Inventory of Streamflow in the Cariboo Region

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Cover photo: Courtesy of Water Survey of Canada; Cableway system for flow measurement at WSC gauge 08MA001, Chilko River near Redstone, B.C.

Disclaimer

The information and analyses contained herein are presented as is, with no interpretation. Prediction of streamflow in ungauged basins is challenging, and professional judgment is required when interpreting the values presented herein. In many cases, further work will be necessary to provide a reasonable estimate of streamflow in an ungauged basin.

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PREFACE

This report is an updated and revised version of the original report titled "Streamflow in the Cariboo Region, September 1999" by W. Obedkoff, P.Eng., Water Inventory Section, Resources Inventory Branch, Ministry of Environment, Lands and Parks.

The analyses presented in this report involve Water Survey of Canada hydrometric station data up to and including data for 2012. Most of the parameters were calculated based on data from the 1981-2010 Climate Normal period, with the exception of recurrence interval peak and low flows, which were based on all available data. Hydrologic zone design curves are not included for the various streamflow indices because the relative position of a particular station's streamflow metric (e.g., peak flow) on the plots is influenced in part by the length of the record period analyzed, and so all station values are not necessarily directly comparable. Furthermore, several stations included in the original report have been decommissioned, resulting in fewer data points from which to draw a regional curve. Except for the design curves, all other analyses from the previous report are presented, including: statistical analysis of peak flows, annual mean flows, and annual and June to September 7-day low flows. In addition, flow duration analyses were carried out for all hydrometric stations using mean daily discharge. The results of these analyses are presented in tabular and graphical format – grouped by hydrologic zone and for each station.

Despite the substantial effort that went into delineating zones with similar streamflow characteristics, significant variability still exists within each zone. In many cases when using this report, professional judgment is required to decide which stations are most representative of the ungauged watershed in question.

The Hydrologic Engineering Center Statistical Software Package (HEC-SSP) version 2.0 from the US Army Corp of Engineers was used for all statistical analyses. The Hydrologic Engineering Center Data Storage System (HEC-DSS), also from US Army Corp of Engineers, was used for storing all hydrometric data including results, i.e., tabular and graphical outputs, from the HEC-SSP analyses.

ACKNOWLEDGEMENTS

Brad Sparks (previously with Ministry of Environment) completed the watershed delineation update. Jaime Cathcart (Knight Piésold Ltd.), Scott Jackson (Lorax Environmental Services Ltd.), and Heather Johnstone (Ministry of Environment and Climate Change Strategy) provided input and edits to the report.

Jaime Cathcart conducted a peer review of the report.

1. INTRODUCTION

1.1 Background

Hydrologic investigations require the summary and analysis of available hydrologic data using standard periods, methods and formats, so that the information is consistent and allows direct comparison between sites. The federal government produces streamflow data as daily average flows and instantaneous peak flows, or in observed real time form, with gaps for missing data. Except for Environment Canada's 30-year Climate Normals publications, there is no published source for standard-period summarized hydrologic data. To fulfill this requirement, the Corporate Resource Inventory Initiative (CRII) initiated a project in the 1995-1996 fiscal year. This work culminated in the production of the report, *British Columbia Streamflow Inventory* (BCSI) (Coulson and Obedkoff, 1998), by the Resources Inventory Branch (RIB) in the 1997-1998 fiscal year. That report presented a summary of streamflow data compiled in datasheet, map and graphical forms covering the whole province. This information enables hydrologists and engineers to quickly and easily make preliminary hydrologic estimates for water management purposes and the planning and preliminary design of water resource projects.

A separate project, also funded by CRII and a direct progression of the above work, launched in the 1998-1999 fiscal year. This served to characterize the variability of streamflow parameters in ministry regions, based on the summary data and hydrologic zones defined in the BCSI report. This work, designed on a geographical basis for regional report publication, delineated sub-regional hydrologic zones and produced graphs that enable more accurate estimates, suitable for design streamflows, to be applied to ungauged watersheds. A series of six reports resulted for: the Southern Interior region, in December 1998; the Cariboo region, in September 1999; the Omineca-Peace region, in September 2000; the Skeena region, in June 2001; Kootenay region, in January 2002 and the sixth and final 2003 report for the Lower Mainland and Vancouver Island region (see Table 1 for a report list). New subzones were renamed to constitute a new edition of provincial hydrologic zones (see Table 1 for a cross-reference index). These zones are a product of the application of additional hydrologic data and regionalization procedures to those applied in the study of the BCSI report.

1.2 Current Study

This report covers the Cariboo region, defined as a provincial Natural Resource Operations region, and presents summary data and datasheets, revised and updated since the 1999 BCSI report (Obedkoff, 1999). The revision includes updated data beyond 1999 and a new 30-year normal period of 1981-2010. The standard discharge data used is published by the Water Survey of Canada (WSC). The datasheets present various hydrologic characteristics that can be used directly in water resource applications and studies. Table 2 lists all BCSI gauged watersheds in the study region with data updated to and including the year 2012, as well as new datasheets for hydrometric stations with records of sufficient length to be incorporated. The new datasheet format includes additional calculations of flow duration analysis for mean daily discharge and standard deviations for all streamflow characteristics.

Table 1: Reports and Hydrologic Zone Index

Streamflow Report		Hydrologic Zones		
Region	Date	1998-02	2003	Name
Southern Interior	Dec. 1998	a	25	Eastern South Coast Mountains
		b	24	Southern Thompson Plateau
		c	23	Okanagan Highland
		d	17	Northern Thompson Plateau
		e	15	Fraser Plateau
		f	14	Northern Columbia Mountains
Cariboo	Sept. 1999	i	16	Southern Quesnel Highland
		j	25	Eastern South Coast Mountains
		k	26	Central South Coast Mountains
Omineca-Peace	Sept. 2000	l	13	Upper Fraser Basin
		m	7	Southern Rocky Mountain Foothills
		n	6	Southern Interior Plains
		o	4	Northern Interior Plains
		p	3	Northern Rocky Mountains
		q	12	McGregor Basin
Skeena	Jun. 2001	m	8	Nechako Plateau
		r	2	Stikine Plateau
		s	1	Northern Coast Mountains
		t	5	Northern Central Uplands
		u	9	Southern Hazelton Mountains
		v	10	Central Coast Mountains
		w	11	Queen Charlotte Islands
Kootenay	Jan. 2002	g	22	Lower Columbia Basin
		h	21	Lower Kootenay Basin
		x	18	Upper Columbia Basin
		y	19	Upper Kootenay Basin
		z	20	Central Kootenay Basin
Lower Mainland &	Apr. 2003		27	Western South Coast Mountains
Vancouver Island			28	Eastern Vancouver Island
			29	Western Vancouver Island

The Cariboo region incorporates contiguous portions of hydrologic **zones 14, 15, 16 and 25,** as shown in Figure 1. Updated administrative regions overlaid on the hydrologic zone map are presented in Figure 2. The hydrologic zones in the study area are defined using a physical mapping procedure described in Section 2.

HEC-SSP software was used for frequency distribution estimates as well as for flow duration estimates while the HEC-DSS software was used for data storage and management. Both the HEC-SSP and HEC-DSS software packages, developed by the Hydrologic Engineering Center of US Army Corp of Engineers, are freely available (http://www.hec.usace.army.mil/software/). A brief description of HEC-SSP and examples of HEC-SSP output are provided in Appendix A.

For purposes of comparison, all datasheets are filed according to the hydrologic zone that the station falls within. Electronic versions of these individual datasheets are available from the EcoCat website (http://www.env.gov.bc.ca/ecocat/). This report contains summary data and datasheets that have been revised and updated from the Obedkoff, 1999 report. The electronic versions of all datasheets contain embedded frequency distribution estimates of all streamflow characteristics and results of flow duration analyses showing percent of time exceeded against daily mean flow. The study region datasheets are included in Appendix B.

2. HYDROLOGIC ZONES

The most practical approach for estimating streamflow characteristics at ungauged sites involves the use of regional procedures and techniques based on hydrologic zones. A hydrologic zone is defined as an area where runoff characteristics are homogeneous and where data collected in the region can be reasonably extrapolated to estimate characteristics at ungauged sites to an acceptable degree of accuracy. A hydrologic zone is typically identified on a map on the basis of physiographic features and/or a statistical study of hydrologic data. Due to the scarcity of hydrologic data in an extremely heterogeneous province, this project used the physical mapping procedure, as described in the BCSI report; however, there are instances where a nearest neighbour approach to selecting stations for prediction in ungauged basins may be more appropriate.

Prior to the Ministry regional studies that began in 1998 the physical methods employed in British Columbia for defining homogeneous hydrologic zones have been mostly subjective, with zone boundaries based on professional judgment regarding the variation of mapped hydrologic and physiographic characteristics. However, the procedure developed in these Ministry regional studies is based on a successive series of statistical graphical plots of measured streamflow data and mapped hydrologic characteristics. The first order of zone definition involves the identification of the magnitude of zonal water supply at the longest time span, that of annual runoff. This was done using graphical plots of mean annual runoff and median basin elevation. Successive orders of zone definition are based on reduced time intervals, of low flow and then peak flow. These were based on graphical plots of seven-day low flow and unit peak flow, respectively,

versus drainage area. Such a procedure is objective and is more precise than the hydrologic zone boundaries of earlier hydrologic zone studies. Figure 1 shows the resulting study zone boundaries of the Cariboo region and adjacent Natural Resource Operations regions. Figure 2 shows all hydrologic zones, using both past and current regional boundaries for the entire province.

3. REGIONAL STREAMFLOW SUMMARIES

This report covers the Cariboo region of Natural Resource Operations regions. Four contiguous portions of hydrologic zones (**zones 14, 15, 16 and 25)** are defined in the study area (Figure 1). However, analyses for all hydrometric stations within the Cariboo regional boundary are included in this report; the complete analyses for zone 14 and 16 will be captured in the Thompson Okanagan report.

The analyses for this report used the 30-year normal period of 1981 to 2010 and, for frequency analyses, all available Environment Canada hydrometric data up to 2012. The 1999 BCSI report considered data from 1960 to 1995 with a 30-year normal period of 1961 to 1990. The current report includes additional calculations of: flow duration, average year flow (average of annual mean flow for full record period) and standard deviations for all streamflow characteristics.

Regional streamflow data are summarized in tabular form. Table 2 provides a summary of annual discharges, monthly distributions and streamflow characteristic frequency ratios, including the annual flow 10-year high- and low-year frequency ratios. Table 3 lists the regional streamflow characteristics with the number of years used in the analysis. Tables 4, 5, 6, 7 and 8 list the results of frequency analyses of instantaneous peak flows, annual mean flows June to September 7-day low flows, and annual 7-day low flows, respectively. Gaps in these tables are attributed to unavailable data or the metric not being calculated due to extreme low flows that don't match the Log Pearson Type III distribution for 7-day low flow analysis. Table 9 lists the percent of time that daily flows are exceeded. The relationship between selected streamflow parameters and certain basin characteristics are presented in graphical form. Variation of normal annual runoff and 10-year peak flow with median elevation are presented in Figures 3 and 4-3, while variation of 10-year peak flow, 10-year 7-day June to September low flow, and annual low flow with drainage area are presented in Figures 4-1, 4-2, 5-1, 5-2, 6-1 and 6-2, respectively. The various parameters in these tables are extracted from Excel spreadsheets containing streamflow summary data, graphs and figures.

In contrast to the previous version of this report, hydrologic zone design curves are not included for the various streamflow indices. Despite the substantial effort that went into delineating zones with similar streamflow characteristics, significant variability still exists within each zone. In many cases when using this report, professional judgment is required to decide which stations are most representative of the ungauged watershed in question. In addition, because the frequency analyses in this iteration used all available data, the record period is not the same for all stations. Therefore, the relative position of

a particular station's streamflow metric (e.g., peak flow) on the plots is influenced in part by the length of the record period analyzed, and so all stations are not necessarily directly comparable. Finally, several stations included in the original report have been decommissioned, resulting in fewer data points from which to draw a regional curve.

4. STREAMFLOW DATA SHEETS

This report section describes the period of record used, the compilation of streamflow data, the procedures for estimating missing data, and the formats for presenting the summarized data. Annual values are based on a calendar year, rather than a water year (October - September). All available data up to the year 2012 were compiled and stored in the HEC-DSS database. However, data from years 1977 to 2012 are presented in the datasheet and the calculated normal values are based on the 1981-2010 period

The hydrometric stations (data) included in the analyses met the following criteria:

- natural flow (or flow with minor regulation);
- minimum 12 years of substantially complete monthly flow data (with a few exceptions); and
- Measured instantaneous discharge.

Compiled streamflow characteristics included:

- monthly flow;
- annual flow;
- monthly flow variation;
- normal annual runoff;
- instantaneous peak flow and date of occurrence; and
- seven-day average low flow.

Each station datasheet contains basic hydrometric station information such as drainage area and station location (i.e., station longitude, latitude and median elevation). The procedures used for calculating this information are described below.

The drainage areas for each WSC station were determined as follows. Upstream watersheds for areas within BC were delineated based on the BC Freshwater Atlas (FWA) "fundamental watersheds". Watersheds outside of BC and within Canada were delineated using the GeoBase Canadian Digital Elevation Data (CDED) digital elevation model (DEM). Drainage areas in the United States were delineated using the USGS National Elevation Dataset (NED) DEM. The results were checked against the highest resolution topography available, and any errors (especially in flat areas) were corrected manually. The BC FWA, CDED, and NED watershed polygons were joined together to form the overall upstream watersheds, with some manual editing at the BC provincial boundary to match up a BC FWA watershed with either the CDED or NED watershed.

The hydrometric station locations are referenced at the centre of a stream. Some of these station locations differ from WSC documented station locations. Where WSC recorded

station locations (latitude and longitude) were found to be inaccurate (usually by comparing calculated upstream watershed areas with the areas provided by WSC), the WSC metadata records with descriptions of locations and 1:50,000 (or sometimes 1:250,000 scale) maps showing positions were used along with best judgment to determine the station locations.

Median elevation was calculated using the delineated watersheds overlaid with DEM data: BC TRIM DEM (25m cell size) for regions within BC. The GeoBase CDED DEM (0.75 arc-second cell size) was used for regions outside of BC and within Canada, and the NED DEM (2 arc-second cell size) was used for regions in the US. An ArcGIS function was used to calculate median elevation for each hydrometric station upstream watershed.

4.1 Annual and Monthly Streamflow

Monthly and annual discharges are reported in m^3/s. The normal value is for the years 1981-2010.

For months with missing values in the 1981-2010 period, monthly normals are computed from the available record during this period.

Monthly streamflow values for the normal period are provided in mm (referred to as "runoff" rather than "flow"), and are calculated as follows:

$$\text{Runoff} = 86.4\ Q\ n\ /\ A$$

where: Q is the normal monthly discharge in m^3/s
n is the number of days in the month
A is the drainage area in km^2.

The annual runoff in mm is calculated using the above equation based on the normal annual discharge using n = 365.25. This value is used for all stations for the 1981-2010 period and, as a result, the sum of monthly runoff does not always exactly equal the annual runoff.

Annual discharges are summarized in graphical format as "Percent of Normal" or "Percent of Average Flow" (where full normal period data are not available) to illustrate the annual streamflow variation or the departure from normal or average for each year. Monthly runoff values for the normal period are summarized in graphical format as "Percent of Annual" for each month.

Frequency analyses used annual peak instantaneous flows, seven-day annual low flows, and June to September low flows from the HYDAT database (i.e., the Water Survey of Canada hydrometric database). Estimates are not provided for years with missing data. Both high flow and low flow frequency analyses used the Log Pearson Type III method. These estimates are summarized in the Annual High Flow and Annual Low Flow figures,

which show the frequency analyses results as ratios of various return period flows to the 10-year return period (10% chance of exceedance) “index” annual flow.

4.2 Peak Flow

Annual maximum instantaneous discharges are presented in the datasheets rather than maximum daily discharges, and form the basis of the peak flow recurrence interval analyses. Date of occurrence is included as this provides some indication of the type of peak flow event (rainfall, snowmelt, rain-on-snow). Except for instances with published maximum daily discharge, there are no estimates made for years with missing values. In such cases, the instantaneous peak flow estimates used a ratio of instantaneous to daily peak flow based on data for other years. These values are marked with comments in the individual station datasheets.

Peak flow frequency analyses covered all available peak flow data. These analyses are based on Bulletin 17B method “Guidelines for Determining Flood Flow Frequency” by the Interagency Advisory Committee on Water Data, USGS (1982), which specifies use of the Log-Pearson Type III distribution. This distribution provided the best fit to the data for most of the hydrological zones in the previous version of this report.

The Peak Flow frequency analyses results are summarized by return period as a ratio to the 10-year return period “index” peak flow. The 10-year return period instantaneous peak flow was used as it can be estimated with some reliability with the available data and provides a reasonably stable value for relating to other return periods.

4.3 Seven-Day Average Low Flow

Seven-day average low flows in the datasheets were compiled from daily discharge data. The periods selected for analyses are June-September and the calendar year. For each period, the minimum value of the seven-day average discharge was computed using HEC-SSP software. There are no estimates made for missing years or for gaps within years.

Low flow frequency analyses covered all available data for both the June-September and the calendar year data sets. The 10-year recurrence interval low flow is shown in the data sheets. The low flow frequency analyses used the Log-Pearson Type III distribution, recommended by the ASCE Task Committee (ASCE, 1980), as it provides the best fit to the data in all zones studied.

The low flow frequency data are summarized in the Annual 7-Day Low Flow graph, which shows the frequency analysis results in terms of return period flows as a ratio to the 10-year return period “index” low flow. For hydrometric stations with exceptionally low discharges, the 7-day annual and June-September low flow values couldn’t be fitted to a Log Pearson Type III distribution and therefore frequency values were not computed.

5. SUMMARY

Updates to the approach used in the analyses for this regional streamflow inventory, since the original report, include: basin area determination, alteration of the normal period to 30 years to align with the Environment Canada standard, use of all available data in the calculation of recurrence intervals for peak flow and low flow metrics, and the inclusion of daily flow duration analyses. Due to ongoing changes in the number of operational hydrometric stations, the amount of data available for use in regional analyses may change. This report is scheduled to be updated approximately every ten years, or following substantial changes to the hydrometric network, as resources allow.

REFERENCES

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FIGURES

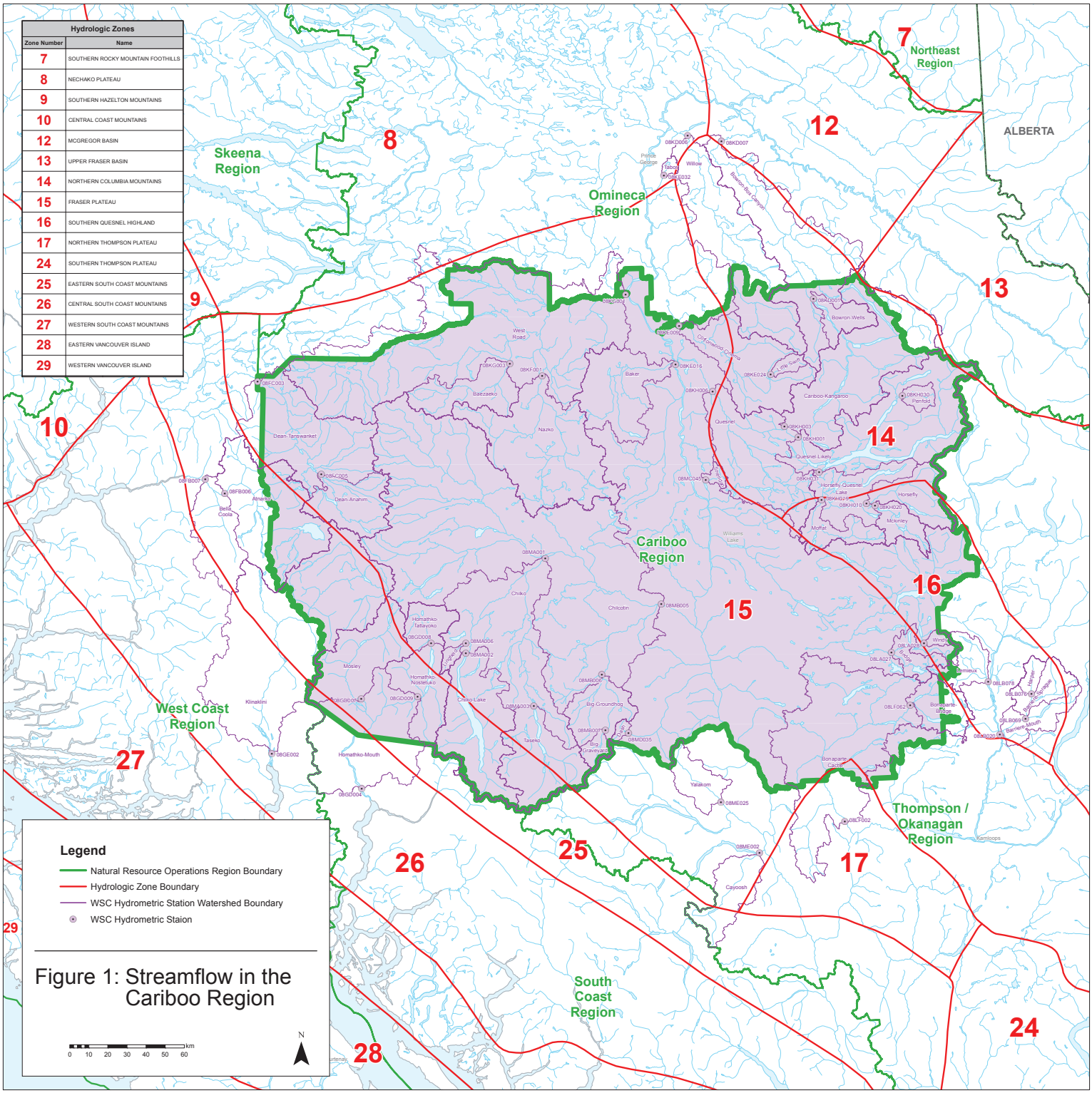
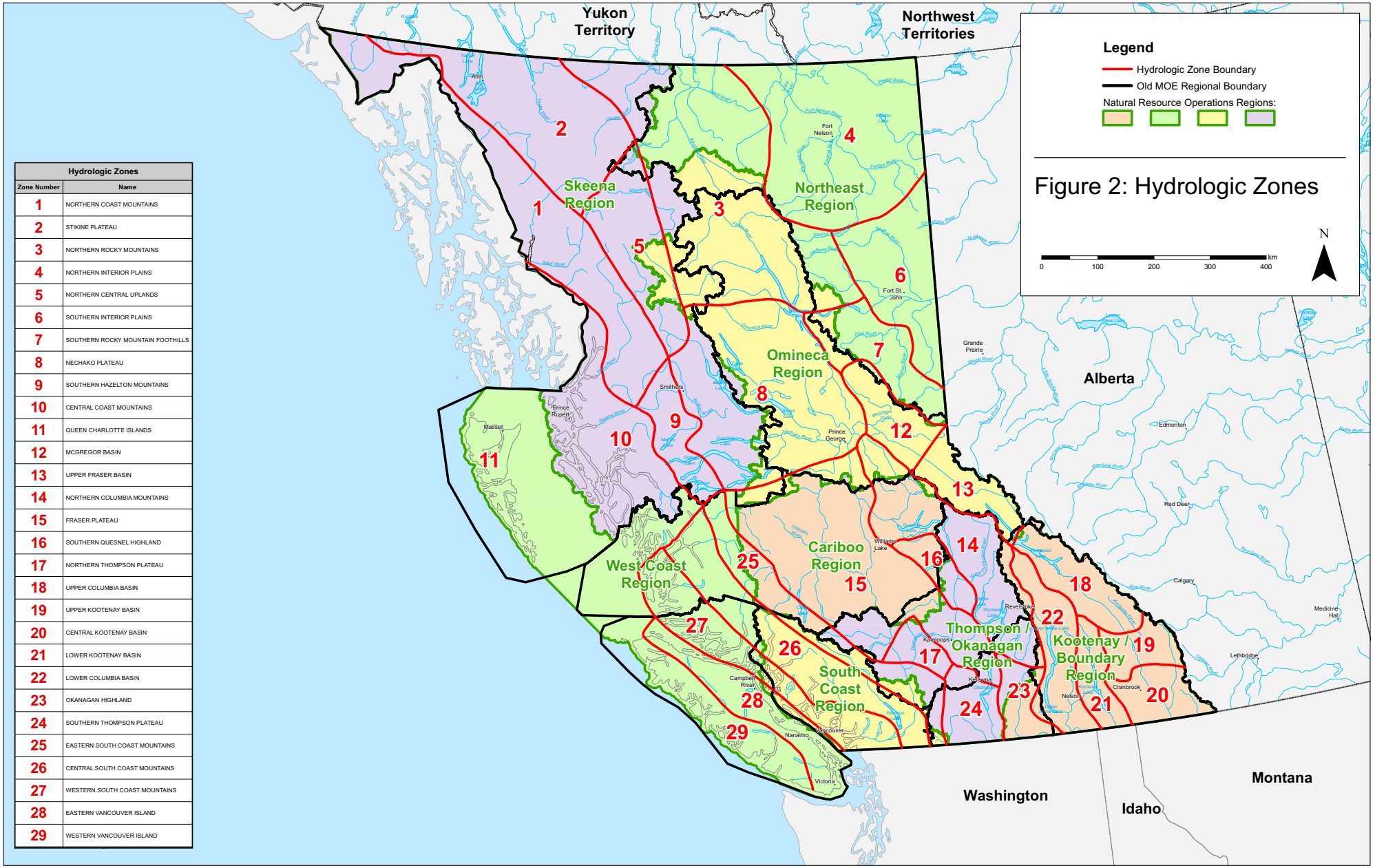


Figure 1: Streamflow in the Cariboo Region



Hydrologic Zones	
Zone Number	Name
1	NORTHERN COAST MOUNTAINS
2	STIKINE PLATEAU
3	NORTHERN ROCKY MOUNTAINS
4	NORTHERN INTERIOR PLAINS
5	NORTHERN CENTRAL UPLANDS
6	SOUTHERN INTERIOR PLAINS
7	SOUTHERN ROCKY MOUNTAIN FOOTHILLS
8	NECHAKO PLATEAU
9	SOUTHERN HAZELTON MOUNTAINS
10	CENTRAL COAST MOUNTAINS
11	QUEEN CHARLOTTE ISLANDS
12	MCGREGOR BASIN
13	UPPER FRASER BASIN
14	NORTHERN COLUMBIA MOUNTAINS
15	FRASER PLATEAU
16	SOUTHERN QUESNEL HIGHLAND
17	NORTHERN THOMPSON PLATEAU
18	UPPER COLUMBIA BASIN
19	UPPER KOOTENAY BASIN
20	CENTRAL KOOTENAY BASIN
21	LOWER KOOTENAY BASIN
22	LOWER COLUMBIA BASIN
23	OKANAGAN HIGHLAND
24	SOUTHERN THOMPSON PLATEAU
25	EASTERN SOUTH COAST MOUNTAINS
26	CENTRAL SOUTH COAST MOUNTAINS
27	WESTERN SOUTH COAST MOUNTAINS
28	EASTERN VANCOUVER ISLAND
29	WESTERN VANCOUVER ISLAND

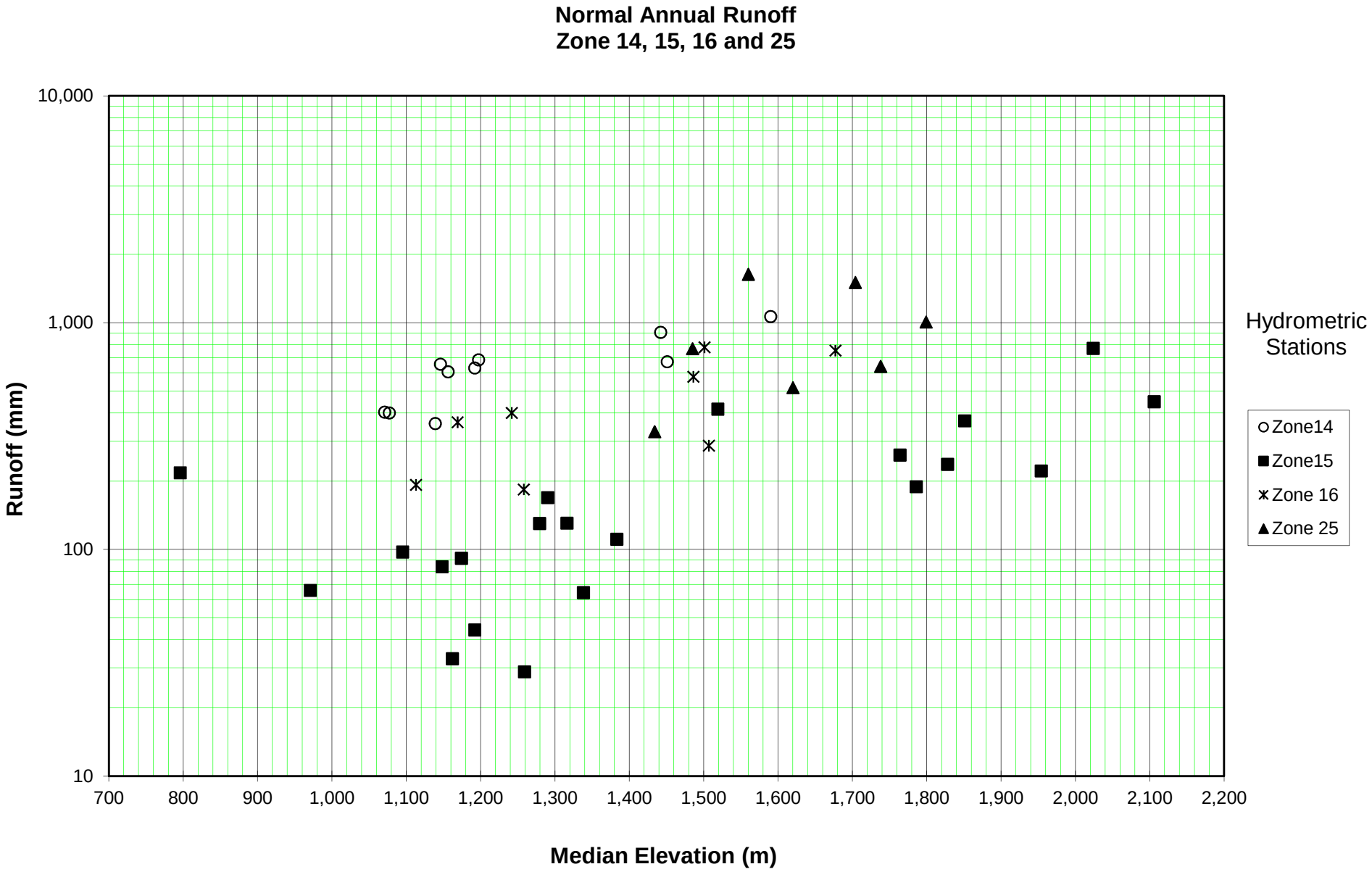


Figure 3 Normal Annual Runoff

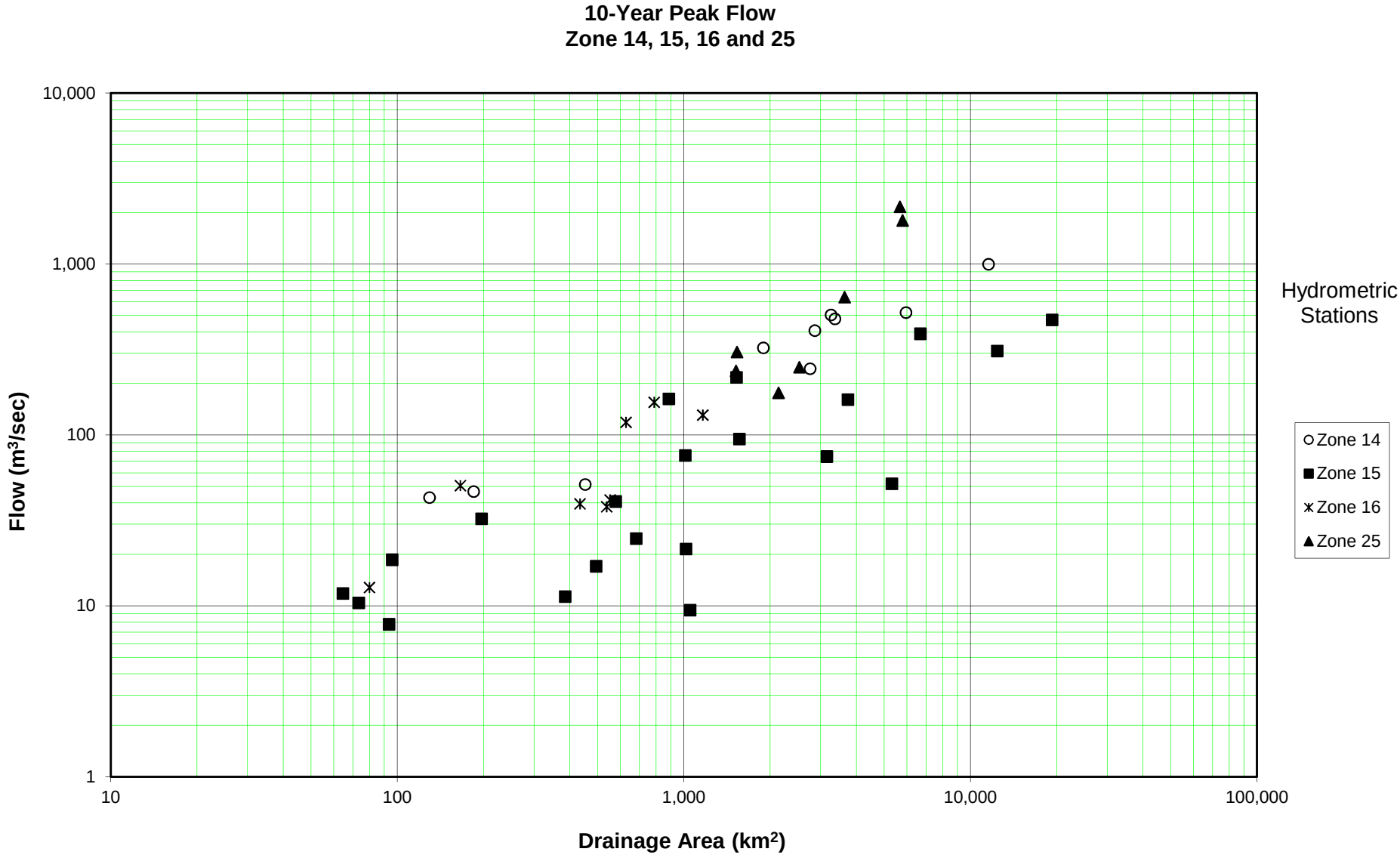


Figure 4-1 10-Year Peak Instantaneous Flow vs Drainage Area

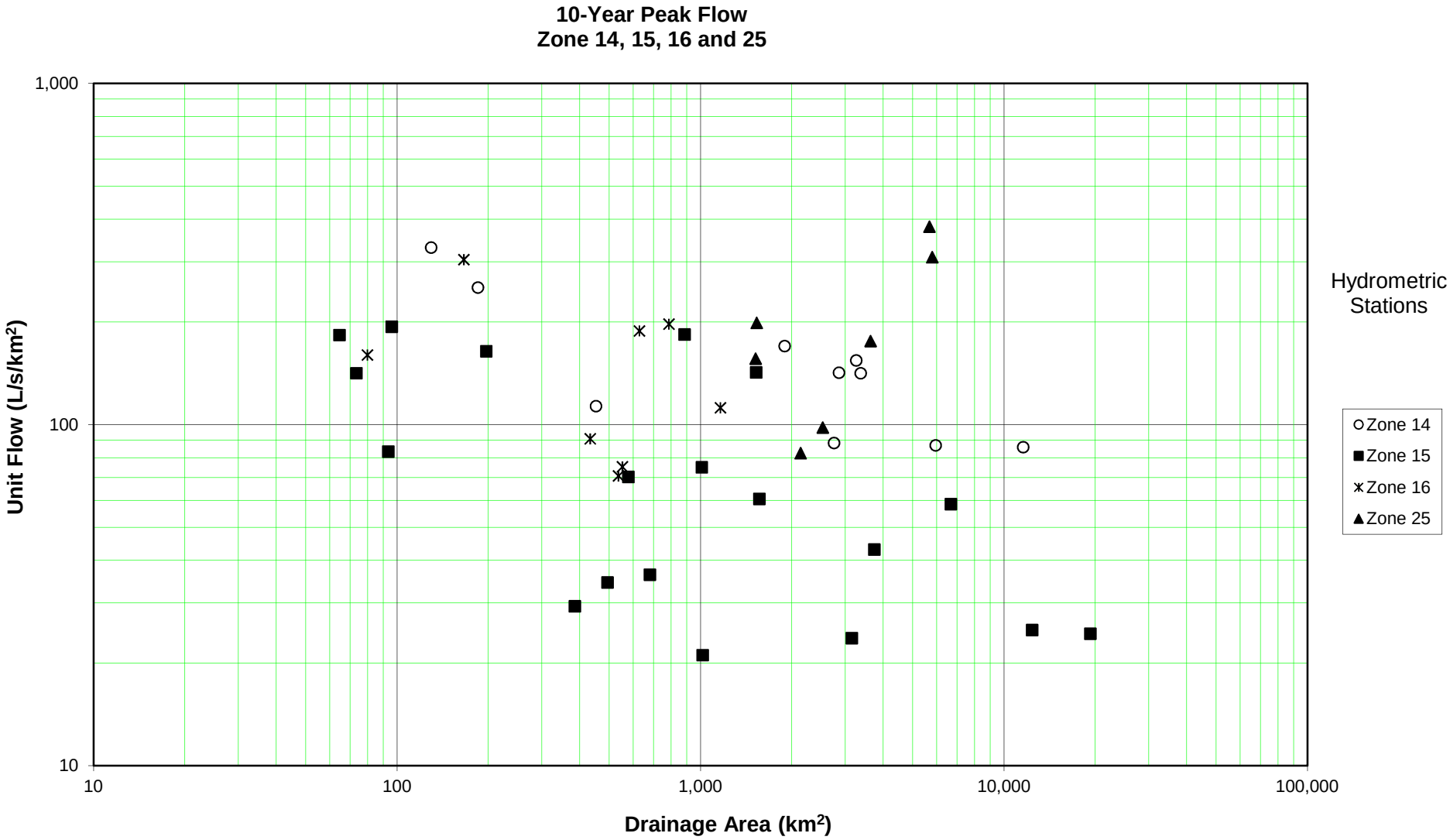


Figure 4-2 10-Year Peak Instantaneous Unit Flow vs Drainage Area

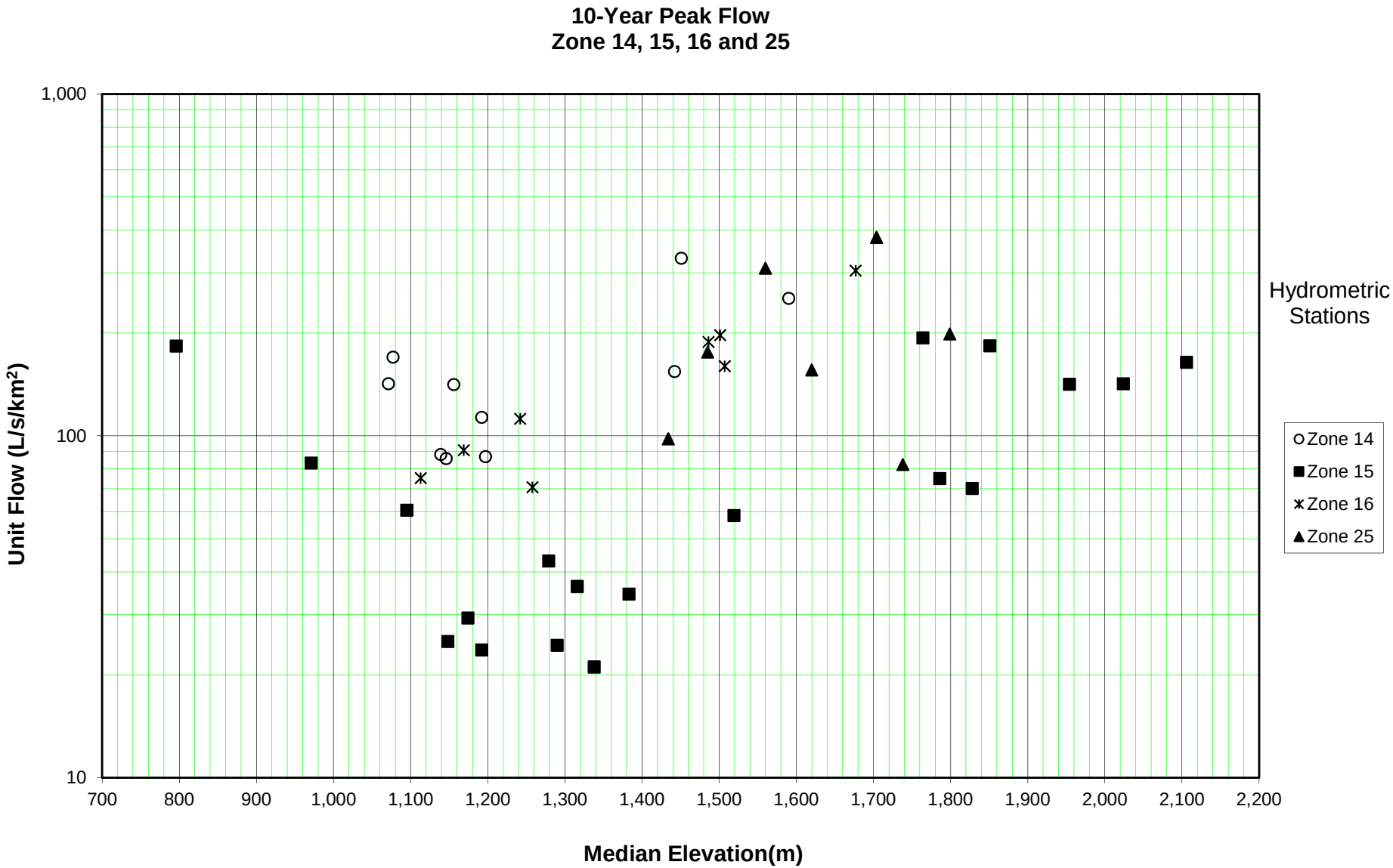


Figure 4-3 10-Year Peak Instantaneous Unit Flow vs Median Elevation

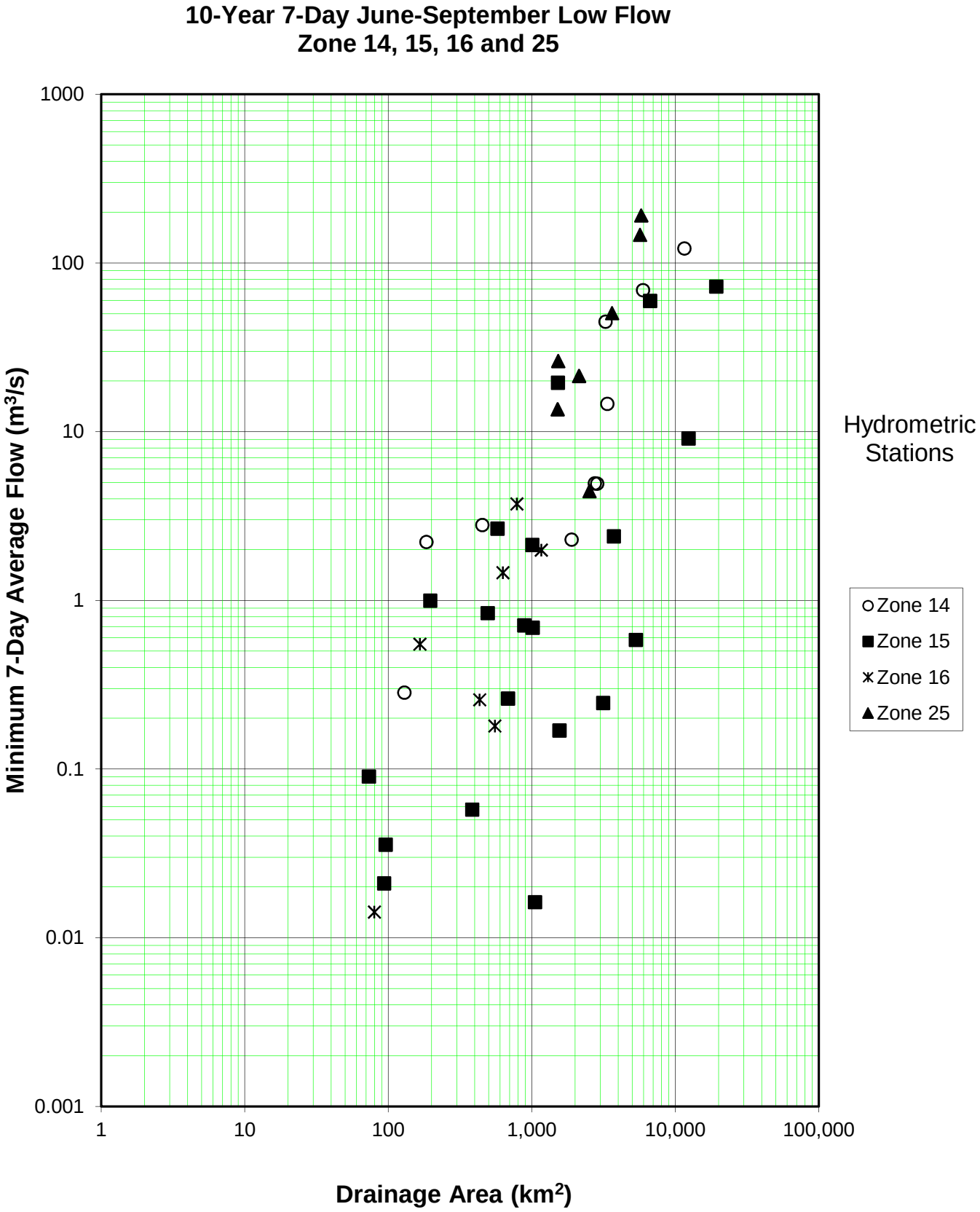


Figure 5-1 10-Year 7-Day June-September Low Flow vs Drainage Area

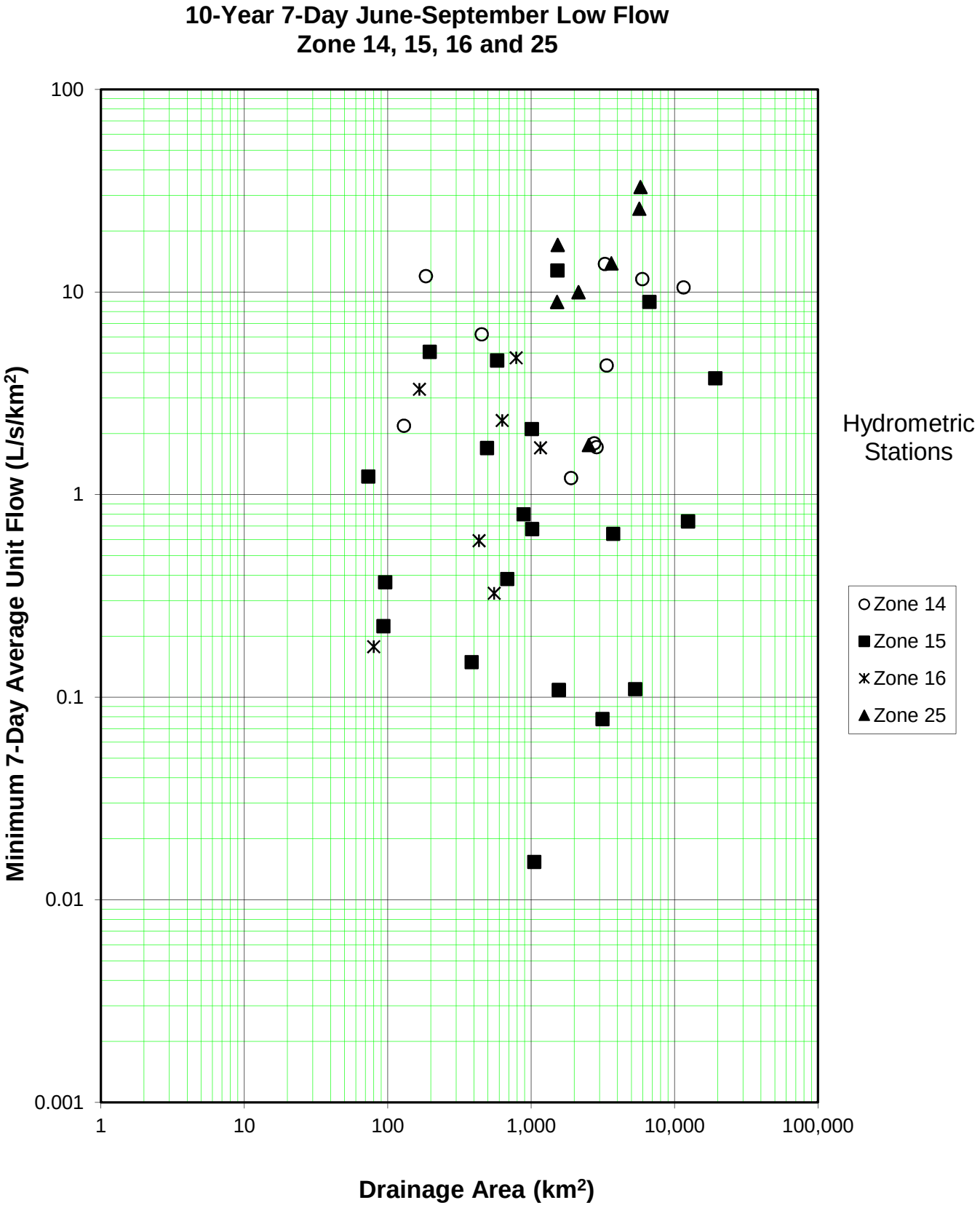


Figure 5-2 10-Year 7-Day June-September Low Flow per Unit Area vs Drainage Area

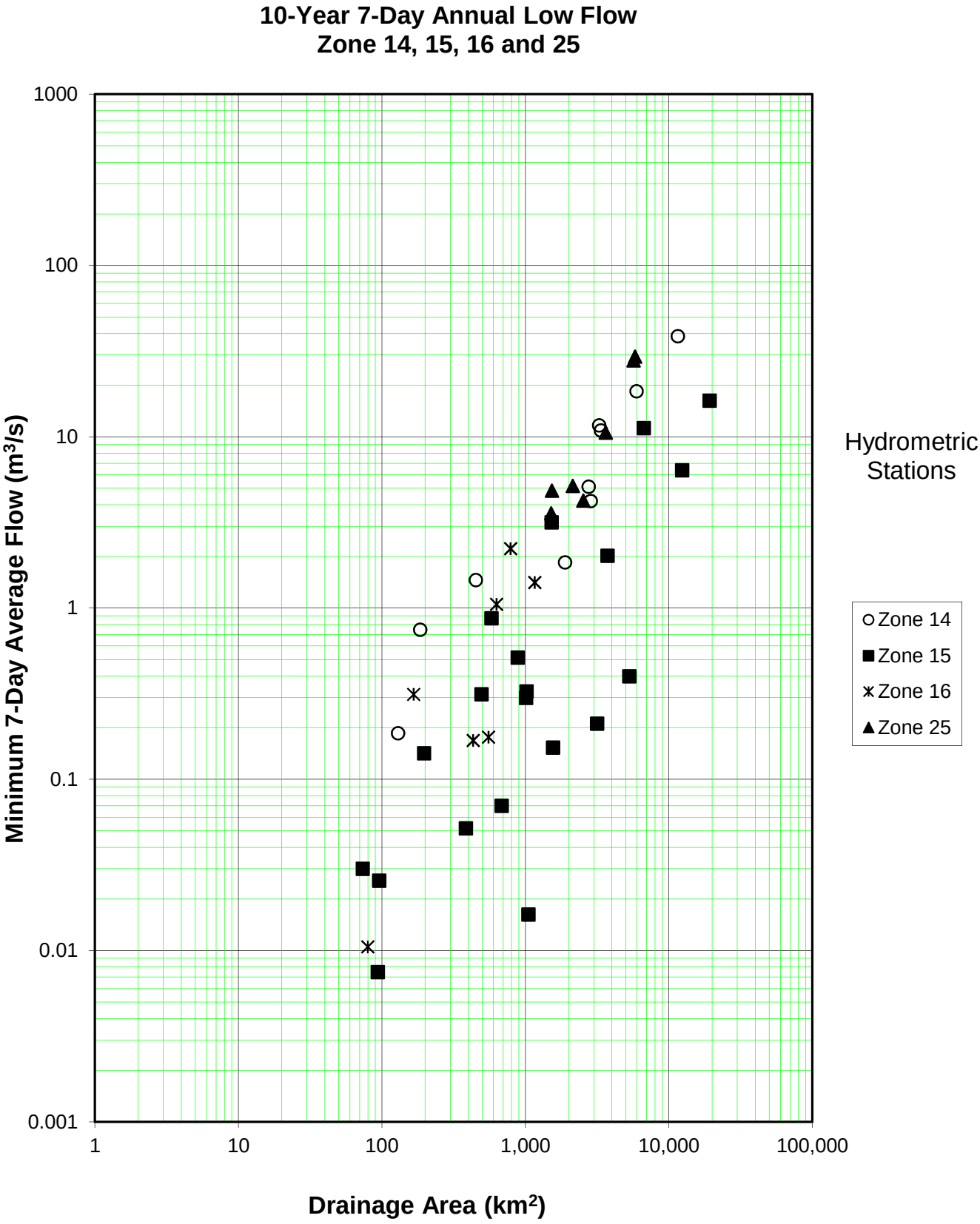


Figure 6-1 10-Year 7-Day Annual Low Flow vs Drainage Area

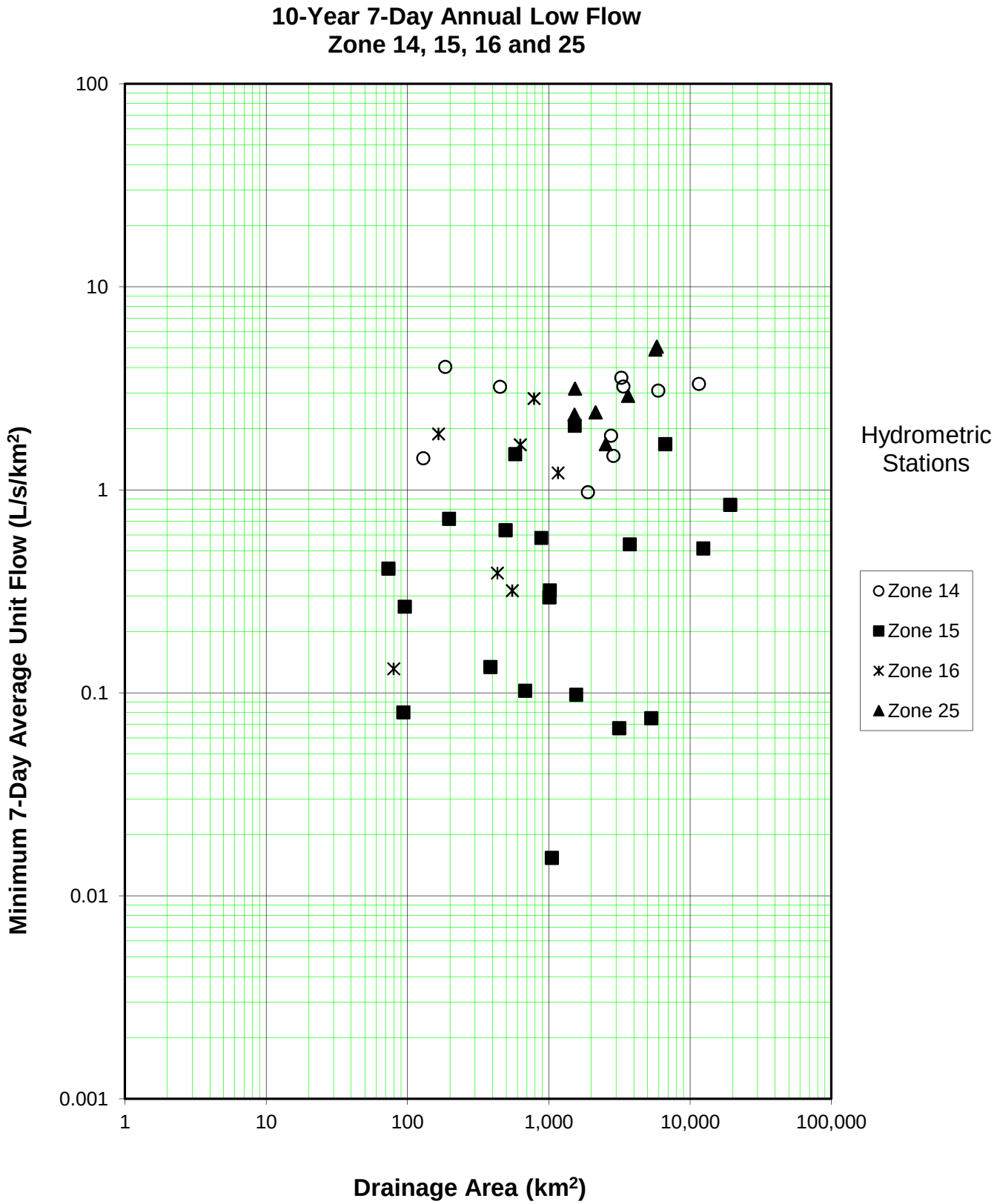


Figure 6-2 10-Year 7-Day Annual Low Flow per Unit Area vs Drainage Area

TABLES

Hydro-logic Zone	Watershed: Stream	Watershed: Hydrometric Station	Drainage Area (km^2)	Median Elevation (m)	Normal Annual Runoff[1]: (mm)	Normal Annual Runoff[1]: (m^3/s)	Monthly Distribution (%): Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Flow Ratio 10-Year : Avg Year: High	Low	Peak Flow: 10 - Year (m^3/s)	Ratio 100-Yr:10-Yr	10-Year 7-Day Low Flow: Jun-Sep (m^3/s)	Annual (m^3/s)
14	Bowron-Box Canyon	08KD007	3371.42	1156	606	64.74	3	2	3	10	23	21	10	5	6	7	6	4	1.207	0.789	476.38	1.373	14.615	10.869
14	Bowron-Wells	08KD001	452.41	1192	630	9.03	3	3	3	7	19	22	14	8	5	5	6	4	1.189	0.807	51.20	1.245	2.792	1.453
14	Cariboo-Kangaroo	08KH003	3263.78	1442	904	93.51	2	2	2	6	19	24	17	10	7	5	4	3	1.161	0.837	503.21	1.288	44.844	11.644
14	Cottonwood-Cinema	08KE009	1895.77	1077	399	23.96	2	2	4	19	28	16	9	4	3	5	5	2	1.318	0.726	322.05	1.457	2.286	1.847
14	Horsefly-Quesnel Lake	08KH031	2758.27	1139	359	31.36	7	5	4	10	26	24	11	3	3	5	5	3	1.410	0.658	243.34	1.220	4.938	5.099
14	Little Swift	08KE024	129.70	1451	671	2.76	2	1	2	9	29	25	10	4	4	6	5	2	1.275	0.738	42.86	1.571	0.283	0.186
14	Penfold	08KH030	184.77	1590	1062	6.22	2	2	2	5	17	28	19	9	7	7	4	2	1.186	0.807	46.60	1.148	2.213	0.745
14	Quesnel-Likely	08KH001	5964.97	1197	686	129.59	3	3	3	4	12	22	19	12	7	6	5	4	1.223	0.782	518.72	1.262	68.967	18.385
14	Quesnel	08KH006	11571.02	1146	655	240.26	3	2	3	6	15	22	18	11	7	6	5	4	1.190	0.818	993.60	1.242	121.886	38.517
14	Willow	08KD006	2864.06	1071	403	36.58	3	2	4	14	29	17	8	4	4	6	5	3	1.327	0.696	406.44	1.859	4.908	4.204
15	Baezaeko	08KG003	1017.07	1338	64	2.07	3	3	4	13	22	16	12	6	6	6	5	3	1.458	0.630	21.43	1.516	0.687	0.326
15	Baker	08KE016	1562.84	1095	97	4.81	2	2	4	25	32	11	10	3	3	3	3	2	1.534	0.374	94.60	1.751	0.169	0.153
15	Big-Graveyard	08MB007	196.76	2106	447	2.79	1	1	1	2	16	28	23	13	6	4	2	1	1.297	0.758	32.28	1.862	0.997	0.141
15	Big-Groundhog	08MB006	1010.85	1786	189	6.04	1	1	1	4	19	28	21	11	6	4	2	1	1.366	0.709	75.73	2.640	2.130	0.298
15	Bonaparte-Bridge	08LF062	681.89	1316	130	2.82	3	3	4	9	23	23	15	9	5	3	2	2	1.556	0.529	24.73	1.888	0.261	0.070
15	Bonaparte-Cache	08LF002	5319.66	1,162	33	5.55	3	3	5	10	22	21	13	6	5	4	4	3	1.587	0.470	51.75	1.745	0.583	0.399
15	Bridge	08LA027	385.51	1174	91	1.11	3	3	4	12	25	22	16	6	3	2	2	2	1.888	0.341	11.31	2.428	0.058	0.052
15	Cayoosh	08ME002	886.53	1851	369	10.35	2	2	3	4	18	35	23	4	2	2	2	2	1.635	0.379	162.68	1.452	0.710	0.514
15	Chilcotin	08MB005	19277.14	1290	169	103.23	2	2	2	3	8	17	22	18	10	7	4	3	1.202	0.832	469.87	1.443	72.299	16.271
15	Chilko	08MA001	6686.00	1519	415	87.85	2	2	2	2	6	18	23	20	11	7	4	3	1.186	0.747	390.57	1.281	59.678	11.232
15	Dash	08MD035	73.46	1954	221	0.52	2	1	1	3	24	39	11	4	4	3	2	2	1.436	0.617	10.39	1.377	0.090	0.030
15	Dean-Anahim	08FC005	1053.34	1259	29	0.96	6	5	6	21	26	16	7	2	2	4	5	7	1.552	0.585	9.42	1.838	0.016	0.016
15	Dean-Tanswanket	08FC003	3741.92	1279	130	15.41	2	2	3	10	28	25	11	4	4	4	4	3	1.474	0.632	160.92	1.650	2.397	2.013
15	Homathko-Tatlayoko	08GD008	494.32	1383	111	1.73	3	3	3	5	14	21	19	12	7	6	4	3	1.335	0.712	17.01	1.796	0.840	0.313
15	Lingfield	08MA006	96.02	1,764	260	0.79	1	1	1	4	35	37	12	3	1	2	2	1	1.520	0.589	18.58	1.839	0.036	0.026
15	Nazko	08KF001	3154.89	1192	44	4.41	2	2	3	23	26	14	10	4	3	4	3	3	1.599	0.469	74.55	1.600	0.246	0.211
15	Sheridan	08MC045	93.66	971	66	0.20	6	3	7	41	17	5	4	2	2	2	2	2	1.792	0.387	7.80	2.062	0.021	0.008
15	Tabor	08KE032	64.60	796	217	0.44	3	4	10	40	21	7	3	1	1	4	4	2	1.492	0.520	11.82	2.059		
15	Taseko	08MA003	1527.22	2024	768	37.18	1	1	1	1	8	20	25	21	10	5	3	2	1.187	0.847	216.99	1.291	19.498	3.159
15	West Road	08KG001	12391.31	1148	84	32.93	3	3	4	16	25	15	11	5	4	5	5	4	1.460	0.612	309.71	1.640	9.132	6.367
15	Yalakom	08ME025	579.19	1828	237	4.34	3	3	3	4	12	23	19	12	8	6	4	3	1.299	0.752	40.67	1.598	2.661	0.869
16	Barriere-Mouth	08LB020	1164.34	1242	399	14.72	2	2	3	9	29	29	11	4	3	3	4	2	1.313	0.684	130.54	1.263	1.983	1.409
16	Barriere-Sprague	08LB069	628.83	1486	577	11.50	2	2	2	8	29	31	12	4	3	3	3	2	1.311	0.723	118.22	1.387	1.458	1.049
16	Harper	08LB076	166.12	1677	753	3.96	2	1	2	7	28	31	12	4	3	4	3	2	1.301	0.731	50.55	1.236	0.550	0.313
16	Horsefly	08KH010	787.80	1501	777	19.39	2	2	2	7	22	27	16	6	5	5	4	2	1.230	0.772	155.16	1.337	3.728	2.218
16	Lemieux	08LB078	537.37	1258	184	3.13	3	2	3	13	36	19	9	5	2	3	3	3	1.514	0.407	37.98	1.580		
16	Mckinley	08KH020	433.88	1169	364	5.00	3	3	4	11	27	21	10	4	3	4	5	4	1.308	0.639	39.40	1.563	0.257	0.169
16	Moffat	08KH019	553.19	1113	192	3.37	3	2	4	19	30	17	9	3	3	4	4	3	1.381	0.625	41.62	1.564	0.180	0.176
16	Windy	08LA028	79.99	1507	287	0.73	2	1	1	9	41	30	11	3	2	4	3	2	1.337	0.630	12.79	1.603	0.014	0.011
25	Atnarko	08FB006	2532.73	1,434	330	26.46	4	3	3	5	21	25	14	7	5	5	5	4	1.363	0.686	248.32	1.462	4.444	4.246
25	Bella Coola	08FB007	3637.76	1485	766	88.32	2	2	2	3	12	18	20	17	10	7	4	3	1.208	0.821	639.39	1.508	50.341	10.545
25	Chilko-Lake	08MA002	2139.72	1738	641	43.49	3	2	2	2	4	15	23	21	12	8	5	4	1.185	9.154	176.30	1.236	21.362	5.155
25	Homathko-Mouth	08GD004	5683.81	1704	1502	270.56	2	2	2	3	8	16	22	20	12	7	4	2	1.140	0.858	2161.78	1.660	146.644	27.894
25	Homathko-Nostetuko	08GD009	1519.53	1,620	516	24.84	2	2	2	3	9	18	22	18	10	7	4	3	1.245	0.784	237.01	1.132	13.574	3.571
25	Klinaklini	08GE002	5805.10	1560	1630	299.76	2	2	2	3	9	16	21	19	12	7	4	2	1.103	0.868	1795.74	1.774	191.586	29.393
25	Mosley	08GD007	1534.03	1799	1006	48.92	2	2	2	3	9	19	23	20	11	6	3	2	1.138	0.867	304.79	1.287	26.231	4.833

Table 2: Cariboo Region Streamflow Summary

Watershed		Hydro-logic Zone	Median Elev-ation (m)	Drainage Area (km^2)	Normal Annual Runoff[1] (mm)	# years n	10-Year Annual Peak Flow (m^3/s)	($L/s/km^2$)	# years n	Annual High Flow 10-yr (m^3/s)	Ratio 10-yr:Avg-yr	# years n	Annual Low Flow 10-yr (m^3/s)	Ratio 10-yr:Avg-yr	# years n	10-Year 7-Day Low Flow June-September (m^3/s)	($L/s/km^2$)	# years n	10-Year 7-Day Low Flow Annual (m^3/s)	($L/s/km^2$)	# years n
Stream	Hydro-metric Station																				
Bowron-Box Canyon	08KD007	14	1156	3371.42	606	28	476.38	141.30	34	78.07	1.207	34	51.02	0.789	34	14.615	4.335	34	10.869	3.224	35
Bowron-Wells	08KD001	14	1192	452.41	630	12	51.20	113.18	41	10.92	1.189	32	7.41	0.807	35	2.792	6.172	42	1.453	3.213	34
Cariboo-Kangaroo	08KH003	14	1442	3263.78	904	12	503.21	154.18	66	108.48	1.161	55	78.16	0.837	58	44.844	13.740	67	11.644	3.568	55
Cottonwood-Cinema	08KE009	14	1077	1895.77	399	16	322.05	169.88	44	32.13	1.318	34	17.70	0.726	34	2.286	1.206	44	1.847	0.974	45
Horsefly-Quesnel Lake	08KH031	14	1139	2758.27	359	5	243.34	88.22	6	47.39	1.410	5	22.11	0.658	5	4.938	1.790	6	5.099	1.849	6
Little Swift	08KE024	14	1451	129.70	671	28	42.86	330.46	40	3.54	1.275	39	2.05	0.738	40	0.283	2.183	40	0.186	1.432	40
Penfold	08KH030	14	1590	184.77	1062	12	46.60	252.21	14	7.57	1.186	12	5.15	0.807	12	2.213	11.977	14	0.745	4.030	14
Quesnel-Likely	08KH001	14	1197	5964.97	686	28	518.72	86.96	86	156.87	1.223	76	100.31	0.782	79	68.967	11.562	86	18.385	3.082	86
Quesnel	08KH006	14	1146	11571.02	655	30	993.60	85.87	74	283.31	1.190	67	194.75	0.818	69	121.886	10.534	73	38.517	3.329	73
Willow	08KD006	14	1071	2864.06	403	23	406.44	141.91	30	49.18	1.327	30	25.78	0.696	31	4.908	1.714	32	4.204	1.468	33
Baezaeko	08KG003	15	1338	1017.07	64	13	21.43	21.07	21	3.45	1.458	21	1.49	0.630	21	0.687	0.675	21	0.326	0.320	21
Baker	08KE016	15	1095	1562.84	97	29	94.60	60.53	48	7.81	1.534	48	1.91	0.374	49	0.169	0.108	49	0.153	0.098	49
Big-Graveyard	08MB007	15	2106	196.76	447	30	32.28	164.05	66	3.58	1.297	38	2.09	0.758	38	0.997	5.066	38	0.141	0.719	38
Big-Groundhog	08MB006	15	1786	1010.85	189	30	75.73	74.92	70	8.21	1.366	38	4.26	0.709	38	2.130	2.107	38	0.298	0.295	38
Bonaparte-Bridge	08LF062	15	1316	681.89	130	12	24.73	36.27	34	4.45	1.556	34	1.51	0.529	34	0.261	0.383	34	0.070	0.103	35
Bonaparte-Cache	08LF002	15	1162	5319.66	33	29	51.75	9.73	49	8.90	1.587	38	2.63	0.470	39	0.583	0.109	39	0.399	0.075	39
Bridge	08LA027	15	1174	385.51	91	14	11.31	29.33	14	2.17	1.888	14	0.39	0.341	14	0.058	0.149	14	0.052	0.134	14
Cayoosh	08ME002	15	1851	886.53	369	28	162.68	183.50	62	22.73	1.635	49	5.27	0.379	39	0.710	0.801	39	0.514	0.580	39
Chilcotin	08MB005	15	1290	19277.14	169	30	469.87	24.37	42	123.06	1.202	42	85.17	0.832	42	72.299	3.751	42	16.271	0.844	42
Chilko	08MA001	15	1519	6686.00	415	30	390.57	58.42	86	104.89	1.186	60	66.09	0.747	47	59.678	8.926	85	11.232	1.680	47
Dash	08MD035	15	1954	73.46	221	11	10.39	141.47	12	0.77	1.436	11	0.33	0.617	11	0.090	1.228	12	0.030	0.408	12
Dean-Anahim	08FC005	15	1259	1053.34	29	9	9.42	8.94	9	1.49	1.552	9	0.56	0.585	9	0.016	0.015	9	0.016	0.015	9
Dean-Tanswanket	08FC003	15	1279	3741.92	130	29	160.92	43.00	46	24.80	1.474	39	10.64	0.632	39	2.397	0.641	48	2.013	0.538	39
Homathko-Tatlayoko	08GD008	15	1383	494.32	111	30	17.01	34.42	38	2.37	1.335	30	1.26	0.712	30	0.840	1.700	38	0.313	0.633	30
Lingfield	08MA006	15	1764	96.02	260	30	18.58	193.50	38	1.22	1.520	38	0.47	0.589	38	0.036	0.370	38	0.026	0.266	38
Nazko	08KF001	15	1192	3154.89	44	11	74.55	23.63	29	7.84	1.599	28	2.30	0.469	29	0.246	0.078	30	0.211	0.067	30
Sheridan	08MC045	15	971	93.66	66	13	7.80	83.23	15	0.37	1.792	13	0.08	0.387	13	0.021	0.224	13	0.008	0.080	13
Tabor	08KE032	15	796	64.60	217	11	11.82	182.90	18	0.66	1.492	11	0.23	0.520	12						
Taseko	08MA003	15	2024	1527.22	768	29	216.99	142.08	31	44.20	1.187	29	31.54	0.847	29	19.498	12.767	29	3.159	2.069	29
West Road	08KG001	15	1148	12391.31	84	28	309.71	24.99	59	50.24	1.460	40	21.06	0.612	40	9.132	0.737	60	6.367	0.514	41
Yalakom	08ME025	15	1828	579.19	237	29	40.67	70.23	29	5.68	1.299	29	3.29	0.752	29	2.661	4.594	29	0.869	1.500	29
Barriere-Mouth	08LB020	16	1242	1164.34	399	29	130.54	112.11	69	19.12	1.313	60	9.96	0.684	62	1.983	1.703	69	1.409	1.210	71
Barriere-Sprague	08LB069	16	1486	628.83	577	30	118.22	188.01	48	15.13	1.311	47	8.34	0.723	48	1.458	2.319	48	1.049	1.668	48
Harper	08LB076	16	1677	166.12	753	26	50.55	304.29	37	5.18	1.301	35	2.91	0.731	36	0.550	3.308	37	0.313	1.885	37
Horsefly	08KH010	16	1501	787.80	777	30	155.16	196.96	49	24.03	1.230	50	15.07	0.772	51	3.728	4.732	48	2.218	2.816	48
Lemieux	08LB078	16	1258	537.37	184	23	37.98	70.69	33	4.58	1.514	28	1.23	0.407	31						
Mckinley	08KH020	16	1169	433.88	364	30	39.40	90.80	89	6.56	1.308	48	3.21	0.639	48	0.257	0.593	48	0.169	0.389	48
Moffat	08KH019	16	1113	553.19	192	28	41.62	75.24	46	4.65	1.381	44	2.11	0.625	45	0.180	0.326	46	0.176	0.319	46
Windy	08LA028	16	1507	79.99	287	11	12.79	159.89	12	0.97	1.337	11	0.46	0.630	11	0.014	0.178	12	0.011	0.131	12
Atnarko	08FB006	25	1434	2532.73	330	27	248.32	98.05	45	38.11	1.363	39	19.17	0.686	41	4.444	1.755	45	4.246	1.676	44
Bella Coola	08FB007	25	1485	3637.76	766	27	639.39	175.76	45	108.77	1.208	39	73.91	0.821	37	50.341	13.838	44	10.545	2.899	37
Chilko-Lake	08MA002	25	1738	2139.72	641	30	176.30	82.39	84	50.92	1.185	51	393.51	9.154	57	21.362	9.984	84	5.155	2.409	45
Homathko-Mouth	08GD004	25	1704	5683.81	1502	30	2161.78	380.34	56	307.05	1.140	44	231.15	0.858	48	146.644	25.800	55	27.894	4.908	40
Homathko-Nostetuko	08GD009	25	1620	1519.53	516	7	237.01	155.98	7	30.90	1.245	7	19.47	0.784	7	13.574	8.933	7	3.571	2.350	8
Klinaklini	08GE002	25	1560	5805.10	1630	28	1795.74	309.34	35	330.02	1.103	34	259.69	0.868	35	191.586	33.003	35	29.393	5.063	36
Mosley	08GD007	25	1799	1534.03	1006	12	304.79	198.68	24	55.69	1.138	13	42.44	0.867	13	26.231	17.099	23	4.833	3.151	13

[1] *If n = 30, then value is considered a "normal", otherwise it is the average annual runoff for the number of years coincident with the period 1981-2010*

Table 3: Summary of Streamflow Characteristics

Hydro-logic Zone	Watershed Stream	Hydrometric Station	Drainage Area (km^2)	Median Elevation (m)	Instantaneous Peak Flow (m^3/s) Return Period (Year) 200	100	50	25	20	10	5	2	1	1.01	# years n
14	Bowron-Box Canyon	08KD007	3371.42	1156	708.30	654.28	600.91	547.71	530.52	476.38	419.77	333.33	268.62	190.05	34
14	Bowron-Wells	08KD001	452.41	1192	66.87	63.75	60.39	56.72	55.46	51.20	46.25	37.45	29.66	18.58	41
14	Cariboo-Kangaroo	08KH003	3263.78	1442	691.37	648.09	605.03	561.79	547.73	503.21	456.15	383.14	327.35	257.96	66
14	Cottonwood-Cinema	08KE009	1895.77	1077	511.95	469.07	425.88	382.03	367.69	322.05	273.59	198.69	142.79	77.67	44
14	Horsefly-Quesnel Lake	08KH031	2758.27	1139	308.88	296.79	283.21	267.76	262.29	243.34	220.24	176.80	136.34	77.62	6
14	Little Swift	08KE024	129.70	1451	75.73	67.35	59.50	52.11	49.81	42.86	36.09	26.73	20.54	14.03	40
14	Penfold	08KH030	184.77	1590	55.34	53.50	51.58	49.55	48.87	46.60	44.03	39.60	35.72	30.01	14
14	Quesnel-Likely	08KH001	5964.97	1197	692.39	654.86	616.20	575.91	562.48	518.72	470.30	389.98	323.48	232.75	86
14	Quesnel	08KH006	11571.02	1146	1299.80	1234.47	1166.70	1095.56	1071.71	993.60	906.34	759.52	635.74	463.17	74
14	Willow	08KD006	2864.06	1071	890.67	755.70	636.09	529.82	498.12	406.44	323.15	219.11	158.15	102.19	30
15	Baezaeko	08KG003	1017.07	1338	35.77	32.48	29.20	25.89	24.82	21.43	17.88	12.52	8.65	4.36	21
15	Baker	08KE016	1562.84	1095	187.53	165.68	144.09	122.70	115.85	94.60	73.18	43.22	24.33	7.81	48
15	Big-Graveyard	08MB007	196.76	2106	69.86	60.12	51.06	42.62	40.02	32.28	24.93	15.29	9.45	4.11	66
15	Big-Groundhog	08MB006	1010.85	1786	252.29	199.97	155.16	117.06	106.10	75.73	50.38	23.14	10.65	2.73	70
15	Bonaparte-Bridge	08LF062	681.89	1316	54.77	46.68	39.34	32.67	30.65	24.73	19.24	12.21	8.02	4.13	34
15	Bonaparte-Cache	08LF002	5319.66	1162	101.79	90.30	78.77	67.20	63.45	51.75	39.83	23.00	12.45	3.57	49
15	Bridge	08LA027	385.51	1174	34.79	27.44	21.42	16.49	15.10	11.31	8.18	4.76	3.05	1.72	14
15	Cayoosh	08ME002	886.53	1851	255.89	236.21	215.59	193.82	186.52	162.68	136.43	94.27	62.29	26.73	62
15	Chilcotin	08MB005	19277.14	1290	749.35	678.11	611.34	548.43	528.88	469.87	412.39	333.52	282.34	231.79	42
15	Chilko	08MA001	6686.00	1519	533.50	500.43	467.64	434.82	424.18	390.57	355.21	300.73	259.52	209.04	86
15	Dash	08MD035	73.46	1954	15.42	14.31	13.18	12.01	11.63	10.39	9.05	6.92	5.24	3.16	12
15	Dean-Anahim	08FC005	1053.34	1259	20.48	17.32	14.57	12.16	11.45	9.42	7.61	5.41	4.17	3.12	9
15	Dean-Tanswanket	08FC003	3741.92	1279	301.76	265.54	231.77	200.13	190.34	160.92	132.47	93.73	68.57	42.67	46
15	Homathko-Tatlayoko	08GD008	494.32	1383	35.56	30.56	26.04	21.92	20.68	17.01	13.60	9.19	6.50	3.92	38
15	Lingfield	08MA006	96.02	1764	39.93	34.17	28.95	24.22	22.78	18.58	14.67	9.65	6.62	3.74	38
15	Nazko	08KF001	3154.89	1192	131.24	119.25	106.65	93.36	88.92	74.55	59.06	35.54	19.62	5.49	29
15	Sheridan	08MC045	93.66	971	18.76	16.07	13.47	10.96	10.17	7.80	5.53	2.69	1.19	0.23	15
15	Tabor	08KE032	64.60	796	29.57	24.32	19.85	16.03	14.93	11.82	9.12	5.96	4.24	2.80	18
15	Taseko	08MA003	1527.22	2024	299.10	280.22	261.44	242.56	236.43	216.99	196.43	164.51	140.09	109.65	31
15	West Road	08KG001	12391.31	1148	569.89	507.89	447.25	387.68	368.66	309.71	249.99	164.28	106.55	48.04	59
15	Yalakom	08ME025	579.19	1828	72.73	65.00	57.50	50.19	47.86	40.67	33.41	22.96	15.81	8.21	29
16	Barriere-Mouth	08LB020	1164.34	1242	174.03	164.84	155.26	145.14	141.73	130.54	117.97	96.71	78.75	53.92	69
16	Barriere-Sprague	08LB069	628.83	1486	177.72	163.92	150.25	136.59	132.17	118.22	103.60	81.22	64.43	44.03	48
16	Harper	08LB076	166.12	1677	65.39	62.47	59.30	55.82	54.62	50.55	45.77	37.19	29.50	18.44	37
16	Horsefly	08KH010	787.80	1501	223.61	207.48	191.65	175.98	170.94	155.16	138.79	114.09	95.86	74.15	49
16	Lemieux	08LB078	537.37	1258	66.86	60.03	53.33	46.71	44.59	37.98	31.23	21.36	14.52	7.22	33
16	Mckinley	08KH020	433.88	1169	68.82	61.58	54.64	47.96	45.86	39.40	32.94	23.74	17.44	10.58	89
16	Moffat	08KH019	553.19	1113	72.54	65.09	57.86	50.81	48.56	41.62	34.59	24.41	17.35	9.65	46
16	Windy	08LA028	79.99	1507	23.13	20.49	18.02	15.69	14.97	12.79	10.66	7.74	5.82	3.80	12
25	Atnarko	08FB006	2532.73	1434	399.44	363.14	327.90	293.43	282.44	248.32	213.51	162.27	125.64	83.60	45
25	Bella Coola	08FB007	3637.76	1485	1071.15	964.15	862.16	764.33	733.56	639.39	545.53	411.88	320.07	219.22	45
25	Chilko-Lake	08MA002	2139.72	1738	229.63	217.84	205.84	193.51	189.44	176.30	161.98	138.75	119.94	94.79	84
25	Homathko-Mouth	08GD004	5683.81	1704	4118.59	3589.62	3111.68	2678.22	2547.05	2161.78	1802.87	1338.98	1057.25	794.24	56
25	Homathko-Nostetuko	08GD009	1519.53	1620	274.23	268.24	261.03	252.22	248.95	237.01	221.18	187.68	152.10	92.77	7
25	Klinaklini	08GE002	5805.10	1560	3770.89	3185.78	2687.69	2263.26	2140.36	1795.74	1499.70	1164.75	1003.82	914.05	35
25	Mosley	08GD007	1534.03	1799	418.37	392.27	366.28	340.17	331.69	304.79	276.34	232.15	198.34	156.22	24

Table 4: Frequency Distribution of Instantaneous Peak Flows

Hydro-logic Zone	Watershed Stream	Hydrometric Station	Drainage Area (km^2)	Median Elevation (m)	Annual Mean Flows (m^3/s) Return Period (Year) 200	100	50	25	20	10	5	2	1	1.01	# years n
14	Bowron-Box Canyon	08KD007	3371.42	1156	89.42	87.43	85.14	82.46	81.49	78.07	73.71	64.91	55.79	40.08	34
14	Bowron-Wells	08KD001	452.41	1192	13.32	12.81	12.28	11.72	11.53	10.92	10.23	9.06	8.07	6.66	32
14	Cariboo-Kangaroo	08KH003	3263.78	1442	126.54	122.87	118.97	114.75	113.31	108.48	102.87	92.81	83.61	69.29	55
14	Cottonwood-Cinema	08KE009	1895.77	1077	44.99	42.08	39.16	36.20	35.23	32.13	28.81	23.57	19.48	14.24	34
14	Horsefly-Quesnel Lake	08KH031	2758.27	1139	68.08	63.56	58.93	54.14	52.54	47.39	41.76	32.62	25.31	15.93	5
14	Little Swift	08KE024	129.70	1451	4.45	4.27	4.07	3.86	3.78	3.54	3.25	2.74	2.28	1.60	39
14	Penfold	08KH030	184.77	1590	8.46	8.31	8.14	7.93	7.85	7.57	7.21	6.44	5.60	4.09	12
14	Quesnel-Likely	08KH001	5964.97	1197	191.85	184.73	177.15	168.99	166.20	156.87	146.07	126.92	109.68	83.63	76
14	Quesnel	08KH006	11571.02	1146	339.32	327.83	315.66	302.60	298.15	283.31	266.22	236.02	208.89	167.68	67
14	Willow	08KD006	2864.06	1071	65.39	62.01	58.45	54.68	53.40	49.18	44.41	36.25	29.29	19.60	30
15	Baezaeko	08KG003	1017.07	1338	6.46	5.65	4.92	4.25	4.05	3.45	2.88	2.15	1.70	1.27	21
15	Baker	08KE016	1562.84	1095	10.96	10.35	9.69	8.95	8.69	7.81	6.77	4.94	3.40	1.51	48
15	Big-Graveyard	08MB007	196.76	2106	5.52	5.03	4.57	4.13	3.99	3.58	3.18	2.62	2.25	1.89	38
15	Big-Groundhog	08MB006	1010.85	1786	14.16	12.58	11.14	9.82	9.41	8.21	7.07	5.57	4.65	3.80	38
15	Bonaparte-Bridge	08LF062	681.89	1316	6.93	6.39	5.84	5.26	5.07	4.45	3.77	2.68	1.86	0.90	34
15	Bonaparte-Cache	08LF002	5319.66	1162	14.58	13.30	12.01	10.69	10.26	8.90	7.45	5.24	3.62	1.81	38
15	Bridge	08LA027	385.51	1174	4.20	3.74	3.27	2.80	2.65	2.17	1.69	0.99	0.55	0.17	14
15	Cayoosh	08ME002	886.53	1851	33.37	31.34	29.09	26.58	25.70	22.73	19.25	13.25	8.44	3.10	49
15	Chilcotin	08MB005	19277.14	1290	166.34	155.89	145.76	135.90	132.76	123.06	113.25	99.10	89.46	79.67	42
15	Chilko	08MA001	6686.00	1519	126.21	121.76	117.10	112.13	110.45	104.89	98.54	87.53	77.82	63.39	60
15	Dash	08MD035	73.46	1954	1.07	1.01	0.94	0.87	0.85	0.77	0.68	0.52	0.39	0.22	11
15	Dean-Anahim	08FC005	1053.34	1259	2.86	2.50	2.17	1.87	1.77	1.49	1.23	0.87	0.65	0.42	9
15	Dean-Tanswanket	08FC003	3741.92	1279	50.47	43.28	36.93	31.31	29.63	24.80	20.43	15.01	11.90	9.22	39
15	Homathko-Tatlayoko	08GD008	494.32	1383	3.37	3.14	2.91	2.68	2.61	2.37	2.11	1.71	1.40	1.00	30
15	Lingfield	08MA006	96.02	1764	2.22	1.96	1.72	1.50	1.43	1.22	1.01	0.73	0.54	0.35	38
15	Nazko	08KF001	3154.89	1192	11.71	10.94	10.11	9.20	8.89	7.84	6.65	4.64	3.04	1.23	28
15	Sheridan	08MC045	93.66	971	0.63	0.58	0.52	0.46	0.44	0.37	0.30	0.19	0.11	0.04	13
15	Tabor	08KE032	64.60	796	0.92	0.87	0.82	0.76	0.73	0.66	0.58	0.43	0.31	0.15	11
15	Taseko	08MA003	1527.22	2024	60.43	56.41	52.57	48.88	47.72	44.20	40.72	35.92	32.91	30.32	29
15	West Road	08KG001	12391.31	1148	77.86	71.56	65.25	58.89	56.82	50.24	43.28	32.54	24.46	14.77	40
15	Yalakom	08ME025	579.19	1828	8.18	7.59	7.01	6.44	6.26	5.68	5.09	4.20	3.56	2.80	29
16	Barriere-Mouth	08LB020	1164.34	1242	26.55	24.88	23.20	21.49	20.93	19.12	17.19	14.10	11.67	8.53	60
16	Barriere-Sprague	08LB069	628.83	1486	20.56	19.37	18.16	16.90	16.48	15.13	13.65	11.23	9.26	6.62	47
16	Harper	08LB076	166.12	1677	7.07	6.65	6.22	5.78	5.64	5.18	4.68	3.87	3.22	2.37	35
16	Horsefly	08KH010	787.80	1501	28.75	27.85	26.85	25.74	25.36	24.03	22.42	19.42	16.55	11.98	50
16	Lemieux	08LB078	537.37	1258	6.88	6.39	5.88	5.34	5.16	4.58	3.93	2.87	2.04	1.04	28
16	Mckinley	08KH020	433.88	1169	8.84	8.33	7.82	7.29	7.12	6.56	5.96	4.99	4.21	3.19	48
16	Moffat	08KH019	553.19	1113	6.12	5.84	5.53	5.18	5.06	4.65	4.17	3.31	2.54	1.46	44
16	Windy	08LA028	79.99	1507	1.40	1.30	1.20	1.10	1.07	0.97	0.87	0.72	0.61	0.48	11
25	Atnarko	08FB006	2532.73	1434	62.16	56.05	50.32	44.90	43.21	38.11	33.12	26.22	21.67	17.00	39
25	Bella Coola	08FB007	3637.76	1485	141.02	133.65	126.29	118.87	116.45	108.77	100.62	87.91	78.18	66.16	39
25	Chilko-Lake	08MA002	2139.72	1738	61.01	58.92	56.72	54.37	53.57	50.92	47.88	42.58	37.86	30.78	51
25	Homathko-Mouth	08GD004	5683.81	1704	362.54	350.50	338.13	325.27	320.98	307.05	291.67	266.18	245.07	216.17	44
25	Homathko-Nostetuko	08GD009	1519.53	1620	47.64	43.25	39.20	35.45	34.31	30.90	27.69	23.55	21.19	19.47	7
25	Klinaklini	08GE002	5805.10	1560	355.78	351.19	345.97	339.91	337.73	330.02	320.21	300.15	278.65	238.40	34
25	Mosley	08GD007	1534.03	1799	63.32	61.80	60.17	58.38	57.77	55.69	53.24	48.76	44.54	37.72	13

Table 5: High Flow Frequency Distribution of Annual Mean Flows

Hydro-logic Zone	Watershed Stream	Watershed Hydrometric Station	Drainage Area (km^2)	Median Elevation (m)	Annual Mean Flow (m^3/s) Return Period (Year) 200	100	50	25	20	10	5	2	1	1.01	# years n
14	Bowron-Box Canyon	08KD007	3371.42	1156	37.60	40.08	42.86	46.02	47.14	51.02	55.79	64.91	73.71	87.43	34
14	Bowron-Wells	08KD001	452.41	1192	6.20	6.41	6.65	6.94	7.04	7.41	7.89	8.92	10.11	12.74	35
14	Cariboo-Kangaroo	08KH003	3263.78	1442	66.01	68.21	70.70	73.55	74.57	78.16	82.71	92.03	102.24	122.58	58
14	Cottonwood-Cinema	08KE009	1895.77	1077	13.55	14.24	15.05	16.02	16.38	17.70	19.48	23.57	28.81	42.08	34
14	Horsefly-Quesnel Lake	08KH031	2758.27	1139	14.70	15.93	17.37	19.11	19.75	22.11	25.31	32.62	41.76	63.56	5
14	Little Swift	08KE024	129.70	1451	1.49	1.59	1.70	1.83	1.88	2.05	2.26	2.72	3.23	4.26	40
14	Penfold	08KH030	184.77	1590	3.85	4.09	4.37	4.67	4.78	5.15	5.60	6.44	7.21	8.31	12
14	Quesnel-Likely	08KH001	5964.97	1197	78.79	82.63	86.99	92.04	93.86	100.31	108.58	125.85	145.13	184.32	79
14	Quesnel	08KH006	11571.02	1146	160.83	166.91	173.80	181.76	184.62	194.75	207.71	234.75	265.01	327.32	69
14	Willow	08KD006	2864.06	1071	18.06	19.37	20.90	22.72	23.38	25.78	28.95	35.87	44.04	61.84	31
15	Baezaeko	08KG003	1017.07	1338	1.18	1.22	1.28	1.35	1.38	1.49	1.66	2.11	2.84	5.60	21
15	Baker	08KE016	1562.84	1095	0.56	0.74	0.97	1.28	1.41	1.91	2.65	4.45	6.53	9.82	49
15	Big-Graveyard	08MB007	196.76	2106	1.83	1.87	1.91	1.98	2.00	2.09	2.23	2.60	3.16	5.01	38
15	Big-Groundhog	08MB006	1010.85	1786	3.65	3.73	3.84	3.98	4.04	4.26	4.60	5.53	7.03	12.53	38
15	Bonaparte-Bridge	08LF062	681.89	1316	0.79	0.90	1.03	1.20	1.27	1.51	1.86	2.68	3.77	6.39	34
15	Bonaparte-Cache	08LF002	5319.66	1162	1.12	1.34	1.62	1.97	2.11	2.63	3.39	5.21	7.53	12.51	39
15	Bridge	08LA027	385.51	1174	0.13	0.17	0.21	0.27	0.29	0.39	0.55	0.99	1.69	3.74	14
15	Cayoosh	08ME002	886.53	1851	1.86	2.32	2.92	3.72	4.04	5.27	7.10	11.60	17.24	28.27	39
15	Chilcotin	08MB005	19277.14	1290	77.88	78.92	80.24	81.95	82.61	85.17	88.94	98.69	112.92	155.54	42
15	Chilko	08MA001	6686.00	1519	55.85	57.68	59.75	62.16	63.02	66.09	70.02	78.25	87.54	106.97	47
15	Dash	08MD035	73.46	1954	0.19	0.22	0.24	0.27	0.29	0.33	0.39	0.52	0.68	1.01	11
15	Dean-Anahim	08FC005	1053.34	1259	0.40	0.42	0.45	0.49	0.51	0.56	0.65	0.87	1.23	2.50	9
15	Dean-Tanswanket	08FC003	3741.92	1279	8.75	9.00	9.33	9.77	9.94	10.64	11.72	14.86	20.29	43.03	39
15	Homathko-Tatlayoko	08GD008	494.32	1383	0.95	1.00	1.06	1.14	1.16	1.26	1.40	1.71	2.11	3.14	30
15	Lingfield	08MA006	96.02	1764	0.33	0.35	0.38	0.41	0.42	0.47	0.54	0.73	1.01	1.96	38
15	Nazko	08KF001	3154.89	1192	0.99	1.18	1.42	1.72	1.84	2.30	2.95	4.54	6.55	10.90	29
15	Sheridan	08MC045	93.66	971	0.03	0.04	0.04	0.06	0.06	0.08	0.11	0.19	0.30	0.58	13
15	Tabor	08KE032	64.60	796	0.11	0.13	0.15	0.18	0.19	0.23	0.29	0.41	0.57	0.86	12
15	Taseko	08MA003	1527.22	2024	29.67	29.90	30.22	30.66	30.83	31.54	32.64	35.73	40.57	56.21	29
15	West Road	08KG001	12391.31	1148	13.57	14.77	16.20	17.96	18.62	21.06	24.46	32.54	43.28	71.56	40
15	Yalakom	08ME025	579.19	1828	2.70	2.80	2.91	3.04	3.10	3.29	3.56	4.20	5.09	7.59	29
16	Barriere-Mouth	08LB020	1164.34	1242	7.36	7.79	8.30	8.91	9.14	9.96	11.07	13.60	16.78	24.60	62
16	Barriere-Sprague	08LB069	628.83	1486	6.27	6.62	7.03	7.52	7.69	8.34	9.21	11.16	13.57	19.34	48
16	Harper	08LB076	166.12	1677	2.24	2.35	2.48	2.64	2.70	2.91	3.19	3.84	4.64	6.63	36
16	Horsefly	08KH010	787.80	1501	11.29	11.97	12.75	13.63	13.95	15.07	16.48	19.33	22.33	27.82	51
16	Lemieux	08LB078	537.37	1258	0.52	0.62	0.75	0.92	0.98	1.23	1.59	2.48	3.63	6.20	31
16	Mckinley	08KH020	433.88	1169	1.80	2.03	2.31	2.65	2.77	3.21	3.77	4.91	6.05	7.74	48
16	Moffat	08KH019	553.19	1113	1.27	1.40	1.57	1.77	1.84	2.11	2.46	3.23	4.11	5.86	45
16	Windy	08LA028	79.99	1507	0.22	0.26	0.31	0.36	0.38	0.46	0.55	0.74	0.91	1.11	11
25	Atnarko	08FB006	2532.73	1434	15.59	16.13	16.79	17.63	17.95	19.17	20.96	25.59	32.55	55.42	41
25	Bella Coola	08FB007	3637.76	1485	64.87	66.37	68.13	70.25	71.03	73.91	77.82	86.83	98.34	127.28	37
25	Chilko-Lake	08MA002	2139.72	1738	339.12	349.14	360.34	373.10	377.64	393.51	413.38	453.40	496.11	578.17	57
25	Homathko-Mouth	08GD004	5683.81	1704	206.44	210.70	215.62	221.42	223.54	231.15	241.16	263.09	289.29	348.99	48
25	Homathko-Nostetuko	08GD009	1519.53	1620	18.15	18.31	18.52	18.83	18.95	19.47	20.32	22.83	27.04	42.35	7
25	Klinaklini	08GE002	5805.10	1560	220.51	228.15	236.47	245.65	248.84	259.69	272.56	296.10	317.78	350.31	35
25	Mosley	08GD007	1534.03	1799	36.66	37.72	38.92	40.27	40.75	42.44	44.54	48.76	53.24	61.80	13

Table 6: Low Flow Frequency Distribution of Annual Mean Flows

Hydro-logic Zone	Watershed Stream	Watershed Hydrometric Station	Drainage Area (km^2)	Median Elevation (m)	June-September 7-Day Low Flow (m^3/s) Return Period (Year) 200	100	50	25	20	10	5	2	1	1.01	# years n
14	Bowron-Box Canyon	08KD007	3371.42	1156	9.657	10.430	11.363	12.523	12.962	14.615	16.969	22.861	31.306	56.797	34
14	Bowron-Wells	08KD001	452.41	1192	1.771	1.928	2.118	2.357	2.448	2.792	3.290	4.560	6.432	12.329	42
14	Cariboo-Kangaroo	08KH003	3263.78	1442	32.113	34.224	36.703	39.690	40.794	44.844	50.340	62.987	79.124	119.484	67
14	Cottonwood-Cinema	08KE009	1895.77	1077	1.411	1.535	1.691	1.894	1.973	2.286	2.768	4.159	6.610	17.317	44
14	Horsefly-Quesnel Lake	08KH031	2758.27	1139	3.350	3.592	3.887	4.258	4.399	4.938	5.719	7.746	10.813	21.027	6
14	Little Swift	08KE024	129.70	1451	0.186	0.199	0.216	0.239	0.248	0.283	0.338	0.500	0.796	2.188	40
14	Penfold	08KH030	184.77	1590	1.432	1.568	1.725	1.910	1.976	2.213	2.515	3.128	3.760	4.830	14
14	Quesnel-Likely	08KH001	5964.97	1197	51.839	54.521	57.753	61.760	63.272	68.967	77.057	97.264	126.286	215.203	86
14	Quesnel	08KH006	11571.02	1146	90.155	95.339	101.466	108.904	111.669	121.886	135.935	169.090	213.029	330.599	73
14	Willow	08KD006	2864.06	1071	3.348	3.568	3.845	4.207	4.349	4.908	5.768	8.246	12.614	31.882	32
15	Baezaeko	08KG003	1017.07	1338	0.479	0.509	0.547	0.596	0.614	0.687	0.795	1.088	1.562	3.351	21
15	Baker	08KE016	1562.84	1095	0.040	0.053	0.073	0.103	0.115	0.169	0.264	0.572	1.137	3.107	49
15	Big-Graveyard	08MB007	196.76	2106	0.687	0.737	0.796	0.869	0.896	0.997	1.138	1.479	1.943	3.240	38
15	Big-Groundhog	08MB006	1010.85	1786	1.607	1.691	1.791	1.914	1.960	2.130	2.367	2.937	3.714	5.896	38
15	Bonaparte-Bridge	08LF062	681.89	1316	0.048	0.069	0.099	0.147	0.168	0.261	0.428	0.993	2.013	5.218	34
15	Bonaparte-Cache	08LF002	5319.66	1162	0.078	0.122	0.191	0.305	0.355	0.583	0.989	2.227	3.953	6.849	39
15	Bridge	08LA027	385.51	1174	0.035	0.037	0.041	0.046	0.048	0.058	0.075	0.144	0.349	3.149	14
15	Cayoosh	08ME002	886.53	1851	0.494	0.516	0.548	0.597	0.618	0.710	0.883	1.598	3.788	37.039	39
15	Chilcotin	08MB005	19277.14	1290	53.487	56.844	60.661	65.084	66.673	72.299	79.459	94.147	109.990	140.035	42
15	Chilko	08MA001	6686.00	1519	36.061	40.200	44.979	50.569	52.581	59.678	68.541	85.553	101.326	122.500	85
15	Dash	08MD035	73.46	1954	0.076	0.078	0.080	0.084	0.085	0.090	0.098	0.121	0.161	0.318	12
15	Dean-Anahim	08FC005	1053.34	1259	0.005	0.006	0.008	0.010	0.011	0.016	0.026	0.063	0.160	0.921	9
15	Dean-Tanswanket	08FC003	3741.92	1279	1.418	1.560	1.737	1.964	2.053	2.397	2.917	4.358	6.745	15.944	48
15	Homathko-Tatlayoko	08GD008	494.32	1383	0.680	0.706	0.737	0.775	0.789	0.840	0.910	1.073	1.284	1.836	38
15	Lingfield	08MA006	96.02	1764	0.012	0.015	0.019	0.025	0.027	0.036	0.049	0.085	0.135	0.257	38
15	Nazko	08KF001	3154.89	1192	0.070	0.090	0.117	0.158	0.174	0.246	0.369	0.778	1.577	4.979	30
15	Sheridan	08MC045	93.66	971	0.009	0.011	0.013	0.016	0.017	0.021	0.027	0.041	0.060	0.104	13
15	Tabor	08KE032	64.60	796											
15	Taseko	08MA003	1527.22	2024	13.002	14.088	15.361	16.887	17.449	19.498	22.241	28.366	35.784	52.518	29
15	West Road	08KG001	12391.31	1148	6.541	6.924	7.397	8.001	8.234	9.132	10.466	14.067	19.841	41.264	60
15	Yalakom	08ME025	579.19	1828	2.193	2.271	2.363	2.472	2.513	2.661	2.860	3.317	3.897	5.355	29
16	Barriere-Mouth	08LB020	1164.34	1242	1.201	1.322	1.469	1.651	1.721	1.983	2.358	3.295	4.629	8.536	69
16	Barriere-Sprague	08LB069	628.83	1486	0.971	1.044	1.134	1.248	1.291	1.458	1.704	2.357	3.379	6.985	48
16	Harper	08LB076	166.12	1677	0.337	0.370	0.409	0.459	0.478	0.550	0.653	0.919	1.308	2.523	37
16	Horsefly	08KH010	787.80	1501	2.381	2.578	2.822	3.136	3.257	3.728	4.435	6.379	9.578	21.903	48
16	Lemieux	08LB078	537.37	1258											
16	Mckinley	08KH020	433.88	1169	0.070	0.091	0.120	0.162	0.180	0.257	0.393	0.859	1.817	6.274	48
16	Moffat	08KH019	553.19	1113	0.092	0.104	0.119	0.139	0.147	0.180	0.234	0.402	0.738	2.531	46
16	Windy	08LA028	79.99	1507	0.001	0.001	0.003	0.005	0.007	0.014	0.029	0.074	0.116	0.137	12
25	Atnarko	08FB006	2532.73	1434	3.396	3.555	3.749	3.994	4.087	4.444	4.962	6.307	8.344	15.174	45
25	Bella Coola	08FB007	3637.76	1485	34.598	37.191	40.248	43.942	45.311	50.341	57.184	72.976	93.127	143.178	44
25	Chilko-Lake	08MA002	2139.72	1738	11.611	13.162	15.029	17.326	18.185	21.362	25.697	35.491	47.163	71.331	84
25	Homathko-Mouth	08GD004	5683.81	1704	93.432	102.428	112.937	125.467	130.055	146.644	168.469	215.388	268.546	374.015	55
25	Homathko-Nostetuko	08GD009	1519.53	1620	8.543	9.355	10.322	11.503	11.943	13.574	15.816	21.057	27.808	44.536	7
25	Klinaklini	08GE002	5805.10	1560	120.850	132.934	146.996	163.671	169.749	191.586	219.952	279.347	343.743	461.452	35
25	Mosley	08GD007	1534.03	1799	17.226	18.702	20.447	22.561	23.345	26.231	30.159	39.201	50.640	78.378	23

Table 7: Frequency Distribution of June-September 7-Day Low Flows

Hydro-logic Zone	Watershed Stream	Hydrometric Station	Drainage Area (km^2)	Median Elevation (m)	Annual 7-Day Low Flow (m^3/s) Return Period (Year) 200	100	50	25	20	10	5	2	1	1.01	# years n
14	Bowron-Box Canyon	08KD007	3371.42	1156	8.303	8.752	9.266	9.868	10.087	10.869	11.886	14.065	16.582	21.972	35
14	Bowron-Wells	08KD001	452.41	1192	0.970	1.050	1.145	1.259	1.301	1.453	1.659	2.119	2.680	3.961	34
14	Cariboo-Kangaroo	08KH003	3263.78	1442	9.362	9.725	10.159	10.693	10.894	11.644	12.696	15.263	18.823	29.103	55
14	Cottonwood-Cinema	08KE009	1895.77	1077	1.137	1.245	1.376	1.542	1.606	1.847	2.197	3.100	4.446	8.754	45
14	Horsefly-Quesnel Lake	08KH031	2758.27	1139	3.177	3.514	3.902	4.356	4.520	5.099	5.830	7.265	8.664	10.751	6
14	Little Swift	08KE024	129.70	1451	0.103	0.116	0.132	0.152	0.159	0.186	0.222	0.301	0.392	0.567	40
14	Penfold	08KH030	184.77	1590	0.734	0.734	0.735	0.737	0.738	0.745	0.761	0.841	1.041	2.180	14
14	Quesnel-Likely	08KH001	5964.97	1197	11.976	13.013	14.247	15.751	16.311	18.385	21.239	27.936	36.650	58.803	86
14	Quesnel	08KH006	11571.02	1146	28.627	30.272	32.201	34.520	35.377	38.517	42.773	52.567	65.091	96.692	73
14	Willow	08KD006	2864.06	1071	2.670	2.924	3.224	3.585	3.718	4.204	4.857	6.313	8.062	11.902	33
15	Baezaeko	08KG003	1017.07	1338	0.136	0.166	0.202	0.247	0.264	0.326	0.407	0.565	0.703	0.841	21
15	Baker	08KE016	1562.84	1095	0.037	0.050	0.068	0.095	0.106	0.153	0.228	0.441	0.744	1.400	49
15	Big-Graveyard	08MB007	196.76	2106	0.082	0.091	0.103	0.117	0.122	0.141	0.167	0.225	0.293	0.432	38
15	Big-Groundhog	08MB006	1010.85	1786	0.177	0.196	0.218	0.247	0.258	0.298	0.355	0.495	0.687	1.213	38
15	Bonaparte-Bridge	08LF062	681.89	1316	0.020	0.026	0.034	0.045	0.050	0.070	0.106	0.236	0.521	2.109	35
15	Bonaparte-Cache	08LF002	5319.66	1162	0.066	0.099	0.149	0.227	0.260	0.399	0.621	1.167	1.709	2.208	39
15	Bridge	08LA027	385.51	1174	0.017	0.022	0.028	0.036	0.040	0.052	0.069	0.104	0.137	0.171	14
15	Cayoosh	08ME002	886.53	1851	0.335	0.358	0.388	0.429	0.445	0.514	0.627	1.004	1.821	7.298	39
15	Chilcotin	08MB005	19277.14	1290	12.396	13.077	13.857	14.768	15.097	16.271	17.790	21.007	24.662	32.272	42
15	Chilko	08MA001	6686.00	1519	8.989	9.365	9.804	10.330	10.524	11.232	12.187	14.370	17.141	24.087	47
15	Dash	08MD035	73.46	1954	0.012	0.015	0.018	0.022	0.024	0.030	0.038	0.055	0.072	0.093	12
15	Dean-Anahim	08FC005	1053.34	1259	0.005	0.006	0.008	0.010	0.011	0.016	0.026	0.063	0.160	0.921	9
15	Dean-Tanswanket	08FC003	3741.92	1279	1.546	1.616	1.702	1.812	1.853	2.013	2.247	2.857	3.790	6.972	39
15	Homathko-Tatlayoko	08GD008	494.32	1383	0.234	0.248	0.263	0.282	0.288	0.313	0.345	0.418	0.507	0.715	30
15	Lingfield	08MA006	96.02	1764	0.010	0.012	0.015	0.019	0.020	0.026	0.033	0.051	0.072	0.108	38
15	Nazko	08KF001	3154.89	1192	0.053	0.072	0.097	0.134	0.149	0.211	0.311	0.586	0.971	1.788	30
15	Sheridan	08MC045	93.66	971	0.001	0.002	0.002	0.004	0.005	0.008	0.012	0.025	0.037	0.046	13
15	Tabor	08KE032	64.60	796											
15	Taseko	08MA003	1527.22	2024	2.816	2.865	2.927	3.007	3.038	3.159	3.339	3.813	4.525	6.795	29
15	West Road	08KG001	12391.31	1148	3.988	4.392	4.864	5.425	5.630	6.367	7.327	9.348	11.554	15.625	41
15	Yalakom	08ME025	579.19	1828	0.563	0.618	0.680	0.753	0.779	0.869	0.979	1.187	1.377	1.630	29
16	Barriere-Mouth	08LB020	1164.34	1242	0.898	0.982	1.081	1.201	1.246	1.409	1.630	2.133	2.754	4.191	71
16	Barriere-Sprague	08LB069	628.83	1486	0.810	0.847	0.891	0.947	0.968	1.049	1.166	1.465	1.910	3.357	48
16	Harper	08LB076	166.12	1677	0.209	0.227	0.247	0.271	0.280	0.313	0.357	0.456	0.575	0.847	37
16	Horsefly	08KH010	787.80	1501	1.818	1.883	1.961	2.054	2.089	2.218	2.396	2.816	3.374	4.876	48
16	Lemieux	08LB078	537.37	1258											
16	Mckinley	08KH020	433.88	1169	0.019	0.031	0.051	0.084	0.099	0.169	0.295	0.679	1.180	1.876	48
16	Moffat	08KH019	553.19	1113	0.083	0.096	0.113	0.135	0.143	0.176	0.226	0.357	0.556	1.164	46
16	Windy	08LA028	79.99	1507	0.001	0.001	0.002	0.004	0.005	0.011	0.021	0.050	0.076	0.089	12
25	Atnarko	08FB006	2532.73	1434	3.251	3.400	3.583	3.815	3.904	4.246	4.748	6.073	8.126	15.282	44
25	Bella Coola	08FB007	3637.76	1485	8.689	8.980	9.331	9.765	9.929	10.545	11.414	13.557	16.566	25.401	37
25	Chilko-Lake	08MA002	2139.72	1738	3.799	4.012	4.268	4.585	4.705	5.155	5.792	7.376	9.639	16.499	45
25	Homathko-Mouth	08GD004	5683.81	1704	17.530	19.320	21.394	23.839	24.726	27.894	31.956	40.246	48.858	63.406	40
25	Homathko-Nostetuko	08GD009	1519.53	1620	2.633	2.797	2.985	3.206	3.286	3.571	3.939	4.720	5.601	7.408	8
25	Klinaklini	08GE002	5805.10	1560	19.137	20.938	23.009	25.429	26.301	29.393	33.313	41.169	49.147	62.234	36
25	Mosley	08GD007	1534.03	1799	3.492	3.737	4.012	4.328	4.440	4.833	5.321	6.273	7.219	8.761	13

Table 8: Frequency Distribution of Annual 7-Day Low Flows

Hydro-logic Zone	Watershed		Drainage Area (km^2)	Median Elevation (m)	Daily Mean Flow (m3/s) Percent of Time Exceeded (%)											
	Stream	Hydrometric Station			0.1	1	2	5	10	15	25	50	80	90	95	99
14	Bowron-Box Canyon	08KD007	3371.42	1156	425.58	307.12	266.12	209.00	158.00	124.00	80.90	37.10	19.60	15.70	14.00	11.49
14	Bowron-Wells	08KD001	452.41	1192	50.70	39.10	34.29	27.02	21.90	18.00	12.10	5.86	3.00	2.29	1.95	1.47
14	Cariboo-Kangaroo	08KH003	3263.78	1442	527.00	405.00	354.00	289.00	236.00	192.00	137.00	61.70	22.10	17.00	14.50	10.80
14	Cottonwood-Cinema	08KE009	1895.77	1077	280.99	167.00	135.26	97.80	69.70	53.80	31.10	10.70	4.72	3.51	2.79	1.94
14	Horsefly-Quesnel Lake	08KH031	2758.27	1139	219.70	173.25	154.50	127.25	97.30	77.05	44.03	17.00	10.20	8.61	7.85	6.69
14	Little Swift	08KE024	129.70	1451	29.80	19.60	16.50	11.30	7.68	5.55	3.00	1.03	0.45	0.34	0.29	0.19
14	Penfold	08KH030	184.77	1590	40.49	34.49	29.98	23.90	18.10	14.50	8.69	3.56	1.30	1.06	0.96	0.81
14	Quesnel-Likely	08KH001	5964.97	1197	566.00	476.00	425.00	364.65	309.00	258.00	183.00	87.80	40.90	30.90	26.10	20.80
14	Quesnel	08KH006	11571.02	1146	1030.00	869.00	789.00	659.00	555.00	471.40	343.00	165.00	74.90	57.80	50.70	39.40
14	Willow	08KD006	2864.06	1071	398.12	217.00	180.00	131.00	90.24	69.60	42.20	16.60	8.79	7.24	6.03	4.38
15	Baezaeko	08KG003	1017.07	1338	22.40	14.20	11.30	8.06	5.35	3.91	2.48	1.33	0.82	0.66	0.59	0.41
15	Baker	08KE016	1562.84	1095	83.11	46.24	35.80	22.60	13.80	9.10	4.68	1.64	0.86	0.63	0.47	0.25
15	Big-Graveyard	08MB007	196.76	2106	29.50	16.30	13.50	10.50	7.87	6.20	3.99	0.92	0.32	0.26	0.22	0.17
15	Big-Groundhog	08MB006	1010.85	1786	69.53	38.71	32.00	22.70	16.50	12.90	7.89	2.25	0.77	0.57	0.47	0.32
15	Bonaparte-Bridge	08LF062	681.89	1316	26.15	18.65	16.50	10.80	7.61	5.66	3.34	1.28	0.56	0.26	0.15	0.07
15	Bonaparte-Cache	08LF002	5319.66	1162	59.16	36.30	29.75	20.10	14.20	10.80	6.24	3.11	1.80	1.34	1.08	0.59
15	Bridge	08LA027	385.51	1174	13.55	8.58	7.20	4.20	3.11	2.42	1.45	0.34	0.14	0.11	0.08	0.05
15	Cayoosh	08ME002	886.53	1851	150.00	98.30	81.30	61.20	42.80	32.80	17.80	5.32	1.53	1.13	0.80	0.58
15	Chilcotin	08MB005	19277.14	1290	543.57	372.97	334.00	286.00	246.70	217.00	160.00	57.50	28.50	23.80	20.50	16.90
15	Chilko	08MA001	6686.00	1519	420.33	327.65	297.00	262.00	228.00	204.00	159.00	54.70	20.00	16.20	14.30	11.70
15	Dash	08MD035	73.46	1954	8.15	5.12	4.19	2.67	1.52	0.93	0.34	0.13	0.08	0.07	0.06	0.03
15	Dean-Anahim	08FC005	1053.34	1259	11.05	6.71	5.29	3.62	2.36	1.83	1.20	0.66	0.20	0.13	0.09	0.04
15	Dean-Tanswanket	08FC003	3741.92	1279	205.07	113.00	94.38	68.27	48.40	36.10	20.20	7.59	4.03	3.25	2.89	2.29
15	Homathko-Tatlayoko	08GD008	494.32	1383	15.00	8.99	7.53	5.71	4.30	3.52	2.53	1.18	0.66	0.52	0.45	0.36
15	Lingfield	08MA006	96.02	1764	15.11	8.10	6.51	4.17	2.55	1.52	0.49	0.15	0.07	0.06	0.05	0.03
15	Nazko	08KF001	3154.89	1192	84.22	41.90	34.30	22.40	12.40	7.70	4.23	1.79	1.01	0.74	0.55	0.36
15	Sheridan	08MC045	93.66	971	5.74	2.64	1.83	0.99	0.42	0.20	0.10	0.06	0.03	0.03	0.02	0.01
15	Tabor	08KE032	64.60	796	9.08	4.28	3.45	2.17	1.36	0.98	0.54	0.15	0.01	0.00	0.00	0.00
15	Taseko	08MA003	1527.22	2024	220.00	169.00	147.10	123.00	105.00	91.60	66.43	13.50	5.26	4.32	3.84	3.28
15	West Road	08KG001	12391.31	1148	345.06	216.30	182.00	130.00	91.60	72.20	46.40	20.20	12.30	10.60	9.26	7.64
15	Yalakom	08ME025	579.19	1828	33.44	20.50	17.11	13.20	10.00	8.12	5.53	2.57	1.54	1.36	1.23	0.98
16	Barriere-Mouth	08LB020	1164.34	1242	127.23	92.80	81.30	63.05	43.90	31.70	14.40	5.18	2.87	2.41	2.10	1.60
16	Barriere-Sprague	08LB069	628.83	1486	111.64	78.62	67.14	51.41	35.70	25.30	11.20	4.02	2.13	1.70	1.47	1.16
16	Harper	08LB076	166.12	1677	39.14	27.70	23.90	17.50	11.60	8.25	3.96	1.39	0.70	0.57	0.48	0.38
16	Horsefly	08KH010	787.80	1501	141.68	106.00	93.70	73.10	55.00	42.20	24.10	8.72	3.99	3.17	2.77	2.27
16	Lemieux	08LB078	537.37	1258	35.68	22.90	18.20	13.10	8.50	5.92	3.20	1.21	0.56	0.34	0.20	0.05
16	Mckinley	08KH020	433.88	1169	41.18	27.10	23.20	18.00	13.70	10.60	6.14	2.33	1.20	0.91	0.64	0.23
16	Moffat	08KH019	553.19	1113	35.79	24.10	20.00	14.10	9.64	7.00	3.68	1.30	0.65	0.46	0.34	0.21
16	Windy	08LA028	79.99	1507	11.95	6.78	5.61	3.90	2.56	1.65	0.66	0.19	0.08	0.06	0.04	0.03
25	Atnarko	08FB006	2532.73	1434	227.47	156.71	136.42	101.00	73.10	55.20	34.50	16.30	9.11	7.35	6.33	4.71
25	Bella Coola	08FB007	3637.76	1485	487.59	340.00	303.00	255.00	214.00	191.00	153.00	55.60	20.60	15.60	13.30	11.01
25	Chilko-Lake	08MA002	2139.72	1738	190.00	155.00	143.00	126.00	111.00	99.10	77.10	30.10	10.80	8.27	6.94	5.24
25	Homathko-Mouth	08GD004	5683.81	1704	1510.00	1040.00	932.00	797.00	677.90	594.00	450.00	154.00	64.60	50.00	42.00	32.20
25	Homathko-Nostetuko	08GD009	1519.53	1620	121.11	100.52	87.00	70.06	60.00	52.58	38.50	12.40	6.00	4.90	4.15	3.56
25	Klinaklini	08GE002	5805.10	1560	1450.00	1010.00	932.00	814.00	718.60	640.00	496.00	167.00	67.40	53.50	46.00	34.80
25	Mosley	08GD007	1534.03	1799	258.49	199.00	179.94	155.00	136.00	120.00	94.70	34.00	10.70	8.39	7.08	5.15

Table 9: Flow Duration of Daily Mean Flows

APPENDIX A

Statistical Analysis Using HEC SSP

A-1 HEC SSP Software

A-2 Examples of HEC SSP Output

A-1 HEC SSP Software

(Note: This section is mainly abstracted from HEC-SSP User Manual, 2010 and paper titled "Statistical Software Package" by Harris, J., Burner, G., et al. (2010) presented at 2nd Joint Federal Interagency Conference, Las Vegas, NV, June 27-July 1, 2010)

Introduction

The HEC-SSP software system was developed by US Army Corps of Engineers (USACE) as a part of the Hydrologic Engineering Center's "Next Generation" (NexGen) of hydrologic engineering software. HEC-SSP is a statistical analysis software for hydrologic data. The system is comprised of a graphical user interface (GUI), separate statistical analysis components, data storage and management capabilities, mapping, graphics and reporting facilities.

The current version of HEC-SSP (v2.0) supports statistical analyses based on Bulletin 17B, "Guidelines for Determining Flood Flow Frequency" (1982). Functions include flood flow frequency analysis, generalized frequency analysis, volume frequency analysis on high and low flows, duration analysis, coincident frequency analysis, and a curve combination analysis. The full details of the data used, statistical methods and variables calculated in this report are contained in the Statistical Analyses section.

User Interface

The user interacts with HEC-SSP through a graphical user interface (GUI). The main focus in the design of the interface was to make it easy to use the software, while still maintaining a high level of efficiency for the user. The interface provides the following functions:

- File Management
- Data entry, importing, and editing
- Statistical analyses
- Results displays (tabular and graphical)
- Reporting
- On-line help

Data Management

All data used in HEC-SSP are stored in the HEC Data Storage System (HEC-DSS) as ASCII "text" files and XML files. All user input data is stored in flat files under the

separate categories of study, analyses, and a data storage list. Flow data are stored as time series data in project HEC-DSS files. HEC-DSS stores all output data and results summaries as XML files, and analysis reports as standard ASCII text files. For every computation, the software produces a report file in standard ASCII text file format.

Statistical Analyses

Instantaneous Peak Flow Frequency Analysis

Instantaneous peak flow frequency analyses were performed in HEC SSP based on guidance in Bulletin 17B "Guidelines for Determining Flood Flow Frequency (1982)," by the Interagency Advisory Committee on Water Data. HEC-SSP has options to follow all recommendations within 17B including the Log-Pearson Type III distribution and the method of moments to determine the statistical parameters of the station data. The following data issues can be addressed in HEC SSP: broken record; incomplete record; zero flood years; low and high outliers and historical events. Other methods such as general frequency analysis can be used if there are reasons why Bulletin 17B can't be followed. The "Station Skew" option was used to estimate the skew coefficient for all frequency analyses. The "Weibull" formula was used as the plotting position and a default confidence limit of 0.05 and 0.95 were used in HEC-SSP. In the Weibull formula: $P = m/(n+1)$

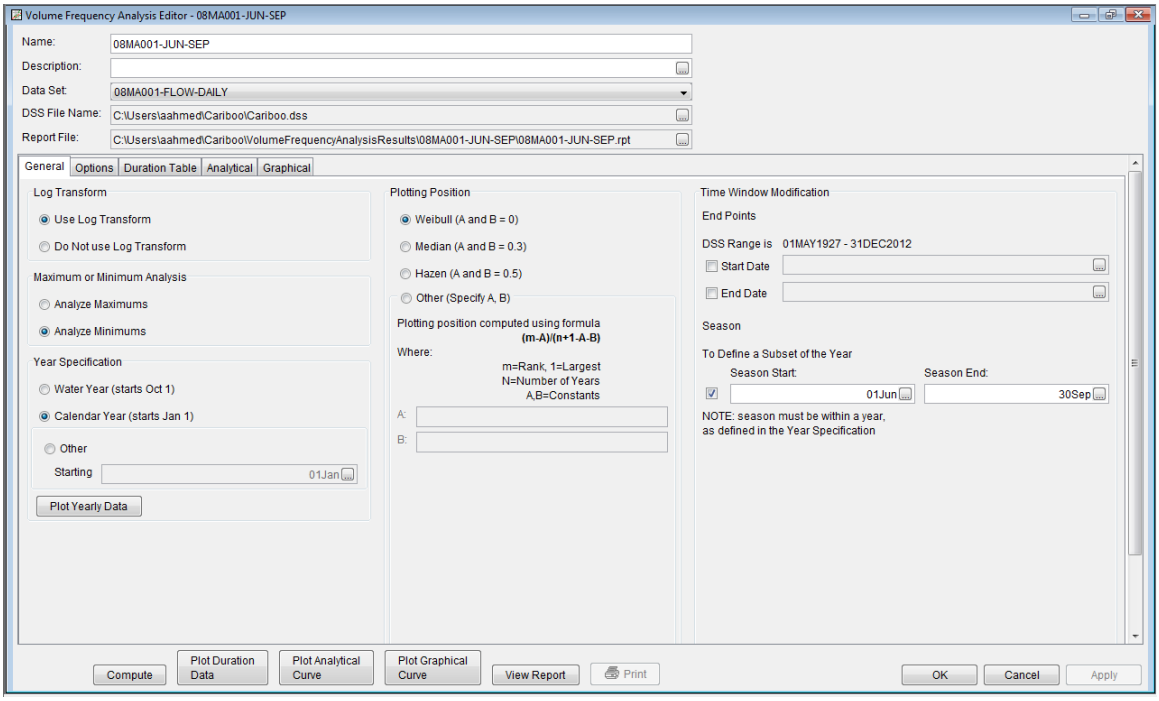
> Where, "P" is probability, "m" is the rank of a value in a list ordered by descending (for high flow frequency analysis) or ascending (for low flow frequency analysis) magnitude and "n" is the total number of values.

Low Flow Frequency Analysis

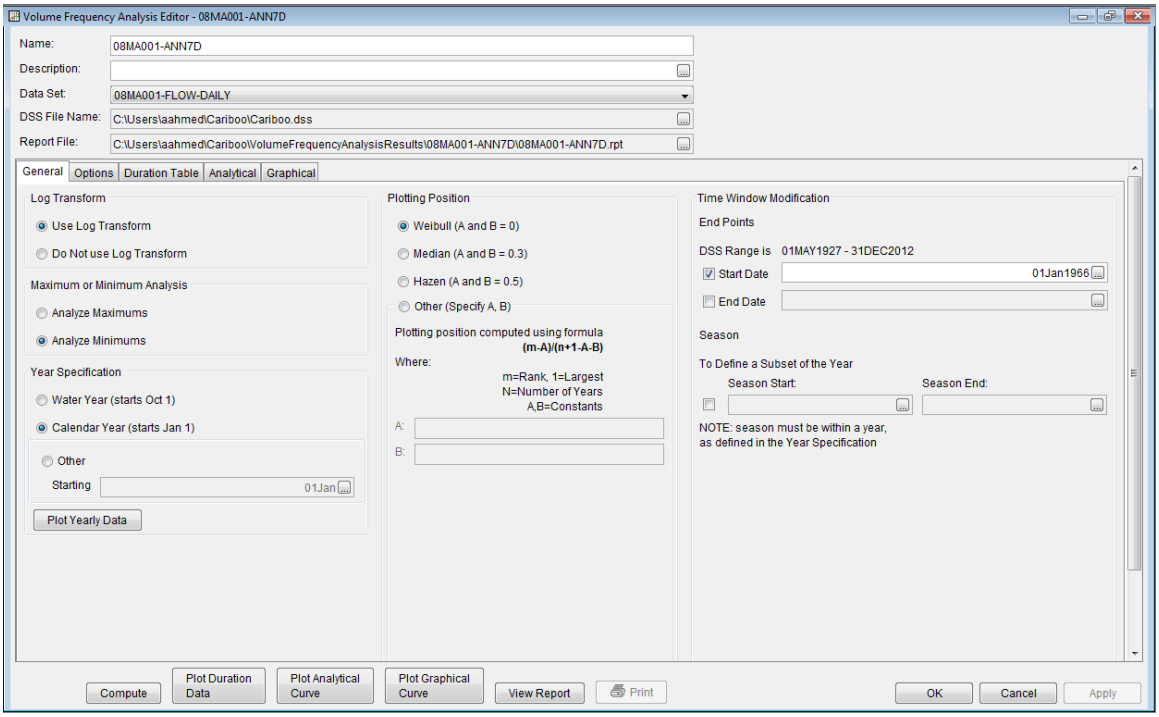
The "Volume Frequency Analysis" component of the software with Log Pearson Type III distribution was used for frequency analyses of June to September 7-day low flows and annual 7-day low flows. Annual minimums of 7-day average flow for June to September (i.e., June 1 to September 30) and for annual series (i.e., January 1 to December 31) were calculated from daily mean flow data. Low flow frequency analyses were performed on these datasets using the "Analyze Minimums" option.

Screenshots of the volume frequency analysis editor in HEC-SSP are presented below:

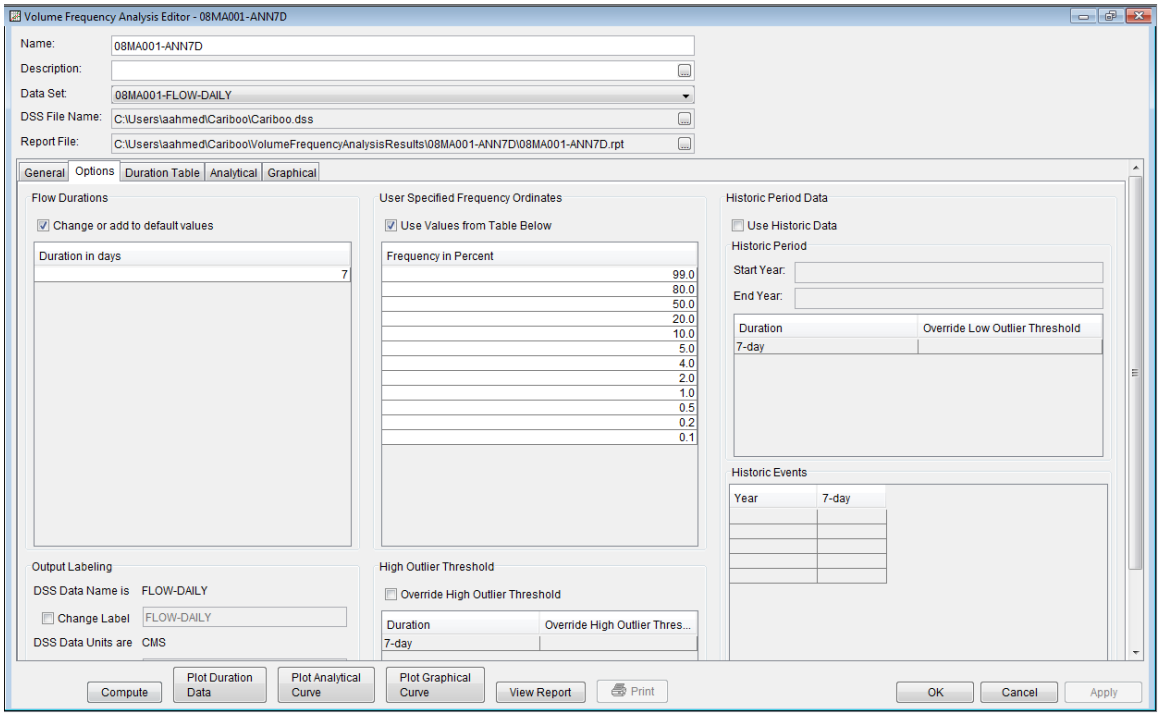
June to September 7-day Low Flow Frequency Analysis, General tab



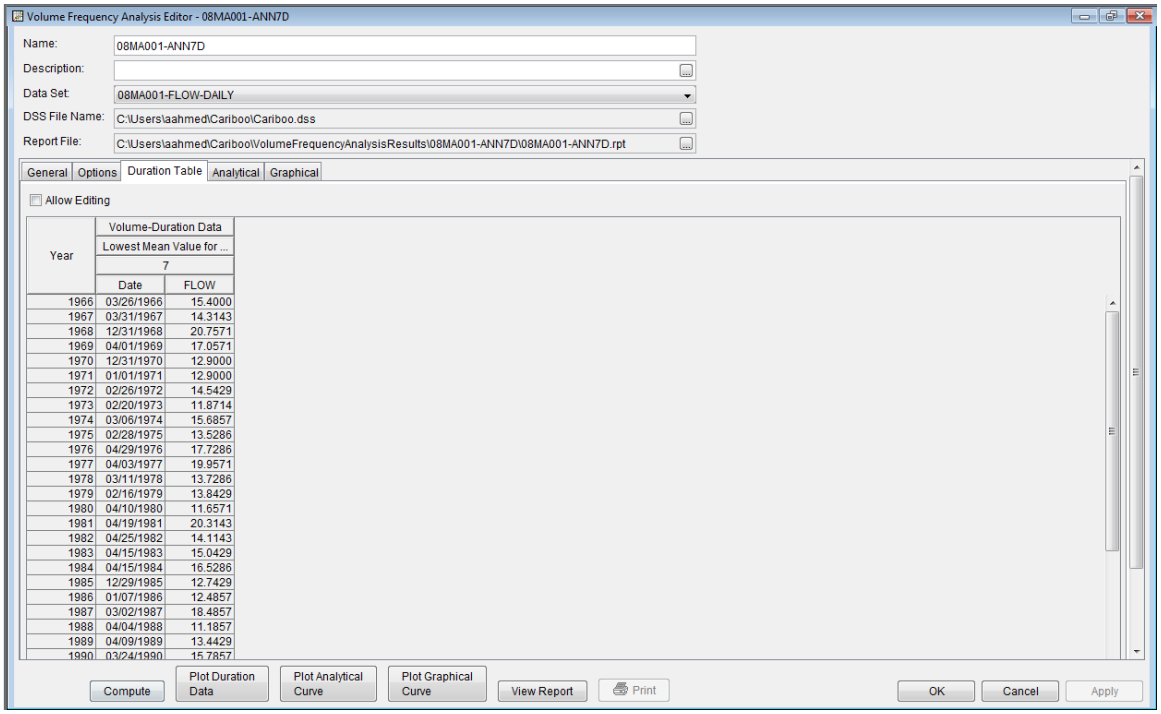
Annual 7-day Low Flow Frequency Analysis, General tab



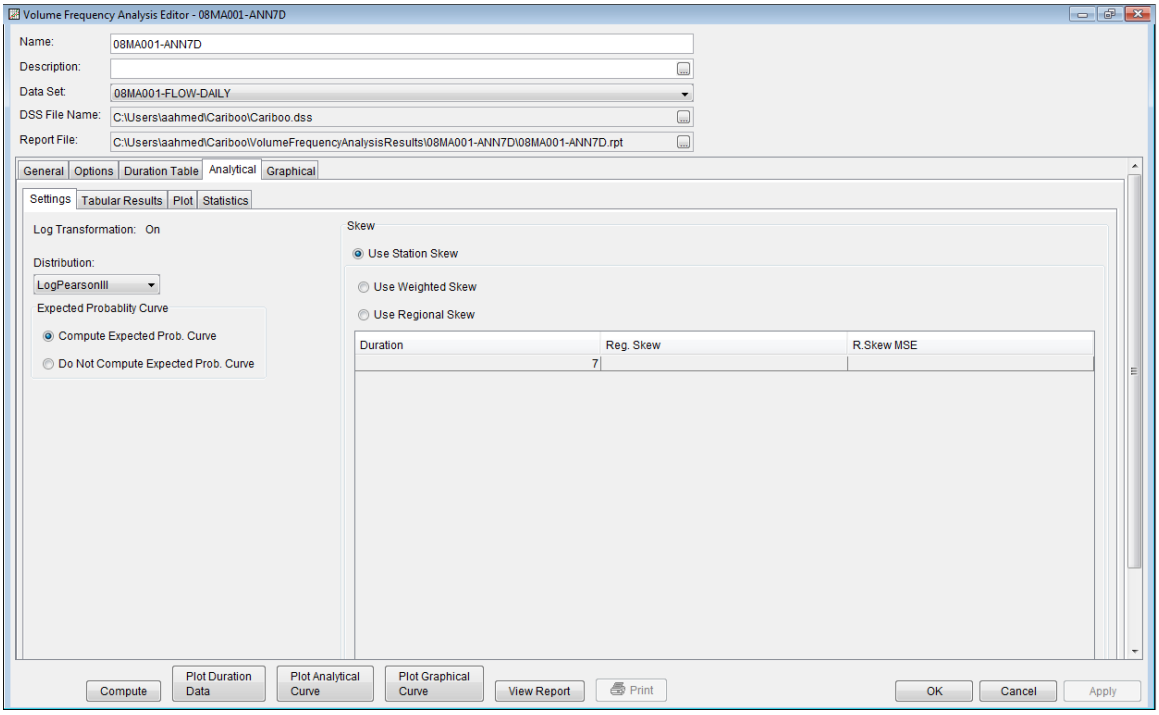
Annual 7-day Low Flow Frequency Analysis, Options tab



Annual 7-day Low Flow Frequency Analysis, Duration Table tab



Annual 7-day Low Flow Frequency Analysis, Analytical tab

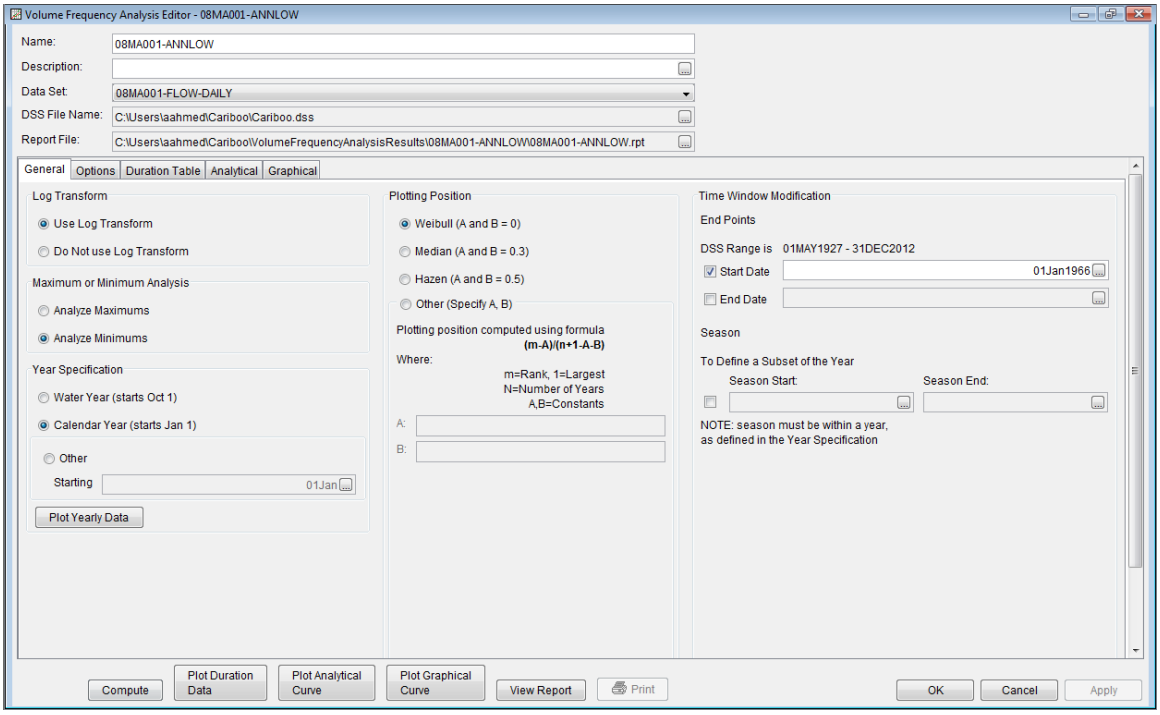


Annual Mean Flow Frequency Analysis

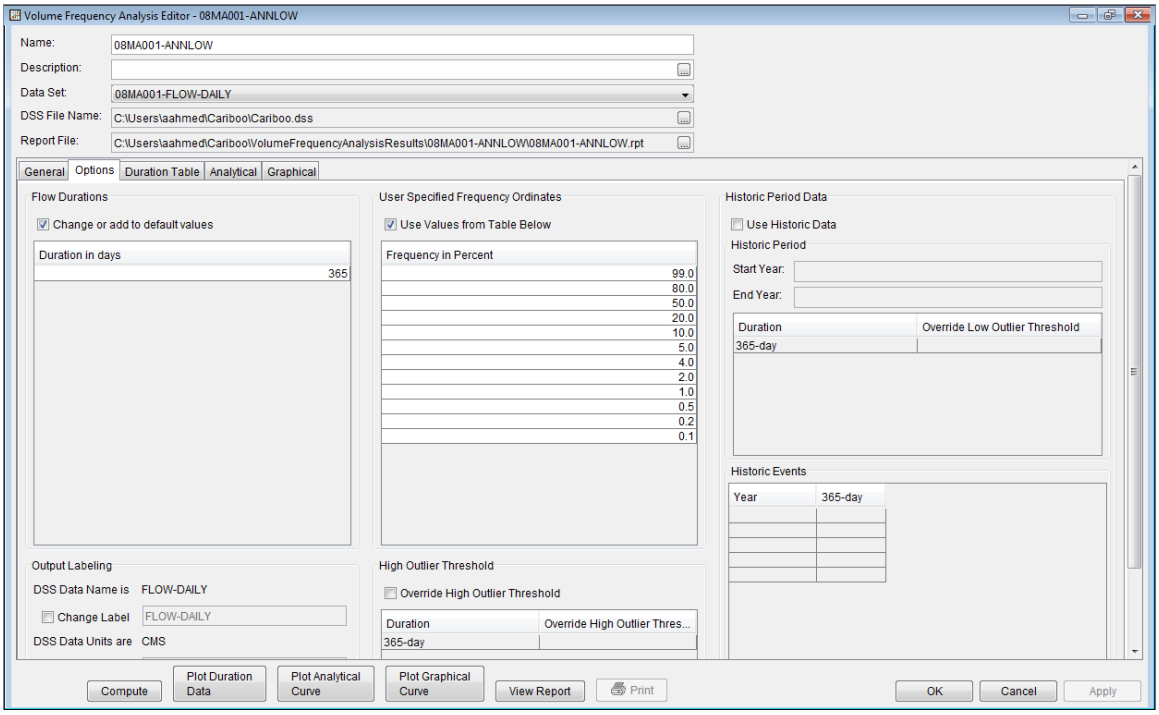
For high flow frequency analysis of annual mean flow the “General Frequency Analysis” with Log Pearson Type III option was used. For low flow frequency analysis of annual mean flow the “Volume Frequency Analysis” with Log Pearson Type III distribution and “Analyze Minimums” option was used.

Screenshots of the volume frequency analysis editor for low flow frequency analysis of mean annual flow are presented below:

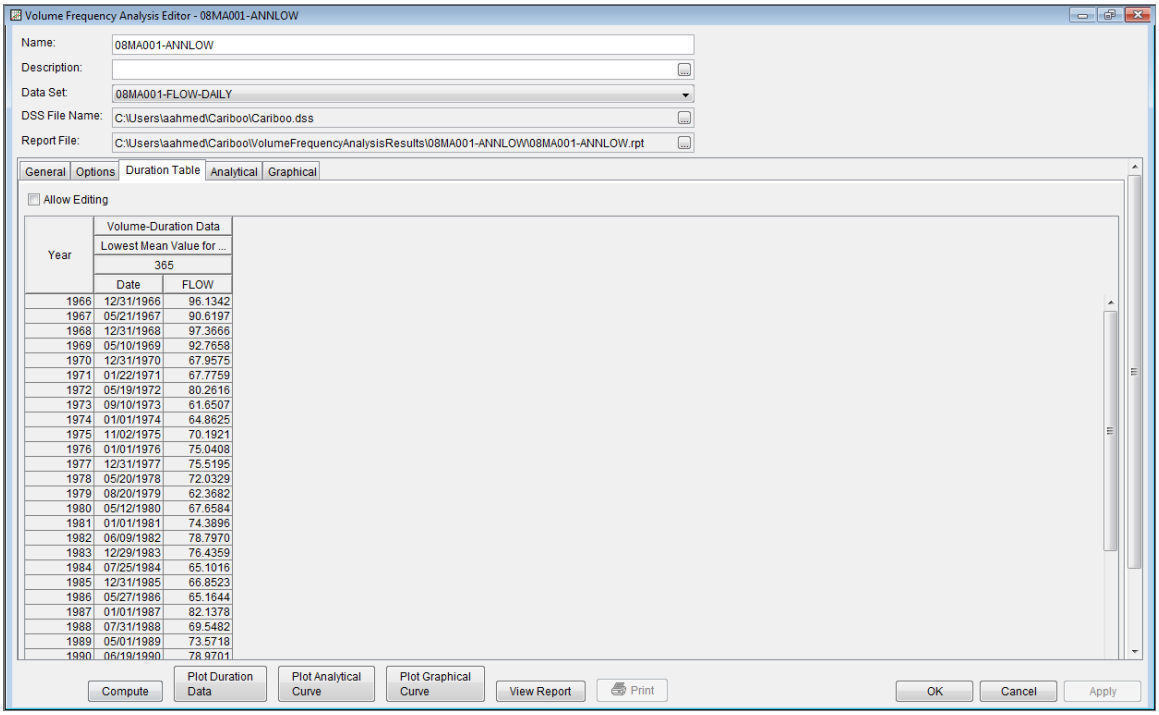
Low flow Frequency Analysis of Annual Mean Flow, General tab.



Low flow Frequency Analysis of Annual Mean Flow, Options tab.



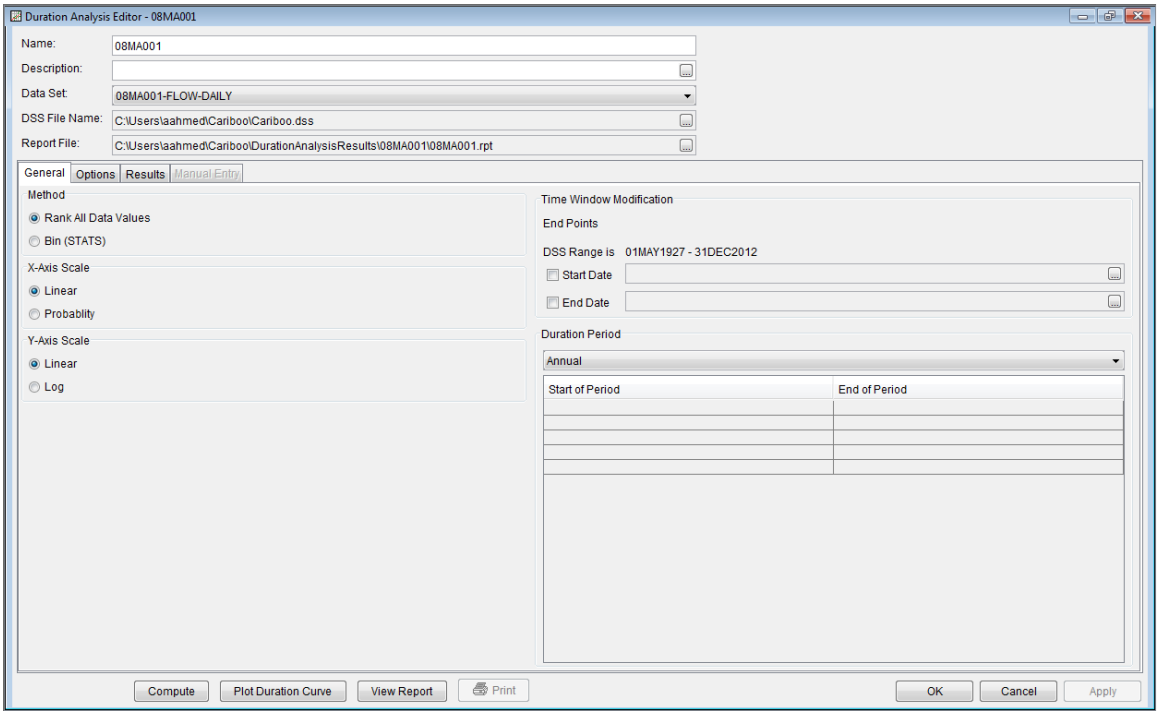
Low flow Frequency Analysis of Annual Mean Flow, Duration Table tab.



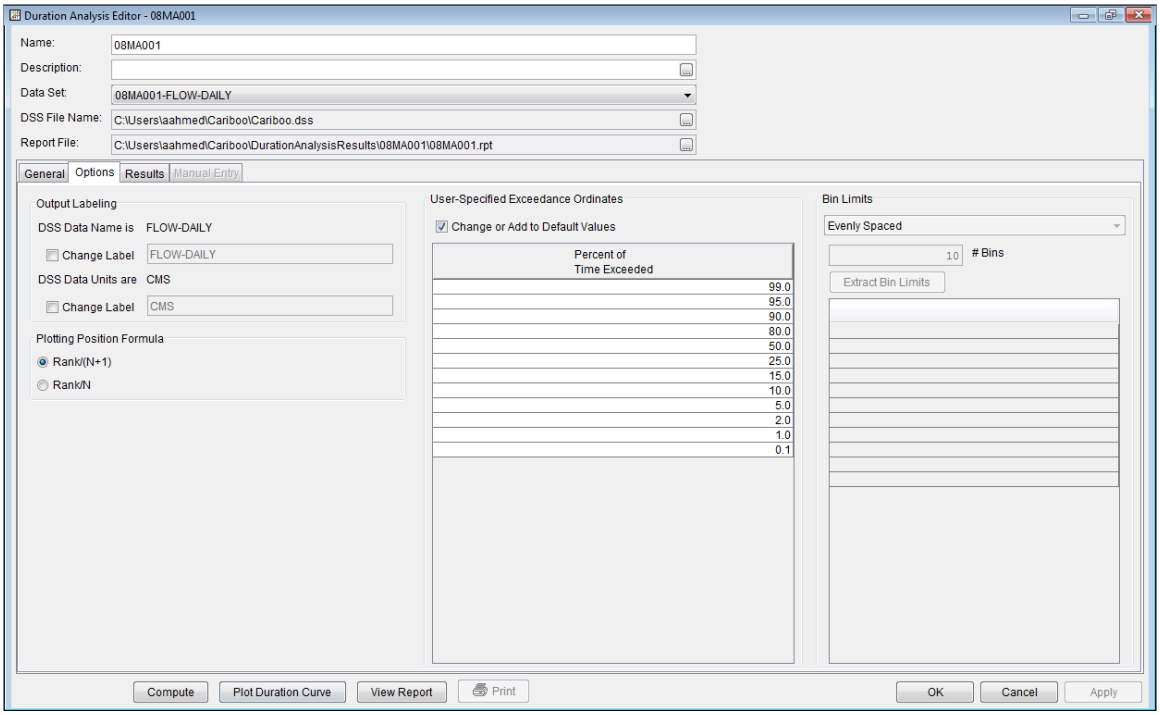
Daily Mean Discharge Flow Duration Analysis

Daily mean flow data with annual duration period were used for flow duration analysis. The program can produce multiple duration curves for different time periods within a year and if the annual period is selected then all the data is used. For this analysis the "Rank All Data Values" method with Weibull plotting position was used. In this method data are sorted from largest to smallest and ranked from 1 to n using P = m/(n+1) where m is ranked position and n is number of events. Screenshots of the "Duration Analysis Editor" are presented below.

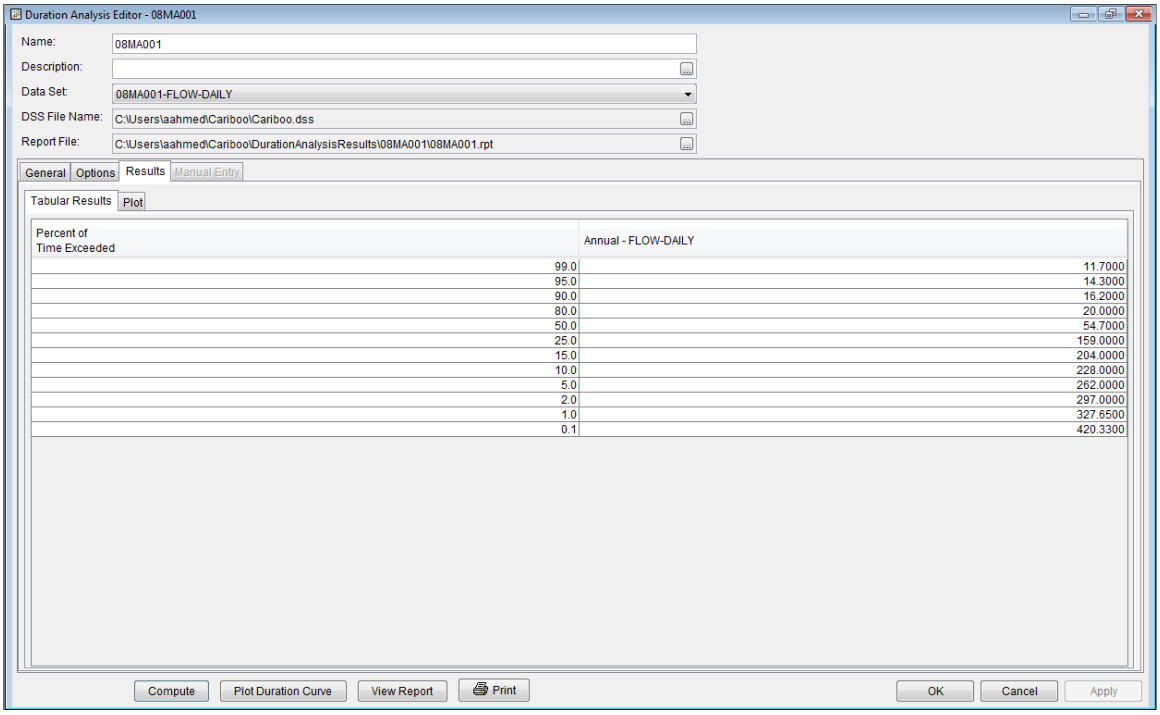
Duration Analysis, General tab.



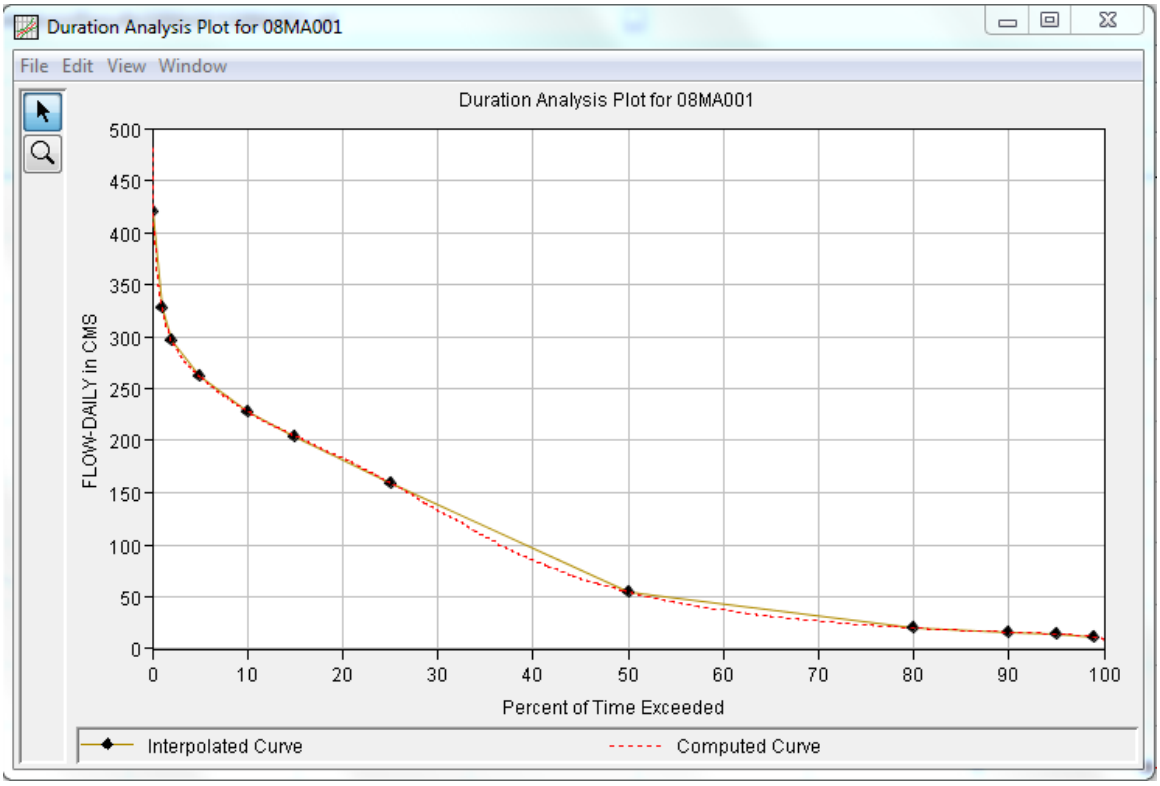
Duration Analysis, Options tab.



Duration Analysis, Results tab.

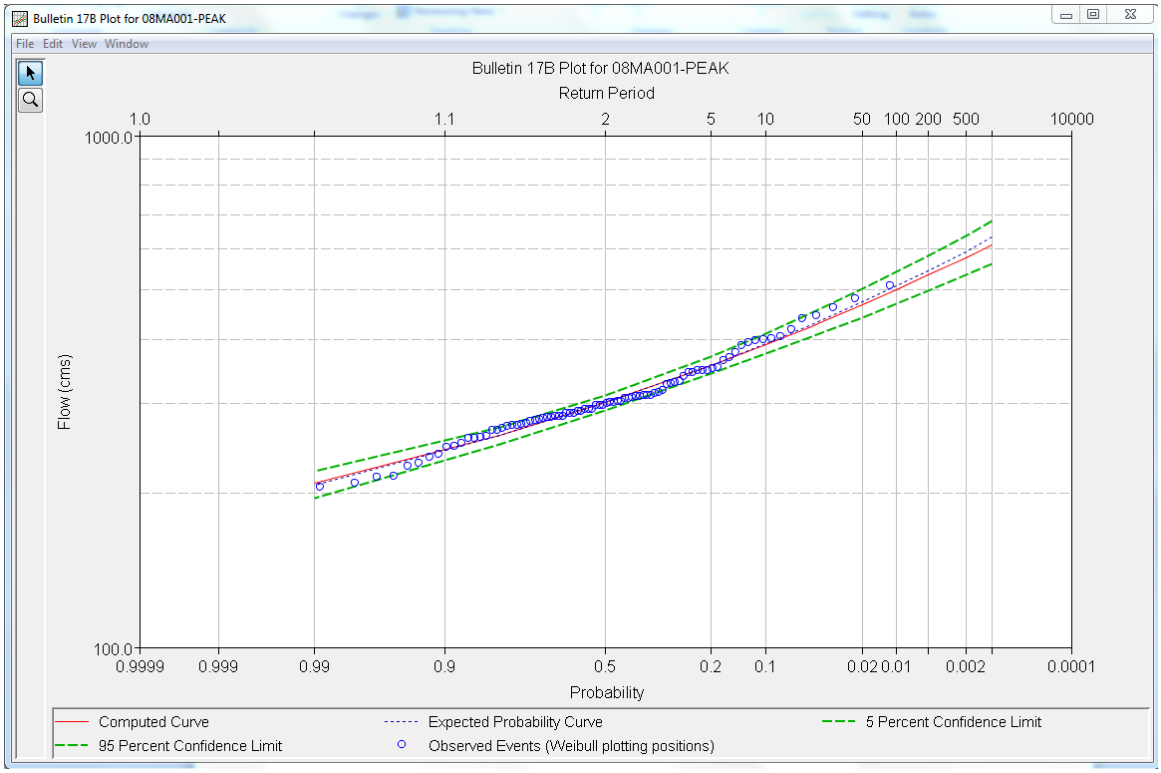


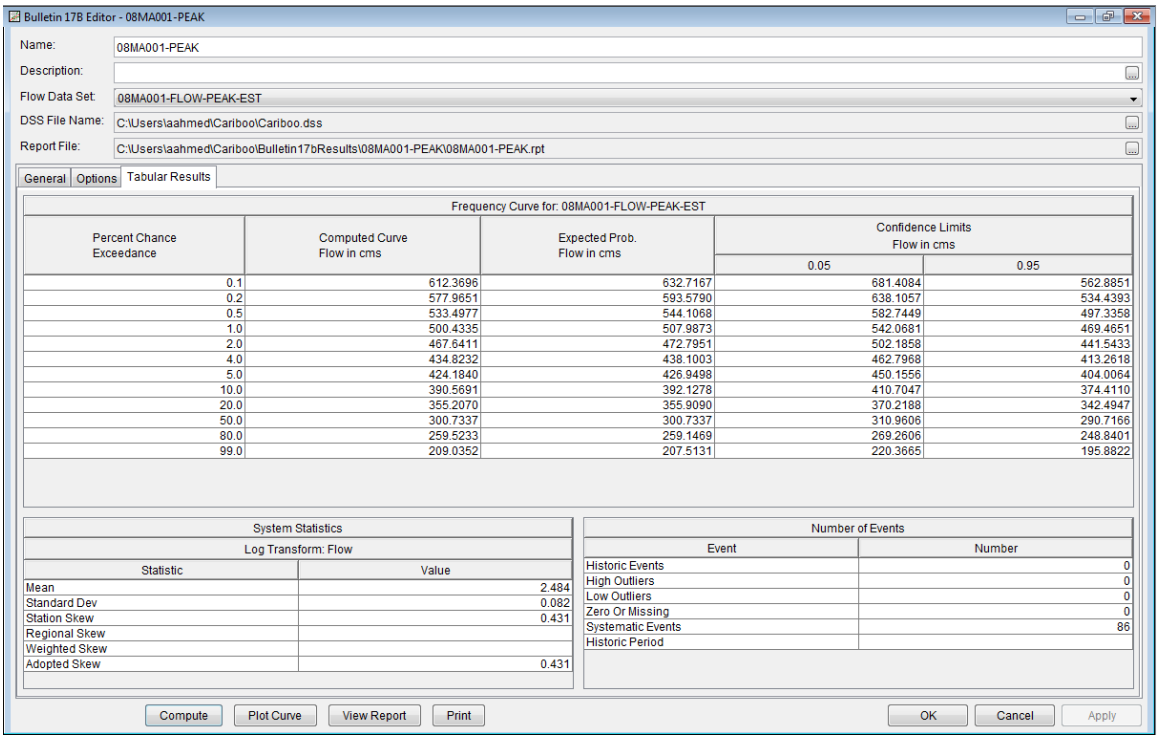
Duration Analysis, plotting function.



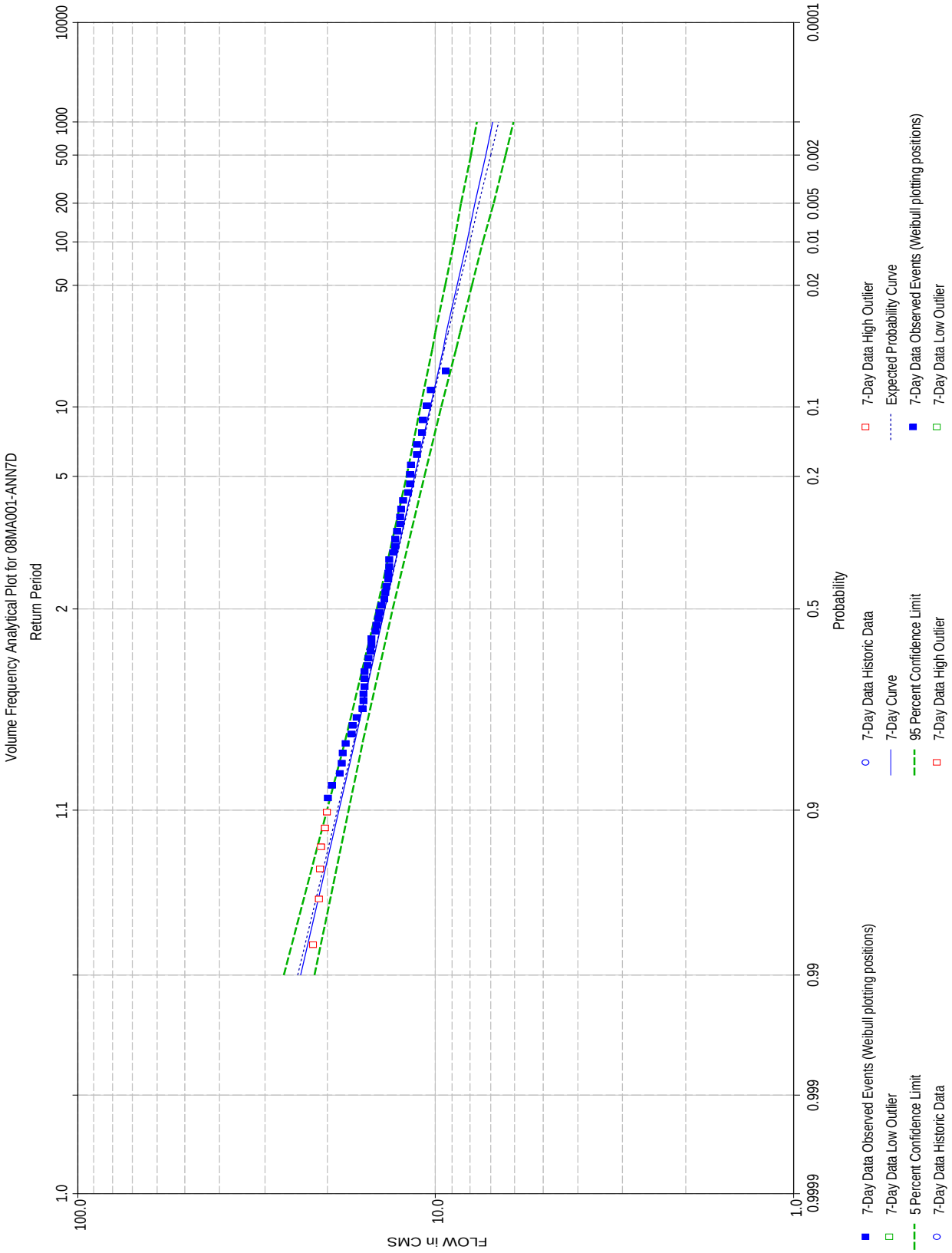
Graphics

The graphics package in HEC SSP can display frequency curve plots. The frequency curve displays the results of the frequency analysis including the computed curve(s); the expected probability curve; confidence limits; and the raw data points plotted based on selected plotting position methods. The tabular output presents computed frequency curves, confidence limits, and summary statistics. The software also produces a report file for each analysis. This report file consists of input data; preliminary results; statistical tests; and final results. Examples of frequency curves, flow duration curves, tabular output in PDFs and report files in text file format are presented in Appendix A-2. A few snap shots of frequency curve and tabular output from HEC-SSP are presented below.




Bulletin 17B Editor - 08MA001-PEAK
Name: 08MA001-PEAK
Description:
Flow Data Set: 08MA001-FLOW-PEAK-EST
DSS File Name: C:\Users\aahmed\Cariboo\Cariboo.dss
Report File: C:\Users\aahmed\Cariboo\Bulletin17bResults\08MA001-PEAK\08MA001-PEAK.rpt
General
Options
Tabular Results
Frequency Curve for: 08MA001-FLOW-PEAK-EST
Percent Chance Exceedance
Computed Curve Flow in cms
Expected Prob. Flow in cms
Confidence Limits Flow in cms
0.05
0.95
0.1 612.3696 632.7167 681.4084 562.8851
0.2 577.9651 593.5790 638.1057 534.4393
0.5 533.4977 544.1068 582.7449 497.3358
1.0 500.4335 507.9873 542.0681 469.4651
2.0 467.6411 472.7951 502.1858 441.5433
4.0 434.8232 438.1003 462.7968 413.2618
5.0 424.1840 426.9498 450.1556 404.0064
10.0 390.5691 392.1278 410.7047 374.4110
20.0 355.2070 355.9090 370.2188 342.4947
50.0 300.7337 300.7337 310.9606 290.7166
80.0 259.5233 259.1469 269.2606 248.8401
99.0 209.0352 207.5131 220.3665 195.8822
System Statistics
Log Transform: Flow
Statistic
Value
Mean 2.484
Standard Dev 0.082
Station Skew 0.431
Regional Skew
Weighted Skew
Adopted Skew 0.431
Number of Events
Event
Number
Historic Events 0
High Outliers 0
Low Outliers 0
Zero Or Missing 0
Systematic Events 86
Historic Period
Compute
Plot Curve
View Report
Print
OK
Cancel
Apply

A-2 Examples of HEC SSP Output


Volume Frequency Analytical Plot for 08MA001-ANN7D
Return Period
1.0
1.1
2
5
10
50
100
200
500
1000
10000
Probability
0.9999
0.999
0.99
0.9
0.5
0.2
0.1
0.02
0.01
0.005
0.002
0.0001
FLOW in CMS
100.0
10.0
1.0
7-Day Data Observed Events (Weibull plotting positions)
7-Day Data Low Outlier
5 Percent Confidence Limit
7-Day Data Historic Data
7-Day Data Historic Data
7-Day Curve
95 Percent Confidence Limit
7-Day Data High Outlier
7-Day Data High Outlier
Expected Probability Curve
7-Day Data Observed Events (Weibull plotting positions)
7-Day Data Low Outlier

```
                              08MA001-ANN7D-REPORT
-----------------------------
Volume-Duration Analysis
   16 Feb 2015   11:59 AM
-----------------------------


--- Input Data ---

Analysis Name: 08MA001-ANN7D
Description:

Data Set Name: 08MA001-FLOW-DAILY
DSS File Name: D:\Cariboo\Cariboo.dss
DSS Pathname: //08MA001/FLOW-DAILY//1DAY/CHILKO RIVER NEAR REDSTONE/

Project Path: D:\Cariboo
Report File Name:
D:\Cariboo\VolumeFrequencyAnalysisResults\08MA001-ANN7D\08MA001-ANN7D.rpt
Result File Name:
D:\Cariboo\VolumeFrequencyAnalysisResults\08MA001-ANN7D\08MA001-ANN7D.xml

Analyze Minimums

Analysis Year: Calendar Year

Record Start Date: 01 May 1927
Record End Date:   31 Dec 2012

User Start Date: 01 Jan 1953

User-Specified Durations
   Duration:   7 days

Plotting Position Type: Weibull

Probability Distribution Type: Pearson Type III
Use Log Transform
Compute Expected Probability Curve

Upper Confidence Level: 0.05
Lower Confidence Level: 0.95

User-Specified Frequencies
   Frequency: 99.0
   Frequency: 80.0
   Frequency: 50.0
   Frequency: 20.0
   Frequency: 10.0
   Frequency: 5.0
   Frequency: 4.0
   Frequency: 2.0
   Frequency: 1.0
   Frequency: 0.5
   Frequency: 0.2
   Frequency: 0.1

Skew Option: Use Station Skew

Display ordinate values using 4 digits in fraction part of value

--- End of Input Data ---
```

==========
Statistical Analysis of 7-day Minimum values
==========

Note: Data are missing for all or part of 8 years in analysis period.

Warning: 2 events occur in first 12 days of analysis year for 7-day duration.

Suggest reviewing data and changing the year/season specification on the General tab to capture independent max/min volumes.

<< High Outlier Test >>

Based on 47 events, 10 percent outlier test deviate K(N) = 2.744
Computed high outlier test value = 25.30089

0 high outlier(s) identified above test value of 25.30089

<< Low Outlier Test >>

Based on 47 events, 10 percent outlier test deviate K(N) = 2.744
Computed low outlier test value = 8.29577

0 low outlier(s) identified below test value of 8.29577

--- Final Results ---

<< Plotting Positions >>
08MA001-FLOW-DAILY (7-day Min)

Events Analyzed		Ordered Events			
	FLOW	Calendar		FLOW	Weibull
Day Mon Year	CMS	Rank	Year	CMS	Plot Pos
26 Mar 1966	15.4000	1	2005	21.8571	97.92
31 Mar 1967	14.3143	2	1992	20.9714	95.83
31 Dec 1968	20.7571	3	1968	20.7571	93.75
01 Apr 1969	17.0571	4	1981	20.3143	91.67
31 Dec 1970	12.9000	5	1996	20.0000	89.58
01 Jan 1971	12.9000	6	1977	19.9571	87.50
26 Feb 1972	14.5429	7	1991	19.4143	85.42
20 Feb 1973	11.8714	8	1987	18.4857	83.33
06 Mar 1974	15.6857	9	1976	17.7286	81.25
28 Feb 1975	13.5286	10	1969	17.0571	79.17
29 Apr 1976	17.7286	11	1984	16.5286	77.08
03 Apr 1977	19.9571	12	2010	15.9000	75.00
11 Mar 1978	13.7286	13	1990	15.7857	72.92
16 Feb 1979	13.8429	14	1994	15.7714	70.83
10 Apr 1980	11.6571	15	2004	15.7429	68.75
19 Apr 1981	20.3143	16	1995	15.7429	66.67
25 Apr 1982	14.1143	17	1974	15.6857	64.58
15 Apr 1983	15.0429	18	1966	15.4000	62.50

15 Apr 1984	16.5286		19	1997	15.0857	60.42
29 Dec 1985	12.7429		20	1993	15.0714	58.33
07 Jan 1986	12.4857		21	1983	15.0429	56.25
02 Mar 1987	18.4857		22	1972	14.5429	54.17
04 Apr 1988	11.1857		23	1967	14.3143	52.08
09 Apr 1989	13.4429		24	1982	14.1143	50.00
24 Mar 1990	15.7857		25	1979	13.8429	47.92
31 Mar 1991	19.4143		26	1978	13.7286	45.83
31 Dec 1992	20.9714		27	2012	13.6429	43.75
21 Apr 1993	15.0714		28	1975	13.5286	41.67
11 Feb 1994	15.7714		29	1999	13.4714	39.58
08 Mar 1995	15.7429		30	1989	13.4429	37.50
02 Apr 1996	20.0000		31	1998	13.3857	35.42
13 Apr 1997	15.0857		32	2007	13.0714	33.33
20 Apr 1998	13.3857		33	1971	12.9000	31.25
06 Apr 1999	13.4714		34	1970	12.9000	29.17
04 Apr 2000	12.2286		35	1985	12.7429	27.08
14 Apr 2001	10.2857		36	2011	12.5286	25.00
06 Apr 2002	11.7000		37	1986	12.4857	22.92
09 Mar 2003	10.8429		38	2000	12.2286	20.83
23 Mar 2004	15.7429		39	1973	11.8714	18.75
19 Apr 2005	21.8571		40	2006	11.7286	16.67
24 Apr 2006	11.7286		41	2002	11.7000	14.58
05 Mar 2007	13.0714		42	1980	11.6571	12.50
09 Apr 2008	11.2429		43	2008	11.2429	10.42
13 Mar 2009	9.3200		44	1988	11.1857	8.33
15 Apr 2010	15.9000		45	2003	10.8429	6.25
04 Mar 2011	12.5286		46	2001	10.2857	4.17
31 Mar 2012	13.6429		47	2009	9.3200	2.08

<< Skew Weighting >>

Based on 47 events, mean-square error of station skew = 0.126
Mean-square error of regional skew is undefined.

<< Frequency Curve >>
08MA001-FLOW-DAILY (7-day Min)

Computed Curve FLOW, CMS	Expected Probability	Percent Chance Non-Exceedance	Confidence Limits 0.05 FLOW, CMS	0.95
24.0872	24.7388	99.0	27.1027	22.0769
17.1409	17.2047	80.0	18.2521	16.2622
14.3699	14.3699	50.0	15.0954	13.6724
12.1869	12.1488	20.0	12.8491	11.4383
11.2316	11.1665	10.0	11.9161	10.4244
10.5235	10.4286	5.0	11.2348	9.6681
10.3297	10.2256	4.0	11.0493	9.4611
9.8037	9.6690	2.0	10.5469	8.8997
9.3646	9.1980	1.0	10.1282	8.4326
8.9888	8.7901	0.5	9.7698	8.0344
8.5641	8.3210	0.2	9.3642	7.5868
8.2849	8.0091	0.1	9.0971	7.2941

<< Systematic Statistics >>

08MA001-ANN7D-REPORT

08MA001-FLOW-DAILY (7-day Min)

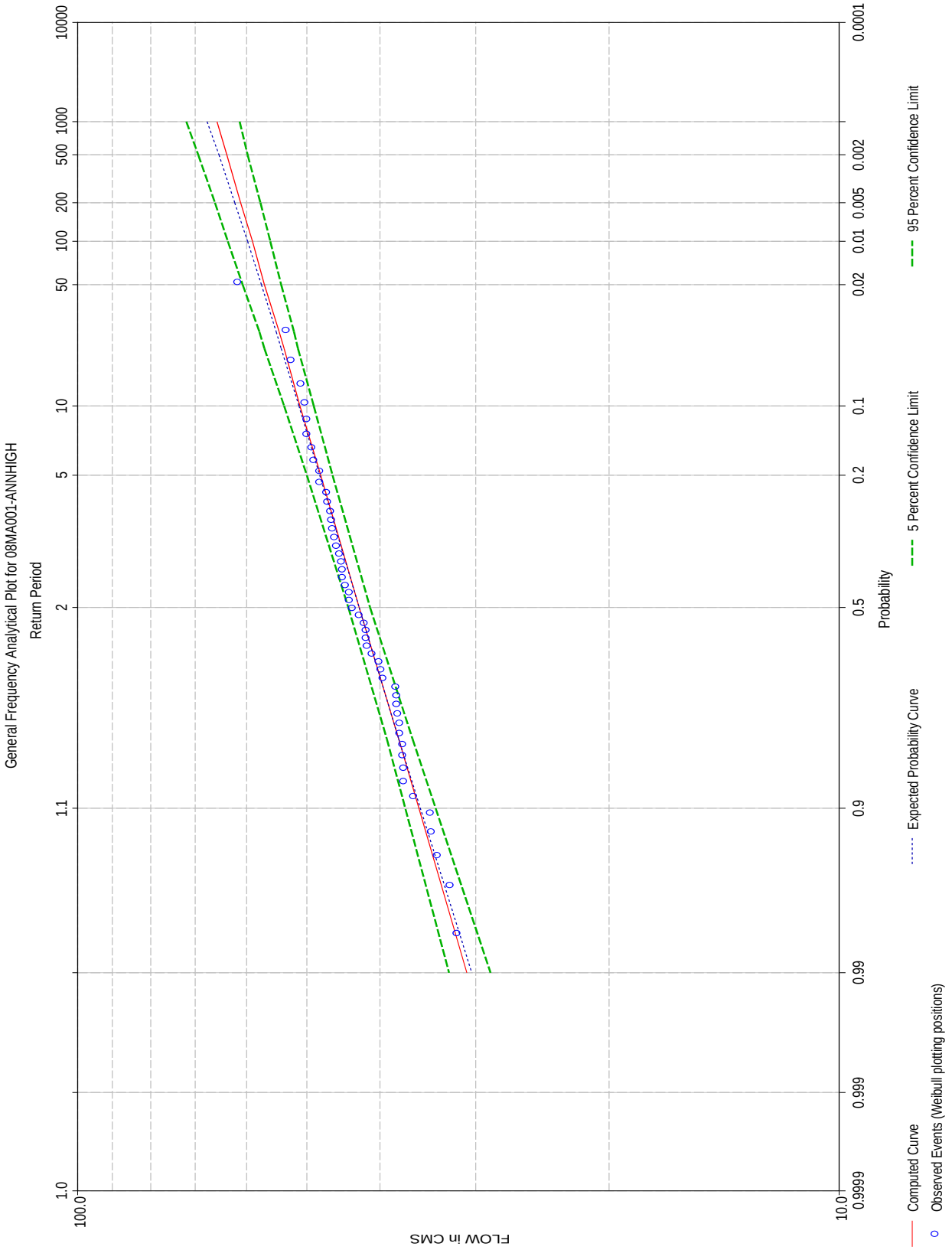
Log Transform: FLOW, CMS			
Mean	1.161	Historic Events	0
Standard Dev	0.088	High Outliers	0
Station Skew	0.241	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	0
Adopted Skew	0.241	Systematic Events	47

--- End of Analytical Frequency Curve ---

Note: No ordinates specified for graphical frequency curve

HEC-SSP 2.0 - Cariboo

Volume Frequency Curves for 08MA001-ANN7D, Average Daily FLOW in CMS	
Percent Chance Exceedance	7
99.0	24.0872
80.0	17.1409
50.0	14.3699
20.0	12.1869
10.0	11.2316
5.0	10.5235
4.0	10.3297
2.0	9.8037
1.0	9.3646
0.5	8.9888
0.2	8.5641
0.1	8.2849


General Frequency Analytical Plot for 08MA001-ANNHIGH
Return Period
10000
1000
500
200
100
50
10
5
2
1.1
1.0
100.0
10.0
FLOW in CMS
0.0001
0.002
0.005
0.01
0.02
0.1
0.2
0.5
0.9
0.99
0.999
0.9999
Probability
95 Percent Confidence Limit
5 Percent Confidence Limit
Expected Probability Curve
Computed Curve
Observed Events (Weibull plotting positions)

08MA001-ANNHIGH-REPORT

General Frequency Analysis
16 Feb 2015 02:08 PM

--- Input Data ---

Analysis Name: 08MA001-ANNHIGH
Description:

Data Set Name: 08MA001-FLOW-ANNMEAN
DSS File Name: D:/Cariboo/Cariboo.dss
DSS Pathname: //08MA001/FLOW-ANNMEAN/01JAN1935/IR-YEAR/CHILKO RIVER NEAR REDSTONE/

Start Date:
End Date:

Project Path: D:\Cariboo
Report File Name:
D:\Cariboo\GeneralFrequencyResults\08MA001-ANNHIGH\08MA001-ANNHIGH.rpt
Result File Name:
D:\Cariboo\GeneralFrequencyResults\08MA001-ANNHIGH\08MA001-ANNHIGH.xml

Plotting Position Type: Weibull

Probability Distribution Type: Pearson Type III
Use Log Transform
Compute Expected Probability Curve

Upper Confidence Level: 0.05
Lower Confidence Level: 0.95

Skew Option: Use Station Skew
Regional Skew: ---
Regional Skew MSE: ---

User-Specified Frequencies
Frequency: 0.1
Frequency: 0.2
Frequency: 0.5
Frequency: 1.0
Frequency: 2.0
Frequency: 4.0
Frequency: 5.0
Frequency: 10.0
Frequency: 20.0
Frequency: 50.0
Frequency: 80.0
Frequency: 99.0

Display ordinate values using 4 digits in fraction part of value

--- End of Input Data ---

--- Preliminary Results ---

<< Plotting Positions >>
08MA001-FLOW-ANNMEAN

Events Analyzed		Ordered Events		
	FLOW	Water	FLOW	Weibull

08MA001-ANNHIGH-REPORT

Day	Mon	Year	CMS	Rank	Year	CMS	Plot Pos
31	Dec	1935	97.800	1	1992	131.000*	1.64
31	Dec	1939	90.200	2	1968	111.000	3.28
31	Dec	1940	96.500	3	1949	111.000	4.92
31	Dec	1941	82.100	4	2000	104.000	6.56
31	Dec	1942	104.000	5	1943	104.000	8.20
31	Dec	1948	111.000	6	2011	102.000	9.84
31	Dec	1949	75.900	7	1993	102.000	11.48
31	Dec	1950	102.000	8	1951	102.000	13.11
31	Dec	1955	94.100	9	1962	101.000	14.75
31	Dec	1956	92.300	10	1936	97.800	16.39
31	Dec	1957	82.500	11	2008	97.300	18.03
31	Dec	1961	101.000	12	1969	97.200	19.67
31	Dec	1963	96.600	13	1970	97.100	21.31
31	Dec	1966	96.100	14	2012	97.000	22.95
31	Dec	1967	111.000	15	1964	96.600	24.59
31	Dec	1968	97.200	16	1941	96.500	26.23
31	Dec	1969	97.100	17	2013	96.200	27.87
31	Dec	1970	68.000	18	2006	96.200	29.51
31	Dec	1971	80.900	19	1967	96.100	31.15
31	Dec	1972	83.200	20	1999	95.400	32.79
31	Dec	1973	64.800	21	1995	94.900	34.43
31	Dec	1974	85.700	22	1991	94.100	36.07
31	Dec	1975	75.000	23	1956	94.100	37.70
31	Dec	1976	94.000	24	1977	94.000	39.34
31	Dec	1977	75.500	25	1957	92.300	40.98
31	Dec	1978	79.800	26	1997	91.700	42.62
31	Dec	1979	68.400	27	2005	91.100	44.26
31	Dec	1980	74.100	28	2004	90.400	45.90
31	Dec	1981	87.800	29	1998	90.200	47.54
31	Dec	1982	87.400	30	1940	90.200	49.18
31	Dec	1983	76.500	31	1988	88.800	50.82
31	Dec	1984	78.200	32	1996	88.400	52.46
31	Dec	1985	66.900	33	1982	87.800	54.10
31	Dec	1986	82.100	34	1983	87.400	55.74
31	Dec	1987	88.800	35	1975	85.700	57.38
31	Dec	1988	73.500	36	2007	84.100	59.02
31	Dec	1989	79.700	37	2003	83.300	60.66
31	Dec	1990	94.100	38	1973	83.200	62.30
31	Dec	1991	131.000	39	1958	82.500	63.93
31	Dec	1992	102.000	40	1987	82.100	65.57
31	Dec	1993	80.800	41	1942	82.100	67.21
31	Dec	1994	94.900	42	1972	80.900	68.85
31	Dec	1995	88.400	43	1994	80.800	70.49
31	Dec	1996	91.700	44	1979	79.800	72.13
31	Dec	1997	90.200	45	1990	79.700	73.77
31	Dec	1998	95.400	46	1985	78.200	75.41
31	Dec	1999	104.000	47	1984	76.500	77.05
31	Dec	2000	75.900	48	2009	76.200	78.69
31	Dec	2001	71.800	49	2001	75.900	80.33
31	Dec	2002	83.300	50	1950	75.900	81.97
31	Dec	2003	90.400	51	1978	75.500	83.61
31	Dec	2004	91.100	52	1976	75.000	85.25
31	Dec	2005	96.200	53	2010	74.700	86.89
31	Dec	2006	84.100	54	1981	74.100	88.52
31	Dec	2007	97.300	55	1989	73.500	90.16
31	Dec	2008	76.200	56	2002	71.800	91.80
31	Dec	2009	74.700	57	1980	68.400	93.44
31	Dec	2010	102.000	58	1971	68.000	95.08
31	Dec	2011	97.000	59	1986	66.900	96.72
31	Dec	2012	96.200	60	1974	64.800	98.36

* Outlier

<< Skew Weighting >>

Based on 60 events, mean-square error of station skew = 0.088
Mean-square error of regional skew = -?

<< Frequency Curve >>
08MA001-FLOW-ANNMEAN

Computed Curve FLOW, CMS	Expected Probability	Percent Chance Exceedance	Confidence Limits 0.05 FLOW, CMS	0.95
135.933	139.337	0.1	147.963	127.484
131.830	134.570	0.2	142.777	124.082
126.209	128.190	0.5	135.728	119.388
121.764	123.255	1.0	130.204	115.645
117.097	118.173	2.0	124.459	111.682
112.132	112.863	4.0	118.415	107.420
110.452	111.085	5.0	116.388	105.965
104.885	105.263	10.0	109.748	101.089
98.544	98.728	20.0	102.361	95.394
87.526	87.526	50.0	90.203	84.926
77.817	77.675	80.0	80.388	74.912
63.390	62.659	99.0	66.699	59.338

<< Systematic Statistics >>
08MA001-FLOW-ANNMEAN

Log Transform: FLOW, CMS		Number of Events	
Mean	1.942	Historic Events	0
Standard Dev	0.061	High Outliers	0
Station Skew	0.030	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	0
Adopted Skew	0.030	Systematic Events	60

--- End of Preliminary Results ---

<< Low Outlier Test >>

Based on 60 events, 10 percent outlier test deviate K(N) = 2.837
Computed low outlier test value = 58.8264

0 low outlier(s) identified below test value of 58.8264

08MA001-ANNHIGH-REPORT

<< High Outlier Test >>

Based on 60 events, 10 percent outlier test deviate K(N) = 2.837
Computed high outlier test value = 130.409

1 high outlier(s) identified above test value of 130.409

* Note - Collection of historical information and comparison with similar data should be explored, if not incorporated in this analysis.

Statistics and frequency curve adjusted for 1 high outlier(s)

--- Final Results ---

<< Plotting Positions >>
08MA001-FLOW-ANNMEAN

Events Analyzed				Ordered Events			
Day	Mon	Year	FLOW CMS	Rank	Water Year	FLOW CMS	Weibull Plot Pos
31	Dec	1935	97.800	1	1992	131.000*	1.27
31	Dec	1939	90.200	2	1968	111.000	2.72
31	Dec	1940	96.500	3	1949	111.000	4.38
31	Dec	1941	82.100	4	2000	104.000	6.03
31	Dec	1942	104.000	5	1943	104.000	7.68
31	Dec	1948	111.000	6	2011	102.000	9.33
31	Dec	1949	75.900	7	1993	102.000	10.98
31	Dec	1950	102.000	8	1951	102.000	12.64
31	Dec	1955	94.100	9	1962	101.000	14.29
31	Dec	1956	92.300	10	1936	97.800	15.94
31	Dec	1957	82.500	11	2008	97.300	17.59
31	Dec	1961	101.000	12	1969	97.200	19.24
31	Dec	1963	96.600	13	1970	97.100	20.90
31	Dec	1966	96.100	14	2012	97.000	22.55
31	Dec	1967	111.000	15	1964	96.600	24.20
31	Dec	1968	97.200	16	1941	96.500	25.85
31	Dec	1969	97.100	17	2013	96.200	27.50
31	Dec	1970	68.000	18	2006	96.200	29.16
31	Dec	1971	80.900	19	1967	96.100	30.81
31	Dec	1972	83.200	20	1999	95.400	32.46
31	Dec	1973	64.800	21	1995	94.900	34.11
31	Dec	1974	85.700	22	1991	94.100	35.76
31	Dec	1975	75.000	23	1956	94.100	37.42
31	Dec	1976	94.000	24	1977	94.000	39.07
31	Dec	1977	75.500	25	1957	92.300	40.72
31	Dec	1978	79.800	26	1997	91.700	42.37
31	Dec	1979	68.400	27	2005	91.100	44.02
31	Dec	1980	74.100	28	2004	90.400	45.68
31	Dec	1981	87.800	29	1998	90.200	47.33
31	Dec	1982	87.400	30	1940	90.200	48.98
31	Dec	1983	76.500	31	1988	88.800	50.63
31	Dec	1984	78.200	32	1996	88.400	52.28
31	Dec	1985	66.900	33	1982	87.800	53.94
31	Dec	1986	82.100	34	1983	87.400	55.59
31	Dec	1987	88.800	35	1975	85.700	57.24
31	Dec	1988	73.500	36	2007	84.100	58.89

08MA001-ANNHIGH-REPORT

31 Dec 1989	79.700	37	2003	83.300	60.54
31 Dec 1990	94.100	38	1973	83.200	62.20
31 Dec 1991	131.000	39	1958	82.500	63.85
31 Dec 1992	102.000	40	1987	82.100	65.50
31 Dec 1993	80.800	41	1942	82.100	67.15
31 Dec 1994	94.900	42	1972	80.900	68.80
31 Dec 1995	88.400	43	1994	80.800	70.46
31 Dec 1996	91.700	44	1979	79.800	72.11
31 Dec 1997	90.200	45	1990	79.700	73.76
31 Dec 1998	95.400	46	1985	78.200	75.41
31 Dec 1999	104.000	47	1984	76.500	77.07
31 Dec 2000	75.900	48	2009	76.200	78.72
31 Dec 2001	71.800	49	2001	75.900	80.37
31 Dec 2002	83.300	50	1950	75.900	82.02
31 Dec 2003	90.400	51	1978	75.500	83.67
31 Dec 2004	91.100	52	1976	75.000	85.33
31 Dec 2005	96.200	53	2010	74.700	86.98
31 Dec 2006	84.100	54	1981	74.100	88.63
31 Dec 2007	97.300	55	1989	73.500	90.28
31 Dec 2008	76.200	56	2002	71.800	91.93
31 Dec 2009	74.700	57	1980	68.400	93.59
31 Dec 2010	102.000	58	1971	68.000	95.24
31 Dec 2011	97.000	59	1986	66.900	96.89
31 Dec 2012	96.200	60	1974	64.800	98.54

Note: Plotting positions based on historic period (H) = 78
Number of historic events plus high outliers (Z) = 1
Weighting factor for systematic events (W) = 1.3051

* Outlier

<< Skew Weighting >>

Based on 60 events, mean-square error of station skew = 0.088
Mean-square error of regional skew = -?

<< Frequency Curve >>
08MA001-FLOW-ANNMEAN

Computed Curve FLOW, CMS	Expected Probability	Percent Chance Exceedance	Confidence Limits 0.05 FLOW, CMS	0.95
135.933	139.337	0.1	147.963	127.484
131.830	134.570	0.2	142.777	124.082
126.209	128.190	0.5	135.728	119.388
121.764	123.255	1.0	130.204	115.645
117.097	118.173	2.0	124.459	111.682
112.132	112.863	4.0	118.415	107.420
110.452	111.085	5.0	116.388	105.965
104.885	105.263	10.0	109.748	101.089
98.544	98.728	20.0	102.361	95.394
87.526	87.526	50.0	90.203	84.926
77.817	77.675	80.0	80.388	74.912
63.390	62.659	99.0	66.699	59.338

<< Systematic Statistics >>

08MA001-FLOW-ANNMEAN

Log Transform: FLOW, CMS		Number of Events	
Mean	1.942	Historic Events	0
Standard Dev	0.061	High Outliers	1
Station Skew	0.030	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	0
Adopted Skew	0.030	Systematic Events	60
		Historic Period	78

--- End of Analytical Frequency Curve ---

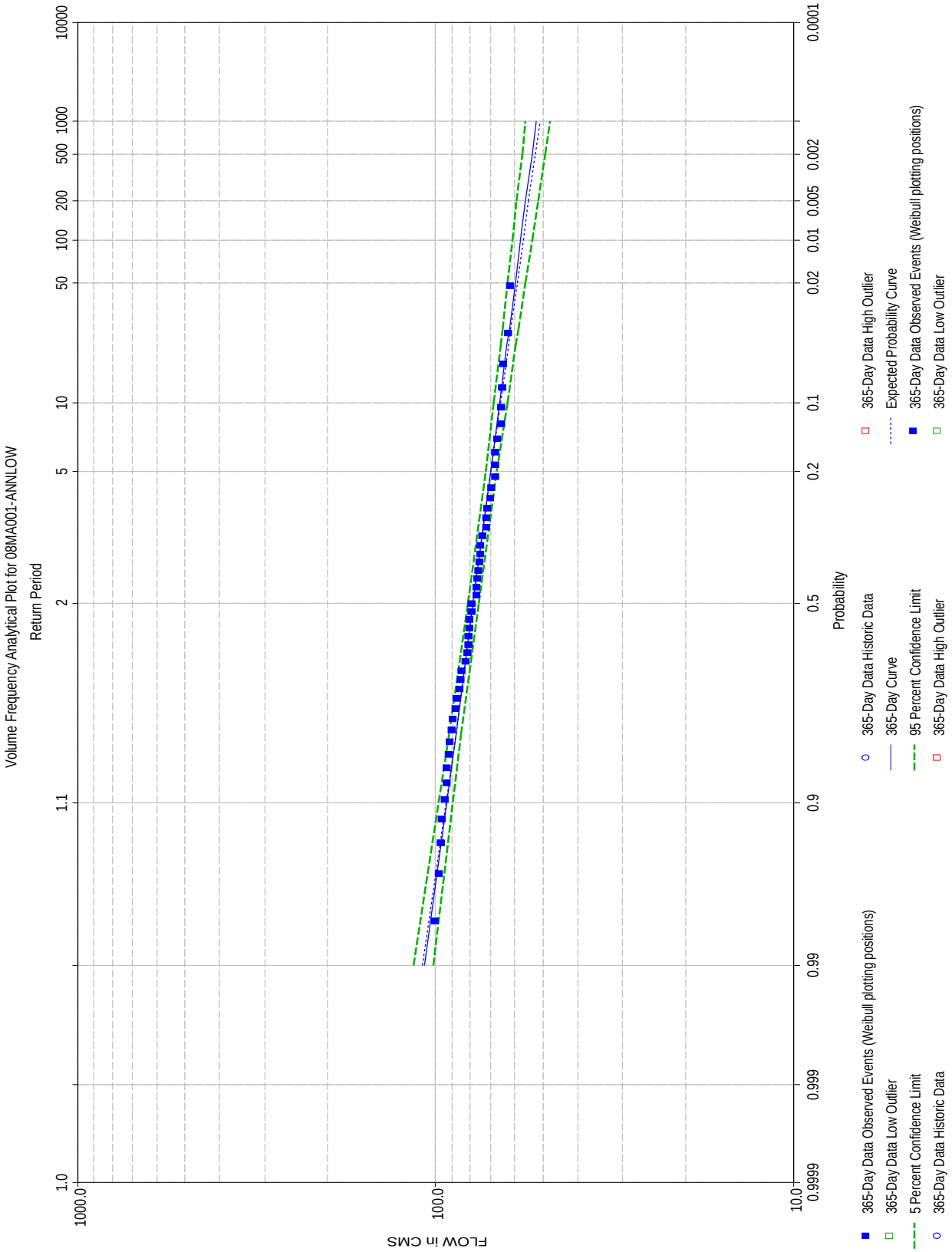
Note: No ordinates specified for graphical frequency curve

Tabular Results 08MA001-ANNHIGH

Percent Chance Exceedance	Curve based on Data				Curve based on User-Adjusted Statistics			
	Computed Curve FLOW in CMS	Expected Prob. FLOW in CMS	Confidence Limits FLOW in CMS		Computed Curve FLOW in CMS	Expected Prob. FLOW in CMS	Confidence Limits FLOW in CMS	
			0.05	0.95			0.95	0.05
0.1	135.9329	139.3370	147.9630	127.4838				
0.2	131.8305	134.5697	142.7767	124.0819				
0.5	126.2092	128.1895	135.7276	119.3877				
1.0	121.7635	123.2554	130.2038	115.6447				
2.0	117.0966	118.1731	124.4587	111.6816				
4.0	112.1318	112.8626	118.4153	107.4199				
5.0	110.4515	111.0853	116.3880	105.9651				
10.0	104.8852	105.2631	109.7482	101.0891				
20.0	98.5435	98.7277	102.3612	95.3944				
50.0	87.5264	87.5264	90.2033	84.9263				
80.0	77.8173	77.6751	80.3880	74.9118				
99.0	63.3903	62.6591	66.6994	59.3380				

System Statistics	
Statistic	Value
Mean	1.942
Standard Dev	0.061
Station Skew	0.030
Regional Skew	
Weighted Skew	
Adopted Skew	0.030

Number of Events	
Event	Number
Historic Events	0
High Outliers	1
Low Outliers	0
Zero Or Missing	0
Systematic Events	60
Historic Period	78


Volume Frequency Analytical Plot for 08MA001-ANNLOW
Return Period
1.0
1.1
2
5
10
50
100
200
500
1000
10000
Probability
0.9999
0.999
0.99
0.9
0.5
0.2
0.1
0.02
0.01
0.005
0.002
0.0001
FLOW in CMS
1000.0
100.0
10.0
365-Day Data Observed Events (Weibull plotting positions)
365-Day Data Low Outlier
5 Percent Confidence Limit
365-Day Data Historic Data
365-Day Data Historic Data
365-Day Curve
95 Percent Confidence Limit
365-Day Data High Outlier
365-Day Data High Outlier
Expected Probability Curve
365-Day Data Observed Events (Weibull plotting positions)
365-Day Data Low Outlier

```
                              08MA001-ANNLOW-REPORT
-----------------------------
Volume-Duration Analysis
   16 Feb 2015   02:06 PM
-----------------------------


--- Input Data ---

Analysis Name: 08MA001-ANNLOW
Description:

Data Set Name: 08MA001-FLOW-DAILY
DSS File Name: D:\Cariboo\Cariboo.dss
DSS Pathname: //08MA001/FLOW-DAILY//1DAY/CHILKO RIVER NEAR REDSTONE/

Project Path: D:\Cariboo
Report File Name:
D:\Cariboo\VolumeFrequencyAnalysisResults\08MA001-ANNLOW\08MA001-ANNLOW.rpt
Result File Name:
D:\Cariboo\VolumeFrequencyAnalysisResults\08MA001-ANNLOW\08MA001-ANNLOW.xml

Analyze Minimums

Analysis Year: Calendar Year

Record Start Date: 01 May 1927
Record End Date:   31 Dec 2012

User Start Date: 01 Jan 1966

User-Specified Durations
   Duration: 365 days

Plotting Position Type: Weibull

Probability Distribution Type: Pearson Type III
Use Log Transform
Compute Expected Probability Curve

Upper Confidence Level: 0.05
Lower Confidence Level: 0.95

User-Specified Frequencies
   Frequency: 99.0
   Frequency: 80.0
   Frequency: 50.0
   Frequency: 20.0
   Frequency: 10.0
   Frequency: 5.0
   Frequency: 4.0
   Frequency: 2.0
   Frequency: 1.0
   Frequency: 0.5
   Frequency: 0.2
   Frequency: 0.1

Skew Option: Use Station Skew

Display ordinate values using 4 digits in fraction part of value

--- End of Input Data ---
```

```
======================================================================
Statistical Analysis of 365-day Minimum values
======================================================================

Note: Data are missing for all or part of 1 years in analysis period.


Warning: 47 events occur in first 370 days of analysis year for 365-day duration.

Suggest reviewing data and changing the year/season specification on the General
tab to capture independent max/min volumes.


-----------------------
<< High Outlier Test >>
-----------------------
 Based on 47 events, 10 percent outlier test deviate K(N) = 2.744
                     Computed high outlier test value = 112.72245

       0 high outlier(s) identified above test value of 112.72245


-----------------------
<< Low Outlier Test >>
-----------------------
 Based on 47 events, 10 percent outlier test deviate K(N) = 2.744
                       Computed low outlier test value = 54.39884

         0 low outlier(s) identified below test value of 54.39884




--- Final Results ---

<< Plotting Positions >>
08MA001-FLOW-DAILY (365-day Min)
```

Events Analyzed			Ordered Events			
		FLOW		Calendar	FLOW	Weibull
Day	Mon Year	CMS	Rank	Year	CMS	Plot Pos
31	Dec 1966	96.1342	1	1992	100.1781	97.92
21	May 1967	90.6197	2	1968	97.3666	95.83
31	Dec 1968	97.3666	3	1966	96.1342	93.75
10	May 1969	92.7658	4	2011	95.5663	91.67
31	Dec 1970	67.9575	5	1991	94.1104	89.58
22	Jan 1971	67.7759	6	2012	92.9301	87.50
19	May 1972	80.2616	7	1969	92.7658	85.42
10	Sep 1973	61.6507	8	2005	91.2866	83.33
01	Jan 1974	64.8625	9	1967	90.6197	81.25
02	Nov 1975	70.1921	10	2004	89.9093	79.17
01	Jan 1976	75.0408	11	1998	89.3071	77.08
31	Dec 1977	75.5195	12	1997	87.3307	75.00
20	May 1978	72.0329	13	1999	86.7756	72.92
20	Aug 1979	62.3682	14	1995	85.4205	70.83
12	May 1980	67.6584	15	1996	84.6595	68.75
01	Jan 1981	74.3896	16	2006	84.1301	66.67
09	Jun 1982	78.7970	17	1987	82.1378	64.58
29	Dec 1983	76.4359	18	2007	81.0553	62.50

25 Jul 1984	65.1016	19	1994	80.7759	60.42
31 Dec 1985	66.8523	20	1993	80.6893	58.33
27 May 1986	65.1644	21	1972	80.2616	56.25
01 Jan 1987	82.1378	22	2003	80.2033	54.17
31 Jul 1988	69.5482	23	1990	78.9701	52.08
01 May 1989	73.5718	24	1982	78.7970	50.00
19 Jun 1990	78.9701	25	1983	76.4359	47.92
10 Jan 1991	94.1104	26	2008	76.3384	45.83
23 Oct 1992	100.1781	27	2000	76.0551	43.75
17 Dec 1993	80.6893	28	1977	75.5195	41.67
01 Jan 1994	80.7759	29	1976	75.0408	39.58
15 Oct 1995	85.4205	30	2010	74.7100	37.50
09 Jul 1996	84.6595	31	1981	74.3896	35.42
25 Sep 1997	87.3307	32	1989	73.5718	33.33
04 May 1998	89.3071	33	1978	72.0329	31.25
16 Jun 1999	86.7756	34	2002	71.6323	29.17
26 Dec 2000	76.0551	35	2001	71.4745	27.08
15 Nov 2001	71.4745	36	1975	70.1921	25.00
27 Jan 2002	71.6323	37	1988	69.5482	22.92
01 Aug 2003	80.2033	38	1970	67.9575	20.83
13 Nov 2004	89.9093	39	1971	67.7759	18.75
01 Jan 2005	91.2866	40	1980	67.6584	16.67
31 Dec 2006	84.1301	41	1985	66.8523	14.58
04 Jun 2007	81.0553	42	1986	65.1644	12.50
31 Dec 2008	76.3384	43	1984	65.1016	10.42
24 Jul 2009	64.5870	44	1974	64.8625	8.33
01 Jan 2010	74.7100	45	2009	64.5870	6.25
22 Aug 2011	95.5663	46	1979	62.3682	4.17
23 Jun 2012	92.9301	47	1973	61.6507	2.08

<< Skew Weighting >>

Based on 47 events, mean-square error of station skew = 0.111
Mean-square error of regional skew is undefined.

<< Frequency Curve >>
08MA001-FLOW-DAILY (365-day Min)

Computed Curve FLOW, CMS	Expected Probability	Percent Chance Non-Exceedance	Confidence Limits 0.05 FLOW, CMS	0.95
106.9682	108.5730	99.0	115.1082	101.3004
87.5449	87.7434	80.0	91.2308	84.5775
78.2527	78.2527	50.0	80.8224	75.7616
70.0154	69.8605	20.0	72.4737	67.1833
66.0864	65.8067	10.0	68.7113	62.9116
63.0211	62.5987	5.0	65.8293	59.5439
62.1573	61.6857	4.0	65.0225	58.5924
59.7536	59.1193	2.0	62.7855	55.9438
57.6772	56.8669	1.0	60.8589	53.6583
55.8451	54.8481	0.5	59.1606	51.6464
53.7086	52.4498	0.2	57.1798	49.3085
52.2628	50.7975	0.1	55.8378	47.7326

<< Systematic Statistics >>

08MA001-ANNLOW-REPORT

08MA001-FLOW-DAILY (365-day Min)

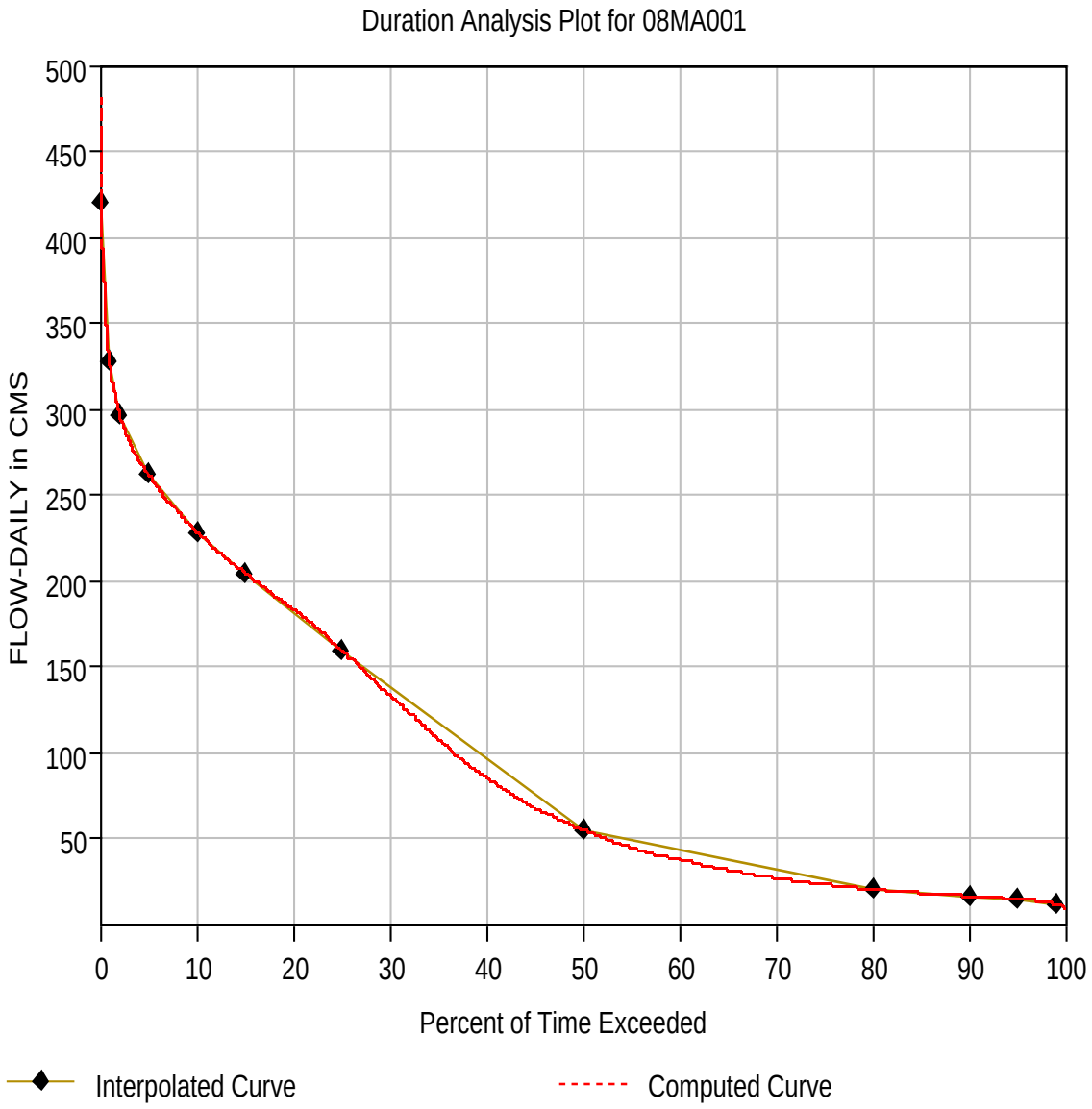
Log Transform: FLOW, CMS		Number of Events	
Mean	1.894	Historic Events	0
Standard Dev	0.058	High Outliers	0
Station Skew	0.031	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	0
Adopted Skew	0.031	Systematic Events	47

--- End of Analytical Frequency Curve ---

Note: No ordinates specified for graphical frequency curve

HEC-SSP 2.0 - Cariboo

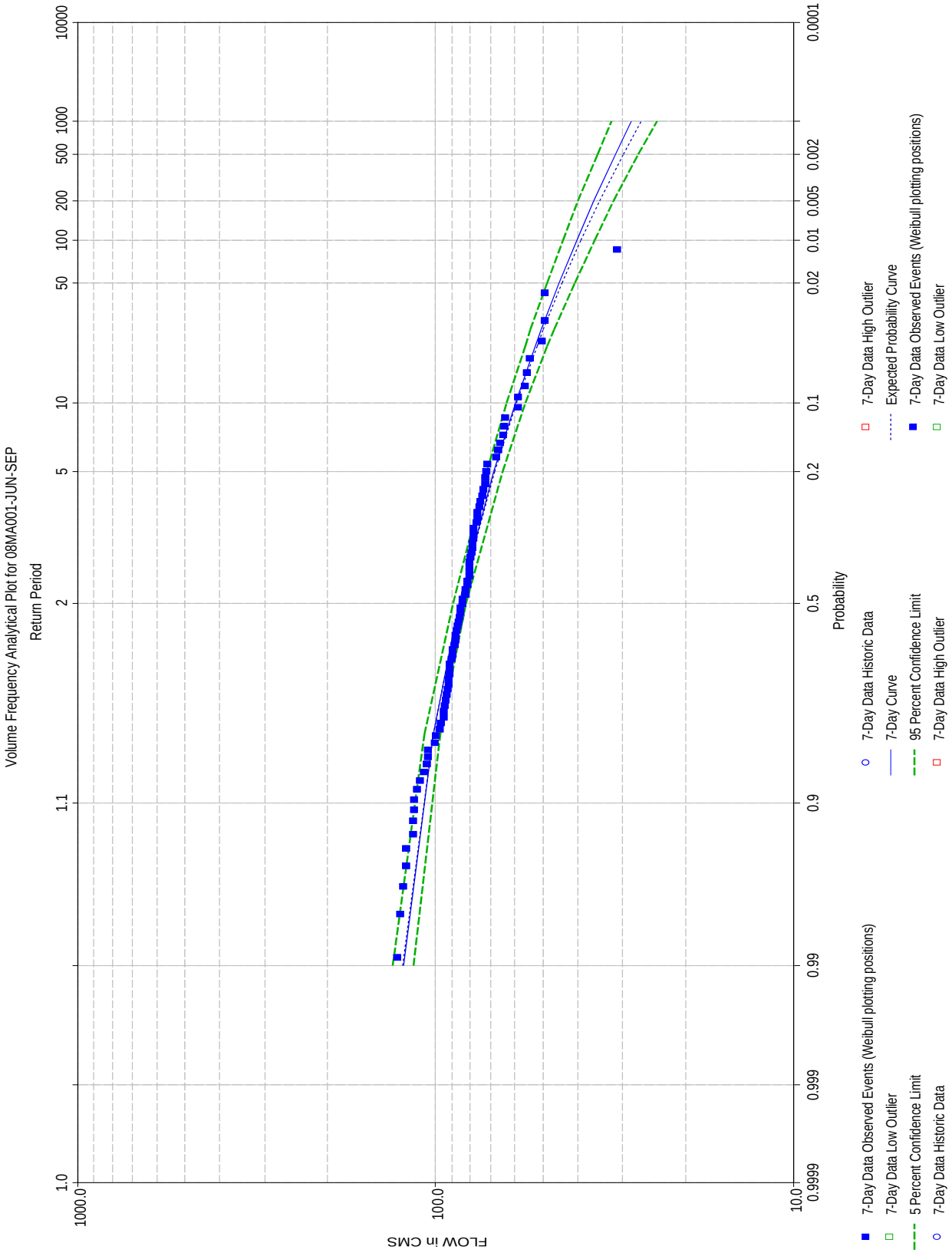
Volume Frequency Curves for 08MA001-ANNLOW, Average Daily FLOW in CMS	
Percent Chance Exceedance	365
99.0	106.1307
80.0	86.6313
50.0	77.5361
20.0	69.6012
10.0	65.8594
5.0	62.9593
4.0	62.1451
2.0	59.8864
1.0	57.9436
0.5	56.2357
0.2	54.2516
0.1	52.9134


Duration Analysis Plot for 08MA001
FLOW-DAILY in CMS
500
450
400
350
300
250
200
150
100
50
0
10
20
30
40
50
60
70
80
90
100
Percent of Time Exceeded
Interpolated Curve
Computed Curve

```
                          08MA001-FLOW DURATION-REPORT
-----------------------------
Duration Analysis
   16 Feb 2015   09:25 AM
-----------------------------


--- Input Data ---

Analysis Name: 08MA001
Description:

DSS File Name: D:\Cariboo\Cariboo.dss
DSS Pathname: //08MA001/FLOW-DAILY/01JAN1927/1DAY/CHILKO RIVER NEAR REDSTONE/


Project Path: D:\Cariboo
Report File Name: D:\Cariboo\DurationAnalysisResults\08MA001\08MA001.rpt
Result File Name: D:\Cariboo\DurationAnalysisResults\08MA001\08MA001.xml

Duration Analysis Method: Standard

Duration Plot Position Method: Rank/(N+1)

X-Axis Scale: Linear

Y-Axis Scale: Linear

Duration Period: Annual

Use User-Specified Percent Exceedance
Percent Exceedance: 99.0
Percent Exceedance: 95.0
Percent Exceedance: 90.0
Percent Exceedance: 80.0
Percent Exceedance: 50.0
Percent Exceedance: 25.0
Percent Exceedance: 15.0
Percent Exceedance: 10.0
Percent Exceedance: 5.0
Percent Exceedance: 2.0
Percent Exceedance: 1.0
Percent Exceedance: 0.1

Display ordinate values using 4 digits in fraction part of value

--- End of Input Data ---


-------------------------------------------------------------------

Annual Duration Analysis

Time Period: 01Jan - 31Dec

 Number Valid Values:     28834
 Number Missing Values:    2458

 Minimum Value:          7.7900
 Maximum Value:        482.0000


---------------------------------
|  Percent of   |  FLOW-DAILY   |
```

08MA001-FLOW DURATION-REPORT

Time Exceeded	CMS
99.0	11.7000
95.0	14.3000
90.0	16.2000
80.0	20.0000
50.0	54.7000
25.0	159.0000
15.0	204.0000
10.0	228.0000
5.0	262.0000
2.0	297.0000
1.0	327.6500
0.1	420.3300


Volume Frequency Analytical Plot for 08MA001-JUN-SEP
Return Period
1.0
1.1
2
5
10
50
100
200
500
1000
10000
Probability
0.9999
0.999
0.99
0.9
0.5
0.2
0.1
0.02
0.01
0.005
0.002
0.0001
FLOW in CMS
1000.0
100.0
10.0
7-Day Data Observed Events (Weibull plotting positions)
7-Day Data Low Outlier
5 Percent Confidence Limit
7-Day Data Historic Data
7-Day Data Historic Data
7-Day Curve
95 Percent Confidence Limit
7-Day Data High Outlier
Expected Probability Curve
7-Day Data Observed Events (Weibull plotting positions)
7-Day Data Low Outlier

08MA001-JUN-SEP-REPORT

Volume-Duration Analysis
16 Feb 2015 01:46 PM

--- Input Data ---

Analysis Name: 08MA001-JUN-SEP
Description:

Data Set Name: 08MA001-FLOW-DAILY
DSS File Name: D:\Cariboo\Cariboo.dss
DSS Pathname: //08MA001/FLOW-DAILY//1DAY/CHILKO RIVER NEAR REDSTONE/

Project Path: D:\Cariboo
Report File Name:
D:\Cariboo\VolumeFrequencyAnalysisResults\08MA001-JUN-SEP\08MA001-JUN-SEP.rpt
Result File Name:
D:\Cariboo\VolumeFrequencyAnalysisResults\08MA001-JUN-SEP\08MA001-JUN-SEP.xml

Analyze Minimums

Analysis Year: Calendar Year
Season Start Day: 01 Jun
Season End Day: 30 Sep

Record Start Date: 01 May 1927
Record End Date: 31 Dec 2012

User-Specified Durations
Duration: 7 days

Plotting Position Type: Weibull

Probability Distribution Type: Pearson Type III
Use Log Transform
Compute Expected Probability Curve

Upper Confidence Level: 0.05
Lower Confidence Level: 0.95

User-Specified Frequencies
Frequency: 99.0
Frequency: 80.0
Frequency: 50.0
Frequency: 20.0
Frequency: 10.0
Frequency: 5.0
Frequency: 4.0
Frequency: 2.0
Frequency: 1.0
Frequency: 0.5
Frequency: 0.2
Frequency: 0.1

Skew Option: Use Station Skew

Use Low Outlier Threshold
7-day Low Outlier Threshold: 31.0

Use Historic Data

08MA001-JUN-SEP-REPORT

Historic Period Start Year: ---
Historic Period End Year: ---

7-day Historic Events

Display ordinate values using 4 digits in fraction part of value

--- End of Input Data ---

==========
Statistical Analysis of 7-day Minimum values
==========

Note: Data are missing for all or part of 3 years in analysis period.

Warning: 33 events occur in first 12 days of season for 7-day duration.

Suggest reviewing data and changing the year/season specification on the General tab to capture independent max/min volumes.

--- Preliminary Results ---

<< Plotting Positions >>
08MA001-FLOW-DAILY (7-day Min)

Events Analyzed		Ordered Events			
	FLOW	Calendar		FLOW	Weibull
Day Mon Year	CMS	Rank	Year	CMS	Plot Pos
25 Sep 1928	107.0429	1	1991	127.7143	98.84
02 Jun 1929	83.8857	2	1942	125.0000	97.67
01 Jun 1930	85.5857	3	1963	122.4286	96.51
01 Jun 1931	58.6286	4	1967	120.2857	95.35
01 Jun 1932	67.5857	5	1957	120.2857	94.19
30 Sep 1933	94.1286	6	1956	114.8571	93.02
30 Sep 1934	93.9286	7	1954	114.7143	91.86
30 Sep 1935	78.0714	8	1944	114.5714	90.70
22 Sep 1936	104.5286	9	1940	114.4286	89.53
01 Jun 1937	72.3143	10	1994	111.8571	88.37
01 Jun 1938	79.1286	11	1966	110.1429	87.21
01 Jun 1939	80.1000	12	1928	107.0429	86.05
03 Jun 1940	114.4286	13	1995	105.4571	84.88
01 Jun 1941	58.4000	14	1936	104.5286	83.72
26 Sep 1942	125.0000	15	1990	104.3571	82.56
01 Jun 1943	76.0429	16	1999	99.9000	81.40
26 Sep 1944	114.5714	17	1969	99.0571	80.23
30 Sep 1945	74.4143	18	1955	97.0143	79.07
30 Sep 1946	78.0857	19	1998	96.3000	77.91
23 Sep 1947	79.9286	20	1962	94.3000	76.74
30 Sep 1948	93.5000	21	1933	94.1286	75.58
30 Sep 1949	76.3429	22	1934	93.9286	74.42
01 Jun 1950	86.2857	23	1948	93.5000	73.26
30 Sep 1951	92.2143	24	1959	92.5143	72.09
19 Sep 1952	82.1143	25	1951	92.2143	70.93
30 Sep 1953	91.5286	26	1953	91.5286	69.77
01 Jun 1954	114.7143	27	2012	91.3143	68.60
08 Jun 1955	97.0143	28	2002	90.8286	67.44
30 Sep 1956	114.8571	29	1981	90.8286	66.28
16 Jul 1957	120.2857	30	1987	90.7571	65.12

30	Sep	1958	79.8286	31	1964	89.6000	63.95
30	Sep	1959	92.5143	32	1979	89.3286	62.79
01	Jun	1960	55.2714	33	1961	89.2286	61.63
30	Sep	1961	89.2286	34	1965	87.8571	60.47
27	Sep	1962	94.3000	35	1997	87.6857	59.30
30	Sep	1963	122.4286	36	2010	87.2429	58.14
01	Jun	1964	89.6000	37	1968	87.0143	56.98
26	Sep	1965	87.8571	38	1950	86.2857	55.81
24	Sep	1966	110.1429	39	1930	85.5857	54.65
01	Jun	1967	120.2857	40	1996	85.3857	53.49
30	Sep	1968	87.0143	41	1992	84.8429	52.33
30	Sep	1969	99.0571	42	1989	84.7857	51.16
30	Sep	1970	49.4429	43	1929	83.8857	50.00
30	Sep	1971	72.0571	44	2004	83.8429	48.84
30	Sep	1972	64.3714	45	2007	82.1571	47.67
30	Sep	1973	71.7286	46	1952	82.1143	46.51
01	Jun	1974	78.3286	47	2003	80.9143	45.35
01	Jun	1975	50.3143	48	2005	80.8000	44.19
08	Jun	1976	79.2714	49	1939	80.1000	43.02
03	Jun	1977	54.4143	50	2011	79.9429	41.86
29	Sep	1978	65.7286	51	1947	79.9286	40.70
01	Jun	1979	89.3286	52	1958	79.8286	39.53
01	Jun	1980	71.4000	53	1976	79.2714	38.37
30	Sep	1981	90.8286	54	1938	79.1286	37.21
01	Jun	1982	73.5571	55	1974	78.3286	36.05
30	Sep	1983	63.5143	56	2008	78.2571	34.88
01	Jun	1984	31.0571	57	2001	78.1857	33.72
30	Sep	1985	56.1571	58	1946	78.0857	32.56
30	Sep	1986	66.5429	59	1935	78.0714	31.40
30	Sep	1987	90.7571	60	1949	76.3429	30.23
10	Jun	1988	73.1857	61	2006	76.1571	29.07
01	Jun	1989	84.7857	62	1943	76.0429	27.91
01	Jun	1990	104.3571	63	1993	75.0714	26.74
30	Sep	1991	127.7143	64	1945	74.4143	25.58
23	Sep	1992	84.8429	65	1982	73.5571	24.42
30	Sep	1993	75.0714	66	1988	73.1857	23.26
18	Sep	1994	111.8571	67	1937	72.3143	22.09
30	Sep	1995	105.4571	68	1971	72.0571	20.93
30	Sep	1996	85.3857	69	1973	71.7286	19.77
25	Sep	1997	87.6857	70	1980	71.4000	18.60
30	Sep	1998	96.3000	71	1932	67.5857	17.44
01	Jun	1999	99.9000	72	1986	66.5429	16.28
01	Jun	2000	64.0714	73	1978	65.7286	15.12
01	Jun	2001	78.1857	74	1972	64.3714	13.95
30	Sep	2002	90.8286	75	2000	64.0714	12.79
27	Sep	2003	80.9143	76	1983	63.5143	11.63
30	Sep	2004	83.8429	77	1931	58.6286	10.47
30	Sep	2005	80.8000	78	1941	58.4000	9.30
28	Sep	2006	76.1571	79	1985	56.1571	8.14
30	Sep	2007	82.1571	80	1960	55.2714	6.98
30	Sep	2008	78.2571	81	1977	54.4143	5.81
01	Jun	2009	49.2429	82	1975	50.3143	4.65
21	Sep	2010	87.2429	83	1970	49.4429	3.49
01	Jun	2011	79.9429	84	2009	49.2429	2.33
01	Jun	2012	91.3143	85	1984	31.0571	1.16

<< Skew Weighting >>

Based on 85 events, mean-square error of station skew = 0.129
Mean-square error of regional skew is undefined.

<< Frequency Curve >>
08MA001-FLOW-DAILY (7-day Min)

Computed Curve FLOW, CMS	Expected Probability	Percent Chance Non-Exceedance	Confidence Limits 0.05 FLOW, CMS	Confidence Limits 0.95 FLOW, CMS
122.4995	123.0987	99.0	131.8422	115.3032
101.3255	101.4740	80.0	106.9776	96.6216
85.5527	85.5527	50.0	89.4264	81.9456
68.5412	68.3417	20.0	71.8044	65.0315
59.6782	59.3105	10.0	63.0469	55.8948
52.5812	52.0394	5.0	56.1189	48.5462
50.5694	49.9575	4.0	54.1582	46.4686
44.9791	44.1597	2.0	48.7011	40.7255
40.2001	39.1781	1.0	44.0111	35.8656
36.0606	34.8315	0.5	39.9185	31.7054
31.3711	29.9022	0.2	35.2358	27.0605
28.3073	26.6655	0.1	32.1431	24.0719

<< Systematic Statistics >>
08MA001-FLOW-DAILY (7-day Min)

Log Transform: FLOW, CMS		Number of Events	
Mean	1.916	Historic Events	0
Standard Dev	0.105	High Outliers	0
Station Skew	-0.929	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	0
Adopted Skew	-0.929	Systematic Events	85

--- End of Preliminary Results ---

<< High Outlier Test >>

Based on 85 events, 10 percent outlier test deviate K(N) = 2.961
Computed high outlier test value = 168.52932

0 high outlier(s) identified above test value of 168.52932

<< Low Outlier Test >>

Based on 85 events, 10 percent outlier test deviate K(N) = 2.961
Computed low outlier test value = 40.34536

0 low outlier(s) identified below input threshold of 31

--- Final Results ---

<< Plotting Positions >>
08MA001-FLOW-DAILY (7-day Min)

Events Analyzed		Ordered Events			
Day Mon Year	FLOW CMS	Rank	Calendar Year	FLOW CMS	Weibull Plot Pos
25 Sep 1928	107.0429	1	1991	127.7143	98.84
02 Jun 1929	83.8857	2	1942	125.0000	97.67
01 Jun 1930	85.5857	3	1963	122.4286	96.51
01 Jun 1931	58.6286	4	1967	120.2857	95.35
01 Jun 1932	67.5857	5	1957	120.2857	94.19
30 Sep 1933	94.1286	6	1956	114.8571	93.02
30 Sep 1934	93.9286	7	1954	114.7143	91.86
30 Sep 1935	78.0714	8	1944	114.5714	90.70
22 Sep 1936	104.5286	9	1940	114.4286	89.53
01 Jun 1937	72.3143	10	1994	111.8571	88.37
01 Jun 1938	79.1286	11	1966	110.1429	87.21
01 Jun 1939	80.1000	12	1928	107.0429	86.05
03 Jun 1940	114.4286	13	1995	105.4571	84.88
01 Jun 1941	58.4000	14	1936	104.5286	83.72
26 Sep 1942	125.0000	15	1990	104.3571	82.56
01 Jun 1943	76.0429	16	1999	99.9000	81.40
26 Sep 1944	114.5714	17	1969	99.0571	80.23
30 Sep 1945	74.4143	18	1955	97.0143	79.07
30 Sep 1946	78.0857	19	1998	96.3000	77.91
23 Sep 1947	79.9286	20	1962	94.3000	76.74
30 Sep 1948	93.5000	21	1933	94.1286	75.58
30 Sep 1949	76.3429	22	1934	93.9286	74.42
01 Jun 1950	86.2857	23	1948	93.5000	73.26
30 Sep 1951	92.2143	24	1959	92.5143	72.09
19 Sep 1952	82.1143	25	1951	92.2143	70.93
30 Sep 1953	91.5286	26	1953	91.5286	69.77
01 Jun 1954	114.7143	27	2012	91.3143	68.60
08 Jun 1955	97.0143	28	2002	90.8286	67.44
30 Sep 1956	114.8571	29	1981	90.8286	66.28
16 Jul 1957	120.2857	30	1987	90.7571	65.12
30 Sep 1958	79.8286	31	1964	89.6000	63.95
30 Sep 1959	92.5143	32	1979	89.3286	62.79
01 Jun 1960	55.2714	33	1961	89.2286	61.63
30 Sep 1961	89.2286	34	1965	87.8571	60.47
27 Sep 1962	94.3000	35	1997	87.6857	59.30
30 Sep 1963	122.4286	36	2010	87.2429	58.14
01 Jun 1964	89.6000	37	1968	87.0143	56.98
26 Sep 1965	87.8571	38	1950	86.2857	55.81
24 Sep 1966	110.1429	39	1930	85.5857	54.65
01 Jun 1967	120.2857	40	1996	85.3857	53.49
30 Sep 1968	87.0143	41	1992	84.8429	52.33
30 Sep 1969	99.0571	42	1989	84.7857	51.16
30 Sep 1970	49.4429	43	1929	83.8857	50.00
30 Sep 1971	72.0571	44	2004	83.8429	48.84
30 Sep 1972	64.3714	45	2007	82.1571	47.67
30 Sep 1973	71.7286	46	1952	82.1143	46.51
01 Jun 1974	78.3286	47	2003	80.9143	45.35
01 Jun 1975	50.3143	48	2005	80.8000	44.19
08 Jun 1976	79.2714	49	1939	80.1000	43.02
03 Jun 1977	54.4143	50	2011	79.9429	41.86
29 Sep 1978	65.7286	51	1947	79.9286	40.70
01 Jun 1979	89.3286	52	1958	79.8286	39.53

01 Jun 1980	71.4000	53	1976	79.2714	38.37
30 Sep 1981	90.8286	54	1938	79.1286	37.21
01 Jun 1982	73.5571	55	1974	78.3286	36.05
30 Sep 1983	63.5143	56	2008	78.2571	34.88
01 Jun 1984	31.0571	57	2001	78.1857	33.72
30 Sep 1985	56.1571	58	1946	78.0857	32.56
30 Sep 1986	66.5429	59	1935	78.0714	31.40
30 Sep 1987	90.7571	60	1949	76.3429	30.23
10 Jun 1988	73.1857	61	2006	76.1571	29.07
01 Jun 1989	84.7857	62	1943	76.0429	27.91
01 Jun 1990	104.3571	63	1993	75.0714	26.74
30 Sep 1991	127.7143	64	1945	74.4143	25.58
23 Sep 1992	84.8429	65	1982	73.5571	24.42
30 Sep 1993	75.0714	66	1988	73.1857	23.26
18 Sep 1994	111.8571	67	1937	72.3143	22.09
30 Sep 1995	105.4571	68	1971	72.0571	20.93
30 Sep 1996	85.3857	69	1973	71.7286	19.77
25 Sep 1997	87.6857	70	1980	71.4000	18.60
30 Sep 1998	96.3000	71	1932	67.5857	17.44
01 Jun 1999	99.9000	72	1986	66.5429	16.28
01 Jun 2000	64.0714	73	1978	65.7286	15.12
01 Jun 2001	78.1857	74	1972	64.3714	13.95
30 Sep 2002	90.8286	75	2000	64.0714	12.79
27 Sep 2003	80.9143	76	1983	63.5143	11.63
30 Sep 2004	83.8429	77	1931	58.6286	10.47
30 Sep 2005	80.8000	78	1941	58.4000	9.30
28 Sep 2006	76.1571	79	1985	56.1571	8.14
30 Sep 2007	82.1571	80	1960	55.2714	6.98
30 Sep 2008	78.2571	81	1977	54.4143	5.81
01 Jun 2009	49.2429	82	1975	50.3143	4.65
21 Sep 2010	87.2429	83	1970	49.4429	3.49
01 Jun 2011	79.9429	84	2009	49.2429	2.33
01 Jun 2012	91.3143	85	1984	31.0571	1.16

<< Skew Weighting >>

Based on 85 events, mean-square error of station skew = 0.129
Mean-square error of regional skew is undefined.

<< Frequency Curve >>
08MA001-FLOW-DAILY (7-day Min)

Computed Curve FLOW, CMS	Expected Probability	Percent Chance Non-Exceedance	Confidence Limits 0.05 FLOW, CMS	0.95
122.4995	123.0987	99.0	131.8422	115.3032
101.3255	101.4740	80.0	106.9776	96.6216
85.5527	85.5527	50.0	89.4264	81.9456
68.5412	68.3417	20.0	71.8044	65.0315
59.6782	59.3105	10.0	63.0469	55.8948
52.5812	52.0394	5.0	56.1189	48.5462
50.5694	49.9575	4.0	54.1582	46.4686
44.9791	44.1597	2.0	48.7011	40.7255
40.2001	39.1781	1.0	44.0111	35.8656
36.0606	34.8315	0.5	39.9185	31.7054
31.3711	29.9022	0.2	35.2358	27.0605
28.3073	26.6655	0.1	32.1431	24.0719

<< Adjusted Statistics >>
08MA001-FLOW-DAILY (7-day Min)

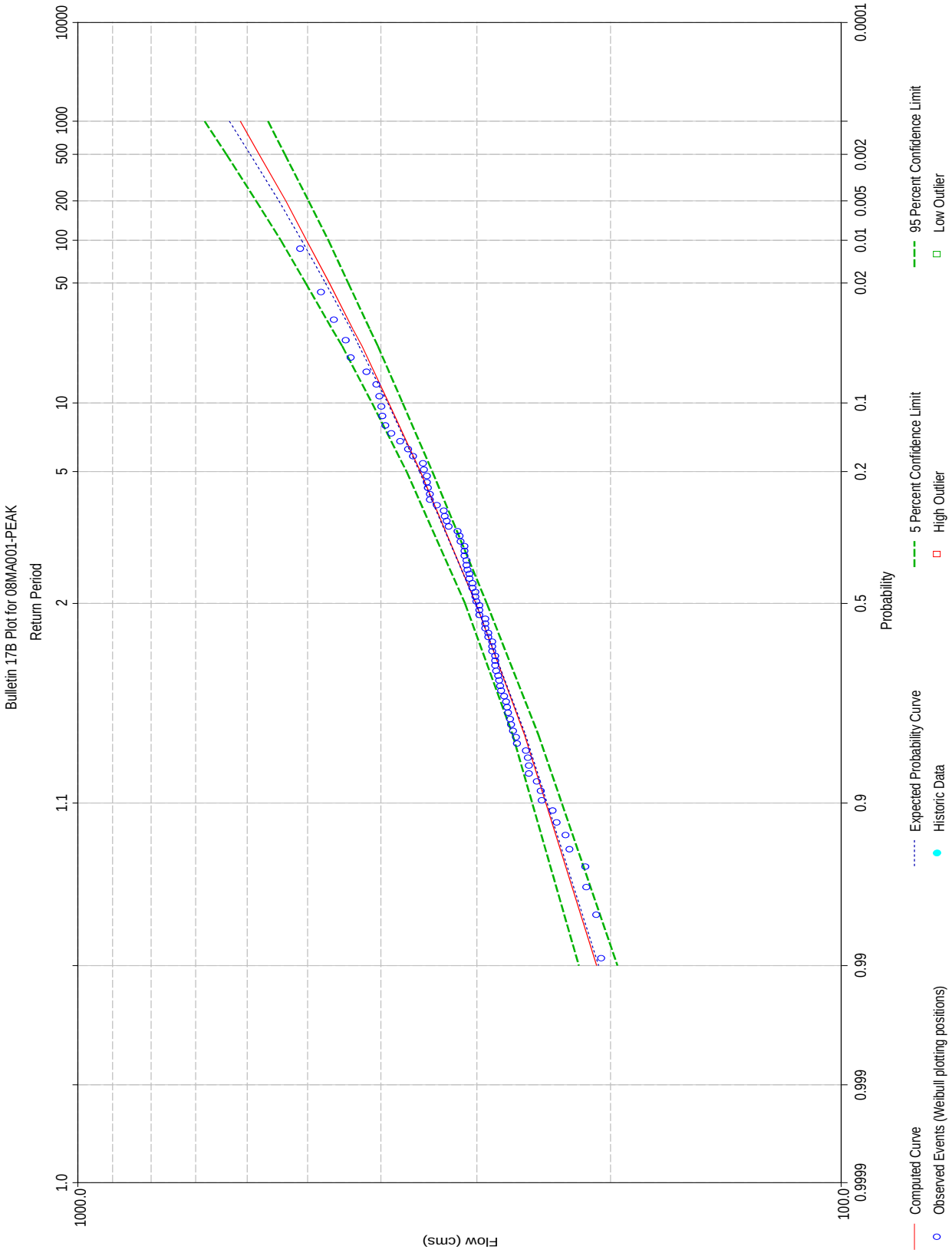
Log Transform: FLOW, CMS		Number of Events	
Mean	1.916	Historic Events	0
Standard Dev	0.105	High Outliers	0
Station Skew	-0.929	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	0
Adopted Skew	-0.929	Systematic Events	85

--- End of Analytical Frequency Curve ---

Note: No ordinates specified for graphical frequency curve

HEC-SSP 2.0 - Cariboo

Volume Frequency Curves for 08MA001-JUN-SEP, Average Daily FLOW in CMS	
Percent Chance Exceedance	7
99.0	122.4995
80.0	101.3255
50.0	85.5527
20.0	68.5412
10.0	59.6782
5.0	52.5812
4.0	50.5694
2.0	44.9791
1.0	40.2001
0.5	36.0606
0.2	31.3711
0.1	28.3073


Bulletin 17B Plot for 08MA001-PEAK
Return Period
Flow (cms)
Probability
1000.0
100.0
1.0
2
5
10
50
100
200
500
1000
10000
0.9999
0.9999
0.999
0.99
0.9
0.5
0.2
0.1
0.02
0.01
0.005
0.002
0.0001
Computed Curve
Observed Events (Weibull plotting positions)
Expected Probability Curve
Historic Data
5 Percent Confidence Limit
High Outlier
95 Percent Confidence Limit
Low Outlier

```
                                08MA001-PEAK-REPORT
------------------------------
Bulletin 17B Frequency Analysis
    16 Feb 2015   09:28 AM
------------------------------


--- Input Data ---

Analysis Name: 08MA001-PEAK
Description:

Data Set Name: 08MA001-FLOW-PEAK-EST
DSS File Name: D:\Cariboo\Cariboo.dss
DSS Pathname: //08MA001/FLOW-PEAK-EST/01jan1900/IR-YEAR/CHILKO RIVER NEAR REDSTONE/

Report File Name: D:\Cariboo\Bulletin17bResults\08MA001-PEAK\08MA001-PEAK.rpt
XML File Name: D:\Cariboo\Bulletin17bResults\08MA001-PEAK\08MA001-PEAK.xml

Start Date:
End Date:

Skew Option: Use Station Skew
Regional Skew: -Infinity
Regional Skew MSE: -Infinity

Plotting Position Type: Weibull

Upper Confidence Level: 0.05
Lower Confidence Level: 0.95

Use non-standard frequencies
Frequency: 0.1
Frequency: 0.2
Frequency: 0.5
Frequency: 1.0
Frequency: 2.0
Frequency: 4.0
Frequency: 5.0
Frequency: 10.0
Frequency: 20.0
Frequency: 50.0
Frequency: 80.0
Frequency: 99.0

Display ordinate values using 4 digits in fraction part of value

--- End of Input Data ---



------------------------
<< High Outlier Test >>
------------------------
 Based on 86 events, 10 percent outlier test deviate K(N) = 2.966
                     Computed high outlier test value = 532.35225

       0 high outlier(s) identified above test value of 532.35225


-----------------------
<< Low Outlier Test >>
-----------------------
 Based on 86 events, 10 percent outlier test deviate K(N) = 2.966
```

08MA001-PEAK-REPORT
Computed low outlier test value = 174.5256

0 low outlier(s) identified below test value of 174.5256

--- Final Results ---

<< Plotting Positions >>
08MA001-FLOW-PEAK-EST

Events Analyzed		Ordered Events			
Day Mon Year	FLOW CMS	Rank	Water Year	FLOW CMS	Weibull Plot Pos
26 Jul 1927	282.0280	1	1991	510.0000	1.15
02 Jul 1928	399.0000	2	1950	479.0000	2.30
14 Aug 1929	247.0000	3	1999	461.0000	3.45
16 Aug 1930	297.0000	4	1948	445.0000	4.60
02 Aug 1931	279.0000	5	2012	438.0000	5.75
28 Aug 1932	303.0000	6	2007	417.0000	6.90
19 Aug 1933	265.0000	7	1967	405.0000	8.05
14 Jun 1934	286.0000	8	1976	402.0000	9.20
25 Jul 1935	377.0000	9	1928	399.0000	10.34
03 Jun 1936	331.0000	10	1985	398.0000	11.49
29 Jul 1937	292.0000	11	1969	394.0000	12.64
26 Jun 1938	283.0000	12	1955	388.0000	13.79
06 Aug 1939	309.0000	13	1935	377.0000	14.94
17 Jul 1940	289.0000	14	1941	368.0000	16.09
20 Jul 1941	368.0000	15	2010	363.0000	17.24
03 Aug 1942	344.9263	16	1987	352.0000	18.39
02 Aug 1943	258.0000	17	1968	351.0000	19.54
29 Jul 1944	314.0000	18	1964	348.0000	20.69
15 Jul 1945	276.0000	19	1958	348.0000	21.84
31 Jul 1946	256.0000	20	2002	347.0000	22.99
04 Jun 1947	216.0000	21	1992	345.0000	24.14
20 Jun 1948	445.0000	22	1942	344.9263	25.29
16 Jul 1949	246.0000	23	1998	338.0000	26.44
20 Jun 1950	479.0000	24	1936	331.0000	27.59
16 Jun 1951	303.0000	25	1996	330.0000	28.74
13 Aug 1952	283.0000	26	2011	328.0000	29.89
12 Jul 1953	256.0000	27	1956	326.0000	31.03
25 Aug 1954	289.0000	28	1994	317.0000	32.18
18 Jul 1955	388.0000	29	2003	315.0000	33.33
23 Jul 1956	326.0000	30	1944	314.0000	34.48
10 Jun 1957	256.6657	31	1982	311.0000	35.63
26 Jun 1958	348.0000	32	1975	311.0000	36.78
26 Jul 1959	306.0000	33	1971	310.4337	37.93
21 Jul 1960	297.0000	34	1961	309.0000	39.08
16 Jul 1961	309.0000	35	1939	309.0000	40.23
03 Aug 1962	273.0000	36	2008	308.0000	41.38
22 Jul 1963	266.0000	37	2006	306.0000	42.53
20 Jun 1964	348.0000	38	1959	306.0000	43.68
27 Aug 1965	274.0000	39	1951	303.0000	44.83
17 Jul 1966	286.0000	40	1932	303.0000	45.98
24 Jun 1967	405.0000	41	2009	301.0000	47.13
12 Jul 1968	351.0000	42	1981	301.0000	48.28
20 Jun 1969	394.0000	43	1972	300.0000	49.43
28 Jun 1970	238.0000	44	1995	297.0000	50.57
03 Aug 1971	310.4337	45	1960	297.0000	51.72
26 Jun 1972	300.0000	46	1930	297.0000	52.87

08MA001-PEAK-REPORT

10 Aug 1973	209.0000	47	2004	292.0000	54.02
22 Jun 1974	283.0000	48	1978	292.0000	55.17
13 Jul 1975	311.0000	49	1937	292.0000	56.32
09 Aug 1976	402.0000	50	1954	289.0000	57.47
15 Aug 1977	268.0000	51	1940	289.0000	58.62
28 Jul 1978	292.0000	52	2005	286.0000	59.77
24 Jul 1979	205.9413	53	1966	286.0000	60.92
28 Jul 1980	215.0000	54	1934	286.0000	62.07
30 Jul 1981	301.0000	55	1974	283.0000	63.22
04 Jul 1982	311.0000	56	1952	283.0000	64.37
02 Jun 1983	280.0000	57	1938	283.0000	65.52
10 Oct 1984	398.0000	58	1927	282.0280	66.67
05 Aug 1985	250.0000	59	1990	281.0135	67.82
07 Jun 1986	272.0000	60	1983	280.0000	68.97
04 Jul 1987	352.0000	61	1931	279.0000	70.11
07 Aug 1988	229.0000	62	1997	278.0000	71.26
13 Jun 1989	235.0000	63	1945	276.0000	72.41
15 Jul 1990	281.0135	64	1965	274.0000	73.56
28 Jun 1991	510.0000	65	1962	273.0000	74.71
30 Jun 1992	345.0000	66	1986	272.0000	75.86
09 Jun 1993	226.0000	67	2001	271.0000	77.01
24 Jul 1994	317.0000	68	2000	270.0000	78.16
05 Jul 1995	297.0000	69	1977	268.0000	79.31
17 Jul 1996	330.0000	70	1963	266.0000	80.46
19 Jun 1997	278.0000	71	1933	265.0000	81.61
31 Jul 1998	338.0000	72	1943	258.0000	82.76
16 Jul 1999	461.0000	73	1957	256.6657	83.91
07 Aug 2000	270.0000	74	1953	256.0000	85.06
24 Jul 2001	271.0000	75	1946	256.0000	86.21
29 Jun 2002	347.0000	76	1985	250.0000	87.36
11 Jun 2003	315.0000	77	1929	247.0000	88.51
27 Jun 2004	292.0000	78	1949	246.0000	89.66
08 Jul 2005	286.0000	79	1970	238.0000	90.80
15 Jun 2006	306.0000	80	1989	235.0000	91.95
15 Jul 2007	417.0000	81	1988	229.0000	93.10
06 Jul 2008	308.0000	82	1993	226.0000	94.25
01 Aug 2009	301.0000	83	1947	216.0000	95.40
13 Jul 2010	363.0000	84	1980	215.0000	96.55
24 Jun 2011	328.0000	85	1973	209.0000	97.70
18 Jul 2012	438.0000	86	1979	205.9413	98.85

<< Skew Weighting >>

Based on 86 events, mean-square error of station skew = 0.085
Mean-square error of regional skew = -?

<< Frequency Curve >>
08MA001-FLOW-PEAK-EST

Computed Curve FLOW, CMS	Expected Probability	Percent Chance Exceedance	Confidence Limits 0.05 FLOW, CMS	0.95
612.3697	632.7167	0.1	681.4085	562.8851
577.9651	593.5790	0.2	638.1057	534.4392
533.4977	544.1068	0.5	582.7449	497.3358
500.4335	507.9873	1.0	542.0681	469.4651
467.6411	472.7951	2.0	502.1858	441.5433

434.8231	438.1002	4.0	462.7968	413.2618
424.1840	426.9498	5.0	450.1556	404.0064
390.5691	392.1278	10.0	410.7047	374.4110
355.2070	355.9090	20.0	370.2188	342.4947
300.7337	300.7337	50.0	310.9606	290.7165
259.5233	259.1469	80.0	269.2606	248.8401
209.0352	207.5131	99.0	220.3665	195.8822

<< Systematic Statistics >>
08MA001-FLOW-PEAK-EST

Log Transform: FLOW, CMS		Number of Events	
Mean	2.484	Historic Events	0
Standard Dev	0.082	High Outliers	0
Station Skew	0.431	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	0
Adopted Skew	0.431	Systematic Events	86

--- End of Analytical Frequency Curve ---

HEC-SSP 2.0 - Cariboo

Frequency Curve for: 08MA001-FLOW-PEAK-EST

Percent Chance Exceedance	Computed Curve Flow in cms	Expected Prob. Flow in cms	Confidence Limits Flow in cms	
			0.05	0.95
0.1	612.3696	632.7167	681.4084	562.8851
0.2	577.9651	593.5790	638.1057	534.4393
0.5	533.4977	544.1068	582.7449	497.3358
1.0	500.4335	507.9873	542.0681	469.4651
2.0	467.6411	472.7951	502.1858	441.5433
4.0	434.8232	438.1003	462.7968	413.2618
5.0	424.1840	426.9498	450.1556	404.0064
10.0	390.5691	392.1278	410.7047	374.4110
20.0	355.2070	355.9090	370.2188	342.4947
50.0	300.7337	300.7337	310.9606	290.7166
80.0	259.5233	259.1469	269.2606	248.8401
99.0	209.0352	207.5131	220.3665	195.8822

System Statistics

Log Transform: Flow

Statistic	Value
Mean	2.484
Standard Dev	0.082
Station Skew	0.431
Regional Skew	
Weighted Skew	
Adopted Skew	0.431

Number of Events

Event	Number
Historic Events	0
High Outliers	0
Low Outliers	0
Zero Or Missing	0
Systematic Events	86
Historic Period	

APPENDIX B. DATA SHEETS

Zone 14 Northern Columbia Mountains

Zone 15 Fraser Plateau

Zone 16 Southern Quesnel Highland

Zone 25 Eastern South Coast Mountains

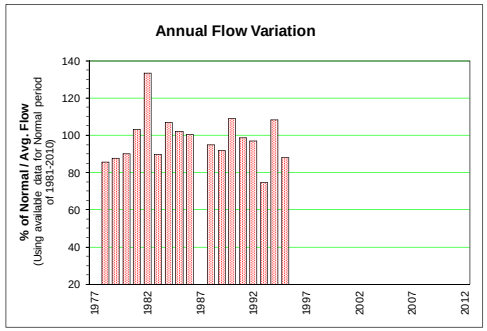
Zone 14 Northern Columbia Mountains

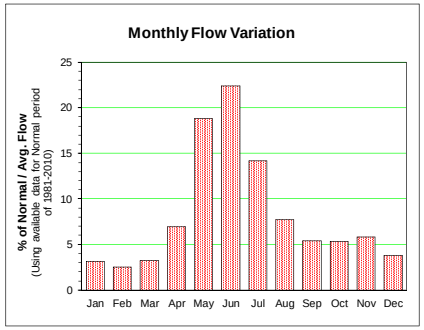
BOWRON RIVER NEAR WELLS 08KD001

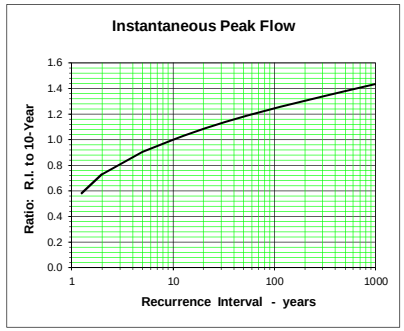
Station Longitude Latitude: -121.413901 53.261112

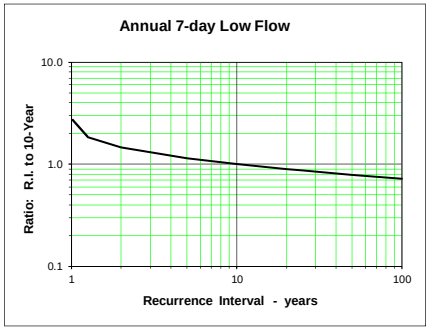
Monthly and Annual Discharge in m^3/s | Drainage Area = 452.41 km^2 | Median Elevation = 1192 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	3.83	3.10	2.78			22.50	19.80	9.43	9.65	5.80	4.02	2.43		Jun 11	25.06	5.91	2.18	1977
1978	2.08	1.87	1.78	4.86	13.20	19.70	12.30	7.49	10.40	8.30	7.11	3.80	7.76	Jun 07	24.70	5.38	1.62	1978
1979	2.11	1.80	2.94	4.09	20.00	29.50	18.50	4.46	2.97	3.83	2.44	2.18	7.93	Jun 06	49.60	2.83	1.68	1979
1980	1.79	1.15	1.34	5.57	18.70	13.50	13.90	7.39	10.50	8.45	6.19	8.85	8.14	May 09	23.83	6.28	1.11	1980
1981	8.13	5.37	3.64	4.90	19.80	25.40	14.10	5.02	3.67	4.60	12.70	4.59	9.33	Jun 02	35.13	2.97	2.97	1981
1982	3.43	2.85	2.70	3.19	16.10	35.00	25.80	20.30	13.50	9.69	6.69	5.04	12.07	Jul 25	43.70	10.14	2.55	1982
1983	4.31	3.64	3.91	4.92	10.60	18.90	19.00	8.97	6.33	5.40	7.54	3.73	8.13	Jul 18	28.90	4.83	2.84	1983
1984	3.10	3.22	4.02	6.46	10.70	27.90	20.60	8.28	12.40	9.23	6.39	3.89	9.68	Jun 15	40.80	7.34	2.84	1984
1985	2.46	2.07	1.93	5.08	28.30	31.60	11.20	4.79	6.26	8.91	5.10	2.75	9.23	May 26	56.50	3.78	1.83	1985
1986	2.53	2.46	4.62	6.51	18.10	32.20	15.70	6.51	5.08	5.78	5.37	3.79	9.07	Jun 02	51.80	4.22	2.32	1986
1987	3.10	3.45	5.79	9.45				9.58	4.33	2.43	4.00	3.66				3.10	2.11	1987
1988	2.07	1.99	2.19	10.30	27.60	21.80	12.00	8.68	5.00	3.89	4.40	3.06	8.60	May 17	38.70	3.75	1.78	1988
1989	2.20	2.23	1.81	5.57	20.30	19.70	14.10	7.92	4.37	3.68	10.90	6.62	8.31	Nov 30	25.78	3.87	1.76	1989
1990	5.61	2.66	2.44	10.70	23.70	36.50	16.00	4.90	3.40	3.71	5.46	3.18	9.87	Jun 13	59.70	2.57	2.13	1990
1991	2.38	4.35	4.01	8.33	22.50	21.50	15.20	8.64	5.92	3.72	5.62	4.52	8.91	May 22	29.10	4.40	2.18	1991
1992	3.76	4.11	7.49	13.00	18.90	19.20	7.60	3.43	6.26	9.75	7.95	3.91	8.77	May 07	23.50	2.82	2.82	1992
1993	2.38	1.76	1.70	4.59	21.90	16.90	11.90	4.68	3.35	2.92	4.83	3.54	6.74	May 21	39.10	2.97	1.52	1993
1994	3.09	3.02	3.40	16.70	27.10	22.50	19.00	5.18	3.18	6.36	4.54	2.97	9.79	May 13	31.50	2.75	2.62	1994
1995	2.19	2.17	2.28	5.93	15.10	16.80	9.97	17.00	6.84	5.47	5.47	5.91	7.97	Jun 06	21.50	3.94	2.03	1995
1996																		1996
1997																		1997
1998																		1998
1999																		1999
2000																		2000
2001																		2001
2002																		2002
2003																		2003
2004																		2004
2005																		2005
2006																		2006
2007																		2007
2008																		2008
2009																		2009
2010																		2010
2011																		2011
2012																		2012
Avg.	3.19	2.80	3.20	7.23	19.56	23.95	15.37	8.03	6.50	5.89	6.14	4.13	8.84	9.18		36.05	4.41	2.15	m^3/s
S. D.	1.53	1.05	1.55	3.54	5.39	6.70	4.46	4.23	3.25	2.45	2.42	1.60	1.17			12.13	1.92	0.52	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	3.38	3.02	3.46	7.71	20.05	24.71	15.16	8.26	5.99	5.70	6.46	4.08	9.03	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	20	16	20	44	119	142	90	49	34	34	37	24	630	mm	10-Year	51.20	2.79	1.45	m^3/s







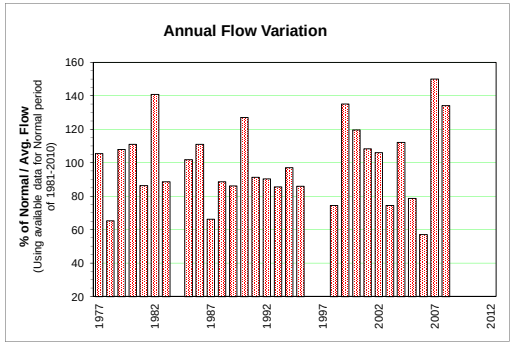


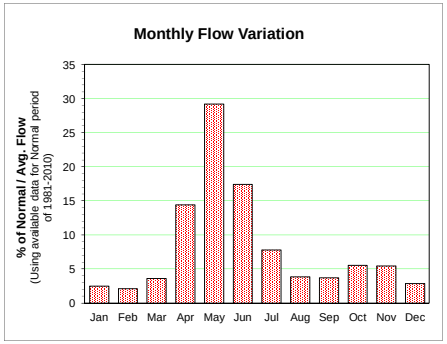
WILLOW RIVER ABOVE HAY CREEK 08KD006

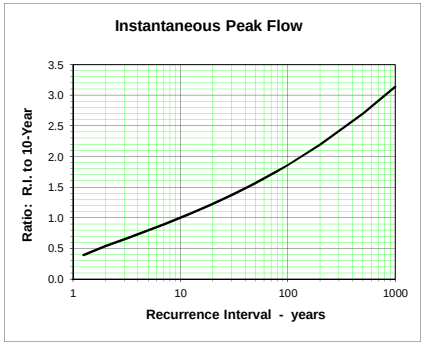
Station Longitude Latitude: -122.374016 54.045837

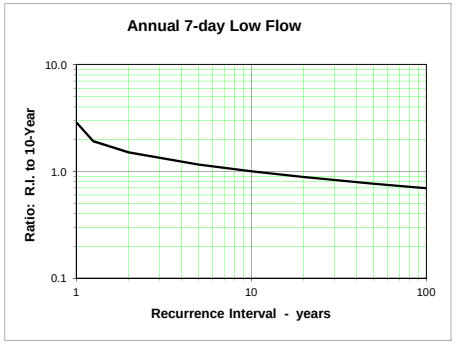
Monthly and Annual Discharge in m^3/s | Drainage Area = 2864.06 km^2 | Median Elevation = 1071 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	15.50	17.90	17.20	76.80	116.00	77.50	54.40	19.30	22.70	22.30	14.40	8.47	38.61		Apr 27	257.00	10.48	7.836	1977
1978	6.97	6.38	8.02	53.40	71.00	46.10	15.70	12.50	19.60	19.90	17.10	10.30	23.95		Apr 28	100.00	5.60	5.600	1978
1979	6.56	5.23	11.40	41.60	210.00	125.00	33.60	8.84	6.03	10.80	7.49	4.91	39.51		May 06	439.00	5.16	4.397	1979
1980	4.01	3.64	4.53	62.80	89.20	48.20	46.70	28.30	48.30	34.50	47.20	69.80	40.68		Dec 17	180.00	22.31	3.500	1980
1981	38.40	17.50	20.00	42.90	103.00	84.70	24.00	10.20	7.72	8.66	13.50	8.42	31.64		May 31	190.00	6.91	6.906	1981
1982	5.49	6.47	7.97	14.40	220.00	124.00	65.60	47.90	52.30	40.00	19.50	11.40	51.61		May 19	611.00	23.63	5.017	1982
1983	8.79	10.00	16.20	43.30	77.70	84.60	67.50	20.30	10.80	12.20	24.70	12.40	32.47		Jun 21	150.63	9.62	7.850	1983
1984	9.24	10.70	16.00	58.10														8.484	1984
1985	13.00	11.60	10.30	35.40	159.00	92.30	22.10	8.11	19.70	47.50	18.10	8.42	37.29		May 25	272.00	7.06	7.057	1985
1986	8.86	8.57	34.20	81.50	113.00	127.00	40.40	12.90	9.35	19.60	19.80	11.80	40.64		Jun 01	237.77	8.19	7.271	1986
1987	10.00	17.10	31.40	49.40	93.10	35.00	12.90	16.40	7.22	5.31	7.89	4.85	24.27		May 02	215.18	5.77	3.927	1987
1988	3.75	5.30	8.00	90.70	132.00	54.70	21.10	20.80	11.50	10.40	19.00	11.90	32.45		Apr 23	219.00	8.35	3.211	1988
1989	8.24	7.43	7.47	59.60	113.00	42.40	22.40	25.40	14.00	13.40	40.70	23.30	31.56		May 01	175.00	12.04	7.324	1989
1990	21.30	12.10	12.50	107.00	140.00	157.00	42.50	8.81	6.82	15.10	19.70	15.40	46.52		Jun 13	398.08	6.00	5.951	1990
1991	11.90	14.80	15.80	54.30	125.00	78.30	36.30	12.70	9.19	12.10	14.50	15.00	33.41		May 21	208.73	8.33	7.484	1991
1992	17.30	20.10	50.30	77.80	74.40	37.30	8.53	5.60	15.70	34.50	39.50	16.10	33.06		May 01	133.41	4.98	4.984	1992
1993	8.21	7.45	11.00	73.60	115.00	58.10	37.20	15.90	8.94	9.83	18.50	11.20	31.35		May 16	178.00	8.16	6.183	1993
1994	13.10	12.90	28.90	116.00	109.00	50.40	46.20	9.03	7.10	13.20	10.40	9.10	35.51		Apr 22	244.00	6.52	6.516	1994
1995	7.82	7.91	12.50	56.70	99.50	38.30	27.90	47.90	15.80	29.20	20.10	12.00	31.48		May 15	166.00	10.71	7.34	1995
1996																			1996
1997																			1997
1998	7.78	8.98	16.70	60.10	83.00	19.90	27.00	7.50	5.78	49.20	25.60	14.10	27.28		Apr 25	181.00	5.02	5.02	1998
1999	13.10	11.20	11.50	102.00	174.00	132.00	56.10	20.90	19.80	20.80	17.40	13.50	49.47		Apr 26	335.00	15.40	10.53	1999
2000	11.10	9.46	9.36	59.70	111.00	104.00	79.90	16.70	40.10	33.40	40.60	10.30	43.80		Jul 03	204.00	12.41	8.72	2000
2001	8.73	7.79	8.66	48.40	116.00	92.30	63.70	41.10	17.80	27.40	31.50	11.90	39.69		Apr 28	171.00	13.01	7.36	2001
2002	7.72	7.57	6.84	21.30	180.00	125.00	26.70	9.78	16.80	33.20	18.30	11.00	38.87		Jun 06	277.00	8.21	6.66	2002
2003	6.60	5.78	9.66	97.00	65.40	39.80	16.40	6.63	11.20	40.80	19.30	8.56	27.28		Apr 25	219.48	5.34	4.72	2003
2004	6.22	5.80	15.90	84.20	110.00	66.10	21.10	9.82	55.50	38.40	60.00	21.10	41.10		May 05	172.00	7.56	5.25	2004
2005	11.50	10.60	13.50	64.80	84.90	35.60	32.10	13.00	13.50	34.40	18.80	11.80	28.81		May 16	158.00	9.55	7.38	2005
2006	9.82	9.74	7.85	39.40	79.00	37.80	11.50	6.82	7.48	11.60	16.30	13.20	20.92		May 24	139.00	4.31	4.31	2006
2007	11.80	11.80	30.70	114.00	199.00	115.00	30.60	14.80	18.00	45.10	54.10	12.60	54.92		May 09	397.01	13.67	9.59	2007
2008	7.91	6.95	7.40	23.40	273.00	112.00	24.00	28.30	29.80	20.00	37.60	16.90	49.15		May 22	559.00	13.63	6.92	2008
2009	10.30	9.83	10.10					6.98	6.12	7.10	13.50	9.34					5.44	5.44	2009
2010	8.51	8.52	9.61				13.90	5.36	12.00	14.90	16.80	11.30					4.85	4.85	2010
2011																			2011
2012																			2012
Avg.	10.61	9.91	15.05	63.65	125.35	77.26	34.27	16.73	17.63	23.70	23.93	13.88	36.46	37.05		247.84	9.30	6.36	m^3/s
S. D.	6.27	4.03	9.97	26.91	50.67	37.85	18.63	11.59	13.69	13.21	13.35	11.09	8.60			124.03	4.75	1.75	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	10.95	10.14	15.73	64.42	125.96	77.74	33.76	16.65	16.67	23.97	24.28	12.48	36.58	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	10	9	15	58	118	70	32	16	15	22	22	12	403	mm	10-Year	406.44	4.91	4.20	m^3/s







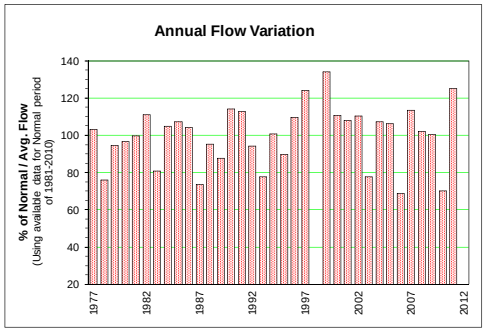


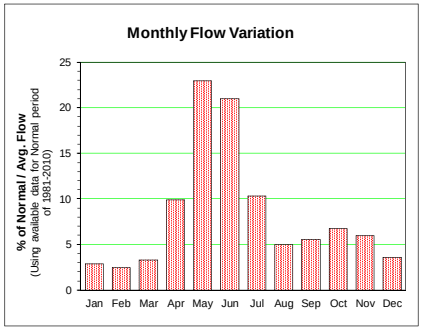
BOWRON RIVER BELOW BOX CANYON 08KD007

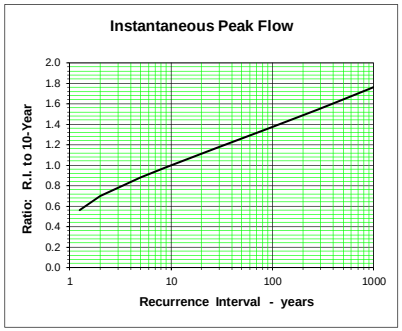
Station Longitude Latitude: -122.103761 54.016906

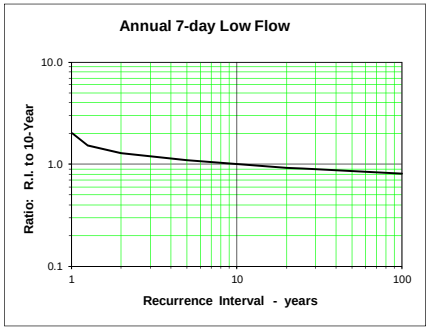
Monthly and Annual Discharge in m^3/s | Drainage Area = 3371.42 km^2 | Median Elevation = 1156 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	30.00	28.20	27.40	97.30	162.00	170.00	117.00	43.10	50.30	37.90	23.60	14.60	66.90	Apr 27	262.00	28.41	13.43	1977
1978	13.50	11.40	13.90	52.50	104.00	121.00	73.30	45.60	55.80	44.90	32.10	20.50	49.17	Jun 05	187.00	37.01	10.53	1978
1979	14.90	12.50	26.40	66.10	200.00	206.00	92.70	23.70	19.40	37.20	19.20	14.10	61.23	Jun 07	310.83	17.53	12.20	1979
1980	12.10	9.51	12.10	84.00	161.00	97.00	82.80	50.30	90.40	50.10	40.30	60.30	62.61	Apr 29	320.00	38.41	8.89	1980
1981	51.90	40.70	34.90	51.50	179.00	150.00	62.00	26.10	27.20	56.50	67.60	27.10	64.63	May 31	326.00	17.37	17.37	1981
1982	16.60	13.70	13.50	24.20	216.00	242.00	74.10	40.50	95.40	65.90	38.60	21.40	71.99	May 23	366.00	26.61	12.87	1982
1983	17.20	16.80	15.80	37.80	106.00	136.00	114.00	40.90	33.80	34.30	49.80	23.30	52.30	Jun 20	240.00	25.81	14.76	1983
1984	17.00	19.60	19.20	58.60	103.00	196.00	133.00	41.80	97.70	66.40	35.70	28.20	67.96	Jul 06	297.00	32.26	15.11	1984
1985	20.00	17.20	16.90	66.00	232.00	200.00	56.80	26.90	55.30	80.60	39.40	21.70	69.60	May 25	459.00	20.83	15.70	1985
1986	22.00	24.60	53.60	82.30	172.00	229.00	88.20	29.80	23.90	37.20	29.10	17.30	67.51	Jun 01	416.00	20.67	16.11	1986
1987	24.30	32.70	41.30	67.60	147.00	103.00	38.80	45.70	16.60	18.50	22.40	13.90	47.72	May 02	279.00	12.90	11.44	1987
1988	11.80	14.40	24.60	135.00	213.00	131.00	61.50	45.80	25.20	24.20	32.20	21.30	61.72	May 14	393.00	20.30	10.73	1988
1989	15.40	13.50	13.20	52.90	187.00	123.00	56.10	34.50	25.80	28.20	82.60	47.40	56.83	May 11	309.00	22.23	12.76	1989
1990	36.20	19.30	18.70	101.00	200.00	282.00	85.60	22.50	18.00	34.20	41.00	27.80	73.91	Jun 13	624.00	14.63	14.46	1990
1991	20.40	30.60	34.40	107.00	237.00	196.00	78.50	31.50	34.90	37.90	37.90	28.80	73.03	May 19	487.54	23.90	17.56	1991
1992	26.60	27.40	64.70	108.00	138.00	117.00	26.90	16.70	47.50	74.50	56.50	28.90	61.01	May 01	233.00	14.60	14.60	1992
1993	16.60	14.40	17.70	70.60	188.00	94.50	58.50	32.80	20.90	22.40	38.30	26.90	50.36	May 14	352.00	17.96	12.37	1993
1994	26.80	19.20	31.30	160.00	197.00	131.00	92.60	27.50	20.90	35.10	23.50	16.80	65.31	Apr 22	309.00	18.86	15.16	1994
1995	14.30	14.90	15.20	58.50	152.00	91.70	62.50	96.20	32.80	71.20	48.20	37.00	58.23	May 15	281.00	23.37	12.46	1995
1996	26.60	21.00	21.70	96.50	119.00	163.00	121.00	62.30	74.20	59.30	59.10	30.60	71.17	Jun 05	287.41	54.03	17.13	1996
1997	21.70	22.10	26.40	98.90	235.00	201.00	121.00	53.50	32.70	68.50	50.10	29.60	80.35	Jun 01	436.00	27.07	20.16	1997
1998											40.40	22.70						1998
1999	26.30	22.70	22.60	101.00	200.00	258.00	145.00	55.40	50.80	55.80	71.00	32.40	86.91	May 25	401.00	41.74	19.69	1999
2000	19.30	17.60	17.50	59.50	137.00	191.00	124.00	46.80	98.60	65.40	60.90	24.30	71.79	Jul 03	293.00	33.73	16.53	2000
2001	17.80	14.80	13.00	54.10	158.00	178.00	139.00	86.90	48.30	50.40	53.20	24.50	69.99	Jul 19	374.00	38.10	12.44	2001
2002	17.00	14.80	13.40	26.90	191.00	258.00	79.00	27.80	58.80	95.80	45.00	28.70	71.53	Jun 06	419.00	21.71	12.79	2002
2003	17.90	16.00	17.40	86.80	118.00	108.00	50.50	21.20	30.00	71.60	40.90	26.10	50.47	May 25	256.00	17.16	12.64	2003
2004	17.40	14.90	19.30	98.30	170.00	141.00	44.80	23.70	101.00	66.50	92.90	45.40	69.48	Jun 07	295.00	19.00	13.36	2004
2005	47.30	51.30	47.30	84.00	169.00	103.00	83.30	33.90	43.00	76.00	50.20	36.10	68.83	May 17	287.00	26.63	20.29	2005
2006	26.70	18.70	11.70	58.20	148.00	94.70	43.20	19.00	17.00	25.30	39.30	30.90	44.52	May 22	322.00	10.49	10.16	2006
2007	23.40	20.10	47.40	95.60	209.00	188.00	62.30	23.30	37.00	78.00	66.60	29.30	73.51	May 09	457.00	19.56	18.23	2007
2008	18.20	14.40	14.90	22.00	258.00	179.00	70.30	50.50	48.10	35.80	47.80	31.80	66.09	May 21	567.00	32.11	14.26	2008
2009	17.80	14.20	16.10	139.00	200.00	214.00	67.40	21.40	19.80	20.00	30.00	21.10	65.09	Jun 06	355.00	16.83	14.00	2009
2010	15.00	16.00	27.10	64.40	111.00	107.00	44.90	19.70	43.60	43.90	34.60	19.20	45.59	May 19	234.00	17.51	13.77	2010
2011	15.50	15.30	15.40	22.20	241.00	220.00	223.00	80.30	42.20	38.60	32.50	21.20	81.15	Jul 09	424.00	30.26	15.30	2011
2012																		2012
Avg.	21.63	19.84	24.29	76.13	175.24	165.29	84.52	39.64	45.20	50.24	44.93	27.18	64.66	64.66		348.79	24.69	14.39	m^3/s
S. D.	8.98	8.66	13.15	33.24	42.93	54.59	39.29	19.42	25.74	20.36	16.84	9.62	10.38			96.61	9.45	2.82	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	22.40	20.61	25.20	78.14	175.52	165.72	78.79	38.09	44.10	51.70	47.49	27.35	64.74	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	18	15	20	60	139	127	63	30	34	41	37	22	606	mm	10-Year	476.38	14.62	10.87	m^3/s







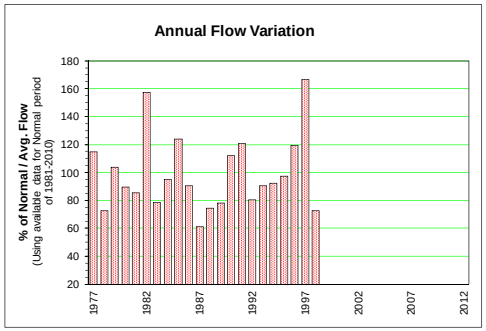


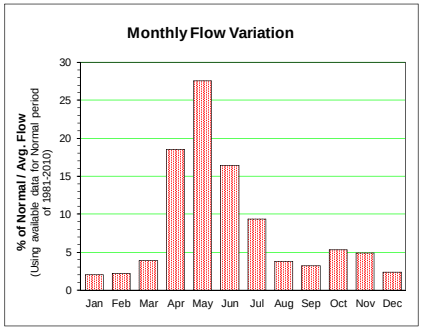
COTTONWOOD RIVER NEAR CINEMA 08KE009

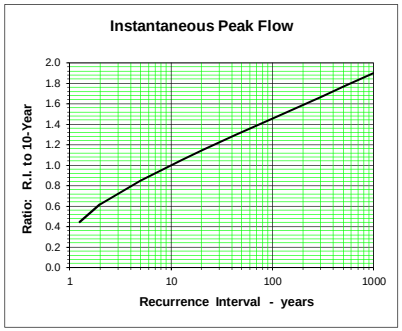
Station Longitude Latitude: -122.476098 53.154541

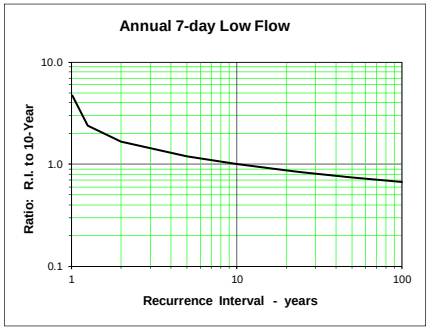
Monthly and Annual Discharge in m^3/s | Drainage Area = 1895.77 km^2 | Median Elevation = 1077 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	8.83	9.56	11.10	82.10	79.40	45.50	38.10	16.30	18.90	14.60	3.46	2.93	27.60	Apr 27	236.06	5.58	2.76	1977
1978	3.27	5.40	5.17	45.60	49.90	30.60	12.20	9.58	22.90	12.70	7.93	4.12	17.44	May 02	79.16	4.65	2.65	1978
1979	3.08	3.09	9.71	45.40	122.00	72.50	21.10	3.63	2.57	6.45	5.12	3.27	24.93	May 01	205.74	2.08	2.08	1979
1980	2.02	1.62	2.03	50.80	50.10	31.80	37.00	15.30	32.60	12.70	13.90	8.47	21.52	Apr 29	152.68	8.04	1.36	1980
1981	12.70	10.80	14.10	34.70	71.70	53.90	12.90	4.44	3.97	6.91	16.40	3.81	20.53	May 31	239.31	2.27	2.27	1981
1982	2.79	2.37	1.97	20.20	137.00	65.20	112.00	29.80	33.30	24.40	13.60	6.20	37.74	May 18	381.17	10.61	1.95	1982
1983	4.58	5.84	10.10	22.90	39.80	44.10	51.10	10.40	8.55	7.84	14.70	6.00	18.89	Jun 20	112.62	6.38	3.80	1983
1984	3.60	4.43	15.80	40.60	54.20	73.70	32.90	5.13	11.60	16.80	8.92	6.11	22.80	Jun 09	136.44	3.76	3.39	1984
1985	4.43	4.20	7.02	54.10	124.00	76.70	9.02	4.36	7.81	44.00	15.00	4.56	29.71	May 19	258.80	3.27	3.27	1985
1986	4.18	3.79	11.90	37.60	76.80	70.10	20.10	6.97	5.99	9.74	6.86	5.63	21.69	May 31	172.17	3.49	3.49	1986
1987	5.15	8.63	26.40	32.20	54.50	23.00	9.24	5.89	2.91	2.51	3.65	2.20	14.73	May 02	112.62	2.46	1.76	1987
1988	1.57	2.04	2.93	53.90	78.90	34.10	11.90	7.86	4.84	5.57	6.91	3.65	17.86	May 14	213.32	3.91	1.36	1988
1989	4.01	4.50	4.74	53.30	62.30	25.80	14.00	12.00	6.53	6.50	22.60	8.24	18.74	Apr 21	148.35	4.67	3.50	1989
1990	6.27	4.82	5.54	86.80	76.20	87.10	15.30	5.05	5.05	12.40	10.00	8.13	26.85	Jun 12	401.74	3.13	3.00	1990
1991	7.19	24.40	9.60	83.90	91.20	60.80	23.60	7.90	7.92	8.65	12.60	11.50	29.01	Apr 25	203.58	4.08	3.95	1991
1992	11.70	13.80	32.70	45.00	47.10	22.80	5.39	4.34	9.36	15.50	17.80	6.68	19.33	May 01	108.00	2.71	2.71	1992
1993	3.97	3.34	5.67	63.70	84.10	45.10	27.00	6.79	3.93	5.06	6.94	4.81	21.76	Jun 29	247.00	3.40	3.14	1993
1994	6.45	6.89	8.10	89.10	64.00	39.50	19.70	5.89	5.37	11.00	5.74	4.82	22.20	Apr 22	214.00	4.16	4.16	1994
1995	4.50	3.94	8.71	49.70	68.40	25.40	23.00	45.60	9.12	17.20	12.90	10.30	23.38	May 14	122.36	5.63	3.36	1995
1996	7.53	6.09	8.03	65.80	47.80	46.80	37.90	19.10	31.50	24.70	39.70	9.83	28.67	Apr 10	150.52	14.91	5.76	1996
1997	5.45	6.35	9.19	99.40	176.00	60.00	32.50	9.04	8.33	32.90	28.20	10.60	40.00	May 15	362.00	5.57	5.21	1997
1998	6.70	6.83	21.80	42.40	49.70	11.20	18.60	3.72	2.63	19.80	14.50	10.30	17.43	Apr 24	201.00	2.30	2.30	1998
1999	9.39	7.35	7.33														7.09	1999
2000																		2000
2001																		2001
2002																		2002
2003																		2003
2004																		2004
2005																		2005
2006																		2006
2007																		2007
2008																		2008
2009																		2009
2010																		2010
2011																		2011
2012																		2012
Avg.	5.62	6.53	10.42	54.51	77.50	47.53	26.57	10.87	11.17	14.45	13.07	6.46	23.76	24.38		202.67	4.87	3.23	m^3/s
S. D.	2.90	4.87	7.59	21.90	34.32	20.95	22.36	9.96	9.96	9.94	8.56	2.80	6.41			88.66	3.03	1.38	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	5.90	6.86	11.14	54.18	77.98	48.07	26.45	10.79	9.37	15.08	14.28	6.85	23.96	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	9	16	74	110	66	37	15	13	21	20	10	399	mm	10-Year	322.05	2.29	1.85	m^3/s







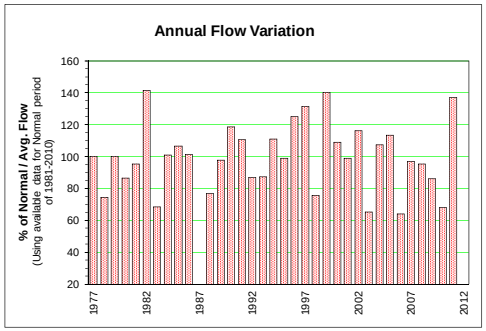


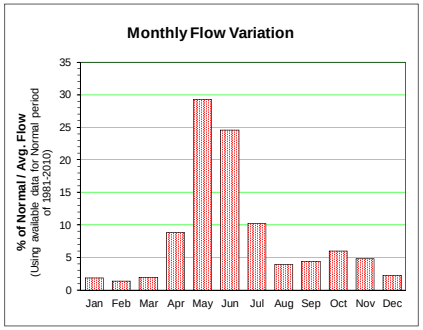
LITTLE SWIFT RIVER AT THE MOUTH 08KE024

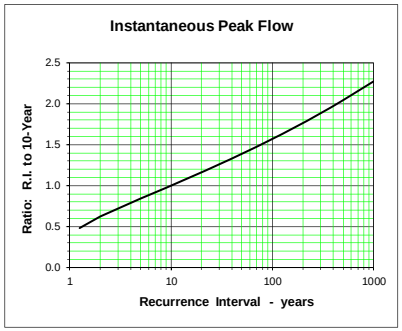
Station Longitude Latitude: -121.768769 52.914753

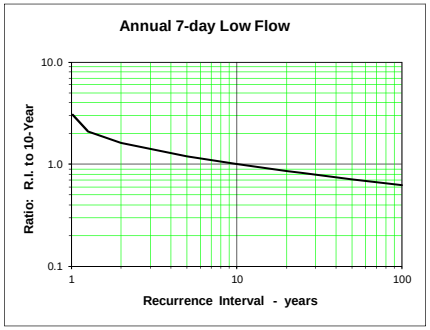
Monthly and Annual Discharge in m^3/s | Drainage Area = 129.70 km^2 | Median Elevation = 1451 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	0.579	0.587	0.552	4.390	9.050	8.360	3.450	1.570	2.180	1.170	0.712	0.511	2.76	Apr 26	23.70	0.710	0.400	1977
1978	0.352	0.270	0.250	1.940	6.400	5.570	1.850	1.470	3.040	2.160	1.030	0.314	2.06	May 20	17.70	0.336	0.199	1978
1979	0.222	0.220	0.530	1.070	11.200	13.000	3.320	0.722	0.652	1.540	0.375	0.219	2.77	May 26	38.80	0.269	0.191	1979
1980	0.143	0.122	0.193	3.160	7.390	4.680	3.760	2.060	3.510	1.400	1.180	1.070	2.39	Apr 29	19.00	1.049	0.109	1980
1981	1.350	0.973	0.716	1.610	11.400	6.540	2.160	0.778	0.897	1.610	2.860	0.636	2.64	May 31	36.30	0.438	0.438	1981
1982	0.512	0.479	0.378	0.945	8.420	14.600	10.200	3.350	3.140	2.510	1.280	0.818	3.90	Jul 22	48.50	1.879	0.321	1982
1983	0.545	0.434	0.421	2.060	5.640	5.510	4.430	0.698	1.000	0.830	0.749	0.328	1.89	Jun 18	14.90	0.375	0.177	1983
1984	0.186	0.208	0.459	1.970	4.900	13.200	6.000	0.982	2.430	1.840	0.771	0.579	2.79	Jun 12	25.50	0.701	0.170	1984
1985	0.344	0.285	0.291	1.350	11.700	12.600	1.490	0.645	1.470	3.680	0.980	0.408	2.95	Jun 05	34.30	0.422	0.269	1985
1986	0.474	0.389	1.200	2.040	9.520	11.700	3.210	0.793	0.923	1.160	1.330	0.745	2.80	Jun 01	39.80	0.505	0.331	1986
1987	0.606	1.060	2.370	2.770							0.581	0.313		May 08	17.70	0.884	0.252	1987
1988	0.209	0.216	0.258	4.220	9.380	5.650	1.480	1.310	0.693	0.649	0.949	0.476	2.13	Apr 30	39.00	0.489	0.195	1988
1989	0.400	0.390	0.323	2.380	13.100	5.730	2.210	1.780	0.880	1.050	2.880	1.100	2.70	May 09	22.42	0.652	0.315	1989
1990	0.805	0.513	0.556	4.040	12.000	13.800	2.400	0.731	0.732	1.850	1.160	0.670	3.28	Jun 12	58.82	0.450	0.429	1990
1991	0.344	1.060	0.877	3.410	11.500	10.400	3.410	1.220	1.150	1.310	1.190	0.774	3.06	May 19	27.40	0.718	0.312	1991
1992	0.585	0.680	1.590	5.340	7.830	4.530	0.917	1.010	1.800	2.370	1.690	0.558	2.41	Apr 30	23.16	0.462	0.387	1992
1993	0.304	0.302	0.385	2.860	12.700	4.900	3.240	1.060	0.579	0.772	0.955	0.703	2.41	May 15	45.10	0.485	0.289	1993
1994	0.669	0.629	0.800	6.350	11.800	7.360	4.480	0.943	0.940	1.470	0.685	0.513	3.06	May 11	24.20	0.662	0.454	1994
1995	0.372	0.317	0.526	2.310	9.190	4.700	3.290	5.020	1.230	2.080	1.930	1.600	2.74	May 15	19.90	0.799	0.271	1995
1996	0.659	0.495	1.040	6.000	5.590	7.840	4.970	2.930	4.160	2.950	3.720	1.190	3.46	Jul 20	19.60	2.130	0.429	1996
1997	0.714	0.454	0.602	4.340	13.000	9.060	4.750	1.350	1.190	4.280	2.710	0.901	3.63	Jun 01	34.10	0.670	0.407	1997
1998	0.446	0.366	0.719	2.880	9.050	2.490	3.540	0.597	0.373	2.100	1.450	0.943	2.10	May 02	21.10	0.302	0.302	1998
1999	0.498	0.354	0.638	3.800	10.600	15.700	6.500	1.640	1.460	1.770	2.590	0.912	3.88	May 24	30.30	0.957	0.337	1999
2000	0.517	0.307	0.312	2.240	7.400	9.680	5.630	1.920	3.210	2.120	1.900	0.825	3.01	May 21	24.20	0.810	0.277	2000
2001	0.487	0.278	0.333	2.050	7.640	8.760	5.430	2.670	1.270	1.340	1.770	0.783	2.74	Jul 19	23.70	0.718	0.239	2001
2002	0.376	0.320	0.329	2.230	11.900	13.200	2.790	0.597	1.210	3.420	1.340	0.743	3.21	May 21	31.90	0.434	0.292	2002
2003	0.503	0.407	0.479	3.470	5.660	4.060	1.310	0.421	0.695	2.500	1.350	0.689	1.80	May 25	17.00	0.298	0.298	2003
2004	0.419	0.376	0.390	3.570	9.990	6.930	1.350	0.902	4.570	2.080	3.660	1.390	2.96	Jun 06	29.50	0.442	0.346	2004
2005	4.200	2.240	1.370	4.480	9.030	4.610	3.330	0.845	1.590	3.430	1.360	0.964	3.13	May 16	22.20	0.601	0.601	2005
2006	0.721	0.397	0.258	2.340	8.680	3.930	1.130	0.616	0.628	0.759	1.150	0.608	1.78	May 21	24.10	0.210	0.210	2006
2007	0.544	0.564	0.504	2.090	9.760	9.070	1.530	0.518	1.060	3.350	2.280	0.779	2.68	Jun 04	22.60	0.410	0.410	2007
2008	0.341	0.307	0.379	0.883	13.200	7.770	1.980	1.650	1.380	1.480	1.310	0.776	2.63	May 18	35.30	0.778	0.280	2008
2009	0.390	0.317	0.379	2.740	9.720	10.100	1.820	0.448	0.463	0.720	0.946	0.507	2.38	Jun 05	24.90	0.294	0.292	2009
2010	0.399	0.353	0.392	3.100	5.850	5.400	1.390	0.415	1.980	1.450	1.160	0.641	1.88	May 19	18.20	0.281	0.281	2010
2011	0.626	0.558	0.361	0.540	15.400	14.400	8.270	2.150	0.701	0.739	0.760	0.601	3.78	May 27	56.70	0.446	0.278	2011
2012																		2012
Avg.	0.595	0.492	0.605	2.885	9.576	8.407	3.442	1.347	1.564	1.881	1.507	0.731	2.76	2.77	28.90	0.630	0.308	m^3/s
S. D.	0.664	0.376	0.446	1.399	2.609	3.703	2.119	0.982	1.094	0.944	0.844	0.299	0.579		11.03	0.403	0.099	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.631	0.516	0.642	2.996	9.522	8.270	3.323	1.305	1.486	1.963	1.623	0.762	2.76	m^3/s				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	13.023	9.704	13.267	59.864	196.640	165.262	68.621	26.944	29.703	40.539	32.432	15.744	671	mm	10-Year	42.86	0.283	0.186	m^3/s







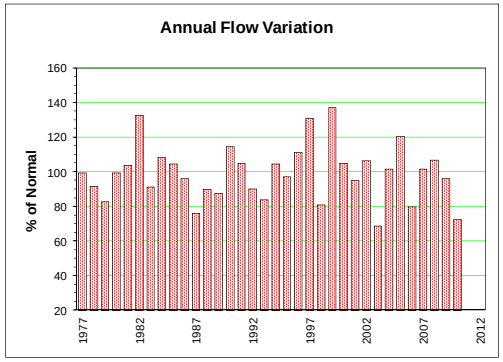


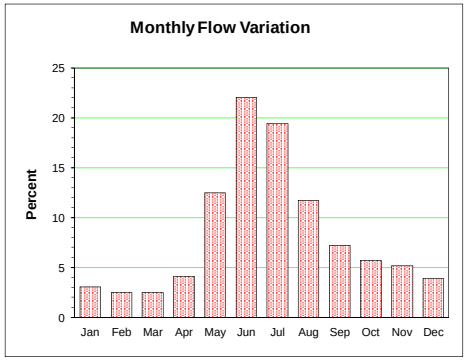
QUESNEL RIVER AT LIKELY 08KH001

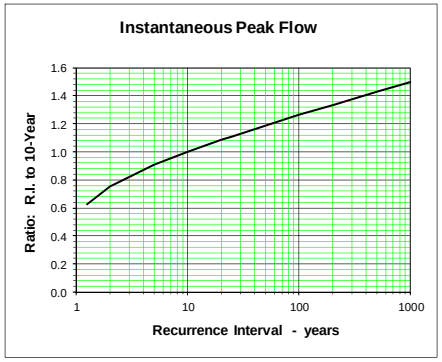
Station Longitude Latitude: -121.5715857 52.6157687

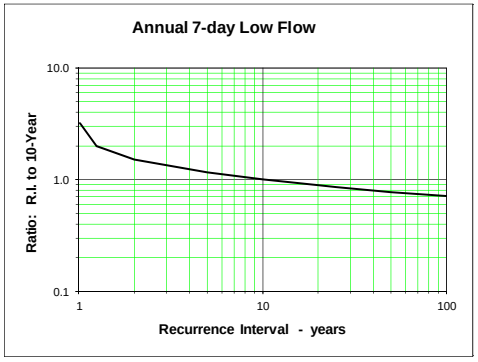
Monthly and Annual Discharge in m^3/s | Drainage Area = 5964.97 km^2 | Median Elevation = 1197 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	50.00	45.50	40.60	58.00	217.00	303.00	290.00	177.00	143.00	99.50	67.20	50.20	128.94		Jun 30	345	127.86	36.80	1977
1978	36.90	28.60	26.40	53.00	146.00	268.00	264.00	178.00	158.00	124.00	84.10	53.50	118.87		Jun 24	298	150.86	23.93	1978
1979	36.40	29.60	28.90	36.60	154.00	324.00	290.00	156.00	93.50	64.10	38.90	31.90	107.45		Jun 14	355	79.70	27.66	1979
1980	24.80	20.20	24.30	47.50	249.00	263.00	250.00	181.00	163.00	146.00	92.70	78.30	128.76		May 20	302	154.14	18.47	1980
1981	90.60	85.20	67.20	68.50	182.00	329.00	248.00	176.00	115.00	84.00	98.00	67.40	134.44		Jun 05	381	96.40	53.57	1981
1982	46.30	40.30	31.80	30.40	168.00	455.00	451.00	318.00	213.00	146.00	94.70	58.20	171.83		Jun 24	532	182.86	28.19	1982
1983	40.50	32.90	40.30	54.70	133.00	275.00	288.00	196.00	115.00	74.60	101.00	64.40	118.45		Jul 17	321	95.93	31.99	1983
1984	46.50	45.00	41.60	66.90	126.00	296.00	399.00	242.00	159.00	122.00	82.10	54.80	140.48		Jul 07	427	146.43	36.70	1984
1985	38.80	31.90	31.20	52.00	221.00	480.00	302.00	153.00	94.40	89.20	84.50	46.50	135.76		Jun 06	556	84.01	28.53	1985
1986	34.60	29.90	38.50	70.90	144.00	417.00	318.00	173.00	100.00	70.60	55.70	40.00	124.73		Jun 12	485	79.93	27.26	1986
1987	31.90	29.70	40.10	68.50	180.00	269.00	210.00	143.00	85.10	47.50	39.80	34.30	98.61		Jun 16	310	67.97	28.70	1987
1988	26.30	24.70	26.00	67.80	256.00	325.00	248.00	155.00	99.30	64.30	55.90	42.50	116.17		May 31	348	77.43	20.94	1988
1989	35.00	29.80	25.60	40.20	198.00	303.00	233.00	158.00	109.00	64.90	84.00	74.70	113.39		Jun 17	356	85.84	24.71	1989
1990	58.00	47.40	40.20	88.70	239.00	478.00	363.00	170.00	93.80	60.50	71.10	66.10	148.43		Jun 25	532	71.66	39.20	1990
1991	47.70	45.70	46.00	69.80	212.00	321.00	317.00	203.00	155.00	84.40	68.40	58.10	136.22		Jul 05	376	122.00	41.84	1991
1992	47.00	45.90	61.40	108.00	206.00	290.00	201.00	116.00	81.50	94.70	95.40	56.70	117.06		Jun 16	312	70.03	43.56	1992
1993	37.50	27.10	24.10	59.20	252.00	307.00	210.00	135.00	94.80	53.90	52.50	43.80	108.52		May 24	372	72.01	23.27	1993
1994	43.80	40.80	42.60	114.00	286.00	353.00	325.00	168.00	90.60	67.00	48.30	37.90	135.34		Jul 05	400	74.37	35.17	1994
1995	31.00	31.40	31.20	58.20	165.00	319.00	239.00	213.00	129.00	93.10	93.30	102.00	125.94		Jun 13	356	98.57	28.97	1995
1996	69.20	49.50	44.50	93.40	155.00	304.00	343.00	220.00	141.00	108.00	112.00	84.90	144.02		Jul 05	363	122.86	41.73	1996
1997	57.70	46.40	41.70	59.50	270.00	503.00	375.00	227.00	126.00	129.00	123.00	70.90	169.74		Jun 07	543	110.00	39.57	1997
1998	48.80	39.30	40.10	66.70	221.00	264.00	203.00	125.00	73.10	60.30	62.20	51.70	105.01		Jun 02	314	58.93	34.79	1998
1999	49.10	43.10	36.40	74.20	223.00	473.00	530.00	289.00	152.00	90.60	86.10	76.40	177.80		Jul 11	597	116.14	33.79	1999
2000	55.10	38.10	32.30	52.70	156.00	330.00	380.00	213.00	135.00	98.50	84.80	54.40	136.20		Jul 13	415	121.86	30.70	2000
2001	35.80	25.50	22.40	35.40	124.00	304.00	314.00	255.00	137.00	87.50	73.60	58.90	123.13		Jul 24	349	109.14	19.70	2001
2002	43.80	35.10	27.40	50.60	172.00	437.00	382.00	170.00	105.00	98.90	71.60	54.60	137.86		Jun 30	524	96.47	24.99	2002
2003	33.90	25.20	22.20	46.00	124.00	239.00	181.00	109.00	72.50	77.20	84.40	49.90	88.97		Jun 14	272	67.14	20.64	2003
2004	31.20	27.50	25.00	73.00	196.00	306.00	239.00	130.00	182.00	143.00	125.00	102.00	131.78		Jun 14	340	113.57	23.94	2004
2005	91.80	143.00	94.80	99.50	261.00	359.00	308.00	161.00	88.40	97.70	104.00	64.90	156.13		Jun 13	388	73.14	57.40	2005
2006	61.10	46.40	33.90	52.10	163.00	317.00	218.00	129.00	74.00	50.10	50.40	42.70	103.39		Jun 16	352	63.64	30.54	2006
2007	34.10	31.10	36.00	77.40	181.00	376.00	289.00	149.00	84.60	106.00	129.00	79.60	131.50		Jun 12	427	73.70	29.24	2007
2008	55.90	42.00	36.60	37.30	180.00	395.00	308.00	189.00	143.00	98.10	97.60	77.30	138.52		Jun 09	442	113.00	31.74	2008
2009	57.90	44.70	35.20	54.60	193.00	387.00	283.00	154.00	98.80	66.40	62.20	51.10	124.35		Jun 20	445	90.29	32.04	2009
2010	38.10	32.40	32.70	53.90	132.00	233.00	210.00	124.00	88.70	80.40	57.90	40.50	93.98		Jun 28	276	82.96	31.20	2010
2011																			2011
2012																			2012
Avg.	46.09	40.61	37.33	62.92	190.7	341.2	294.38	178.09	117.44	89.47	80.34	59.44	128.58	128.24		394	98.55	31.81	m^3/s
S. D.	15.59	21.54	14.23	20.09	45.72	73.92	77.23	47.91	34.46	27.08	23.74	17.55	20.93			87.01	29.85	8.88	m^3/s
Normal	47.30	41.90	38.30	64.80	190.63	348.13	297.17	178.77	114.52	86.95	81.62	60.24	129.59	m^3/s					
Normal	21	17	17	28	86	151	133	80	50	39	35	27	686	mm	10-Year	518.72	68.97	18.39	m^3/s









CARIBOO RIVER BELOW KANGAROO CREEK 08KH003

Station Longitude Latitude: -121.674700 52.667068

Monthly and Annual Discharge in m^3/s | Drainage Area = 3263.78 km^2 | Median Elevation = 1442 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	27.40	23.30	23.90	71.10	188.00	264.00	206.00	142.00	101.00	52.30	34.70	21.40	96.62	Jun 09	348.00	85.70	19.91	1977
1978	18.40	17.30	18.30	42.90	130.00	220.00	171.00	118.00	117.00	86.10	54.40	32.40	85.79	Jun 06	294.00	93.16	16.46	1978
1979	19.80	17.40	18.30	30.30	199.00	315.00	238.00	103.00	70.10	49.80	23.10	16.80	92.13	Jun 06	434.00	58.07	15.03	1979
1980	12.80	11.50	13.90	68.30	225.00	171.00	154.00	109.00	121.00	89.10	50.90	53.90	90.32	May 08	286.00	93.61	10.84	1980
1981	63.10	41.80	29.60	44.00	232.00	226.00	156.00	102.00	67.30	44.10	79.10	34.10	93.56	May 26	444.00	50.54	28.10	1981
1982	24.80	21.50	17.10	22.10	176.00	391.00	305.00	186.00	146.00	78.80	40.10	22.10	119.68	Jun 16	460.00	101.06	16.03	1982
1983	19.40	18.60	23.10	47.30	141.00	230.00	198.00	102.00	72.90	48.60	70.80	24.80	83.33	Jul 15	313.00	54.03	16.93	1983
1984	22.20	23.60	25.30	50.70	103.00	292.00	248.00	130.00	123.00	89.60	41.90	24.20	97.88	Jun 15	398.00	95.01	19.71	1984
1985	20.00	16.00	15.90	44.50	258.00	339.00	178.00	89.70	73.50	84.50	39.20	21.90	98.75	May 26	535.00	58.81	14.79	1985
1986	16.90	16.30	27.70	51.00	144.00	350.00	190.00	94.40	67.20	50.90	40.10	28.80	89.97	Jun 02	554.00	41.76	14.64	1986
1987	24.60	23.80	35.10	62.50	198.00	231.00	131.00	101.00	53.30	27.20	37.90	26.20	79.57	Jun 14	322.00	42.09	19.14	1987
1988	18.60	17.00	16.50	93.90	270.00	235.00	149.00	109.00	60.90	45.30	41.20	24.70	90.30	May 15	454.00	36.79	15.07	1988
1989	19.50	14.80	15.70	51.20	196.00	236.00	154.00	113.00	58.60	43.20	74.10	44.50	85.41	Jun 16	319.00	49.17	11.57	1989
1990	35.70	25.10	22.00	89.70	219.00	379.00	204.00	97.60	58.00	43.20	65.80	35.50	106.42	Jun 13	462.00	45.93	20.01	1990
1991	25.60	30.40	22.80	68.00	217.00	256.00	200.00	121.00	92.90	50.80	43.20	31.30	96.93	May 21	350.00	57.61	18.89	1991
1992	26.60	27.80	49.20	98.80	195.00	239.00	112.00	75.80	85.00	100.00	61.40	28.30	91.60	Jun 03	295.00	50.67	23.31	1992
1993	18.60	16.30	17.00	57.30	267.00	188.00	124.00	88.50	50.30	30.50	34.90	29.10	77.22	May 16	463.00	32.09	13.99	1993
1994	25.10	21.80	26.20	126.00	260.00	248.00	211.00	90.00	58.40	57.20	30.60	22.60	98.51	Jul 03	356.00	54.17	18.93	1994
1995	17.50	16.50	20.80														14.81	1995
1996																		1996
1997																		1997
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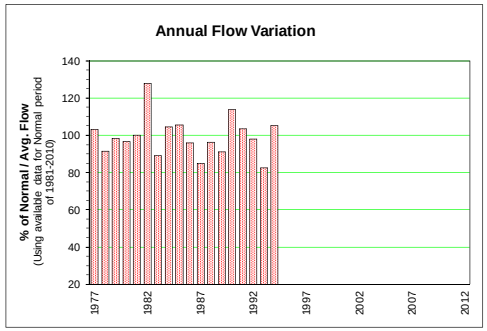
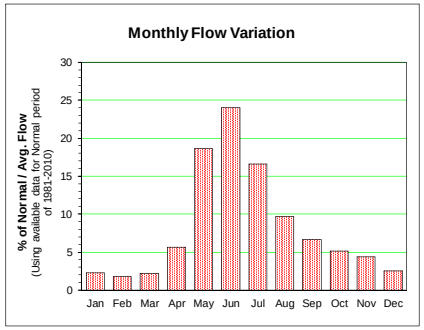
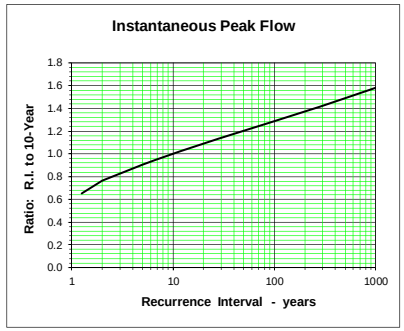
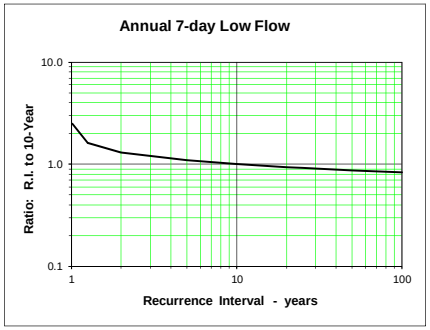
Avg.	24.03	21.09	23.07	62.20	201.00	267.22	184.94	109.56	82.02	59.51	47.97	29.03	93.00	93.40		393.72	61.13	17.27	m^3/s
S. D.	10.74	6.96	8.38	26.11	48.70	63.34	48.11	24.84	28.39	22.23	16.08	8.94	9.90			84.46	22.13	4.08	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	25.21	22.09	24.27	64.79	205.43	274.29	182.86	107.14	76.24	56.71	50.02	28.44	93.51	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	21	17	20	51	169	218	150	88	61	47	40	23	904	mm	10-Year	503.21	44.84	11.64	m^3/s







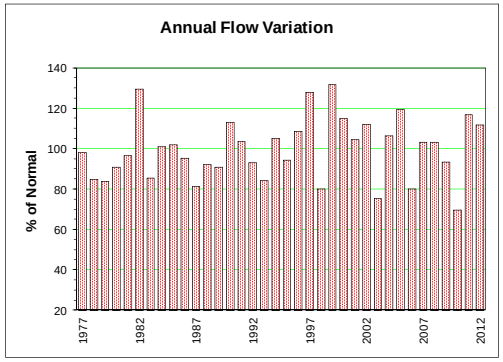


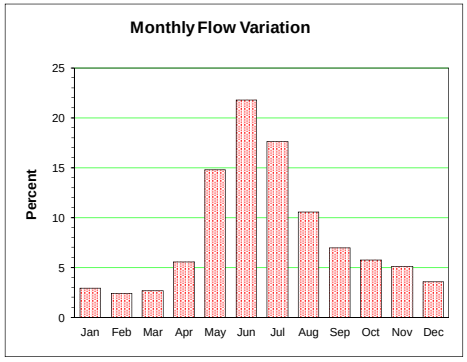
QUESNEL RIVER NEAR QUESNE 08KH006

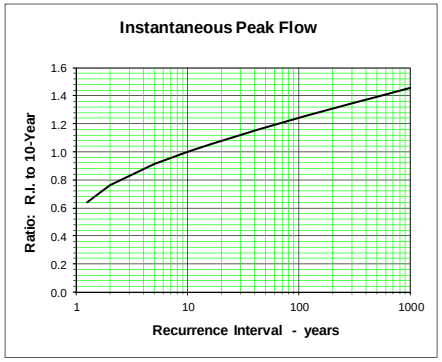
Station Longitude Latitude: -122.224953 52.843246

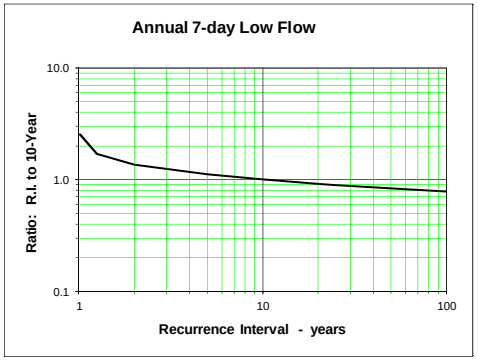
Monthly and Annual Discharge in m^3/s | Drainage Area = 11571.02 km^2 | Median Elevation = 1146 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	89.00	78.50	73.70	167.00	415.00	572.00	482.00	346.00	254.00	156.00	108.00	80.40	235.98		Jun 10	672.44	221.57	70.00	1977
1978	54.10	47.10	52.10	126.00	277.00	476.00	426.00	284.00	261.00	203.00	140.00	91.10	203.88		Jun 14	540.98	231.14	44.13	1978
1979	61.10	53.40	57.70	90.90	356.00	641.00	509.00	242.00	161.00	114.00	69.60	58.20	201.94		Jun 07	793.78	137.86	51.41	1979
1980	41.20	33.50	39.60	127.00	468.00	419.00	399.00	283.00	275.00	233.00	150.00	144.00	218.42		May 14	546.04	245.00	33.07	1980
1981	163.00	139.00	113.00	134.00	407.00	544.00	393.00	278.00	186.00	135.00	178.00	111.00	232.20		May 28	736.14	155.86	92.34	1981
1982	81.20	67.20	54.40	68.30	424.00	889.00	803.00	510.00	365.00	225.00	142.00	91.60	311.44		Jun 21	1021.30	278.14	51.10	1982
1983	70.40	61.00	81.90	121.00	273.00	495.00	477.00	292.00	186.00	126.00	173.00	99.40	205.39		Jul 15	616.82	147.71	56.73	1983
1984	75.70	78.80	83.70	157.00	239.00	582.00	630.00	368.00	282.00	202.00	130.00	81.40	242.87		Jun 18	759.40	259.29	68.84	1984
1985	69.50	56.00	55.90	140.00	519.00	813.00	474.00	245.00	169.00	181.00	132.00	79.40	245.28		Jun 06	1031.41	156.71	54.11	1985
1986	67.20	53.20	96.90	158.00	320.00	766.00	508.00	275.00	173.00	134.00	112.00	76.60	228.95		Jun 03	945.46	134.43	45.96	1986
1987	66.70	67.10	102.00	156.00	392.00	519.00	363.00	264.00	155.00	91.10	91.50	75.40	195.90		Jun 15	634.01	125.43	61.90	1987
1988	53.60	51.10	54.10	179.00	544.00	569.00	419.00	283.00	178.00	127.00	115.00	78.40	221.43		May 16	723.00	132.29	49.79	1988
1989	66.70	59.40	55.10	118.00	425.00	555.00	417.00	292.00	184.00	126.00	175.00	134.00	218.12		Jun 16	690.64	153.29	51.97	1989
1990	113.00	82.50	78.10	244.00	500.00	863.00	575.00	269.00	155.00	113.00	149.00	111.00	271.70		Jun 14	977.82	124.43	73.43	1990
1991	82.10	86.40	78.10	206.00	463.00	582.00	532.00	338.00	254.00	134.00	122.00	99.50	248.95		Jul 04	695.70	184.00	71.27	1991
1992	81.80	87.90	140.00	236.00	423.00	540.00	330.00	199.00	177.00	206.00	166.00	93.40	223.47		Jun 03	584.00	127.43	79.36	1992
1993	64.00	56.70	54.90	162.00	554.00	516.00	360.00	235.00	152.00	89.40	93.10	79.70	202.27		May 22	811.98	109.57	50.00	1993
1994	77.00	70.00	81.90	292.00	585.00	622.00	563.00	265.00	161.00	137.00	91.20	72.40	252.51		Jul 04	794.00	142.57	64.63	1994
1995	61.20	59.90	66.40	137.00	371.00	548.00	399.00	384.00	209.00	166.00	167.00	147.00	227.23		Jun 07	630.00	158.29	57.71	1995
1996	88.10	81.80	88.80	237.00	302.00	553.00	557.00	384.00	281.00	202.00	210.00	147.00	261.31		Jun 09	640.00	221.00	71.30	1996
1997	99.70	79.00	80.80	204.00	568.00	845.00	616.00	365.00	214.00	263.00	226.00	115.00	307.44		Jun 08	1030.00	190.00	73.00	1997
1998	74.00	63.50	75.50	133.00	485.00	438.00	364.00	217.00	128.00	126.00	116.00	82.50	192.80		May 28	594.00	103.23	57.90	1998
1999	81.70	68.10	66.70	197.00	457.00	845.00	846.00	475.00	252.00	179.00	180.00	135.00	316.66		Jun 21	1050.00	208.00	56.83	1999
2000	86.40	64.00	58.40	138.00	369.00	695.00	689.00	402.00	306.00	209.00	184.00	107.00	276.20		Jul 03	821.00	254.57	54.56	2000
2001	78.50	58.70	56.90	112.00	329.00	658.00	620.00	457.00	238.00	156.00	138.00	104.00	251.16		Jul 21	817.00	192.71	50.49	2001
2002	76.90	63.90	53.30	131.00	442.00	883.00	638.00	275.00	208.00	226.00	126.00	95.00	269.10		Jun 18	996.00	180.00	49.97	2002
2003	64.10	51.40	50.40	128.00	284.00	503.00	347.00	199.00	135.00	170.00	149.00	84.00	180.94		Jun 14	583.00	123.86	42.60	2003
2004	61.00	58.50	59.60	195.00	430.00	600.00	407.00	227.00	365.00	242.00	251.00	177.00	256.12		Jun 13	696.00	202.00	51.26	2004
2005	213.00	261.00	174.00	223.00	522.00	615.00	512.00	262.00	170.00	209.00	173.00	112.00	287.29		May 17	725.00	150.43	98.20	2005
2006	103.00	77.50	63.70	134.00	392.00	569.00	358.00	216.00	127.00	88.90	94.20	78.30	192.31		May 25	713.00	112.86	58.31	2006
2007	60.80	57.00	87.40	206.00	408.00	712.00	494.00	237.00	156.00	217.00	226.00	112.00	248.49		Jun 08	925.00	135.14	55.37	2007
2008	75.60	63.30	61.40	85.20	475.00	704.00	513.00	311.00	219.00	164.00	169.00	128.00	247.87		Jun 07	867.00	175.43	53.87	2008
2009	91.40	71.30	60.60	155.00	417.00	716.00	454.00	250.00	175.00	108.00	107.00	86.00	224.83		Jun 19	860.00	163.14	59.14	2009
2010	66.60	57.10	67.10	120.00	254.00	420.00	337.00	208.00	159.00	144.00	102.00	68.20	167.45		Jun 26	473.00	145.00	54.13	2010
2011	52.80	54.10	51.40	85.60	470.00	847.00	781.00	416.00	222.00	157.00	118.00	94.30	280.52		Jul 01	945.00	192.00	50.06	2011
2012	73.7	59.0	53.5	168.0	454.0	823.0	703.0	347.0	182.0	129.0	128.0	94.9	268.44		Jun 19	1010.00	140.57	49.89	2012
Avg.	80.16	71.61	73.03	157.53	417.0	637.1	508.19	302.78	207.61	163.57	144.49	100.67	239.36	238.15		776	169.86	58.74	m^3/s
S. D.	30.94	36.75	26.66	50.24	91.01	141.05	137.54	80.12	61.03	47.03	42.44	26.44	36.78			164.22	45.96	13.30	m^3/s
Normal	83.80	75.08	76.70	163.55	419.10	638.63	499.83	299.40	203.97	163.21	149.60	102.04	240.26	m^3/s					
Normal	19	16	18	37	97	143	116	69	46	38	34	24	655	mm	10-Year	993.60	121.89	38.52	m^3/s







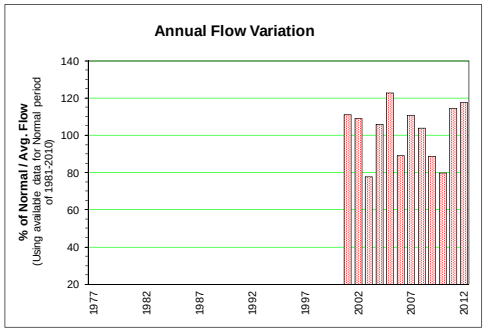


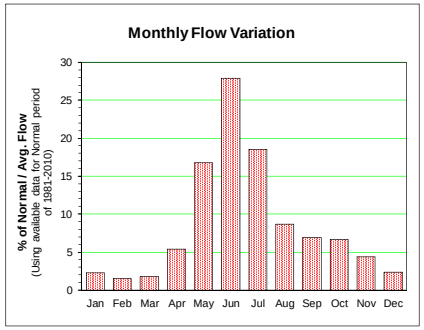
PENFOLD CREEK NEAR THE MOUTH 08KH030

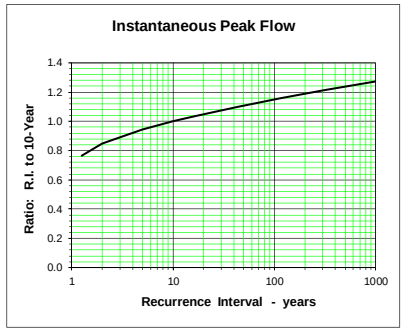
Station Longitude Latitude: -120.749511 52.791344

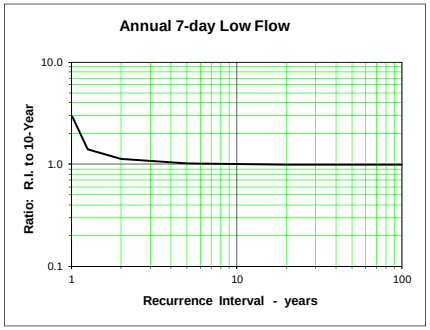
Monthly and Annual Discharge in m^3/s | Drainage Area = 184.77 km^2 | Median Elevation = 1590 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977																		1977
1978																		1978
1979																		1979
1980																		1980
1981																		1981
1982																		1982
1983																		1983
1984																		1984
1985																		1985
1986																		1986
1987																		1987
1988																		1988
1989																		1989
1990																		1990
1991																		1991
1992																		1992
1993																		1993
1994																		1994
1995																		1995
1996																		1996
1997																		1997
1998																		1998
1999	1.27	1.11	1.53	5.37	12.10	26.60	23.40	11.00	4.98					Jun 16	40.20	3.85	0.98	1999
2000					10.00	24.00	17.90	6.83	8.33	4.41	2.80	1.46		Jun 06	37.90	4.34		2000
2001	1.25	1.01	1.06	3.45	12.00	20.10	18.40	11.00	5.06	3.53	3.90	1.93	6.91	Jun 02	44.20	3.58	0.88	2001
2002	1.40	1.01	0.79	2.44	12.40	28.40	13.70	4.92	5.17	6.84	2.52	1.76	6.80	Oct 07	45.00	3.51	0.74	2002
2003	1.22	0.99	1.10	4.89	6.20	15.40	8.69	4.33	3.30	7.53	2.71	1.53	4.84	Jun 08	32.30	2.69	0.84	2003
2004	1.39	1.03	1.09	5.95	12.30	18.80	8.61	5.38	11.40	5.22	5.67	2.38	6.59	Jun 06	34.50	4.28	0.78	2004
2005	5.71	3.12	2.36	7.12	17.90	20.90	13.80	4.83	3.59	6.69	3.10	2.27	7.64	May 31	40.60	3.04	1.85	2005
2006	1.74	1.16	0.98	3.56	15.10	17.50	12.20	6.37	2.71	1.74	1.85	1.31	5.54	Jun 03	37.50	2.09	0.83	2006
2007	1.08	1.03	2.21	4.54	12.70	23.80	14.10	4.77	4.58	7.68	4.19	1.90	6.90	Jun 05	41.20	2.83	1.02	2007
2008	1.12	0.93	1.13	1.62	16.60	19.00	12.50	8.53	4.65	4.67	4.55	2.09	6.47	May 20	39.00	3.65	0.84	2008
2009	1.38	1.20	1.06	2.70	11.50	22.40	11.00	4.33	4.37	2.16	2.53	1.62	5.53	Jun 06	37.40	2.82	0.93	2009
2010	1.17	0.96	1.50	3.70	8.93	16.90	9.26	4.68	5.10	3.44	2.66	1.33	4.98	May 19	33.80	3.33	0.85	2010
2011	1.09	1.00	0.95	1.27	15.70	25.70	20.60	6.74	4.43	3.84	2.12	1.58	7.12	Jun 29	46.30	3.49	0.81	2011
2012	1.26	1.02	0.89	6.56	13.70	30.20	19.30	6.37	3.30	2.49	1.47	1.26	7.32	Jun 17	49.70	2.42	0.78	2012
Avg.	1.62	1.20	1.28	4.09	12.65	22.12	14.53	6.43	5.07	4.63	3.08	1.72	6.39	6.39		39.97	3.28	0.93	m^3/s
S. D.	1.24	0.58	0.49	1.84	3.09	4.51	4.68	2.27	2.25	2.03	1.18	0.37	0.93			5.00	0.66	0.29	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1.70	1.23	1.35	4.12	12.31	21.15	13.63	6.41	5.27	4.90	3.32	1.78	6.22	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	25	16	20	58	178	297	198	93	74	71	47	26	1062	mm	10-Year	46.60	2.21	0.74	m^3/s









HORSEFLY RIVER ABOVE QUESNEL LAKE 08KH031

Station Longitude Latitude: -121.418609 52.447502

Monthly and Annual Discharge in m^3/s | Drainage Area = 2758.27 km^2 | Median Elevation = 1139 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)		Date	Annual	Jun-Sep	Annual	Year
1977																			1977
1978																			1978
1979																			1979
1980																			1980
1981																			1981
1982																			1982
1983																			1983
1984																			1984
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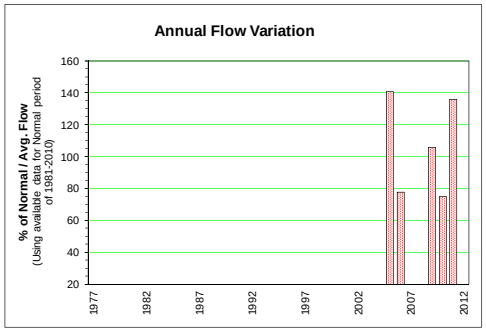
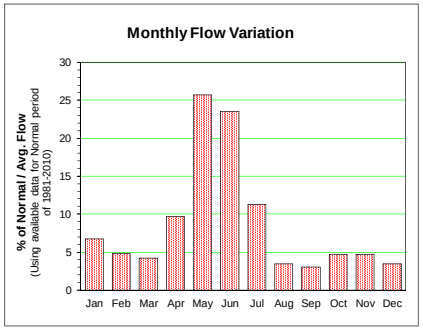
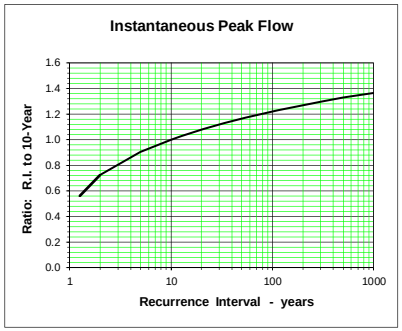
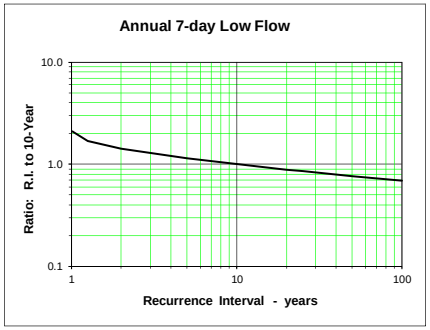
1997																			1997
1998																			1998
1999																			1999
2000																			2000
2001																			2001
2002																			2002
2003																			2003
2004										26.20	35.00	22.60							2004
2005	58.80	49.00	30.20	48.70	112.00	80.20	60.00	16.20	11.90	30.40	19.30	13.40	44.18		May 16	193.21	9.28	9.28	2005
2006	15.90	8.80	8.93	30.20	81.00	75.80	25.30	11.90	7.52	8.28	11.30	7.81	24.45		May 25	159.00	5.61	5.61	2006
2007																			2007
2008					122.00	106.00	50.50								May 22	238.00			2008
2009	15.50	12.10	11.40	41.80	106.00	111.00	42.60	12.20	10.40	9.17	14.70	11.00	33.20		Jun 07	147.00	7.58	6.74	2009
2010	9.84	8.94	12.30	27.70	54.30	75.70	31.60	11.10	17.60	14.50	10.40	8.92	23.59		May 20	109.00	8.59	8.59	2010
2011	8.14	9.32	12.20	17.90	132.00	140.00	106.00	33.70	16.20	14.10	9.56	9.75	42.64		May 28	220.00	14.41	7.79	2011
2012																			2012
Avg.	21.64	17.63	15.01	33.26	101.22	98.12	52.67	17.02	12.72	17.11	16.71	12.25	33.61	33.62		177.70	9.09	7.60	m^3/s
S. D.	21.05	17.59	8.60	12.12	28.74	25.71	28.97	9.53	4.15	9.12	9.65	5.42	9.72			48.33	3.28	1.46	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	25.01	19.71	15.71	37.10	95.06	89.74	42.00	12.85	11.86	17.71	18.14	12.75	31.36	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	24	17	15	35	92	84	41	12	11	17	17	12	359	mm	10-Year	243.34	4.94	5.10	m^3/s









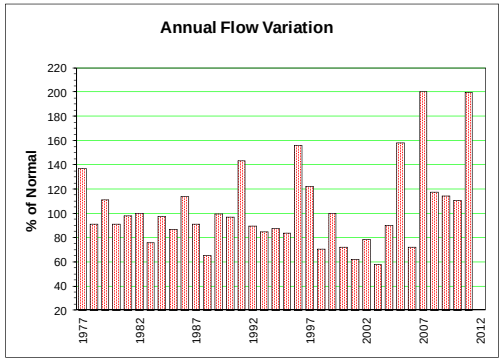
Zone 15 Fraser Plateau

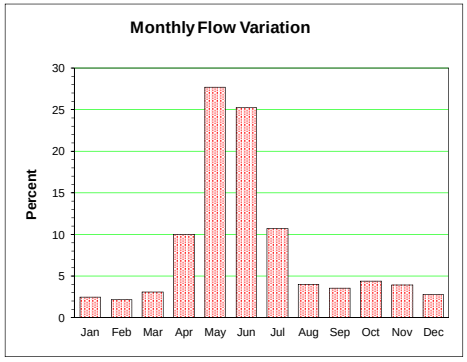
DEAN RIVER BELOW TANSWANKET CREEK 08FC003

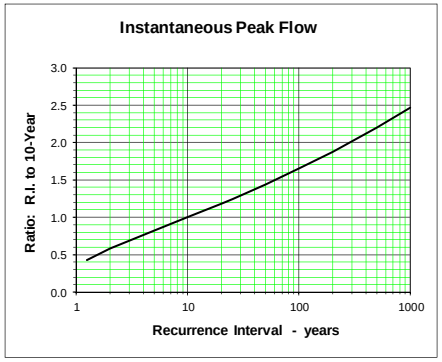
Station Longitude Latitude: -125.772934 52.889488

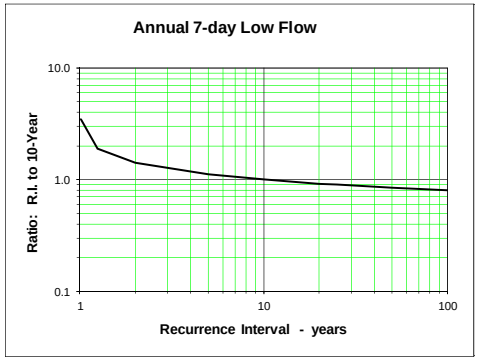
Monthly and Annual Discharge in m^3/s | Drainage Area = 3741.92 km^2 | Median Elevation = 1279 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	9.26	9.47	8.49	56.20	72.00	43.10	23.90	9.64	6.73	7.58	4.08	3.25	21.17		May 03	110.00	5.27	3.03	1977
1978	3.14	3.75	4.88	11.90	53.50	51.10	12.00	5.75	4.61	5.86	6.92	4.87	14.06		Jun 07	100.00	4.48	2.89	1978
1979	3.64	3.20	5.12	13.00	82.90	54.00	19.80	7.14	4.97	5.52	3.71	2.14	17.19		Jun 04	100.00	4.64	1.83	1979
1980	2.43	2.43	3.06	8.98	39.40	35.90	25.50	9.79	14.90	9.05	7.14	9.88	14.07		May 16	56.50	8.00	2.30	1980
1981	9.41	5.33	4.58	12.20	60.70	45.20	18.30	5.69	3.86	4.78	6.99	4.00	15.15		May 27	110.00	3.63	3.46	1981
1982	3.37	3.12	3.00	6.12	50.50	59.50	21.30	8.45	11.00	8.96	5.41	4.13	15.45		Jun 05	108.00	6.15	2.69	1982
1983	3.62	3.72	3.71	8.26	32.60	30.10	27.60	8.00	6.33	6.70	6.09	3.08	11.70		Jun 26	63.50	4.38	2.65	1983
1984	3.67	5.82	10.90	20.60	31.20	52.70	20.60	6.05	7.63	10.60	6.47	4.90	15.07		Jun 15	78.30	4.13	2.80	1984
1985	3.75	3.69	4.71	18.90	53.00	43.60	11.50	4.04	3.35	6.85	4.22	2.90	13.41		May 28	112.00	2.68	2.64	1985
1986	3.15	3.27	7.11	16.40	47.10	86.90	21.10	6.65	4.00	6.18	4.76	4.07	17.56		Jun 02	142.00	3.56	2.79	1986
1987	4.39	5.36	6.42	19.50	53.10	42.20	15.30	7.55	4.03	3.56	3.87	2.84	14.04		May 29	70.60	3.28	2.36	1987
1988	1.76	2.15	3.60	10.20	26.20	33.10	12.20	7.07	5.79	8.64	5.43	4.45	10.05		Jun 16	54.00	4.09	1.56	1988
1989	3.02	2.65	2.48	16.80	52.00	35.50	31.50	12.40	5.93	5.38	9.34	6.19	15.35		Jun 03	73.20	4.47	2.37	1989
1990	4.83	3.50	4.52	21.40	44.60	54.40	20.30	6.05	3.35	4.91	5.56	6.01	14.98		Jun 12	76.00	2.73	2.73	1990
1991	5.12	5.85	4.02	30.90	88.10	66.80	31.70	8.14	4.23	5.46	8.15	5.67	22.08		May 22	116.00	3.80	3.56	1991
1992	5.42	5.50	13.20	33.20	39.30	33.20	13.70	4.17	3.50	5.74	5.47	3.23	13.79		May 08	50.20	2.86	2.85	1992
1993	2.09	2.81	4.41	8.98	55.10	33.50	21.10	8.83	4.94	4.51	6.43	3.52	13.10		May 18	110.00	3.89	1.75	1993
1994	3.52	2.68	6.08	29.10	52.20	26.30	18.00	4.70	3.39	5.86	4.93	4.54	13.50		May 18	65.00	2.95	2.45	1994
1995	3.33	3.67	4.81	12.80	62.00	28.50	11.40	7.51	5.54	5.81	4.51	4.52	12.94		May 18	102.00	4.57	3.07	1995
1996	8.60	6.99	7.61	49.70	57.50	80.40	35.20	10.30	13.00	7.29	8.20	4.56	24.06		Jun 06	120.00	7.37	3.64	1996
1997	3.86	5.01	6.54	21.90	79.30	63.20	18.40	5.84	3.54	8.38	5.81	4.11	18.89		May 18	125.00	2.75	2.75	1997
1998	3.43	3.27	5.30	8.45	48.20	20.60	17.10	3.78	2.55	6.77	5.62	4.70	10.89		May 14	62.50	2.32	2.32	1998
1999	4.48	4.71	5.61	16.40	42.90	52.10	20.90	9.84	7.84	8.10	6.66	5.81	15.48		Jun 02	73.10	6.06	4.23	1999
2000	4.05	4.00	3.69	13.80	25.40	38.10	19.00	5.49	4.60	5.50	6.08	3.84	11.12		Jun 06	52.90	3.90	3.38	2000
2001	3.25	2.95	3.04	7.80	25.10	38.60	15.20	6.09	3.14	3.19	3.31	3.32	9.58		Jun 02	51.50	2.90	2.75	2001
2002	3.01	3.30	2.82	7.09	35.40	58.50	16.40	4.71	4.02	4.01	3.00	2.89	12.10		Jun 17	84.30	3.10	2.44	2002
2003	2.68	2.36	3.05	8.71	27.40	31.90	8.65	3.45	3.06	5.88	5.42	4.02	8.90		Jun 08	60.60	2.84	2.25	2003
2004	2.95	2.71	3.88	16.20	29.50	15.00	10.30	9.31	21.10	11.40	29.60	14.50	13.86		Nov 09	69.20	3.41	2.52	2004
2005	9.46	8.99	14.10	43.90	81.90	52.70	23.90	9.53	8.57	20.40	11.10	7.47	24.41		Apr 29	133.00	6.83	6.66	2005
2006	5.24	3.80	3.74	13.30	40.40	34.70	9.93	4.53	2.84	4.21	5.69	4.89	11.13		Jun 03	59.80	1.85	1.85	2006
2007	4.87	4.75	6.20	29.20	81.50	114.00	45.10	21.40	12.90	21.90	17.50	10.70	30.91		Jun 06	170.00	10.18	4.60	2007
2008	7.85	7.48	7.24	14.40	82.70	47.80	12.20	8.51	7.18	7.24	7.64	6.44	18.10		May 21	149.00	5.94	5.59	2008
2009	5.24	5.13	5.34	24.60	57.70	60.50	24.90	5.70	4.16	5.05	7.47	5.06	17.60		Jun 08	96.80	3.86	3.86	2009
2010	4.70	4.76	4.62	21.10	47.40	39.90	10.00	4.03	25.40	24.90	11.40	6.60	17.09		Sep 27	156.00	3.11	3.11	2010
2011	4.82	4.90	4.53	8.79	103.00	129.00	50.30	18.70	14.50	20.10	4.51	5.07	30.80		Jun 02	266.00	6.48	4.08	2011
2012																			2012
Avg.	4.50	4.37	5.50	18.88	53.2	49.5	20.41	7.68	7.04	8.18	7.10	5.09	15.99	16.82		98	4.36	3.02	m^3/s
S. D.	2.05	1.78	2.71	12.10	20.19	23.81	9.49	3.80	5.30	5.34	4.77	2.45	5.29			43.80	1.81	1.05	m^3/s
Normal	4.47	4.31	5.54	18.73	50.33	47.32	19.43	7.26	6.69	7.94	7.40	5.10	15.41	m^3/s					
Normal	3	3	4	13	36	33	14	5	5	6	5	4	130	mm	10-Year	160.92	2.40	2.01	m^3/s







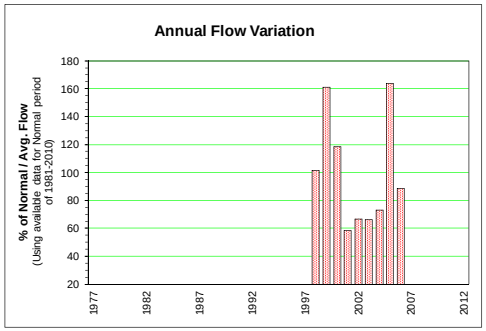


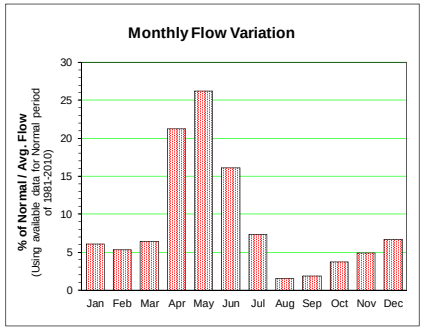
DEAN RIVER NEAR ANAHIM LAKE 08FC005

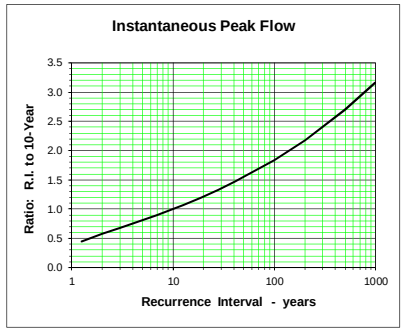
Station Longitude Latitude: -125.263610 52.460270

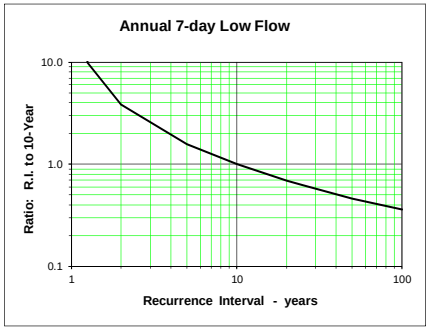
Monthly and Annual Discharge in m^3/s | Drainage Area = 1053.34 km^2 | Median Elevation = 1259 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977																		1977
1978																		1978
1979																		1979
1980																		1980
1981																		1981
1982																		1982
1983																		1983
1984																		1984
1985																		1985
1986																		1986
1987																		1987
1988																		1988
1989																		1989
1990																		1990
1991																		1991
1992																		1992
1993																		1993
1994																		1994
1995																		1995
1996																		1996
1997						1.47	0.78	0.17	0.15	0.28	0.27	0.56						1997
1998	0.67	0.63	1.02	1.48	2.19	1.49	1.42	0.18	0.15	0.63	0.92	0.95	0.98	May 30	4.70	0.117	0.117	1998
1999	0.90	0.96	1.15	4.38	4.29	2.32	1.32	0.26	0.49	0.57	0.92	1.10	1.55	Apr 26	12.40	0.207	0.207	1999
2000	0.78	0.70	0.61	3.75	2.65	2.06	1.53	0.17	0.18	0.31	0.57	0.41	1.14	May 17	6.52	0.120	0.120	2000
2001	0.28	0.16	0.14	0.95	1.95	1.67	0.36	0.13	0.09	0.18	0.19	0.68	0.57	Jun 19	5.67	0.053	0.053	2001
2002	0.60	0.60	0.50	0.99	1.99	1.42	0.37	0.06	0.10	0.13	0.47	0.51	0.64	Jun 02	5.54	0.030	0.030	2002
2003	0.43	0.37	0.41	2.29	1.93	0.87	0.17	0.07	0.08	0.25	0.26	0.54	0.64	Apr 12	3.55	0.012	0.012	2003
2004	0.55	0.62	0.74	1.55	1.25	0.46	0.20	0.10	0.38	0.62	1.09	0.91	0.70	May 24	3.86	0.027	0.027	2004
2005	0.96	1.13	1.03	2.95	3.18	3.83	1.76	0.54	0.51	1.13	0.90	1.06	1.58	Jun 15	7.35	0.357	0.357	2005
2006	0.85	0.70	0.61	2.52	2.76	1.26	0.22	0.06	0.10	0.14	0.17	0.91	0.86	Apr 30	5.55	0.035	0.035	2006
2007	0.90	0.73	1.07	4.05	7.59	3.97	1.09											2007
2008																		2008
2009																		2009
2010																		2010
2011																		2011
2012																		2012
Avg.	0.69	0.66	0.73	2.49	2.98	1.89	0.84	0.17	0.22	0.42	0.57	0.76	0.96	0.96		6.13	0.107	0.107	m^3/s
S. D.	0.23	0.27	0.33	1.26	1.82	1.11	0.61	0.14	0.17	0.32	0.35	0.25	0.39			2.64	0.113	0.113	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.69	0.66	0.73	2.49	2.98	1.89	0.84	0.17	0.22	0.42	0.57	0.76	0.96	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	2	2	2	6	8	5	2	0	1	1	1	2	29	mm	10-Year	9.42	0.016	0.016	m^3/s







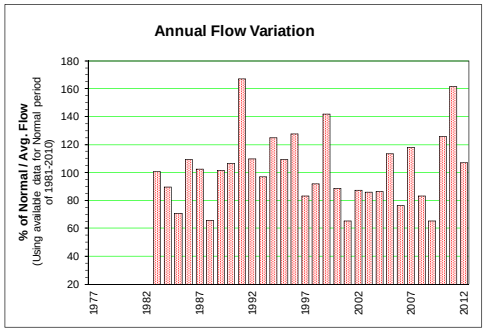


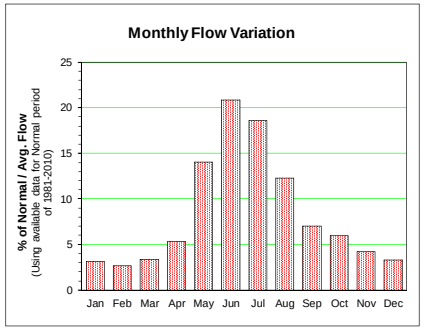
HOMATHKO RIVER AT INLET TO TATLAYOKO LAKE 08GD008

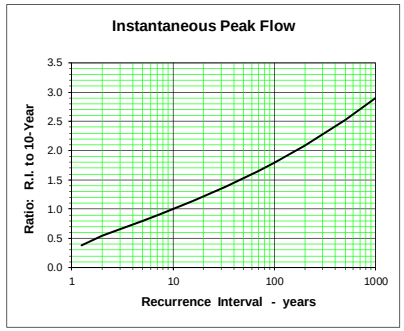
Station Longitude Latitude: -124.407623 51.672688

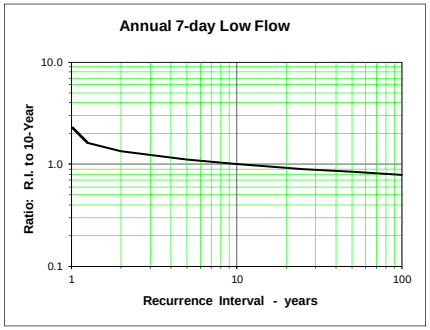
Monthly and Annual Discharge in m^3/s | Drainage Area = 494.32 km^2 | Median Elevation = 1383 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977																		1977
1978																		1978
1979																		1979
1980																		1980
1981																		1981
1982				1.14	3.37	6.12	6.04	2.66	2.09	2.02	1.11	0.80		Jul 16	9.98	1.550		1982
1983	0.81	0.76	0.82	1.23	4.88	4.34	3.05	1.83	1.09	0.81	0.76	0.54	1.75	May 31	10.00	0.836	0.487	1983
1984	0.70	0.63	0.75	0.76	1.09	3.51	2.43	1.98	1.56	3.61	1.00	0.63	1.56	Oct 09	17.90	0.959	0.466	1984
1985	0.50	0.49	0.46	0.92	2.67	2.35	2.20	1.99	1.22	1.08	0.53	0.33	1.23	May 26	6.58	1.002	0.299	1985
1986	0.84	0.69	0.94	0.77	3.45	5.12	4.15	2.42	1.49	1.25	0.88	0.68	1.90	May 27	19.50	1.107	0.281	1986
1987	0.97	0.79	1.16	1.17	2.90	4.07	4.23	2.46	1.37	0.85	0.73	0.56	1.78	Jul 01	6.07	1.054	0.465	1987
1988	0.50	0.47	0.60	0.85	1.90	2.10	1.95	2.14	1.16	0.78	0.69	0.54	1.14	May 14	4.45	0.789	0.423	1988
1989	0.47	0.45	0.45	0.76	2.18	4.46	3.40	4.13	1.62	1.14	1.19	0.83	1.76	Aug 17	12.00	1.166	0.321	1989
1990	0.55	0.46	0.61	1.47	3.79	4.65	3.64	2.45	1.21	1.04	1.27	0.94	1.85	Jun 24	6.85	1.075	0.421	1990
1991	0.79	1.21	1.00	2.20	5.41	8.31	6.26	4.08	1.85	1.38	1.35	0.89	2.90	Jun 28	17.50	1.423	0.717	1991
1992	0.87	1.07	1.31	1.52	2.23	4.41	4.88	2.15	1.22	1.58	0.95	0.65	1.91	Jun 30	11.40	0.963	0.548	1992
1993	0.40	0.39	0.68	0.68	3.25	2.66	4.81	2.93	1.26	1.13	0.96	0.91	1.68	Jul 12	8.86	0.826	0.343	1993
1994	0.75	0.68	1.23	3.39	4.95	4.17	3.98	2.89	1.45	1.04	0.81	0.60	2.17	May 12	8.50	1.327	0.551	1994
1995	0.63	0.75	0.71	0.83	3.79	4.59	3.30	3.92	1.56	1.08	0.74	0.80	1.90	Aug 08	8.07	1.160	0.536	1995
1996	1.32	0.70	1.01	1.89	2.63	6.19	4.94	2.96	2.09	1.24	0.92	0.66	2.22	Jun 26	10.40	1.457	0.547	1996
1997	0.69	0.68	0.67	0.92	2.82	3.19	2.97	2.06	1.16	1.10	0.55	0.43	1.44	May 16	7.04	1.027	0.343	1997
1998	0.49	0.45	0.54	0.60	2.61	3.45	4.55	2.23	1.28	1.39	0.83	0.59	1.59	Jul 03	11.30	1.030	0.412	1998
1999	0.56	0.38	0.47	1.21	2.73	6.03	8.17	4.82	2.07	1.18	0.97	0.81	2.47	Jun 17	11.10	1.587	0.357	1999
2000	0.64	0.59	0.56	1.08	1.71	3.15	4.50	2.05	1.65	1.09	0.81	0.60	1.54	Jul 09	8.21	1.260	0.524	2000
2001	0.56	0.44	0.47	0.69	1.31	2.65	2.60	1.76	1.16	0.71	0.70	0.60	1.14	Jun 02	7.09	0.908	0.406	2001
2002	0.57	0.47	0.56	0.71	2.02	5.09	2.75	2.39	1.36	0.80	0.67	0.75	1.52	Jun 15	8.49	1.071	0.448	2002
2003	0.62	0.47	0.42	0.65	2.40	5.35	2.79	2.16	1.16	0.79	0.57	0.50	1.49	Jun 10	10.60	0.786	0.404	2003
2004	0.47	0.45	0.50	0.93	2.94	2.81	2.85	2.09	1.83	1.18	1.21	0.68	1.50	May 26	6.00	1.214	0.409	2004
2005	0.77	0.88	0.94	1.62	3.84	6.59	3.16	2.32	1.19	0.97	0.75	0.55	1.97	Jun 19	18.90	0.904	0.472	2005
2006	0.48	0.37	0.50	1.10	2.74	3.37	2.49	1.41	1.13	0.90	0.78	0.61	1.33	May 21	5.81	1.001	0.352	2006
2007	0.51	0.46	0.47	1.17	2.95	7.01	4.52	2.27	1.58	1.56	1.20	0.86	2.05	Jun 07	16.80	1.384	0.420	2007
2008	0.61	0.52	0.60	0.92	3.06	3.20	2.64	2.00	1.24	0.97	0.94	0.63	1.45	May 20	8.29	0.986	0.419	2008
2009	0.38	0.38	0.35	0.49	1.23	2.42	2.72	1.85	1.21	0.76	0.90	0.85	1.13	Aug 01	4.63	0.972	0.306	2009
2010	0.79	0.63	0.65	1.07	2.45	6.40	4.37	2.45	3.05	2.09	1.23	0.95	2.18	Sep 26	25.10	1.111	0.530	2010
2011	0.64	0.50	0.55	0.99	4.39	11.90	5.77	3.01	2.66	1.50	0.92	0.76	2.80	Jun 09	23.90	1.651	0.273	2011
2012	0.67	0.50	0.70	1.83	3.03	5.23	3.94	2.48	1.30	1.11	0.93	0.53	1.86	Jun 24	8.86	1.039	0.392	2012
Avg.	0.65	0.59	0.69	1.15	2.93	4.67	3.87	2.53	1.52	1.23	0.90	0.68	1.77	1.77		10.97	1.117	0.429	m^3/s
S. D.	0.19	0.20	0.25	0.58	1.05	2.05	1.39	0.77	0.46	0.55	0.22	0.16	0.45			5.48	0.236	0.099	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.65	0.60	0.69	1.13	2.87	4.41	3.80	2.51	1.49	1.22	0.90	0.68	1.73	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	4	3	4	6	16	23	21	14	8	7	5	4	111	mm	10-Year	17.01	0.840	0.313	m^3/s







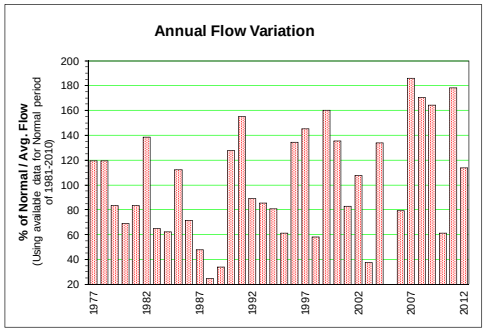


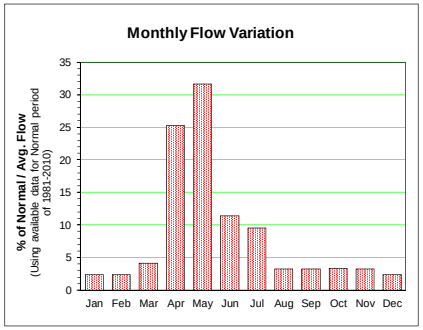
BAKER CREEK AT QUESNEL 08KE016

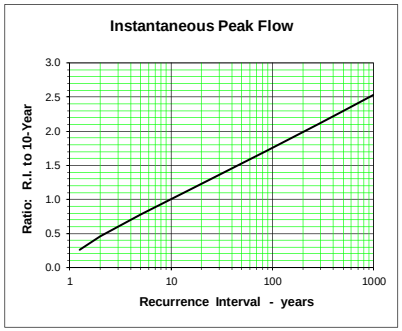
Station Longitude Latitude: -122.509681 52.973633

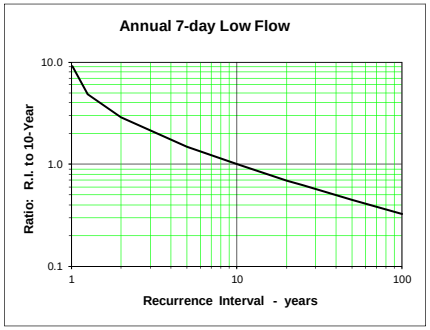
Monthly and Annual Discharge in m^3/s | Drainage Area = 1562.84 km^2 | Median Elevation = 1095 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	1.84	2.40	2.20	16.60	21.00	7.55	5.29	2.11	3.33	4.13	1.65	0.89	5.76	Apr 29	39.16	1.370	0.834	1977
1978	0.99	1.56	5.94	15.80	23.40	10.60	3.22	1.24	2.27	1.66	1.19	1.07	5.76	May 02	39.16	0.759	0.759	1978
1979	0.88	0.88	1.68	7.34	24.90	6.35	2.76	0.49	0.32	0.60	0.76	0.93	4.02	May 06	59.65	0.195	0.195	1979
1980	0.77	0.52	0.75	4.92	5.14	7.85	7.02	2.49	4.76	2.37	1.85	1.49	3.33	Jul 03	15.02	1.857	0.463	1980
1981	1.32	1.66	3.12	6.40	12.50	13.10	4.13	2.12	0.75	0.85	1.12	1.06	4.02	May 31	25.10	0.598	0.598	1981
1982	1.08	0.85	0.81	3.19	32.20	6.86	11.40	7.66	7.53	4.37	2.02	1.22	6.66	May 17	51.81	2.126	0.738	1982
1983	1.02	1.25	1.56	5.52	4.13	3.51	9.34	3.75	1.87	1.81	2.39	1.18	3.12	Jul 25	16.63	1.687	0.773	1983
1984	0.75	0.88	1.93	7.79	10.10	6.09	2.32	0.86	1.36	1.61	1.21	1.11	3.00	May 18	17.70	0.555	0.555	1984
1985	1.17	1.24	2.04	17.30	30.80	6.42	0.88	0.37	0.44	2.09	1.21	0.66	5.41	May 21	45.70	0.145	0.145	1985
1986	0.82	1.33	3.31	6.99	12.80	5.69	3.09	1.19	0.72	1.91	1.89	1.55	3.45	May 24	25.21	0.418	0.418	1986
1987	1.25	1.46	2.78	8.05	10.20	1.75	0.48	0.32	0.16	0.32	0.65	0.34	2.32	May 03	32.29	0.101	0.101	1987
1988	0.23	0.46	0.86	4.17	4.40	1.71	0.53	0.28	0.16	0.28	0.61	0.51	1.18	Apr 25	9.33	0.124	0.124	1988
1989	0.49	0.30	0.48	3.69	4.92	1.47	1.29	2.85	1.09	0.68	1.35	0.97	1.64	May 02	9.53	0.570	0.258	1989
1990	1.13	1.02	1.16	20.20	14.40	19.80	10.90	0.93	0.49	1.34	1.44	1.15	6.16	Jun 13	64.37	0.344	0.336	1990
1991	1.25	3.54	2.37	35.80	24.50	9.13	5.87	1.33	0.85	1.24	1.99	1.81	7.46	Apr 26	138.39	0.642	0.610	1991
1992	1.85	2.01	11.80	21.40	8.23	2.28	0.63	0.30	0.37	0.71	1.14	0.94	4.30	Apr 06	35.62	0.213	0.213	1992
1993	0.73	0.64	0.92	13.60	18.80	3.79	6.02	1.51	0.52	0.82	0.95	0.87	4.12	May 03	31.97	0.453	0.441	1993
1994	0.79	0.79	1.42	21.20	8.64	3.66	6.19	0.81	0.67	1.27	0.79	0.65	3.90	Apr 23	41.41	0.517	0.517	1994
1995	0.62	0.55	1.54	9.85	12.10	2.21	1.17	2.41	1.00	1.55	1.10	1.16	2.95	May 08	22.64	0.669	0.489	1995
1996	1.57	1.15	1.53	24.40	19.70	8.26	7.03	2.01	2.23	2.01	4.88	3.15	6.48	Apr 19	46.77	0.911	0.911	1996
1997	1.99	1.54	2.01	27.00	32.20	6.97	3.13	1.25	1.99	2.02	2.19	1.33	6.98	Apr 28	92.69	0.609	0.609	1997
1998	0.85	0.99	2.16	7.21	9.48	1.84	6.37	0.88	0.52	1.23	1.13	0.89	2.81	May 01	19.31	0.422	0.422	1998
1999	0.89	1.07	1.80	24.20	29.90	11.80	13.60	2.95	1.38	1.19	1.76	1.56	7.71	Apr 27	84.00	0.957	0.661	1999
2000	1.28	0.95	1.29	9.75	9.80	13.70	32.20	2.87	1.79	1.45	1.88	1.14	6.54	Jul 12	93.01	1.347	0.878	2000
2001	1.21	1.13	1.08	6.90	12.40	7.31	7.62	5.02	1.30	1.72	1.32	0.89	4.00	Apr 30	24.35	0.955	0.790	2001
2002	0.74	0.65	0.76	9.86	30.50	11.80	2.92	0.80	1.07	1.01	0.98	0.81	5.19	May 16	75.42	0.563	0.563	2002
2003	0.65	0.62	0.99	6.47	6.54	1.90	1.02	0.38	0.61	0.96	0.94	0.77	1.82	Apr 28	18.99	0.349	0.349	2003
2004	0.63	0.62	1.79	17.60	9.04	5.39	4.65	6.19	17.00	4.67	5.85	4.14	6.44	Sep 04	91.72	1.097	0.567	2004
2005	7.70	10.40	11.40	16.70					5.96	11.60	5.94	3.72						2005
2006	2.77	1.98	1.99	15.50	12.10	4.20	1.84	0.79	0.60	1.13	1.67	1.39	3.83	Apr 30	26.00	0.376	0.376	2006
2007	1.23	1.36	1.72	40.20	36.70	10.50	3.57	1.37	1.62	3.37	3.60	2.06	8.95	Apr 26	116.00	1.207	1.183	2007
2008	1.72	1.50	1.57	8.51	58.50	12.10	3.45	1.96	2.07	1.90	2.52	2.08	8.21	May 18	112.00	1.466	1.466	2008
2009	2.42	2.15	1.86	33.70	36.40	7.71	5.35	0.98	0.78	1.18	1.31	1.00	7.92	Apr 23	87.10	0.732	0.732	2009
2010	1.03	1.08	2.97	11.70	9.76	3.05	1.18	0.44	1.28	1.12	1.11	0.86	2.97	Apr 23	24.80	0.306	0.306	2010
2011	0.76	0.80	1.04	7.00	49.00	20.40	13.60	4.81	1.43	1.48	0.68	0.99	8.57	May 19	78.90	0.988	0.435	2011
2012	1.09	1.07	1.36	24.30	19.90	8.51	4.33	1.51	0.79	1.12	0.92	0.91	5.47	Apr 28	73.90	0.654	0.654	2012
Avg.	1.32	1.46	2.33	14.47	19.00	7.29	5.55	1.92	1.97	1.91	1.78	1.31	4.93	5.09		51.02	0.751	0.556	m^3/s
S. D.	1.22	1.66	2.48	9.57	13.13	4.78	5.87	1.74	3.03	1.96	1.32	0.82	2.12			34.25	0.507	0.293	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1.37	1.51	2.37	14.83	17.99	6.69	5.45	1.88	1.94	1.91	1.90	1.36	4.81	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	2	2	4	25	31	11	9	3	3	3	3	2	97	mm	10-Year	94.60	0.169	0.153	m^3/s







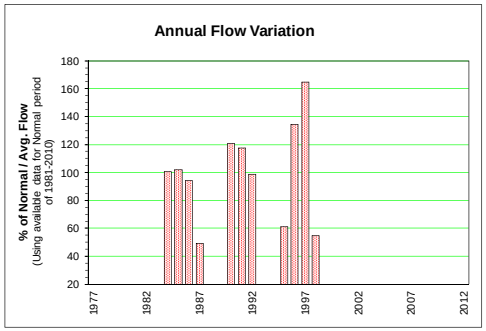


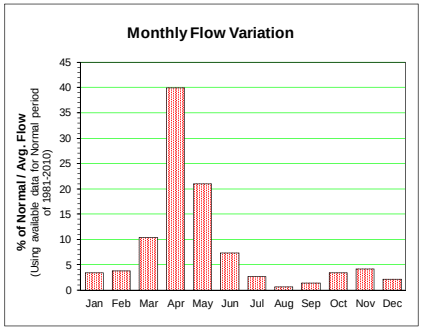
TABOR CREEK ABOVE SWEDE CREEK 08KE032

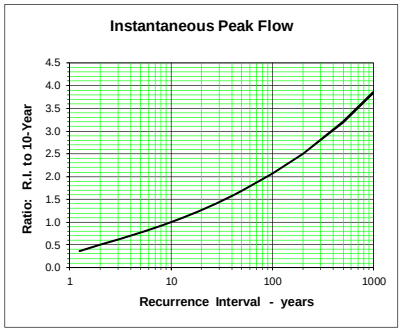
Station Longitude Latitude: -122.570803 53.862690

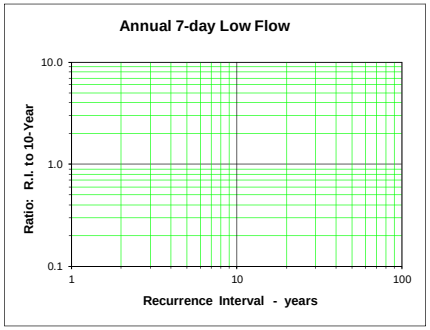
Monthly and Annual Discharge in m^3/s | Drainage Area = 64.60 km^2 | Median Elevation = 796 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977																		1977
1978																		1978
1979																		1979
1980																		1980
1981				1.070	1.500	0.696	0.044	0.058	0.003					Jun 01	4.02			1981
1982					3.000	0.533	0.157	0.105	0.645	0.553				May 07	5.27			1982
1983			0.761	1.180	0.447	0.333	1.040	0.282	0.045	0.074	0.229	0.106		Apr 08	4.28			1983
1984	0.312	0.384	0.960	1.350	0.911	0.568	0.056	0.003	0.035	0.428	0.199	0.180	0.448	May 15	4.54			1984
1985	0.181	0.189	0.551	2.220	1.440	0.157	0.004	0.000	0.004	0.470	0.169	0.062	0.454	Apr 14	6.90			1985
1986	0.111	0.086	1.030	2.180	1.160	0.330	0.040	0.001	0.000	0.006	0.029	0.067	0.420	Apr 21	5.89			1986
1987	0.066	0.100	0.250	1.520	0.654	0.035	0.001	0.001	0.000	0.000	0.006	0.008	0.219	Apr 15	3.60			1987
1988				2.330	0.583	0.120	0.002	0.000						Apr 18	6.65			1988
1989	0.062	0.075	0.128	2.170	0.730	0.028	0.001							Apr 22	7.32			1989
1990	0.308	0.174	0.288	3.150	0.661	1.540	0.177	0.010	0.001	0.021	0.107	0.053	0.537	Jun 13	15.56			1990
1991	0.176	0.533	0.198	2.750	1.360	0.553	0.424	0.015	0.000	0.018	0.182	0.121	0.524	Apr 26	6.74			1991
1992	0.634	0.920	0.981	0.969	0.877	0.039	0.000	0.000	0.000	0.239	0.435	0.193	0.439	Apr 29	3.98			1992
1993	0.101	0.143	0.240	2.090										Apr 10	5.92			1993
1994	0.223	0.146	1.020	4.630	0.472	0.192								Apr 09	14.16			1994
1995	0.005	0.010	0.326	2.130	0.475	0.027	0.000	0.002	0.000	0.025	0.144	0.134	0.272	Apr 10	4.19			1995
1996	0.084	0.089	0.790	2.380	1.060	1.100	0.263	0.094	0.261	0.298	0.610	0.182	0.598	Apr 25	11.00			1996
1997	0.144	0.234	0.589	3.830	2.550	0.512	0.083	0.012	0.094	0.124	0.444	0.192	0.733	Apr 28	13.20			1997
1998	0.126	0.124	0.450	0.887	0.837	0.076	0.017	0.000	0.000	0.140	0.177	0.099	0.245	Apr 25	4.26			1998
1999	0.211	0.122	0.124															1999
2000																		2000
2001																		2001
2002																		2002
2003																		2003
2004																		2004
2005																		2005
2006																		2006
2007																		2007
2008																		2008
2009																		2009
2010																		2010
2011																		2011
2012																		2012
Avg.	0.183	0.222	0.543	2.167	1.101	0.402	0.144	0.039	0.078	0.184	0.228	0.116	0.444	0.444		7.08		m^3/s
S. D.	0.152	0.233	0.337	1.017	0.717	0.418	0.267	0.076	0.178	0.195	0.180	0.062	0.156			3.78		m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.183	0.222	0.543	2.167	1.101	0.402	0.144	0.039	0.078	0.184	0.228	0.116	0.444	m^3/s				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	8	23	87	46	16	6	2	3	8	9	5	217	mm	10-Year	11.82		m^3/s









NAZKO RIVER ABOVE MICHELLE CREEK 08KF001

Station Longitude Latitude: -123.553415 52.928498

Monthly and Annual Discharge in m^3/s | Drainage Area = 3154.89 km^2 | Median Elevation = 1192 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	2.36	2.62	2.53	11.30			11.30	5.42	4.13	3.51	2.24	1.62				3.56	1.38	1977
1978	1.44	1.65	1.85	15.80	28.10	9.21	1.95	1.71	2.06	1.59	1.55	1.45	5.71	May 12	32.80	1.24	1.24	1978
1979	1.29	1.34	2.10	5.68	29.70	7.70	3.51	1.02	0.59	0.88	0.79	0.97	4.67	May 05	51.80	0.51	0.51	1979
1980	0.74	0.61	0.79	5.86	4.59	11.70	19.90	3.47	4.07	2.52	2.35	1.78	4.88	Jun 28	41.70	3.08	0.57	1980
1981	1.53	1.66	2.68	4.56	7.86	8.86	3.95	2.42	1.24	1.22	1.27	1.07	3.20	May 28	16.10	0.98	0.97	1981
1982	0.88	0.78	0.64	2.00	24.70	5.15	5.68	4.91	6.24	5.52	3.42	1.51	5.16	May 16	37.40	2.23	0.60	1982
1983	0.89	1.13	1.66	3.62	2.80	3.47	9.42	3.32	1.57	1.92	2.77	1.38	2.84	Jul 23	21.30	1.30	0.87	1983
1984	1.04	1.08	1.70	6.67	10.10	7.04	2.95	0.79	1.07	1.75	1.16	1.05	3.03	May 18	16.50	0.54	0.54	1984
1985	1.02	1.28	1.98	11.20	12.70	3.89	0.42	0.34	0.44	1.24	0.86	0.49	2.99	Apr 15	23.90	0.16	0.16	1985
1986																		1986
1987	1.04	1.35	1.95	8.74	12.20	2.05	0.99	0.68						May 03	31.50	0.39		1987
1988	0.40	0.44	0.77	3.51	3.37	2.67	1.48	0.92	0.46	0.81	1.05	0.58	1.37	Apr 20	6.66	0.32	0.32	1988
1989	0.55	0.42	0.37	3.48	3.70	1.81	2.90	4.92	3.65	1.53	1.73	1.34	2.21	Aug 24	10.10	0.90	0.36	1989
1990	1.15	0.97	1.17	13.50	14.00	18.70	6.68	1.58	1.07	1.54	1.97	1.87	5.35	Jun 14	46.60	0.74	0.73	1990
1991	1.60	1.53	1.39	29.50	34.30	32.00	15.70	2.96	1.48	1.57	2.35	2.30	10.57	Apr 26	90.90	1.27	1.14	1991
1992	1.99	2.06	6.85	31.50	13.30	4.41	2.42	0.81	0.63	0.89	1.44	1.23	5.61	Apr 06	46.20	0.43	0.43	1992
1993	1.04	0.85	0.98	13.40	19.20	6.38	10.20	3.21	1.34	1.73	1.71	1.33	5.14	Apr 27	30.30	1.12	0.77	1993
1994	1.09	0.94	1.33	31.10	10.60	4.81	6.40	1.38	0.95	1.81	1.32	0.99	5.21	Apr 23	42.30	0.86	0.85	1994
1995	0.89	0.98	1.98	12.90	20.70	3.57	1.86	3.02	2.51	2.53	2.16	2.18	4.63	May 13	33.83	1.32	0.77	1995
1996																		1996
1997																		1997
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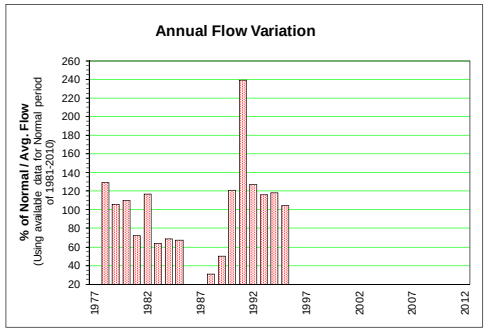
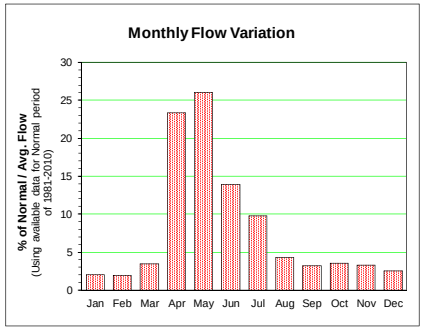
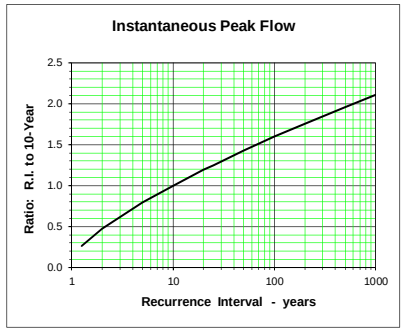
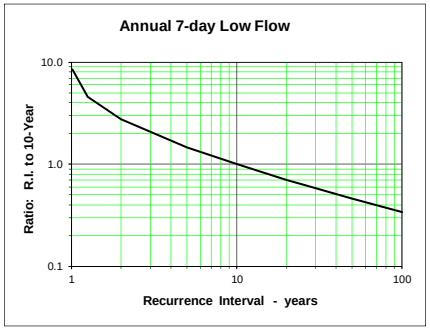
2010																		2010
2011																		2011
2012																		2012
Avg.	1.16	1.20	1.82	11.91	14.82	7.85	5.98	2.38	1.97	1.92	1.77	1.36	4.54	4.90		34.11	1.16	0.72	m^3/s
S. D.	0.48	0.56	1.41	9.58	9.80	7.50	5.41	1.60	1.63	1.15	0.71	0.50	2.09			19.73	0.93	0.34	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1.08	1.11	1.82	12.55	13.54	7.49	5.07	2.23	1.74	1.85	1.79	1.33	4.41	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1	1	2	10	11	6	4	2	1	2	1	1	44	mm	10-Year	74.55	0.246	0.211	m^3/s







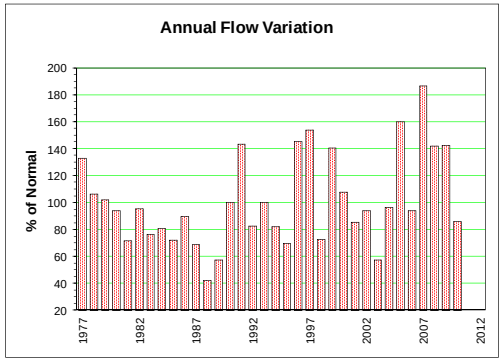


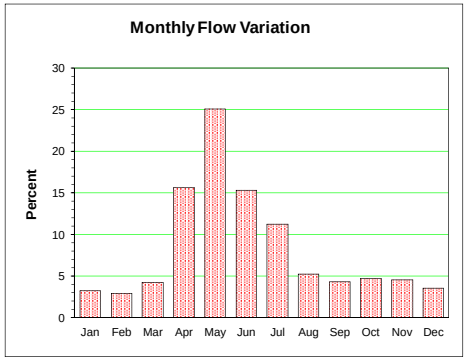
WEST ROAD RIVER NEAR CINEMA 08KG001

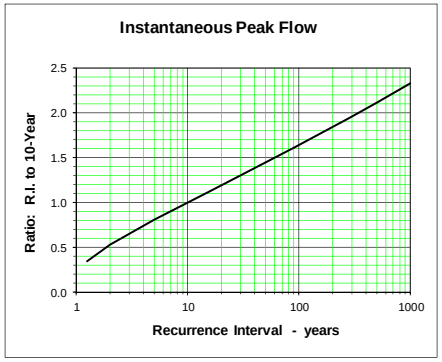
Station Longitude Latitude: -122.892097 53.306496

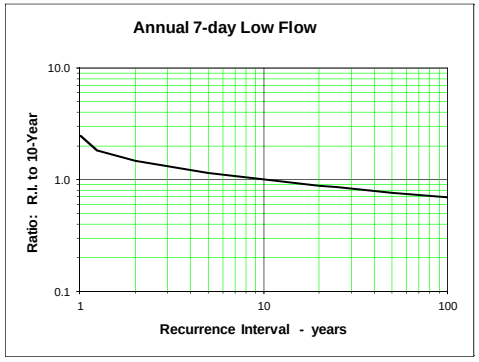
Monthly and Annual Discharge in m^3/s | Drainage Area = 12391.31 km^2 | Median Elevation = 1148 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	18.30	20.60	18.50	95.80	146.00	58.80	50.80	29.20	27.40	27.30	18.20	13.40	43.81		Apr 30	228.00	21.40	12.51	1977
1978	12.50	12.20	13.60	69.80	153.00	63.30	23.20	14.50	15.40	14.10	13.70	13.30	35.01		May 19	185.00	12.87	11.61	1978
1979	11.40	11.30	13.90	29.30	171.00	72.90	35.20	14.50	10.30	11.50	10.60	9.33	33.65		May 08	294.00	9.59	8.79	1979
1980	7.38	8.10	9.98	34.20	44.20	62.00	73.90	28.20	40.00	24.40	20.10	18.70	30.97		Jun 30	125.00	24.54	6.63	1980
1981	15.90	12.70	15.30	26.20	48.40	63.30	30.30	18.60	11.40	12.70	15.00	12.60	23.56		May 30	94.10	9.77	9.51	1981
1982	11.60	10.50	10.20	19.70	125.00	52.20	39.20	27.20	30.90	23.60	14.60	9.94	31.41		May 19	174.00	19.00	8.11	1982
1983	9.48	11.40	11.70	23.00	24.10	33.90	78.70	38.20	17.90	17.20	20.50	13.90	25.12		Jul 24	115.00	17.36	9.14	1983
1984	11.50	12.90	19.90	42.50	64.30	64.00	32.70	15.30	14.50	17.60	12.40	11.30	26.58		May 20	95.90	12.61	9.78	1984
1985	8.46	9.74	11.40	55.50	82.90	48.40	16.00	9.27	8.15	15.10	12.70	7.90	23.83		Apr 17	99.30	7.32	7.32	1985
1986	8.59	9.10	16.10	38.60	84.20	86.70	35.60	17.40	11.20	18.50	16.70	11.50	29.59		Jun 03	123.00	8.17	7.79	1986
1987	10.90	13.70	19.70	56.50	79.70	28.70	17.80	12.40	9.80	9.11	8.83	5.46	22.76		May 05	136.00	9.11	5.03	1987
1988	5.55	6.08	7.01	24.90	33.40	29.00	15.60	9.65	8.35	8.95	9.31	8.51	13.86		Apr 29	46.20	7.99	4.92	1988
1989	8.45	7.92	8.61	25.60	48.30	28.00	25.20	23.20	18.20	11.00	11.40	11.10	18.98		May 08	60.10	12.36	7.64	1989
1990	12.40	10.20	11.80	68.70	74.00	92.50	58.40	15.60	11.50	11.60	14.10	15.70	33.08		Jun 15	165.00	9.50	8.94	1990
1991	14.30	13.80	14.70	111.00	143.00	114.00	71.70	21.90	13.00	12.70	19.70	16.80	47.30		Apr 26	325.00	12.43	11.19	1991
1992	14.90	15.50	38.40	93.60	58.20	30.90	19.80	10.70	9.34	10.80	13.40	11.80	27.24		Apr 07	126.00	8.16	8.16	1992
1993	11.30	9.89	10.70	51.70	101.00	55.60	71.30	26.20	16.20	13.80	14.20	12.30	33.02		Jul 02	134.00	13.47	9.21	1993
1994	12.30	11.60	14.50	94.70	58.00	31.10	42.90	13.20	10.30	13.70	12.20	9.34	27.00		Apr 24	136.00	9.96	8.01	1994
1995	9.93	11.10	12.20	40.20	68.00	29.60	18.90	19.60	16.30	16.50	16.80	15.30	22.93		May 07	80.30	12.41	8.87	1995
1996	12.50	11.20	16.60	138.00	127.00	92.20	53.50	22.30	25.00	21.20	31.10	24.40	47.86		Apr 19	219.00	17.80	10.43	1996
1997	19.50	20.60	23.90	150.00	189.00	79.70	41.40	18.70	14.70	18.40	19.00	12.30	50.68		Apr 26	325.00	13.86	11.76	1997
1998	11.90	11.60	16.60	29.10	58.90	31.50	54.90	15.40	11.20	17.20	16.30	12.00	24.00		Jul 09	82.80	10.83	10.71	1998
1999	11.50	11.90	12.60	97.70	154.00	83.50	89.10	26.80	18.70	16.10	17.00	14.40	46.30		Apr 27	302.00	16.57	10.49	1999
2000	14.10	13.80	13.20	43.90	49.70	78.60	104.00	31.30	22.10	18.10	22.70	14.60	35.56		Jul 11	170.00	17.80	12.61	2000
2001	14.80	13.80	13.70	37.10	76.90	66.20	41.90	26.90	12.60	12.70	11.20	10.30	28.21		May 01	112.00	11.29	10.06	2001
2002	11.20	12.30	11.00	35.20	120.00	76.10	28.70	15.50	15.80	16.50	14.80	13.20	30.96		May 24	158.00	14.46	10.61	2002
2003	11.00	8.58	10.00	33.50	48.40	31.00	16.50	11.10	11.20	15.00	16.50	13.90	18.93		Apr 29	78.10	10.24	7.27	2003
2004	11.70	10.50	14.60	68.50	52.50	31.70	27.20	14.60	54.60	34.30	38.10	23.90	31.79		Apr 16	94.70	13.04	9.72	2004
2005	16.30	17.50	55.10	105.00	115.00	79.50	70.00	32.80	27.00	51.40	37.10	23.40	52.69		Apr 29	212.00	24.97	14.31	2005
2006	19.80	16.00	15.50	68.80	91.40	56.10	27.00	16.30	14.30	16.00	15.40	14.80	30.99		May 01	125.00	13.09	13.09	2006
2007	14.30	15.20	20.30	107.00	226.00	124.00	65.20	38.60	30.30	33.20	38.70	21.50	61.42		May 11	350.00	27.07	13.83	2007
2008	18.80	18.40	19.00	31.70	225.00	90.30	35.10	26.10	27.50	24.60	24.20	18.70	46.81		May 18	315.00	22.41	15.53	2008
2009	12.90	10.20	8.51	104.00	208.00	82.70	58.20	20.30	14.20	15.00	16.90	10.70	47.02		May 08	274.00	12.44	7.99	2009
2010	10.30	12.50	18.90	59.80	83.80	49.80	21.90	11.20	13.00	27.70	17.00	13.40	28.33		Apr 24	112.00	9.91	9.54	2010
2011	13.20	13.40	15.30	30.50	259.00	212.00	137.00	77.20	23.10	32.30					May 30	424.00	12.90	12.90	2011
2012					123.0	82.2	53.9	28.7	20.0	16.9	16.0	15.8			Apr 28	221.00	17.81		2012
Avg.	12.54	12.45	16.09	61.18	106.0	66.4	46.74	22.18	18.21	18.80	17.90	13.87	33.27	34.41		175.46	14.01	9.83	m^3/s
S. D.	3.34	3.33	8.79	35.32	60.57	35.68	27.47	12.31	9.74	8.66	7.60	4.46	11.13			94.73	5.14	2.49	m^3/s
Normal	12.54	12.34	16.39	62.72	97.27	61.36	43.62	20.21	17.31	18.34	18.26	13.83	32.93	m^3/s					
Normal	3	2	4	13	21	13	9	4	4	4	4	3	84	mm	10-Year	309.71	9.13	6.37	m^3/s







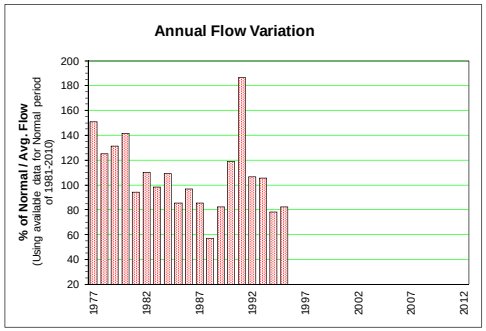


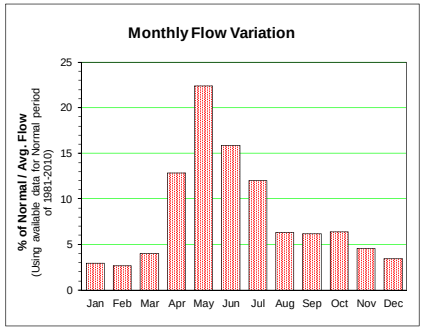
BAEZAEKO RIVER AT LOT 10262 08KG003

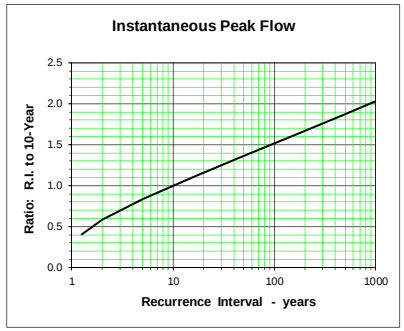
Station Longitude Latitude: -123.80399 52.98722

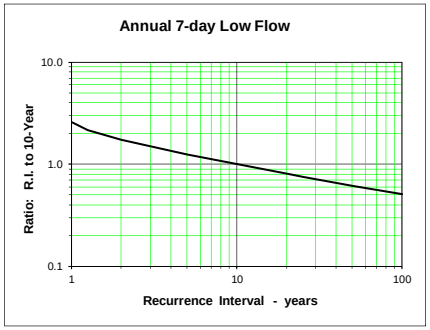
Monthly and Annual Discharge in m^3/s | Drainage Area = 1017.07 km^2 | Median Elevation = 1338 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	1.26	1.40	1.32	5.84	10.30	4.43	3.67	2.13	2.55	2.14	1.51	0.98	3.14	Apr 27	21.60	1.51	0.813	1977
1978	0.77	0.82	0.90	3.74	11.00	5.07	2.18	1.41	1.84	1.49	0.98	0.82	2.60	May 21	16.30	1.18	0.710	1978
1979	0.61	0.63	0.88	2.33	13.40	5.87	2.54	1.50	1.34	1.46	1.12	0.82	2.73	May 06	24.94	1.26	0.591	1979
1980	0.59	0.54	0.71	2.23	3.96	7.18	8.54	3.29	3.41	2.08	1.58	1.15	2.94	Jul 12	15.20	2.39	0.501	1980
1981	0.94	0.90	1.30	1.79	3.50	5.55	2.46	1.66	1.51	1.60	1.51	0.76	1.96	Jun 24	9.89	1.30	0.687	1981
1982	0.88	0.74	0.69	1.41	7.62	3.65	3.48	2.04	2.43	1.93	1.41	1.03	2.29	May 18	11.10	1.66	0.638	1982
1983	0.82	0.82	0.82	0.99	1.58	3.28	7.14	2.67	1.91	1.79	1.77	0.82	2.04	Jul 22	14.80	1.35	0.389	1983
1984	0.27	0.40	1.27	3.92	5.64	5.39	1.86	0.98	2.89	2.73	0.95	0.92	2.27	Jun 08	8.90	0.74	0.226	1984
1985	0.86	0.74	0.89	3.15	4.68	2.67	0.96	0.74	1.92	2.73	1.22	0.67	1.77	May 19	8.83	0.55	0.554	1985
1986	0.69	0.74	0.59	0.89	5.88	6.22	2.46	1.31	1.38	1.70	1.23	1.02	2.02	Jun 05	9.74	1.03	0.583	1986
1987	0.94	1.06	1.28	3.35	6.74	1.84	1.37	1.01	0.85	0.91	1.17	0.71	1.77	May 03	12.37	0.80	0.569	1987
1988	0.46	0.44	0.63	2.22	2.26	2.02	1.26	1.06	1.08	1.16	1.03	0.69	1.19	Jun 09	4.44	0.93	0.368	1988
1989	0.64	0.55	0.55	2.55	3.69	1.96	2.93	2.67	1.69	1.25	1.07	0.86	1.71	May 02	7.03	1.34	0.525	1989
1990	0.74	0.67	0.75	3.65	6.28	6.90	4.42	1.42	1.39	1.35	1.06	0.90	2.47	Jun 14	12.80	1.07	0.624	1990
1991	0.74	0.82	0.81	6.92	12.80	10.80	5.40	1.95	1.68	1.63	1.36	1.41	3.87	Apr 24	23.80	1.55	0.623	1991
1992	1.20	1.10	2.55	6.80	5.75	2.46	1.76	1.08	1.05	1.10	1.09	0.66	2.22	Apr 04	13.10	0.92	0.627	1992
1993	0.61	0.61	0.85	3.50	7.22	3.60	3.71	1.79	1.25	1.27	0.91	0.82	2.19	May 14	11.60	1.17	0.584	1993
1994	0.71	0.63	0.76	4.94	2.77	1.94	3.56	1.08	0.92	1.10	0.58	0.53	1.63	Jul 03	11.30	0.78	0.445	1994
1995	0.47	0.64	0.97	2.72	5.69	1.91	1.47	1.83	1.51	1.32	1.02	0.95	1.72	May 15	9.17	1.13	0.404	1995
1996																		1996
1997																		1997
1998																		1998
1999																		1999
2000																		2000
2001																		2001
2002																		2002
2003																		2003
2004																		2004
2005																		2005
2006																		2006
2007																		2007
2008																		2008
2009																		2009
2010																		2010
2011																		2011
2012																		2012
Avg.	0.75	0.75	0.97	3.31	6.36	4.35	3.22	1.66	1.72	1.62	1.19	0.87	2.24	2.36		13.00	1.19	0.551	m^3/s
S. D.	0.24	0.24	0.45	1.77	3.40	2.39	2.01	0.68	0.69	0.52	0.28	0.20	0.62			5.47	0.412	0.138	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.73	0.72	0.98	3.25	5.47	4.01	2.95	1.55	1.56	1.57	1.16	0.85	2.07	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	2	2	3	8	14	10	8	4	4	4	3	2	64	mm	10-Year	21.43	0.687	0.326	m^3/s







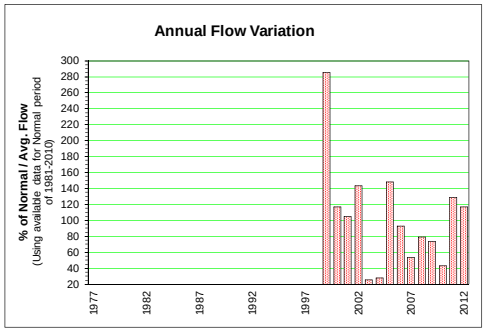


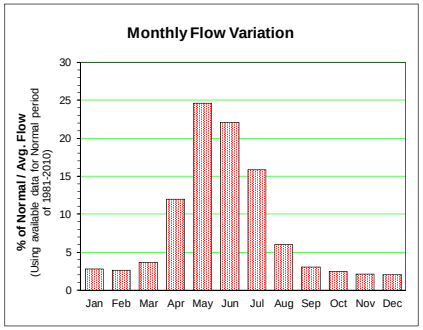
BRIDGE CREEK BELOW DEKA CREEK 08LA027

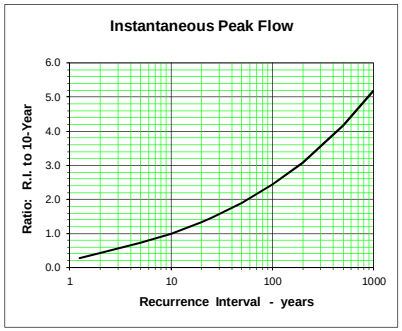
Station Longitude Latitude: -120.921669 51.587689

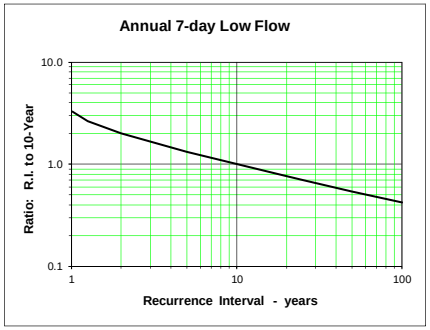
Monthly and Annual Discharge in m^3/s | Drainage Area = 385.51 km^2 | Median Elevation = 1174 m

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Instantaneous Peak Flow Date	Instantaneous Peak Flow Annual	7-Day Low Flow Jun-Sep	7-Day Low Flow Annual	Year
1977																		1977
1978																		1978
1979																		1979
1980																		1980
1981																		1981
1982																		1982
1983																		1983
1984																		1984
1985																		1985
1986																		1986
1987																		1987
1988																		1988
1989																		1989
1990																		1990
1991																		1991
1992																		1992
1993																		1993
1994																		1994
1995																		1995
1996																		1996
1997																		1997
1998									0.150	0.132	0.141	0.110						1998
1999	0.173	0.209	0.243	2.500	7.410	8.130	10.900	3.720	2.230	1.060	0.768	0.605	3.184	Jul 08	16.30	1.803	0.136	1999
2000	0.792	0.724	0.781	2.320	3.750	3.200	2.100	0.951	0.418	0.275	0.215	0.169	1.309	Apr 23	4.87	0.312	0.137	2000
2001	0.213	0.196	0.210	2.040	2.880	3.110	2.320	1.840	0.525	0.324	0.224	0.213	1.177	Apr 28	3.94	0.415	0.172	2001
2002	0.479	0.453	0.501	2.550	8.190	4.960	1.300	0.224	0.143	0.142	0.137	0.114	1.605	May 23	13.30	0.128	0.110	2002
2003	0.121	0.107	0.144	0.445	1.350	0.797	0.178	0.056	0.061	0.064	0.045	0.041	0.285	May 07	3.31	0.047	0.032	2003
2004	0.054	0.045	0.066	0.635	0.527	1.290	0.399	0.124	0.186	0.114	0.195	0.142	0.313	Jun 07	2.44	0.085	0.044	2004
2005	0.830	1.180	1.770	2.180	2.480	2.620	3.220	1.030	0.710	1.330	1.140	1.360	1.658	Jul 17	4.85	0.575	0.112	2005
2006	1.240	1.030	0.964	2.140	2.840	2.460	0.911	0.299	0.173	0.143	0.178	0.139	1.041	May 30	3.45	0.162	0.113	2006
2007	0.105	0.107	0.483	1.660	1.650	1.680	0.636	0.197	0.159	0.163	0.195	0.147	0.599	Jun 08	2.21	0.125	0.104	2007
2008	0.159	0.182	0.220	1.030	3.700	3.420	1.040	0.462	0.142	0.101	0.118	0.088	0.889	May 27	4.82	0.112	0.077	2008
2009	0.147	0.168	0.248	1.650	3.380	2.320	1.200	0.286	0.121	0.121	0.163	0.097	0.828	Apr 23	5.11	0.079	0.078	2009
2010	0.137	0.119	0.151	0.397	0.700	1.990	0.800	0.313	0.378	0.228	0.292	0.282	0.482	Jun 11	3.58	0.163	0.116	2010
2011	0.234	0.410	0.414	0.247	4.080	6.350	3.020	1.540	0.381	0.217	0.157	0.164	1.439	May 28	10.20	0.210	0.101	2011
2012	0.153	0.128	0.213	1.880	3.620	3.930	3.540	1.430	0.317	0.108	0.145	0.164	1.306	Apr 27	7.15	0.128	0.096	2012
Avg.	0.346	0.361	0.458	1.548	3.326	3.304	2.255	0.891	0.406	0.301	0.274	0.256	1.151	1.151		6.11	0.310	0.102	m^3/s
S. D.	0.357	0.364	0.456	0.831	2.217	2.012	2.714	1.003	0.535	0.373	0.290	0.332	0.740			4.24	0.454	0.036	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.37	0.38	0.48	1.63	3.24	3.00	2.08	0.79	0.42	0.32	0.29	0.27	1.11	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	3	2	3	11	22	20	14	6	3	2	2	2	91	mm	10-Year	11.31	0.058	0.052	m^3/s







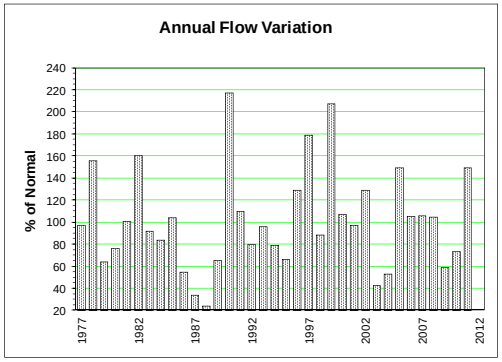


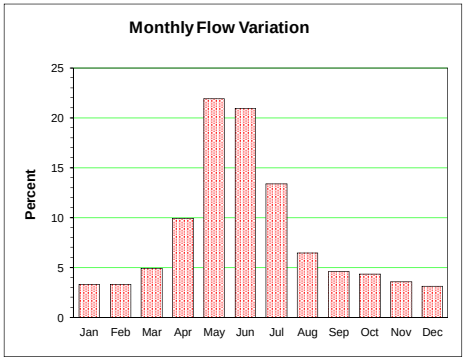
BONAPARTE RIVER BELOW CACHE CREEK 08LF002

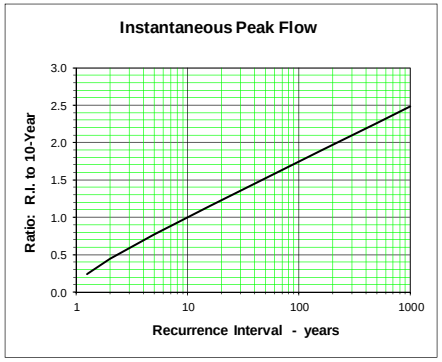
Station Longitude Latitude: -121.3233706 50.803050

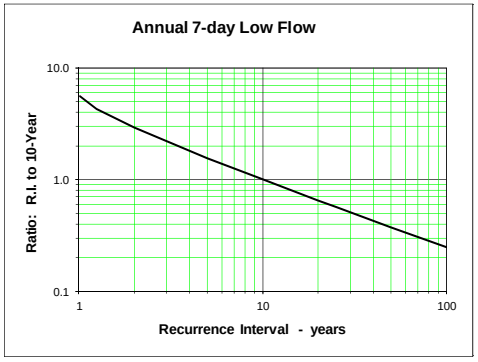
Monthly and Annual Discharge in m^3/s | Drainage Area = 5319.66 km^2 | Median Elevation = 1162 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	2.70	3.21	3.05	8.53	20.20	9.78	4.98	3.03	2.63	2.35	1.90	2.19	5.39		Apr 30	29.20	2.57	1.45	1977
1978	2.26	2.35	3.42	11.90	35.70	26.30	7.59	3.61	3.38	2.47	2.33	2.15	8.65		Jun 05	44.70	2.98	1.86	1978
1979	1.44	1.96	3.08	4.34	12.80	8.37	4.02	1.82	1.25	1.24	1.03	1.06	3.54		May 10	15.40	1.09	0.75	1979
1980	1.07	1.27	1.16	1.64	2.15	13.60	11.60	5.98	4.54	2.80	2.15	2.64	4.22		Jun 18	21.70	2.73	0.83	1980
1981	3.16	3.12	3.47	4.31	13.00	14.50	10.50	5.82	2.78	2.54	2.22	1.53	5.60		May 22	29.30	2.38	1.15	1981
1982	1.77	2.13	2.96	3.35	16.20	14.50	24.80	16.00	9.33	8.39	4.13	2.45	8.90		Jul 09	36.80	8.72	1.13	1982
1983	3.63	3.80	4.83	7.58	14.00	9.06	7.21	3.33	2.64	2.06	2.05	0.98	5.11		Apr 29	18.60	2.11	0.74	1983
1984	1.68	2.41	3.54	5.48	7.42	18.50	8.19	3.01	1.79	1.45	1.34	1.16	4.65		Jun 13	30.50	1.65	0.87	1984
1985	1.96	2.33	2.44	7.32	17.20	23.20	6.26	2.56	2.28	1.73	1.11	1.10	5.79		Jun 12	35.80	1.44	0.62	1985
1986	1.46	1.57	3.46	3.68	6.24	6.86	5.09	3.07	1.42	1.33	1.16	1.17	3.05		May 28	10.40	1.17	0.97	1986
1987	1.13	1.75	2.97	3.38	5.70	3.71	1.24	0.55	0.27	0.50	0.73	0.62	1.88		May 25	7.00	0.16	0.16	1987
1988	0.45	0.60	0.92	2.09	3.80	3.06	1.37	0.64	0.49	0.99	0.92	0.71	1.34		May 08	4.40	0.28	0.28	1988
1989	1.06	1.14	1.74	2.88	7.87	7.61	3.94	4.45	4.83	2.62	2.30	2.74	3.61		May 29	12.00	3.16	0.63	1989
1990	2.94	2.81	3.29	10.50	26.10	49.00	30.00	8.05	3.55	2.71	2.85	2.63	12.06		Jun 16	88.70	2.90	2.30	1990
1991	2.39	3.37	2.89	7.25	14.10	13.80	9.97	6.00	3.63	4.24	2.96	2.49	6.10		Jun 27	20.00	3.11	1.74	1991
1992	2.51	3.03	5.84	8.07	12.20	7.40	5.04	2.13	1.66	1.57	2.00	1.56	4.42		May 16	14.70	1.53	1.47	1992
1993	2.13	2.59	3.02	9.02	17.70	9.35	6.81	4.09	2.47	2.21	2.16	2.20	5.33		May 15	24.10	2.23	1.60	1993
1994	2.37	1.97	3.07	11.70	13.20	7.42	3.70	2.19	2.30	1.93	1.68	1.20	4.40		Apr 22	17.00	1.59	1.01	1994
1995	1.44	1.85	2.25	3.41	10.10	7.14	3.18	3.46	2.72	2.61	3.09	2.99	3.70		May 07	12.60	2.39	1.10	1995
1996	3.29	2.42	4.49	13.10	19.90	20.10	7.67	3.33	3.05	2.98	2.83	2.88	7.17		Jun 05	27.30	2.50	1.69	1996
1997	2.61	2.85	3.91	10.80	29.70	23.90	19.90	8.46	5.04	4.36	3.91	3.10	9.92		Jun 01	37.90	4.66	2.46	1997
1998	3.05	3.42	4.56	8.82	16.90	8.62	5.60	1.75	1.13	1.69	1.67	1.37	4.89		May 20	20.60	0.90	0.90	1998
1999	1.58	1.64	2.35	6.75	26.60	31.60	39.70	10.70	5.13	4.34	3.83	3.09	11.52		Jul 10	66.70	4.16	1.37	1999
2000	2.40	2.26	3.23	7.88	13.70	13.30	8.88	5.73	4.74	3.27	3.03	2.59	5.92		Jun 03	16.40	3.76	1.98	2000
2001	2.46	2.09	3.15	6.72	12.90	11.60	6.83	7.29	3.71	3.39	2.65	1.96	5.41		May 01	20.70	3.34	1.73	2001
2002	1.71	1.75	2.02	6.20	31.80	27.10	5.07	2.71	2.56	2.26	1.43	1.24	7.17		May 27	66.00	2.11	0.91	2002
2003	1.36	1.29	1.96	3.47	7.11	5.17	1.93	1.30	1.23	1.27	1.15	1.14	2.37		May 10	7.67	1.07	1.03	2003
2004	1.17	1.42	2.01	3.97	5.31	4.28	1.90	1.37	3.86	3.23	3.38	3.55	2.95		May 04	5.88	0.71	0.71	2004
2005	3.37	5.64	6.76	9.66	15.40	14.40	14.00	4.97	5.22	7.54	6.79	5.46	8.28		Jul 01	23.00	4.37	2.29	2005
2006	4.78	3.97	4.44	11.00	13.80	13.80	4.69	2.82	3.18	2.79	2.52	2.33	5.84		May 31	18.80	2.43	1.87	2006
2007	2.53	2.64	4.10	10.40	13.50	15.20	5.92	3.01	3.68	3.66	2.89	2.73	5.86		Jun 07	19.00	2.58	2.11	2007
2008	2.40	2.44	2.96	4.09	20.80	19.20	5.88	2.68	2.80	2.66	2.07	1.57	5.80		May 27	30.70	2.56	1.24	2008
2009	1.69	1.96	2.48	5.14	9.98	5.56	2.80	1.72	2.14	2.19	1.99	1.44	3.26		May 22	11.20	1.49	1.33	2009
2010	1.35	1.37	1.69	3.20	7.76	15.40	5.00	3.44	3.79	2.56	1.64	1.46	4.06		May 30	23.00	2.61	1.20	2010
2011	1.57	1.97	2.14	2.82	26.10	35.80	12.40	6.11	3.79	3.05	1.80	1.68	8.29		Jun 03	64.20	3.45	1.26	2011
2012																			2012
Avg.	2.14	2.35	3.13	6.58	15.1	14.8	8.68	4.21	3.11	2.77	2.33	2.03	5.61	5.61		27	2.48	1.28	m^3/s
S. D.	0.89	0.96	1.23	3.23	8.15	10.01	8.26	3.10	1.70	1.59	1.16	0.98	2.53			19.18	1.54	0.57	m^3/s
Normal	2.19	2.39	3.23	6.71	14.33	14.14	8.77	4.22	3.11	2.84	2.42	2.05	5.55	m^3/s					
Normal	1	1	2	3	7	7	4	2	2	1	1	1	33	mm	10-Year	51.75	0.58	0.40	m^3/s









BONAPARTE RIVER NEAR BRIDGE LAKE 08LF062

Station Longitude Latitude: -120.798599 51.335556

Monthly and Annual Discharge in m^3/s | Drainage Area = 681.89 km^2 | Median Elevation = 1316 m

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Instantaneous Peak Flow Date	Instantaneous Peak Flow Annual	7-Day Low Flow Jun-Sep	7-Day Low Flow Annual	Year
1977	1.03	1.25	1.08	3.14	8.49	6.49	3.60	2.63	1.55	0.58	0.20	0.35	2.54	May 25	11.32	1.216	0.156	1977
1978	0.60	0.73	1.03	3.88	11.20	9.67	4.76	2.08	1.20	0.40	0.29	0.32	3.02	May 22	13.60	0.860	0.264	1978
1979	0.39	0.44	0.56	1.18	7.65	7.52	3.62	1.48	0.69	0.33	0.10	0.07	2.01	May 25	10.38	0.524	0.068	1979
1980	0.07	0.09	0.35	0.76	2.67	7.53	7.59	4.39	2.74	1.25	0.63	1.76	2.49	Jun 02	13.50	2.287	0.066	1980
1981	1.67	1.32	1.25	2.13	4.38	7.02	5.67	3.57	1.81	1.12	0.74	0.82	2.63	Jun 24	8.89	1.411	0.696	1981
1982	0.96	1.23	1.21	1.53	9.88	9.64	16.70	12.00	7.52	5.14	2.43	1.35	5.84	Jul 08	22.64	6.006	0.858	1982
1983	1.72	1.73	2.03	4.40	7.89	4.99	4.44	2.40	1.43	0.74	0.46	0.38	2.72	Apr 26	11.01	1.139	0.340	1983
1984	0.62	0.78	1.16	2.33	5.18	13.90	5.48	2.02	0.83	0.32	0.25	0.53	2.78	Jun 10	19.52	0.669	0.191	1984
1985	0.87	0.90	1.02	2.28	10.90	14.70	3.93	1.74	0.79	0.40	0.31	0.33	3.18	Jun 08	22.84	0.494	0.224	1985
1986	0.43	0.48	0.84	1.16	3.17	4.52	3.30	2.19	0.38	0.24	0.26	0.44	1.46	Jun 04	6.18	0.195	0.148	1986
1987	0.58	0.88	0.98	1.44	4.23	2.48	0.76	0.36	0.16	0.09	0.12	0.07	1.01	May 02	4.81	0.109	0.061	1987
1988	0.11	0.18	0.34	1.71	3.63	2.60	1.49	0.57	0.39	0.31	0.22	0.25	0.98	Apr 18	5.03	0.246	0.061	1988
1989	0.57	0.59	0.80	1.61	7.46	4.85	3.37	4.31	3.28	0.78	1.10	1.53	2.53	May 19	10.80	2.089	0.371	1989
1990	1.60	1.53	1.60	7.03	16.60	25.90	13.00	3.48	1.59	0.70	0.60	0.58	6.19	Jun 13	54.40	1.037	0.484	1990
1991	0.86	1.23	1.06	3.08	7.48	6.87	4.62	2.22	1.27	0.71	0.69	0.71	2.57	May 27	9.93	1.084	0.562	1991
1992	0.80	0.88	2.11	3.77	7.29	4.32	3.03	1.80	0.82	0.42	0.59	0.49	2.20	May 13	9.19	0.645	0.391	1992
1993	0.97	1.04	1.05	3.94	11.50	5.61	3.28	1.98	1.40	0.97	0.80	0.75	2.79	May 16	14.30	1.263	0.597	1993
1994	0.80	0.90	1.27	6.45	7.59	4.06	2.54	2.46	2.05	0.91	0.91	0.63	2.55	Apr 20	9.99	1.677	0.601	1994
1995	0.69	0.77	0.80														0.547	1995
1996																		1996
1997																		1997
1998																		1998
1999																		1999
2000																		2000
2001																		2001
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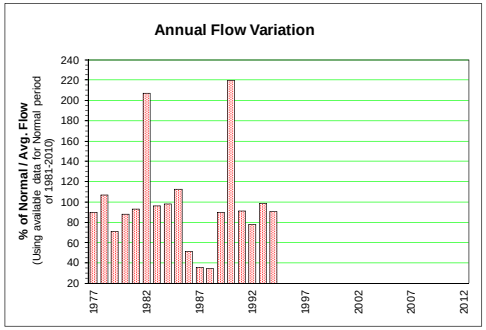
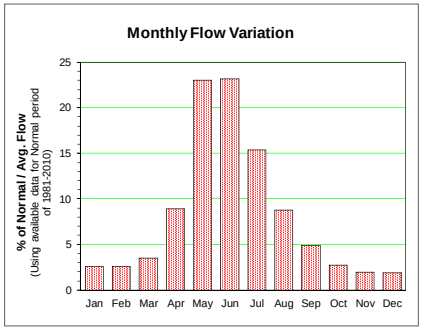
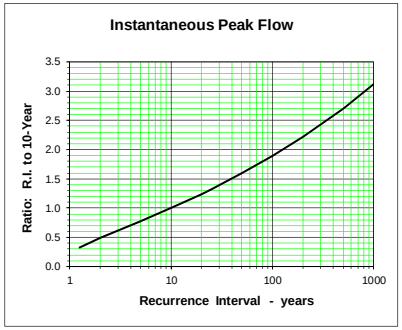
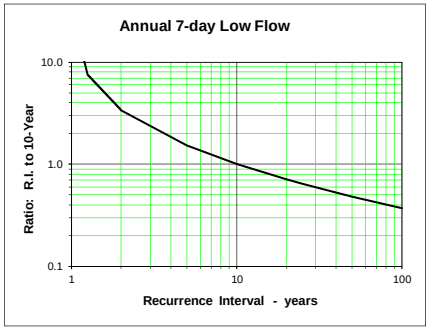
2010																		2010
2011																		2011
2012																		2012
Avg.	0.81	0.89	1.08	2.88	7.62	7.93	5.07	2.87	1.66	0.86	0.59	0.63	2.75	2.86		14.35	1.28	0.35	m^3/s
S. D.	0.46	0.43	0.47	1.78	3.54	5.61	3.93	2.52	1.67	1.12	0.54	0.47	1.34			11.28	1.33	0.24	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.88	0.96	1.17	3.06	7.66	7.96	5.11	2.94	1.69	0.92	0.68	0.63	2.82	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	3	3	5	12	30	30	20	12	6	4	3	2	130	mm	10-Year	24.73	0.261	0.070	m^3/s







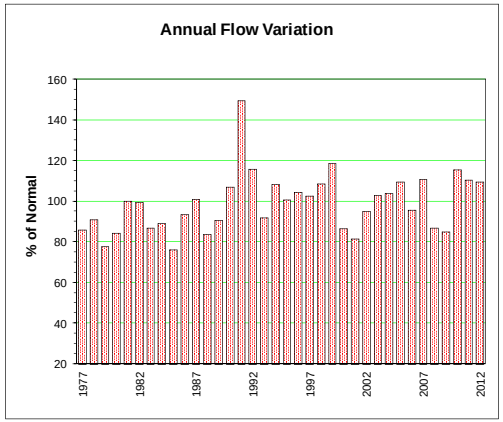


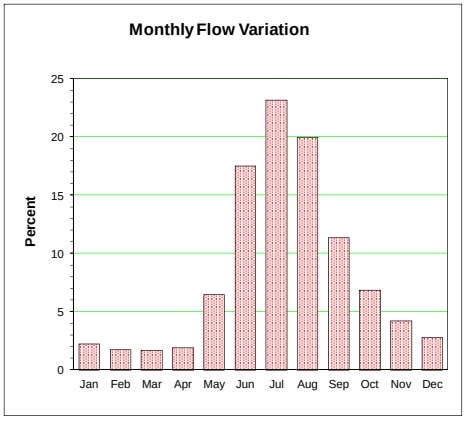
CHILKO RIVER NEAR REDSTONE 08MA001

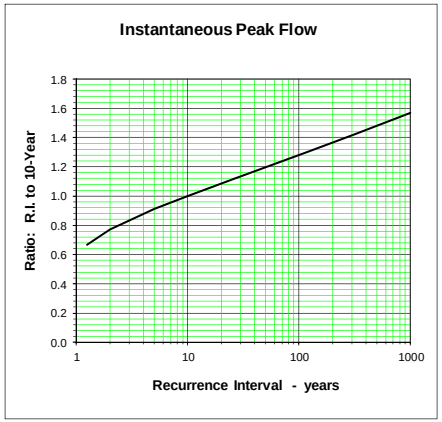
Station Longitude Latitude: -123.5369027 52.070652

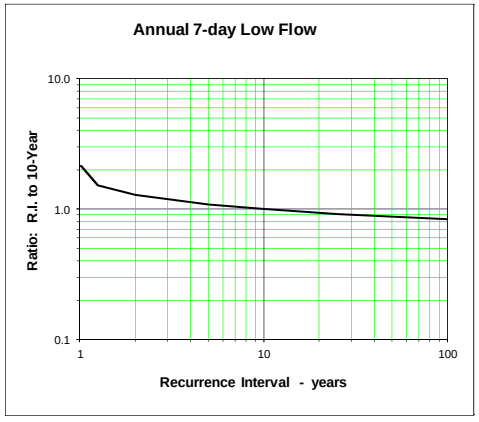
Monthly and Annual Discharge in m^3/s | Drainage Area = 6686.00 km^2 | Median Elevation = 1519 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	30.60	23.60	21.30	27.00	54.80	130.00	185.00	235.00	95.50	42.50	31.20	24.00	75.51		Aug 15	268.0	54.41	19.96	1977
1978	21.80	18.40	14.20	17.60	48.60	160.00	256.00	213.00	94.60	55.30	33.90	18.10	79.82		Jul 28	292.0	65.73	13.73	1978
1979	14.30	14.60	15.80	15.60	51.20	101.00	159.00	186.00	139.00	69.20	29.80	19.80	68.34		Jul 24	205.9	89.33	13.84	1979
1980	17.20	13.90	12.40	13.30	51.70	164.00	190.00	175.00	98.00	67.20	39.10	43.60	74.06		Jul 28	215.0	71.40	11.66	1980
1981	51.40	36.00	25.60	22.30	75.20	116.00	204.00	235.00	126.00	49.60	68.40	38.00	87.76		Jul 30	301.0	90.83	20.31	1981
1982	23.00	20.00	17.10	14.70	37.50	196.00	262.00	190.00	141.00	73.40	42.90	25.90	87.38		Jul 04	311.0	73.56	14.11	1982
1983	19.50	18.20	17.40	17.70	71.20	200.00	184.00	181.00	96.00	43.40	40.90	23.10	76.37		Jun 02	280.0	63.51	15.04	1983
1984	26.90	20.90	18.50	17.40	21.50	115.00	183.00	192.00	93.00	155.00	56.00	33.80	78.14		Oct 10	398.0	31.06	16.53	1984
1985	23.10	19.60	14.60	17.10	54.10	141.00	178.00	186.00	84.50	43.60	22.70	13.80	66.90		Aug 05	250.0	56.16	12.74	1985
1986	15.80	14.30	16.70	17.90	50.30	234.00	212.00	195.00	119.00	49.30	33.70	23.40	82.13		Jun 07	272.0	66.54	12.49	1986
1987	24.10	21.40	22.00	25.10	88.20	200.00	275.00	176.00	116.00	55.20	32.90	23.90	88.81		Jul 04	352.0	90.76	18.49	1987
1988	17.80	14.90	12.80	18.00	64.50	126.00	179.00	191.00	125.00	68.10	37.80	23.10	73.45		Aug 07	229.0	73.19	11.19	1988
1989	16.90	14.70	14.30	16.20	66.60	187.00	167.00	202.00	124.00	66.70	44.30	31.20	79.62		Jun 13	235.0	84.79	13.44	1989
1990	25.20	19.80	16.90	24.70	68.00	176.00	249.00	227.00	122.00	70.20	70.50	53.20	94.10		Jul 15	281.0	104.36	15.79	1990
1991	27.40	31.10	23.30	28.30	127.00	282.00	370.00	313.00	186.00	86.90	53.90	37.30	131.26		Jun 28	510.0	127.71	19.41	1991
1992	26.90	27.90	27.70	40.00	83.90	221.00	283.00	214.00	111.00	87.50	65.90	29.20	101.82		Jun 30	345.0	84.84	20.97	1992
1993	18.50	17.50	17.00	15.60	96.00	181.00	182.00	194.00	124.00	59.90	33.30	25.40	80.78		Jun 09	226.0	75.07	15.07	1993
1994	20.30	17.90	21.80	41.70	125.00	165.00	258.00	220.00	126.00	78.80	33.20	24.20	94.98		Jul 24	317.0	111.86	15.77	1994
1995	19.90	17.90	16.50	16.90	76.20	207.00	250.00	172.00	122.00	68.50	46.70	41.50	88.39		Jul 05	297.0	105.46	15.74	1995
1996	35.40	27.00	20.90	35.20	51.90	159.00	267.00	215.00	136.00	78.10	43.40	27.30	91.68		Jul 17	330.0	85.39	20.00	1996
1997	22.70	19.50	17.40	17.30	73.50	204.00	235.00	193.00	114.00	94.90	52.20	32.90	90.20		Jun 19	278.0	87.69	15.09	1997
1998	20.50	17.30	14.30	14.10	94.90	233.00	256.00	224.00	134.00	65.80	38.80	23.90	95.24		Jul 31	338.0	96.30	13.39	1998
1999	19.70	17.90	15.50	15.70	46.90	197.00	331.00	307.00	148.00	61.60	46.90	33.50	104.11		Jul 16	461.0	99.90	13.47	1999
2000	21.30	16.50	13.70	16.50	35.70	127.00	226.00	198.00	115.00	69.00	42.50	25.30	75.87		Aug 07	270.0	64.07	12.23	2000
2001	22.10	15.40	12.70	13.00	35.00	118.00	221.00	183.00	114.00	56.50	37.20	27.60	71.61		Jul 24	271.0	78.19	10.29	2001
2002	20.70	16.10	12.40	16.30	58.20	212.00	257.00	184.00	121.00	53.80	27.20	17.00	83.40		Jun 29	347.0	90.83	11.70	2002
2003	15.00	12.50	13.80	17.20	40.90	225.00	232.00	201.00	119.00	106.00	66.30	31.40	90.46		Jun 11	315.0	80.91	10.84	2003
2004	21.50	17.50	16.70	24.30	84.00	172.00	231.00	227.00	133.00	66.80	54.70	40.20	91.07		Jun 27	292.0	83.84	15.74	2004
2005	33.40	39.80	29.10	30.60	106.00	221.00	231.00	205.00	113.00	65.00	44.10	32.00	96.22		Jul 08	286.0	80.80	21.86	2005
2006	33.30	24.30	18.40	14.00	66.10	227.00	245.00	164.00	102.00	51.00	34.20	24.50	84.02		Jun 15	306.0	76.16	11.73	2006
2007	20.90	17.70	14.60	20.40	49.00	231.00	331.00	203.00	116.00	73.20	58.40	26.00	97.31		Jul 15	417.0	82.16	13.07	2007
2008	16.40	14.40	12.30	12.20	74.90	169.00	226.00	174.00	104.00	55.90	31.60	19.40	76.14		Jul 06	308.0	78.26	11.24	2008
2009	16.20	11.30	9.60	10.50	24.10	147.00	181.00	204.00	150.00	62.50	44.40	31.90	74.74		Aug 01	301.0	49.24	9.32	2009
2010	26.00	22.00	17.60	18.80	59.60	231.00	296.00	243.00	117.00	111.00	46.10	22.60	101.51		Jul 13	363.0	87.24	15.90	2010
2011	17.60	15.00	14.40	16.20	37.00	256.00	278.00	224.00	155.00	83.10	35.30	26.00	96.93		Jun 24	328.0	79.94	12.53	2011
2012	18.2	14.5	13.7	18.5	55.2	202.0	336.0	251.0	109.0	68.1	39.8	22.1	96.16		Jul 18	438.0	91.31	13.64	2012
Avg.	22.82	19.48	17.03	19.94	64.0	184.3	239.06	208.25	120.63	69.79	43.34	28.23	86.84	88.44		312.1	80.91	14.68	m^3/s
S. D.	7.19	6.27	4.45	7.41	25.13	44.41	51.86	32.92	20.06	21.72	12.03	8.17	12.59			67.68	18.22	3.25	m^3/s
Normal	23.39	20.04	17.37	20.32	66.86	187.33	240.07	207.10	121.72	70.91	45.04	28.75	87.85	m^3/s					
Normal	9	7	7	8	27	73	96	83	47	28	17	12	415	mm	10-Year	390.57	59.68	11.23	m^3/s







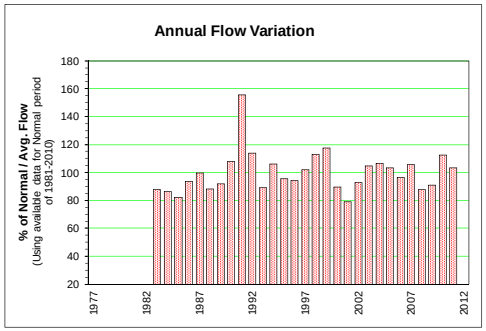


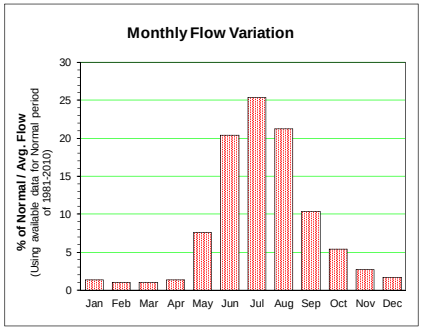
TASEKO RIVER AT OUTLET OF TASEKO LAKES 08MA003

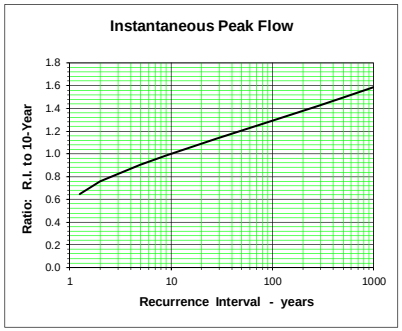
Station Longitude Latitude: -123.630699 51.378387

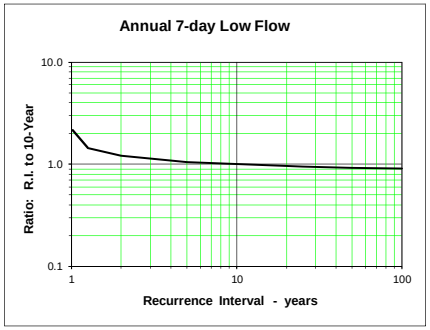
Monthly and Annual Discharge in m^3/s | Drainage Area = 1527.22 km^2 | Median Elevation = 2024 m

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Instantaneous Peak Flow Date	Instantaneous Peak Flow Annual	7-Day Low Flow Jun-Sep	7-Day Low Flow Annual	Year
1977																		1977
1978																		1978
1979																		1979
1980																		1980
1981																		1981
1982														Jun 22	176.00			1982
1983	5.70	4.87	4.33	4.69	37.40	95.60	80.80	85.10	38.00	14.10	14.20	5.63	32.70	Jun 03	180.00	22.37	3.62	1983
1984	7.13	5.73	4.68	5.26	8.16	62.80	85.90	87.70	32.90	62.60	13.60	8.21	32.24	Oct 10	257.00	13.98	4.35	1984
1985	5.65	4.82	3.62	6.35	32.20	70.70	95.60	93.30	30.50	12.60	5.68	3.46	30.61	Aug 04	138.00	18.14	3.26	1985
1986	4.50	3.98	4.03	4.10	25.80	111.00	91.70	90.20	47.00	16.70	11.30	7.32	34.96	Jun 03	156.00	19.66	3.43	1986
1987	7.13	6.10	6.52	8.07	40.20	93.70	122.00	75.40	49.40	18.60	9.34	6.46	37.13	Jul 03	187.00	36.51	5.14	1987
1988	4.81	4.09	4.04	8.10	34.10	62.80	86.50	90.60	51.00	26.90	11.80	7.52	32.84	Jul 29	128.00	22.33	3.76	1988
1989	5.62	4.60	3.93	5.40	32.30	91.90	75.30	94.50	48.90	23.80	13.60	9.01	34.25	Jun 14	125.00	31.01	3.64	1989
1990	6.17	5.47	4.40	8.96	29.80	90.60	119.00	104.00	52.40	23.30	23.10	12.50	40.22	Jun 24	159.00	48.33	4.01	1990
1991	7.78	8.14	6.65	8.62	59.70	136.00	170.00	164.00	74.80	30.30	15.20	9.58	57.96	Jun 25	259.00	45.19	5.91	1991
1992	7.53	7.01	7.34	13.40	37.80	120.00	127.00	93.70	36.60	32.10	18.00	7.64	42.49	Jun 30	191.00	23.03	4.23	1992
1993	4.35	3.88	3.78	3.83	55.90	76.30	76.10	87.00	48.50	19.80	8.78	6.76	33.14	May 21	113.00	22.53	3.54	1993
1994	5.16	4.84	5.63	13.00	61.20	74.50	120.00	94.10	52.70	25.60	7.49	6.06	39.50	Jul 26	161.00	41.66	4.14	1994
1995	4.98	4.50	4.35	4.48	37.00	92.20	117.00	64.70	50.00	19.70	13.70	12.00	35.59	Jul 05	143.00	39.20	3.92	1995
1996	8.22	5.91	6.73	10.80	17.90	71.90	118.00	84.40	47.80	27.20	13.00	7.06	35.06	Jul 16	160.00	25.81	5.13	1996
1997	5.72	4.76	4.34	4.77	35.00	100.00	109.00	89.60	43.40	34.30	14.20	8.23	38.02	Jun 18	154.00	28.24	3.66	1997
1998	5.85	5.25	4.71	4.91	56.30	111.00	120.00	104.00	57.40	18.60	8.90	5.73	42.15	Jul 31	196.01	34.09	4.50	1998
1999	5.42	4.92	4.08	3.94	21.40	104.00	155.00	140.00	48.60	14.80	12.00	8.15	43.86	Jul 16	231.09	36.09	3.20	1999
2000	5.44	4.25	3.45	5.22	15.70	60.90	99.90	108.00	61.60	19.40	9.33	5.52	33.37	Aug 07	154.75	29.66	3.21	2000
2001	4.74	3.74	3.34	3.46	16.60	59.10	108.00	77.80	43.40	14.80	9.58	6.46	29.40	Jul 25	129.00	34.71	3.17	2001
2002	5.42	4.40	3.60	4.17	19.50	115.00	114.00	76.40	44.50	14.30	6.32	5.23	34.56	Jun 28	188.00	30.34	3.27	2002
2003	4.53	4.10	3.89	4.73	19.70	111.00	107.00	94.10	47.20	41.70	18.60	8.33	38.95	Jun 11	178.00	25.36	3.20	2003
2004	6.03	5.23	4.68	9.49	44.00	92.20	112.00	105.00	45.60	21.90	17.10	10.80	39.67	Jun 27	172.00	26.01	4.59	2004
2005	9.76	10.40	7.61	10.20	52.00	99.50	99.50	89.00	38.90	21.30	12.90	8.62	38.51	Jul 07	131.00	25.50	6.22	2005
2006	9.76	5.74	4.42	4.63	35.50	116.00	117.00	65.60	38.40	15.30	10.30	7.08	35.99	Jun 16	163.00	23.71	3.89	2006
2007	6.13	4.84	4.96	6.29	23.80	110.00	151.00	74.40	40.10	23.10	16.60	8.46	39.38	Jul 17	214.00	22.66	4.52	2007
2008	6.57	4.88	4.00	3.99	41.60	75.20	108.00	76.60	37.20	17.80	9.23	6.24	32.77	Jul 05	168.00	25.07	3.45	2008
2009	4.56	3.33	3.27	3.48	12.60	80.90	94.60	102.00	63.90	16.30	11.70	7.77	33.88	Aug 01	180.00	31.04	3.05	2009
2010	6.42	4.73	4.13	5.35	26.50	110.00	135.00	100.00	45.10	40.60	14.10	8.31	41.97	Jul 12	188.00	27.57	3.97	2010
2011	6.90	5.30	5.06	4.03	14.60	116.00	113.00	91.80	62.50	24.80	9.23	7.14	38.53	Jun 22	151.00	38.10	3.67	2011
2012																		2012
Avg.	6.14	5.17	4.67	6.34	32.56	93.48	111.31	93.21	47.53	23.87	12.38	7.63	37.23	37.22		171.03	29.24	3.99	m^3/s
S. D.	1.43	1.41	1.20	2.85	14.76	20.63	22.47	20.02	9.81	10.62	3.93	1.95	5.48			35.66	8.20	0.81	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	6.11	5.16	4.66	6.42	33.20	92.67	111.25	93.26	46.99	23.84	12.49	7.65	37.18	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	11	8	8	11	58	157	195	164	80	42	21	13	768	mm	10-Year	216.99	19.50	3.16	m^3/s







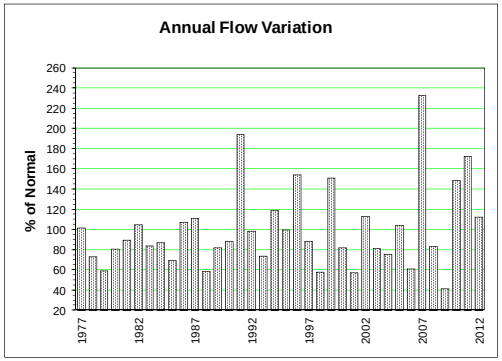


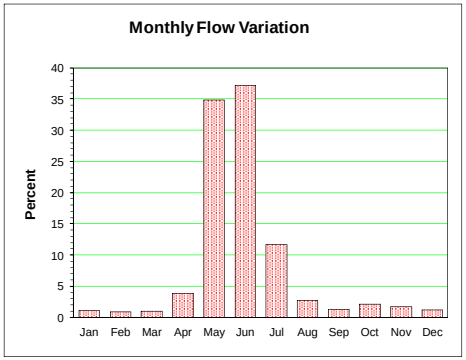
LINGFIELD CREEK NEAR THE MOUTH 08MA006

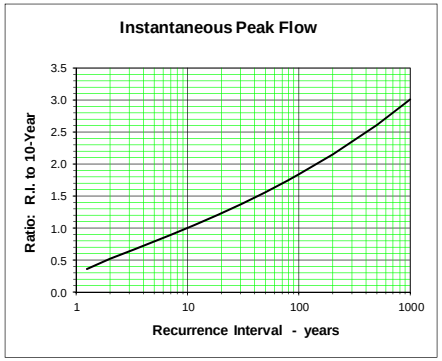
Station Longitude Latitude: -124.143979 51.674081

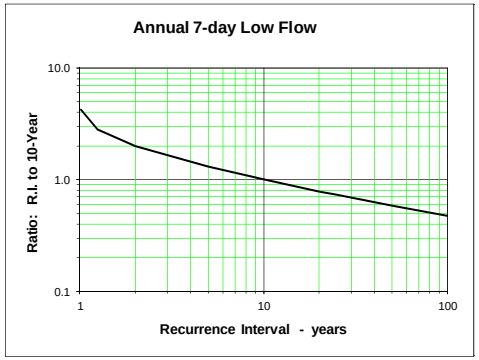
Monthly and Annual Discharge in m^3/s | Drainage Area = 96.02 km^2 | Median Elevation = 1764 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	0.392	0.194	0.145	1.210	2.500	3.060	1.410	0.300	0.115	0.088	0.089	0.129	0.804		Jun 07	5.86	0.086	0.062	1977
1978	0.097	0.055	0.055	0.123	2.160	3.130	0.713	0.197	0.134	0.132	0.093	0.051	0.579		Jun 04	7.02	0.099	0.045	1978
1979	0.043	0.050	0.056	0.124	2.500	1.880	0.506	0.186	0.092	0.050	0.041	0.054	0.468		May 26	6.31	0.056	0.034	1979
1980	0.051	0.052	0.045	0.169	2.320	2.460	0.957	0.424	0.207	0.414	0.192	0.355	0.639		Jun 05	4.90	0.130	0.042	1980
1981	0.401	0.168	0.095	0.335	3.460	1.660	1.010	0.323	0.093	0.137	0.558	0.189	0.707		May 20	10.40	0.071	0.071	1981
1982	0.078	0.056	0.055	0.115	2.590	4.310	1.650	0.301	0.202	0.312	0.164	0.103	0.830		May 24	10.40	0.089	0.052	1982
1983	0.085	0.060	0.064	0.306	4.140	2.170	0.624	0.121	0.061	0.107	0.116	0.057	0.664		May 31	10.00	0.047	0.044	1983
1984	0.237	0.103	0.094	0.201	1.110	3.640	0.851	0.164	0.146	1.320	0.275	0.143	0.689		Jun 12	9.61	0.063	0.056	1984
1985	0.101	0.090	0.089	0.165	3.720	1.600	0.320	0.097	0.131	0.154	0.044	0.021	0.549		May 18	12.20	0.046	0.019	1985
1986	0.065	0.063	0.075	0.123	3.540	4.350	1.200	0.232	0.117	0.132	0.128	0.113	0.848		May 26	24.70	0.098	0.023	1986
1987	0.098	0.059	0.093	0.397	4.180	4.120	1.070	0.227	0.081	0.054	0.056	0.049	0.877		May 11	10.00	0.057	0.033	1987
1988	0.040	0.035	0.044	0.307	2.150	1.820	0.648	0.251	0.061	0.042	0.069	0.068	0.462		May 13	6.36	0.043	0.026	1988
1989	0.057	0.063	0.060	0.322	2.820	2.820	0.638	0.335	0.137	0.130	0.220	0.181	0.651		May 08	6.46	0.107	0.046	1989
1990	0.092	0.058	0.090	0.850	3.170	2.510	0.650	0.204	0.081	0.185	0.284	0.165	0.698		May 05	5.40	0.063	0.052	1990
1991	0.114	0.134	0.122	0.575	5.730	7.880	2.420	0.657	0.270	0.183	0.181	0.132	1.537		Jun 23	16.90	0.178	0.099	1991
1992	0.116	0.138	0.388	1.190	2.910	3.050	0.781	0.159	0.118	0.286	0.136	0.087	0.780		Jun 14	8.64	0.091	0.064	1992
1993	0.048	0.071	0.068	0.073	3.340	1.330	1.220	0.268	0.102	0.166	0.134	0.092	0.582		May 14	13.40	0.079	0.039	1993
1994	0.100	0.080	0.117	1.230	5.600	2.550	0.867	0.304	0.086	0.108	0.083	0.066	0.939		May 09	14.10	0.062	0.059	1994
1995	0.067	0.076	0.055	0.131	3.870	3.100	0.634	0.733	0.161	0.302	0.148	0.163	0.791		May 30	9.10	0.105	0.048	1995
1996	0.215	0.141	0.175	1.310	2.800	6.320	2.490	0.510	0.273	0.184	0.138	0.100	1.219		Jun 03	15.20	0.187	0.074	1996
1997	0.066	0.059	0.056	0.133	3.620	3.120	0.797	0.109	0.067	0.128	0.114	0.080	0.699		May 16	11.60	0.051	0.042	1997
1998	0.066	0.057	0.061	0.081	3.060	1.160	0.558	0.053	0.031	0.122	0.110	0.095	0.459		May 06	5.00	0.025	0.025	1998
1999	0.083	0.081	0.072	0.166	2.540	6.810	3.460	0.394	0.220	0.192	0.201	0.121	1.197		Jun 16	15.00	0.184	0.062	1999
2000	0.084	0.057	0.050	0.249	2.020	2.890	1.480	0.212	0.194	0.238	0.181	0.104	0.647		May 21	7.61	0.124	0.047	2000
2001	0.089	0.063	0.039	0.077	1.640	2.330	0.684	0.149	0.071	0.084	0.148	0.081	0.455		Jun 01	7.92	0.053	0.034	2001
2002	0.097	0.080	0.078	0.119	2.400	5.940	1.220	0.340	0.165	0.112	0.092	0.071	0.892		May 28	10.50	0.138	0.062	2002
2003	0.055	0.048	0.059	0.125	1.840	4.660	0.573	0.117	0.069	0.058	0.056	0.056	0.641		Jun 07	13.70	0.060	0.039	2003
2004	0.056	0.072	0.102	0.631	3.580	1.430	0.357	0.107	0.202	0.179	0.236	0.213	0.600		May 21	6.19	0.069	0.045	2004
2005	0.196	0.415	0.238	1.170	3.410	3.010	0.643	0.175	0.149	0.217	0.142	0.107	0.823		Jun 18	15.30	0.111	0.100	2005
2006	0.076	0.060	0.064	0.127	2.300	2.130	0.380	0.090	0.087	0.111	0.195	0.135	0.481		May 27	6.00	0.056	0.050	2006
2007	0.127	0.116	0.119	0.183	7.820	9.240	2.950	0.499	0.198	0.333	0.269	0.179	1.843		Jun 06	29.30	0.160	0.114	2007
2008	0.136	0.108	0.104	0.199	3.810	2.200	0.630	0.281	0.061	0.060	0.143	0.141	0.659		May 18	18.30	0.044	0.039	2008
2009	0.129	0.103	0.051	0.121	1.080	1.570	0.496	0.053	0.020	0.057	0.146	0.117	0.329		May 29	4.74	0.011	0.011	2009
2010	0.094	0.084	0.089	0.223	3.360	7.910	1.310	0.207	0.278	0.220	0.232	0.141	1.177		Jun 13	18.00	0.103	0.080	2010
2011	0.171	0.166	0.127	0.122	2.110	10.400	2.450	0.362	0.169	0.128	0.115	0.124	1.366		Jun 08	22.92	0.088	0.085	2011
2012	0.133	0.126	0.103	0.155	2.270	5.560	1.510	0.297	0.132	0.151	0.185	0.078	0.889		Jun 17	10.10	0.109	0.057	2012
Avg.	0.115	0.096	0.094	0.365	3.096	3.726	1.115	0.262	0.133	0.191	0.159	0.116	0.791	0.801		11.36	0.087	0.052	m^3/s
S. D.	0.083	0.067	0.065	0.386	1.308	2.341	0.763	0.157	0.067	0.212	0.094	0.061	0.322			5.87	0.043	0.023	m^3/s
Normal	0.109	0.093	0.096	0.374	3.254	3.588	1.087	0.256	0.131	0.197	0.167	0.112	0.791	m^3/s					
Normal	3	2	3	10	91	97	30	7	4	5	4	3	260	mm	10-Year	18.58	0.036	0.026	m^3/s







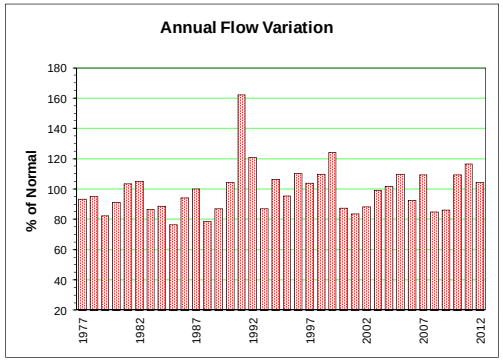


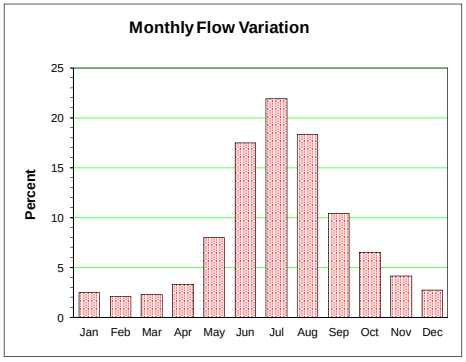
CHILCOTIN RIVER BELOW BIG CREEK 08MB005

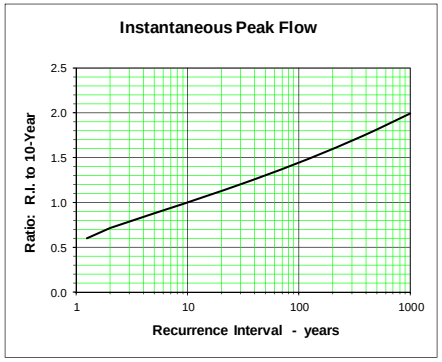
Station Longitude Latitude: -122.656222 51.8476048

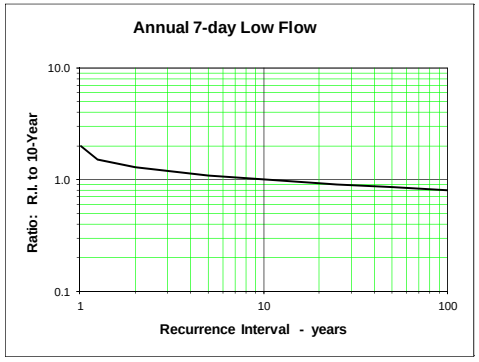
Monthly and Annual Discharge in m^3/s | Drainage Area = 19277.14 km^2 | Median Elevation = 1290 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	40.10	35.20	31.20	75.60	104.00	161.00	212.00	255.00	111.00	55.30	38.70	31.00	96.33		Aug 23	289.00	82.49	28.24	1977
1978	30.00	26.20	26.40	44.00	90.70	192.00	286.00	238.00	110.00	66.20	39.60	21.80	98.17		Jul 29	328.00	76.83	17.91	1978
1979	17.70	23.90	28.00	32.90	91.40	130.00	178.00	211.00	158.00	82.90	38.60	23.40	85.09		Aug 25	230.00	117.57	16.09	1979
1980	21.00	20.50	21.10	28.90	73.90	218.00	252.00	207.00	115.00	78.00	45.20	49.50	94.49		Jun 27	305.00	97.13	20.23	1980
1981	59.40	42.30	35.30	37.70	115.00	147.00	242.00	274.00	140.00	59.20	80.20	42.40	106.79		Jul 30	365.00	104.13	30.23	1981
1982	30.70	30.30	27.70	30.00	66.10	244.00	317.00	218.00	159.00	91.90	51.30	32.10	108.67		Jul 05	400.00	108.29	26.09	1982
1983	27.10	26.80	26.50	33.80	94.50	227.00	210.00	191.00	105.00	52.20	49.50	25.10	89.39		Jun 03	332.00	72.40	19.57	1983
1984	34.30	28.90	31.50	32.80	38.70	147.00	201.00	206.00	102.00	171.00	66.20	37.00	91.76		Oct 10	432.00	53.17	24.66	1984
1985	28.60	25.00	23.70	34.60	73.60	164.00	194.00	206.00	97.30	53.20	27.30	15.00	78.94		Aug 05	268.00	65.59	14.50	1985
1986	19.00	20.10	28.40	33.20	75.30	274.00	237.00	213.00	133.00	59.20	41.00	29.80	97.29		Jun 07	330.00	78.19	15.09	1986
1987	33.60	32.70	34.50	42.50	123.00	226.00	296.00	193.00	124.00	61.00	39.70	27.40	103.30		Jul 04	382.00	97.11	21.16	1987
1988	22.10	19.90	22.60	31.90	76.60	138.00	189.00	200.00	131.00	71.90	41.40	27.00	81.23		Aug 07	245.00	78.43	18.73	1988
1989	20.60	21.10	22.60	33.10	79.70	198.00	180.00	221.00	135.00	73.10	51.70	39.30	90.00		Aug 21	259.00	80.39	19.17	1989
1990	29.20	24.80	25.40	48.80	97.80	212.00	274.00	242.00	131.00	74.90	74.20	53.00	107.83		Jul 15	307.00	116.57	20.79	1990
1991	34.40	41.80	33.40	61.80	196.00	369.00	470.00	385.00	207.00	97.00	61.90	43.40	167.66		Jun 28	699.00	134.86	27.93	1991
1992	36.40	36.40	43.60	69.20	116.00	289.00	346.00	248.00	116.00	91.70	70.40	32.70	124.97		Jul 01	434.00	84.06	24.00	1992
1993	20.30	20.70	25.30	34.90	116.00	188.00	200.00	200.00	128.00	67.70	42.00	31.60	90.01		Jun 08	236.00	81.27	18.07	1993
1994	26.80	26.80	37.90	82.50	159.00	198.00	277.00	225.00	129.00	84.20	38.80	29.70	110.21		Jul 26	334.00	116.29	22.17	1994
1995	29.40	27.70	28.20	34.10	107.00	218.00	263.00	183.00	121.00	70.70	51.80	43.40	98.60		Jul 05	305.00	104.53	24.97	1995
1996	40.60	38.50	34.60	87.70	103.00	209.00	289.00	225.00	153.00	92.30	54.70	35.40	113.84		Jul 18	352.00	103.43	27.30	1996
1997	35.70	30.80	28.60	46.70	116.00	231.00	256.00	203.00	123.00	106.00	62.40	40.90	107.20		Jul 11	302.00	96.03	21.89	1997
1998	25.90	27.10	29.20	30.60	122.00	259.00	296.00	250.00	151.00	79.60	48.80	33.40	113.31		Aug 01	364.00	111.71	22.99	1998
1999	29.80	28.50	28.80	40.80	87.40	239.00	406.00	335.00	165.00	71.10	56.20	40.30	128.16		Jul 16	636.00	125.86	26.36	1999
2000	27.50	26.80	25.00	40.30	54.70	154.00	261.00	211.00	124.00	77.80	49.80	28.80	90.38		Jul 11	313.00	84.81	21.73	2000
2001	28.60	25.40	24.60	33.20	59.50	146.00	251.00	204.00	124.00	64.00	43.60	30.10	86.49		Jul 23	313.00	103.66	23.01	2001
2002	24.90	21.30	18.40	29.40	65.00	238.00	264.00	193.00	128.00	58.00	31.20	21.10	91.43		Jun 29	369.00	95.11	17.79	2002
2003	21.90	20.00	22.70	30.90	65.40	252.00	251.00	216.00	127.00	110.00	71.10	37.60	102.61		Jun 11	342.00	83.64	17.30	2003
2004	29.00	26.30	27.50	40.70	106.00	195.00	252.00	233.00	155.00	81.10	66.90	48.60	105.42		Jun 28	318.00	103.26	21.96	2004
2005	42.00	49.10	40.80	60.20	142.00	273.00	255.00	208.00	124.00	77.20	50.70	33.50	113.33		Jun 19	399.00	91.66	27.67	2005
2006	41.90	30.60	28.70	38.00	100.00	253.00	251.00	164.00	108.00	60.60	39.70	27.20	95.60		Jun 15	323.00	84.83	23.34	2006
2007	26.50	25.50	24.70	40.80	103.00	282.00	339.00	205.00	124.00	83.20	66.00	28.70	112.91		Jul 17	427.00	92.31	20.93	2007
2008	22.40	27.20	25.60	28.10	110.00	194.00	234.00	173.00	108.00	62.60	39.10	24.60	87.66		Jul 06	311.00	83.04	20.79	2008
2009	22.20	18.30	18.70	34.60	62.50	170.00	195.00	224.00	156.00	72.30	52.30	35.70	88.88		Aug 02	302.00	94.01	17.33	2009
2010	35.10	30.90	29.60	37.90	88.70	260.00	302.00	240.00	122.00	122.00	54.20	26.70	113.03		Jul 13	375.00	93.90	24.04	2010
2011	20.20	19.90	22.30	28.10	101.00	345.00	319.00	240.00	167.00	100.00	42.10	35.50	120.55		Jun 10	393.00	131.14	18.83	2011
2012	25.90	20.70	17.90	42.90	88.30	231.00	345.00	253.00	113.00	74.50	46.70	29.00	107.79		Jul 24	440.00	97.47	15.53	2012
Avg.	29.47	27.72	27.81	42.03	96.4	218.6	266.39	224.81	131.23	79.27	50.69	33.10	102.76	102.39		354.42	95.14	21.62	m^3/s
S. D.	8.43	7.15	5.91	15.46	30.33	55.45	62.90	41.37	22.56	22.84	12.63	8.41	16.54			94.88	17.99	4.06	m^3/s
Normal	30.20	28.39	28.47	42.03	97.32	219.80	266.60	222.97	131.68	79.89	52.47	33.38	103.23	m^3/s					
Normal	4	4	4	6	14	30	37	31	18	11	7	5	169	mm	10-Year	469.87	72.30	16.27	m^3/s







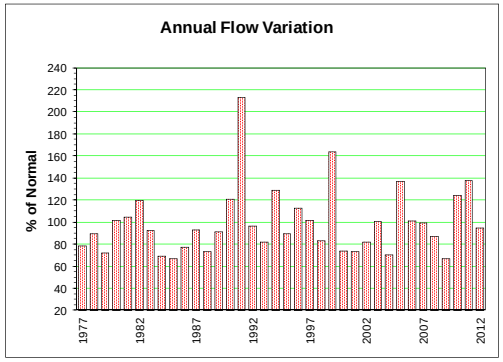


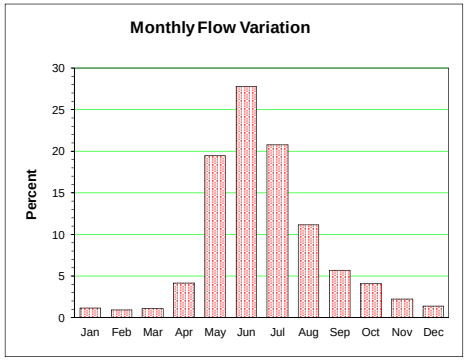
BIG CREEK ABOVE GROUNDHOG CREEK 08MB006

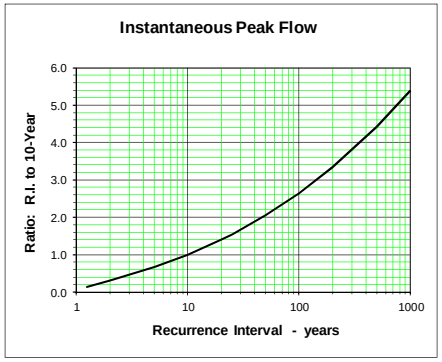
Station Longitude Latitude: -123.115670 51.5236319

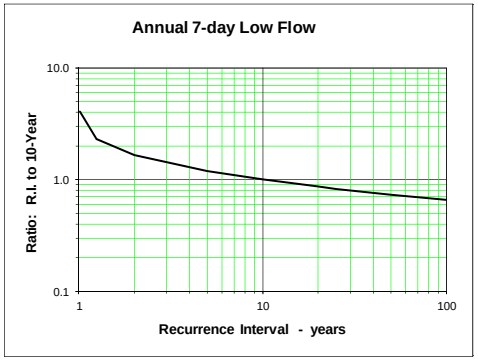
Monthly and Annual Discharge in m^3/s | Drainage Area = 1010.85 km^2 | Median Elevation = 1786 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	0.59	0.77	0.71	3.37	10.40	14.80	11.40	8.40	3.10	1.57	0.92	0.55	4.74		Jun 08	31.10	2.77	0.45	1977
1978	0.40	0.51	0.47	1.25	13.10	18.90	14.50	7.58	4.53	2.07	1.06	0.42	5.43		May 21	43.90	3.30	0.34	1978
1979	0.27	0.38	0.54	1.48	14.90	10.70	9.59	6.36	4.25	1.85	1.04	0.66	4.37		May 26	36.50	3.09	0.24	1979
1980	0.46	0.33	0.33	1.31	9.43	26.10	14.30	9.40	5.09	3.47	1.81	1.92	6.17		Jun 26	50.70	3.70	0.32	1980
1981	1.89	1.03	1.00	2.79	19.40	10.30	17.70	11.60	4.01	1.64	2.84	1.03	6.33		May 21	52.40	2.35	0.87	1981
1982	0.81	0.77	0.71	1.29	10.90	24.00	22.50	10.20	6.86	5.50	1.92	0.87	7.23		Jul 04	53.80	5.46	0.53	1982
1983	0.41	0.49	0.74	5.15	17.80	15.40	12.70	6.08	3.21	2.42	1.78	0.50	5.59		May 31	41.30	2.42	0.30	1983
1984	0.66	0.50	0.67	1.27	4.77	14.90	9.35	6.00	2.62	6.61	1.83	0.96	4.19		Oct 09	42.20	1.94	0.47	1984
1985	0.77	0.56	0.52	1.57	13.70	10.60	7.42	6.10	3.76	2.48	0.68	0.26	4.06		May 26	40.40	3.11	0.21	1985
1986	0.60	0.48	0.64	1.49	11.70	14.60	10.40	6.79	3.18	2.63	1.96	1.25	4.67		May 27	59.80	1.82	0.34	1986
1987	0.90	0.82	0.83	4.00	17.50	18.40	12.20	6.10	3.43	1.46	0.87	0.71	5.63		May 10	27.60	2.39	0.63	1987
1988	0.55	0.43	0.49	2.74	10.90	12.10	9.47	7.45	4.13	2.76	1.40	0.80	4.45		May 13	29.50	2.83	0.39	1988
1989	0.67	0.47	0.53	3.66	11.20	16.00	8.76	12.20	6.18	3.32	2.01	0.96	5.52		Jun 02	26.70	4.03	0.42	1989
1990	1.01	0.83	1.05	7.92	17.50	22.50	17.90	7.46	3.64	3.14	2.46	1.84	7.30		Jul 07	57.20	3.29	0.77	1990
1991	1.16	1.18	1.12	4.31	30.00	52.40	28.90	19.80	8.12	2.91	2.50	1.76	12.90		Jun 26	140.00	4.46	1.03	1991
1992	1.30	1.12	1.86	5.74	12.50	17.30	14.10	6.05	3.38	3.70	2.05	0.92	5.85		Jun 14	26.40	2.89	0.77	1992
1993	0.61	0.47	0.80	0.96	11.00	10.00	16.50	8.24	4.34	2.90	1.96	1.28	4.96		Jul 12	31.80	3.17	0.31	1993
1994	1.04	0.76	1.25	10.40	22.30	24.90	14.80	9.31	3.88	2.19	1.57	1.02	7.82		Jun 19	63.80	3.54	0.73	1994
1995	0.88	0.81	0.92	1.69	14.20	18.00	11.40	7.94	4.76	2.85	0.70	0.66	5.43		May 17	30.40	3.30	0.52	1995
1996	0.79	0.59	0.64	3.61	13.50	25.00	16.70	7.59	6.01	3.68	2.51	1.12	6.82		Jun 26	50.90	5.04	0.51	1996
1997	0.57	0.72	0.85	3.05	18.00	19.40	16.30	6.44	3.02	2.76	1.40	0.84	6.15		May 16	47.50	2.48	0.48	1997
1998	0.68	0.59	0.54	0.81	15.70	14.90	14.00	5.89	3.00	1.77	1.01	0.87	5.02		Jul 05	32.70	2.19	0.48	1998
1999	0.92	0.84	0.89	1.74	8.72	27.60	48.50	21.10	3.71	1.62	1.24	0.88	9.90		Jul 15	169.00	3.04	0.74	1999
2000	0.62	0.49	0.43	4.26	5.45	11.80	15.90	6.03	3.79	2.55	1.51	0.80	4.48		Jul 10	42.80	2.74	0.42	2000
2001	0.74	0.61	0.59	1.78	9.97	13.20	13.60	6.50	3.01	1.47	0.93	0.75	4.45		May 24	31.60	2.67	0.58	2001
2002	0.59	0.53	0.49	1.05	11.30	23.40	9.92	6.10	3.09	1.92	0.67	0.50	4.98		May 29	40.90	2.38	0.43	2002
2003	0.38	0.33	0.29	0.41	13.90	30.80	11.40	6.65	2.88	3.68	1.16	0.77	6.07		Jun 10	66.10	1.97	0.28	2003
2004	0.67	0.61	0.72	2.51	10.20	12.30	7.94	5.78	3.96	2.80	2.15	1.36	4.26		Jun 26	19.50	3.20	0.56	2004
2005	1.37	1.27	1.31	7.72	16.90	35.30	12.90	5.81	7.89	4.95	2.44	1.68	8.30		Jun 19	148.00	4.32	1.06	2005
2006	1.30	0.73	0.47	2.94	16.00	29.00	10.60	4.22	3.11	2.01	1.54	1.30	6.11		Jun 09	111.00	2.97	0.45	2006
2007	0.99	0.93	1.17	2.21	10.70	25.60	14.80	5.29	3.30	3.39	2.21	1.28	6.01		Jun 06	77.70	2.95	0.87	2007
2008	0.93	0.83	0.88	1.46	16.90	18.80	10.20	5.49	3.53	2.04	1.29	0.74	5.27		May 19	63.60	2.37	0.50	2008
2009	0.52	1.19	0.84	1.28	10.00	13.80	8.16	5.36	3.42	1.79	1.32	0.92	4.06		May 30	25.80	2.78	0.43	2009
2010	0.68	0.48	0.37	1.69	13.30	31.90	18.40	9.12	5.95	4.52	2.18	1.54	7.54		May 29	53.60	4.07	0.34	2010
2011	1.07	0.78	0.70	1.78	17.20	42.20	19.20	8.84	4.22	1.75	1.15	1.09	8.35		Jun 04	63.90	3.15	0.64	2011
2012	0.75	0.57	0.53	1.39	9.77	20.70	19.20	8.46	3.02	1.68	1.27	1.14	5.73		Jun 24	47.70	2.52	0.50	2012
Avg.	0.79	0.69	0.75	2.84	13.6	20.8	14.77	7.99	4.15	2.77	1.59	1.00	6.00	6.01		54.94	3.07	0.53	m^3/s
S. D.	0.33	0.25	0.32	2.22	4.74	9.43	7.32	3.54	1.39	1.19	0.59	0.40	1.81			34.78	0.83	0.21	m^3/s
Normal	0.83	0.72	0.79	3.05	13.86	20.47	14.78	7.96	4.17	2.92	1.67	1.01	6.04	m^3/s					
Normal	2	2	2	8	37	52	39	21	11	8	4	3	189	mm	10-Year	75.73	2.13	0.30	m^3/s







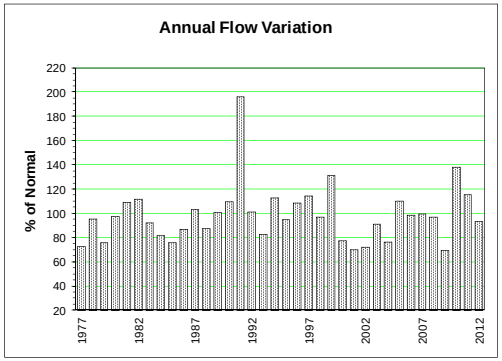


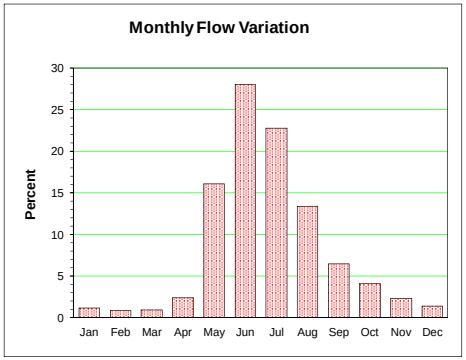
BIG CREEK BELOW GRAVEYARD CREEK 08MB007

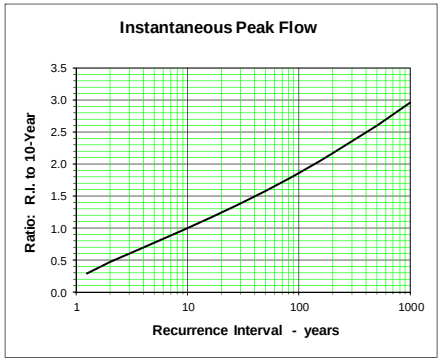
Station Longitude Latitude: -123.090165 51.263000

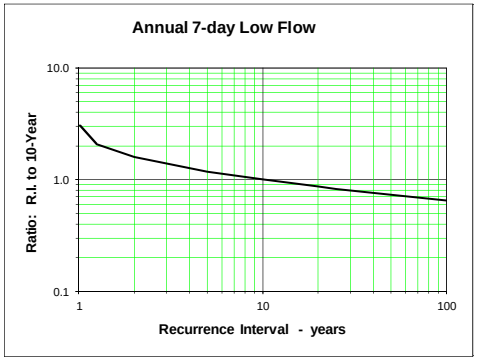
Monthly and Annual Discharge in m^3/s | Drainage Area = 196.76 km^2 | Median Elevation = 2106 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	0.23	0.23	0.22	1.72	2.83	6.63	5.51	4.58	1.24	0.51	0.33	0.28	2.04		Jun 07	12.60	0.95	0.210	1977
1978	0.25	0.24	0.21	0.35	3.58	10.10	8.14	5.01	2.22	0.93	0.53	0.21	2.66		Jun 04	22.10	1.43	0.171	1978
1979	0.13	0.18	0.33	0.63	4.92	5.47	5.31	4.31	2.47	0.80	0.37	0.29	2.12		May 26	16.60	1.60	0.118	1979
1980	0.24	0.21	0.19	0.60	4.61	10.50	6.90	4.48	2.50	1.37	0.40	0.59	2.72		Jun 05	17.90	1.78	0.155	1980
1981	0.70	0.34	0.22	0.91	8.52	5.17	8.94	5.68	2.49	1.00	1.66	0.59	3.04		May 21	24.90	1.28	0.191	1981
1982	0.41	0.38	0.34	0.46	3.23	13.10	9.68	4.39	2.81	1.47	0.64	0.41	3.12		Jul 04	23.20	2.16	0.308	1982
1983	0.32	0.26	0.32	2.24	8.92	6.43	5.49	3.48	1.31	0.88	0.68	0.35	2.57		May 31	23.40	0.74	0.237	1983
1984	0.52	0.23	0.30	0.55	1.95	7.29	5.76	3.90	1.56	3.97	0.82	0.45	2.28		Oct 08	31.90	1.16	0.201	1984
1985	0.31	0.25	0.24	0.49	5.94	6.58	5.03	3.76	1.46	0.86	0.28	0.12	2.12		May 23	19.50	0.94	0.099	1985
1986	0.25	0.20	0.23	0.66	5.87	7.28	5.89	4.32	1.79	1.04	0.85	0.51	2.42		May 26	40.70	0.94	0.149	1986
1987	0.35	0.31	0.32	0.66	6.66	11.00	7.95	3.79	1.96	0.76	0.40	0.32	2.89		Jul 01	16.70	1.28	0.260	1987
1988	0.28	0.20	0.26	1.32	5.23	7.10	5.99	4.14	2.13	1.44	0.72	0.41	2.44		Jun 15	14.10	1.23	0.177	1988
1989	0.27	0.23	0.23	0.65	5.68	9.06	5.28	6.36	2.68	1.46	1.13	0.60	2.82		Jun 05	16.50	1.72	0.194	1989
1990	0.34	0.18	0.24	1.73	5.38	9.99	8.77	4.51	2.13	1.70	0.94	0.68	3.07		Jun 23	21.80	1.91	0.148	1990
1991	0.41	0.41	0.36	0.66	7.95	23.40	14.40	10.70	4.12	1.36	1.06	0.67	5.48		Jun 25	68.01	2.22	0.344	1991
1992	0.48	0.37	0.48	1.67	5.21	9.48	7.16	3.63	1.70	2.13	1.12	0.40	2.82		Oct 24	15.80	1.33	0.294	1992
1993	0.22	0.20	0.32	0.39	6.55	5.13	5.91	4.29	2.17	1.14	0.71	0.46	2.31		May 11	18.90	1.37	0.157	1993
1994	0.40	0.27	0.39	1.70	7.58	9.27	8.48	5.27	2.20	0.97	0.59	0.39	3.15		May 11	17.80	1.96	0.254	1994
1995	0.29	0.28	0.29	0.41	6.07	9.62	6.79	3.70	2.42	1.14	0.30	0.28	2.64		May 30	15.90	1.58	0.214	1995
1996	0.34	0.36	0.41	1.23	3.14	9.52	9.85	4.68	3.00	1.90	1.28	0.57	3.03		Jun 04	18.80	2.48	0.279	1996
1997	0.37	0.30	0.28	0.47	7.88	11.10	8.72	4.25	1.91	1.59	0.66	0.52	3.19		May 15	24.40	1.39	0.240	1997
1998	0.37	0.37	0.38	0.43	7.84	7.71	7.00	4.17	2.11	0.90	0.53	0.42	2.71		May 28	13.90	1.31	0.345	1998
1999	0.42	0.37	0.33	0.43	2.98	11.30	15.60	7.83	2.16	0.96	0.79	0.44	3.66		Jul 14	50.80	1.64	0.306	1999
2000	0.32	0.25	0.22	1.06	2.85	6.72	6.50	3.78	1.87	1.04	0.86	0.41	2.16		Jul 09	14.80	1.41	0.214	2000
2001	0.31	0.25	0.23	0.65	3.61	6.31	5.48	3.23	1.77	0.77	0.45	0.33	1.95		May 23	14.60	1.58	0.229	2001
2002	0.30	0.31	0.30	0.46	2.58	9.67	4.73	2.98	1.56	0.63	0.33	0.31	2.02		Jun 16	21.00	1.21	0.272	2002
2003	0.29	0.25	0.26	0.32	2.75	11.90	7.58	3.91	1.58	0.74	0.42	0.37	2.54		Jun 10	27.50	0.98	0.232	2003
2004	0.33	0.36	0.35	0.96	3.51	6.47	4.89	3.63	2.13	1.37	0.96	0.60	2.13		Jun 25	10.30	1.64	0.310	2004
2005	0.65	0.64	0.60	1.61	6.43	10.00	5.45	3.55	3.61	2.09	1.27	0.83	3.07		Jun 18	25.20	2.85	0.456	2005
2006	0.63	0.37	0.30	0.53	6.23	12.10	6.50	2.72	1.81	0.82	0.52	0.41	2.75		Jun 09	45.10	1.39	0.290	2006
2007	0.36	0.33	0.33	0.47	3.02	12.00	8.93	3.04	1.68	1.68	0.91	0.58	2.79		Jun 06	39.10	1.49	0.317	2007
2008	0.42	0.34	0.31	0.53	8.00	9.61	6.29	3.21	1.88	0.88	0.55	0.31	2.70		May 18	31.80	1.22	0.213	2008
2009	0.17	0.37	0.28	0.42	3.16	6.90	4.39	3.17	2.26	0.87	0.69	0.51	1.94		Jun 05	12.30	1.85	0.106	2009
2010	0.36	0.25	0.20	0.53	3.75	14.50	11.50	5.93	3.83	2.96	1.49	0.83	3.86		Jun 25	24.90	2.59	0.187	2010
2011	0.48	0.32	0.37	0.60	3.05	14.60	9.13	4.88	2.47	1.04	0.93	0.69	3.22		Jun 06	23.70	1.92	0.286	2011
2012	0.32	0.23	0.25	0.40	3.45	8.89	10.30	4.40	1.52	0.78	0.30	0.24	2.60		Jun 23	27.50	1.23	0.216	2012
Avg.	0.36	0.30	0.30	0.80	5.0	9.5	7.51	4.44	2.18	1.28	0.73	0.46	2.75	2.76		24	1.55	0.23	m^3/s
S. D.	0.12	0.09	0.08	0.51	2.02	3.46	2.56	1.48	0.66	0.68	0.35	0.17	0.66			12.01	0.48	0.08	m^3/s
Normal	0.37	0.31	0.31	0.82	5.28	9.52	7.50	4.40	2.20	1.35	0.79	0.47	2.79	m^3/s					
Normal	5	4	4	11	72	125	102	60	29	18	10	6	447	mm	10-Year	32.28	1.00	0.14	m^3/s







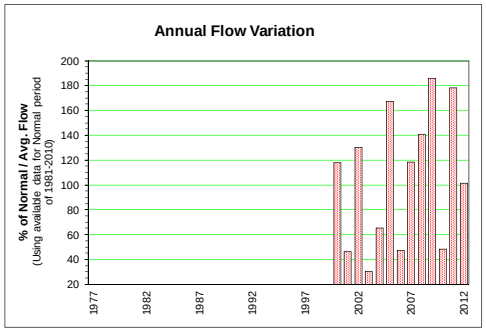


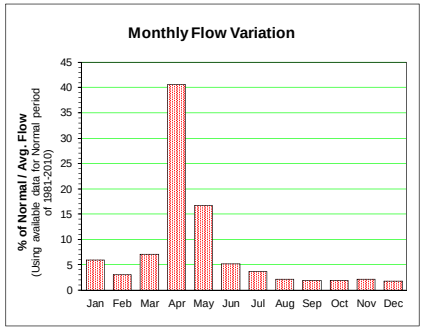
SHERIDAN CREEK ABOVE MCLEESE LAKE 08MC045

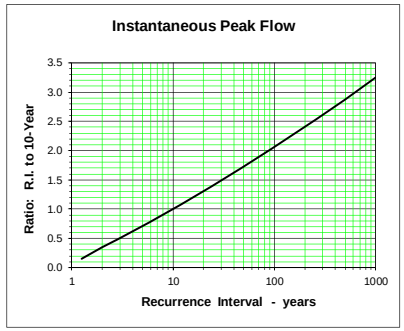
Station Longitude Latitude: -122.294471 52.426140

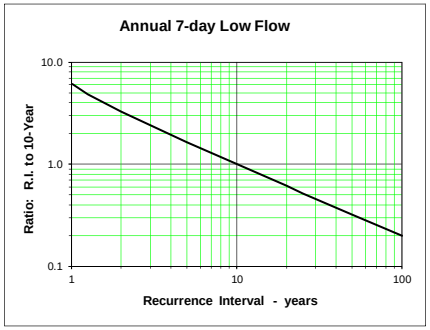
Monthly and Annual Discharge in m^3/s | Drainage Area = 93.66 km^2 | Median Elevation = 971 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)		Date	Annual	Jun-Sep	Annual	Year
1977																			1977
1978																			1978
1979																			1979
1980																			1980
1981																			1981
1982																			1982
1983																			1983
1984																			1984
1985																			1985
1986																			1986
1987					0.368	0.086	0.059	0.048	0.039	0.040	0.043				May 02	1.82			1987
1988				0.149	0.082	0.092	0.035	0.020	0.017	0.014					Apr 17	0.49			1988
1989					0.104	0.050	0.031	0.024	0.043	0.062									1989
1990																			1990
1991																			1991
1992																			1992
1993																			1993
1994																			1994
1995																			1995
1996																			1996
1997																			1997
1998										0.039	0.030	0.027							1998
1999																			1999
2000	0.061	0.053	0.060	1.170	0.273	0.434	0.347	0.092	0.078	0.073	0.079	0.062	0.231		Apr 11	2.17	0.074	0.050	2000
2001	0.036	0.027	0.035	0.522	0.160	0.074	0.058	0.057	0.039	0.033	0.029	0.027	0.091		Apr 18	1.26	0.035	0.025	2001
2002	0.032	0.028	0.022	1.370	1.160	0.128	0.077	0.056	0.051	0.050	0.045	0.034	0.255		Apr 21	6.67	0.047	0.021	2002
2003	0.025	0.020	0.047	0.303	0.122	0.067	0.038	0.021	0.026	0.027	0.013	0.010	0.060		Apr 16	0.71	0.017	0.010	2003
2004	0.004	0.004	0.022	0.721	0.167	0.128	0.067	0.044	0.084	0.081	0.164	0.060	0.128		Apr 12	1.93	0.034	0.004	2004
2005	1.120	0.524	0.920	0.663	0.168	0.117	0.102	0.070	0.064	0.064	0.067	0.055	0.327		Jan 25	5.57	0.060	0.027	2005
2006	0.049	0.037	0.076	0.641	0.095	0.064	0.038	0.022	0.024	0.024	0.024	0.031	0.093		Mar 31	1.87	0.018	0.018	2006
2007	0.038	0.035	0.286	1.750	0.284	0.082	0.095	0.061	0.031	0.034	0.039	0.053	0.231		Apr 09	6.00	0.027	0.027	2007
2008	0.035	0.038	0.047	1.390	1.190	0.185	0.085	0.070	0.059	0.057	0.069	0.081	0.275		Apr 18	3.99	0.050	0.031	2008
2009	0.061	0.047	0.057	2.660	1.060	0.144	0.111	0.059	0.046	0.049	0.053	0.035	0.364		Apr 22	7.94	0.035	0.030	2009
2010	0.040	0.032	0.236	0.270	0.169	0.091	0.072	0.052	0.047	0.041	0.041	0.037	0.094		Mar 27	0.74	0.036	0.025	2010
2011	0.028	0.025	0.038	0.927	1.650	0.565	0.404	0.231	0.100	0.081	0.065	0.049	0.349		May 18	6.37	0.077	0.022	2011
2012	0.060	0.062	0.060	1.430	0.300	0.105	0.089	0.074	0.065	0.053	0.052	0.048	0.198		Apr 13	5.16	0.057	0.041	2012
Avg.	0.122	0.072	0.147	0.998	0.460	0.151	0.107	0.063	0.051	0.048	0.054	0.044	0.207	0.207		3.51	0.044	0.025	m^3/s
S. D.	0.300	0.137	0.246	0.686	0.501	0.142	0.108	0.050	0.023	0.020	0.035	0.018	0.106			2.55	0.019	0.012	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.136	0.077	0.164	0.967	0.386	0.124	0.087	0.050	0.046	0.046	0.054	0.043	0.195	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	4	2	5	27	11	3	2	1	1	1	1	1	66	mm	10-Year	7.80	0.021	0.008	m^3/s









DASH CREEK ABOVE CHURN CREEK 08MD035

Station Longitude Latitude: -122.921712 51.244936

Monthly and Annual Discharge in m^3/s | Drainage Area = 73.46 km^2 | Median Elevation = 1954 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)		Date	Annual	Jun-Sep	Annual	Year
1977																			1977
1978																			1978
1979																			1979
1980																			1980
1981																			1981
1982																			1982
1983																			1983
1984																			1984
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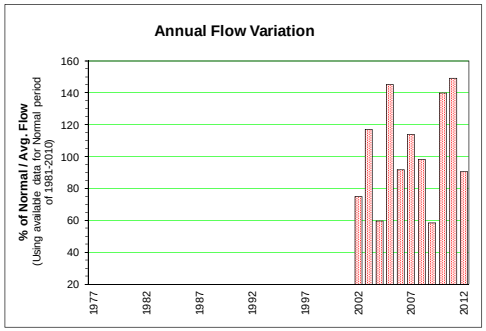
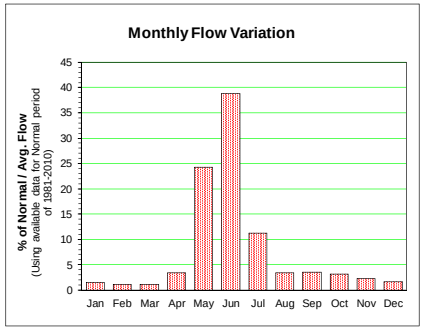
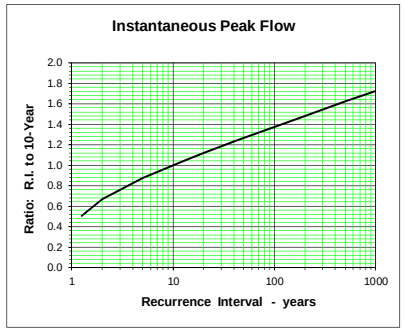
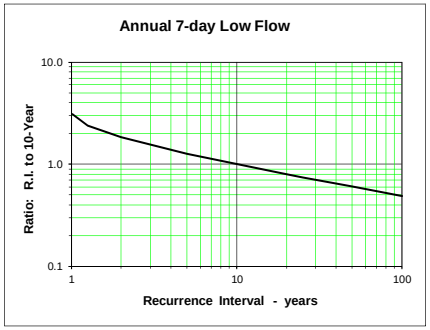
1994																			1994
1995																			1995
1996																			1996
1997																			1997
1998																			1998
1999																			1999
2000																			2000
2001				0.117	1.040	1.070	0.706	0.299	0.127	0.102	0.085	0.069			May 24	4.28	0.106	0.020	2001
2002	0.062	0.055	0.048	0.078	0.753	2.440	0.472	0.253	0.169	0.118	0.099	0.102	0.387		Jun 16	4.57	0.142	0.043	2002
2003	0.100	0.088	0.089	0.124	1.620	3.910	0.752	0.188	0.106	0.137	0.078	0.066	0.604		Jun 07	9.08	0.096	0.064	2003
2004	0.068	0.067	0.069	0.244	1.010	0.855	0.337	0.165	0.298	0.253	0.209	0.117	0.308		May 25	2.69	0.117	0.063	2004
2005	0.105	0.095	0.100	1.020	1.870	2.830	0.983	0.273	0.722	0.556	0.263	0.167	0.749		Jun 18	7.40	0.234	0.089	2005
2006	0.138	0.082	0.063	0.117	1.810	2.400	0.386	0.140	0.159	0.147	0.123	0.103	0.473		May 17	7.23	0.093	0.061	2006
2007	0.093	0.080	0.079	0.150	1.440	3.320	0.819	0.205	0.186	0.252	0.282	0.142	0.587		Jun 06	8.04	0.131	0.071	2007
2008	0.104	0.090	0.078	0.090	2.380	2.270	0.463	0.165	0.141	0.100	0.095	0.084	0.506		May 17	9.15	0.115	0.069	2008
2009	0.105	0.109	0.063	0.078	1.130	1.300	0.358	0.134	0.096	0.105	0.088	0.062	0.303		May 29	6.65	0.089	0.056	2009
2010	0.050	0.061	0.073	0.152	1.680	4.010	1.570	0.305	0.279	0.196	0.150	0.123	0.721		May 28	7.00	0.213	0.046	2010
2011	0.088	0.073	0.081	0.071	1.490	5.360	1.340	0.360	0.149	0.084	0.067	0.086	0.769		Jun 06	12.60	0.128	0.033	2011
2012	0.097	0.089	0.062	0.144	1.120	2.200	1.060	0.432	0.158	0.094	0.075	0.065	0.466		Jun 23	6.01	0.138	0.043	2012
Avg.	0.092	0.081	0.073	0.199	1.445	2.664	0.771	0.243	0.216	0.179	0.135	0.099	0.534	0.534		7.06	0.133	0.055	m^3/s
S. D.	0.024	0.016	0.014	0.263	0.459	1.323	0.403	0.094	0.171	0.133	0.076	0.033	0.167			2.60	0.05	0.019	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.092	0.081	0.074	0.217	1.473	2.441	0.685	0.213	0.228	0.197	0.147	0.104	0.515	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	3	3	3	8	54	86	25	8	8	7	5	4	221	mm	10-Year	10.39	0.090	0.030	m^3/s







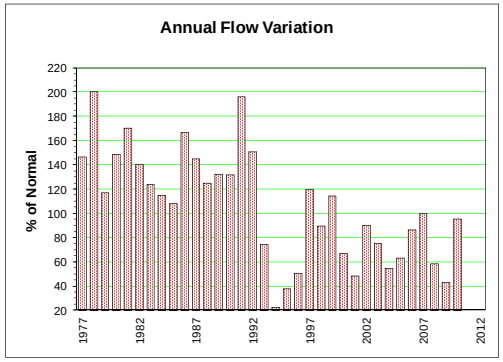


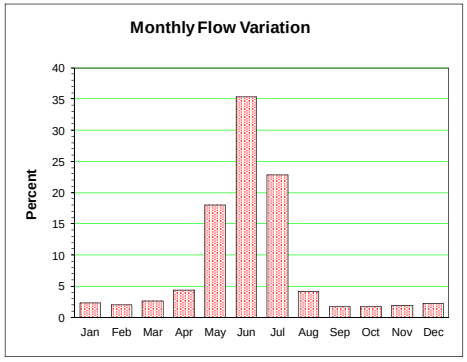
CAYOOSH CREEK NEAR LILLOOET 08ME002

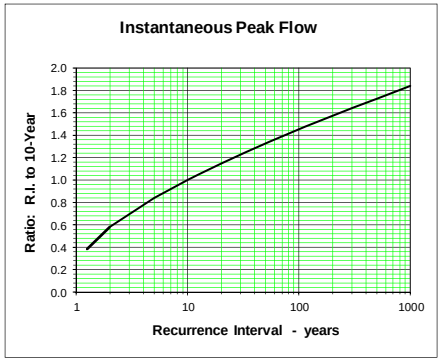
Station Longitude Latitude: -121.9643317 50.668781

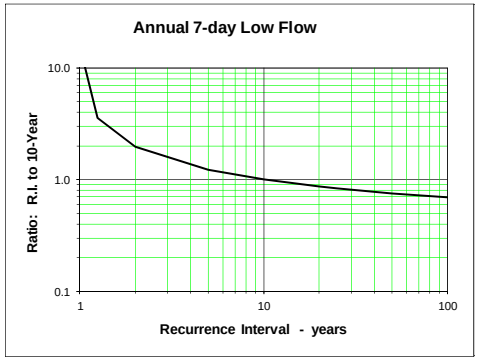
Monthly and Annual Discharge in m^3/s | Drainage Area = 886.53 km^2 | Median Elevation = 1851 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	6.22	5.43	4.29	10.30	22.50	47.90	27.10	22.70	12.00	9.36	8.51	5.32	15.17		Jun 08	76.20	10.74	3.61	1977
1978	4.42	3.95	4.78	8.81	25.00	73.90	52.30	23.00	21.20	13.80	11.10	6.30	20.76		Jun 06	140.38	15.21	3.56	1978
1979	4.18	4.08	4.55	5.20	25.70	37.00	28.60	16.30	10.00	1.59	1.60	6.16	12.13		Jun 04	82.10	2.06	1.40	1979
1980	4.05	3.75	3.89	7.96	35.90	65.00	41.20	3.36	2.08	1.66	1.45	14.20	15.40		Jun 17	118.00	1.78	0.70	1980
1981	14.10	8.86	6.33	9.16	41.70	47.00	60.50	8.16	2.48	1.54	3.78	7.35	17.67		May 25	106.00	1.67	0.91	1981
1982	4.88	4.16	3.98	4.23	19.90	83.20	43.00	2.81	2.30	1.49	0.93	3.40	14.52		Jun 20	130.00	1.81	0.58	1982
1983	4.91	4.51	4.90	7.19	33.90	51.40	39.60	3.89	1.08	0.79	0.64	0.64	12.83		May 31	122.00	0.76	0.51	1983
1984	1.46	2.56	5.13	5.70	9.36	54.10	42.50	7.94	1.03	6.68	2.05	4.53	11.93		Jun 29	103.00	0.75	0.56	1984
1985	4.29	3.84	3.36	6.93	31.70	50.00	25.60	1.27	0.97	1.12	1.56	3.76	11.22		Jun 03	82.60	0.91	0.84	1985
1986	3.99	4.19	7.67	8.39	33.40	86.70	43.70	9.08	1.09	1.17	2.89	4.58	17.26		Jun 01	154.00	0.93	0.86	1986
1987	5.99	4.41	6.21	9.19	40.00	60.50	42.20	3.58	1.43	0.63	1.34	4.22	15.03		Jun 15	85.30	0.86	0.43	1987
1988	3.30	3.26	3.52	12.00	31.70	52.10	36.30	6.51	1.29	1.77	1.40	2.16	12.95		Jun 17	83.20	1.12	1.01	1988
1989	4.48	3.88	3.56	8.89	33.70	63.50	25.60	1.47	1.09	1.68	8.25	8.36	13.71		Jun 06	104.00	0.93	0.93	1989
1990	5.01	4.27	4.06	12.60	25.10	46.00	36.90	4.70	1.09	2.57	15.40	5.98	13.66		Jun 23	88.00	0.87	0.82	1990
1991	4.45	6.28	4.35	7.44	32.00	57.30	56.70	46.00	15.00	1.92	2.99	8.32	20.34		Aug 12	108.00	1.18	1.13	1991
1992	6.07	6.98	10.80	19.50	44.20	65.20	28.60	0.88	0.99	3.29	0.56	0.58	15.62		Jun 14	84.30	0.70	0.48	1992
1993	0.54	2.45	3.98	5.26	45.80	28.20	1.78	0.86	0.71	0.86	0.83	0.82	7.70		May 15	95.10	0.62	0.46	1993
1994	0.73	0.70	0.75	0.93	6.43	8.40	5.57	1.24	1.15	0.82	0.81	0.75	2.37		May 11	52.80	0.87	0.66	1994
1995	0.77	0.83	0.81	0.82	8.09	20.40	8.00	1.15	1.37	1.04	2.81	0.82	3.91		Jul 03	43.60	0.92	0.56	1995
1996	0.80	0.71	0.91	3.51	1.78	20.80	27.80	1.54	1.44	1.33	1.16	0.97	5.24		Jul 02	70.10	1.28	0.56	1996
1997	0.64	0.66	0.65	2.02	17.20	65.10	46.80	6.59	1.98	2.82	1.81	2.29	12.42		Jun 18	110.00	1.20	0.57	1997
1998	1.30	1.75	4.21	6.19	37.40	34.10	17.20	2.85	1.59	1.39	1.55	1.65	9.31		Jun 01	64.10	1.32	1.14	1998
1999	1.38	1.31	2.55	6.56	15.90	39.70	51.60	15.30	2.05	1.16	1.49	2.02	11.83		Jun 16	136.00	1.65	0.93	1999
2000	1.93	1.80	2.48	4.81	11.10	36.20	15.40	3.59	1.94	1.55	1.37	1.23	6.93		Jun 29	67.20	1.79	1.17	2000
2001	1.23	1.16	2.52	4.43	11.90	18.80	11.90	2.19	2.15	1.39	1.49	1.36	5.05		May 27	41.90	1.16	1.15	2001
2002	1.32	1.25	1.24	1.23	10.40	56.10	30.40	2.61	3.19	1.70	1.31	1.25	9.33		Jun 15	115.00	1.79	1.14	2002
2003	1.22	1.17	1.06	1.32	10.20	43.40	14.80	2.87	2.31	11.00	2.78	1.47	7.80		Jun 10	104.00	2.12	1.01	2003
2004	2.07	1.76	2.99	3.17	13.40	24.70	8.44	2.39	2.36	2.05	2.35	2.34	5.66		Jun 26	45.40	2.17	1.39	2004
2005	4.80	1.89	1.85	3.79	19.20	22.10	11.70	3.24	2.66	2.73	1.69	2.88	6.57		May 31	61.40	2.16	1.14	2005
2006	1.10	1.13	2.17	2.01	22.10	47.50	16.80	2.93	3.11	2.74	2.70	3.15	8.96		Jun 16	81.80	2.18	1.09	2006
2007	1.52	1.09	1.50	1.29	12.30	55.60	40.40	3.20	1.79	2.34	1.96	1.49	10.40		Jun 04	128.12	1.63	1.04	2007
2008	1.36	1.43	1.88	1.44	22.70	22.60	11.90	1.94	1.87	1.78	1.76	1.68	6.04		May 20	67.10	1.80	1.21	2008
2009	1.29	1.21	1.79	1.42	4.29	27.10	6.47	2.56	2.27	2.09	1.88	1.32	4.46		May 31	52.30	2.00	1.07	2009
2010	1.38	1.55	2.12	6.83	14.60	51.60	29.00	2.43	4.01	1.87	1.62	1.61	9.89		Jul 12	73.20	1.73	1.08	2010
2011																			2011
2012																			2012
Avg.	3.15	2.89	3.44	5.90	22.7	46.0	29.01	6.50	3.33	2.70	2.82	3.38	11.00	13.90		90.48	2.08	1.05	m^3/s
S. D.	2.68	2.01	2.17	4.09	12.34	19.06	16.20	9.03	4.47	2.99	3.21	2.98	4.73			29.51	2.86	0.70	m^3/s
Normal	2.94	2.70	3.31	5.61	22.05	44.65	27.91	5.19	2.26	2.18	2.44	2.77	10.35	m^3/s					
Normal	9	7	10	16	67	131	84	16	7	7	7	8	369	mm	10-Year	162.68	0.71	0.51	m^3/s







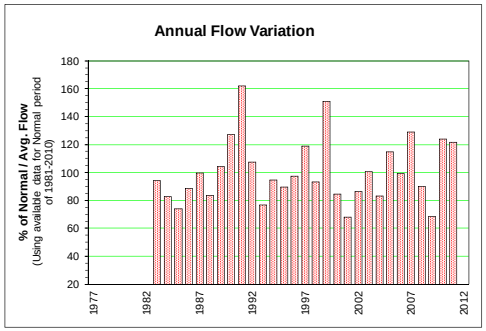


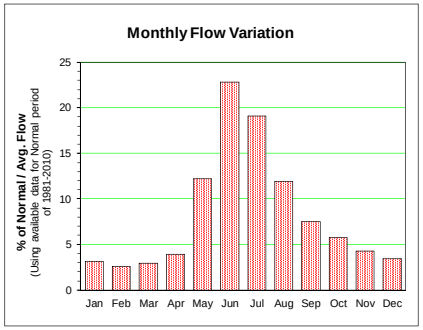
YALAKOM RIVER ABOVE ORE CREEK 08ME025

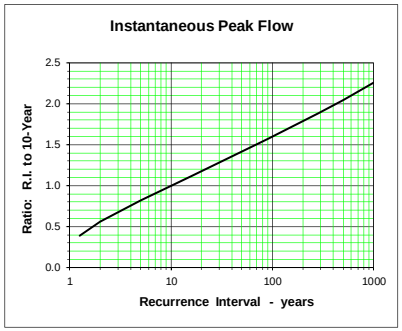
Station Longitude Latitude: -122.239441 50.912663

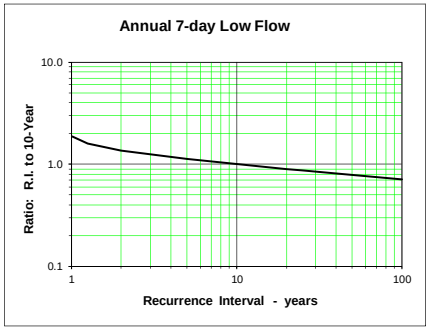
Monthly and Annual Discharge in m^3/s | Drainage Area = 579.19 km^2 | Median Elevation = 1828 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977																		1977
1978																		1978
1979																		1979
1980																		1980
1981																		1981
1982																		1982
1983	1.95	1.62	1.60	2.53	7.88	9.29	8.40	5.43	3.96	2.73	2.24	1.46	4.11	May 30	32.20	3.35	1.20	1983
1984	1.52	1.50	1.53	1.57	2.24	10.90	8.11	5.54	3.14	3.07	2.54	1.58	3.60	Jun 14	27.80	2.71	1.31	1984
1985	1.55	1.26	1.11	1.39	5.91	9.06	6.70	4.41	3.01	1.97	1.09	1.17	3.23	Jun 04	16.60	2.43	0.83	1985
1986	1.52	1.23	1.27	1.40	4.75	12.40	7.74	6.13	3.94	2.84	1.88	1.19	3.87	Jun 01	24.50	3.08	1.03	1986
1987	0.92	1.24	1.39	2.53	8.08	12.40	10.40	5.85	3.47	2.22	1.81	1.59	4.34	Jul 05	22.40	2.88	0.80	1987
1988	1.54	1.35	1.31	2.15	5.42	8.79	6.62	6.19	3.62	2.80	2.15	1.73	3.65	Jun 17	17.00	2.95	1.21	1988
1989	1.69	1.20	1.24	1.80	5.84	12.30	7.36	8.85	5.62	3.52	2.69	2.10	4.53	Jun 05	22.90	4.04	1.03	1989
1990	1.46	1.28	1.52	2.60	7.07	16.70	16.00	7.04	4.28	3.04	2.97	2.22	5.54	Jul 07	38.50	3.67	1.11	1990
1991	1.95	1.82	1.64	2.61	10.70	19.70	17.20	12.50	7.16	3.93	3.01	1.92	7.04	Jun 27	37.40	5.24	1.37	1991
1992	1.73	1.99	2.29	3.35	8.35	12.40	9.30	5.53	3.73	3.11	2.33	1.83	4.67	Jun 14	20.60	3.48	1.03	1992
1993	1.75	1.36	1.53	1.53	6.28	6.70	6.52	4.83	3.27	2.42	1.94	1.75	3.34	May 14	16.90	2.73	1.25	1993
1994	1.44	1.17	1.55	2.84	8.20	9.35	9.48	5.39	3.46	2.57	2.00	1.72	4.12	Jun 24	16.50	3.19	0.81	1994
1995	1.33	1.02	1.08	1.44	6.21	10.50	8.54	6.28	3.79	2.79	2.09	1.58	3.90	Jun 23	15.10	3.09	0.66	1995
1996	1.43	1.68	1.62	1.98	3.51	10.70	11.30	6.35	4.58	3.63	2.24	1.71	4.23	Jun 03	20.90	3.82	1.15	1996
1997	1.47	1.65	1.69	2.01	8.22	14.30	13.50	7.49	4.26	3.52	2.30	1.46	5.18	Jun 01	26.80	3.69	1.24	1997
1998	1.50	1.56	1.66	1.56	8.22	9.28	9.62	5.19	3.36	2.59	2.03	1.76	4.05	May 31	16.10	3.09	1.32	1998
1999	1.70	1.52	1.61	2.37	6.35	20.20	20.80	10.60	4.97	3.32	2.78	2.16	6.56	Jun 17	47.00	4.25	1.41	1999
2000	2.02	1.98	1.60	1.82	2.95	8.26	9.12	5.81	4.07	2.76	2.01	1.60	3.67	Jun 29	12.00	3.40	1.38	2000
2001	1.53	1.30	1.47	1.67	3.36	5.47	7.40	4.88	3.04	2.24	1.76	1.42	2.97	Jul 21	9.75	2.69	1.26	2001
2002	1.32	1.18	1.10	1.42	4.14	12.60	8.15	5.52	3.40	2.49	2.17	1.51	3.76	Jun 15	23.40	2.91	1.03	2002
2003	1.74	1.51	1.60	2.19	5.79	16.50	8.00	4.88	3.06	3.10	2.35	1.82	4.38	Jun 07	40.40	2.62	1.43	2003
2004	1.46	1.40	1.43	2.05	4.54	7.89	5.84	4.75	4.86	3.54	3.07	2.56	3.62	Jun 25	11.50	4.17	1.31	2004
2005	2.41	2.03	1.94	3.12	8.62	13.00	10.30	5.10	4.15	3.47	2.61	2.95	4.99	Jun 22	22.40	3.71	1.62	2005
2006	2.05	1.57	1.56	2.04	6.46	14.30	8.67	4.02	3.72	3.12	2.40	1.68	4.31	Jun 09	49.90	3.45	1.37	2006
2007	1.86	1.82	2.04	2.70	7.21	19.30	12.90	6.38	4.30	3.63	2.79	2.27	5.61	Jun 06	47.50	4.03	1.51	2007
2008	1.66	1.38	1.54	1.61	7.60	10.40	7.91	5.12	3.59	2.65	2.10	1.36	3.92	May 19	24.80	3.20	1.10	2008
2009	1.50	1.37	1.17	1.42	3.62	8.52	6.06	3.85	2.91	2.13	1.87	1.38	2.99	Jun 06	12.50	2.61	1.13	2009
2010	1.38	1.36	1.50	2.50	7.86	17.20	12.30	7.68	4.93	3.61	2.24	1.81	5.38	Jun 13	25.90	4.22	1.25	2010
2011	0.99	1.17	1.32	1.55	7.13	21.40	12.00	7.25	4.35	3.05	1.77	1.46	5.30	Jun 07	33.50	4.02	0.92	2011
2012																		2012
Avg.	1.60	1.47	1.51	2.06	6.29	12.41	9.87	6.17	4.00	2.96	2.25	1.75	4.37	4.38		25.27	3.40	1.17	m^3/s
S. D.	0.31	0.27	0.27	0.56	2.02	4.26	3.51	1.88	0.91	0.52	0.44	0.40	0.99			11.28	0.65	0.23	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1.62	1.48	1.52	2.08	6.26	12.09	9.79	6.13	3.99	2.96	2.27	1.76	4.34	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	7	6	7	9	29	54	45	28	18	14	10	8	237	mm	10-Year	40.67	2.66	0.87	m^3/s









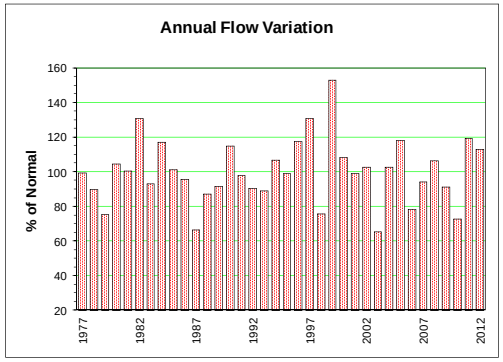
Zone 16 Southern Quesnel Highland

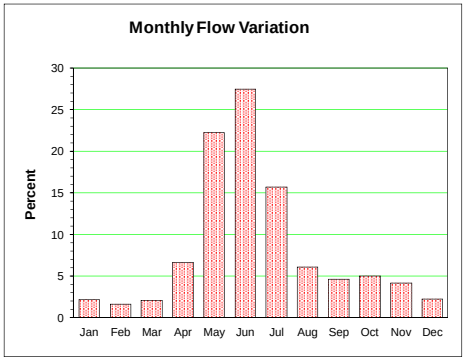
HORSEFLY RIVER ABOVE MCKINLEY CREEK 08KH010

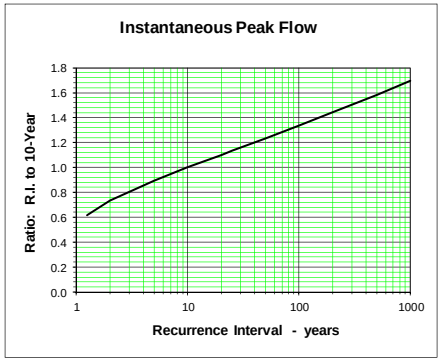
Station Longitude Latitude: -121.064590 52.2922744

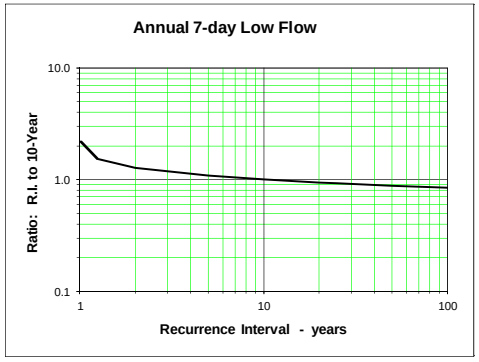
Monthly and Annual Discharge in m^3/s | Drainage Area = 787.80 km^2 | Median Elevation = 1501 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	6.06	5.92	4.40	18.80	41.90	54.70	39.00	19.60	19.60	11.10	6.34	3.46	19.29		Jun 08	94.30	11.90	3.32	1977
1978	3.22	3.04	4.30	13.70	36.20	57.60	29.60	14.10	18.70	12.50	9.77	5.73	17.41		Jun 05	89.20	10.71	2.86	1978
1979	3.42	2.57	3.97	7.78	43.40	59.30	29.90	7.23	5.12	4.88	3.49	3.66	14.61		Jun 05	110.00	3.76	2.53	1979
1980	2.83	2.18	4.03	17.10	55.80	41.10	33.00	21.50	26.80	16.40	10.20	11.70	20.28		May 07	87.10	16.80	2.06	1980
1981	15.00	8.68	6.71	11.20	53.90	47.20	32.80	14.50	11.10	12.70	14.10	5.33	19.51		May 26	123.00	8.14	4.95	1981
1982	4.32	3.35	3.16	5.38	53.70	87.90	55.60	34.50	23.30	19.30	8.17	4.12	25.35		Jun 15	112.00	16.87	2.97	1982
1983	3.78	3.80	5.08	12.80	38.80	51.20	42.90	14.20	11.20	10.80	15.70	5.51	18.05		May 31	93.60	8.08	2.78	1983
1984	4.43	4.53	6.11	14.10	27.90	79.60	66.30	23.60	22.10	13.90	5.98	3.85	22.71		Jun 14	114.00	14.53	3.58	1984
1985	3.20	2.80	2.86	12.10	69.90	74.90	29.00	8.91	10.30	12.50	5.50	2.61	19.62		May 25	151.00	5.54	2.31	1985
1986	2.84	2.83	7.59	12.70	44.60	80.00	34.10	12.00	6.50	8.91	6.90	3.68	18.60		Jun 01	157.00	4.27	2.37	1986
1987	3.44	4.29	7.27	13.70	43.00	39.10	15.00	12.60	4.48	2.51	5.02	3.89	12.90		May 02	81.70	3.21	1.99	1987
1988	2.65	2.69	3.22	25.00	57.10	51.00	23.80	10.70	6.09	7.56	8.62	4.49	16.92		May 14	157.00	4.72	2.38	1988
1989	3.64	2.58	3.10	13.50	51.60	58.20	23.30	15.60	8.71	7.81	16.80	7.47	17.74		May 11	95.40	6.47	2.14	1989
1990	4.18	3.61	4.16	28.00	55.90	91.20	38.60	10.30	5.60	7.64	11.90	6.38	22.31		Jun 12	153.00	3.68	3.14	1990
1991	4.74	5.52	3.77	17.70	51.00	60.30	36.00	15.80	14.00	6.96	6.81	4.84	19.00		May 20	95.80	7.25	3.20	1991
1992	4.78	5.64	15.00	25.70	45.90	46.90	15.60	6.90	12.00	14.80	11.20	6.02	17.53		Jun 02	83.40	4.71	4.62	1992
1993	3.10	2.65	5.07	14.50	73.10	44.00	24.50	12.70	7.97	5.50	7.10	5.61	17.26		May 15	141.00	4.91	2.55	1993
1994	5.94	5.34	6.18	35.10	60.10	63.00	40.90	9.75	6.03	6.92	4.71	3.92	20.71		May 12	97.20	4.66	3.59	1994
1995	3.07	3.64	4.18	10.80	49.20	55.90	26.40	30.00	10.40	15.10	10.50	9.79	19.18		Jun 06	88.40	6.81	2.76	1995
1996	7.13	4.23	5.32	22.50	34.30	70.00	56.40	17.70	17.90	13.80	15.60	8.53	22.79		Jun 05	117.00	12.29	3.91	1996
1997	5.04	4.52	3.70	14.50	69.00	81.00	53.80	16.10	11.80	21.90	14.60	6.86	25.35		Jun 01	158.00	8.36	3.12	1997
1998	4.53	3.74	6.17	14.10	62.90	35.50	22.60	6.54	3.45	6.40	6.07	3.45	14.71		May 28	82.80	2.98	2.86	1998
1999	4.81	3.68	3.88	21.10	52.00	112.00	88.40	25.80	12.70	12.30	12.10	6.28	29.69		Jul 08	224.00	9.76	3.16	1999
2000	4.96	4.39	3.94	13.20	42.10	79.10	54.40	13.90	13.00	10.40	8.27	4.21	21.00		Jun 15	106.08	8.71	3.23	2000
2001	3.25	2.72	2.77	9.42	39.40	67.80	54.40	21.80	8.43	7.04	8.14	4.98	19.22		Jul 19	148.00	6.58	2.60	2001
2002	3.74	2.78	2.51	6.49	54.90	89.50	38.90	9.40	8.88	11.80	5.78	4.15	19.96		May 22	136.00	7.16	2.39	2002
2003	3.53	3.23	2.77	13.50	33.80	46.20	15.70	5.35	4.68	13.00	7.72	2.85	12.71		May 25	90.40	2.99	2.48	2003
2004	2.46	2.64	3.55	21.00	48.30	59.10	21.10	9.15	33.40	14.70	17.60	6.33	19.90		Jun 07	110.00	5.58	2.26	2004
2005	19.80	13.40	9.43	23.80	63.20	54.50	37.30	9.12	7.16	20.40	9.46	6.48	22.91		May 16	138.00	5.96	3.40	2005
2006	6.38	3.79	4.16	11.80	54.60	56.90	17.40	7.61	5.05	5.23	5.62	3.62	15.22		May 24	129.00	3.59	3.39	2006
2007	2.91	2.19	2.13	15.60	44.80	67.60	25.00	6.80	7.26	24.30	15.20	5.10	18.28		Jun 05	129.00	4.64	1.98	2007
2008	3.50	3.27	3.13	5.00	64.70	66.20	33.90	19.80	12.60	12.60	15.20	7.58	20.67		May 21	145.32	8.63	3.11	2008
2009	5.19	4.10	3.89	11.50	50.50	76.20	28.90	7.37	7.39	5.89	7.23	4.35	17.73		Jun 06	108.00	4.72	3.40	2009
2010	3.54	3.70	4.34	13.70	33.70	52.20	22.10	7.00	12.10	8.05	5.63	3.38	14.13		May 19	92.90	5.23	2.82	2010
2011	2.62	2.79	2.94	3.98	65.70	90.70	66.20	16.50	7.93	8.32	4.31	4.55	23.17		May 27	143.00	6.48	2.55	2011
2012	3.61	2.92	3.10	16.50	50.20	96.90	47.50	13.60	5.78	7.18	10.70	4.99	21.90		Jun 18	158.05	4.34	2.39	2012
Avg.	4.77	3.99	4.66	15.20	50.5	65.1	36.68	14.11	11.38	11.14	9.39	5.27	19.40	19.53		120.55	7.08	2.92	m^3/s
S. D.	3.35	2.07	2.39	6.72	11.18	18.14	16.61	6.92	6.84	5.06	4.00	1.95	3.60			31.25	3.66	0.67	m^3/s
Normal	5.00	4.14	4.84	15.65	50.80	64.81	35.84	13.85	10.85	11.36	9.77	5.19	19.39	m^3/s					
Normal	17	13	16	51	173	213	122	47	36	39	32	18	777	mm	10-Year	155.16	3.73	2.22	m^3/s







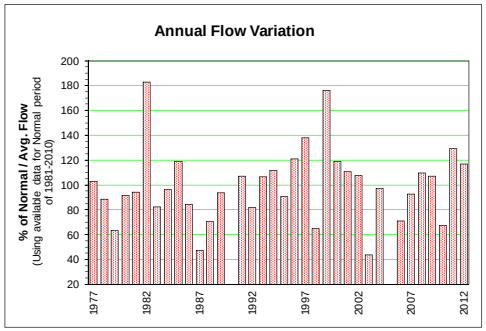


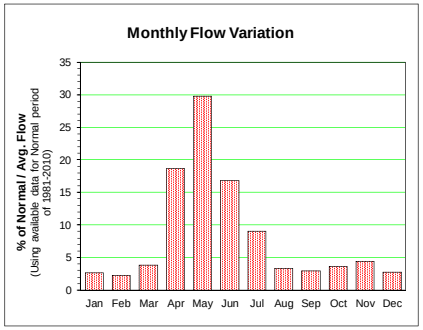
MOFFAT CREEK NEAR HORSEFLY 08KH019

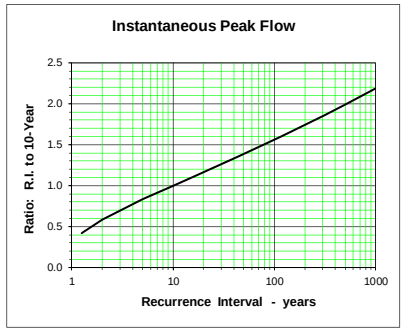
Station Longitude Latitude: -121.408065 52.315861

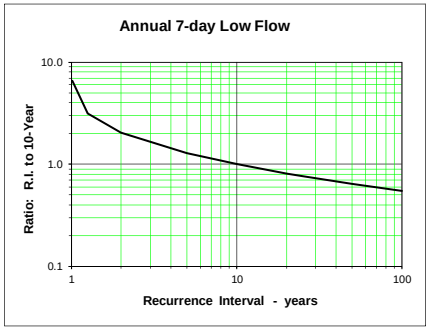
Monthly and Annual Discharge in m^3/s | Drainage Area = 553.19 km^2 | Median Elevation = 1113 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	1.10	1.20	1.08	8.19	14.10	5.26	3.16	1.52	2.79	1.74	0.84	0.68	3.48	Apr 28	28.30	0.58	0.58	1977
1978	0.69	0.71	1.09	6.03	11.60	6.05	4.09	1.12	1.46	1.21	0.98	0.65	2.99	May 12	16.60	0.70	0.61	1978
1979	0.54	0.52	1.04	2.56	12.20	5.45	1.63	0.24	0.19	0.30	0.34	0.41	2.13	May 05	20.70	0.12	0.12	1979
1980	0.35	0.29	0.69	3.77	6.81	5.70	6.76	3.12	3.95	1.85	1.42	2.25	3.09	Jul 01	18.10	1.72	0.25	1980
1981	3.18	1.85	1.84	4.37	10.40	8.38	2.40	1.19	0.80	1.17	1.66	0.90	3.18	May 28	19.00	0.41	0.41	1981
1982	0.88	0.81	0.84	1.98	24.60	11.10	13.00	7.63	5.13	4.85	1.52	0.98	6.17	May 18	46.50	2.50	0.77	1982
1983	0.85	1.09	1.83	5.12	6.26	5.88	5.78	1.30	1.01	1.02	2.15	0.96	2.78	Jun 22	13.90	0.57	0.57	1983
1984	0.83	0.92	2.15	5.29	8.48	8.66	4.56	1.16	3.34	1.50	1.14	1.00	3.25	Jun 11	13.10	0.76	0.76	1984
1985	1.03	0.91	0.91	7.26	20.50	9.65	1.41	0.39	0.78	3.04	1.56	0.62	4.02	May 26	35.90	0.25	0.25	1985
1986	0.65	0.68	2.54	4.89	11.70	7.31	2.44	0.76	0.49	0.99	0.95	0.75	2.86	May 29	19.70	0.32	0.32	1986
1987	0.80	0.88	1.73	4.30	6.15	2.31	0.86	0.87	0.36	0.28	0.40	0.32	1.61	May 03	17.80	0.29	0.18	1987
1988	0.34	0.37	0.55	7.41	10.40	3.90	1.59	0.51	0.36	0.69	1.47	1.03	2.39	May 15	37.43	0.31	0.30	1988
1989	0.98	0.67	0.95	4.65	11.20	4.19	1.72	1.85	1.27	1.06	6.85	2.44	3.16	Nov 05	21.70	0.65	0.54	1989
1990	1.51	1.22	1.70	15.20					0.31	1.10	1.91	1.06				0.26	0.26	1990
1991	1.07	1.83	1.42	9.92	12.10	7.84	3.15	1.09	1.24	1.07	1.46	1.23	3.62	Apr 25	23.90	0.81	0.60	1991
1992	1.31	1.80	5.80	8.03	7.83	2.62	1.23	0.53	0.55	1.12	1.43	0.93	2.77	May 01	21.00	0.30	0.30	1992
1993	0.57	0.56	1.44	9.53	14.60	5.23	4.52	1.90	1.22	0.95	1.39	1.14	3.60	May 08	28.60	0.64	0.37	1993
1994	1.31	1.10	2.76	16.80	9.62	7.28	3.81	0.51	0.40	0.59	0.55	0.51	3.76	Apr 23	27.00	0.34	0.34	1994
1995	0.50	0.73	1.02	3.79	10.10	5.07	2.04	6.95	1.39	1.91	1.30	1.62	3.06	May 13	19.50	0.71	0.42	1995
1996	1.77	1.54	2.50	13.20	9.16	5.96	3.09	1.35	1.95	1.99	4.15	2.47	4.08	Apr 11	26.50	0.78	0.78	1996
1997	1.51	1.85	1.99	11.90	18.50	6.97	5.26	1.29	1.16	2.38	2.02	0.91	4.66	Apr 29	31.63	0.55	0.55	1997
1998	0.81	0.87	2.22	7.03	7.70	2.44	3.17	0.26	0.21	0.48	0.57	0.55	2.20	Apr 25	24.10	0.16	0.16	1998
1999	0.83	0.68	0.87	11.50	19.40	18.90	11.50	1.67	0.84	1.19	2.17	1.52	5.94	Jun 02	34.00	0.64	0.59	1999
2000	1.41	1.24	1.22	7.92	10.60	9.48	8.69	1.22	1.30	1.52	2.23	1.34	4.02	Jul 12	27.50	0.63	0.63	2000
2001	1.22	1.08	1.16	4.70	8.46	12.60	9.31	2.12	0.57	1.00	1.53	1.13	3.74	Jul 20	43.30	0.42	0.42	2001
2002	1.00	0.96	0.82	5.62	22.10	6.91	1.68	0.54	0.66	1.28	0.97	0.81	3.63	May 23	66.21	0.36	0.36	2002
2003	0.61	0.55	0.76	5.21	5.41	2.87	0.57	0.17	0.24	0.44	0.53	0.41	1.48	Apr 27	13.30	0.16	0.16	2003
2004	0.34	0.35	0.55	9.35	8.24	5.96	1.19	0.41	5.85	1.58	4.19	1.66	3.29	Apr 15	21.10	0.26	0.26	2004
2005							4.26	0.67	0.67	2.80	1.55	1.23				0.38		2005
2006	1.81	1.17	1.33	7.12	7.80	4.81	1.10	0.44	0.40	0.61	1.24	0.91	2.39	May 22	11.90	0.23	0.23	2006
2007	0.73	0.69	0.91	8.93	7.59	7.71	1.51	0.46	0.71	3.95	3.19	1.18	3.13	Apr 11	17.20	0.38	0.38	2007
2008	0.82	0.81	0.90	5.37	19.70	7.44	1.60	1.17	1.11	1.76	2.07	1.44	3.69	May 19	41.80	0.80	0.75	2008
2009	1.37	1.19	1.22	11.60	16.80	5.23	1.66	0.32	0.43	0.81	1.43	1.25	3.62	Apr 25	26.90	0.21	0.21	2009
2010	1.03	0.66	1.13	4.87	6.23	7.14	1.84	0.29	1.59	1.07	0.81	0.71	2.28	Jun 08	13.50	0.23	0.23	2010
2011	0.80	0.78	0.73	2.91	24.10	11.90	7.35	1.43	0.51	0.56	0.45	0.51	4.37	May 18	44.10	0.40	0.36	2011
2012	0.53	0.74	1.10	11.80	14.00	11.30	3.94	1.20	0.50	0.70	0.85	0.84	3.95	Apr 27	43.40	0.46	0.46	2012
Avg.	1.00	0.95	1.45	7.37	12.19	7.04	3.77	1.36	1.27	1.40	1.65	1.06	3.36	3.37		26.92	0.54	0.41	m^3/s
S. D.	0.54	0.42	0.96	3.62	5.45	3.37	3.06	1.61	1.34	0.99	1.26	0.53	1.01			12.17	0.45	0.19	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1.07	1.00	1.55	7.68	11.84	6.92	3.62	1.35	1.21	1.47	1.81	1.10	3.37	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	5	4	8	36	57	32	18	7	6	7	8	5	192	mm	10-Year	41.62	0.180	0.176	m^3/s







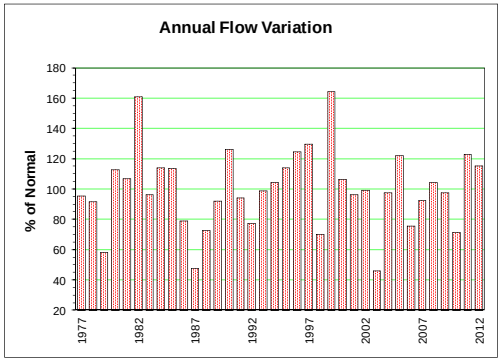


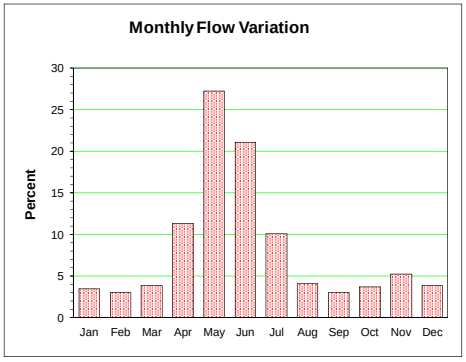
MCKINLEY CREEK BELOW OUTLET OF MCKINLEY LAKE 08KH020

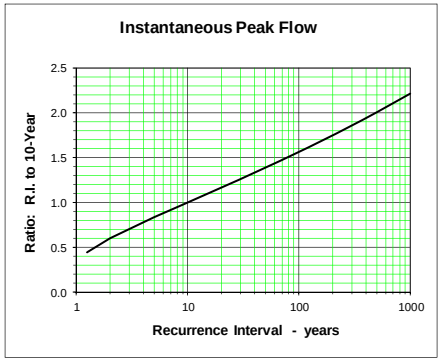
Station Longitude Latitude: -120.9988035 52.2798189

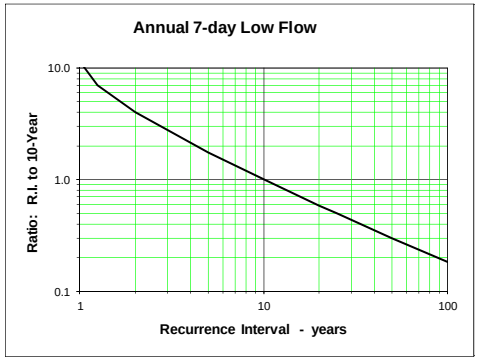
Monthly and Annual Discharge in m^3/s | Drainage Area = 433.88 km^2 | Median Elevation = 1169 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	1.71	1.67	1.52	4.71	14.80	9.68	6.11	3.76	5.61	3.37	2.32	2.01	4.79		May 13	18.70	1.92	1.39	1977
1978	1.29	1.23	1.52	6.49	14.50	11.80	7.44	2.48	2.90	1.97	1.84	1.42	4.59		May 22	16.60	2.03	1.10	1978
1979	1.03	0.85	1.03	2.25	12.90	10.90	3.79	0.75	0.27	0.20	0.19	0.79	2.92		May 27	15.80	0.23	0.17	1979
1980	0.80	0.65	1.29	5.10	14.10	9.45	11.60	7.03	6.67	3.86	2.88	4.16	5.66		May 03	18.10	5.43	0.59	1980
1981	5.86	5.18	3.51	4.86	13.80	12.60	5.51	3.01	2.32	2.51	3.04	2.15	5.36		May 27	20.80	1.70	1.70	1981
1982	2.04	1.73	1.56	2.02	25.10	19.80	14.20	10.80	6.83	6.95	3.13	1.97	8.06		May 19	47.30	5.20	1.41	1982
1983	1.63	1.52	3.35	5.86	12.20	10.80	10.10	3.27	1.55	1.39	3.89	2.08	4.82		Jun 01	15.00	1.39	1.10	1983
1984	1.83	2.33	2.74	7.66	12.80	18.30	10.40	2.43	3.05	2.72	2.56	1.71	5.71		Jun 15	24.10	1.58	1.46	1984
1985	1.55	1.32	1.28	5.98	26.20	19.30	3.34	0.67	0.80	3.65	2.73	1.14	5.68		May 26	51.10	0.42	0.42	1985
1986	1.08	1.08	2.26	5.86	12.40	14.80	4.21	1.40	0.60	1.27	1.43	1.11	3.96		Jun 02	26.60	0.31	0.31	1986
1987	1.01	1.11	2.74	4.22	9.74	5.58	1.88	0.98	0.26	0.06	0.31	0.79	2.40		May 11	13.70	0.15	0.04	1987
1988	0.61	0.83	0.95	8.64	15.10	7.88	2.98	1.35	0.61	0.65	2.31	1.65	3.63		May 17	22.10	0.34	0.34	1988
1989	1.41	1.03	1.52	4.19	16.70	9.19	3.09	2.51	2.76	1.81	7.22	3.76	4.61		May 11	23.60	0.83	0.83	1989
1990	2.65	2.10	2.09	14.60	16.70	22.40	5.99	0.40	0.86	1.44	3.48	3.36	6.33		Jun 14	40.70	0.27	0.27	1990
1991	1.83	2.59	2.28	7.40	15.50	10.90	6.10	2.48	2.17	1.15	2.08	2.12	4.72		May 21	19.50	1.47	0.75	1991
1992	1.87	2.82	6.50	8.24	10.40	6.21	2.54	0.80	0.69	1.62	3.21	1.68	3.88		May 09	13.20	0.33	0.33	1992
1993	1.18	1.00	3.19	7.76	19.70	9.65	6.17	2.12	1.89	1.67	2.63	2.04	4.94		May 17	29.00	1.20	0.90	1993
1994	2.46	2.13	3.16	15.70	16.90	11.80	5.29	1.06	1.36	0.95	0.87	0.94	5.22		Apr 24	24.80	0.88	0.66	1994
1995	1.10	1.39	1.60	5.81	16.50	11.80	3.57	8.51	3.50	3.57	5.28	5.59	5.71		May 17	23.90	1.86	0.99	1995
1996	2.88	1.96	2.94	10.40	15.80	14.20	6.61	2.39	2.49	2.90	7.33	4.95	6.24		May 21	24.30	1.41	1.41	1996
1997	2.27	2.41	2.29	6.66	23.80	15.40	7.68	3.91	2.06	4.48	4.63	2.05	6.50		May 19	32.40	1.88	1.61	1997
1998	1.63	1.62	2.90	6.72	14.50	4.51	5.34	1.28	0.50	0.37	1.24	1.28	3.51		May 15	20.00	0.37	0.33	1998
1999	2.13	1.59	1.85	10.80	22.30	26.60	18.70	3.67	2.42	1.98	3.43	2.83	8.22		May 27	29.70	2.11	1.35	1999
2000	1.91	1.34	1.40	5.97	15.30	16.30	10.40	2.82	2.03	1.92	2.90	1.56	5.33		Jun 19	19.10	1.40	1.14	2000
2001	1.26	1.02	1.11	3.21	11.50	13.50	10.30	6.56	2.19	1.88	2.74	2.55	4.83		Jul 24	22.20	1.62	0.83	2001
2002	1.68	1.42	1.26	5.65	22.30	16.10	4.56	1.17	0.95	1.43	1.64	1.33	4.97		May 24	44.00	0.77	0.77	2002
2003	0.93	0.87	1.09	4.54	8.01	6.49	2.15	0.37	0.43	0.43	1.49	0.95	2.31		Jun 02	10.60	0.14	0.14	2003
2004	0.84	1.00	1.19	8.34	12.50	10.80	2.78	0.82	6.51	3.89	5.54	4.56	4.89		May 06	16.50	0.55	0.55	2004
2005	6.63	9.23	4.54	7.22	15.00	9.57	7.81	2.02	1.12	3.59	4.15	2.61	6.11		May 18	19.60	0.88	0.88	2005
2006	3.45	2.22	1.64	6.29	14.00	9.51	2.75	0.92	0.49	0.64	1.88	1.61	3.79		May 24	22.60	0.40	0.40	2006
2007	1.34	1.21	2.09	7.14	13.30	11.50	3.01	0.92	0.65	4.46	6.82	3.02	4.63		Jun 07	20.70	0.55	0.55	2007
2008	1.90	1.47	1.43	2.29	22.80	15.10	3.87	1.94	1.99	2.50	3.82	3.42	5.22		May 23	46.40	1.64	1.32	2008
2009	2.36	1.71	1.48	7.34	20.80	13.60	4.05	0.82	0.59	1.11	2.68	1.84	4.88		May 20	23.80	0.45	0.45	2009
2010	1.41	1.38	2.37	4.98	10.00	10.90	3.55	1.21	1.63	2.74	1.52	1.17	3.58		Jun 08	15.15	0.83	0.83	2010
2011	1.30	1.48	1.18	2.63	27.90	20.30	9.91	3.62	1.39	1.17	1.23	1.27	6.15		May 19	43.00	1.08	0.95	2011
2012	1.08	1.00	1.09	7.98	21.70	20.50	8.54	2.42	0.73	0.75	1.84	1.72	5.78		May 02	35.80	0.56	0.43	2012
Avg.	1.89	1.82	2.11	6.54	16.3	13.0	6.29	2.57	2.02	2.14	2.95	2.20	5.00	5.02		25.29	1.23	0.80	m^3/s
S. D.	1.24	1.51	1.14	2.98	4.96	5.01	3.75	2.33	1.80	1.49	1.77	1.20	1.30			10.62	1.18	0.46	m^3/s
Normal	2.02	1.95	2.28	6.88	16.06	12.84	5.96	2.42	1.84	2.19	3.20	2.26	5.00	m^3/s					
Normal	12	11	14	41	99	77	37	15	11	14	19	14	364	mm	10-Year	39.40	0.26	0.17	m^3/s







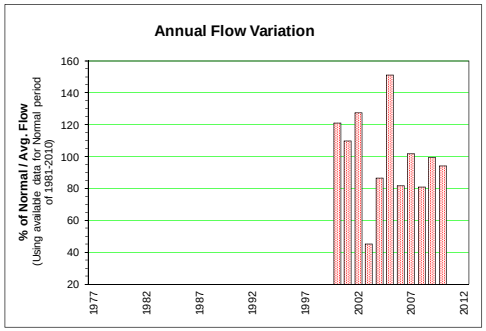


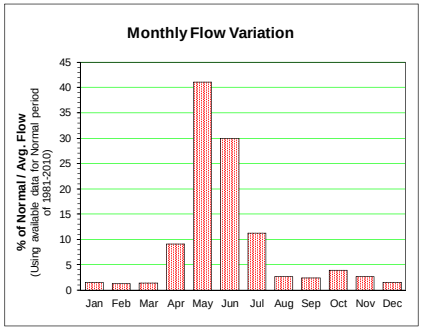
WINDY CREEK ABOVE JIM CREEK 08LA028

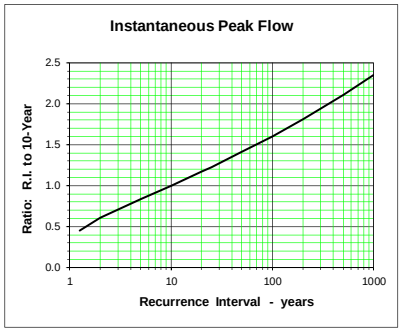
Station Longitude Latitude: -120.672218 51.622635

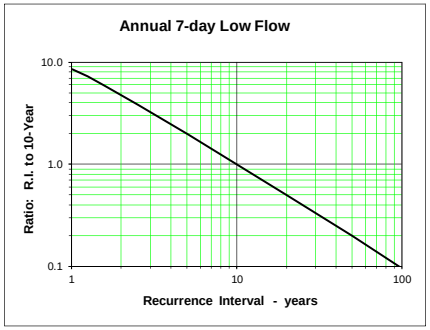
Monthly and Annual Discharge in m^3/s | Drainage Area = 79.99 km^2 | Median Elevation = 1507 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)		Date	Annual	Jun-Sep	Annual	Year
1977																			1977
1978																			1978
1979																			1979
1980																			1980
1981																			1981
1982																			1982
1983																			1983
1984																			1984
1985																			1985
1986																			1986
1987																			1987
1988																			1988
1989																			1989
1990																			1990
1991																			1991
1992																			1992
1993																			1993
1994																			1994
1995																			1995
1996																			1996
1997																			1997
1998																			1998
1999				1.110	4.980	6.790	3.580	0.524	0.213	0.232	0.352	0.248			May 24	14.50			1999
2000	0.157	0.110	0.107	0.827	3.900	3.130	1.140	0.353	0.232	0.269	0.218	0.092	0.880		May 17	6.80	0.153	0.065	2000
2001	0.087	0.066	0.067	0.392	2.590	2.790	2.030	0.776	0.179	0.191	0.247	0.148	0.800		Jul 22	8.01	0.109	0.057	2001
2002	0.117	0.096	0.094	0.619	5.710	3.600	0.386	0.097	0.105	0.139	0.067	0.054	0.929		May 29	13.80	0.050	0.045	2002
2003	0.041	0.036	0.053	0.621	1.750	1.030	0.151	0.027	0.021	0.136	0.050	0.036	0.331		May 25	4.48	0.003	0.003	2003
2004	0.036	0.039	0.054	1.180	2.870	1.540	0.232	0.096	0.613	0.331	0.341	0.225	0.630		May 03	5.13	0.039	0.028	2004
2005	0.404	0.546	0.527	1.800	3.170	1.970	1.690	0.282	0.429	1.530	0.570	0.230	1.099		May 16	7.93	0.129	0.129	2005
2006	0.223	0.147	0.096	0.899	3.480	1.400	0.340	0.100	0.101	0.084	0.113	0.104	0.594		May 18	6.89	0.039	0.039	2006
2007	0.088	0.080	0.101	0.699	3.820	2.280	0.346	0.095	0.125	0.633	0.398	0.165	0.740		May 17	6.46	0.043	0.043	2007
2008	0.163	0.113	0.085	0.107	2.700	2.740	0.419	0.163	0.103	0.147	0.199	0.118	0.589		May 17	12.00	0.059	0.059	2008
2009	0.102	0.080	0.068	0.444	4.250	2.200	0.754	0.120	0.116	0.198	0.199	0.087	0.723		May 19	7.49	0.051	0.051	2009
2010	0.068	0.076	0.110	1.000	3.020	2.450	0.516	0.123	0.370	0.236	0.129	0.091	0.684		May 19	7.80	0.083	0.063	2010
2011	0.082	0.072	0.056	0.098			2.340	0.619	0.153	0.127	0.051	0.048					0.100	0.030	2011
2012																			2012
Avg.	0.131	0.122	0.118	0.754	3.520	2.660	1.071	0.260	0.212	0.327	0.226	0.127	0.727	0.727		8.44	0.071	0.051	m^3/s
S. D.	0.101	0.137	0.130	0.466	1.094	1.494	1.046	0.238	0.165	0.387	0.155	0.071	0.203			3.24	0.044	0.030	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.135	0.126	0.124	0.808	3.520	2.660	0.965	0.230	0.217	0.344	0.240	0.133	0.727	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	5	4	4	26	118	86	32	8	7	12	8	4	287	mm	10-Year	12.79	0.014	0.011	m^3/s







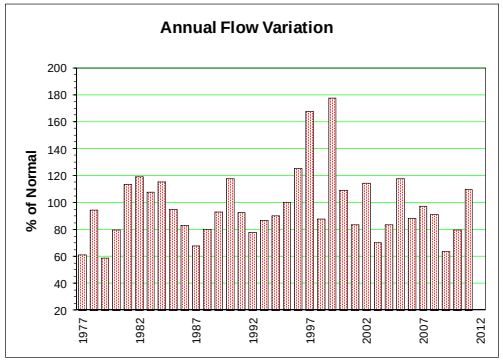


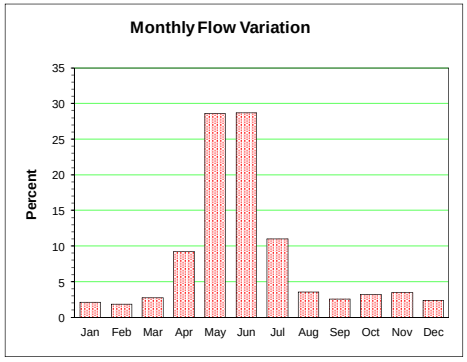
BARRIERE RIVER AT THE MOUTH 08LB020

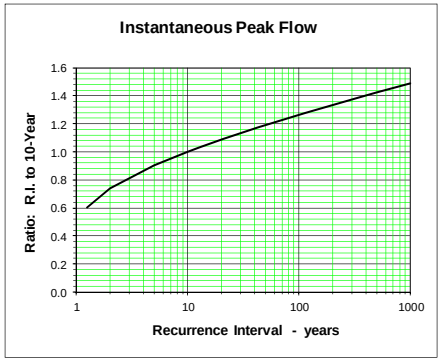
Station Longitude Latitude: -120.1358864 51.1771811

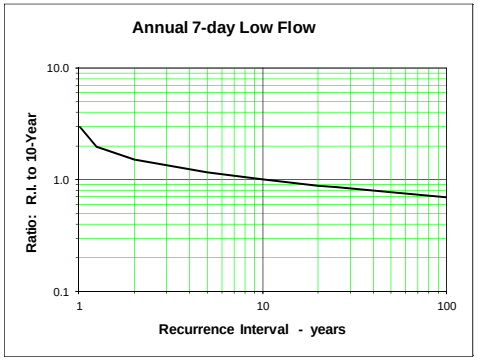
Monthly and Annual Discharge in m^3/s | Drainage Area = 1164.34 km^2 | Median Elevation = 1242 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	3.34	3.10	3.01	11.50	31.20	25.70	9.08	4.34	5.68	4.49	3.52	2.98	9.01		Jun 08	43.17	3.04	2.42	1977
1978	2.68	2.55	3.38	13.50	39.80	53.80	16.30	6.31	12.50	7.50	4.74	3.55	13.90		Jun 06	90.77	3.84	2.20	1978
1979	2.87	2.29	2.39	4.74	35.60	33.20	9.50	2.94	2.80	2.81	2.62	2.38	8.71		Jun 06	60.68	2.44	2.09	1979
1980	1.84	1.99	2.92	12.40	45.40	24.00	15.30	7.62	7.56	6.43	8.19	6.67	11.73		May 07	70.26	6.08	1.43	1980
1981	7.41	6.97	7.18	11.90	54.30	44.60	21.30	6.99	6.38	14.40	12.50	6.20	16.73		May 26	100.55	4.37	4.37	1981
1982	3.80	3.52	3.32	6.17	50.90	68.00	32.00	12.60	9.11	10.30	6.65	3.70	17.57		Jun 05	88.81	7.61	3.06	1982
1983	2.52	2.63	8.50	19.90	49.80	47.10	24.40	6.97	5.76	4.69	12.90	4.64	15.86		Jun 02	101.48	3.94	1.84	1983
1984	4.40	4.10	6.86	17.60	27.70	77.00	44.30	7.12	4.96	4.85	3.12	2.27	17.00		Jun 15	106.12	3.18	2.01	1984
1985	2.71	2.53	2.30	14.70	58.70	55.90	10.50	3.38	3.93	4.89	4.32	3.55	13.98		May 25	114.36	2.16	2.01	1985
1986	2.60	1.94	3.96	11.70	37.40	54.40	13.90	5.91	3.43	5.21	3.43	2.56	12.22		Jun 02	126.72	2.46	1.64	1986
1987	2.14	2.13	5.97	14.60	53.30	26.10	5.87	3.15	1.71	1.16	1.85	1.84	10.04		May 10	82.83	1.49	0.94	1987
1988	1.49	1.72	2.17	18.30	45.40	36.20	13.40	4.49	3.25	5.42	6.50	3.57	11.83		May 14	88.70	2.51	1.10	1988
1989	2.80	1.98	2.54	13.40	49.70	43.60	13.00	9.54	6.83	5.01	9.29	6.25	13.71		May 11	88.19	4.98	1.77	1989
1990	4.72	3.99	4.50	25.50	47.50	75.50	24.00	5.83	3.44	2.95	5.86	4.43	17.35		Jun 12	114.36	2.21	2.11	1990
1991	3.14	4.93	4.79	16.70	50.50	43.00	18.80	6.44	6.32	2.84	2.98	2.68	13.62		May 21	100.86	3.65	2.40	1991
1992	2.55	3.59	9.92	19.70	44.70	28.70	9.92	3.70	2.89	3.71	5.13	2.66	11.44		May 27	73.46	2.05	2.05	1992
1993	2.39	2.27	2.43	14.70	65.00	30.50	10.90	8.46	5.84	3.36	3.58	3.09	12.79		May 15	113.33	3.58	1.70	1993
1994	3.42	2.82	4.75	30.50	55.50	34.60	13.00	3.99	2.68	2.33	2.86	2.62	13.29		May 14	84.27	2.09	1.91	1994
1995	2.85	2.79	3.70	11.40	52.70	49.30	9.91	10.50	5.03	7.21	10.00	10.90	14.74		May 30	93.80	3.24	2.19	1995
1996	6.66	4.57	6.68	24.40	44.70	72.40	27.50	6.31	6.06	6.20	9.75	6.85	18.48		Jun 05	119.00	3.62	3.62	1996
1997	4.79	4.73	5.17	20.60	76.20	85.10	39.20	11.40	11.10	16.90	13.40	7.21	24.73		Jun 01	176.00	6.05	3.90	1997
1998	4.84	5.65	9.93	21.20	64.10	25.40	8.39	2.84	2.01	3.02	3.94	3.35	12.95		May 07	83.90	1.84	1.84	1998
1999	3.92	3.37	4.70	20.90	54.10	107.00	70.70	15.30	6.62	5.55	12.20	8.55	26.15		Jun 20	149.00	5.44	3.19	1999
2000	4.91	3.96	4.84	18.50	43.30	64.80	27.10	7.51	4.86	4.77	5.10	3.24	16.06		Jun 08	92.83	3.97	2.75	2000
2001	2.88	2.38	2.71	7.39	36.90	46.50	22.70	9.79	3.57	3.49	4.86	4.33	12.31		May 29	96.90	2.82	2.27	2001
2002	3.55	2.93	2.50	16.20	55.80	80.50	23.70	5.34	3.48	2.91	2.67	2.56	16.86		Jun 16	113.00	3.10	2.22	2002
2003	2.20	2.14	2.57	12.00	34.30	46.00	8.46	2.19	1.62	5.71	4.73	2.64	10.39		Jun 02	81.50	1.60	1.60	2003
2004	2.08	2.26	2.91	21.50	45.50	30.60	8.50	3.73	9.01	6.73	8.05	6.87	12.31		May 05	57.00	2.74	1.84	2004
2005	11.60	14.60	12.00	25.50	56.70	32.80	18.10	5.56	4.44	12.20	9.97	4.97	17.38		May 17	113.00	3.95	3.24	2005
2006	6.86	4.54	4.51	16.90	62.80	39.40	7.55	2.89	2.45	2.40	2.88	2.35	13.00		May 24	140.00	2.37	1.90	2006
2007	2.51	2.38	4.50	16.80	47.80	56.00	11.50	3.68	2.54	8.83	8.74	6.14	14.31		Jun 05	116.00	2.36	1.91	2007
2008	3.56	3.41	3.39	6.80	56.50	52.30	12.70	4.49	3.63	4.22	6.54	3.73	13.45		May 21	120.00	3.47	2.19	2008
2009	3.18	2.55	2.42	8.34	34.90	39.40	9.98	2.73	1.91	2.06	2.81	2.23	9.39		May 31	74.30	1.81	1.42	2009
2010	2.33	2.50	3.01	11.50	36.00	53.20	13.90	3.53	4.64	4.20	3.17	2.84	11.74		May 20	88.30	2.56	2.09	2010
2011	2.61	2.82	2.69	7.10	49.90	72.10	33.60	10.20	3.21	3.32	3.20	2.50	16.16		May 27	96.20	2.87	2.22	2011
2012																			2012
Avg.	3.66	3.50	4.55	15.56	48.4	50.1	18.83	6.22	4.89	5.49	6.06	4.20	14.32	14.57		98.85	3.30	2.21	m^3/s
S. D.	1.97	2.26	2.47	6.10	10.58	19.91	13.08	3.16	2.61	3.45	3.39	2.11	3.80			26.11	1.39	0.74	m^3/s
Normal	3.83	3.66	4.82	16.51	49.76	51.53	19.17	6.21	4.65	5.58	6.33	4.29	14.72	m^3/s					
Normal	9	8	11	37	114	115	44	14	10	13	14	10	399	mm	10-Year	130.54	1.98	1.41	m^3/s







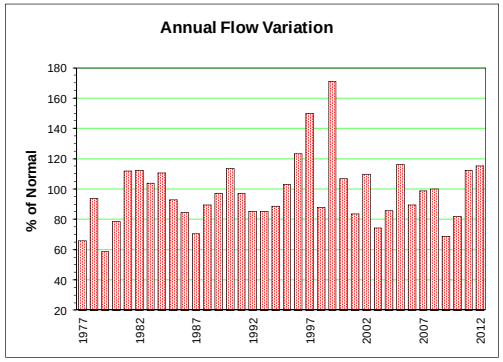


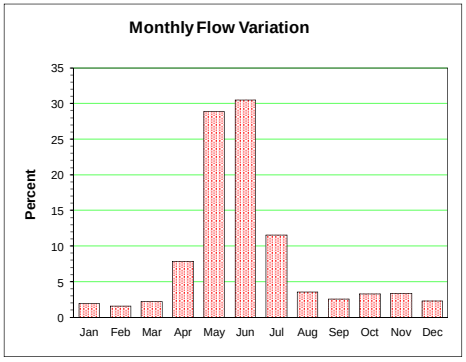
BARRIERE RIVER BELOW SPRAGUE CREEK 08LB069

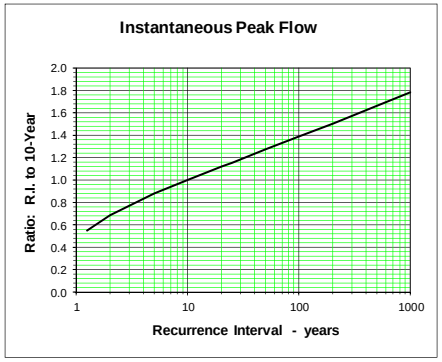
Station Longitude Latitude: -119.936913 51.245392

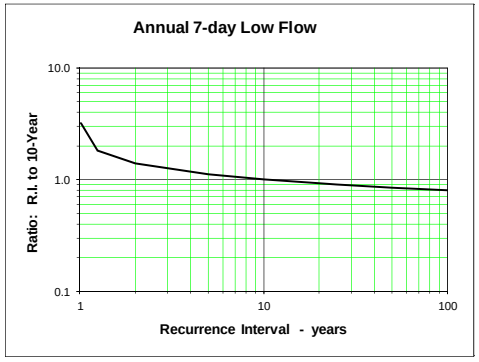
Monthly and Annual Discharge in m^3/s | Drainage Area = 628.83 km^2 | Median Elevation = 1486 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	1.96	2.06	1.93	8.86	25.70	23.40	7.32	3.97	5.53	4.54	3.26	2.40	7.59		Jun 08	40.80	2.75	1.82	1977
1978	1.85	1.62	2.23	9.33	30.10	45.50	12.40	4.95	9.57	5.48	3.69	2.58	10.78		Jun 06	79.00	3.26	1.49	1978
1979	1.74	1.35	1.40	3.23	27.70	28.00	7.90	1.99	1.99	2.22	1.88	1.52	6.77		May 27	47.30	1.53	1.26	1979
1980	1.25	1.43	1.83	9.48	37.10	19.00	11.50	5.41	5.83	4.90	6.04	4.19	9.03		May 06	55.80	4.47	0.87	1980
1981	5.38	5.08	4.98	8.67	42.30	34.70	17.30	5.24	4.58	11.80	9.53	4.33	12.87		May 26	86.70	3.53	3.44	1981
1982	2.82	2.52	2.26	3.82	35.50	53.30	24.80	8.45	6.73	8.05	4.29	2.19	12.93		Jun 15	71.22	5.06	1.91	1982
1983	2.25	2.16	5.02	11.60	39.70	40.10	19.60	4.86	4.33	3.64	6.52	3.19	11.95		May 30	89.38	3.35	1.82	1983
1984	3.10	2.91	3.37	8.68	17.10	64.00	34.90	6.00	4.18	3.97	2.77	1.93	12.72		Jun 15	98.05	2.85	1.48	1984
1985	2.09	1.75	1.50	8.20	42.40	45.90	9.38	3.08	3.75	4.60	3.42	2.24	10.72		May 25	93.10	2.13	1.35	1985
1986	1.79	1.51	2.82	7.94	28.70	43.60	12.80	4.96	2.96	4.40	3.19	2.07	9.74		May 31	105.00	2.12	1.28	1986
1987	1.69	1.50	4.16	11.00	42.10	22.60	5.32	2.90	1.41	1.02	1.81	1.73	8.15		May 10	67.60	1.16	0.98	1987
1988	1.15	1.37	1.79	15.10	39.60	33.30	11.80	3.73	2.83	4.72	5.21	2.89	10.30		May 14	77.60	2.31	0.99	1988
1989	2.14	1.35	1.61	9.23	39.60	38.20	11.70	8.72	5.44	3.95	7.65	4.45	11.21		May 10	65.90	3.51	1.16	1989
1990	3.10	2.46	2.72	19.20	36.90	56.50	19.30	4.16	2.70	2.52	4.70	2.93	13.10		Jun 12	79.80	1.94	1.81	1990
1991	1.86	2.83	3.04	11.40	40.80	39.10	17.20	5.55	5.66	2.25	2.26	1.89	11.18		May 21	79.50	3.18	1.47	1991
1992	1.69	2.58	6.98	16.30	40.20	25.90	8.39	2.99	2.65	3.78	4.11	2.36	9.84		May 27	67.10	1.63	1.54	1992
1993	1.84	1.72	1.83	9.04	53.20	22.90	8.48	6.59	4.38	2.45	2.52	2.08	9.82		May 16	104.00	2.61	1.33	1993
1994	2.26	1.96	3.05	21.10	41.10	30.90	11.10	3.25	2.34	1.82	1.98	1.66	10.24		May 12	57.80	1.76	1.48	1994
1995	1.82	1.76	2.22	7.11	40.40	43.60	8.63	9.61	3.89	6.08	8.10	8.51	11.85		May 31	80.60	2.59	1.42	1995
1996	4.37	3.11	4.33	16.90	31.90	58.40	24.50	4.92	4.76	4.48	8.30	4.92	14.22		Jun 05	101.00	2.58	2.30	1996
1997	2.71	2.34	2.65	11.40	56.40	59.00	27.30	7.86	8.60	14.10	9.36	4.69	17.27		May 31	158.00	3.96	2.03	1997
1998	3.05	3.73	5.85	13.50	55.30	22.70	5.85	1.95	1.30	2.18	2.94	2.61	10.13		May 07	73.28	1.23	1.23	1998
1999	2.90	2.49	3.15	13.20	40.10	81.70	54.80	12.20	4.87	4.21	9.62	6.16	19.67		Jun 17	125.00	3.80	2.38	1999
2000	3.68	2.78	3.00	11.40	33.80	52.90	22.90	5.08	3.44	3.47	3.37	2.03	12.31		Jun 08	68.20	2.77	1.74	2000
2001	1.70	1.26	1.50	4.26	29.70	39.20	18.80	6.86	2.57	2.66	3.71	3.02	9.62		May 28	79.80	2.04	1.14	2001
2002	2.38	2.02	1.70	9.47	39.80	65.60	19.10	3.74	2.46	2.06	1.76	1.69	12.66		Jun 16	96.80	2.19	1.35	2002
2003	1.46	1.29	1.54	8.34	28.60	40.90	6.54	1.62	1.13	5.15	3.91	2.11	8.55		Jun 02	71.70	1.08	1.08	2003
2004	1.56	1.63	2.07	16.40	38.80	26.00	6.70	2.81	7.21	5.03	5.85	4.60	9.89		May 04	50.20	1.89	1.39	2004
2005	8.01	8.98	6.80	17.40	47.70	28.30	14.50	4.11	3.29	10.10	6.98	3.85	13.36		May 16	97.00	2.69	2.69	2005
2006	4.61	3.03	2.59	10.70	51.50	34.80	5.81	2.37	1.70	1.66	2.57	2.09	10.32		May 23	114.00	1.45	1.45	2006
2007	1.70	1.41	2.81	11.40	37.80	47.10	11.10	2.77	1.94	6.87	6.60	5.02	11.40		Jun 05	94.96	1.69	1.35	2007
2008	2.71	2.45	2.54	4.32	46.70	48.10	12.50	3.90	2.64	3.75	5.72	3.01	11.54		May 20	104.00	2.21	1.78	2008
2009	2.32	1.84	1.73	5.47	28.70	36.30	8.55	2.36	1.67	1.81	2.54	1.95	7.95		May 31	67.30	1.57	1.23	2009
2010	1.71	1.71	2.23	8.70	27.00	45.60	11.30	2.75	3.79	3.59	2.77	2.17	9.44		May 19	73.30	1.89	1.62	2010
2011	2.13	2.45	2.46	4.00	36.80	63.00	28.00	6.61	2.56	2.76	2.40	1.89	12.95		Jun 09	79.70	2.27	1.73	2011
2012	1.80	1.77	1.71	12.60	41.00	64.10	22.20	4.31	1.90	2.11	3.52	2.55	13.28		Jun 13	85.70	1.60	1.47	2012
Avg.	2.52	2.34	2.87	10.52	38.1	42.3	15.56	4.80	3.79	4.39	4.58	3.04	11.26	11.55		82.95	2.46	1.58	m^3/s
S. D.	1.33	1.39	1.46	4.41	8.62	15.05	9.97	2.37	2.03	2.83	2.38	1.50	2.55			22.84	0.95	0.51	m^3/s
Normal	2.66	2.45	3.06	11.04	39.11	42.71	15.70	4.85	3.64	4.54	4.80	3.15	11.50	m^3/s					
Normal	11	10	13	46	167	176	67	21	15	19	20	13	577	mm	10-Year	118.22	1.46	1.05	m^3/s







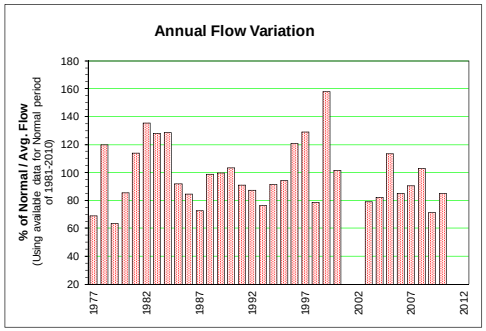


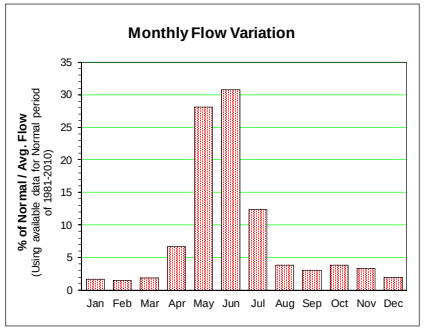
HARPER CREEK NEAR THE MOUTH 08LB076

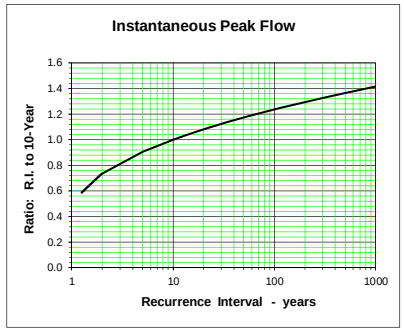
Station Longitude Latitude: -119.881691 51.359012

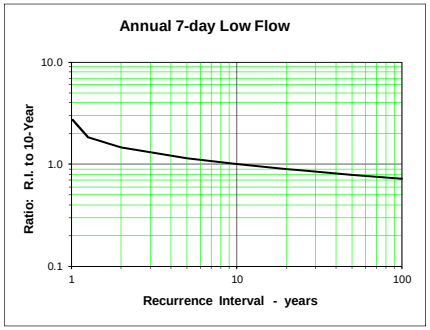
Monthly and Annual Discharge in m^3/s | Drainage Area = 166.12 km^2 | Median Elevation = 1677 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	0.58	0.60	0.78	3.39	7.99	8.37	3.36	1.66	2.55	1.65	1.08	0.80	2.74	Jun 07	20.90	0.93	0.52	1977
1978	0.78	0.57	0.82	3.97	18.60	16.90	4.90	1.88	4.40	2.12	1.25	0.80	4.76	Jun 04	36.50	1.11	0.51	1978
1979	0.60	0.50	0.62	1.55	9.51	9.88	2.88	0.92	1.06	1.19	0.82	0.66	2.52	Jun 02	26.10	0.70	0.46	1979
1980	0.47	0.66	0.55	4.53	13.70	6.66	4.10	2.11	2.44	1.90	2.38	1.27	3.41	May 06	31.10	1.71	0.31	1980
1981	1.42	1.14	1.36	2.55	15.70	11.80	6.54	1.81	1.86	4.78	3.46	1.64	4.53	May 25	44.70	1.23	0.85	1981
1982	0.88	0.80	0.73	1.24	12.20	23.30	11.00	3.84	3.25	3.87	2.14	1.02	5.37	Jun 14	37.50	2.25	0.68	1982
1983	1.22	1.25	1.83	4.40	17.10	16.30	8.48	2.07	2.18	1.85	3.21	1.04	5.09	May 30	46.00	1.48	0.68	1983
1984	0.98	0.92	1.08	2.77	7.24	25.60	14.40	2.57	2.12	1.88	1.13	0.69	5.11	Jun 14	42.70	1.58	0.47	1984
1985	0.57	0.48	0.57	2.40	14.00	15.10	4.19	1.14	1.54	1.82	1.21	0.72	3.65	Jun 04	37.60	0.89	0.41	1985
1986	0.63	0.67	0.80	2.40	11.30	14.70	4.14	1.28	1.11	1.51	0.99	0.70	3.36	May 31	45.80	0.81	0.55	1986
1987	0.49	0.48	1.13	4.03	15.10	7.80	1.91	1.12	0.51	0.59	0.64	0.58	2.88	May 01	33.40	0.47	0.37	1987
1988	0.40	0.44	0.55	4.98	14.40	12.70	5.55	1.58	1.39	2.25	1.96	0.92	3.93	May 13	42.40	0.98	0.34	1988
1989	0.72	0.57	0.63	3.79	13.40	13.90	3.31	3.35	1.93	1.68	2.68	1.46	3.96	Jun 06	29.86	1.20	0.46	1989
1990	1.05	0.81	0.73	4.56	11.50	18.20	6.46	1.37	0.89	0.99	1.70	0.94	4.10	May 29	32.40	0.75	0.62	1990
1991	0.63	0.93	0.87	3.67	12.00	12.80	5.85	2.42	1.93	0.78	0.71	0.61	3.61	May 19	34.00	1.07	0.53	1991
1992	0.61	0.76	1.92	6.24	13.60	9.42	2.89	1.13	1.15	1.58	1.45	0.92	3.48	May 26	39.10	0.80	0.56	1992
1993	0.51	0.46	0.52	2.51	15.90	7.37	3.02	2.18	1.33	0.87	0.77	0.63	3.03	May 13	35.60	0.82	0.36	1993
1994	0.61	0.50	0.83	6.72	14.80	11.30	4.53	1.24	0.88	0.76	0.68	0.61	3.63	May 11	25.40	0.67	0.44	1994
1995	0.55	0.58	0.71	2.23	13.90	13.00	3.29	3.45	1.36	2.18	2.04	1.32	3.73	May 29	32.20	0.94	0.45	1995
1996	0.79	0.74	1.15	4.61	10.00	20.70	9.34	2.38	2.38	1.87	2.33	1.26	4.79	Jun 03	37.50	1.67	0.49	1996
1997	0.78	0.63	0.66	2.20	17.00	17.20	8.82	2.65	2.91	4.57	2.53	1.29	5.13	May 31	63.30	1.28	0.55	1997
1998	0.88	0.94	1.24	3.55	17.20	7.07	2.33	0.78	0.52	1.02	0.94	0.87	3.13	May 13	25.00	0.49	0.49	1998
1999	0.69	0.68	0.85	3.55	12.30	26.90	17.90	4.78	1.80	1.28	2.79	1.50	6.27	Jun 16	48.30	1.43	0.67	1999
2000	0.99	0.73	0.69	3.05	9.95	18.40	8.07	1.92	1.41	1.48	1.15	0.59	4.03	Jun 05	28.50	1.15	0.47	2000
2001	0.53	0.43	0.54	1.36	9.18	11.80	6.88	2.20	0.94	0.89				Jul 18	31.60	0.75		2001
2002				2.20	12.20	23.00	6.66	1.42	1.02	0.87	0.80	0.73		Jun 14	39.70	0.88		2002
2003	0.57	0.47	0.59	3.03	11.20	14.60	2.38	0.56	0.44	2.25	1.03	0.60	3.15	May 25	30.90	0.39	0.39	2003
2004	0.43	0.39	0.57	4.55	12.20	9.80	2.80	1.01	2.87	1.49	1.72	1.39	3.27	May 26	19.00	0.61	0.32	2004
2005	2.27	2.46	1.90	4.60	16.70	11.10	4.92	1.32	1.21	4.25	2.13	1.11	4.51	May 16	52.10	0.90	0.73	2005
2006	1.66	1.00	0.93	2.89	17.10	11.10	2.12	0.88	0.75	0.62	0.81	0.49	3.38	May 23	48.00	0.56	0.43	2006
2007	0.42	0.39	0.52	2.35	11.90	16.20	3.52	0.95	0.90	2.79	1.89	1.25	3.60	Jun 04	47.70	0.78	0.37	2007
2008	0.79	0.85	0.85	1.13	17.10	16.00	5.19	1.50	0.95	1.61	2.19	0.90	4.10	Jun 02	48.50	0.82	0.57	2008
2009	0.71	0.58	0.53	1.25	9.71	14.00	3.40	0.81	0.67	0.81	0.89	0.63	2.84	May 30	37.10	0.47	0.47	2009
2010	0.67	0.74	0.92	2.80	9.42	15.30	4.52	1.12	1.79	1.35	1.04	0.76	3.37	Jun 02	40.00	0.78	0.58	2010
2011																		2011
2012																		2012
Avg.	0.78	0.73	0.88	3.27	13.09	14.36	5.58	1.81	1.60	1.81	1.59	0.93	3.89	3.98		37.37	0.98	0.50	m^3/s
S. D.	0.39	0.38	0.39	1.37	3.00	5.20	3.53	0.96	0.89	1.09	0.79	0.32	0.88			9.51	0.41	0.13	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.81	0.75	0.90	3.25	13.18	14.88	5.81	1.83	1.47	1.82	1.62	0.94	3.96	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	13	11	15	51	212	232	94	29	23	29	25	15	753	mm	10-Year	50.55	0.550	0.313	m^3/s







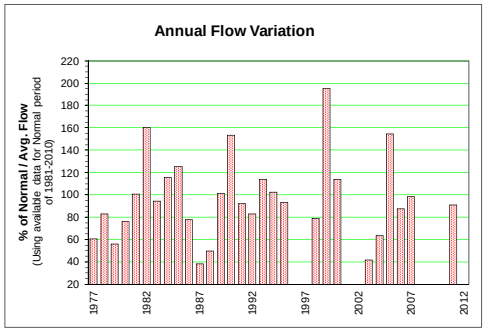


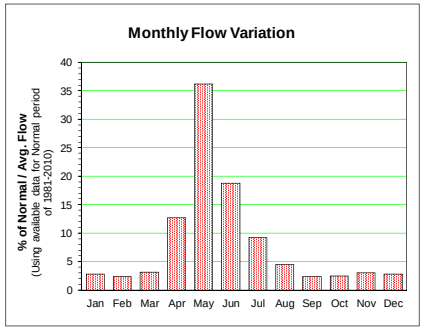
LEMIEUX CREEK NEAR THE MOUTH 08LB078

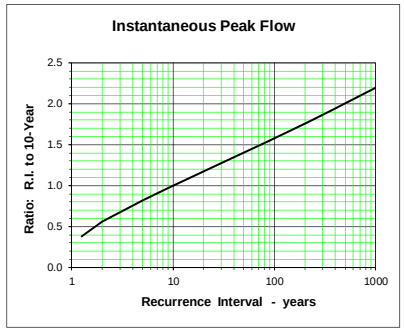
Station Longitude Latitude: -120.201954 51.427573

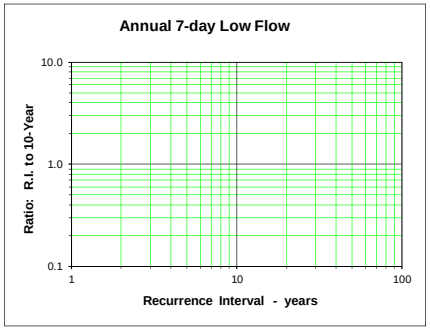
Monthly and Annual Discharge in m^3/s | Drainage Area = 537.37 km^2 | Median Elevation = 1258 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	0.98	0.92	0.90	3.05	8.18	3.58	1.84	0.65	0.58	0.47	0.68	0.89	1.90	May 12	11.00	0.285	0.285	1977
1978	0.58	0.47	0.57	3.56	12.90	5.87	1.93	0.88	1.54	1.03	0.98	0.79	2.60	May 21	16.50	0.609	0.339	1978
1979	0.64	0.60	0.59	1.17	11.40	4.98	1.19	0.11	0.06	0.07	0.08	0.12	1.76	May 09	14.01	0.023	0.023	1979
1980	0.20	0.23	0.57	1.77	5.95	4.32	5.09	2.59	2.33	2.01	1.51	1.90	2.38	May 06	9.34	2.104	0.165	1980
1981	1.68	1.15	1.45	3.17	12.00	7.18	4.54	1.98	0.98	1.24	1.32	1.05	3.16	May 16	15.88	0.840	0.806	1981
1982	0.59	0.86	0.98	1.43	20.90	9.13	7.98	7.21	4.24	3.02	1.83	1.57	5.02	May 18	37.99	3.296	0.503	1982
1983	1.18	1.08	1.88	5.58	11.90	3.93	3.94	1.78	1.14	0.59	1.03	1.23	2.95	May 07	17.44	0.851	0.485	1983
1984	1.13	1.17	1.34	3.70	13.80	13.80	3.82	2.01	0.75	0.74	0.70	0.56	3.63	May 21	26.05	0.494	0.471	1984
1985	0.85	0.77	0.73	3.41	22.80	13.60	1.93	0.56	0.38	0.51	0.79	0.53	3.92	May 25	43.80	0.309	0.309	1985
1986	0.55	0.57	0.67	2.17	12.40	6.89	2.35	1.13	0.50	0.54	0.64	0.62	2.43	May 29	24.70	0.362	0.362	1986
1987	0.61	0.51	0.84	2.67	7.14	1.53	0.47	0.20	0.07	0.07	0.10	0.09	1.20	May 02	15.60	0.057	0.050	1987
1988	0.15	0.21	0.31	3.60	7.71	2.36	0.86	0.46	0.36	0.74	1.00	0.94	1.56	May 14	15.40	0.216	0.051	1988
1989	0.99	0.55	0.58	3.24	13.70	3.73	2.55	3.31	2.46	1.32	3.17	2.28	3.18	May 11	23.30	1.283	0.494	1989
1990	1.73	1.35	1.48	10.10	10.00	19.70	7.69	2.09	0.69	0.51	1.18	1.17	4.80	Jun 12	49.50	0.459	0.411	1990
1991	1.05	1.09	1.11	5.35	13.80	5.11	2.62	1.35	0.95	0.43	0.72	0.92	2.89	May 14	21.50	0.637	0.321	1991
1992	0.84	1.02	2.37	8.86	10.40	2.69	2.03	0.79	0.33	0.31	0.84	0.76	2.60	Apr 30	26.40	0.286	0.226	1992
1993	0.85	0.65	0.61	4.77	21.20	5.12	3.44	2.40	1.10	0.61	0.78	0.86	3.56	May 15	45.30	0.643	0.502	1993
1994	0.97	0.90	1.10	14.80	12.10	4.13	2.09	1.07	0.40	0.27	0.40	0.39	3.22	Apr 23	34.30	0.259	0.235	1994
1995	0.59	0.69	0.78	2.57	15.90	4.12	1.12	2.10	1.23	1.03	2.05	2.73	2.93	May 12	29.20	0.738	0.352	1995
1996	1.93	1.64	1.85							1.50								1996
1997										1.50	2.03	1.28						1997
1998	1.12	1.13	1.59	5.65	11.80	3.29	2.86	0.66	0.23	0.24	0.48	0.54	2.48	May 04	22.40	0.162	0.162	1998
1999	1.07	0.64	1.08	6.24	21.00	18.50	14.40	4.11	1.79	0.96	1.43	1.69	6.11	May 26	36.64	1.243	0.491	1999
2000	1.32	1.02	1.28	5.88	16.10	8.31	3.88	1.58	0.79	0.78	1.07	0.64	3.56	May 03	24.91	0.595	0.484	2000
2001	0.70	0.58	0.76	2.06	9.72	7.83	5.15	4.18	0.71	0.88				May 17	14.50	0.455		2001
2002				3.85	19.40	11.90	2.36	0.48	0.31	0.30	0.36	0.40		May 23	34.90	0.270		2002
2003	0.46	0.39	0.55	2.80	7.04	3.40	0.69	0.05	0.01	0.06	0.10	0.05	1.30	May 05	8.53	0.005	0.005	2003
2004	0.08	0.16	0.36	3.95	6.70	4.64	1.23	0.30	1.44	1.31	1.81	1.91	1.99	May 05	11.00	0.135	0.032	2004
2005	2.72	3.70	3.27	9.13	12.10	6.53	7.32	2.20	1.44	4.06	3.77	1.88	4.85	Apr 27	25.20	1.116	1.116	2005
2006	2.17	1.63	1.69	6.90	12.30	5.12	1.33	0.40	0.28	0.22	0.48	0.38	2.74	May 24	20.70	0.172	0.172	2006
2007	0.46	0.58	0.93	5.71	14.60	6.63	1.44	0.39	0.31	1.72	2.34	1.74	3.08	May 10	21.00	0.262	0.262	2007
2008	1.04	0.96	1.00	1.88	16.20	8.48	2.02							May 18	27.40			2008
2009	1.21	0.96	0.92	3.15	14.50	5.48	2.88							May 20	18.30			2009
2010				3.63	7.06	7.02	2.27	0.46	0.55	0.59	0.52	0.60	1.90	Jun 12	12.90	0.266		2010
2011	0.75	0.88	0.76	1.70	11.30	8.83	5.13	2.31	0.81	0.43	0.50	0.62	2.85	May 17	18.70	0.598	0.374	2011
2012																		2012
Avg.	0.97	0.91	1.09	4.47	12.85	6.90	3.35	1.61	0.93	0.91	1.12	1.00	2.99	3.02		23.46	0.614	0.339	m^3/s
S. D.	0.58	0.63	0.62	2.90	4.50	4.32	2.79	1.53	0.88	0.85	0.87	0.67	1.15			10.64	0.668	0.242	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1.04	0.96	1.17	4.87	13.37	7.15	3.40	1.66	0.90	0.93	1.19	1.03	3.13	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	5	4	6	23	67	34	17	8	4	5	6	5	184	mm	10-Year	37.98			m^3/s









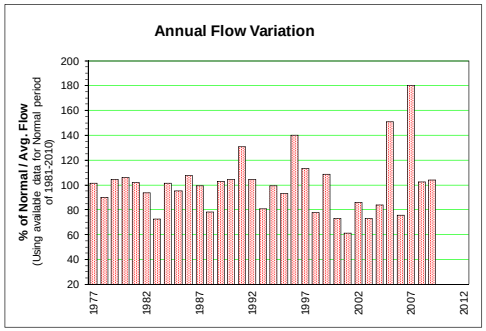
Zone 25 Eastern South Coast Mountains

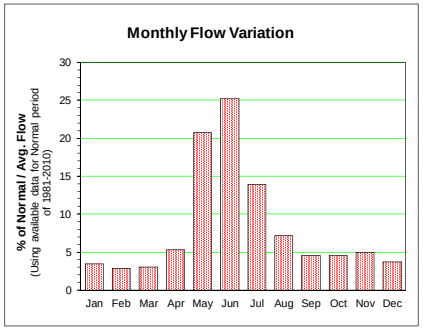
ATNARKO RIVER NEAR THE MOUTH 08FB006

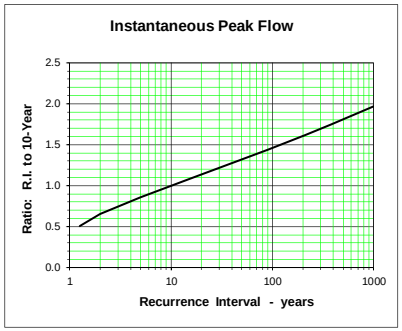
Station Longitude Latitude: -126.004448 52.360329

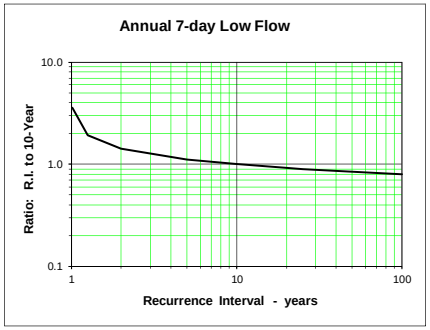
Monthly and Annual Discharge in m^3/s | Drainage Area = 2532.73 km^2 | Median Elevation = 1434 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	26.70	19.40	13.00	26.90	53.80	69.70	37.50	28.90	15.40	12.90	11.30	7.53	26.94	Jun 07	105.00	7.28	7.284	1977
1978	7.33	5.91	6.58	10.70	44.20	90.20	38.50	20.40	10.20	11.30	30.00	11.60	23.93	Jun 05	161.00	5.48	5.481	1978
1979	7.15	6.85	9.60	15.30	87.60	87.80	43.50	25.00	17.00	14.90	9.11	6.92	27.68	Jun 03	180.00	5.50	5.503	1979
1980	6.49	4.79	4.32	7.32	57.30	73.80	38.80	22.00	20.00	18.40	16.00	66.50	28.09	Dec 16	239.00	3.94	3.940	1980
1981	23.70	14.10	11.20	12.70	71.40	66.90	46.70	23.70	14.20	11.10	17.10	10.90	27.07	May 25	155.00	9.02	9.021	1981
1982	9.19	8.55	8.52	7.88	42.40	104.00	43.10	20.70	19.60	14.20	11.40	8.62	24.86	Jun 03	169.00	6.28	6.277	1982
1983	7.74	6.89	6.96	11.20	58.10	51.20	31.90	17.50	12.20	9.56	10.10	6.18	19.21	Jun 02	111.00	5.75	5.753	1983
1984	12.90	13.50	11.20	14.10	31.10	79.10	46.60	25.50	21.50	31.80	20.20	14.80	26.86	Jun 13	139.00	6.00	6.004	1984
1985	10.90	10.20	9.48	16.40	81.30	80.00	38.10	19.40	11.00	12.50	7.56	4.74	25.21	May 26	184.00	4.44	4.444	1985
1986	8.04	7.50	11.20	16.70	58.70	124.00	49.70	25.00	13.90	9.29	8.88	8.62	28.50	Jun 01	217.00	4.50	4.501	1986
1987	10.80	10.00	10.20	17.00	71.20	85.00	46.50	23.60	14.60	9.07	9.13	7.63	26.30	Jun 08	129.00	6.56	6.557	1987
1988	5.31	6.23	5.97	11.50	45.30	52.30	31.50	23.50	17.60	21.80	14.60	12.60	20.73	Sep 29	108.00	4.87	4.873	1988
1989	10.20	9.75	7.88	16.90	67.90	74.50	46.20	25.60	13.60	11.50	24.10	18.40	27.30	Jun 04	146.00	7.37	7.370	1989
1990	14.70	9.80	9.14	24.30	72.00	77.00	40.20	22.00	12.00	10.80	20.10	19.10	27.68	May 28	127.00	8.55	8.551	1990
1991	10.60	13.40	11.10	23.00	87.90	108.00	63.70	31.10	16.00	14.20	20.50	14.80	34.62	Jun 10	178.00	7.36	7.357	1991
1992	14.80	15.60	19.90	35.00	58.20	74.00	45.50	19.40	11.70	14.50	13.20	9.92	27.65	Jun 01	104.00	8.85	8.854	1992
1993	6.15	6.45	7.02	9.45	79.80	48.10	31.00	20.90	12.00	9.38	14.90	10.60	21.44	May 15	178.00	4.40	4.403	1993
1994	9.06	6.88	11.10	35.30	87.30	61.70	36.20	17.70	12.70	13.40	11.90	10.70	26.27	May 11	128.00	6.38	6.384	1994
1995	7.14	7.37	8.12	12.70	94.60	68.60	33.10	19.40	13.50	9.90	10.40	10.60	24.74	May 16	172.00	6.58	6.58	1995
1996	21.60	12.00	12.70	38.40	61.60	118.00	80.30	35.40	22.10	16.10	16.80	10.10	37.10	Jun 03	174.00	8.45	8.45	1996
1997	7.07	7.55	8.57	15.60	90.00	103.00	45.50	23.00	14.00	16.90	15.60	12.30	30.03	May 15	171.00	4.65	4.65	1997
1998	8.88	7.22	7.21	9.92	76.60	46.70	30.70	16.30	11.00	12.60	10.20	8.90	20.64	May 28	123.00	6.50	6.50	1998
1999	8.50	7.71	7.26	12.30	50.10	102.00	54.30	32.00	22.50	19.00	15.30	13.20	28.75	Jun 16	159.00	7.01	7.01	1999
2000	9.74	7.76	6.80	12.70	40.60	63.50	34.40	17.90	11.70	10.00	10.90	5.74	19.32	Jun 04	92.70	4.39	4.39	2000
2001	6.66	5.20	5.00	6.21	29.30	62.20	33.50	16.80	10.30	5.96	7.70	6.22	16.26	Jun 01	103.00	4.06	4.06	2001
2002	6.97	6.41	5.61	9.95	31.70	103.00	44.90	21.80	15.50	10.70	8.64	8.12	22.78	Jun 15	190.00	5.37	5.37	2002
2003	8.08	8.61	6.11	8.56	38.90	67.60	26.60	16.70	13.00	16.80	12.80	8.59	19.38	Jun 07	138.00	5.39	5.39	2003
2004	7.28	4.76	8.13	17.20	56.80	34.50	20.60	15.90	22.00	14.10	42.50	22.60	22.22	Nov 08	128.00	4.50	4.50	2004
2005	24.20	38.40	26.30	43.70	111.00	94.80	43.50	23.20	14.30	21.40	24.00	14.70	39.92	May 15	172.00	11.63	11.63	2005
2006	13.50	10.50	8.06	12.90	53.80	63.00	27.60	14.10	8.71	8.29	10.10	10.10	20.09	Jun 02	105.00	5.87	5.87	2006
2007	9.97	9.42	12.80	22.00	86.90	167.00	109.00	44.30	22.90	35.30	34.20	17.00	47.73	Jun 04	260.00	8.75	8.75	2007
2008	10.20	9.86	8.52	8.85	89.60	77.30	40.80	22.80	13.30	10.50	17.60	16.40	27.22	May 20	199.00	6.33	6.33	2008
2009	11.10	8.64	7.01	12.60	57.80	99.40	45.90	21.30	11.80	12.10	25.20	16.80	27.52	Jun 05	180.00	6.38	6.38	2009
2010	12.70	10.40	9.04	20.20	59.00	79.30	37.70	20.40								8.34		2010
2011																		2011
2012				27.10	82.10	144.00	89.70	39.40	17.50	14.50	13.70	8.73						2012
Avg.	11.04	9.93	9.46	17.22	64.74	82.89	44.38	23.22	14.98	14.26	16.05	12.95	26.49	27.97		155.29	6.38	6.32	m^3/s
S. D.	5.42	5.97	4.19	9.35	20.47	27.72	17.60	6.61	3.97	6.11	7.96	10.37	6.33			40.53	1.76	1.75	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	10.92	10.02	9.60	17.17	64.70	81.19	43.51	22.56	14.80	14.23	16.06	11.69	26.46	m^3/s				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	12	10	10	18	68	83	46	24	15	15	16	12	330	mm	10-Year	248.32	4.44	4.25	m^3/s







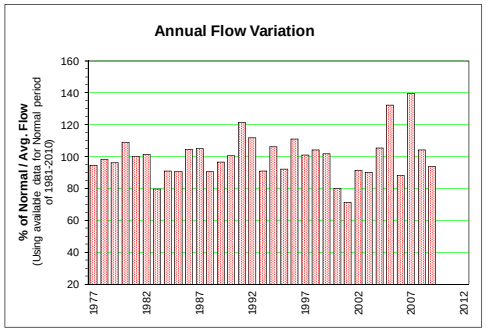


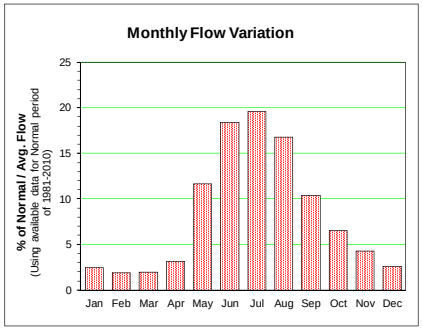
BELLA COOLA RIVER ABOVE BURNT BRIDGE CREEK 08FB007

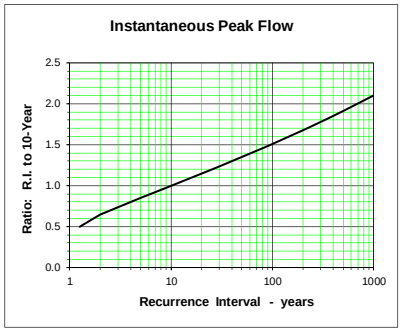
Station Longitude Latitude: -126.157936 52.421806

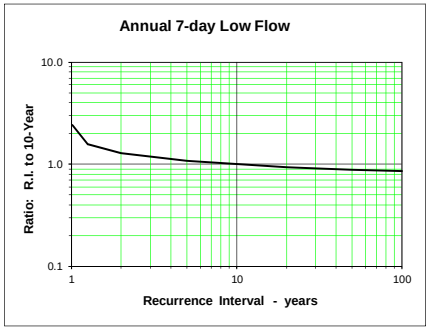
Monthly and Annual Discharge in m^3/s | Drainage Area = 3637.76 km^2 | Median Elevation = 1485 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	57.30	36.70	23.80	46.70	96.80	177.00	163.00	228.00	72.50	48.70	29.90	16.70	83.49	Jun 22	317.00	46.314	13.657	1977
1978	14.20	11.80	14.20	25.40	95.20	203.00	222.00	199.00	71.90	69.90	87.30	21.00	86.74	Nov 07	518.00	41.943	11.357	1978
1979	14.70	12.50	24.70	33.30	149.00	182.00	183.00	190.00	120.00	64.70	18.70	19.40	84.88	Jun 03	394.00	97.614	12.086	1979
1980	16.90	11.80	11.00	18.80	111.00	191.00	195.00	166.00	150.00	77.10	52.00	153.00	96.52	Dec 16	725.00	91.529	9.723	1980
1981	50.10	27.60	19.50	23.30	123.00	131.00	214.00	208.00	126.00	54.50	58.10	21.40	88.58	Aug 11	321.00	60.471	16.700	1981
1982	16.80	14.00	12.20	15.90	82.30	260.00	214.00	159.00	177.00	72.90	30.70	17.20	89.61	Sep 09	601.00	92.857	11.371	1982
1983	17.20	15.50	15.40	24.80	127.00	167.00	155.00	149.00	92.00	38.90	27.10	13.70	70.58	Jun 02	317.00	62.929	12.629	1983
1984	39.40	30.00	23.20	26.40	53.00	163.00	170.00	167.00	104.00	113.00	43.40	29.70	80.41	Oct 08	389.00	67.729	13.443	1984
1985	23.20	18.80	16.50	33.50	137.00	179.00	201.00	168.00	81.70	60.40	23.20	12.30	80.05	May 27	296.00	61.557	11.314	1985
1986	19.80	16.80	28.40	39.30	112.00	273.00	205.00	190.00	106.00	61.10	33.70	19.50	92.44	Jun 01	399.00	60.386	9.957	1986
1987	33.30	24.60	23.10	34.00	132.00	212.00	218.00	154.00	140.00	69.10	49.10	20.30	92.84	Jul 02	356.00	100.600	14.714	1987
1988	13.60	15.40	16.50	28.70	102.00	135.00	160.00	189.00	131.00	98.80	34.20	33.80	80.16	Sep 29	681.00	44.443	12.000	1988
1989	19.90	20.30	11.90	32.40	129.00	185.00	171.00	162.00	95.40	59.40	81.90	53.10	85.49	Jun 05	306.00	72.486	11.486	1989
1990	33.50	20.40	20.20	47.80	128.00	187.00	193.00	183.00	106.00	45.50	58.20	40.90	89.06	Aug 13	284.00	94.371	18.100	1990
1991	25.00	35.30	22.30	41.80	157.00	228.00	231.00	207.00	114.00	113.00	73.80	35.70	107.50	Jun 11	380.00	103.257	19.129	1991
1992	35.80	35.10	39.40	65.00	111.00	227.00	233.00	167.00	115.00	87.80	41.10	26.00	98.80	Jun 30	430.00	58.771	21.471	1992
1993	15.00	16.70	19.40	20.40	173.00	168.00	163.00	162.00	94.90	56.30	45.40	23.80	80.32	May 15	374.00	52.557	12.771	1993
1994	21.70	16.60	28.60	71.80	162.00	165.00	216.00	164.00	147.00	75.00	29.00	24.10	93.92	Oct 01	411.00	111.543	15.714	1994
1995	15.60	16.50	16.30	26.30	171.00	184.00	208.00	137.00	105.00	35.80	29.10	26.00	81.36	May 17	293.00	75.37	13.97	1995
1996	62.30	24.10	26.80	73.70	96.70	221.00	230.00	182.00	104.00	80.40	50.80	22.70	98.12	Jun 04	320.00	58.71	17.70	1996
1997	18.80	22.80	20.70	36.20	154.00	214.00	192.00	168.00	95.60	73.50	42.20	27.30	89.21	Jun 16	317.00	67.00	15.29	1997
1998	20.80	14.50	14.70	18.20	163.00	202.00	230.00	182.00	126.00	80.70	26.40	20.90	92.22	May 28	329.00	81.24	12.90	1998
1999	19.30	16.00	15.50	28.20	85.80	216.00	210.00	239.00	119.00	59.20	39.40	27.10	90.02	Aug 25	541.00	91.00	14.53	1999
2000	19.30	13.90	12.70	24.70	76.00	153.00	172.00	161.00	111.00	57.40	31.90	13.20	70.71	Aug 06	243.00	90.37	9.99	2000
2001	14.60	11.20	11.40	14.20	56.50	141.00	169.00	145.00	96.20	37.20	38.90	18.20	62.96	Jul 23	235.00	73.67	10.67	2001
2002	15.30	13.00	11.80	19.70	64.40	238.00	198.00	164.00	126.00	57.90	36.80	20.80	80.76	Jun 16	404.00	96.40	11.37	2002
2003	18.80	14.70	13.10	22.60	80.20	182.00	169.00	171.00	138.00	89.20	35.20	17.50	79.64	Sep 06	314.00	94.14	11.59	2003
2004	15.20	12.90	15.90	37.20	129.00	150.00	197.00	198.00	119.00	69.50	113.00	59.30	93.31	Nov 08	650.00	73.84	11.77	2004
2005	68.90	84.20	64.40	76.40	189.00	233.00	211.00	202.00	95.00	78.10	65.40	32.30	116.90	Aug 01	386.00	53.49	22.76	2005
2006	25.70	20.20	15.10	24.10	105.00	193.00	211.00	143.00	87.60	42.40	37.30	26.40	77.95	Jul 24	313.00	56.83	14.39	2006
2007	30.90	24.90	32.30	43.70	160.00	344.00	345.00	173.00	101.00	116.00	66.00	33.30	123.13	Oct 24	523.00	64.81	20.03	2007
2008	24.60	22.50	22.60	23.80	187.00	182.00	216.00	186.00	86.60	50.00	56.30	45.10	92.31	May 20	438.00	50.83	19.41	2008
2009	19.30	16.40	15.10	29.60	87.10	214.00	202.00	160.00	108.00	54.50	53.40	31.70	82.93	Oct 31	630.00	82.51	14.57	2009
2010					112.00	206.00	215.00	206.00										2010
2011																		2011
2012																		2012
Avg.	25.96	21.45	20.57	34.18	120.50	197.24	202.41	177.32	110.98	68.12	46.63	30.41	88.27	90.04		407.12	73.68	14.20	m^3/s
S. D.	14.53	13.28	10.31	16.58	37.05	42.40	34.07	23.76	23.00	21.23	20.56	24.53	12.11			130.29	19.25	3.47	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	25.99	21.89	20.86	34.61	121.50	198.43	203.97	174.87	112.00	68.53	46.59	27.36	88.32	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	19	15	15	25	89	141	150	129	80	50	33	20	766	mm	10-Year	639.39	50.34	10.54	m^3/s







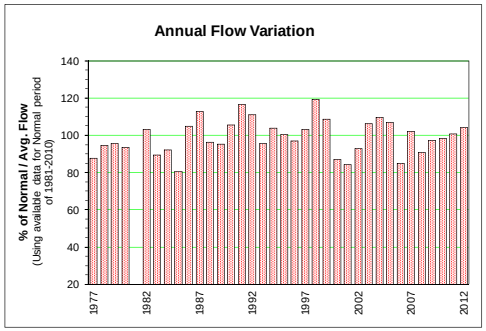


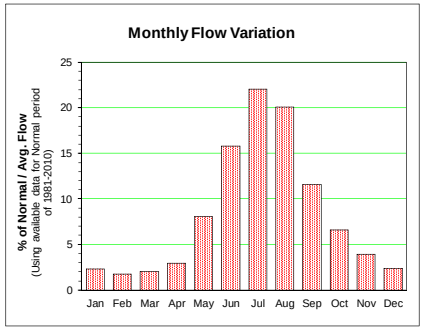
HOMATHKO RIVER AT THE MOUTH 08GD004

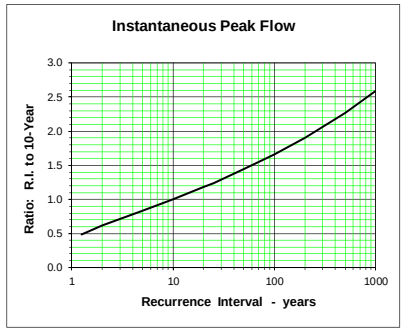
Station Longitude Latitude: -124.918777 50.986965

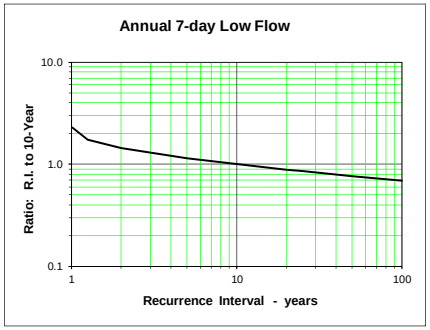
Monthly and Annual Discharge in m^3/s | Drainage Area = 5683.81 km^2 | Median Elevation = 1704 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	84.20	90.80	73.80	103.00	161.00	438.00	531.00	790.00	243.00	128.00	113.00	80.00	237.64	Aug 14	1060.00	142.14	64.91	1977
1978	65.10	45.00	63.20	86.10	158.00	485.00	798.00	650.00	296.00	206.00	138.00	62.70	256.18	Jul 28	1020.00	193.86	36.69	1978
1979	34.60	36.20	98.20	126.00	243.00	403.00	650.00	686.00	444.00	196.00	73.40	92.30	258.65	Jul 21	1010.00	295.71	30.99	1979
1980	51.50	53.40	43.80	87.10	268.00	522.00	630.00	539.00	348.00	164.00	133.00	195.00	253.78	Aug 12	869.00	205.29	37.66	1980
1981	131.00	82.60	57.50	78.90	219.00	297.00	686.00	754.00						Aug 11	1100.00		52.81	1981
1982	54.50	48.10	45.00	58.50	214.00	743.00	780.00	534.00	462.00	246.00	92.30	62.50	279.55	Jun 22	1331.78	252.14	41.40	1982
1983	68.60	79.00	73.50	92.70	323.00	542.00	574.00	587.00	277.00	120.00	108.00	50.30	242.44	Jul 20	1050.00	183.86	46.64	1983
1984	91.10	70.00	73.50	80.10	118.00	413.00	580.00	604.00	370.00	439.00	89.40	54.30	249.62	Oct 09	2900.00	199.29	48.14	1984
1985	48.20	39.00	39.00	89.10	232.00	410.00	705.00	616.00	254.00	111.00	34.80	22.00	218.35	Aug 02	1020.00	199.43	20.39	1985
1986	54.20	52.10	87.20	83.60	330.00	657.00	684.00	756.00	352.00	185.00	82.60	60.70	283.79	May 27	2120.00	169.71	21.70	1986
1987	90.40	84.70	103.00	103.00	272.00	629.00	868.00	600.00	478.00	199.00	152.00	68.80	305.39	Jun 13	1520.00	293.86	44.93	1987
1988	42.20	47.00	58.00	121.00	264.00	426.00	628.00	680.00	424.00	259.00	104.00	68.00	261.17	Sep 07	1150.00	137.43	34.07	1988
1989	46.80	44.00	33.30	100.00	241.00	578.00	570.00	661.00	375.00	182.00	142.00	109.00	258.13	Aug 02	1040.00	254.86	30.26	1989
1990	63.00	37.90	43.40	106.00	220.00	495.00	763.00	735.00	431.00	163.00	249.00	110.00	286.33	Nov 13	1510.00	295.29	32.93	1990
1991	66.10	156.00	68.50	109.00	294.00	552.00	796.00	854.00	418.00	239.00	133.00	89.60	316.03	Aug 09	1870.00	325.71	45.29	1991
1992	96.80	108.00	101.00	143.00	269.00	719.00	768.00	631.00	299.00	288.00	114.00	57.80	300.39	Oct 25	2000.00	140.00	36.86	1992
1993	32.80	53.70	72.70	73.10	424.00	490.00	555.00	644.00	407.00	197.00	74.30	61.30	258.70	Aug 24	1390.00	180.57	26.04	1993
1994	69.80	47.40	82.70	139.00	324.00	434.00	778.00	626.00	488.00	206.00	76.10	80.40	281.13	Oct 02	1380.00	267.00	41.80	1994
1995	58.60	87.10	66.60	97.80	339.00	545.00	717.00	450.00	406.00	184.00	196.00	105.00	272.08	Jul 27	1070.00	308.86	46.26	1995
1996	117.00	77.10	89.40	172.00	177.00	417.00	722.00	617.00	329.00	226.00	135.00	56.30	262.22	Aug 31	1270.00	170.86	41.94	1996
1997	55.50	53.80	65.80	114.00	320.00	552.00	679.00	637.00	380.00	267.00	134.00	72.60	279.21	Aug 14	1350.00	250.29	41.47	1997
1998	71.30	68.40	68.50	74.30	398.00	698.00	916.00	675.00	461.00	229.00	107.00	88.30	323.16	Jul 29	1480.00	319.00	50.96	1998
1999	73.30	67.70	62.30	103.00	200.00	528.00	773.00	936.00	410.00	122.00	160.00	80.10	294.72	Aug 26	2350.00	234.86	54.66	1999
2000	50.20	41.50	43.00	80.20	192.00	457.00	686.00	595.00	375.00	175.00	79.70	47.70	236.11	Jul 29	1300.00	236.14	36.66	2000
2001	48.20	32.90	41.20	59.20	157.00	388.00	604.00	618.00	404.00	129.00	195.00	59.50	228.70	Sep 02	1030.00	275.00	30.64	2001
2002	74.30	44.40	38.40	80.20	194.00	617.00	684.00	556.00	378.00	130.00	123.00	83.70	251.40	Jun 28	1300.00	278.43	35.29	2002
2003	77.70	60.20	70.40	97.20	221.00	571.00	669.00	621.00	423.00	420.00	118.00	79.70	287.35	Oct 19	1540.00	250.14	42.93	2003
2004	103.00	53.30	82.10	140.00	320.00	548.00	722.00	700.00	350.00	217.00	209.00	109.00	297.27	Jun 27	1040.00	214.00	51.29	2004
2005	199.00	112.00	90.90	160.00	338.00	488.00	633.00	656.00	302.00	201.00	137.00	134.00	289.19	Aug 02	1930.00	181.57	58.44	2005
2006	88.70	53.10	47.00	75.60	240.00	522.00	679.00	461.00	284.00	111.00	109.00	73.60	229.90	Jul 25	1180.00	174.43	41.87	2006
2007	60.50	55.70	105.00	107.00	253.00	533.00	842.00	538.00	309.00	260.00	165.00	73.40	276.90	Jul 17	1310.00	181.00	49.33	2007
2008	50.60	43.00	50.10	55.20	295.00	400.00	663.00	610.00	294.00	190.00	169.00	121.00	246.35	Aug 25	1200.00	188.29	37.00	2008
2009	61.50	40.10	39.90	75.30	172.00	495.00	716.00	661.00	498.00	141.00	172.00	77.60	263.76	Sep 20	1440.00	286.57	38.39	2009
2010	96.10	64.60	69.10	90.60	194.00	472.00	665.00	611.00	445.00	283.00	124.00	69.30	266.77	Sep 27	2760.00	212.29	51.00	2010
2011	39.10	63.10	55.10	76.00	201.00	521.00	578.00	631.00	634.00	199.00	139.00	124.00	272.63	Sep 25	2810.00	312.00	27.64	2011
2012	123.00	56.70	56.50	102.00	211.00	518.00	853.00	692.00	359.00	227.00	113.00	61.50	282.37	Jul 19	1390.00	283.57	40.79	2012
Avg.	73.29	62.49	65.52	98.30	249.89	513.97	698.47	644.78	383.06	206.83	128.39	81.17	268.78	269.27	1474.74	231.24	40.83	m^3/s
S. D.	32.53	25.34	20.26	27.38	70.64	97.53	93.87	95.90	81.21	74.26	43.55	31.09	25.06		534.07	55.96	9.98	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	74.70	63.48	65.60	98.62	258.47	520.53	703.50	640.80	382.17	211.00	130.49	76.74	270.56	m^3/s				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	35	27	31	45	122	237	332	302	174	99	60	36	1502	mm	10-Year	2161.78	146.64	27.89	m^3/s







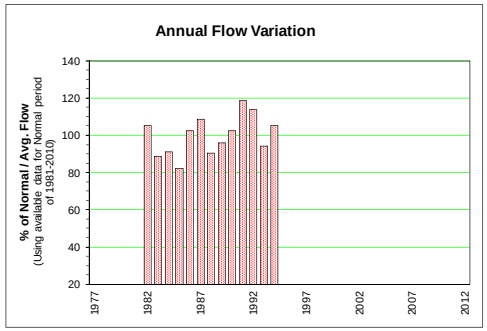


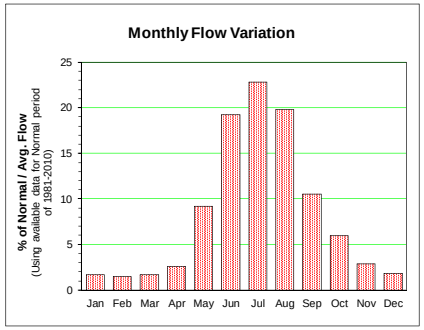
MOSLEY CREEK NEAR DUMBELL LAKE 08GD007

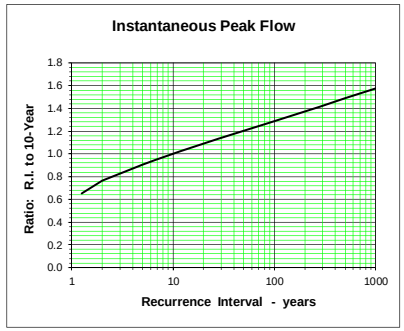
Station Longitude Latitude: -124.931736 51.408206

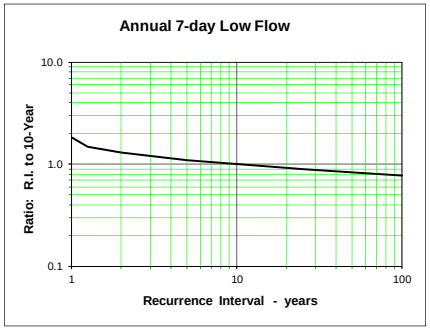
Monthly and Annual Discharge in m^3/s | Drainage Area = 1534.03 km^2 | Median Elevation = 1799 m

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Instantaneous Peak Flow Date	Instantaneous Peak Flow Annual	7-Day Low Flow Jun-Sep	7-Day Low Flow Annual	Year
1977																		1977
1978																		1978
1979																		1979
1980																		1980
1981																		1981
1982	8.40	7.00	6.33	8.63	43.20	158.00	144.00	96.90	81.10	38.00	15.10	9.01	51.51	Sep 09	232.00	48.53	5.77	1982
1983	10.60	11.00	10.10	13.80	63.30	120.00	105.00	99.40	46.90	17.20	13.70	7.50	43.41	Jun 01	233.00	30.53	6.82	1983
1984	12.30	9.48	9.34	12.00	19.00	86.90	116.00	108.00	56.70	73.60	18.50	11.50	44.64	Oct 08	353.00	32.83	7.23	1984
1985	9.39	7.86	7.12	13.20	48.00	87.60	128.00	105.00	39.90	20.40	7.35	4.98	40.19	Aug 01	189.00	30.37	4.66	1985
1986	8.35	7.08	11.70	12.50	60.80	143.00	131.00	125.00	52.90	28.30	11.60	7.02	50.23	May 26	306.00	25.37	4.79	1986
1987	12.50	11.60	13.90	15.20	50.60	126.00	159.00	104.00	79.40	31.10	20.80	10.50	53.14	Jul 01	272.00	51.87	7.05	1987
1988	8.50	8.90	8.01	16.90	48.10	84.60	113.00	110.00	68.50	38.40	14.00	9.70	44.22	Jul 26	190.00	24.03	6.41	1988
1989	7.47	6.92	5.14	14.80	45.90	118.00	108.00	119.00	63.90	28.80	25.10	18.80	47.05	Jul 31	179.00	43.76	4.66	1989
1990	10.70	7.32	7.85	17.90	46.60	102.00	140.00	126.00	69.20	24.30	31.60	15.20	50.18	Aug 12	220.00	59.47	6.63	1990
1991	8.41	14.70	9.47	16.70	58.50	122.00	157.00	158.00	69.90	42.60	21.60	13.40	58.04	Aug 09	324.00	59.26	7.19	1991
1992	14.80	15.50	15.50	23.50	51.30	152.00	154.00	113.00	51.20	46.10	19.40	10.30	55.70	Jun 30	283.00	26.91	7.89	1992
1993	6.53	8.21	10.10	9.88	89.00	97.90	107.00	107.00	61.30	28.70	13.20	11.20	46.15	Aug 23	185.00	29.00	5.33	1993
1994	9.31	7.51	13.10	28.90	67.90	93.20	148.00	113.00	78.60	32.50	12.40	9.60	51.50	Oct 01	221.00	56.11	6.95	1994
1995	9.09	10.50	8.50															1995
1996																		1996
1997																		1997
1998																		1998
1999																		1999
2000																		2000
2001																		2001
2002																		2002
2003																		2003
2004																		2004
2005																		2005
2006																		2006
2007																		2007
2008																		2008
2009																		2009
2010																		2010
2011																		2011
2012																		2012
Avg.	9.74	9.54	9.73	15.69	53.25	114.71	131.54	114.18	63.04	34.62	17.26	10.67	48.92	48.92		245.15	39.85	6.26	m^3/s
S. D.	2.23	2.81	2.96	5.49	16.11	25.18	20.13	15.85	13.02	14.37	6.47	3.60	5.18			57.32	13.64	1.10	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	9.74	9.54	9.73	15.69	53.25	114.71	131.54	114.18	63.04	34.62	17.26	10.67	48.92	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	17	15	17	27	93	194	230	199	107	60	29	19	1006	mm	10-Year	304.79	26.23	4.83	m^3/s







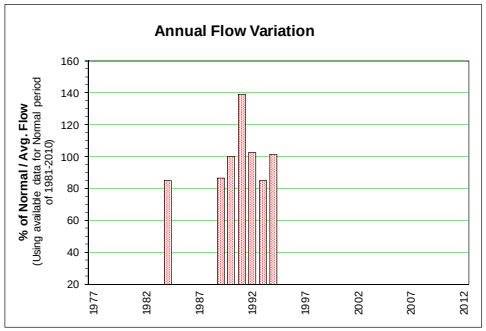


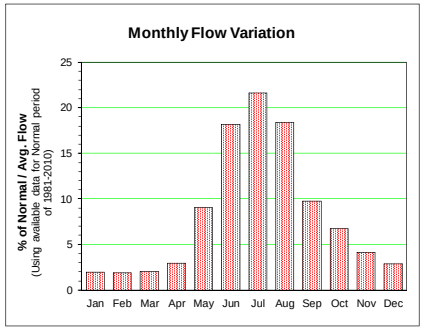
HOMATHKO RIVER BELOW NOSTETUKO RIVER 08GD009

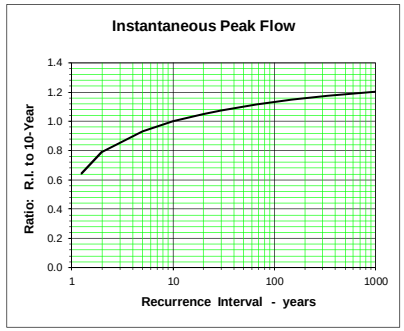
Station Longitude Latitude: -124.506897 51.421112

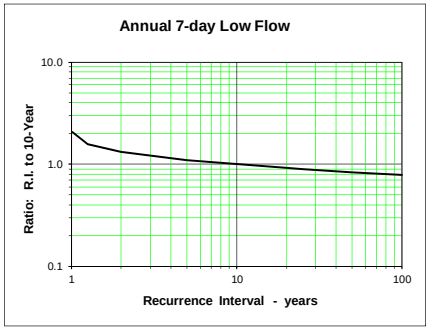
Monthly and Annual Discharge in m^3/s | Drainage Area = 1519.53 km^2 | Median Elevation = 1620 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977																		1977
1978																		1978
1979																		1979
1980																		1980
1981																		1981
1982																		1982
1983																		1983
1984	6.24	5.31	5.08	5.14	8.03	39.30	54.20	45.50	25.10	36.10	13.50	8.59	21.10	Oct 07	207.00	13.414	4.79	1984
1985																		1985
1986																		1986
1987																		1987
1988																		1988
1989	4.23	3.67	3.54	5.75	20.00	53.40	48.80	51.60	29.20	14.80	12.20	10.10	21.55	Jul 31	153.00	21.46	3.34	1989
1990	6.59	5.28	4.51	7.95	20.50	49.60	66.30	58.20	31.90	13.00	20.80	12.50	24.89	Aug 10	235.00	27.06	4.22	1990
1991	7.19	10.40	7.91	11.80	41.70	81.30	94.30	77.40	36.50	22.70	12.50	8.39	34.52	Aug 24	211.00	31.60	6.46	1991
1992	7.03	9.32	9.58	12.60	23.50	66.60	62.60	47.70	23.50	23.00	13.20	6.62	25.49	Oct 23	146.00	16.33	5.43	1992
1993	4.11	4.23	4.75	5.10	37.10	48.20	48.20	45.50	26.80	13.10	7.79	6.64	21.09	Aug 23	82.30	15.53	3.85	1993
1994	5.97	5.08	6.80	15.40	35.70	46.70	69.70	51.70	34.10	15.30	7.87	6.53	25.22	Jul 29	211.00	28.26	4.79	1994
1995	5.91	6.23	6.00														5.35	1995
1996																		1996
1997																		1997
1998																		1998
1999																		1999
2000																		2000
2001																		2001
2002																		2002
2003																		2003
2004																		2004
2005																		2005
2006																		2006
2007																		2007
2008																		2008
2009																		2009
2010																		2010
2011																		2011
2012																		2012
Avg.	5.91	6.19	6.02	9.11	26.65	55.01	63.44	53.94	29.59	19.71	12.55	8.48	24.84	24.83		177.90	21.95	4.78	m^3/s
S. D.	1.17	2.41	1.99	4.15	11.95	14.26	15.98	11.26	4.81	8.37	4.36	2.22	4.71			53.35	7.13	0.99	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	5.91	6.19	6.02	9.11	26.65	55.01	63.44	53.94	29.59	19.71	12.55	8.48	24.84	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	10	10	11	16	47	94	112	95	50	35	21	15	516	mm	10-Year	237.01	13.57	3.57	m^3/s







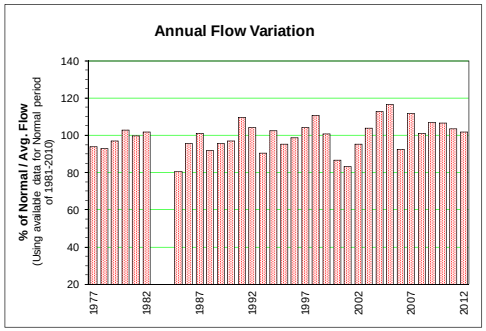


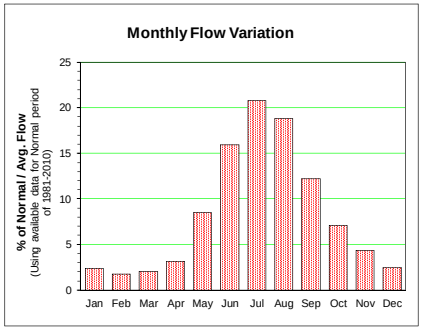
KLINAKLINI RIVER EAST CHANNEL (MAIN) NEAR THE MOUTH 08GE002

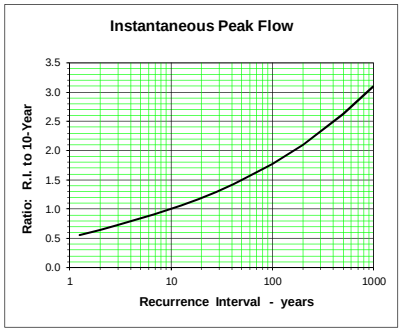
Station Longitude Latitude: -125.595887 51.143498

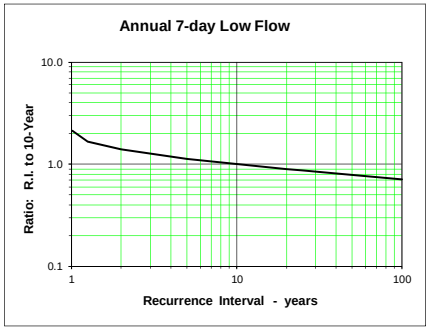
Monthly and Annual Discharge in m^3/s | Drainage Area = 5805.10 km^2 | Median Elevation = 1560 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)		Date	Annual	Jun-Sep	Annual	Year
1977	103.00	106.00	69.90	110.00	205.00	568.00	622.00	871.00	297.00	191.00	129.00	90.00	281.64		Aug 14	1150.00	175.86	58.79	1977
1978	53.50	48.00	67.20	90.10	186.00	535.00	826.00	712.00	352.00	275.00	130.00	51.80	279.11		Aug 08	1080.00	211.00	40.61	1978
1979	36.60	38.70	80.50	99.50	295.00	477.00	700.00	736.00	545.00	253.00	64.60	141.00	290.88		Jul 20	1020.00	399.29	34.93	1979
1980	61.90	63.10	49.40	94.50	293.00	549.00	664.00	618.00	544.00	260.00	175.00	319.00	308.55		Dec 16	1160.00	325.29	42.14	1980
1981	168.00	100.00	69.10	101.00	305.00	374.00	725.00	747.00	472.00	210.00	243.00	57.10	299.23		Aug 11	1100.00	222.57	46.13	1981
1982	50.60	42.90	39.30	56.10	215.00	763.00	814.00	590.00	629.00	286.00	100.00	63.90	305.39		Sep 09	1940.89	353.14	37.06	1982
1983	75.40	76.80	70.80	99.60	342.00	587.00	598.00	569.00							Jun 01	923.00			1983
1984	111.00	79.70	77.60																1984
1985	40.30	35.50	35.00	91.30	262.00	467.00	760.00	638.00	291.00	178.00	48.70	28.50	241.45		Jul 23	973.00	221.57	25.10	1985
1986	61.90	52.90	92.50	93.30	312.00	660.00	670.00	716.00	362.00	208.00	106.00	82.20	286.41		May 27	1357.56	196.43	29.30	1986
1987	89.90	90.00	106.00	118.00	291.00	598.00	750.00	538.00	529.00	231.00	214.00	78.00	303.81		Jul 02	1140.00	332.00	49.66	1987
1988	49.00	52.50	64.90	129.00	281.00	445.00	617.00	697.00	432.00	315.00	122.00	86.50	275.37		Jul 26	956.00	153.57	37.76	1988
1989	63.80	50.90	45.90	116.00	281.00	634.00	606.00	655.00	419.00	227.00	195.00	139.00	287.38		Aug 01	928.00	307.57	38.87	1989
1990	82.00	43.80	51.80	124.00	270.00	539.00	719.00	692.00	445.00	182.00	230.00	94.30	290.93		Nov 12	1120.00	387.86	39.14	1990
1991	60.60	137.00	58.50	125.00	338.00	596.00	784.00	825.00	456.00	297.00	162.00	95.90	329.41		Aug 09	1230.00	376.86	37.63	1991
1992	102.00	110.00	115.00	163.00	289.00	700.00	756.00	622.00	359.00	334.00	126.00	63.70	312.47		Oct 23	1310.00	170.57	43.07	1992
1993	36.00	71.00	83.70	84.40	472.00	516.00	565.00	626.00	403.00	215.00	94.80	72.60	271.54		Aug 23	950.00	206.14	30.83	1993
1994	76.30	54.70	94.50	183.00	356.00	490.00	764.00	626.00	541.00	273.00	99.80	104.00	307.00		Sep 30	1310.00	301.00	49.94	1994
1995	54.10	83.90	63.30	104.00	364.00	604.00	766.00	489.00	442.00	170.00	181.00	99.80	286.22		Jul 26	998.00	333.86	40.50	1995
1996	141.00	75.60	97.30	227.00	214.00	489.00	769.00	671.00	364.00	266.00	153.00	80.30	296.66		Aug 30	1190.00	187.43	52.90	1996
1997	64.00	69.60	77.10	128.00	363.00	623.00	708.00	701.00	440.00	307.00	165.00	87.10	312.75		Jul 09	1020.00	301.14	51.80	1997
1998	71.00	69.00	72.40	81.80	447.00	756.00	882.00	666.00	471.00	267.00	100.00	82.70	332.40		Jul 28	1210.00	335.00	51.30	1998
1999	68.60	61.50	59.20	103.00	203.00	584.00	786.00	862.00	459.00	161.00	158.00	98.20	301.97		Aug 25	1803.01	254.29	55.01	1999
2000	58.10	45.30	52.90	104.00	217.00	484.00	701.00	613.00	430.00	238.00	115.00	56.00	260.44		Jul 28	1090.00	267.14	38.64	2000
2001	65.10	42.30	49.30	75.00	173.00	421.00	631.00	652.00	442.00	157.00	210.00	71.60	249.82		Sep 01	942.00	334.43	38.24	2001
2002	76.10	54.00	45.40	92.80	226.00	682.00	723.00	601.00	467.00	192.00	161.00	95.80	285.85		Jun 27	1442.41	345.57	41.13	2002
2003	88.70	65.90	69.40	108.00	266.00	650.00	701.00	644.00	507.00	422.00	123.00	71.40	311.30		Sep 07	1060.00	342.43	42.87	2003
2004	112.00	51.00	80.80	152.00	373.00	594.00	773.00	799.00	466.00	276.00	244.00	127.00	338.59		Aug 31	1640.00	274.43	48.49	2004
2005	240.00	158.00	122.00	175.00	440.00	625.00	709.00	756.00	382.00	265.00	162.00	137.00	349.27		Aug 01	1520.00	228.43	55.09	2005
2006	98.60	63.70	52.60	96.20	288.00	640.00	769.00	539.00	367.00	160.00	148.00	92.80	277.59		Jul 23	1150.00	256.00	46.59	2006
2007	77.30	70.50	126.00	133.00	320.00	674.00	963.00	620.00	395.00	339.00	205.00	81.30	335.64		Jul 15	1330.00	261.71	56.71	2007
2008	55.80	48.20	57.70	69.40	377.00	502.00	748.00	729.00	358.00	259.00	259.00	164.00	303.70		Aug 25	1270.00	246.43	38.53	2008
2009	82.70	51.40	50.40	98.40	231.00	635.00	850.00	774.00	574.00	173.00	231.00	84.70	321.13		Jul 29	1420.00	357.86	45.84	2009
2010	102.00	65.60	72.70	112.00	250.00	559.00	751.00	685.00	585.00	414.00	148.00	69.50	319.53		Sep 26	2290.00	287.14	54.94	2010
2011	55.20	70.20	60.00	81.00	256.00	596.00	659.00	703.00	793.00	215.00	136.00	91.00	310.58		Sep 24	3260.00	412.14	34.73	2011
2012	106.00	59.90	56.50	108.00	231.00	600.00	938.00	703.00	384.00	270.00	126.00	63.20	305.13		Jul 18	1400.00	322.71	41.34	2012
Avg.	81.61	68.31	70.46	112.18	292.34	577.60	736.20	676.71	453.00	249.59	154.85	94.73	299.09	299.12		1305.25	284.97	43.40	m^3/s
S. D.	39.27	26.77	22.56	34.20	74.38	89.94	90.27	87.85	100.52	66.54	52.67	48.51	24.48			455.06	70.81	8.27	m^3/s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	84.06	69.11	71.77	115.29	302.28	582.45	736.48	666.97	445.96	250.79	160.87	88.03	299.76	m^3/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	39	29	33	51	139	260	340	308	199	116	72	41	1630	mm	10-Year	1795.74	191.59	29.39	m^3/s







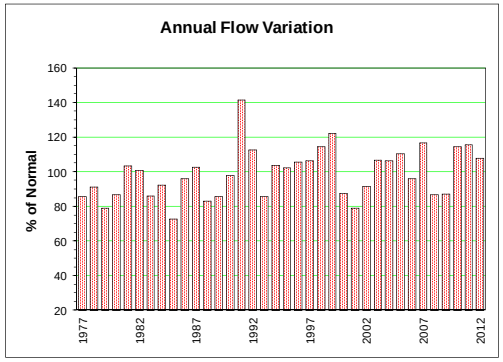


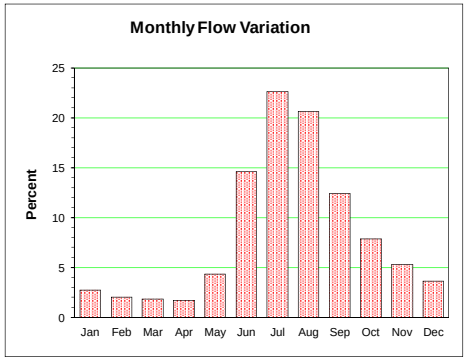
CHILKO RIVER AT OUTLET OF CHILKO LAKE 08MA002

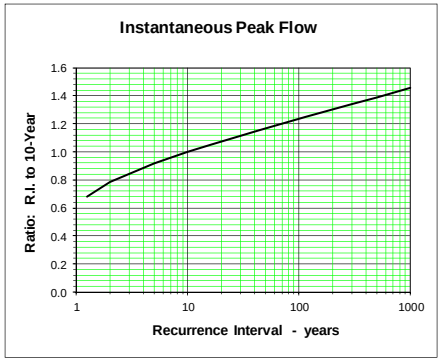
Station Longitude Latitude: -124.143155 51.624835

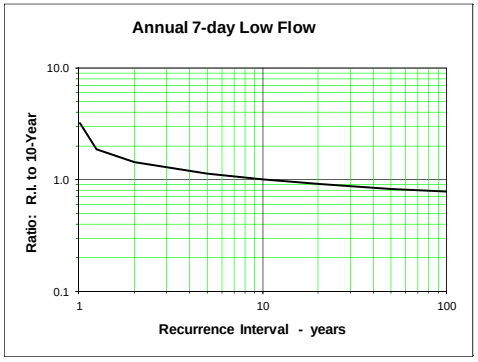
Monthly and Annual Discharge in m^3/s | Drainage Area = 2139.72 km^2 | Median Elevation = 1738 m | Instantaneous Peak Flow | 7-Day Low Flow

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1977	19.40	14.30	11.10	10.10	18.60	49.60	89.30	113.00	58.20	27.80	20.20	13.50	37.31		Aug 23	132.00	22.03	8.95	1977
1978	11.10	9.46	8.22	8.40	16.00	63.50	121.00	108.00	54.30	34.40	24.60	14.40	39.71		Aug 06	136.00	23.63	8.01	1978
1979	8.08	7.14	8.34	7.45	17.40	46.40	72.00	89.50	74.30	42.60	22.40	14.20	34.33		Jul 31	96.00	28.79	6.16	1979
1980	9.77	7.71	6.17	5.63	18.40	65.60	95.10	92.00	57.60	40.70	25.50	26.70	37.73		Jul 26	106.00	28.56	4.77	1980
1981	32.20	23.90	15.80	11.70	24.40	55.60	88.70	116.00	67.60	33.90	41.90	25.80	44.97		Jul 30	130.00	46.27	10.54	1981
1982	15.10	11.50	9.16	7.51	11.90	77.40	128.00	96.00	71.10	46.40	30.90	18.80	43.88		Jul 04	145.00	21.70	7.07	1982
1983	12.80	11.00	10.10	9.14	23.40	87.30	88.10	85.20	51.70	27.30	25.30	15.50	37.39		Jun 10	100.00	38.27	8.47	1983
1984	14.30	11.50	10.40	9.28	10.10	42.40	87.70	96.60	54.20	79.90	40.10	22.90	40.14		Oct 13	130.00	13.03	8.47	1984
1985	13.70	10.50	7.68	7.34	13.60	57.80	83.00	84.30	47.10	27.80	15.80	9.92	31.71		Aug 04	111.00	31.59	6.83	1985
1986	10.40	8.97	9.73	9.31	16.80	104.00	109.00	98.10	64.50	30.90	21.30	15.60	41.73		Jun 14	124.00	43.27	7.85	1986
1987	15.90	13.20	13.10	12.80	30.50	85.50	136.00	92.70	60.80	34.50	22.10	16.80	44.74		Jul 07	163.00	42.87	11.27	1987
1988	10.30	7.68	6.63	7.15	22.40	53.10	86.90	95.50	66.70	37.30	24.50	15.10	36.24		Aug 08	115.00	34.09	5.65	1988
1989	10.40	7.86	6.85	6.73	21.30	70.70	81.20	93.90	64.70	35.50	25.20	20.60	37.27		Aug 21	106.00	26.54	5.74	1989
1990	14.70	10.80	8.03	9.29	20.60	62.90	109.00	108.00	61.60	37.30	37.10	28.80	42.60		Aug 14	124.00	30.56	7.32	1990
1991	16.80	19.60	15.40	14.40	38.30	102.00	175.00	154.00	98.60	48.20	31.70	21.00	61.59		Jul 13	200.00	64.39	12.17	1991
1992	14.80	15.70	14.10	16.50	31.40	94.40	140.00	107.00	56.80	41.60	37.00	16.30	48.95		Jul 03	160.00	44.84	11.33	1992
1993	9.42	7.42	6.56	6.41	29.00	80.90	79.70	88.50	65.60	35.50	21.00	16.10	37.35		Aug 22	109.00	47.56	6.05	1993
1994	11.70	9.42	11.80	14.20	41.60	70.80	118.00	112.00	67.80	44.60	21.90	14.30	45.15		Jul 26	147.00	54.70	8.62	1994
1995	11.70	9.78	8.91	7.22	24.70	92.30	127.00	96.70	59.30	38.50	28.90	26.30	44.53		Jul 26	139.00	49.69	6.61	1995
1996	21.60	16.20	12.50	15.20	21.00	61.80	126.00	115.00	76.70	42.20	25.40	16.30	46.00		Jul 17	160.98	29.03	11.54	1996
1997	11.80	9.62	8.71	9.01	25.20	90.30	122.00	100.00	64.90	54.00	34.30	21.80	46.23		Jul 14	135.00	46.07	7.35	1997
1998	13.20	10.30	8.18	7.33	33.30	114.00	133.00	123.00	73.30	40.10	22.70	16.20	49.82		Jul 31	155.00	55.66	7.13	1998
1999	11.90	10.20	8.21	7.36	16.20	78.00	158.00	166.00	90.80	37.70	28.30	20.60	53.14		Aug 08	189.00	28.17	6.75	1999
2000	12.70	8.80	7.08	6.57	13.20	50.10	109.00	108.00	60.90	39.10	24.90	13.70	38.02		Jul 31	138.00	22.29	6.02	2000
2001	8.33	5.96	5.66	4.62	8.44	46.90	99.90	96.20	62.30	33.30	20.50	18.00	34.34		Jul 28	121.00	17.50	4.30	2001
2002	13.00	8.19	6.51	6.21	12.40	78.10	126.00	97.40	66.40	31.90	17.30	12.50	39.89		Jun 29	149.00	22.99	5.67	2002
2003	10.50	8.39	7.53	8.60	16.50	90.50	119.00	105.00	69.00	55.90	42.70	21.80	46.53		Jun 30	132.00	31.17	6.38	2003
2004	11.70	9.75	8.19	8.21	31.50	76.60	118.00	110.00	78.90	40.70	34.00	25.30	46.23		Jul 06	131.00	52.93	6.75	2004
2005	21.40	23.40	17.00	14.50	42.30	94.00	117.00	104.00	61.50	36.50	25.10	17.20	48.02		Jul 08	139.00	46.19	12.23	2005
2006	18.90	12.80	9.59	8.80	23.20	91.50	122.00	87.70	54.30	29.00	23.10	18.00	41.78		Jul 11	135.00	43.00	7.87	2006
2007	14.70	10.40	9.35	10.70	20.00	97.60	164.00	118.00	64.90	40.20	35.00	21.40	50.83		Jul 22	202.00	34.01	8.66	2007
2008	14.30	9.44	6.99	5.91	19.40	71.70	111.00	89.10	56.00	32.10	21.00	13.80	37.70		Jul 10	127.00	43.49	5.67	2008
2009	8.92	5.97	5.21	5.06	7.99	54.00	84.50	108.00	74.90	39.30	33.20	25.90	37.96		Aug 03	129.00	13.53	4.94	2009
2010	19.10	15.30	11.50	9.92	22.30	87.40	138.00	121.00	62.40	59.20	30.80	17.90	49.87		Jul 14	151.00	36.91	8.50	2010
2011	14.60	11.60	10.30	8.53	13.30	94.70	143.00	123.00	87.20	56.60	22.50	15.20	50.33		Jul 14	151.00	24.81	7.84	2011
2012	12.40	10.20	8.62	9.08	20.60	79.10	151.00	128.00	62.70	39.30	24.40	15.40	46.96		Jul 21	176.00	33.37	8.03	2012
Avg.	13.93	11.22	9.42	9.06	21.6	75.5	115.45	106.29	65.82	40.33	27.29	18.43	43.08	42.99		138.72	35.37	7.71	m^3/s
S. D.	4.67	4.24	2.91	2.98	8.68	18.80	25.70	17.66	10.85	10.47	6.92	4.66	6.28			25.63	12.58	2.09	m^3/s
Normal	14.21	11.45	9.55	9.23	22.43	77.32	116.16	105.76	65.84	40.35	28.10	18.81	43.49	m^3/s					
Normal	18	13	12	11	28	94	145	132	80	51	34	24	641	mm	10-Year	176.30	21.36	5.15	m^3/s









OVERSIZED FIGURES

Figure 1 Streamflow in the Cariboo Region 30 x 30″

Figure 2 Hydrologic Zones 22 x 34″

Hydrologic Zones	
Zone Number	Name
7	SOUTHERN ROCKY MOUNTAIN FOOTHILLS
8	NECHAKO PLATEAU
9	SOUTHERN HAZELTON MOUNTAINS
10	CENTRAL COAST MOUNTAINS
12	MCGREGOR BASIN
13	UPPER FRASER BASIN
14	NORTHERN COLUMBIA MOUNTAINS
15	FRASER PLATEAU
16	SOUTHERN QUESNEL HIGHLAND
17	NORTHERN THOMPSON PLATEAU
24	SOUTHERN THOMPSON PLATEAU
25	EASTERN SOUTH COAST MOUNTAINS
26	CENTRAL SOUTH COAST MOUNTAINS
27	WESTERN SOUTH COAST MOUNTAINS
28	EASTERN VANCOUVER ISLAND
29	WESTERN VANCOUVER ISLAND

Skeena Region
Omineca Region
Northeast Region
Cariboo Region
West Coast Region
South Coast Region
Thompson / Okanagan Region
ALBERTA
Prince George
Kamloops
Williams Lake

Legend

- Natural Resource Operations Region Boundary
- Hydrologic Zone Boundary
- WSC Hydrometric Station Watershed Boundary
- WSC Hydrometric Staion

Figure 1: Streamflow in the Cariboo Region

0 10 20 30 40 50 60 km

N

Hydrologic Zones	
Zone Number	Name
1	NORTHERN COAST MOUNTAINS
2	STIKINE PLATEAU
3	NORTHERN ROCKY MOUNTAINS
4	NORTHERN INTERIOR PLAINS
5	NORTHERN CENTRAL UPLANDS
6	SOUTHERN INTERIOR PLAINS
7	SOUTHERN ROCKY MOUNTAIN FOOTHILLS
8	NECHAKO PLATEAU
9	SOUTHERN HAZELTON MOUNTAINS
10	CENTRAL COAST MOUNTAINS
11	QUEEN CHARLOTTE ISLANDS
12	MCGREGOR BASIN
13	UPPER FRASER BASIN
14	NORTHERN COLUMBIA MOUNTAINS
15	FRASER PLATEAU
16	SOUTHERN QUESNEL HIGHLAND
17	NORTHERN THOMPSON PLATEAU
18	UPPER COLUMBIA BASIN
19	UPPER KOOTENAY BASIN
20	CENTRAL KOOTENAY BASIN
21	LOWER KOOTENAY BASIN
22	LOWER COLUMBIA BASIN
23	OKANAGAN HIGHLAND
24	SOUTHERN THOMPSON PLATEAU
25	EASTERN SOUTH COAST MOUNTAINS
26	CENTRAL SOUTH COAST MOUNTAINS
27	WESTERN SOUTH COAST MOUNTAINS
28	EASTERN VANCOUVER ISLAND
29	WESTERN VANCOUVER ISLAND

Yukon Territory

Northwest Territories

Alberta

Montana

Washington

Idaho

Skeena Region

Northeast Region

Omineca Region

West Coast Region

Cariboo Region

South Coast Region

Thompson / Okanagan Region

Kootenay / Boundary Region

Atlin

Fort Nelson

Fort St. John

Grande Prairie

Smithers

Prince Rupert

Masset

Prince George

Williams Lake

Revelstoke

Kamloops

Kelowna

Nelson

Cranbrook

Campbell River

Nanaimo

Vancouver

Victoria

Edmonton

Red Deer

Calgary

Medicine Hat

Lethbridge

Legend

Hydrologic Zone Boundary

Old MOE Regional Boundary

Natural Resource Operations Regions:

Figure 2: Hydrologic Zones

N

0 100 200 300 400 km