.12	3.89	1.44	1.24	1.32	1.22	1.42	1.50	1.12
SKENESS	0.682	0.043	1.077	0.934	1.330	2.117	-0.394	0.167	0.821	0.922	0.279	0.451	0.179
STD ERR SKEW	0.491	0.491	0.491	0.491	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.491
SER CORR COEFF	0.366	-0.076	-0.216	0.398	-0.247	-0.229	-0.159	0.072	0.281	0.110	-0.081	0.327	-0.041
COEFF OF VAR	0.198	0.214	0.233	0.327	0.381	0.343	0.153	0.156	0.184	0.185	0.208	0.199	0.114
MEAN LOGS	0.906	1.056	1.099	1.155	1.102	1.035	0.969	0.897	0.847	0.812	0.826	0.868	0.987
STD DEV LOGS	0.083	0.096	0.096	0.141	0.152	0.132	0.070	0.069	0.077	0.077	0.091	0.085	0.050
SKENESS LOGS	0.387	-0.369	0.477	-0.110	0.446	0.431	-0.713	-0.221	0.478	0.532	-0.150	0.170	-0.206
STD ERR SKEW LOGS	0.491	0.491	0.491	0.491	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.491
SER CORR LOGS	0.437	-0.127	-0.260	0.404	-0.319	-0.392	-0.149	0.008	0.241	0.085	-0.060	0.352	-0.038
COEFF OF VAR LOGS	0.091	0.087	0.087	0.122	0.138	0.127	0.072	0.076	0.091	0.095	0.111	0.098	0.051
% OF AVE FLOW	7.0	9.9	10.9	12.7	11.4	9.6	8.0	6.8	6.0	5.6	5.8	6.4	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1957-1979)

0.99	5.4	6.4	8.1	6.5	6.3	5.9	5.9	5.3	5.0	4.6	4.0	4.8	7.3
0.95	6.0	7.7	9.0	8.3	7.5	6.8	6.9	6.0	5.4	5.0	4.7	5.4	8.0
0.90	6.4	8.5	9.6	9.4	8.2	7.5	7.5	6.4	5.7	5.2	5.1	5.4	8.3
0.80	6.8	9.5	10.4	10.9	9.4	8.4	8.2	6.9	6.0	5.6	5.6	6.3	8.8
0.50	8.0	11.5	12.3	14.4	12.3	10.6	9.5	7.9	6.9	6.4	6.7	7.3	9.7
0.20	9.4	13.7	15.0	18.8	16.8	13.9	10.7	9.0	8.1	7.5	8.0	8.7	10.7
0.10	10.4	15.0	16.8	21.6	20.1	16.2	11.2	9.6	8.9	8.2	8.7	9.5	11.2
0.04	11.5	16.3	19.1	24.9	24.5	19.2	11.8	10.3	9.8	9.1	9.6	10.5	11.8
0.02	12.4	17.1	20.9	28.1	27.3	21.6	12.7	10.7	10.6	9.8	10.1	11.3	12.1
0.01	13.3	17.9	22.6	29.7	31.9	24.1	12.4	11.1	11.3	10.5	10.7	12.0	12.5

STATION 12091300 LEACH CREEK NEAR STEILACDUM, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1958	7.6	7.6	7.7	8.0	8.4	9.6	9.7	9.7	9.8
1959	6.2	6.7	6.8	6.9	7.0	7.1	7.2	7.6	8.4
1960	6.4	6.4	6.6	6.7	6.8	6.9	7.2	7.5	7.9
1961	6.2	6.3	6.4	6.5	6.5	6.8	7.3	7.3	7.7
1962	5.5	5.7	5.8	5.9	6.0	6.2	6.3	6.5	6.9
1963	5.2	5.3	5.4	5.5	5.5	5.8	5.9	6.1	6.5
1964	5.4	5.4	5.6	6.4	6.8	6.9	7.2	7.2	7.5
1965	5.9	6.1	6.2	6.3	6.5	7.1	7.4	7.7	8.1
1966	5.0	5.1	5.1	5.2	5.3	5.5	5.6	6.0	6.3
1967	4.6	4.7	4.9	5.0	5.1	5.4	5.8	5.9	6.3
1968	4.4	4.6	4.9	5.0	5.1	5.3	5.5	6.0	7.1
1969	5.4	5.5	5.7	5.8	6.1	6.4	7.4	7.6	8.2
1970	4.1	4.2	4.2	4.3	4.3	4.5	4.8	5.1	6.2
1971	4.5	4.6	4.7	4.9	5.5	5.8	5.9	5.9	6.5
1972	3.6	3.6	3.8	4.7	4.9	5.5	5.7	6.1	6.1
1973	4.7	4.7	4.7	4.9	5.0	5.9	7.2	7.5	7.8
1974	4.7	4.7	4.8	4.9	5.0	5.3	5.6	5.7	6.6
1975	4.8	4.9	5.0	5.1	5.2	5.3	5.3	5.6	6.0
1976	4.8	4.8	4.8	4.9	5.1	5.6	5.9	6.5	7.3
1977	4.9	4.9	5.0	5.1	5.6	5.2	6.5	6.8	7.0
1978	4.4	4.5	4.6	4.6	4.7	5.2	6.4	6.6	7.2
1979	4.9	4.9	5.0	5.5	6.0	6.6	6.9	7.1	7.5

LOWEST MEAN FLOW STATISTICS (YEARS 1958-1979)

MEAN	5.1	5.2	5.4	5.6	5.7	6.1	6.5	6.7	7.2
MAXIMUM	7.6	7.6	7.7	8.0	8.4	9.6	9.7	9.7	9.8
MINIMUM	3.6	3.6	3.8	4.3	4.3	4.5	4.8	5.1	6.0
STANDARD DEVIATION	0.89	0.92	0.93	0.91	0.95	1.05	1.06	1.01	0.93
SKENNESS	0.974	0.861	0.862	1.068	1.040	1.632	1.150	1.038	0.927
STD ERROR OF SKENNESS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491
SERIAL CORR COEFF	0.688	0.744	0.750	0.737	0.548	0.406	0.200	0.260	0.317
COEFF OF VARIATION	0.173	0.176	0.173	0.165	0.166	0.172	0.164	0.150	0.128
MEAN LOGS	0.706	0.713	0.722	0.739	0.754	0.782	0.807	0.823	0.855
STD DEVIATION LOGS	0.072	0.074	0.072	0.068	0.069	0.069	0.068	0.063	0.054
SKENNESS LOGS	0.434	0.368	0.429	0.748	0.621	0.928	0.578	0.534	0.582
STD ERR SKENNESS LOGS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491
SER CORR COEFF LOGS	0.639	0.684	0.699	0.698	0.485	0.351	0.175	0.239	0.284
COEFF OF VAR LOGS	0.103	0.103	0.100	0.092	0.091	0.088	0.084	0.076	0.063

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1958-1979)

0.99	7.9	8.0	8.2	8.6	8.8	9.7	9.8	9.8	10.1
0.98	7.4	7.6	7.7	8.0	8.3	9.0	9.3	9.3	9.6
0.96	7.0	7.1	7.2	7.5	7.7	8.4	8.7	8.8	9.1
0.90	6.3	6.5	6.6	6.8	7.0	7.5	7.9	8.1	8.4
0.80	5.8	5.9	6.0	6.2	6.4	6.8	7.3	7.5	7.9
0.50	5.0	5.1	5.2	5.4	5.6	5.9	6.3	6.6	7.1
0.20	4.4	4.5	4.6	4.8	5.0	5.3	5.6	5.9	6.4
0.10	4.1	4.2	4.3	4.6	4.7	5.1	5.3	5.6	6.2
0.05	3.9	4.0	4.1	4.4	4.5	4.9	5.1	5.4	6.0
0.02	3.8	3.8	3.9	4.2	4.3	4.8	4.9	5.2	5.8
0.01	3.6	3.6	3.8	4.2	4.2	4.7	4.8	5.0	5.7

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1958-1979)

P95	P90	P75	P70	P50	P25	P10
5.2	5.6	6.4	6.6	7.7	11.0	16.0

LEACH CREEK NEAR STEILACOOM, WASH.

ANNUAL PEAK-FLOW DATA

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW(CFS)	DATE	REG. (R)
1958	23.	21.	18.	17.	16.	15.	13.	12.	12.	44.	01/16/58	R
1959	45.	31.	24.	21.	18.	15.	14.	13.	12.	66.	01/24/59	R
1960	46.	35.	25.	18.	17.	13.	14.	13.	12.	94.	11/21/59	R
1961	61.	36.	32.	25.	21.	17.	15.	15.	13.	92.	02/24/61	R
1962	26.	17.	16.	13.	11.	10.	10.	9.	9.	65.	12/23/61	R
1963	45.	33.	24.	21.	16.	14.	12.	12.	11.	82.	11/19/62	R
1964	38.	32.	26.	24.	20.	17.	16.	15.	14.	38.	01/25/64	R
1965	47.	34.	24.	19.	16.	14.	14.	13.	12.	71.	01/27/65	R
1966	53.	40.	25.	20.	16.	13.	12.	11.	10.	76.	01/05/66	R
1967	54.	45.	27.	24.	19.	17.	15.	14.	13.	85.	01/19/67	R
1968	50.	38.	30.	21.	18.	17.	16.	14.	13.	76.	02/18/68	R
1969	41.	33.	28.	22.	18.	17.	16.	14.	13.	63.	02/08/69	R
1970	40.	33.	29.	26.	17.	16.	13.	12.	11.	47.	01/27/70	R
1971	48.	40.	26.	22.	16.	16.	15.	14.	13.	81.	01/26/71	R
1972	170.	90.	74.	55.	36.	27.	22.	19.	16.	238.	03/05/72	R
1973	58.	46.	40.	35.	34.	21.	18.	15.	12.	78.	12/26/72	R
1974	63.	59.	48.	40.	39.	30.	25.	22.	18.	63.	02/01/74	R
1975	50.	41.	33.	26.	22.	19.	18.	17.	14.	94.	02/20/75	R
1976	65.	53.	32.	23.	19.	17.	16.	14.	13.	97.	12/02/75	R
1977	38.	24.	18.	16.	12.	10.	10.	9.	9.	53.	05/31/77	R
1978	73.	38.	31.	24.	18.	14.	13.	12.	12.	99.	12/10/77	R
1979	65.	35.	29.	20.	18.	14.	12.	11.	11.	131.	02/06/79	R

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	MEAN	54.5	38.8	30.0	24.1	19.8	16.4	15.0	13.9	12.4	
MAXIMUM		170.0	90.0	74.0	55.0	39.0	30.0	25.0	22.0	18.0	
MINIMUM		17.0	13.0	10.0	7.0	5.0	4.0	3.5	3.0	2.5	
STANDARD DEVIATION		28.59	14.81	12.09	9.73	7.19	4.71	3.57	2.92	2.10	
SKEWNESS		3.313	2.011	2.529	2.079	1.715	1.573	1.175	0.953	0.598	
STD ERROR OF SKEWNESS		0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	
SERIAL CORR COEFF		0.023	0.207	0.239	0.355	0.540	0.400	0.359	0.259	0.067	
COEFF OF VARIATION		0.525	0.402	0.375	0.375	0.287	0.287	0.287	0.210	0.169	
MEAN LOGS		1.700	1.564	1.453	1.360	1.275	1.134	1.064	1.133	1.089	1-8861
STD DEVIATION LOGS		0.170	0.149	0.142	0.134	0.134	0.113	0.098	0.089	0.073	0.1861
SKEWNESS LOGS		0.980	0.259	1.043	1.160	1.053	0.649	0.352	0.133	-0.076	0.1678
STD ERR SKEWNESS LOGS		0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.8370
SER CORR COEFF LOGS		0.075	0.239	0.360	0.360	0.466	0.370	0.368	0.224	0.057	
COEFF OF VAR LOGS		0.100	0.095	0.098	0.098	0.105	0.094	0.084	0.078	0.067	
HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1958-1979)											
	0.99	26.8	17.6	17.0	14.5	11.7	9.8	9.2	8.6	8.2	39.8
	0.95	29.9	21.4	18.5	15.5	12.6	10.9	10.3	9.8	9.3	39.8
	0.90	32.2	23.9	19.6	16.3	13.3	11.6	11.0	10.5	9.9	49.2
	0.80	35.9	27.4	21.4	17.6	14.5	12.7	12.0	11.4	10.6	55.3
	0.50	47.0	36.1	25.7	21.6	17.9	15.4	14.4	13.5	12.3	72.9
	0.20	67.4	48.6	36.2	28.7	23.8	19.5	17.6	16.1	14.1	103.8
	0.10	84.6	57.3	43.9	34.6	28.5	22.4	19.6	17.7	15.2	129.0
	0.04	111.1	68.7	55.4	43.4	35.6	26.3	22.3	19.6	16.4	166.8
	0.02	134.8	77.5	65.4	51.2	41.6	29.5	24.2	21.0	17.2	199.8
	0.01	162.4	86.7	76.8	60.0	48.4	32.7	26.2	22.3	18.0	237.3

STATION 12091500 CHAMBERS C BW LEACH C, NR STEILACOOM, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1938	57.3	65.6	76.3	34.3	26.9	22.4	22.0	176	108	80.9	67.1	77.6	
1939	55.0	47.6	63.0	109	182	193	137	101	101	52.5	45.5	44.9	93.8
1940				86.5	123	186	135	130	85.5	60.5	47.0	56.2	89.5
1943													
1944	57.3	49.5	52.9	67.8	98.7	88.4	63.1	60.4	51.5	40.9	40.0	42.4	59.3
1945	38.6	43.5	40.5	43.7	93.4	124	134	95.1	83.0	56.1	42.0	48.6	69.9
1946	49.5	61.1	82.6	217	257	256	201	127	101	75.0	54.9	50.1	127
1947	49.4	66.3	159	166	245	181	158	110	88.1	67.8	56.9	55.4	116
1948	66.9	71.5	89.2	204	186	237	213	201	126	101	94.6	79.7	139
1949	75.8	80.9	212.9	180	200	211	169	110	113	58.4	45.6	51.5	123
1950	46.1	53.7	94.7	265	278	248	270	175	113	79.9	66.0	59.7	162
1951	78.5	98.0	238	310	499	391	285	129	86.1	67.9	54.1	50.5	184
1952	76.6	72.7	86.1	87.2	130	116	84.7	72.0	61.1	44.9	42.7	40.7	76.1
1953	36.0	37.6	42.7	81.3	234	234	111	89.5	79.3	71.8	41.6	47.1	82.8
1954	53.5	69.2	172	305	275	232	165	114	97.7	77.1	51.2	61.7	139
1955	54.8	63.9	96.0	126	144	137	164	126	80.1	62.9	51.5	44.6	95.5
1956	57.3	89.0	357	496	242	194	194	123	103	72.1	58.5	46.7	173
1957	62.7	69.5	99.1	115	121	233	156	110	77.9	65.3	56.0	45.3	101
1958	50.1	46.4	59.0	110	203	172	120	109	81.3	55.9	38.0	38.1	89.6
1959	42.0	85.0	141	249	241	164	146	115	87.0	59.5	45.0	42.7	117
1960	39.6	57.1	132	137	236	175	162	149	103	65.9	56.9	51.0	113
1961	52.9	98.9	173	212	325	329	194	155	98.4	70.7	53.4	41.9	149
1962	53.3	53.3	76.9	103	80.2	84.1	79.2	78.0	54.1	39.2	34.5	35.9	64.2
1963	57.4	86.7	196	163	175	147	165	128	84.9	53.6	50.8	46.9	113
1964	50.8	91.0	116	250	290	183	126	85.0	77.0	61.2	46.4	39.0	117
1965	48.3	50.0	105	181	281	168	115	104	71.4	41.4	36.9	35.1	102

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1938-1965)

MEAN	54.6	67.0	123.3	184.3	216.3	201.9	156.3	118.9	85.9	63.3	51.0	49.2	112.3
MAXIMUM	78.5	98.9	357.0	496.0	499.0	448.0	270.0	201.0	126.0	101.0	94.6	79.7	184.0
MINIMUM	36.0	37.6	40.5	43.7	80.2	84.1	63.1	60.4	51.5	39.2	34.5	35.1	59.3
STD DEVIATION	11.31	17.85	73.61	104.47	90.83	85.95	48.88	33.29	17.75	14.23	12.18	10.95	33.27
SKWENESS	0.635	0.270	1.580	1.185	0.991	1.350	0.208	0.656	0.109	0.388	1.874	1.497	0.462
STD ERR SKEW	0.472	0.472	0.472	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SER CORR COEFF	0.098	-0.174	-0.153	-0.162	0.008	0.165	0.161	-0.067	-0.097	0.013	0.049	0.204	0.065
COEFF OF VAR	0.207	0.266	0.597	0.567	0.420	0.426	0.313	0.280	0.207	0.225	0.239	0.222	0.296
MEAN LOGS	1.728	1.811	2.026	2.200	2.297	2.271	2.171	2.059	1.925	1.791	1.697	1.683	2.032
STD DEV LOGS	0.089	0.118	0.239	0.250	0.190	0.174	0.148	0.122	0.093	0.100	0.093	0.088	0.131
SKWENESS LOGS	0.100	-0.144	0.210	-0.183	-0.378	0.113	-0.722	-0.167	-0.513	-0.310	0.890	0.908	-0.174
STD ERR SKEW LOGS	0.472	0.472	0.472	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SER CORR LOGS	0.060	-0.150	0.008	0.022	0.050	0.080	0.107	-0.045	-0.093	0.022	0.063	0.257	0.072
COEFF OF VAR LOGS	0.051	0.065	0.118	0.113	0.083	0.077	0.068	0.059	0.049	0.056	0.055	0.052	0.064
% OF AVE FLOW	4.0	4.9	9.0	13.4	15.8	14.7	11.4	8.7	6.3	4.6	3.7	3.6	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1938-1965)

0.99	33.8	33.4	32.1	38.5	63.7	75.8	56.2	57.5	47.1	34.4	34.9	34.5	51.4
0.95	38.5	40.9	44.4	59.8	92.6	97.7	79.6	71.2	57.3	41.5	37.3	36.7	64.6
0.90	41.3	45.5	53.2	75.1	111.7	112.1	94.0	79.5	63.2	45.7	38.9	38.2	72.8
0.80	45.0	51.6	66.5	98.2	138.8	132.8	113.3	90.6	70.7	51.1	41.5	40.5	83.7
0.50	53.3	65.1	104.3	161.1	203.9	185.2	154.5	115.4	85.6	62.5	48.3	46.8	108.6
0.20	63.4	81.5	167.9	287.9	340.0	261.1	198.8	145.4	101.1	75.1	58.7	56.3	139.0
0.10	69.6	91.3	217.8	326.7	340.0	313.7	222.0	163.3	109.2	82.2	66.3	63.2	157.4
0.04	77.0	102.7	289.9	417.2	401.4	382.9	246.0	184.3	117.7	90.0	76.7	72.6	179.1
0.02	82.2	110.7	350.4	486.7	444.2	436.2	260.8	196.9	123.0	95.2	84.9	80.0	194.3
0.01	87.3	118.3	416.7	557.7	484.7	491.2	273.5	212.8	127.8	100.0	93.6	87.8	208.8

STATION 12091500

CHAMBERS C 8W LEACH C, NR STEILACOOM, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1939	48.0	49.0	52.0	53.0	57.0	61.0	63.0	66.0	71.0
1940	40.0	40.0	40.0	41.0	44.0	44.0	46.0	48.0	50.0
1945	35.0	35.0	35.0	36.0	38.0	40.0	40.0	40.0	41.0
1946	40.0	41.0	41.0	41.0	42.0	45.0	45.0	48.0	55.0
1947	46.0	46.0	47.0	48.0	48.0	49.0	50.0	53.0	65.0
1948	52.0	52.0	52.0	53.0	55.0	56.0	59.0	61.0	66.0
1949	69.0	70.0	71.0	73.0	75.0	75.0	78.0	82.0	92.0
1950	37.0	38.0	38.0	40.0	44.0	47.0	47.0	48.0	56.0
1951	57.0	57.0	57.0	58.0	60.0	62.0	66.0	71.0	82.0
1952	48.0	48.0	49.0	49.0	50.0	52.0	56.0	60.0	67.0
1953	31.0	31.0	33.0	34.0	36.0	37.0	38.0	39.0	41.0
1954	38.0	38.0	39.0	40.0	41.0	44.0	47.0	50.0	60.0
1955	45.0	46.0	48.0	49.0	50.0	55.0	56.0	56.0	66.0
1956	39.0	39.0	40.0	40.0	42.0	48.0	51.0	54.0	62.0
1957	40.0	41.0	41.0	45.0	47.0	50.0	55.0	58.0	66.0
1958	38.0	39.0	40.0	42.0	44.0	47.0	47.0	48.0	53.0
1959	33.0	34.0	34.0	35.0	37.0	38.0	39.0	42.0	56.0
1960	28.0	29.0	32.0	35.0	37.0	40.0	41.0	43.0	52.0
1961	38.0	39.0	41.0	43.0	47.0	50.0	52.0	54.0	68.0
1962	31.0	38.0	39.0	40.0	42.0	47.0	48.0	50.0	58.0
1963	29.0	30.0	31.0	31.0	32.0	34.0	36.0	40.0	47.0
1964	40.0	41.0	43.0	44.0	45.0	48.0	49.0	50.0	63.0
1965	35.0	35.0	36.0	37.0	38.0	39.0	44.0	45.0	53.0

LOWEST MEAN FLOW STATISTICS (YEARS 1939-1965)

MEAN	40.7	41.5	42.6	43.8	45.7	48.2	50.1	52.4	60.4
MAXIMUM	69.0	70.0	71.0	73.0	75.0	75.0	78.0	82.0	92.0
MINIMUM	28.0	29.0	31.0	31.0	32.0	34.0	36.0	39.0	41.0
STANDARD DEVIATION	9.53	9.31	9.22	9.28	9.41	9.30	9.87	10.49	11.87
SKEWNESS	1.311	1.415	1.461	1.513	1.468	1.089	1.071	1.163	0.715
STD ERROR OF SKEWNESS	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481
SERIAL CORR COEFF	0.296	0.214	0.181	0.171	0.216	0.170	0.176	0.154	0.035
COEFF OF VARIATION	0.234	0.224	0.217	0.212	0.206	0.193	0.197	0.200	0.196
MEAN LOGS	1.600	1.609	1.620	1.633	1.652	1.676	1.693	1.712	1.773
STD DEVIATION LOGS	0.094	0.090	0.086	0.085	0.083	0.080	0.081	0.082	0.084
SKEWNESS LOGS	0.645	0.724	0.847	0.849	0.882	0.441	0.524	0.649	0.051
STD ERR SKEWNESS LOGS	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481
SER CORR COEFF LOGS	0.321	0.218	0.187	0.175	0.223	0.171	0.184	0.164	0.044
COEFF OF VAR LOGS	0.059	0.056	0.053	0.052	0.050	0.048	0.048	0.048	0.047

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1939-1965)

0.99	72.9	73.2	74.6	75.9	77.7	77.5	81.7	87.1	93.8
0.98	66.7	67.1	68.2	69.5	71.5	72.4	76.1	80.7	88.8
0.96	60.8	61.1	62.2	63.5	65.5	67.3	70.5	74.4	83.6
0.90	53.1	53.6	54.4	55.7	57.8	60.4	63.1	66.2	76.1
0.80	47.3	47.8	48.7	49.9	52.0	55.0	57.3	59.8	69.8
0.50	38.9	39.6	40.6	41.6	43.8	46.7	48.5	50.5	59.3
0.20	33.0	34.0	35.2	36.4	38.1	40.5	42.0	43.8	50.4
0.10	30.7	31.8	33.2	34.3	36.0	37.9	39.3	41.2	46.4
0.05	29.1	30.3	31.8	32.9	34.5	36.0	37.3	39.3	43.3
0.02	27.5	28.9	30.5	31.6	33.1	34.2	35.4	37.5	40.1
0.01	26.6	28.1	29.8	30.9	32.3	33.0	34.3	36.4	38.1

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1939-1965)

P95	P90	P75	P70	P50	P25	P10
40.0	43.0	55.0	59.0	84.0	150.0	220.0

STATION 12091500 CHAMBERS C RM LEACH C. NR STEILACOOM, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW (CFS)	DATE	REG. (R)
1938										461.	12/29/37	
1939	250.	240.	226.	212.	206.	190.	171.	157.	133.	278.	03/03/39	
1940	230.	227.	222.	210.	189.	172.	157.	146.	124.	263.	03/10/40	
1941	113.	107.	102.	102.	100.	94.	86.	72.	72.	128.	02/06/44	
1942	155.	144.	141.	138.	137.	129.	121.	115.	97.	166.	04/08/45	
1943	296.	295.	290.	270.	263.	256.	248.	234.	192.	348.	01/07/46	
1944	286.	280.	273.	264.	244.	216.	201.	193.	168.	323.	02/02/47	
1945	271.	264.	262.	254.	239.	231.	223.	213.	195.	281.	01/14/48	
1946	283.	274.	274.	265.	239.	214.	207.	205.	180.	321.	02/17/49	
1947	596.	576.	551.	506.	455.	377.	347.	316.	258.	611.	03/04/50	
1948	650.	643.	635.	600.	506.	440.	398.	364.	295.	661.	02/11/51	
1949	143.	142.	140.	136.	131.	123.	114.	107.	98.	152.	02/04/52	
1950	324.	320.	308.	279.	231.	185.	162.	144.	122.	347.	02/08/53	
1951	381.	377.	364.	338.	321.	295.	273.	253.	210.	418.	01/27/54	
1952	188.	175.	172.	169.	164.	153.	150.	145.	132.	245.	02/08/55	
1953	640.	606.	590.	571.	531.	444.	370.	336.	277.	792.	01/05/56	
1954	316.	304.	293.	271.	237.	198.	173.	158.	139.	320.	03/12/57	R
1955	241.	240.	235.	224.	211.	189.	166.	154.	131.	253.	02/24/58	R
1956	350.	315.	305.	297.	276.	245.	220.	203.	175.	368.	01/24/59	R
1957	280.	279.	271.	261.	238.	207.	192.	183.	168.	313.	02/06/60	R
1958	477.	444.	438.	414.	377.	327.	292.	265.	233.	530.	02/24/61	R
1959	128.	119.	117.	110.	105.	96.	91.	84.	84.	161.	12/23/61	R
1960	241.	230.	221.	205.	199.	187.	180.	173.	164.	262.	12/14/62	R
1961	484.	472.	448.	383.	329.	271.	241.	214.	177.	508.	01/31/64	R
1962	330.	323.	314.	305.	279.	232.	210.	188.	157.	330.	02/05/65	R

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1938-1965)

W R C SYSTEMATIC
ESTIMATE RECORD

MEAN	319.6	308.5	299.7	282.7	258.6	228.0	208.0	193.2	165.9			
MAXIMUM	650.0	643.0	635.0	600.0	531.0	444.0	398.0	364.0	295.0			
MINIMUM	113.0	107.0	102.0	102.0	100.0	94.0	86.0	80.0	72.0			
STANDARD DEVIATION	151.96	147.14	143.02	132.63	114.67	94.22	81.96	73.84	58.50			
SKENNESS	0.924	0.920	0.949	1.024	1.006	0.940	0.795	0.743	0.576			
STD ERROR OF SKENNESS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472			
SERIAL CORR COEFF	0.011	0.021	0.017	0.019	-0.010	-0.051	-0.014	0.014	0.039			
COEFF OF VARIATION	0.475	0.477	0.477	0.469	0.443	0.413	0.394	0.382	0.353			
MEAN LOGS	2.458	2.442	2.430	2.407	2.373	2.323	2.286	2.256	2.193			
STD DEVIATION LOGS	0.207	0.210	0.209	0.203	0.191	0.179	0.173	0.159	0.158			
SKENNESS LOGS	-0.114	-0.165	-0.162	-0.122	-0.093	-0.110	-0.184	-0.204	-0.257			
STD ERR SKENNESS LOGS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472			
SER CORR COEFF LOGS	0.012	0.020	0.022	0.028	0.010	-0.028	0.004	0.035	0.080			
COEFF OF VAR LOGS	0.084	0.086	0.086	0.084	0.080	0.077	0.076	0.075	0.072			

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1938-1965)

0.99	90.9	85.0	82.9	82.5	82.5	78.3	72.5	68.9	62.7	107.8		
0.95	129.1	122.5	119.3	116.4	113.3	105.7	98.3	93.1	83.8	149.6		
0.90	155.0	148.0	144.1	139.3	133.9	123.7	115.1	108.7	97.2	177.7		
0.80	192.8	185.3	180.2	172.7	163.5	149.3	138.7	130.5	115.6	218.5		
0.50	289.9	280.6	272.6	257.6	237.8	212.1	195.5	182.5	158.5	322.3		
0.20	430.4	417.1	404.8	379.1	342.4	298.1	271.0	250.5	212.5	471.4		
0.10	526.4	509.3	494.2	461.6	412.7	354.7	319.2	293.5	245.7	573.2		
0.04	650.1	626.6	608.1	567.1	502.3	378.2	345.6	284.9	204.2	704.2		
0.02	743.4	714.5	693.3	646.4	569.3	477.9	420.8	382.9	312.4	803.4		
0.01	837.7	802.3	778.6	726.1	636.6	529.8	462.4	419.1	338.7	903.5		

STATION 12091700 JUDD CREEK NEAR BURTON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1968													
1969	2.79	6.01	13.2	13.8	15.0	4.40	3.89	2.33	2.37	1.09	1.64	1.60	5.78
1970	1.80	2.95	8.81	17.3	8.25	7.23	5.01	2.67	2.09	1.43	1.15	2.33	4.88
1971	1.95	2.84	11.9	11.6	9.68	16.0	4.63	2.45	1.43	1.20	1.16	1.37	5.96
1972	2.50	4.40	10.9	13.1	15.5	24.8	7.59	2.80	2.31	1.75	1.31	1.88	8.07
1973	2.42	3.48	14.1	10.2	4.69	5.23	10.6	4.67	2.87	2.59	2.12	2.82	4.30
1974	2.30	8.10	18.7	18.0	12.9	13.7	7.83	3.77	2.85	1.34	1.29	1.47	7.83
1975	1.95	3.70	7.43	14.4	11.6	9.29	4.72	3.33	1.80	2.45	1.87	1.63	5.25
1976	4.67									1.50	2.13	1.47	

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ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW (CFS)	DATE
1969	87.0	2- 8-1969
1970	78.0	1-27-1970
1971	76.0	1-15-1971
1972	200.0	3- 6-1972
1973	106.0	12-26-1972
1974	102.0	1-15-1974
1975	84.0	2-19-1975
1976	112.0	12- 4-1975
1977	96.0	1-18-1977
1978	94.0	12- 2-1977
1979	50.0	2-12-1979

ANNUAL PEAK FLOW STATISTICS (YEARS 1969-1979)

	W R C ESTIMATE	SYSTEMATIC RECORD
MEAN LOGS	1.9705	1.9705
STANDARD DEVIATION LOGS	0.1453	0.1453
SKEWNESS LOGS	0.008	0.617
ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES LOG-PEARSON III ANALYSIS (YEARS 1969-1979)		
	43.0	50.0
	53.9	57.5
	60.9	62.6
	70.5	70.1
	93.4	90.3
	123.8	122.0
	143.5	145.7
	168.0	179.0
	186.0	206.3
	203.9	235.8

STATION 12U92000 PUYALLUP RIVER NR. ELECTRON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1909				418	273	205	217	380	724	542	451	361	
1910	224	944	368	264	251	671	477	533	413	554	437	296	454
1911	615	873	426	319	163	448	254	448	821	766	483	390	484
1912	214	660	352	694	515	183	264	632	951	723	701	516	538
1913	331	654	396	442	263	188	261	522	1031	916	701	548	520
1914	446	408	253	624	290	449	508	517	546	681	574	370	474
1915	399	715	174	215	201	243	451	385	442	635	727	300	409
1916	476	592	598	241	660	753	436	505	882	635	693	413	601
1917	224	364	338	328	418	198	395	590	1171	1256	746	461	541
1918	290	236	1883	1071	498	295	359	462	842	738	655	537	659
1919	419	312	837	837	324	248	504	634	619	761	612	352	522
1920	205	600	523	594	269	254	316	451	637	665	567	529	473
1921	645	391	511	614	756	504	421	559	1001	661	548	325	577
1922	341	478	951	203	154	146	265	625	953	653	574	438	484
1923	290	233	431	920	230	248	394	593	759	830	586	417	497
1924	361	275	421	450	709	221	272	646	487	593	536	373	445
1925	347	596	707	489	576	299	488	789	588	580	580	395	558
1926	260	291	844	468	488	431	386	465	508	639	556	340	574
1927	614	546	513	502	456	289	377	623	998	742	665	727	588
1928	937	1326	536	882	231	505	467	861	565	762	491	377	664
1929	457	258	309	251	171	384	379	1019	1229	760	718	376	525
1930	218	134	453	213	855	432	499	508	556	625	599	336	453
1931	308	196	180	530	341	343	524	511	713	512	401	358	410
1932	387	359	341	384	468	741	606	656	1094	729	498	358	552
1933	459	1468	629	575	179	288	328	537	1104	934	612	403	628
1934	910	658	2217	733	534	298	357	909	664	626	541	503	518
1945	325	326	388	530	382	419	452	868	902	822	595	338	573
1946	359	591	600	559	523	346	520	588	673	512	368	376	553
1947	503	636	1028	503	443	297	365	838	1157	634	512	379	627
1948	844	956	600	431	407	418	535	995	797	664	472	369	523
1949	384	579	431	213	407	290	467	729	718	610	516	327	504
1958	333	343	536	560	632	290	569	652	806	580	371	709	632
1959	434	1083	881	797	329	364	569	652	806	580	371	709	632
1960	1015	1178	656	712	480	384	510	817	739	563	435	382	622
1961	414	938	458	580	909	455	523	625	896	647	618	324	613
1962	373	410	558	624	304	214	625	464	621	559	497	354	471
1963	353	744	653	324	681	334	466	518	592	575	535	516	522
1964	351	491	448	448	362	286	407	609	1241	988	637	468	580
1965	510	448	823	897	655	333	496	506	622	656	650	344	584
1966	381	365	326	374	200	388	549	649	642	647	568	482	469
1967	474	530	659	732	487	316	216	636	1024	688	601	530	576
1968	599	511	598	661	833	384	344	595	775	531	581	571	581
1969	415	650	487	570	239	282	439	904	847	521	368	377	510
1970	301	295	385	817	466	329	340	520	786	541	413	353	462
1971	321	455	485	739	673	346	371	810	870	426	608	364	572
1972	295	444	406	488	699	944	466	860	1061	907	564	418	629
1973	205	325	662	471	220	213	255	453	533	495	405	343	383
1974	288	469	627	934	373	466	200	688	1248	914	575	362	623
1975	189	342	602	907	403	363	200	574	760	802	502	357	502
1976	427	672	1323	852	358	264	393	706	624	706	584	413	611
1977	264	301	260	275	218	261	326	522	726	434	584	379	396
1978	238	768	1295	459	302	278	326	477	599	477	432	477	523
1979	225	369	378	193	398	554	402	713	556	550	408	395	428

STATION 12092000 PUYALLUP RIVER NEAR ELECTRON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1909-1979)

MEAN	407.6	553.6	606.2	543.8	427.8	356.9	412.7	628.3	792.0	694.9	552.5	415.6	531.7
MAXIMUM	1015.0	1468.0	2217.0	1071.0	909.0	944.0	625.0	1019.0	1248.0	1256.0	746.0	727.0	664.0
MINIMUM	189.0	134.0	174.0	193.0	154.0	146.0	200.0	380.0	413.0	454.0	368.0	296.0	383.0
STD DEVIATION	188.17	288.09	377.08	228.06	196.04	155.34	185.66	186.47	219.34	154.01	98.52	92.99	71.77
SKWENESS	1.655	1.259	2.535	0.285	0.651	1.748	-0.224	0.799	0.457	1.172	-0.062	1.617	-0.115
STD ERR SKEW	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.333
SER CORR COEFF	0.111	0.171	-0.110	0.068	-0.189	-0.257	0.029	0.200	-0.169	0.152	0.330	-0.065	-0.080
COEFF OF VAR	0.462	0.520	0.622	0.419	0.458	0.435	0.256	0.249	0.277	0.222	0.435	0.224	0.135
MEAN LOGS	2.573	2.690	2.725	2.693	2.585	2.519	2.600	2.786	2.882	2.832	2.735	2.610	2.722
STD DEV LOGS	0.175	0.218	0.216	0.202	0.205	0.167	0.122	0.105	0.121	0.090	0.080	0.087	0.060
SKWENESS LOGS	0.581	-0.014	0.520	-0.465	-0.118	0.483	-0.731	0.273	-0.028	0.521	-0.442	1.087	-0.372
STD ERR SKEW LOGS	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.330	0.333
SER CORR LOGS	0.132	0.249	-0.037	0.068	-0.152	-0.232	-0.007	0.180	-0.142	0.134	0.304	-0.046	-0.094
COEFF OF VAR LOGS	0.068	0.081	0.079	0.075	0.079	0.066	0.047	0.038	0.042	0.032	0.029	0.033	0.022
% OF AVE FLOW	6.4	8.7	9.5	8.5	6.7	5.6	6.5	9.8	12.4	10.9	8.6	6.5	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1909-1979)

0.99	174.6	151.5	202.3	143.4	123.2	155.5	178.8	366.0	397.7	453.8	333.2	299.8	368.0
0.95	207.6	214.0	253.7	217.3	174.4	186.2	238.2	418.9	482.2	499.0	392.4	314.7	414.0
0.90	230.6	257.1	290.3	267.2	209.0	207.2	273.4	451.9	534.1	528.0	425.8	325.9	439.3
0.80	265.1	321.0	346.5	338.5	259.5	238.1	318.9	497.2	604.1	568.6	467.6	343.4	470.5
0.50	360.1	490.2	508.2	511.3	388.5	320.6	411.7	603.7	763.8	667.6	550.9	392.7	531.3
0.20	516.7	747.3	792.1	734.0	574.0	450.9	506.5	744.6	963.9	804.1	636.7	472.5	592.9
0.10	638.7	931.0	1024.6	869.7	700.3	548.8	554.4	836.1	1087.8	895.8	681.7	532.2	624.9
0.04	815.2	1176.4	1375.1	1027.6	662.4	486.3	602.9	950.8	1236.8	1013.4	729.3	614.9	658.7
0.02	964.0	1367.9	1681.4	1136.0	984.5	799.2	632.3	1035.9	1343.4	1102.6	759.7	681.9	680.3
0.01	1128.7	1566.4	2030.2	1237.3	1107.5	921.4	657.4	1121.0	1446.8	1193.3	786.6	753.6	699.5

STATION 12092000 PUYALLUP RIVER NR. ELECTRON, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31									
YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1910	120.0	122.0	125.0	136.0	172.0	240.0	296.0	387.0	402.0
1911	130.0	134.0	137.0	140.0	149.0	182.0	240.0	286.0	440.0
1912	147.0	148.0	152.0	159.0	181.0	265.0	333.0	380.0	434.0
1913	125.0	127.0	132.0	146.0	161.0	213.0	292.0	319.0	376.0
1914	145.0	147.0	153.0	191.0	233.0	327.0	367.0	378.0	413.0
1915	116.0	116.0	121.0	135.0	167.0	192.0	191.0	208.0	324.0
1916	173.0	174.0	177.0	186.0	238.0	369.0	409.0	465.0	472.0
1917	157.0	159.0	163.0	168.0	192.0	284.0	305.0	310.0	310.0
1918	158.0	160.0	167.0	181.0	215.0	237.0	294.0	377.0	648.0
1919	164.0	168.0	171.0	179.0	235.0	286.0	411.0	420.0	464.0
1920	136.0	148.0	150.0	153.0	183.0	261.0	365.0	393.0	407.0
1921	192.0	200.0	213.0	238.0	304.0	356.0	464.0	483.0	536.0
1922	120.0	122.0	123.0	126.0	137.0	149.0	168.0	350.0	382.0
1923	123.0	130.0	143.0	147.0	174.0	222.0	251.0	319.0	391.0
1924	158.0	163.0	167.0	174.0	214.0	287.0	336.0	351.0	404.0
1925	158.0	165.0	206.0	232.0	260.0	345.0	399.0	441.0	476.0
1926	169.0	173.0	181.0	182.0	211.0	261.0	312.0	373.0	450.0
1927	201.0	206.0	232.0	266.0	285.0	364.0	414.0	432.0	483.0
1928	181.0	181.0	187.0	196.0	221.0	300.0	483.0	523.0	689.0
1929	140.0	144.0	155.0	159.0	171.0	195.0	224.0	242.0	287.0
1930	93.0	94.0	104.0	115.0	129.0	159.0	196.0	255.0	340.0
1931	136.0	139.0	143.0	155.0	174.0	188.0	197.0	240.0	304.0
1932	132.0	133.0	135.0	142.0	173.0	285.0	303.0	336.0	340.0
1933	145.0	145.0	151.0	162.0	179.0	226.0	353.0	420.0	600.0
1946	220.0	223.0	242.0	250.0	320.0	399.0	445.0	465.0	480.0
1947	162.0	165.0	179.0	193.0	234.0	334.0	429.0	482.0	587.0
1948	206.0	207.0	215.0	230.0	276.0	367.0	409.0	457.0	506.0
1949	150.0	153.0	155.0	161.0	186.0	225.0	317.0	362.0	388.0
1959	198.0	204.0	209.0	256.0	321.0	352.0	414.0	460.0	553.0
1960	183.0	184.0	189.0	202.0	241.0	385.0	353.0	454.0	597.0
1961	199.0	241.0	255.0	269.0	313.0	361.0	391.0	436.0	524.0
1962	174.0	181.0	191.0	198.0	205.0	259.0	359.0	382.0	413.0
1963	183.0	188.0	199.0	216.0	291.0	343.0	362.0	420.0	466.0
1964	226.0	232.0	244.0	263.0	275.0	323.0	422.0	436.0	431.0
1965	219.0	220.0	228.0	251.0	308.0	429.0	456.0	511.0	574.0
1966	163.0	164.0	170.0	184.0	195.0	262.0	276.0	304.0	332.0
1967	186.0	197.0	211.0	256.0	290.0	402.0	471.0	500.0	534.0
1968	179.0	188.0	193.0	198.0	212.0	433.0	493.0	510.0	557.0
1969	173.0	174.0	181.0	196.0	208.0	233.0	362.0	397.0	440.0
1970	185.0	195.0	203.0	210.0	232.0	258.0	302.0	323.0	351.0
1971	181.0	186.0	197.0	225.0	256.0	309.0	334.0	357.0	410.0
1972	176.0	181.0	206.0	237.0	247.0	313.0	349.0	354.0	401.0
1973	100.0	102.0	112.0	168.0	200.0	217.0	288.0	321.0	351.0
1974	173.0	176.0	187.0	209.0	249.0	297.0	326.0	369.0	414.0
1975	132.0	135.0	143.0	150.0	167.0	205.0	275.0	323.0	466.0
1976	185.0	185.0	186.0	188.0	200.0	310.0	414.0	465.0	534.0
1977	157.0	157.0	164.0	181.0	208.0	229.0	249.0	249.0	264.0
1978	157.0	161.0	181.0	191.0	231.0	279.0	348.0	412.0	482.0
1979	151.0	152.0	156.0	175.0	187.0	233.0	293.0	287.0	327.0

STATION 12092000 PUYALLUP RIVER NEAR ELECTRON, WASH.

LOWEST MEAN FLOW STATISTICS (YEARS 1910-1979)

MEAN	161.9	166.3	175.4	190.3	220.6	284.7	341.6	382.1	444.0
MAXIMUM	226.0	241.0	255.0	269.0	321.0	433.0	493.0	523.0	689.0
MINIMUM	93.0	94.0	104.0	115.0	129.0	149.0	168.0	208.0	264.0
STANDARD DEVIATION	30.75	32.79	35.90	40.34	50.05	71.35	80.82	79.08	97.17
SKWENESS	-0.067	0.087	0.163	0.329	0.408	0.198	-0.158	-0.210	0.402
STD ERROR OF SKWENESS	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340
SERIAL CORR COEFF	0.280	0.288	0.269	0.213	0.073	0.089	0.129	0.074	-0.054
COEFF DF VARIATION	0.190	0.197	0.205	0.212	0.227	0.251	0.237	0.207	0.219
MEAN LOGS	2.1201	2.212	2.235	2.270	2.333	2.440	2.520	2.572	2.637
STD DEVIATION LOGS	0.086	0.089	0.091	0.093	0.099	0.113	0.111	0.096	0.096
SKWENESS LOGS	-0.567	-0.463	-0.292	-0.063	-0.025	-0.299	-0.730	-0.661	-0.089
STD ERR SKWENESS LOGS	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340	0.340
SER CORR COEFF LOGS	0.267	0.281	0.274	0.253	0.129	0.098	0.144	0.070	-0.058
COEFF DF VAR LOGS	0.039	0.040	0.041	0.041	0.042	0.046	0.044	0.037	0.036

LOWEST MEAN FLOW NDN-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1910-1979)

0.99	232.2	244.5	267.4	302.5	363.3	475.7	523.6	560.2	712.9
0.98	224.6	235.5	255.6	286.2	341.9	450.0	505.4	542.0	674.1
0.96	216.0	225.3	242.6	269.0	319.5	422.2	483.9	520.7	633.0
0.90	202.0	209.3	223.1	244.2	287.6	380.7	448.3	485.8	573.6
0.80	188.5	194.2	205.4	222.8	260.5	343.9	412.8	451.4	522.3
0.50	161.9	165.6	173.5	186.6	215.3	279.3	341.9	382.7	435.1
0.20	135.4	138.1	144.5	155.7	177.8	222.7	270.9	313.4	360.7
0.10	122.0	124.4	130.5	141.5	160.7	192.7	235.4	278.4	326.5
0.05	111.3	113.6	119.6	130.6	147.9	176.3	207.6	250.4	300.4
0.02	99.6	102.0	108.1	119.3	134.6	155.5	178.2	220.4	273.2
0.01	92.2	94.6	100.8	112.3	126.4	142.6	159.9	201.4	256.3

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1910-1979)

P95	P90	P75	P70	P50	P25	P10
190.0	220.0	300.0	330.0	440.0	650.0	920.0

STATION 12092000 PUYALLUP RIVER NR. ELECTRON, WASH.

HIGHEST MEAN FLDW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW(CFS) DATE REG.(R)
1910	2490.	2190.	1740.	1390.	965.	659.	561.	531.	518.	
1911	3200.	2110.	1450.	1200.	912.	803.	692.	642.	532.	
1912	2960.	2320.	1480.	1050.	955.	866.	823.	790.	642.	4300. 11/19/11
1913	2330.	1620.	1340.	1170.	1040.	1010.	914.	851.	664.	2390. 12/29/12
1914	2530.	2300.	1580.	940.	680.	650.	608.	584.	549.	2610. 01/04/14
1915	1660.	1300.	1010.	906.	735.	684.	608.	564.	495.	2070. 11/02/14
1916	2410.	1980.	1480.	1170.	1140.	955.	857.	764.	717.	3440. 12/21/15
1917	1780.	1710.	1570.	1480.	1420.	1240.	1080.	957.	771.	2080. 07/16/17
1918	6420.	4440.	3640.	3090.	2400.	1600.	1170.	963.	812.	7700. 12/18/17
1919	4160.	3350.	2330.	1520.	943.	741.	707.	661.	587.	6540. 01/23/19
1920	1740.	1410.	1050.	953.	699.	667.	625.	618.	538.	2720. 12/24/19
1921	2770.	2260.	1770.	1270.	1000.	845.	777.	715.	664.	3750. 12/30/20
1922	5540.	3870.	2260.	1700.	1190.	863.	765.	707.	585.	6980. 12/12/21
1923	4590.	3540.	2480.	1540.	1170.	800.	742.	705.	603.	5810. 01/06/23
1924	2100.	1560.	1260.	1060.	776.	618.	590.	580.	499.	3350. 01/31/24
1925	2560.	2020.	1480.	965.	833.	792.	764.	715.	619.	2830. 12/11/24
1926	2110.	1600.	1190.	1000.	863.	665.	605.	565.	515.	2740. 12/23/25
1927	2130.	1710.	1410.	1160.	1000.	877.	831.	804.	689.	
1928	2730.	2130.	1580.	1480.	1410.	1150.	972.	932.	738.	
1929	2150.	1970.	1630.	1390.	1270.	1170.	1010.	936.	770.	
1930	2350.	1350.	1210.	952.	818.	631.	624.	589.	574.	
1931	2290.	1370.	1140.	911.	729.	619.	583.	565.	520.	
1932	3160.	2640.	1570.	1320.	1150.	939.	833.	807.	761.	
1933	4350.	3310.	3050.	2090.	1560.	1080.	944.	804.	654.	
1945	3010.	1940.	1660.	1210.	916.	797.	740.	694.	602.	5060. 01/07/45
1946	2690.	2170.	1410.	1060.	983.	926.	871.	807.	683.	3830. 12/28/45
1947	5740.	3840.	2720.	1630.	1290.	953.	793.	749.	633.	9160. 12/11/46
1948	2990.	2430.	1650.	1310.	1250.	1020.	890.	793.	648.	6580. 11/07/47
1949	1720.	1550.	1460.	1190.	1030.	915.	833.	776.	664.	3320. 11/23/48
1958	1420.	1190.	1140.	956.	799.	742.	696.	668.	581.	1870. 12/06/57
1959	3610.	2270.	1890.	1460.	1200.	1010.	936.	814.	684.	4840. 11/12/58
1960	4210.	3500.	2720.	1710.	1290.	1140.	962.	800.	680.	10800. 11/22/59
1961	2780.	1800.	1480.	1290.	966.	797.	744.	720.	675.	3740. 02/21/61
1962	2330.	1680.	1380.	1010.	872.	633.	578.	528.	520.	3940. 04/06/62
1963	5190.	3050.	1820.	1250.	1080.	741.	676.	602.	545.	10600. 11/20/62
1964	1920.	1620.	1580.	1450.	1280.	1130.	994.	889.	729.	2520. 01/29/65
1965	5340.	4000.	2560.	1560.	1090.	867.	823.	721.	627.	6970. 05/06/66
1966	1610.	1320.	1110.	796.	748.	681.	663.	642.	597.	1780. 12/13/66
1967	2380.	1580.	1400.	1230.	1050.	943.	824.	770.	618.	3060. 12/25/67
1968	3960.	2470.	1680.	1080.	886.	815.	715.	678.	633.	6900. 01/05/69
1969	2940.	2050.	1410.	1140.	1050.	903.	765.	668.	577.	4020. 01/22/70
1970	2340.	2070.	1780.	1370.	916.	869.	820.	785.	570.	2680. 01/19/71
1971	2580.	1780.	1190.	1080.	952.	869.	844.	745.	661.	3580. 01/20/72
1972	2600.	1950.	1410.	1350.	1120.	1050.	962.	858.	850.	4050. 12/21/72
1973	2720.	1890.	1490.	1150.	853.	602.	516.	476.	415.	4180. 01/15/74
1974	4390.	3200.	2160.	1550.	1270.	1080.	965.	865.	750.	6010. 01/18/75
1975	4100.	2960.	2020.	1450.	931.	803.	733.	670.	588.	6180. 12/04/75
1976	4780.	4520.	3100.	2000.	1350.	1130.	967.	841.	667.	1550. 01/18/77
1977	1250.	1160.	1040.	869.	734.	645.	592.	580.	528.	1550. 12/02/77
1978	6610.	3980.	2500.	2110.	1550.	1050.	858.	719.	574.	9460. 03/06/79
1979	1930.	1680.	1170.	825.	747.	638.	618.	575.	538.	2200.

STATION 12092000 PUVALLUP RIVER NEAR ELECTRON, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1910-1979)

	MEAN	3091.2	2308.0	1718.2	1309.7	1055.7	872.6	782.1	719.0	624.7	W R C	SYSTEMATIC
MAXIMUM	6610.0	4520.0	3640.0	3090.0	2400.0	1600.0	1170.0	963.0	850.0		ESTIMATE	RECORD
MINIMUM	1250.0	1160.0	1010.0	796.0	680.0	602.0	516.0	476.0	415.0			
STANDARD DEVIATION	1319.97	895.83	588.77	399.11	293.72	203.26	151.52	120.92	90.04			
SKEWNESS	1.050	0.970	1.378	2.077	2.058	0.999	0.323	0.150	0.303			
STD. ERROR OF SKEWNESS	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333			
SERIAL CORR COEFF	-0.146	-0.067	-0.021	0.026	0.045	0.039	0.017	0.025	-0.063			
COEFF OF VARIATION	0.427	0.388	0.343	0.305	0.278	0.233	0.194	0.168	0.144			
MEAN LOGS	3.455	3.334	3.214	3.101	3.010	2.930	2.885	2.851	2.791			
STD DEVIATION LOGS	0.174	0.158	0.133	0.115	0.107	0.097	0.084	0.074	0.063			
SKEWNESS LOGS	0.313	0.415	0.724	0.829	0.785	0.366	-0.031	-0.158	-0.098			
STD ERR SKEWNESS LOGS	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333			
SER CORR COEFF LOGS	-0.165	-0.095	-0.047	0.005	0.021	-0.003	-0.021	-0.014	-0.094			
COEFF OF VAR LOGS	0.050	0.047	0.041	0.037	0.035	0.033	0.029	0.026	0.022			

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1910-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01	W R C	SYSTEMATIC
MEAN	1231.1	1037.0	945.8	801.2	666.5	539.0	467.8	437.3	403.0		ESTIMATE	RECORD
MAXIMUM	1530.6	1243.3	1060.4	875.3	726.3	605.1	556.9	531.8	513.1			
MINIMUM	1731.6	1381.3	1139.8	927.4	767.6	646.7	598.2	568.4	547.9			
STANDARD DEVIATION	2024.7	1582.0	1258.1	1005.6	828.8	703.9	652.2	615.2	584.6			
SKEWNESS	2791.3	2104.8	1576.8	1216.9	990.8	839.7	768.6	712.1	619.8			
STD. ERROR OF SKEWNESS	3963.6	2901.6	2082.1	1550.6	1239.3	1021.2	904.4	819.1	698.7			
SERIAL CORR COEFF	4818.7	3482.4	2461.4	1799.2	1420.1	1140.1	984.2	879.1	743.0			
COEFF OF VARIATION	5990.6	4278.8	2993.9	2145.5	1667.2	1290.0	1076.6	946.2	792.4			
MEAN LOGS	6931.0	4918.7	3431.2	2427.7	1865.2	1402.0	1140.5	991.2	825.7			
STD DEVIATION LOGS	7930.2	5599.8	3904.8	2731.4	2075.5	1514.5	1201.1	1032.8	856.4			

STATION 12092100 ALLISON CREEK NR ELECTRON, WASH.

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1969	86.0	1-5-1969
1970	61.0	1-19-1970
1971	95.0	1-19-1971
1972	141.0	1-20-1972
1973	71.0	1-13-1973
1974	105.0	1-15-1974
1975	114.0	1-14-1975

STATION 12093000 KAPOWSIN CREEK NEAR KAPOWSIN, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1927	62.4	137	96.6	136	45.6	106	129	62.1	31.5	11.3	5.47	13.9	68.2
1928	20.9	22.8	43.4	52.6	41.0	86.0	77.4	67.6	18.4	14.8	5.08	3.36	39.9
1929	5.88	7.76	46.0	36.4	125	69.0	44.4	32.2	45.3	13.3	4.55	4.39	32.8
1930	5.92	20.4	22.6	61.8	50.0	51.2	102	22.9	22.3	6.85	2.33	2.30	33.1
1931	19.9	61.2	54.2	76.2	94.5	166	95.1	40.1	31.5	18.1	4.62	8.02	53.1
1932	27.7	73.6	135	59.0	58.6	45.3	32.4	40.1	13.7	8.30	5.45	3.34	47.8
1942	5.02	83.0	96.7	65.1	95.2	43.0	79.3	34.4	69.4	22.5	6.45	5.01	46.1
1943	15.3	14.6	43.9	45.9	48.6	41.4	34.9	23.8	15.4	11.7	5.12	5.16	24.8
1944	7.56	19.9	26.8	65.5	71.3	74.0	80.8	58.0	25.3	4.54	2.80	7.19	36.7
1945	10.2	14.2	86.0	133	120	112	55.3	26.4	20.8	34.2	6.87	12.1	59.5
1946	25.8	102	181	101	77.2	44.5	55.3	21.8	47.8	12.7	4.80	4.84	54.8
1947	27.0	82.3	77.5	96.1	98.1	95.9	86.9	85.4	40.1	17.3	12.2	16.0	61.2
1948	33.1	83.5	169	43.7	115	71.4	49.2	43.4	10.1	6.24	4.95	6.03	52.7
1949	11.2	49.9	108	140	151	149	85.2	43.7	16.5	6.93	5.24	4.38	63.9
1950	34.2	108	138	139	176	81.5	33.6	20.7	10.1	2.86	1.42	2.53	61.6
1951	24.9	42.3	76.8	37.5	74.6	54.9	47.2	36.9	13.3	6.35	2.41	2.11	34.8
1952	2.65	4.90	13.2	99.9	102	50.1	53.9	46.7	56.3	19.9	6.76	6.64	38.2
1953	21.5	50.9	164	129	115	62.7	77.2	23.1	53.6	23.5	12.8	29.7	63.4
1954	28.5	50.1	51.0	79.9	79.5	66.1	118	48.9	22.8	24.9	11.1	9.77	48.9
1955	69.9	133	198	134	62.8	130	62.4	24.2	27.5	14.5	3.33	4.47	72.3
1956	29.0	44.1	107	38.9	86.6	148	57.0	36.5	24.2	8.11	6.85	3.60	49.0

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1927-1957)

MEAN	23.3	60.3	92.1	84.3	89.9	83.2	69.8	40.0	29.6	13.4	5.6	7.2	49.7
MAXIMUM	69.9	137.0	198.0	140.0	176.0	166.0	129.0	85.4	69.4	34.2	12.8	29.7	72.3
MINIMUM	2.6	4.9	13.2	36.4	41.0	41.4	32.4	20.7	10.1	2.9	1.4	2.1	24.8
STD DEVIATION	17.37	39.07	54.96	38.01	35.38	38.37	27.00	17.15	16.39	7.96	3.03	6.27	13.19
SKEWNESS	1.376	0.421	0.444	0.310	0.712	0.881	0.543	1.072	0.897	0.926	1.168	2.515	-0.115
STD ERR SKEW	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.491	0.491	0.491	0.491	0.501
SER CORR COEFF	0.187	0.069	-0.036	-0.055	0.165	-0.017	-0.158	-0.128	-0.080	0.049	0.224	0.085	0.195
COEFF OF VAR	0.747	0.648	0.597	0.451	0.394	0.461	0.387	0.429	0.553	0.594	0.537	0.869	0.266
MEAN LOGS	1.240	1.651	1.871	1.881	1.921	1.879	1.812	1.567	1.409	1.050	0.692	0.753	1.680
STD DEV LOGS	0.368	0.396	0.318	0.207	0.173	0.191	0.173	0.177	0.242	0.274	0.237	0.289	0.124
SKEWNESS LOGS	-0.539	-1.022	-0.724	-0.113	-0.109	0.327	-0.181	0.280	0.010	-0.258	-0.300	0.774	-0.589
STD ERR SKEW LOGS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.491	0.491	0.491	0.491	0.501
SER CORR LOGS	0.117	0.201	0.029	-0.081	0.110	0.041	-0.224	-0.194	-0.039	0.175	0.204	0.190	0.247
COEFF OF VAR LOGS	0.297	0.240	0.170	0.110	0.090	0.102	0.096	0.113	0.171	0.261	0.342	0.384	0.074
% OF AVE FLOW	3.9	10.1	15.4	14.1	15.0	13.9	11.7	6.7	5.0	2.2	0.9	1.2	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1927-1957)

0.99	1.7	2.8	9.3	24.1	31.9	30.2	24.3	15.6	7.1	2.3	1.2	1.8	21.8
0.95	3.8	8.1	19.6	34.2	42.8	38.3	32.9	19.5	10.3	3.8	1.9	2.2	28.6
0.90	5.7	13.2	28.0	41.0	49.8	43.8	38.6	22.2	12.6	4.9	2.4	2.6	32.7
0.80	8.8	22.5	41.8	51.0	59.8	52.0	46.5	26.1	16.1	6.7	3.1	3.2	38.1
0.50	18.7	52.1	81.1	76.7	84.1	73.9	65.6	36.2	25.6	11.5	5.1	5.2	49.2
0.20	35.9	97.2	139.2	113.7	117.0	108.8	91.0	51.6	41.0	19.2	7.8	9.5	61.2
0.10	48.4	124.6	176.2	139.1	138.5	134.9	107.2	62.9	52.4	24.7	9.7	13.8	67.5
0.04	64.6	154.2	219.4	171.7	165.3	171.7	127.1	78.2	68.1	31.9	12.1	21.2	74.2
0.02	76.7	172.5	248.6	196.4	185.0	201.8	141.5	90.4	80.7	37.4	13.8	28.7	78.4
0.01	86.7	187.9	275.3	221.3	204.6	234.3	155.6	103.4	94.0	43.1	15.5	38.3	82.1

STATION 12093000 KAPOWSIN CREEK NEAR KAPOWSIN, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1929	2.5	2.6	2.7	2.9	3.3	4.1	6.5	9.2	14.0
1930	3.6	3.7	3.8	4.0	4.2	4.4	4.4	4.9	11.0
1931	1.6	1.6	1.6	1.7	1.9	2.2	3.1	4.0	8.9
1932	3.4	3.6	3.9	4.1	4.3	6.2	7.2	11.0	17.0
1943	2.3	2.6	2.6	2.9	3.2	3.4	4.5	8.6	24.0
1944	3.8	3.9	4.0	4.2	4.3	4.9	5.6	8.9	14.0
1945	2.9	2.9	2.9	3.0	3.4	3.8	4.8	5.5	9.1
1946	1.2	1.2	1.2	1.5	1.9	2.8	4.8	5.5	18.0
1947	5.6	5.6	5.6	5.9	6.5	9.4	11.0	18.0	25.0
1948	3.0	3.1	3.3	3.4	3.9	4.7	5.9	8.7	15.0
1949	9.2	9.2	9.5	10.0	12.0	13.0	15.0	20.0	29.0
1950	4.3	4.4	4.5	4.6	4.9	5.0	5.6	6.3	10.0
1951	2.9	3.0	3.1	3.3	3.9	4.7	5.3	7.7	18.0
1952	0.9	0.9	1.0	1.1	1.4	1.7	2.1	4.0	9.2
1953	1.8	1.8	1.9	2.0	2.0	2.1	2.3	2.8	5.0
1954	4.1	4.3	4.7	4.9	6.0	6.5	9.3	13.0	26.0
1955	3.8	3.8	4.3	5.1	9.7	15.0	19.0	23.0	28.0
1956	5.8	6.2	6.7	6.8	7.1	9.7	14.0	16.0	29.0
1957	1.9	2.0	2.1	2.4	2.8	3.7	5.1	10.0	16.0

LOWEST MEAN FLOW STATISTICS (YEARS 1929-1957)

MEAN	3.4	3.5	3.6	3.9	4.6	5.6	7.1	9.9	17.2
MAXIMUM	9.2	9.2	9.5	10.0	12.0	15.0	19.0	23.0	29.0
MINIMUM	0.9	0.9	1.0	1.1	1.4	1.7	2.1	2.8	5.0
STANDARD DEVIATION	1.94	1.96	2.05	2.11	2.73	3.65	4.55	5.71	7.62
SKWENESS	1.520	1.399	1.320	1.358	1.454	1.442	1.416	1.004	0.280
STD ERROR OF SKWENESS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SERIAL CORR COEFF	-0.025	-0.030	-0.011	0.013	0.148	0.163	0.286	0.194	0.129
COEFF OF VARIATION	0.571	0.561	0.562	0.544	0.598	0.647	0.637	0.578	0.444
MEAN LOGS	0.468	0.480	0.498	0.531	0.594	0.677	0.781	0.928	1.189
STD DEVIATION LOGS	0.245	0.247	0.250	0.236	0.244	0.258	0.256	0.251	0.214
SKWENESS LOGS	-0.221	-0.318	-0.319	-0.220	0.123	0.283	0.216	-0.011	-0.502
STD ERR SKWENESS LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SER CORR COEFF LOGS	-0.011	-0.004	0.008	0.045	0.165	0.182	0.297	0.225	0.107
COEFF OF VAR LOGS	0.523	0.514	0.501	0.446	0.412	0.380	0.328	0.270	0.180

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1929-1957)

0.99	10.0	9.9	10.5	11.0	15.3	21.3	26.1	32.3	40.4
0.98	8.8	8.8	9.3	9.7	12.9	17.6	21.6	27.6	37.0
0.96	7.6	7.7	8.1	8.4	10.8	14.2	17.7	23.2	33.4
0.90	6.0	6.1	6.4	6.7	8.1	10.3	13.0	17.7	28.1
0.80	4.8	4.9	5.1	5.4	6.3	7.8	9.8	13.8	23.5
0.50	3.0	3.1	3.2	3.5	3.9	4.6	5.9	8.5	16.1
0.20	1.8	1.9	2.0	2.2	2.4	2.9	3.7	5.2	10.4
0.10	1.4	1.4	1.5	1.7	1.9	2.3	2.9	4.0	8.1
0.05	1.1	1.1	1.2	1.3	1.6	1.9	2.4	3.3	6.5
0.02	0.9	0.9	0.9	1.0	1.3	1.5	1.9	2.6	5.0
0.01	0.7	0.7	0.7	0.9	1.1	1.4	1.7	2.2	4.1

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1929-1957)

P95	P90	P75	P70	P50	P25	P10
3.3	4.6	11.0	15.0	35.0	67.0	120.0

STATION 12093000 KAPOWSIN CREEK NEAR KAPOWSIN, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW (CFS)	DATE	REG. (R)
1928	293.	263.	232.	192.	159.	138.	125.	110.	111.	302.	01/04/28	
1929	148.	142.	125.	99.	89.	83.	79.	71.	63.	149.	03/29/29	
1930	186.	175.	157.	154.	120.	96.	78.	72.	59.	189.	02/15/30	
1931	274.	252.	196.	156.	110.	79.	75.	61.	53.	283.	06/02/31	
1932	374.	330.	258.	247.	185.	150.	122.	110.	92.	393.	03/06/32	
1942	418.	402.	324.	215.	141.	112.	95.	83.	68.	546.	12/19/41	
1943	302.	245.	189.	143.	116.	102.	98.	85.	77.	324.	11/24/42	
1944	149.	118.	86.	59.	57.	51.	47.	45.	40.	168.	12/04/43	
1945	150.	145.	125.	103.	84.	78.	75.	74.	63.	160.	04/11/45	
1946	367.	334.	255.	223.	154.	130.	127.	114.	96.	397.	01/05/46	
1947	574.	514.	431.	283.	216.	139.	118.	96.	96.	605.	12/12/46	
1948	242.	229.	200.	162.	124.	107.	104.	94.	91.	260.	02/26/48	
1949	407.	377.	311.	245.	190.	131.	109.	107.	90.	417.	12/10/48	
1950	418.	403.	317.	284.	204.	175.	159.	142.	116.	430.	02/26/50	
1951	546.	476.	378.	250.	191.	163.	145.	145.	113.	592.	02/12/51	
1952	170.	151.	121.	96.	79.	65.	61.	51.	51.	176.	02/05/52	
1953	274.	256.	231.	196.	152.	102.	86.	77.	68.	285.	02/01/53	
1954	520.	423.	326.	233.	181.	150.	137.	121.	99.	574.	12/10/53	
1955	246.	217.	167.	146.	124.	95.	88.	88.	75.	293.	02/08/55	
1956	580.	432.	299.	253.	227.	186.	161.	138.	125.	610.	12/12/55	
1957	322.	304.	255.	208.	171.	124.	97.	99.	81.	364.	03/07/57	
1958										218.	02/24/58	
1959										440.	11/12/58	
1960										377.	11/22/59	
1961										501.	11/24/60	
1962										210.	12/24/61	
1963										266.	02/03/63	
1964										577.	01/25/64	
1965										681.	01/29/65	
1966										136.	01/05/66	
1967										344.	01/19/67	
1968										287.	02/24/68	
1969										545.	01/09/69	
1970										340.	01/20/70	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1928-1970)

W R C
ESTIMATESYSTEMATIC
RECORD

MEAN	331.4	294.7	237.3	188.0	146.4	117.2	106.1	96.2	82.5
MAXIMUM	580.0	514.0	431.0	284.0	227.0	186.0	164.0	145.0	125.0
MINIMUM	148.0	118.0	86.0	59.0	57.0	51.0	47.0	45.0	40.0
STANDARD DEVIATION	140.96	117.95	91.62	64.96	47.85	36.56	33.16	27.66	23.10
SKEDNESS	0.410	0.210	0.259	-0.339	-0.115	0.114	0.288	0.173	0.103
STD ERROR OF SKEWNESS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501
SERIAL CORR. COEFF	0.005	0.098	0.101	0.207	0.163	0.078	0.082	0.194	0.150
COEFF OF VARIATION	0.425	0.400	0.386	0.346	0.327	0.312	0.302	0.287	0.280
MEAN LOGS	2.480	2.433	2.341	2.243	2.140	2.047	2.005	1.965	1.899
STD DEVIATION LOGS	0.195	0.189	0.184	0.180	0.160	0.146	0.142	0.132	0.129
SKEDNESS LOGS	-0.226	-0.382	-0.524	-1.077	-0.767	-0.557	-0.379	-0.455	-0.456
STD ERR SKEWNESS LOGS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501
SER CORR COEFF LOGS	0.121	0.182	0.173	0.226	0.202	0.105	0.106	0.196	0.177
COEFF OF VAR LOGS	0.079	0.078	0.079	0.080	0.075	0.071	0.071	0.067	0.068

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1928-1970)

0.99	98.6	87.2	69.8	48.8	48.0	44.6	43.2	41.2	36.1	113.9	104.0
0.95	140.3	126.6	103.2	79.8	70.3	61.1	57.1	54.0	47.0	156.4	151.3
0.90	168.2	152.7	125.1	100.2	84.4	71.3	65.7	61.8	53.6	185.0	182.9
0.80	208.2	189.7	155.8	128.2	103.4	85.1	77.3	72.1	62.3	226.6	228.3
0.50	307.5	278.3	227.4	188.2	144.6	115.0	103.2	94.4	81.1	340.1	340.1
0.20	443.2	392.8	325.1	248.9	189.1	148.7	133.7	119.6	102.2	488.2	490.4
0.10	531.6	463.3	366.3	277.7	212.4	167.2	151.4	133.7	113.9	595.3	586.2
0.04	640.9	546.3	432.0	304.5	236.4	187.4	171.4	149.2	126.8	734.8	702.6
0.02	720.4	604.1	462.6	319.3	251.0	200.4	184.9	159.4	135.2	841.3	785.8
0.01	798.4	658.8	497.8	330.9	263.5	212.0	197.4	168.7	142.8	950.0	866.2

STATION 12093500 PUYALLUP RIVER NEAR ORTING, WASH.
MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1932	471	589	494	696	893	1275	858	743	965	745	504	362	715
1933	462	1846	1000	1057	354	644	540	790	1270	1239	724	439	866
1934	1038	1046	3015	2314	635	794	645	530	311	546	532	330	945
1935	752	1346	1002	1170	649	556	453	556	833	693	483	371	739
1936	270	256	303	927	470	697	791	1282	1275	615	449	283	636
1937	235	153	683	205	481	674	936	815	1373	813	474	447	607
1938	373	1299	1041	880	397	477	866	772	698	708	495	443	705
1939	332	596	826	777	753	659	571	744	828	774	595	369	652
1940	242	323	1040	463	905	749	586	719	515	515	509	486	587
1941	461	545	577	439	285	266	378	494	512	566	533	511	465
1942	599	816	1138	455	436	353	454	700	1120	925	670	409	675
1943	318	973	946	475	685	530	761	537	711	686	455	498	630
1944	411	354	767	470	480	417	399	601	701	608	497	627	528
1945	364	396	468	956	819	581	620	1131	770	690	597	532	660
1946	378	838	898	925	743	755	614	892	1075	910	603	381	751
1947	617	941	1663	974	752	501	701	675	715	529	410	445	744
1948	1056	1365	887	885	780	576	572	1057	1263	673	562	439	843
1949	496	874	944	331	772	591	657	1092	790	620	468	387	668
1950	485	831	799	890	1167	1151	722	730	1176	960	586	403	823
1951	708	1167	1374	939	1340	631	594	725	651	566	454	391	791
1952	801	692	662	336	668	403	647	747	578	626	453	311	577
1953	210	92.8	205	1555	847	419	569	801	889	841	531	397	612
1954	417	616	1526	895	1018	565	649	681	994	843	561	500	771
1955	416	694	577	639	683	404	700	697	1244	1034	544	415	669
1956	950	1324	1520	1003	469	826	831	1036	1136	842	512	386	905
1957	553	658	1369	373	759	937	664	936	738	488	373	377	685
1958	366	459	887	847	975	422	737	831	786	649	577	385	658
1959	495	1457	1260	1164	546	611	733	780	878	645	429	700	809
1960	1291	1702	937	456	766	586	695	1099	827	603	491	426	823
1961	507	1552	634	893	1479	777	678	838	982	702	692	359	835
1962	444	483	674	847	426	367	820	671	753	626	565	473	597
1963	428	1143	872	478	1003	492	770	688	666	673	609	601	698
1964	440	681	831	1142	544	499	628	711	1360	1066	702	480	741
1965	569	598	1383	1417	1059	431	627	645	994	714	704	416	772
1966	416	435	425	683	337	628	679	716	746	721	632	552	583
1967	523	601	930	1326	780	513	342	748	1098	730	644	560	734
1968	684	603	782	954	1271	648	538	711	978	606	691	748	766
1969	626	989	928	1021	438	434	601	1074	1039	606	421	439	720
1970	379	421	642	1346	812	498	521	657	852	628	511	454	643
1971	360	600	803	1435	950	610	563	956	979	993	699	463	784
1972	419	677	755	1092	1497	1619	823	1150	1161	999	617	475	939
1973	242	443	1148	770	319	331	343	592	689	584	455	365	526
1974	330	720	1072	1470	765	742	791	915	1470	971	631	408	858
1975	218	477	925	1636	814	642	303	733	878	909	592	387	711
1976	519	980	1972	1379	561	441	611	862	721	812	671	467	836
1977	304	389	364	367	280	502	691	704	904	483	640	451	507
1978	287	1048	1754	699	476	404	478	575	629	623	544	544	574
1979	290	536	689	338	787	727	614	773	629	652	475	455	579

STATION 12093500 PUYALLUP RIVER NEAR ORTING, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1932-1979)

MEAN	490.7	783.9	962.3	891.4	731.8	611.6	632.6	789.8	893.2	730.3	553.5	448.9	710.0
MAXIMUM	1291.0	1846.0	3015.0	2314.0	1497.0	1619.0	936.0	1282.0	1470.0	1239.0	724.0	748.0	985.0
MINIMUM	210.0	92.8	205.0	205.0	280.0	266.0	303.0	494.0	311.0	483.0	373.0	283.0	465.0
STD DEVIATION	230.30	405.42	482.61	421.18	297.93	244.58	144.57	179.97	255.06	169.52	90.64	91.70	115.22
SKENNESS	1.592	0.747	1.869	0.811	0.720	2.072	-0.317	0.832	0.316	0.922	0.157	1.213	0.143
STD ERR SKEW	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343
SER CORR COEFF	0.206	0.131	-0.176	0.212	-0.060	-0.072	-0.010	0.030	-0.103	-0.020	0.138	0.240	0.071
COEFF OF VAR	0.469	0.517	0.502	0.472	0.407	0.400	0.229	0.228	0.286	0.252	0.164	0.204	0.162
MEAN LOGS	2.652	2.830	2.935	2.899	2.828	2.759	2.788	2.887	2.933	2.853	2.737	2.844	2.846
STD DEV LOGS	0.182	0.257	0.210	0.223	0.182	0.149	0.110	0.095	0.131	0.096	0.072	0.084	0.072
SKENNESS LOGS	0.428	-0.925	-0.351	-0.501	-0.242	0.613	-0.980	0.324	-0.620	0.464	-0.121	0.516	-0.269
STD ERR SKEW LOGS	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343	0.343
SER CORR LOGS	0.270	0.082	-0.222	0.119	-0.069	-0.063	-0.060	0.053	-0.085	-0.026	0.118	0.265	0.066
COEFF OF VAR LOGS	0.069	0.091	0.071	0.077	0.064	0.054	0.040	0.033	0.045	0.034	0.026	0.032	0.025
% DF AVE FLOW	5.8	9.2	11.3	10.5	8.6	7.2	7.4	9.3	10.5	8.6	6.5	5.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1932-1979)

0.99	193.4	116.1	247.6	199.1	235.6	301.9	286.3	488.3	370.8	460.4	366.4	303.2	462.1
0.95	237.9	224.1	372.0	318.1	328.5	348.5	382.0	549.4	496.7	511.6	413.8	331.1	527.7
0.90	268.3	305.7	456.9	401.2	389.5	380.4	437.3	587.4	572.9	544.3	441.0	348.9	564.8
0.80	313.4	429.3	579.8	522.7	475.8	427.8	506.7	639.6	672.8	590.0	475.7	373.7	611.4
0.50	435.1	739.6	886.4	826.4	685.0	554.8	640.0	762.0	883.2	700.6	548.0	433.4	706.0
0.20	630.2	1120.8	1301.8	1229.7	962.7	756.2	762.7	923.2	1109.4	852.1	628.2	514.5	806.6
0.10	778.2	1329.8	1567.2	1479.3	1139.5	907.7	818.7	1027.7	1229.4	953.5	673.5	568.3	861.2
0.04	987.9	1546.4	1888.5	1771.8	1354.6	1121.1	870.7	1158.2	1355.7	1083.2	724.4	636.7	920.9
0.02	1161.3	1677.9	2117.5	1973.3	1509.1	1296.8	899.7	1254.9	1435.2	1181.4	758.8	688.1	960.0
0.01	1350.0	1788.2	2337.7	2161.8	1658.9	1487.5	922.7	1351.5	1504.8	1281.1	790.6	740.0	995.5

STATION 12093500 PUYALLUP RIVER NEAR DRTING, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1933	198.0	211.0	262.0	272.0	330.0	387.0	431.0	503.0	628.0
1934	182.0	225.0	244.0	427.0	464.0	464.0	604.0	788.0	829.0
1935	171.0	179.0	213.0	224.0	265.0	355.0	415.0	428.0	436.0
1936	161.0	165.0	169.0	186.0	212.0	249.0	270.0	295.0	393.0
1937	123.0	132.0	136.0	142.0	151.0	182.0	200.0	253.0	310.0
1938	192.0	192.0	203.0	219.0	264.0	371.0	418.0	483.0	692.0
1939	207.0	223.0	228.0	259.0	320.0	369.0	419.0	466.0	545.0
1940	134.0	159.0	178.0	193.0	222.0	277.0	306.0	368.0	498.0
1941	207.0	207.0	216.0	228.0	258.0	277.0	331.0	388.0	430.0
1942	265.0	265.0	273.0	289.0	345.0	392.0	414.0	486.0	498.0
1943	162.0	175.0	189.0	214.0	240.0	325.0	432.0	513.0	609.0
1944	206.0	212.0	216.0	236.0	354.0	383.0	421.0	484.0	484.0
1945	224.0	235.0	240.0	255.0	303.0	365.0	397.0	449.0	486.0
1946	178.0	239.0	267.0	294.0	342.0	442.0	498.0	545.0	605.0
1947	165.0	170.0	182.0	204.0	252.0	365.0	453.0	537.0	708.0
1948	300.0	313.0	346.0	367.0	402.0	426.0	454.0	521.0	578.0
1949	240.0	240.0	240.0	247.0	280.0	377.0	475.0	517.0	585.0
1950	234.0	245.0	260.0	311.0	361.0	397.0	424.0	461.0	558.0
1951	239.0	253.0	290.0	349.0	369.0	473.0	554.0	605.0	746.0
1952	190.0	201.0	204.0	222.0	272.0	412.0	446.0	497.0	548.0
1953	59.0	64.0	66.0	72.0	88.0	129.0	167.0	201.0	306.0
1954	211.0	241.0	255.0	317.0	374.0	401.0	421.0	460.0	613.0
1955	251.0	261.0	276.0	308.0	330.0	439.0	475.0	502.0	559.0
1956	260.0	263.0	284.0	306.0	382.0	439.0	559.0	687.0	758.0
1957	200.0	200.0	210.0	257.0	319.0	405.0	464.0	522.0	627.0
1958	239.0	250.0	257.0	275.0	316.0	336.0	360.0	385.0	451.0
1959	223.0	252.0	264.0	319.0	368.0	437.0	474.0	514.0	616.0
1960	237.0	242.0	246.0	270.0	345.0	510.0	553.0	623.0	669.0
1961	265.0	280.0	307.0	333.0	370.0	418.0	443.0	486.0	645.0
1962	190.0	200.0	214.0	235.0	293.0	386.0	418.0	444.0	532.0
1963	267.0	272.0	289.0	318.0	348.0	418.0	436.0	492.0	556.0
1964	290.0	293.0	317.0	391.0	434.0	488.0	522.0	556.0	596.0
1965	250.0	262.0	279.0	314.0	358.0	486.0	498.0	559.0	740.0
1966	240.0	252.0	261.0	283.0	334.0	410.0	417.0	418.0	452.0
1967	232.0	240.0	268.0	344.0	450.0	497.0	526.0	552.0	611.0
1968	206.0	309.0	323.0	325.0	340.0	530.0	568.0	592.0	641.0
1969	263.0	271.0	281.0	325.0	360.0	398.0	634.0	654.0	703.0
1970	204.0	225.0	245.0	248.0	320.0	346.0	402.0	404.0	462.0
1971	180.0	188.0	195.0	219.0	272.0	349.0	403.0	431.0	545.0
1972	280.0	291.0	324.0	344.0	353.0	429.0	499.0	542.0	646.0
1973	150.0	153.0	176.0	207.0	236.0	295.0	367.0	397.0	546.0
1974	200.0	200.0	221.0	239.0	277.0	319.0	361.0	422.0	498.0
1975	160.0	164.0	175.0	181.0	200.0	245.0	326.0	394.0	585.0
1976	221.0	225.0	267.0	283.0	303.0	427.0	479.0	557.0	635.0
1977	203.0	204.0	212.0	233.0	274.0	326.0	337.0	379.0	358.0
1978	190.0	192.0	203.0	221.0	280.0	367.0	457.0	464.0	576.0
1979	204.0	208.0	220.0	236.0	277.0	371.0	430.0	459.0	480.0

STATION 12093500 PUYALLUP RIVER NEAR ORTING, WASH.

LOWEST MEAN FLOW STATISTICS (YEARS 1933-1979)

MEAN	211.6	222.2	238.1	264.4	310.0	380.6	433.1	480.8	565.4
MAXIMUM	300.0	313.0	346.0	391.0	450.0	530.0	634.0	788.0	829.0
MINIMUM	59.0	64.0	66.0	72.0	88.0	129.0	167.0	201.0	306.0
STANDARD DEVIATION	47.90	48.35	52.76	61.93	70.51	80.82	92.19	105.24	113.55
SKENNESS	-0.531	-0.844	-0.577	-0.462	-0.675	-0.860	-0.538	0.070	-0.175
STD ERROR OF SKEWNESS	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347
SERIAL CORR COEFF	0.207	0.160	0.111	0.146	0.153	0.285	0.256	0.142	-0.006
COEFF OF VARIATION	0.226	0.218	0.222	0.234	0.227	0.212	0.213	0.219	0.201
MEAN LOGS	2.312	2.334	2.363	2.408	2.477	2.568	2.625	2.671	2.743
STD DEVIATION LOGS	0.120	0.115	0.118	0.123	0.122	0.112	0.108	0.104	0.094
SKENNESS LOGS	-2.106	-2.186	-2.225	-2.028	-2.115	-1.989	-1.673	-1.136	-0.834
STD ERR SKEWNESS LOGS	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347
SER CORR COEFF LOGS	0.149	0.111	0.099	0.114	0.122	0.197	0.227	0.156	0.013
COEFF OF VAR LOGS	0.052	0.049	0.050	0.051	0.049	0.044	0.041	0.039	0.034

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1933-1979)

0.99	265.8	274.9	294.5	337.4	390.7	478.7	562.2	669.9	800.1
0.98	265.3	274.5	294.2	336.6	389.9	477.4	558.6	657.5	779.4
0.96	264.1	273.6	293.3	334.7	388.3	474.8	552.6	641.0	754.2
0.90	260.3	270.3	290.0	328.9	382.6	466.8	537.7	609.6	710.7
0.80	253.0	263.6	283.0	318.4	371.8	452.6	516.0	573.7	665.6
0.50	223.8	235.4	252.8	279.2	328.3	400.5	450.4	489.7	570.0
0.20	174.2	185.1	197.8	215.3	254.3	315.9	357.4	392.3	467.9
0.10	143.5	153.3	163.0	176.7	208.7	264.1	303.2	339.7	414.5
0.05	118.1	126.6	133.9	145.0	171.0	220.8	258.2	297.2	371.4
0.02	91.1	98.1	102.9	111.6	131.1	174.3	209.7	251.3	324.7
0.01	74.8	80.7	84.1	91.5	107.2	145.8	179.6	222.4	295.0

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1933-1979)

P95	P90	P75	P70	P50	P25	P10
260.0	310.0	420.0	450.0	580.0	830.0	1200.0

STATION 12093500 PUYALLUP RIVER NEAR ORTING, WASH.

YEAR	HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30										ANNUAL PEAK-FLOW DATA	
	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW (CFS)	DATE	REG. (R)
1932	5160.	3850.	2490.	2020.	1560.	1270.	1100.	1040.	932.	6950.	02/26/32	
1933	7670.	4650.	3810.	2560.	1990.	1520.	1330.	1100.	912.	11800.	11/13/32	
1934	12000.	8830.	5410.	3390.	3390.	2780.	2160.	1940.	1510.	12800.	12/10/33	
1935	5460.	4310.	2860.	2340.	1680.	1280.	1170.	1150.	931.	8900.	11/05/34	
1936	3600.	3150.	2230.	1700.	1510.	1320.	1150.	1030.	909.	4850.	06/07/36	
1937	2820.	2360.	1850.	1580.	1390.	1110.	1100.	990.	873.	4640.	04/14/37	
1938	4420.	2920.	2000.	1610.	1380.	1230.	1090.	936.	837.	8680.	04/18/38	
1939	3190.	2210.	1830.	1230.	975.	838.	803.	755.	739.	5110.	02/15/39	
1940	3380.	2890.	2080.	1480.	1130.	840.	834.	795.	744.	5600.	12/15/39	
1941	3580.	2250.	1520.	1090.	773.	607.	552.	550.	499.	6700.	11/29/40	
1942	4740.	3270.	2260.	1560.	1200.	1080.	974.	868.	714.	7450.	12/19/41	
1943	4580.	2760.	1950.	1410.	1200.	984.	832.	789.	737.	7500.	11/23/42	
1944	4540.	2660.	1710.	1130.	781.	673.	641.	623.	572.	5600.	12/03/43	
1945	4140.	2460.	2060.	1550.	1140.	965.	875.	819.	824.	5240.	01/07/45	
1946	3880.	3260.	2180.	1760.	1230.	1060.	970.	891.	875.	5530.	12/28/45	
1947	8200.	6040.	4630.	2750.	2100.	1460.	1300.	1170.	963.	11200.	12/11/46	
1948	3860.	3200.	2190.	1710.	1490.	1220.	1190.	1060.	924.	8300.	11/07/47	
1949	2890.	2030.	1590.	1310.	1310.	981.	872.	858.	768.	4720.	02/17/49	
1950	4610.	3770.	2470.	2310.	1640.	1320.	1140.	1070.	1020.	9720.	11/27/49	
1951	5110.	4290.	3040.	1950.	1630.	1350.	1380.	1220.	1020.	6250.	02/11/51	
1952	2200.	1610.	1320.	1030.	887.	780.	726.	661.	619.	3060.	10/03/51	
1953	3090.	2530.	2120.	2060.	1880.	1210.	946.	874.	875.	4730.	01/31/53	
1954	6040.	3900.	2900.	2200.	1610.	1270.	1150.	1050.	898.	10100.	12/09/53	
1955	3240.	2500.	2050.	1470.	1280.	1150.	1020.	922.	797.	4420.	02/08/55	
1956	5760.	4090.	2410.	2110.	1700.	1520.	1390.	1220.	1040.	12100.	12/11/55	
1957	3190.	2920.	2540.	2150.	1420.	1040.	941.	906.	864.	4360.	12/09/56	
1958	2100.	1760.	1440.	1230.	970.	913.	904.	810.	784.	2740.	12/25/57	
1959	4000.	2690.	2300.	1870.	1630.	1410.	1320.	1130.	978.	5460.	11/12/58	
1960	5930.	5170.	4060.	2510.	1850.	1610.	1330.	1120.	970.	12900.	11/22/59	
1961	4600.	3040.	2520.	2260.	1560.	1220.	1100.	1150.	1010.	6230.	02/21/61	
1962	2980.	2250.	1850.	1310.	1120.	804.	756.	726.	672.	4420.	04/06/62	
1963	7620.	4140.	2840.	2030.	1570.	1090.	1010.	883.	816.	15300.	11/20/62	
1964	4350.	2760.	1920.	1580.	1400.	1240.	1100.	972.	847.	5960.	01/25/64	
1965	9070.	6360.	4200.	2540.	1780.	1450.	1340.	1140.	947.	12200.	01/29/65	
1966	1690.	1390.	1170.	959.	844.	753.	735.	728.	697.	1900.	05/06/66	
1967	2930.	2120.	1830.	1530.	1370.	1180.	1050.	929.	806.	3730.	01/19/67	
1968	4700.	3120.	2320.	1550.	1260.	1170.	1030.	928.	890.	6300.	12/25/67	
1969	3790.	3580.	2520.	1690.	1240.	1180.	1040.	905.	772.	5430.	01/05/69	
1970	3380.	3100.	2660.	2250.	1530.	1120.	944.	857.	803.	3780.	01/20/70	
1971	3470.	2570.	2070.	1970.	1590.	1210.	1120.	987.	926.	4930.	01/19/71	
1972	4450.	3650.	2600.	2410.	2100.	1710.	1480.	1340.	1270.	6570.	01/20/72	
1973	3780.	2880.	2480.	2010.	1460.	1020.	802.	682.	608.	5580.	12/21/72	
1974	5810.	4620.	3090.	2340.	1730.	1340.	1170.	1050.	1060.	8380.	01/15/74	
1975	6170.	4750.	3600.	2500.	1670.	1370.	1210.	1060.	893.	9130.	01/18/75	
1976	6800.	6520.	4660.	3070.	2050.	1750.	1470.	1260.	1010.	8850.	12/04/75	
1977	1730.	1500.	1440.	1160.	939.	843.	769.	706.	661.	2110.	01/18/77	
1978	9180.	5630.	3610.	2840.	2090.	1420.	1180.	1010.	813.	12100.	12/02/77	
1979	2180.	1910.	1400.	1080.	947.	769.	740.	747.	699.	3820.	02/06/79	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1932-1979)

[illegible]

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1932-1979)

0.99	1614.5	1352.1	1161.9	878.7	718.1	583.1	535.2	1881.5
0.95	2123.0	1684.0	1387.5	1075.3	874.1	682.7	584.3	2769.5
0.90	2453.9	1922.2	1571.8	1200.4	971.0	753.4	657.4	3311.7
0.80	2947.5	2252.5	1751.9	1374.6	1103.8	829.8	716.7	4232.5
0.50	4197.6	3105.3	2302.9	1753.8	1412.7	1034.8	845.2	6418.8
0.20	6038.5	4337.0	3122.9	2362.2	1812.2	1276.7	996.3	9400.0
0.10	7934.9	5307.3	3750.9	2738.4	2066.4	1455.5	1085.5	11330.4
0.04	9046.9	6533.6	4345.5	3214.5	2378.2	1693.9	1199.6	13659.1
0.02	10379.9	7551.8	5177.3	3370.8	2605.3	1732.0	1265.9	15468.9
0.01	11759.3	8581.8	5787.3	3599.0	2828.8	1855.7	1330.1	17071.4

STATION 12093900 CARBON RIVER AT FAIRFAX, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1966	286	245	240	282	131	265	420	517	638	542	343	249	348
1967	410	494	536	688	427	223	182	580	854	449	324	256	452
1968	521	372	579	521	610	288	302	521	619	395	415	463	467
1969	393	525	429	542	159	235	380	793	809	379	257	253	431
1970	248	245	280	568	385	236	277	485	666	438	288	299	377
1971	262	445	409	724	567	269	308	718	682	705	412	253	479
1972	218	400	364	381	638	879	404	807	996	828	399	298	551
1973	220	310	718	423	153	155	202	351	412	365	270	186	315
1974	189	333	494	874	375	415	404	616	1060	709	394	242	510
1975	109	263	529	904	392	297	134	515	694	730	433	245	439
1976	343	600	1251	836	302	183	295	576	523	311	446	285	498
1977	167	289	237	265	168	199	471	470	654	343	414	324	334
1978	183	821	1134					391		431			

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1966-1979)

MEAN	273.0	410.9	554.6	592.3	358.9	303.7	314.9	564.6	717.2	509.6	366.2	279.4	433.4
MAXIMUM	521.0	821.0	1251.0	904.0	638.0	879.0	471.0	807.0	1060.0	828.0	446.0	463.0	551.0
MINIMUM	109.0	245.0	237.0	265.0	131.0	155.0	134.0	351.0	412.0	311.0	257.0	186.0	315.0
STD DEVIATION	115.33	167.01	315.67	224.11	182.13	193.02	104.76	139.98	185.26	173.74	66.78	67.84	74.98
SKEWNESS	0.812	1.312	1.386	-0.088	0.203	2.797	-0.296	0.476	0.473	0.716	-0.579	1.853	-0.249
STD ERR SKEW	0.616	0.616	0.616	0.637	0.637	0.637	0.637	0.616	0.637	0.616	0.637	0.637	0.637
SER CORR COEFF	0.485	-0.562	-0.363	0.019	-0.144	-0.241	-0.525	-0.257	-0.611	0.137	0.112	-0.137	-0.525
COEFF OF VAR	0.422	0.406	0.569	0.378	0.507	0.636	0.333	0.268	0.258	0.341	0.182	0.243	0.173
MEAN LOGS	2.401	2.585	2.688	2.739	2.495	2.433	2.472	2.739	2.842	2.685	2.557	2.436	2.631
STD DEV LOGS	0.185	0.161	0.225	0.185	0.250	0.195	0.166	0.108	0.114	0.142	0.084	0.095	0.078
SKEWNESS LOGS	-0.117	0.581	0.430	-0.580	-0.361	1.730	-0.888	-0.041	-0.217	0.439	-0.729	0.971	-0.482
STD ERR SKEW LOGS	0.616	0.616	0.616	0.637	0.637	0.637	0.637	0.616	0.637	0.616	0.637	0.637	0.637
SER CORR LOGS	0.368	-0.605	-0.442	-0.099	-0.244	-0.358	-0.474	-0.282	-0.616	0.123	0.084	-0.114	-0.520
COEFF OF VAR LOGS	0.077	0.062	0.084	0.067	0.100	0.080	0.067	0.039	0.040	0.053	0.033	0.039	0.030
% OF AVE FLOW	5.2	7.8	10.6	11.3	6.8	5.8	6.0	10.8	13.7	9.7	7.0	5.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1966-1979)

0.99	90.2	190.1	172.2	171.2	70.4	163.4	95.9	305.8	362.8	252.0	207.2	192.2	264.1
0.95	123.3	223.1	222.3	256.2	114.6	169.3	145.7	363.8	445.1	295.7	252.6	204.3	310.7
0.90	145.1	245.7	258.0	312.2	146.6	175.8	177.6	398.9	494.5	324.6	277.9	213.2	336.8
0.80	176.3	279.5	312.7	390.5	194.9	188.6	220.7	445.6	559.7	366.3	309.1	226.7	369.3
0.50	253.6	370.8	469.5	571.7	323.3	239.6	313.4	549.8	702.0	473.0	368.8	263.7	433.4
0.20	360.6	517.5	742.7	790.0	510.8	363.3	411.0	676.7	868.8	631.9	425.5	322.3	498.3
0.10	431.4	629.2	964.6	915.3	636.5	490.2	460.1	753.6	966.2	745.4	453.0	365.7	531.9
0.04	520.5	788.2	1296.4	1054.3	793.9	721.6	508.8	844.6	1077.8	898.9	480.1	425.7	589.1
0.02	586.6	920.1	1584.0	1145.7	908.9	962.7	537.6	908.9	1154.3	1020.5	496.2	474.1	589.1
0.01	652.2	1064.3	1909.0	1228.1	1021.6	1280.9	561.3	970.6	1225.9	1148.7	509.7	525.8	608.6

STATION 12093900 CARBON RIVER AT FAIRFAX, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1967	129.0	133.0	145.0	186.0	222.0	245.0	292.0	351.0	418.0
1968	154.0	160.0	164.0	171.0	182.0	268.0	294.0	347.0	390.0
1969	124.0	124.0	125.0	137.0	150.0	125.0	310.0	343.0	380.0
1970	142.0	147.0	162.0	162.0	207.0	211.0	236.0	242.0	260.0
1971	128.0	132.0	154.0	176.0	212.0	252.0	266.0	281.0	341.0
1972	89.0	130.0	103.0	176.0	228.0	280.0	294.0	314.0	332.0
1973	110.0	112.0	149.0	142.0	153.0	154.0	246.0	273.0	320.0
1974	110.0	112.0	118.0	130.0	154.0	170.0	201.0	237.0	289.0
1975	76.0	78.0	83.0	97.0	97.0	133.0	186.0	221.0	252.0
1976	121.0	125.0	123.0	124.0	134.0	241.0	334.0	362.0	460.0
1977	91.0	93.0	97.0	122.0	163.0	177.0	212.0	216.0	221.0

LOWEST MEAN FLOW STATISTICS (YEARS 1967-1977)

MEAN	115.8	118.7	127.0	143.3	167.8	204.0	259.7	289.7	341.5
MAXIMUM	154.0	160.0	164.0	186.0	222.0	268.0	334.0	382.0	460.0
MINIMUM	76.0	78.0	83.0	87.0	97.0	133.0	186.0	216.0	221.0
STANDARD DEVIATION	23.55	24.48	26.04	28.71	36.81	45.85	47.57	58.29	69.72
SKENNESS	-0.184	-0.032	-0.182	-0.293	-0.238	-0.120	-0.123	0.228	-0.065
STD ERROR OF SKENNESS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
SERIAL CORR COEFF	0.223	0.236	0.221	0.536	0.460	0.038	-0.115	-0.134	-0.254
COEFF OF VARIATION	0.203	0.206	0.205	0.200	0.219	0.225	0.183	0.201	0.204
MEAN LOGS	2.055	2.066	2.095	2.148	2.214	2.299	2.408	2.454	2.525
STD DEVIATION LOGS	0.093	0.093	0.093	0.093	0.103	0.102	0.082	0.088	0.093
SKENNESS LOGS	-0.570	-0.454	-0.529	-0.877	-0.873	-0.353	-0.379	0.032	-0.536
STD ERR SKENNESS LOGS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
SER CORR COEFF LOGS	0.162	0.185	0.185	0.480	0.426	0.027	-0.058	-0.137	-0.296
COEFF OF VAR LOGS	0.045	0.045	0.045	0.043	0.046	0.044	0.034	0.036	0.037

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1967-1977)

0.99	170.5	178.2	188.6	201.3	243.7	322.8	376.3	457.1	505.0
0.98	164.6	171.2	181.7	196.4	237.1	307.7	362.4	432.0	486.9
0.96	157.8	163.4	173.9	190.3	229.1	291.2	346.8	405.9	466.2
0.90	146.9	151.2	161.5	179.8	215.1	266.0	322.8	368.6	433.4
0.80	136.3	139.8	149.6	168.7	200.5	243.2	300.5	337.0	401.9
0.50	115.8	118.2	126.8	144.9	169.5	201.9	258.7	284.1	341.2
0.20	95.6	97.8	104.7	119.0	136.5	164.3	219.0	239.9	282.0
0.10	85.5	87.7	93.6	105.4	119.4	146.4	199.3	219.7	252.4
0.05	77.4	79.7	84.9	94.3	105.7	132.5	183.8	204.4	228.9
0.02	68.8	71.2	75.5	82.4	91.1	117.9	167.0	188.6	203.8
0.01	63.3	65.9	69.6	74.7	81.8	108.8	156.3	178.7	187.8

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1967-1977)

P95	P90	P75	P70	P50	P25	P10
140.0	160.0	230.0	250.0	340.0	520.0	810.0

STATION 12093900 CARBON RIVER AT FAIRFAX, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA FLOW (CFS)	DATE	REG. (R)
1966	1440.	1150.	925.	748.	712.	601.	572.	538.	460.	1580.	05/06/66	
1967	1580.	1250.	1130.	959.	854.	765.	639.	580.	497.	1950.	10/23/66	
1968	1360.	1010.	825.	660.	562.	462.	362.	262.	162.	7480.	12/25/67	
1969	3580.	2590.	1470.	1080.	947.	824.	681.	599.	490.	5390.	01/05/69	
1970	2230.	1700.	1520.	1130.	764.	599.	534.	477.	390.	2490.	01/18/70	
1971	3110.	1790.	1130.	1080.	894.	707.	706.	639.	566.	4850.	11/24/70	
1972	2930.	2120.	1540.	1310.	1080.	984.	890.	801.	781.	3220.	02/28/72	
1973	3300.	2430.	1790.	1250.	911.	614.	492.	425.	348.	5000.	12/21/72	
1974	4590.	3140.	1950.	1480.	1110.	909.	806.	717.	661.	7180.	01/15/74	
1975	4870.	3200.	2020.	1480.	924.	757.	667.	605.	536.	7320.	01/18/75	
1976	5150.	4860.	3010.	1950.	1270.	1090.	908.	784.	599.	7460.	12/01/75	
1977	1320.	1010.	925.	778.	662.	583.	538.	486.	445.	2150.	01/18/77	
1978										10000.	12/01/77	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1966-1978)

W R C
ESTIMATESYSTEMATIC
RECORD

MEAN	3205.0	2311.7	1575.0	1178.2	907.7	757.7	668.0	600.9	531.2			
MAXIMUM	5150.0	4860.0	3010.0	1950.0	1270.0	1090.0	908.0	801.0	781.0			
MINIMUM	1320.0	1010.0	925.0	748.0	662.0	583.0	492.0	425.0	348.0			
STANDARD DEVIATION	1358.52	1071.45	580.57	343.32	177.54	185.75	138.38	118.37	111.70			
SKWENESS	-0.053	1.124	1.326	0.911	0.636	0.835	0.853	0.431	0.839			
STD ERROR OF SKWENESS	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637			
SERIAL CORR COEFF	0.172	0.082	0.089	0.291	-0.261	-0.505	-0.460	-0.486	-0.477			
COEFF OF VARIATION	0.424	0.463	0.369	0.291	0.196	0.219	0.207	0.197	0.210			
MEAN LOGS	3.463	3.323	3.173	3.055	2.951	2.871	2.817	2.771	2.717			
STD DEVIATION LOGS	0.211	0.199	0.149	0.122	0.083	0.091	0.087	0.085	0.089			
SKWENESS LOGS	-0.556	-0.025	0.388	0.262	0.246	0.557	0.380	0.077	0.136			
STD ERR SKWENESS LOGS	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637	0.637			
SER CORR COEFF LOGS	0.143	0.090	0.108	0.217	-0.254	-0.524	-0.485	-0.507	-0.521			
COEFF OF VAR LOGS	0.061	0.060	0.047	0.040	0.028	0.032	0.031	0.031	0.033			
										3.6391	3.6391	
										0.2643	0.2643	
										0.0	-0.4160	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1966-1978)

0.99	774.7	719.0	738.5	623.1	591.6	497.4	434.3	378.6	329.6	1057.6	880.8	
0.95	1220.9	987.2	880.4	730.6	660.2	545.4	481.7	429.7	374.5	1601.1	1497.8	
0.90	1526.8	1168.2	974.3	798.7	701.9	576.5	511.3	460.2	401.5	1997.2	1953.6	
0.80	1967.6	1431.2	1109.6	893.5	758.0	620.3	551.8	500.4	437.6	2610.3	2652.7	
0.50	3038.4	2106.5	1456.4	1121.7	885.4	727.9	647.2	588.9	518.5	4356.3	4543.8	
0.20	4403.0	3092.0	1972.6	1432.7	1045.7	878.0	772.8	695.6	618.3	7270.7	7331.8	
0.10	5218.8	3774.9	2341.8	1639.8	1145.9	979.6	854.2	760.0	679.8	9503.1	9202.7	
0.04	6149.3	4666.4	2840.3	1904.2	1267.8	1110.8	956.0	836.1	753.6	12644.0	11532.6	
0.02	6775.3	5349.0	3235.4	2103.5	1355.9	1210.8	1031.4	889.8	806.4	15205.5	13224.5	
0.01	7349.5	6046.1	3651.5	2305.3	1442.3	1312.9	1106.7	941.4	857.7	17950.2	14870.5	

STATION 12094000 CARBON RIVER NR FAIRFAX, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1911			392	260	120	191	202	356	629	567	400	287	
1912	121	668	264	650	586	153	264	778	950	264	416	229	
1929							256	599	668	537	239	158	
1930	201	59.0	270	142	680	322	401	395	484	347	416	229	304
1931	182	167	129	380	212	298	437	474	559	368	251	185	304
1932	316	405	321	348	410	684	534	546	676	510	283	162	433
1933	371	1138	512	519	151	296	324	529	867	702	406	309	512
1934	629	549	1952	948	336	570	522	505	338	338	267	183	601
1935	495	624	490	630	369	309	270	417	572	284	284	211	431
1936	134	163	205	525	185	373	507	854	834	450	273	196	389
1937	140	80.3	416	110	194	348	468	619	957	547	292	265	370
1938	237	1074	554	540	171	248	577	543	506	355	227	181	435
1939	190	409	545	454	301	377	418	603	638	514	298	191	412
1940	192	256	620	250	511	441	357	537	310	264	241	200	348
1941	244	362	351	247	141	143	241	346	336	332	235	323	276
1942	395	361	543	259	176	308	308	511	789	576	436	184	397
1943	171	614	572	310	408	274	523	431	582	582	270	205	417
1944	147	185	487	230	229	237	253	443	461	327	243	310	296
1945	188	327	652	417	242	359	853	853	569	413	262	333	401
1946	282	522	494	464	378	374	412	682	707	564	285	166	445
1947	358	502	802	488	400	307	453	553	588	417	220	247	445
1948	676	707	421	354	363	229	309	645	900	455	338	236	469
1949	275	410	414	354	362	329	463	846	651	550	361	262	428
1950	404	754	516	415	461	566	471	865	882	734	447	247	539
1951	480	746	785	505	781	368	419	584	519	351	249	208	496
1952	503	373	285	137	324	211	415	538	440	457	265	167	343
1953	111	62.5	110	790	492	189	356	462	585	645	297	209	359
1954	215	412	883	371	461	239	375	517	706	656	400	417	459
1955	264	413	316	299	334	168	336	511	1007	763	381	217	419
1956	596	920	733	437	181	269	506	674	750	637	311	218	529
1957	387	515	878	170	286	428	402	618	544	349	240	207	420
1958	204	296	487	466	466	401	401	567	571	406	299	241	383
1959	361	981	844	659	270	313	454	518	636	472	291	538	529
1960	830	1014	844	224	326	308	413	518	684	443	326	257	506
1961	318	773	354	484	756	397	428	522	686	406	308	188	465
1962	280	344	509	567	247	189	536	469	534	456	336	228	387
1963	214	596	582	283	573	281	415	462	498	415	308	268	406
1964	226	449	399	592	294	248	378	570	1083	797	500	365	492
1965	416	412	751	745	593	226	388	444	517	463	362	236	463

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1911-1965)

MEAN	317.6	500.1	527.7	424.1	368.3	301.5	398.7	559.4	649.1	490.8	311.8	239.2	425.2
MAXIMUM	830.0	1138.0	1952.0	948.0	781.0	684.0	577.0	854.0	1083.0	797.0	500.0	538.0	601.0
MINIMUM	111.0	59.0	110.0	110.0	120.0	143.0	202.0	346.0	310.0	264.0	220.0	158.0	276.0
STD DEVIATION	169.30	285.48	308.70	197.26	167.82	118.80	91.62	130.36	184.16	131.64	69.49	71.05	73.89
SKEDNESS	1.203	0.530	2.717	0.512	0.717	1.380	-0.219	0.801	0.449	0.590	0.913	2.223	0.036
STD ERR SKEW	0.388	0.388	0.383	0.383	0.383	0.383	0.378	0.378	0.378	0.383	0.383	0.383	0.393
SER CORR COEFF	0.239	0.100	0.005	-0.065	-0.078	0.099	0.068	0.056	-0.011	0.071	0.134	0.039	0.363
COEFF OF VAR	0.533	0.571	0.585	0.465	0.456	0.394	0.230	0.233	0.284	0.268	0.223	0.297	0.174
MEAN LOGS	2.447	2.607	2.664	2.576	2.521	2.450	2.588	2.737	2.795	2.676	2.484	2.364	2.622
STD DEV LOGS	0.220	0.322	0.231	0.225	0.206	0.157	0.108	0.098	0.127	0.115	0.092	0.110	0.078
SKEDNESS LOGS	0.190	-1.080	-0.346	-0.528	-0.246	0.357	-0.746	0.239	-0.306	0.055	0.548	1.060	-0.441
STD ERR SKEW LOGS	0.388	0.388	0.383	0.383	0.383	0.383	0.378	0.378	0.378	0.383	0.383	0.383	0.393
SER CORR LOGS	0.315	0.131	0.112	-0.187	-0.058	0.167	0.138	0.063	0.053	0.056	0.145	0.049	0.372
COEFF OF VAR LOGS	0.090	0.124	0.087	0.087	0.082	0.064	0.042	0.036	0.045	0.043	0.037	0.047	0.030
% OF AVE FLOW	6.2	9.8	10.4	8.3	7.2	5.9	7.8	11.0	12.8	9.6	6.1	4.7	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1911-1965)

0.99	92.6	41.3	117.3	92.9	100.9	133.6	190.3	335.9	296.8	258.6	203.3	156.1	260.6
0.95	125.3	99.5	183.3	150.0	178.1	161.6	245.7	382.4	377.0	307.8	223.3	166.4	305.4
0.90	148.0	149.6	229.7	189.9	174.4	180.2	279.9	411.1	425.7	338.1	236.2	174.1	330.5
0.80	182.1	232.4	298.4	248.3	223.8	207.0	318.7	450.2	490.6	379.1	254.4	186.3	362.0
0.50	275.5	461.6	475.8	394.2	338.1	276.1	399.6	540.6	632.9	473.1	299.0	221.2	424.3
0.20	426.3	760.3	726.5	586.8	496.9	379.8	479.8	652.4	799.5	592.5	279.6	488.2	
0.10	540.5	924.0	891.4	705.1	601.2	456.2	519.4	732.0	844.1	667.4	403.3	324.9	
0.04	701.1	1088.9	1095.1	842.7	730.8	555.2	559.0	844.1	1005.8	758.5	457.6	389.6	
0.02	832.7	1185.2	1242.7	936.8	730.8	555.2	559.0	844.1	1005.8	758.5	457.6	389.6	
0.01	974.6	1262.9	1386.4	1024.2	918.6	720.1	602.7	958.6	1149.5	888.8	541.2	502.8	599.3

STATION 12094000 CARBON RIVER NR FAIRFAX, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1912	74.0	82.0	87.0	94.0	116.0	180.0	244.0	311.0	354.0
1930	46.0	47.0	49.0	51.0	54.0	78.0	128.0	168.0	217.0
1931	84.0	90.0	97.0	104.0	122.0	148.0	147.0	154.0	187.0
1932	94.0	95.0	99.0	111.0	139.0	177.0	206.0	248.0	288.0
1933	91.0	96.0	114.0	122.0	144.0	186.0	245.0	321.0	416.0
1934	170.0	173.0	184.0	218.0	265.0	291.0	369.0	462.0	520.0
1935	103.0	105.0	109.0	111.0	127.0	185.0	216.0	243.0	318.0
1936	83.0	84.0	86.0	99.0	117.0	133.0	154.0	174.0	237.0
1937	68.0	68.0	69.0	70.0	80.0	99.0	123.0	158.0	181.0
1938	79.0	80.0	83.0	94.0	130.0	213.0	249.0	300.0	466.0
1939	121.0	125.0	134.0	141.0	162.0	181.0	198.0	234.0	310.0
1940	166.0	162.0	164.0	150.0	182.0	182.0	212.0	233.0	297.0
1941	100.0	103.0	106.0	114.0	134.0	142.0	178.0	218.0	245.0
1942	123.0	125.0	130.0	133.0	144.0	190.0	214.0	298.0	301.0
1943	84.0	97.0	108.0	116.0	125.0	154.0	222.0	286.0	369.0
1944	90.0	100.0	108.0	120.0	138.0	165.0	177.0	198.0	242.0
1945	83.0	85.0	88.0	104.0	127.0	181.0	217.0	228.0	259.0
1946	122.0	136.0	143.0	150.0	227.0	256.0	265.0	307.0	351.0
1947	119.0	120.0	122.0	128.0	139.0	173.0	224.0	288.0	403.0
1948	108.0	110.0	120.0	129.0	178.0	232.0	286.0	338.0	412.0
1949	130.0	130.0	132.0	137.0	160.0	217.0	256.0	286.0	298.0
1950	153.0	162.0	176.0	202.0	255.0	285.0	321.0	373.0	437.0
1951	158.0	185.0	176.0	195.0	228.0	325.0	373.0	408.0	529.0
1952	94.0	95.0	95.0	100.0	120.0	194.0	208.0	231.0	291.0
1953	40.0	41.0	42.0	45.0	57.0	74.0	93.0	110.0	181.0
1954	106.0	109.0	125.0	155.0	197.0	208.0	229.0	257.0	381.0
1955	112.0	117.0	121.0	133.0	140.0	254.0	271.0	282.0	299.0
1956	123.0	124.0	135.0	148.0	169.0	212.0	294.0	402.0	508.0
1957	110.0	110.0	112.0	115.0	126.0	179.0	294.0	343.0	393.0
1958	116.0	121.0	125.0	143.0	164.0	187.0	209.0	236.0	291.0
1959	140.0	142.0	148.0	195.0	235.0	256.0	294.0	318.0	404.0
1960	133.0	137.0	143.0	160.0	187.0	270.0	255.0	348.0	470.0
1961	161.0	165.0	172.0	190.0	215.0	250.0	276.0	324.0	405.0
1962	94.0	97.0	108.0	120.0	143.0	218.0	250.0	269.0	316.0
1963	115.0	127.0	144.0	162.0	188.0	209.0	222.0	269.0	343.0
1964	130.0	131.0	136.0	144.0	193.0	230.0	262.0	291.0	340.0
1965	156.0	160.0	164.0	176.0	221.0	342.0	360.0	403.0	480.0

LOWEST MEAN FLOW STATISTICS (YEARS 1912-1965)

MEAN	108.6	112.9	119.3	132.4	158.1	201.5	236.2	278.8	344.3
MAXIMUM	170.0	173.0	184.0	218.0	265.0	342.0	373.0	462.0	529.0
MINIMUM	40.0	41.0	42.0	45.0	54.0	74.0	93.0	110.0	181.0
STANDARD DEVIATION	30.24	30.99	33.00	39.61	43.36	59.98	64.53	77.52	95.38
SKWENESS	-0.024	-0.100	-0.143	0.055	0.129	0.129	0.083	0.103	0.175
STD ERROR OF SKWENESS	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388
SERIAL CORR COEFF	0.367	0.346	0.333	0.299	0.185	0.340	0.322	0.303	0.176
COEFF OF VARIATION	0.278	0.275	0.277	0.299	0.312	0.298	0.273	0.278	0.277
MEAN LOGS	2.017	2.034	2.057	2.100	2.175	2.283	2.356	2.427	2.520
STD DEVIATION LOGS	0.136	0.136	0.139	0.148	0.153	0.146	0.131	0.132	0.126
SKWENESS LOGS	-1.066	-1.171	-1.241	-1.109	-1.036	-1.057	-0.897	-0.796	-0.400
STD ERR SKWENESS LOGS	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388
SER CORR COEFF LOGS	0.354	0.388	0.317	0.296	0.208	0.273	0.306	0.311	0.200
COEFF OF VAR LOGS	0.068	0.067	0.067	0.071	0.071	0.064	0.055	0.054	0.050

STATION 12094000 CARBON RIVER NEAR FAIRFAX, WASH.

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1912-1965)

0.99	168.7	171.3	179.8	210.6	260.0	322.7	374.0	453.0	597.4
0.98	164.1	167.4	176.0	204.9	251.7	315.2	361.7	435.8	564.3
0.96	158.2	162.2	171.0	197.3	241.2	301.1	346.5	415.4	528.1
0.90	147.5	152.2	161.0	183.4	222.3	279.1	320.4	381.1	473.5
0.80	135.7	140.9	149.3	168.0	202.1	255.2	293.3	346.9	424.4
0.50	109.9	114.8	121.7	133.8	158.9	203.2	237.1	278.3	337.4
0.20	82.2	85.9	90.5	97.6	114.7	149.0	180.0	211.0	260.9
0.10	68.3	71.0	74.4	79.7	93.2	122.2	151.6	178.2	225.6
0.05	57.5	59.5	61.9	65.9	76.9	101.7	129.7	153.0	198.8
0.02	46.5	47.7	49.1	52.1	60.6	80.9	107.0	127.1	171.4
0.01	39.8	40.5	41.4	43.8	51.0	68.6	93.3	111.3	154.6

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1912-1965)

P95	P90	P75	P70	P50	P25	P10
130.0	160.0	220.0	240.0	340.0	530.0	760.0

STATION 12094000 CARBON RIVER NR FAIRFAX, WASH.									
HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30									
YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1930	1260.	1060.	895.	774.	649.	490.	459.	444.	429.
1931	1620.	1330.	842.	672.	563.	522.	503.	475.	412.
1932	3290.	2210.	1420.	1030.	847.	718.	659.	654.	581.
1933	4200.	2870.	2490.	1650.	1210.	875.	781.	648.	523.
1934	6790.	5090.	3170.	2950.	2090.	1510.	1170.	1070.	863.
1935	4520.	2910.	1620.	1330.	912.	684.	587.	609.	499.
1936	2110.	1680.	1250.	1030.	968.	861.	777.	680.	548.
1937	1460.	1290.	1130.	1000.	962.	800.	732.	655.	547.
1938	3660.	2380.	1610.	1370.	1120.	839.	742.	620.	535.
1939	1900.	1570.	1230.	798.	706.	651.	591.	564.	483.
1940	1560.	1210.	978.	795.	657.	481.	469.	463.	453.
1941	2600.	1750.	1170.	809.	528.	387.	340.	325.	302.
1942	2100.	1470.	1060.	909.	863.	751.	654.	592.	470.
1943	3410.	2060.	1290.	949.	806.	672.	573.	567.	479.
1944	3560.	1900.	1190.	744.	496.	455.	415.	376.	339.
1945	3260.	1840.	1560.	1110.	850.	725.	642.	561.	527.
1946	2880.	2220.	1360.	955.	754.	709.	666.	605.	533.
1947	4300.	3190.	2200.	1300.	1010.	743.	638.	595.	516.
1948	2260.	1770.	1190.	1020.	975.	795.	678.	603.	501.
1949	1490.	1240.	1170.	988.	872.	759.	691.	645.	555.
1950	2540.	1790.	1410.	1050.	914.	821.	745.	668.	634.
1951	3420.	3120.	2000.	1330.	989.	784.	816.	709.	614.
1952	1600.	1030.	758.	680.	626.	532.	504.	468.	399.
1953	2420.	1780.	1310.	1090.	1000.	641.	596.	539.	508.
1954	4170.	2290.	1630.	1240.	956.	715.	647.	579.	493.
1955	1950.	1860.	1580.	1160.	1030.	894.	792.	675.	541.
1956	3280.	2400.	1580.	1370.	981.	931.	776.	682.	544.
1957	3720.	2580.	1960.	1460.	902.	709.	608.	517.	484.
1958	1270.	1100.	828.	710.	627.	572.	553.	504.	453.
1959	2960.	1890.	1540.	1250.	1110.	942.	842.	728.	597.
1960	4980.	3970.	2710.	1650.	1200.	955.	805.	655.	548.
1961	2340.	1580.	1220.	1070.	808.	633.	566.	592.	545.
1962	2330.	1600.	1310.	1030.	832.	577.	499.	489.	436.
1963	3600.	2210.	1450.	1080.	902.	649.	579.	517.	474.
1964	2010.	1500.	1250.	1230.	1120.	969.	850.	749.	616.
1965	4850.	3330.	2170.	1360.	945.	761.	741.	631.	540.
1966									
1967									
1968									
1969									
1970									
1971									
1972									
1973									
1974									

ANNUAL PEAK-FLOW DATA
FLOW(CFS) DATE REG.(R)

1770.	02/05/30	
2950.	03/31/31	
5500.	02/26/32	
7100.	11/13/32	
11000.	12/09/33	
6500.	10/25/34	
2550.	06/07/36	
1810.	04/14/37	
5560.	04/18/38	
2640.	12/07/38	
1810.	05/01/40	
4040.	11/29/40	
2580.	12/19/41	
4760.	11/23/42	
5020.	12/03/43	
4370.	01/07/45	
4500.	12/28/45	
5960.	12/11/46	
4330.	11/07/47	
2440.	11/23/48	
3750.	11/27/49	
4770.	02/09/51	
2610.	10/03/51	
4580.	01/31/53	
6850.	12/09/53	
2490.	02/08/55	
6320.	12/11/55	
5280.	12/10/56	
1610.	12/06/57	
4310.	11/12/58	
9970.	11/23/59	
3360.	11/16/60	
3430.	04/06/62	
6460.	11/20/62	
2550.	01/25/64	
6800.	01/29/65	
1580.	/ / 66	
1950.	/ / 67	
7480.	/ / 68	
5390.	/ / 69	
2490.	/ / 70	
4850.	/ / 71	
3220.	/ / 72	
5000.	/ / 73	
7180.	/ / 74	

STATION 12094000 CARBON RIVER NEAR FAIRFAX, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1930-1974)

	2935.3	2085.3	1497.0	1137.3	910.7	736.4	658.2	596.1	514.6		W R C ESTIMATE	SYSTEMATIC RECORD
MEAN	2935.3	2085.3	1497.0	1137.3	910.7	736.4	658.2	596.1	514.6			
MAXIMUM	6790.0	5090.0	3170.0	2950.0	2090.0	1510.0	1170.0	1070.0	863.0			
MINIMUM	1260.0	1030.0	758.0	672.0	496.0	387.0	340.0	325.0	302.0			
STANDARD DEVIATION	1244.74	866.45	532.71	402.50	271.85	198.59	153.44	125.68	93.29			
SKWENESS	0.898	1.534	1.387	2.683	2.194	1.490	0.738	1.119	1.032			
STD ERROR OF SKWENESS	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393			
SERIAL CORR COEFF	0.140	0.129	0.175	0.288	0.240	0.221	0.240	0.212	0.119			
COEFF OF VARIATION	0.424	0.416	0.358	0.354	0.299	0.270	0.233	0.211	0.181			
MEAN LOGS	3.430	3.288	3.149	3.036	2.943	2.853	2.807	2.766	2.705		3.6004	3.6004
STD DEVIATION LOGS	0.184	0.163	0.142	0.128	0.117	0.112	0.102	0.091	0.078		0.2164	0.2164
SKWENESS LOGS	-0.034	0.449	0.459	0.899	0.349	0.079	-0.292	-0.243	-0.258		-0.0430	-0.1640
STD ERR SKWENESS LOGS	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393			
SER CORR COEFF LOGS	0.084	0.090	0.137	0.290	0.268	0.287	0.278	0.247	0.148			
COEFF OF VAR LOGS	0.054	0.050	0.045	0.042	0.040	0.039	0.036	0.033	0.029			

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1930-1974)

	0.99	0.95	0.90	0.80	0.70	0.60	0.50	0.40	0.30	0.20	0.10	0.05	0.02	0.01
0.99	995.6	919.1	735.6	666.2	503.2	398.1	353.3	346.4	322.4	320.4	1230.4	1177.5		
0.95	1337.3	1102.5	860.9	759.2	580.0	470.0	427.8	408.6	372.2	374.8	1744.8	1716.3		
0.90	1583.6	1256.3	944.1	774.8	629.0	514.1	471.5	444.7	400.6	409.1	2099.1	2086.9		
0.80	1887.8	1407.8	1064.3	844.6	697.6	573.8	528.3	491.2	436.7	447.4	2622.4	2631.3		
0.70	2700.3	1887.1	1373.4	1039.7	864.3	710.4	648.5	588.7	510.5	598.8	3998.8	4039.0		
0.60	3849.3	2632.0	1836.3	1361.6	1094.8	883.9	783.2	697.0	590.4	606.7	5998.0	6082.0		
0.50	4626.9	3183.8	2168.9	1610.1	1250.1	992.7	859.1	757.9	634.3	752.9	7476.2	7476.2		
0.40	5624.1	3950.5	2619.9	1966.4	1450.2	1125.2	943.7	825.7	682.5	9463.8	9264.2	9264.2		
0.30	6376.4	4573.9	2978.9	2264.3	1602.4	1221.0	1000.2	871.2	714.4	10961.5	10608.1	10608.1		
0.20	7136.1	5243.7	3558.2	2591.7	1757.6	1314.8	1052.2	913.0	743.6	12503.2	11958.2	11958.2		

STATION 12094400 SO PRAIRIE CREEK NR ENUMCLAW, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1964	61.3	140	117	207	98.2	90.5	134	157	237	120	79.2	84.4	127
1965	86.4	129	219	279	165	78.3	122	111	84.0	41.1	27.0	31.3	114
1966	61.8	63.4	68.3	104	51.3	103	132	128	126	90.6	28.7	29.6	82.4
1967	87.1	119	158	245	131	70.2	59.3	154	139	41.1	21.1	19.8	104
1968	104	102	154	132	191	90.6	101	130	143	41.9	91.0	107	115

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1964	1090.0	1-25-1964
1965	3290.0	1-29-1965
1966	425.0	3-30-1966
1967	630.0	1-28-1967
1968	1800.0	12-25-1967

STATION 12095000 SOUTH PRAIRIE CREEK AT SOUTH PRAIRIE, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1949													
1950	171	343	449	390	507	527	371	243	162	108	70.6	56.6	292
1951	220	468	537	451	656	352	195	199	263	130	67.5	55.2	275
1952	220	226	268	154	291	206	244	251	142	112	51.3	45.3	180
1953	34.0	35.2	61.5	510	401	186	281	252	320	156	84.9	35.2	195
1954	129	293	678	388	434	212	318	215	350	197	131	165	232
1955	126	221	235	258	340	209	361	324	283	246	84.7	50.5	233
1956	316	566	728	490	168	424	362	279	286	110	52.2	54.4	320
1957	203	250	569	126	301	461	295	272	147	110	57.1	56.4	234
1958	105	163	342	386	399	165	332	150	119	58.9	36.8	56.6	191
1959	101	613	467	495	228	259	267	267	273	96.1	46.2	188	276
1960	349	566	384	207	300	212	296	463	203	70.7	88.2	81.6	268
1961	174	665	282	329	624	350	300	292	159	60.1	43.1	50.1	274
1962	96.5	172	329	273	133	217	301	274	182	69.5	79.9	65.7	183
1963	106	325	343	210	386	215	359	222	161	143	70.0	60.2	215
1964	105	312	279	548	256	246	313	293	439	188	123	127	269
1965	159	297	554	638	453	181	280	226	133	88.5	51.9	48.1	257
1966	101	118	153	324	138	262	266	191	194	173	52.6	60.0	170
1967	156	242	369	618	348	224	192	276	207	173	52.6	34.9	230
1968	204	166	282	317	504	245	247	231	334	82.4	193	233	252
1969	234	390	484	547	201	242	331	354	303	123	48.9	75.3	279
1970	114	156	291	656	299	157	238	241	141	60.6	41.3	83.1	206
1971	118	208	318	683	370	316	268	278	284	175	52.1	76.6	262
1972													

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1949-1972)

MEAN	161.0	308.9	381.9	409.0	351.7	266.7	292.4	263.3	229.0	112.5	68.2	78.9	243.3
MAXIMUM	349.0	665.0	728.0	683.0	656.0	527.0	371.0	463.0	433.0	246.0	193.0	233.0	320.0
MINIMUM	34.0	35.2	61.5	126.0	133.0	157.0	192.0	150.0	112.0	51.3	36.5	34.9	170.0
STD DEVIATION	75.17	170.87	162.84	167.15	142.02	98.73	50.27	63.32	91.54	54.36	37.23	50.90	42.23
SKEDNESS	0.963	0.730	0.374	0.012	0.444	1.389	-0.309	1.362	0.584	0.884	2.106	2.012	-0.235
STD ERR SKEW	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.481	0.481	0.481	0.481	0.491
SER CORR COEFF	0.024	0.135	-0.292	0.013	-0.227	0.170	0.214	-0.004	0.001	0.188	-0.127	-0.154	-0.107
COEFF OF VAR	0.467	0.553	0.426	0.409	0.404	0.370	0.172	0.240	0.400	0.483	0.546	0.645	0.174
MEAN LOGS	2.160	2.415	2.534	2.570	2.509	2.402	2.459	2.409	2.327	2.006	1.788	1.837	2.380
STD DEV LOGS	0.217	0.286	0.232	0.206	0.191	0.142	0.079	0.099	0.174	0.201	0.190	0.216	0.079
SKEDNESS LOGS	-0.752	-1.139	-1.545	-0.740	-0.518	0.827	-0.731	0.209	0.094	0.314	1.019	1.184	-0.476
STD ERR SKEW LOGS	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.491	0.481	0.481	0.481	0.481	0.491
SER CORR LOGS	0.004	0.029	-0.260	-0.107	-0.295	0.049	0.214	-0.028	-0.013	0.111	-0.074	-0.117	-0.092
COEFF OF VAR LOGS	0.100	0.118	0.091	0.080	0.076	0.059	0.032	0.041	0.075	0.100	0.107	0.117	0.033
% OF AVE FLOW	5.5	10.6	13.1	14.0	12.0	9.1	10.0	9.0	7.8	3.8	2.3	2.7	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1949-1972)

0.99	34.7	33.5	57.0	95.8	98.7	143.9	171.7	156.3	86.1	38.4	30.8	33.3	147.9
0.95	58.0	74.4	120.4	155.9	147.8	160.6	206.6	178.8	111.2	49.3	34.6	36.9	174.0
0.90	74.2	107.6	168.1	197.0	180.5	172.5	225.9	192.6	127.7	59.9	37.5	40.0	188.7
0.80	97.6	159.8	237.5	255.7	226.5	190.6	249.6	211.4	151.3	68.2	42.3	45.2	207.0
0.50	153.7	294.0	390.2	393.8	335.3	241.3	294.4	257.7	210.9	98.9	57.1	62.4	243.1
0.20	221.5	454.3	530.4	558.3	470.4	325.6	336.5	310.3	296.5	148.4	85.5	99.0	279.8
0.10	259.5	536.5	585.7	650.0	550.2	391.2	356.8	345.6	355.6	186.0	110.6	133.7	298.8
0.04	300.5	615.5	628.1	748.2	640.9	486.2	376.6	389.1	432.8	239.4	150.7	193.4	318.7
0.02	326.4	659.9	647.1	810.4	701.8	566.4	388.4	420.8	492.2	283.4	187.9	252.4	331.3
0.01	349.1	694.6	659.4	864.7	757.7	655.1	398.3	452.2	553.0	331.2	232.4	326.7	342.4

STATION 12095000 SOUTH PRAIRIE CREEK AT SOUTH PRAIRIE, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1951	35.0	36.0	37.0	39.0	43.0	59.0	76.0	114.0	158.0
1952	24.0	25.0	28.0	29.0	34.0	35.0	41.0	59.0	98.0
1953	26.0	27.0	29.0	31.0	32.0	35.0	35.0	35.0	46.0
1954	41.0	42.0	42.0	43.0	52.0	58.0	81.0	96.0	160.0
1955	65.0	65.0	70.0	80.0	106.0	130.0	135.0	138.0	170.0
1956	43.0	43.0	45.0	48.0	50.0	61.0	105.0	154.0	213.0
1957	39.0	39.0	40.0	44.0	46.0	50.0	58.0	91.0	154.0
1958	38.0	40.0	42.0	44.0	46.0	55.0	59.0	65.0	100.0
1959	27.0	28.0	29.0	32.0	33.0	37.0	46.0	61.0	84.0
1960	34.0	36.0	37.0	41.0	44.0	63.0	90.0	135.0	175.0
1961	41.0	41.0	42.0	48.0	52.0	72.0	76.0	79.0	172.0
1962	38.0	39.0	40.0	41.0	42.0	46.0	48.0	60.0	91.0
1963	36.0	36.0	39.0	44.0	61.0	67.0	70.0	79.0	112.0
1964	44.0	44.0	47.0	48.0	51.0	60.0	64.0	88.0	123.0
1965	75.0	78.0	87.0	96.0	106.0	124.0	134.0	143.0	207.0
1966	24.0	24.0	25.0	28.0	40.0	48.0	53.0	65.0	86.0
1967	39.0	40.0	41.0	44.0	47.0	56.0	61.0	94.0	129.0
1968	25.0	29.0	29.0	30.0	34.0	35.0	43.0	68.0	111.0
1969	46.0	46.0	47.0	48.0	63.0	85.0	142.0	166.0	208.0
1970	33.0	33.0	34.0	35.0	39.0	49.0	74.0	83.0	125.0
1971	34.0	35.0	36.0	36.0	39.0	47.0	59.0	70.0	100.0

LOWEST MEAN FLOW STATISTICS (YEARS 1951-1971)

MEAN	38.4	39.3	41.2	44.2	50.5	60.5	73.8	92.5	134.4
MAXIMUM	75.0	78.0	87.0	96.0	106.0	130.0	142.0	166.0	213.0
MINIMUM	24.0	24.0	25.0	28.0	32.0	34.0	35.0	35.0	46.0
STANDARD DEVIATION	12.52	12.58	14.17	16.19	20.28	25.54	31.37	35.82	46.02
SKENNESS	1.582	1.770	2.084	2.191	2.116	1.765	1.101	0.686	0.171
STD ERROR OF SKENNESS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501
SERIAL CORR COEFF	-0.013	-0.048	-0.047	-0.048	-0.014	-0.068	-0.009	-0.006	-0.013
COEFF OF VARIATION	0.326	0.320	0.344	0.366	0.402	0.422	0.425	0.387	0.342
MEAN LOGS	1.566	1.577	1.596	1.625	1.678	1.752	1.855	1.935	2.101
STD DEVIATION LOGS	0.128	0.123	0.126	0.131	0.141	0.157	0.172	0.169	0.164
SKENNESS LOGS	0.613	0.750	1.053	1.226	1.364	0.811	0.408	-0.112	-0.742
STD ERR SKENNESS LOGS	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501	0.501
SER CORR COEFF LOGS	-0.016	-0.052	-0.059	-0.037	0.030	-0.037	0.014	0.033	-0.010
COEFF OF VAR LOGS	0.082	0.078	0.079	0.081	0.084	0.090	0.094	0.087	0.078

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1951-1971)

	0.99	0.98	0.96	0.90	0.80	0.70	0.60	0.50	0.40	0.30	0.20	0.10	0.05	0.02	0.01
0.99	82.9	84.8	86.0	109.6	136.9	161.6	192.6	206.4	246.7						
0.98	73.7	75.2	83.2	93.4	114.2	137.7	167.3	187.2	234.4						
0.96	65.1	66.2	71.8	79.3	94.9	116.5	143.8	167.8	220.0						
0.90	54.4	55.1	58.3	63.2	73.6	91.8	115.0	141.2	196.8						
0.80	46.5	47.2	49.1	52.5	60.0	75.0	94.3	119.8	174.4						
0.70	35.7	36.5	37.5	39.7	44.4	53.9	66.5	86.8	132.2						
0.60	28.6	29.6	30.8	32.7	36.4	41.5	48.7	62.3	93.8						
0.50	25.9	27.1	28.5	30.4	33.9	37.1	42.0	52.1	76.3						
0.40	24.0	25.4	27.0	29.0	32.5	34.2	37.4	44.9	63.3						
0.30	22.2	23.8	25.8	27.9	31.4	31.7	33.1	37.9	50.5						
0.20	21.2	22.9	25.1	27.3	30.8	30.3	30.7	33.8	43.0						

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1951-1971)

P95	P90	P75	P70	P50	P25	P10
41.0	49.0	98.0	120.0	190.0	300.0	470.0

STATION 12096500 PUYALLUP RIVER AT ALDERTON, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1915			657	1044	671	865	1327	1095	1209	1380	1310	607	
1916	1152	2284	2925	919	2929	3062	1658	1699	2182	2527	1354	884	1961
1917	519	1022	1640	1669	1812	1114	2180	1916	3276	2877	1378	998	1917
1918	694	620	5882	4296	2175	1297	1242	1349	1864	1475	1144	888	1917
1919	941	1076	2183	2249	1504	1436	2039	1861	1516	1398	1025	781	1502
1920	562	1744	1416	2387	1097	1112	1331	1198	1815	1640	1121	1506	1427
1921	2327	1318	2032	2794	2712	2041	1541	1714	2207	1588	1136	794	1831
1922	737	1628	3715	824	831	813	1209	2046	2179	1256	1005	847	1429
1923	741	869	1659	4243	1495	1505	1612	1921	2034	1788	1079	807	1651
1924	988	857	1829	1603	3127	817	1009	1433	1032	1068	919	636	1271
1925	830	2015	2755	1999	2033	1073	1397	1794	1371	1314	893	640	1507
1926	550	626	2680	1555	1651	1129	974	1259	1104	1120	1010	854	1209
1927	1423	1307	1774	1807									
1944	750	819	1813	1114	1203	1096	1022	1468	1441	1116	878	1164	1157
1945	678	799	993	2299	1875	1367	1634	2547	1425	1159	975	1153	1407
1946	880	2076	2134	2472	1963	1961	1703	2304	2653	2095	1136	731	1842
1947	1266	2085	3936	2232	1869	1249	1738	1569	1686	1186	1721	806	1695
1948	1994	2910	2004	1889	1873	1432	1674	2611	2840	1518	1260	1025	1917
1949	1209	2005	2335	874	1969	1562	1670	2534	1766	1431	924	776	1585
1950	1166	1958	2124	2264	2686	2777	1932	1802	2613	1995	1159	733	1929
1951	1624	2740	3070	2430	3703	1796	1448	1700	1512	1195	815	649	1879
1952	1720	1498	1501	850	1606	1133	1572	1772	1403	1327	884	587	1320
1953	386	217	433	3177	2353	1060	1548	1780	2093	1798	979	676	1370
1954	842	1516	3831	2169	2365	1298	1672	1678	2433	1891	1153	1230	1837
1955	1028	1619	1344	1543	1732	1155	1934	1800	2839	2376	1256	888	1623
1956	2191	3288	3836	2578	1308	2097	2251	2458	2540	1841	1043	851	2195
1957	1374	1599	3024	830	1745	2169	1493						

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1915-1957)

MEAN	1098.9	1557.5	2352.8	2004.1	1934.1	1477.5	1569.6	1812.3	1961.3	1614.3	1062.3	860.4	1631.6
MAXIMUM	2327.0	3288.0	5882.0	4296.0	3703.0	3062.0	2251.0	2611.0	3276.0	2877.0	1378.0	1506.0	2195.0
MINIMUM	386.0	217.0	433.0	824.0	671.0	813.0	974.0	1095.0	1032.0	1068.0	721.0	587.0	1157.0
STD DEVIATION	520.62	753.27	1177.33	929.15	700.04	572.76	333.61	419.70	606.85	474.36	170.25	219.17	275.10
SKWENESS	0.955	0.445	1.010	0.852	0.563	1.342	0.102	0.428	0.370	1.121	0.099	1.287	0.844
STD ERR SKEW	0.456	0.456	0.448	0.448	0.456	0.456	0.456	0.456	0.464	0.464	0.464	0.464	0.472
SER CORR COEFF	0.016	0.228	-0.256	-0.255	-0.123	-0.092	0.176	0.157	0.195	0.249	0.215	0.080	0.204
COEFF OF VAR	0.474	0.484	0.500	0.464	0.362	0.388	0.213	0.232	0.309	0.294	0.160	0.255	0.169
MEAN LOGS	2.996	3.132	3.314	3.256	3.257	3.142	3.186	3.247	3.272	3.192	3.021	2.923	3.207
STD DEV LOGS	0.201	0.257	0.242	0.209	0.169	0.152	0.096	0.101	0.137	0.118	0.071	0.102	0.075
SKWENESS LOGS	0.077	-1.161	-0.856	-0.227	-0.637	0.609	-0.446	-0.101	-0.132	0.611	-0.262	0.675	-0.235
STD ERR SKEW LOGS	0.456	0.456	0.448	0.448	0.456	0.456	0.456	0.456	0.464	0.464	0.464	0.464	0.472
SER CORR LOGS	0.011	0.131	-0.212	-0.258	-0.161	-0.108	0.221	0.116	0.257	0.231	0.153	0.165	0.253
COEFF OF VAR LOGS	0.067	0.082	0.073	0.064	0.052	0.048	0.030	0.031	0.042	0.037	0.023	0.035	0.023
% OF AVE FLOW	5.7	8.1	12.2	10.4	10.0	7.7	8.1	9.4	10.2	8.4	5.5	4.5	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1915-1957)

0.99	346.9	212.8	402.7	544.3	613.4	721.1	854.8	1009.9	869.5	934.1	695.9	545.0	1047.3
0.95	467.9	438.6	734.8	793.7	896.2	834.9	1039.7	1196.3	1099.3	1046.8	793.0	597.7	1199.4
0.90	550.1	612.2	977.9	963.5	1077.9	913.0	1146.3	1307.4	1242.4	1122.3	847.8	634.0	1285.9
0.80	670.6	875.0	1339.4	1210.3	1326.6	1028.8	1282.1	1457.1	1437.1	1231.5	916.8	684.1	1395.5
0.50	985.6	1514.8	2231.2	1835.1	1883.3	1340.2	1559.6	1773.1	1884.2	1513.0	1056.5	815.1	1619.8
0.20	1460.9	2234.5	3323.0	2712.0	2522.5	1835.3	1853.6	2150.8	2446.2	1933.0	1205.2	1008.2	1862.4
0.10	1800.7	2589.5	3928.9	3293.0	2875.6	2209.1	2010.9	2373.9	2793.0	2233.0	1286.1	1144.5	1995.9
0.04	2256.4	2922.6	4567.3	4020.4	3256.0	2736.5	2179.2	2633.1	3207.9	2638.9	1374.4	1326.5	2142.8
0.02	2814.1	3105.6	4962.6	4555.2	3492.7	3171.5	2287.6	2812.9	3502.6	2960.5	1432.3	1469.4	2240.2
0.01	2986.9	3246.9	5300.3	5083.2	3713.3	3644.5	2384.3	2983.3	3786.7	3299.4	1485.0	1618.7	2329.2

STATION 12096500 PUYALLUP RIVER AT ALDERTON, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1916	390.0	413.0	471.0	559.0	601.0	803.0	943.0	1040.0	1080.0
1917	436.0	436.0	474.0	501.0	511.0	650.0	790.0	895.0	1170.0
1918	430.0	442.0	485.0	523.0	580.0	646.0	746.0	861.0	1490.0
1919	528.0	551.0	604.0	613.0	787.0	866.0	952.0	1000.0	1210.0
1920	342.0	406.0	441.0	470.0	528.0	666.0	785.0	935.0	1090.0
1921	505.0	540.0	560.0	653.0	905.0	1150.0	1350.0	1400.0	1470.0
1922	460.0	483.0	510.0	592.0	695.0	740.0	743.0	882.0	1240.0
1923	362.0	395.0	414.0	432.0	519.0	721.0	748.0	801.0	955.0
1924	343.0	384.0	428.0	460.0	568.0	752.0	820.0	891.0	1170.0
1925	228.0	305.0	439.0	474.0	526.0	648.0	742.0	826.0	940.0
1926	270.0	303.0	331.0	348.0	426.0	541.0	578.0	668.0	895.0
1945	352.0	366.0	383.0	428.0	528.0	681.0	785.0	854.0	924.0
1946	465.0	526.0	573.0	591.0	760.0	927.0	1000.0	1000.0	1270.0
1947	384.0	386.0	412.0	452.0	507.0	715.0	892.0	1090.0	1590.0
1948	480.0	501.0	543.0	628.0	673.0	759.0	881.0	1070.0	1280.0
1949	565.0	568.0	571.0	587.0	695.0	975.0	1120.0	1190.0	1410.0
1950	498.0	515.0	554.0	595.0	719.0	786.0	903.0	1000.0	1240.0
1951	501.0	508.0	523.0	559.0	681.0	901.0	1150.0	1270.0	1640.0
1952	493.0	501.0	527.0	584.0	600.0	713.0	870.0	1020.0	1160.0
1953	150.0	153.0	171.0	171.0	207.0	274.0	343.0	402.0	611.0
1954	344.0	364.0	416.0	529.0	661.0	757.0	821.0	896.0	1300.0
1955	512.0	538.0	565.0	674.0	915.0	1090.0	1110.0	1150.0	1300.0
1956	500.0	507.0	551.0	633.0	846.0	964.0	1280.0	1580.0	1790.0
1957	500.0	500.0	529.0	606.0	756.0	887.0	1030.0	1180.0	1460.0

LOWEST MEAN FLOW STATISTICS (YEARS 1916-1957)

MEAN	418.2	441.3	477.5	527.8	633.2	775.5	888.8	995.9	1237.9
MAXIMUM	565.0	568.0	604.0	674.0	915.0	1150.0	1350.0	1580.0	1790.0
MINIMUM	150.0	153.0	171.0	171.0	207.0	274.0	343.0	402.0	611.0
STANDARD DEVIATION	103.61	98.66	96.54	112.22	159.46	182.24	217.17	238.21	265.71
SKEWNESS	-0.951	-1.138	-1.574	-1.495	-0.407	-0.331	-0.028	0.131	-0.117
STD ERROR OF SKEWNESS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472
SERIAL CORR COEFF	0.321	0.244	0.120	0.082	0.171	0.106	0.152	0.277	0.227
COEFF OF VARIATION	0.248	0.224	0.206	0.213	0.552	0.235	0.244	0.239	0.215
MEAN LOGS	2.605	2.631	2.666	2.709	2.785	2.875	2.934	2.985	3.082
STD DEVIATION LOGS	0.133	0.123	0.120	0.123	0.132	0.122	0.120	0.115	0.101
SKEWNESS LOGS	-1.761	-2.221	-2.827	-2.704	-1.871	-1.911	-1.414	-1.316	-0.950
STD ERR SKEWNESS LOGS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472
SER CORR COEFF LOGS	0.257	0.184	0.076	0.015	0.092	0.076	0.092	0.223	0.207
COEFF OF VAR LOGS	0.051	0.047	0.045	0.046	0.048	0.042	0.041	0.039	0.033

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1916-1957)

0.99	565.7	551.1	564.0	631.2	839.9	1002.1	1235.3	1390.7	1762.4
0.98	562.1	550.4	563.9	631.1	836.0	998.3	1219.4	1369.8	1720.4
0.96	555.8	548.6	563.5	630.7	828.8	991.2	1196.0	1340.3	1667.6
0.90	539.6	542.1	562.2	628.3	808.6	970.4	1146.0	1280.1	1573.8
0.80	514.9	528.5	556.9	620.7	775.8	935.7	1082.3	1206.4	1473.1
0.50	438.0	469.5	515.8	569.4	666.0	815.5	915.8	1021.8	1252.8
0.20	329.5	363.5	408.7	446.6	502.8	630.2	708.0	798.1	1011.8
0.10	268.2	297.0	331.8	361.4	408.5	520.2	594.3	676.5	884.9
0.05	219.1	241.8	265.6	288.9	332.6	430.0	502.9	576.5	782.7
0.02	168.3	183.7	195.3	212.4	254.0	334.7	406.3	474.4	672.6
0.01	138.2	148.9	153.7	167.4	207.3	277.1	347.2	410.1	603.0

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1916-1957)

	P95	P90	P75	P70	P50	P25	P10
540.0	660.0	930.0	1000.0	1300.0	2000.0	2800.0	

STATION 12096500 PUYALLUP RIVER AT ALDERTON, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW (CFS) DATE REG. (R)
1916	11400.	8110.	5840.	4080.	3200.	3020.	2560.	2600.	2370.	12800. 12/22/15
1917	6630.	4010.	3670.	3460.	3410.	3140.	2760.	2590.	2200.	9970. 12/13/16
1918	15900.	14300.	10800.	9890.	7770.	5550.	4200.	3500.	2790.	19300. 01/28/17
1919	12200.	7880.	5510.	3990.	2820.	2260.	2010.	1950.	1890.	17300. 01/23/19
1920	8360.	6010.	4730.	4040.	2780.	2160.	1850.	1680.	1620.	9440. 01/28/20
1921	11000.	7620.	7440.	5480.	3730.	3060.	2790.	2430.	2250.	12900. 12/30/20
1922	18400.	12100.	7870.	6140.	4640.	3280.	2790.	1790.	1690.	20000. 12/12/21
1923	15000.	12200.	9880.	6390.	4930.	3220.	2690.	2420.	2250.	16600. 01/06/23
1924	10200.	6410.	4930.	4270.	3180.	2410.	2190.	1920.	1650.	11700. 02/12/24
1925	8380.	6580.	5790.	3890.	3230.	2700.	2520.	2230.	1910.	11500. 12/11/24
1926	6730.	6280.	4360.	3560.	2740.	2130.	1970.	1780.	1540.	8820. 12/23/25
1927	9990.	6340.	4130.	2660.	1840.	1480.	1390.	1320.	1300.	8600. 10/16/26
1944	8960.	5640.	4770.	3730.	2560.	2140.	1890.	1900.	1880.	14600. 12/03/43
1945	9920.	7750.	5490.	4560.	3220.	2590.	2410.	2230.	2280.	12700. 01/07/45
1946	16600.	13800.	10300.	6330.	4750.	3280.	3020.	2680.	2250.	13900. 12/29/45
1947	10200.	7100.	4920.	3720.	3140.	2760.	2510.	2230.	2050.	22600. 12/11/46
1948	7830.	5000.	3960.	3280.	3080.	2270.	2120.	2100.	1900.	14600. 11/08/47
1949	8630.	7500.	5220.	4930.	3640.	3110.	2770.	2630.	2410.	10600. 02/17/49
1951	14200.	12200.	8650.	5460.	3930.	3290.	3430.	3030.	2560.	12400. 11/27/49
1952	4540.	3530.	2750.	2230.	1870.	1710.	1610.	1570.	1480.	17100. 02/11/51
1953	8320.	6890.	5530.	4720.	4170.	2760.	2210.	2090.	2060.	6280. 10/03/51
1954	12800.	9520.	7120.	5390.	3990.	3150.	2810.	2550.	2200.	11700. 02/01/53
1955	14600.	5220.	4110.	3160.	2950.	2630.	2390.	2240.	1940.	21900. 12/09/53
1956	14800.	9870.	6160.	5120.	4340.	3750.	3430.	3040.	2650.	9550. 02/08/55
1957										23300. 12/12/55
										11000. 12/10/56

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1916-1957)

W R C
ESTIMATESYSTEMATIC
RECORD

MEAN	10768.7	8010.8	5997.1	4603.3	3579.6	2806.2	2485.8	2270.8	2048.3	
MAXIMUM	18400.0	14300.0	10800.0	9890.0	7770.0	5550.0	4200.0	3500.0	2790.0	
MINIMUM	4540.0	3530.0	2750.0	2230.0	1840.0	1600.0	1390.0	1320.0	1300.0	
STANDARD DEVIATION	3552.52	2986.57	2158.95	1584.76	1206.04	776.65	627.89	509.00	381.14	
SKWENESS	0.499	0.761	0.936	1.588	1.786	1.594	0.794	0.426	-0.045	
STD ERROR OF SKWENESS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	
SERIAL CORR COEFF	-0.038	-0.166	-0.160	-0.092	-0.032	0.049	0.012	0.099	0.070	
COEFF OF VARIATION	0.330	0.373	0.360	0.344	0.337	0.284	0.253	0.224	0.186	
MEAN LOGS	4.009	3.876	3.753	3.641	3.533	3.433	3.383	3.346	3.304	
STD DEVIATION LOGS	0.147	0.160	0.150	0.138	0.134	0.116	0.108	0.098	0.084	4.1200
SKWENESS LOGS	-0.242	0.026	0.234	0.291	0.306	0.157	-0.018	-0.201	-0.455	0.1435
STD ERR SKWENESS LOGS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.1435
SER CORR COEFF LOGS	-0.081	-0.214	-0.175	-0.072	0.028	0.113	0.069	0.129	0.098	-0.0170
COEFF OF VAR LOGS	0.037	0.041	0.040	0.038	0.038	0.034	0.032	0.029	0.025	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1916-1957)

0.99	4381.7	3213.4	2697.1	2238.5	1789.9	1502.4	1347.3	1265.1	1205.5	6120.4	6087.4
0.95	5726.8	4111.3	3290.2	2668.5	2117.5	1768.7	1599.8	1507.4	1431.8	7659.6	7643.6
0.90	6559.4	4691.2	3675.6	2946.5	2328.8	1934.4	1752.8	1650.1	1559.9	8633.6	8626.9
0.80	7718.7	5507.1	4222.5	3339.4	2626.8	2161.1	1957.1	1835.9	1720.8	9981.4	9984.9
0.50	10350.4	7497.1	5584.2	4312.0	3362.1	2691.4	2414.8	2233.2	2042.6	13177.8	13193.9
0.20	13613.9	10229.2	7526.7	5690.6	4399.7	3385.0	2976.5	2687.4	2374.9	17405.0	17411.2
0.10	15593.1	12044.3	8866.1	6637.4	5110.0	3831.3	3181.9	2948.0	2549.4	20117.0	20117.0
0.04	17921.6	14346.0	10621.2	7875.1	6036.3	4385.7	3726.4	3243.8	2733.8	23517.5	23451.9
0.02	19548.6	16067.9	11975.0	8828.4	6793.9	4915.2	4444.6	3851.3	26002.6	25900.0	
0.01	21095.7	17797.3	13369.3	9809.4	7480.1	5199.3	4293.6	3631.7	2955.4	28462.7	28309.0

STATION 12096600 WHITE RIVER NEAR GREENWATER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1964													
1965	75.6	52.0	49.4	53.5	56.9	40.3	61.6	105	194	252	218	110	109
1966	63.3	61.1	40.0	40.3	24.6	34.9	64.1	154	193	251	263	101	109
1967	60.5	51.8	68.4	34.1	34.2	33.0	28.9	119	263	260	217	158	113
1968	93.2	64.8	62.5	103	69.5	56.3	37.0	110	344	322	229	174	139
1969	76.2	108	68.0	40.8	28.0	31.8	49.3	148	323	285	223	144	128
1970	59.2	55.3	43.0	42.0	33.0	32.6	32.1	99.2	339	383	250	132	126

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1965	365.0	7-27-1965
1966	401.0	7-19-1966
1967	542.0	6-19-1967
1968	650.0	6-2-1968
1969	606.0	6-18-1969
1970	652.0	6-21-1970

STATION 12096800 DRY CREEK NEAR GREENWATER, WASH.

ANNUAL PEAK FLOW STATISTICS (YEARS 1957-1975)

W R C
ESTIMATE
RECORD

1.3201
0.2471
0.0

MEAN LOGS
STANDARD DEVIATION LOGS
SKEWNESS LOGS

ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES
LOG-PEARSON III ANALYSIS (YEARS 1957-1975)

5.6
8.2
10.1
12.9
20.9
33.7
43.3
56.6
67.2
78.5

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1957	37.0	12-10-1956
1958	14.0	4-20-1958
1959	21.0	11-12-1958
1960	48.0	10-22-1959
1961	11.0	6-0-1961
1962	15.0	1-7-1962
1963	14.0	2-3-1963
1964	12.0	6-2-1964
1965	67.0	1-29-1965
1966	14.0	5-6-1966
1967	21.0	5-20-1967
1968	39.0	12-25-1967
1969	23.0	1-5-1969
1970	15.0	1-22-1970
1971	29.0	1-31-1971
1972	20.0	6-9-1972
1973	7.0	12-21-1972
1974	37.0	1-15-1974
1975	21.0	6-2-1975

STATION 12096950 JIM CHEEK NEAR GREENWATER, WASH.

ANNUAL PEAK FLOW DATA		ANNUAL PEAK FLOW STATISTICS (YEARS 1965-1975)			W R C		SYSTEMATIC	
WATER YEAR	FLOW (CFS)	DATE	MEAN LOGS	STANDARD DEVIATION LOGS	ESTIMATE	RECORD		
1965	291.0	1-29-1965			2.2166	2.2166		
1966	106.0	5- 6-1966			0.1472	0.1472		
1967	104.0	5-20-1967			0.0	0.071		
1968	204.0	12-25-1967						
1969	141.0	1- 1-1969						
1970	118.0	1-22-1970						
1971	162.0	1-31-1971						
1972	208.0	2-28-1972						
1973	139.0	12-21-1972						
1974	221.0	1-15-1974						
1975	214.0	1-18-1975						
			ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES					
			LOG-PEARSON III ANALYSIS (YEARS 1965-1975)					
			0.99		74.8	76.2		
			0.95		94.3	94.9		
			0.90		106.6	106.9		
			0.80		123.8	123.6		
			0.50		164.7	164.0		
			0.20		219.0	218.7		
			0.10		254.2	254.9		
			0.04		298.1	300.5		
			0.02		330.3	334.6		
			0.01		362.3	368.8		

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1929	238	173	341	230	877	605	490	1219	1357	979	707	376	
1930	321	252	234	605	545	537	923	1388	1023	762	615	401	575
1931	326	503	576	699	811	1148	1037	1349	1723	1163	622	379	861
1932	364	1749	915	853	318	458	749	1233	2379	1902	632	556	1041
1933	946	1009	3648	1893	889	1177	1334	1130	898	761	671	431	1222
1934	656	1359	926	1305	897	633	646	1111	1396	988	646	509	922
1935	299	220	269	618	292	579	1012	1548	1545	881	663	451	922
1936	324	188	388	162	356	537	819	1358	1817	1242	637	485	717
1937	394	1195	992	828	296	488	1106	1531	2182	1116	608	502	916
1938	325	427	583	604	641	681	1009	1325	1163	916	645	406	707
1939	286	299	730	564	679	693	746	1267	1006	753	593	675	675
1940	433	420	631	447	368	398	566	834	890	793	615	426	570
1941	478	603	1040	456	454	352	655	950	1448	1116	710	424	727
1943	303	786	812	584	704	539	1227	1007	1447	1314	673	486	828
1944	357	325	588	349	446	380	542	943	1066	740	543	437	558
1945	309	329	436	869	778	456	632	1625	1427	991	555	410	735
1946	1946	644	777	779	516	737	1031	1855	1692	1354	802	469	923
1947	468	710	1462	841	899	735	971	1538	1247	839	576	481	898
1948	1114	1140	800	739	581	499	690	1592	2652	1088	691	467	1004
1949	466	643	649	432	581	762	1121	2280	1762	1128	666	473	915
1950	414	960	769	655	694	924	892	1570	2660	1874	862	552	1070
1951	818	1448	1536	727	1313	624	1169	1504	1484	1129	638	422	1065
1952	556	544	501	330	642	428	970	1407	1249	1004	625	433	724
1953	341	227	293	1043	978	416	665	1149	1302	1404	715	500	747
1954	490	598	1312	647	843	552	690	1352	1416	1531	758	529	900
1955	432	624	514	525	688	320	572	985	2395	1573	846	591	838
1956	863	1592	1490	726	400	457	1260	2225	2200	1791	898	569	1208
1957	520	690	1515	605	535	854	937	1753	1395	817	609	520	897
1958	377	416	648	776	852	504	737	1744	1562	950	720	449	811
1959	559	1547	1569	1422	677	597	961	1216	1806	1398	749	731	1107
1960	1196	1849	1210	557	799	630	912	1245	1630	1078	655	462	1017
1961	433	968	674	852	1312	838	804	1338	2166	1165	839	482	985
1962	404	472	813	1139	520	413	1052	887	1401	1098	716	527	788
1963	494	1201	1276	600	1053	552	769	1000	1128	800	637	507	832
1964	399	534	1048	695	551	526	735	1187	2178	1670	864	527	877
1965	510	519	1375	1375	1119	654	901	1104	1451	968	757	463	905
1966	397	406	362	394	303	545	981	1369	1303	1124	690	512	701
1967	438	570	1037	959	770	524	468	1332	2151	1357	810	578	917
1968	668	706	1090	1313	1248	583	1033	1626	1950	950	683	687	948
1969	533	967	761	821	371	507	876	1798	1950	876	593	498	881
1970	403	434	482	951	752	541	537	1127	1788	1055	627	468	763
1971	362	536	657	1131	1107	522	634	1580	1575	1684	904	501	938
1972	380	501	575	698	1067	1738	886	1806	2168	1601	856	560	1072
1973	411	424	949	787	399	382	433	902	1007	1810	596	449	631
1974	351	633	871	1403	665	661	870	1211	2660	1898	1023	557	1069
1975	320	369	685	998	571	637	475	1333	2030	1637	829	518	869
1976													

STATION 12097000 WHITE RIVER AT GREENWATER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1929-1976)

MEAN	475.0	712.7	872.7	778.0	694.7	619.6	827.5	1345.6	1632.5	1166.3	709.5	489.9	862.7
MAXIMUM	1196.0	1847.0	3648.0	1693.0	1313.0	1738.0	1334.0	2280.0	2660.0	1902.0	1023.0	731.0	1222.0
MINIMUM	238.0	173.0	234.0	162.0	256.0	320.0	433.0	834.0	890.0	740.0	543.0	365.0	558.0
STD DEVIATION	268.10	433.95	553.14	332.47	279.12	248.49	224.63	335.33	488.14	342.05	118.65	72.61	162.89
SKEWNESS	2.027	1.107	2.939	0.704	0.499	2.498	0.189	0.770	0.504	0.738	0.932	1.034	0.095
STD ERR SKEW	0.350	0.350	0.350	0.350	0.350	0.350	0.347	0.347	0.347	0.347	0.347	0.347	0.350
SER CORR COEFF	0.183	0.202	0.031	0.148	-0.083	-0.157	-0.134	0.249	0.039	0.065	0.061	0.190	0.272
COEFF OF VAR	0.438	0.609	0.634	0.427	0.402	0.401	0.271	0.249	0.299	0.293	0.167	0.148	0.189
MEAN LOGS	2.646	2.777	2.877	2.869	2.805	2.767	2.901	3.116	3.194	3.050	2.845	2.686	2.928
STD DEV LOGS	0.154	0.261	0.234	0.204	0.183	0.142	0.123	0.105	0.130	0.122	0.069	0.062	0.084
SKEWNESS LOGS	1.134	-0.007	0.073	-0.775	-0.270	0.990	-0.331	0.162	-0.347	0.347	0.640	0.471	-0.336
STD ERR SKEW LOGS	0.350	0.350	0.350	0.350	0.350	0.350	0.347	0.347	0.347	0.347	0.347	0.347	0.350
SER CORR LOGS	0.253	0.244	0.104	0.100	-0.029	-0.120	-0.103	0.247	0.089	0.064	0.072	0.241	0.292
COEFF OF VAR LOGS	0.058	0.094	0.081	0.072	0.085	0.051	0.042	0.034	0.041	0.040	0.024	0.023	0.029
% OF AVE FLOW	4.6	6.9	8.5	7.5	6.7	6.0	8.0	13.0	15.8	11.3	6.9	4.7	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1929-1976)

0.99	260.5	147.9	221.4	183.3	220.2	347.0	385.1	764.8	771.1	625.3	521.7	366.0	514.4
0.95	282.4	223.0	314.1	298.5	309.3	379.6	487.6	886.7	950.8	726.0	556.6	391.6	605.0
0.90	299.7	277.5	379.4	377.2	367.9	404.0	549.5	961.8	1062.5	790.6	579.2	407.6	656.7
0.80	327.9	361.6	478.0	489.0	450.7	442.4	631.3	1063.6	1214.5	881.3	611.1	429.3	722.4
0.50	414.8	599.5	748.4	749.5	651.0	554.2	809.3	1298.4	1565.6	1103.0	688.7	479.5	856.5
0.20	576.2	992.9	1184.1	1054.9	915.2	748.9	1014.6	1599.4	2012.8	1412.2	795.1	544.3	1000.1
0.10	712.9	1292.0	1510.3	1222.3	1082.3	905.6	1132.2	1790.9	2292.9	1622.0	865.7	585.3	1078.0
0.05	924.5	1710.5	1963.2	1399.3	1284.3	1138.4	1264.8	2025.8	2632.7	1893.8	955.5	635.7	1162.8
0.02	1114.2	2050.1	2329.2	1509.9	1428.4	1339.3	1354.0	2147.2	2877.3	2101.6	1022.9	677.5	1218.2
0.01	1334.9	2412.5	2719.4	1605.4	1567.5	1565.9	1436.3	2366.2	3115.8	2314.1	1040.9	708.8	1266.3

STATION 12097000 WHITE RIVER AT GREENWATER, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1930	149.0	144.0	149.0	155.0	164.0	190.0	223.0	246.0	335.0
1931	201.0	205.0	210.0	218.0	230.0	243.0	245.0	277.0	374.0
1932	216.0	228.0	226.0	228.0	251.0	251.0	319.0	395.0	469.0
1933	262.0	288.0	307.0	308.0	316.0	369.0	442.0	572.0	761.0
1934	390.0	405.0	424.0	461.0	496.0	574.0	789.0	844.0	1250.0
1935	176.0	186.0	222.0	249.0	283.0	416.0	507.0	568.0	743.0
1936	160.0	172.0	193.0	210.0	215.0	229.0	259.0	317.0	371.0
1937	140.0	140.0	147.0	149.0	151.0	198.0	242.0	233.0	294.0
1938	252.0	256.0	265.0	276.0	322.0	417.0	480.0	580.0	711.0
1939	242.0	247.0	255.0	274.0	316.0	375.0	405.0	454.0	456.0
1940	242.0	244.0	251.0	267.0	275.0	291.0	322.0	383.0	478.0
1941	247.0	254.0	267.0	273.0	306.0	371.0	405.0	458.0	449.0
1942	247.0	247.0	295.0	314.0	350.0	401.0	420.0	528.0	568.0
1943	241.0	248.0	253.0	260.0	281.0	353.0	408.0	508.0	591.0
1944	241.0	243.0	251.0	265.0	324.0	341.0	384.0	399.0	404.0
1945	248.0	249.0	252.0	275.0	297.0	313.0	353.0	367.0	452.0
1946	283.0	309.0	316.0	330.0	352.0	384.0	440.0	481.0	568.0
1947	271.0	272.0	284.0	297.0	337.0	432.0	494.0	594.0	770.0
1948	355.0	358.0	366.0	381.0	455.0	524.0	603.0	652.0	787.0
1949	298.0	303.0	307.0	320.0	337.0	434.0	480.0	524.0	524.0
1950	286.0	287.0	290.0	309.0	360.0	416.0	466.0	538.0	630.0
1951	360.0	364.0	395.0	472.0	500.0	645.0	729.0	799.0	978.0
1952	250.0	254.0	258.0	263.0	299.0	396.0	445.0	465.0	491.0
1953	167.0	173.0	179.0	263.0	299.0	396.0	445.0	465.0	491.0
1954	480.0	480.0	480.0	480.0	480.0	480.0	480.0	480.0	480.0
1955	268.0	271.0	273.0	287.0	291.0	312.0	312.0	312.0	312.0
1956	314.0	318.0	323.0	343.0	359.0	418.0	458.0	499.0	572.0
1957	327.0	330.0	335.0	346.0	374.0	525.0	584.0	642.0	731.0
1958	249.0	257.0	266.0	305.0	366.0	395.0	435.0	470.0	538.0
1959	340.0	343.0	354.0	366.0	425.0	498.0	555.0	638.0	962.0
1960	388.0	403.0	417.0	417.0	465.0	643.0	637.0	745.0	1030.0
1961	302.0	305.0	315.0	333.0	392.0	431.0	481.0	582.0	672.0
1962	319.0	330.0	340.0	351.0	379.0	391.0	436.0	476.0	621.0
1963	315.0	342.0	370.0	398.0	488.0	499.0	521.0	607.0	746.0
1964	311.0	313.0	330.0	375.0	395.0	416.0	467.0	500.0	547.0
1965	247.0	259.0	303.0	326.0	366.0	458.0	493.0	597.0	711.0
1966	274.0	277.0	280.0	285.0	299.0	345.0	341.0	359.0	381.0
1967	272.0	276.0	287.0	327.0	422.0	450.0	481.0	544.0	691.0
1968	330.0	352.0	375.0	418.0	445.0	540.0	630.0	644.0	799.0
1969	314.0	334.0	346.0	342.0	350.0	383.0	550.0	614.0	653.0
1970	312.0	318.0	326.0	338.0	374.0	394.0	421.0	437.0	499.0
1971	283.0	287.0	290.0	301.0	323.0	362.0	409.0	471.0	565.0
1972	319.0	324.0	353.0	369.0	374.0	422.0	444.0	470.0	550.0
1973	240.0	250.0	267.0	340.0	367.0	391.0	441.0	447.0	562.0
1974	294.0	299.0	317.0	333.0	344.0	379.0	424.0	495.0	589.0
1975	237.0	250.0	265.0	280.0	285.0	331.0	368.0	451.0	588.0

STATION 12097000 WHITE RIVER AT GREENWATER, WASH.

LOWEST MEAN FLOW STATISTICS (YEARS 1930-1975)

MEAN	274.3	281.1	292.8	311.2	343.8	401.4	452.5	513.1	619.9
MAXIMUM	390.0	405.0	424.0	472.0	500.0	645.0	789.0	844.0	1250.0
MINIMUM	139.0	140.0	147.0	149.0	151.0	149.0	223.0	233.0	294.0
STANDARD DEVIATION	59.73	60.60	62.93	69.78	80.94	99.99	117.79	138.63	197.18
SKEWNESS	-0.409	-0.382	-0.247	-0.064	-0.116	0.177	0.408	0.227	0.945
STD ERROR OF SKEWNESS	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350
SERIAL CORR COEFF	0.328	0.316	0.287	0.291	0.291	0.292	0.312	0.298	0.246
COEFF OF VARIATION	0.218	0.216	0.215	0.224	0.235	0.249	0.260	0.270	0.318
MEAN LOGS	2.427	2.438	2.456	2.481	2.523	2.589	2.641	2.693	2.772
STD DEVIATION LOGS	0.105	0.104	0.102	0.106	0.113	0.116	0.119	0.126	0.134
SKEWNESS LOGS	-1.063	-1.053	-0.965	-0.913	-0.990	-0.773	-0.573	-0.659	0.065
STD ERR SKEWNESS LOGS	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350
SER CORR COEFF LOGS	0.394	0.381	0.355	0.373	0.371	0.358	0.377	0.342	0.265
COEFF OF VAR LOGS	0.043	0.043	0.042	0.043	0.045	0.045	0.045	0.047	0.048

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1930-1975)

0.99	388.6	397.1	417.4	452.9	504.4	621.0	734.7	839.5	1233.0
0.98	380.4	388.7	407.6	441.0	491.7	599.6	702.3	803.9	1128.7
0.96	369.8	377.8	395.1	426.2	475.7	574.1	665.6	762.8	1023.7
0.90	350.1	357.8	372.9	400.3	446.9	531.4	607.4	696.5	881.1
0.80	328.3	335.7	349.0	373.0	415.9	488.5	552.4	632.6	766.6
0.50	278.6	285.4	296.4	314.2	347.8	401.9	448.5	509.6	589.4
0.20	222.7	228.8	238.7	251.2	273.9	314.9	351.0	392.5	455.4
0.10	192.9	198.7	208.3	218.6	235.6	271.6	304.1	336.0	398.7
0.05	168.9	174.3	183.8	192.5	205.1	237.6	267.9	292.6	357.6
0.02	143.2	148.2	157.5	164.5	172.7	202.0	230.1	247.6	316.7
0.01	127.0	131.7	140.9	147.0	152.6	179.9	206.8	220.0	292.2

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1930-1975)	
P95	P90
290.0	350.0
P75	P70
460.0	500.0
P50	P25
690.0	1100.0
P10	
1600.0	

STATION 12097000 WHITE RIVER AT GREENWATER, WASH.												
HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30												
YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA		
										FLOW (CFS)	DATE	REG. (R)
1930	1470.	1370.	1360.	1090.	1000.	942.	940.	906.	821.	2000.	02/19/30	
1931	2100.	1990.	1880.	1660.	1410.	1230.	1100.	1020.	877.	2740.	03/31/31	
1932	4990.	4430.	2830.	2010.	1800.	1560.	1430.	1380.	1250.	8600.	02/26/32	
1933	5190.	4200.	3560.	2720.	2420.	2190.	1870.	1680.	1300.	6460.	11/17/32	
1934	12600.	10100.	6680.	5630.	3930.	2780.	2170.	1930.	1660.	18100.	12/21/33	
1935	4000.	3800.	3070.	2250.	1770.	1270.	1200.	1190.	1040.	5440.	11/05/34	
1936	2400.	2200.	1980.	1830.	1770.	1680.	1520.	1340.	1070.	2470.	05/14/36	
1937	3800.	3330.	2620.	2370.	2210.	1840.	1610.	1420.	1130.	4210.	06/21/37	
1938	4640.	3250.	2460.	2160.	1940.	1700.	1600.	1420.	1110.	5440.	04/18/38	
1939	2290.	1920.	1630.	1400.	1340.	1250.	1180.	1140.	963.	2470.	05/29/39	
1940	1550.	1500.	1380.	1320.	1270.	1140.	1030.	953.	863.	1780.	12/16/39	
1941	2140.	1470.	1120.	993.	952.	891.	845.	798.	691.	2690.	11/29/40	
1942	2080.	1780.	1690.	1600.	1520.	1380.	1210.	1070.	885.	2500.	12/02/41	
1943	2890.	2220.	1760.	1630.	1570.	1450.	1280.	1260.	1060.	4770.	11/23/42	
1944	2120.	1530.	1200.	1150.	1110.	1010.	921.	835.	713.	2500.	12/03/43	
1945	3060.	2210.	2030.	1750.	1650.	1530.	1370.	1210.	999.	4080.	01/07/45	
1946	4000.	2880.	2190.	2050.	1940.	1800.	1670.	1520.	1260.	5620.	12/29/45	
1947	5260.	4550.	3290.	2110.	1600.	1420.	1290.	1170.	1110.	7460.	12/11/46	
1948	4730.	4250.	3630.	3230.	2960.	2210.	1800.	1560.	1220.	5000.	05/28/48	
1949	3860.	3620.	3550.	2830.	2430.	2050.	1800.	1600.	1310.	4220.	05/13/49	
1950	5140.	3680.	3460.	2940.	2740.	2420.	2070.	1780.	1490.	8270.	11/21/49	
1951	4230.	3980.	3090.	2270.	1890.	1540.	1420.	1330.	1210.	5550.	02/09/51	
1952	2100.	2040.	1830.	1770.	1680.	1380.	1300.	1170.	956.	2190.	05/20/52	
1953	2990.	2540.	2040.	1780.	1530.	1390.	1320.	1200.	1010.	4020.	01/31/53	
1954	3680.	2730.	2440.	1930.	1780.	1560.	1470.	1290.	1070.	5560.	12/09/53	
1955	4840.	4660.	4030.	2980.	2430.	2000.	1710.	1470.	1160.	5160.	06/11/55	
1956	6650.	4410.	3580.	3190.	2740.	2380.	2120.	1910.	1500.	11100.	12/12/55	
1957	5780.	3940.	3030.	2340.	1760.	1610.	1370.	1240.	1110.	6860.	12/10/56	
1958	3150.	3050.	2840.	2360.	1980.	1680.	1450.	1300.	1070.	3360.	05/25/58	
1959	3790.	2980.	2230.	2030.	1860.	1630.	1560.	1350.	1160.	5230.	11/12/58	
1960	10300.	6930.	4610.	2860.	2170.	1700.	1430.	1230.	1060.	14300.	11/23/59	
1961	3500.	3190.	2740.	2330.	2210.	1840.	1570.	1390.	1270.	3660.	06/18/61	
1962	3390.	2510.	2420.	1850.	1500.	1270.	1140.	1120.	947.	4580.	01/07/62	
1963	7000.	4200.	2820.	2020.	1780.	1330.	1180.	1040.	929.	9280.	11/20/62	
1964	3040.	2790.	2690.	2480.	2240.	2000.	1730.	1490.	1200.	3400.	06/01/64	
1965	8360.	6250.	4110.	2630.	1780.	1340.	1260.	1150.	1140.	10400.	01/29/65	
1966	2570.	2320.	2090.	1620.	1400.	1360.	1280.	1210.	1010.	2740.	05/06/66	
1967	3120.	2990.	2750.	2490.	2200.	1960.	1650.	1430.	1120.	3270.	06/21/67	
1968	4700.	3850.	2610.	1910.	1630.	1420.	1290.	1130.	1150.	6780.	12/25/67	
1969	3400.	2740.	2640.	2530.	2300.	1920.	1580.	1390.	1120.	4090.	01/05/69	
1970	2880.	2510.	2330.	1940.	1800.	1570.	1340.	1160.	1030.	3430.	01/23/70	
1971	3500.	2970.	2050.	1890.	1700.	1640.	1620.	1470.	1210.	4350.	01/30/71	
1972	3810.	3160.	2830.	2770.	2370.	2100.	1880.	1680.	1580.	4580.	02/28/72	
1973	2940.	2460.	2110.	1570.	1240.	1010.	929.	838.	700.	3740.	12/21/72	
1974	5800.	4920.	3540.	3200.	2720.	2290.	1960.	1730.	1400.	8540.	01/15/74	
1975	3610.	2970.	2800.	2340.	2090.	1950.	1700.	1470.	1160.	4460.	01/18/75	
1976										13900.	12/02/75	
1978										17800.	12/02/77	

STATION 12097000 WHITE RIVER AT GREENWATER, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1930-1978)										W R C		SYSTEMATIC RECORD
										ESTIMATE		
MEAN	4118.3	3338.5	2687.8	2213.1	1911.3	1643.8	1460.1	1312.4	1110.7			
MAXIMUM	12600.0	10100.0	6680.0	5630.0	3930.0	2780.0	2170.0	1930.0	1660.0			
MINIMUM	1470.0	1370.0	1120.0	993.0	952.0	891.0	845.0	798.0	691.0			
STANDARD DEVIATION	2156.71	1567.51	995.43	762.23	559.53	417.89	322.68	268.15	211.21			
SKWENESS	2.024	2.096	1.474	1.961	1.089	0.473	0.237	0.278	0.355			
STD ERROR OF SKWENESS	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350			
SERIAL CORR COEFF	0.091	0.190	0.372	0.272	0.189	0.168	0.189	0.177	0.150			
COEFF OF VARIATION	0.524	0.470	0.370	0.344	0.293	0.254	0.221	0.204	0.190			
MEAN LOGS	3.569	3.485	3.403	3.323	3.264	3.202	3.154	3.109	3.038			
STD DEVIATION LOGS	0.196	0.180	0.154	0.138	0.123	0.112	0.098	0.091	0.084			
SKWENESS LOGS	0.409	0.318	-0.047	0.121	0.010	-0.174	-0.290	-0.282	-0.319			
STD ERR SKWENESS LOGS	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350	0.350			
SER CORR COEFF LOGS	0.253	0.365	0.507	0.393	0.247	0.185	0.206	0.182	0.162			
COEFF OF VAR LOGS	0.055	0.052	0.045	0.041	0.038	0.035	0.031	0.029	0.028			
HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1930-1978)												
0.99	1484.4	1287.9	1092.6	1034.8	950.1	847.3	801.8	758.3	665.2	1410.8	1633.4	
0.95	1862.4	1610.9	1402.3	1262.6	1151.7	1030.3	964.1	897.8	780.6	1993.3	2120.6	
0.90	2124.1	1828.9	1600.2	1407.3	1276.4	1140.2	1059.1	978.6	846.6	2409.3	2475.7	
0.80	2515.9	2148.6	1875.6	1608.4	1445.8	1285.5	1181.9	1082.2	930.5	3046.2	3031.9	
0.50	3590.9	2991.8	2534.0	2090.9	1836.1	1604.1	1440.3	1297.9	1102.2	4845.5	4689.9	
0.20	5353.7	4297.3	3410.1	2743.0	2333.3	1980.7	1728.3	1535.2	1286.7	7866.8	7755.8	
0.10	6716.2	5259.1	3976.6	3172.7	2645.4	2202.4	1889.7	1667.0	1387.3	10219.2	10372.1	
0.04	8673.2	6587.3	4679.2	3715.9	3024.9	2458.6	2069.3	1812.8	1497.1	13593.3	14450.8	
0.02	10311.0	7660.5	5194.6	4121.6	3299.0	2635.4	2189.1	1909.7	1569.2	16401.8	18121.3	
0.01	12110.6	8806.8	5704.1	4528.9	3566.9	2802.2	2299.1	1998.4	1634.5	19466.4	22396.8	

STATION 12097500 GREENWATER RIVER AT GREENWATER, WASH.
MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1912	46.6	405	179	374	314	79.5							
1929								486	368	129	57.8	40.4	
1930	33.6	30.3	64.4	46.3	216	214	313	256	200	78.5	41.2	31.5	126
1931	38.8	54.5	54.0	119	136	162	263	323	142	79.6	45.3	41.7	121
1932	71.6	125	171	212	212	411	410	501	430	120	58.1	38.2	222
1933	51.9	569	272	310	87.7	140	276	458	711	302	95.9	68.7	279
1934	170	287	1116	597	312	376	407	237	101	51.6	36.5	31.4	311
1935	126	315	276	440	316	189	199	237	353	123	65.1	40.5	234
1936	38.7	47.9	61.1	196	70.3	203	422	611	368	111	55.8	42.4	186
1937	36.2	29.7	108	45.3	72.4	178	260	469	500	155	68.8	52.8	165
1938	69.9	322	337	296	116	145	364	506	304	89.7	47.5	34.5	220
1939	36.7	83.4	226	255	129	273	405	451	271	123	54.1	45.3	197
1940	39.3	60.9	163	120	205	189	194	310	127	123	38.2	33.1	128
1941	36.3	78.9	139	106	80.7	77.5	136	158	135	62.1	41.3	57.9	192.4
1942	137	166	289	120	130	105	245	307	415	156	70.3	43.6	182
1943	40.5	157	276	189	217	165	421	345	417	193	69.6	42.8	210
1944	41.8	50.1	124	68.2	110	104	182	285	205	82.0	46.2	47.5	112
1945	39.4	42.0	88.5	282	204	140	227	548	300	99.8	46.6	70.0	174
1946	92.6	192	249	241	178	251	352	643	516	177	70.0	49.7	241
1947	77.2	163	533	263	245	270	341	408	255	111	58.1	47.1	231
1948	181	504	320	225	177	135	433	605	747	184	92.3	72.1	290
1949	86.3	156	159	102	171	282	433	833	425	160	67.3	45.3	244
1950	64.7	180	226	203	240	286	291	575	900	371	102	57.2	291
1951	94.0	328	400	235	327	175	411	528	319	114	57.5	43.1	252
1952	69.5	97.2	118	276	158	118	323	391	218	119	55.5	38.3	147
1953	32.1	32.9	35.0	64.4	297	124	206	364	357	191	71.9	47.7	169
1954	48.0	89.4	483	228	290	153	227	517	453	283	97.4	64.4	244
1955	70.8	93.2	116	155	235	90.6	182	363	736	301	102	67.3	208
1956	172	457	406	211	113	149	457	764	544	241	88.9	61.0	306
1957	80.1	167	427	145	124	221	322	511	231	89.1	53.9	38.1	202
1958	41.2	58.7	172	219	222	147	263	429	198	77.0	45.5	42.3	159
1959	104	436	484	441	205	182	292	381	397	151	65.6	129	272
1960	347	567	345	129	183	189	300	368	312	120	72.4	61.9	249
1961	50.1	255	152	240	420	260	285	454	423	109	51.3	43.8	227
1962	54.9	102	217	385	193	115	308	288	311	135	71.8	48.0	186
1963	56.2	181	338	191	300	189	246	297	230	109	61.5	47.4	186
1964	45.4	105	156	218	180	165	271	449	747	270	93.6	69.7	230
1965	97.3	106	314	546	463	231	297	373	360	134	74.7	59.4	253
1966	61.3	75.9	68.9	111	91.5	167	371	425	267	153	62.0	44.2	160
1967	64.2	116	264	389	310	151	133	422	509	164	64.4	45.2	219
1968	84.1	116	296	330	341	214	181	269	257	95.5	67.5	123	197
1969	145	250	225	268	106	157	304	647	372	126	64.5	48.3	227
1970	49.1	61.6	255	238	238	148	172	373	399	108	52.5	47.2	165
1971	59.5	111	134	375	372	155	194	582	492	258	89.1	55.2	239
1972	52.5	111	203	237	363	640	298	743	719	297	95.6	77.3	320
1973	57.9	98.6	283	251	107	102	124	231	158	81.9	42.6	36.2	131
1974	38.4	111	244	441	234	202	337	496	896	325	104	52.6	290
1975	39.7	63.4	191	372	191	216	154	523	581	232	87.1	64.0	227
1976	77.2	476	727	500	239	142	230	458	307	207	133	86.6	299
1977	58.5	72.7	86.6	113	90.8	126	301	241	207	80.3	56.6	75.5	126

STATION 12097500 GREENWATER RIVER AT GREENWATER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1912-1977)

MEAN	75.0	178.7	252.6	246.8	210.7	189.9	282.7	440.3	389.6	154.9	67.6	54.1	211.4
MAXIMUM	347.0	569.0	1116.0	597.0	483.0	640.0	457.0	833.0	900.0	371.0	133.0	129.0	320.0
MINIMUM	32.1	29.7	35.0	45.3	70.3	77.5	124.0	158.0	101.0	51.6	36.5	31.4	92.4
STD DEVIATION	54.60	149.77	188.84	130.54	95.94	94.93	145.36	145.26	197.52	78.55	20.93	19.81	57.73
SKEWNESS	3.063	1.327	2.393	0.693	0.551	2.637	0.127	0.561	0.966	1.044	0.864	2.092	-0.064
STD ERR SKEW	0.340	0.340	0.340	0.340	0.340	0.340	0.343	0.340	0.340	0.340	0.340	0.340	0.343
SER CORR COEFF	0.079	0.084	-0.020	0.103	-0.049	-0.144	-0.109	0.161	-0.020	0.112	0.139	0.032	0.138
COEFF OF VAR	0.728	0.838	0.748	0.529	0.455	0.500	0.309	0.330	0.507	0.507	0.310	0.366	0.273
MEAN LOGS	1.806	2.115	2.304	2.324	2.276	2.240	2.144	2.620	2.536	2.140	1.810	1.711	2.307
STD DEV LOGS	0.225	0.349	0.301	0.263	0.212	0.177	0.144	0.149	0.224	0.209	0.130	0.134	0.129
SKEWNESS LOGS	1.115	0.175	-0.174	-0.689	-0.310	0.632	-0.502	-0.383	-0.206	0.224	0.195	0.967	-0.651
STD ERR SKEW LOGS	0.340	0.340	0.340	0.340	0.340	0.340	0.343	0.340	0.340	0.340	0.340	0.340	0.343
SER CORR LOGS	0.170	0.090	0.055	0.041	-0.015	-0.101	-0.062	0.152	0.0	0.097	0.142	0.077	0.172
COEFF OF VAR LOGS	0.125	0.165	0.131	0.113	0.093	0.079	0.059	0.057	0.088	0.098	0.072	0.078	0.056
% OF AVE FLOW	3.0	7.0	9.9	9.7	8.3	7.5	11.1	17.3	15.3	6.1	2.7	2.1	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1912-1977)

0.99	29.3	22.4	36.8	38.2	54.5	81.5	110.0	170.9	95.9	48.7	33.6	31.3	88.6
0.95	33.0	36.3	62.3	70.1	81.4	96.3	149.0	229.1	143.0	64.5	40.2	34.1	118.6
0.90	36.1	47.4	81.9	94.0	99.8	106.7	173.1	265.5	175.7	75.4	44.3	36.2	136.7
0.80	41.2	66.0	113.1	130.5	126.5	122.5	205.4	314.9	224.1	91.6	50.1	39.5	160.3
0.50	58.3	127.4	205.3	225.9	193.7	166.4	276.2	425.8	349.9	135.5	64.0	48.9	209.6
0.20	94.2	254.4	362.3	354.5	286.3	240.2	357.1	558.3	532.9	258.7	82.9	65.0	261.9
0.10	128.4	370.0	482.1	432.6	346.4	298.6	402.4	635.7	657.5	258.5	95.4	77.6	289.3
0.04	187.4	557.4	648.5	521.2	420.0	384.1	452.1	723.7	816.6	332.4	111.3	96.2	317.8
0.02	245.8	730.4	781.8	580.1	473.2	457.0	484.7	783.3	935.6	392.8	123.2	112.0	335.6
0.01	319.4	935.2	922.2	633.3	524.8	538.5	514.1	838.5	1054.7	457.8	135.3	129.6	351.0

STATION 12097500 GREENWATER RIVER AT GREENWATER, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1931	27.0	28.0	29.0	29.0	31.0	34.0	36.0	40.0	47.0
1932	29.0	29.0	29.0	32.0	36.0	39.0	42.0	53.0	77.0
1933	30.0	30.0	31.0	31.0	34.0	39.0	48.0	64.0	182.0
1934	53.0	53.0	54.0	57.0	64.0	68.0	88.0	151.0	255.0
1935	24.0	24.0	24.0	25.0	26.0	29.0	33.0	39.0	94.0
1936	31.0	31.0	32.0	33.0	35.0	38.0	41.0	46.0	62.0
1937	24.0	24.0	24.0	25.0	29.0	32.0	35.0	39.0	51.0
1938	40.0	40.0	40.0	41.0	43.0	52.0	60.0	75.0	163.0
1939	30.0	31.0	31.0	32.0	37.0	39.0	39.0	45.0	85.0
1940	30.0	30.0	31.0	32.0	37.0	39.0	43.0	49.0	80.0
1941	28.0	28.0	29.0	32.0	32.0	33.0	35.0	38.0	59.0
1942	35.0	36.0	37.0	40.0	41.0	47.0	53.0	71.0	97.0
1943	31.0	31.0	32.0	33.0	35.0	39.0	49.0	61.0	122.0
1944	32.0	32.0	33.0	34.0	37.0	41.0	45.0	50.0	65.0
1945	28.0	29.0	30.0	33.0	34.0	38.0	41.0	43.0	56.0
1946	32.0	32.0	34.0	38.0	40.0	49.0	56.0	67.0	103.0
1947	38.0	38.0	39.0	41.0	42.0	49.0	60.0	73.0	145.0
1948	37.0	38.0	38.0	41.0	47.0	52.0	66.0	87.0	170.0
1949	58.0	58.0	61.0	62.0	70.0	79.0	80.0	89.0	108.0
1950	37.0	38.0	39.0	41.0	44.0	49.0	56.0	68.0	120.0
1951	47.0	48.0	48.0	50.0	55.0	69.0	83.0	106.0	200.0
1952	35.0	35.0	36.0	39.0	43.0	47.0	54.0	64.0	74.0
1953	28.0	28.0	28.0	29.0	32.0	32.0	33.0	34.0	46.0
1954	40.0	41.0	42.0	44.0	47.0	47.0	50.0	58.0	131.0
1955	49.0	49.0	50.0	52.0	58.0	66.0	70.0	80.0	97.0
1956	56.0	57.0	61.0	62.0	66.0	75.0	98.0	151.0	236.0
1957	50.0	50.0	50.0	52.0	55.0	62.0	75.0	90.0	162.0
1958	34.0	34.0	35.0	35.0	36.0	39.0	42.0	48.0	72.0
1959	32.0	33.0	34.0	37.0	39.0	42.0	49.0	66.0	144.0
1960	50.0	50.0	53.0	55.0	59.0	65.0	101.0	151.0	224.0
1961	32.0	32.0	33.0	35.0	41.0	54.0	60.0	69.0	117.0
1962	34.0	35.0	36.0	38.0	39.0	45.0	50.0	57.0	83.0
1963	40.0	40.0	41.0	43.0	47.0	52.0	55.0	62.0	129.0
1964	38.0	38.0	39.0	39.0	41.0	46.0	50.0	59.0	86.0
1965	58.0	59.0	61.0	63.0	69.0	81.0	79.0	86.0	142.0
1966	46.0	46.0	48.0	50.0	55.0	60.0	64.0	67.0	76.0
1967	34.0	34.0	35.0	37.0	40.0	44.0	54.0	63.0	112.0
1968	35.0	35.0	36.0	38.0	43.0	47.0	57.0	77.0	111.0
1969	50.0	51.0	53.0	57.0	60.0	69.0	92.0	105.0	151.0
1970	41.0	41.0	42.0	42.0	46.0	48.0	51.0	54.0	66.0
1971	38.0	38.0	41.0	42.0	45.0	47.0	51.0	55.0	82.0
1972	38.0	39.0	40.0	42.0	44.0	52.0	63.0	75.0	116.0
1973	50.0	51.0	52.0	54.0	57.0	63.0	67.0	77.0	138.0
1974	31.0	31.0	32.0	33.0	35.0	36.0	39.0	44.0	77.0
1975	35.0	35.0	36.0	37.0	39.0	42.0	49.0	56.0	108.0
1976	48.0	49.0	50.0	52.0	53.0	66.0	74.0	108.0	242.0
1977	48.0	49.0	50.0	52.0	58.0	64.0	66.0	73.0	85.0

STATION 12097500 GREENWATER RIVER AT GREENWATER, WASH.

LOWEST MEAN FLOW STATISTICS (YEARS 1931-1977)

MEAN	38.1	38.5	39.6	41.4	44.5	49.8	57.1	69.9	115.9
MAXIMUM	58.0	59.0	61.0	63.0	70.0	81.0	101.0	151.0	255.0
MINIMUM	24.0	24.0	24.0	25.0	26.0	29.0	33.0	34.0	46.0
STANDARD DEVIATION	9.18	9.30	9.76	9.92	11.06	13.27	17.25	27.97	53.03
SKEWNESS	0.616	0.613	0.666	0.601	0.680	0.631	0.829	1.553	1.024
STD ERROR OF SKEWNESS	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347
SERIAL CORR COEFF	0.191	0.200	0.198	0.156	0.181	0.183	0.149	0.074	0.064
COEFF OF VARIATION	0.241	0.242	0.247	0.240	0.248	0.266	0.302	0.400	0.458
MEAN LOGS	1.569	1.573	1.585	1.605	1.636	1.683	1.738	1.815	2.023
STD DEVIATION LOGS	0.102	0.102	0.104	0.102	0.105	0.113	0.127	0.155	0.191
SKEWNESS LOGS	0.247	0.239	0.231	0.158	0.245	0.184	0.235	0.533	0.144
STD ERR SKEWNESS LOGS	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347	0.347
SER CORR COEFF LOGS	0.213	0.220	0.217	0.171	0.198	0.203	0.194	0.140	0.100
COEFF OF VAR LOGS	0.065	0.065	0.066	0.064	0.064	0.067	0.073	0.085	0.095

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1931-1977)

0.99	66.8	67.5	70.0	71.5	79.1	91.5	113.3	172.0	307.2
0.98	61.9	62.6	64.8	66.6	73.2	84.4	103.2	150.1	269.0
0.96	57.0	57.6	59.6	61.5	67.3	77.3	93.2	129.8	232.6
0.90	50.4	50.9	52.6	54.6	59.2	67.6	80.0	104.9	186.3
0.80	45.0	45.5	46.9	49.0	52.8	59.8	69.6	87.2	152.0
0.50	36.7	37.1	38.1	40.0	42.8	47.8	54.1	63.3	104.2
0.20	30.4	30.6	31.3	33.0	35.2	38.6	42.7	48.1	72.5
0.10	27.7	27.9	28.4	29.9	32.0	34.7	38.0	42.4	60.4
0.05	25.7	25.8	26.3	27.7	29.6	31.8	34.6	38.5	52.0
0.02	23.7	23.8	24.2	25.4	27.2	29.0	31.2	34.9	44.1
0.01	22.4	22.6	22.9	24.0	25.8	27.2	29.2	32.8	39.6

FLOW DURATION DATA

OAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1931-1977)					
P95	P90	P75	P70	P50	P10
38.0	45.0	71.0	82.0	150.0	470.0

STATION 12097500 GREENWATER RIVER AT GREENWATER, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30										ANNUAL PEAK-FLOW DATA		
YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	FLOW(CFS)	DATE	REG.(R)
1912										2800.	11/19/11	
1930	687.	583.	546.	427.	363.	319.	293.	260.	210.	753.	03/25/30	
1931	709.	571.	487.	418.	345.	302.	255.	225.	193.	850.	04/01/31	
1932	1260.	1040.	715.	569.	503.	478.	471.	465.	359.	1490.	02/26/32	
1933	1840.	1430.	1230.	857.	751.	590.	524.	441.	340.	2200.	11/16/32	
1934	3720.	2/50.	1920.	1660.	1210.	899.	703.	621.	519.	4140.	12/09/33	
1935	1230.	1190.	1030.	815.	546.	420.	358.	351.	323.	1320.	01/23/35	
1936	812.	752.	710.	668.	656.	599.	478.	405.	313.	840.	05/05/36	
1937	720.	689.	652.	577.	536.	490.	419.	357.	276.	748.	05/04/37	
1938	1260.	949.	697.	581.	519.	493.	396.	333.	308.	1410.	04/18/38	
1939	900.	803.	667.	524.	494.	462.	414.	363.	299.	1110.	12/08/38	
1940	542.	459.	395.	365.	317.	253.	232.	229.	201.	567.	02/10/40	
1941	613.	406.	288.	226.	173.	153.	144.	127.	121.	773.	11/29/40	
1942	860.	728.	606.	511.	469.	364.	325.	283.	226.	924.	06/11/42	
1943	664.	642.	590.	507.	454.	396.	357.	298.	248.	920.	11/23/42	
1944	396.	338.	323.	301.	294.	256.	226.	199.	162.	575.	12/03/43	
1945	850.	810.	743.	626.	551.	451.	362.	309.	286.	990.	01/07/45	
1946	1340.	1030.	723.	667.	655.	565.	485.	422.	353.	1760.	12/28/45	
1947	2550.	2020.	1440.	862.	561.	408.	364.	334.	350.	5000.	12/11/46	
1948	1760.	1600.	1320.	1110.	947.	680.	552.	449.	356.	1890.	05/28/48	
1949	1490.	1460.	1360.	1070.	843.	695.	573.	500.	385.	1540.	05/13/49	
1950	1210.	1170.	1120.	973.	927.	801.	637.	540.	449.	1210.	06/17/50	
1951	1040.	952.	744.	636.	539.	477.	423.	372.	356.	1130.	02/11/51	
1952	565.	555.	515.	475.	408.	369.	319.	275.	221.	576.	05/20/52	
1953	1070.	853.	631.	528.	436.	374.	336.	285.	282.	1370.	02/01/53	
1954	1320.	1010.	909.	692.	563.	511.	433.	375.	323.	2000.	12/09/53	
1955	1510.	1470.	1280.	956.	739.	582.	471.	399.	318.	1580.	06/11/55	
1956	1690.	1400.	1240.	1020.	846.	701.	609.	512.	380.	2230.	12/12/55	
1957	949.	797.	749.	652.	531.	426.	361.	329.	304.	1000.	12/13/56	
1958	746.	661.	591.	514.	440.	379.	301.	278.	250.	816.	04/21/58	
1959	1520.	1180.	844.	643.	554.	484.	469.	401.	349.	1610.	11/24/59	
1960	2860.	2190.	1470.	909.	665.	508.	423.	350.	304.	5360.	11/22/59	
1961	948.	789.	654.	608.	546.	448.	391.	377.	345.	1180.	02/21/61	
1962	1150.	1000.	754.	582.	476.	348.	305.	266.	277.	1220.	01/08/62	
1963	677.	591.	479.	391.	365.	317.	292.	271.	261.	948.	02/03/63	
1964	1140.	1070.	973.	897.	792.	626.	504.	440.	352.	1220.	06/02/64	
1965	3650.	2670.	1720.	1070.	739.	532.	440.	406.	385.	5090.	01/29/65	
1966	793.	736.	683.	543.	433.	407.	368.	322.	248.	820.	05/06/66	
1967	853.	828.	727.	617.	566.	481.	372.	314.	218.	876.	05/22/67	
1968	1300.	1150.	799.	523.	420.	376.	345.	305.	290.	1820.	12/25/67	
1969	954.	906.	856.	804.	724.	542.	452.	382.	311.	1380.	01/05/69	
1970	745.	667.	628.	559.	483.	388.	319.	276.	268.	780.	01/23/70	
1971	1200.	1000.	752.	669.	595.	542.	454.	386.	370.	2260.	01/31/71	
1972	1220.	1180.	1030.	985.	905.	746.	602.	613.	519.	1400.	02/29/72	
1973	818.	740.	679.	511.	404.	278.	226.	195.	191.	1070.	12/21/72	
1974	1370.	1300.	1210.	1090.	905.	700.	599.	520.	455.	1700.	01/15/74	
1975	1520.	1040.	867.	729.	686.	572.	458.	378.	356.	2210.	01/18/75	
1976	3000.	2270.	1560.	1160.	812.	677.	576.	493.	403.	4140.	12/02/75	
1977	579.	509.	411.	366.	323.	273.	254.	220.	181.	640.	04/08/77	

STATION 1209R500 WHITE RIVER NEAR BUCKLEY, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES* IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1942	1030	1116	2045	896	922	759	1205	1635	2530	1494	874	549	1255
1943	456	1522	1839	1118	1523	1085	2186	1708	2304	1734	895	634	1413
1944	611	588	1180	768	920	788	1029	1496	1348	937	620	617	910
1945	467	565	804	2026	1537	1027	1424	2718	2021	1232	772	613	1283
1946	663	1359	1688	1871	1284	1551	1941	3104	2640	1852	962	629	1631
1947	843	1497	3306	1927	1581	1330	1876	2355	1840	1081	743	702	1589
1948	1820	2601	1687	1562	1413	1060	1445	2901	3916	1538	991	692	1802
1949	825	1338	1543	799	1464	1813	2301	3706	3868	1495	886	645	1613
1950	779	1552	1921	1348	1570	2315	1853	2652	3668	2670	1148	729	1868
1951	1282	2647	3067	1858	2623	1299	1961	2401	2100	1316	760	577	1818
1952	1075	1194	1154	640	1354	870	1591	2203	1674	1301	810	541	1199
1953	373	267	343	2243	2127	848	1432	1771	2430	1875	971	666	1273
1954	630	1018	2996	1491	1840	1066	1511	2406	2335	2244	1116	790	1621
1955	736	1108	976	1136	1486	1287	1287	1738	3794	2244	1116	790	1621
1956	1477	3119	2963	1620	779	1210	2684	3553	3573	2390	1029	749	1427
1957	937	1374	2888	757	875	1767	1797	2519	1544	1362	734	592	2088
1958	515	681	1410	1634	1469	1016	1754	2396	2094	1063	946	726	1435
1959	841	2915	2635	2799	1115	1169	1753	1702	2817	1602	809	1277	1787
1960	2159	2937	2175	1043	1403	1145	1569	2179	3066	1222	889	637	1624
1961	655	2193	1278	1694	2927	1683	1650	1934	3066	1338	920	576	1652
1962	667	888	1538	2126	1002	836	1836	1556	1851	1332	906	655	1268
1963	684	1791	2227	1154	1867	1083	1532	1612	1521	1095	823	635	1331
1964	558	1174	1243	1904	1261	1130	1637	2256	3574	2096	1115	764	1558
1965	920	1044	2170	2590	2970	1184	1465	2030	2217	1306	914	616	1611
1966	671	748	704	1027	654	1106	1782	2201	1819	1488	851	659	1145
1967	734	1173	1954	2421	1641	972	874	1882	3246	1488	893	669	1507
1968	1060	1081	1665	2282	2388	1366	1195	1580	2420	1179	956	1168	1550
1969	1060	1891	1636	1968	733	1136	1976	3106	3204	1250	751	638	1617
1970	652	743	1010	2207	1581	1049	1185	1895	2537	1294	765	605	1292
1971	575	1060	1233	2765	2341	1162	1393	3012	2677	2439	1203	714	1712
1972	1138	1453	1716	1716	2261	9428	1775	3263	3745	2460	1166	858	2027
1973	526	797	2000	1613	704	725	836	1471	3978	2460	768	548	1050
1974	493	1235	1923	2558	1878	1452	1870	2094	3978	2259	1207	1563	1876
1975	446	739	1460	2872	1311	1324	919	2539	3083	2153	1045	687	1533
1976	906	1714	4398	3061	1295	869	1432	2117	2084	1867	1237	890	1826
1977	552	688	708	779	591	852	1655	1320	1810	831	965	802	963
1978	578	2219	4314	1145	926	973	1204	1630	1905	1304	843	941	1502
1979	537	1139	1383	738	1456	1767	1305	1907	1806	1023	706	615	1196

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1942-1979)

MEAN	798.9	1391.0	1874.1	1683.3	1501.9	1248.7	1581.6	2224.2	2510.6	1587.6	924.5	731.8	1504.2
MAXIMUM	2159.0	3119.0	4398.0	3081.0	2970.0	3928.0	2864.0	3766.0	3978.0	2670.0	1237.0	1543.0	2088.0
MINIMUM	373.0	267.0	343.0	630.0	591.0	725.0	386.0	1370.0	1368.0	831.0	156.0	207.58	281.70
STD DEVIATION	375.08	716.54	919.59	678.96	607.48	564.34	392.09	608.52	767.46	495.25	156.70	207.58	281.70
SKEWNESS	2.001	0.995	1.037	0.186	0.740	3.194	0.294	0.730	0.514	0.656	0.364	2.525	-0.083
STD ERR SKEW	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383
SER CORR COEFF	0.104	0.109	-0.336	0.103	-0.183	-0.066	-0.145	0.206	-0.128	0.148	0.098	-0.140	-0.100
COEFF OF VAR	0.469	0.515	0.491	0.403	0.404	0.452	0.248	0.274	0.306	0.312	0.172	0.284	0.187
MEAN LOGS	2.867	3.048	3.221	3.187	3.142	3.068	3.185	3.332	3.380	3.181	2.960	2.852	3.169
STD DEV LOGS	0.169	0.226	0.225	0.193	0.179	0.147	0.113	0.115	0.132	0.132	0.074	0.100	0.085
SKEWNESS LOGS	0.865	-0.326	-0.596	-0.412	-0.178	1.391	-0.489	0.262	0.081	0.220	0.040	1.740	-0.544
STD ERR SKEW LOGS	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383
SER CORR LOGS	0.176	0.063	-0.299	0.075	-0.171	-0.058	-0.146	0.203	-0.119	0.101	0.045	-0.130	-0.099
COEFF OF VAR LOGS	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074
% OF AVE FLUW	4.4	7.7	10.4	9.3	8.3	6.9	6.6	12.3	13.9	8.8	5.1	4.1	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1942-1979)

0.99	381.6	319.6	399.6	480.4	503.6	747.7	765.8	1221.2	1206.0	786.3	615.4	552.3	867.5
0.95	432.3	493.9	655.6	707.1	699.6	747.2	968.5	1418.4	1467.1	948.8	689.4	561.3	1041.4
0.90	469.5	615.9	835.4	858.0	811.4	827.0	1088.1	1542.6	1631.1	1046.0	732.7	571.4	1149.4
0.80	527.4	796.0	1094.3	1072.2	983.8	882.7	1242.8	1742.5	1857.0	1171.6	789.0	591.3	1261.8
0.50	696.2	1459.9	1749.2	1547.2	1403.1	1084.4	1565.2	2123.5	2390.6	1500.2	910.4	666.6	1503.6
0.20	994.6	1915.4	2500.4	2250.5	1986.4	1485.0	1913.4	2673.8	3095.3	1951.2	1052.0	824.5	1747.4
0.10	1238.7	2347.5	3095.1	2696.9	2330.6	1837.6	2101.2	3036.2	3591.1	2253.0	1135.4	962.1	1872.2
0.04	1610.6	2883.0	3669.8	3135.5	2774.9	2392.6	2302.9	3202.9	4118.6	2639.3	1232.2	1175.4	2001.5
0.02	1936.4	3272.1	4034.8	3463.5	3104.9	2524.6	2436.8	3436.4	4536.9	2931.4	1299.4	1365.1	2082.5
0.01	2309.2	3651.4	4406.5	3774.1	3424.3	3526.6	2548.7	4184.1	4952.7	3227.5	1363.2	1581.8	2152.7

STATION 12U98500 WHITE RIVER NEAR BUCKLEY, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1943	72.0	235.0	345.0	375.0	408.0	479.0	600.0	696.0	1050.0
1944	379.0	386.0	403.0	444.0	571.0	601.0	609.0	669.0	770.0
1945	295.0	307.0	335.0	376.0	435.0	480.0	523.0	558.0	655.0
1946	330.0	417.0	423.0	493.0	619.0	690.0	733.0	846.0	977.0
1947	206.0	306.0	439.0	459.0	625.0	768.0	870.0	1350.0	1350.0
1948	487.0	554.0	622.0	649.0	693.0	719.0	821.0	981.0	1400.0
1949	249.0	343.0	503.0	561.0	636.0	744.0	777.0	867.0	999.0
1950	455.0	471.0	487.0	527.0	609.0	658.0	718.0	821.0	1150.0
1951	504.0	509.0	571.0	636.0	674.0	863.0	1040.0	1190.0	1760.0
1952	436.0	449.0	465.0	493.0	546.0	657.0	741.0	880.0	891.0
1953	175.0	186.0	208.0	226.0	254.0	290.0	324.0	373.0	558.0
1954	480.0	487.0	504.0	563.0	615.0	646.0	689.0	783.0	1250.0
1955	544.0	552.0	567.0	599.0	674.0	727.0	789.0	870.0	967.0
1956	60.0	283.0	563.0	577.0	694.0	813.0	1020.0	1390.0	1790.0
1957	169.0	406.0	476.0	517.0	551.0	699.0	862.0	986.0	1220.0
1958	59.0	60.0	343.0	402.0	460.0	533.0	573.0	626.0	822.0
1959	106.0	211.0	369.0	581.0	671.0	771.0	818.0	849.0	1320.0
1960	167.0	439.0	496.0	661.0	760.0	864.0	1110.0	1360.0	1590.0
1961	376.0	395.0	427.0	456.0	513.0	603.0	714.0	803.0	1130.0
1962	396.0	414.0	437.0	440.0	492.0	609.0	653.0	731.0	977.0
1963	506.0	538.0	571.0	600.0	628.0	661.0	692.0	784.0	1080.0
1964	107.0	223.0	334.0	423.0	483.0	579.0	657.0	739.0	905.0
1965	537.0	544.0	567.0	620.0	671.0	819.0	813.0	914.0	1230.0
1966	464.0	478.0	501.0	521.0	612.0	635.0	675.0	685.0	735.0
1967	368.0	377.0	399.0	446.0	552.0	618.0	702.0	794.0	1110.0
1968	354.0	465.0	495.0	528.0	584.0	664.0	777.0	908.0	1150.0
1969	457.0	536.0	614.0	675.0	720.0	771.0	1010.0	1040.0	1310.0
1970	81.0	82.0	287.0	395.0	557.0	618.0	650.0	672.0	774.0
1971	150.0	295.0	418.0	446.0	508.0	546.0	596.0	658.0	882.0
1972	393.0	409.0	450.0	468.0	489.0	619.0	772.0	858.0	1090.0
1973	188.0	311.0	462.0	475.0	524.0	645.0	692.0	759.0	1070.0
1974	117.0	130.0	378.0	421.0	453.0	510.0	562.0	656.0	923.0
1975	111.0	240.0	380.0	388.0	418.0	517.0	681.0	872.0	1200.0
1976	422.0	465.0	508.0	538.0	564.0	724.0	845.0	1010.0	1590.0
1977	179.0	426.0	436.0	483.0	547.0	603.0	607.0	651.0	684.0
1978	426.0	434.0	457.0	481.0	563.0	682.0	778.0	788.0	1040.0
1979	280.0	342.0	399.0	448.0	511.0	716.0	755.0	820.0	919.0

LOWEST MEAN FLOW STATISTICS (YEARS 1943-1979)

MEAN	299.6	371.5	449.7	497.1	560.6	648.6	733.7	831.3	1089.7
MAXIMUM	544.0	554.0	622.0	675.0	760.0	864.0	1110.0	1390.0	1790.0
MINIMUM	59.0	60.0	208.0	226.0	254.0	290.0	324.0	373.0	558.0
STANDARD DEVIATION	158.36	132.31	92.09	95.41	102.66	115.14	151.31	197.81	291.18
SKEWNESS	-0.085	-0.678	-0.256	-0.217	-0.486	-0.549	0.288	0.886	0.608
STD ERROR OF SKEWNESS	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388
SERIAL CORR COEFF	0.059	0.009	-0.024	0.001	0.056	0.066	0.105	0.100	-0.013
COEFF OF VARIATION	0.528	0.356	0.205	0.192	0.183	0.178	0.206	0.238	0.267
MEAN LOGS	2.395	2.528	2.643	2.688	2.741	2.804	2.856	2.908	3.022
STD DEVIATION LOGS	0.296	0.221	0.097	0.091	0.089	0.087	0.095	0.104	0.116
SKEWNESS LOGS	-0.715	-1.866	-1.053	-1.187	-1.453	-1.648	-0.974	-0.390	-0.125
STD ERR SKEWNESS LOGS	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388
SER CORR COEFF LOGS	0.108	0.037	-0.053	-0.016	0.046	0.090	0.090	0.084	-0.007
COEFF OF VAR LOGS	0.124	0.088	0.037	0.034	0.032	0.031	0.033	0.036	0.038

STATION 12098500 WHITE RIVER NEAR BUCKLEY, WASH.

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1943-1979)

0.99	844.2	577.4	622.1	661.4	715.6	805.4	1020.1	1315.1	1915.1
0.98	767.0	572.9	609.8	651.5	709.3	801.0	998.0	1254.6	1792.0
0.96	682.0	564.6	593.9	638.1	699.8	793.6	970.0	1187.7	1662.8
0.90	555.2	541.6	564.5	612.1	679.1	775.8	919.6	1085.5	1478.1
0.80	445.2	505.2	531.7	581.5	651.8	749.9	864.8	992.0	1320.8
0.50	269.0	391.2	456.9	507.4	577.1	671.4	743.2	821.6	1058.6
0.20	145.0	244.5	371.5	417.8	477.1	557.4	607.7	665.7	841.8
0.10	100.0	172.8	325.6	368.0	418.8	488.5	535.3	591.1	744.4
0.05	71.7	122.6	288.2	326.7	369.7	429.7	476.5	533.2	671.4
0.02	47.9	78.2	247.5	281.4	315.1	363.9	412.5	472.3	596.7
0.01	36.0	55.7	221.7	252.3	280.1	321.5	371.8	434.3	551.0

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1943-1979)

P95	P90	P75	P70	P50	P25	P10
500.0	580.0	790.0	860.0	1200.0	1900.0	2800.0

STATION 12U94500 WHITE RIVER NEAR BUCKLEY, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL FLOW(CFS)	DATE	REG.(R)
1929										4350.	05/24/29	
1930										4870.	03/25/30	
1931										9850.	03/31/31	
1932										17000.	02/26/32	
1933										16500.	11/13/32	
1934										28000.	12/ /33	
1939										4270.	03/24/39	
1940										4060.	02/10/40	
1941										7600.	11/29/40	
1942	6510.	5000.	3390.	3050.	2680.	2240.	1900.	1730.	1420.	7550.	12/19/41	R
1943	6400.	5030.	3250.	2570.	2430.	2190.	2070.	2040.	1760.	9950.	11/23/42	R
1944	4860.	3500.	2470.	1660.	1580.	1440.	1310.	1220.	1090.	7320.	12/03/43	R
1945	6810.	4920.	4060.	3230.	2730.	2400.	2140.	1890.	1820.	8820.	01/01/45	R
1946	10100.	7270.	5000.	3690.	3190.	2960.	2720.	2420.	2170.	10600.	12/29/45	R
1947	11400.	11300.	8670.	5180.	3660.	2680.	2430.	2140.	2090.	12300.	12/11/46	R
1948	6750.	5810.	4850.	4600.	4230.	3490.	2910.	2490.	2060.	7580.	11/08/47	R
1949	5780.	5600.	5010.	4310.	3730.	3320.	2890.	2640.	2240.	6950.	05/12/49	R
1950	5600.	5360.	4970.	4190.	3940.	3630.	3090.	2780.	2510.	7580.	11/28/49	R
1951	9170.	7720.	5440.	4430.	3650.	2950.	2880.	2570.	2310.	9650.	02/12/51	R
1952	4440.	3790.	2930.	2710.	2420.	2090.	1900.	1730.	1510.	5550.	02/04/52	R
1953	7520.	5910.	4660.	3880.	3340.	2330.	2140.	1910.	1900.	9000.	02/03/53	R
1954	8150.	7670.	5520.	4210.	3120.	2580.	2370.	2150.	1900.	10100.	12/09/53	R
1955	7090.	7060.	6020.	4570.	3770.	3120.	2650.	2310.	1900.	7210.	06/10/55	R
1956	11100.	6670.	4680.	4530.	4100.	3600.	3430.	3070.	2400.	13700.	12/12/55	R
1957	6620.	6160.	5360.	4610.	2990.	2270.	2100.	2000.	1850.	6910.	12/10/56	R
1958	3560.	3540.	3510.	2950.	2490.	2300.	2120.	1840.	1740.	3620.	05/26/58	R
1959	10400.	7410.	5110.	3900.	3430.	2910.	2860.	2430.	2120.	10700.	01/25/59	R
1960	11200.	9930.	7560.	4760.	3840.	2890.	2460.	2110.	1850.	13000.	11/23/59	R
1961	5210.	4750.	3790.	3340.	3110.	2510.	2220.	2120.	2150.	8740.	02/21/61	R
1962	6060.	4740.	4220.	3200.	2820.	1960.	1760.	1650.	1590.	9020.	12/24/61	R
1963	6590.	4760.	4360.	3230.	2900.	2260.	2030.	1810.	1670.	8090.	11/21/62	R
1964	5310.	4570.	4340.	4080.	3710.	3130.	2660.	2400.	2040.	7490.	01/25/64	R
1965	10400.	10600.	9480.	5900.	4000.	2900.	2590.	2300.	2120.	11200.	01/30/65	R
1966	4070.	3890.	3460.	2750.	2230.	2020.	1950.	1870.	1550.	4080.	05/07/66	R
1967	5280.	5020.	4140.	3690.	3280.	2730.	2280.	1940.	1860.	5600.	12/14/66	R
1968	8970.	7610.	5080.	3290.	2920.	2560.	2310.	2050.	1960.	9620.	12/26/67	R
1969	8660.	7480.	5350.	4650.	4000.	3220.	2800.	2470.	2030.	10500.	01/05/69	R
1970	6130.	5720.	4950.	3710.	2630.	2220.	1940.	1740.	1810.	7530.	01/20/70	R
1971	7690.	5940.	4360.	4190.	3430.	2870.	2720.	2430.	2290.	8550.	01/19/71	R
1972	8680.	7320.	5900.	5120.	4290.	3610.	3190.	3220.	2950.	10100.	01/21/72	R
1973	6070.	5310.	4620.	3430.	2660.	1880.	1510.	1320.	1290.	10800.	12/21/72	R
1974	10200.	8390.	5520.	4850.	4020.	3150.	2810.	2590.	2420.	11100.	01/15/74	R
1975	9300.	7300.	5180.	4140.	3270.	3010.	2610.	2320.	2100.	9800.	01/18/75	R
1976	12100.	11600.	10200.	6630.	4430.	3760.	3120.	2690.	2220.	12700.	12/02/75	R
1977	3500.	3370.	2810.	2300.	1830.	1670.	1600.	1420.	1250.	5280.	06/08/77	R
1978	12900.	12400.	9230.	6840.	5050.	3320.	2180.	1420.	1250.	14800.	12/02/77	R
1979	4150.	3950.	3040.	2430.	2020.	1900.	1690.	1720.	1540.	5280.	02/07/79	R

TATION 12098500 WHITE RIVER NEAR BUCKLEY, WASH.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1942-1979)

W R C
ESTIMATE

SYSTEMATIC
RECORD

MEAN	7503.4	6430.8	5065.5	3968.4	3261.1	2686.6	2388.4	2147.9	1928.7
MAXIMUM	12900.0	12400.0	10200.0	6800.0	5050.0	3760.0	3430.0	3220.0	2950.0
MINIMUM	3500.0	3370.0	2470.0	1660.0	1580.0	1440.0	1310.0	1250.0	1090.0
STANDARD DEVIATION	2548.41	2322.43	1820.74	1117.23	774.57	595.00	505.58	447.35	374.33
SKENNESS	0.371	0.989	1.353	0.504	-0.074	-0.042	-0.093	0.182	0.076
STD ERROR OF SKEWNESS	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383
SERIAL CORR COEFF	-0.262	-0.252	-0.260	-0.198	-0.215	-0.024	-0.007	-0.066	-0.018
COEFF OF VARIATION	0.340	0.361	0.359	0.282	0.238	0.221	0.212	0.208	0.194
MEAN LOGS	3.850	3.783	3.681	3.581	3.500	3.418	3.368	3.322	3.277
STD DEVIATION LOGS	0.152	0.149	0.143	0.127	0.111	0.101	0.097	0.094	0.088
STD ERR SKEWNESS LOGS	-0.197	0.277	0.411	-0.467	-0.712	-0.494	-0.564	-0.439	-0.615
SER CORR COEFF LOGS	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383
COEFF OF VAR LOGS	-0.293	-0.247	-0.218	-0.099	-0.163	-0.033	-0.021	-0.090	-0.038
	0.040	0.039	0.039	0.035	0.032	0.030	0.029	0.028	0.027

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1942-1979)

0.99	2973.8	2927.7	2462.5	1751.0	1533.5	1402.4	1267.4	1188.8	1078.3	3420.4
0.95	3898.6	3546.8	2904.7	2275.4	1986.0	1733.0	1564.2	1438.0	1312.0	4739.5
0.90	4483.6	3950.7	3196.6	2591.8	2249.9	1924.6	1734.5	1581.2	1443.9	5545.9
0.80	5288.3	4526.0	3616.3	3008.4	2586.2	2169.3	1950.0	1763.4	1608.4	6607.4
0.50	7160.8	5988.8	4686.9	3900.5	3261.1	2669.6	2382.6	2134.5	1931.3	8835.6
0.20	9539.4	8049.8	6271.7	4896.9	3940.0	3197.4	2825.9	2526.7	2251.7	11184.2
0.10	11011.7	9498.5	7399.7	5448.2	4280.9	3477.6	3055.3	2736.3	2413.1	12396.6
0.04	12771.9	11411.9	8917.7	6050.6	4625.2	3775.4	3293.9	2960.5	2577.6	13638.9
0.02	14019.8	12898.7	10117.6	6444.2	4834.1	3965.4	3443.4	3104.8	2678.8	14400.4
0.01	15219.8	14439.1	11378.2	6799.2	5011.7	4134.0	3573.8	3233.6	2765.9	15051.2

STATION 12098500 WHITE RIVER NEAR BUCKLEY, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1929		487	495	449	336	1061	1055	2476	2304	1218	815	526	
1930	368	264	747	528	1698	1331	1517	1412	1393	983	756	492	952
1931	476	538	481	1289	956	1246	1667	1930	1464	964	716	555	1024
1932	755	1093	1208	1415	1927	2839	2139	2315	2623	1502	884	578	1605
1933	729	4072	1787	2200	657	1194	1573	2315	4143	2482	1262	891	1945
1939		817	1345	1542	1022	1565	1867	2123	1804	1265	810	566	
1940	491	634	1362	964	1480	1409	1284	2005	1327	920	720	597	1099
1941	640	926	1295	910	657	648	952	1240	1252	952	718	689	908

STATION 12099500 BOISE CREEK NEAR ENUMCLAW, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1945													
1946	15.3	50.0	45.1	61.3	57.7	62.8	34.8	18.2	30.4	21.6	3.72	16.4	
1963				35.0	46.1	29.9	47.2	24.0	24.2	23.0	7.83	7.30	34.2
1964	13.3	42.8	42.4	82.7	43.9	42.9	43.3	34.8	56.2	18.3	13.3	9.60	
1965	18.0	43.7	73.5	47.6	84.5	32.1	35.0	25.5	13.4	8.46	16.7	18.5	37.9
1966	13.1	17.6	23.2	45.9	23.3	36.2	39.4	24.6	22.1	27.2	8.88	7.61	37.1
											9.44	8.62	24.2

STATION 1210000 WHITE RIVER AT BUCKLEY, WASH.

ANNUAL PEAK FLOW DATA		ANNUAL PEAK FLOW STATISTICS (YEARS 1900-1979)		W R C	SYSTEMATIC
WATER YEAR	FLOW(CFS)	DATE	MEAN LOGS	ESTIMATE	RECORD
1900	14200.0	12- 1-1899			
1901	11200.0	1-13-1901		4.0565	4.0565
1902	14600.0	11-22-1901		0.1826	0.1826
1911	12600.0	11-10-1910		0.000	-0.784
1912	13000.0	11-19-1911			
1914	6050.0	1- 6-1914			
1915	4160.0	11- 3-1914			
1916	9330.0	7- 2-1916			
1917	6760.0	6-17-1917			
1918	23100.0	12-18-1917			
1919	19000.0	1-22-1919			
1921	12400.0	12-30-1920			
1922	16600.0	12-13-1921			
1923	13300.0	1- 6-1923			
1935	14300.0	10-25-1934			
1936	8990.0	1- 4-1936			
1937	7170.0	4-14-1937			
1938	12400.0	4-18-1938			
1978	14300.0	12- 2-1977			
1979	3200.0	2- 7-1979			
ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES LOG-PEARSON III ANALYSIS (YEARS 1900-1979)					
			0.99	4284.2	3393.2
			0.95	5705.0	5264.1
			0.90	6646.0	6495.7
			0.80	7995.9	8200.7
			0.50	11389.6	12027.2
			0.20	16224.5	16324.9
			0.10	19520.9	18614.9
			0.04	23777.8	20992.0
			0.02	27009.5	22456.9
			0.01	30290.1	23709.9

STATION 12100500 WHITE RIVER NR SUMNER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1945													
1946	117	272	1064	1068	765	211	441	1364	347	174	96.2	113	781
1947	227	626	2565	1167	544	744	1116	2169	1384	608	188	71.0	676
1948	981	1356	603	563	630	338	561	1102	595	127	73.9	68.5	798
1949	115	378	501	169	446	323	352	1519	2742	271	119	90.5	593
1950	144	486	895	610	641	246	980	2920	950	171	155	71.8	853
1951	198	1025	2325	811	1929	296	653	1287	2456	1273	189	89.4	712
1952	111	107	154	142	303	135	346	751	315	164	85.1	87.0	219
1953	54.0	49.9	61.1	993	1404	174	245	764	325	93.6	65.4	88.7	388
1954	114	238	2051	430	406	200	263	352	710	356	252	84.0	525
1955	106	142	166	228	550	147	256	759	868	729	110	100	437
1956	475	1772	2182	616	260	346	1173	2101	2204	603	174	60.0	1000
1957	123	259	2092	134	200	423	432	946	368	126	216	156	452
1958	98.7	89.8	253	505	371	159	412	865	438	148	85.8	140	297
1959	278	2018	1953	2229	578	425	815	894	1869	101	61.2	321	962
1960	792	2177	1188	275	314	233	255	1459	831	117	72.0	110	647
1961	102	1101	209	460	1971	162	391	580	1321	117	66.6	66.1	583
1962	73.2	107	585	1172	123	164	949	689	1401	88.7	131	66.5	463
1963	96.0	1295	1594	388	1306	256	786	988	870	394	208	96.2	684
1964	104	530	224	784	374	191	182	1614	3576	1550	517	81.3	810
1965	366	393	1476	1908	2718	273	658	579	1717	298	155	291	889
1966	484	352	191	304	178	235	229	762	1029	468	91.1	108	370
1967	100	199	728	1180	498	209	164	653	2128	630	83.0	85.0	554
1968	372	142	1053	1169	1441	296	187	279	1738	174	147	374	610
1969	215	552	728	2094	277	225	510	1591	1617	112	99.5	85.8	679
1970	103	143	185	1501	564	150	219	384	1251	193	94.9	84.5	405

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1945-1970)

MEAN	238.0	632.4	1001.0	836.0	749.4	335.0	506.9	1077.8	1342.4	379.0	144.3	117.3	615.5
MAXIMUM	981.0	2177.0	2565.0	2229.0	2718.0	1550.0	1173.0	2920.0	3576.0	1550.0	517.0	374.0	1000.0
MINIMUM	54.0	49.9	61.1	134.0	123.0	135.0	164.0	279.0	315.0	59.9	61.2	60.0	219.0
STD DEVIATION	231.74	635.70	805.30	606.39	650.55	294.03	302.38	626.56	830.45	377.38	94.13	81.85	207.24
SKWENESS	2.091	1.297	0.577	0.928	1.578	3.024	0.853	1.277	0.826	1.826	2.639	2.326	0.035
STD ERR SKEW	0.464	0.464	0.464	0.464	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
SER CORR COEFF	-0.071	0.156	-0.297	0.024	-0.407	-0.091	-0.035	0.126	-0.108	0.014	0.172	-0.061	-0.060
COEFF OF VAR	0.974	1.005	0.804	0.725	0.668	0.878	0.597	0.581	0.619	0.996	0.652	0.698	0.337
MEAN LOGS	2.237	2.582	2.811	2.797	2.743	2.539	2.631	2.966	3.037	2.406	2.097	2.006	2.762
STD DEV LOGS	0.330	0.462	0.463	0.358	0.339	0.247	0.260	0.248	0.304	0.386	0.223	0.213	0.164
SKWENESS LOGS	0.858	0.029	-0.488	-0.347	0.284	1.451	0.104	-0.071	-0.410	0.435	0.781	1.626	-0.761
STD ERR SKEW LOGS	0.464	0.464	0.464	0.464	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456
SER CORR LOGS	0.042	0.063	-0.271	-0.034	-0.506	-0.074	0.072	0.104	0.051	0.246	0.456	-0.042	-0.004
COEFF OF VAR LOGS	0.148	0.179	0.165	0.128	0.123	0.101	0.099	0.084	0.100	0.160	0.106	0.106	0.059
% DF AVE FLOW	3.2	8.6	13.6	11.4	10.2	4.6	6.9	14.6	18.2	5.2	2.0	1.6	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1945-1970)

0.99	47.8	32.8	37.2	74.9	106.4	131.7	111.0	238.0	173.3	43.1	50.6	56.8	196.3
0.95	61.1	66.9	97.8	149.8	164.1	142.6	162.5	357.6	318.7	66.6	60.8	59.7	289.9
0.90	71.8	97.9	157.8	212.5	209.4	152.8	199.8	443.1	432.4	85.9	68.4	62.5	349.5
0.80	90.2	155.7	272.8	318.9	283.9	171.4	257.5	573.2	614.5	119.3	80.5	68.1	430.3
0.50	155.1	380.0	705.3	657.6	534.9	240.7	423.2	930.9	1141.3	239.1	117.3	89.4	606.3
0.20	310.9	934.3	1613.2	1267.3	1054.1	408.2	705.8	1497.7	1980.8	525.0	187.2	140.9	798.7
0.10	477.3	1499.7	2372.8	1740.0	1536.4	585.8	927.5	1913.2	2574.7	822.3	248.5	194.4	899.8
0.04	794.3	2489.7	3462.2	2393.7	2334.3	922.5	1246.9	2476.9	3341.7	1366.4	346.5	293.3	1004.2
0.02	1136.5	3458.5	4341.0	2911.5	3086.5	1286.5	1513.2	2922.1	3914.9	1928.2	437.6	397.7	1068.5
0.01	1600.3	4652.0	5259.1	3444.0	3992.7	1782.5	1804.1	3387.1	4484.4	2657.7	545.8	537.3	1123.4

STATION 12100500 WHITE RIVER NR SUMNER, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1946	62.0	66.0	72.0	79.0	92.0	99.0	107.0	124.0	163.0
1947	46.0	52.0	48.0	58.0	52.0	79.0	116.0	161.0	479.0
1948	52.0	56.0	62.0	62.0	67.0	70.0	86.0	145.0	418.0
1949	70.0	76.0	73.0	80.0	88.0	101.0	106.0	117.0	288.0
1950	54.0	59.0	59.0	67.0	72.0	93.0	115.0	126.0	288.0
1951	62.0	63.0	63.0	73.0	82.0	133.0	157.0	178.0	730.0
1952	68.0	70.0	71.0	73.0	82.0	85.0	94.0	96.0	113.0
1953	36.0	38.0	42.0	45.0	47.0	51.0	55.0	63.0	68.0
1954	70.0	71.0	72.0	75.0	80.0	91.0	105.0	151.0	287.0
1955	72.0	76.0	80.0	84.0	96.0	97.0	100.0	112.0	141.0
1956	37.0	41.0	47.0	50.0	55.0	95.0	158.0	290.0	650.0
1957	68.0	72.0	76.0	82.0	101.0	133.0	136.0	168.0	463.0
1958	53.0	56.0	57.0	60.0	61.0	63.0	77.0	85.0	129.0
1959	32.0	34.0	37.0	48.0	68.0	80.0	114.0	159.0	326.0
1960	40.0	45.0	50.0	54.0	61.0	70.0	90.0	201.0	568.0
1961	41.0	42.0	43.0	52.0	53.0	63.0	80.0	93.0	271.0
1962	45.0	52.0	55.0	58.0	64.0	66.0	67.0	70.0	122.0
1963	55.0	55.0	56.0	61.0	64.0	70.0	78.0	94.0	348.0
1964	68.0	82.0	82.0	84.0	87.0	95.0	136.0	180.0	255.0
1965	74.0	74.0	75.0	78.0	81.0	228.0	210.0	302.0	547.0
1966	92.0	93.0	95.0	96.0	110.0	166.0	213.0	290.0	290.0
1967	52.0	54.0	57.0	58.0	66.0	88.0	93.0	106.0	274.0
1968	67.0	68.0	71.0	74.0	81.0	83.0	105.0	172.0	310.0
1969	95.0	95.0	96.0	99.0	107.0	140.0	219.0	359.0	359.0
1970	58.0	62.0	67.0	69.0	71.0	95.0	90.0	96.0	121.0

LOWEST MEAN FLOW STATISTICS (YEARS 1946-1970)

MEAN	58.8	61.7	64.4	68.8	76.0	97.0	115.8	148.4	317.9
MAXIMUM	95.0	95.0	96.0	99.0	110.0	228.0	219.0	302.0	730.0
MINIMUM	32.0	34.0	37.0	45.0	47.0	51.0	55.0	63.0	68.0
STANDARD DEVIATION	16.22	16.09	15.52	14.57	16.81	38.29	43.50	62.51	176.33
SKEWNESS	0.392	0.270	0.253	0.278	0.386	1.993	1.178	0.931	0.710
STD ERROR OF SKEWNESS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SERIAL CORR COEFF	0.152	0.109	0.113	0.032	-0.158	0.295	0.199	0.129	-0.174
COEFF OF VARIATION	0.276	0.261	0.241	0.212	0.221	0.395	0.376	0.421	0.555
MEAN LOGS	1.753	1.775	1.796	1.828	1.871	1.961	2.038	2.136	2.431
STD DEVIATION LOGS	0.123	0.117	0.108	0.093	0.096	0.145	0.151	0.180	0.266
SKEWNESS LOGS	-0.243	-0.297	-0.274	-0.102	-0.045	0.924	0.426	0.045	-0.431
STD ERR SKEWNESS LOGS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SER CORR COEFF LOGS	0.162	0.117	0.129	0.044	-0.142	0.291	0.214	0.144	-0.087
COEFF OF VAR LOGS	0.070	0.066	0.060	0.051	0.051	0.074	0.074	0.084	0.110

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1970)

0.99	103.9	105.2	105.9	108.9	123.4	246.7	272.2	363.1	923.6
0.98	97.5	99.2	100.3	103.2	116.4	211.2	240.3	323.1	822.0
0.96	90.7	92.9	94.2	97.1	109.1	179.7	210.1	284.0	717.2
0.90	80.7	83.4	85.2	88.3	98.5	143.0	172.4	232.8	572.5
0.80	70.0	75.0	77.3	80.6	89.5	118.1	144.7	193.5	456.0
0.50	57.2	60.4	63.3	67.5	74.4	86.9	106.4	136.3	282.0
0.20	44.8	47.8	51.0	56.3	61.6	68.7	81.0	96.4	163.8
0.10	39.1	41.9	45.3	51.0	55.8	62.4	71.2	80.6	120.2
0.05	34.9	37.5	40.9	47.0	51.4	58.4	64.4	69.6	91.8
0.02	30.5	32.9	36.3	42.8	46.8	54.8	58.0	59.0	66.8
0.01	27.9	30.1	33.5	40.2	44.0	52.8	54.2	52.9	53.6

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1946-1970)						
P95	P90	P75	P70	P50	P25	P10
65.0	77.0	110.0	130.0	200.0	620.0	1800.0

STATION 12100500 WHITE RIVER NR SUMNER, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL FLOW (CFS)	PEAK-TO-PEAK DATA REG. (R)
1946	10500.	7740.	4990.	3280.	2210.	1920.	1630.	1400.	1310.	11400.	12/29/45 R
1947	12200.	11900.	8080.	4770.	2980.	1970.	1620.	1300.	1090.	13100.	12/14/46 R
1948	6360.	5260.	3860.	3740.	3000.	2190.	1580.	1260.	1040.	7950.	10/19/47 R
1949	7190.	6860.	6020.	4460.	3080.	2240.	1650.	1330.	953.	7190.	05/14/49 R
1950	5250.	4440.	3830.	2970.	2620.	2160.	1740.	1480.	1340.	6010.	03/06/50 R
1951	11000.	8960.	5710.	3370.	2540.	1880.	1940.	1540.	1220.	12200.	02/11/51 R
1952	2410.	1620.	1430.	996.	786.	621.	492.	406.	340.	2860.	05/01/52 R
1953	6400.	5150.	3790.	2800.	2040.	1180.	846.	721.	660.	6700.	02/04/53 R
1954	9880.	8770.	6010.	3690.	2140.	1290.	981.	807.	690.	11700.	12/09/53 R
1955	6960.	6800.	5220.	3340.	2270.	1530.	1160.	939.	728.	7380.	06/12/55 R
1956	13400.	8080.	4540.	3260.	2530.	2070.	1850.	1530.	1170.	15100.	12/12/55 R
1957	5540.	5320.	4470.	3790.	2170.	1220.	863.	744.	746.	6460.	12/18/56 R
1958	2480.	420.	2290.	1620.	976.	714.	588.	489.	461.	2900.	02/27/58 R
1959	11300.	6750.	6210.	3520.	2630.	2150.	1740.	1420.	1420.	11900.	01/25/59 R
1960	12500.	10800.	7700.	4200.	3080.	1940.	1420.	1150.	861.	14700.	11/24/59 R
1961	4370.	3810.	3110.	2260.	2040.	1360.	1090.	972.	892.	6600.	03/22/61 R
1962	4750.	3790.	3270.	2150.	1700.	1050.	1020.	806.	776.	6660.	12/25/61 R
1963	6020.	4390.	3790.	2780.	1700.	1050.	1020.	806.	776.	7420.	11/21/62 R
1964	5450.	5080.	4330.	4080.	3640.	2990.	2330.	1840.	1290.	6180.	01/25/64 R
1965	13500.	13100.	11300.	6630.	4050.	2470.	2040.	1630.	1380.	14100.	01/30/65 R
1966	2830.	2690.	2200.	1490.	1060.	930.	770.	641.	490.	2910.	05/08/66 R
1967	5060.	4330.	3580.	2820.	2150.	1550.	1150.	911.	816.	5630.	05/22/67 R
1968	7940.	6310.	4130.	2230.	1950.	1590.	1250.	1010.	939.	8240.	12/26/67 R
1969	11100.	9460.	6460.	3880.	2430.	1650.	1260.	998.	1060.	13800.	01/06/69 R
1970	4940.	4210.	4010.	2730.	1710.	1040.	761.	618.	685.	5290.	01/23/70 R
1971										7100.	01/31/71 R
1972										11800.	01/21/72 R
1973										10800.	12/21/72 R

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1946-1973)

W R C
ESTIMATE
SYSTEMATIC
RECORD

MEAN	7573.2	6426.0	4860.8	3235.8	2332.5	1653.8	1344.4	1097.3	934.7		
MAXIMUM	13500.0	13100.0	11300.0	6630.0	4050.0	2990.0	2330.0	1840.0	1420.0		
MINIMUM	2410.0	1930.0	1620.0	996.0	786.0	621.0	492.0	406.0	340.0		
STANDARD DEVIATION	3495.54	2995.74	2168.10	1173.80	764.17	576.73	501.78	398.64	299.81		
SKEWNESS	0.312	0.582	1.280	0.826	-0.009	0.167	0.188	0.131	-0.112		
STD ERROR OF SKEWNESS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464		
SERIAL CORR COEFF	-0.198	-0.216	-0.216	-0.060	0.122	0.261	0.141	0.141	0.025		
COEFF OF VARIATION	0.462	0.466	0.446	0.363	0.328	0.349	0.373	0.363	0.321		
MEAN LOGS	3.829	3.759	3.648	3.480	3.341	3.190	3.096	3.009	2.946		
STD DEVIATION LOGS	0.222	0.216	0.189	0.175	0.168	0.168	0.178	0.174	0.158		
SKEWNESS LOGS	-0.453	-0.351	-0.141	-0.094	-1.175	-0.695	-0.534	-0.566	-0.883		
STD ERR SKEWNESS LOGS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464		
SER CORR COEFF LOGS	-0.188	-0.166	-0.194	-0.081	0.006	0.175	0.116	0.111	0.008		
COEFF OF VAR LOGS	0.058	0.058	0.052	0.050	0.050	0.053	0.057	0.058	0.054		

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1973)

0.99	1736.2	1590.1	1543.0	920.3	652.6	518.8	411.2	342.6	301.2	1996.1	1996.1
0.95	2737.3	2418.5	2134.8	1429.7	1048.9	765.3	601.3	498.5	448.4	3252.2	3252.2
0.90	3433.8	2988.8	2527.9	1761.2	1305.0	923.5	725.1	601.0	541.4	4117.5	4117.5
0.80	4453.2	3820.5	3090.8	2213.9	1648.5	1139.5	897.1	741.2	665.9	5359.9	5359.9
0.50	7012.3	5916.6	4489.6	3200.4	2358.8	1618.5	1293.7	1060.9	930.2	8321.8	8321.8
0.20	10454.4	8792.7	6428.2	4252.9	3036.3	2157.7	1772.0	1439.8	1204.8	11927.6	11927.6
0.10	12615.8	10645.5	7710.9	4786.2	3339.8	2449.4	2048.5	1655.4	1342.1	13976.3	13976.3
0.04	15184.6	12902.3	9322.2	5316.6	3610.0	2757.9	2357.7	1893.5	1477.8	16207.6	16207.6
0.02	16976.9	14517.7	10513.7	5630.4	3753.0	2952.0	2562.8	2049.7	1557.8	17642.5	17642.5
0.01	18672.0	16076.7	11697.0	5889.9	3860.8	3121.1	2749.3	2190.5	1623.8	18910.5	18910.5

3.8958
0.2109
-0.7000
-0.70001996.1
3252.2
4117.5
5359.9
8321.8
11927.6
13976.3
16207.6
17642.5
18910.5

STATION 12101500 PUYALLUP RIVER AT PUYALLUP, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1942	2313	2670	4850	2325	2483	1942	2487	3505	5167	3682	2183	1360	2917
1943	1139	4206	4638	2940	4094	2763	4401	3339	4448	3389	1796	1502	3226
1944	1540	1480	3037	2074	2305	2054	2196	3027	2955	2069	1628	1869	2186
1945	1315	1477	2189	4693	3977	2755	3395	4951	3616	2375	1798	2086	2879
1946	1829	4335	4594	5034	4059	4289	4053	5534	5290	3910	2104	1383	3867
1947	2141	3807	7523	4411	4110	3156	3903	3962	3808	2479	1505	1642	3535
1948	3926	5641	4513	4084	3762	3304	3153	5095	3447	3447	2454	1824	4011
1949	2186	3495	4358	1869	3640	3904	3439	6407	4399	3226	2171	1488	3461
1950	2192	4067	4630	4509	5000	5969	4145	4692	6928	5160	2643	1737	4301
1951	3123	5504	6577	4812	7187	3529	3694	4153	3655	2583	1777	1364	3960
1952	2916	2682	2910	1874	3289	2277	3267	4291	3505	2808	1744	1192	2727
1953	846	656	984	6248	5490	2297	2981	3600	4851	3824	2026	1483	2907
1954	1714	2987	7485	4363	4397	3068	3458	3597	4934	3243	2574	1995	3785
1955	1837	2906	2730	3355	3948	2146	3740	3700	6830	4850	2493	1621	3337
1956	3663	6925	7646	4708	2588	3673	4634	5905	4534	4953	2244	1498	4544
1957	2523	2068	6667	2121	2360	4836	3820	4855	3868	2340	1687	1457	3341
1958	1401	3288	3699	4335	4354	2782	3567	4260	3772	2620	1960	1595	3040
1959	2068	7153	6423	6706	3043	2779	3772	4017	5266	3319	1682	3340	4131
1960	5308	7697	5269	2612	3956	2690	3332	5255	4471	2656	1991	1641	3902
1961	2012	3271	3271	4017	7518	4620	3459	4706	5515	2965	2267	1420	4010
1962	1714	2095	3797	4629	2347	2443	3658	3480	3824	2641	2139	1473	2859
1963	1732	4563	4766	3204	4368	2708	3726	3503	3131	2593	1972	1649	3150
1964	1555	3179	3328	5586	3274	2974	3053	4267	7501	4557	2846	1877	3649
1965	2336	2930	6505	7021	6475	3059	3603	3224	3769	2769	2290	1599	3785
1966	1646	1721	2154	3462	1622	2550	3841	4128	3686	3331	2095	1616	2662
1967	2015	2803	4947	6877	4384	3029	2010	3502	5974	3240	2038	1682	3540
1968	2595	2681	4071	4704	5742	3144	3097	2927	4993	2549	2539	2869	3481
1969	2731	4419	4559	5765	2285	2204	3710	5932	6027	2621	1645	1717	3642
1970	1813	1882	2902	6275	4153	2520	2817	3246	4652	2565	1777	1726	3021
1971	1699	2643	3542	7367	5529	3382	3453	5571	5434	5046	2874	1933	4036
1972	1576	3245	3950	5637	6715	8703	3944	6059	6939	4980	2542	2033	4682
1973	1283	1910	5395	4069	2171	2053	1673	2842	3219	2389	1741	1340	2498
1974	1336	3367	4987	7135	4354	3505	4371	4637	7973	4663	2885	2592	4312
1975	1099	2156	4042	7908	4371	3564	1950	4315	5492	4350	2516	1693	3623
1976	2298	4270	10340	6674	3724	2638	2772	4011	3911	2772	2906	1984	4419
1977	1257	1710	1663	1882	1864	2382	3420	2773	3556	1891	2341	2045	2230
1978	1471	5131	9358	3547	2846	2340	1948	2872	3628	2639	1984	2109	3320
1979	1326	2666	3042	2331	3350	3709	2928	3505	3338	2473	1633	1612	2654

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1942-1979)

MEAN	2038.8	3504.2	4666.1	4504.3	3998.3	3193.2	3363.9	4203.0	4827.1	3315.0	2133.9	1764.4	3456.1
MAXIMUM	5308.0	7697.0	10340.0	7908.0	7518.0	8703.0	4634.0	6407.0	7973.0	5160.0	2906.0	3340.0	4682.0
MINIMUM	846.0	656.0	984.0	1869.0	1622.0	1942.0	1673.0	2842.0	2955.0	1891.0	1505.0	1192.0	2186.0
STD DEVIATION	871.53	1702.34	2032.40	1743.31	1443.87	1236.44	738.98	998.01	1350.14	944.42	383.01	424.58	628.32
SKENESS	1.824	0.866	0.817	0.148	0.667	2.779	-0.574	0.491	0.670	0.591	0.285	1.984	-0.142
STD ERR SKEW	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383
SER CORR COEFF	0.153	0.151	-0.390	0.179	-0.198	-0.014	-0.184	0.088	-0.126	0.137	0.149	-0.049	-0.077
COEFF OF VAR	0.427	0.486	0.436	0.387	0.361	0.387	0.220	0.237	0.280	0.285	0.179	0.241	0.182
MEAN LOGS	3.278	3.493	3.626	3.618	3.574	3.442	3.515	3.612	3.668	3.504	3.322	3.236	3.531
STD DEV LOGS	0.163	0.222	0.205	0.186	0.160	0.133	0.108	0.112	0.118	0.120	0.078	0.091	0.083
SKENESS LOGS	0.511	-0.516	-0.747	-0.484	-0.219	1.316	-1.125	0.073	0.292	0.262	0.033	1.201	-0.521
STD ERR SKEW LOGS	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383
SER CORR LOGS	0.200	0.052	-0.346	0.088	-0.229	0.005	-0.185	0.084	-0.090	0.108	0.137	-0.001	-0.073
COEFF OF VAR LOGS	0.064	0.064	0.057	0.051	0.045	0.038	0.031	0.028	0.031	0.028	0.023	0.028	0.023
% DF AVE FLOW	4.9	8.4	11.2	10.9	9.6	7.7	8.1	10.1	11.6	8.0	5.1	4.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1942-1979)

0.99	912.7	781.8	1097.3	1319.1	1499.6	1995.3	1514.8	2395.9	2628.1	1766.1	1390.1	1271.4	2033.8
0.95	1044.4	1251.7	1782.5	1942.8	2000.1	2192.7	2042.9	2791.1	3052.1	2066.1	1566.7	1327.1	2422.9
0.90	1201.4	1579.5	2250.7	2354.2	2319.7	2103.8	2445.9	3019.1	3420.9	2255.9	1670.5	1372.1	2641.7
0.80	1374.1	2058.5	2917.5	2932.0	2762.0	2348.0	2721.8	3352.8	3694.5	2519.6	1805.9	1443.8	2914.9
0.50	1835.8	3251.8	4461.5	4292.3	3800.2	2840.6	3425.3	4079.1	4593.9	3152.9	2098.7	1654.4	3464.0
0.20	2566.1	4826.8	6336.1	5984.1	5129.9	3777.5	4038.8	4987.9	5619.1	4134.4	2442.3	2101.3	3998.0
0.10	3115.0	5795.4	7365.0	6988.3	5956.5	4561.0	4302.9	5541.5	6535.1	4584.8	2845.2	2284.2	4569.4
0.04	3886.7	6924.7	8463.6	8135.6	6744.8	5774.8	4535.3	6214.5	7676.7	5312.5	2881.6	2675.5	4569.5
0.02	4521.1	7699.1	9157.4	8911.0	7649.3	6855.0	4658.2	6696.1	8462.7	5860.3	3046.0	2992.8	4751.9
0.01	5208.8	8420.2	9761.7	9626.9	8325.2	8103.6	4751.3	7164.8	9258.6	6414.2	3202.4	3340.6	4911.6

STATION 12101500 PUYALLUP RIVER AT PUYALLUP, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1943	850.0	902.0	922.0	937.0	1020.0	1190.0	1520.0	1810.0	2750.0
1944	886.0	969.0	1060.0	1140.0	1360.0	1460.0	1510.0	1570.0	1900.0
1945	860.0	900.0	1020.0	1070.0	1160.0	1320.0	1480.0	1540.0	1740.0
1946	1120.0	1290.0	1350.0	1370.0	1680.0	1790.0	1820.0	1990.0	2590.0
1947	848.0	970.0	1100.0	1130.0	1140.0	1430.0	1700.0	2010.0	3060.0
1948	972.0	1120.0	1240.0	1350.0	1430.0	1570.0	1820.0	2220.0	2840.0
1949	840.0	913.0	989.0	1050.0	1430.0	1980.0	2030.0	2230.0	2610.0
1950	840.0	970.0	1150.0	1250.0	1410.0	1680.0	1870.0	2100.0	2790.0
1951	970.0	1180.0	1280.0	1420.0	1650.0	2080.0	2480.0	2730.0	3930.0
1952	828.0	874.0	1180.0	1260.0	1310.0	1550.0	1800.0	2110.0	2240.0
1953	400.0	488.0	520.0	618.0	647.0	707.0	812.0	901.0	1300.0
1954	774.0	945.0	1170.0	1330.0	1440.0	1590.0	1730.0	1870.0	2740.0
1955	766.0	993.0	1120.0	1240.0	1700.0	1880.0	2010.0	2210.0	2550.0
1956	432.0	914.0	1200.0	1300.0	1540.0	1800.0	2340.0	3040.0	3710.0
1957	779.0	1030.0	1210.0	1280.0	1390.0	1620.0	2050.0	2350.0	3020.0
1958	657.0	853.0	1040.0	1110.0	1230.0	1330.0	1450.0	1580.0	2010.0
1959	802.0	911.0	1140.0	1350.0	1500.0	1640.0	1820.0	1980.0	2690.0
1960	772.0	1060.0	1470.0	1550.0	1680.0	2150.0	2590.0	3050.0	3420.0
1961	982.0	1130.0	1150.0	1290.0	1350.0	1600.0	1730.0	2020.0	2970.0
1962	830.0	868.0	910.0	1190.0	1250.0	1550.0	1670.0	1850.0	2280.0
1963	710.0	835.0	1170.0	1340.0	1470.0	1600.0	1640.0	1840.0	2360.0
1964	738.0	888.0	1070.0	1190.0	1380.0	1490.0	1700.0	1870.0	2300.0
1965	830.0	943.0	1300.0	1540.0	1790.0	2100.0	2090.0	2270.0	3240.0
1966	812.0	866.0	1120.0	1290.0	1540.0	1600.0	1630.0	1740.0	2000.0
1967	813.0	981.0	1100.0	1210.0	1510.0	1580.0	1820.0	2000.0	2560.0
1968	1010.0	1160.0	1380.0	1390.0	1460.0	1680.0	1850.0	2240.0	2580.0
1969	1130.0	1400.0	1720.0	1720.0	1910.0	2210.0	2500.0	2590.0	3060.0
1970	695.0	850.0	1160.0	1200.0	1410.0	1660.0	1690.0	1760.0	2010.0
1971	541.0	846.0	1010.0	1440.0	1550.0	1610.0	1670.0	1730.0	2310.0
1972	632.0	833.0	1140.0	1210.0	1290.0	1680.0	2020.0	2320.0	3000.0
1973	665.0	735.0	962.0	1030.0	1240.0	1460.0	1650.0	1910.0	2810.0
1974	618.0	795.0	964.0	1010.0	1150.0	1250.0	1420.0	1620.0	2080.0
1975	527.0	703.0	847.0	893.0	967.0	1250.0	1730.0	1950.0	2840.0
1976	1000.0	1080.0	1230.0	1310.0	1440.0	1860.0	2080.0	2440.0	3340.0
1977	662.0	745.0	884.0	1040.0	1240.0	1430.0	1440.0	1590.0	1710.0
1978	833.0	1050.0	1120.0	1150.0	1440.0	1740.0	1940.0	1930.0	2330.0
1979	777.0	861.0	1110.0	1150.0	1260.0	1670.0	1770.0	1940.0	2210.0

LOWEST MEAN FLOW STATISTICS (YEARS 1943-1979)

MEAN	789.2	941.9	1114.8	1225.6	1388.2	1615.3	1807.4	2024.4	2591.4
MAXIMUM	1150.0	1400.0	1490.0	1720.0	1910.0	2210.0	2590.0	3050.0	3930.0
MINIMUM	400.0	488.0	520.0	618.0	647.0	707.0	812.0	901.0	1300.0
STANDARD DEVIATION	165.69	167.30	179.77	200.23	238.57	289.67	335.87	414.63	565.23
SKEWNESS	-0.240	0.296	-0.625	-0.378	-0.581	-0.404	0.083	0.362	0.130
STD ERROR OF SKEWNESS	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388
SERIAL CORR COEFF	0.213	0.101	0.022	0.061	0.082	0.066	0.045	0.112	0.011
COEFF OF VARIATION	0.210	0.178	0.161	0.163	0.172	0.179	0.186	0.205	0.218
MEAN LOGS	2.887	2.967	3.041	3.082	3.135	3.200	3.249	3.297	3.403
STD DEVIATION LOGS	0.100	0.080	0.079	0.078	0.084	0.088	0.087	0.094	0.099
SKEWNESS LOGS	-0.997	-0.756	-1.836	-1.384	-1.629	-1.666	-1.274	-0.930	-0.590
STD ERR SKEWNESS LOGS	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388	0.388
SER CORR COEFF LOGS	0.176	0.096	-0.015	0.035	0.068	0.072	0.042	0.096	0.014
COEFF OF VARI LOGS	0.035	0.027	0.026	0.025	0.027	0.027	0.027	0.028	0.029

STATION 12101500 PUYALLUP RIVER AT PUYALLUP, WASH.

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1943-1979)

0.99	1110.5	1284.0	1334.6	1531.9	1715.1	2004.3	2350.3	2822.2	3895.6
0.98	1086.0	1252.6	1330.5	1518.3	1705.6	1993.6	2321.4	2757.8	3754.0
0.96	1054.9	1215.0	1323.1	1498.4	1690.0	1975.9	2281.1	2677.4	3591.0
0.90	998.5	1151.2	1302.6	1456.1	1652.3	1932.3	2199.6	2534.8	3329.4
0.80	937.0	1085.7	1269.6	1402.0	1598.1	1868.4	2100.3	2382.1	3076.8
0.50	800.0	948.6	1157.3	1257.1	1435.2	1673.0	1849.6	2047.7	2585.9
0.20	647.4	802.1	978.2	1064.5	1199.4	1367.5	1535.0	1679.4	2105.4
0.10	566.3	724.6	864.7	951.2	1056.4	1214.5	1356.3	1483.8	1865.9
0.05	500.7	661.3	765.5	854.6	934.0	1066.8	1206.9	1324.9	1676.9
0.02	429.9	591.7	652.6	745.6	796.4	901.7	1041.4	1152.2	1475.3
0.01	385.0	546.7	578.9	674.3	707.2	795.4	934.6	1042.0	1348.2

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1943-1979)

P95	P90	P75	P70	P50	P25	P10
1200.0	1400.0	2000.0	2200.0	2900.0	4200.0	5900.0

STATION 12101500 PUYALLUP RIVER AT PUYALLUP, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL FLOW (CFS)	PEAK-FLOW DATA DATE	REG. (H)
1942	16800.	14400.	9310.	6320.	5610.	4860.	4150.	3760.	3220.	22500.	12/19/41	R
1943	17500.	13300.	8740.	6400.	5690.	4690.	4330.	4130.	3900.	25700.	11/23/42	R
1944	12500.	9750.	6410.	4280.	3330.	3010.	2760.	2590.	2480.	19900.	12/03/43	R
1945	14200.	11100.	7380.	5010.	4430.	4020.	3930.	3910.	3930.	21800.	01/07/45	R
1946	22200.	15400.	10700.	8630.	6390.	5520.	5160.	4910.	4920.	33800.	12/29/45	R
1947	26300.	25000.	20000.	11900.	8770.	6120.	5130.	4660.	4660.	33800.	12/11/46	R
1948	15700.	11000.	8700.	7950.	7360.	6200.	5290.	4710.	4400.	17700.	11/08/47	R
1949	11000.	9900.	7740.	6580.	5840.	5120.	5060.	4400.	4400.	14000.	02/17/49	R
1950	14700.	13300.	10100.	9510.	7230.	6350.	5630.	5570.	5470.	17400.	03/04/50	R
1951	25800.	22800.	16200.	10400.	7660.	6550.	6870.	6050.	5210.	29800.	02/11/51	R
1952	7270.	6480.	4960.	4560.	4390.	4020.	3740.	3550.	3520.	9110.	02/04/52	R
1953	13600.	11400.	11000.	9700.	8610.	5880.	4720.	4380.	4320.	16900.	02/01/53	R
1954	22100.	19200.	14700.	10400.	7100.	6160.	5450.	5000.	4490.	34500.	12/09/53	R
1955	13300.	12800.	11000.	8300.	7050.	5880.	5240.	4790.	4210.	15000.	02/08/55	R
1956	31900.	19500.	12600.	10100.	8680.	7560.	6730.	5880.	5100.	37600.	12/12/55	R
1957	15700.	14500.	12400.	10400.	6870.	5050.	4540.	4410.	4270.	17300.	01/17/56	R
1958	9510.	7810.	6570.	5510.	4630.	4350.	4170.	3820.	3910.	10700.	01/17/56	R
1959	18600.	16300.	11700.	9490.	8110.	7140.	6950.	5970.	5130.	22600.	01/23/59	R
1960	32100.	25600.	19900.	12300.	9490.	7330.	6150.	5330.	4600.	35600.	11/23/59	R
1961	14800.	13200.	11200.	7640.	5990.	5440.	5440.	5480.	4990.	23300.	02/21/61	R
1962	11500.	10200.	9480.	7600.	6170.	4390.	3710.	3510.	3440.	15400.	12/24/61	R
1963	20200.	13500.	11000.	8070.	6850.	5370.	4910.	4350.	4060.	22900.	11/20/62	R
1964	16400.	12400.	9090.	8690.	7680.	6540.	5540.	4870.	4530.	22200.	01/25/64	R
1965	35000.	29900.	23000.	14400.	9750.	7410.	6790.	5960.	5080.	41500.	01/29/65	R
1966	7910.	7510.	6540.	5060.	4180.	4020.	3900.	3790.	3300.	8710.	05/06/66	R
1967	12700.	10800.	9710.	7920.	7100.	6190.	5540.	4930.	4300.	14700.	01/19/67	R
1968	18000.	14800.	10600.	7230.	5940.	5540.	5000.	4530.	4280.	24400.	12/25/67	R
1969	22200.	20900.	14000.	8970.	7230.	6050.	5280.	4660.	4340.	25600.	01/05/69	R
1970	16100.	13000.	12500.	10100.	7290.	5400.	4580.	4110.	4010.	17700.	01/20/70	R
1971	15800.	13300.	11200.	11000.	8680.	6500.	5660.	5110.	5180.	21100.	01/19/71	R
1972	23900.	17500.	14200.	12500.	10300.	8360.	7260.	6710.	6520.	25800.	01/21/72	R
1973	15100.	12100.	11000.	8290.	6580.	4850.	4400.	3540.	3040.	20700.	12/21/72	R
1974	26800.	22000.	14600.	10500.	8110.	6530.	5910.	5440.	5450.	31400.	01/15/74	R
1975	27700.	20300.	15600.	11700.	8050.	6620.	5980.	5170.	4750.	32600.	01/18/75	R
1976	31600.	30600.	22800.	15200.	10500.	8740.	7250.	6390.	5150.	33300.	12/02/75	R
1977	6320.	5780.	4800.	4210.	3640.	3320.	3280.	3050.	2750.	6560.	06/08/77	R
1978	35400.	27400.	19000.	14500.	10700.	7390.	6110.	5280.	4210.	40600.	12/02/77	R
1979	9100.	8200.	6090.	4580.	4260.	3670.	3500.	3490.	3220.	10300.	02/07/79	R

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1942-1979)

	MEAN	MAXIMUM	MINIMUM	STANDARD DEVIATION	SKENNESS	STD ERROR OF SKENNESS	SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	SKENNESS LOGS	STD ERR SKENNESS LOGS	SER CORR COEFF LOGS	COEFF OF VAR LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
18613.4	15382.4	11828.2	8973.2	7100.3	5784.7	5167.6	4718.9	4330.8								
35400.0	30600.0	23000.0	15200.0	10700.0	8740.0	7260.0	6710.0	6520.0								
6320.0	5780.0	4800.0	4210.0	3330.0	3010.0	2760.0	2590.0	2480.0								
7902.70	6429.87	4568.15	2816.05	1875.22	1337.15	1143.00	954.61	840.90								
0.607	0.814	0.861	0.232	-0.110	-0.032	0.010	-0.071	-0.052								
0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383								
-0.300	-0.292	-0.290	-0.203	-0.172	-0.128	-0.110	-0.122	-0.071								
0.425	0.418	0.386	0.314	0.264	0.231	0.221	0.202	0.194								
4.230	4.151	4.042	3.930	3.835	3.750	3.702	3.665	3.628								
0.191	0.181	0.167	0.146	0.126	0.107	0.101	0.093	0.089								
-0.242	-0.037	-0.121	-0.529	-0.756	-0.634	-0.496	-0.581	-0.654								
-0.563	0.383	0.383	0.383	0.383	0.383	0.383	0.383	0.383								
-0.315	-0.316	-0.312	-0.202	-0.143	-0.110	-0.085	-0.105	-0.079								
0.045	0.043	0.041	0.037	0.033	0.029	0.027	0.025	0.025								

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1942-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
5647.0	5321.0	4345.4	3421.6	2982.4	2835.2	2702.7	2576.1	2396.7	6003.1	6003.1
7113.6	6770.8	4673.2	4021.4	3604.7	3338.1	3153.5	2931.7	9302.0	9302.0	9302.0
8296.4	7896.9	6692.6	5449.9	4642.1	4051.8	3706.2	3482.0	11507.6	11507.6	11507.6
11807.1	9984.9	7985.8	6491.5	5445.2	4621.6	4176.1	3895.1	14613.1	14613.1	14613.1
17304.3	14192.2	11102.4	8773.0	7086.7	5771.6	5135.9	4715.6	21842.2	21842.2	21842.2
24732.9	20098.6	15267.4	11369.1	8760.0	6947.5	6187.1	5545.0	30484.6	30484.6	30484.6
29520.0	24072.8	17955.7	12814.0	9603.3	7550.2	6683.5	5969.3	35372.0	35372.0	35372.0
35392.5	29148.5	21277.2	14392.4	10452.3	8170.5	7252.9	6407.2	40705.1	40705.1	40705.1
39638.3	32963.4	23701.0	15420.6	10965.1	8554.3	7616.2	6679.4	44150.8	44150.8	44150.8
43777.1	36805.1	26085.7	16344.1	11398.6	8885.8	7938.2	6915.7	47212.1	47212.1	47212.1

STATION 12101500 PUYALLUP RIVER AT PUYALLUP, WASH.
MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1915	1870	4823	1590	2056	1479	1642	3021	2325	2705	2586	2328	1407	2319
1916	2039	3829	4797	1807	5095	6522	3884	4505	5814	5949	2896	1932	4079
1917	1307	1998	2971	2966	3582	1901	4666	5052	8262	6374	2729	1853	3633
1918	1447	1293	11150	7629	4150	2616	2956	3361	4338	2704	2231	1938	3828
1919	1987	2347	4799	5823	2845	2857	3837	4019	3782	3186	2240	1837	3347
1920	1541	2786	3009	4876	2901	2158	3447	3258	3921	2975	2231	2455	2961
1921	3833	2984	4002	5557	6866	4945	3682	4535	6149	3860	2323	1750	4185
1922	1732	3331	3788	2197	2736	1755	2128	5064	6119	3084	1790	1441	3203
1923	1288	1984	3105	7180	2501	2575	3690	4287	4267	3572	2477	2122	3267
1924	2164	1715	3103	3320	5910	2309	2119	3533	2567	2390	1964	1636	2718
1925	1625	2660	4416	4116	4443	2587	3610	4349	3153	2764	2154	1545	3112
1926	1235	2383	3533	3583	3633	2630	2222	2571	2038	2043	2018	1687	2423
1927	2250	2383	3533	3716	3561	2600	2697	3578	3006	3080	2234	2352	3870
1928	3771	7552	3964	5460	2174	4157	4238	5158	5127	2689	2085	1717	3870
1929	2098	1514	1588	1706	1620	2824	2800	4958	2762	2165	2127	1603	2560
1930	3157	678	1765	1731	4032	3081	3824	2724	2742	2431	1776	1437	2180
1931	1623	1131	1039	2555	2118	2657	4298	3359	3613	2431	1898	1495	2350
1932	1782	2912	2856	3393	4432	4634	4689	4406	5334	3476	2018	1845	3635
1933	2295	8119	5388	2021	2235	3358	3358	4355	6231	4478	2575	2117	4064
1934	4316	4634	15790	8024	4163	5060	4236	4751	2663	2066	1797	1330	4927
1935	3719	5902	4414	6261	3521	3133	2985	3215	4116	3199	2018	1626	3676
1936	1193	1238	1499	4396	2734	3540	4115	6647	6061	3191	2438	1909	3249
1937	1358	792	3140	1416	2352	2996	4103	4165	6322	3360	2089	1661	2812
1938	1427	6280	5222	4203	2324	2572	4992	4430	4155	2855	2093	1805	3516
1939	1700	2264	3344	3796	3098	3497	3380	3784	3978	3050	2093	1565	2963
1940	1423	1727	3392	3135	4486	3964	3098	3618	2447	2097	1706	1561	2717
1941	1591	2217	2515	2324	1801	1585	1977	2575	2666	2218	1737	1818	2087

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1915-1941)

MEAN	1991.5	2974.9	4189.9	4022.7	3338.8	3179.0	3469.3	4023.0	4292.2	3147.4	2146.3	1757.2	3218.5
MAXIMUM	4316.0	8119.0	15790.0	8024.0	6866.0	6522.0	4992.0	6647.0	8262.0	6374.0	2896.0	2455.0	4927.0
MINIMUM	1157.0	678.0	1039.0	1416.0	1479.0	1585.0	1977.0	2325.0	2038.0	2043.0	1706.0	1330.0	2087.0
STD DEVIATION	881.46	2013.77	3066.94	1882.36	1325.37	1288.75	841.48	969.02	1591.71	1063.71	298.54	276.46	708.98
SKWENESS	1.599	1.274	2.615	0.572	0.830	1.353	-0.116	0.383	0.625	1.860	0.691	0.837	0.341
STD ERR SKEW	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.456	0.456	0.448	0.448	0.456
SER CORR COEFF	0.236	0.086	0.070	0.246	-0.244	-0.333	-0.016	-0.097	0.293	0.261	0.250	-0.060	0.265
COEFF OF VAR	0.443	0.577	0.732	0.468	0.397	0.405	0.243	0.241	0.371	0.338	0.139	0.157	0.220
MEAN LOGS	3.267	3.385	3.544	3.556	3.491	3.472	3.527	3.592	3.604	3.479	3.328	3.240	3.497
STD DEV LOGS	0.162	0.283	0.4254	0.4214	0.4171	0.4160	0.4112	0.4107	0.4161	0.4126	0.4059	0.4066	0.4097
SKWENESS LOGS	1.039	0.074	0.370	-0.197	0.008	0.462	-0.555	-0.321	0.032	1.018	0.358	0.458	-0.110
STD ERR SKEW LOGS	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.448	0.456
SER CORR LOGS	0.211	0.178	0.222	0.247	-0.250	-0.371	-0.021	-0.091	0.308	0.197	0.235	-0.045	0.268
COEFF OF VAR LOGS	0.050	0.084	0.072	0.060	0.049	0.046	0.032	0.030	0.045	0.036	0.018	0.020	0.028
% OF AVE FLOW	5.2	7.7	10.9	10.4	8.7	8.3	9.0	10.4	11.1	8.2	5.6	4.6	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1915-1941)

0.99	1033.5	552.6	1052.5	1067.3	1242.7	1428.1	1661.6	2076.3	1710.8	1907.1	1608.1	1284.9	1840.7
0.95	1138.0	642.3	1428.4	1560.0	1623.1	1704.5	2119.9	2584.2	2191.1	2059.6	1726.6	1382.3	2165.8
0.90	1218.2	1057.8	1698.3	1897.7	1871.9	1891.0	2386.3	2827.0	2501.9	2173.9	1798.3	1442.9	2358.2
0.80	1346.8	1398.1	2123.0	2391.7	2225.0	2164.2	2732.1	3190.1	2939.9	2352.9	1894.2	1525.5	2610.4
0.50	1735.1	2406.0	3378.3	3657.8	3098.6	2884.9	3445.2	3961.2	4011.3	2868.9	2109.9	1717.4	3156.4
0.20	2446.7	4191.2	5657.5	5467.8	4318.3	4003.1	4199.9	4531.4	3488.7	3748.1	2377.3	1965.3	3794.8
0.10	3045.4	5629.6	7564.5	6686.2	5138.0	4830.4	4599.0	5314.5	4643.6	4441.0	2542.2	2123.2	4168.8
0.04	3968.6	7740.2	10480.3	8230.9	6185.5	5978.8	5020.3	5857.0	7725.9	5450.2	2740.6	2317.8	4600.6
0.02	4793.3	9527.4	13055.0	9379.7	6974.0	6911.9	5287.3	6218.7	8665.1	6305.6	2882.8	2460.2	4988.5
0.01	5750.1	11500.9	16005.1	10524.1	7769.5	7913.8	5522.2	6550.7	9610.1	7256.2	3021.2	2600.9	5179.7

STATION 12101500 PUYALLUP RIVER AT PUYALLUP, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1916	1190.0	1190.0	1250.0	1330.0	1410.0	1630.0	1840.0	1970.0	2180.0
1917	1130.0	1220.0	1260.0	1290.0	1300.0	1510.0	1670.0	1890.0	2340.0
1918	870.0	957.0	1010.0	1070.0	1270.0	1350.0	1480.0	1680.0	3330.0
1919	1100.0	1360.0	1490.0	1620.0	1750.0	1870.0	1990.0	2110.0	2570.0
1920	1080.0	1270.0	1420.0	1460.0	1530.0	1680.0	1860.0	2030.0	2320.0
1921	1630.0	1670.0	1690.0	1770.0	1960.0	2220.0	2520.0	2700.0	2850.0
1922	1470.0	1460.0	1540.0	1600.0	1690.0	1710.0	1750.0	1980.0	3070.0
1923	1120.0	1120.0	1120.0	1120.0	1150.0	1320.0	1480.0	1610.0	2030.0
1924	1320.0	1400.0	1430.0	1490.0	1620.0	1880.0	1960.0	2100.0	2430.0
1925	1250.0	1340.0	1390.0	1420.0	1490.0	1600.0	1730.0	1850.0	2120.0
1926	1040.0	1110.0	1140.0	1150.0	1210.0	1230.0	1330.0	1510.0	2010.0
1927	1040.0	1480.0	1500.0	1570.0	1630.0	1810.0	1850.0	1900.0	2040.0
1929	1240.0	1350.0	1400.0	1430.0	1490.0	1550.0	1600.0	1600.0	1710.0
1930	410.0	508.0	532.0	557.0	613.0	794.0	1020.0	1230.0	1510.0
1931	645.0	785.0	816.0	869.0	966.0	1060.0	1130.0	1280.0	1480.0
1932	704.0	742.0	776.0	838.0	987.0	1060.0	1130.0	1280.0	1480.0
1933	1160.0	1460.0	1630.0	1700.0	1800.0	1880.0	2020.0	2360.0	3220.0
1934	1530.0	1650.0	1730.0	1770.0	1960.0	2130.0	2450.0	3110.0	3770.0
1935	700.0	890.0	1010.0	1100.0	1130.0	1380.0	1520.0	1660.0	2450.0
1936	500.0	650.0	693.0	818.0	919.0	1170.0	1270.0	1370.0	1770.0
1937	640.0	657.0	710.0	737.0	770.0	995.0	1260.0	1510.0	1730.0
1938	784.0	853.0	913.0	961.0	1120.0	1460.0	1680.0	1950.0	3050.0
1939	1140.0	1340.0	1460.0	1530.0	1700.0	1730.0	1680.0	1910.0	2310.0
1940	986.0	1020.0	1110.0	1260.0	1310.0	1440.0	1560.0	1670.0	2190.0
1941	1090.0	1090.0	1140.0	1320.0	1400.0	1550.0	1570.0	1600.0	1840.0

LOWEST MEAN FLOW STATISTICS (YEARS 1916-1941)

MEAN	1047.6	1144.1	1206.4	1271.2	1367.0	1529.6	1674.8	1854.0	2341.2
MAXIMUM	1630.0	1670.0	1730.0	1770.0	1960.0	2220.0	2520.0	3110.0	3770.0
MINIMUM	410.0	508.0	532.0	557.0	613.0	794.0	1020.0	1230.0	1480.0
STANDARD DEVIATION	323.40	321.74	334.95	339.03	358.38	343.03	356.93	420.25	589.90
SKEWNESS	-0.222	-0.289	-0.334	-0.384	-0.223	-0.055	0.536	1.260	0.735
STD ERROR OF SKEWNESS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SERIAL CORR COEFF	0.417	0.354	0.344	0.322	0.301	0.271	0.289	0.315	0.393
COEFF OF VARIATION	0.309	0.281	0.278	0.267	0.262	0.224	0.213	0.227	0.252
MEAN LOGS	2.997	3.039	3.063	3.087	3.119	3.173	3.215	3.258	3.357
STD DEVIATION LOGS	0.154	0.137	0.136	0.131	0.126	0.104	0.093	0.092	0.106
SKEWNESS LOGS	-0.909	-0.812	-0.853	-0.929	-0.872	-0.723	-0.146	0.503	0.221
STD ERR SKEWNESS LOGS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SER CORR COEFF LOGS	0.439	0.375	0.362	0.340	0.322	0.301	0.338	0.371	0.445
COEFF OF VAR LOGS	0.051	0.045	0.044	0.042	0.040	0.033	0.029	0.028	0.032

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1916-1941)

	0.99	0.98	0.96	0.90	0.80	0.70	0.60	0.50	0.40	0.30	0.20	0.10	0.05	0.02	0.01
MEAN	1780.3	1884.9	1961.8	2000.8	2146.2	2288.1	2633.1	3212.0	4182.1						
MAXIMUM	1712.5	1812.3	1890.6	1937.5	2075.3	2213.0	2499.3	2965.3	3869.4						
MINIMUM	1629.7	1725.4	1804.4	1859.1	1988.9	2124.2	2356.5	2722.6	3555.0						
STANDARD DEVIATION	1481.6	1579.8	1658.2	1722.4	1840.7	1976.9	2147.5	2402.6	3128.7						
SKEWNESS	1342.0	1433.9	1509.5	1579.4	1688.2	1829.8	1964.3	2152.9	2785.8						
STD ERROR OF SKEWNESS	1046.1	1142.1	1207.5	1279.0	1372.8	1533.4	1647.3	1780.8	2253.4						
SERIAL CORR COEFF	756.3	856.7	907.3	970.1	1051.8	1233.6	1371.3	1510.7	1846.2						
COEFF OF VARIATION	618.0	718.6	760.8	816.3	892.1	1082.2	1242.3	1399.5	1671.8						
MEAN LOGS	514.0	612.9	648.4	697.0	768.0	834.6	962.4	1143.2	1544.2						
STD DEVIATION LOGS	409.7	504.6	533.0	573.7	639.0	754.3	874.4	1039.3	1416.0						
SKEWNESS LOGS	348.0	439.2	463.2	498.7	560.1	663.2	794.4	974.4	1338.6						

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1916-1941)

	P95	P90	P75	P50	P25	P10
1200.0	1500.0	1900.0	2600.0	3800.0	5600.0	

STATION 12101500 PUYALLUP RIVER AT PUYALLUP, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30

ANNUAL PEAK-FLOW DATA
FLOW (CFS) DATE REG. (R)

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA FLOW (CFS) DATE REG. (R)
1915	8800.	7390.	6540.	5720.	4830.	3420.	2870.	2660.	2440.	9390. 11/03/14
1916	17800.	14800.	11700.	8640.	7270.	5970.	5550.	5540.	5290.	22300. 12/22/15
1917	12200.	11400.	10200.	9190.	8590.	7610.	6770.	6170.	4970.	15000. 12/13/16
1918	35600.	27000.	21800.	18600.	14300.	10200.	7810.	6580.	5470.	40500. 12/18/17
1919	32600.	21500.	14600.	10100.	6540.	5390.	4550.	4210.	4140.	36500. 01/23/19
1920	16500.	13000.	9290.	7630.	5700.	4370.	3820.	3500.	3510.	16500. 01/28/20
1921	20200.	16400.	13900.	10300.	7200.	6640.	6250.	5590.	5440.	24900. 12/30/20
1922	32400.	24800.	16000.	11800.	8830.	5670.	4800.	4130.	3630.	35600. 12/13/21
1923	24900.	22600.	17400.	11100.	8230.	5420.	4460.	4220.	4210.	31000. 01/06/23
1924	14800.	12800.	9010.	8270.	6030.	4660.	4150.	3670.	3410.	21700. 02/12/24
1925	14700.	12800.	9490.	7080.	5610.	5030.	4430.	3930.	3910.	18600. 12/11/24
1926	12800.	11500.	8670.	5600.	4830.	4240.	3850.	3530.	3140.	15800. 12/23/25
1927										14500. 10/16/26
1928	22100.	15100.	11700.	9720.	8310.	6520.	5750.	5240.	4630.	25400. 11/25/27
1929	8170.	7600.	6340.	6000.	5330.	5070.	4390.	4100.	3420.	8610. 06/14/29
1930	7730.	6780.	5350.	4520.	3900.	3520.	3350.	3200.	2930.	8390. 03/25/30
1931	16700.	11700.	8210.	6280.	4730.	4040.	3820.	3590.	3180.	19800. 04/01/31
1932	24500.	20600.	13700.	10300.	8070.	6550.	5860.	5660.	4890.	33000. 02/26/32
1933	28000.	20400.	17800.	11700.	8750.	7060.	6110.	5160.	4470.	37800. 11/13/32
1934	53400.	38400.	28800.	23100.	16900.	12400.	9750.	8690.	7230.	57000. 12/10/33
1935	31800.	21200.	13700.	11500.	7850.	6020.	5540.	5550.	4700.	39500. 10/25/34
1936	12900.	10600.	8580.	7510.	7130.	6600.	5810.	5150.	4590.	14000. 06/08/36
1937	14700.	11000.	8830.	7190.	6420.	5330.	5070.	4510.	3950.	17800. 04/15/37
1938	27900.	18200.	11600.	7850.	6660.	6010.	5350.	4580.	4350.	33900. 04/18/38
1939	10800.	7230.	5680.	4420.	4210.	3910.	3770.	3750.	3600.	13000. 02/15/39
1940	10500.	9150.	7800.	5490.	4940.	4250.	4070.	3850.	3630.	11500. 02/10/40
1941	14500.	8870.	5430.	4020.	3120.	2750.	2500.	2370.	2240.	18400. 11/29/40

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1915-1941)

W R C SYSTEMATIC
ESTIMATE RECORD

MEAN	20269.2	15508.5	11543.1	8985.8	7087.7	5718.1	5017.3	4581.9	4129.6	
MAXIMUM	53400.0	38400.0	26800.0	23100.0	16900.0	12400.0	9750.0	8690.0	7230.0	
MINIMUM	7730.0	6780.0	5350.0	4520.0	3120.0	2750.0	2500.0	2370.0	2240.0	
STANDARD DEVIATION	10731.79	7457.10	5233.66	4251.24	2996.96	2067.68	1562.12	1348.58	1071.95	
SKEWNESS	1.299	1.265	1.238	1.852	1.868	1.617	1.119	1.056	0.739	
STD ERROR OF SKEWNESS	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	
SERIAL CORR COEFF	0.344	0.371	0.411	0.369	0.283	0.284	0.302	0.299	0.140	
COEFF OF VARIATION	0.529	0.481	0.453	0.473	0.623	0.362	0.311	0.294	0.260	
MEAN LOSS	4.254	4.147	4.023	3.915	3.820	3.734	3.681	3.644	3.602	
STD DEVIATION LOGS	0.218	0.197	0.185	0.180	0.161	0.143	0.130	0.124	0.113	
SKEWNESS LOGS	0.204	0.227	0.259	0.473	0.501	0.392	0.081	0.070	-0.162	
STD ERR SKEWNESS LOGS	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	0.456	
SER CORR COEFF LOGS	0.344	0.408	0.452	0.497	0.402	0.344	0.315	0.292	0.137	
COEFF OF VAR LOGS	0.051	0.048	0.046	0.046	0.042	0.038	0.035	0.034	0.031	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1915-1941)

0.99	6031.1	5260.1	4252.7	3627.4	3198.6	2773.0	2432.4	2303.2	2120.6	6328.2	6207.3
0.95	8106.6	6846.6	5413.3	4617.3	3798.8	3275.5	2952.1	2772.2	2575.6	8977.4	8911.1
0.90	9549.6	7928.3	6196.8	4960.5	4200.5	3611.2	3278.0	3063.8	2855.9	10819.5	10789.6
0.80	11713.2	9525.0	7444.3	5769.1	4808.9	4088.4	3726.5	3462.3	3222.0	13583.6	13583.6
0.50	17627.9	13778.1	10363.8	7965.4	6405.1	5301.0	4783.4	4390.5	4027.5	20924.3	21015.8
0.20	27176.4	20421.0	15010.1	11518.9	8916.6	7085.6	6152.2	5593.6	4984.7	32300.1	32340.2
0.10	34412.6	25334.0	18411.2	14239.0	10794.3	8349.9	7073.4	6360.6	5551.0	40541.8	40426.1
0.04	44597.5	32125.3	23078.9	18119.7	13423.4	10044.7	8190.0	7305.2	6207.8	51672.9	51205.4
0.02	52948.7	37610.6	26827.4	21349.9	15576.1	11379.8	9012.1	7995.1	6662.4	60447.9	59600.2
0.01	61962.0	43463.8	30810.9	24885.6	17902.4	12778.6	9828.3	8675.8	7092.2	69613.3	68280.2

STATION 12102200 SWAN CREEK NEAR TACOMA, WASH.

ANNUAL PEAK FLOW DATA			ANNUAL PEAK FLOW STATISTICS (YEARS 1951-1971)			W R C		SYSTEMATIC RECORD
WATER YEAR	FLOW(CFS)	DATE	MEAN LOGS	STANDARD DEVIATION LOGS	SKEWNESS LOGS	ESTIMATE		
1951	216.0	2- 9-1951	0.99	0.95	0.80	2.0510	0.1446	2.0510
1952	75.0	2- 4-1952						
1953	67.0	1-31-1953						
1954	117.0	1- 6-1954						
1955	94.0	2- 8-1955						
1956	158.0	12-11-1955	0.99	0.95	0.80	2.0510	0.1446	2.0510
1957	229.0	12- 9-1956						
1958	83.0	1-16-1958						
1959	104.0	1-24-1959						
1960	138.0	2- 6-1960						
1961	128.0	11-28-1960						
1962	76.0	3- 5-1962						
1963	106.0	2- 3-1963						
1964	152.0	1- 1-1964						
1965	110.0	1-29-1965						
1966	95.0	1- 5-1966						
1967	144.0	1-19-1967	0.99	0.95	0.80	2.0510	0.1446	2.0510
1968	85.0	2-19-1968						
1969	99.0	11-11-1968						
1970	85.0	1-19-1970						
1971	136.0	1-19-1971						

ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES
LOG-PEARSON III ANALYSIS (YEARS 1951-1971)

52.0	59.8
65.1	69.0
73.4	75.3
85.0	84.5
112.4	106.9
148.8	146.9
172.4	175.0
201.7	214.0
223.2	245.8
244.6	280.0

STATION 12102800 SOUTH FORK HYLEROS CREEK NR PUYALLUP, WASH.

ANNUAL PEAK FLOW DATA			ANNUAL PEAK FLOW STATISTICS (YEARS 1949-1966)			W R C		SYSTEMATIC RECORD
WATER YEAR	FLOW(CFS)	DATE	MEAN LOGS	STANDARD DEVIATION LOGS	SKEWNESS LOGS	ESTIMATE		
1949	3.7	12- 8-1948	0.99	0.95	0.80	0.6637	0.1046	0.6637
1950	4.8	3-17-1950						
1951	6.3	2- 9-1951						
1952	3.3	2- 4-1952						
1953								
1954	4.8	1- 6-1954	0.99	0.95	0.80	0.6637	0.1046	0.6637
1955	4.7	2- 8-1955						
1956	7.4	12-11-1955						
1957	4.6	12-10-1956						
1958	6.9	1-16-1958						
1959	5.3	1-24-1959						
1960	4.6	12-15-1959						
1961	4.7	11-24-1960						
1962	3.3	12-22-1961						
1963	3.5	11-25-1962						
1964	4.9	1-25-1964						
1965	4.2	1-29-1965						
1966	3.6	1- 5-1966						

ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES
LOG-PEARSON III ANALYSIS (YEARS 1949-1966)

2.6	2.8
3.1	3.2
3.4	3.4
3.8	3.8
4.6	4.5
5.6	5.6
6.3	6.3
7.0	7.3
7.6	8.0
8.1	8.7

STATION 12103200 JOES CREEK AT TACOMA, WASH.

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1958	11.1	1-16-1958
1959	12.0	1-24-1959
1960	11.0	1-29-1960
1961	11.9	2-24-1961
1962	8.6	12-22-1961
1963	12.0	2-3-1963
1964	12.0	1-25-1964
1965	12.0	12-22-1964
1966	8.0	1-5-1966
1967	17.0	1-19-1967
1968	9.2	2-19-1968
1969	7.3	1-6-1969
1970	7.1	1-19-1970
1971	6.8	1-26-1971
1972	8.1	2-28-1972
1973	13.0	12-26-1972

ANNUAL PEAK FLOW STATISTICS (YEARS 1958-1973)

MEAN LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
1.0050	0.0050	1.0050
0.1133	0.1133	0.1133
0.008	0.008	0.045

ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES LOG-PEARSON III ANALYSIS (YEARS 1958-1973)	W R C ESTIMATE	SYSTEMATIC RECORD
5.5	5.5	5.6
6.6	6.6	6.6
7.2	7.2	7.3
8.1	8.1	8.1
10.1	10.1	10.1
12.6	12.6	12.6
14.1	14.1	14.1
16.0	16.0	16.0
17.3	17.3	17.4
18.6	18.6	18.7

STATION 12103400 GREEN RIVER BLW INTAKE CR NR LESTER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1967	34.8	80.7	206	257	202	92.2	89.1	330	252	49.9	18.2	12.9	135
1968	67.5	89.6	267	214	268	124	121	171	171	28.3	21.7	73.6	128
1969	100	193	96.4	158	34.6	113	275	417	187	44.2	16.4	17.7	138
1970	22.1	31.5	39.2	93.6	124	108	139	260	267	37.0	17.3	18.8	89.0
1971	29.1	78.6	64.9	213	215	67.4	137	378	324	117	29.9	15.0	134
1972	21.0	99.0	136	156	203	336	185	484	434	113	31.6	31.9	177
1973	24.7	52.8	196	111	52.1	67.2	99.3	131	61.8	33.1	15.5	12.6	71.8
1974	18.3	53.2	109	257	92.2	114	235	329	492	134	38.3	16.9	158
1975	12.4	26.4	134	250	82.1	103	104	390	306	88.5	34.3	30.0	131
1976	65.2	208	480	263	124	72.1	192	340	172	69.8	42.5	26.1	172
1977	22.5	51.2	69.9	110	66.8	76.6	211	128	88.7	29.2	21.1	35.7	75.8

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1967-1977)

MEAN	38.0	87.6	163.5	169.3	133.1	115.8	162.5	305.3	220.9	67.6	26.1	26.5	128.1
MAXIMUM	100.0	208.0	480.0	263.0	268.0	336.0	275.0	484.0	492.0	134.0	42.5	73.6	177.0
MINIMUM	12.4	26.4	39.2	93.6	34.6	67.2	89.1	128.0	61.8	28.3	15.5	12.6	71.8
STD DEVIATION	27.47	60.40	125.21	65.67	77.23	75.83	61.13	118.81	125.35	39.19	9.59	17.56	35.83
SKEWNESS	1.443	1.318	1.788	-0.282	0.450	2.886	0.539	-0.380	0.832	0.627	0.496	2.189	-0.407
STD ERR SKEW	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
SER CORR COEFF	0.123	-0.397	-0.125	0.038	0.058	-0.335	-0.436	-0.199	-0.199	0.034	0.128	-0.316	-0.608
COEFF OF VAR	0.724	0.689	0.766	0.347	0.580	0.655	0.376	0.389	0.567	0.579	0.368	0.663	0.280
MEAN LOGS	1.492	1.857	2.113	2.250	2.047	2.013	2.183	2.447	2.274	1.763	1.350	1.359	2.090
STD DEV LOGS	0.278	0.284	0.308	0.168	0.284	0.196	0.164	0.203	0.271	0.255	0.159	0.231	0.135
SKEWNESS LOGS	0.656	0.623	0.158	-0.564	-0.362	1.903	0.088	-0.865	-0.416	0.211	0.200	0.989	-0.802
STD ERR SKEW LOGS	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661	0.661
SER CORR LOGS	0.106	-0.416	0.101	-0.031	-0.121	-0.486	-0.421	-0.400	-0.332	0.010	0.104	-0.378	-0.576
COEFF OF VAR LOGS	0.186	0.153	0.146	0.075	0.139	0.098	0.075	0.083	0.119	0.145	0.114	0.170	0.065
% OF AVE FLOW	2.5	5.7	10.6	12.3	8.7	7.5	10.6	19.9	14.4	4.4	1.7	1.7	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1967-1977)

0.99	9.6	17.6	27.1	61.7	20.5	64.5	64.9	70.9	36.6	16.2	11.1	9.8	49.9
0.95	12.4	25.7	41.8	88.8	35.7	66.0	82.7	117.6	63.0	22.8	13.3	11.3	69.3
0.90	14.5	31.8	53.0	106.2	47.2	67.9	94.3	149.6	82.7	27.7	15.5	12.6	81.1
0.80	18.0	41.3	71.1	130.2	65.3	72.1	110.7	194.8	113.2	35.1	18.0	14.6	96.5
0.50	29.0	70.2	127.4	184.2	116.0	90.1	151.5	298.9	196.3	56.7	24.2	21.0	128.2
0.20	51.6	123.7	234.4	247.7	194.9	136.6	208.9	417.1	320.4	94.2	34.2	34.2	160.6
0.10	72.8	168.6	325.8	283.6	250.3	186.1	247.9	479.7	404.3	124.4	39.5	46.6	176.9
0.04	108.4	237.4	466.7	323.1	321.6	298.3	543.7	509.4	509.4	168.7	47.7	67.6	193.1
0.02	142.8	297.8	591.4	349.0	375.0	378.7	336.6	582.5	586.0	206.4	54.0	88.1	202.8
0.01	185.3	366.8	733.9	372.2	428.2	513.2	375.5	615.1	660.8	248.4	60.6	113.6	211.0

STATION 12103400 GREEN RIVER BLW INTAKE CR NR LESTER, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1968	11.0	11.0	11.0	12.0	13.0	14.0	18.0	30.0	58.0
1969	16.0	16.0	16.0	16.0	16.0	16.0	18.0	30.0	77.0
1970	13.0	13.0	14.0	14.0	15.0	17.0	19.0	20.0	26.0
1971	14.0	14.0	15.0	15.0	16.0	16.0	20.0	23.0	40.0
1972	10.0	10.0	10.0	11.0	11.0	16.0	21.0	39.0	66.0
1973	17.0	17.0	16.0	16.0	21.0	28.0	29.0	31.0	63.0
1974	10.0	10.0	11.0	12.0	15.0	15.0	15.0	18.0	32.0
1975	11.0	11.0	11.0	12.0	12.0	14.0	16.0	21.0	51.0
1976	20.0	21.0	22.0	23.0	23.0	31.0	32.0	50.0	121.0
1977	15.0	16.0	16.0	17.0	18.0	24.0	30.0	33.0	44.0

LOWEST MEAN FLOW STATISTICS (YEARS 1968-1977)

MEAN	13.7	13.9	14.4	15.0	16.1	19.8	23.0	31.0	57.8
MAXIMUM	20.0	21.0	22.0	23.0	25.0	31.0	32.0	50.0	121.0
MINIMUM	10.0	10.0	10.0	11.0	11.0	13.0	15.0	18.0	26.0
STANDARD DEVIATION	3.34	3.60	3.81	3.89	4.48	6.32	6.52	10.95	27.26
SKEWNESS	0.597	0.706	0.733	0.687	0.824	0.702	0.277	0.537	1.387
STD ERROR OF SKEWNESS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SERIAL CORR COEFF	-0.337	-0.240	-0.315	-0.243	-0.314	-0.237	-0.132	-0.154	-0.213
COEFF OF VARIATION	0.243	0.259	0.264	0.259	0.278	0.319	0.283	0.353	0.472
MEAN LOGS	1.125	1.130	1.145	1.164	1.192	1.278	1.346	1.467	1.722
STD DEVIATION LOGS	0.104	0.110	0.112	0.107	0.116	0.134	0.124	0.153	0.193
SKEWNESS LOGS	0.256	0.319	0.300	0.536	0.397	0.396	0.090	0.104	0.212
STD ERR SKEWNESS LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SER CORR COEFF LOGS	-0.345	-0.266	-0.339	-0.275	-0.337	-0.245	-0.125	-0.085	-0.174
COEFF OF VAR LOGS	0.092	0.097	0.098	0.092	0.098	0.105	0.092	0.105	0.112

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1968-1977)

0.99	24.3	25.7	26.9	28.5	31.4	42.4	43.8	68.5	159.3
0.98	22.5	23.6	24.7	25.9	28.5	38.0	40.3	61.7	138.4
0.96	20.7	21.6	22.5	23.4	25.8	33.8	36.8	55.1	118.8
0.90	18.2	18.8	19.6	20.2	22.2	28.4	32.0	46.3	94.2
0.80	16.3	16.6	17.3	17.4	19.4	24.4	28.1	39.4	76.4
0.50	13.2	13.3	13.8	14.3	15.3	18.6	22.1	29.1	52.0
0.20	10.9	10.9	11.2	11.8	12.4	14.6	17.4	21.7	36.1
0.10	9.9	9.9	10.1	10.8	11.2	13.0	15.4	18.7	30.2
0.05	9.2	9.1	9.4	10.1	10.4	11.8	15.0	16.6	26.1
0.02	8.5	8.4	8.6	9.5	9.5	10.8	12.5	14.5	22.3
0.01	8.0	8.0	8.1	9.1	9.0	10.1	11.7	13.2	20.1

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1968-1977)

P95	P90	P75	P70	P50	P25	P10
15.0	18.0	33.0	41.0	77.0	160.0	310.0

STATION 12103500 SNOW CREEK NEAR LESTER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1946	38.8	70.4	61.7	46.6	23.2	57.9	104	189	137	40.5	11.0	6.65	65.7
1947	41.5	52.2	142	78.2	59.0	96.9	124	88.5	45.3	21.0	7.97	8.48	63.9
1948	43.1	117	50.0	21.7	36.7	34.6	76.2	206	177	26.6	9.87	18.2	67.3
1949	28.2	36.1	25.9	29.7	35.5	44.6	125	244	139	50.3	13.3	9.61	65.2
1950	62.4	102	40.3	42.1	75.5	75.5	131	169	230	85.8	17.9	10.3	82.1
1951	53.4	129	116	56.9	124	39.5	131	163	75.9	16.0	6.93	6.93	76.1
1952	53.2	63.8	36.1	20.8	56.0	33.2	127	152	67.7	27.8	7.90	5.48	54.1
1953	4.16	4.23	7.75	158	107	42.8	85.2	116	85.2	32.3	9.26	6.68	54.6
1954	13.2	57.5	173	52.0	64.1	38.7	89.3	179	165	79.1	17.5	11.1	78.4
1955	25.2	67.5	31.7	42.5	79.2	18.3	48.1	141	226	107	23.4	10.0	68.0
1956	93.9	125	89.4	24.5	17.3	27.6	153	262	148	58.2	11.5	9.19	85.1
1957	60.3	69.7	237	23.3	20.4	36.1	120	135	27.0	12.9	7.17	5.09	64.5
1958	8.01	31.2	80.3	56.9	94.1	46.4	104	116	27.0	10.0	5.40	11.6	48.9
1959	53.4	187	149	15.6	45.4	62.5	126	121	78.0	28.5	9.34	88.5	89.0
1960	104	166	119	45.4	45.4	67.4	117	132	75.9	15.4	9.32	11.0	73.1
1961	39.4	104	37.1	93.4	140	76.9	104	127	76.3	14.1	6.68	11.9	68.6
1962	44.2	61.2	76.3	105	64.9	27.1	154	89.4	64.7	19.2	8.95	8.06	60.1
1963	24.3	114	112	61.0	106	49.2	74.2	69.1	24.6	14.0	7.93	6.87	54.8
1964	15.1	76.7	41.7	56.9	34.6	44.4	96.6	218	258	80.5	26.3	34.2	81.8
1965	57.0	44.4	106	166	117	70.6	144	113	62.5	17.4	8.28	7.56	76.0

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1946-1965)

MEAN	43.1	83.9	88.2	63.8	65.4	49.5	108.9	151.5	110.2	37.6	11.3	14.0	68.9
MAXIMUM	104.0	187.0	237.0	166.0	140.0	96.9	154.0	262.0	258.0	107.0	26.3	88.5	89.0
MINIMUM	4.2	4.2	7.8	15.6	17.3	18.3	48.1	69.1	24.6	10.0	5.4	5.1	48.9
STD DEVIATION	25.98	45.95	57.20	44.71	37.35	20.04	28.33	52.15	70.53	29.18	5.68	18.55	11.21
SKEWNESS	0.690	0.590	0.922	1.171	0.592	0.708	-0.283	0.588	0.801	1.175	1.614	3.831	0.033
STD ERR SKEW	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512
SER CORR COEFF	0.067	0.103	-0.199	-0.149	-0.192	0.141	-0.326	-0.035	0.010	0.267	0.074	-0.040	-0.103
COEFF OF VAR	0.602	0.547	0.648	0.701	0.571	0.405	0.260	0.344	0.460	0.775	0.503	1.328	0.163
MEAN LOGS	1.532	1.832	1.840	1.708	1.742	1.661	2.021	2.156	1.952	1.463	1.012	1.008	1.832
STD DEV LOGS	0.350	0.353	0.346	0.301	0.269	0.179	0.127	0.152	0.297	0.315	0.184	0.280	0.072
SKEWNESS LOGS	-1.171	-2.135	-0.991	0.083	-0.237	-0.207	-0.992	-0.146	-0.204	0.444	0.928	2.392	-0.263
STD ERR SKEW LOGS	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512	0.512
SER CORR LOGS	0.081	0.041	-0.136	-0.134	-0.041	0.224	-0.282	-0.015	0.040	0.261	0.138	0.024	-0.089
COEFF OF VAR LOGS	0.229	0.193	0.188	0.176	0.154	0.108	0.063	0.070	0.132	0.216	0.182	0.024	0.039
% DF AVE FLOW	5.2	10.1	10.7	7.7	7.9	6.0	13.2	18.3	13.3	4.5	1.4	1.7	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1965)

0.99	2.7	3.4	6.2	10.6	11.7	16.4	43.6	61.2	16.5	6.8	5.1	5.9	44.8
0.95	7.3	13.4	15.5	16.6	19.1	22.7	60.8	79.5	28.0	9.7	5.8	6.0	51.1
0.90	11.6	23.8	23.7	21.1	24.6	26.7	71.0	91.1	36.8	11.9	6.3	6.1	54.7
0.80	18.8	42.3	37.7	28.4	33.0	32.5	84.1	107.0	50.8	15.6	7.2	6.4	59.3
0.50	39.7	88.4	78.7	50.5	56.5	46.4	110.0	144.4	91.7	27.5	9.6	8.1	68.5
0.20	67.3	126.1	136.4	91.1	93.4	65.0	134.5	192.4	160.3	52.3	14.2	14.4	78.5
0.10	82.2	136.8	170.2	124.7	119.9	76.9	145.8	222.6	211.9	75.6	18.1	23.0	83.7
0.04	96.7	142.5	206.1	174.9	154.8	91.5	156.4	259.1	282.6	114.7	24.2	43.7	89.5
0.02	104.9	144.2	228.2	218.2	181.6	102.1	162.3	285.2	338.6	152.1	29.8	71.6	93.4
0.01	111.4	145.0	246.7	266.6	209.0	112.3	167.0	310.5	397.0	198.0	36.3	118.1	96.9

STATION 12103500 SNOW CREEK NEAR LESTER, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1947	4.7	4.9	5.3	5.6	6.0	6.6	9.5	20.0	43.0
1948	7.0	7.0	7.0	7.2	7.5	7.5	11.0	19.0	32.0
1949	8.9	8.9	9.0	9.0	9.2	9.8	14.0	26.0	22.0
1950	7.1	7.2	7.4	8.2	9.3	11.0	19.0	30.0	48.0
1951	6.8	6.8	6.8	7.2	8.7	13.0	24.0	36.0	62.0
1952	4.1	4.2	4.4	4.4	5.4	6.3	9.4	15.0	30.0
1953	3.0	3.1	3.4	3.6	4.0	4.2	4.4	7.9	33.0
1954	4.4	4.7	5.0	5.3	6.1	7.9	9.0	14.0	30.0
1955	8.2	8.4	8.7	9.3	10.0	12.0	17.0	20.0	31.0
1956	7.8	7.8	8.2	8.9	9.3	14.0	23.0	40.0	60.0
1957	6.4	6.8	7.2	7.4	8.1	9.8	15.0	31.0	53.0
1958	4.0	4.3	4.4	4.4	4.8	5.2	6.0	7.8	17.0
1959	4.2	4.4	4.5	4.8	4.8	5.9	8.6	11.0	35.0
1960	7.4	7.4	7.7	7.8	9.1	15.0	28.0	42.0	63.0
1961	6.5	6.8	7.0	7.1	8.2	10.0	14.0	10.0	36.0
1962	5.3	5.3	5.6	5.8	6.6	9.0	10.0	17.0	29.0
1963	5.0	5.2	5.4	5.8	7.0	8.2	11.0	14.0	20.0
1964	6.3	6.3	6.4	6.4	6.5	6.9	7.5	9.5	20.0
1965	17.0	17.0	18.0	20.0	24.0	29.0	39.0	36.0	51.0

LOWEST MEAN FLOW STATISTICS (YEARS 1947-1965)

MEAN	6.5	6.7	6.9	7.3	8.1	10.1	14.5	20.9	36.9
MAXIMUM	17.0	17.0	18.0	20.0	24.0	29.0	39.0	42.0	63.0
MINIMUM	3.0	3.1	3.4	3.6	4.0	4.2	4.4	4.9	7.9
STANDARD DEVIATION	3.01	2.97	3.12	3.50	4.23	5.46	8.74	11.37	15.74
SKENNESS	2.414	2.436	2.599	2.817	3.119	2.444	1.475	0.626	0.188
STD ERROR OF SKENNESS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SERIAL CORR COEFF	0.238	0.226	0.205	0.172	0.049	-0.039	-0.069	0.003	0.037
COEFF OF VARIATION	0.461	0.446	0.452	0.480	0.520	0.541	0.603	0.544	0.426
MEAN LOGS	0.782	0.792	0.808	0.829	0.874	0.960	1.096	1.255	1.521
STD DEVIATION LOGS	0.167	0.161	0.159	0.163	0.168	0.191	0.240	0.254	0.283
SKENNESS LOGS	0.701	0.725	0.899	1.058	1.256	0.711	0.298	-0.344	-1.147
STD ERR SKENNESS LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SER CORR COEFF LOGS	0.342	0.335	0.321	0.301	0.184	0.093	0.049	0.049	0.0
COEFF OF VAR LOGS	0.213	0.203	0.197	0.196	0.192	0.199	0.219	0.203	0.147

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1965)

0.99	17.9	17.8	19.0	21.3	25.6	31.8	50.8	60.5	71.3
0.98	15.2	15.2	16.1	17.7	20.8	26.4	42.3	53.6	68.5
0.96	12.9	12.9	13.5	14.6	16.8	21.7	34.6	46.6	64.9
0.90	10.1	10.2	10.5	11.2	12.6	16.4	25.7	37.1	58.4
0.80	8.2	8.3	8.5	8.9	9.9	12.9	19.7	29.6	51.3
0.50	5.8	5.9	6.1	6.3	6.9	8.7	12.1	18.6	36.6
0.20	4.4	4.5	4.7	4.9	5.4	6.3	7.8	11.1	22.7
0.10	3.8	4.0	4.2	4.4	4.9	5.4	6.3	8.3	16.7
0.05	3.5	3.7	3.9	4.2	4.7	4.9	5.3	6.5	12.5
0.02	3.2	3.4	3.6	3.9	4.5	4.4	4.4	4.9	8.7
0.01	3.0	3.2	3.5	3.8	4.3	4.1	3.9	4.0	6.7

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1947-1965)

P95	P90	P75	P70	P50	P25	P10
6.6	8.3	17.0	21.0	42.0	91.0	160.0

STATION 12104000 FRIDAY CREEK NEAR LESTER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	DCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1946	19.3	33.9	27.7	21.5	13.4	26.3	44.7	81.1	67.1	19.3	4.81	2.98	30.2
1947	17.3	23.6	63.9	37.0	36.9	39.3	51.2	35.4	73.1	10.8	3.76	4.84	28.6
1948	23.7	57.0	31.7	18.9	18.2	16.1	29.0	62.8	73.1	14.0	6.00	5.26	29.6
1949	11.2	22.0	19.5	11.5	16.7	23.3	46.5	87.9	61.1	21.4	6.57	3.45	27.6
1950	22.8	38.0	29.0	23.3	18.2	26.5	30.5	59.7	85.2	34.8	8.39	5.36	31.8
1951	20.2	51.2	45.7	21.4	46.0	16.0	41.6	63.7	32.1	6.39	3.34	3.08	29.0
1952	16.7	22.9	14.2	8.60	22.6	16.0	45.5	61.8	26.8	10.7	3.79	2.66	21.0
1953	2.15	1.96	3.23	63.9	38.6	15.7	29.2	49.8	38.0	11.9	4.19	3.18	21.7
1954	4.92	23.4	75.1	23.8	26.8	16.8	32.1	60.8	71.4	30.9	7.83	6.00	31.7
1955	9.03	22.3	14.6	19.1	34.4	9.89	19.3	41.8	85.0	47.8	11.0	5.97	26.5
1956	37.2	55.2	37.3	12.2	7.43	13.1	52.9	86.6	70.5	28.8	6.08	4.20	34.3
1957	17.7	25.5	90.4	13.0	12.4	17.8	43.4	66.1	17.8	5.93	3.25	2.21	26.4
1958	3.68	11.0	28.8	22.7	31.7	14.5	39.9	43.6	9.59	3.65	2.40	3.65	17.8
1959	22.6	82.8	62.3	53.6	17.2	22.8	40.9	50.8	32.5	9.66	3.73	37.8	36.4
1960	45.7	66.5	36.4	9.08	19.4	21.7	39.0	54.3	35.1	7.36	4.77	4.35	28.6
1961	11.0	40.8	19.0	37.6	56.0	28.5	41.7	56.3	35.6	6.79	3.14	4.12	28.1
1962	11.0	20.9	33.7	48.9	26.7	13.6	49.1	35.2	28.6	7.33	4.89	4.33	23.7
1963	8.69	33.6	36.3	24.6	38.6	22.0	37.4	27.7	11.0	8.59	4.98	3.84	20.8
1964	6.66	28.1	21.7	28.1	17.3	19.7	37.4	61.3	91.3	33.5	11.7	16.9	31.1
1965	21.2	16.6	39.0	47.6	42.7	21.5	46.9	48.5	28.1	7.38	4.12	4.85	27.3
1966	6.86	10.5	16.7	13.7	6.97	19.3	52.3	55.6	24.6	11.1	3.63	2.76	18.7
1967	12.6	24.7	51.1	56.6	35.2	16.5	14.2	58.3	36.4	6.48	2.91	2.32	26.4
1968	23.5	23.8	50.8	40.9	49.7	25.3	25.4	28.5	15.8	6.18	5.28	22.9	26.4
1969	22.3	38.9	23.1	24.5	6.61	17.6	39.6	73.0	32.3	11.9	4.45	4.31	25.0
1970	9.48	11.6	11.2	30.1	25.1	25.0	34.8	60.9	34.0	6.24	3.13	4.56	21.3
1971	9.09	21.6	10.9	46.7	48.2	13.3	25.4	84.6	56.5	26.0	5.55	5.28	29.3
1972	9.59	23.1	28.6	34.6	55.9	71.0	34.4	96.1	57.1	21.2	5.81	11.3	37.4
1973	6.83	15.2	50.9	26.8	10.4	14.2	27.2	28.5	14.3	7.03	3.39	2.95	17.4
1974	5.13	14.9	27.6	56.0	19.2	23.6	46.9	70.0	11.2	26.6	6.81	3.76	34.4
1975	2.60	10.9	45.8	50.1	16.5	19.0	19.6	81.4	56.6	15.4	6.31	5.46	21.6
1976	14.2	44.4	162	47.0	22.3	11.1	37.1	71.9	31.7	11.8	7.17	5.28	35.6
1977	6.83	15.3	24.6	21.2	15.0	15.5	39.8	24.2	12.6	3.76	3.53	9.11	15.9

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1946-1977)

MEAN	14.4	29.1	37.3	31.1	26.6	21.0	37.2	58.4	43.9	15.0	5.2	6.5	27.1
MAXIMUM	45.7	82.8	122.0	63.9	56.0	71.0	52.9	96.1	112.0	47.8	11.7	37.8	37.4
MINIMUM	2.1	2.0	3.2	8.6	6.6	9.9	14.2	24.2	9.6	3.6	2.4	2.2	15.9
STD DEVIATION	9.81	17.99	24.87	15.78	14.48	10.91	10.01	19.01	26.72	10.93	2.21	7.12	5.66
SKEWNESS	1.356	1.224	1.617	0.433	0.570	3.359	-0.450	-0.025	0.789	1.315	1.408	3.388	-0.194
STD ERR SKEW	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414
SER CORR COEFF	0.149	0.148	-0.111	-0.062	-0.166	-0.158	-0.120	-0.071	0.036	0.267	0.167	-0.130	-0.319
COEFF DF VAR	0.680	0.617	0.667	0.508	0.544	0.519	0.269	0.326	0.609	0.728	0.424	1.090	0.209
MEAN LOGS	1.059	1.378	1.479	1.432	1.356	1.287	1.552	1.741	1.558	1.077	0.684	0.697	1.423
STD DEV LOGS	0.314	0.307	0.308	0.244	0.260	0.164	0.136	0.159	0.286	0.296	0.167	0.276	0.097
SKEWNESS LOGS	-0.405	-1.209	-0.791	-0.369	-0.382	1.268	-1.158	-0.721	-0.257	0.302	0.492	1.666	-0.637
STD ERR SKEW LOGS	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414
SER CORR LOGS	0.199	0.057	-0.021	-0.038	-0.208	-0.137	-0.106	-0.122	0.014	0.218	0.201	-0.120	-0.315
COEFF OF VAR LOGS	0.297	0.223	0.208	0.170	0.192	0.128	0.088	0.091	0.183	0.275	0.243	0.396	0.068
% OF AVE FLOW	4.4	8.9	11.4	9.5	8.2	6.5	11.4	17.9	13.5	4.6	1.6	2.0	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1977)

0.99	1.7	2.6	3.9	6.3	4.8	11.4	13.4	19.5	6.9	2.8	2.3	2.4	14.3
0.95	3.2	6.2	8.2	10.2	8.0	12.2	19.6	28.3	11.7	4.1	2.7	2.5	17.7
0.90	4.4	9.2	11.7	12.9	10.3	12.9	23.4	33.8	15.3	5.1	3.0	2.7	19.7
0.80	6.4	14.2	17.3	17.1	13.9	14.1	28.3	41.3	21.0	6.7	3.5	3.0	22.2
0.50	12.0	27.4	33.0	28.0	23.6	17.9	37.8	57.5	37.2	11.5	4.7	4.2	27.1
0.20	21.3	43.3	55.2	43.6	37.9	25.5	46.4	75.2	63.3	20.9	6.6	7.6	32.1
0.10	27.9	51.3	68.9	54.0	47.6	32.1	50.2	84.0	82.2	29.1	8.0	11.6	34.6
0.04	36.6	58.9	84.2	66.9	59.7	42.9	53.5	94.4	107.5	42.1	10.0	19.8	37.1
0.02	43.2	63.0	94.3	76.3	68.6	52.8	55.3	100.5	127.1	53.8	11.7	29.6	38.7
0.01	49.7	66.2	103.3	85.5	77.3	64.7	56.6	105.8	147.1	67.6	13.5	43.9	40.0

STATION 12104000 FRIDAY CREEK NEAR LESTER, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1947	2.2	2.3	2.3	2.6	2.8	3.1	4.3	9.1	20.0
1948	2.8	2.8	2.9	3.0	3.4	4.3	4.3	9.3	15.0
1949	4.2	4.2	4.4	4.5	5.1	5.6	7.5	7.9	12.0
1950	1.3	1.4	1.5	1.6	3.2	4.5	7.9	12.0	19.0
1951	3.4	3.5	3.7	3.9	4.7	6.5	10.0	14.0	25.0
1952	2.1	2.1	2.1	2.3	2.7	3.9	3.9	5.8	11.0
1953	1.3	1.4	1.4	1.6	1.8	2.0	2.1	2.4	3.5
1954	2.4	2.5	2.5	2.6	2.9	3.5	3.9	5.3	14.0
1955	4.8	4.9	5.0	5.2	5.6	6.3	7.5	8.4	12.0
1956	4.8	4.9	5.2	5.6	5.7	7.5	11.0	18.0	26.0
1957	3.5	3.5	3.6	3.7	4.0	4.5	6.8	12.0	22.0
1958	2.0	2.0	2.0	2.1	2.2	2.4	2.8	3.4	7.2
1959	1.6	1.7	1.7	1.9	2.1	2.5	3.1	4.1	14.0
1960	2.8	3.0	3.1	3.3	3.7	5.8	10.0	16.0	27.0
1961	3.5	3.5	3.6	4.0	4.1	4.5	4.7	5.8	14.0
1962	2.4	2.4	2.6	2.6	3.1	3.6	4.2	6.2	10.0
1963	3.2	3.3	3.5	3.8	4.1	4.4	5.0	6.0	12.0
1964	3.3	3.5	3.5	3.5	3.6	3.9	4.5	5.6	9.0
1965	7.2	7.5	7.9	8.6	9.9	13.0	17.0	15.0	20.0
1966	3.2	3.2	3.2	3.4	3.8	4.3	4.7	5.6	8.3
1967	2.4	2.5	2.6	2.7	2.8	3.2	3.6	6.2	12.0
1968	1.6	1.7	1.7	1.9	2.3	2.5	3.1	5.1	13.0
1969	3.3	3.4	3.5	3.8	4.2	5.2	6.3	10.0	16.0
1970	2.8	2.6	2.8	3.1	3.4	4.2	6.1	6.7	8.1
1971	2.3	2.4	2.8	2.6	3.0	3.7	4.1	5.5	9.1
1972	3.5	3.6	3.7	4.0	4.1	4.8	5.2	10.0	15.0
1973	3.5	3.7	3.8	4.0	4.3	6.3	7.9	8.6	15.0
1974	2.3	2.3	2.3	2.5	2.7	3.0	3.4	4.4	7.7
1975	2.3	2.3	2.4	2.4	2.6	3.1	3.8	5.6	15.0
1976	3.7	3.8	4.0	4.2	4.7	5.8	6.0	9.3	24.0
1977	3.5	3.5	3.7	3.8	3.9	4.9	5.6	7.2	11.0

LOWEST MEAN FLOW STATISTICS (YEARS 1947-1977)

MEAN	3.0	3.1	3.2	3.4	3.8	4.6	5.9	8.1	14.4
MAXIMUM	7.2	7.5	7.9	8.6	9.9	13.0	17.0	18.0	27.0
MINIMUM	1.3	1.4	1.4	1.6	1.8	2.0	2.1	2.4	3.5
STANDARD DEVIATION	1.19	1.23	1.23	1.39	1.51	2.07	3.03	3.81	5.95
SKEWNESS	1.456	1.589	1.617	1.824	2.319	2.325	1.872	1.022	0.593
STD ERROR OF SKEWNESS	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421
SERIAL CORR COEFF	0.134	0.134	0.116	0.083	0.079	0.012	0.005	0.033	0.007
COEFF OF VARIATION	0.397	0.399	0.409	0.411	0.401	0.452	0.513	0.472	0.413
MEAN LOGS	0.447	0.458	0.471	0.499	0.548	0.527	0.726	0.863	1.121
STD DEVIATION LOGS	0.165	0.162	0.166	0.162	0.149	0.168	0.196	0.201	0.193
SKEWNESS LOGS	-0.019	0.127	0.129	0.289	0.596	0.504	0.395	-0.037	-0.643
STD ERR SKEWNESS LOGS	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421
SER CORR COEFF LOGS	0.116	0.123	0.119	0.092	0.162	0.111	0.115	0.083	-0.012
COEFF OF VAR LOGS	0.370	0.354	0.352	0.324	0.272	0.268	0.271	0.233	0.172

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1977)

0.99	6.7	7.1	7.5	8.1	9.1	12.0	17.3	21.1	30.0
0.98	6.1	6.3	6.7	7.2	7.9	10.4	14.8	18.7	28.0
0.96	5.4	5.6	5.9	6.3	6.9	8.9	12.4	16.3	25.8
0.90	4.6	4.7	4.9	5.1	5.6	7.1	9.6	13.2	22.4
0.80	3.9	3.9	4.1	4.3	4.7	5.8	7.7	10.6	15.3
0.50	2.8	2.8	2.9	3.1	3.4	4.1	5.2	7.3	13.8
0.20	2.0	2.1	2.1	2.3	2.6	3.0	3.6	4.9	9.3
0.10	1.7	1.8	1.8	2.0	2.3	2.6	3.0	4.0	7.3
0.05	1.5	1.6	1.6	1.8	2.1	2.4	2.7	3.4	5.9
0.02	1.3	1.4	1.4	1.6	2.0	2.1	2.3	2.8	4.6
0.01	1.1	1.2	1.3	1.4	1.9	2.0	2.1	2.5	3.8

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1947-1977)

P95	P90	P75	P70	P50	P25	P10
3.1	4.0	7.6	9.3	17.0	36.0	64.0

STATION 12104000 FRIDAY CREEK NEAR LESTER, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA FLOW (CFS) DATE REG. (R)
1946	129.	112.	94.	90.	84.	77.	67.	56.	44.	194. 12/28/45
1947	295.	233.	172.	103.	73.	51.	48.	46.	45.	497. 12/11/46
1948	173.	147.	119.	108.	91.	78.	56.	46.	36.	219. 11/10/47
1949	166.	161.	146.	111.	96.	78.	67.	56.	43.	173. 05/12/49
1950	209.	148.	104.	92.	86.	78.	63.	53.	44.	228. 11/27/49
1951	210.	198.	124.	77.	65.	54.	47.	43.	41.	262. 02/11/51
1952	110.	103.	90.	81.	65.	56.	47.	39.	31.	125. 05/20/52
1953	239.	165.	111.	103.	86.	52.	40.	41.	40.	300. 01/31/53
1954	275.	184.	142.	97.	76.	70.	58.	49.	40.	412. 12/09/53
1955	250.	167.	137.	100.	90.	72.	59.	49.	40.	424. 02/08/55
1956	256.	169.	132.	113.	97.	83.	74.	61.	43.	406. 12/11/55
1957	376.	254.	208.	159.	93.	59.	47.	38.	41.	424. 12/10/56
1958	162.	114.	83.	60.	52.	42.	34.	30.	30.	181. 04/20/58
1959	418.	246.	156.	115.	94.	76.	68.	57.	48.	590. 11/12/58
1960	426.	309.	203.	114.	83.	60.	50.	40.	36.	1370. 11/22/59
1961	192.	132.	87.	72.	63.	51.	47.	46.	43.	230. 02/21/61
1962	154.	117.	94.	78.	63.	47.	38.	37.	36.	270. 04/06/62
1963	241.	145.	101.	58.	48.	42.	37.	35.	33.	370. 11/20/62
1964	142.	132.	118.	109.	99.	60.	55.	57.	43.	158. 05/31/64
1965	284.	253.	171.	102.	72.	53.	44.	46.	41.	459. 01/29/65
1966	136.	116.	100.	72.	58.	56.	47.	39.	29.	149. 05/06/66
1967	153.	128.	98.	79.	65.	57.	51.	43.	40.	188. 01/15/67
1968	263.	214.	136.	80.	60.	52.	50.	43.	38.	329. 12/25/67
1969	191.	118.	108.	91.	79.	60.	50.	42.	33.	241. 01/05/69
1970	103.	93.	82.	70.	64.	52.	45.	40.	35.	132. 04/09/70
1971	150.	127.	109.	95.	86.	72.	58.	49.	47.	150. 01/31/71
1972	191.	145.	114.	107.	102.	78.	68.	69.	59.	245. 02/15/72
1973	220.	155.	132.	87.	61.	41.	32.	27.	27.	252. 12/21/72
1974	200.	180.	148.	125.	121.	92.	78.	66.	56.	455. 01/15/74
1975	265.	193.	126.	103.	98.	70.	55.	44.	44.	387. 01/18/75
1976	860.	673.	394.	221.	130.	89.	72.	61.	53.	1660. 12/01/75
1977	89.	68.	55.	43.	41.	33.	28.	25.	24.	120. 01/18/77

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1946-1977)

W R C
ESTIMATE SYSTEMATIC
RECORD

MEAN	235.2	178.1	130.7	98.0	79.3	62.6	52.8	46.1	40.1		
MAXIMUM	860.0	673.0	394.0	221.0	130.0	92.0	78.0	69.0	59.0		
MINIMUM	89.0	68.0	55.0	43.0	41.0	33.0	28.0	25.0	24.0		
STANDARD DEVIATION	141.13	105.07	59.10	32.48	20.26	15.09	12.79	10.48	7.85		
SKEWNESS	3.020	3.577	3.026	1.842	0.389	0.111	0.101	0.246	0.251		
STD ERROR OF SKEWNESS	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414		
SERIAL CORR COEFF	-0.080	-0.152	-0.228	-0.200	-0.069	-0.168	-0.243	-0.380	-0.310		
COEFF OF VARIATION	0.600	0.590	0.452	0.331	0.255	0.241	0.242	0.227	0.196		
MEAN LOGS	2.321	2.207	2.087	1.971	1.885	1.783	1.710	1.652	1.595	2.4612	
STD DEVIATION LOGS	0.199	0.182	0.154	0.132	0.114	0.109	0.110	0.102	0.087	0.2683	
SKEWNESS LOGS	0.779	1.144	0.950	0.192	-0.290	-0.360	-0.432	-0.425	-0.380	0.0960	
STD ERR SKEWNESS LOGS	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414		
SER CORR COEFF LOGS	-0.130	-0.252	-0.308	-0.245	-0.104	-0.192	-0.251	-0.391	-0.349		
COEFF OF VAR LOGS	0.086	0.082	0.074	0.067	0.060	0.061	0.064	0.062	0.055		

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1977)

0.99	93.9	86.5	68.7	48.2	39.5	31.8	26.3	24.2	23.3	71.8	109.9
0.95	110.4	95.0	76.1	57.7	48.9	39.3	32.8	29.7	27.7	106.5	129.1
0.90	122.5	101.8	81.7	63.8	54.5	43.7	36.7	32.9	30.2	131.9	144.7
0.80	141.4	113.1	90.3	72.3	61.9	49.5	41.7	37.1	33.4	171.5	171.0
0.50	197.5	149.0	115.5	92.6	77.8	61.7	52.2	45.7	39.8	286.3	260.5
0.20	300.0	219.4	159.9	120.4	96.0	75.3	63.7	55.9	46.7	484.8	460.7
0.10	386.8	282.0	196.0	138.9	106.4	82.8	69.9	59.9	50.4	642.1	661.9
0.04	521.8	383.4	250.2	162.5	118.2	91.2	76.7	65.4	55.4	870.1	1025.8
0.02	643.2	478.1	297.5	180.2	126.1	96.7	81.2	68.9	57.0	1061.3	1401.7
0.01	784.9	592.0	351.3	198.0	133.5	101.8	85.2	72.1	59.3	1270.9	1893.7

STATION 12104500 GREEN RIVER NEAR LESTER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1946	186	436	443	337	229	487	806	1246	628	198	64.6	43.7	426
1947	168	275	1084	530	502	600	716	453	220	122	53.0	56.6	398
1948	443	964	433	305	310	281	998	1237	688	168	72.9	48.5	447
1949	160	371	368	193	337	528	998	1455	624	208	70.0	48.5	447
1950	221	617	558	318	359	587	631	1151	1263	388	91.3	60.6	520
1951	268	798	795	452	787	293	805	899	1263	388	89.0	38.4	465
1952	186	307	255	126	369	268	833	838	313	145	49.7	34.5	309
1953	26.0	27.9	44.9	94.3	688	286	515	688	481	191	61.0	40.7	331
1954	57.3	270	1133	410	443	308	616	1009	839	326	91.3	64.9	464
1955	109	297	227	316	539	178	428	875	1201	458	122.3	69.0	399
1956	510	811	686	226	130	299	1169	1596	789	257	67.8	49.5	550
1957	214	399	1343	167	179	361	782	804	203	76.7	66.9	31.8	386
1958	42.0	127	447	405	569	264	667	676	167	68.5	38.8	49.6	291
1959	294	1345	1002	945	291	377	717	688	423	132	57.9	41.2	557
1960	750	1683	611	185	403	382	573	709	379	114	65.8	80.4	510
1961	117	614	298	604	944	539	660	816	419	104	46.5	56.1	430
1962	140	273	473	690	408	219	782	442	319	104	62.4	48.0	329
1963	104	556	604	408	584	325	467	405	159	101	59.4	40.3	316
1964	54.6	278	280	398	279	326	610	977	1173	346	114	144	414
1965	259	264	646	929	793	421	702	616	378	112	59.9	35.4	434
1966	78.5	123	203	224	191	374	787	727	296	162	63.4	39.6	273
1967	126	290	664	856	596	275	251	803	526	103	43.2	31.6	380
1968	247	294	861	674	805	349	370	389	241	70.4	66.8	246	383
1969	290	536	355	416	116	316	737	1070	392	131	55.4	49.1	374
1970	100	125	154	411	428	322	422	705	408	268	71.1	56.5	440
1971	97.9	284	207	900	834	255	481	1185	674	279	88.1	115	588
1972	103	397	513	611	970	1272	579	1386	751	279	88.1	115	588
1973	77.4	186	827	433	164	210	287	359	169	89.6	42.9	36.6	241
1974	58.2	198	460	1001	367	399	708	961	1401	326	104	44.5	502
1975	26.3	118	581	872	277	348	342	1066	706	201	82.4	68.0	393
1976	168	648	1521	870	412	227	648	998	432	167	113	81.2	525
1977	68.5	170	272	321	201	259	587	315	205	64.1	56.2	116	219
1978	117	890	1199	201	245	332	356	403	211	90.4	62.0	100	351
1979	65.6	248	390	144	354	508	468	542	184	75.5	45.5	40.4	255

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1946-1979)

MEAN	174.5	447.6	592.3	494.7	444.2	375.6	620.1	837.9	523.9	171.1	67.5	75.6	401.5
MAXIMUM	750.0	1683.0	1521.0	1001.0	970.0	1272.0	1169.0	1596.0	1401.0	458.0	122.0	412.0	588.0
MINIMUM	26.0	27.9	44.9	126.0	116.0	178.0	251.0	315.0	159.0	64.1	38.8	31.6	219.0
STD DEVIATION	150.73	360.66	361.42	276.00	238.78	191.18	198.96	332.29	342.72	102.86	22.26	72.22	96.81
SKENESS	2.186	1.800	0.858	0.532	0.730	3.329	0.372	0.349	1.129	1.192	0.970	3.654	-0.028
STD ERR SKEW	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403
SER CORR COEFF	0.114	0.222	-0.246	0.038	-0.112	-0.153	0.017	0.098	0.056	0.234	0.082	-0.064	-0.104
COEFF OF VAR	0.864	0.806	0.610	0.558	0.538	0.509	0.321	0.397	0.530	0.601	0.330	0.955	0.281
MEAN LOGS	2.113	2.526	2.682	2.622	2.540	2.540	2.682	2.540	2.534	2.166	1.808	1.788	2.591
STD DEV LOGS	0.341	0.351	0.313	0.263	0.246	0.162	0.150	0.187	0.276	0.241	0.135	0.244	0.111
SKENESS LOGS	-0.003	-0.542	-0.986	-0.227	-0.232	-0.232	-0.601	-0.428	0.160	0.438	0.438	1.716	-0.096
STD ERR SKEW LOGS	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403
SER CORR LOGS	0.178	0.060	-0.127	0.071	-0.144	-0.163	0.022	0.075	0.064	0.064	0.083	-0.027	-0.121
COEFF OF VAR LOGS	0.161	0.139	0.117	0.100	0.095	0.064	0.054	0.065	0.075	0.111	0.074	0.137	0.063
% OF AVE FLOW	3.6	9.3	12.3	10.3	9.2	7.8	12.9	17.4	10.9	3.5	1.4	1.6	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1979)

0.99	20.9	37.3	54.7	92.8	93.2	204.7	226.8	248.1	105.7	47.7	34.6	32.5	196.4
0.95	35.7	79.3	124.3	149.2	145.6	219.7	315.8	361.9	155.8	63.0	40.3	34.0	247.7
0.90	47.5	114.9	182.7	190.5	183.1	232.2	371.2	431.1	192.8	74.0	44.0	35.6	277.9
0.80	67.1	175.2	277.8	253.9	239.8	253.2	445.6	542.9	251.0	91.1	49.3	39.0	316.9
0.50	129.9	361.2	539.7	428.9	391.9	321.3	607.9	794.4	140.9	140.9	62.9	52.7	397.8
0.20	251.4	671.7	887.8	701.4	621.1	474.7	789.7	1113.1	731.3	230.1	88.7	484.7	484.7
0.10	355.0	893.4	1085.1	895.6	780.5	552.2	889.0	1305.9	982.7	304.1	96.8	128.9	531.4
0.04	512.6	1177.6	1291.2	1151.6	987.0	760.4	995.5	1529.9	1356.7	416.5	115.6	208.8	581.4
0.02	650.0	1386.9	1416.2	1347.8	1143.1	934.1	1063.7	1683.7	1677.8	515.3	130.4	299.0	613.5
0.01	804.6	1591.5	1520.4	1547.5	1300.3	1141.4	1124.1	1827.5	2036.8	626.1	145.8	426.8	642.1

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1947	34.0	34.0	35.0	37.0	38.0	43.0	56.0	102.0	210.0
1948	36.0	37.0	39.0	40.0	46.0	54.0	72.0	106.0	218.0
1949	44.0	45.0	48.0	50.0	63.0	75.0	97.0	109.0	199.0
1950	38.0	39.0	40.0	43.0	48.0	56.0	88.0	125.0	264.0
1951	44.0	45.0	46.0	47.0	52.0	56.0	114.0	179.0	380.0
1952	28.0	28.0	29.0	31.0	36.0	40.0	50.0	74.0	151.0
1953	22.0	23.0	23.0	25.0	26.0	27.0	32.0	32.0	47.0
1954	32.0	34.0	35.0	35.0	39.0	47.0	52.0	70.0	182.0
1955	48.0	48.0	49.0	52.0	59.0	69.0	86.0	98.0	169.0
1956	57.0	57.0	61.0	65.0	67.0	86.0	151.0	239.0	402.0
1957	41.0	41.0	42.0	43.0	47.0	51.0	73.0	135.0	258.0
1958	28.0	28.0	29.0	30.0	31.0	33.0	39.0	46.0	86.0
1959	30.0	30.0	31.0	32.0	34.0	41.0	48.0	67.0	201.0
1960	47.0	48.0	51.0	53.0	56.0	82.0	119.0	202.0	368.0
1961	43.0	44.0	45.0	50.0	57.0	68.0	69.0	86.0	211.0
1962	38.0	39.0	39.0	41.0	46.0	50.0	58.0	81.0	137.0
1963	35.0	36.0	38.0	42.0	46.0	53.0	63.0	75.0	147.0
1964	28.0	28.0	29.0	30.0	31.0	39.0	48.0	63.0	104.0
1965	76.0	77.0	83.0	91.0	113.0	125.0	173.0	162.0	272.0
1966	41.0	42.0	43.0	46.0	54.0	56.0	61.0	72.0	104.0
1967	32.0	33.0	35.0	37.0	39.0	43.0	56.0	87.0	155.0
1968	24.0	24.0	25.0	27.0	32.0	35.0	46.0	73.0	176.0
1969	36.0	36.0	36.0	38.0	45.0	65.0	82.0	135.0	206.0
1970	32.0	32.0	34.0	36.0	40.0	51.0	68.0	75.0	98.0
1971	32.0	32.0	33.0	36.0	41.0	49.0	57.0	70.0	129.0
1972	35.0	35.0	36.0	40.0	42.0	53.0	68.0	119.0	232.0
1973	47.0	48.0	49.0	54.0	60.0	90.0	92.0	102.0	184.0
1974	25.0	26.0	27.0	30.0	33.0	38.0	43.0	53.0	96.0
1975	22.0	22.0	23.0	24.0	26.0	32.0	44.0	69.0	187.0
1976	38.0	39.0	41.0	45.0	51.0	71.0	74.0	118.0	305.0
1977	46.0	46.0	47.0	50.0	55.0	73.0	85.0	95.0	134.0
1978	36.0	36.0	37.0	38.0	43.0	57.0	68.0	86.0	143.0
1979	51.0	52.0	54.0	56.0	62.0	66.0	76.0	77.0	126.0

LOWEST MEAN FLOW STATISTICS (YEARS 1947-1979)

MEAN	37.8	38.3	39.8	42.2	47.2	57.2	72.8	99.5	190.3
MAXIMUM	76.0	77.0	83.0	91.0	113.0	125.0	173.0	239.0	402.0
MINIMUM	22.0	22.0	23.0	24.0	26.0	27.0	28.0	32.0	47.0
STANDARD DEVIATION	10.96	11.09	11.96	13.03	16.14	20.23	30.98	44.58	85.02
SKEWNESS	1.330	1.308	1.509	1.677	2.102	1.221	1.576	1.435	0.902
STD ERROR OF SKEWNESS	0.409	0.409	0.409	0.409	0.409	0.409	0.409	0.409	0.409
SERIAL CORR COEFF	0.092	0.082	0.068	0.046	0.022	-0.040	-0.011	0.026	0.077
COEFF OF VARIATION	0.290	0.290	0.301	0.309	0.342	0.353	0.425	0.448	0.447
MEAN LOGS	1.561	1.567	1.582	1.608	1.654	1.733	1.830	1.961	2.237
STD DEVIATION LOGS	0.119	0.119	0.121	0.122	0.131	0.146	0.167	0.181	0.201
SKEWNESS LOGS	0.276	0.265	0.362	0.456	0.533	0.162	0.336	0.115	-0.424
STD ERR SKEWNESS LOGS	0.409	0.409	0.409	0.409	0.409	0.409	0.409	0.409	0.409
SER CORR COEFF LOGS	0.155	0.140	0.132	0.107	0.080	0.045	0.087	0.075	0.040
COEFF OF VAR LOGS	0.076	0.076	0.077	0.076	0.079	0.084	0.091	0.092	0.090

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1979)

0.99	72.6	73.5	78.7	85.7	102.1	123.2	181.9	249.6	437.4
0.98	66.4	67.2	71.4	77.3	91.0	111.2	159.5	220.6	400.3
0.96	60.2	61.0	64.4	69.2	80.4	99.4	138.4	192.6	361.0
0.90	52.0	52.8	55.2	58.8	67.2	83.8	112.0	156.6	304.4
0.80	45.6	46.3	48.0	51.0	57.5	71.6	92.7	129.4	256.3
0.50	35.9	36.5	37.6	39.7	43.9	53.6	66.1	90.6	178.3
0.20	28.8	29.2	30.1	31.9	34.8	40.7	48.6	64.1	118.4
0.10	25.9	26.2	27.1	28.8	31.3	35.4	41.9	53.8	93.8
0.05	23.7	24.1	24.9	26.6	28.8	31.6	37.3	46.6	76.6
0.02	21.6	21.9	22.8	24.4	26.5	27.9	32.9	39.8	60.3
0.01	20.4	20.6	21.5	23.2	25.2	25.8	30.4	35.8	51.1

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1947-1979)									
P95	P90	P75	P70	P50	P25	P10			
41.0	52.0	110.0	130.0	250.0	510.0	910.0			

STATION 12104500 GREEN RIVER NEAR LESTER, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

ANNUAL PEAK-FLOW DATA

FLOW (CFS) DATE REG. (R)

YEAR 1 DAY 3 DAYS 7 DAYS 15 DAYS 30 DAYS 60 DAYS 90 DAYS 120 DAYS 183 DAYS

1946	2650.	2100.	1420.	1280.	1260.	1110.	910.	807.	656.
1947	5400.	4430.	3070.	1830.	1800.	1280.	910.	793.	660.
1948	3210.	2770.	2290.	1480.	1480.	1140.	913.	762.	601.
1949	2660.	2600.	1900.	1300.	1280.	1060.	931.	762.	601.
1950	3160.	2470.	1790.	1400.	1400.	1050.	915.	740.	594.
1951	3390.	3250.	1230.	925.	860.	818.	711.	718.	4790.
1952	1520.	1350.	1240.	1080.	942.	846.	702.	579.	463.
1953	3550.	2790.	1920.	1360.	1360.	1080.	869.	607.	4990.
1954	3740.	2710.	2280.	1590.	1590.	1160.	835.	712.	6020.
1955	3760.	2370.	2050.	1550.	1310.	1070.	866.	748.	5280.
1956	4600.	3110.	2570.	1990.	1870.	1500.	1200.	996.	729.
1957	5680.	3810.	3040.	2330.	1390.	896.	696.	562.	613.
1958	2650.	1980.	1360.	984.	856.	678.	562.	544.	502.
1959	5240.	3400.	1820.	1240.	1240.	1120.	927.	799.	6840.
1960	15000.	9670.	5570.	2970.	2120.	1380.	1090.	867.	722.
1961	2980.	2100.	1440.	1030.	937.	795.	728.	741.	664.
1962	3140.	2230.	1490.	1140.	894.	675.	545.	557.	515.
1963	4610.	2640.	1570.	1030.	849.	725.	629.	566.	4980.
1964	2210.	2030.	1750.	1380.	1380.	1100.	927.	805.	6550.
1965	7070.	5460.	3530.	2060.	1410.	942.	818.	779.	683.
1966	1950.	1680.	1390.	1110.	860.	807.	654.	556.	438.
1967	2210.	1890.	1430.	1070.	943.	837.	733.	618.	589.
1968	5150.	3880.	2490.	1430.	1060.	883.	818.	692.	586.
1969	2760.	1980.	1730.	1370.	1140.	932.	792.	645.	514.
1970	1730.	1320.	1050.	791.	731.	616.	538.	503.	448.
1971	3430.	2730.	1870.	1560.	1270.	961.	790.	746.	725.
1972	4180.	1960.	1290.	1680.	1520.	1210.	1110.	1130.	929.
1973	3610.	2640.	2330.	1500.	1020.	663.	500.	429.	390.
1974	3610.	3150.	1860.	1530.	1220.	1030.	893.	823.	5380.
1975	5720.	3780.	2300.	1490.	1240.	902.	729.	622.	648.
1976	9140.	6830.	4220.	2580.	1600.	1250.	1020.	888.	805.
1977	1300.	845.	634.	470.	401.	371.	335.	311.	335.
1978	11000.	6060.	3680.	2300.	1540.	1060.	775.	641.	540.
1979	1230.	1110.	826.	691.	612.	519.	513.	478.	404.

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1946-1979)

W R C SYSTEMATIC
ESTIMATE RECORD

MEAN	4212.9	3069.4	2160.6	1542.1	1213.2	953.1	801.4	708.3	616.8
MAXIMUM	15000.0	9670.0	5570.0	2970.0	2120.0	1500.0	1200.0	1130.0	929.0
MINIMUM	1230.0	1110.0	826.0	634.0	600.0	470.0	401.0	371.0	335.0
STANDARD DEVIATION	2828.22	1749.18	986.58	530.40	337.39	248.24	202.82	171.27	134.96
SKENNESS	2.257	2.095	1.553	0.586	0.234	0.158	0.113	0.289	-0.041
STD ERROR OF SKEWNESS	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403
SERIAL CORR COEFF	-0.205	-0.248	-0.278	-0.4239	-0.102	-0.093	-0.089	-0.137	-0.128
COEFF OF VARIATION	0.671	0.570	0.457	0.344	0.278	0.260	0.253	0.242	0.219
MEAN LOGS	3.554	3.434	3.296	3.162	3.067	2.964	2.890	2.837	2.779
STD DEVIATION LOGS	0.243	0.211	0.184	0.155	0.128	0.119	0.115	0.108	0.101
SKENNESS LOGS	0.383	0.431	0.444	-0.371	-0.480	-0.472	-0.436	-0.343	-0.607
STD EPR SKEWNESS LOGS	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403	0.403
SER CORR COEFF LOGS	-0.346	-0.369	-0.347	-0.271	-0.141	-0.142	-0.118	-0.151	-0.138
COEFF OF VAR LOGS	0.069	0.061	0.056	0.049	0.042	0.040	0.040	0.038	0.036

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1979)

0.99	1138.4	1026.9	772.1	574.2	531.6	443.3	384.6	362.1	317.1	1068.2	1137.3
0.95	1518.0	1304.1	1002.8	778.8	693.0	567.0	486.1	446.2	396.4	1646.2	1687.5
0.90	1791.5	1498.8	1157.0	907.8	790.4	640.8	546.3	495.9	442.0	2074.6	2094.9
0.80	2215.4	1794.1	1380.6	1084.1	918.7	737.1	624.8	560.6	499.8	2747.0	2737.1
0.50	3452.0	2623.8	1957.1	1485.4	1193.3	940.3	790.5	697.7	615.8	4709.9	4644.0
0.20	5658.0	4030.8	2814.2	1972.5	1499.1	1163.7	973.2	851.0	733.9	8097.5	8060.0
0.10	7479.5	5148.6	3422.4	2260.3	1667.8	1285.8	1073.8	936.7	794.4	10760.7	10851.4
0.04	10236.0	6790.6	4235.2	2590.8	1851.6	1418.2	1183.4	1031.8	856.9	14584.3	15005.6
0.02	12649.1	8192.2	4872.2	2816.2	1971.4	1504.2	1255.0	1094.9	895.7	17757.5	18572.4
0.01	15395.7	9756.8	5535.7	3026.2	2079.2	1581.4	1319.6	1152.7	929.2	21204.1	22558.6

STATION 12104700 GREEN CANYON CREEK NEAR LESTER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1960							18.2	17.8	9.55	4.52	4.10	2.97	
1961	4.04	25.1	14.7	25.1	38.8	21.7	16.5	12.7	6.24	3.70	2.84	2.21	14.3
1962	3.14	8.58	20.4	25.7	12.3	15.1	21.1	13.1	7.13	3.88	2.87	2.02	11.3
1963	3.16	16.4	24.3	15.0	19.6	12.4	12.4	10.3	5.45	4.14	2.75	2.22	11.0
1964	3.03	13.6	13.2	25.0	17.9	20.7	23.8	22.6	21.1	8.62	4.95	5.67	15.0
1965	8.19	12.1	25.5	34.9	28.2	15.2	13.6	9.93	5.91	3.55	2.55	2.09	13.4
1966	2.35	2.55	4.55	11.6	10.7	17.6	19.5	12.7	8.29	6.50	3.04	2.36	8.46
1967	3.85	7.88	22.9	35.4	24.2	15.4	12.4	16.5	8.94	4.65	2.60	1.79	13.0
1968	7.90	8.50	24.7	29.4	30.6	15.4	14.5	9.57	10.1	4.31	3.90	7.81	13.8
1969	7.89	16.3	18.9	21.6	4.19	19.8	27.3	21.4	11.0	6.52	3.51	2.76	13.5
1970	4.07	5.24	8.08	27.9	26.4	14.0	17.9	14.4	7.22	3.88	2.55	2.23	11.1

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1960-1970)

MEAN	4.8	11.6	17.7	25.2	21.3	16.7	18.4	14.6	9.2	4.9	3.2	3.1	12.5
MAXIMUM	8.2	25.1	25.5	35.4	38.8	21.7	27.3	22.6	21.1	8.6	4.9	7.8	15.0
MINIMUM	2.4	2.6	4.6	11.6	4.2	12.4	12.4	9.6	5.4	3.6	2.6	1.8	8.5
STD DEVIATION	2.29	6.55	7.33	7.64	10.41	3.08	4.43	4.46	4.34	1.60	0.79	1.89	1.98
SKEWNESS	0.840	0.763	-0.722	-0.465	-0.036	0.479	0.716	0.713	2.350	1.509	1.206	2.069	-0.840
STD ERR SKEW	0.687	0.687	0.687	0.687	0.687	0.687	0.661	0.661	0.661	0.661	0.661	0.661	-0.687
SER CORR COEFF	-0.016	-0.154	-0.462	-0.495	-0.637	-0.538	-0.347	-0.559	-0.374	-0.425	-0.398	-0.244	-0.207
COEFF OF VAR	0.481	0.564	0.414	0.304	0.489	0.184	0.241	0.305	0.473	0.324	0.246	0.609	0.158
MEAN LOGS	0.636	0.993	1.198	1.379	1.262	1.217	1.253	1.148	0.930	0.676	0.498	0.441	1.091
STD DEV LOGS	0.197	0.284	0.246	0.153	0.284	0.079	0.102	0.128	0.164	0.124	0.099	0.201	0.074
SKEWNESS LOGS	0.535	-0.794	-1.438	-1.118	-1.333	0.230	0.216	0.319	1.346	1.154	0.930	1.649	-1.188
STD ERR SKEW LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.661	0.661	0.661	0.661	0.661	0.661	0.687
SER CORR LOGS	-0.031	-0.076	-0.385	-0.494	-0.552	-0.525	-0.319	-0.595	-0.441	-0.450	-0.431	-0.272	-0.211
COEFF OF VAR LOGS	0.310	0.286	0.205	0.111	0.225	0.065	0.082	0.112	0.176	0.183	0.198	0.455	0.068
% OF AVE FLOW	3.2	7.7	11.8	16.7	14.1	11.1	12.2	9.7	6.1	3.3	2.1	2.1	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1960-1970)

0.99	1.8	1.5	2.4	8.0	2.2	11.1	10.7	7.6	5.1	3.1	2.2	1.6	7.2
0.95	2.2	3.0	5.3	12.2	5.2	12.4	12.3	8.9	5.4	3.3	2.3	1.7	8.9
0.90	2.5	4.1	7.4	14.9	7.6	13.1	13.3	9.7	5.7	3.5	2.4	1.8	9.8
0.80	2.9	5.9	10.6	18.4	11.4	14.1	14.6	10.9	6.2	3.7	2.6	1.9	10.9
0.50	4.2	10.7	18.0	25.5	21.0	16.4	17.7	13.8	7.9	4.5	3.0	2.4	12.7
0.20	6.2	17.2	25.3	32.3	31.6	19.2	21.8	17.9	11.1	5.9	3.7	3.8	14.3
0.10	7.9	21.1	28.3	35.3	36.5	20.9	24.3	20.7	14.1	6.9	4.3	5.1	14.9
0.04	10.3	25.4	30.9	38.1	40.8	23.0	27.5	24.3	18.9	8.6	5.0	7.5	15.4
0.02	12.4	28.2	32.1	39.6	42.9	24.5	29.9	27.1	23.4	10.0	5.6	10.0	15.6
0.01	14.8	30.6	32.9	40.7	44.5	25.9	32.2	29.9	28.9	11.5	6.2	13.4	15.8

STATION 12104700 GREEN CANYON CREEK NEAR LESTER, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31										
YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	
1961	2.4	2.4	2.4	2.5	2.7	3.0	3.4	3.7	6.6	
1962	1.5	1.6	1.7	1.7	1.9	2.3	2.5	2.9	4.1	
1963	1.6	1.6	1.7	1.8	2.0	2.3	2.6	2.8	4.3	
1964	1.8	1.8	1.9	2.0	2.2	2.2	2.5	3.0	4.3	
1965	3.2	3.2	3.4	3.9	4.3	5.0	6.2	5.9	9.7	
1966	1.8	1.8	1.8	1.9	2.1	2.2	2.3	2.4	2.9	
1967	2.1	2.1	2.1	2.2	2.2	2.4	2.8	3.4	5.1	
1968	1.5	1.5	1.5	1.6	1.8	2.0	2.4	3.2	5.5	
1969	2.5	2.5	2.6	3.0	3.3	3.7	4.5	5.6	7.0	
1970	2.2	2.2	2.2	2.3	2.5	3.1	3.4	3.6	4.8	

LOWEST MEAN FLOW STATISTICS (YEARS 1961-1970)

MEAN	2.1	2.1	2.1	2.3	2.5	2.8	3.3	3.6	5.4
MAXIMUM	3.2	3.2	3.4	3.9	4.3	5.0	6.2	5.9	9.7
MINIMUM	1.5	1.5	1.5	1.6	1.8	2.0	2.3	2.4	2.9
STANDARD DEVIATION	0.54	0.53	0.56	0.70	0.78	0.93	1.17	1.17	1.92
SKWENESS	1.004	1.070	1.343	1.520	1.674	1.669	1.818	1.325	1.202
STD ERROR OF SKWENESS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SERIAL CORR COEFF	-0.249	-0.262	-0.279	-0.265	-0.279	-0.265	-0.309	-0.296	-0.445
COEFF OF VARIATION	0.261	0.255	0.264	0.307	0.316	0.330	0.378	0.322	0.354
MEAN LOGS	0.301	0.304	0.316	0.344	0.378	0.433	0.491	0.545	0.712
STD DEVIATION LOGS	0.108	0.104	0.106	0.119	0.120	0.125	0.139	0.126	0.146
SKWENESS LOGS	0.540	0.621	0.816	1.006	1.255	1.211	1.349	0.951	0.300
STD ERR SKWENESS LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687
SER CORR COEFF LOGS	-0.241	-0.259	-0.294	-0.277	-0.265	-0.278	-0.334	-0.300	-0.466
COEFF OF VAR LOGS	0.357	0.343	0.334	0.347	0.317	0.290	0.284	0.231	0.205

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1961-1970)

0.99	3.9	3.9	4.2	5.1	5.8	6.7	8.7	8.3	12.1
0.98	3.6	3.6	3.8	4.4	5.0	5.8	7.3	7.3	10.8
0.96	3.2	3.2	3.4	3.9	4.3	4.9	6.1	6.3	9.6
0.90	2.8	2.8	2.9	3.2	3.5	4.0	4.8	5.2	8.0
0.80	2.4	2.4	2.5	2.7	2.9	3.3	3.9	4.4	6.8
0.50	2.0	2.0	2.0	2.1	2.3	2.6	2.9	3.4	5.1
0.20	1.6	1.6	1.7	1.7	1.9	2.1	2.4	2.7	3.9
0.10	1.5	1.5	1.6	1.6	1.8	2.0	2.2	2.5	3.4
0.05	1.4	1.4	1.5	1.5	1.7	1.9	2.1	2.4	3.1
0.02	1.3	1.3	1.4	1.5	1.6	1.8	2.0	2.3	2.7
0.01	1.2	1.3	1.4	1.4	1.6	1.8	2.0	2.2	2.5

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1961-1970)

P95	P90	P75	P70	P50	P25	P10
2.1	2.5	4.0	4.6	9.1	16.0	26.0

STATION 12105000 SMAY CREEK NEAR LESTER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1947	27.3	42.6	154	61.3	51.5	50.9	64.5	52.0	32.7	22.9	10.0	12.5	48.6
1948	60.2	122	66.4	47.8	41.1	33.2	55.9	123	113	33.5	15.5	15.5	60.4
1949	25.6	31.0	40.4	27.4	31.0	50.6	77.5	151	81.1	63.4	16.6	10.0	48.8
1950	41.6	72.2	68.1	52.7	51.7	73.3	65.0	112	159	63.4	19.8	12.0	65.9
1951	36.8	97.9	100	61.1	99.7	32.8	82.1	98.7	46.7	16.5	9.55	8.57	57.2
1952	40.5	55.3	36.1	20.1	50.9	27.1	80.8	95.3	48.0	25.1	10.9	7.49	41.3
1953	5.81	4.89	7.09	105	84.7	33.6	12.9	72.9	55.1	28.9	12.8	8.52	38.7
1954	9.14	41.6	131	56.9	60.2	37.5	60.8	101	106	51.2	18.2	15.8	57.4
1955	19.1	47.2	33.9	41.4	63.5	19.0	36.2	78.7	144	78.0	26.2	12.9	49.8
1956	61.5	103	81.7	34.1	17.8	25.2	89.9	157	105	42.2	13.8	10.2	61.8
1957	38.4	55.8	154	28.7	22.3	35.5	80.5	95.5	33.0	15.3	9.81	6.52	48.6
1958	7.29	21.1	60.0	59.1	73.6	66.9	62.4	22.9	22.9	12.3	7.55	7.72	36.0
1959	41.0	150	129	115	48.5	73.3	78.0	54.0	54.0	22.3	11.3	69.0	69.3
1960	89.5	166	77.5	24.0	50.0	39.6	78.2	87.6	56.9	18.6	10.5	9.76	58.8
1961	17.6	94.6	46.6	88.2	127	58.4	73.0	78.5	49.4	13.4	8.70	8.04	54.7
1962	20.9	38.8	67.8	85.8	51.6	25.5	89.6	59.1	46.9	18.1	12.3	10.3	43.8
1963	17.6	64.5	85.6	53.9	60.2	41.1	57.1	47.5	24.2	18.6	11.8	8.37	40.7
1964	10.8	51.0	47.6	57.8	38.1	37.9	63.3	94.1	147	64.5	24.9	31.3	55.6
1965	41.1	34.4	86.4	114	101	49.4	66.8	66.0	47.2	18.2	10.9	8.99	53.5
1966	13.7	20.3	33.9	35.1	23.9	37.9	93.5	95.3	52.8	29.9	13.3	8.04	38.3
1967	19.1	41.9	96.2	121	75.2	37.3	28.0	74.1	61.3	18.1	9.00	6.45	49.0
1968	34.5	47.0	109	92.2	104	48.4	45.6	53.8	42.7	17.6	14.6	46.8	54.5
1969	46.8	76.1	59.0	62.9	16.2	80.5	80.5	129	68.7	27.9	11.6	10.6	51.7
1970	21.9	23.7	30.8	82.8	66.7	42.9	57.5	66.4	54.4	16.5	9.49	10.1	40.1

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1947-1970)

MEAN	31.2	62.9	75.1	63.7	58.4	39.7	67.3	88.7	68.8	29.4	13.3	14.8	51.0
MAXIMUM	89.5	166.0	154.0	121.0	127.0	73.3	93.5	157.0	159.0	78.0	26.2	69.0	69.3
MINIMUM	5.8	4.9	7.1	20.1	16.2	19.0	28.0	47.5	22.9	12.3	7.6	6.4	36.0
STD DEVIATION	20.01	40.82	39.52	30.37	29.21	11.97	16.80	29.44	39.22	17.91	4.84	14.55	9.06
SKENESS	1.151	1.121	0.527	0.464	0.610	0.825	-0.578	0.825	1.150	1.526	1.478	2.960	0.101
STD ERR SKEW	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472
SER CORR COEFF	-0.016	0.224	-0.228	-0.169	-0.250	-0.001	-0.128	0.064	0.061	0.222	0.156	-0.173	-0.069
COEFF OF VAR	0.642	0.649	0.526	0.477	0.500	0.301	0.250	0.332	0.570	0.609	0.364	0.982	0.177
MEAN LOGS	1.402	1.701	1.802	1.752	1.708	1.580	1.812	1.926	1.777	1.407	1.101	1.069	1.701
STD DEV LOGS	0.303	0.328	0.292	0.244	0.241	0.131	0.127	0.140	0.232	0.225	0.140	0.257	0.078
SKENESS LOGS	-0.400	-1.081	-1.425	-0.335	-0.515	-0.158	-1.325	0.151	0.259	0.776	0.817	1.914	-0.213
STD ERR SKEW LOGS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472
SER CORR LOGS	0.055	0.082	-0.139	-0.182	-0.204	0.034	-0.076	0.036	0.068	0.248	0.189	-0.202	-0.067
COEFF OF VAR LOGS	0.216	0.193	0.162	0.128	0.141	0.083	0.070	0.073	0.131	0.160	0.127	0.241	0.046
% OF AVE FLOW	5.1	10.3	12.2	10.4	9.5	6.5	11.0	14.5	11.2	4.8	2.2	2.4	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1947-1970)

0.99	4.1	4.9	7.0	15.0	11.4	18.2	25.3	41.2	19.1	10.3	7.3	6.4	32.1
0.95	7.4	12.1	17.2	23.1	19.0	25.9	37.0	50.3	25.9	12.4	8.1	6.6	36.9
0.90	10.1	18.3	25.8	28.7	24.5	28.8	43.9	56.1	30.6	13.9	8.7	6.8	39.7
0.80	14.3	28.6	39.5	37.0	32.6	29.6	52.7	64.1	37.9	16.4	9.6	7.4	43.2
0.50	26.4	57.4	73.9	58.2	53.6	38.4	69.1	83.7	58.5	23.9	12.1	9.8	50.6
0.20	45.8	95.4	110.7	87.8	82.2	49.1	82.8	110.4	93.1	38.3	16.2	17.0	58.6
0.10	59.6	116.3	127.1	107.3	100.3	55.7	88.3	129.2	120.2	50.9	19.4	25.5	63.0
0.04	71.4	137.4	140.8	131.2	121.6	63.4	92.9	159.7	159.7	71.4	24.0	43.4	68.0
0.02	90.7	149.7	147.4	148.6	136.5	68.8	95.1	168.0	192.9	90.4	27.8	64.8	71.3
0.01	104.0	159.7	152.1	165.4	150.4	74.0	96.6	185.3	229.5	113.1	32.0	96.6	74.3

STATION 12105000 SMAY CREEK NEAR LESTER, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1948	9.0	9.0	9.0	9.3	9.7	11.0	14.0	19.0	31.0
1949	11.0	11.0	12.0	12.0	13.0	15.0	19.0	20.0	27.0
1950	8.4	8.5	8.7	9.0	9.8	12.0	17.0	24.0	39.0
1951	9.6	9.7	10.0	10.0	12.0	15.0	22.0	29.0	53.0
1952	6.9	6.9	7.0	7.4	8.1	8.9	11.0	14.0	27.0
1953	4.2	4.2	4.3	4.4	4.7	5.2	5.7	6.3	9.2
1954	6.9	7.2	7.6	7.8	8.2	8.6	10.0	13.0	25.0
1955	12.0	13.0	13.0	14.0	15.0	16.0	17.0	19.0	28.0
1956	10.0	10.0	11.0	12.0	13.0	17.0	26.0	40.0	52.0
1957	8.8	8.8	8.9	9.2	9.6	11.0	14.0	25.0	40.0
1958	5.8	5.8	6.1	6.3	6.5	6.7	7.5	8.7	15.0
1959	5.8	5.8	5.8	6.0	6.4	7.4	8.6	11.0	25.0
1960	8.6	9.1	9.5	9.9	11.0	15.0	23.0	32.0	48.0
1961	8.2	8.2	8.3	8.8	9.0	9.7	10.0	13.0	32.0
1962	6.5	6.7	7.0	7.3	7.4	8.1	9.1	12.0	20.0
1963	9.1	9.1	9.2	9.5	10.0	11.0	12.0	14.0	23.0
1964	6.3	6.5	6.7	6.7	7.1	8.2	9.9	12.0	19.0
1965	15.0	16.0	17.0	18.0	22.0	27.0	32.0	31.0	42.0
1966	7.5	7.6	7.7	8.1	8.9	9.4	11.0	12.0	17.0
1967	6.7	6.8	6.9	7.3	7.7	8.5	11.0	16.0	27.0
1968	5.4	5.5	5.5	5.8	6.4	7.1	8.6	12.0	36.0
1969	9.7	9.7	10.0	11.0	12.0	15.0	18.0	27.0	36.0
1970	8.2	8.2	8.4	8.7	9.2	11.0	15.0	16.0	20.0

LOWEST MEAN FLOW STATISTICS (YEARS 1948-1970)

MEAN	8.2	15.3	17.4	18.6	22.5	28.6	38.6	49.4	61.4
MAXIMUM	15.0	16.0	17.0	18.0	22.0	27.0	32.0	40.0	53.0
MINIMUM	4.2	4.2	4.3	4.4	4.7	5.2	5.7	6.3	9.2
STANDARD DEVIATION	2.39	2.58	2.77	2.97	3.65	4.74	6.55	8.64	11.65
SKEWNESS	0.926	1.181	1.247	1.285	1.743	1.648	1.123	0.898	0.527
STD ERROR OF SKEWNESS	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481
SERIAL CORR COEFF	-0.015	-0.022	-0.012	-0.021	-0.054	-0.069	-0.041	0.007	0.048
COEFF OF VARIATION	0.290	0.307	0.319	0.327	0.370	0.413	0.454	0.466	0.393
MEAN LOGS	0.899	0.906	0.919	0.937	0.970	1.029	1.119	1.224	1.438
STD DEVIATION LOGS	0.124	0.128	0.132	0.135	0.144	0.162	0.187	0.199	0.183
SKEWNESS LOGS	-0.013	0.117	0.166	0.185	0.448	0.428	0.244	0.037	-0.551
STD ERR SKEWNESS LOGS	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481	0.481
SER CORR COEFF LOGS	0.046	0.045	0.055	0.037	0.015	0.023	0.064	0.055	0.021
COEFF OF VAR LOGS	0.138	0.141	0.143	0.144	0.149	0.157	0.167	0.163	0.127

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1948-1970)

0.99	15.3	16.4	17.4	18.6	22.5	28.6	38.6	49.4	61.4
0.98	14.2	15.0	15.9	16.9	19.9	25.0	33.6	43.4	57.2
0.96	13.0	13.6	14.3	15.2	17.5	21.6	28.9	37.7	52.5
0.90	11.4	11.8	12.3	12.9	14.5	17.5	23.1	30.2	45.5
0.80	10.1	10.3	10.7	11.2	12.2	14.5	18.8	24.6	39.3
0.50	7.9	8.0	8.2	8.6	9.1	10.4	12.9	16.7	28.5
0.20	6.2	6.3	6.4	6.6	7.0	7.8	9.1	11.4	19.6
0.10	5.5	5.6	5.7	5.9	6.2	6.8	7.7	9.3	15.7
0.05	5.0	5.0	5.1	5.3	5.6	6.1	6.7	7.9	12.9
0.02	4.4	4.5	4.6	4.7	5.1	5.4	5.8	6.6	10.3
0.01	4.1	4.2	4.3	4.4	4.8	5.1	5.2	5.8	8.7

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1948-1970)

P95	P90	P75	P70	P50	P25	P10
8.1	10.0	18.0	22.0	38.0	66.0	110.0

STATION 12105000 SMAY CREEK NEAR LESTER, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW(CFS) DATE REG.(R)
1947	800.	683.	471.	264.	165.	109.	92.	82.	74.	412. 11/08/47
1948	350.	291.	254.	187.	153.	120.	100.	83.	69.	
1949	280.	267.	247.	192.	155.	121.	105.	91.	71.	11/27/49
1950	303.	246.	183.	167.	119.	144.	119.	103.	90.	02/09/51
1951	366.	358.	243.	149.	115.	102.	102.	90.	84.	05/21/52
1952	140.	137.	126.	115.	100.	91.	77.	65.	55.	147. 01/31/53
1953	336.	271.	197.	172.	148.	96.	75.	73.	67.	447. 12/09/53
1954	352.	274.	221.	165.	133.	108.	93.	81.	76.	534. 02/08/55
1955	332.	263.	224.	171.	148.	123.	102.	86.	70.	422. 12/12/55
1956	347.	276.	235.	196.	167.	144.	121.	101.	73.	478. 12/10/56
1957	545.	371.	321.	254.	160.	107.	89.	72.	71.	617. 06/20/58
1958	208.	171.	132.	99.	81.	67.	64.	61.	59.	230. 11/12/58
1959	586.	393.	259.	206.	166.	149.	134.	112.	94.	702. 11/23/59
1960	1180.	728.	490.	282.	191.	143.	112.	90.	77.	2380. 02/21/61
1961	401.	298.	200.	138.	125.	109.	93.	89.	81.	564. 04/06/62
1962	359.	245.	164.	147.	115.	86.	71.	69.	65.	506. 11/20/62
1963	371.	243.	163.	117.	105.	92.	77.	63.	63.	475. 06/01/64
1964	208.	190.	180.	168.	155.	127.	105.	93.	74.	211. 01/29/65
1965	850.	667.	430.	248.	173.	115.	101.	90.	81.	951. 05/06/66
1966	226.	194.	163.	121.	100.	97.	83.	72.	58.	243. 12/13/66
1967	288.	263.	199.	154.	128.	116.	101.	86.	73.	330. 12/25/67
1968	650.	498.	306.	178.	138.	116.	106.	91.	78.	896. 01/05/69
1969	437.	282.	186.	157.	142.	112.	94.	80.	65.	665. 01/23/70
1970	284.	256.	228.	146.	108.	80.	72.	68.	62.	878. 02/15/72
1972										474. 12/21/72
1973										

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HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1948-1973)

	MEAN	MAXIMUM	MINIMUM	STANDARD DEVIATION	STD ERROR OF SKEWNESS	SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	SKEWNESS LOGS	STD ERR SKEWNESS LOGS	SER CORR COEFF LOGS	COEFF OF VAR LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
	425.0	1180.0	160.0	239.28	1.773	0.472	-0.046	2.575	0.212	0.481	0.472	-0.113	0.082	2.6780	2.6780
	1180.0	160.0	137.0	159.63	1.562	0.472	-0.146	2.476	0.183	0.700	0.472	-0.194	0.074	0.2510	0.2510
	140.0	137.0	137.0	159.63	1.562	0.472	-0.146	2.476	0.183	0.700	0.472	-0.194	0.074	0.5110	0.5110
	239.28	159.63	137.0	159.63	1.562	0.472	-0.146	2.476	0.183	0.700	0.472	-0.194	0.074	0.0	0.0
	1.773	1.562	1.562	1.562	1.562	0.472	-0.146	2.476	0.183	0.700	0.472	-0.194	0.074	2.6780	2.6780
	0.472	0.472	0.472	0.472	0.472	0.472	-0.146	2.476	0.183	0.700	0.472	-0.194	0.074	0.2510	0.2510
	-0.046	-0.146	-0.146	-0.146	-0.146	-0.146	-0.146	-0.146	-0.146	-0.146	-0.146	-0.146	-0.146	0.0	0.0
	2.575	2.476	2.476	2.476	2.476	2.476	2.476	2.476	2.476	2.476	2.476	2.476	2.476	0.0	0.0
	0.212	0.183	0.183	0.183	0.183	0.183	0.183	0.183	0.183	0.183	0.183	0.183	0.183	2.6780	2.6780
	0.481	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.700	0.2510	0.2510
	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.5110	0.5110
	-0.113	-0.194	-0.194	-0.194	-0.194	-0.194	-0.194	-0.194	-0.194	-0.194	-0.194	-0.194	-0.194	0.0	0.0
	0.082	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074	2.6780	2.6780

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1948-1973)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
	144.0	181.2	207.6	247.7	361.8	558.4	716.7	922.3	1155.6	1384.7
	139.9	164.4	181.8	208.6	284.8	416.7	523.5	643.2	822.0	979.4
	118.4	136.2	148.5	167.2	218.3	301.9	366.5	459.4	537.4	623.3
	92.8	109.6	120.1	134.4	167.7	211.1	238.9	273.3	298.6	323.6
	74.3	92.1	102.2	114.7	139.4	163.5	175.5	187.5	194.8	201.0
	64.3	77.3	84.6	93.7	111.4	129.1	138.1	147.2	152.9	157.8
	58.8	68.2	73.6	80.5	94.6	109.8	118.2	127.4	133.5	139.0
	56.6	63.4	67.2	72.2	82.4	93.8	100.2	107.3	112.2	116.7
	52.4	57.4	60.2	63.8	71.4	80.0	84.9	90.5	94.4	98.0
	124.2	184.1	227.2	292.9	476.4	774.9	999.3	1310.5	1561.4	1827.8
	154.7	201.7	236.2	290.4	453.6	759.7	1024.0	1439.9	1817.4	2260.2

STATION 12105500 CHARLEY CREEK NR EAGLE GORGE, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1947	38.3	81.9	172	106	80.9	69.7	103	35.4	42.0	26.8	15.3	20.5	65.9
1948	94.2	152	87.0	79.7	86.0	52.1	85.4	125	89.7	29.7	36.3	34.7	79.1
1949	42.3	102	79.9	43.8	76.6	81.6	118	128	39.1	26.7	18.2	14.0	64.0
1950	73.5	108	112	68.1	112	139	125	131	128	42.0	23.5	19.1	89.8
1951	79.7	156	161	123	179	63.1	98.6	88.5	30.0	14.8	11.8	13.0	84.2
1952	55.1	76.2	75.9	36.5	90.1	62.6	99.6	90.2	43.8	23.5	11.4	11.1	56.3
1953	94.3	94.22	19.0	211	135	54.3	79.3	68.7	65.7	29.0	16.4	15.2	59.0
1954	30.2	80.3	223	94.2	104	56.5	97.1	80.9	103	46.3	25.7	34.1	81.1
1955	25.2	62.2	73.0	82.0	114	37.2	76.1	122	153	70.2	35.4	17.5	71.9
1956	89.4	130											

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1947	1380.0	12-11-1946
1948	559.0	11-7-1947
1949	440.0	2-17-1949
1950	810.0	3-4-1950
1951	1510.0	2-11-1951
1952	468.0	2-4-1952
1953	1070.0	1-23-1953
1954	2440.0	12-9-1953
1955	1280.0	2-8-1955

STATION 12105700 N.F. GREEN RIVER NR PALMER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1957	92.5	105	289	42.5	64.9	118	143	94.7	61.3	29.8	16.9	14.7	88.0
1958	24.8	80.4	174	157	132	52.1	86.8	49.4	24.7	14.9	8.51	16.7	66.0
1959	60.4	212	151	207	53.5	77.2	132	88.6	56.3	35.6	11.4	156	104
1960	153	237	143	50.7	113	83.8	130	132	62.2	13.2	11.7	14.6	95.0
1961	38.6	211	108	161	240	122	116	88.7	36.4	14.3	3.05	4.59	94.2
1962	47.7	84.7	164	184	66.8	52.4	148	93.5	50.6	16.0	18.5	15.3	78.6
1963	44.8	170	210	108	125	79.4	119	68.3	42.4	33.9	15.8	9.62	85.2
1964	28.3	139	91.3	167	112	95.4	154	184	195	52.3	37.3	72.3	110
1965	75.2	97.1	181	268									

STATION 12105700 N.F. GREEN RIVER NR PALMER, WASH.

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW (CFS)	DATE
1957	1100.0	12-10-1956
1958	645.0	1-17-1958
1959	1350.0	4-1-1959
1960	2000.0	11-23-1959
1961	920.0	2-21-1961
1962	1140.0	4-6-1962
1963	1360.0	11-19-1962
1964	496.0	1-25-1964
1965	2400.0	1-28-1965

STATION 12105710 NORTH FORK GREEN RIVER NEAR LEMOLO, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1965													
1966	23.8	52.4	65.2	98.6	51.1	98.3	183	133	67.6	48.7	2.20	9.06	69.8
1967	53.3	96.9	174	234	134	74.1	57.0	115	46.9	11.8	7.56	6.95	84.3
1968	54.8	73.4	171	175	176	79.8	90.8	78.8	72.7	36.5	37.6	78.3	92.0
1969	112	118	119	138	138	71.8	161	164	82.8	18.5	8.74	25.0	84.3
1970	49.7	50.3	97.1	169	124	84.2	118	106	45.0	14.3	6.76	26.0	74.0
1971	48.5	88.2	80.5	195	146	79.7	123	201	114	51.9	13.7	21.1	96.6
1972	44.5	118	130	180	295	262	122	178	82.4	51.5	16.2	36.8	126
1973	23.4	48.3	206	104	49.6	152.7	166.7	73.7	50.1	22.7	6.74	7.95	159.4
1974	26.2	108	231	287	113	135	169	168	229	49.5	13.3	7.75	128
1975	6.05	82.9	187	247	86.5	89.2	65.1	198	103	23.4	19.2	16.0	92.5
1976	67.2	178	299	198	66.4	54.4	135	122	51.9	22.1	20.9	17.9	103
1977	17.2	41.2	61.2	69.4	54.1	92.9	154	95.9	48.7	9.19	10.3	29.7	56.8
1978	29.6	309	301	63.2	62.7	59.5	69.5	71.0	33.2	12.7	10.0	52.6	89.4
1979	22.7	95.1	137	48.5	130	130	106	76.9	17.2	15.8	7.21	10.8	66.0

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1965-1979)

MEAN	38.4	102.4	161.4	157.8	107.2	97.6	115.7	127.2	74.6	26.3	12.7	23.4	87.3
MAXIMUM	70.8	309.0	301.0	287.0	295.0	262.0	185.0	201.0	229.0	51.9	37.6	78.3	128.0
MINIMUM	6.1	41.2	61.2	48.5	18.8	54.4	57.0	71.0	17.2	5.4	2.2	5.0	56.8
STD DEVIATION	19.70	69.80	78.21	73.20	70.86	53.12	41.71	46.90	51.75	16.71	8.52	20.07	21.85
SKWENESS	0.140	2.246	0.557	0.058	1.407	2.559	0.059	0.339	2.210	0.612	1.908	1.726	0.542
STD ERR SKEW	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.580	0.580	0.580	0.597
SER CORR COEFF	0.073	-0.371	-0.208	0.317	-0.125	-0.298	-0.529	0.093	0.088	-0.095	-0.141	-0.059	-0.386
COEFF OF VAR	0.513	0.682	0.485	0.464	0.661	0.544	0.360	0.369	0.694	0.635	0.671	0.858	0.250
MEAN LOGS	1.513	1.942	2.157	2.144	1.940	1.949	2.034	2.076	1.796	1.330	1.023	1.238	1.929
STD DEV LOGS	0.288	0.239	0.224	0.239	0.305	0.180	0.169	0.164	0.266	0.301	0.282	0.348	0.108
SKWENESS LOGS	-1.197	0.772	-0.250	-0.677	-0.879	1.379	-0.374	-0.011	0.037	-0.224	-0.425	0.243	0.041
STD ERR SKEW LOGS	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.597	0.580	0.580	0.580	0.597
SER CORR LOGS	-0.024	-0.590	-0.203	0.480	-0.274	-0.453	-0.501	0.090	0.281	-0.121	-0.061	0.192	-0.420
COEFF OF VAR LOGS	0.190	0.123	0.104	0.111	0.157	0.092	0.083	0.079	0.148	0.226	0.276	0.281	0.056
% OF AVE FLOW	3.7	9.8	15.4	15.1	10.3	9.3	11.1	12.2	7.1	2.5	1.2	2.2	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1965-1979)

0.99	4.0	33.3	39.3	29.8	13.3	51.2	39.3	49.4	15.3	3.8	1.9	3.1	47.9
0.95	9.2	40.5	59.3	51.4	25.1	54.6	54.9	64.0	22.9	6.6	3.4	4.9	56.5
0.90	13.4	45.9	73.2	67.0	34.4	57.7	64.8	73.5	28.6	8.7	4.5	6.3	61.7
0.80	20.0	54.6	93.6	90.2	49.3	63.0	78.7	86.8	37.3	12.0	6.2	8.8	68.8
0.50	37.1	81.6	146.7	148.3	92.1	81.1	110.9	119.3	62.2	21.9	11.0	16.7	84.7
0.20	57.0	134.6	222.8	223.3	158.9	119.2	151.0	163.8	104.5	38.5	18.4	33.6	104.5
0.10	67.0	182.5	273.9	267.7	205.0	154.6	175.2	193.2	137.3	51.0	23.4	49.2	116.8
0.04	76.3	261.0	336.4	317.6	263.3	214.0	203.2	230.4	184.0	68.0	29.7	75.0	131.6
0.02	81.4	335.2	386.2	350.3	306.0	271.4	222.5	258.1	222.6	81.4	34.3	99.3	142.2
0.01	85.3	425.2	433.5	379.8	347.5	342.3	240.6	285.8	264.2	95.4	38.9	128.4	152.5

STATION 12105710 NORTH FORK GREEN RIVER NEAR LEMOLO, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31												
YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS			
1967	3.8	4.1	4.5	4.6	5.0	7.3	10.0	23.0	43.0			
1968	4.9	5.1	5.4	5.7	6.7	7.2	8.5	11.0	32.0			
1969	6.4	6.5	7.2	8.4	13.0	19.0	29.0	43.0	57.0			
1970	4.0	4.2	4.6	5.2	5.8	9.5	21.0	27.0	39.0			
1971	4.8	4.8	5.0	5.2	6.2	9.4	15.0	18.0	34.0			
1972	10.0	10.0	11.0	11.0	13.0	17.0	19.0	31.0	59.0			
1973	10.0	10.0	11.0	12.0	14.0	18.0	25.0	28.0	41.0			
1974	1.8	1.9	2.1	3.0	3.7	6.8	9.8	15.0	30.0			
1975	4.1	4.3	4.6	5.1	5.6	6.8	8.4	13.0	44.0			
1976	4.8	5.4	5.7	6.4	8.9	18.0	16.0	24.0	63.0			
1977	7.6	7.6	7.8	9.3	11.0	15.0	17.0	19.0	27.0			
1978	3.7	3.8	3.9	4.0	4.9	7.8	13.0	17.0	37.0			
1979	4.3	4.4	4.8	5.6	8.3	11.0	15.0	24.0	33.0			

LOWEST MEAN FLOW STATISTICS (YEARS 1967-1979)

MEAN	5.4	5.5	6.0	6.6	8.2	11.8	15.9	22.5	41.5
MAXIMUM	10.0	10.0	11.0	12.0	14.0	19.0	29.0	43.0	63.0
MINIMUM	1.8	1.9	2.1	3.0	3.7	6.8	8.4	11.0	27.0
STANDARD DEVIATION	2.46	2.39	2.64	2.75	3.51	4.87	6.35	8.61	11.57
SKEWNESS	0.956	0.885	0.994	0.907	0.574	0.454	0.722	0.971	0.806
STD ERROR OF SKEWNESS	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616
SERIAL CORR COEFF	0.053	0.044	0.054	-0.018	-0.102	-0.111	0.049	-0.157	-0.318
COEFF OF VARIATION	0.455	0.431	0.442	0.418	0.431	0.415	0.400	0.382	0.279
MEAN LOGS	0.692	0.707	0.738	0.785	0.875	1.036	1.170	1.325	1.603
STD DEVIATION LOGS	0.199	0.191	0.192	0.175	0.187	0.179	0.173	0.163	0.116
SKEWNESS LOGS	-0.261	-0.358	-0.216	0.237	0.119	0.249	0.050	0.019	0.441
STD ERR SKEWNESS LOGS	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616	0.616
SER CORR COEFF LOGS	-0.076	-0.079	-0.079	-0.110	-0.137	-0.083	0.101	-0.208	-0.332
COEFF OF VAR LOGS	0.288	0.271	0.260	0.223	0.214	0.173	0.148	0.123	0.072

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1967-1979)

0.99	13.1	12.6	14.2	16.7	21.2	30.6	37.9	50.9	81.2
0.98	11.8	11.5	12.8	14.6	18.7	26.7	33.9	45.9	73.7
0.96	10.5	10.4	11.4	12.7	16.2	23.1	29.9	40.9	66.4
0.90	8.7	8.8	9.5	10.3	13.1	18.6	24.7	34.2	57.0
0.80	7.3	7.4	8.0	8.5	10.7	15.3	20.7	29.0	49.8
0.50	5.0	5.2	5.6	6.0	7.4	10.7	14.7	21.1	39.3
0.20	3.4	3.5	3.8	4.3	5.2	7.6	10.6	15.4	31.9
0.10	2.7	2.9	3.1	3.7	4.3	6.5	8.9	13.1	28.9
0.05	2.2	2.4	2.6	3.2	3.7	5.7	7.7	11.4	26.8
0.02	1.8	1.9	2.1	2.8	3.2	4.9	6.6	9.8	24.7
0.01	1.6	1.6	1.8	2.6	2.9	4.5	5.9	8.9	23.5

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1967-1979)						
P95	P90	P75	P70	P50	P25	P10
6.8	10.0	24.0	31.0	59.0	110.0	190.0

STATION 12105710 NORTH FORK GREEN RIVER NEAR LEMOLO, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA FLOW(CFS)	DATE	REG. (R)
1957										1100.	12/10/56	
1958										645.	01/17/58	
1959										1350.	04/01/59	
1960										2000.	11/23/59	
1961										920.	02/21/61	
1962										1140.	04/06/62	
1963										1360.	11/19/62	
1964										496.	01/25/64	
1965										2400.	01/28/65	
1966	325.	304.	264.	251.	196.	168.	141.	125.	108.	434.	04/01/66	
1967	557.	502.	374.	291.	236.	214.	191.	164.	135.	704.	12/13/66	
1968	838.	631.	423.	279.	242.	196.	178.	154.	133.	1100.	12/25/67	
1969	894.	620.	400.	241.	171.	163.	144.	126.	114.	1080.	01/05/69	
1970	518.	489.	426.	289.	206.	152.	142.	133.	118.	582.	01/22/70	
1971	613.	409.	328.	305.	242.	175.	145.	154.	144.	902.	01/19/71	
1972	971.	723.	507.	440.	389.	305.	253.	228.	194.	1390.	02/21/72	
1973	850.	683.	581.	374.	255.	162.	123.	108.	100.	1420.	12/21/72	
1974	1170.	879.	572.	480.	330.	271.	224.	196.	196.	1610.	01/15/74	
1975	1270.	989.	614.	415.	255.	224.	189.	162.	152.	1970.	01/18/75	
1976	1650.	1450.	857.	531.	336.	272.	232.	197.	159.	2010.	12/02/75	
1977	270.	221.	195.	177.	160.	133.	117.	104.	90.	270.	01/18/77	
1978	1700.	1200.	844.	618.	431.	310.	228.	186.	144.	2000.	12/02/77	
1979	416.	363.	263.	189.	158.	134.	125.	114.	109.	605.	02/06/79	

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HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1957-1979)

	MEAN	MINIMUM	STANDARD DEVIATION	SKEWNESS	STD ERROR OF SKEWNESS	SERIAL CORR COEFF	COEFF OF VARIATION	MEAN LOGS	STD DEVIATION LOGS	SKEWNESS LOGS	STD ERR SKEWNESS LOGS	SER CORR COEFF LOGS	COEFF OF VAR LOGS	W R C ESTIMATE	SYSTEMATIC RECORD
	860.1	1700.0	456.51	0.619	0.597	-0.283	-0.531	2.873	0.246	-0.279	0.597	-0.331	0.086		
	675.9	1450.0	221.0	0.914	0.597	-0.361	-0.427	2.775	0.230	-0.138	0.597	-0.433	0.083		
	474.9	857.0	195.0	0.705	0.597	-0.353	-0.378	2.639	0.189	-0.130	0.597	-0.426	0.072		
	348.6	618.0	177.0	0.660	0.597	-0.328	-0.328	2.514	0.164	-0.138	0.597	-0.378	0.065		
	257.6	431.0	158.0	0.462	0.597	-0.432	-0.522	2.390	0.138	0.128	0.597	-0.526	0.058		
	205.7	310.0	133.0	0.796	0.597	-0.585	-0.585	2.296	0.128	0.313	0.597	-0.537	0.051		
	174.0	253.0	117.0	0.615	0.597	-0.522	-0.522	2.227	0.114	0.156	0.597	-0.537	0.049		
	153.5	228.0	104.0	0.436	0.597	-0.554	-0.554	2.174	0.107	0.069	0.597	-0.578	0.049		
	134.9	196.0	90.0	0.597	0.597	-0.342	-0.342	2.118	0.105	0.144	0.597	-0.389	0.049		
	3.0177	0.2468	0.0											3.0177	0.2468
															-0.6020

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1957-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
	175.8	279.2	353.4	465.7	766.4	1214.8	1523.2	1917.9	2212.9	2507.1
	165.0	244.6	300.3	383.3	603.4	933.6	1164.9	1467.7	1699.3	1935.1
	152.1	209.9	248.3	303.3	440.1	630.1	835.6	914.9	1032.6	1149.7
	137.6	176.5	201.7	237.4	325.4	447.9	530.3	565.8	615.4	679.5
	125.6	149.8	165.4	187.4	242.0	319.2	372.1	411.2	449.4	494.0
	106.6	125.1	137.0	153.6	194.5	251.6	290.4	340.7	379.2	418.6
	94.4	110.8	121.0	134.9	167.4	209.7	236.8	270.4	295.1	319.6
	85.1	100.0	109.0	121.2	148.8	183.5	205.0	231.1	249.9	268.1
	76.9	89.2	96.8	107.1	130.6	160.5	179.4	202.6	219.4	235.9
	277.7	409.1	502.6	645.6	1041.5	1680.1	2157.2	2816.1	3345.2	3905.6
	217.5	375.1	489.6	661.3	1102.2	1695.0	2059.5	2480.8	2766.3	3028.9

STATION 12105900 GREEN RIVER BELOW HOWARD A. HANSON DAM, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1961	400	1996	1031	1771	2931	1564	1594	1637	804	257	152	173	1179
1962	464	887	1051	2369	968	703	1734	1031	697	403	259	266	902
1963	582	1616	1817	1151	1521	546	1440	882	458	430	276	242	908
1964	418	1305	1098	1662	1134	1144	1685	2190	2247	825	230	611	1222
1965	877	1029	2070	2025	3151	1075	1498	1204	434	824	220	217	1156
1966	512	451	619	905	661	1108	1868	1241	641	558	232	223	752
1967	676	925	1973	2766	1746	907	751	1552	651	264	283	222	1059
1968	885	883	2003	1919	2263	1059	1109	974	812	290	349	829	1111
1969	880	1530	1323	1387	428	1025	1960	2220	981	431	206	230	1054
1970	453	483	730	1749	1396	959	1263	1288	639	275	202	278	806
1971	492	1012	774	2716	2233	952	1338	2532	1067	764	279	291	1199
1972	631	1383	1522	2062	2551	3675	1522	2601	1176	843	319	506	1565
1973	385	706	2337	1412	541	669	758	741	253	374	254	302	732
1974	353	847	1780	2885	1403	1398	1916	2189	2402	712	412	329	1391
1975	170	529	1741	2663	1004	1149	920	2365	1114	503	337	368	1076
1976	718	2054	4269	2686	1216	838	1558	1606	755	444	263	479	1419
1977	348	620	817	914	573	824	1327	497	607	245	243	513	626
1978	649	2501	4192	713	751	857	916	626	529	309	256	488	1068
1979	357	995	1373	474	1503	1723	1382	1288	256	237	234	229	833

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1967-1979)

MEAN	539.5	1144.8	1711.6	1801.5	1472.3	1167.1	1396.8	1508.6	869.6	444.6	275.8	357.7	1055.7
MAXIMUM	885.0	2501.0	4265.0	2885.0	3151.0	3675.0	1960.0	2601.0	2402.0	843.0	412.0	829.0	1565.0
MINIMUM	170.0	451.0	619.0	474.0	428.0	546.0	751.0	497.0	253.0	211.67	152.0	173.0	626.0
STD DEVIATION	202.41	574.23	1021.89	753.77	816.53	674.24	372.01	666.46	575.18	211.67	66.51	170.63	249.44
STANDARD ERROR	0.376	0.943	1.606	0.142	0.704	3.122	-0.333	0.261	1.810	0.890	0.328	1.380	0.215
SKEWNESS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SER CORR SKEW	0.034	-0.367	-0.243	0.182	-0.243	-0.203	-0.361	0.038	-0.244	0.0	0.112	-0.208	-0.387
SER CORR COEFF	0.375	0.502	0.597	0.418	0.555	0.578	0.266	0.442	0.661	0.476	0.241	0.477	0.236
COEFF OF VAR	0.700	3.009	3.171	3.209	3.101	3.025	3.128	3.133	2.866	2.605	2.428	2.514	3.012
MEAN LOGS	2.700	3.009	3.171	3.209	3.101	3.025	3.128	3.133	2.866	2.605	2.428	2.514	3.012
STD DEV LOGS	0.178	0.215	0.233	0.222	0.256	0.179	0.128	0.212	0.256	0.196	0.107	0.185	0.106
SKEWNESS LOGS	-0.113	0.071	0.347	-0.940	-0.197	1.443	-0.791	-0.440	0.197	0.416	-0.278	0.637	-0.294
STD ERR SKEW LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SER CORR SKEW LOGS	0.012	-0.363	-0.216	0.341	-0.582	-0.265	-0.325	0.063	-0.532	-0.4031	0.129	-0.133	-0.409
SER CORR LOGS	0.066	0.071	0.074	0.069	0.082	0.089	0.041	0.068	0.089	0.075	0.044	0.074	0.035
COEFF OF VAR LOGS	4.3	9.0	13.5	14.2	11.6	9.2	11.0	11.9	6.9	3.5	2.2	2.8	100.0
% OF AVE FLOW													

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1967-1979)

0.99	157.0	331.6	488.4	352.9	294.7	621.8	572.6	374.9	203.3	162.3	143.8	148.1	553.9
0.95	237.6	457.1	648.6	624.6	464.0	658.6	780.6	780.6	288.4	203.2	175.5	176.3	675.4
0.90	290.2	543.7	763.0	763.0	586.5	692.2	905.3	714.8	391.9	231.5	194.3	196.1	747.2
0.80	362.9	672.0	938.2	1096.3	773.5	752.4	1066.9	914.7	445.1	273.9	218.8	226.4	840.7
0.50	526.2	1014.4	1438.6	1752.7	1289.7	962.4	1397.0	1408.8	719.9	350.2	271.2	311.9	1039.5
0.20	712.3	1544.0	2305.7	2504.4	2079.5	1412.1	1731.4	2062.9	1196.7	581.1	330.8	458.0	1263.9
0.10	813.6	1929.6	3003.9	2898.4	2645.2	1835.3	1898.3	2469.9	1578.4	728.6	364.7	575.2	1390.7
0.04	920.8	2453.7	4038.6	3295.3	3391.7	2552.1	2064.9	2951.1	2138.5	940.8	402.8	748.8	1532.5
0.02	988.3	2869.7	4927.7	3531.2	3965.3	3249.3	2164.6	3262.1	2614.3	1118.4	428.5	898.6	1627.6
0.01	1047.0	3307.0	5924.5	3726.2	4550.8	4117.6	2248.2	3602.2	3142.0	1313.7	452.2	1067.3	1715.1

STATION 12105900 GREEN RIVER BELOW HOWARD A. HANSON DAM, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1962	122.0	127.0	130.0	139.0	151.0	161.0	180.0	243.0	416.0
1963	199.0	201.0	202.0	203.0	241.0	252.0	288.0	363.0	428.0
1964	128.0	130.0	163.0	169.0	203.0	231.0	252.0	299.0	421.0
1965	263.0	263.0	268.0	312.0	363.0	446.0	571.0	604.0	894.0
1966	215.0	215.0	216.0	217.0	217.0	219.0	220.0	233.0	334.0
1967	213.0	213.0	213.0	218.0	222.0	224.0	259.0	350.0	470.0
1968	204.0	205.0	206.0	207.0	213.0	226.0	242.0	257.0	492.0
1969	208.0	209.0	211.0	215.0	239.0	276.0	346.0	497.0	662.0
1970	139.0	140.0	141.0	146.0	160.0	202.0	280.0	312.0	400.0
1971	189.0	189.0	190.0	191.0	197.0	215.0	238.0	287.0	426.0
1972	222.0	226.0	227.0	231.0	275.0	285.0	313.0	452.0	721.0
1973	269.0	274.0	276.0	278.0	293.0	350.0	402.0	433.0	592.0
1974	204.0	205.0	207.0	210.0	217.0	244.0	291.0	278.0	353.0
1975	124.0	124.0	127.0	128.0	136.0	135.0	257.0	312.0	520.0
1976	217.0	222.0	222.0	222.0	263.0	338.0	319.0	406.0	792.0
1977	219.0	222.0	255.0	274.0	322.0	361.0	379.0	401.0	478.0
1978	242.0	242.0	242.0	242.0	243.0	244.0	274.0	383.0	455.0
1979	219.0	222.0	222.0	229.0	237.0	271.0	310.0	349.0	414.0

LOWEST MEAN FLOW STATISTICS (YEARS 1962-1979)

MEAN	199.8	201.6	206.6	212.8	232.9	264.6	301.3	358.8	514.9
MAXIMUM	269.0	274.0	276.0	312.0	363.0	446.0	571.0	604.0	894.0
MINIMUM	122.0	124.0	127.0	128.0	136.0	161.0	180.0	233.0	334.0
STANDARD DEVIATION	44.30	44.42	43.34	47.93	57.39	69.64	86.82	96.23	156.14
SKEWNESS	-0.612	-0.578	-0.471	0.066	0.453	1.181	1.833	0.955	1.251
STD ERROR OF SKEWNESS	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SERIAL CORR COEFF	-0.034	-0.031	0.078	0.041	-0.040	-0.080	-0.260	-0.419	-0.260
COEFF OF VARIATION	0.222	0.220	0.210	0.225	0.246	0.263	0.288	0.268	0.303
MEAN LOGS	2.289	2.293	2.305	2.317	2.334	2.410	2.465	2.541	2.695
STD DEVIATION LOGS	0.107	0.106	0.100	0.103	0.109	0.107	0.111	0.111	0.120
SKEWNESS LOGS	-0.976	-0.944	-0.899	-0.544	-0.270	0.546	0.811	0.950	0.816
STD ERR SKEWNESS LOGS	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SER CORR COEFF LOGS	-0.065	-0.064	0.047	0.041	-0.035	-0.053	-0.256	-0.431	-0.264
COEFF OF VAR LOGS	0.047	0.046	0.043	0.044	0.046	0.044	0.045	0.044	0.044

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1962-1979)

	P99	P98	P95	P90	P75	P70	P50	P25	P10
0.99	289.2	292.4	295.4	326.9	385.7	501.1	612.6	673.6	1101.7
0.98	282.2	285.0	287.9	314.1	365.0	455.8	547.2	616.8	975.7
0.96	273.3	275.8	278.7	299.4	342.6	412.1	486.1	560.8	858.9
0.90	257.3	259.4	262.5	276.2	309.5	355.8	410.5	486.8	716.2
0.80	240.1	241.9	245.5	254.1	280.1	313.0	355.8	429.0	614.1
0.50	202.4	204.0	208.8	212.0	228.8	251.2	281.6	342.4	477.6
0.20	161.2	162.9	169.2	171.5	183.9	208.0	234.1	279.2	391.6
0.10	139.7	141.6	148.4	151.6	162.9	190.8	216.3	253.0	359.9
0.05	122.4	124.5	131.8	136.0	147.0	178.7	204.4	234.2	338.7
0.02	104.0	106.2	113.8	119.5	130.4	167.0	193.4	215.6	318.3
0.01	92.5	94.7	102.4	109.1	120.1	160.2	187.3	204.6	308.6

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "PM" PERCENT OF THE TIME (YEARS 1962-1979)

	P95	P90	P75	P70	P50	P25	P10
220.0	230.0	350.0	410.0	710.0	1300.0	2200.0	

STATION 12105900 GREEN RIVER BELOW HOWARD A. HANSON DAM, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW (CFS) DATE REG. (R)
1961	9530.	6870.	4700.	3300.	2920.	2420.	2150.	1990.	1800.	12200. 02/21/61 R
1962	8820.	7260.	5060.	3930.	2670.	1890.	1590.	1550.	1370.	9630. 01/08/62 R
1963	7990.	6940.	4370.	2970.	2450.	2080.	1790.	1580.	1380.	8850. 11/20/62 R
1964	4360.	4090.	3490.	3190.	2960.	2380.	2100.	1860.	1720.	5050. 01/01/64 R
1965	10400.	9960.	8950.	5940.	4090.	2660.	2450.	2140.	1860.	10600. 02/01/65 R
1966	4600.	4330.	3270.	2620.	2060.	1790.	1470.	1290.	1090.	4820. 05/05/66 R
1967	5950.	5610.	4410.	3400.	2850.	2550.	2240.	1900.	1620.	6470. 01/15/67 R
1968	8210.	6900.	5270.	3320.	2650.	2350.	2140.	1860.	1590.	9150. 12/26/67 R
1969	6930.	6280.	3770.	2710.	2210.	1660.	1580.	1410.	1410.	7510. 01/06/69 R
1970	5310.	4800.	4400.	2980.	2210.	1660.	1530.	1460.	1250.	6390. 01/21/70 R
1971	8020.	5560.	4570.	4310.	3430.	2480.	2020.	1990.	1810.	8550. 01/31/71 R
1972	7640.	6820.	5280.	4870.	4200.	3310.	2870.	2700.	2360.	8570. 02/17/72 R
1973	6620.	6410.	5920.	4140.	2940.	1970.	1520.	1300.	1120.	7210. 12/22/72 R
1974	8170.	7260.	5070.	4760.	3420.	2570.	2280.	2100.	2140.	9660. 01/18/74 R
1975	8000.	7910.	6500.	4430.	2740.	2300.	1990.	1690.	1730.	8460. 01/21/75 R
1976	10000.	9490.	8890.	6620.	4380.	3650.	3060.	2670.	2160.	10700. 12/06/75 R
1977	3520.	2880.	1940.	1610.	1380.	1040.	940.	935.	847.	3980. 01/18/77 R
1978	9610.	9530.	8960.	7260.	5220.	3410.	2510.	2070.	1860.	10000. 12/04/77 R
1979	5450.	4890.	3360.	2420.	1970.	1680.	1630.	1480.	1300.	5970. 02/07/79 R

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1961-1979)

W R C SYSTEMATIC
ESTIMATE RECORD

MEAN	7333.2	6515.3	5167.4	3935.8	2992.6	2333.7	2006.3	1797.1	1590.4	
MAXIMUM	10400.0	9960.0	8960.0	7260.0	5220.0	3650.0	3060.0	2700.0	2360.0	
MINIMUM	3520.0	2880.0	1940.0	1610.0	1380.0	1080.0	940.0	935.0	847.0	
STANDARD DEVIATION	2023.11	1895.31	1962.98	1465.61	946.11	635.86	515.57	446.12	392.68	
SKEWNESS	-0.308	0.133	0.883	0.841	0.722	0.396	0.144	0.353	0.125	
STD ERROR OF SKEWNESS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	
SERIAL CORR COEFF	-0.518	-0.548	-0.529	-0.468	-0.529	-0.598	-0.564	-0.522	-0.348	
COEFF OF VARIATION	0.276	0.291	0.380	0.372	0.316	0.272	0.257	0.248	0.247	
MEAN LOGS	3.847	3.795	3.684	3.567	3.456	3.352	3.288	3.241	3.188	
STD DEVIATION LOGS	0.133	0.136	0.165	0.161	0.138	0.124	0.120	0.112	0.113	
SKEWNESS LOGS	-0.791	-0.684	-0.214	-0.095	-0.169	-0.573	-0.749	-0.444	-0.499	3.8907
STD ERR SKEWNESS LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.1310
S	-0.493	-0.540	-0.595	-0.504	-0.567	-0.609	-0.557	-0.541	-0.376	-0.7310
COEFF OF VAR LOGS	0.035	0.036	0.045	0.045	0.040	0.037	0.036	0.034	0.035	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1961-1979)

0.99	2900.6	2576.3	1882.0	1521.0	1312.9	1030.5	883.6	883.5	768.9	3295.4
0.95	4001.5	3524.7	2530.3	1988.7	1669.9	1349.5	1172.5	1109.2	973.7	4482.4
0.90	4667.4	4102.4	2946.9	2289.0	1891.7	1540.4	1343.3	1242.4	1094.5	5198.2
0.80	5535.4	4862.2	3526.6	2708.4	2193.0	1789.3	1562.7	1415.1	1250.8	6131.3
0.50	7323.5	6461.1	4898.8	3713.0	2881.1	2311.0	2006.7	1776.9	1575.9	8063.0
0.20	9152.3	8162.9	6675.7	5048.4	3737.6	2872.2	2455.1	2172.1	1926.0	10067.5
0.10	10070.4	9052.5	7789.2	5908.5	4261.1	3171.6	2679.8	2387.9	2114.2	11091.8
0.04	10990.1	9475.0	8131.0	6970.8	4882.4	3489.0	2905.6	2622.1	2315.9	12134.7
0.02	11541.9	10547.4	10087.9	7746.2	5320.4	3690.5	3041.9	2774.4	2445.4	12770.9
0.01	12005.5	11041.7	11011.8	8509.4	5740.1	3868.1	3157.0	2911.4	2560.7	13312.9

STATION 12106000 BEAR CREEK NR EAGLE GORGE, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1947	14.3	44.8	76.7	41.3	30.2	26.2	29.6	7.72	14.4	7.38	2.08	5.49	25.0
1948	48.0	64.8	39.0	35.5	37.8	23.6	31.1	36.6	19.4	8.82	7.73	9.85	30.6
1949	12.1	36.8	26.6	12.7	30.6	31.5	45.7	27.0	6.36	6.92	4.08	3.31	20.2
1950	26.9	36.8	41.4	23.5	41.9	46.3	48.2	41.8	25.1	5.23	5.05	4.92	29.0
1951	32.6	49.2	54.8	41.2	89.7	23.2	30.0	20.1	6.01	2.54	1.28	2.51	29.0
1952	25.1	31.2	13.4	13.4	33.6	27.2	34.6	21.3	10.00	5.44	2.20	1.82	19.7
1953	1.24	2.20	9.35	91.9	43.4	22.8	28.8	19.3	22.6	7.65	3.10	4.08	21.3
1954	16.0	38.4	84.6	35.9	48.1	23.3	41.1	18.7	31.6	12.0	6.01	9.32	30.5
1955	10.4	28.9	33.6	29.6	39.7	19.7	39.6	47.7	29.6	15.8	9.31	5.02	25.6
1956	44.2	54.6	69.9	32.0									

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STATION 12106000 BEAR CREEK NR EAGLE GORGE, WASH.

ANNUAL PEAK FLOW DATA		ANNUAL PEAK FLOW STATISTICS (YEARS 1947-1956)		W R C	
WATER YEAR	FLOW(CFS)	DATE	MEAN LOGS	ESTIMATE	SYSTEMATIC RECORD
1947	605.0	12-11-1946			
1948	275.0	11- 7-1947		2.6245	2.6245
1949	367.0	2-17-1949		0.2243	0.2243
1950	384.0	3- 4-1950	STANDARD DEVIATION LOGS	0.0	0.348
1951	830.0	2-11-1951	SKWESS LOGS		
1952	188.0	2- 4-1952			
1953	275.0	1-23-1953			
1954	400.0	12- 9-1953			
1955	432.0	2- 7-1955			
1956	1010.0	12-11-1955			
ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES					
LOG-PEARSON III ANALYSIS (YEARS 1947-1956)					
			0.99	126.6	144.7
			0.95	180.1	190.1
			0.90	217.3	222.1
			0.80	272.7	270.9
			0.50	421.2	408.7
			0.20	650.5	643.4
			0.10	816.5	829.9
			0.04	1040.3	1103.4
			0.02	1216.6	1336.3
			0.01	1400.6	1595.7

STATION 12106500 GREEN RIVER NEAR PALMER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1932	653	1204	985	1642	1757	2945	2088	1644	1113	403	221	209	1237
1933	576	3700	1733	2376	542	1251	1597	1949	2137	696	197	391	1430
1934	1609	1858	5533	3246	1142	1858	1101	586	265	171	117	147	1479
1935	1135	1792	1746	2630	1377	1131	1050	1254	777	336	195	136	1130
1936	160	388	640	2040	666	1640	1985	2224	1097	315	157	159	958
1937	161	126	1513	395	830	1474	1909	1787	1498	453	223	177	879
1938	270	2886	1786	1602	579	996	2141	1600	522	202	134	99.2	1052
1939	166	841	1601	1932	1061	1412	1517	1172	838	338	185	152	933
1940	292	682	1273	709	1545	1517	1085	1052	294	125	144	118	736
1941	224	730	1063	732	523	520	630	530	458	207	144	372	511
1942	962	1760	1760	578	915	834	1241	1066	1534	463	214	136	889
1943	227	1592	1911	1058	1242	1096	2162	1504	1147	441	197	146	1057
1944	265	445	1456	658	841	786	1085	1269	570	230	162	257	669
1945	239	481	914	2192	1406	999	1565	2231	854	262	128	448	975
1946	641	1527	1520	1548	1042	1693	1932	2351	1466	588	221	171	1226
1947	539	1059	3154	1765	1481	1317	1622	894	1614	399	183	245	1105
1948	1384	2608	1530	1240	1241	975	1555	2503	1842	487	295	265	1325
1949	523	1315	1334	684	1317	1713	2289	2872	1226	485	218	167	1175
1950	761	1631	1766	1086	1464	2169	2000	2514	2526	847	279	210	1436
1951	900	2157	2278	1603	2614	979	1769	1722	746	241	146	145	1265
1952	708	1112	1025	525	1403	917	1836	1645	715	396	181	143	880
1953	110	113	220	3029	2106	924	1310	1412	1101	492	216	167	926
1954	287	992	3363	1447	1644	1017	1690	1919	1850	759	298	282	1294
1955	341	938	855	1099	1695	689	1362	2037	2479	1096	404	246	1097
1956	1346	2276	2341	1067	529	1133	2590	2898	1678	603	216	179	1407
1957	796	1179	3285	675	753	1288	1876	1522	532	284	197	153	1048
1958	202	571	1469	1527	1731	760	1569	1141	395	194	126	189	817
1959	789	3282	2581	2653	921	1226	1861	1644	983	412	207	1487	1504
1960	2033	3214	2040	644	1344	1190	1694	1838	992	329	231	230	1312
1961	430	2137	1127	1905	3020	1645	1663	1683	830	275	166	197	1243
1962	508	926	1197	2376	1019	733	1767	1034	716	406	274	274	935
1963	617	1646	1887	1178	1573	567	1491	889	459				

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1932-1963)

MEAN	620.4	1443.3	1777.7	1494.4	1291.3	1231.1	1657.2	1637.1	1070.4	418.7	201.2	248.3	1094.5
MAXIMUM	2033.0	3700.0	5533.0	3246.0	3020.0	2945.0	2590.0	2898.0	2526.0	1096.0	404.0	1487.0	1504.0
MINIMUM	110.0	113.0	220.0	395.0	523.0	520.0	630.0	530.0	285.0	169.0	117.0	99.2	511.0
STD DEVIATION	467.17	927.88	996.13	776.87	572.97	500.38	413.63	610.44	609.66	211.79	62.00	243.84	248.94
SKWENESS	1.336	0.783	1.916	0.547	1.088	1.422	-0.233	0.275	0.912	1.411	1.230	4.658	-0.257
STD ERR SKEW	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.421	0.421	0.421	0.401
SER CORR COEFF	0.139	0.139	-0.090	0.154	0.054	0.139	0.176	0.336	0.138	0.285	0.238	-0.028	0.401
COEFF OF VAR	0.753	0.643	0.560	0.520	0.444	0.406	0.250	0.373	0.570	0.506	0.308	0.982	0.227
MEAN LOGS	2.676	3.047	3.188	3.112	3.071	3.059	3.204	3.181	2.960	2.574	2.285	2.316	3.027
STD DEV LOGS	0.330	0.360	0.248	0.246	0.193	0.166	0.123	0.180	0.256	0.205	0.126	0.220	0.108
SKWENESS LOGS	-0.015	-1.122	-0.931	-0.295	-0.163	0.145	-1.220	-0.709	-0.182	0.204	0.299	2.086	-0.915
STD ERR SKEW LOGS	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.421	0.421	0.421	0.421
SER CORR LOGS	0.245	0.123	-0.099	0.042	0.073	0.176	0.259	0.297	0.116	0.207	0.188	0.042	0.410
COEFF OF VAR LOGS	0.123	0.118	0.078	0.079	0.063	0.054	0.038	0.057	0.086	0.080	0.055	0.095	0.036
% OF AVE FLOW	4.7	11.0	13.6	11.4	9.9	9.4	12.7	12.5	8.2	3.2	1.5	1.9	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1932-1963)

0.99	80.3	85.2	282.3	306.5	396.6	490.4	652.8	468.8	214.0	134.2	104.6	127.7	508.1
0.95	135.5	231.0	532.8	486.9	554.9	620.9	718.7	718.7	335.8	177.4	122.8	129.8	669.3
0.90	178.9	366.6	718.7	616.1	660.6	706.4	1094.1	872.4	424.0	207.0	134.3	132.9	762.3
0.80	250.5	602.2	971.1	810.9	812.4	828.5	1300.8	1093.4	558.7	251.0	150.6	140.3	879.1
0.50	475.5	1297.9	1683.8	1330.0	1190.7	1135.1	1692.4	1592.8	928.5	369.0	190.2	176.2	1104.9
0.20	900.2	2251.8	2510.9	2097.1	1715.6	1575.5	2031.7	2165.1	1504.6	555.0	245.1	279.5	1316.6
0.10	1255.4	2783.5	2958.8	2620.3	2062.7	1875.9	2174.2	2477.5	1917.3	693.0	282.3	399.5	1415.3
0.04	1788.4	3319.7	3418.9	3285.7	2498.1	2278.7	2295.9	2809.4	2484.6	885.3	330.2	641.7	1508.9
0.02	2246.8	3631.1	3696.6	3779.7	2819.4	2586.0	2358.2	3018.7	2887.0	1040.9	366.8	919.9	1562.2
0.01	2757.8	3880.4	3928.5	4270.2	3137.9	2902.0	2403.9	3201.2	3319.6	1207.1	404.0	1319.9	1605.1

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1933	141.0	141.0	145.0	151.0	176.0	200.0	219.0	294.0	687.0
1934	100.0	102.0	106.0	112.0	123.0	219.0	328.0	512.0	1070.0
1935	81.0	82.0	87.0	92.0	104.0	129.0	135.0	149.0	265.0
1936	107.0	108.0	110.0	113.0	126.0	140.0	158.0	182.0	287.0
1937	112.0	113.0	115.0	119.0	126.0	140.0	145.0	149.0	259.0
1938	115.0	118.0	121.0	131.0	141.0	172.0	199.0	256.0	658.0
1939	88.0	90.0	91.0	93.0	98.0	112.0	128.0	146.0	322.0
1940	110.0	113.0	124.0	130.0	148.0	156.0	178.0	226.0	409.0
1941	100.0	101.0	104.0	113.0	116.0	117.0	130.0	148.0	215.0
1942	122.0	124.0	128.0	133.0	144.0	168.0	227.0	288.0	389.0
1943	106.0	108.0	109.0	116.0	121.0	131.0	159.0	230.0	590.0
1944	107.0	108.0	111.0	115.0	126.0	149.0	186.0	244.0	434.0
1945	129.0	131.0	133.0	141.0	148.0	167.0	213.0	296.0	315.0
1946	106.0	108.0	111.0	116.0	123.0	152.0	235.0	296.0	633.0
1947	126.0	131.0	138.0	141.0	164.0	201.0	297.0	339.0	659.0
1948	154.0	155.0	156.0	161.0	171.0	212.0	261.0	354.0	615.0
1949	160.0	167.0	177.0	192.0	245.0	269.0	328.0	376.0	697.0
1950	140.0	144.0	146.0	152.0	167.0	185.0	258.0	366.0	656.0
1951	154.0	155.0	156.0	165.0	185.0	239.0	325.0	528.0	1050.0
1952	112.0	112.0	114.0	118.0	128.0	138.0	171.0	234.0	512.0
1953	97.0	98.0	98.0	100.0	108.0	111.0	119.0	131.0	187.0
1954	126.0	131.0	135.0	138.0	156.0	189.0	220.0	277.0	516.0
1955	197.0	203.0	207.0	220.0	267.0	293.0	327.0	370.0	549.0
1956	212.0	216.0	225.0	235.0	241.0	295.0	465.0	660.0	1180.0
1957	154.0	155.0	156.0	164.0	172.0	186.0	227.0	407.0	707.0
1958	134.0	136.0	140.0	147.0	155.0	174.0	203.0	321.0	321.0
1959	108.0	108.0	109.0	116.0	148.0	153.0	161.0	200.0	449.0
1960	171.0	174.0	180.0	188.0	206.0	275.0	442.0	607.0	999.0
1961	162.0	163.0	169.0	186.0	195.0	226.0	222.0	266.0	642.0
1962	134.0	138.0	142.0	150.0	165.0	180.0	199.0	267.0	444.0
1963	203.0	203.0	203.0	215.0	253.0	263.0	297.0	374.0	444.0

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LOWEST MEAN FLOW STATISTICS (YEARS 1933-1963)

MEAN	131.2	133.0	136.6	143.9	157.6	182.1	226.1	298.5	554.5
MAXIMUM	212.0	216.0	225.0	235.0	287.0	295.0	465.0	660.0	1180.0
MINIMUM	81.0	82.0	87.0	92.0	98.0	111.0	119.0	131.0	187.0
STANDARD DEVIATION	33.27	33.58	34.54	37.26	45.40	52.71	85.13	133.74	255.34
SKWENESS	0.894	0.861	0.885	0.881	1.041	0.681	1.261	1.155	0.859
STD ERROR OF SKWENESS	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421
SERIAL CORR COEFF	0.516	0.527	0.504	0.499	0.419	0.333	0.150	0.169	0.169
COEFF OF VARIATION	0.254	0.252	0.253	0.259	0.288	0.289	0.377	0.448	0.460
MEAN LOGS	2.105	2.111	2.123	2.145	2.182	2.243	2.328	2.436	2.699
STD DEVIATION LOGS	0.105	0.105	0.105	0.107	0.117	0.122	0.151	0.184	0.203
SKWENESS LOGS	0.400	0.375	0.405	0.404	0.564	0.263	0.429	0.208	-0.152
STD ERR SKWENESS LOGS	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421
SER CORR COEFF LOGS	0.517	0.525	0.495	0.489	0.417	0.323	0.201	0.208	0.202
COEFF OF VAR LOGS	0.050	0.050	0.049	0.050	0.053	0.054	0.065	0.076	0.075

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1933-1963)

0.99	239.8	241.9	249.5	266.3	316.2	355.2	531.5	781.7	1409.2
0.98	220.2	222.4	229.0	244.0	284.9	324.1	469.0	684.0	1258.0
0.96	200.8	203.1	208.9	222.1	255.0	293.5	410.0	591.3	1106.7
0.90	175.2	177.5	182.3	193.2	217.0	252.8	336.3	474.6	903.8
0.80	155.3	157.4	161.5	170.7	188.5	220.9	282.2	388.5	744.0
0.50	125.4	127.3	130.6	137.3	148.2	173.0	207.5	269.2	506.4
0.20	103.7	105.1	108.0	113.0	120.8	137.9	158.0	190.5	339.0
0.10	94.7	95.9	98.6	103.0	110.0	123.3	138.9	160.2	272.9
0.05	88.2	89.3	91.9	95.9	102.4	112.8	125.7	139.5	227.4
0.02	81.8	82.7	85.3	88.8	95.3	102.5	113.2	119.9	184.5
0.01	78.1	78.8	81.4	84.7	91.1	96.3	105.9	108.7	160.1

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1933-1963)

P95	P90	P75	P70	P50	P25	P10
140.0	160.0	310.0	390.0	780.0	1500.0	2300.0

STATION 12106500 GREEN RIVER NEAR PALMER, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA FLOW(CFS)	DATE	REG.(R)
1918	13900.	10200.	6160.	4820.	3720.	3030.	2600.	2260.	1920.	25000.	12/ /17	
1932	13400.	8860.	7710.	5330.	3950.	3020.	2700.	2160.	1880.	17400.	02/26/32	
1933	13900.	14200.	9510.	8300.	5980.	4560.	3590.	3270.	2650.	14900.	11/13/32	
1934	12400.	8530.	6480.	4320.	2730.	2340.	2080.	2070.	1740.	21700.	12/09/33	
1935	12400.	4150.	3350.	2880.	2570.	2260.	1970.	1800.	1630.	13400.	10/25/34	
1936	5170.	3970.	2950.	2420.	2160.	1880.	1790.	1710.	1370.	7080.	01/04/36	
1937	4460.	7530.	5310.	3550.	2960.	2370.	1710.	1550.	1690.	5580.	04/14/37	
1938	11600.	4280.	3450.	2640.	2190.	1810.	1550.	1480.	1480.	13500.	04/18/38	
1939	4620.	3880.	3040.	2100.	1830.	1570.	1470.	1310.	1200.	6300.	12/07/38	
1940	6740.	4050.	2740.	2020.	1400.	1070.	903.	803.	727.	5040.	02/10/40	
1941	6300.	4540.	3090.	2140.	1790.	1430.	1290.	1180.	1100.	7800.	12/19/41	
1942	7530.	5350.	3290.	2520.	2430.	1930.	1720.	1560.	1560.	11200.	11/23/42	
1943	11200.	6230.	3770.	2320.	1490.	1190.	1090.	1010.	1020.	14600.	12/03/43	
1944	10200.	6570.	5040.	3690.	2450.	1930.	1670.	1600.	1560.	13600.	01/07/45	
1945	8160.	6530.	4360.	3150.	2470.	2270.	1990.	1930.	1770.	11400.	12/28/45	
1946	17900.	12700.	8750.	5160.	3490.	2520.	2230.	2010.	1780.	23200.	12/11/46	
1947	6950.	5570.	4720.	3530.	2700.	2360.	1990.	1800.	1580.	8510.	11/07/47	
1948	5820.	4770.	4480.	3670.	3170.	2630.	2330.	2200.	1740.	7340.	02/17/49	
1949	7730.	5890.	4190.	3610.	2880.	2550.	2350.	2390.	2010.	9050.	03/04/50	
1950	11000.	10600.	6830.	3990.	2800.	2440.	2480.	2160.	1950.	14500.	02/09/51	
1951	5240.	3830.	2750.	2140.	1870.	1790.	1510.	1460.	1220.	5940.	02/04/52	
1952	10800.	7460.	5440.	4880.	4070.	2580.	2040.	1920.	1640.	12700.	01/23/53	
1953	11700.	8300.	6550.	4510.	3410.	2610.	2170.	1950.	1860.	17600.	12/09/53	
1954	10900.	7090.	4170.	3190.	2750.	2340.	2010.	1780.	1580.	14100.	02/08/55	
1955	12000.	8100.	4820.	3500.	3100.	2880.	2460.	2100.	1810.	18300.	12/11/55	
1956	13100.	8860.	7420.	5570.	3440.	2280.	1890.	1640.	1600.	14500.	12/10/56	
1958	5160.	4110.	3090.	2310.	1820.	1640.	1570.	1450.	1350.	5700.	04/20/58	
1959	11900.	8130.	5590.	4520.	3670.	3100.	2910.	2440.	2140.	15800.	11/12/58	
1960	19100.	12600.	8990.	5300.	4080.	2940.	2460.	2020.	1810.	27800.	11/23/59	
1961	9520.	6980.	4760.	3380.	3010.	2530.	2250.	2080.	1930.	12100.	02/21/61	
1962	8530.	6940.	4840.	3850.	2760.	1980.	1620.	1600.	1420.	9100.	01/03/62	R
1963										8420.	11/20/62	R

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1918-1963)

W R C SYSTEMATIC
ESTIMATE RECORD

MEAN	9902.9	7122.6	5085.2	3719.0	2875.5	2316.1	2024.3	1837.2	1636.0
MAXIMUM	19100.0	14200.0	9510.0	8300.0	5980.0	4560.0	3590.0	3270.0	2650.0
MINIMUM	4460.0	3830.0	2740.0	2020.0	1400.0	1070.0	903.0	803.0	727.0
STANDARD DEVIATION	4102.20	2780.46	1919.34	1368.35	937.33	673.17	549.64	469.47	366.07
SKWENESS	0.653	0.881	0.802	1.238	1.076	0.894	0.450	0.441	-0.004
STD ERROR OF SKWENESS	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421
SERIAL CORR COEFF	0.198	0.179	0.220	0.315	0.326	0.440	0.459	0.459	0.359
CDEFF OF VARIATION	0.414	0.390	0.377	0.368	0.326	0.291	0.272	0.256	0.224
MEAN LOGS	3.959	3.822	3.678	3.544	3.437	3.347	3.290	3.249	3.202
STD DEVIATION LOGS	0.184	0.164	0.159	0.152	0.139	0.129	0.124	0.118	0.107
SKWENESS LOGS	-0.090	0.174	0.221	0.218	-0.076	-0.422	-0.596	-0.808	-1.110
STD ERR SKWENESS LOGS	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421
SER CORR COEFF LOGS	0.219	0.228	0.246	0.349	0.363	0.501	0.490	0.515	0.400
CDEFF OF VAR LOGS	0.046	0.043	0.043	0.043	0.040	0.038	0.038	0.036	0.033

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1918-1963)

0.99	3310.7	2888.2	2159.8	1644.9	1276.4	1019.2	888.8	807.0	744.4	3891.1	3891.1
0.95	4493.0	3630.6	2673.1	2017.2	1605.3	1321.0	1167.7	1075.8	999.2	5373.5	5373.5
0.90	5274.3	4117.9	3009.4	2259.2	1811.1	1504.0	1334.5	1234.1	1145.2	6374.7	6374.7
0.80	6894.8	4814.4	3489.7	2602.7	2093.0	1746.1	1551.7	1436.6	1326.2	7831.2	7831.2
0.50	9159.7	6567.9	4698.8	3458.0	2748.2	2269.6	2005.4	1841.9	1664.9	11569.2	11569.2
0.20	13013.3	9099.9	6448.2	4677.6	3587.9	2864.3	2490.2	2242.6	1961.3	17015.0	17015.0
0.10	15579.7	10859.0	7667.4	5177.6	3877.9	3198.6	2746.9	2439.1	2089.4	20779.3	20779.3
0.04	18826.2	13174.3	9277.5	6617.7	4754.9	3684.6	3017.4	2532.8	2202.7	25680.7	25680.7
0.02	21243.9	14966.1	10527.8	7465.3	5215.4	3813.4	3188.2	2747.6	2262.9	29424.3	29424.3
0.01	23659.8	16415.2	11822.0	8337.6	5664.0	4036.3	3337.8	2843.1	2308.7	33239.2	33239.2

STATION 12106700 GREEN RIVER AT PURIFICATION PNT NR PALMER, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1963													
1964	365	1299	1087	1693	1092	1086	1646	2094	2146	336	171	148	1165
1965	819	989	1966	1904	3036	958	1442	1114	338	118	122	522	1065
1966	443	405	578	882	655	1219	1904	1209	579	492	132	125	719
1967	619	929	1962	2832	1759	884	702	1490	562	160	175	119	1015
1968	832	864	1958	1971	2281	1059	1104	938	779	187	275	757	1080
1969	756	1507	1331	1408	367	1050	2829	2309	970	363	98.6	141	1030
1970	406	425	678	1894	1453	928	1292	1284	563	180	113	194	781
1971	434	1015	748	2860	2275	906	1333	2569	998	677	168	186	1175
1972	538	1381	1496	2139	2658	3801	1522	2605	1153	809	221	432	1562
1973	304	673	2464	1453	459	603	766	695	178	284	141	196	689
1974	273	876	1921	3180	1444	1415	1967	2251	2514	677	306	229	1421
1975	66.2	493	1850	2849	977	1127	878	2321	1044	429	267	295	1054
1976	701	2148	1591	2808	1192	788	1540	1564	725	368	280	417	1431
1977	253	547	782	934	507	820	1317	472	571	135	136	460	577
1978	654	2790	4489	654	678	765	855	553	419	195	141	396	1055
1979	257	939	1318	399	1498	1660	1269	1156	160	148	104	109	747

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1963-1979)

MEAN	482.5	1080.0	1826.2	1868.7	1395.7	1191.2	1347.9	1539.0	856.2	368.5	183.3	285.1	1035.4
MAXIMUM	832.0	2790.0	4591.0	3180.0	3036.0	3801.0	2059.0	2605.0	2514.0	809.0	306.0	757.0	1562.0
MINIMUM	66.2	405.0	578.0	399.0	367.0	603.0	702.0	472.0	160.0	118.0	98.6	109.0	577.0
STD DEVIATION	228.79	643.33	1197.06	870.32	820.05	742.30	417.21	725.95	649.44	228.32	70.26	183.89	282.95
SKEWNESS	0.042	1.516	1.499	-0.097	0.601	3.242	0.063	0.118	1.605	0.704	0.538	1.182	0.203
STD ERR SKEW	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.550	0.550	0.550	0.564
SER CORR COEFF	-0.055	-0.395	-0.259	0.278	-0.188	-0.258	-0.438	0.081	-0.190	-0.001	0.103	-0.278	-0.397
COEFF OF VAR	0.474	0.596	0.655	0.466	0.588	0.623	0.310	0.472	0.759	0.620	0.383	0.645	0.273
MEAN LOGS	2.619	2.970	3.184	3.212	3.065	3.031	3.108	3.133	2.823	2.485	2.234	2.377	2.999
STD DEV LOGS	0.278	0.238	0.265	0.257	0.283	0.181	0.144	0.237	0.327	0.278	0.164	0.266	0.123
SKEWNESS LOGS	-1.558	0.264	0.195	-1.026	-0.301	1.931	-0.458	-0.572	-0.231	0.074	0.211	0.364	-0.331
STD ERR SKEW LOGS	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.550	0.550	0.550	0.564
SER CORR LOGS	-0.029	-0.468	-0.200	0.445	-0.255	-0.434	-0.413	0.131	-0.233	-0.037	0.120	-0.204	-0.419
COEFF OF VAR LOGS	0.106	0.080	0.083	0.080	0.092	0.060	0.046	0.076	0.116	0.112	0.074	0.112	0.041
% OF AVE FLOW	3.9	8.7	14.7	15.0	11.2	9.6	10.8	12.4	6.9	3.0	1.5	2.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1963-1979)

0.99	48.2	289.8	403.1	269.2	221.2	701.3	531.9	305.4	101.6	71.2	75.3	67.7	481.1
0.95	118.7	395.2	579.6	534.6	377.3	715.9	715.0	511.4	183.8	107.8	94.0	93.1	609.7
0.90	177.3	470.2	708.6	736.5	495.0	734.2	828.3	658.6	249.3	135.0	106.4	111.8	687.3
0.80	268.7	585.1	909.8	1042.3	679.5	774.3	980.5	876.9	356.7	177.6	124.1	141.1	790.1
0.50	487.5	911.8	1498.9	1800.3	1201.3	948.1	1316.2	1430.3	685.6	303.0	169.0	229.3	1013.8
0.20	703.4	1470.1	2539.7	2697.6	1207.9	1390.6	1704.8	1267.4	522.5	177.6	106.0	141.1	1013.8
0.10	791.2	1913.6	3384.0	3168.5	2618.9	1851.0	1925.2	2620.1	1714.2	697.9	280.3	392.6	1272.2
0.04	859.2	2562.1	4635.9	3636.5	3395.0	2695.3	2170.1	3144.5	2342.7	953.5	341.2	746.1	1420.3
0.02	889.7	3112.2	5708.8	3909.4	3986.3	3577.6	2332.4	3501.1	2848.2	1168.7	388.7	937.7	1587.3
0.01	909.4	3722.1	6906.8	4130.5	4584.0	4745.8	2430.2	3830.5	3381.0	1405.3	437.9	1159.1	1803.6

STATION 12106700 GREEN RIVER AT PURIFICATION PNT NR PALMER, WASH

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1965	142.0	146.0	168.0	214.0	264.0	352.0	470.0	528.0	808.0
1966	112.0	112.0	112.0	115.0	115.0	119.0	120.0	120.0	249.0
1967	112.0	115.0	117.0	123.0	124.0	125.0	164.0	265.0	400.0
1968	109.0	109.0	111.0	114.0	117.0	124.0	138.0	155.0	415.0
1969	97.0	98.0	102.0	105.0	132.0	181.0	262.0	411.0	585.0
1970	31.0	33.0	35.0	38.0	51.0	95.0	190.0	231.0	330.0
1971	100.0	103.0	105.0	105.0	110.0	127.0	151.0	201.0	351.0
1972	119.0	119.0	121.0	128.0	165.0	176.0	204.0	320.0	643.0
1973	159.0	161.0	166.0	168.0	185.0	254.0	318.0	355.0	556.0
1974	102.0	102.0	104.0	107.0	110.0	131.0	187.0	267.0	442.0
1975	20.0	20.0	22.0	24.0	39.0	118.0	156.0	211.0	442.0
1976	142.0	143.0	145.0	148.0	192.0	269.0	248.0	339.0	744.0
1977	133.0	134.0	165.0	172.0	224.0	276.0	297.0	316.0	402.0
1978	125.0	126.0	126.0	128.0	130.0	174.0	170.0	305.0	400.0
1979	104.0	105.0	107.0	115.0	124.0	158.0	197.0	244.0	313.0

LOWEST MEAN FLOW STATISTICS (YEARS 1965-1979)

MEAN	107.1	108.4	113.7	120.3	138.9	175.9	218.1	281.7	459.0
MAXIMUM	159.0	161.0	168.0	214.0	264.0	352.0	470.0	528.0	808.0
MINIMUM	20.0	20.0	22.0	24.0	39.0	95.0	120.0	133.0	249.0
STANDARD DEVIATION	37.68	37.99	41.81	47.37	59.28	75.93	90.44	105.73	169.39
SKEWNESS	-1.317	-1.289	-0.895	-0.284	0.427	1.181	1.698	0.743	0.861
STD ERROR OF SKEWNESS	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580
SERIAL CORR COEFF	0.025	0.016	0.068	0.081	0.051	-0.023	-0.295	-0.446	-0.277
COEFF OF VARIATION	0.352	0.350	0.368	0.394	0.427	0.432	0.415	0.375	0.369
MEAN LOGS	1.983	1.989	2.009	2.032	2.099	2.212	2.310	2.421	2.636
STD DEVIATION LOGS	0.249	0.247	0.245	0.244	0.217	0.169	0.157	0.164	0.154
SKEWNESS LOGS	-2.191	-2.211	-2.036	-1.831	-1.032	0.722	0.815	-0.097	0.298
STD ERR SKEWNESS LOGS	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580	0.580
SER CORR COEFF LOGS	-0.062	-0.066	-0.035	-0.011	-0.010	-0.022	-0.276	-0.436	-0.289
COEFF OF VAR LOGS	0.126	0.124	0.122	0.120	0.104	0.076	0.068	0.068	0.058

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1965-1979)

0.99	161.8	162.6	176.8	196.4	274.9	492.8	582.4	619.1	1064.5
0.98	161.3	162.1	175.8	194.5	262.5	418.1	496.6	562.4	946.0
0.96	160.2	161.0	174.0	191.2	247.0	351.7	420.1	505.0	832.4
0.90	156.1	157.2	168.1	182.1	220.0	274.2	331.0	426.6	687.5
0.80	148.0	149.3	157.8	168.2	192.1	221.7	270.5	363.3	578.9
0.50	116.1	117.6	121.6	126.3	136.5	155.7	194.5	265.4	444.8
0.20	69.1	70.4	72.6	75.2	86.0	116.8	149.9	192.2	319.6
0.10	46.0	47.0	49.1	51.4	64.1	103.0	134.2	161.8	278.1
0.05	30.5	31.2	33.1	35.3	48.9	94.0	123.9	140.1	249.1
0.02	17.6	18.0	19.6	21.6	34.9	85.8	114.7	118.9	221.2
0.01	11.5	11.8	13.2	14.9	27.3	81.2	109.6	106.5	205.0

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1965-1979)

P95	P90	P75	P70	P50	P25	P10
120.0	130.0	280.0	350.0	670.0	1300.0	2300.0

STATION 12106700 GREEN RIVER AT PURIFICATION PNT NR PALMER, WASH

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA FLOW(CFS)	DATE	REG. (R)
1964	4250.	3960.	3370.	3080.	2850.	2280.	2020.	1790.	1670.	5300.	01/02/64	R
1965	9310.	8840.	8220.	5560.	3910.	2510.	2340.	2020.	1760.	9430.	02/01/65	R
1966	4600.	4380.	3270.	2750.	2120.	1830.	1520.	1320.	1090.	4760.	05/05/66	R
1967	5720.	5490.	4480.	3470.	2920.	2580.	2260.	1980.	1610.	6170.	01/15/67	R
1968	7990.	6630.	5320.	3930.	2650.	2300.	2150.	1880.	1600.	8820.	12/26/67	R
1969	6900.	6480.	3970.	2840.	2420.	2190.	1940.	1620.	1440.	7940.	01/05/69	R
1970	5850.	5400.	4960.	3330.	2400.	1760.	1610.	1520.	1270.	6900.	01/21/70	R
1971	8200.	5660.	4780.	4530.	3580.	2560.	2070.	2020.	1820.	8800.	01/31/71	R
1972	7990.	7020.	5540.	5070.	4400.	3470.	2990.	2770.	2410.	8800.	02/17/72	R
1973	7400.	6930.	6370.	4390.	3110.	2070.	1560.	1320.	1120.	8140.	12/22/72	R
1974	9310.	8280.	5760.	5340.	3780.	2710.	2370.	2220.	2260.	10500.	01/18/74	R
1975	8860.	8730.	7260.	4840.	2930.	2460.	2090.	1760.	1760.	9620.	01/18/75	R
1976	10400.	10100.	9870.	7260.	4740.	3910.	3250.	2810.	2230.	11200.	12/06/75	R
1977	4030.	3220.	2120.	1620.	1370.	1080.	929.	928.	835.	4720.	01/18/77	R
1978	10900.	10700.	10100.	8220.	5720.	3710.	2710.	2200.	1720.	11700.	12/03/77	R
1979	5850.	5170.	3450.	2400.	2000.	1640.	1570.	1390.	1230.	6420.	02/07/79	R

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1964-1979)

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1964-1979)										
	7347.5	6686.9	5552.5	4255.6	3181.2	2444.4	2086.2	1843.0	1614.1	
MEAN	10900.0	10700.0	10100.0	8220.0	5720.0	3910.0	3250.0	2810.0	2410.0	
MINIMUM	4030.0	3220.0	2120.0	1620.0	1370.0	1080.0	929.0	928.0	835.0	
STANDARD DEVIATION	2144.24	2168.56	2322.29	1769.82	1123.37	752.94	588.53	509.06	443.59	
SKEWNESS	-0.039	0.331	0.737	0.813	0.683	0.462	0.178	0.359	0.160	
STD ERROR OF SKEWNESS	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564	
SERIAL CORR COEFF	-0.451	-0.431	-0.524	-0.503	-0.582	-0.629	-0.635	-0.566	-0.363	
COEFF OF VARIATION	0.292	0.324	0.418	0.416	0.353	0.308	0.282	0.276	0.275	
MEAN LOGS	3.847	3.803	3.709	3.594	3.477	3.368	3.302	3.249	3.192	
STD DEVIATION LOGS	0.136	0.147	0.184	0.183	0.156	0.140	0.133	0.125	0.126	
SKEWNESS LOGS	-0.473	-0.309	-0.161	-0.179	-0.251	-0.529	-0.799	-0.431	-0.466	
STD ERR SKEWNESS LOGS	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564	0.564	
SER CORR COEFF LOGS	-0.439	-0.473	-0.593	-0.537	-0.597	-0.642	-0.617	-0.580	-0.390	
COEFF OF VAR LOGS	0.035	0.039	0.050	0.051	0.045	0.042	0.040	0.038	0.039	
										3.8909
										0.1260
										-0.4810

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1964-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
MEAN	3052.8	2681.6	1811.3	1394.1	1215.5	973.9	828.7	832.7	719.3	3581.0
MAXIMUM	4044.6	3541.2	2495.6	1922.5	1618.8	1312.9	1142.3	1071.9	932.2	4653.5
MINIMUM	4651.3	4078.3	2947.4	2270.5	1874.7	1521.2	1331.8	1215.9	1060.5	5299.5
STANDARD DEVIATION	5457.8	4807.9	3590.4	2764.6	2226.8	1798.7	1578.3	1405.6	1229.1	6148.7
SKEWNESS	7208.7	6461.4	5172.1	3974.0	3044.0	2400.2	2084.9	1812.5	1589.6	7960.2
STD ERROR OF SKEWNESS	9194.9	8472.5	7331.6	5612.2	4074.1	3076.5	2600.9	2269.9	1991.5	9971.9
SERIAL CORR. COEFF	10304.6	9669.3	8743.0	6675.1	4705.2	3449.9	2859.0	2525.1	2213.6	11078.9
COEFF OF VAR	11524.6	11054.5	10499.1	7989.9	5452.7	3855.7	3116.6	2805.9	2456.1	12283.2
MEAN LOGS	12325.3	12007.8	11786.6	8948.6	5977.7	4119.0	3270.8	2990.8	2614.4	13066.9
STD DEVIATION LOGS	13049.6	12903.0	13056.8	9890.3	6478.8	4354.8	3399.9	3158.6	2757.2	13771.3

STATION 12107200 DEEP CREEK NEAR CUMBERLAND, WASH.

ANNUAL PEAK FLOW DATA			ANNUAL PEAK FLOW STATISTICS (YEARS 1950-1970)			W R C		SYSTEMATIC RECORD
WATER YEAR	FLOW (CFS)	DATE	MEAN LOGS	STANDARD DEVIATION LOGS	SKEWNESS LOGS	ESTIMATE		
1950	82.0	3- 4-1950				1.8210		1.7841
1951	109.0	2-10-1951				0.1606		0.2380
1952	12.0	10-22-1951				0.0		-1.343
1953	43.0	1-23-1953						
1954	93.0	12- 9-1953						
1955	60.0	2- 8-1955						
1956	102.0	12-11-1955						
1957	61.0	10-21-1956						
1958	44.0	1-17-1958						
1959	60.0	1-24-1959						
1960	103.0	10-22-1959						
1961	70.0	11-25-1960						
1962	55.0	12-23-1961						
1963	63.0	2- 3-1963						
1964	97.0	1-25-1964						
1965	128.0	1-29-1965						
1966	26.0	1- 5-1966						
1967	43.0	1-19-1967						
1968	65.0	6- 2-1968						
1969	83.0	1- 6-1969						
1970	37.0	1-19-1970						

ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES
LOG-PEARSON III ANALYSIS (YEARS 1950-1970)

0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
10.3	36.0	41.2	48.5	66.2	90.4	106.4	126.5	141.5	156.6
21.1	29.2	41.1	68.5	96.2	108.4	118.9	124.1	127.8	

STATION 12107300 ICY CREEK NR BLACK DIAMOND, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1963													
1964	4.36	11.6	27.8	55.4	54.8	40.9	38.4	32.7	32.2	25.9	13.5	7.16	29.0
1965	13.3	13.7	50.2	51.1	77.9	32.9	26.5	25.7	16.9	8.74	4.72	11.3	26.8
1966	3.15	6.44	9.18	23.7	22.4	25.4	30.4	21.9	15.4	19.1	11.0	6.15	16.2
1967	4.75	12.8	30.6	53.7	50.6	37.0	29.5	24.1	15.9	10.1	6.15	2.90	23.0
1968	0.87	3.80	6.15	26.8	34.8	33.5	30.1	22.1	23.0				

STATION 12107500 GREEN RIVER NR BLACK DIAMOND, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1940	266	687	1343	783	1695	1736	1186	1183	301	150	96.3	77.8	790
1941	181	662	1034	719	526	495	599	508	450	199	118	333	485
1942	906	964	1796	657	1008	955	1242	1140	1620	542	214	113	932
1943	168	1766	2159	1190	1369	1244	2346	1612	1112	389	172	127	1134
1944	233	428	1459	724	844	813	1109	1366	607	208	127	197	676
1945	219	468	967	2375	1605	1138	1807	2431	877	298	143	426	1060
1946	671	1652	1624	1809	1232	1905	2092	2455	1475	618	215	142	1325
1947	534	1165	3559	2102	1719	1424	1714	959	640	357	139	189	1207
1948	1489	2870	1735	1558	1452	1142	1693	2589	1799	536	306	264	1450

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW(CFS)	DATE
1940	4710.0	2-10-1940
1941	8680.0	11-29-1940
1942	8360.0	12-19-1941
1943	11000.0	11-23-1942
1944	13900.0	12-3-1943
1945	14400.0	1-7-1945
1946	11100.0	12-29-1945
1947	21100.0	12-11-1946
1948	8730.0	11-8-1947

STATION 12108500 NEWAUKUM CREEK NEAR BLACK DIAMOND, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CURTIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1944	14.1	18.8	25.1	76.2	105	92.3	90.4	66.8	35.1	21.4	16.5	15.3	48.6
1945	27.5	70.2	85.6	134	130	140	67.2	33.3	31.0	27.9	19.7	22.8	65.7
1946	24.3	71.9	150	130	123	70.2	68.7	35.4	31.3	20.9	16.8	19.0	63.6
1947	44.8	88.3	101	129	125	99.2	90.7	83.2	62.2	40.1	29.5	33.4	77.1
1948	39.1	80.7	159	82.6	168	78.3	54.9	47.4	25.5	19.5	16.3	15.0	63.1
1949	21.4	60.7	125	192	158	215	105	55.6	55.2	25.8	21.1	19.3	85.9
1950	38.9												
1951	9.42	10.1	11.4	155	131	65.1	76.4	52.5	58.4	30.7	22.4	19.7	53.0
1952	27.4	97.0	193	141	107	71.8	75.9	34.5	42.4	33.8	24.8	30.2	73.0
1953	27.4	57.8	70.8	172	72.0	109	109	62.6	40.1	26.6	25.1	19.5	56.6
1954	56.9	141	225	172	78.6	131	70.9	40.0	40.7	36.7	21.5	20.4	85.9
1955	33.5	45.6	128	63.8	106	140	78.1	45.3	33.8	26.1	22.5	19.6	61.6
1956	19.4	26.8	66.7	117	102	54.2	63.6	33.3	25.4	17.7	12.8	14.4	45.8
1957	17.7	94.0	128	150	87.2	80.0	73.6	57.0	49.8	29.7	22.3	39.2	69.0
1958	53.9	138	126	91.5	105	71.9	72.6	81.3	45.6	27.4	23.8	21.6	71.1
1959	27.2	146	75.8	102	222	126	87.1	81.4	39.4	27.0	20.3	20.0	80.2
1960	18.5	25.9	66.8	68.6	55.2	72.5	53.4	54.5	34.3	21.0	19.0	17.1	42.1
1961	20.1	75.2	115	196	118	73.8	79.6	45.8	28.9	30.7	23.6	21.2	58.9
1962	23.0	92.5	101	234	93.4	86.0	56.2	46.1	74.5	37.9	30.0	26.9	75.2
1963	31.6	96.4	147	159	139	61.2	60.0	46.5	31.3	23.3	19.7	17.7	70.6
1964	19.5	28.0	63.1	93.2	47.9	69.4	52.3	34.2	28.4	30.6	17.6	17.5	41.9
1965	22.5	49.1	92.5	168	108	81.5	69.5	44.3	57.2	22.8	14.2	13.2	59.1
1966	18.0	23.8	44.9	94.6	121	79.9	58.4	33.5	57.2	22.8	29.3	33.7	51.2
1967	42.6	86.6	111	148	92.4	57.9	71.8	52.1	40.2	29.3	22.1	24.3	64.7
1968	32.7	36.5	75.1	160	78.4	61.2	69.9	46.3	29.0	18.9	16.0	16.0	53.3
1969	19.1	28.5	45.5	157	89.6	118	68.9	39.4	42.7	29.8	16.2	20.5	59.6
1970	18.2	63.5	112	141	138	182	80.4	44.5	52.3	36.3	21.5	29.7	76.5
1971	18.4	37.5	104	91.6	51.6	51.2	44.9	39.1	32.5	32.0	16.1	16.3	44.0
1972	20.5	81.3	138	146	106	115	83.2	73.7	55.8	32.4	20.2	17.1	74.0
1973	16.1	34.1	95.5	252	151	112	53.2	37.7	29.1	23.4	26.8	21.2	70.7
1974	39.6	75.6	181	145	89.5	73.8	65.8	41.1	36.2	26.2	32.2	24.7	69.4
1975	19.8	24.6	38.9	37.4	34.4	78.5	40.0	38.0	36.4	19.8	19.8	23.1	34.3
1976	23.5	65.6	133	74.7	71.1	51.9	58.3	41.8	29.7	20.7	17.7	34.7	51.8
1977	21.9	56.0	84.0	61.2	115	72.4	60.9	32.5	20.9	17.6	13.4	15.5	47.1

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1944-1979)

MEAN	26.8	64.5	105.0	124.2	107.1	91.0	70.6	48.5	38.9	26.3	20.9	21.9	62.0
MAXIMUM	58.9	146.0	225.0	252.0	222.0	215.0	109.0	83.2	74.5	40.1	32.2	39.2	85.9
MINIMUM	9.4	10.1	11.4	37.4	34.4	51.2	40.0	32.5	20.9	17.6	12.8	13.2	34.3
STD DEVIATION	11.34	35.60	47.22	50.18	37.39	37.62	15.56	14.65	12.19	6.14	4.83	6.42	13.34
SKWENESS	1.209	0.638	0.371	0.526	0.655	1.684	0.426	1.172	1.127	0.516	0.512	1.088	-0.115
STD ERR SKEW	0.403	0.409	0.409	0.409	0.409	0.409	0.409	0.409	0.409	0.403	0.403	0.403	0.409
SER CORR COEFF	-0.027	-0.007	-0.351	0.027	-0.041	-0.118	0.197	0.090	-0.229	-0.105	0.015	-0.283	-0.151
COEFF OF VAR	0.423	0.552	0.450	0.404	0.349	0.413	0.220	0.302	0.313	0.233	0.231	0.294	0.215
MEAN LOSS	1.394	1.735	1.964	2.057	2.002	1.930	1.839	1.669	1.572	1.409	1.310	1.323	1.782
STD DEV LOSS	0.172	0.276	0.258	0.188	0.165	0.154	0.097	0.120	0.127	0.100	0.100	0.119	0.099
SKWENESS LOSS	0.232	-0.610	-1.639	-0.458	-0.793	0.873	-0.825	0.714	0.477	0.153	-0.014	0.556	-0.545
STD ERR SKEW LOSS	0.403	0.409	0.409	0.409	0.409	0.409	0.409	0.409	0.409	0.403	0.403	0.403	0.409
SER CORR LOSS	-0.073	-0.161	-0.316	0.036	-0.029	-0.132	-0.194	0.037	-0.190	-0.110	0.007	-0.285	-0.136
COEFF OF VAR LOSS	0.123	0.159	0.131	0.092	0.082	0.080	0.053	0.072	0.081	0.071	0.076	0.090	0.055
% OF AVE FLOW	3.6	8.6	14.1	16.7	14.4	12.2	9.5	6.5	5.2	3.5	2.8	2.9	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1944-1979)

0.99	10.6	9.4	12.1	36.0	33.6	47.0	39.4	28.4	21.0	15.4	11.9	12.5	32.6
0.95	13.3	17.3	28.6	53.1	50.0	52.5	47.0	31.5	24.1	17.8	14.0	14.1	40.3
0.90	15.1	23.3	41.8	64.3	60.5	56.6	51.5	33.7	26.1	19.2	15.2	15.1	44.7
0.80	17.7	32.7	61.8	80.2	74.7	62.9	57.3	36.8	29.1	21.1	16.8	16.7	50.4
0.50	24.4	57.9	107.3	117.9	105.6	80.9	69.6	45.2	36.5	25.5	20.4	20.5	61.7
0.20	34.4	93.6	149.1	165.3	139.0	112.0	83.4	58.0	47.2	31.1	24.8	26.2	73.5
0.10	41.5	116.3	165.1	193.8	156.5	136.9	91.2	67.4	54.8	34.6	27.4	30.2	79.6
0.04	51.1	174.3	176.8	226.7	174.3	173.8	100.0	80.3	65.0	38.8	30.5	35.6	86.1
0.02	58.6	161.4	181.7	249.1	185.1	205.6	105.9	90.8	72.9	41.9	32.7	39.9	90.1
0.01	66.5	178.5	184.8	269.9	194.3	241.4	111.3	101.9	81.2	44.9	34.8	44.3	93.7

STATION 12108500 NEWAUKUM CREEK NEAR BLACK DIAMOND, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1946	17.0	17.0	18.0	18.0	20.0	20.0	21.0	22.0	31.0
1947	17.0	17.0	17.0	19.0	20.0	22.0	22.0	24.0	26.0
1948	14.0	14.0	15.0	16.0	18.0	18.0	19.0	21.0	27.0
1949	22.0	22.0	23.0	23.0	27.0	29.0	33.0	35.0	43.0
1950	14.0	14.0	14.0	14.0	15.0	16.0	17.0	17.0	21.0
1954	18.0	18.0	18.0	18.0	19.0	21.0	23.0	25.0	35.0
1955	21.0	21.0	22.0	22.0	24.0	25.0	26.0	28.0	32.0
1956	18.0	18.0	19.0	19.0	20.0	21.0	21.0	29.0	39.0
1957	19.0	19.0	19.0	20.0	20.0	20.0	21.0	24.0	30.0
1958	16.0	16.0	17.0	17.0	18.0	19.0	20.0	21.0	25.0
1959	12.0	12.0	12.0	12.0	13.0	13.0	15.0	15.0	20.0
1960	21.0	21.0	22.0	22.0	22.0	24.0	28.0	33.0	41.0
1961	18.0	18.0	18.0	19.0	19.0	22.0	22.0	24.0	37.0
1962	15.0	15.0	15.0	17.0	17.0	19.0	19.0	20.0	24.0
1963	15.0	15.0	15.0	15.0	16.0	17.0	18.0	19.0	25.0
1964	17.0	17.0	17.0	18.0	18.0	19.0	22.0	24.0	28.0
1965	24.0	24.0	25.0	26.0	27.0	28.0	29.0	31.0	41.0
1966	16.0	16.0	16.0	16.0	17.0	18.0	19.0	20.0	23.0
1967	16.0	16.0	16.0	16.0	17.0	17.0	18.0	20.0	24.0
1968	12.0	12.0	12.0	13.0	14.0	14.0	14.0	19.0	19.0
1969	16.0	16.0	17.0	17.0	18.0	23.0	27.0	29.0	36.0
1970	18.0	18.0	18.0	19.0	20.0	22.0	25.0	27.0	30.0
1971	13.0	13.0	13.0	14.0	15.0	16.0	17.0	17.0	21.0
1972	11.0	12.0	13.0	14.0	16.0	16.0	18.0	21.0	28.0
1973	13.0	14.0	16.0	17.0	18.0	22.0	23.0	24.0	31.0
1974	13.0	14.0	14.0	14.0	15.0	16.0	17.0	18.0	24.0
1975	14.0	14.0	15.0	15.0	15.0	17.0	18.0	19.0	26.0
1976	16.0	16.0	17.0	17.0	19.0	23.0	24.0	24.0	28.0
1977	17.0	17.0	17.0	18.0	19.0	22.0	23.0	26.0	26.0
1978	13.0	13.0	14.0	14.0	15.0	18.0	20.0	21.0	26.0
1979	16.0	16.0	16.0	17.0	18.0	19.0	21.0	24.0	27.0

LOWEST MEAN FLOW STATISTICS (YEARS 1946-1979)

MEAN	16.2	16.3	16.8	17.3	18.3	20.0	21.3	23.1	28.8
MAXIMUM	24.0	24.0	25.0	26.0	27.0	29.0	33.0	35.0	43.0
MINIMUM	11.0	12.0	12.0	12.0	13.0	13.0	14.0	15.0	19.0
STANDARD DEVIATION	3.08	2.97	3.11	3.13	3.39	3.70	4.36	4.90	6.45
SKEWNESS	0.595	0.711	0.832	0.790	0.975	0.478	0.627	0.612	0.705
STD ERROR OF SKEWNESS	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421
SERIAL CORR COEFF	0.098	0.036	-0.026	-0.074	-0.134	-0.161	-0.174	-0.176	-0.136
COEFF OF VARIATION	0.190	0.162	0.185	0.181	0.185	0.185	0.205	0.212	0.224
MEAN LOGS	1.202	1.205	1.218	1.230	1.255	1.293	1.320	1.354	1.450
STD DEVIATION LOGS	0.081	0.077	0.078	0.076	0.077	0.080	0.088	0.091	0.094
SKEWNESS LOGS	0.130	0.273	0.335	0.295	0.415	-0.041	0.068	0.122	0.300
STD ERR SKEWNESS LOGS	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421	0.421
SER CORR COEFF LOGS	0.132	0.050	-0.023	-0.079	-0.133	-0.150	-0.165	-0.178	-0.148
COEFF OF VAR LOGS	0.068	0.064	0.064	0.062	0.061	0.062	0.066	0.067	0.065

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1979)

0.99	25.1	25.1	26.2	26.6	28.7	30.0	33.8	37.4	48.9
0.98	23.7	23.7	24.6	25.1	26.9	28.6	31.9	35.2	45.5
0.96	22.3	22.2	23.0	23.5	25.2	27.1	29.9	32.9	42.1
0.90	20.3	20.2	20.9	21.4	22.8	24.9	27.1	29.6	37.4
0.80	18.6	18.6	19.1	19.7	20.8	23.0	24.8	26.9	33.7
0.50	15.9	15.9	16.3	16.9	17.8	19.7	20.9	22.5	27.9
0.20	13.6	13.8	14.2	14.6	15.5	16.8	17.6	19.0	23.4
0.10	12.6	12.9	13.2	13.6	14.5	15.5	16.2	17.4	21.5
0.05	11.8	12.2	12.5	12.9	13.8	14.5	15.1	16.2	20.1
0.02	11.0	11.4	11.8	12.2	13.0	13.4	13.9	14.9	18.7
0.01	10.5	11.0	11.4	11.7	12.6	12.7	13.2	14.2	17.9

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1946-1979)

P95	P90	P75	P70	P50	P25	P10
16.0	18.0	24.0	27.0	43.0	76.0	120.0

STATION 12111500 COVINGTON CREEK NR BLACK DIAMOND, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1953					57.6	15.7	24.8	13.7	18.6	3.83	0.00	0.00	
1954	0.02	24.7	80.5	75.4	58.2	41.0	35.1	12.8	8.80	6.48	1.13	1.83	28.7
1955	0.18	10.9	23.9	38.9	45.0	30.0	50.9	33.2	15.3	11.1	2.76	0.09	21.7
1956	10.4	54.3	118	95.0	41.7	60.1	39.9	15.6	10.5	2.48	0.00	0.00	37.5
1957	0.68	13.8	56.5	35.7	51.5	72.0	38.8	17.0	6.60	1.27	0.00	0.00	24.5
1958	0.00	0.26	14.5	52.0	60.5	32.1	30.4	18.9	5.10	0.35	0.00	0.00	17.6
1959	0.00	11.3	59.8	83.5	54.2	36.2	37.4	33.5	17.3	7.13	0.76	6.80	28.9
1960	15.8												

ANNUAL PEAK FLOW DATA

WATER YEAR	FLOW (CFS)	DATE
1953	124.0	2- 1-1953
1954	149.0	12-11-1953
1955	104.0	2- 9-1955
1956	210.0	12-12-1955
1957	114.0	3-10-1957
1958	112.0	1-18-1958
1959	158.0	1-26-1959

STATION 12112500 BIG SOOS CREEK NEAR AUBURN, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1945	25.0	34.5	43.4	141	223	178	169	142	80.1	42.3	29.8	38.8	94.7
1946	38.7	129	193	304	285	268	189	103	67.2	48.3	32.8	35.9	140
1947	38.1	80.2	309	207	272	154	124	69.5	59.7	38.8	30.7	31.2	117
1948	77.0	174	211	325	239	226	181	163	113	85.1	56.5	51.7	158
1949	57.5	126	288	151	278	208	130	101	58.6	38.2	28.1	27.9	123
1950	36.7	64.5	145	298	341	431	228	119	66.6	43.1	33.8	30.8	152
1951	52.5	140	333	322	166	122	85.5	60.4	39.3	28.0	25.7	25.8	71.3
1952	36.5	56.7	109	108	166	106	115	90.1	86.3	52.1	26.5	37.1	83.3
1953	21.7	24.0	30.4	157	263	157	132	71.7	57.1	47.8	35.2	37.8	130
1954	42.5	108	296	340	241	157	132	122	68.1	50.9	35.9	34.8	101
1955	39.3	170.6	114	182	195	132	194						
1956	60.7	206	423	435	157	247							

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1945-1956)

MEAN	43.9	101.1	207.9	245.8	241.8	202.6	154.7	104.2	69.6	47.5	33.8	33.5	117.0
MAXIMUM	77.0	206.0	423.0	435.0	341.0	431.0	228.0	163.0	113.0	85.1	56.5	51.7	158.0
MINIMUM	21.7	24.0	30.4	108.0	157.0	106.0	85.5	60.4	39.3	28.0	25.7	21.8	71.3
STD DEVIATION	15.60	55.87	123.46	103.68	54.65	92.11	44.00	33.02	19.95	15.04	8.43	7.91	29.09
SKEWNESS	0.737	0.443	0.119	0.285	-0.011	1.606	0.104	0.402	0.969	1.814	2.140	0.967	-0.131
STD ERR SKEW	0.637	0.637	0.637	0.637	0.661	0.661	0.687	0.687	0.687	0.687	0.661	0.661	0.687
SER CORR COEFF	0.136	-0.237	-0.370	-0.529	-0.055	-0.127	-0.378	-0.284	-0.420	-0.321	-0.213	0.003	-0.112
COEFF OF VAR	0.356	0.552	0.594	0.422	0.226	0.455	0.284	0.317	0.287	0.317	0.249	0.236	0.249
MEAN LOGS	1.617	1.932	2.213	2.352	2.373	2.272	2.173	1.998	1.827	1.660	1.519	1.515	2.055
STD DEV LOGS	0.156	0.282	0.358	0.194	0.103	0.176	0.130	0.140	0.122	0.124	0.094	0.099	0.114
SKEWNESS LOGS	-0.136	-0.635	-1.030	-0.178	-0.488	0.619	-0.412	-0.108	-0.003	0.708	1.503	0.191	-0.500
STD ERR SKEW LOGS	0.637	0.637	0.637	0.637	0.661	0.661	0.687	0.687	0.687	0.687	0.661	0.661	0.687
SER CORR LOGS	0.130	-0.143	-0.168	-0.449	-0.028	-0.040	-0.305	-0.295	-0.439	-0.334	-0.199	0.093	-0.040
COEFF OF VAR LOGS	0.130	0.146	0.162	0.083	0.043	0.078	0.060	0.070	0.067	0.074	0.062	0.066	0.056
% OF AVE FLOW	2.9	6.8	14.0	16.5	16.3	13.6	10.4	7.0	4.7	3.2	2.3	2.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1945-1956)

0.99	17.4	14.1	13.3	75.1	125.2	87.7	68.0	45.7	34.9	27.4	25.2	19.9	56.0
0.95	22.6	26.5	34.6	105.6	155.2	103.8	88.2	57.9	42.3	30.5	25.9	19.9	71.2
0.90	26.0	36.1	54.1	126.0	172.6	115.1	100.4	65.5	46.9	32.6	26.5	24.5	80.2
0.80	30.7	51.0	87.7	155.2	194.8	132.1	116.7	75.9	53.0	35.8	27.7	24.5	91.8
0.50	41.7	91.5	187.6	228.2	240.5	179.5	152.0	100.0	67.2	44.2	31.4	32.5	116.1
0.20	56.1	148.9	329.2	329.1	288.9	258.7	192.2	130.8	85.1	57.2	38.4	39.6	142.3
0.10	65.1	185.3	411.7	395.6	314.8	321.0	215.0	149.9	96.3	66.7	44.1	44.1	156.4
0.04	76.2	228.0	498.4	478.8	342.3	412.0	240.2	173.0	109.8	80.0	52.6	49.6	171.5
0.02	84.1	257.2	551.0	540.1	359.9	459.5	257.0	189.6	119.6	90.7	59.8	53.6	181.3
0.01	91.9	284.2	594.6	600.6	375.5	575.8	272.3	205.6	129.1	102.1	67.9	57.6	189.9

STATION 12112500 BIG SOOS CREEK NEAR AUBURN, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31										
YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	
1946	27.0	27.0	28.0	29.0	29.0	32.0	34.0	37.0	56.0	
1947	30.0	30.0	31.0	32.0	33.0	34.0	34.0	36.0	47.0	
1948	27.0	27.0	29.0	30.0	30.0	31.0	32.0	36.0	50.0	
1949	29.0	29.0	31.0	31.0	33.0	34.0	35.0	39.0	78.0	
1950	25.0	25.0	25.0	25.0	26.0	28.0	30.0	32.0	41.0	
1953	20.0	20.0	20.0	20.0	20.0	22.0	22.0	23.0	25.0	
1954	30.0	30.0	30.0	31.0	32.0	35.0	37.0	41.0	55.0	
1955	31.0	31.0	32.0	34.0	35.0	36.0	37.0	38.0	45.0	
1956	31.0	31.0	32.0	32.0	33.0	35.0	38.0	43.0	61.0	

LOWEST MEAN FLOW STATISTICS (YEARS 1946-1956)

MEAN	28.9	24.9	29.8	30.4	31.6	33.9	35.4	38.3	50.9	
MAXIMUM	39.0	39.0	41.0	41.0	46.0	52.0	55.0	59.0	78.0	
MINIMUM	20.0	20.0	20.0	20.0	20.0	22.0	22.0	23.0	25.0	
STANDARD DEVIATION	5.18	5.18	5.70	5.81	7.06	8.09	8.81	9.64	14.57	
SKWENESS	0.324	0.324	0.337	-0.061	0.607	1.228	1.145	0.907	0.134	
STD ERROR OF SKWENESS	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717	
SERIAL CORR COEFF	-0.146	-0.146	-0.059	-0.023	-0.108	-0.188	-0.175	-0.159	-0.153	
COEFF OF VARIATION	0.179	0.179	0.191	0.191	0.224	0.239	0.248	0.252	0.286	
MEAN LOGS	1.454	1.454	1.467	1.476	1.489	1.520	1.538	1.572	1.689	
STD DEVIATION LOGS	0.079	0.079	0.085	0.087	0.098	0.099	0.105	0.109	0.136	
SKWENESS LOGS	-0.368	-0.368	-0.428	-0.746	-0.288	0.270	0.085	-0.167	-0.984	
STD ERR SKWENESS LOGS	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717	0.717	
SER CORR COEFF LOGS	-0.090	-0.090	0.007	0.043	-0.034	-0.127	-0.121	-0.107	-0.095	
COEFF OF VAR LOGS	0.054	0.054	0.058	0.059	0.066	0.065	0.068	0.069	0.081	

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1946-1956)

0.99	41.4	41.4	43.4	42.7	49.7	58.9	61.4	64.7	80.8	
0.98	39.9	39.9	41.8	41.5	47.3	54.7	57.3	60.9	78.3	
0.96	38.2	38.2	40.0	40.2	44.8	50.4	53.0	56.9	75.2	
0.90	35.7	35.7	37.2	37.9	40.9	44.6	47.1	51.1	69.7	
0.80	33.3	33.3	34.6	35.5	37.4	40.0	42.3	46.1	63.9	
0.50	28.8	28.8	29.7	30.7	31.2	32.8	34.4	37.6	51.4	
0.20	24.5	24.5	25.0	25.6	25.6	27.2	28.2	30.3	38.5	
0.10	22.4	22.4	22.6	22.9	23.0	24.9	25.4	27.0	32.1	
0.05	20.7	20.7	20.8	20.7	20.9	23.1	23.4	24.4	27.1	
0.02	18.9	18.9	18.8	18.4	18.8	21.4	21.3	21.8	22.0	
0.01	17.7	17.7	17.5	16.9	17.4	20.4	20.0	20.2	19.0	

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1946-1956)

P95	P90	P75	P70	P50	P25	P10
27.0	31.0	39.0	44.0	84.0	160.0	250.0

STATION 12112500 BIG SOOS CREEK NEAR AUBURN, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL FLOW (CFS)	ANNUAL PEAK-FLOW DATA DATE REG. (R)
1945	457.	392.	334.	273.	224.	200.	190.	182.	154.	493.	02/08/45
1946	475.	462.	438.	395.	325.	298.	290.	268.	230.	488.	01/08/46
1947	698.	655.	556.	422.	315.	285.	262.	237.	193.	748.	12/15/46
1948	482.	474.	463.	420.	342.	284.	267.	251.	226.	496.	02/26/48
1949	622.	548.	499.	417.	313.	245.	238.	234.	199.	733.	02/17/49
1950	833.	752.	611.	533.	464.	401.	361.	330.	259.	869.	03/05/50
1951										1570.	02/10/51
1952	262.	252.	222.	199.	169.	146.	132.	126.	109.	281.	02/04/52
1953	555.	503.	472.	414.	314.	214.	181.	161.	134.	580.	02/01/53
1954	690.	658.	517.	408.	348.	320.	294.	264.	212.	764.	01/06/54
1955	487.	424.	330.	248.	195.	181.	173.	171.	153.	545.	02/08/55
1956										932.	01/07/56

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1945-1956)

W R C SYSTEMATIC
ESTIMATE RECORD

MEAN	556.1	512.0	444.2	372.9	300.8	257.7	238.9	222.4	186.9		
MAXIMUM	833.0	752.0	611.0	533.0	464.0	401.0	361.0	330.0	259.0		
MINIMUM	262.0	252.0	222.0	199.0	169.0	146.0	132.0	126.0	109.0		
STANDARD DEVIATION	160.64	146.98	117.54	100.79	85.72	75.91	69.48	61.36	47.72		
STD ERROR OF SKEWNESS	-0.030	-0.011	-0.614	-0.498	0.137	0.393	0.140	0.067	-0.208		
SERIAL CORR COEFF	-0.410	-0.410	-0.350	-0.376	-0.486	-0.372	-0.272	-0.175	-0.087		
COEFF OF VARIATION	0.289	0.287	0.265	0.270	0.285	0.295	0.291	0.276	0.255		
MEAN LOGS	2.727	2.691	2.631	2.555	2.461	2.394	2.331	2.258	2.175		
STD DEVIATION LOGS	0.139	0.136	0.132	0.132	0.132	0.131	0.133	0.127	0.119		
STD ERR SKEWNESS LOGS	-0.994	-0.835	-1.187	-0.965	-0.560	-0.234	-0.408	-0.470	-0.613	2.8126	0.1866
SER CORR SKEWNESS LOGS	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.687	0.0030	0.1490
SER CORR COEFF LOGS	-0.381	-0.368	-0.325	-0.361	-0.455	-0.424	-0.287	-0.185	-0.052		
COEFF OF VAR LOGS	0.051	0.051	0.050	0.052	0.054	0.055	0.056	0.054	0.053		

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1945-1956)

0.99	202.6	197.0	164.7	143.9	126.4	116.4	102.9	98.6	84.9	239.3	250.6
0.95	292.2	275.4	239.6	203.0	168.1	147.7	134.2	128.1	110.6	320.5	326.4
0.90	346.9	323.0	284.7	238.6	193.4	166.9	153.3	145.9	125.8	374.6	377.3
0.80	418.0	385.2	342.3	284.6	226.6	192.7	178.8	169.3	145.4	452.4	451.2
0.50	561.5	513.0	453.6	376.6	297.4	250.5	234.2	219.3	186.1	649.5	642.7
0.20	700.2	642.5	552.9	465.3	375.0	320.2	298.0	275.1	228.9	932.6	929.4
0.10	765.2	706.7	595.5	507.0	417.0	361.6	334.2	306.0	251.3	1126.8	1133.9
0.04	826.2	770.3	632.6	546.4	462.0	409.8	374.6	339.7	274.7	1378.9	1408.4
0.02	860.6	808.0	651.9	568.7	470.8	443.1	401.4	361.6	289.3	1571.1	1624.3
0.01	887.8	839.3	666.3	586.6	516.3	474.6	426.0	381.5	302.1	1766.8	1849.8

STATION 12112600 BIG 500S CREEK AB. HATCHERY, NR. AUBURN, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1960	29.4	227	184	259	469	319	168	167	64.8	35.5	22.5	23.4	162
1961	21.3	29.7	70.9	117	87.1	127	90.7	82.6	55.0	33.7	33.6	25.3	18.5
1962	31.1	108	220	206	238	122	174	91.0	52.4	31.3	21.2	20.8	64.4
1963	32.0	114	198	445	222	169	111	67.7	52.4	48.2	27.3	25.9	109
1964	28.1	122	330	278	320	137	120	86.7	43.5	35.1	21.3	20.8	129
1965	21.4	35.2	90.8	241	111	171	113	60.1	46.1	35.1	30.6	32.3	130
1966	37.4	55.2	241	407	291	216	166	111	62.1	37.4	28.3	27.3	83.1
1967	39.1	45.2	70.4	203	286	211	153	83.5	109	44.6	44.9	45.4	139
1968	74.1	154	354	349	260	136	138	102	72.9	51.5	39.2	39.7	147
1969	51.8	58.8	178	313	238	163	154	104	52.2	35.6	31.5	32.8	117
1970	35.8	55.4	176	289	238	284	192	92.7	80.7	56.8	36.5	43.4	131
1971	43.5	117	262	320	377	453	212	109	72.2	56.4	33.8	46.4	175
1972	40.2	59.7	235	259	136	130	83.4	63.1	55.1	38.8	33.7	35.5	97.5
1973	39.9	138	348	349	337	291	212	113	81.7	55.6	35.4	31.8	168
1974	33.5	74.0	150	392	313	257	139	95.1	55.8	40.5	42.1	36.2	135
1975	74.8	207	401	335	239	184	134	80.5	55.3	42.1	46.8	40.9	153
1976	40.0	43.6	58.0	84.3	73.6	143	80.5	65.9	65.0	36.0	34.3	38.1	63.5
1977	40.6	109	340	201	192	140	165	114	59.7	40.8	33.5	57.9	124
1978	42.5	98.1	168	108	299	188	98.2	66.8	42.9	31.6	26.7	34.0	99.1

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1960-1979)

MEAN	39.8	97.4	214.5	271.3	248.8	202.2	142.3	92.4	63.7	42.0	33.8	34.4	123.0
MAXIMUM	74.8	227.0	401.0	445.0	469.0	453.0	212.0	167.0	109.0	56.8	46.8	57.9	175.0
MINIMUM	21.3	29.7	58.0	84.3	73.6	122.0	80.5	60.1	42.9	31.3	21.2	18.5	63.5
STD DEVIATION	14.32	55.90	104.37	101.18	100.18	85.56	40.49	25.31	16.69	8.40	6.92	9.46	32.01
SKENNESS	0.524	0.524	0.167	-0.280	0.031	1.618	0.136	1.281	0.524	0.524	0.059	0.496	-0.328
STD ERR SKEW	0.245	0.478	0.524	0.524	0.524	0.066	0.524	0.524	0.524	0.524	0.524	0.512	0.524
SER CORR COEFF	0.360	0.574	-0.602	0.094	-0.406	0.066	-0.332	-0.365	-0.043	-0.047	0.198	0.457	-0.350
COEFF OF VAR	1.577	1.920	2.270	2.396	2.433	2.275	2.136	2.274	0.260	0.260	0.260	0.260	0.260
MEAN LOGS	0.143	0.254	0.254	0.200	0.214	0.160	0.130	0.112	0.107	0.084	0.092	0.124	0.126
STD DEV LOGS	0.417	0.047	-0.731	-1.122	-1.053	0.860	-0.333	0.405	0.512	0.376	-0.450	-0.245	-0.917
SER CORR LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.512	0.524
STD ERR SKEW LOGS	0.365	-0.461	-0.544	0.165	-0.363	0.053	-0.380	-0.383	-0.032	-0.053	0.192	0.371	-0.326
COEFF OF VAR LOGS	0.091	0.132	0.112	0.083	0.091	0.070	0.061	0.057	0.060	0.052	0.061	0.082	0.061
% OF AVE FLOW	2.7	6.6	14.5	18.3	16.8	13.6	9.6	6.2	4.3	2.8	2.3	2.3	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1960-1979)

0.99	19.4	20.9	35.2	59.7	50.0	101.4	63.5	53.1	38.3	27.7	18.8	16.2	50.0
0.95	22.9	31.5	64.0	103.9	89.1	114.1	81.5	60.5	42.9	30.7	22.7	20.3	69.0
0.90	25.2	39.2	85.3	134.3	116.5	123.4	92.4	65.2	45.8	32.5	25.0	22.8	80.3
0.80	28.5	50.9	117.6	176.9	155.8	137.7	107.0	71.8	50.1	35.0	27.8	26.1	94.9
0.50	36.9	83.6	200.0	270.9	245.5	179.0	138.9	87.9	60.5	40.8	33.6	33.5	123.9
0.20	49.4	136.4	307.7	367.9	342.7	250.5	176.2	110.4	75.4	48.4	38.7	42.3	152.0
0.10	58.3	175.8	371.4	413.8	390.9	308.2	197.8	125.6	85.6	53.3	42.9	47.4	165.4
0.04	70.2	229.8	442.1	456.3	437.2	394.3	222.2	145.2	99.0	59.4	46.4	53.3	178.2
0.02	79.7	273.0	488.3	479.6	463.4	468.9	238.7	160.2	109.3	63.9	48.6	57.4	185.5
0.01	89.7	318.5	529.3	497.5	484.2	553.4	254.0	175.6	119.9	68.4	50.5	61.2	191.5

STATION 12112600 BIG 5005 CREEK AB. HATCHERY, NR. AUBURN, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1962	14.0	14.0	15.0	16.0	17.0	19.0	20.0	22.0	28.0
1963	19.0	19.0	19.0	20.0	24.0	27.0	29.0	30.0	40.0
1964	18.0	18.0	18.0	20.0	20.0	21.0	22.0	25.0	37.0
1965	19.0	20.0	20.0	22.0	23.0	25.0	27.0	31.0	46.0
1966	16.0	16.0	17.0	20.0	21.0	25.0	29.0	32.0	34.0
1967	27.0	28.0	29.0	30.0	30.0	31.0	32.0	35.0	40.0
1968	25.0	25.0	26.0	26.0	27.0	28.0	30.0	33.0	39.0
1969	31.0	31.0	32.0	33.0	37.0	42.0	44.0	49.0	66.0
1970	34.0	34.0	34.0	35.0	36.0	39.0	43.0	45.0	51.0
1971	28.0	28.0	29.0	29.0	30.0	31.0	33.0	33.0	40.0
1972	34.0	34.0	34.0	35.0	36.0	39.0	40.0	44.0	58.0
1973	29.0	29.0	30.0	31.0	33.0	36.0	40.0	42.0	51.0
1974	30.0	30.0	30.0	31.0	33.0	33.0	35.0	37.0	43.0
1975	29.0	29.0	29.0	30.0	31.0	32.0	33.0	37.0	50.0
1976	30.0	31.0	32.0	33.0	34.0	39.0	39.0	42.0	56.0
1977	35.0	35.0	36.0	36.0	38.0	40.0	41.0	42.0	43.0
1978	25.0	26.0	26.0	26.0	28.0	33.0	35.0	36.0	46.0
1979	30.0	30.0	31.0	32.0	33.0	37.0	39.0	44.0	53.0

LOWEST MEAN FLOW STATISTICS (YEARS 1962-1979)

MEAN	26.3	26.5	27.0	28.1	29.5	32.1	33.9	36.6	45.6
MAXIMUM	35.0	35.0	35.0	36.0	38.0	42.0	44.0	49.0	66.0
MINIMUM	14.0	14.0	15.0	16.0	17.0	19.0	20.0	22.0	28.0
STANDARD DEVIATION	6.47	6.45	6.41	6.11	6.29	6.80	6.92	7.25	9.33
SKEWNESS	-0.584	-0.657	-0.685	-0.585	-0.552	-0.380	-0.448	-0.274	0.308
STD ERROR OF SKEWNESS	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SERIAL CORR COEFF	0.651	0.645	0.679	0.622	0.586	0.557	0.562	0.470	0.145
COEFF OF VARIATION	0.246	0.243	0.237	0.218	0.213	0.212	0.204	0.198	0.205
MEAN LOGS	1.405	1.409	1.418	1.437	1.459	1.496	1.521	1.555	1.850
STD DEVIATION LOGS	0.120	0.120	0.116	0.104	0.102	0.099	0.096	0.092	0.090
SKEWNESS LOGS	-0.914	-0.988	-0.933	-0.878	-0.887	-0.756	-0.881	-0.738	-0.273
STD ERR SKEWNESS LOGS	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SER CORR COEFF LOGS	0.688	0.670	0.710	0.680	0.615	0.585	0.577	0.516	0.185
COEFF OF VAR LOGS	0.085	0.085	0.082	0.072	0.070	0.066	0.063	0.059	0.055

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1962-1979)

	0.99	0.98	0.96	0.90	0.80	0.50	0.20	0.10	0.05	0.02	0.01
MEAN	40.1	39.8	38.7	37.4	35.0	32.4	29.8	27.6	25.3	22.7	20.1
MAXIMUM	48.9	48.6	47.4	46.1	43.7	41.3	38.9	36.5	34.1	31.7	29.3
MINIMUM	38.9	38.7	37.4	36.1	33.7	31.3	28.9	26.5	24.1	21.7	19.3
STANDARD DEVIATION	6.47	6.45	6.41	6.11	6.29	6.80	6.92	7.25	9.33	11.4	13.5
SKEWNESS	-0.584	-0.657	-0.685	-0.585	-0.552	-0.380	-0.448	-0.274	0.308	0.536	0.764
STD ERROR OF SKEWNESS	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SERIAL CORR COEFF	0.651	0.645	0.679	0.622	0.586	0.557	0.562	0.470	0.145	0.090	0.055
COEFF OF VARIATION	0.246	0.243	0.237	0.218	0.213	0.212	0.204	0.198	0.205	0.210	0.215
MEAN LOGS	1.405	1.409	1.418	1.437	1.459	1.496	1.521	1.555	1.850	2.145	2.440
STD DEVIATION LOGS	0.120	0.120	0.116	0.104	0.102	0.099	0.096	0.092	0.090	0.085	0.080
SKEWNESS LOGS	-0.914	-0.988	-0.933	-0.878	-0.887	-0.756	-0.881	-0.738	-0.273	0.185	0.516
STD ERR SKEWNESS LOGS	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SER CORR COEFF LOGS	0.688	0.670	0.710	0.680	0.615	0.585	0.577	0.516	0.185	0.055	0.010
COEFF OF VAR LOGS	0.085	0.085	0.082	0.072	0.070	0.066	0.063	0.059	0.055	0.050	0.045

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1962-1979)

P95	P90	P75	P70	P50	P25	P10
26.0	31.0	40.0	44.0	76.0	170.0	290.0

STATION 12113000 GREEN RIVER NEAR AUBURN, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1937	230	147	1757	627	1304	1909	2505	2010	1685	587	287	231	1108
1938	321	3142	2496	2509	1084	1463	2682	1977	728	317	185	144	1421
1939	222	966	1753	2449	1694	1923	1810	1342	1033	486	233	203	1174
1940	327	821	1600	1028	732	681	827	1450	607	223	155	148	972
1941	285	824	1377	1030	732	681	827	1450	607	223	155	148	972
1942	1056	1156	2358	981	1350	1137	1457	1266	1849	639	298	196	1143
1943	222	1923	2367	1435	1630	1438	2624	1685	1331	569	238	173	1298
1944	305	521	1631	906	1180	1041	1302	1492	768	303	195	286	827
1945	276	562	1075	2762	2099	1583	2172	2797	1076	362	201	510	1285
1946	734	1946	2040	2432	1776	2442	2453	2665	1710	774	297	239	1625
1947	733	1341	4182	2452	2211	1757	1977	1117	750	453	204	256	1451
1948	1607	3062	1974	1980	1812	1531	1959	2854	2205	707	404	375	1703
1949	643	1568	1945	1000	1875	2042	2409	3018	1318	537	250	187	1396
1950	775	1741	2225	1715	2187	2012	2615	2829	2648	954	340	244	1778
1951	971	2533	2512	2368	4961	1620	2033	1870	847	291	151	132	1632
1952	727	1137	1253	746	1732	1166	1955	1694	734	414	173	108	983
1953	110	111	224	3499	2824	1173	1584	1588	1300	625	279	186	1115
1954	355	1261	4184	2343	2300	1451	2002	1987	1962	917	379	356	1622
1955	400	1085	1118	1563	2272	1020	1889	2308	2759	1274	500	272	1363
1956	1447	2845	3491	2075	1032	1655	2905	3042	1748	680	251	186	1782
1957	825	1302	3586	872	1127	1971	2239	1696	655	346	220	148	1252
1958	217	654	1692	2098	2353	1103	1841	1303	466	217	139	194	1015
1959	791	3470	3017	3392	1577	1650	2133	1865	1176	558	262	1528	1783
1960	2125	3679	2806	1158	1950	1541	2043	2154	1227	446	289	273	1638
1961	450	2690	1560	2380	4161	2518	2112	2119	1006	360	192	199	1626

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1937-1961)

MEAN	646.2	1621.1	2184.9	1832.0	1935.8	1640.2	2039.1	1950.1	1279.8	533.2	252.2	288.4	1346.2
MAXIMUM	2125.0	3679.0	4184.0	3499.0	4161.0	3112.0	2905.0	3042.0	2759.0	1274.0	500.0	1528.0	1783.0
MINIMUM	110.0	111.0	224.0	627.0	732.0	681.0	827.0	676.0	408.0	217.0	139.0	108.0	662.0
STD DEVIATION	495.66	1042.54	977.53	828.55	821.25	539.66	477.51	638.59	647.66	253.80	85.97	275.66	318.07
SKWENESS	1.503	0.553	0.475	0.270	1.382	0.795	-0.483	0.199	0.809	1.192	1.176	4.094	-0.325
STD ERR SKEW	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SER CORR COEFF	0.088	0.115	-0.224	-0.129	0.138	0.161	0.205	0.344	0.140	0.266	0.158	-0.037	0.294
COEFF OF VAR	0.767	0.643	0.447	0.452	0.424	0.329	0.234	0.327	0.506	0.476	0.441	0.956	0.236
MEAN LOGS	2.698	3.092	3.284	3.215	3.253	3.192	3.296	3.263	3.053	2.683	2.380	2.376	3.116
STD DEV LOGS	0.321	0.375	0.256	0.217	0.175	0.144	0.118	0.155	0.225	0.198	0.139	0.234	0.113
SKWENESS LOGS	0.089	-1.169	-1.950	-0.339	0.058	-0.267	-1.447	-0.733	-0.109	0.373	0.373	1.783	-0.838
STD ERR SKEW LOGS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464
SER CORR LOGS	0.180	0.015	-0.142	-0.171	0.187	0.151	0.270	0.330	0.170	0.213	0.126	0.067	0.304
COEFF OF VAR LOGS	0.119	0.121	0.078	0.067	0.054	0.045	0.036	0.048	0.074	0.074	0.058	0.098	0.036
% OF AVE FLOW	4.0	10.0	13.5	11.3	11.9	10.1	12.6	12.0	7.9	3.3	1.6	1.8	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1937-1961)

0.99	93.8	82.7	233.6	454.7	714.9	673.3	807.5	665.1	325.5	174.1	124.6	131.9	613.3
0.95	150.7	238.3	595.0	690.1	930.4	879.6	1166.1	958.4	475.1	231.4	147.0	137.0	809.3
0.90	194.9	388.0	891.3	852.2	1072.2	1008.3	1375.6	1142.7	579.0	270.3	161.6	142.8	923.5
0.80	267.0	653.9	1337.4	1088.9	1275.5	1183.1	1635.0	1390.0	733.4	327.3	182.5	154.7	1068.3
0.50	493.3	1456.6	2298.2	1686.4	1783.2	1580.5	2104.2	1923.8	1140.8	477.2	235.0	204.7	1353.8
0.20	926.0	2564.4	3053.0	2509.7	2067.7	2067.7	2612.8	2503.3	2179.7	705.6	311.3	336.8	1630.4
0.10	1295.0	3175.9	3285.9	3042.3	3003.3	2360.2	2612.8	2808.1	2179.7	870.6	364.8	483.7	1763.7
0.04	1860.8	3783.2	3425.7	3593.3	3646.5	2701.5	2720.0	3123.8	2741.9	1093.9	493.9	773.3	1893.5
0.02	2357.9	4129.5	3473.5	4160.9	4137.3	2938.3	2769.4	3123.8	2741.9	1270.8	493.9	1098.2	1669.4
0.01	2922.8	4402.2	3498.1	4613.4	4637.8	3162.2	2802.5	3486.6	3173.1	1456.6	549.3	1555.8	2032.0

STATION 12113000 GREEN RIVER NEAR AUBURN, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1938	170.0	170.0	173.0	182.0	191.0	227.0	259.0	322.0	769.0
1939	125.0	125.0	125.0	125.0	141.0	158.0	182.0	210.0	420.0
1940	145.0	149.0	152.0	155.0	188.0	208.0	232.0	297.0	514.0
1941	113.0	116.0	137.0	140.0	140.0	147.0	165.0	189.0	289.0
1942	145.0	148.0	154.0	162.0	181.0	222.0	294.0	368.0	496.0
1943	148.0	149.0	151.0	161.0	168.0	221.0	319.0	736.0	
1944	122.0	126.0	133.0	148.0	178.0	224.0	298.0	386.0	511.0
1945	146.0	146.0	150.0	165.0	171.0	201.0	252.0	328.0	386.0
1946	164.0	165.0	172.0	178.0	192.0	229.0	319.0	372.0	746.0
1947	190.0	194.0	198.0	212.0	214.0	232.0	276.0	444.0	831.0
1948	166.0	167.0	172.0	178.0	189.0	229.0	282.0	403.0	722.0
1949	258.0	260.0	270.0	283.0	338.0	374.0	465.0	500.0	938.0
1950	158.0	163.0	171.0	180.0	185.0	208.0	287.0	398.0	705.0
1951	178.0	182.0	188.0	192.0	215.0	282.0	384.0	595.0	1160.0
1952	96.0	103.0	107.0	124.0	138.0	187.0	256.0	344.0	544.0
1953	81.0	85.0	89.0	94.0	110.0	120.0	182.0	182.0	182.0
1954	146.0	147.0	151.0	154.0	180.0	212.0	272.0	346.0	634.0
1955	225.0	228.0	243.0	269.0	330.0	342.0	408.0	408.0	678.0
1956	210.0	214.0	231.0	262.0	270.0	339.0	536.0	758.0	1350.0
1957	146.0	146.0	150.0	173.0	179.0	197.0	256.0	437.0	764.0
1958	132.0	132.0	135.0	139.0	146.0	157.0	185.0	222.0	371.0
1959	123.0	128.0	130.0	148.0	150.0	172.0	220.0	280.0	490.0
1960	215.0	222.0	228.0	236.0	257.0	364.0	544.0	759.0	1140.0
1961	168.0	173.0	180.0	200.0	213.0	269.0	332.0	332.0	763.0

LOWEST MEAN FLOW STATISTICS (YEARS 1938-1961)

MEAN	157.2	159.5	165.0	174.8	191.2	223.8	281.2	366.7	674.5
MAXIMUM	258.0	260.0	270.0	283.0	338.0	374.0	544.0	758.0	1350.0
MINIMUM	81.0	85.0	88.0	89.0	94.0	108.0	110.0	120.0	182.0
STANDARD DEVIATION	41.30	41.72	44.29	49.44	59.15	72.74	110.90	157.18	281.11
SKWENESS	0.565	0.603	0.691	0.679	1.097	0.708	1.101	0.602	0.602
STD ERROR OF SKWENESS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472
SERIAL CORR COEFF	0.242	0.235	0.242	0.287	0.210	0.171	0.070	0.097	0.148
COEFF OF VARIATION	0.263	0.264	0.264	0.283	0.309	0.325	0.394	0.429	0.417
MEAN LOGS	2.182	2.189	2.203	2.226	2.263	2.328	2.419	2.528	2.789
STD DEVIATION LOGS	0.116	0.114	0.116	0.122	0.128	0.140	0.165	0.185	0.199
SKWENESS LOGS	-0.250	-0.150	-0.033	-0.069	0.176	0.022	0.068	-0.184	-0.708
STD ERR SKWENESS LOGS	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472	0.472
SER CORR COEFF LOGS	0.292	0.245	0.246	0.326	0.246	0.191	0.130	0.150	0.167
COEFF OF VAR LOGS	0.053	0.052	0.052	0.055	0.057	0.060	0.068	0.073	0.071

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1938-1961)

	P95	P90	P75	P70	P50	P25	P10
0.99	268.8	276.2	294.2	319.3	378.4	452.1	645.4
0.98	253.2	259.1	274.1	296.9	345.5	413.7	579.1
0.96	236.6	241.1	253.3	273.6	312.7	374.8	513.7
0.90	212.1	215.1	224.0	240.9	268.9	321.8	427.5
0.80	190.7	192.9	199.6	213.5	234.3	279.1	360.4
0.50	153.7	155.4	159.7	168.9	181.7	212.8	261.2
0.20	122.0	124.0	127.5	135.0	142.6	162.5	190.5
0.10	107.4	109.9	113.3	117.2	126.3	141.3	161.9
0.05	96.4	99.2	102.7	105.4	114.5	125.9	141.7
0.02	85.0	88.2	91.9	93.5	102.8	110.6	122.1
0.01	78.0	81.5	85.3	86.3	95.8	101.4	110.7

FLOW DURATION DATA DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1938-1961)

P95	P90	P75	P70	P50	P25	P10
160.0	200.0	390.0	520.0	1100.0	1900.0	2700.0

STATION 12113000 GREEN RIVER NEAR AUBURN, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA	DATE	REG. (R)
1937	6000.	4800.	3660.	3150.	2680.	2310.	2260.	2110.	1730.	6820.	04/15/37	
1938	12200.	8110.	6090.	4290.	3580.	3070.	2810.	2370.	2310.	14400.	04/18/38	
1939	5070.	4410.	3720.	3010.	2630.	2180.	2070.	2020.	1850.	5420.	12/08/38	
1940	4920.	4320.	3620.	2680.	2460.	2130.	1970.	1760.	1600.	5150.	02/10/40	
1941	5920.	4080.	2840.	2210.	1640.	1340.	1160.	1040.	938.	7290.	11/29/40	
1942	7260.	6250.	4390.	2970.	2400.	1820.	1620.	1510.	1450.	9310.	12/19/41	
1943	7720.	6000.	4140.	3330.	3010.	2320.	2040.	1860.	1940.	10900.	11/23/42	
1944	9040.	6540.	4070.	2530.	1670.	1410.	1320.	1270.	1270.	12900.	12/03/43	
1945	9220.	7430.	5700.	4510.	3130.	2520.	2240.	2300.	2100.	13600.	01/07/45	
1946	11000.	7500.	5440.	4370.	3140.	2630.	2540.	2420.	2360.	12800.	12/29/45	
1947	14700.	13600.	10800.	6580.	4530.	3430.	3060.	2740.	2380.	22000.	12/11/46	
1948	8130.	6250.	5360.	4090.	3080.	2730.	2490.	2260.	2090.	8960.	11/09/47	
1949	7810.	5270.	4590.	3810.	3320.	2760.	2630.	2460.	2100.	9470.	02/17/49	
1950	9520.	8260.	5650.	4960.	3760.	3160.	2980.	2950.	2600.	11800.	03/04/50	
1951	15500.	14000.	9830.	6030.	4180.	3490.	3410.	2980.	2630.	18400.	02/10/51	
1952	5010.	4320.	3130.	2470.	1980.	1900.	1630.	1650.	1420.	6280.	02/04/52	
1953	11100.	8750.	6780.	6070.	5000.	3190.	2540.	2350.	1990.	13400.	02/01/53	
1954	12200.	9400.	7700.	5530.	4250.	3400.	2960.	2660.	2400.	18300.	12/10/53	
1955	13000.	8150.	5170.	4490.	3020.	2610.	2350.	2110.	1980.	15500.	02/08/55	
1956	16400.	9530.	6040.	4670.	3830.	3360.	2980.	2540.	2420.	20300.	12/12/55	
1957	12500.	9140.	7750.	5940.	3780.	2510.	2080.	2050.	1950.	13900.	12/10/56	
1958	5360.	4570.	3580.	2880.	2500.	2250.	2050.	1880.	1720.	5780.	06/20/58	
1959	11000.	8550.	6320.	4750.	3690.	3470.	3400.	2960.	2600.	15900.	11/13/58	
1960	21400.	13600.	9940.	6170.	4930.	3450.	2880.	2540.	2800.	28100.	11/23/59	
1961	9580.	8530.	6580.	5030.	4220.	3400.	3080.	2820.	2600.	13000.	02/21/61	

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1937-1961)

W R C
ESTIMATE
SYSTEMATIC
RECORD

MEAN	10062.4	7662.4	5715.6	4220.8	3304.4	2673.6	2422.4	2224.4	2028.3			
MAXIMUM	21400.0	14000.0	10800.0	6580.0	5000.0	3490.0	3410.0	2980.0	2630.0			
MINIMUM	4920.0	4080.0	2840.0	2210.0	1640.0	1340.0	1160.0	1040.0	938.0			
STANDARD DEVIATION	4099.93	2893.58	2160.50	1328.39	938.56	658.52	612.43	520.62	452.30			
SKWENESS	0.886	0.860	0.925	0.208	0.005	-0.409	-0.304	-0.501	-0.628			
STD ERROR OF SKWENESS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464			
SERIAL CORR COEFF	0.115	0.057	0.027	0.139	0.183	0.324	0.308	0.393	0.293			
CDEFF OF VARIATION	0.407	0.378	0.378	0.315	0.284	0.246	0.253	0.234	0.223			
MEAN LOGS	3.969	3.856	3.729	3.604	3.501	3.413	3.369	3.334	3.295			
STD DEVIATION LOGS	0.176	0.160	0.158	0.142	0.133	0.119	0.122	0.115	0.110			
SKWENESS LOGS	0.004	0.138	0.227	-0.185	-0.603	-0.911	-0.890	-1.130	-1.243			
STD ERR SKWENESS LOGS	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464	0.464			
SER CORR COEFF LOGS	0.152	0.119	0.079	0.176	0.173	0.333	0.335	0.400	0.307			
CDEFF OF VAR LOGS	0.044	0.041	0.042	0.039	0.038	0.035	0.036	0.035	0.033			

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1937-1961)

0.99	3638.5	3164.6	2447.1	1796.5	1358.0	1145.7	1020.9	947.6	879.8			
0.95	4789.3	3975.5	3021.6	2307.3	1823.3	1551.3	1388.3	1304.5	1211.7			
0.90	5545.6	4503.6	3397.8	2626.1	2105.7	1790.1	1605.8	1512.2	1402.9			
0.80	6623.5	5253.2	3934.8	3060.4	2477.4	2094.1	1883.9	1772.3	1639.4			
0.50	9306.8	7116.2	5286.2	4056.2	3265.1	2694.1	2437.2	2264.9	2075.6			
0.20	13082.2	9756.0	7240.9	5300.0	4119.9	3268.9	2973.5	2699.4	2442.0			
0.10	15633.2	11561.2	8603.0	6061.2	4577.0	3540.9	3230.0	2887.4	2592.5			
0.04	18906.3	13907.0	10401.8	7684.7	5661.1	3800.6	3476.9	3053.2	2719.1			
0.02	21377.9	15701.9	11798.8	7601.6	5661.1	3800.6	3476.9	3053.2	2719.1			
0.01	23877.1	17537.7	13245.1	8211.8	5637.2	4070.2	3736.0	3207.4	2829.4			

4.0648
0.1988
-0.2070

3735.5
5328.2
6458.9
7940.3
11606.4
11794.2
17131.6
20375.4
25885.7
28225.3
31387.6

STATION 12113000 GREEN RIVER NEAR AUBURN, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1962	511	959	1397	2843	1254	1069	2023	1284	858	480	318	324	1110
1963	669	1907	2525	1758	2088	891	1920	1142	624	544	340	276	1217
1964	509	1705	1645	2768	1832	1640	2094	2445	2609	978	456	696	1612
1965	997	1349	2898	2724	4242	1532	1890	1508	603	283	260	240	1527
1966	579	568	887	1491	1019	1443	2289	1446	796	726	287	263	999
1967	773	1118	2568	3789	2484	1435	1171	1815	821	726	296	237	1400
1968	966	1082	2210	2340	2895	1576	1549	1235	1152	370	432	955	1391
1969	1042	1916	2090	2378	1045	1416	2464	2559	1290	619	262	297	1453
1970	571	640	1211	2571	2050	1378	1731	1632	830	357	247	333	1124
1971	588	1170	1267	3567	2886	1713	1882	2793	1311	941	343	376	1572
1972	703	1772	2247	3047	3552	4994	2123	2896	1439	1069	409	625	2071
1973	469	875	3235	2225	882	1018	1013	959	382	425	257	307	1009
1974	430	1245	2635	3815	2542	2323	2669	2698	2849	985	514	386	1921
1975	273	751	2213	3908	1910	1971	1348	2750	1287	626	438	469	1498
1976	875	2650	5654	3903	1897	1316	1987	1913	940	523	438	565	1892
1977	404	726	1001	1161	720	1209	1627	676	829	271	257	555	785
1978	703	1266	4977	1206	1126	1108	1241	939	673	401	306	599	1337
1979	448	1228	1925	794	2264	2243	1697	1478	331	298	261	257	1095

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1962-1979)

MEAN	640.6	1355.9	2385.8	2572.7	2043.8	1693.1	1817.7	1787.1	1090.2	567.8	340.1	431.1	1389.6
MAXIMUM	1062.0	2746.0	5654.0	3908.0	4242.0	4994.0	2669.0	2896.0	2849.0	1069.0	514.0	955.0	2071.0
MINIMUM	273.0	568.0	887.0	794.0	720.0	891.0	1013.0	676.0	331.0	271.0	247.0	237.0	785.0
STD DEVIATION	222.16	641.65	1264.65	1001.02	967.47	912.91	445.52	726.44	674.37	266.49	85.31	197.26	347.06
SKEWNESS	0.487	0.943	1.445	-0.213	0.620	3.035	-0.044	0.271	1.690	0.752	0.649	1.241	0.328
STD ERR SKEW	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SER CORR COEFF	0.0	-0.435	-0.363	0.247	-0.220	-0.119	-0.450	0.066	-0.254	-0.085	-0.025	-0.285	-0.290
COEFF OF VAR	0.347	0.473	0.535	0.389	0.473	0.539	0.245	0.406	0.619	0.469	0.251	0.458	0.250
MEAN LOGS	2.781	3.088	3.322	3.371	3.261	3.191	3.246	3.215	2.972	2.711	2.519	2.577	3.130
STD DEV LOGS	0.155	0.200	0.217	0.203	0.219	0.170	0.113	0.188	0.282	0.199	0.105	0.181	0.111
SKEWNESS LOGS	-0.257	0.134	0.179	-0.934	-0.276	1.517	-0.592	-0.302	0.225	0.260	0.430	0.566	-0.232
STD ERR SKEW LOGS	0.1536	0.1536	0.1536	0.1536	0.1536	0.1536	0.1536	0.1536	0.1536	0.1536	0.1536	0.1536	0.1536
SER CORR LOGS	-0.018	-0.443	-0.398	0.363	-0.214	-0.127	-0.414	0.073	-0.275	-0.094	-0.041	-0.226	-0.309
COEFF OF VAR LOGS	0.056	0.065	0.065	0.060	0.067	0.053	0.035	0.059	0.081	0.073	0.042	0.070	0.035
% OF AVE FLOW	3.8	8.1	14.2	15.4	12.2	10.1	10.9	10.7	6.5	3.4	2.0	2.6	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1962-1979)

0.99	246.2	436.4	702.1	581.8	510.9	954.1	859.3	544.0	281.7	193.6	203.4	178.4	713.6
0.95	327.5	584.1	948.0	981.0	767.5	1000.5	1102.7	776.4	389.3	250.8	229.2	214.1	872.3
0.90	379.0	883.2	1118.5	1254.8	944.6	1044.5	1245.8	930.3	466.1	290.0	249.7	239.0	967.0
0.80	449.7	828.9	1373.7	1642.3	1204.2	1125.1	1430.1	1148.7	583.8	348.0	268.8	276.4	1091.6
0.50	613.5	1213.2	2057.7	2525.6	1867.9	1411.9	1408.5	1678.6	917.9	503.6	324.9	380.1	1361.7
0.20	819.0	1801.6	3178.5	3505.7	2803.8	2030.7	2205.1	2378.1	1486.5	749.6	402.5	552.5	1675.1
0.10	944.5	2228.4	4013.9	4010.5	3423.1	2612.3	2412.8	2819.1	1935.7	933.4	454.7	687.6	1856.6
0.04	1092.8	2808.0	5181.7	4514.5	4195.2	3593.4	2629.9	3350.1	2588.9	1189.7	522.0	884.2	2063.5
0.02	1196.7	3268.5	6133.3	4812.2	4760.1	4543.8	2766.3	3727.3	3139.9	1398.4	573.2	1050.8	2204.4
0.01	1295.7	3753.1	7155.1	5057.6	5315.0	5723.4	2885.4	4090.0	3747.9	1622.5	625.4	1235.8	2336.0

STATION 12113000 GREEN RIVER NEAR AUBURN, WASH.

LOWEST MEAN FLDW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1963	230.0	230.0	236.0	254.0	295.0	309.0	349.0	430.0	532.0
1964	244.0	244.0	245.0	253.0	274.0	288.0	317.0	377.0	556.0
1965	328.0	332.0	356.0	393.0	453.0	539.0	698.0	722.0	1120.0
1966	226.0	226.0	228.0	233.0	239.0	250.0	257.0	290.0	409.0
1967	243.0	244.0	251.0	262.0	262.0	269.0	316.0	438.0	585.0
1968	216.0	219.0	221.0	226.0	236.0	246.0	298.0	265.0	575.0
1969	221.0	222.0	227.0	237.0	279.0	350.0	446.0	610.0	833.0
1970	158.0	159.0	162.0	171.0	197.0	257.0	376.0	405.0	539.0
1971	230.0	230.0	230.0	231.0	239.0	270.0	293.0	355.0	536.0
1972	271.0	271.0	277.0	292.0	328.0	357.0	389.0	554.0	896.0
1973	325.0	327.0	331.0	344.0	359.0	441.0	498.0	539.0	749.0
1974	206.0	207.0	209.0	212.0	221.0	244.0	310.0	329.0	428.0
1975	235.0	243.0	249.0	250.0	270.0	310.0	343.0	413.0	684.0
1976	278.0	282.0	286.0	296.0	347.0	444.0	416.0	518.0	990.0
1977	296.0	299.0	302.0	306.0	380.0	434.0	450.0	471.0	567.0
1978	220.0	223.0	224.0	226.0	234.0	261.0	300.0	434.0	546.0
1979	280.0	285.0	291.0	296.0	306.0	336.0	379.0	435.0	539.0

LOWEST MEAN FLOW STATISTICS (YEARS 1963-1979)

MEAN	247.5	249.6	254.4	263.9	289.9	329.7	376.6	448.1	652.0
MAXIMUM	328.0	332.0	356.0	393.0	453.0	539.0	698.0	722.0	1120.0
MINIMUM	158.0	159.0	162.0	171.0	197.0	244.0	257.0	290.0	409.0
STANDARD DEVIATION	43.89	44.61	47.73	53.05	66.84	87.27	106.98	113.32	199.49
SKWENESS	0.249	0.251	0.448	0.802	0.933	1.092	1.786	0.815	1.136
STD ERROR OF SKWENESS	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550
SERIAL CORR COEFF	0.023	0.017	-0.022	-0.052	-0.086	-0.147	-0.324	-0.456	-0.286
COEFF OF VARIATION	0.177	0.179	0.188	0.201	0.231	0.265	0.284	0.253	0.306
MEAN LOGS	2.387	2.391	2.398	2.413	2.452	2.505	2.562	2.639	2.797
STD DEVIATION LOGS	0.078	0.079	0.082	0.085	0.096	0.107	0.109	0.107	0.123
SKWENESS LOGS	-0.332	-0.326	-0.155	0.166	0.467	0.750	0.982	0.198	0.666
STD ERR SKWENESS LOGS	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550	0.550
SER CORR COEFF LOGS	0.056	0.054	0.020	-0.009	-0.070	-0.145	-0.338	-0.470	-0.296
COEFF OF VAR LOGS	0.033	0.033	0.034	0.035	0.039	0.043	0.043	0.040	0.044

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1963-1979)

	0.99	0.98	0.96	0.90	0.80	0.70	0.60	0.50	0.40	0.30	0.20	0.10	0.05	0.02	0.01
0.99	354.8	359.1	379.5	418.9	508.7	645.1	777.1	799.4	1381.3						
0.98	341.7	345.7	362.6	394.5	469.1	580.9	689.4	740.2	1230.5						
0.96	327.2	330.8	344.4	369.3	430.2	520.2	608.7	680.6	1088.9						
0.90	304.9	308.0	317.4	334.3	378.7	444.0	510.7	599.5	912.7						
0.80	284.4	287.1	293.6	305.1	338.5	388.0	441.4	534.0	784.1						
0.50	246.2	248.2	251.5	257.7	278.4	310.5	350.3	431.9	607.6						
0.20	210.2	211.7	213.9	219.3	234.6	259.4	294.5	353.3	492.1						
0.10	192.4	193.6	196.0	202.2	216.5	239.9	274.5	319.5	448.1						
0.05	178.3	179.4	182.1	189.4	203.6	226.7	261.6	294.7	418.1						
0.02	163.1	164.0	167.4	176.2	190.8	214.3	250.1	289.8	389.8						
0.01	153.4	154.2	158.1	168.1	183.3	207.4	243.9	254.7	373.8						

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1963-1979)

P95	P90	P75	P70	P50	P25	P10
250.0	290.0	470.0	560.0	1000.0	1800.0	2900.0

STATION 12113000 GREEN RIVER NEAR AUBURN, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT.30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA
										FLOW (CFS) DATE REG. (R)
1962	9140.	7830.	5830.	4510.	3290.	2350.	1910.	1930.	1690.	9510. 01/03/62 R
1963	7800.	7200.	4960.	3690.	3160.	2790.	2440.	2160.	1900.	8020. 11/21/62 R
1964	5630.	4340.	3760.	3430.	3240.	2860.	2450.	2250.	2280.	6250. 01/02/64 R
1965	10900.	10800.	10300.	7230.	5230.	3490.	3300.	2920.	2500.	11400. 01/29/65 R
1966	4780.	4560.	3460.	3070.	2470.	2190.	1880.	1720.	1460.	4900. 05/06/66 R
1967	7020.	6890.	5610.	4520.	3880.	3420.	3000.	2610.	2210.	7580. 01/15/67 R
1968	8700.	8100.	6130.	4080.	3020.	2810.	2590.	2340.	2020.	8870. 02/20/68 R
1969	9100.	8190.	5640.	3690.	2690.	2530.	2280.	2050.	1780.	9210. 01/06/69 R
1970	6630.	6190.	5860.	4260.	3170.	2400.	2180.	2060.	1800.	7080. 01/21/70 R
1971	7850.	6690.	5660.	5440.	4350.	3310.	2830.	2660.	2380.	8840. 01/31/71 R
1972	8740.	8700.	7300.	6660.	5720.	4800.	3990.	3600.	3180.	9260. 02/11/72 R
1973	8600.	8280.	8020.	5820.	4230.	2830.	2210.	1920.	1600.	9900. 12/22/72 R
1974	9080.	8700.	6380.	5960.	4700.	3520.	3130.	3040.	2980.	10200. 01/18/74 R
1975	9480.	9320.	8230.	6090.	4000.	3260.	2970.	2560.	2440.	9820. 01/18/75 R
1976	11600.	11300.	11000.	8250.	5690.	4930.	4120.	3640.	2950.	12100. 12/07/75 R
1977	4260.	3360.	2310.	1950.	1680.	1430.	1230.	1210.	1100.	4490. 01/19/77 R
1978	9750.	9610.	9230.	7920.	5960.	3930.	3020.	2550.	2080.	9920. 12/03/77 R
1979	6300.	5790.	4160.	3150.	2810.	2310.	2160.	1920.	1750.	6450. 02/07/79 R

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1962-1979)

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W R C
ESTIMATE
SYSTEMATIC
RECORD

MEAN	8080.0	7508.9	6324.4	4984.4	3849.4	3043.3	2649.4	2391.1	2128.3
MAXIMUM	11600.0	11300.0	11000.0	8250.0	5960.0	4930.0	4120.0	3640.0	3180.0
MINIMUM	4260.0	3360.0	2310.0	1950.0	1680.0	1430.0	1230.0	1210.0	1100.0
STANDARD DEVIATION	1991.07	2151.63	2338.06	1782.27	1230.32	867.00	729.21	631.34	550.66
SKWENESS	-0.326	-0.183	0.432	0.334	0.301	0.551	0.344	0.469	0.281
STD ERROR DF SKWENESS	0.4536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SERIAL CORR COEFF	-0.448	-0.459	-0.456	-0.358	-0.361	-0.414	-0.390	-0.359	-0.247
COEFF OF VARIATION	0.246	0.287	0.370	0.358	0.320	0.285	0.275	0.264	0.259
MEAN LOGS	3.893	3.856	3.771	3.670	3.563	3.466	3.407	3.364	3.314
STD DEVIATION LOGS	0.118	0.140	0.173	0.165	0.146	0.127	0.126	0.117	0.117
SKWENESS LOGS	-0.870	-0.895	-0.564	-0.431	-0.408	-0.393	-0.587	-0.344	-0.422
STD ERR SKWENESS LOGS	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SER CORR COEFF LOGS	-0.430	-0.459	-0.491	-0.398	-0.382	-0.454	-0.414	-0.385	-0.277
COEFF OF VAR LOGS	0.030	0.036	0.046	0.045	0.041	0.037	0.037	0.035	0.035

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1962-1979)

	0.99	0.95	0.90	0.80	0.50	0.20	0.10	0.04	0.02	0.01
MEAN	3515.5	2778.3	1994.3	1716.7	1517.9	1363.9	1152.0	1152.7	1015.8	3656.4
MAXIMUM	4723.1	3952.2	2898.4	2397.2	2031.7	1754.8	1517.6	1446.1	1285.0	4971.8
MINIMUM	5433.3	4669.4	3482.6	2832.3	2351.1	1991.5	1737.0	1621.0	1445.3	5744.1
STANDARD DEVIATION	6338.2	5606.8	4288.2	3430.7	2782.1	2304.6	2023.4	1852.3	1654.6	6723.4
SKWENESS	9132.2	7528.3	6121.8	4801.7	3792.5	2993.0	2642.2	2348.2	2088.5	8636.9
STD ERROR DF SKWENESS	9870.3	9449.5	8290.6	6466.0	4874.4	3757.8	3269.9	2912.2	2591.3	10434.3
SERIAL CORR COEFF	10704.1	10385.1	9523.9	7443.8	5527.7	4196.0	3613.6	3231.6	2864.1	11267.2
COEFF OF VARIATION	11510.4	11294.8	10885.6	8557.5	6284.4	4684.0	3977.1	3588.5	3163.0	12047.8
MEAN LOGS	11978.8	11824.2	11778.5	9310.7	6759.0	5008.7	4207.2	3827.0	3359.1	12487.2
STD DEVIATION LOGS	12362.4	12257.4	12583.1	10007.2	7214.4	5305.7	4409.5	4046.2	3536.7	12837.7

STATION 12113200 MILL CREEK NEAR AUBURN, WASH.

ANNUAL PEAK FLOW DATA			ANNUAL PEAK FLOW STATISTICS (YEARS 1949-1970)			W R C SYSTEMATIC	
WATER YEAR	FLOW (CFS)	DATE	MEAN LOGS	STANDARD DEVIATION LOGS	SKENNESS LOGS	ESTIMATE	RECORD
1949	25.0	0-0-1949				1.6398	1.6398
1950	62.0	1-20-1950				0.1919	0.1919
1951	112.0	2-9-1951				0.006	-0.945
1952	33.0	4-27-1952					
1953	35.0	1-31-1953					
1954	48.0	1-6-1954					
1955	37.0	2-8-1955					
1956	54.0	12-11-1955					
1957	47.0	2-24-1957	0.99			15.6	11.7
1958	41.0	1-17-1958	0.95			21.1	19.1
1959	56.0	1-24-1959	0.90			24.8	24.1
1960	45.0	12-15-1959	0.80			30.1	31.1
1961	65.0	11-24-1960	0.50			43.6	46.7
1962	13.0	0-0-1962	0.20			63.3	63.6
1963	52.0	12-30-1962	0.10			76.9	72.2
1964	52.0	1-25-1964	0.04			94.7	80.6
1965	52.0	12-22-1964	0.02			108.3	85.5
1966	43.0	12-28-1965	0.01			122.2	89.6
1967	46.0	1-19-1967					
1968	19.0	2-19-1968					
1969	55.0	1-6-1969					
1970	52.0	1-19-1970					

ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES
LOG-PEARSON III ANALYSIS (YEARS 1949-1970)

STATION 12113300 MILL CREEK TRIBUTARY NEAR AUBURN, WASH.

ANNUAL PEAK FLOW DATA			ANNUAL PEAK FLOW STATISTICS (YEARS 1959-1975)			W R C SYSTEMATIC	
WATER YEAR	FLOW (CFS)	DATE	MEAN LOGS	STANDARD DEVIATION LOGS	SKENNESS LOGS	ESTIMATE	RECORD
1959	5.1	1-23-1959				0.7062	0.7062
1960	6.4	11-20-1959				0.2236	0.2236
1961	5.5	2-24-1961				0.005	-0.218
1962	1.4	0-0-1962					
1963	5.9	11-25-1962					
1964	15.0	1-25-1964					
1965	8.5	4-19-1965					
1966	4.6	1-5-1966					
1967	5.6	1-19-1967					
1968	4.7	2-19-1968					
1969	3.4	12-3-1968					
1970	3.4	1-19-1970					
1971	4.0	12-6-1970					
1972	11.0	3-5-1972					
1973	4.3	12-26-1972					
1974	4.5	1-15-1974					
1975	4.5	1-20-1975					

ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES
LOG-PEARSON III ANALYSIS (YEARS 1959-1975)

STATION 12113350 GREEN RIVER AT TUKWILA, WASH.

MONTHLY AND ANNUAL MEAN DISCHARGES, IN CUBIC FEET PER SECOND (CFS)

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	ANNUAL
1961	493	2856	1712	2609	4418	2784	2203	2254	1112	444	235	242	1761
1962	550	1007	1511	3008	1420	1154	2110	2254	924	548	363	354	1195
1963	693	2066	2636	1888	2323	1726	2047	1201	686	587	373	306	1314
1964	508	1864	1860	3197	2063	1726	2146	2490	2933	1129	569	730	1765
1965	1032	1443	3372	2834	4375	1667	1929	1530	887	360	316	276	1682
1966	584	580	954	1641	1055	1683	1299	1603	827	743	320	279	1058
1967	757	1140	2865	3992	2898	1572	1299	1931	955	371	331	274	1512
1968	914	1147	2297	2721	3226	1754	1682	1292	1222	440	448	936	1500
1969	1038	2038	2485	2830	1347	1466	2519	2678	1439	711	341	365	1607
1970	635	1717	1371	2984	2389	1562	1866	1717	860	1023	289	357	1255
1971	612	1241	1558	3864	3510	2017	2025	2945	1478	1023	416	422	1750
1972	705	1901	2506	3358	4006	5835	2332	3015	1734	1207	502	670	2312
1973	520	890	3131	2569	1084	1223	1120	1057	468	511	312	341	1107
1974	447	1381	3104	4253	2890	2483	2696	2693	3050	1056	561	417	2082
1975	289	763	2528	4068	2203	2152	1377	2327	1524	1781	500	499	1628
1976	929	2935	6003	4212	2163	1448	1666	1959	1005	622	495	573	2028
1977	448	714	968	1182	1788	1247	1600	1022	860	331	299	583	813
1978	786	2846	5735	1567	1378	1244	1369	1544	752	467	353	661	1517
1979	501	1249	2068	983	2467	2447	1766	1543	454	334	294	294	1193

MONTHLY AND ANNUAL MEAN DISCHARGE STATISTICS (YEARS 1961-1979)

MEAN	653.7	1514.6	2561.3	2829.5	2442.3	1922.2	1921.1	1889.1	1208.9	634.3	385.1	451.5	1530.5
MAXIMUM	1038.0	2935.0	6003.0	4253.0	4975.0	5835.0	2696.0	3015.0	3050.0	1207.0	569.0	936.0	2312.0
MINIMUM	289.0	580.0	954.0	983.0	788.0	1057.0	1120.0	754.0	454.0	331.0	235.0	242.0	813.0
STD DEVIATION	210.01	754.47	1363.75	1014.02	1177.65	1082.55	435.69	714.31	719.65	284.38	99.16	191.54	381.89
SKENESS	0.481	0.762	1.481	-0.298	0.616	3.027	-0.147	0.212	1.694	0.856	0.601	1.086	0.168
STD ERR SKEW	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SER CORR COEFF	-0.108	-0.477	-0.373	0.224	-0.274	-0.086	-0.402	0.047	-0.225	-0.010	0.014	-0.200	-0.314
COEFF OF VAR	0.321	0.498	0.532	0.358	0.482	0.553	0.227	0.378	0.595	0.448	0.257	0.424	0.250
MEAN LOGS	2.794	3.130	3.357	3.418	3.337	3.244	3.272	3.244	3.023	2.764	2.572	2.621	3.171
STD DEV LOGS	0.143	0.216	0.216	0.186	0.223	0.173	0.105	0.176	0.225	0.185	0.109	0.171	0.113
SKENESS LOGS	-0.262	0.068	0.143	-0.985	-0.301	1.553	-0.589	-0.348	0.508	0.375	0.248	0.509	-0.466
STD ERR SKEW LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SER CORR LOGS	-0.091	-0.482	-0.438	0.286	-0.258	-0.096	-0.371	0.055	-0.262	-0.041	0.010	-0.118	-0.332
COEFF OF VAR LOGS	0.051	0.069	0.064	0.055	0.067	0.053	0.032	0.034	0.074	0.067	0.042	0.065	0.036
% DF AVE FLOW	3.6	8.2	13.9	15.4	13.3	10.4	10.4	10.3	6.6	3.4	2.1	2.5	100.0

MONTHLY AND ANNUAL MEAN DISCHARGE EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1961-1979)

0.99	271.5	433.5	755.4	718.9	586.2	1078.6	964.4	618.0	385.2	242.0	218.0	194.5	740.5
0.95	353.4	599.7	1026.4	1172.3	893.4	1128.5	1213.6	868.6	488.8	301.8	251.7	233.0	935.6
0.90	404.5	714.5	1213.8	1474.3	1106.8	1176.8	1358.2	1031.5	563.0	342.6	272.7	259.4	1050.9
0.80	473.7	895.0	1493.3	1891.9	1421.0	1266.4	1542.5	1259.2	677.6	402.9	301.6	298.7	1200.5
0.50	630.9	1340.6	2247.9	2809.4	2227.3	1590.7	1915.7	1796.6	1010.4	565.1	369.7	404.6	1513.9
0.20	823.2	2047.1	3441.0	3778.7	3366.0	2302.4	2300.9	1602.8	823.1	460.0	574.5	574.5	1855.1
0.10	938.6	2562.3	4328.1	4258.7	4118.2	2379.9	2500.6	2897.3	2093.2	1017.5	518.6	703.7	2040.7
0.04	1073.3	3263.1	5556.0	4724.0	5053.4	4135.2	2708.3	3368.4	2839.0	1291.2	592.2	887.1	2241.4
0.02	1166.7	3819.9	6547.6	4991.7	5735.3	5265.5	2838.1	3730.3	3495.9	1516.1	646.9	1039.1	2371.4
0.01	1255.0	4405.4	7604.5	5207.7	6403.1	6680.2	2951.2	4053.7	4247.9	1759.6	701.6	1205.0	2487.9

STATION 12113350

GREEN RIVER AT TUKWILA, WASH.

LOWEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING MARCH 31

YEAR	1 DAY	3 DAYS	7 DAYS	14 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS
1962	198.0	199.0	199.0	210.0	219.0	231.0	271.0	356.0	551.0
1963	285.0	288.0	309.0	332.0	341.0	349.0	392.0	470.0	590.0
1964	251.0	255.0	258.0	269.0	293.0	311.0	344.0	409.0	598.0
1965	450.0	452.0	467.0	498.0	558.0	630.0	779.0	793.0	1260.0
1966	260.0	263.0	266.0	269.0	275.0	294.0	311.0	348.0	450.0
1967	285.0	286.0	289.0	272.0	277.0	290.0	334.0	456.0	613.0
1968	257.0	258.0	260.0	284.0	274.0	286.0	306.0	339.0	613.0
1969	273.0	275.0	283.0	295.0	330.0	408.0	484.0	637.0	857.0
1970	231.0	232.0	236.0	242.0	333.0	333.0	447.0	481.0	621.0
1971	261.0	262.0	264.0	267.0	280.0	306.0	324.0	387.0	569.0
1972	325.0	328.0	336.0	350.0	382.0	407.0	447.0	609.0	978.0
1973	378.0	380.0	385.0	397.0	418.0	522.0	558.0	600.0	824.0
1974	250.0	251.0	252.0	257.0	269.0	299.0	357.0	391.0	490.0
1975	250.0	253.0	257.0	261.0	284.0	329.0	371.0	442.0	750.0
1976	305.0	308.0	318.0	339.0	392.0	486.0	472.0	596.0	1120.0
1977	360.0	364.0	366.0	368.0	429.0	502.0	493.0	511.0	602.0
1978	250.0	250.0	250.0	252.0	286.0	311.0	354.0	480.0	600.0
1979	321.0	326.0	329.0	335.0	393.0	393.0	443.0	491.0	604.0

LOWEST MEAN FLOW STATISTICS (YEARS 1962-1979)

MEAN	287.2	289.4	294.7	304.3	328.2	371.5	415.9	488.7	705.0
MAXIMUM	450.0	452.0	467.0	498.0	558.0	630.0	779.0	793.0	1260.0
MINIMUM	198.0	199.0	199.0	210.0	219.0	231.0	271.0	339.0	450.0
STANDARD DEVIATION	60.66	61.16	63.95	69.21	82.34	103.76	119.49	119.62	220.70
SKEWNESS	1.297	1.256	1.236	1.370	1.384	1.117	1.706	0.956	1.399
STD ERROR OF SKEWNESS	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SERIAL CORR COEFF	-0.152	-0.148	-0.127	-0.202	-0.167	-0.137	-0.252	-0.360	-0.244
COEFF OF VARIATION	0.211	0.211	0.217	0.227	0.251	0.279	0.287	0.245	0.313
MEAN LOGS	2.450	2.453	2.461	2.474	2.505	2.556	2.605	2.678	2.831
STD DEVIATION LOGS	0.085	0.086	0.088	0.091	0.100	0.113	0.111	0.101	0.121
SKEWNESS LOGS	0.766	0.732	0.665	0.800	0.806	0.623	0.868	0.429	0.933
STD ERR SKEWNESS LOGS	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536
SER CORR COEFF LOGS	-0.141	-0.138	-0.194	-0.211	-0.167	-0.116	-0.240	-0.368	-0.255
COEFF OF VAR LOGS	0.035	0.035	0.036	0.037	0.040	0.044	0.043	0.038	0.043

LOWEST MEAN FLOW NON-EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1962-1979)

0.99	494.9	497.4	509.6	545.9	621.7	738.0	854.2	880.5	1557.2
0.98	454.7	457.5	469.0	498.0	562.0	665.1	760.6	809.5	1367.0
0.96	416.0	419.0	429.5	452.2	505.5	595.6	673.7	739.7	1193.4
0.90	366.3	369.3	378.3	394.0	434.6	507.5	567.0	647.4	985.0
0.80	328.6	331.6	339.2	350.6	382.4	442.0	490.5	575.5	839.1
0.50	274.9	277.3	282.4	289.6	310.1	349.8	387.9	468.1	649.2
0.20	238.2	239.9	242.7	248.8	262.6	287.6	323.2	389.8	533.9
0.10	223.9	225.2	226.8	233.1	244.7	263.4	299.4	357.4	492.8
0.05	214.1	215.0	215.8	222.5	232.5	246.6	283.6	334.2	466.0
0.02	204.8	205.4	205.2	212.6	221.2	230.7	269.2	311.4	442.0
0.01	199.6	199.9	199.1	207.0	215.0	221.5	261.4	297.9	429.1

FLOW DURATION DATA

DAILY MEAN DISCHARGE IN CFS EXCEEDED "P" PERCENT OF THE TIME (YEARS 1962-1979)

P95	P90	P75	P70	P50	P25	P10
290.0	330.0	530.0	640.0	1100.0	2000.0	3100.0

STATION 12113350 GREEN RIVER AT TUKWILA, WASH.

HIGHEST MEAN FLOW IN CFS FOR THE FOLLOWING NUMBER OF CONSECUTIVE DAYS IN YEAR ENDING SEPT. 30

YEAR	1 DAY	3 DAYS	7 DAYS	15 DAYS	30 DAYS	60 DAYS	90 DAYS	120 DAYS	183 DAYS	ANNUAL PEAK-FLOW DATA	DATE	REG. (R)
1961	11000.	8910.	6870.	5280.	4490.	3680.	3340.	3070.	2810.	11500.	02/22/61	
1962	8820.	7520.	5720.	4560.	3640.	2620.	2040.	2060.	1800.	9080.	01/04/62	R
1963	8060.	7270.	5290.	4060.	3420.	2370.	2020.	2330.	2060.	8410.	11/21/62	R
1964	4790.	4060.	3690.	3690.	3420.	2370.	2020.	2330.	2060.	6000.	01/02/64	R
1965	12000.	11900.	11200.	8020.	5840.	3890.	3720.	3270.	2470.	12100.	01/31/65	R
1966	4800.	4550.	3640.	3190.	2590.	2320.	1980.	1820.	1570.	4910.	05/06/66	R
1967	7070.	6520.	5630.	4070.	3650.	2870.	3240.	2820.	2400.	7310.	01/16/67	R
1968	8730.	7940.	6550.	4520.	3870.	3150.	2830.	2220.	2220.	9210.	01/21/68	R
1969	9520.	8610.	6300.	4260.	2960.	2870.	2530.	2210.	2240.	9750.	01/06/69	R
1970	6750.	6600.	6300.	4870.	3610.	2790.	2490.	2310.	1990.	7350.	01/23/70	R
1971	8220.	7250.	6280.	5920.	4840.	3720.	3180.	2960.	2650.	8960.	02/01/71	R
1972	9900.	8110.	7710.	7500.	6570.	5270.	4550.	4040.	3550.	10100.	03/02/72	R
1973	8110.	7710.	7500.	6570.	5270.	4550.	4040.	3550.	3140.	8340.	12/28/72	R
1974	9760.	9210.	6920.	6460.	5200.	4020.	3460.	3260.	3200.	10300.	01/18/74	R
1975	9260.	9210.	7950.	6120.	4170.	3530.	3240.	2800.	2620.	9340.	01/18/75	R
1976	11600.	11500.	11300.	8550.	6070.	5270.	4300.	3930.	3170.	12000.	12/07/75	R
1977	4010.	3120.	2250.	1870.	1640.	1430.	1260.	1230.	1130.	4300.	01/19/77	R
1978	10500.	10300.	9840.	8750.	6660.	4370.	3440.	2920.	2370.	10700.	12/06/77	R
1979	6490.	5880.	4360.	3370.	3030.	2520.	2320.	2060.	1890.	6590.	03/07/79	R

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW STATISTICS (YEARS 1961-1979)

326
W R C
ESTIMATE
SYSTEMATIC
RECORD

MEAN	8452.6	7815.3	6651.1	5348.9	4199.5	3353.2	2927.4	2637.9	2348.9
MAXIMUM	12000.0	11900.0	11300.0	8750.0	6660.0	5270.0	4550.0	4040.0	3550.0
MINIMUM	4010.0	3120.0	2250.0	1870.0	1640.0	1430.0	1260.0	1230.0	1130.0
STANDARD DEVIATION	2199.24	2303.55	2388.06	1905.73	1378.67	967.27	824.77	705.42	606.10
SKENNESS	-0.341	-0.149	0.405	0.341	0.330	0.394	0.196	0.262	0.075
STD ERROR OF SKEWNESS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SERIAL CORR COEFF	-0.301	-0.521	-0.518	-0.436	-0.395	-0.440	-0.427	-0.407	-0.306
COEFF OF VARIATION	0.260	0.295	0.359	0.356	0.328	0.288	0.282	0.267	0.258
MEAN LOGS	3.911	3.872	3.794	3.700	3.599	3.507	3.449	3.406	3.356
STD DEVIATION LOGS	0.127	0.145	0.171	0.168	0.152	0.133	0.132	0.120	0.120
SKEWNESS LOGS	-0.965	-1.015	-0.777	-0.656	-0.587	-0.670	-0.772	-0.625	-0.701
STD ERR SKEWNESS LOGS	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524	0.524
SER CORR COEFF LOGS	-0.454	-0.484	-0.522	-0.459	-0.423	-0.478	-0.448	-0.432	-0.432
COEFF OF VAR LOGS	0.032	0.038	0.045	0.045	0.042	0.038	0.038	0.036	0.036

HIGHEST MEAN FLOW AND ANNUAL PEAK FLOW EXCEEDENCE PROBABILITIES BASED ON LOG-PEARSON III ANALYSIS (YEARS 1961-1979)

0.99	3391.5	2697.0	2002.0	1703.3	1518.8	1365.6	1173.1	1161.8	1039.6	3553.4
0.95	4716.8	3968.4	3017.3	2491.0	2120.2	1848.4	1608.8	1528.4	1372.7	4924.3
0.90	5507.4	4753.6	3672.7	2996.1	2496.5	2147.7	1871.9	1747.1	1570.1	5739.4
0.80	6520.8	5782.3	4567.6	3686.2	3003.0	2523.8	2214.5	2031.0	1824.5	6781.2
0.50	8530.5	7874.9	6539.1	5223.6	4113.4	3326.5	2920.8	2620.1	2343.8	8838.0
0.20	10447.1	9905.1	8712.4	6974.2	5368.3	4178.6	3645.6	3242.5	2876.9	10787.1
0.10	11343.3	10855.3	9858.6	7933.5	6058.7	4624.1	4011.4	3568.6	3148.6	11693.4
0.04	12187.3	11744.2	11042.3	8960.1	6804.1	5086.7	4379.7	3909.1	3425.6	12543.3
0.02	12664.2	12241.4	11769.7	9613.8	7283.6	5374.4	4601.8	4122.2	3595.1	13021.4
0.01	13045.3	12634.8	12390.8	10188.7	7709.8	5623.2	4789.2	4307.8	3739.9	13402.2

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12105900	GREEN RIVER BELOW HOWARD A. HANSON DAM, WASH.	295
12103400	GREEN RIVER BLW INTAKE CR NR LESTER, WASH.	272
12113000	GREEN RIVER NEAR AUBURN, WASH.	317
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12107500	GREEN RIVER NR BLACK DIAMOND, WASH.	306
12097500	GREENWATER RIVER AT GREENWATER, WASH.	248
12054500	HAMMA HAMMA RIVER NEAR ELDON, WASH.	65
12043300	HOKO RIVER NEAR SEKIU, WASH.	24
12043270	HOKO RIVER TRIB NR SEKIU, WASH.	24
12073500	HUGE CREEK NEAR WAUNA, WASH.	133
12107300	ICY CREEK NR BLACK DIAMOND, WASH.	305
12054600	JEFFERSON CREEK NEAR ELDON, WASH.	68
12096950	JIM CREEK NEAR GREENWATER, WASH.	241
12103200	JOES CREEK AT TACOMA, WASH.	272
12076000	JOHNS CREEK NEAR SHELTON, WASH.	136
12091700	JUDD CREEK NEAR BURTON, WASH.	210
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12078400	KENNEDY CREEK NEAR KAMILCHE, WASH.	140
12091180	LEACH CREEK AT HOLDING POND, AT FIRCREST, WASH.	198
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12087000	MASHEL RIVER NEAR LA GRANDE, WASH.	174
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12113300	MILL CREEK TRIBUTARY NEAR AUBURN, WASH.	323
12083000	MINERAL CREEK NEAR MINERAL, WASH.	158
12064500	MISSION CREEK NEAR BREMERTON, WASH.	111
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12088400	NISQUALLY R ABV POWELL C NR MCKENNA, WASH.	180
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