

# Inventory of Streamflow in the Omineca and Northeast Regions



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**Cover photo:** Courtesy of Water Survey of Canada; flow measurement under ice cover at WSC gauge 07EE007, Parsnip River above Misinchinka River near Kennedy, B.C.

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**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 Omineca-Peace Region, September 2000” by W. Obedkoff, P.Eng., Water Inventory Section, Resources Inventory Branch, Ministry of Environment, Lands and Parks.

The analyses presented in this report include all Water Survey of Canada hydrometric station data up to and including 2011. Normal Annual Runoff for the 1981 to 2010 period has been estimated for selected hydrometric stations within the region which met the analysis criteria. However, no regional analyses have been performed for stream flows due to insufficient hydrometric data resulting from deactivation of several hydrometric stations in the mid 1990’s. Consequently, no regional design curves were developed for this report. Except for the design curves, all other analyses from the previous report are included, including: statistical analysis of peak flows, annual mean flows, and annual and June to September 7-day low flows were completed using the available data. 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.

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 (Ministry of Environment (MoE)) completed the watershed delineation update. Rio Tinto Alcan provided operational data for inflows to, and outflows from the Nechako Reservoir. Jaime Cathcart (Knight Piésold Ltd.), Chelton van Geloven (Ministry of Forests, Lands and Natural Resource Operations (FLNRO)), Scott Jackson (Lorax Environmental Services Ltd.), and Heather Johnstone (MoE) 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 five 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; and the fifth 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 Omineca and Northeast regions, defined as provincial Natural Resource Operations regions, and presents summary data and datasheets, revised and updated since the 2000 BCSI report (Obedkoff, 2000). The revision includes updated data beyond 2000 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 2011, 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
Kootenay	Jan. 2002	w	11	Queen Charlotte Islands
		g	22	Lower Columbia Basin
		h	21	Lower Kootenay Basin
		x	18	Upper Columbia Basin
		y	19	Upper Kootenay Basin
Lower Mainland & Vancouver Island	Apr. 2003	z	20	Central Kootenay Basin
			27	Western South Coast Mountains
			28	Eastern Vancouver Island
		29	Western Vancouver Island	

The Omineca-Northeast region incorporates hydrologic **zones 4, 6, 7, 12 and 13** and the contiguous portions of **zones 3, 5, 8 and 14**, 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://a100.gov.bc.ca/pub/acat/public/viewReport.do?reportId=48460> ). This report contains summary data and datasheets that have been revised and updated from the Obedkoff, 2000 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 Omineca and Northeast regions 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 Omineca and Northeast regions of Natural Resource Operations regions. Eight hydrologic zones (**zones 4, 6, 7, 12 and 13** and the contiguous portions of **zones 3, 5, 8, and 14**) are defined in the study area (Figure 1). However, no analyses for zones 5 and 14 are presented in this report. The complete analyses for zone 5 are included in the Skeena report (Ahmed and Jackson, 2013). The complete analyses for zone 14 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 2011. The 2000 BCSI report considered data from 1965 to 2000 with a 30-year normal period of 1971 to 2000. 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 Figure 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. Annual values are based on a calendar year, rather than a water year (October - September). All available data up to the year 2011 were compiled and stored in the HEC-DSS database. However, data from year 1976 to 2011 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 are determined as follows. Upstream watersheds for areas within BC are delineated based on the BC Freshwater Atlas (FWA) "fundamental watersheds". Watersheds outside of BC and within Canada are delineated using the GeoBase Canadian Digital Elevation Data (CDED) digital elevation model (DEM). Drainage areas in the United States are delineated using the USGS National Elevation Dataset (NED) DEM. These results are checked against the highest resolution topography available, and any errors (especially in flat areas) are 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) are 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 are used along with best judgment to determine the station locations.

Median elevation is 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) for regions outside of BC and within Canada, and the NED DEM (2 arc-second cell size) for regions in the US. An ArcGIS function is 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<sup>3</sup>/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<sup>3</sup>/s  
n is the number of days in the month  
A is the drainage area in km<sup>2</sup>.

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 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 runoffs 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.

Reservoir level and outflow data are available for the Nechako Reservoir with reservoir inflow calculated on a monthly basis as outlined below. This provides reliable monthly and annual flow data though does not provide instantaneous peak flow or 7-day low flow data. Outflows are calculated as the sum of Skins Lake Spillway releases and flows through the Kemano powerhouse. Inflow estimates are calculated as the difference between the above outflow values and the change in reservoir volume (reservoir level multiplied by surface area).

#### 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 is 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 are 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 is 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 are 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.



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## **FIGURES**

Figure 1: Stream Flow in the Omineca and Northeast Regions

Figure 2: Hydrologic Zones

Figure 3: Normal Annual Runoff

Figure 4-1: 10-Year Peak Flow vs. Drainage Area

Figure 4-2: 10-Year Peak Flow per Unit Area vs. Drainage Area

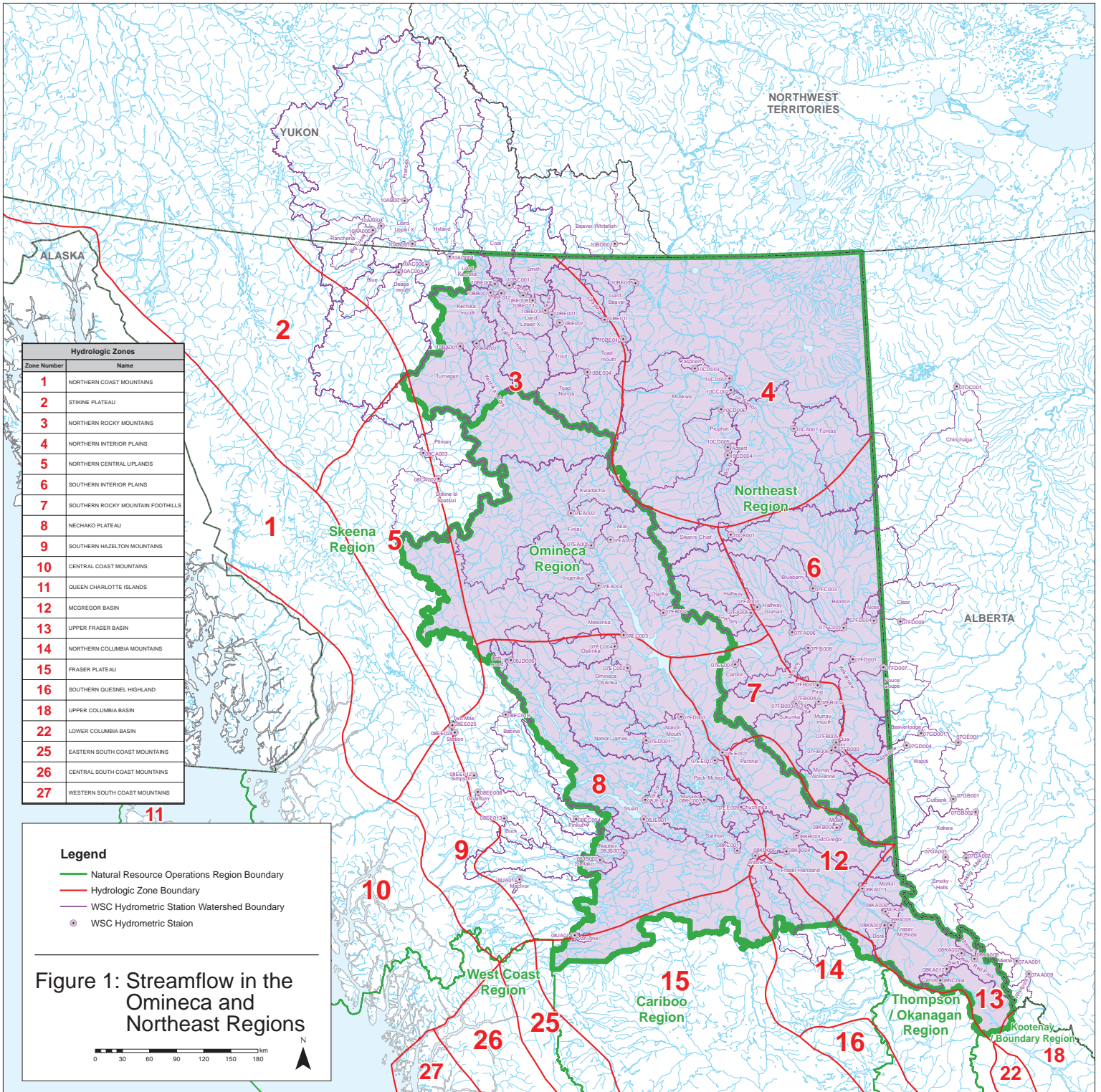
Figure 4-3: 10-Year Peak Flow per Unit Area vs. Median Elevation

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

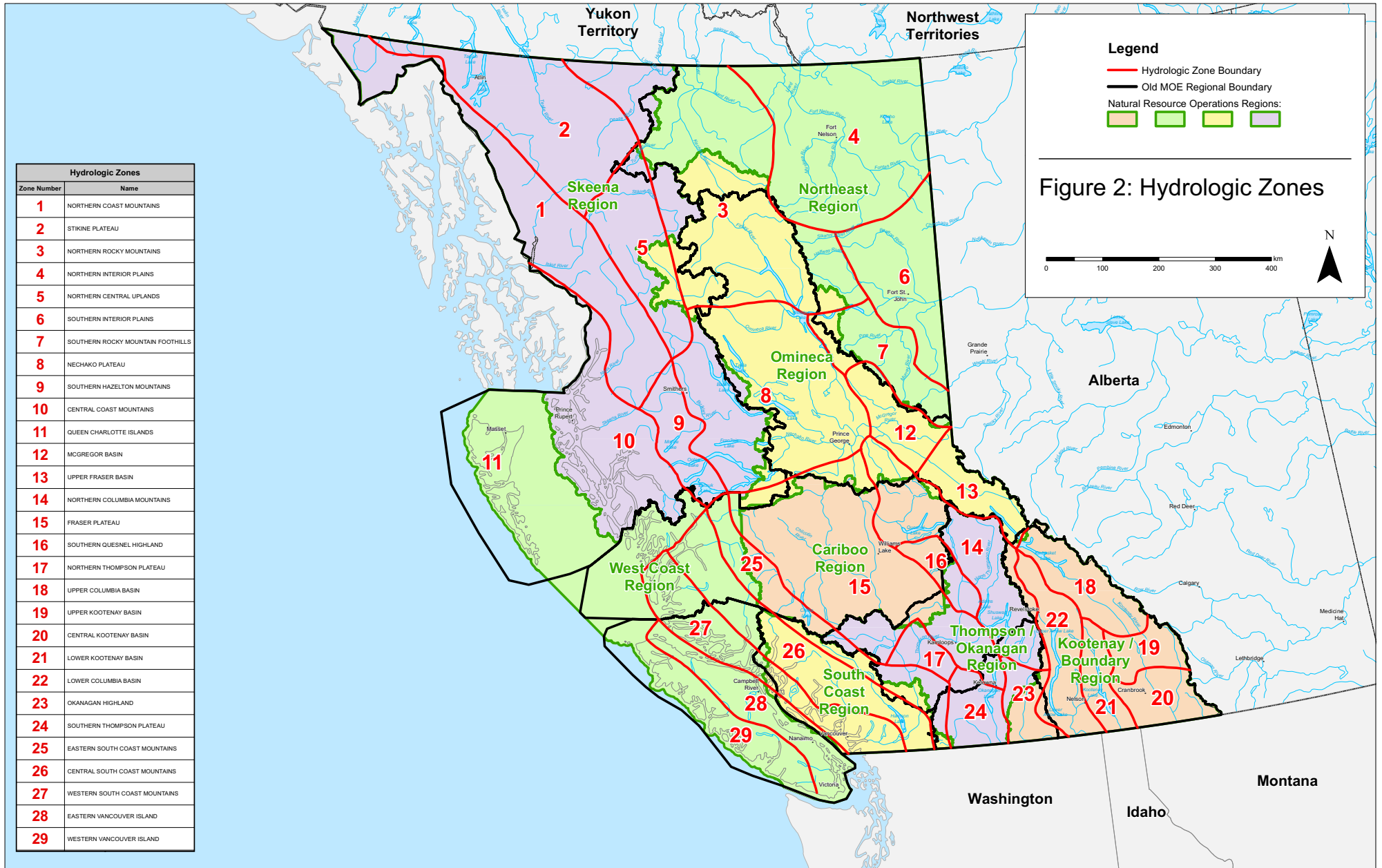
Figure 5-2: 10-Year 7-Day June-September Low Flow per Unit Area vs. Drainage Area

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



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



**Legend**

- Hydrologic Zone Boundary (Red line)
- Old MOE Regional Boundary (Black line)
- Natural Resource Operations Regions: (Color swatches: light green, medium green, yellow-green, light purple)

**Figure 2: Hydrologic Zones**

0 100 200 300 400 km

N

### Normal Annual Runoff Zone 3, 4 and 6

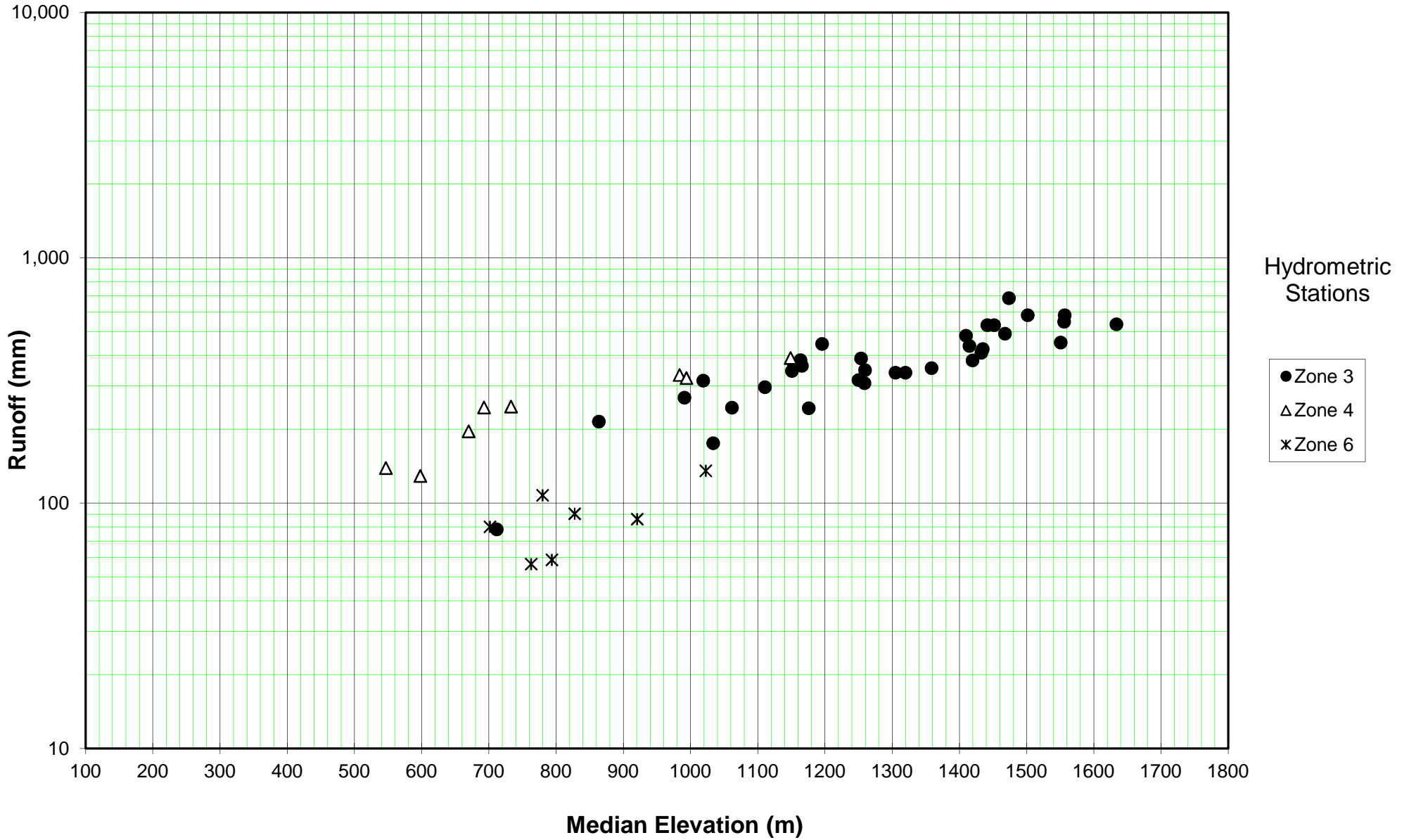
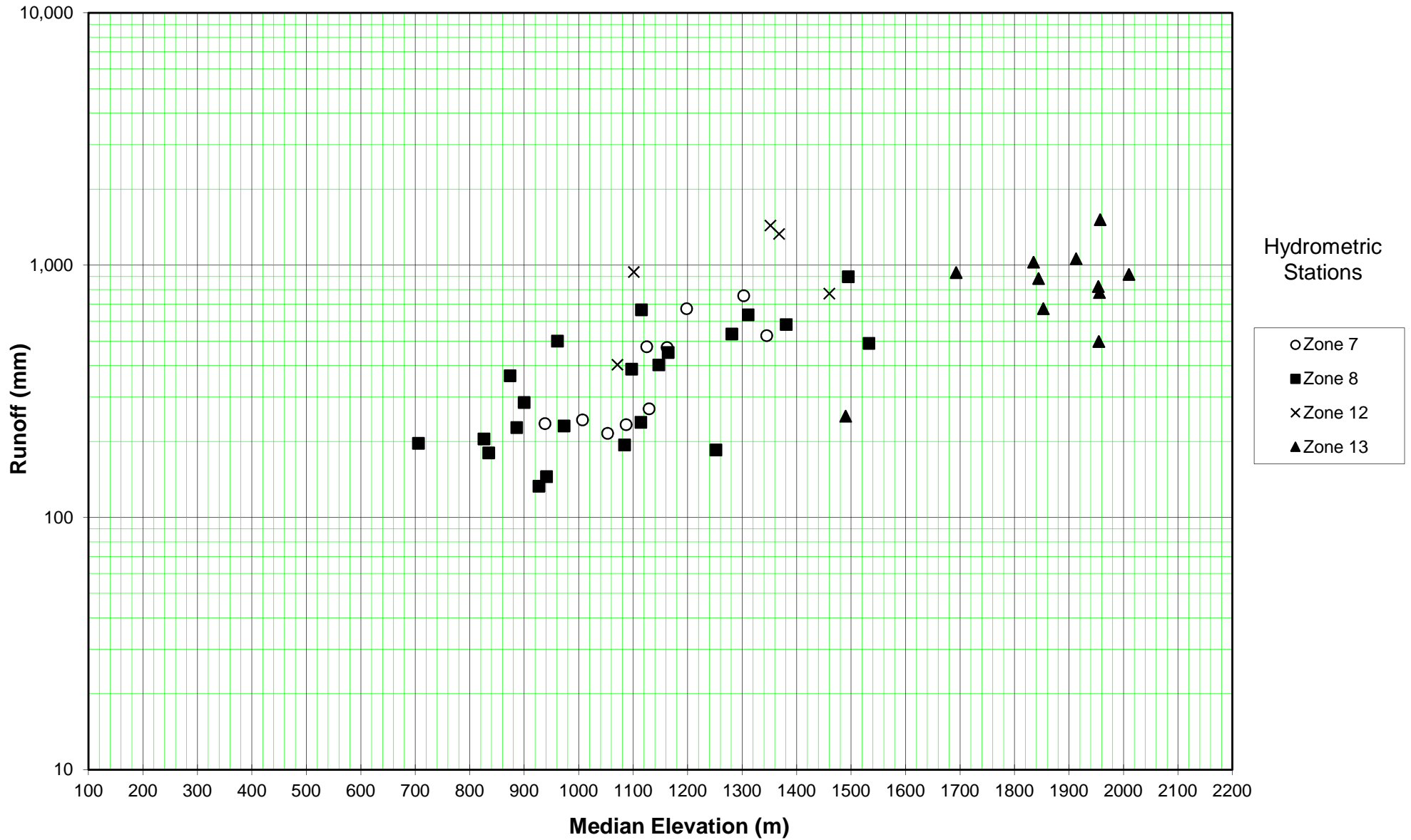


Figure 3 Normal Annual Runoff (page 1 of 2)

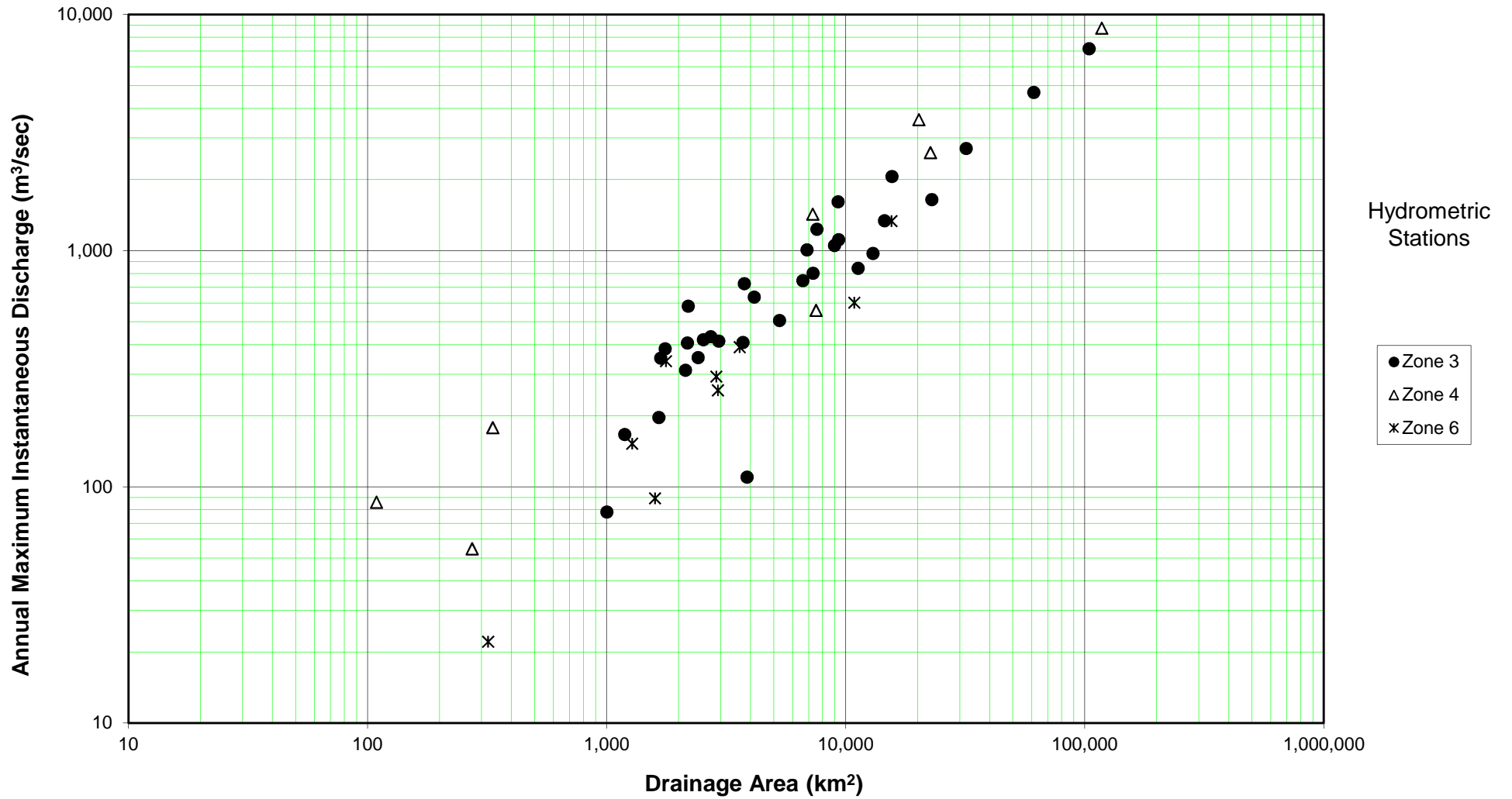
**Normal Annual Runoff  
Zone 7, 8, 12 and 13**



**Figure 3 Normal Annual Runoff (page 2 of 2)**

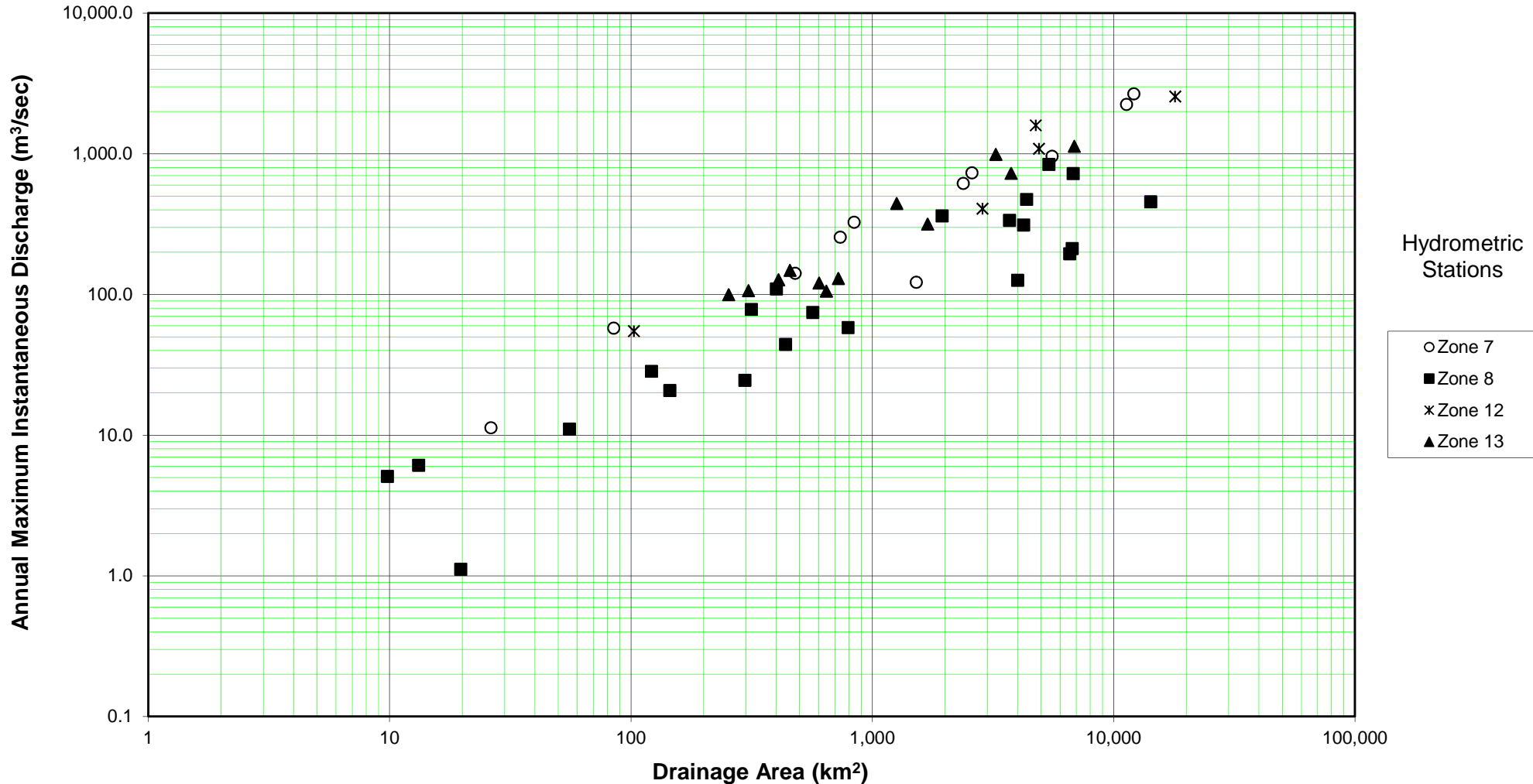


**10-Year Peak Flow  
Zone 3, 4 and 6**



**Figure 4-1 10-Year Peak Flow vs Drainage Area (page 1 of 2)**

**10-Year Peak Flow  
Zone 7, 8, 12 and 13**



**Figure 4-1 10-Year Peak Flow vs Drainage Area (page 2 of 2)**



10-Year Peak Flow  
Zone 3, 4 and 6

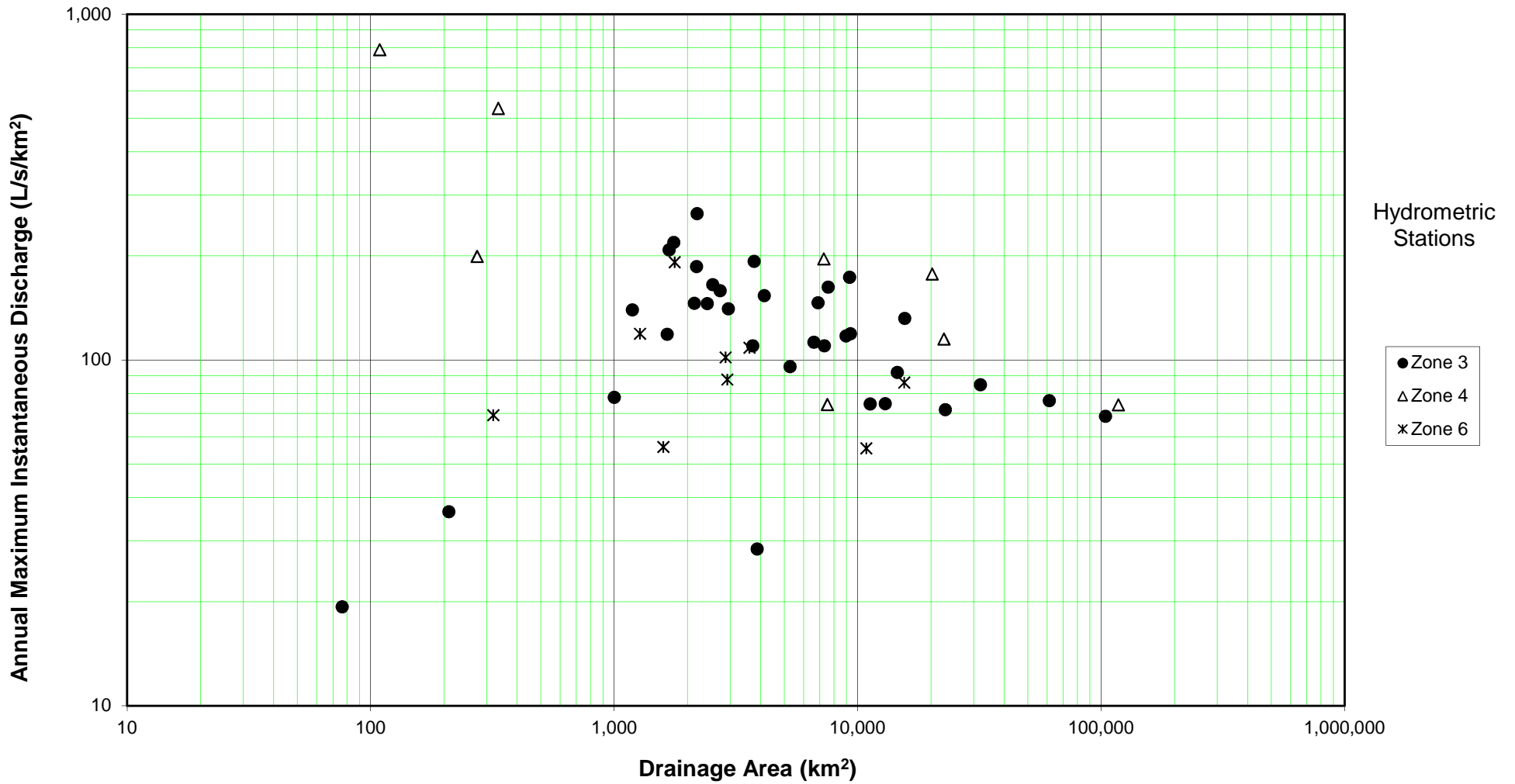


Figure 4-2 10-Year Peak Flow per Unit Area vs Drainage Area (page 1 of 2)

10-Year Peak Flow  
Zone 7, 8, 12 and 13

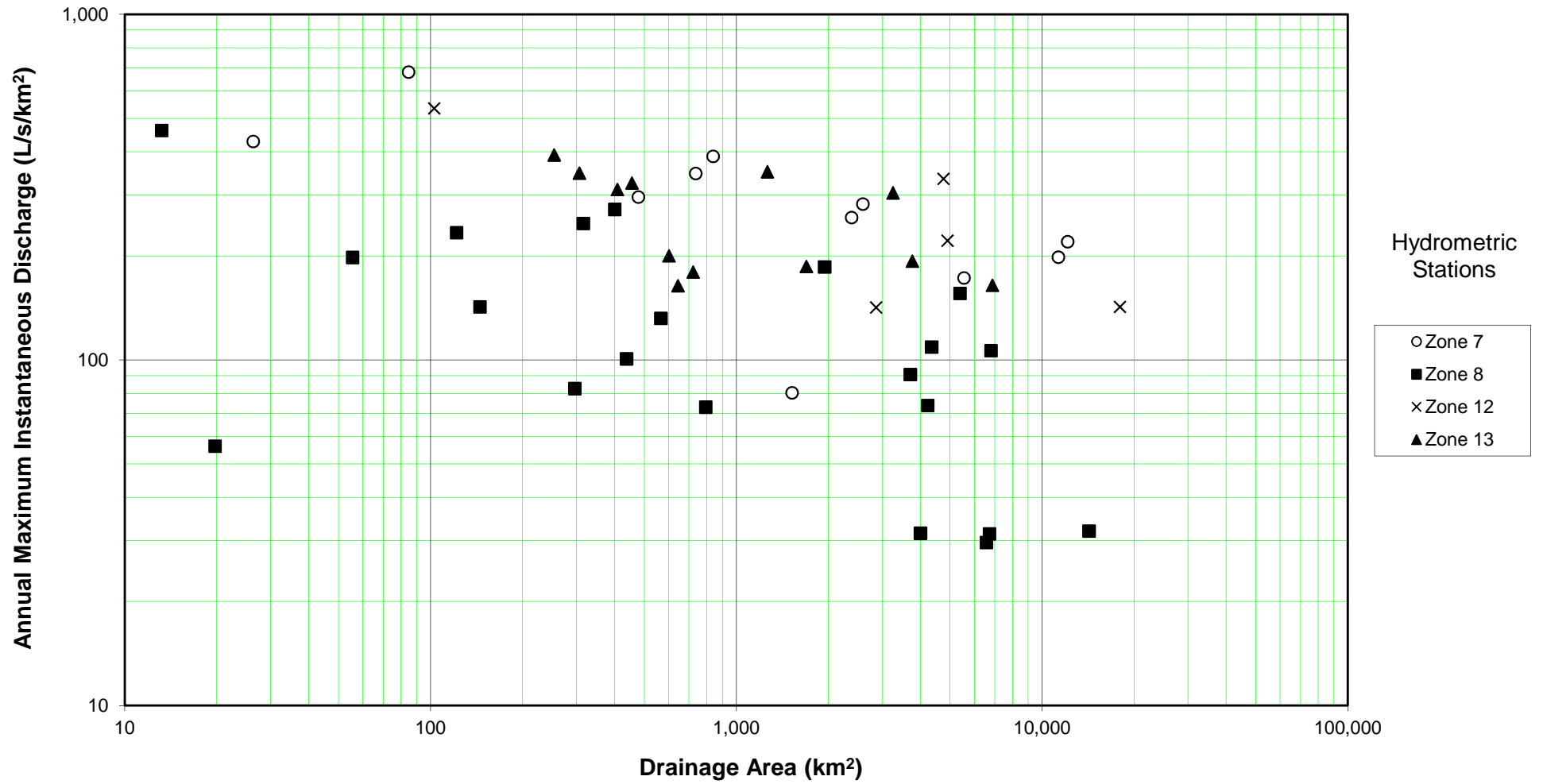


Figure 4-2 10-Year Peak Flow per Unit Area vs Drainage Area (page 2 of 2)

**10-Year Peak Flow  
Zone 3, 4 and 6**

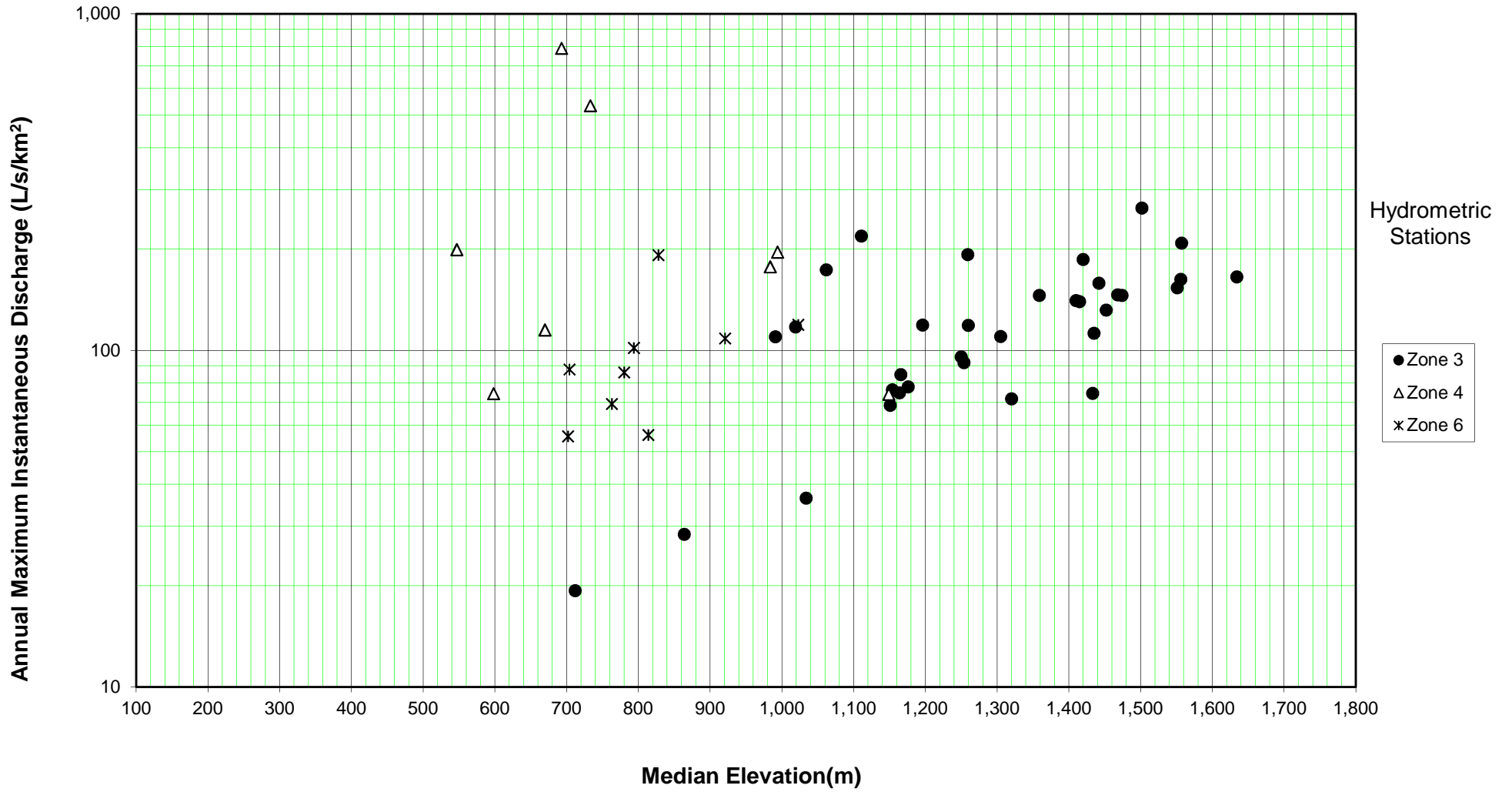
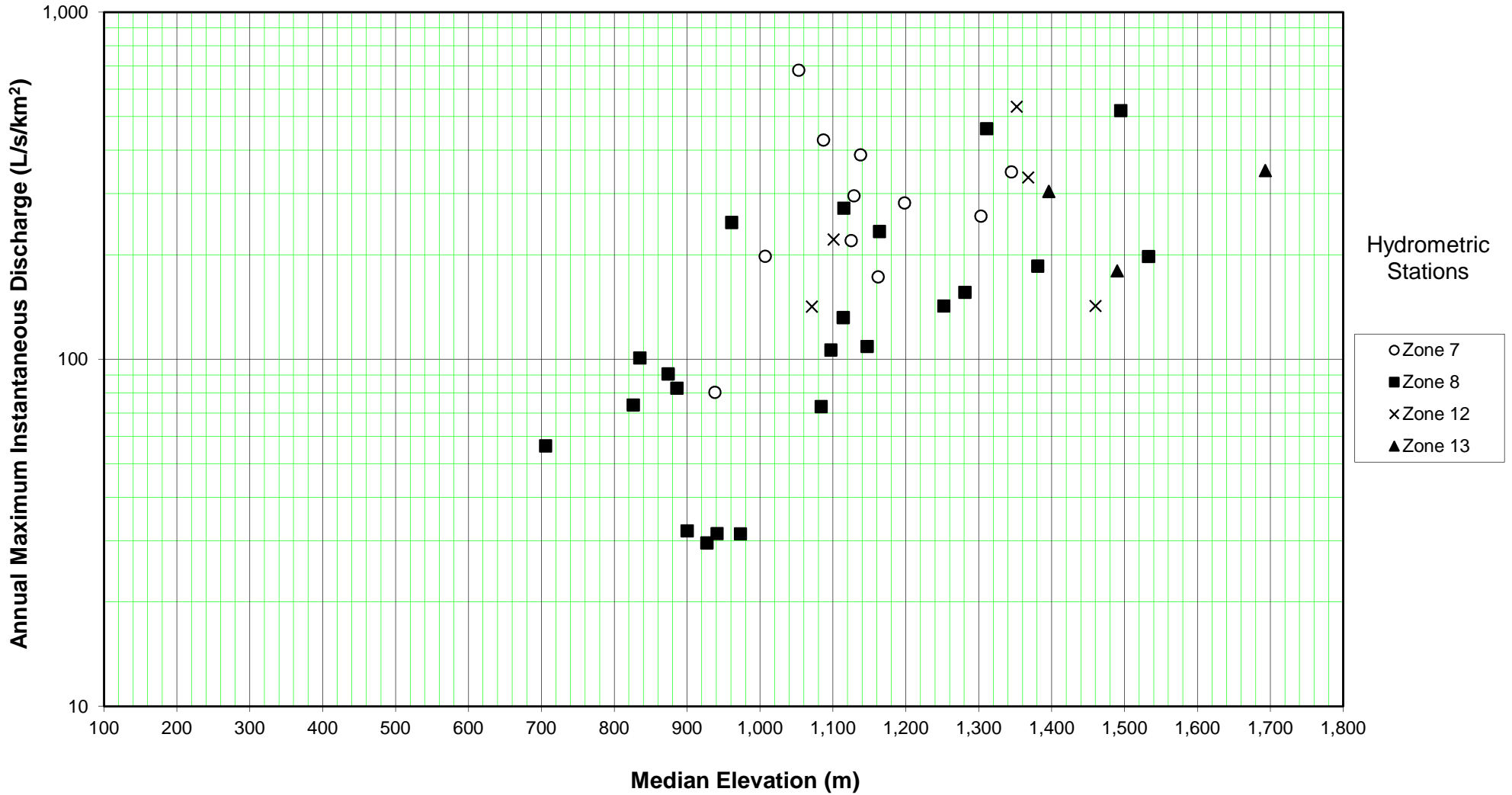


Figure 4-3 10-Year Peak Flow per Unit Area vs Median Elevation (page 1 of 2)

**10-Year Peak Flow  
Zone 7, 8, 12 and 13**



**Figure 4-3 10-Year Peak Flow per Unit Area vs Median Elevation (page 2 of 2)**

### 10-Year 7-Day June-September Low Flow Zone 3, 4 and 6

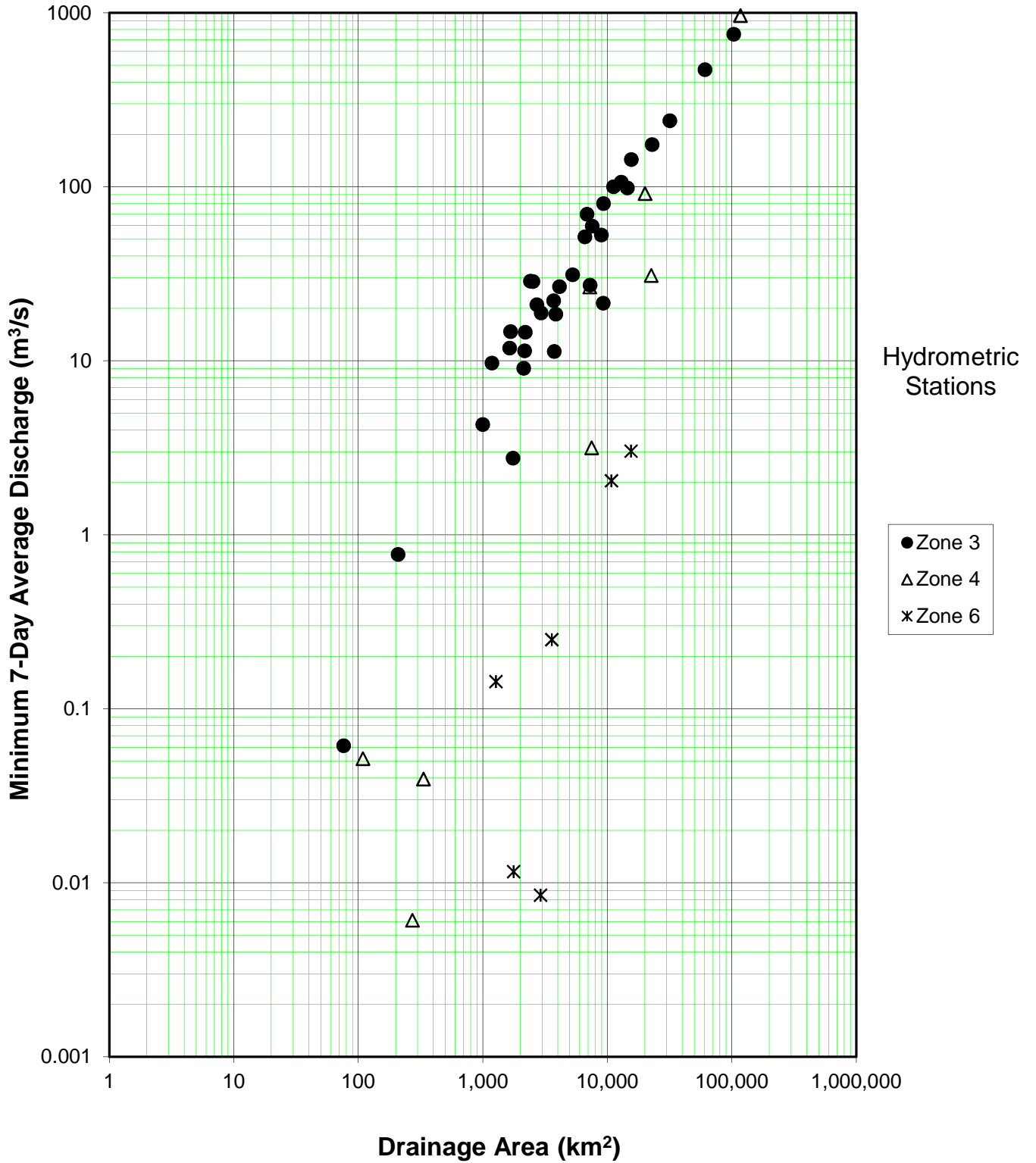
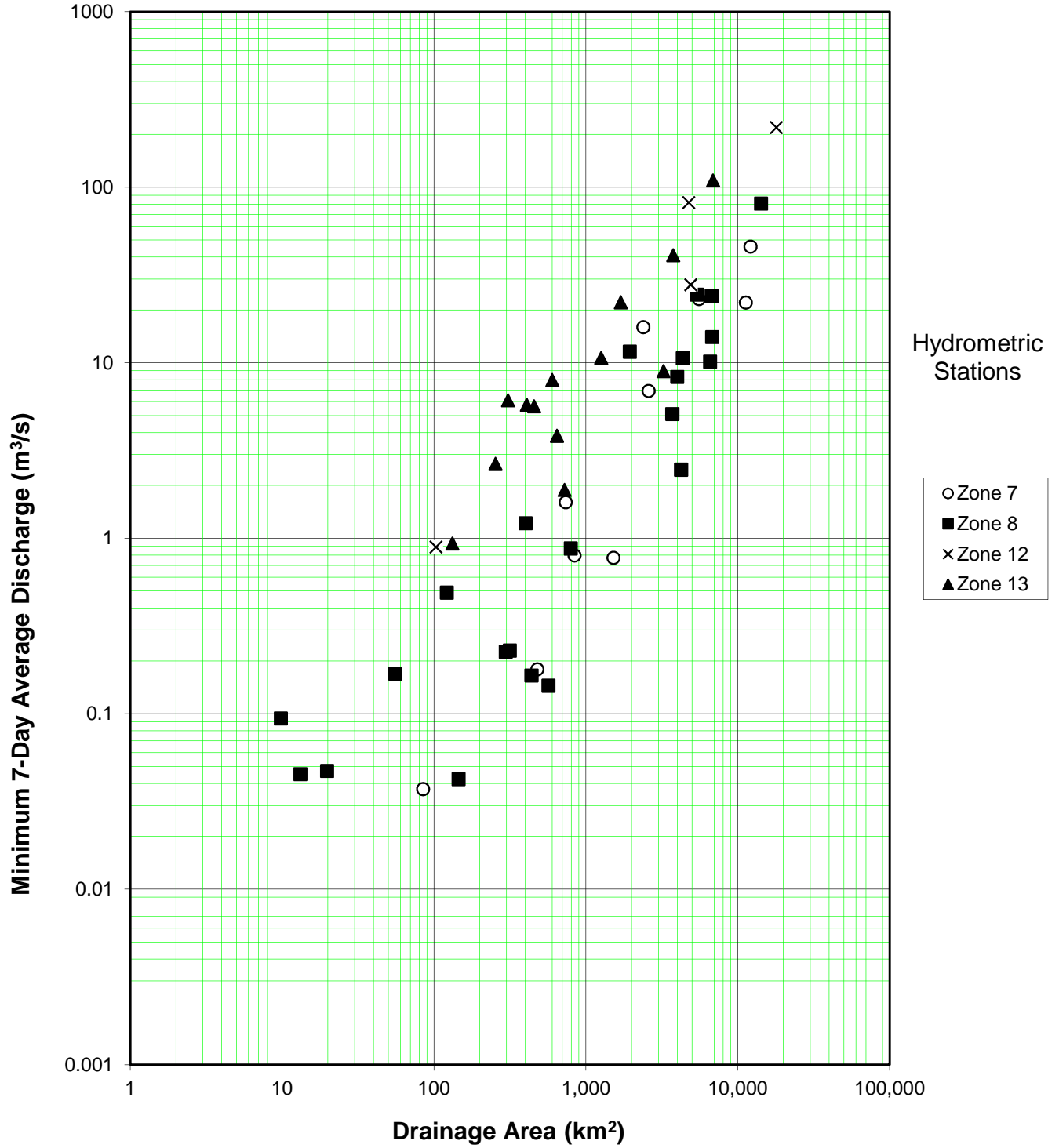


Figure 5-1 10-Year 7-Day June-September Low Flow vs Drainage Area (page 1 of 2)

**10-Year 7-Day June-September Low Flow  
Zone 7, 8, 12 and 13**



**Figure 5-1 10-Year 7-Day June-September Low Flow vs Drainage Area (page 2 of 2)**

### 10-Year 7-Day June-September Low Flow Zone 3, 4 and 6

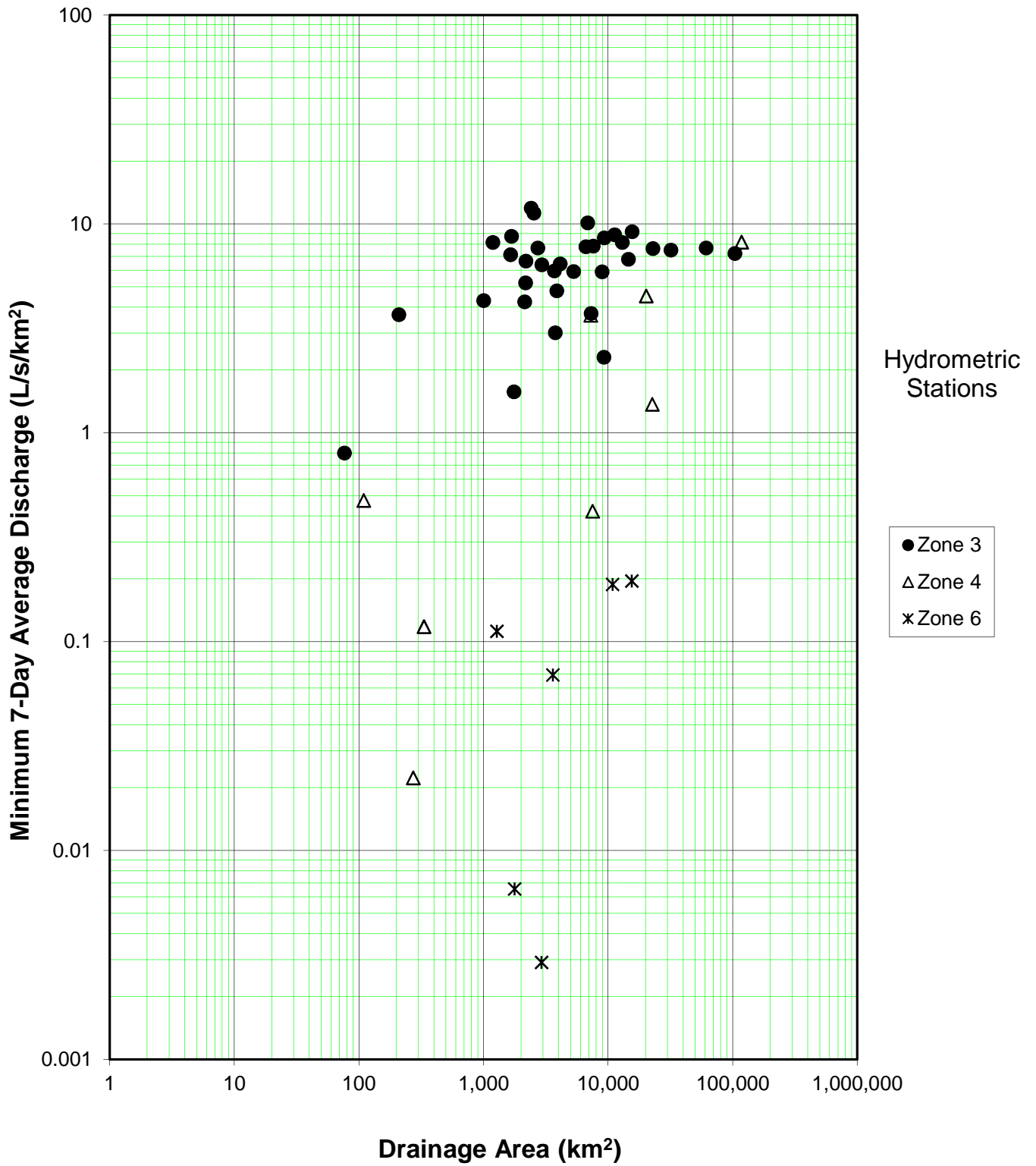
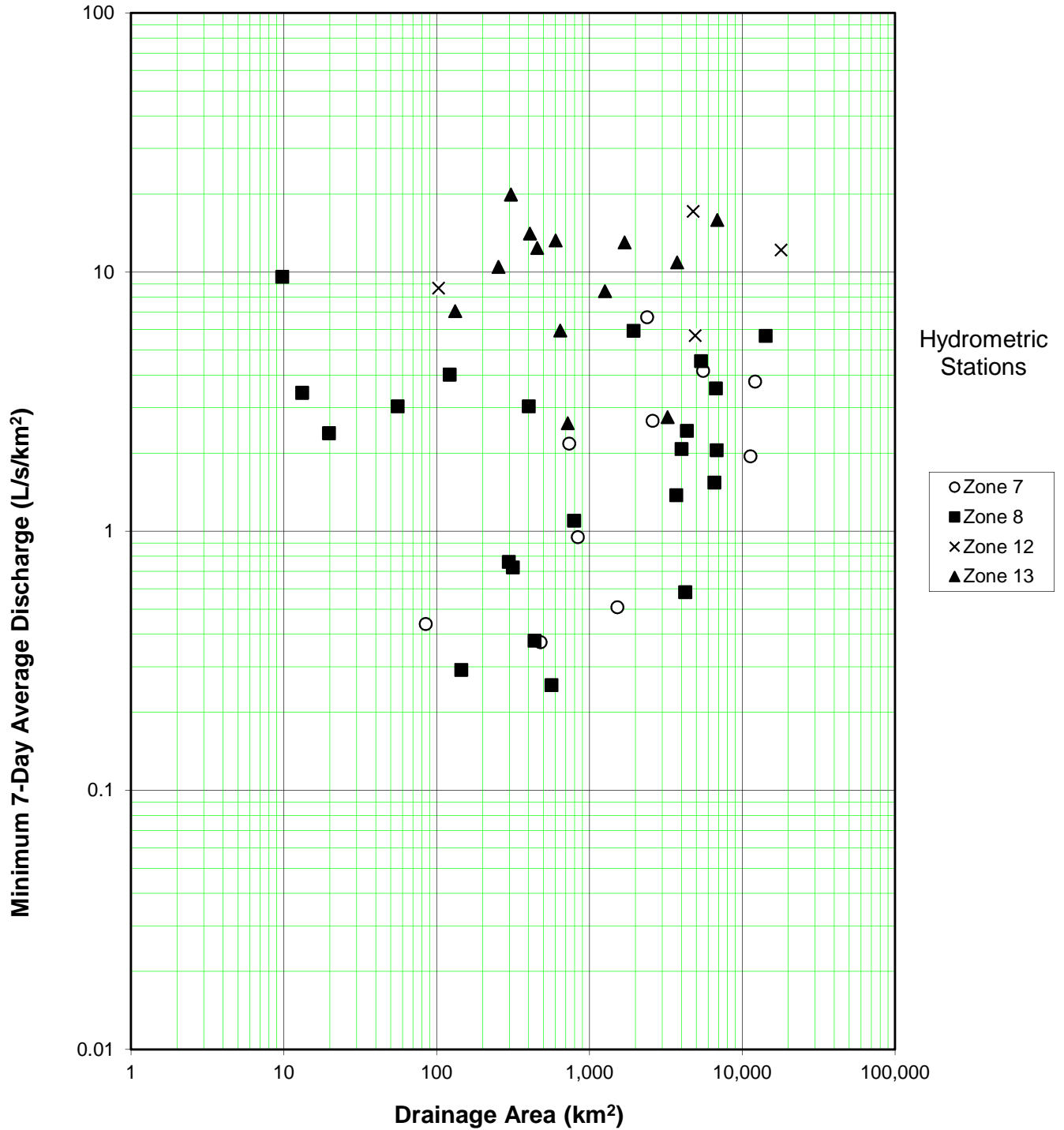


Figure 5-2 10-Year 7-Day June-September Low Flow per Unit Area vs Drainage Area (page 1 of 2)

**10-Year 7-Day June-September Low Flow  
Zone 7, 8, 12 and 13**



**Figure 5-2 10-Year 7-Day June-September Low Flow per Unit Area vs Drainage Area (page 2 of 2)**



**10-Year 7-Day Annual Low Flow  
Zone 3, 4 and 6**

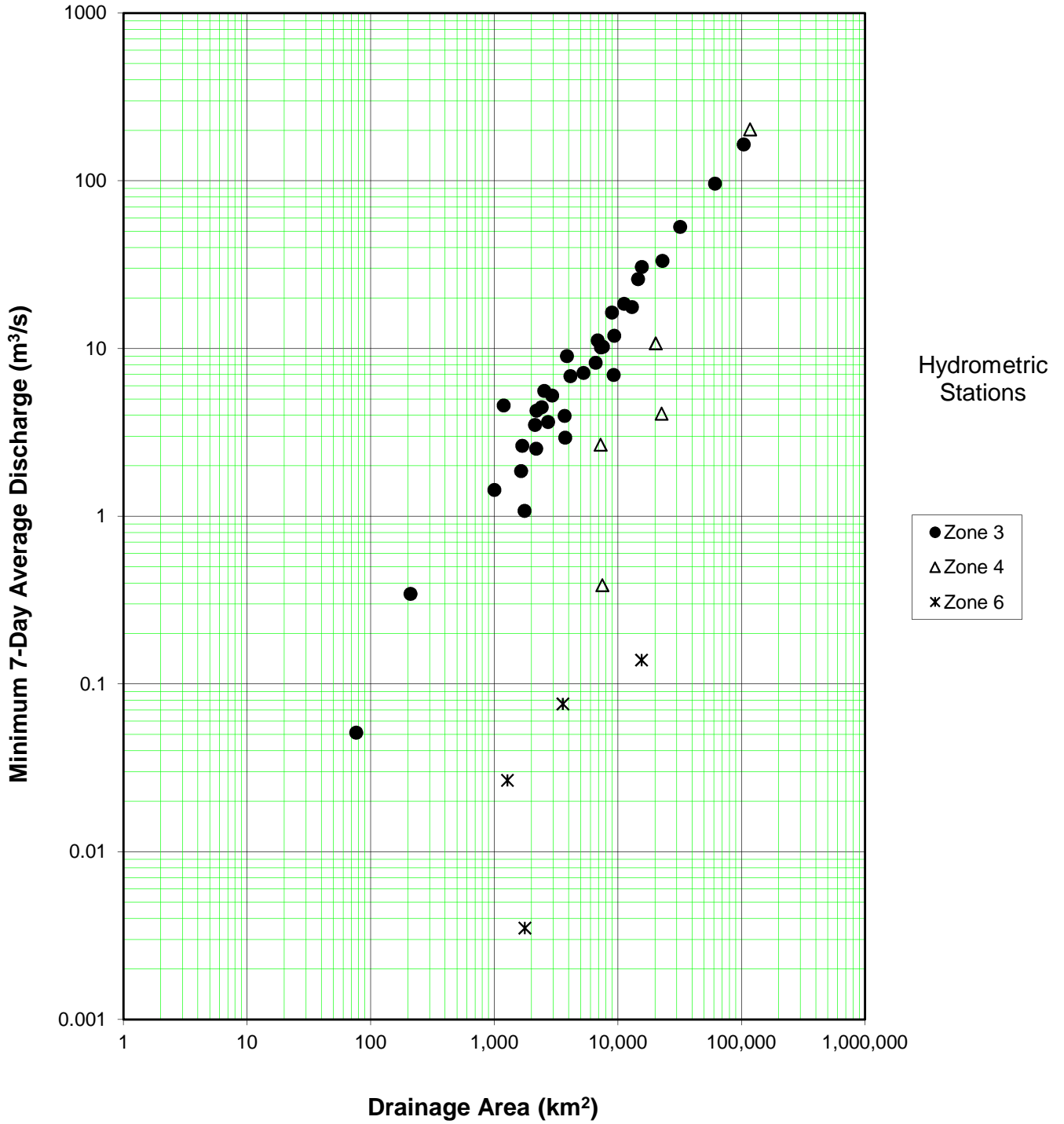
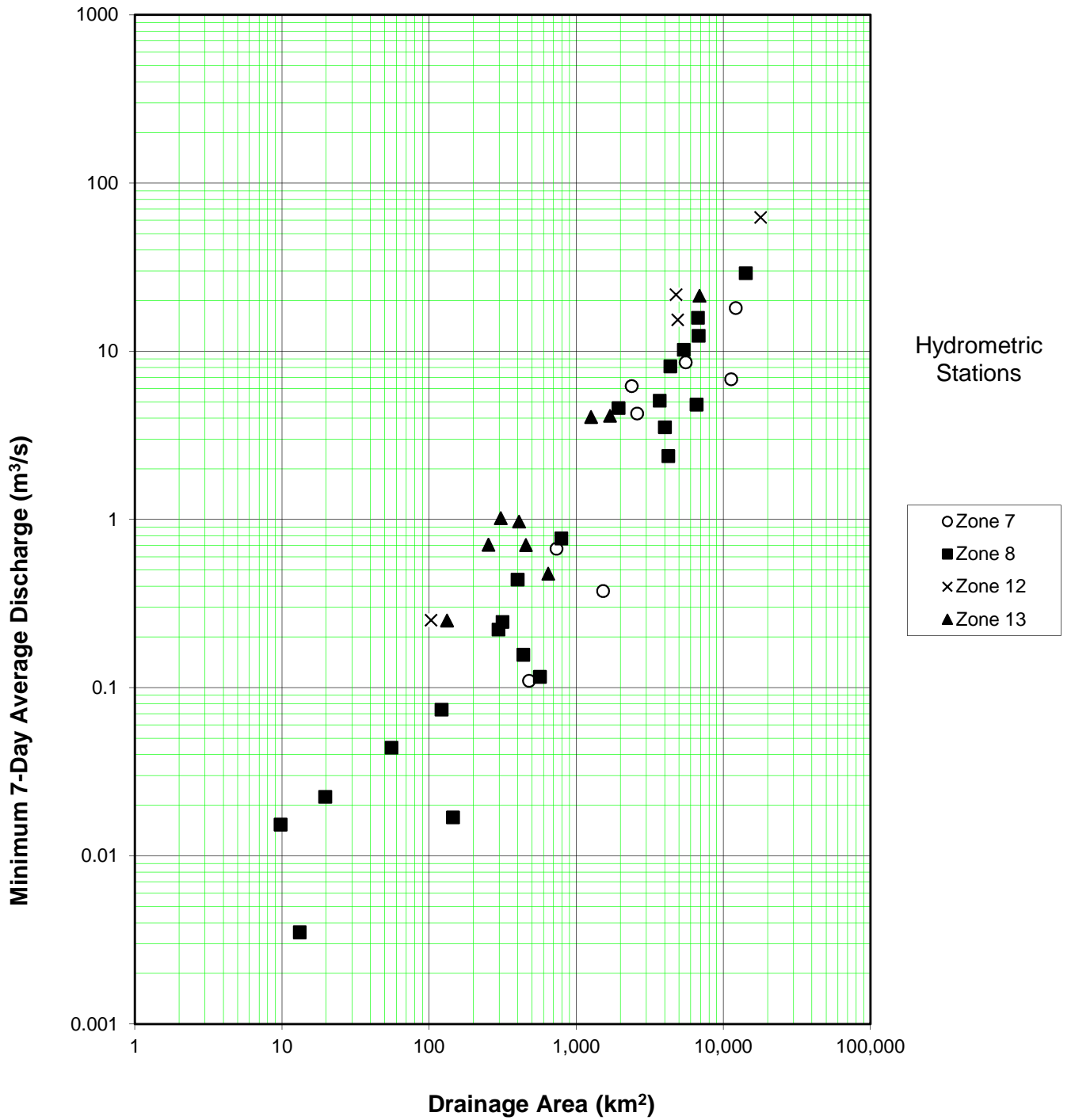


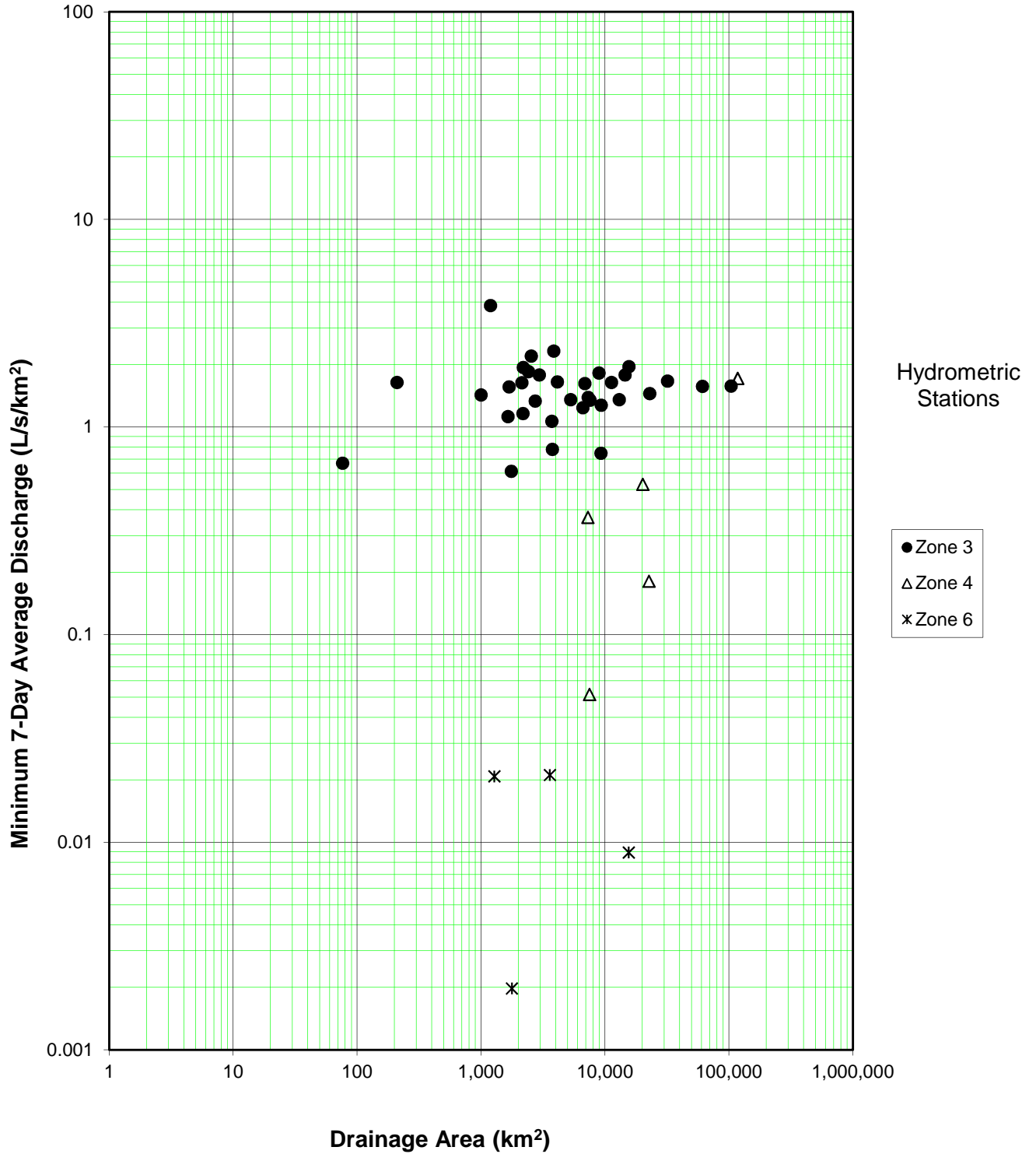
Figure 6-1 10-Year 7-Day Annual Low Flow vs Drainage Area (page 1 of 2)

**10-Year 7-Day Annual Low Flow  
Zone 7, 8, 12 and 13**



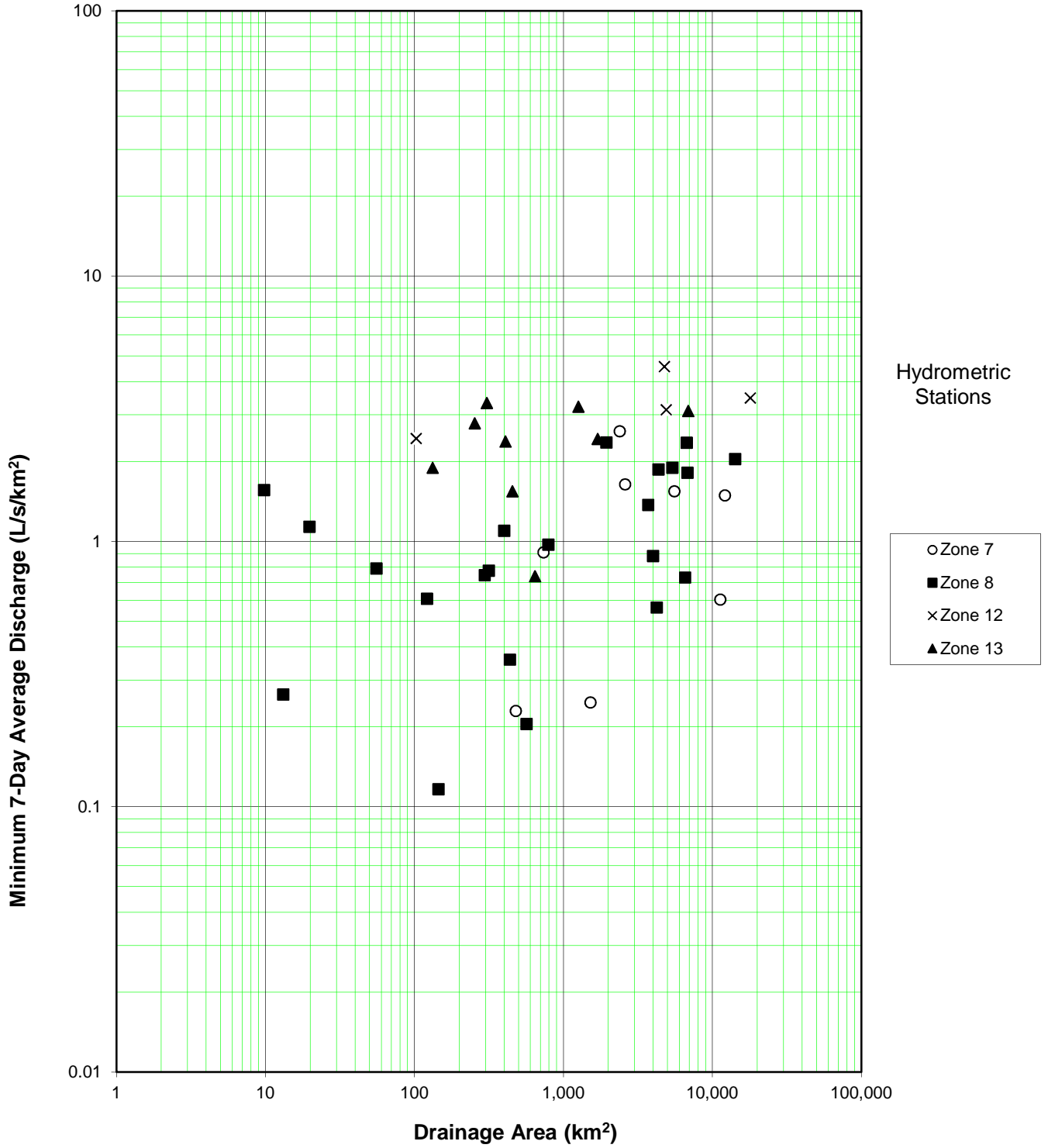
**Figure 6-1 10-Year 7-Day Annual Low Flow vs Drainage Area (page 2 of 2)**

**10-Year 7-Day Annual Low Flow  
Zone 3, 4 and 6**



**Figure 6-2 10-Year 7-Day Annual Low Flow per Unit Area vs Drainage Area (page 1 of 2)**

**10-Year 7-Day Annual Low Flow  
Zone 7, 8, 12 and 13**



**Figure 6-2 10-Year 7-Day Annual Low Flow per Unit Area vs Drainage Area (page 2 of 2)**

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Hydro-logic Zone	Watershed		Drainage Area (km <sup>2</sup> )	Median Elevation (m)	Normal Annual Runoff <sup>1</sup>		Monthly Distribution (%)												Annual Flow Ratio		Peak Flow		10-Year 7-Day Low Flow	
	Stream	Hydrometric Station			(mm)	(m <sup>3</sup> /s)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	10-Year : Avg Year		10 - Year (m <sup>3</sup> /s)	Ratio 100-Yr:10-Yr	Jun-Sep (m <sup>3</sup> /s)	Annual (m <sup>3</sup> /s)
							High	Low																
3	Akie	07EA007	1683.0	1557	584	31.13	1	1	1	2	14	30	20	12	9	6	3	2	1.19	0.81	350.11	1.53	14.69	2.62
3	Beaver-Whitefish	10BD001	7306.4	991	269	62.07	2	2	2	4	26	18	14	11	8	7	4	3	1.35	0.68	801.82	1.42	27.25	10.16
3	Big Creek	10AA005	1003.2	1176	243	7.73	3	3	3	3	17	24	14	9	8	7	5	4	1.28	0.76	78.12	1.77	4.30	1.43
3	Blue	10AC004	1654.6	1260	348	18.27	2	2	2	2	11	27	20	10	9	8	4	3	1.18	0.81	196.28	1.58	11.80	1.86
3	Coal	10BC001	8973.3	1019	316	89.79	2	2	2	3	20	27	15	9	7	6	3	3	1.26	0.76	1052.37	1.28	52.83	16.34
3	Dease - mouth	10AC006	14558.7	1254	388	179.08	2	2	2	2	13	28	17	9	9	9	4	3	1.15	0.82	1338.04	1.26	98.48	25.91
3	Finlay	07EA005	15637.2	1452	531	262.92	2	1	1	2	13	30	20	10	8	6	3	2	1.14	0.85	2060.90	1.50	143.26	30.59
3	Frances	10AB001	13012.7	1164	382	157.54	2	1	1	2	11	28	18	11	10	8	4	3	1.22	0.79	972.80	1.30	106.12	17.64
3	Geddes	10BE008	76.5	712	78	0.19	5	5	5	9	16	10	12	9	9	9	7	6	1.49	0.58	1.48	1.71	0.06	0.05
3	Graham	07FA005	2138.8	1359	355	24.07	2	2	2	3	15	30	19	10	7	6	3	2	1.23	0.75	311.45	1.99	9.05	3.50
3	Grayling	10BE011	1759.2	1111	297	16.54	1	1	1	3	29	21	15	8	8	6	3	2	1.31	0.69	384.29	1.78	2.76	1.08
3	Halfway	07FA003	3764.1	1259	308	36.73	1	1	1	3	15	27	22	13	7	5	2	2	1.32	0.72	725.25	1.47	11.32	2.94
3	Halfway - Graham	07FA006	9288.3	1062	245	72.10	1	1	1	3	16	30	21	10	7	5	3	2	1.42	0.62	1610.99	2.29	21.39	6.95
3	Hyland	10AD001	9342.8	1196	445	131.65	2	1	1	2	14	32	20	10	8	6	3	2	1.23	0.78	1110.86	1.37	80.09	11.89
3	Ingenika	07EA004	4141.5	1551	451	59.24	2	2	2	2	14	33	19	9	7	6	3	2	1.16	0.83	635.17	1.59	26.68	6.83
3	Kechika - Boya	10BB002	11276.4	1433	409	146.28	2	1	2	2	10	25	22	13	9	7	4	2	1.14	0.86	840.65	1.18	100.12	18.48
3	Kechika - mouth	10BB001	22938.0	1320	340	246.87	2	2	2	2	11	26	20	12	10	8	4	2	1.13	0.85	1646.00	1.22	174.68	33.27
3	Kwadacha	07EA002	2417.2	1474	684	52.40	1	1	1	2	13	25	21	14	9	6	3	2	1.14	0.84	351.90	1.43	28.72	4.47
3	Liard - Kechika	10BE006	61277.6	1154	365	709.46	2	2	2	2	13	27	18	10	8	8	4	3	1.16	0.83	4673.02	1.25	470.03	96.11
3	Liard - Lower X	10BE001	104328.0	1151	345	1141.04	2	2	2	2	13	27	18	10	9	8	4	3	1.21	0.78	7161.40	1.23	754.05	164.25
3	Liard - Upper X	10AA001	31957.7	1166	363	367.37	2	2	2	2	14	28	17	10	9	8	4	3	1.21	0.79	2705.60	1.35	239.40	53.11
3	Mesilinka	07EC003	2948.8	1410	482	45.01	2	1	1	2	15	33	19	9	6	6	3	2	1.17	0.83	414.15	1.44	18.79	5.25
3	Ospika	07EB002	2196.1	1502	583	40.55	2	1	1	2	18	32	17	8	7	6	3	2	1.19	0.81	581.69	2.48	14.58	4.25
3	Pitman	08CA003	2730.0	1442	531	45.91	1	1	1	1	14	30	19	9	9	8	4	2	1.00	0.88	432.40	1.19	20.97	3.65
3	Rabbit - mouth	10BE012	3718.1	1305	340	40.09	2	1	2	2	12	22	21	12	10	8	4	3	1.28	0.74	408.34	1.45	22.14	3.96
3	Rancheria	10AA004	5286.3	1250	317	53.08	3	2	2	2	13	28	17	9	9	7	4	3	1.27	0.74	505.62	1.63	31.25	7.15
3	Sikanni Chief	10CB001	2181.3	1420	382	26.38	2	1	2	3	13	27	21	12	9	6	3	2	1.28	0.69	406.01	1.78	11.40	2.53
3	Stikine bl Spatsizi	08CA002	7588.3	1556	548	131.69	1	1	1	1	15	31	21	10	8	7	2	2	1.10	0.89	1232.58	1.43	59.40	10.21
3	Smith	10BE013	3874.1	864	215	26.34	5	4	5	7	13	13	13	10	9	9	6	6	1.28	0.73	109.98	1.69	18.52	9.00
3	Teeter	10BE009	210.0	1034	176	1.17	5	4	4	5	13	13	14	11	9	9	7	6	1.35	0.69	7.64	1.98	0.77	0.34
3	Toad - mouth	10BE010	6889.6	1468	490	106.91	2	1	1	2	8	22	24	17	11	7	3	2	1.22	0.79	1007.63	1.63	69.60	11.16
3	Toad - Nonda	10BE004	2540.7	1634	536	43.13	2	2	2	2	8	25	23	14	10	7	3	2	1.19	0.82	419.52	1.83	28.59	5.58
3	Trout	10BE007	1190.9	1415	437	16.50	3	3	3	3	8	22	19	12	10	8	5	4	1.23	0.78	166.23	2.68	9.71	4.58
3	Turnagain	10BA001	6629.1	1435	424	89.10	2	1	1	2	13	30	18	10	9	8	3	2	1.13	0.81	745.03	1.24	51.54	8.21
4	Adsett	10CD005	109.2	693	245	0.85	0	0	0	4	23	19	27	15	8	3	1	0	1.61	0.51	86.19	3.37	0.05	
4	Bougie	10CD004	334.2	733	248	2.62	0	0	0	4	27	22	23	13	7	3	0	0	1.45	0.61	178.20	2.44	0.04	
4	Fontas	10CA001	7514.2	598	129	30.71	0	0	1	8	25	19	19	11	7	5	2	1	1.39	0.52	558.20	1.39	3.16	0.39
4	Fort Nelson	10CC002	22632.2	670	196	140.66	1	0	1	5	21	21	20	14	9	5	2	1	1.52	0.57	2600.19	1.89	30.96	4.09
4	Liard - Beaver	10BE005	117873.8	1149	391	1458.75	2	2	2	2	13	27	19	10	9	7	4	3	1.17	0.83	8738.77	1.15	962.74	202.43
4	Muskwa	10CD001	20253.3	984	333	213.79	1	1	1	3	14	22	23	16	10	5	2	2	1.29	0.72	3586.09	1.51	91.45	10.71
4	Prophet	10CD006	7278.1	994	324	74.62	1	1	1	3	16	25	24	15	6	4	2	1	1.29	0.72	1426.05	1.27	26.56	2.67
4	Raspberry	10CD003	274.0	547	139	1.21	0	0	0	5	45	15	13	9	7	4	1	0	1.74	0.42	54.54	3.27	0.006	
6	Alces	07FD004	319.3	763	56	0.57	0	0	1	19	31	18	12	5	8	3	1	1	1.85	0.36	22.10	2.53		
6	Beaton	07FC001	15529.2	780	108	53.00	0	0	0	12	30	20	16	9	7	3	1	0	1.55	0.53	1334.86	1.53	3.03	0.14
6	Beaverlodge	07GD001	1595.5	814																	89.32	1.79		
6	Blueberry	07FC003	1774.2	828	90	5.08	0	0	0	17	31	22	14	6	6	2	1	0	1.69	0.42	340.11	2.61	0.012	0.004
6	Chinchaga	07OC001	10858.4	702	80	27.50	0	0	0	11	35	16	16	11	6	4	1	1	1.63	0.51	602.57	1.55	2.04	
6	Clear	07FD009	2921.2	704																	256.41	2.61	0.009	
6	Kiskatinaw	07FD001	3599.7	921	86	9.80	1	1	1	16	26	17	19	7	6	4	2	1	1.73	0.43	390.47	2.23	0.249	0.076
6	Pouce Coupe	07FD007	2876.4	794	59	5.36	0	0	1	26	30	12	15	5	7	3	1	1	2.02	0.21	292.53	1.67		
6	Redwillow	07GD004	1280.3	1023	135	5.49	1	1	1	13	34	16	16	4	7	4	3	1	1.63	0.51	152.37	1.91	0.144	0.027

Table 2: Omineca and Northeast Regions Streamflow Summary (page 1 of 2)











Hydro-logic Zone	Watershed		Drainage Area (km <sup>2</sup> )	Median Elevation (m)	Instantaneous Peak Flow (m <sup>3</sup> /s)										# years n
	Stream	Hydrometric Station			Return Period (Year)										
					200	100	50	25	20	10	5	2	1.25	1.01	
7	Carbon	07EF004	736.6	1345	603.36	501.04	413.49	338.47	316.64	255.06	201.37	137.99	103.47	75.01	14
7	Cutbank	07GB001	840.8	1138	1263.32	961.11	717.84	523.32	469.62	326.43	213.67	99.82	49.69	16.83	39
7	Dickebusch	07FB004	84.8	1053	613.76	371.31	220.05	126.91	105.53	57.71	29.51	9.77	4.02	1.34	33
7	Flatbed	07FB009	478.7	1129	595.12	437.05	317.46	227.30	203.33	141.51	95.06	50.03	30.45	17.20	28
7	Moberly	07FB008	1521.7	938	255.00	218.80	186.20	156.80	148.00	122.10	98.20	67.50	49.00	31.50	32
7	Murray - mouth	07FB002	5554.3	1162	1633.16	1469.56	1311.62	1158.16	1109.46	959.18	807.38	587.66	434.37	264.38	34
7	Murray - Wolverine	07FB006	2385.4	1303	1143.61	1004.39	876.67	758.97	722.95	615.93	514.29	379.18	293.94	209.50	34
7	Pine	07FB001	12138.1	1125	6087.78	5102.14	4247.29	3504.38	3286.17	2664.47	2113.65	1448.71	1075.72	754.01	50
7	Quality	07FB005	26.3	1087	62.29	43.48	29.84	20.03	17.51	11.26	6.85	2.97	1.49	0.60	23
7	Sukunka	07FB003	2591.3	1198	1068.90	992.99	916.39	838.35	812.74	730.82	642.92	503.90	395.73	259.61	33
7	Wapiti	07GE001	11312.6	1007	10791.81	7656.29	5380.50	3734.15	3308.70	2240.50	1471.15	763.46	473.63	291.30	50
8	Babine	08EC013	6731.9	973	354.31	319.03	285.33	252.93	242.72	211.43	180.16	135.48	104.66	70.64	40
8	Buck	08EE013	566.5	1114	145.98	127.08	109.77	93.87	89.01	74.62	61.01	43.03	31.76	20.61	39
8	Chuchinka	07EE009	315.8	961	112.19	105.23	97.84	89.91	87.22	78.29	68.18	51.10	37.07	19.38	36
8	Driftwood	08JD006	400.4	1115	182.33	163.57	146.04	129.57	124.46	109.06	94.09	73.56	60.14	46.48	29
8	Goathorn	08EE008	121.7	1164	63.87	53.66	44.81	37.11	34.84	28.39	22.67	15.76	11.89	8.57	50
8	Lower Nechako	LowerNechako	13768.0												
8	Maclvor	08JA016	55.7	1533	15.35	14.36	13.36	12.36	12.04	11.01	9.92	8.22	6.92	5.29	16
8	Muskeg	08KC003	296.9	886	28.15	27.63	26.96	26.09	25.75	24.49	22.71	18.74	14.38	7.40	21
8	Nation-James	07ED001	4355.7	1147	672.02	629.16	585.00	539.02	523.70	473.93	419.13	329.36	256.77	162.28	41
8	Nation-Mouth	07ED003	6799.8	1097	1089.94	1004.78	920.37	835.98	808.64	722.40	631.93	493.32	389.28	262.99	31
8	Nautley	08JB003	6574.0	927	363.18	321.69	281.90	243.56	231.47	194.49	157.72	106.02	71.63	36.29	59
8	Nechako Reservoir	NechakoRes	14132.0												
8	Omineca - Osilinka	07EC002	5390.8	1281	1186.28	1109.70	1031.78	951.69	925.24	840.03	747.49	598.41	479.59	325.40	36
8	Osilinka	07EC004	1945.2	1381	540.58	498.37	456.86	415.70	402.44	360.86	317.65	252.25	203.81	145.70	30
8	Pack-Mcleod	07EE010	3704.8	874	507.18	465.46	425.27	386.29	373.92	335.77	297.19	241.13	201.74	157.71	30
8	Pinkut	08EC004	794.6	1084	107.20	95.28	83.73	72.51	68.95	57.99	46.99	31.36	20.87	10.11	47
8	Salmon	08KC001	4231.5	826	493.41	450.72	408.81	367.35	354.03	312.34	269.23	204.58	157.38	102.04	54
8	Simpson	08EE012	13.2	1311	12.31	10.66	9.15	7.77	7.34	6.09	4.91	3.36	2.39	1.44	41
8	Station	08EE028	9.8	1495	15.13	11.87	9.28	7.21	6.63	5.09	3.85	2.55	1.93	1.53	11
8	Stellako	08JB002	4000.9	941	247.20	216.57	187.66	160.26	151.73	125.92	100.78	66.43	44.31	22.32	63
8	Stuart	08JE001	14234.7	900	645.70	603.86	561.16	517.12	502.55	455.51	404.25	321.34	255.06	169.07	81
8	Tsilcoh	08JE004	437.9	835	64.93	60.55	55.95	51.10	49.47	44.12	38.17	28.35	20.50	10.80	35
8	Two Mile	08EE025	19.7	706	2.90	2.40	1.95	1.56	1.44	1.11	0.82	0.47	0.28	0.12	29
8	Van Tine	08JA014	145.2	1252	40.14	35.51	30.97	26.51	25.08	20.68	16.26	10.03	6.00	2.25	31
12	Fraser-Hansand	08KA004	17972.8	1460	3259.24	3110.32	2955.22	2791.71	2736.73	2555.95	2352.70	2007.09	1711.47	1290.63	58
12	McGregor	08KB003	4760.9	1368	2449.92	2237.62	2034.83	1839.82	1778.35	1589.90	1401.45	1132.08	946.86	746.08	51
12	Muller	08KB006	102.9	1352	75.05	70.73	66.26	61.59	60.03	54.95	49.31	39.95	32.22	21.82	31
12	Parsnip	07EE007	4905.0	1101	1430.00	1355.60	1278.91	1198.94	1172.26	1085.29	988.92	828.64	695.30	511.92	43
13	Canoe	08NC004	306.7	1957	160.57	146.18	132.99	120.87	117.17	106.29	96.19	83.66	77.11	73.33	37
13	Dore	08KA001	408.7	1913	187.15	172.91	159.01	145.31	140.92	127.21	113.08	91.93	76.49	58.32	49
13	Fraser - McBride	08KA005	6881.1	1844	1426.58	1363.09	1297.52	1228.98	1206.08	1131.24	1047.95	908.33	790.69	625.51	59
13	Fraser - Red Pass	08KA007	1696.9	1954	453.59	420.44	388.33	356.99	347.01	316.09	284.61	238.50	205.90	169.63	57
13	Kakwa	07GB002	3253.6	1396	5595.90	3819.24	2584.25	1728.79	1514.26	990.54	630.02	316.40	195.98	125.87	18
13	McKale	08KA009	253.7	1835	185.36	161.53	140.34	121.44	115.79	99.40	84.49	66.01	55.63	47.56	39
13	Miette	07AA001	644.7	1955	146.57	137.34	128.04	118.58	115.48	105.56	94.91	78.00	64.71	47.59	46
13	Moose	08KA008	456.0	2010	224.10	206.61	189.22	171.78	166.12	148.23	129.39	100.40	78.55	51.97	41
13	Morkill	08KA013	1263.3	1693	610.63	576.03	539.30	499.85	486.43	441.87	391.11	304.20	230.96	133.62	14
13	Muskeg - Alberta	07GA002	722.9	1490	526.86	392.34	288.23	208.00	186.36	129.85	86.58	43.83	24.96	11.96	39
13	Smoky - Hells	07GA001	3760.0	1853	1510.32	1286.05	1090.66	920.03	869.74	725.99	598.09	443.62	358.56	291.43	43
13	Swift	08KA012	132.4	1956											
13	Whirlpool	07AA009	602.0	2037	190.25	172.46	155.79	140.07	135.19	120.44	106.07	86.36	73.61	61.13	28

Note: Gaps in the table indicate that matrix wasn't calculated due to unavailability of data

Table 4: Frequency Distribution of Instantaneous Peak Flows (page 2 of 2)

Hydro-logic Zone	Watershed		Drainage Area (km <sup>2</sup> )	Median Elevation (m)	Annual Mean Flow (m <sup>3</sup> /s)										# years n
	Stream	Hydrometric Station			Return Period (Year)										
			200	100	50	25	20	10	5	2	1.25	1.01			
3	Akie	07EA007	1683.0	1557	42.66	41.58	40.38	39.03	38.56	36.92	34.92	31.08	27.29	20.96	28
3	Beaver-Whitefish	10BD001	7306.4	991	115.18	108.86	102.24	95.22	92.85	85.05	76.25	61.34	48.76	31.59	16
3	Big Creek	10AA005	1003.2	1176	13.96	12.98	12.02	11.08	10.78	9.83	8.86	7.42	6.37	5.15	22
3	Blue	10AC004	1654.6	1260	24.65	24.07	23.42	22.67	22.41	21.48	20.32	18.03	15.72	11.79	33
3	Coal	10BC001	8973.3	1019	155.98	149.07	141.82	134.11	131.51	122.89	113.11	96.26	81.63	60.49	31
3	Dease - mouth	10AC006	14558.7	1254	217.48	216.20	214.41	211.87	210.84	206.62	200.07	182.87	160.03	111.85	12
3	Finlay	07EA005	15637.2	1452	332.58	326.91	320.46	312.95	310.26	300.71	288.59	263.95	237.93	190.76	33
3	Frances	10AB001	13012.7	1164	234.67	226.75	218.22	208.90	205.68	194.81	182.03	158.78	137.25	103.76	46
3	Geddes	10BE008	76.5	712	0.48	0.43	0.39	0.34	0.33	0.28	0.24	0.18	0.13	0.08	16
3	Graham	07FA005	2138.8	1359	32.88	32.42	31.83	31.07	30.77	29.65	28.08	24.45	20.25	12.67	28
3	Grayling	10BE011	1759.2	1111	26.09	25.33	24.46	23.42	23.05	21.71	20.00	16.59	13.17	7.81	12
3	Halfway	07FA003	3764.1	1259	63.71	60.03	56.26	52.35	51.05	46.85	42.22	34.65	28.46	20.18	18
3	Halfway - Graham	07FA006	9288.3	1062	146.61	137.74	128.41	118.49	115.13	104.07	91.62	70.65	53.32	30.72	28
3	Hyland	10AD001	9342.8	1196	204.36	197.12	189.33	180.83	177.91	168.03	156.43	135.45	116.16	86.44	33
3	Ingenika	07EA004	4141.5	1551	74.53	73.45	72.17	70.61	70.03	67.92	65.10	59.01	52.19	39.36	34
3	Kechika - Boya	10BB002	11276.4	1433	177.89	174.64	171.00	166.85	165.38	160.25	153.89	141.35	128.52	105.85	26
3	Kechika - mouth	10BB001	22938.0	1320	294.53	291.88	288.57	284.35	282.74	276.67	268.14	248.34	224.42	175.58	25
3	Kwadacha	07EA002	2417.2	1474	63.90	63.00	61.80	60.50	60.00	58.20	55.90	51.00	45.50	35.40	34
3	Liard - Kechika	10BE006	61277.6	1154	897.33	885.19	870.47	852.26	845.44	820.23	786.07	710.52	624.37	460.71	26
3	Liard - Lower X	10BE001	104328.0	1151	1609.05	1565.90	1517.93	1463.76	1444.66	1378.51	1297.56	1142.02	988.89	735.64	55
3	Liard - Upper X	10AA001	31957.7	1166	547.65	529.45	509.84	488.38	480.98	455.95	426.46	372.78	322.97	245.22	52
3	Mesilinka	07EC003	2948.8	1410	62.00	60.02	57.93	55.68	54.91	52.36	49.41	44.18	39.47	32.26	36
3	Ospika	07EB002	2196.1	1502	55.73	54.33	52.77	51.02	50.39	48.24	45.61	40.52	35.48	27.03	30
3	Pitman	08CA003	2730.0	1442	53.29	52.71	51.70	50.67	49.24	45.96	42.03	39.77	37.81	33.98	15
3	Rabbit - mouth	10BE012	3718.1	1305	65.58	62.68	59.60	56.30	55.17	51.42	47.11	39.55	32.90	23.21	11
3	Rancheria	10AA004	5286.3	1250	86.92	82.65	78.24	73.62	72.07	67.01	61.38	51.93	43.98	32.89	25
3	Sikanni Chief	10CB001	2181.3	1420	44.46	42.18	39.80	37.28	36.44	33.64	30.49	25.14	20.60	14.25	54
3	Stikine bl Spatsizi	08CA002	7588.3	1556	155.19	153.39	151.29	148.80	147.89	144.62	140.36	131.32	121.29	101.90	15
3	Smith	10BE013	3874.1	864	45.64	42.99	40.31	37.57	36.67	33.77	30.63	25.59	21.56	16.27	27
3	Teeter	10BE009	210.0	1034	2.20	2.06	1.92	1.77	1.73	1.57	1.40	1.13	0.90	0.61	32
3	Toad - mouth	10BE010	6889.6	1468	159.55	153.67	147.42	140.68	138.38	130.68	121.77	105.96	91.73	70.19	12
3	Toad - Nonda	10BE004	2540.7	1634	60.71	58.82	56.80	54.60	53.84	51.28	48.29	42.86	37.84	29.96	48
3	Trout	10BE007	1190.9	1415	24.49	23.61	22.67	21.64	21.29	20.09	18.69	16.16	13.84	10.27	40
3	Turnagain	10BA001	6629.1	1435	101.58	101.34	100.95	100.33	100.05	98.81	96.63	89.91	79.73	56.02	25
4	Adsett	10CD005	109.2	693	2.70	2.36	2.04	1.74	1.64	1.37	1.10	0.74	0.51	0.28	28
4	Bougie	10CD004	334.2	733	5.90	5.42	4.94	4.46	4.30	3.80	3.28	2.48	1.88	1.17	28
4	Fontas	10CA001	7514.2	598	46.85	46.43	45.79	44.80	44.38	42.58	39.64	31.81	22.32	8.09	17
4	Fort Nelson	10CC002	22632.2	670	366.71	328.20	291.16	255.33	243.99	209.13	174.15	124.03	89.59	52.19	25
4	Liard - Beaver	10BE005	117873.8	1149	1882.41	1841.76	1796.04	1743.73	1725.12	1660.00	1578.89	1418.80	1255.65	973.15	26
4	Muskwa	10CD001	20253.3	984	364.33	344.14	323.53	302.25	295.19	272.38	247.41	206.62	173.40	128.81	52
4	Prophet	10CD006	7278.1	994	113.91	110.87	107.32	103.12	101.59	96.13	89.14	75.00	60.64	37.48	7
4	Raspberry	10CD003	274.0	547	4.35	3.77	3.23	2.72	2.56	2.08	1.62	1.01	0.63	0.27	32
6	Alces	07FD004	319.3	763	2.72	2.25	1.84	1.47	1.36	1.05	0.78	0.44	0.26	0.11	27
6	Beaton	07FC001	15529.2	780	132.22	121.38	110.33	98.98	95.24	83.24	70.35	50.19	35.06	17.65	45
6	Beaverlodge	07GD001	1595.5	814											
6	Blueberry	07FC003	1774.2	828	14.30	13.19	12.01	10.74	10.31	8.91	7.34	4.84	2.98	1.06	44
6	Chinchaga	07OC001	10858.4	702	89.53	78.92	68.86	59.28	56.28	47.17	38.22	25.83	17.70	9.38	39
6	Clear	07FD009	2921.2	704											
6	Kiskatinaw	07FD001	3599.7	921	34.59	30.69	26.89	23.16	21.97	18.30	14.59	9.34	5.87	2.47	48
6	Pouce Coupe	07FD007	2876.4	794	22.43	20.55	18.46	16.15	15.35	12.71	9.78	5.29	2.44	0.41	35
6	Redwillow	07GD004	1280.3	1023	16.91	14.92	13.03	11.24	10.67	8.96	7.27	4.93	3.39	1.81	17

Table 5: High Flow Frequency Distribution of Annual Mean Flows (page 1 of 2)

Hydro-logic Zone	Watershed		Drainage Area (km <sup>2</sup> )	Median Elevation (m)	Annual Mean Flow (m <sup>3</sup> /s)										# years n
	Stream	Hydrometric Station			Return Period (Year)										
			200	100	50	25	20	10	5	2	1.25	1.01			
7	Carbon	07EF004	736.6	1345	31.92	28.76	25.75	22.86	21.95	19.16	16.37	12.40	9.66	6.64	13
7	Cutbank	07GB001	840.8	1138											
7	Dickebusch	07FB004	84.8	1053	1.34	1.27	1.19	1.10	1.07	0.95	0.81	0.56	0.35	0.12	32
7	Flatbed	07FB009	478.7	1129	7.74	7.38	6.98	6.53	6.37	5.83	5.19	4.01	2.96	1.54	27
7	Moberly	07FB008	1521.7	938	25.10	22.90	20.80	18.70	18.10	16.10	14.10	11.20	9.20	6.90	32
7	Murray - mouth	07FB002	5554.3	1162	124.57	121.03	117.03	112.43	110.79	105.05	97.90	83.93	70.06	47.52	34
7	Murray - Wolverine	07FB006	2385.4	1303	77.25	75.97	74.43	72.52	71.81	69.19	65.65	57.94	49.36	33.82	34
7	Pine	07FB001	12138.1	1125	289.62	278.67	266.80	253.76	249.25	233.95	215.89	183.01	152.75	106.75	50
7	Quality	07FB005	26.3	1087	0.56	0.51	0.46	0.40	0.38	0.33	0.26	0.17	0.11	0.04	23
7	Sukunka	07FB003	2591.3	1198	76.08	74.41	72.48	70.21	69.38	66.43	62.63	54.87	46.75	32.74	33
7	Wapiti	07GE001	11312.6	1007	191.51	178.43	165.13	151.45	146.94	132.41	116.65	91.38	71.42	45.96	50
8	Babine	08EC013	6731.9	973	100.53	92.37	84.46	76.75	74.29	66.67	58.91	47.51	39.36	30.04	40
8	Buck	08EE013	566.5	1114	11.15	9.88	8.71	7.63	7.29	6.30	5.34	4.06	3.24	2.42	38
8	Chuchinka	07EE009	315.8	961	8.16	7.86	7.53	7.16	7.03	6.58	6.04	5.03	4.08	2.64	36
8	Driftwood	08JD006	400.4	1115	12.47	11.98	11.47	10.93	10.75	10.15	9.48	8.32	7.31	5.85	29
8	Goathorn	08EE008	121.7	1164	2.69	2.59	2.48	2.37	2.33	2.19	2.04	1.75	1.49	1.09	48
8	Lower Nechako	LowerNechako	13768.0												
8	Maclvor	08JA016	55.7	1533	1.62	1.50	1.39	1.28	1.25	1.15	1.04	0.89	0.79	0.68	16
8	Muskeg	08KC003	296.9	886	4.27	3.95	3.63	3.31	3.20	2.87	2.52	1.97	1.56	1.05	21
8	Nation-James	07ED001	4355.7	1147	89.34	85.75	81.92	77.78	76.36	71.61	66.09	56.29	47.48	34.33	28
8	Nation-Mouth	07ED003	6799.8	1097	143.16	135.29	127.27	119.01	116.27	107.44	97.80	82.11	69.38	52.34	31
8	Nautley	08JB003	6574.0	927	85.60	75.80	66.64	58.03	55.36	47.31	39.49	28.75	21.70	14.34	58
8	Nechako Reservoir	NechakoRes	14132.0												
8	Omineca - Osilinka	07EC002	5390.8	1281	135.93	130.41	124.64	118.56	116.51	109.75	102.12	89.07	77.11	61.42	36
8	Osilinka	07EC004	1945.2	1381	50.30	48.55	46.72	44.79	44.14	41.99	39.57	35.42	31.82	26.55	30
8	Pack-Mcleod	07EE010	3704.8	874	62.80	60.96	58.91	56.59	55.76	52.91	49.40	42.66	36.06	25.36	30
8	Pinkut	08EC004	794.6	1084	12.36	11.06	9.84	8.69	8.34	7.26	6.22	4.78	3.83	2.85	44
8	Salmon	08KC001	4231.5	826	49.44	47.17	44.68	41.91	40.95	37.67	33.79	26.79	20.53	11.76	54
8	Simpson	08EE012	13.2	1311	0.44	0.41	0.39	0.37	0.36	0.34	0.31	0.26	0.22	0.17	35
8	Station	08EE028	9.8	1495	0.43	0.41	0.38	0.36	0.36	0.33	0.31	0.28	0.25	0.23	10
8	Stellako	08JB002	4000.9	941	51.99	46.80	41.83	37.03	35.51	30.85	26.18	19.46	14.80	9.64	60
8	Stuart	08JE001	14234.7	900	215.25	205.29	194.83	183.71	179.95	167.51	153.38	129.06	108.00	77.81	69
8	Tsilcoh	08JE004	437.9	835	4.45	4.21	3.97	3.70	3.61	3.31	2.97	2.39	1.90	1.22	34
8	Two Mile	08EE025	19.7	706	0.18	0.18	0.17	0.17	0.17	0.16	0.15	0.13	0.10	0.05	29
8	Van Tine	08JA014	145.2	1252	2.66	2.34	2.05	1.77	1.68	1.42	1.17	0.82	0.59	0.36	31
12	Fraser-Hansand	08KA004	17972.8	1460	610.36	596.10	580.32	562.58	556.34	534.77	508.45	457.88	407.76	323.02	57
12	McGregor	08KB003	4760.9	1368	290.07	284.02	277.07	268.98	266.06	255.72	242.58	215.97	188.24	139.73	50
12	Muller	08KB006	102.9	1352	6.66	6.50	6.31	6.09	6.01	5.74	5.38	4.68	3.96	2.75	30
12	Parsnip	07EE007	4905.0	1101	207.43	202.37	196.61	189.96	187.57	179.18	168.64	147.68	126.37	90.36	43
13	Canoe	08NC004	306.7	1957	17.63	17.34	17.03	16.67	16.54	16.11	15.58	14.56	13.53	11.73	37
13	Dore	08KA001	408.7	1913	19.46	18.78	18.07	17.34	17.10	16.30	15.42	13.96	12.75	11.08	45
13	Fraser - McBride	08KA005	6881.1	1844	248.12	242.75	236.94	230.56	228.35	220.85	211.93	195.40	179.59	153.55	54
13	Fraser - Red Pass	08KA007	1696.9	1954	59.33	57.95	56.44	54.76	54.18	52.19	49.80	45.30	40.95	33.71	56
13	Kakwa	07GB002	3253.6	1396											
13	McKale	08KA009	253.7	1835	11.20	10.97	10.70	10.39	10.28	9.87	9.35	8.29	7.17	5.20	39
13	Miette	07AA001	644.7	1955	16.77	15.84	14.91	13.97	13.66	12.69	11.66	10.04	8.80	7.24	36
13	Moose	08KA008	456.0	2010	21.47	20.59	19.66	18.68	18.35	17.26	16.03	13.91	12.07	9.40	41
13	Morkill	08KA013	1263.3	1693	54.70	53.48	52.04	50.31	49.67	47.37	44.37	38.10	31.50	20.35	14
13	Muskeg - Alberta	07GA002	722.9	1490											
13	Smoky - Hells	07GA001	3760.0	1853											
13	Swift	08KA012	132.4	1956	4.85	4.69	4.52	4.32	4.26	4.03	3.75	3.24	2.76	2.01	14
13	Whirlpool	07AA009	602.0	2037											

Note: Gaps in the table indicate that matrix wasn't calculated due to unavailability of data

Table 5: High Flow Frequency Distribution of Annual Mean Flows (page 2 of 2)

Hydro-logic Zone	Watershed		Drainage Area (km <sup>2</sup> )	Median Elevation (m)	Annual Mean Flow (m <sup>3</sup> /s)										# years n
	Stream	Hydrometric Station			Return Period (Year)										
					200	100	50	25	20	10	5	2	1.25	1.01	
3	Akie	07EA007	1683.0	1557	19.74	20.74	21.85	23.12	23.56	25.13	27.07	30.87	34.75	41.52	29
3	Beaver-Whitefish	10BD001	7306.4	991	29.26	31.59	34.31	37.55	38.74	43.05	48.76	61.34	76.25	108.86	16
3	Big Creek	10AA005	1003.2	1176	4.90	5.04	5.22	5.45	5.53	5.84	6.28	7.33	8.79	12.92	23
3	Blue	10AC004	1654.6	1260	11.56	12.17	12.85	13.62	13.90	14.84	16.01	18.25	20.47	24.13	31
3	Coal	10BC001	8973.3	1019	57.02	60.01	63.44	67.46	68.92	74.14	80.93	95.51	112.39	148.75	32
3	Dease - mouth	10AC006	14558.7	1254	103.58	111.85	120.96	131.08	134.58	146.40	160.03	182.87	200.07	216.20	12
3	Finlay	07EA005	15637.2	1452	182.90	190.76	199.41	209.06	212.43	224.00	237.93	263.95	288.59	326.91	33
3	Frances	10AB001	13012.7	1164	98.76	103.71	109.32	115.79	118.11	126.30	136.70	158.05	181.27	226.49	47
3	Geddes	10BE008	76.5	712	0.075	0.080	0.087	0.096	0.099	0.111	0.129	0.172	0.236	0.429	17
3	Graham	07FA005	2138.8	1359	11.50	12.67	14.01	15.53	16.08	17.96	20.25	24.45	28.08	32.42	30
3	Grayling	10BE011	1759.2	1111	7.04	7.81	8.70	9.74	10.12	11.46	13.17	16.59	20.00	25.33	12
3	Halfway	07FA003	3764.1	1259	19.05	20.18	21.49	23.05	23.62	25.69	28.46	34.65	42.22	60.03	18
3	Halfway - Graham	07FA006	9288.3	1062	27.80	30.72	34.17	38.36	39.92	45.62	53.32	70.65	91.62	137.74	28
3	Hyland	10AD001	9342.8	1196	81.48	85.86	90.84	96.59	98.66	105.98	115.30	134.54	155.58	196.79	34
3	Ingenika	07EA004	4141.5	1551	37.21	39.36	41.73	44.37	45.29	48.44	52.19	59.01	65.10	73.45	34
3	Kechika - Boya	10BB002	11276.4	1433	101.11	104.86	109.00	113.63	115.26	120.85	127.66	140.62	153.32	174.45	27
3	Kechika - mouth	10BB001	22938.0	1320	163.30	172.13	181.75	192.32	195.97	208.27	222.55	247.25	267.63	291.73	26
3	Kwadacha	07EA002	2417.2	1474	34.09	35.78	37.64	39.71	40.44	42.90	45.83	51.19	56.06	63.01	33
3	Liard - Kechika	10BE006	61277.6	1154	445.56	472.33	501.81	534.69	546.16	585.27	631.70	715.34	788.80	885.99	25
3	Liard - Lower X	10BE001	104328.0	1151	666.81	707.09	752.37	804.16	822.58	887.00	967.15	1125.13	1285.59	1561.18	59
3	Liard - Upper X	10AA001	31957.7	1166	233.02	245.01	258.55	274.12	279.69	299.29	324.04	374.31	428.10	529.97	51
3	Mesilinka	07EC003	2948.8	1410	31.18	32.26	33.49	34.90	35.41	37.19	39.47	44.18	49.41	60.02	36
3	Ospika	07EB002	2196.1	1502	25.70	27.03	28.52	30.21	30.81	32.90	35.48	40.52	45.61	54.33	30
3	Pitman	08CA003	2730.0	1442	33.75	35.09	36.55	38.14	38.69	40.52	42.64	46.33	49.43	53.34	14
3	Rabbit - mouth	10BE012	3718.1	1305	21.83	23.21	24.80	26.67	27.35	29.76	32.90	39.55	47.11	62.68	11
3	Rancheria	10AA004	5286.3	1250	29.90	31.48	33.31	35.47	36.25	39.08	42.79	50.91	60.55	82.17	27
3	Sikanni Chief	10CB001	2181.3	1420	12.93	13.81	14.83	16.04	16.48	18.07	20.16	24.74	30.14	42.00	57
3	Stikine bl Spatsizi	08CA002	7588.3	1556	101.05	104.27	107.77	111.61	112.94	117.44	122.74	132.31	140.96	153.59	14
3	Smith	10BE013	3874.1	864	14.67	15.41	16.28	17.31	17.69	19.07	20.93	25.12	30.34	43.04	28
3	Teeter	10BE009	210.0	1034	0.575	0.614	0.659	0.713	0.733	0.806	0.905	1.13	1.40	2.06	32
3	Toad - mouth	10BE010	6889.6	1468	66.99	70.19	73.82	78.02	79.53	84.88	91.73	105.96	121.77	153.67	12
3	Toad - Nonda	10BE004	2540.7	1634	28.79	29.97	31.30	32.82	33.37	35.29	37.72	42.70	48.12	58.76	49
3	Trout	10BE007	1190.9	1415	9.71	10.24	10.83	11.52	11.77	12.64	13.76	16.07	18.60	23.58	41
3	Turnagain	10BA001	6629.1	1435	48.56	53.01	57.90	63.31	65.17	71.39	78.39	89.37	96.53	101.32	26
4	Adsett	10CD005	109.2	693	0.262	0.288	0.319	0.359	0.375	0.434	0.521	0.754	1.117	2.372	27
4	Bougie	10CD004	334.2	733	1.06	1.15	1.25	1.38	1.43	1.60	1.85	2.44	3.24	5.40	29
4	Fontas	10CA001	7514.2	598	5.29	6.80	8.77	11.34	12.34	16.07	21.12	31.17	39.49	46.39	18
4	Fort Nelson	10CC002	22632.2	670	49.35	53.78	59.14	65.84	68.39	78.01	91.79	126.57	176.92	330.39	24
4	Liard - Beaver	10BE005	117873.8	1149	927.58	973.15	1023.75	1080.84	1100.95	1170.56	1255.65	1418.80	1578.89	1841.76	26
4	Muskwa	10CD001	20253.3	984	117.13	123.32	130.51	139.05	142.18	153.54	168.67	202.46	243.92	341.97	56
4	Prophet	10CD006	7278.1	994	34.09	37.48	41.38	45.93	47.57	53.35	60.64	75.00	89.14	110.87	7
4	Raspberry	10CD003	274.0	547	0.243	0.279	0.326	0.386	0.410	0.502	0.643	1.032	1.65	3.80	31
6	Alces	07FD004	319.3	763	0.099	0.114	0.133	0.157	0.167	0.207	0.269	0.456	0.795	2.278	26
6	Beaton	07FC001	15529.2	780	15.62	17.61	20.04	23.08	24.23	28.56	34.70	49.61	69.62	121.03	46
6	Beaverlodge	07GD001	1595.5	814											
6	Blueberry	07FC003	1774.2	828	0.86	1.05	1.28	1.60	1.72	2.21	2.93	4.76	7.26	13.15	45
6	Chinchaga	07OC001	10858.4	702	8.64	9.54	10.65	12.05	12.59	14.66	17.69	25.67	37.87	78.35	40
6	Clear	07FD009	2921.2	704											
6	Kiskatinaw	07FD001	3599.7	921	2.13	2.47	2.90	3.46	3.68	4.53	5.80	9.21	14.40	30.58	49
6	Pouce Coupe	07FD007	2876.4	794	0.222	0.326	0.485	0.736	0.846	1.332	2.20	4.98	9.48	20.38	37
6	Redwillow	07GD004	1280.3	1023	1.63	1.81	2.02	2.30	2.40	2.80	3.39	4.93	7.27	14.92	17

Table 6: Low Flow Frequency Distribution of Annual Mean Flows (page 1 of 2)

Hydro-logic Zone	Watershed		Drainage Area (km <sup>2</sup> )	Median Elevation (m)	Annual Mean Flow (m <sup>3</sup> /s)										# years n
	Stream	Hydrometric Station			Return Period (Year)										
					200	100	50	25	20	10	5	2	1.25	1.01	
7	Carbon	07EF004	736.6	1345	5.87	6.23	6.67	7.21	7.41	8.18	9.28	12.03	16.03	28.44	14
7	Cutbank	07GB001	840.8	1138											
7	Dickebusch	07FB004	84.8	1053	0.09	0.11	0.14	0.18	0.20	0.25	0.34	0.55	0.80	1.27	33
7	Flatbed	07FB009	478.7	1129	1.36	1.54	1.76	2.02	2.12	2.48	2.96	4.01	5.19	7.38	27
7	Moberly	07FB008	1521.7	938	3.89	4.45	5.11	5.92	6.21	7.29	8.70	11.63	14.62	19.29	32
7	Murray - mouth	07FB002	5554.3	1162	44.12	47.52	51.39	55.85	57.44	63.05	70.06	83.93	97.90	121.03	34
7	Murray - Wolverine	07FB006	2385.4	1303	31.34	33.82	36.60	39.75	40.86	44.71	49.36	57.94	65.65	75.97	34
7	Pine	07FB001	12138.1	1125	106.21	112.83	120.37	129.12	132.27	143.42	157.65	186.98	218.84	280.04	46
7	Quality	07FB005	26.3	1087	0.038	0.045	0.053	0.064	0.069	0.085	0.110	0.174	0.265	0.511	23
7	Sukunka	07FB003	2591.3	1198	30.54	32.74	35.21	38.03	39.02	42.49	46.75	54.87	62.63	74.41	33
7	Wapiti	07GE001	11312.6	1007	42.65	45.96	49.87	54.58	56.32	62.72	71.42	91.38	116.65	178.43	50
8	Babine	08EC013	6731.9	973	29.18	30.32	31.68	33.36	34.00	36.36	39.70	47.87	59.28	92.66	39
8	Buck	08EE013	566.5	1114	2.24	2.33	2.44	2.58	2.63	2.84	3.15	3.98	5.27	9.79	39
8	Chuchinka	07EE009	315.8	961	2.43	2.64	2.88	3.16	3.26	3.62	4.08	5.03	6.04	7.86	36
8	Driftwood	08JD006	400.4	1115	4.90	5.19	5.52	5.90	6.04	6.51	7.10	8.29	9.51	11.69	30
8	Goathorn	08EE008	121.7	1164	1.02	1.08	1.14	1.22	1.25	1.35	1.47	1.73	2.02	2.58	50
8	Lower Nechako	LowerNechako	13768.0												
8	Maclvor	08JA016	55.7	1533	0.631	0.643	0.659	0.679	0.687	0.716	0.759	0.866	1.02	1.48	17
8	Muskeg	08KC003	296.9	886	0.980	1.05	1.12	1.22	1.25	1.38	1.56	1.97	2.52	3.95	21
8	Nation-James	07ED001	4355.7	1147	32.03	33.93	36.10	38.63	39.55	42.80	46.99	55.79	65.64	85.56	29
8	Nation-Mouth	07ED003	6799.8	1097	50.02	52.34	55.04	58.25	59.43	63.69	69.38	82.11	97.80	135.29	31
8	Nautley	08JB003	6574.0	927	13.50	14.34	15.35	16.64	17.12	18.99	21.70	28.75	39.49	75.80	58
8	Nechako Reservoir	NechakoRes	14132.0												
8	Omineca - Osiliinka	07EC002	5390.8	1281	59.05	61.42	64.12	67.27	68.41	72.49	77.77	89.07	102.12	130.41	36
8	Osiliinka	07EC004	1945.2	1381	25.78	26.55	27.43	28.44	28.81	30.12	31.82	35.42	39.57	48.55	30
8	Pack-Mcleod	07EE010	3704.8	874	23.73	25.36	27.20	29.32	30.07	32.73	36.06	42.66	49.40	60.96	30
8	Pinkut	08EC004	794.6	1084	2.65	2.76	2.90	3.07	3.13	3.38	3.75	4.70	6.14	10.98	46
8	Salmon	08KC001	4231.5	826	11.60	12.77	14.13	15.75	16.35	18.50	21.33	27.38	34.17	47.37	51
8	Simpson	08EE012	13.2	1311	0.155	0.163	0.172	0.182	0.186	0.200	0.218	0.258	0.306	0.413	37
8	Station	08EE028	9.8	1495	0.152	0.163	0.175	0.189	0.194	0.211	0.233	0.274	0.315	0.378	11
8	Stellako	08JB002	4000.9	941	9.02	9.64	10.37	11.29	11.64	12.94	14.80	19.46	26.18	46.80	60
8	Stuart	08JE001	14234.7	900	72.17	76.43	81.33	87.09	89.18	96.70	106.50	127.59	152.07	204.66	72
8	Tsilcoh	08JE004	437.9	835	1.12	1.21	1.31	1.44	1.49	1.66	1.88	2.37	2.95	4.20	35
8	Two Mile	08EE025	19.7	706	0.040	0.047	0.055	0.065	0.068	0.081	0.097	0.127	0.152	0.177	29
8	Van Tine	08JA014	145.2	1252	0.329	0.355	0.388	0.428	0.444	0.504	0.590	0.818	1.17	2.34	31
12	Fraser-Hansand	08KA004	17972.8	1460	309.48	323.02	338.08	355.11	361.13	382.03	407.76	457.88	508.45	596.10	57
12	McGregor	08KB003	4760.9	1368	121.87	130.77	140.69	151.91	155.86	169.47	185.91	216.25	243.68	281.20	50
12	Muller	08KB006	102.9	1352	2.52	2.70	2.91	3.16	3.24	3.54	3.92	4.64	5.36	6.49	31
12	Parsnip	07EE007	4905.0	1101	84.73	90.36	96.67	103.88	106.44	115.36	126.37	147.68	168.64	202.37	43
13	Canoe	08NC004	306.7	1957	11.41	11.70	12.03	12.39	12.52	12.95	13.49	14.51	15.54	17.33	38
13	Dore	08KA001	408.7	1913	10.82	11.05	11.32	11.63	11.75	12.16	12.71	13.92	15.38	18.75	45
13	Fraser - McBride	08KA005	6881.1	1844	149.11	153.37	158.10	163.43	165.32	171.87	179.96	195.89	212.35	242.47	53
13	Fraser - Red Pass	08KA007	1696.9	1954	32.56	33.71	35.00	36.45	36.96	38.74	40.95	45.30	49.80	57.95	56
13	Kakwa	07GB002	3253.6	1396											
13	McKale	08KA009	253.7	1835	4.89	5.20	5.55	5.95	6.09	6.58	7.17	8.29	9.35	10.97	39
13	Miette	07AA001	644.7	1955	7.04	7.24	7.48	7.77	7.87	8.27	8.80	10.04	11.66	15.84	36
13	Moose	08KA008	456.0	2010	9.36	9.74	10.17	10.67	10.85	11.50	12.34	14.13	16.21	20.68	38
13	Morkill	08KA013	1263.3	1693	18.66	20.35	22.28	24.50	25.29	28.07	31.50	38.10	44.37	53.48	14
13	Muskeg - Alberta	07GA002	722.9	1490											
13	Smoky - Hells	07GA001	3760.0	1853											
13	Swift	08KA012	132.4	1956	1.90	2.01	2.14	2.29	2.34	2.53	2.76	3.24	3.75	4.69	14
13	Whirlpool	07AA009	602.0	2037											

Note: Gaps in the table indicate that matrix wasn't calculated due to unavailability of data

Table 6: Low Flow Frequency Distribution of Annual Mean Flows (page 2 of 2)

Hydro-logic Zone	Watershed		Drainage Area (km <sup>2</sup> )	Median Elevation (m)	June-September 7-Day Low Flow (m <sup>3</sup> /s)									# years n	
	Stream	Hydrometric Station			Return Period (Year)										
					200	100	50	25	20	10	5	2	1.25		1.01
3	Akie	07EA007	1683.0	1557	9.470	10.338	11.359	12.587	13.040	14.693	16.910	21.859	27.817	41.016	30
3	Beaver-Whitefish	10BD001	7306.4	991	14.942	16.975	19.388	22.300	23.371	27.253	32.331	42.883	53.844	71.487	16
3	Big Creek	10AA005	1003.2	1176	2.808	3.064	3.361	3.713	3.841	4.302	4.901	6.165	7.561	10.229	23
3	Blue	10AC004	1654.6	1260	9.187	9.639	10.161	10.774	10.997	11.800	12.853	15.146	17.861	23.936	32
3	Coal	10BC001	8973.3	1019	46.357	47.206	48.321	49.828	50.429	52.831	56.566	67.167	84.720	150.601	33
3	Dease - mouth	10AC006	14558.7	1254	75.289	79.306	83.930	89.375	91.354	98.475	107.812	128.091	151.999	204.963	12
3	Finlay	07EA005	15637.2	1452	104.056	110.685	118.404	127.609	130.986	143.264	159.656	196.327	241.266	346.531	33
3	Frances	10AB001	13012.7	1164	72.058	77.896	84.664	92.677	95.598	106.121	119.902	149.486	183.280	252.500	49
3	Geddes	10BE008	76.5	712	0.031	0.036	0.041	0.048	0.051	0.061	0.076	0.116	0.173	0.346	17
3	Graham	07FA005	2138.8	1359	5.251	5.871	6.607	7.501	7.833	9.049	10.685	14.311	18.556	27.238	28
3	Grayling	10BE011	1759.2	1111	0.366	0.584	0.930	1.484	1.726	2.762	4.435	8.378	11.763	13.930	12
3	Halfway	07FA003	3764.1	1259	5.817	6.660	7.692	8.986	9.476	11.322	13.918	20.099	28.033	46.515	18
3	Halfway - Graham	07FA006	9288.3	1062	11.429	12.981	14.866	17.210	18.093	21.394	25.985	36.739	50.276	81.074	28
3	Hylland	10AD001	9342.8	1196	64.699	67.217	70.192	73.801	75.142	80.093	86.894	102.909	124.093	180.767	39
3	Ingenika	07EA004	4141.5	1551	18.109	19.554	21.241	23.255	23.994	26.680	30.255	38.163	47.624	68.614	34
3	Kechika - Boya	10BB002	11276.4	1433	78.770	82.466	86.720	91.732	93.555	100.122	108.751	127.594	150.026	200.714	27
3	Kechika - mouth	10BB001	22938.0	1320	125.344	134.288	144.398	156.015	160.158	174.682	192.796	228.442	264.267	323.805	27
3	Kwadacha	07EA002	2417.2	1474	20.672	22.052	23.651	25.543	26.233	28.724	32.007	39.168	47.619	66.163	34
3	Liard - Kechika	10BE006	61277.6	1154	332.482	357.493	385.740	418.146	429.682	470.026	520.052	617.218	712.543	863.484	26
3	Liard - Lower X	10BE001	104328.0	1151	518.106	559.623	607.208	662.769	682.813	754.052	845.067	1031.671	1230.374	1591.531	65
3	Liard - Upper X	10AA001	31957.7	1166	174.243	185.313	198.175	213.474	219.078	239.402	266.425	326.437	399.217	566.808	51
3	Mesilinka	07EC003	2948.8	1410	12.238	13.367	14.675	16.219	16.780	18.790	21.391	26.820	32.712	43.610	36
3	Ospika	07EB002	2196.1	1502	8.951	9.865	10.952	12.274	12.765	14.577	17.045	22.693	29.714	45.955	30
3	Pitman	08CA003	2730.0	1442	15.129	16.091	17.224	18.594	19.101	20.968	23.517	29.445	37.131	56.897	14
3	Rabbit - mouth	10BE012	3718.1	1305	18.537	19.020	19.647	20.484	20.816	22.135	24.179	30.007	39.871	79.261	12
3	Rancheria	10AA004	5286.3	1250	22.775	24.195	25.855	27.844	28.576	31.252	34.854	43.037	53.297	78.281	26
3	Sikanni Chief	10CB001	2181.3	1420	7.561	8.180	8.917	9.818	10.154	11.402	13.129	17.229	22.668	37.020	68
3	Stikine bl Spatsizi	08CA002	7588.3	1556	39.642	42.948	46.821	51.464	53.173	59.400	67.732	86.316	108.784	159.326	14
3	Smith	10BE013	3874.1	864	14.665	15.296	16.041	16.945	17.280	18.520	20.221	24.230	29.533	43.736	29
3	Teeter	10BE009	210.0	1034	0.539	0.578	0.623	0.678	0.698	0.771	0.869	1.087	1.352	1.963	32
3	Toad - mouth	10BE010	6889.6	1468	42.651	47.198	52.521	58.875	61.201	69.599	80.597	103.898	129.505	177.032	12
3	Toad - Nonda	10BE004	2540.7	1634	21.676	22.833	24.187	25.809	26.407	28.593	31.543	38.285	46.830	68.128	50
3	Trout	10BE007	1190.9	1415	6.078	6.688	7.402	8.257	8.571	9.708	11.210	14.458	18.158	25.535	41
3	Turnagain	10BA001	6629.1	1435	35.228	38.041	41.294	45.132	46.528	51.543	58.078	71.979	87.653	119.090	26
4	Adsett	10CD005	109.2	693	0.023	0.026	0.031	0.038	0.040	0.052	0.071	0.138	0.285	1.224	27
4	Bougie	10CD004	334.2	733	0.002	0.004	0.008	0.016	0.019	0.039	0.086	0.303	0.803	2.482	29
4	Fontas	10CA001	7514.2	598	0.869	1.139	1.512	2.042	2.261	3.162	4.619	8.803	15.172	31.715	18
4	Fort Nelson	10CC002	22632.2	670	21.579	22.734	24.281	26.433	27.313	30.963	37.098	57.795	103.782	429.022	24
4	Liard - Beaver	10BE005	117873.8	1149	708.719	753.224	804.233	863.937	885.541	962.744	1062.664	1274.079	1512.962	2002.443	26
4	Muskwa	10CD001	20253.3	984	58.375	63.591	69.860	77.607	80.523	91.448	106.819	144.366	196.138	341.211	66
4	Prophet	10CD006	7278.1	994	15.553	17.317	19.427	22.014	22.980	26.558	31.465	42.790	56.938	89.551	7
4	Raspberry	10CD003	274.0	547	0.000	0.000	0.000	0.001	0.002	0.006	0.022	0.137	0.446	1.114	31
6	Alces	07FD004	319.3	763											
6	Beatton	07FC001	15529.2	780	0.857	1.104	1.448	1.945	2.152	3.029	4.523	9.366	18.442	54.153	50
6	Beaverlodge	07GD001	1595.5	814											
6	Blueberry	07FC003	1774.2	828	0.000	0.000	0.001	0.002	0.003	0.012	0.044	0.276	0.771	1.373	45
6	Chinchaga	07OC001	10858.4	702	0.763	0.920	1.131	1.424	1.545	2.044	2.878	5.601	11.052	37.962	41
6	Clear	07FD009	2921.2	704	0.000	0.000	0.001	0.002	0.003	0.009	0.025	0.148	0.632	3.953	38
6	Kiskatinaw	07FD001	3599.7	921	0.016	0.029	0.054	0.103	0.127	0.249	0.512	1.526	3.258	6.546	46
6	Pouce Coupe	07FD007	2876.4	794											
6	Redwillow	07GD004	1280.3	1023	0.037	0.048	0.064	0.088	0.099	0.144	0.225	0.524	1.190	4.795	17

Table 7: Frequency Distribution of June-September 7-Day Low Flows (page 1 of 2)



Hydro-logic Zone	Watershed		Drainage Area (km <sup>2</sup> )	Median Elevation (m)	June-September 7-Day Low Flow (m <sup>3</sup> /s)										# years n
	Stream	Hydrometric Station			Return Period (Year)										
			200	100	50	25	20	10	5	2	1.25	1.01			
7	Carbon	07EF004	736.6	1345	0.668	0.800	0.968	1.187	1.273	1.605	2.094	3.337	5.036	9.190	14
7	Cutbank	07GB001	840.8	1138	0.427	0.481	0.548	0.634	0.668	0.798	0.992	1.516	2.338	5.139	40
7	Dickebusch	07FB004	84.8	1053	0.016	0.018	0.022	0.027	0.029	0.037	0.051	0.095	0.184	0.637	33
7	Flatbed	07FB009	478.7	1129	0.012	0.022	0.040	0.076	0.094	0.179	0.348	0.885	1.537	2.185	28
7	Moberly	07FB008	1521.7	938	0.117	0.175	0.267	0.414	0.480	0.773	1.304	3.022	5.769	12.048	32
7	Murray - mouth	07FB002	5554.3	1162	13.826	15.263	17.003	19.165	19.982	23.056	27.405	38.086	52.832	93.686	34
7	Murray - Wolverine	07FB006	2385.4	1303	9.095	10.176	11.480	13.094	13.701	15.969	19.128	26.616	36.330	60.092	34
7	Pine	07FB001	12138.1	1125	28.799	31.568	34.857	38.863	40.353	45.853	53.373	70.749	92.741	145.551	50
7	Quality	07FB005	26.3	1087											
7	Sukunka	07FB003	2591.3	1198	3.438	3.953	4.592	5.406	5.718	6.909	8.631	12.944	18.912	34.703	33
7	Wapiti	07GE001	11312.6	1007	13.938	15.156	16.649	18.534	19.255	22.014	26.044	36.601	52.741	107.020	50
8	Babine	08EC013	6731.9	973	16.135	17.402	18.906	20.738	21.420	23.948	27.430	35.646	46.457	74.674	39
8	Buck	08EE013	566.5	1114	0.077	0.086	0.097	0.113	0.119	0.144	0.186	0.319	0.594	2.191	39
8	Chuchinka	07EE009	315.8	961	0.131	0.144	0.160	0.183	0.192	0.229	0.290	0.491	0.918	3.621	36
8	Driftwood	08JD006	400.4	1115	0.691	0.771	0.869	0.991	1.038	1.214	1.467	2.100	2.991	5.518	30
8	Goathorn	08EE008	121.7	1164	0.323	0.350	0.382	0.421	0.436	0.489	0.562	0.732	0.948	1.480	50
8	Lower Nechako	LowerNechako	13768.0												
8	Maclvor	08JA016	55.7	1533	0.113	0.121	0.130	0.143	0.148	0.169	0.200	0.294	0.466	1.284	18
8	Muskeg	08KC003	296.9	886	0.142	0.156	0.171	0.191	0.198	0.226	0.264	0.356	0.479	0.809	21
8	Nation-James	07ED001	4355.7	1147	6.895	7.469	8.167	9.038	9.369	10.623	12.423	16.999	23.700	44.642	29
8	Nation-Mouth	07ED003	6799.8	1097	7.496	8.486	9.696	11.214	11.791	13.970	17.064	24.619	34.794	60.985	31
8	Nautley	08JB003	6574.0	927	8.176	8.428	8.761	9.215	9.396	10.131	11.303	14.826	21.291	51.632	59
8	Nechako Reservoir	NechakoRes	14132.0												
8	Omineca - Osilinka	07EC002	5390.8	1281	15.606	17.049	18.758	20.833	21.603	24.439	28.302	37.176	48.333	74.920	36
8	Osilinka	07EC004	1945.2	1381	7.735	8.369	9.114	10.010	10.340	11.546	13.168	16.823	21.309	31.683	30
8	Pack-Mcleod	07EE010	3704.8	874	3.122	3.425	3.794	4.257	4.433	5.100	6.060	8.499	12.050	22.914	30
8	Pinkut	08EC004	794.6	1084	0.369	0.442	0.535	0.653	0.699	0.873	1.120	1.702	2.410	3.799	48
8	Salmon	08KC001	4231.5	826	1.331	1.496	1.701	1.963	2.065	2.457	3.038	4.587	6.975	14.881	54
8	Simpson	08EE012	13.2	1311	0.019	0.023	0.028	0.034	0.036	0.045	0.059	0.096	0.149	0.299	40
8	Station	08EE028	9.8	1495	0.059	0.065	0.071	0.080	0.083	0.094	0.110	0.148	0.201	0.345	10
8	Stellako	08JB002	4000.9	941	6.928	7.104	7.337	7.653	7.780	8.291	9.099	11.484	15.707	34.007	61
8	Stuart	08JE001	14234.7	900	55.767	60.010	64.939	70.790	72.928	80.658	90.857	113.091	139.173	195.326	77
8	Tsilcoh	08JE004	437.9	835	0.088	0.100	0.115	0.133	0.140	0.165	0.201	0.286	0.396	0.656	35
8	Two Mile	08EE025	19.7	706	0.023	0.026	0.031	0.037	0.039	0.047	0.059	0.086	0.119	0.187	29
8	Van Tine	08JA014	145.2	1252	0.014	0.017	0.022	0.028	0.031	0.042	0.061	0.124	0.245	0.789	31
12	Fraser-Hansand	08KA004	17972.8	1460	151.112	162.621	175.988	191.859	197.659	218.626	246.285	306.585	377.305	529.507	58
12	McGregor	08KB003	4760.9	1368	53.520	58.125	63.577	70.194	72.652	81.711	94.082	122.715	159.236	249.011	51
12	Muller	08KB006	102.9	1352	0.306	0.387	0.492	0.631	0.685	0.892	1.185	1.840	2.524	3.449	32
12	Parsnip	07EE007	4905.0	1101	17.515	19.158	21.127	23.551	24.461	27.856	32.596	43.991	59.306	100.198	44
13	Canoe	08NC004	306.7	1957	3.563	3.969	4.456	5.053	5.276	6.101	7.232	9.840	13.091	20.550	39
13	Dore	08KA001	408.7	1913	3.307	3.708	4.185	4.763	4.977	5.761	6.809	9.110	11.751	16.948	45
13	Fraser - McBride	08KA005	6881.1	1844	78.316	83.656	89.814	97.070	99.707	109.183	121.561	148.135	178.733	243.097	58
13	Fraser - Red Pass	08KA007	1696.9	1954	14.993	16.171	17.553	19.213	19.824	22.058	25.062	31.833	40.172	59.612	56
13	Kakwa	07GB002	3253.6	1396	5.825	6.283	6.852	7.583	7.866	8.968	10.623	15.200	22.789	52.501	18
13	McKale	08KA009	253.7	1835	1.660	1.823	2.016	2.250	2.337	2.655	3.086	4.061	5.256	7.967	40
13	Miette	07AA001	644.7	1955	2.796	2.959	3.154	3.397	3.488	3.831	4.318	5.531	7.267	12.544	36
13	Moose	08KA008	456.0	2010	3.223	3.616	4.085	4.657	4.870	5.654	6.716	9.097	11.924	17.827	40
13	Morkill	08KA013	1263.3	1693	5.836	6.606	7.531	8.665	9.088	10.648	12.764	17.499	23.061	34.310	14
13	Muskeg - Alberta	07GA002	722.9	1490	1.358	1.433	1.527	1.650	1.698	1.886	2.175	2.994	4.408	10.411	39
13	Smoky - Hells	07GA001	3760.0	1853	27.115	29.407	32.102	35.349	36.549	40.937	46.855	60.238	76.748	115.137	42
13	Swift	08KA012	132.4	1956	0.818	0.832	0.852	0.879	0.890	0.935	1.007	1.226	1.615	3.278	14
13	Whirlpool	07AA009	602.0	2037	5.387	5.834	6.350	6.960	7.182	7.978	9.012	11.201	13.643	18.440	27

Note: Gaps in the table indicate that either data were not available or the metric wasn't calculated due to extreme low flows that don't match the Log Pearson Type III distribution for 7-Day Low Flow analysis

Table 7: Frequency Distribution of June-September 7-Day Low Flows (page 2 of 2)

Hydro-logic Zone	Watershed		Drainage Area (km <sup>2</sup> )	Median Elevation (m)	Annual 7-Day Low Flow (m <sup>3</sup> /s)										# years n
	Stream	Hydrometric Station			Return Period (Year)										
					200	100	50	25	20	10	5	2	1.25	1.01	
3	Akie	07EA007	1683.0	1557	1.832	1.972	2.132	2.319	2.386	2.623	2.925	3.538	4.185	5.346	30
3	Beaver-Whitefish	10BD001	7306.4	991	6.285	6.992	7.794	8.712	9.036	10.155	11.489	13.821	15.652	17.421	16
3	Big Creek	10AA005	1003.2	1176	0.731	0.848	0.987	1.154	1.214	1.431	1.705	2.225	2.674	3.163	23
3	Blue	10AC004	1654.6	1260	0.624	0.801	1.030	1.325	1.437	1.855	2.404	3.427	4.175	4.656	32
3	Coal	10BC001	8973.3	1019	11.751	12.631	13.602	14.686	15.063	16.343	17.843	20.445	22.551	24.865	34
3	Dease - mouth	10AC006	14558.7	1254	18.282	19.663	21.225	23.022	23.662	25.908	28.705	34.180	39.618	48.420	12
3	Finlay	07EA005	15637.2	1452	24.754	25.837	27.045	28.416	28.902	30.593	32.688	36.811	41.037	48.552	33
3	Frances	10AB001	13012.7	1164	14.043	14.683	15.410	16.255	16.559	17.640	19.029	21.945	25.228	32.021	49
3	Geddes	10BE008	76.5	712	0.028	0.032	0.037	0.042	0.044	0.051	0.061	0.082	0.106	0.151	17
3	Graham	07FA005	2138.8	1359	3.084	3.158	3.241	3.338	3.373	3.497	3.657	3.995	4.381	5.205	28
3	Grayling	10BE011	1759.2	1111	0.404	0.503	0.629	0.790	0.851	1.078	1.382	1.993	2.531	3.063	13
3	Halfway	07FA003	3764.1	1259	1.789	1.993	2.227	2.500	2.597	2.940	3.363	4.156	4.865	5.748	18
3	Halfway - Graham	07FA006	9288.3	1062	5.191	5.509	5.869	6.284	6.432	6.954	7.612	8.940	10.336	12.881	28
3	Hyland	10AD001	9342.8	1196	6.656	7.560	8.615	9.858	10.307	11.893	13.867	17.569	20.794	24.500	36
3	Ingenika	07EA004	4141.5	1551	4.492	4.921	5.405	5.959	6.155	6.833	7.654	9.150	10.444	12.012	34
3	Kechika - Boya	10BB002	11276.4	1433	11.863	13.095	14.480	16.048	16.599	18.480	20.691	24.467	27.333	29.952	27
3	Kechika - mouth	10BB001	22938.0	1320	24.230	25.870	27.721	29.848	30.607	33.267	36.590	43.162	49.837	61.191	28
3	Kwadacha	07EA002	2417.2	1474	2.958	3.238	3.552	3.908	4.034	4.465	4.980	5.891	6.640	7.462	34
3	Liard - Kechika	10BE006	61277.6	1154	70.957	75.523	80.676	86.595	88.706	96.113	105.378	123.785	142.660	175.447	26
3	Liard - Lower X	10BE001	104328.0	1151	124.873	131.581	139.361	148.603	151.985	164.246	180.550	216.846	261.169	365.112	66
3	Liard - Upper X	10AA001	31957.7	1166	41.887	43.874	46.139	48.776	49.727	53.115	57.483	66.708	77.177	99.074	51
3	Mesilinka	07EC003	2948.8	1410	4.239	4.420	4.625	4.862	4.947	5.247	5.628	6.415	7.281	9.009	36
3	Ospika	07EB002	2196.1	1502	2.307	2.665	3.074	3.540	3.703	4.250	4.855	5.714	6.118	6.238	30
3	Pitman	08CA003	2730.0	1442	2.441	2.652	2.894	3.178	3.280	3.645	4.113	5.073	6.093	7.924	15
3	Rabbit - mouth	10BE012	3718.1	1305	2.306	2.578	2.900	3.290	3.434	3.962	4.667	6.212	7.986	11.498	13
3	Rancheria	10AA004	5286.3	1250	2.667	3.365	4.238	5.324	5.725	7.154	8.881	11.585	12.977	13.418	27
3	Sikanni Chief	10CB001	2181.3	1420	0.485	0.734	1.095	1.602	1.800	2.529	3.379	4.331	4.495	4.501	53
3	Stikine bl Spatsizi	08CA002	7588.3	1556	6.970	7.552	8.214	8.978	9.251	10.212	11.412	13.766	16.094	19.794	15
3	Smith	10BE013	3874.1	864	5.119	5.783	6.560	7.479	7.812	8.998	10.498	13.420	16.156	19.817	29
3	Teeter	10BE009	210.0	1034	0.188	0.215	0.246	0.283	0.296	0.344	0.404	0.519	0.622	0.746	32
3	Toad - mouth	10BE010	6889.6	1468	9.133	9.479	9.879	10.354	10.527	11.155	11.989	13.843	16.112	21.482	13
3	Toad - Nonda	10BE004	2540.7	1634	3.422	3.823	4.276	4.789	4.969	5.581	6.291	7.457	8.261	8.843	50
3	Trout	10BE007	1190.9	1415	3.691	3.857	4.041	4.250	4.323	4.578	4.889	5.492	6.092	7.106	41
3	Turnagain	10BA001	6629.1	1435	4.123	4.812	5.628	6.603	6.958	8.214	9.770	12.595	14.829	16.830	26
4	Adsett	10CD005	109.2	693											
4	Bougie	10CD004	334.2	733											
4	Fontas	10CA001	7514.2	598	0.113	0.148	0.195	0.259	0.285	0.387	0.539	0.902	1.314	1.928	19
4	Fort Nelson	10CC002	22632.2	670	2.103	2.425	2.811	3.282	3.456	4.090	4.925	6.661	8.437	11.153	25
4	Liard - Beaver	10BE005	117873.8	1149	156.347	164.448	173.712	184.536	188.450	202.434	220.550	259.084	303.192	396.431	27
4	Muskwa	10CD001	20253.3	984	4.554	5.523	6.713	8.186	8.733	10.714	13.245	17.963	21.693	24.807	51
4	Prophet	10CD006	7278.1	994	1.492	1.677	1.901	2.178	2.282	2.669	3.205	4.460	6.047	9.743	8
4	Raspberry	10CD003	274.0	547											
6	Alces	07FD004	319.3	763											
6	Beaton	07FC001	15529.2	780	0.008	0.016	0.030	0.058	0.072	0.139	0.271	0.673	1.104	1.430	46
6	Beaverlodge	07GD001	1595.5	814											
6	Blueberry	07FC003	1774.2	828	0.000	0.000	0.001	0.001	0.001	0.004	0.009	0.033	0.073	0.128	45
6	Chinchaga	07OC001	10858.4	702											
6	Clear	07FD009	2921.2	704											
6	Kiskatinaw	07FD001	3599.7	921	0.006	0.010	0.018	0.033	0.041	0.076	0.147	0.393	0.755	1.301	46
6	Pouce Coupe	07FD007	2876.4	794											
6	Redwillow	07GD004	1280.3	1023	0.002	0.003	0.006	0.011	0.013	0.027	0.056	0.176	0.395	0.851	17

Table 8: Frequency Distribution of Annual 7-Day Low Flows (page 1 of 2)

Hydro-logic Zone	Watershed		Drainage Area (km <sup>2</sup> )	Median Elevation (m)	Annual 7-Day Low Flow (m <sup>3</sup> /s)										# years n
	Stream	Hydrometric Station			Return Period (Year)										
					200	100	50	25	20	10	5	2	1.25	1.01	
7	Carbon	07EF004	736.6	1345	0.542	0.560	0.583	0.612	0.624	0.669	0.738	0.926	1.235	2.403	14
7	Cutbank	07GB001	840.8	1138											
7	Dickebusch	07FB004	84.8	1053											
7	Flatbed	07FB009	478.7	1129	0.011	0.019	0.033	0.055	0.066	0.110	0.182	0.339	0.445	0.484	28
7	Moberly	07FB008	1521.7	938	0.108	0.141	0.186	0.249	0.274	0.376	0.531	0.927	1.424	2.328	32
7	Murray - mouth	07FB002	5554.3	1162	6.663	6.969	7.334	7.780	7.947	8.570	9.438	11.536	14.414	22.584	34
7	Murray - Wolverine	07FB006	2385.4	1303	5.423	5.527	5.663	5.845	5.917	6.205	6.652	7.909	9.976	17.662	34
7	Pine	07FB001	12138.1	1125	14.508	15.013	15.649	16.479	16.802	18.066	19.974	25.234	33.824	66.445	50
7	Quality	07FB005	26.3	1087											
7	Sukunka	07FB003	2591.3	1198	3.525	3.626	3.755	3.925	3.991	4.253	4.650	5.753	7.560	14.404	33
7	Wapiti	07GE001	11312.6	1007	4.603	4.997	5.448	5.972	6.160	6.826	7.668	9.353	11.075	13.964	50
8	Babine	08EC013	6731.9	973	13.395	13.801	14.277	14.849	15.060	15.834	16.882	19.292	22.372	30.161	39
8	Buck	08EE013	566.5	1114	0.047	0.057	0.069	0.085	0.091	0.116	0.153	0.245	0.369	0.665	39
8	Chuchinka	07EE009	315.8	961	0.121	0.140	0.162	0.191	0.202	0.245	0.308	0.469	0.699	1.345	36
8	Driftwood	08JD006	400.4	1115	0.190	0.228	0.276	0.335	0.357	0.438	0.544	0.751	0.934	1.127	31
8	Goathorn	08EE008	121.7	1164	0.038	0.044	0.050	0.059	0.062	0.074	0.090	0.129	0.178	0.284	51
8	Lower Nechako	LowerNechako	13768.0												
8	Maclvor	08JA016	55.7	1533	0.033	0.034	0.036	0.039	0.040	0.044	0.050	0.066	0.091	0.180	19
8	Muskeg	08KC003	296.9	886	0.159	0.169	0.180	0.195	0.200	0.221	0.251	0.324	0.430	0.753	21
8	Nation-James	07ED001	4355.7	1147	6.718	6.958	7.236	7.568	7.690	8.133	8.727	10.069	11.744	15.836	29
8	Nation-Mouth	07ED003	6799.8	1097	9.518	10.009	10.573	11.234	11.474	12.334	13.456	15.871	18.684	24.804	31
8	Nautley	08JB003	6574.0	927	3.133	3.403	3.724	4.116	4.262	4.802	5.546	7.291	9.561	15.338	59
8	Nechako Reservoir	NechakoRes	14132.0												
8	Omineca - Osilinka	07EC002	5390.8	1281	8.998	9.190	9.421	9.706	9.813	10.213	10.771	12.115	13.928	18.868	36
8	Osilinka	07EC004	1945.2	1381	3.943	4.058	4.188	4.340	4.394	4.590	4.842	5.378	5.996	7.328	30
8	Pack-Mcleod	07EE010	3704.8	874	3.080	3.397	3.779	4.249	4.426	5.087	6.011	8.229	11.190	18.935	30
8	Pinkut	08EC004	794.6	1084	0.371	0.433	0.508	0.603	0.638	0.772	0.957	1.378	1.876	2.846	49
8	Salmon	08KC001	4231.5	826	1.371	1.530	1.722	1.959	2.048	2.382	2.849	3.959	5.415	9.051	54
8	Simpson	08EE012	13.2	1311	0.001	0.001	0.002	0.002	0.003	0.004	0.005	0.009	0.014	0.025	37
8	Station	08EE028	9.8	1495	0.007	0.008	0.010	0.012	0.012	0.015	0.019	0.027	0.035	0.044	11
8	Stellako	08JB002	4000.9	941	2.064	2.308	2.596	2.941	3.067	3.525	4.125	5.387	6.748	9.147	61
8	Stuart	08JE001	14234.7	900	20.660	22.106	23.780	25.764	26.488	29.102	32.545	40.052	48.883	68.113	77
8	Tsilcoh	08JE004	437.9	835	0.087	0.098	0.111	0.128	0.134	0.157	0.189	0.268	0.371	0.630	35
8	Two Mile	08EE025	19.7	706	0.010	0.012	0.015	0.017	0.018	0.022	0.028	0.040	0.054	0.079	29
8	Van Tine	08JA014	145.2	1252	0.004	0.005	0.007	0.010	0.012	0.017	0.026	0.057	0.113	0.305	32
12	Fraser-Hansand	08KA004	17972.8	1460	52.295	53.980	55.949	58.310	59.180	62.359	66.647	76.440	88.849	119.854	58
12	McGregor	08KB003	4760.9	1368	16.553	17.417	18.427	19.636	20.081	21.708	23.899	28.895	35.207	50.862	51
12	Muller	08KB006	102.9	1352	0.177	0.189	0.203	0.221	0.227	0.251	0.285	0.367	0.480	0.797	33
12	Parsnip	07EE007	4905.0	1101	10.131	11.018	12.053	13.286	13.737	15.371	17.528	22.213	27.638	38.929	44
13	Canoe	08NC004	306.7	1957	0.858	0.883	0.914	0.952	0.966	1.019	1.094	1.279	1.537	2.282	39
13	Dore	08KA001	408.7	1913	0.632	0.692	0.761	0.841	0.870	0.972	1.099	1.347	1.587	1.950	45
13	Fraser - McBride	08KA005	6881.1	1844	18.600	19.040	19.566	20.210	20.451	21.347	22.589	25.546	29.492	40.086	56
13	Fraser - Red Pass	08KA007	1696.9	1954	3.559	3.657	3.770	3.903	3.952	4.126	4.356	4.858	5.460	6.836	56
13	Kakwa	07GB002	3253.6	1396											
13	McKale	08KA009	253.7	1835	0.555	0.580	0.609	0.645	0.658	0.707	0.776	0.940	1.164	1.789	40
13	Miette	07AA001	644.7	1955	0.327	0.353	0.382	0.417	0.430	0.476	0.537	0.667	0.818	1.132	36
13	Moose	08KA008	456.0	2010	0.217	0.288	0.381	0.500	0.544	0.704	0.893	1.158	1.255	1.269	40
13	Morkill	08KA013	1263.3	1693	4.057	4.058	4.058	4.058	4.059	4.064	4.085	4.277	4.955	9.345	14
13	Muskeg - Alberta	07GA002	722.9	1490											
13	Smoky - Hells	07GA001	3760.0	1853											
13	Swift	08KA012	132.4	1956	0.199	0.207	0.217	0.230	0.234	0.251	0.274	0.326	0.395	0.571	15
13	Whirlpool	07AA009	602.0	2037											

Note: Gaps in the table indicate that either data were not available or the metric wasn't calculated due to extreme low flows that don't match the Log Pearson Type III distribution for 7-Day Low Flow analysis

Table 8: Frequency Distribution of Annual 7-Day Low Flows (page 2 of 2)

Hydro-logic Zone	Watershed		Drainage Area (km <sup>2</sup> )	Median Elevation (m)	Daily Mean Flow (m <sup>3</sup> /s)												
	Stream	Hydrometric Station			Percent of Time Exceeded (%)												
					0.1	1.0	2	5	10	15	25	50	80	90	95	99	
3	Akie	07EA007	1683.0	1557	269.44	180.00	153.00	114.00	84.30	65.00	42.90	13.50	4.62	3.95	3.52	2.82	
3	Beaver-Whitefish	10BD001	7306.4	991	635.08	400.00	302.00	198.00	142.00	112.00	75.33	34.50	16.60	14.30	13.00	10.00	
3	Big Creek	10AA005	1003.2	1176	62.16	39.41	33.68	23.80	16.90	13.00	9.06	4.92	2.75	2.29	2.03	1.15	
3	Blue	10AC004	1654.6	1260	147.25	98.50	82.70	62.90	45.30	35.00	23.60	10.40	4.45	3.62	2.91	1.53	
3	Coal	10BC001	8973.3	1019	918.40	558.00	473.12	334.00	245.00	186.00	117.00	49.30	23.50	21.00	19.40	16.10	
3	Dease - mouth	10AC006	14558.7	1254	1344.64	881.32	779.32	617.80	464.60	354.40	223.00	102.00	43.00	35.80	32.00	23.78	
3	Finlay	07EA005	15637.2	1452	1938.42	1330.00	1170.00	947.00	734.00	558.00	332.00	128.00	49.20	41.00	37.50	32.10	
3	Frances	10AB001	13012.7	1164	1020.00	772.00	691.00	547.00	418.00	334.00	219.00	92.25	28.60	23.50	21.10	17.80	
3	Geddes	10BE008	76.5	712	2.099	0.902	0.665	0.42	0.32	0.27	0.22	0.15	0.11	0.09	0.07	0.05	
3	Graham	07FA005	2138.8	1359	265.77	141.73	122.00	90.87	65.80	49.00	27.90	10.80	5.12	4.40	4.05	3.53	
3	Grayling	10BE011	1759.2	1111	265.79	115.52	96.26	67.20	40.70	29.10	19.10	6.60	2.42	2.01	1.73	1.08	
3	Halfway	07FA003	3764.1	1259	464.12	249.79	190.00	127.00	90.09	69.90	43.50	15.00	5.58	4.65	3.98	2.90	
3	Halfway - Graham	07FA006	9288.3	1062	1195.44	555.00	412.00	271.00	190.00	144.00	86.20	27.30	12.00	9.70	8.71	7.09	
3	Hyland	10AD001	9342.8	1196	1082.36	782.00	691.00	542.90	379.00	286.00	179.00	70.50	22.90	18.90	16.70	13.10	
3	Ingenika	07EA004	4141.5	1551	547.70	344.50	302.00	226.00	164.00	113.00	65.10	27.00	11.80	10.30	9.60	7.58	
3	Kechika - Boya	10BB002	11276.4	1433	812.17	617.00	555.12	456.00	358.00	294.00	208.00	79.00	29.70	26.00	23.90	18.04	
3	Kechika - mouth	10BB001	22938.0	1320	1630.00	1140.00	994.00	788.05	612.00	493.00	343.00	137.00	53.80	46.70	42.00	34.00	
3	Kwadacha	07EA002	2417.2	1474	327.26	236.28	210.00	174.00	139.00	116.00	79.30	24.40	7.65	6.34	5.80	4.89	
3	Liard - Kechika	10BE006	61277.6	1154	4549.71	3370.00	2945.40	2368.50	1800.00	1390.00	915.00	408.00	154.00	131.00	112.00	94.90	
3	Liard - Lower X	10BE001	104328.0	1151	7289.25	5470.00	4810.00	3770.00	2885.00	2270.00	1550.00	706.00	268.00	224.00	197.00	160.00	
3	Liard - Upper X	10AA001	31957.7	1166	2700.00	1910.00	1630.00	1250.00	943.00	739.00	488.00	215.00	85.00	71.40	62.00	53.70	
3	Mesilinka	07EC003	2948.8	1410	393.81	261.51	227.00	170.00	129.00	92.50	51.70	20.90	8.38	7.15	6.58	5.74	
3	Ospika	07EB002	2196.1	1502	422.46	252.42	220.00	160.10	114.00	79.70	45.10	18.80	7.00	6.00	5.56	4.96	
3	Pitman	08CA003	2730.0	1442	244.00	219.00	165.00	132.00	118.70	105.00	83.10	54.65	28.86	24.50	22.37	16.50	
3	Rabbit - mouth	10BE012	3718.1	1305	308.00	207.70	167.00	121.00	92.70	76.00	53.38	21.10	8.05	6.66	5.55	3.77	
3	Rancheria	10AA004	5286.3	1250	408.47	288.00	238.00	175.00	123.00	94.00	64.10	29.30	13.60	11.50	10.20	7.18	
3	Sikanni Chief	10CB001	2181.3	1420	300.00	148.00	120.00	90.00	67.70	53.60	35.10	13.40	5.13	4.18	3.57	2.72	
3	Stikine bl Spatsizi	08CA002	7588.3	1556	1062.80	777.80	647.00	508.00	370.00	278.00	172.00	49.80	17.30	15.20	13.30	10.16	
3	Smith	10BE013	3874.1	864	117.00	78.36	63.70	50.00	42.10	37.30	31.40	22.00	15.50	13.10	11.60	9.90	
3	Teeter	10BE009	210.0	1034	6.32	4.11	3.36	2.51	1.98	1.75	1.42	0.97	0.65	0.56	0.47	0.35	
3	Toad - mouth	10BE010	6889.6	1468	904.39	492.26	443.52	354.30	269.00	229.00	161.00	44.80	17.00	15.00	13.70	12.00	
3	Toad - Nonda	10BE004	2540.7	1634	339.22	212.00	183.82	143.00	113.00	91.72	62.30	19.00	8.92	7.84	7.08	6.14	
3	Trout	10BE007	1190.9	1415	108.00	74.19	62.00	46.30	35.40	28.98	20.90	9.91	6.29	5.69	5.38	4.63	
3	Turnagain	10BA001	6629.1	1435	673.10	473.00	411.00	311.00	227.00	175.00	118.00	44.50	15.60	12.90	11.60	7.08	
4	Adsett	10CD005	109.2	693	35.93	9.01	5.85	3.20	2.01	1.46	0.79	0.13	0.00	0.00	0.00	0.00	
4	Bougie	10CD004	334.2	733	88.59	31.39	21.80	12.40	7.04	4.53	2.01	0.24	0.00	0.00	0.00	0.00	
4	Fontas	10CA001	7514.2	598	490.79	256.00	200.00	135.00	82.90	58.87	33.60	8.90	1.37	1.06	0.72	0.34	
4	Fort Nelson	10CC002	22632.2	670	2000.13	1045.30	817.18	561.65	383.30	278.00	159.00	42.60	9.46	7.16	5.93	3.79	
4	Liard - Beaver	10BE005	117873.8	1149	8197.38	6230.00	5520.00	4513.50	3587.00	2800.00	1940.00	800.50	324.00	266.00	232.00	208.33	
4	Muskwa	10CD001	20253.3	984	2660.00	1340.00	1030.00	729.00	549.00	453.00	317.00	106.00	23.20	17.90	14.70	9.63	
4	Prophet	10CD006	7278.1	994	1034.08	557.60	417.12	274.20	190.00	149.80	94.40	23.60	6.60	4.70	4.25	3.63	
4	Raspberry	10CD003	274.0	547	43.28	14.68	10.00	5.72	3.25	2.01	0.93	0.12	0.00	0.00	0.00	0.00	
6	Alces	07FD004	319.3	763	18.24	7.65	5.20	2.88	1.54	0.99	0.47	0.07	0.01	0.00	0.00	0.00	
6	Beatton	07FC001	15529.2	780	1182.02	600.03	453.02	263.00	157.00	106.00	54.23	9.82	1.42	0.78	0.48	0.18	
6	Beaverlodge	07GD001	1595.5	814													
6	Blueberry	07FC003	1774.2	828	209.10	74.17	50.70	27.00	12.76	7.53	3.00	0.37	0.08	0.04	0.01	0.00	
6	Chinchaga	07OC001	10858.4	702	680.20	317.00	239.04	139.00	80.40	54.20	27.10	5.07	0.77	0.38	0.20	0.01	
6	Clear	07FD009	2921.2	704													
6	Kiskatinaw	07FD001	3599.7	921	299.61	110.00	76.02	45.00	26.60	16.90	8.00	2.16	0.73	0.42	0.22	0.05	
6	Pouce Coupe	07FD007	2876.4	794	228.54	98.50	69.38	35.00	15.40	8.06	2.97	0.55	0.11	0.06	0.03	0.01	
6	Redwillow	07GD004	1280.3	1023	121.00	56.11	40.86	25.60	14.80	9.52	5.08	1.05	0.37	0.20	0.12	0.05	

Table 9: Flow Duration of Daily Mean Flows (page 1 of 2)

Hydro-logic Zone	Watershed		Drainage Area (km <sup>2</sup> )	Median Elevation (m)	Daily Mean Flow (m <sup>3</sup> /s)											
	Stream	Hydrometric Station			Percent of Time Exceeded (%)											
					0.1	1.0	2	5	10	15	25	50	80	90	95	99
7	Carbon	07EF004	736.6	1345	270.44	112.32	94.50	68.20	38.04	24.00	11.10	3.60	1.38	1.11	0.96	0.68
7	Cutbank	07GB001	840.8	1138												
7	Dickebusch	07FB004	84.8	1053	20.00	5.61	4.08	2.55	1.55	0.97	0.49	0.12	0.03	0.01	0.01	0.00
7	Flatbed	07FB009	478.7	1129	84.50	34.33	27.50	18.20	12.50	8.82	4.30	1.11	0.50	0.38	0.29	0.15
7	Moberly	07FB008	1521.7	938	134.30	77.60	67.50	50.00	35.30	26.40	13.10	3.80	1.60	1.10	0.70	0.30
7	Murray - mouth	07FB002	5554.3	1162	808.72	477.93	400.00	305.55	224.00	170.00	101.00	40.50	16.40	13.00	11.00	8.74
7	Murray - Wolverine	07FB006	2385.4	1303	524.29	324.13	272.26	205.00	150.00	115.00	70.00	29.50	11.20	9.10	7.90	6.10
7	Pine	07FB001	12138.1	1125	2070.00	1230.00	1010.00	759.00	537.20	395.30	225.50	87.20	37.30	28.30	23.80	18.10
7	Quality	07FB005	26.3	1087	4.67	1.95	1.44	0.84	0.48	0.32	0.17	0.05	0.02	0.01	0.00	0.00
7	Sukunka	07FB003	2591.3	1198	585.00	365.00	310.94	227.85	153.00	110.00	62.10	20.00	8.80	6.83	5.65	4.45
7	Wapiti	07GE001	11312.6	1007	1339.95	595.00	484.00	345.00	257.00	198.00	118.00	39.20	13.50	10.60	9.23	7.07
8	Babine	08EC013	6731.9	973	244.00	211.00	176.02	137.00	108.00	91.20	65.60	33.20	21.50	19.00	17.70	16.20
8	Buck	08EE013	566.5	1114	73.51	41.62	33.10	23.00	13.80	8.10	3.31	0.96	0.42	0.30	0.23	0.11
8	Chuchinka	07EE009	315.8	961	66.01	42.90	34.90	25.10	13.30	7.92	4.35	1.90	0.83	0.62	0.48	0.29
8	Driftwood	08JD006	400.4	1115	83.52	58.74	51.60	37.60	25.10	16.93	8.32	2.90	1.08	0.82	0.68	0.48
8	Goathorn	08EE008	121.7	1164	17.94	10.40	8.69	6.31	4.70	3.73	2.42	0.84	0.20	0.15	0.12	0.08
8	Lower Nechako		13768.0													
8	Maclvor	08JA016	55.7	1533	8.81	6.05	5.10	3.66	2.53	1.75	1.06	0.32	0.11	0.07	0.06	0.05
8	Muskeg	08KC003	296.9	886	22.61	17.93	15.60	10.40	5.26	2.76	1.39	0.78	0.50	0.39	0.31	0.24
8	Nation-James	07ED001	4355.7	1147	571.35	371.94	338.00	269.00	191.00	134.00	66.50	26.20	14.10	11.10	9.91	8.20
8	Nation-Mouth	07ED003	6799.8	1097	749.03	573.77	469.62	362.00	253.00	161.00	76.50	33.70	20.60	17.40	15.30	12.60
8	Nautley	08JB003	6574.0	927	259.39	175.94	139.00	102.00	75.14	58.80	37.80	17.30	9.76	8.08	7.10	5.04
8	Nechako Reservoir		14132.0													
8	Omineca - Osilinka	07EC002	5390.8	1281	842.96	579.66	524.00	394.30	257.00	178.00	89.90	38.20	15.90	13.30	12.10	10.60
8	Osilinka	07EC004	1945.2	1381	333.04	231.42	200.00	152.00	104.00	69.50	36.70	15.10	6.79	5.90	5.40	4.74
8	Pack-Mcleod	07EE010	3704.8	874	387.17	267.00	233.00	181.00	121.20	74.20	38.50	19.50	13.20	10.20	7.95	5.54
8	Pinkut	08EC004	794.6	1084	61.95	40.20	31.98	21.50	12.10	7.82	4.08	2.48	1.87	1.68	1.43	0.88
8	Salmon	08KC001	4231.5	826	343.00	231.02	189.04	135.00	86.50	55.50	24.80	10.10	5.93	4.59	3.88	2.71
8	Simpson	08EE012	13.2	1311	3.64	1.86	1.50	1.08	0.76	0.56	0.35	0.12	0.02	0.01	0.01	0.00
8	Station	08EE028	9.8	1495	2.43	1.48	1.24	0.98	0.76	0.61	0.41	0.12	0.04	0.03	0.03	0.02
8	Stellako	08JB002	4000.9	941	165.00	114.00	88.90	65.09	49.30	39.06	25.20	11.40	6.51	5.38	4.61	3.20
8	Stuart	08JE001	14234.7	900	535.28	428.00	400.00	330.00	276.00	236.00	176.00	93.70	51.50	41.90	36.80	27.80
8	Tsilcoh	08JE004	437.9	835	39.86	27.20	20.96	12.90	6.49	3.28	1.56	0.75	0.45	0.35	0.26	0.18
8	Two Mile	08EE025	19.7	706	0.73	0.40	0.33	0.26	0.21	0.19	0.16	0.11	0.06	0.05	0.04	0.02
8	Van Tine	08JA014	145.2	1252	16.75	7.57	6.06	3.93	2.51	1.76	0.92	0.28	0.10	0.07	0.05	0.03
12	Fraser-Hansand	08KA004	17972.8	1460	2524.39	1920.00	1720.00	1400.00	1120.00	923.00	643.00	291.00	103.00	85.60	77.00	64.60
12	McGregor	08KB003	4760.9	1368	1384.40	968.00	841.00	668.00	525.00	427.00	305.00	138.00	43.00	32.30	27.80	23.01
12	Muller	08KB006	102.9	1352	39.97	26.65	22.50	17.00	12.60	9.68	6.10	2.21	0.66	0.44	0.37	0.26
12	Parsnip	07EE007	4905.0	1101	1010.00	782.00	685.00	544.00	408.10	314.00	175.00	73.60	33.60	26.00	20.85	16.69
13	Canoe	08NC004	306.7	1957	81.77	66.00	60.27	50.10	41.00	34.70	23.80	5.32	1.89	1.50	1.31	1.10
13	Dore	08KA001	408.7	1913	101.47	67.40	59.50	48.70	40.00	33.30	22.80	5.46	1.80	1.50	1.32	1.08
13	Fraser - McBride	08KA005	6881.1	1844	1060.00	864.00	770.00	643.00	529.00	450.00	317.00	96.35	34.80	28.80	26.10	22.20
13	Fraser - Red Pass	08KA007	1696.9	1954	303.33	225.00	201.00	165.00	131.00	107.00	67.70	17.50	6.40	5.34	4.87	4.25
13	Kakwa	07GB002	3253.6	1396												
13	McKale	08KA009	253.7	1835	66.51	46.79	41.10	32.04	23.67	18.11	9.91	3.42	1.31	1.08	0.97	0.77
13	Miette	07AA001	644.7	1955	94.15	63.85	55.00	43.30	31.80	24.00	13.00	3.44	1.04	0.81	0.70	0.52
13	Moose	08KA008	456.0	2010	133.53	81.30	69.93	52.85	40.50	33.10	22.70	4.98	1.50	1.24	1.12	0.85
13	Morkill	08KA013	1263.3	1693	1384.40	968.00	841.00	668.00	525.00	427.00	305.00	138.00	43.00	32.30	27.80	23.01
13	Muskeg - Alberta	07GA002	722.9	1490												
13	Smoky - Hells	07GA001	3760.0	1853												
13	Swift	08KA012	132.4	1956	37.32	22.40	18.60	14.70	10.30	7.20	3.49	1.01	0.46	0.38	0.33	0.27
13	Whirlpool	07AA009	602.0	2037												

Note: Gaps in the table indicate that matrix wasn't calculated due to unavailability of data

Table 9: Flow Duration of Daily Mean Flows (page 2 of 2)

## **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 2<sup>nd</sup> 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*

Volume Frequency Analysis Editor - 07EC003-JUN-SEP

Name: 07EC003-JUN-SEP

Description:

Data Set: WILLISTON LAKE-07EC003-FLOW-DAILY

DSS File Name: D:\OmenicaNE\OmenicaNE.dss

Report File: D:\OmenicaNE\VolumeFrequencyAnalysisResults\07EC003-JUN-SEP\07EC003-JUN-SEP.r

General | Options | Duration Table | Analytical | Graphical

Log Transform

Use Log Transform

Do Not use Log Transform

Maximum or Minimum Analysis

Analyze Maximums

Analyze Minimums

Year Specification

Water Year (starts Oct 1)

Calendar Year (starts Jan 1)

Other

Starting: 01Jan

Plot Yearly Data

Plotting Position

Weibull (A and B = 0)

Median (A and B = 0.3)

Hazen (A and B = 0.5)

Other (Specify A, B)

Plotting position computed using formula

$(m-A)/(n+1-A-B)$

Where:

m=Rank, 1=Largest  
N=Number of Years  
A,B=Constants

A:

B:

Time Window Modification

End Points

DSS Range is 01JAN1976 - 30DEC2011

Start Date

End Date

Season

To Define a Subset of the Year

Season Start: 01Jun

Season End: 30Sep

NOTE: season must be within a year, as defined in the Year Specification

Compute Plot Duration Data Plot Analytical Curve Plot Graphical Curve View Report Print OK Cancel Apply

*Annual 7-day Low Flow Frequency Analysis, General tab*

Volume Frequency Analysis Editor - 07EC003-ANN7D

Name: 07EC003-ANN7D

Description:

Data Set: WILLISTON LAKE-07EC003-FLOW-DAILY

DSS File Name: D:\OmenicaNE\OmenicaNE.dss

Report File: D:\OmenicaNE\VolumeFrequencyAnalysisResults\07EC003-ANN7D\07EC003-ANN7D.rpt

General | Options | Duration Table | Analytical | Graphical

Log Transform

Use Log Transform

Do Not use Log Transform

Maximum or Minimum Analysis

Analyze Maximums

Analyze Minimums

Year Specification

Water Year (starts Oct 1)

Calendar Year (starts Jan 1)

Other

Starting: 01Jan

Plot Yearly Data

Plotting Position

Weibull (A and B = 0)

Median (A and B = 0.3)

Hazen (A and B = 0.5)

Other (Specify A, B)

Plotting position computed using formula

$(m-A)/(n+1-A-B)$

Where:

m=Rank, 1=Largest  
N=Number of Years  
A,B=Constants

A:

B:

Time Window Modification

End Points

DSS Range is 01JAN1976 - 30DEC2011

Start Date

End Date

Season

To Define a Subset of the Year

Season Start:

Season End:

NOTE: season must be within a year, as defined in the Year Specification

Compute Plot Duration Data Plot Analytical Curve Plot Graphical Curve View Report Print OK Cancel Apply

*Annual 7-day Low Flow Frequency Analysis, Options tab*

Volume Frequency Analysis Editor - 07EC003-ANN7D

Name: 07EC003-ANN7D

Description:

Data Set: WILLISTON LAKE-07EC003-FLOW-DAILY

DSS File Name: D:\OmenicaNE\OmenicaNE.dss

Report File: D:\OmenicaNE\VolumeFrequencyAnalysisResults\07EC003-ANN7D\07EC003-ANN7D.rpt

General Options Duration Table Analytical Graphical

Change or add to default values

Duration in days: 7

User Specified Frequency Ordinates

Use Values from Table Below

Frequency in Percent
99.0
80.0
50.0
20.0
10.0
5.0
4.0
2.0
1.0
0.5
0.2
0.1

Historic Period Data

Use Historic Data

Historic Period

Start Year:

End Year:

Duration	Override Low Outlie...
7-day	

Historic Events

Year	7-day

Output Labeling

DSS Data Name is FLOW-DAILY

Change Label FLOW-DAILY

DSS Data Units are CMS

Change Label CMS

High Outlier Threshold

Override High Outlier Threshold

Duration	Override High Outlier...
7-day	

Compute Plot Duration Data Plot Analytical Curve Plot Graphical Curve View Report Print OK Cancel Apply

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

Volume Frequency Analysis Editor - 07EC003-ANN7D

Name: 07EC003-ANN7D

Description:

Data Set: WILLISTON LAKE-07EC003-FLOW-DAILY

DSS File Name: D:\OmenicaNE\OmenicaNE.dss

Report File: D:\OmenicaNE\VolumeFrequencyAnalysisResults\07EC003-ANN7D\07EC003-ANN7D.rpt

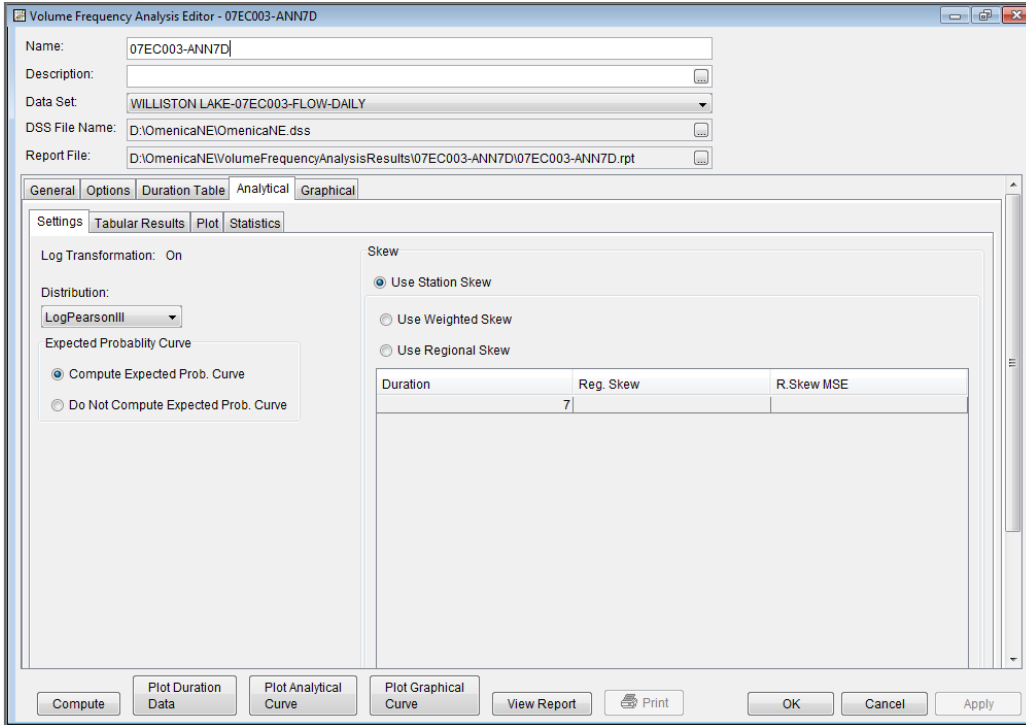
General Options Duration Table Analytical Graphical

Allow Editing

Year	Volume-Duration Data	
	Lowest Mean Value for ...	
	7	
	Date	FLOW
1983	12/31/1983	7.8643
1984	02/25/1984	6.3043
1985	03/24/1985	5.9329
1986	03/03/1986	5.4871
1987	04/21/1987	7.1000
1988	02/10/1988	6.9714
1989	03/25/1989	6.2114
1990	02/21/1990	6.0086
1991	03/18/1991	6.4300
1992	02/27/1992	8.2786
1993	03/20/1993	6.7429
1994	02/28/1994	5.8871
1995	03/17/1995	7.7471
1996	04/05/1996	5.6029
1997	03/19/1997	7.9629
1998	04/15/1998	7.6300
1999	04/15/1999	5.7286
2000	03/06/2000	6.5714
2001	03/29/2001	6.6014
2002	03/31/2002	6.5314
2003	04/18/2003	5.8700

Compute Plot Duration Data Plot Analytical Curve Plot Graphical Curve View Report Print OK Cancel Apply

*Annual 7-day Low Flow Frequency Analysis, Analytical tab*

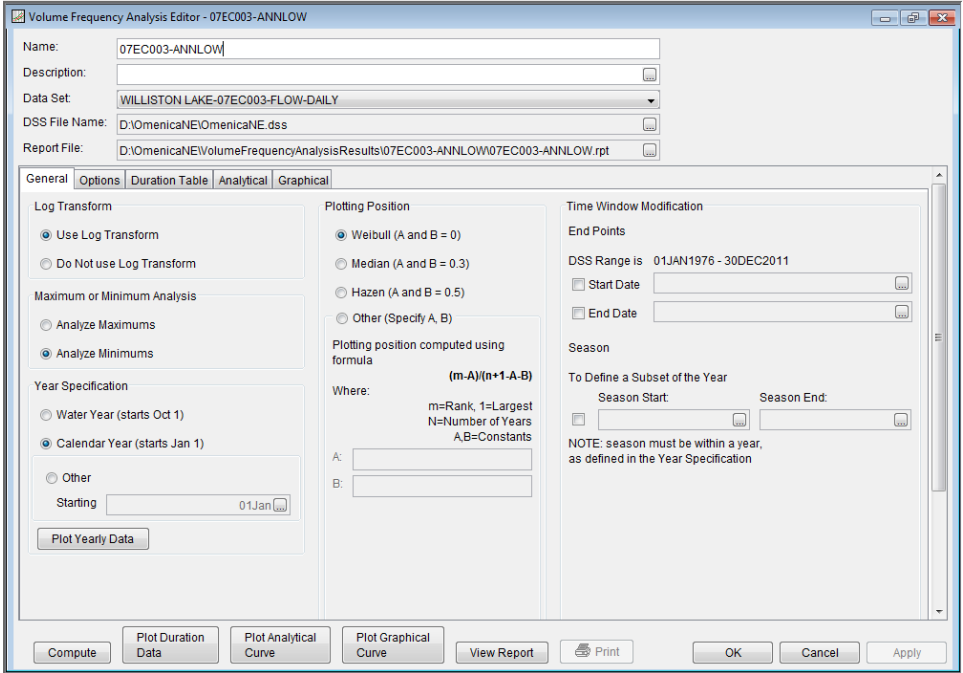


**Annual Mean Flow Frequency Analysis**

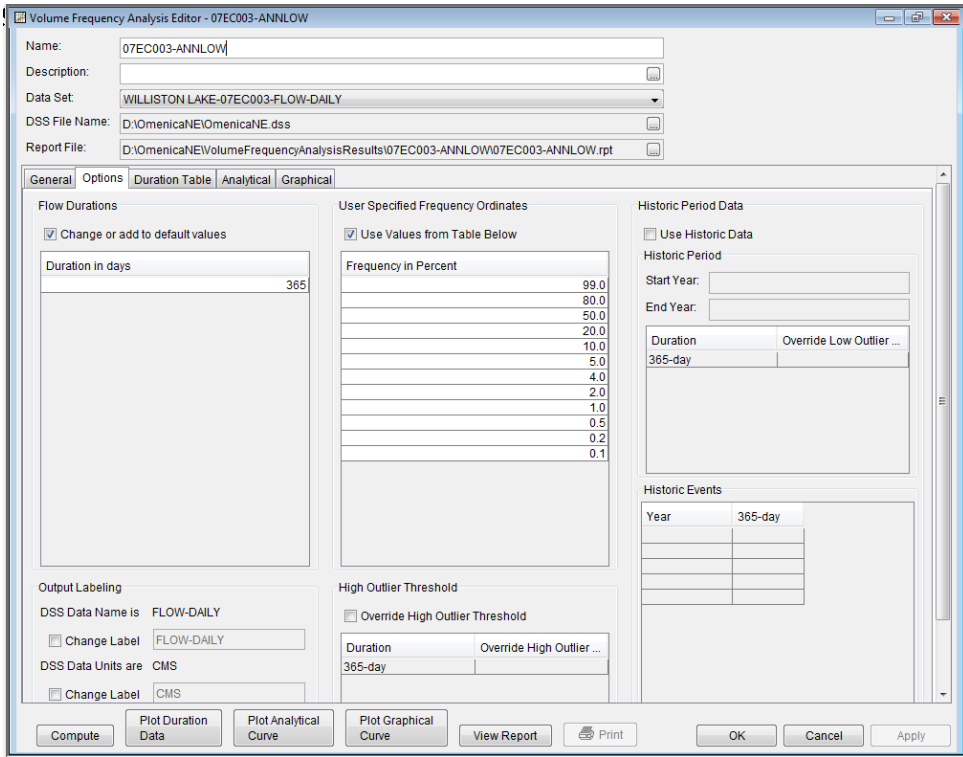
For high flow frequency analysis of annual mean flow the “General Frequency Analysis” with Log Pearson Type III option was used. For low flow frequency analysis of annual mean flow the “Volume Frequency Analysis” with Log Pearson Type III distribution and “Analyze Minimums” option was used.

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

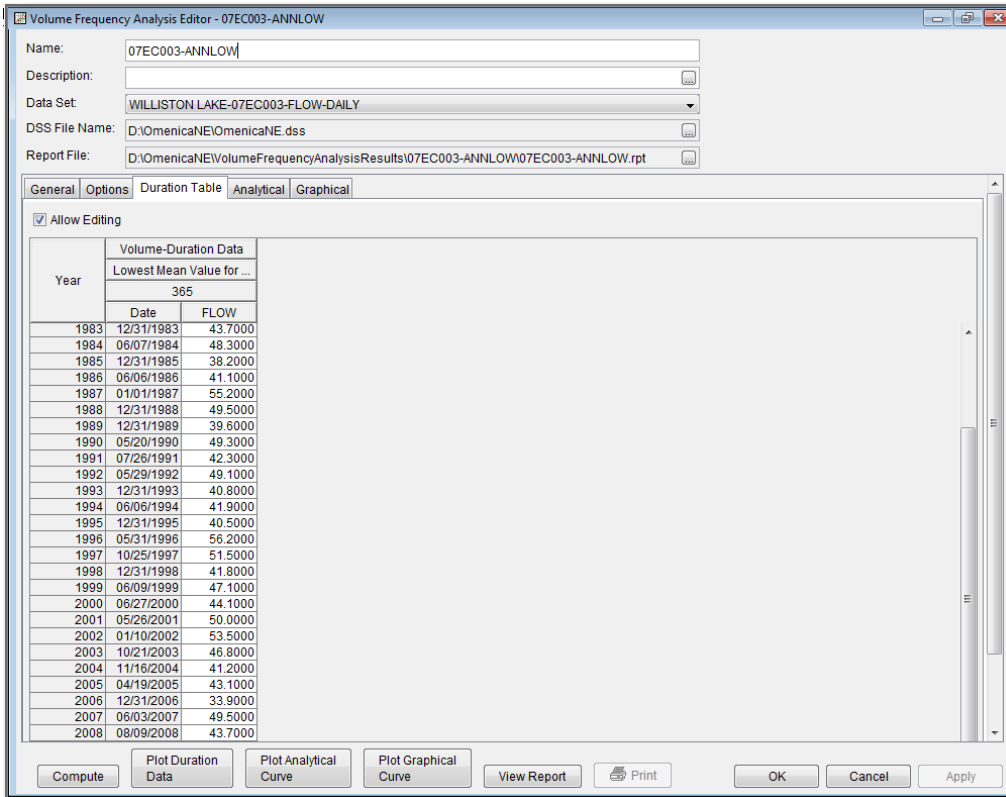
*Low flow Frequency Analysis of Annual Mean Flow, General tab.*



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



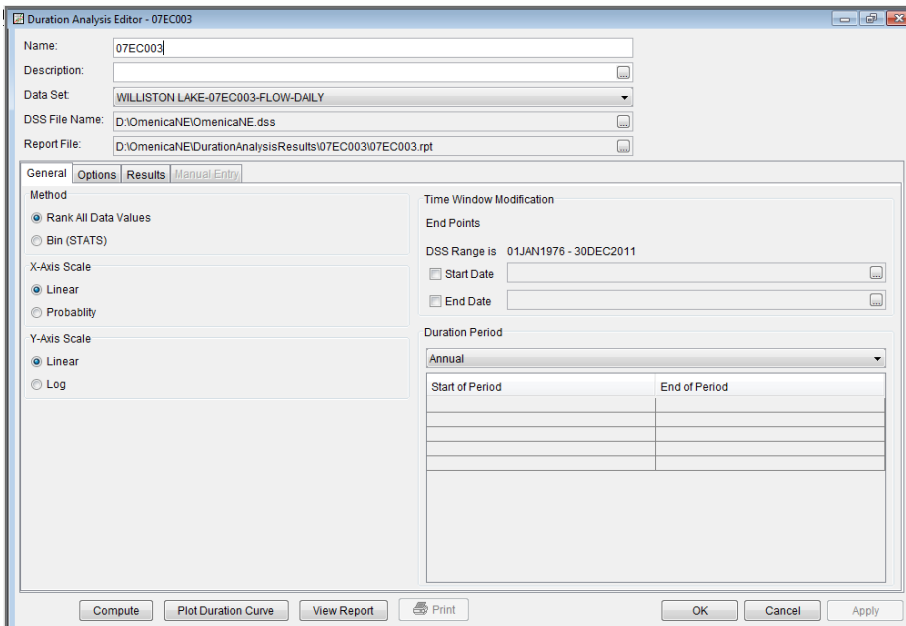
*Low flow Frequency Analysis of Annual Mean Flow, Duration Table tab.*



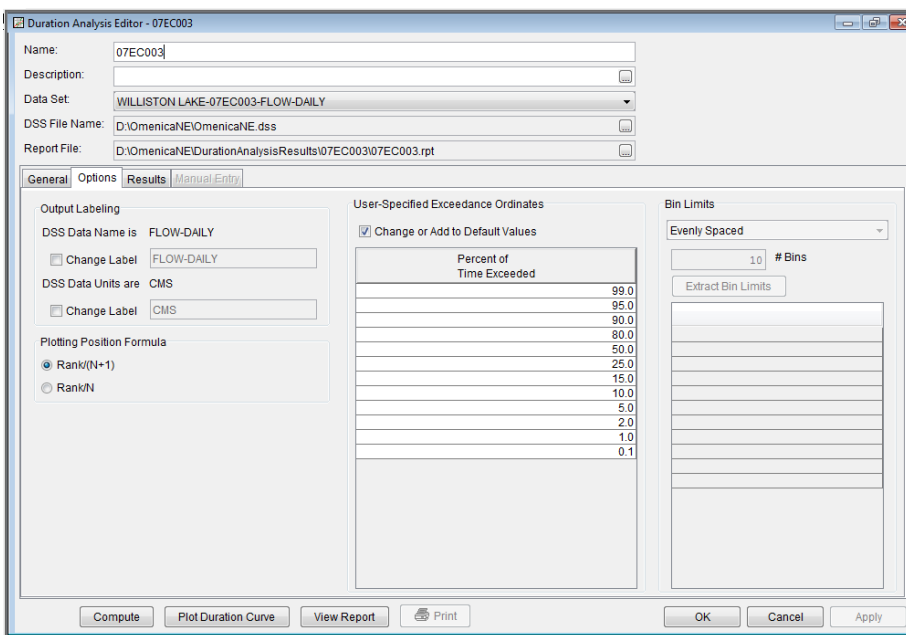
**Daily Mean Discharge Flow Duration Analysis**

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.

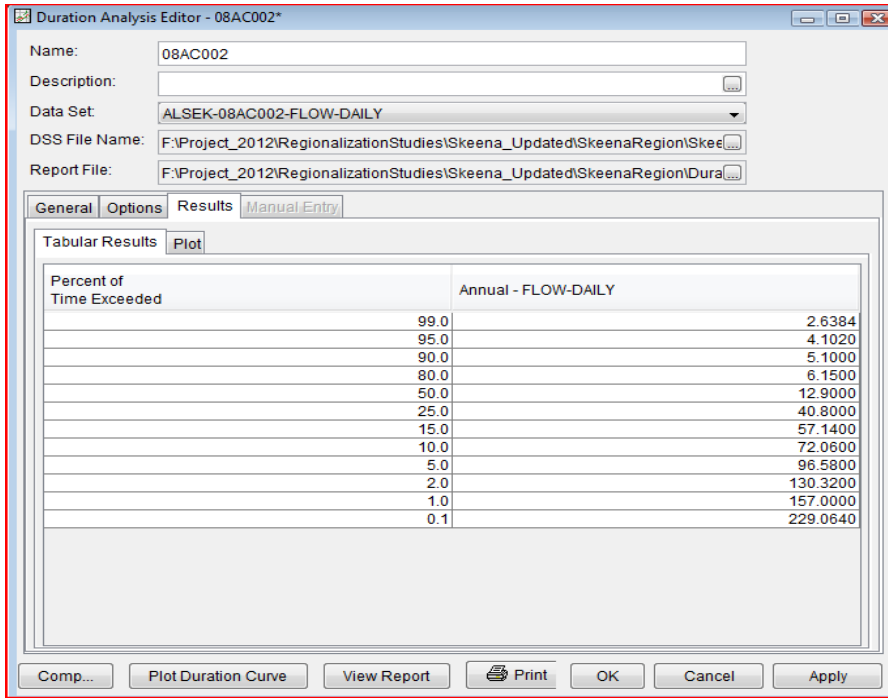
*Duration Analysis, General tab.*



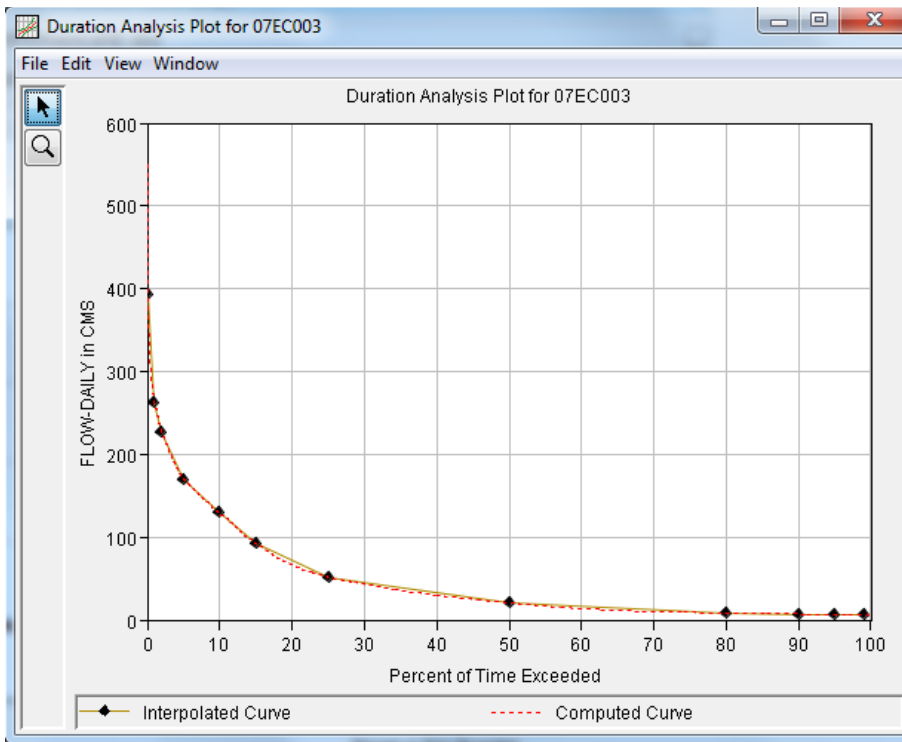
*Duration Analysis, Options tab.*



*Duration Analysis, Results tab.*

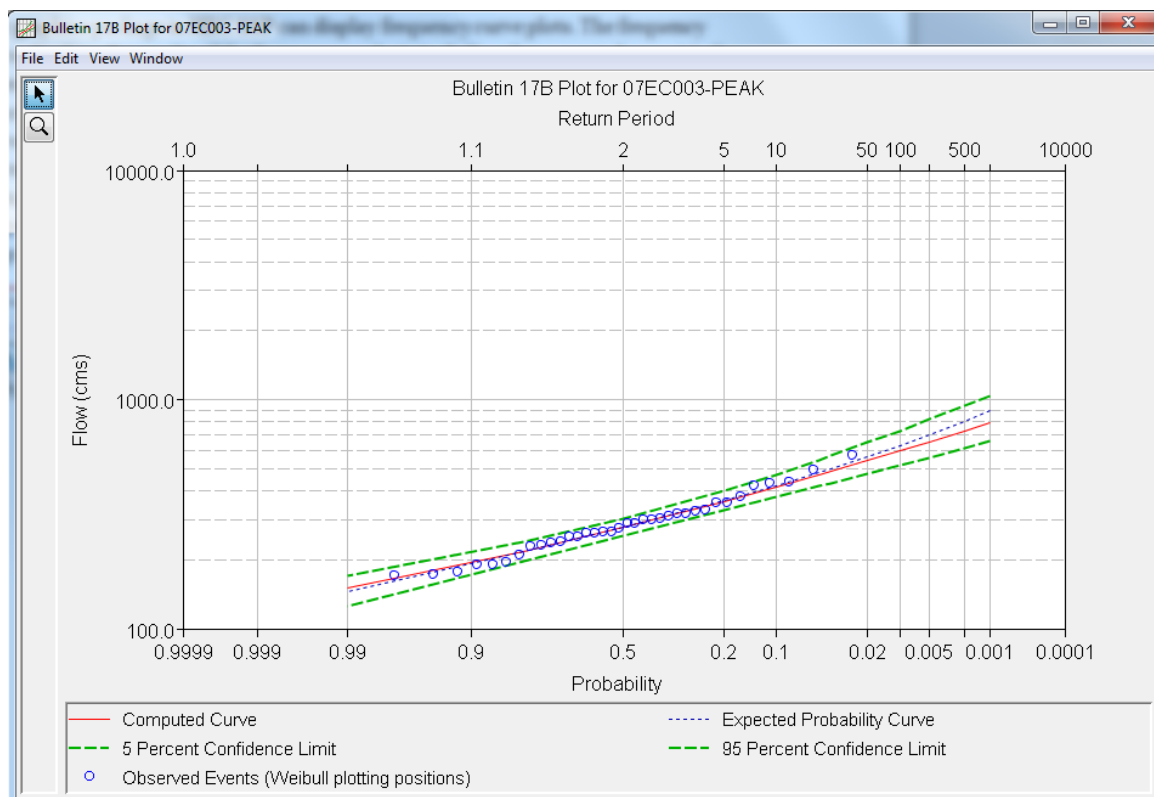


*Duration Analysis, plotting function.*



## 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 - 07EC003-PEAK

Name: 07EC003-PEAK

Description:

Flow Data Set: WILLISTON LAKE-07EC003-FLOW-PEAK-EST

DSS File Name: D:\OmenicaNE\OmenicaNE.dss

Report File: D:\OmenicaNE\Bulletin17bResults\07EC003-PEAK\07EC003-PEAK.rpt

General Options Tabular Results

Frequency Curve for: WILLISTON LAKE-07EC003-FLOW-PEAK-EST

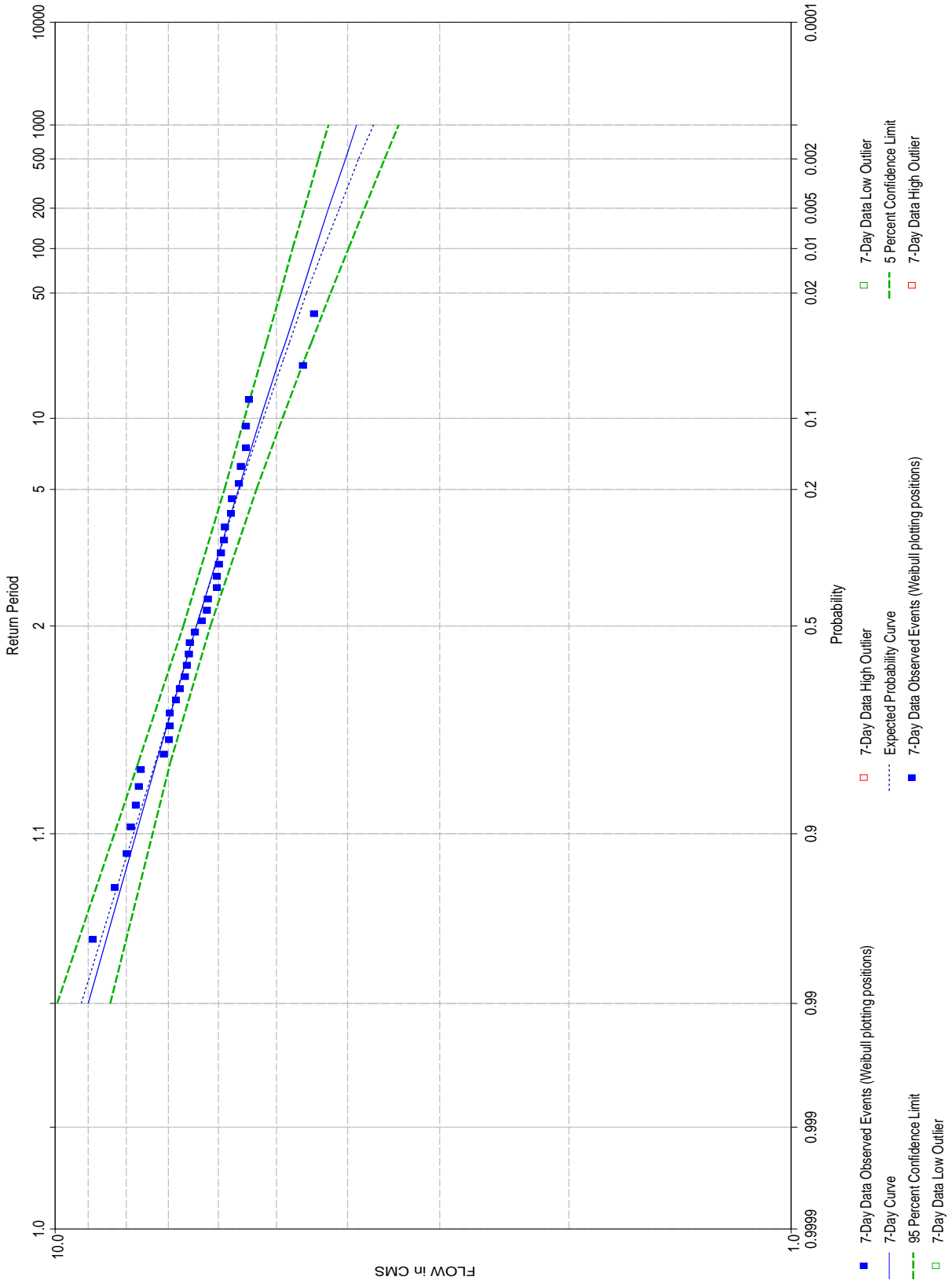
Percent Chance Exceedance	Computed Curve Flow in cms	Expected Prob. Flow in cms	Confidence Limits Flow in cms	
			0.05	0.95
0.1	793.4839	891.5275	1038.8447	658.8008
0.2	731.4146	803.9562	939.8351	614.6949
0.5	652.8080	699.9869	817.4897	557.8304
1.0	595.6136	628.2156	730.8062	515.6306
2.0	540.0115	561.5588	648.6240	473.8080
4.0	485.5557	498.8297	570.3674	431.9174
5.0	468.1711	479.2722	545.9006	418.3114
10.0	414.1451	420.1537	471.6861	375.1234
20.0	358.8834	361.4798	399.1877	329.0412
50.0	277.2063	277.2063	300.9620	255.0336
80.0	218.4826	217.2039	238.4296	196.1838
99.0	150.4994	145.6005	170.9028	126.0355

System Statistics		Number of Events	
Log Transform: Flow		Event	Number
Statistic	Value		
Mean	2.449	Historic Events	0
Standard Dev	0.129	High Outliers	0
Station Skew	0.289	Low Outliers	0
Regional Skew		Zero Or Missing	0
Weighted Skew		Systematic Events	36
Adopted Skew	0.289	Historic Period	

Compute Plot Curve View Report Print OK Cancel Apply

## **A-2 Examples of HEC SSP Output**

Volume Frequency Analytical Plot for 07EC003-ANN7D



## HEC-SSP 2.0 - OmenicaNE

Volume Frequency Curves for 07EC003-ANN7D, Average Daily FLOW in CMS	
Percent Chance Exceedance	7
99.0	9.0085
80.0	7.2805
50.0	6.4149
20.0	5.6280
10.0	5.2467
5.0	4.9469
4.0	4.8621
2.0	4.6254
1.0	4.4202
0.5	4.2386
0.2	4.0264
0.1	3.8826

07EC003-ANN7D-REPORT

-----  
Volume-Duration Analysis  
09 Jan 2014 04:02 PM  
-----

--- Input Data ---

Analysis Name: 07EC003-ANN7D  
Description:

Data Set Name: WILLISTON LAKE-07EC003-FLOW-DAILY  
DSS File Name: F:\OminecaNE Region\OminecaNE\OminecaNE.dss  
DSS Pathname: /WILLISTON LAKE/07EC003/FLOW-DAILY//1DAY/MESILINKA RIVER ABOVE  
GOPHERHOLE CREEK/

Project Path: F:\OminecaNE Region\OminecaNE  
Report File Name: F:\OminecaNE  
Region\OminecaNE\VolumeFrequencyAnalysisResults\07EC003-ANN7D\07EC003-ANN7D.rpt  
Result File Name: F:\OminecaNE  
Region\OminecaNE\VolumeFrequencyAnalysisResults\07EC003-ANN7D\07EC003-ANN7D.xml

Analyze Miniums

Analysis Year: Calendar Year

Record Start Date: 01 Jan 1976  
Record End Date: 30 Dec 2011

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 ---

07EC003-ANN7D-REPORT

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

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

-----  
 << High Outlier Test >>  
 -----

Based on 36 events, 10 percent outlier test deviate K(N) = 2.639  
 Computed high outlier test value = 9.57822

0 high outlier(s) identified above test value of 9.57822

-----  
 << Low Outlier Test >>  
 -----

Based on 36 events, 10 percent outlier test deviate K(N) = 2.639  
 Computed low outlier test value = 4.27027

0 low outlier(s) identified below test value of 4.27027

--- Final Results ---

<< Plotting Positions >>  
 WILLISTON LAKE-07EC003-FLOW-DAILY (7-day Min)

Events Analyzed			Ordered Events				
Day	Mon	Year	FLOW CMS	Rank	Calendar Year	FLOW CMS	Wei bul l Plot Pos
22	Apr	1976	4.4300	1	2004	8.8586	97.30
01	Apr	1977	6.8343	2	1992	8.2786	94.59
16	Mar	1978	6.1914	3	1997	7.9629	91.89
26	Feb	1979	5.7600	4	1983	7.8643	89.19
11	Apr	1980	6.0086	5	1995	7.7471	86.49
11	Mar	1981	7.6643	6	1981	7.6643	83.78
12	Feb	1982	6.6471	7	1998	7.6300	81.08
31	Dec	1983	7.8643	8	1987	7.1000	78.38
25	Feb	1984	6.3043	9	2006	6.9757	75.68
24	Mar	1985	5.9329	10	1988	6.9714	72.97
03	Mar	1986	5.4871	11	2005	6.9543	70.27
21	Apr	1987	7.1000	12	1977	6.8343	67.57
10	Feb	1988	6.9714	13	1993	6.7429	64.86
25	Mar	1989	6.2114	14	1982	6.6471	62.16
21	Feb	1990	6.0086	15	2001	6.6014	59.46
18	Mar	1991	6.4300	16	2000	6.5714	56.76
27	Feb	1992	8.2786	17	2002	6.5314	54.05
20	Mar	1993	6.7429	18	1991	6.4300	51.35
28	Feb	1994	5.8871	19	1984	6.3043	48.65
17	Mar	1995	7.7471	20	1989	6.2114	45.95
05	Apr	1996	5.6029	21	1978	6.1914	43.24
19	Mar	1997	7.9629	22	1980	6.0086	40.54
15	Apr	1998	7.6300	23	1990	6.0086	37.84

07EC003-ANN7D-REPORT

15 Apr 1999	5.7286	24	2009	5.9786	35.14
06 Mar 2000	6.5714	25	1985	5.9329	32.43
29 Mar 2001	6.6014	26	1994	5.8871	29.73
31 Mar 2002	6.5314	27	2003	5.8700	27.03
18 Apr 2003	5.8700	28	1979	5.7600	24.32
30 Mar 2004	8.8586	29	1999	5.7286	21.62
15 Apr 2005	6.9543	30	1996	5.6029	18.92
31 Dec 2006	6.9757	31	2010	5.5800	16.22
28 Feb 2007	5.4814	32	1986	5.4871	13.51
24 Apr 2008	5.4386	33	2007	5.4814	10.81
13 Apr 2009	5.9786	34	2008	5.4386	8.11
14 Apr 2010	5.5800	35	2011	4.5900	5.41
21 Apr 2011	4.5900	36	1976	4.4300	2.70

<< Skew Weighting >>

Based on 36 events, mean-square error of station skew = 0.149  
 Mean-square error of regional skew is undefined.

<< Frequency Curve >>

WILLISTON LAKE-07EC003-FLOW-DAILY (7-day Min)

Computed Curve FLOW, CMS	Expected Probability Probabi lity CMS	Percent Chance Non- Exceedance	Confidence Limits	
			0.05 FLOW, CMS	0.95 FLOW, CMS
9.0085	9.1910	99.0	9.9149	8.4136
7.2805	7.3041	80.0	7.6963	6.9592
6.4149	6.4149	50.0	6.6962	6.1469
5.6280	5.6081	20.0	5.8870	5.3252
5.2467	5.2106	10.0	5.5210	4.9073
4.9469	4.8923	5.0	5.2393	4.5754
4.8621	4.8008	4.0	5.1602	4.4814
4.6254	4.5424	2.0	4.9403	4.2193
4.4202	4.3137	1.0	4.7500	3.9929
4.2386	4.1071	0.5	4.5817	3.7936
4.0264	3.8601	0.2	4.3847	3.5624
3.8826	3.6883	0.1	4.2508	3.4068

<< Systematic Statistics >>

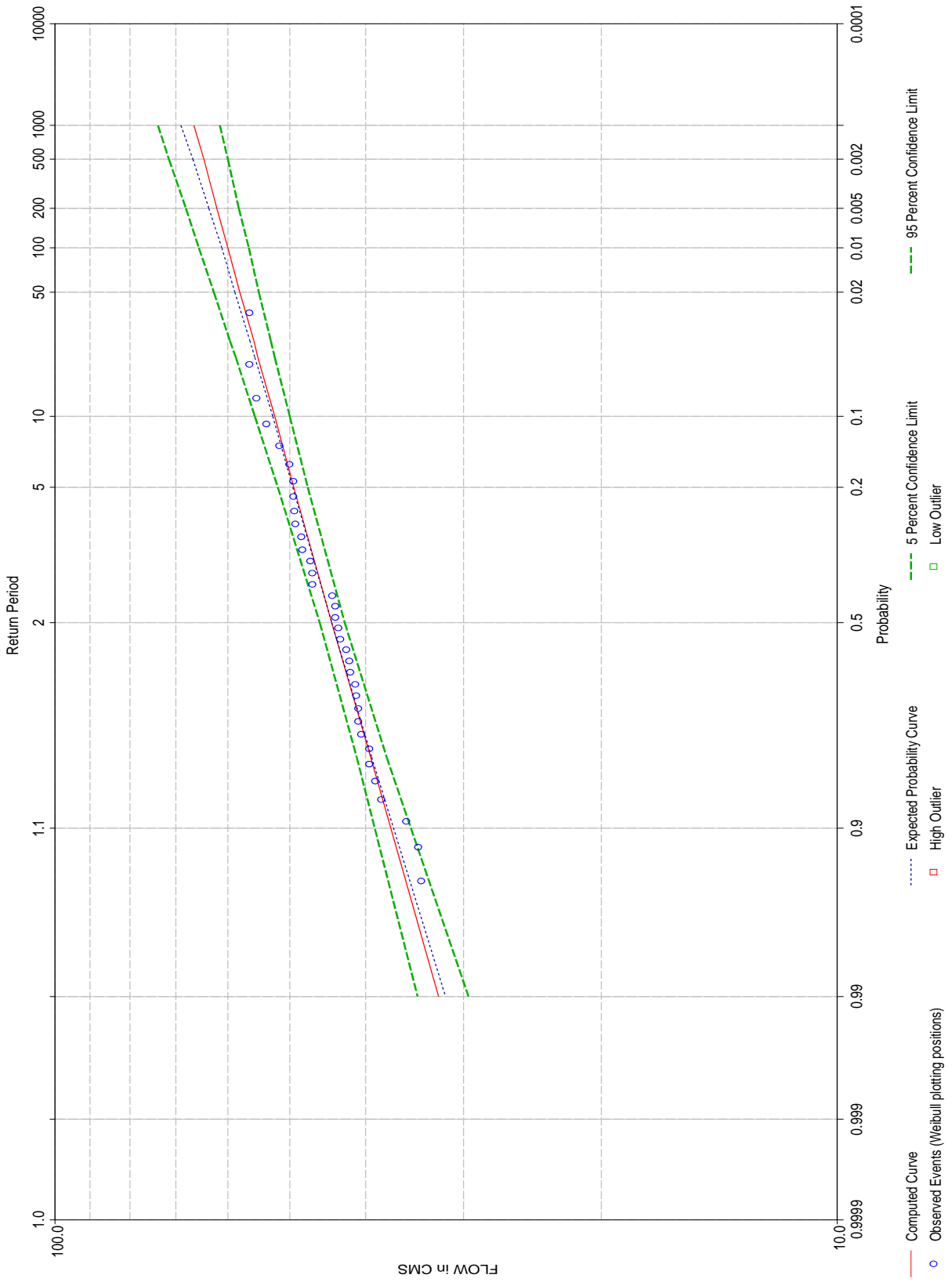
WILLISTON LAKE-07EC003-FLOW-DAILY (7-day Min)

Log Transform: FLOW, CMS		Number of Events	
Mean	0.8059	Hi storic Events	0
Standard Dev	0.0665	High Outliers	0
Station Skew	-0.1192	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Miss ing Events	0
Adopted Skew	-0.1192	Systematic Events	36

--- End of Analytical Frequency Curve ---

Note: No ordinates specified for graphical frequency curve

General Frequency Analytical Plot for 07EC003-ANNHIGH





07EC003-ANNH IGH-REPORT

-----  
General Frequency Analysis  
09 Jan 2014 03:03 PM  
-----

--- Input Data ---

Analysis Name: 07EC003-ANNH IGH  
Description:

Data Set Name: WILLI STON LAKE-07EC003-FLOW-ANNMEAN  
DSS File Name: F:\Omi necaNE Regi on\Omeni caNE\Omeni caNE. dss  
DSS Pathname: /WILLI STON LAKE/07EC003/FLOW-ANNMEAN/01JAN1976/1R-YEAR/MESI LI NKA  
RIVER ABOVE GOPHERHOLE CREEK/

Start Date:  
End Date:

Project Path: F:\Omi necaNE Regi on\Omeni caNE  
Report File Name: F:\Omi necaNE  
Regi on\Omeni caNE\General FrequencyResul ts\07EC003-ANNH IGH\07EC003-ANNH IGH. rpt  
Result File Name: F:\Omi necaNE  
Regi on\Omeni caNE\General FrequencyResul ts\07EC003-ANNH IGH\07EC003-ANNH IGH. 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-Speci fi ed 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 ---

Note: Adopted skew equals station skew and preliminary  
frequency statistics are for the conditional frequency curve  
because of zero or missing events.

07EC003-ANNHIGH-REPORT

<< Frequency Curve >>  
WILLISTON LAKE-07EC003-FLOW-ANNMEAN

Computed Curve FLOW, CMS	Expected Probability FLOW, CMS	Percent Chance Exceedance	Confidence Limits	
			0.05 FLOW, CMS	0.95
66.2144	68.7981	0.1	73.7699	61.4408
64.4667	66.5584	0.2	71.3833	60.0543
62.0440	63.5659	0.5	68.1075	58.1158
60.1042	61.2586	1.0	65.5144	56.5483
58.0446	58.8831	2.0	62.7928	54.8663
55.8266	56.4008	4.0	59.9028	53.0305
55.0696	55.5696	5.0	58.9271	52.3969
52.5376	52.8376	10.0	55.7108	50.2465
49.6070	49.7547	20.0	52.0978	47.6765
44.3930	44.3930	50.0	46.1018	42.7516
39.6621	39.5399	80.0	41.2662	37.7696
32.3799	31.7158	99.0	34.4646	29.6390

<< Conditional Statistics >>  
WILLISTON LAKE-07EC003-FLOW-ANNMEAN

Log Transform: FLOW, CMS		Number of Events	
Mean	1.6468	Historic Events	0
Standard Dev	0.0577	High Outliers	0
Station Skew	-0.0523	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	1
Adopted Skew	-0.0523	Systematic Events	36

<< Conditional Probability Adjusted Ordinates >>

<< Frequency Curve >>  
WILLISTON LAKE-07EC003-FLOW-ANNMEAN

Computed Curve FLOW, CMS	Expected Probability FLOW, CMS	Percent Chance Exceedance	Confidence Limits	
			0.05 FLOW, CMS	0.95
66.1445	---	0.1	---	---
64.3941	---	0.2	---	---
61.9669	---	0.5	---	---
60.0229	---	1.0	---	---
57.9578	---	2.0	---	---
55.7323	---	4.0	---	---
54.9719	---	5.0	---	---
52.4273	---	10.0	---	---
49.4753	---	20.0	---	---
44.1819	---	50.0	---	---
39.2099	---	80.0	---	---
---	---	99.0	---	---

--- End of Preliminary Results ---

O7EC003-ANNHI GH-REPORT

-----  
 << Low Outlier Test >>  
 -----

Based on 35 events, 10 percent outlier test deviate K(N) = 2.628  
 Computed low outlier test value = 31.26604

0 low outlier(s) identified below test value of 31.26604

Based on statistics after 0 zero events and 1 missing events were deleted.

-----  
 << High Outlier Test >>  
 -----

Based on 35 events, 10 percent outlier test deviate K(N) = 2.628  
 Computed high outlier test value = 62.88567

0 high outlier(s) identified above test value of 62.88567

Note: Statistics and frequency curve were modified  
 using conditional probability adjustment.

--- Final Results ---

<< Plotting Positions >>  
 WILLISTON LAKE-O7EC003-FLOW-ANNMEAN

Events Analyzed				Ordered Events			
Day	Mon	Year	FLOW CMS	Rank	Water Year	FLOW CMS	Wei bull I Plot Pos
31	Dec	1976	56.3000	1	1977	56.3000	2.70
31	Dec	1977	43.3000	2	1997	56.2000	5.41
31	Dec	1978	35.5000	3	1988	55.2000	8.11
31	Dec	1979	40.8000	4	2003	53.5000	10.81
31	Dec	1980	39.5000	5	1998	51.5000	13.51
31	Dec	1981	48.1000	6	2002	50.0000	16.22
31	Dec	1982	46.8000	7	2008	49.5000	18.92
31	Dec	1983	43.7000	8	1989	49.5000	21.62
31	Dec	1984	48.3000	9	1991	49.3000	24.32
31	Dec	1985	38.2000	10	1993	49.1000	27.03
31	Dec	1986	41.1000	11	1985	48.3000	29.73
31	Dec	1987	55.2000	12	1982	48.1000	32.43
31	Dec	1988	49.5000	13	2000	47.1000	35.14
31	Dec	1989	39.6000	14	2004	46.8000	37.84
31	Dec	1990	49.3000	15	1983	46.8000	40.54
31	Dec	1991	42.3000	16	2001	44.1000	43.24
31	Dec	1992	49.1000	17	2009	43.7000	45.95
31	Dec	1993	40.8000	18	1984	43.7000	48.65
31	Dec	1994	41.9000	19	1978	43.3000	51.35
31	Dec	1995	40.5000	20	2006	43.1000	54.05
31	Dec	1996	56.2000	21	1992	42.3000	56.76
31	Dec	1997	51.5000	22	1995	41.9000	59.46
31	Dec	1998	41.8000	23	1999	41.8000	62.16

07EC003-ANNHIGH-REPORT

31 Dec 1999	47.1000	24	2005	41.2000	64.86
31 Dec 2000	44.1000	25	1987	41.1000	67.57
31 Dec 2001	50.0000	26	1994	40.8000	70.27
31 Dec 2002	53.5000	27	1980	40.8000	72.97
31 Dec 2003	46.8000	28	1996	40.5000	75.68
31 Dec 2004	41.2000	29	1990	39.6000	78.38
31 Dec 2005	43.1000	30	1981	39.5000	81.08
31 Dec 2006	33.9000	31	2010	38.9000	83.78
31 Dec 2007	49.5000	32	1986	38.2000	86.49
31 Dec 2008	43.7000	33	1979	35.5000	89.19
31 Dec 2009	38.9000	34	2011	34.2000	91.89
31 Dec 2010	34.2000	35	2007	33.9000	94.59
31 Dec 2011	---	36	2012	---	97.30

<< Skew Weighting >>

Based on 36 events, mean-square error of station skew = 0.143  
 Mean-square error of regional skew = -?

<< Frequency Curve >>

WILLISTON LAKE-07EC003-FLOW-ANNMEAN

Computed Curve FLOW, CMS	Expected Probability	Percent Chance Exceedance	Confidence Limits	
			0.05 FLOW, CMS	0.95 FLOW, CMS
66.2638	68.8352	0.1	73.7739	61.4937
64.4742	66.5510	0.2	71.3394	60.0712
61.9993	63.5067	0.5	68.0061	58.0875
60.0228	61.1637	1.0	65.3742	56.4875
57.9293	58.7562	2.0	62.6185	54.7748
55.6805	56.2453	4.0	59.6994	52.9103
54.9143	55.4056	5.0	58.7157	52.2680
52.3568	52.6509	10.0	55.4787	50.0926
49.4061	49.5506	20.0	51.8536	47.5018
44.1819	44.1819	50.0	45.8626	42.5652
39.4691	39.3513	80.0	41.0502	37.6085
32.2642	31.6293	99.0	34.3138	29.5816

<< Synthetic Statistics >>

WILLISTON LAKE-07EC003-FLOW-ANNMEAN

Log Transform: FLOW, CMS		Number of Events	
Mean	1.6449	Historic Events	0
Standard Dev	0.0579	High Outliers	0
Station Skew	-0.0330	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	1
Adopted Skew	-0.0330	Systematic Events	36

--- End of Analytical Frequency Curve ---

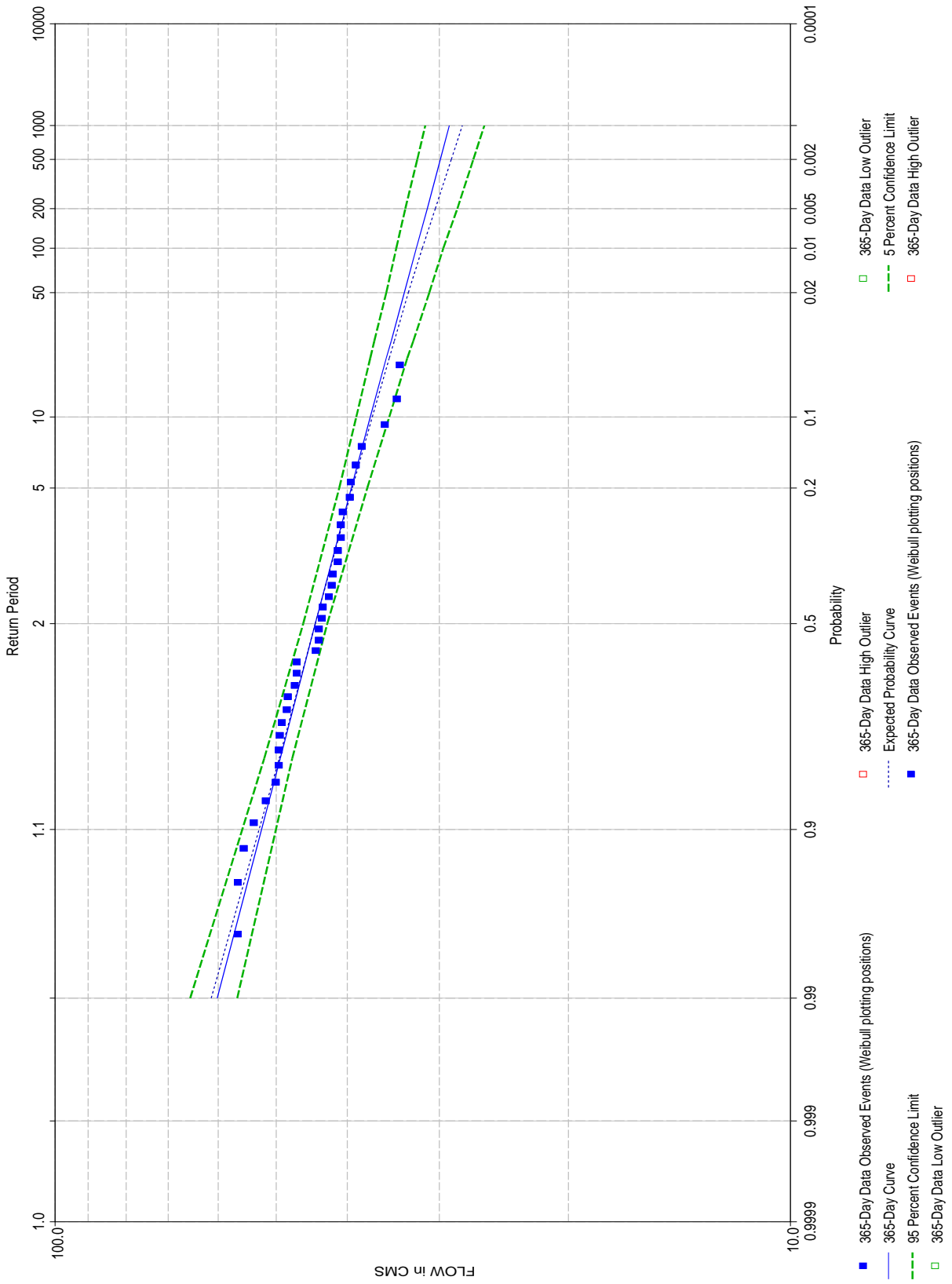
Note: No ordinates specified for graphical frequency curve

## Tabular Results 07EC003-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			
0.1	66.2638	68.8352	73.7739	61.4937			0.05
0.2	64.4742	66.5510	71.3394	60.0712			
0.5	61.9993	63.5067	68.0061	58.0875			
1.0	60.0228	61.1637	65.3742	56.4875			
2.0	57.9293	58.7562	62.6185	54.7748			
4.0	55.6805	56.2453	59.6994	52.9103			
5.0	54.9143	55.4056	58.7157	52.2680			
10.0	52.3568	52.6509	55.4787	50.0926			
20.0	49.4061	49.5506	51.8536	47.5018			
50.0	44.1819	44.1819	45.8626	42.5652			
80.0	39.4691	39.3513	41.0502	37.6085			
99.0	32.2642	31.6293	34.3138	29.5816			

System Statistics		Number of Events	
Statistic	Value	Event	Number
Mean	1.6449	Historic Events	0
Standard Dev	0.0579	High Outliers	0
Station Skew	-0.0330	Low Outliers	0
Regional Skew		Zero Or Missing	1
Weighted Skew		Systematic Events	36
Adopted Skew	-0.0330	Historic Period	

Volume Frequency Analytical Plot for 07EC003-ANNLOW



07EC003-ANNLOW-REPORT

-----  
Volume-Duration Analysis  
09 Jan 2014 04:21 PM  
-----

--- Input Data ---

Analysis Name: 07EC003-ANNLOW  
Description:

Data Set Name: WILLISTON LAKE-07EC003-FLOW-DAILY  
DSS File Name: F:\OminecaNE Region\OminecaNE\OminecaNE.dss  
DSS Pathname: /WILLISTON LAKE/07EC003/FLOW-DAILY//1DAY/MESILINKA RIVER ABOVE  
GOPHERHOLE CREEK/

Project Path: F:\OminecaNE Region\OminecaNE  
Report File Name: F:\OminecaNE  
Region\OminecaNE\VolumeFrequencyAnalysisResults\07EC003-ANNLOW\07EC003-ANNLOW.rpt  
Result File Name: F:\OminecaNE  
Region\OminecaNE\VolumeFrequencyAnalysisResults\07EC003-ANNLOW\07EC003-ANNLOW.xml

Analyze Miniums

Analysis Year: Calendar Year

Record Start Date: 01 Jan 1976  
Record End Date: 30 Dec 2011

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 ---

07EC003-ANNLOW-REPORT

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

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

Warning: 36 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.

--- Preliminary Results ---

Note: Adopted skew equals station skew and preliminary frequency statistics are for the conditional frequency curve because of zero or missing events.

<< Frequency Curve >>  
 WILLISTON LAKE-07EC003-FLOW-DAILY (365-day Min)

Computed Curve FLOW, CMS	Expected Probability	Percent Chance Non-Exceedance	Confidence Limits	
			0.05 FLOW, CMS	0.95
60.1042	61.2586	99.0	65.5144	56.5483
49.6070	49.7547	80.0	52.0978	47.6765
44.3930	44.3930	50.0	46.1018	42.7516
39.6621	39.5399	20.0	41.2662	37.7696
37.3686	37.1454	10.0	39.0784	35.2305
35.5627	35.2233	5.0	37.3942	33.2082
35.0512	34.6707	4.0	36.9210	32.6340
33.6218	33.1053	2.0	35.6044	31.0298
32.3799	31.7158	1.0	34.4646	29.6390
31.2788	30.4561	0.5	33.4550	28.4104
29.9884	28.9432	0.2	32.2714	26.9781
29.1113	27.8876	0.1	31.4657	26.0101

<< Conditional Statistics >>  
 WILLISTON LAKE-07EC003-FLOW-DAILY (365-day Min)

Log Transform: FLOW, CMS		Number of Events	
Mean	1.6468	Historic Events	0
Standard Dev	0.0577	High Outliers	0
Station Skew	-0.0523	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	1
Adopted Skew	-0.0523	Systematic Events	36

<< Conditional Probability Adjusted Ordinates >>

<< Frequency Curve >>  
 WILLISTON LAKE-07EC003-FLOW-DAILY (365-day Min)



07EC003-ANNLOW-REPORT

Computed Curve FLOW, CMS	Expected Probability CMS	Percent Chance Non-Exceedance	Confidence Limits 0.05 FLOW, CMS	0.95
---	---	99.0	---	---
50.1581	---	80.0	---	---
44.6046	---	50.0	---	---
39.7702	---	20.0	---	---
37.4502	---	10.0	---	---
35.6292	---	5.0	---	---
35.1142	---	4.0	---	---
33.6758	---	2.0	---	---
32.4273	---	1.0	---	---
31.3211	---	0.5	---	---
30.0256	---	0.2	---	---
29.1455	---	0.1	---	---

--- End of Preliminary Results ---

<< High Outlier Test >>

Based on 35 events, 10 percent outlier test deviate  $K(N) = 2.628$   
 Computed high outlier test value = 62.88567

0 high outlier(s) identified above test value of 62.88567

<< Low Outlier Test >>

Based on 35 events, 10 percent outlier test deviate  $K(N) = 2.628$   
 Computed low outlier test value = 31.26604

0 low outlier(s) identified below test value of 31.26604

Based on statistics after 0 zero events and 1 missing events were deleted.

Note: Statistics and frequency curve were modified using conditional probability adjustment.

--- Final Results ---

<< Plotting Positions >>

WILLISTON LAKE-07EC003-FLOW-DAILY (365-day Min)

Events Analyzed			Ordered Events			
Day	Mon	Year	Rank	Calendar Year	FLOW CMS	Wei bull Plot Pos
30	Dec	1976	1	1976	56.3000	97.30
31	Dec	1977	2	1996	56.2000	94.59
07	Sep	1978	3	1987	55.2000	91.89

07EC003-ANNLOW-REPORT

18 Jun 1979	40.8000	4	2002	53.5000	89.19
19 Sep 1980	39.5000	5	1997	51.5000	86.49
20 May 1981	48.1000	6	2001	50.0000	83.78
08 Jun 1982	46.8000	7	2007	49.5000	81.08
31 Dec 1983	43.7000	8	1988	49.5000	78.38
07 Jun 1984	48.3000	9	1990	49.3000	75.68
31 Dec 1985	38.2000	10	1992	49.1000	72.97
06 Jun 1986	41.1000	11	1984	48.3000	70.27
01 Jan 1987	55.2000	12	1981	48.1000	67.57
31 Dec 1988	49.5000	13	1999	47.1000	64.86
31 Dec 1989	39.6000	14	2003	46.8000	62.16
20 May 1990	49.3000	15	1982	46.8000	59.46
26 Jul 1991	42.3000	16	2000	44.1000	56.76
29 May 1992	49.1000	17	2008	43.7000	54.05
31 Dec 1993	40.8000	18	1983	43.7000	51.35
06 Jun 1994	41.9000	19	1977	43.3000	48.65
31 Dec 1995	40.5000	20	2005	43.1000	45.95
31 May 1996	56.2000	21	1991	42.3000	43.24
25 Oct 1997	51.5000	22	1994	41.9000	40.54
31 Dec 1998	41.8000	23	1998	41.8000	37.84
09 Jun 1999	47.1000	24	2004	41.2000	35.14
27 Jun 2000	44.1000	25	1986	41.1000	32.43
26 May 2001	50.0000	26	1993	40.8000	29.73
10 Jan 2002	53.5000	27	1979	40.8000	27.03
21 Oct 2003	46.8000	28	1995	40.5000	24.32
16 Nov 2004	41.2000	29	1989	39.6000	21.62
19 Apr 2005	43.1000	30	1980	39.5000	18.92
31 Dec 2006	33.9000	31	2009	38.9000	16.22
03 Jun 2007	49.5000	32	1985	38.2000	13.51
09 Aug 2008	43.7000	33	1978	35.5000	10.81
04 Jun 2009	38.9000	34	2010	34.2000	8.11
28 Sep 2010	34.2000	35	2006	33.9000	5.41
22 May 2011	-?	36	2011	-?	2.70

<< Skew Weighting >>

Based on 36 events, mean-square error of station skew = 0.143  
 Mean-square error of regional skew is undefined.

<< Frequency Curve >>

WILLISTON LAKE-07EC003-FLOW-DAILY (365-day Min)

Computed Curve FLOW, CMS	Expected Probability	Percent Chance Non-Exceedance	Confidence Limits	
			0.05 FLOW, CMS	0.95
60.0228	61.1637	99.0	65.3742	56.4875
49.4061	49.5506	80.0	51.8536	47.5018
44.1819	44.1819	50.0	45.8626	42.5652
39.4691	39.3513	20.0	41.0502	37.6085
37.1937	36.9791	10.0	38.8785	35.0947
35.4061	35.0803	5.0	37.2096	33.0975
34.9005	34.5355	4.0	36.7412	32.5311
33.4889	32.9945	2.0	35.4393	30.9503
32.2642	31.6293	1.0	34.3138	29.5816
31.1796	30.3943	0.5	33.3181	28.3737
29.9102	28.9139	0.2	32.1522	26.9669
29.0484	27.8834	0.1	31.3595	26.0170

<< Synthetic Statistics >>  
 WILLISTON LAKE-07EC003-FLOW-DAILY (365-day Min)

Log Transform: FLOW, CMS		Number of Events	
Mean	1.6449	Historic Events	0
Standard Dev	0.0579	High Outliers	0
Station Skew	-0.0330	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	1
Adopted Skew	-0.0330	Systematic Events	36

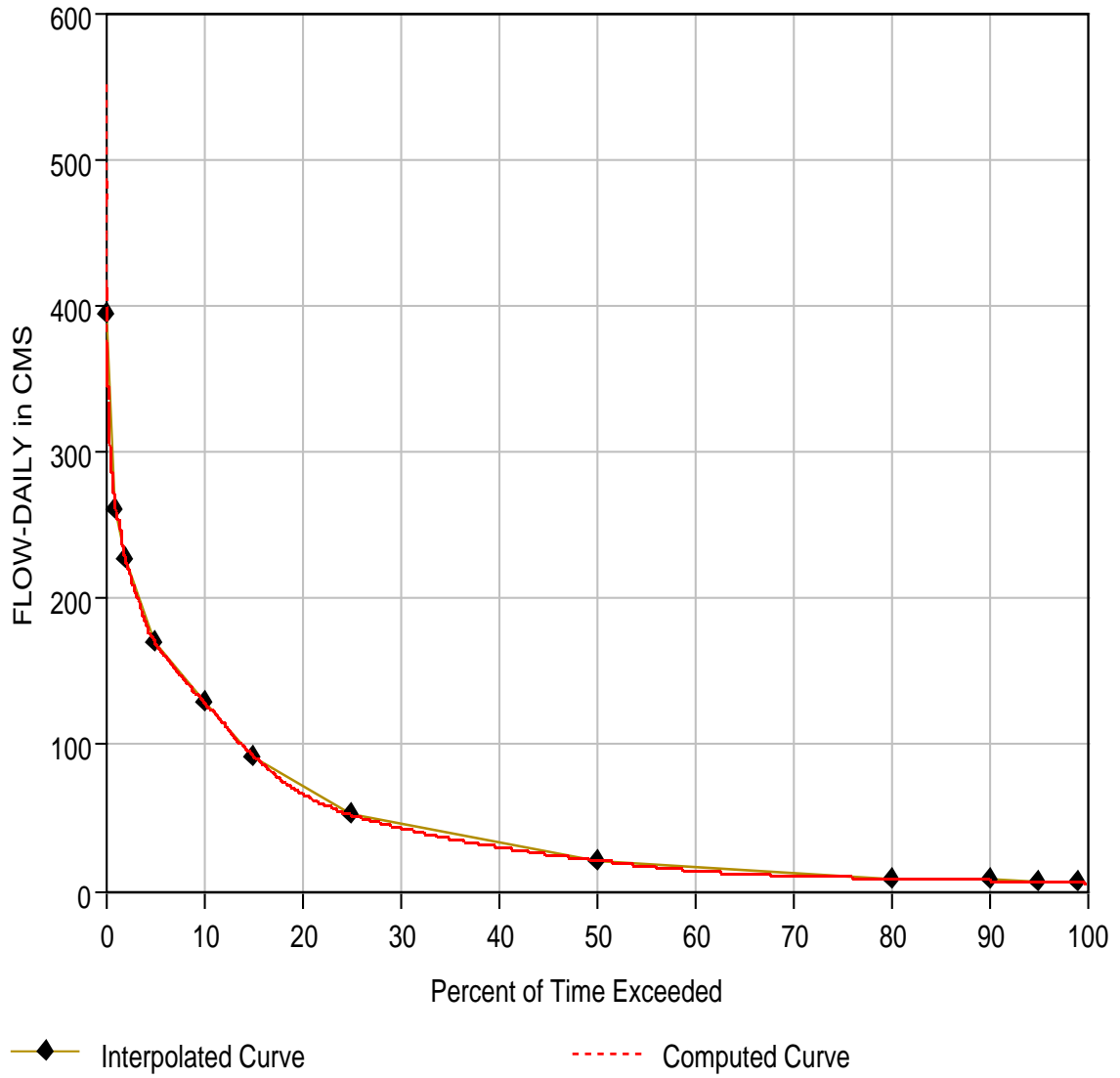
--- End of Analytical Frequency Curve ---

Note: No ordinates specified for graphical frequency curve

## HEC-SSP 2.0 - OmenicaNE

Volume Frequency Curves for 07EC003-ANNLOW, Average Daily FLOW in CMS	
Percent Chance Exceedance	365
99.0	60.0228
80.0	49.4061
50.0	44.1819
20.0	39.4691
10.0	37.1937
5.0	35.4061
4.0	34.9005
2.0	33.4889
1.0	32.2642
0.5	31.1796
0.2	29.9102
0.1	29.0484

Duration Analysis Plot for 07EC003



07EC003-FLOW DURATI ON-REPORT

-----  
Durati on Analysis  
14 Jan 2014 04:28 PM  
-----

--- Input Data ---

Analysis Name: 07EC003  
Description:

DSS File Name: F:\Omi necaNE Regi on\Omeni caNE\Omeni caNE. dss  
DSS Pathname: /WILLI STON LAKE/07EC003/FLOW-DAI LY/01JAN1976/1DAY/MESI L INKA RI VER  
ABOVE GOPHERHOLE CREEK/

Project Path: F:\Omi necaNE Regi on\Omeni caNE  
Report File Name: F:\Omi necaNE  
Regi on\Omeni caNE\Durati onAnalysisResul ts\07EC003\07EC003. rpt  
Resul t File Name: F:\Omi necaNE  
Regi on\Omeni caNE\Durati onAnalysisResul ts\07EC003\07EC003. xml

Durati on Analysis Method: Standard

Durati on Pl ot Posi ti on Method: Rank/(N+1)

X-Axi s Scale: Li near

Y-Axi s Scale: Li near

Durati on Peri od: Annual

Use User-Speci fi ed 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

Di splay ordi nate values using 4 di gi ts i n fracti on part of val ue

--- End of Input Data ---

-----  
Annual Durati on Analysis

Time Period: 01Jan - 31Dec

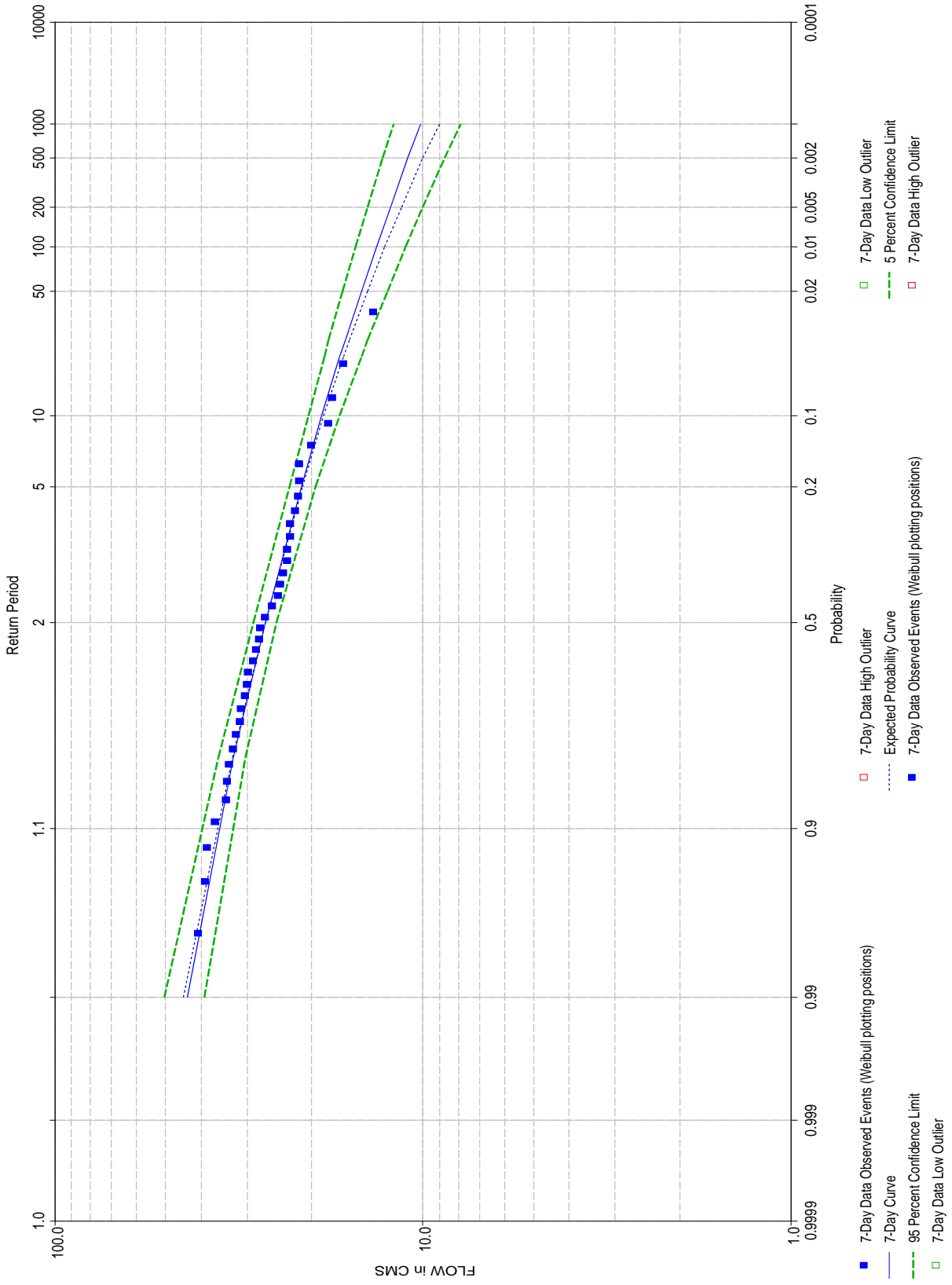
Number Val id Values: 13148  
Number Mi ssi ng Values: 0

Mi ni mum Val ue: 4.3900  
Maxi mum Val ue: 551.0000

07EC003-FLOW DURATI ON-REPORT

Percent of Time Exceeded	FLOW-DAILY CMS
99.0	5.7400
95.0	6.5845
90.0	7.1500
80.0	8.3800
50.0	20.9000
25.0	51.7000
15.0	92.5000
10.0	129.0000
5.0	170.0000
2.0	227.0000
1.0	261.5100
0.1	393.8080

Volume Frequency Analytical Plot for 07EC003-JUN-SEP





07EC003-JUN-SEP-REPORT

-----  
Volume-Duration Analysis  
09 Jan 2014 04:09 PM  
-----

--- Input Data ---

Analysis Name: 07EC003-JUN-SEP  
Description:

Data Set Name: WILLISTON LAKE-07EC003-FLOW-DAILY  
DSS File Name: F:\OmicronNE Region\OmicronNE\OmicronNE.dss  
DSS Pathname: /WILLISTON LAKE/07EC003/FLOW-DAILY//1DAY/MESILINKA RIVER ABOVE  
GOPHERHOLE CREEK/

Project Path: F:\OmicronNE Region\OmicronNE  
Report File Name: F:\OmicronNE  
Region\OmicronNE\VolumeFrequencyAnalysisResults\07EC003-JUN-SEP\07EC003-JUN-SEP.rpt  
Result File Name: F:\OmicronNE  
Region\OmicronNE\VolumeFrequencyAnalysisResults\07EC003-JUN-SEP\07EC003-JUN-SEP.xml

Analyze Miniums

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

Record Start Date: 01 Jan 1976  
Record End Date: 30 Dec 2011

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 ---

07EC003-JUN-SEP-REPORT

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

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

-----  
 << High Outlier Test >>  
 -----

Based on 36 events, 10 percent outlier test deviate  $K(N) = 2.639$   
 Computed high outlier test value = 51.51811

0 high outlier(s) identified above test value of 51.51811

-----  
 << Low Outlier Test >>  
 -----

Based on 36 events, 10 percent outlier test deviate  $K(N) = 2.639$   
 Computed low outlier test value = 13.42965

0 low outlier(s) identified below test value of 13.42965

--- Final Results ---

<< Plotting Positions >>  
 WILLISTON LAKE-07EC003-FLOW-DAILY (7-day Min)

Events Analyzed			Ordered Events			
Day	Mon	Year	Rank	Calendar Year	FLOW CMS	Weibull Plot Pos
28	Sep	1976	1	1996	40.5857	97.30
19	Sep	1977	2	2000	38.9571	94.59
27	Sep	1978	3	1997	38.4000	91.89
30	Sep	1979	4	2011	36.6714	89.19
18	Sep	1980	5	1994	34.1714	86.49
30	Sep	1981	6	1987	33.9143	83.78
30	Sep	1982	7	1979	33.5857	81.08
25	Sep	1983	8	2002	32.7714	78.38
30	Sep	1984	9	1984	32.1000	75.68
12	Sep	1985	10	2004	31.1857	72.97
22	Sep	1986	11	1983	31.0286	70.27
19	Sep	1987	12	2001	30.2429	67.57
28	Sep	1988	13	1991	30.0143	64.86
21	Sep	1989	14	1982	29.7857	62.16
30	Sep	1990	15	1980	28.7571	59.46
25	Sep	1991	16	1976	28.2143	56.76
19	Sep	1992	17	2003	27.7143	54.05
30	Sep	1993	18	2007	27.5429	51.35
31	Aug	1994	19	1985	26.7143	48.65
30	Sep	1995	20	2009	25.6429	45.95
27	Sep	1996	21	1999	24.6857	43.24

07EC003-JUN-SEP-REPORT

27 Aug 1997	38.4000	22	2005	24.4143	40.54
02 Sep 1998	23.8429	23	1998	23.8429	37.84
30 Sep 1999	24.6857	24	1981	23.3429	35.14
30 Sep 2000	38.9571	25	2008	23.3000	32.43
23 Sep 2001	30.2429	26	1993	22.8571	29.73
15 Sep 2002	32.7714	27	1977	22.8286	27.03
05 Sep 2003	27.7143	28	1986	22.1714	24.32
01 Sep 2004	31.1857	29	1995	21.8000	21.62
30 Sep 2005	24.4143	30	1989	21.6714	18.92
25 Sep 2006	13.6000	31	1978	21.5857	16.22
26 Sep 2007	27.5429	32	1988	20.0143	13.51
30 Sep 2008	23.3000	33	1992	17.9714	10.81
04 Sep 2009	25.6429	34	1990	17.6143	8.11
24 Sep 2010	16.4143	35	2010	16.4143	5.41
21 Sep 2011	36.6714	36	2006	13.6000	2.70

<< Skew Weighting >>

Based on 36 events, mean-square error of station skew = 0.178  
 Mean-square error of regional skew is undefined.

<< Frequency Curve >>

WILLISTON LAKE-07EC003-FLOW-DAILY (7-day Min)

Computed Curve FLOW, CMS	Expected Probability	Percent Chance Non-Exceedance	Confidence Limits	
			0.05 FLOW, CMS	0.95
43.6098	44.6605	99.0	50.4589	39.2542
32.7118	32.8658	80.0	35.8925	30.3402
26.8201	26.8201	50.0	28.8257	24.9931
21.3910	21.2519	20.0	23.0458	19.5278
18.7899	18.5419	10.0	20.4671	16.7899
16.7798	16.4170	5.0	18.5115	14.6701
16.2188	15.8131	4.0	17.9680	14.0816
14.6749	14.1380	2.0	16.4719	12.4747
13.3669	12.6984	1.0	15.1992	11.1327
12.2375	11.4340	0.5	14.0928	9.9922
10.9556	9.9824	0.2	12.8249	8.7223
10.1128	9.0073	0.1	11.9823	7.9036

<< Systematic Statistics >>

WILLISTON LAKE-07EC003-FLOW-DAILY (7-day Min)

Log Transform: FLOW, CMS		Number of Events	
Mean	1.4200	Historic Events	0
Standard Dev	0.1106	High Outliers	0
Station Skew	-0.4597	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	0
Adopted Skew	-0.4597	Systematic Events	36

--- End of Analytical Frequency Curve ---

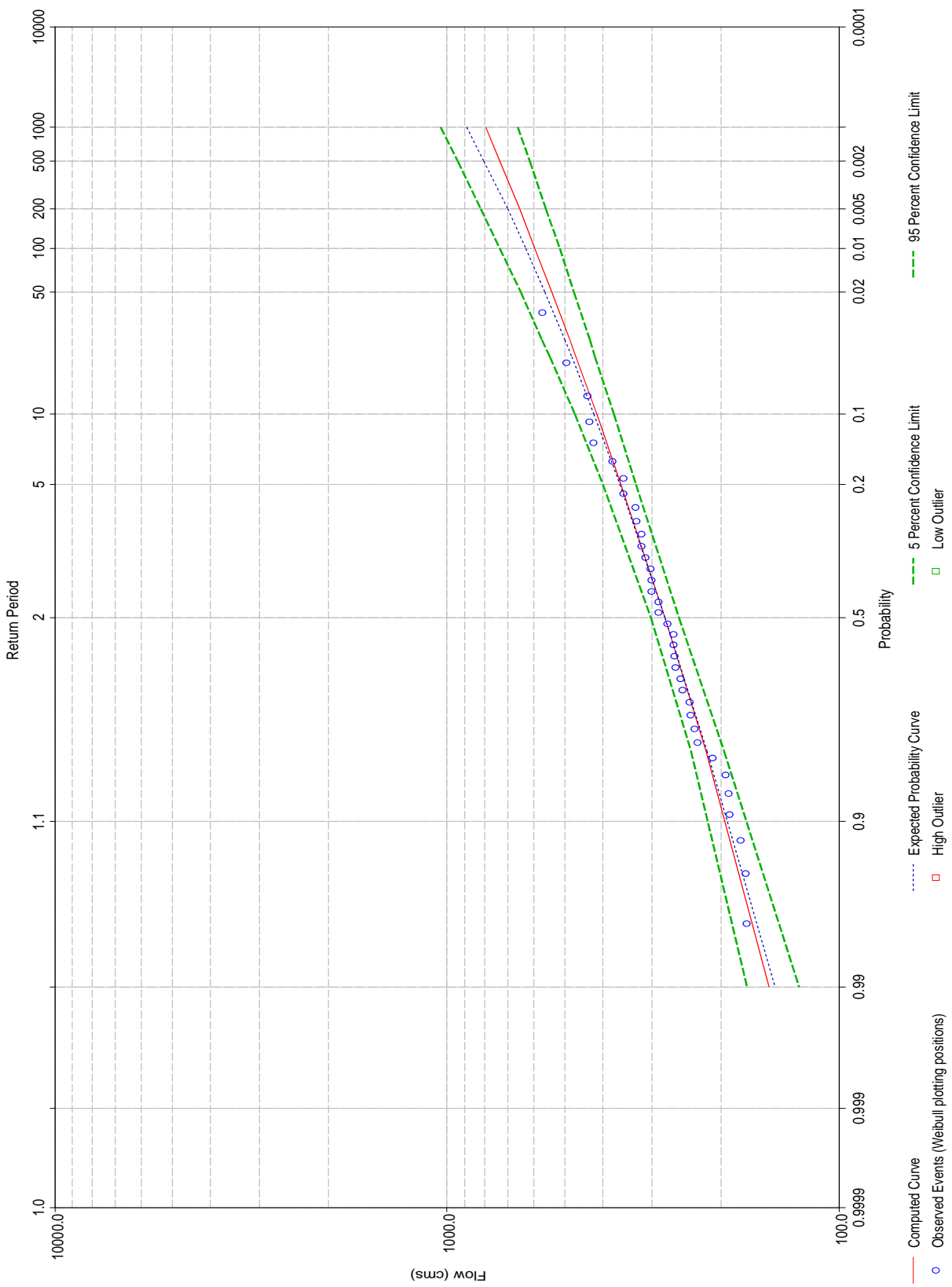
07EC003-JUN-SEP-REPORT

Note: No ordinates specified for graphical frequency curve

## HEC-SSP 2.0 - OmenicaNE

Volume Frequency Curves for 07EC003-JUN-SEP, Average Daily FLOW in CMS	
Percent Chance Exceedance	7
99.0	43.6098
80.0	32.7118
50.0	26.8201
20.0	21.3910
10.0	18.7899
5.0	16.7798
4.0	16.2188
2.0	14.6749
1.0	13.3669
0.5	12.2375
0.2	10.9556
0.1	10.1128

Bulletin 17B Plot for 07EC003-PEAK



07EC003-PEAK-REPORT

-----  
Bulletin 17B Frequency Analysis  
09 Jan 2014 02:54 PM  
-----

--- Input Data ---

Analysis Name: 07EC003-PEAK  
Description:

Data Set Name: WILLISTON LAKE-07EC003-FLOW-PEAK-EST  
DSS File Name: F:\OmincaNE Region\OmincaNE\OmincaNE.dss  
DSS Pathname: /WILLISTON LAKE/07EC003/FLOW-PEAK-EST/01jan1900/1R-YEAR/MESILINKA  
RIVER ABOVE GOPHERHOLE CREEK/

Report File Name: F:\OmincaNE  
Region\OmincaNE\Bulletin17bResults\07EC003-PEAK\07EC003-PEAK.rpt  
XML File Name: F:\OmincaNE  
Region\OmincaNE\Bulletin17bResults\07EC003-PEAK\07EC003-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 ---

-----  
<< Low Outlier Test >>  
-----

Based on 36 events, 10 percent outlier test deviate  $K(N) = 2.639$   
Computed low outlier test value = 128.76955

0 low outlier(s) identified below test value of 128.76955

07EC003-PEAK-REPORT

<< High Outlier Test >>

Based on 36 events, 10 percent outlier test deviate  $K(N) = 2.639$   
 Computed high outlier test value = 613.98628

0 high outlier(s) identified above test value of 613.98628

--- Final Results ---

<< Plotting Positions >>

WILLISTON LAKE-07EC003-FLOW-PEAK-EST

Events Analyzed				Ordered Events			
Day	Mon	Year	FLOW CMS	Rank	Water Year	FLOW CMS	Wei bul I Plot Pos
02	Jul	1976	353.7866	1	1990	568.0000	2.70
20	Jun	1977	209.0000	2	2007	495.0000	5.41
05	Jun	1978	253.0000	3	2002	436.0000	8.11
04	Jun	1979	189.0000	4	1999	431.0000	10.81
18	Jun	1980	172.0000	5	1981	421.0000	13.51
28	May	1981	421.0000	6	1998	376.0000	16.22
15	Jun	1982	318.0000	7	1992	354.0000	18.92
02	Jun	1983	329.0000	8	1976	353.7866	21.62
14	Jun	1984	299.0000	9	1983	329.0000	24.32
02	Jul	1985	263.0000	10	1997	327.0000	27.03
08	Jun	1986	228.0000	11	1982	318.0000	29.73
23	Jun	1987	317.0000	12	1987	317.0000	32.43
10	Jun	1988	287.0000	13	2009	311.0000	35.14
06	Jun	1989	239.0000	14	2001	302.0000	37.84
02	Jun	1990	568.0000	15	2003	300.0000	40.54
28	Jun	1991	177.0000	16	1984	299.0000	43.24
16	Jun	1992	354.0000	17	2008	287.0000	45.95
22	May	1993	260.0000	18	1988	287.0000	48.65
09	Jun	1994	190.0000	19	1996	273.0000	51.35
29	May	1995	194.0000	20	2005	263.0000	54.05
07	Jun	1996	273.0000	21	1985	263.0000	56.76
06	Jun	1997	327.0000	22	2011	261.0000	59.46
30	May	1998	376.0000	23	1993	260.0000	62.16
17	Jun	1999	431.0000	24	1978	253.0000	64.86
14	Jun	2000	232.0000	25	2006	250.0000	67.57
17	Jun	2001	302.0000	26	1989	239.0000	70.27
16	Jun	2002	436.0000	27	2004	238.0000	72.97
02	Jul	2003	300.0000	28	2000	232.0000	75.68
07	Jun	2004	238.0000	29	1986	228.0000	78.38
03	Jun	2005	263.0000	30	1977	209.0000	81.08
04	Jun	2006	250.0000	31	1995	194.0000	83.78
06	Jun	2007	495.0000	32	1994	190.0000	86.49
31	May	2008	287.0000	33	1979	189.0000	89.19
11	Jun	2009	311.0000	34	1991	177.0000	91.89
29	May	2010	171.0000	35	1980	172.0000	94.59
01	Jun	2011	261.0000	36	2010	171.0000	97.30

<< Skew Weighting >>

Based on 36 events, mean-square error of station skew = 0.163



Mean-square error of regional skew = -?

<< Frequency Curve >>  
 WILLISTON LAKE-07EC003-FLOW-PEAK-EST

Computed Curve FLOW, CMS	Expected Probability CMS	Percent Chance Exceedance	Confidence Limits	
			0.05 FLOW, CMS	0.95 FLOW, CMS
793.4840	891.5275	0.1	1,038.8447	658.8009
731.4146	803.9562	0.2	939.8352	614.6950
652.8080	699.9868	0.5	817.4898	557.8304
595.6136	628.2156	1.0	730.8062	515.6306
540.0115	561.5588	2.0	648.6240	473.8080
485.5557	498.8297	4.0	570.3674	431.9174
468.1711	479.2722	5.0	545.9006	418.3114
414.1451	420.1537	10.0	471.6861	375.1233
358.8834	361.4798	20.0	399.1878	329.0412
277.2063	277.2063	50.0	300.9620	255.0336
218.4826	217.2039	80.0	238.4296	196.1838
150.4994	145.6005	99.0	170.9028	126.0355

<< Systematic Statistics >>  
 WILLISTON LAKE-07EC003-FLOW-PEAK-EST

Log Transform: FLOW, CMS		Number of Events	
Mean	2.4490	Historic Events	0
Standard Dev	0.1285	High Outliers	0
Station Skew	0.2891	Low Outliers	0
Regional Skew	---	Zero Events	0
Weighted Skew	---	Missing Events	0
Adopted Skew	0.2891	Systematic Events	36

--- End of Analytical Frequency Curve ---

# HEC-SSP 2.0 - Omenicane

Frequency Curve for: WILLISTON LAKE-07EC003-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	793.4839	891.5275	1038.8447	658.8008
0.2	731.4146	803.9562	939.8351	614.6949
0.5	652.8080	699.9869	817.4897	557.8304
1.0	595.6136	628.2156	730.8062	515.6306
2.0	540.0115	561.5588	648.6240	473.8080
4.0	485.5557	498.8297	570.3674	431.9174
5.0	468.1711	479.2722	545.9006	418.3114
10.0	414.1451	420.1537	471.6861	375.1234
20.0	358.8834	361.4798	399.1877	329.0412
50.0	277.2063	277.2063	300.9620	255.0336
80.0	218.4826	217.2039	238.4296	196.1838
99.0	150.4994	145.6005	170.9028	126.0355

System Statistics		Number of Events	
Statistic	Value	Event	Number
Log Transform: Flow			
Mean	2.4490	Historic Events	0
Standard Dev	0.1285	High Outliers	0
Station Skew	0.2891	Low Outliers	0
Regional Skew		Zero Or Missing	0
Weighted Skew		Systematic Events	36
Adopted Skew	0.2891	Historic Period	

## **APPENDIX B. DATA SHEETS**

Zone 3 Northern Rocky Mountains

Zone 4 Northern Interior Plains

Zone 6 Southern Interior Plains

Zone 7 Southern Rocky Mountain Foothills

Zone 8 Nechako Plateau

Zone 12 McGregor Basin

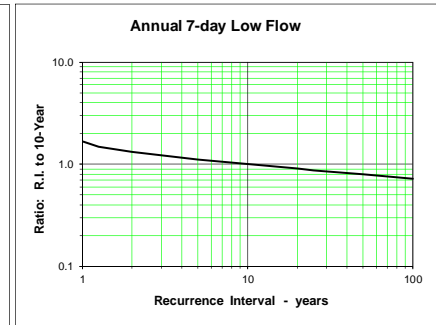
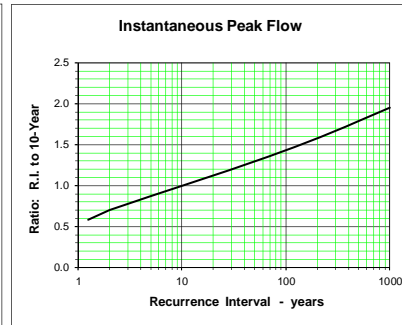
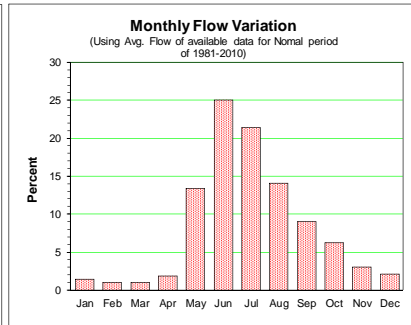
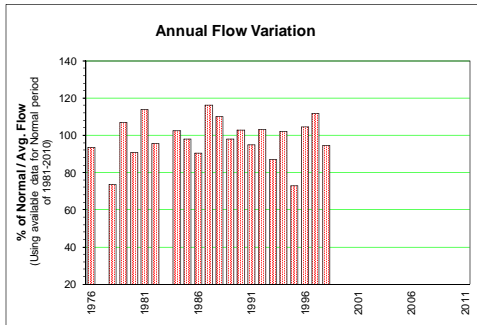
Zone 13 Upper Fraser Basin

## Zone 3 Northern Rocky Mountains

**KWADACHA RIVER NEAR WARE TEA002**

Station Longitude Latitude: -125.634755 57.449516

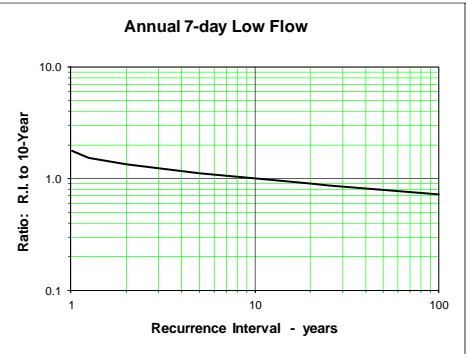
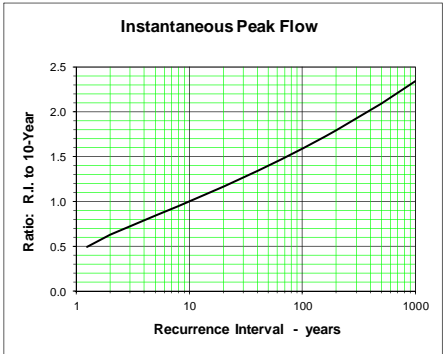
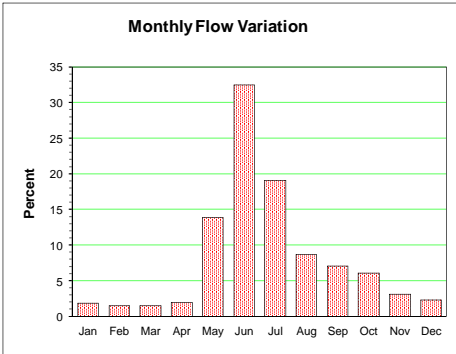
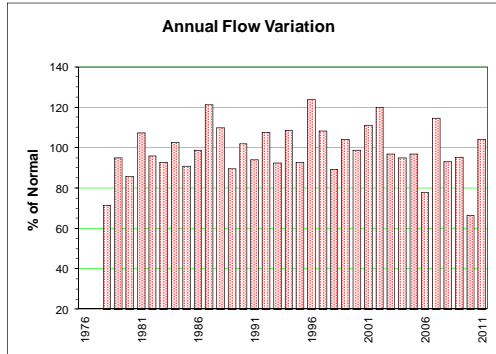
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 2417.24 km <sup>2</sup>		Median Elevation = 1474 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976	7.43	6.80	5.93	6.71	59.30	125.00	143.00	119.00	46.30	37.40	16.90	12.10	49.05		Jul 02	230.24	37.13	5.66	1976		
1977																				1977	
1978	6.78	6.24	5.64	12.40	28.70	129.00	81.10	71.90	43.50	37.50	26.20	13.10	38.61		Jun 06	191.00	28.06	5.52	1978		
1979	8.69	6.71	6.00	6.07	48.50	185.00	200.00	84.00	47.70	39.70	22.10	15.20	56.11		Jul 03	335.00	44.21	5.39	1979		
1980	9.35	6.54	5.81	6.10	56.00	119.00	132.00	72.10	54.80	63.00	27.50	17.50	47.65		Jun 19	216.00	47.66	4.88	1980		
1981	11.30	7.78	6.65	7.44	134.00	161.00	132.00	94.40	77.70	41.50	24.30	15.10	59.77		May 28	372.00	52.59	6.20	1981		
1982	8.70	6.56	6.02	6.79	30.00	194.00	122.00	90.60	71.30	36.40	17.50	11.30	50.21		Jun 20	263.58	45.10	5.69	1982		
1983																			1983		
1984	6.91	5.97	5.99	10.10	39.00	159.00	144.00	135.00	59.50	41.60	20.20	16.30	53.80		Jun 14	248.00	37.29	5.35	1984		
1985	10.00	6.69	6.18	9.37	66.40	141.00	170.00	77.00	64.30	36.90	15.90	10.00	51.44		Jun 04	263.00	47.14	5.85	1985		
1986	9.85	7.61	5.91	7.43	38.40	147.00	163.00	70.30	30.20	52.50	21.20	13.50	47.52		Jul 15	259.00	24.16	5.08	1986		
1987	11.50	8.62	6.97	9.95	77.90	178.00	151.00	93.40	95.90	57.90	22.30	13.90	60.86		Jun 23	330.00	57.96	6.73	1987		
1988	7.92	7.31	6.81	14.30	111.00	161.00	165.00	111.00	50.20	28.80	16.60	9.55	57.70		Jul 15	269.00	31.83	6.01	1988		
1989	8.08	7.04	6.42	15.90	99.80	156.00	106.00	95.00	51.40	32.30	21.30	14.80	51.42		Jun 05	215.00	36.84	6.27	1989		
1990	8.50	6.03	6.94	13.30	126.00	217.00	116.00	70.40	37.90	18.60	12.80	10.20	53.85		Jun 01	489.00	30.23	5.62	1990		
1991	6.92	6.78	5.03	12.70	83.20	112.00	116.00	76.90	74.00	54.90	26.80	17.90	49.70		Jun 29	169.00	61.54	4.77	1991		
1992	10.90	8.09	8.37	22.10	74.60	216.00	120.00	58.90	39.20	52.40	23.20	15.90	54.16		Jun 17	312.00	26.40	7.36	1992		
1993	7.00	5.78	5.46	14.40	106.00	142.00	95.30	68.50	37.40	29.30	21.10	12.30	45.61		Jun 05	195.00	28.11	4.63	1993		
1994	9.27	5.82	5.59	13.60	91.70	148.00	137.00	90.50	75.60	32.90	17.60	11.30	53.52		Jun 08	225.00	54.80	4.32	1994		
1995	8.66	7.27	6.35	15.30	77.90	112.00	87.00	59.20	41.10	22.30	12.10	7.79	38.26		Jun 16	175.00	35.01	5.80	1995		
1996	6.13	5.44	4.98	12.90	42.50	160.00	159.00	115.00	68.90	43.70	23.00	13.90	54.76		Jun 07	230.00	52.40	4.89	1996		
1997	9.12	7.93	6.49	8.82	78.20	194.00	155.00	101.00	64.70	41.00	20.40	13.10	58.58		Jun 06	241.00	49.19	6.26	1997		
1998	9.18	6.41	6.38	11.90	132.00	123.00	113.00	69.30	46.30	39.30	20.80	13.80	49.62		May 27	274.00	36.49	6.09	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		
Avg.	8.68	6.83	6.19	11.31	76.24	156.14	133.69	86.83	56.09	40.00	20.47	13.26	51.53	50.84		261.99	41.15	5.64	m <sup>3</sup> /s		
S. D.	1.51	0.84	0.75	4.04	33.01	31.78	29.77	20.62	16.79	11.31	4.20	2.65	6.00			74.30	11.12	0.73	m <sup>3</sup> /s		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8.82	6.89	6.27	12.14	82.86	160.06	132.43	86.85	57.98	38.96	19.83	12.98	52.40	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	10	7	7	13	92	172	147	96	62	43	21	14	684	mm	10-Year	351.9	28.724	4.465	m <sup>3</sup> /s		



**INGENIKA RIVER ABOVE SWANNELL RIVER 7EA004**

Station Longitude Latitude: -125.103500 56.731297

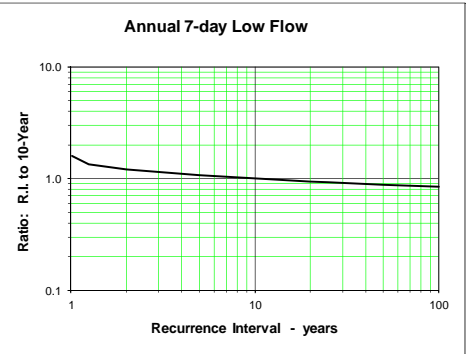
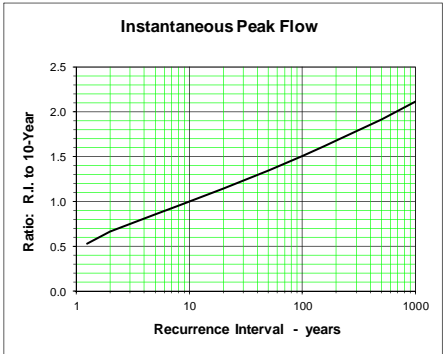
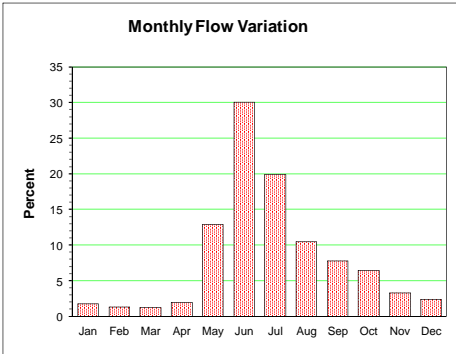
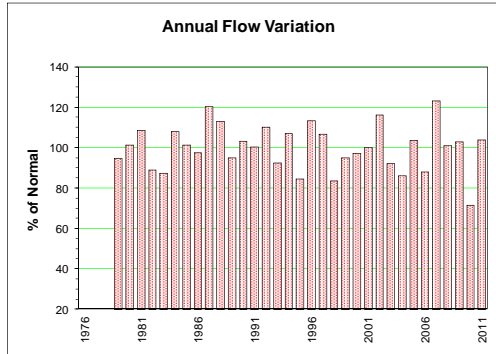
Monthly and Annual Discharge in m <sup>3</sup> /s																Drainage Area = 4141.54 km <sup>2</sup>		Median Elevation = 1551 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year					
1976																			1976					
1977																			1977					
1978	10.8	10.7	9.7	12.6	42.4	202.0	66.9	40.1	46.3	35.9	16.3	11.4	42.5	58.5	Jun 05	337.00	30.46	9.49	1978					
1979	10.4	7.7	6.4	7.5	57.1	220.0	179.0	57.6	60.4	41.9	13.5	11.2	56.2	58.5	Jun 03	311.00	39.59	5.97	1979					
1980	11.5	10.2	9.9	10.5	98.3	165.0	86.9	47.3	57.5	67.4	28.1	18.1	51.0	58.5	Jun 05	247.00	40.29	8.77	1980					
1981	16.4	14.8	12.9	10.5	172.0	233.0	136.0	49.6	40.6	36.8	22.4	15.6	63.6	58.5	May 27	653.00	32.44	7.63	1981					
1982	11.7	10.1	10.2	9.0	45.8	249.0	132.0	72.3	64.2	41.0	20.8	14.9	56.8	58.5	Jun 14	398.00	44.41	8.37	1982					
1983	12.4	11.1	10.2	14.3	83.6	215.0	121.0	67.6	50.4	38.4	20.6	14.0	55.0	58.5	Jun 02	404.00	42.53	10.04	1983					
1984	11.9	9.6	10.2	12.1	38.0	226.0	161.0	84.9	67.9	60.9	27.5	20.2	60.9	58.5	Jun 13	396.00	51.63	9.00	1984					
1985	13.2	11.0	10.9	9.3	83.9	176.0	162.0	52.1	56.2	38.3	17.3	12.6	53.8	58.5	Jun 04	369.00	37.57	7.08	1985					
1986	13.3	11.4	9.8	10.9	45.0	237.0	184.0	54.1	33.8	65.3	21.5	14.5	58.6	58.5	Jun 08	359.00	25.76	8.94	1986					
1987	13.5	12.9	11.4	10.1	98.6	279.0	169.0	81.4	76.6	57.3	27.4	22.5	71.8	58.5	Jun 22	420.00	52.00	8.89	1987					
1988	15.0	11.0	11.3	15.3	139.0	237.0	175.0	68.1	35.5	36.6	22.2	14.8	65.2	58.5	Jun 09	387.00	26.23	8.49	1988					
1989	12.5	10.5	9.9	15.2	121.0	201.0	86.7	54.9	38.5	42.4	23.0	19.0	53.1	58.5	Jun 05	358.00	30.03	9.63	1989					
1990	11.9	9.5	9.6	12.2	127.0	320.0	117.0	40.9	30.9	20.1	13.4	11.4	60.4	58.5	Jun 02	880.00	23.69	7.79	1990					
1991	9.7	10.7	9.4	11.6	120.0	181.0	95.6	51.7	70.5	57.9	27.7	21.5	55.8	58.5	Jun 22	240.00	40.66	4.76	1991					
1992	18.4	16.7	13.3	23.3	86.8	321.0	108.0	35.3	44.9	58.6	24.5	17.3	63.8	58.5	Jun 16	507.00	24.77	9.21	1992					
1993	11.8	11.0	9.4	14.1	180.0	158.0	104.0	66.0	39.1	28.3	18.8	13.3	54.8	58.5	May 21	378.00	31.83	8.19	1993					
1994	11.4	8.8	9.8	14.9	113.0	214.0	148.0	78.4	77.7	51.7	23.2	17.9	64.3	58.5	Jun 08	324.00	53.50	7.72	1994					
1995	15.8	13.3	11.4	12.8	133.0	153.0	147.0	64.5	44.6	29.2	15.5	15.0	54.9	58.5	Jul 04	375.00	35.61	6.84	1995					
1996	12.3	10.9	9.3	15.2	56.7	275.0	244.0	98.3	62.6	54.5	24.3	16.9	73.4	58.5	Jun 07	387.00	55.86	9.10	1996					
1997	14.0	11.1	9.9	13.8	124.0	231.0	118.0	77.2	68.7	52.7	26.8	20.8	64.2	58.5	Jun 06	520.00	53.94	9.58	1997					
1998	15.4	13.8	13.3	15.5	198.0	134.0	74.0	47.0	36.9	44.5	21.5	16.6	52.9	58.5	May 27	560.00	33.21	12.74	1998					
1999	15.1	12.8	11.7	17.5	52.3	294.0	163.0	56.0	44.2	34.4	22.1	16.5	61.7	58.5	Jun 18	690.00	38.56	10.64	1999					
2000	13.3	11.3	10.1	14.5	40.4	248.0	142.0	68.0	69.1	43.2	25.1	17.6	58.5	58.5	Jun 18	343.00	57.89	9.83	2000					
2001	12.5	10.1	9.3	17.2	44.3	302.0	187.0	79.0	51.7	35.5	25.8	16.2	66.0	58.5	Jun 16	410.00	41.97	8.95	2001					
2002	12.5	10.7	9.7	11.3	66.0	313.0	170.0	77.0	71.8	59.2	31.2	20.1	71.1	58.5	Jun 17	593.00	53.36	9.47	2002					
2003	15.7	13.3	11.7	16.9	72.6	216.0	144.0	47.9	52.0	47.2	29.1	21.7	57.5	58.5	Jun 08	375.00	35.44	10.93	2003					
2004	16.8	13.3	12.0	16.0	110.0	200.0	104.0	55.6	52.7	46.5	28.8	18.8	56.2	58.5	Jun 07	406.00	45.86	11.90	2004					
2005	13.4	10.4	10.0	20.8	161.0	214.0	85.0	54.4	45.0	32.5	23.5	16.6	57.4	58.5	Jun 02	386.00	37.79	9.53	2005					
2006	13.8	11.5	10.1	15.0	83.2	220.0	79.2	39.6	26.2	16.5	11.8	46.3	61.0	58.5	Jun 16	401.00	26.64	9.86	2006					
2007	9.6	8.6	9.0	13.3	55.0	357.0	159.0	73.1	56.5	39.6	20.5	14.9	68.0	58.5	Jun 06	940.00	47.61	8.18	2007					
2008	13.3	13.7	12.2	10.9	127.0	208.0	120.0	58.8	36.4	27.8	18.7	15.1	55.2	58.5	May 30	408.00	27.50	10.40	2008					
2009	12.9	12.1	11.5	11.5	61.5	288.0	110.0	46.8	54.7	34.8	19.1	15.8	56.5	58.5	Jun 10	508.00	38.94	11.31	2009					
2010	13.1	11.2	10.2	16.8	85.7	135.0	57.2	30.6	36.3	42.8	18.8	14.8	39.5	58.5	May 29	208.00	24.63	9.89	2010					
2011	13.7	11.8	9.9	8.2	104.0	219.0	136.0	78.0	66.1	49.4	23.1	18.4	61.7	58.5	Jun 25	363.00	50.93	7.24	2011					
Avg.	13.21	11.40	10.45	13.55	94.9	230.6	131.51	60.41	51.55	43.57	22.27	16.27	58.49	58.50		437	39.21	9.01	m <sup>3</sup> /s					
S. D.	2.00	1.83	1.39	3.44	43.40	55.16	41.28	15.95	14.10	11.71	4.51	3.11	7.56			159.61	10.30	1.62	m <sup>3</sup> /s					
Normal	13.42	11.58	10.65	14.06	97.48	234.50	133.42	61.04	51.26	42.81	22.59	16.62	59.24	m <sup>3</sup> /s										
Normal	9	7	7	9	63	147	86	39	32	28	14	11	451	mm	10-Year	635.17	26.68	6.83	m <sup>3</sup> /s					



**FINLAY RIVER ABOVE AKIE RIVER 7EA005**

Station Longitude Latitude: -125.249690 57.130218

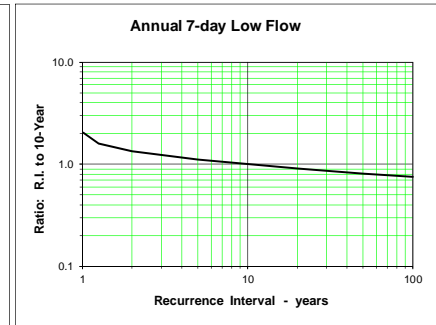
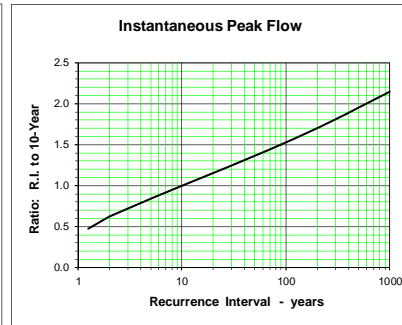
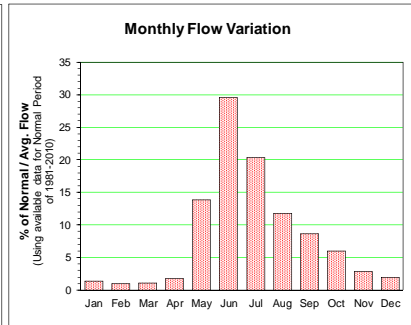
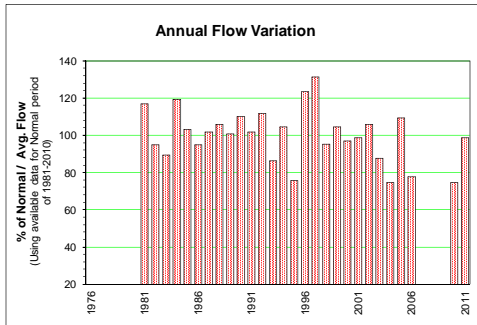
Monthly and Annual Discharge in m <sup>3</sup> /s																Drainage Area = 15637.25 km <sup>2</sup>		Median Elevation = 1452 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year					
1976																			1976					
1977																			1977					
1978										228.0	117.0	54.3							1978					
1979	42.7	31.5	27.0	32.7	248.0	876.0	805.0	310.0	231.0	200.0	101.0	69.6	249.0		Jul 03	1120.0	203.57	24.77	1979					
1980	50.9	39.9	35.5	39.0	442.0	744.0	578.0	331.0	295.0	365.0	161.0	104.0	266.2		Jun 09	951.0	252.86	32.23	1980					
1981	71.7	51.6	46.2	51.8	643.0	1030.0	652.0	307.0	226.0	157.0	104.0	73.6	285.7		May 28	2010.0	178.00	44.56	1981					
1982	53.6	40.8	38.4	43.8	179.0	1010.0	529.0	303.0	300.0	166.0	82.3	60.5	234.1		Jun 13	1404.6	186.71	36.21	1982					
1983	49.5	41.9	32.2	60.8	304.0	814.0	510.0	350.0	266.0	164.0	99.3	60.0	230.0		Jun 02	1350.0	215.43	31.14	1983					
1984	51.4	39.5	40.3	52.5	202.0	913.0	742.0	579.0	344.0	235.0	116.0	87.0	284.0		Jun 13	1350.0	230.29	36.06	1984					
1985	56.4	40.3	35.3	39.2	370.0	828.0	862.0	318.0	298.0	206.0	74.0	54.5	266.5		Jun 06	1363.9	227.86	34.34	1985					
1986	59.1	45.7	39.1	51.6	183.0	870.0	792.0	304.0	204.0	307.0	128.0	80.3	256.4		Jun 08	1230.0	170.29	32.51	1986					
1987	61.7	51.4	44.9	59.9	390.0	1100.0	819.0	373.0	363.0	313.0	121.0	83.4	316.1		Jun 23	1580.0	252.86	43.30	1987					
1988	58.6	46.3	42.3	67.5	579.0	929.0	741.0	506.0	230.0	177.0	113.0	64.4	297.1		Jun 12	1350.0	154.43	39.67	1988					
1989	58.2	48.4	42.2	69.3	534.0	820.0	447.0	347.0	211.0	192.0	117.0	98.4	249.7		Jun 06	1160.0	165.29	40.17	1989					
1990	59.8	40.9	44.4	65.8	549.0	1330.0	542.0	240.0	162.0	102.0	70.0	51.7	271.9		Jun 02	2500.0	133.86	38.33	1990					
1991	41.5	45.5	34.1	60.6	509.0	697.0	519.0	290.0	372.0	323.0	152.0	108.0	263.8		Jun 29	844.0	254.29	32.50	1991					
1992	72.2	54.9	58.5	115.0	381.0	1310.0	563.0	219.0	192.0	307.0	121.0	89.9	290.0		Jun 16	1960.0	131.29	50.06	1992					
1993	49.4	43.0	38.7	78.5	686.0	781.0	504.0	275.0	163.0	127.0	96.4	64.1	243.4		May 22	1240.0	136.29	33.84	1993					
1994	51.1	37.6	38.1	69.4	514.0	840.0	645.0	367.0	383.0	226.0	113.0	79.2	281.5		Jun 09	1150.0	284.29	31.14	1994					
1995	61.1	49.8	44.3	86.5	507.0	640.0	524.0	273.0	192.0	131.0	84.0	65.3	222.6		May 15	930.0	152.86	41.26	1995					
1996	48.6	37.6	32.9	73.7	249.0	1050.0	906.0	496.0	278.0	209.0	101.0	89.0	298.1		Jun 07	1480.0	226.57	32.24	1996					
1997	70.5	52.9	45.8	65.9	470.0	948.0	618.0	372.0	292.0	218.0	121.0	79.9	280.5		Jun 06	1430.0	254.43	42.77	1997					
1998	50.0	44.5	42.5	53.3	676.0	646.0	350.0	228.0	173.0	198.0	97.6	67.1	220.0		May 29	1560.0	157.71	42.07	1998					
1999	59.1	49.0	42.4	51.0	226.0	1090.0	633.0	294.0	198.0	156.0	122.0	72.5	249.8		Jun 18	2010.0	171.00	36.20	1999					
2000	57.7	42.9	37.3	65.4	167.0	915.0	656.0	355.0	355.0	198.0	118.0	73.5	255.9		Jun 14	1200.0	259.71	36.17	2000					
2001	50.3	40.1	36.4	64.5	172.0	1130.0	729.0	359.0	234.0	164.0	106.0	69.4	263.4		Jun 15	1450.0	192.86	35.66	2001					
2002	51.7	42.4	38.1	72.4	304.0	1140.0	911.0	351.0	280.0	242.0	132.0	94.1	305.9		Jun 17	1630.0	245.57	37.40	2002					
2003	65.6	47.4	39.2	59.8	299.0	857.0	604.0	252.0	268.0	224.0	108.0	80.3	242.7		Jun 09	1200.0	184.14	37.89	2003					
2004	60.3	46.9	37.3	48.4	433.0	803.0	435.0	245.0	211.0	189.0	119.0	84.6	226.3		Jun 09	1120.0	197.86	33.20	2004					
2005	58.2	43.6	39.0	75.0	702.0	971.0	460.0	298.0	242.0	165.0	125.0	74.3	272.1		Jun 03	1450.0	198.86	38.10	2005					
2006	62.3	48.2	40.1	49.7	350.0	1030.0	483.0	239.0	159.0	159.0	85.2	66.9	231.4		Jun 16	1580.0	128.43	39.03	2006					
2007	55.7	48.4	43.3	53.6	282.0	1530.0	827.0	370.0	292.0	216.0	99.1	66.3	324.0		Jun 07	3160.0	245.14	41.84	2007					
2008	46.9	37.9	39.3	52.3	509.0	1030.0	652.0	313.0	201.0	147.0	86.3	70.5	265.8		May 31	1540.0	158.57	36.61	2008					
2009	56.1	44.8	35.5	39.8	1260.0	1260.0	571.0	289.0	274.0	183.0	89.3	72.4	270.4		Jun 12	1910.0	232.00	30.81	2009					
2010	55.1	44.8	40.1	64.5	339.0	595.0	326.0	194.0	186.0	226.0	110.0	71.1	188.2		Jun 04	778.0	154.86	39.69	2010					
2011	52.9	41.5	37.1	37.4	434.0	898.0	560.0	395.0	388.0	244.0	105.0	77.3	273.5		Jun 02	1190.0	328.43	35.03	2011					
Avg.	56.06	44.30	39.63	59.72	398.8	952.3	621.06	326.42	256.45	207.76	108.66	75.22	262.91	262.94		1460	202.02	36.87	m <sup>3</sup> /s					
S. D.	7.43	5.10	5.40	16.26	159.15	209.91	153.63	83.19	68.08	59.86	19.77	13.64	29.72			476.46	49.48	4.94	m <sup>3</sup> /s					
Normal	56.78	44.97	40.27	62.05	401.17	963.57	618.40	324.53	251.63	200.90	107.02	75.07	262.92	m <sup>3</sup> /s										
Normal	10	7	7	10	69	160	106	56	42	34	18	13	531	mm	10-Year	2060.90	143.26	30.59	m <sup>3</sup> /s					



**AKIE RIVER NEAR THE 760 M CONTOUR TEA007**

Station Longitude Latitude: -124.897174 57.188644

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 1682.98 km <sup>2</sup>		Median Elevation = 1557 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			
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981	6.88	4.75	4.06	3.96	99.70	99.70	79.10	49.20	45.90	20.80	12.40	8.68	36.47		May 27	320.00	23.99	3.80	1981		
1982	5.35	4.16	4.04	4.16	20.90	129.00	67.10	53.70	32.30	17.40	9.82	5.97	29.54		Jun 15	276.00	21.17	3.67	1982		
1983	4.29	3.84	3.40	5.92	43.70	87.80	65.70	45.60	32.40	20.40	12.40	6.94	27.82		May 31	212.00	24.57	3.24	1983		
1984	5.13	4.03	3.60	4.69	18.20	120.00	108.00	82.60	42.90	32.60	12.70	10.00	37.13		Jun 13	225.00	25.26	3.22	1984		
1985	6.09	4.50	4.28	5.40	50.50	106.00	96.30	35.40	39.70	21.60	8.84	5.22	32.12		Jun 04	249.85	24.11	4.10	1985		
1986	4.95	4.25	3.73	4.38	29.60	104.00	100.00	32.90	19.30	36.60	8.40	5.03	29.58		Jul 15	247.00	16.16	3.25	1986		
1987	4.04	3.81	4.12	5.83	51.20	111.00	55.60	29.90	59.10	34.40	12.80	8.17	31.72		Jun 22	272.00	23.20	3.62	1987		
1988	5.32	4.65	4.15	8.87	73.10	94.70	92.00	50.50	25.90	17.00	11.30	7.08	33.01		Jul 19	183.00	16.26	3.70	1988		
1989	5.34	4.35	3.88	9.44	73.40	99.90	51.50	51.00	32.20	22.40	13.20	8.83	31.43		Jun 05	187.00	21.13	3.79	1989		
1990	5.51	3.68	4.52	8.31	78.00	157.00	78.70	36.80	21.70	7.89	4.83	3.88	34.34		Jun 01	534.00	14.43	3.30	1990		
1991	3.53	4.19	3.21	7.03	62.70	74.50	73.30	38.10	49.10	36.90	15.10	11.10	31.73		Jul 14	123.00	31.19	2.98	1991		
1992	7.23	5.25	5.21	17.40	54.00	155.00	67.00	30.00	25.20	30.80	12.70	8.14	34.80		Jun 15	253.00	14.19	4.63	1992		
1993	4.13	3.74	3.63	7.60	77.50	81.30	54.70	34.70	19.50	16.40	10.70	7.07	26.90		May 21	162.00	15.29	2.90	1993		
1994	5.09	3.63	3.77	9.62	62.00	106.00	68.70	44.70	42.00	22.50	13.80	7.72	32.58		Jun 08	201.00	30.47	3.02	1994		
1995	5.59	4.45	3.56	8.78	53.40	74.10	44.50	36.50	25.20	13.80	7.31	4.19	23.55		Jun 06	155.00	20.13	3.24	1995		
1996	3.11	3.00	3.49	7.46	30.80	128.00	120.00	69.40	40.40	31.20	14.60	8.89	38.45		Jun 06	201.00	32.66	2.79	1996		
1997	6.13	5.45	4.90	7.70	61.30	137.00	99.80	55.70	48.60	33.50	18.60	9.84	40.87		May 31	226.00	38.40	4.74	1997		
1998	5.77	4.92	4.55	7.30	104.00	66.80	59.40	36.80	21.10	20.80	12.80	9.07	29.67		May 26	217.00	18.07	4.38	1998		
1999	4.70	3.07	2.88	7.22	29.30	149.00	89.30	47.10	32.00	13.40	6.94	4.64	32.53		Jun 17	337.00	22.51	2.63	1999		
2000	4.48	3.88	3.78	3.92	16.40	110.00	83.80	53.00	46.30	20.20	10.10	7.06	30.25		Jun 29	188.52	26.84	3.59	2000		
2001	5.49	4.27	3.37	3.39	18.00	137.00	86.00	52.00	30.70	14.70	7.22	5.55	30.70		Jun 12	264.00	27.86	2.48	2001		
2002	4.70	3.89	2.78	2.28	32.80	137.00	113.00	35.60	24.10	19.30	11.60	7.55	33.00		Jun 16	272.00	20.11	1.94	2002		
2003	5.57	4.70	4.29	5.37	33.60	93.80	69.60	32.30	30.10	24.80	13.20	9.17	27.30		Jul 01	199.00	24.00	2.88	2003		
2004	6.72	4.74	4.19	6.46	44.80	78.90	43.30	29.10	26.80	18.10	9.65	6.69	23.31		Jun 08	128.00	23.23	4.09	2004		
2005	5.59	4.74	4.32	11.20	95.80	105.00	62.10	44.10	34.80	17.60	12.70	8.95	34.07		May 30	232.00	24.97	3.51	2005		
2006	6.89	5.51	5.11	6.27	45.00	94.30	46.70	33.20	19.50	15.60	6.66	5.32	24.24		Jun 16	198.00	12.09	4.82	2006		
2007	4.61	4.10	3.86	4.72	34.10	235.00				15.70					Jun 05	457.00		3.80	2007		
2008																			2008		
2009										15.70	6.87	5.60							2009		
2010	4.85	4.60	4.35	8.18	38.80	71.00	47.90	31.10	26.10	25.10	10.60	5.56	23.27		Jun 13	105.00	19.27	4.21	2010		
2011	4.43	3.71	3.39	3.99	48.80	93.00	73.40	49.30	45.50	27.50	7.79	6.11	30.72		Jun 24	220.00	34.63	3.30	2011		
Avg.	5.22	4.27	3.95	6.79	51.08	111.58	74.88	43.58	33.51	22.16	10.88	7.17	31.11	31.10		236.01	23.08	3.50			
S. D.	0.99	0.62	0.60	2.96	24.49	34.76	21.50	12.55	10.77	7.62	3.10	1.89	4.46			90.29	6.46	0.69	m <sup>3</sup> /s		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	5.25	4.29	3.97	6.89	51.16	112.24	74.93	43.37	33.07	21.97	10.99	7.21	31.13	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	6	6	11	81	173	119	69	51	35	17	11	584	mm	10-Year	350.1	14.693	2.623	m <sup>3</sup> /s		

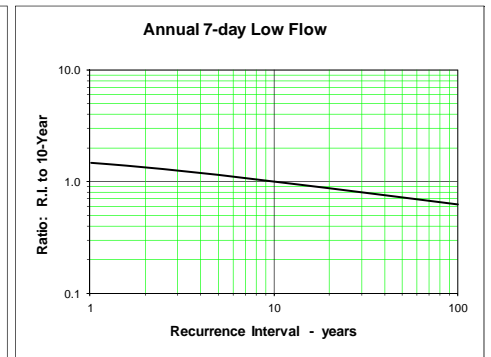
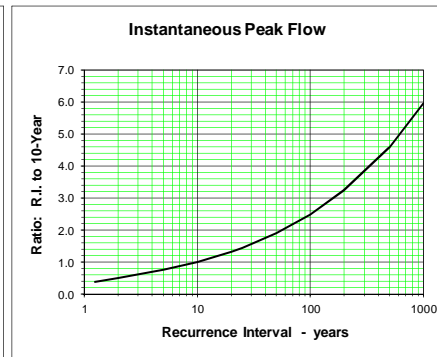
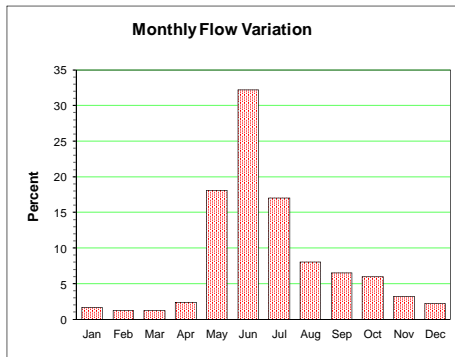
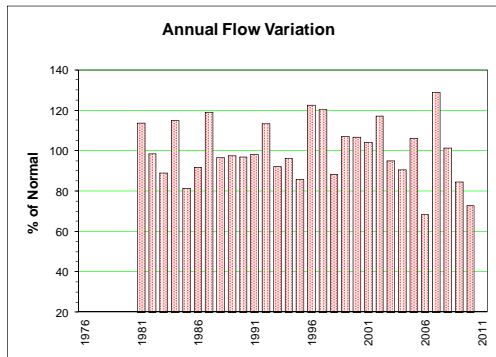




**OSPIKA RIVER ABOVE ALEY CREEK 7EB002**

Station Longitude Latitude: -123.929723 56.465840

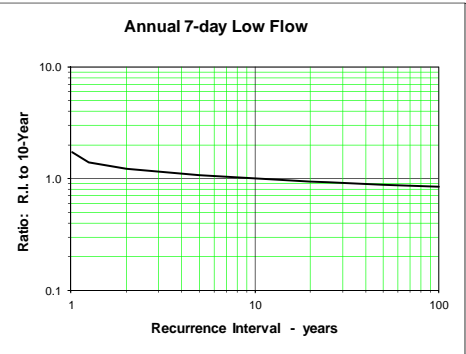
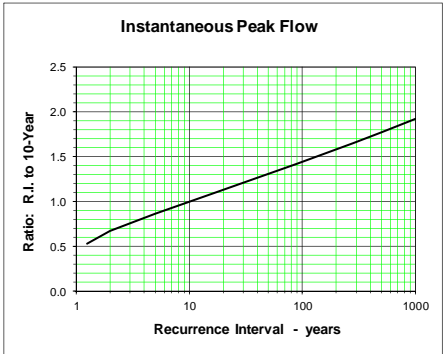
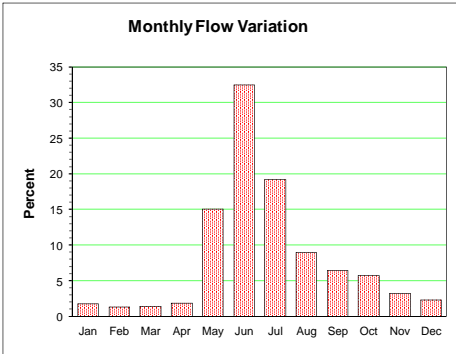
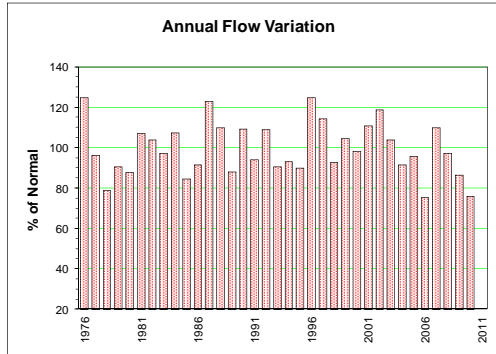
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 2196.06 km <sup>2</sup>		Median Elevation = 1502 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976																			1976			
1977																			1977			
1978																			1978			
1979																			1979			
1980																			1980			
1981	10.90	7.54	6.49	6.42	152.00	141.00	88.00	49.10	44.90	21.00	13.70	10.10	46.18	42.99	May 26	692.0	23.34	6.03	1981			
1982	7.07	6.05	5.91	5.81	51.30	171.00	69.00	53.20	34.50	35.90	23.80	14.40	39.90	36.05	Jun 13	294.0	27.04	5.40	1982			
1983	10.20	8.01	6.31	14.30	73.60	117.00	81.40	39.60	30.60	24.90	16.20	8.84	36.05	32.97	May 31	277.0	25.44	6.01	1983			
1984	7.39	6.04	5.86	10.40	43.00	183.00	122.00	61.50	44.30	45.50	17.30	13.30	46.67	42.97	Jun 13	323.0	27.96	5.36	1984			
1985	8.17	6.13	5.30	7.07	60.60	117.00	88.10	27.70	34.90	22.30	10.20	6.74	32.97	32.97	Jun 03	247.0	18.86	5.09	1985			
1986	7.19	6.08	5.38	6.01	45.40	135.00	127.00	41.90	17.70	34.80	11.10	6.78	37.22	37.22	Jul 15	582.0	14.77	4.06	1986			
1987	5.85	5.62	6.10	9.52	92.40	192.00	81.20	54.40	58.10	38.70	20.30	14.00	48.29	48.29	Jun 22	325.0	34.84	5.30	1987			
1988	9.51	7.66	6.93	16.90	117.00	136.00	80.10	35.10	19.00	19.20	12.40	8.82	39.15	39.15	May 14	262.0	14.13	6.40	1988			
1989	7.80	6.88	6.12	17.80	112.00	138.00	58.40	41.90	24.70	28.90	18.00	12.30	39.56	39.56	Jun 05	238.0	19.91	5.85	1989			
1990	10.40	7.07	7.47	13.60	118.00	192.00	56.40	25.80	17.80	9.84	6.60	5.64	39.28	39.28	May 31	1360.0	12.83	4.96	1990			
1991	5.15	6.54	5.43	14.80	121.00	124.00	69.20	25.90	34.90	42.20	15.80	11.50	39.89	39.89	May 20	197.0	27.33	4.44	1991			
1992	10.10	8.04	8.10	25.90	78.50	194.00	64.40	23.40	33.40	61.40	29.00	15.70	45.93	45.93	Jun 14	298.0	15.13	7.54	1992			
1993	6.97	6.20	6.10	14.70	123.00	111.00	79.20	41.00	23.90	14.70	11.60	8.31	37.44	37.44	May 21	251.0	17.77	5.37	1993			
1994	7.03	3.66	3.01	11.30	98.20	128.00	64.30	43.70	48.50	30.50	17.90	11.50	39.12	39.12	Jun 08	239.0	27.96	2.51	1994			
1995	8.48	7.42	6.59	11.40	105.00	111.00	64.00	38.60	23.80	18.00	12.70	9.20	34.85	34.85	May 15	201.0	18.10	6.36	1995			
1996	7.21	5.91	5.47	14.60	57.90	194.00	159.00	56.50	37.20	34.40	14.70	8.98	49.73	49.73	Jun 05	320.0	33.20	5.37	1996			
1997	7.09	6.20	5.34	8.36	98.90	188.00	88.90	54.70	54.10	40.40	20.00	11.80	48.79	48.79	May 31	320.0	39.79	5.15	1997			
1998	7.77	6.44	6.23	12.20	159.00	77.50	46.70	28.40	22.00	32.00	17.00	11.00	35.80	35.80	May 26	269.0	19.33	5.40	1998			
1999	7.45	6.04	6.01	16.50	61.90	210.00	92.90	38.60	29.30	21.60	18.10	12.50	43.44	43.44	Jun 16	477.0	23.47	5.49	1999			
2000	7.68	5.83	5.41	9.89	37.50	197.00	103.00	53.60	46.60	25.00	16.30	12.00	43.26	43.26	Jun 09	267.0	38.73	5.33	2000			
2001	8.61	6.81	5.66	8.89	43.30	225.00	92.70	42.40	29.70	21.70	14.30	8.35	42.28	42.28	Jun 12	384.0	26.64	5.31	2001			
2002	7.23	6.18	5.26	6.28	73.70	247.00	116.00	35.50	28.10	23.90	11.20	9.12	47.51	47.51	Jun 16	405.0	22.00	4.96	2002			
2003	7.05	5.66	5.62	8.70	69.70	146.00	93.30	30.20	31.70	33.80	17.20	11.60	38.51	38.51	Jun 09	266.0	20.27	5.41	2003			
2004	8.11	6.68	6.60	13.60	75.20	125.00	68.70	33.20	42.40	32.40	17.90	11.00	36.75	36.75	Jun 07	200.0	33.26	6.45	2004			
2005	8.33	6.81	6.05	21.70	144.00	136.00	56.60	41.50	30.70	26.30	21.20	14.40	42.99	42.99	May 30	310.0	25.96	5.90	2005			
2006	10.10	8.40	6.94	11.50	73.10	122.00	45.30	20.30	11.70	10.20	7.48	5.96	27.79	27.79	Jun 03	210.0	10.73	5.63	2006			
2007	5.33	5.19	5.99	10.60	61.00	272.00	107.00	43.30	38.20	37.60	21.90	19.20	52.30	52.30	Jun 05	786.0	32.23	5.07	2007			
2008	11.30	7.48	6.18	8.08	117.00	162.00	78.10	31.30	24.40	20.20	16.40	9.72	41.07	41.07	May 29	332.0	21.14	5.91	2008			
2009	6.85	5.73	5.48	6.26	57.80	181.00	59.60	26.60	24.30	16.30	12.00	9.25	34.26	34.26	Jun 05	372.0	17.77	5.45	2009			
2010	7.28	6.13	5.65	14.70	73.30	95.60	40.30	22.30	25.10	38.40	14.90	10.00	29.57	29.57	May 20	191.0	18.46	5.53	2010			
2011																			2011			
Avg.	7.99	6.48	5.97	11.93	86.5	158.9	81.36	38.71	32.22	28.73	15.91	10.73	40.55	40.54		363.17	23.61	5.43	m <sup>3</sup> /s			
S. D.	1.56	0.97	0.87	4.79	33.92	46.12	26.54	11.29	11.20	11.30	4.76	3.01	5.94	5.94		234.84	7.61	0.85	m <sup>3</sup> /s			
Normal	7.99	6.48	5.97	11.93	86.48	158.94	81.36	38.71	32.22	28.73	15.91	10.73	40.55	m <sup>3</sup> /s								
Normal	10	7	7	14	105	188	99	47	38	35	19	13	583	mm	10-Year	581.69	14.58	4.25	m <sup>3</sup> /s			



**MESILINKA RIVER ABOVE GOPHERHOLE CREEK TEC003**

Station Longitude Latitude: -124.642584 56.243962

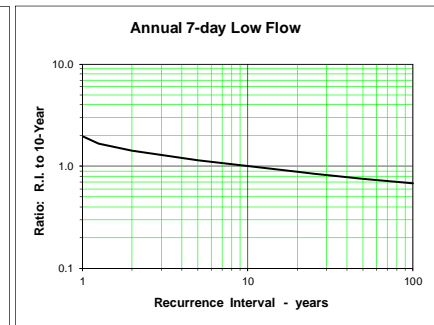
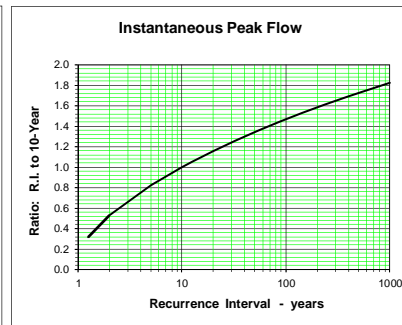
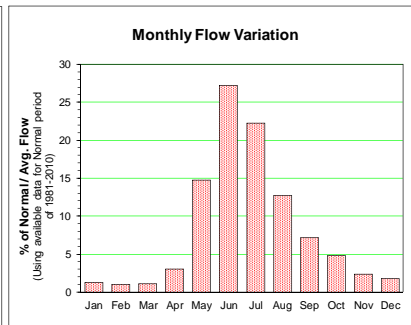
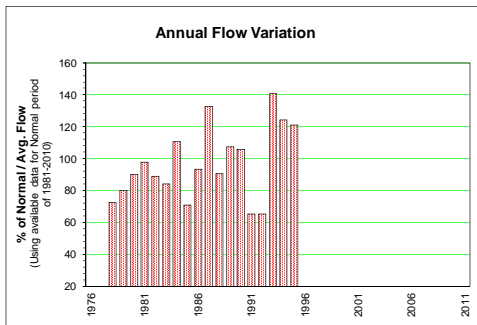
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 2948.84 km <sup>2</sup>		Median Elevation = 1410 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976	7.39	7.00	6.65	5.12	72.90	193.00	184.00	91.00	37.10	33.90	21.20	13.40	56.2		Jul 03	353.8	28.21	4.43	1976			
1977	9.82	8.67	7.31	12.40	70.20	154.00	122.00	56.00	27.60	25.10	14.60	10.70	43.4		Jun 21	209.0	22.83	6.83	1977			
1978	8.84	7.21	6.32	8.52	39.40	158.00	60.70	32.50	27.90	43.40	20.50	11.80	35.5		Jun 06	253.0	21.59	6.19	1978			
1979	8.97	6.68	6.31	7.66	42.30	150.00	119.00	46.40	46.00	30.30	13.60	11.10	40.8		Jun 05	189.0	33.59	5.76	1979			
1980	8.89	6.83	6.68	8.91	81.80	131.00	67.40	36.40	38.10	46.60	24.80	16.40	39.5		Jun 19	172.0	28.76	6.01	1980			
1981	12.00	8.56	8.08	9.30	131.00	171.00	106.00	41.70	27.80	27.00	18.60	14.00	48.1		May 29	421.0	23.34	7.66	1981			
1982	8.29	6.96	7.92	8.20	39.90	210.00	118.00	56.50	41.90	33.20	18.20	12.10	46.8		Jun 16	318.0	29.79	6.65	1982			
1983	10.40	8.70	8.28	12.60	68.10	164.00	111.00	54.20	35.20	25.10	16.40	9.58	43.8		Jun 03	329.0	31.03	7.86	1983			
1984	7.58	6.61	7.41	10.20	40.60	182.00	126.00	73.40	41.50	45.80	21.80	16.40	48.3		Jun 15	299.0	32.10	6.30	1984			
1985	10.60	7.23	6.17	7.06	60.70	128.00	38.30	37.60	24.60	12.10	7.07	38.1	40.8		Jul 03	263.0	26.71	5.93	1985			
1986	7.39	6.70	6.68	8.03	36.20	165.00	119.00	43.80	27.50	39.70	19.70	12.50	41.1		Jun 09	228.0	22.17	5.49	1986			
1987	9.05	8.76	8.76	7.95	81.40	226.00	130.00	53.10	55.10	39.40	23.10	18.90	53.3		Jun 24	317.0	33.91	7.10	1987			
1988	10.40	7.69	7.62	13.20	119.00	182.00	110.00	51.40	25.40	31.70	20.80	14.00	49.5		Jun 11	287.0	20.01	6.97	1988			
1989	10.80	7.20	6.49	12.30	94.90	148.00	65.90	41.90	26.20	29.10	17.50	13.30	39.6		Jun 07	239.0	21.67	6.21	1989			
1990	8.29	6.44	7.08	10.40	95.30	264.00	105.00	36.00	23.00	14.50	11.50	9.08	49.3		Jun 03	568.0	17.61	6.01	1990			
1991	7.14	7.52	6.76	12.80	102.00	137.00	79.20	39.80	37.70	39.80	20.50	15.20	42.3		Jun 29	177.0	30.01	6.43	1991			
1992	11.00	8.82	9.23	21.40	77.50	231.00	83.70	29.90	31.50	49.90	21.50	14.20	49.1		Jun 17	354.0	17.97	8.28	1992			
1993	9.16	8.11	7.26	12.70	132.00	115.00	73.70	53.40	30.30	19.90	15.80	10.10	40.9		May 23	260.0	22.86	6.74	1993			
1994	7.97	6.68	7.19	11.10	83.20	134.00	93.20	47.80	47.30	30.20	18.70	13.60	41.9		Jun 10	190.0	34.17	5.89	1994			
1995	10.70	9.47	8.21	10.60	104.00	125.00	95.90	49.30	30.10	19.10	12.50	9.26	40.6		May 30	194.0	21.80	7.75	1995			
1996	7.39	6.19	5.74	11.20	53.40	204.00	180.00	77.00	47.40	45.80	21.70	13.40	56.2		Jun 08	273.0	40.59	5.60	1996			
1997	10.40	8.81	8.36	10.80	96.30	193.00	95.10	59.50	48.40	39.00	25.50	20.40	51.4		Jun 07	327.0	38.40	7.96	1997			
1998	12.40	9.66	9.00	10.00	162.00	124.00	51.80	31.40	27.50	30.70	16.60	13.80	41.8		May 31	376.0	23.84	7.63	1998			
1999	11.50	9.13	8.00	11.00	56.80	214.00	122.00	49.60	30.60	22.40	17.30	11.60	47.1		Jun 18	431.0	24.69	5.73	1999			
2000	8.76	7.02	6.66	8.84	37.30	183.00	121.00	54.60	46.40	27.70	17.00	12.00	44.2		Jun 15	232.0	38.96	6.57	2000			
2001	9.48	7.63	6.77	8.76	33.30	228.00	149.00	61.10	40.50	25.80	17.70	10.60	50.0		Jun 18	302.0	30.24	6.60	2001			
2002	9.48	7.95	6.88	8.13	62.40	262.00	121.00	52.80	45.80	35.60	16.60	12.70	53.5		Jun 17	436.0	32.77	6.53	2002			
2003	10.80	9.45	8.13	9.00	66.10	176.00	123.00	41.80	41.70	36.70	22.80	13.80	46.7		Jul 03	300.0	27.71	5.87	2003			
2004	11.00	9.69	9.07	11.60	82.70	142.00	74.30	46.00	37.10	34.40	20.40	15.30	41.2		Jun 08	238.0	31.19	8.86	2004			
2005	11.90	9.32	8.16	16.90	122.00	155.00	66.30	41.90	31.60	22.70	17.00	12.80	43.1		Jun 04	263.0	24.41	6.95	2005			
2006	10.20	8.75	8.39	8.88	67.30	169.00	65.10	25.80	15.10	12.40	8.68	7.37	33.9		Jun 05	250.0	13.60	6.98	2006			
2007	6.23	5.69	5.80	8.08	53.70	242.00	130.00	52.10	35.80	26.90	15.60	11.30	49.5		Jun 07	495.0	27.54	5.48	2007			
2008	8.59	7.95	7.55	6.20	100.00	155.00	92.40	60.20	33.60	23.00	15.90	13.10	43.7		Jun 01	287.0	23.30	5.44	2008			
2009	9.39	7.34	6.26	6.31	21.00	188.00	80.00	33.30	38.40	21.00	12.30	9.37	38.9		Jun 12	311.0	25.64	5.98	2009			
2010	8.22	7.54	7.04	11.90	79.60	130.00	54.10	26.00	24.60	36.00	14.80	9.75	34.2		May 30	171.0	16.41	5.58	2010			
2011	7.96	7.32	6.95	5.84	89.70	194.00	107.00	59.90	51.30	45.10	21.00				Jun 02	261.0	36.67	4.59	2011			
Avg.	9.40	7.81	7.37	10.11	77.5	175.8	103.27	48.49	35.84	31.49	17.90	12.57	44.73	44.72		294	27.11	6.47	m <sup>3</sup> /s			
S. D.	1.54	1.09	0.94	3.13	30.90	39.88	31.67	14.04	9.08	9.49	3.90	2.90	5.93			91.61	6.60	0.99	m <sup>3</sup> /s			
Normal	9.55	7.92	7.50	10.51	79.80	178.23	101.92	47.45	35.41	30.30	17.62	12.55	45.01	m <sup>3</sup> /s								
Normal	9	7	7	9	72	157	93	43	31	28	15	11	482	mm	10-Year	414.15	18.79	5.25	m <sup>3</sup> /s			



**HALFWAY RIVER ABOVE GRAHAM RIVER 7FA003**

Station Longitude Latitude: -122.241100 56.508330

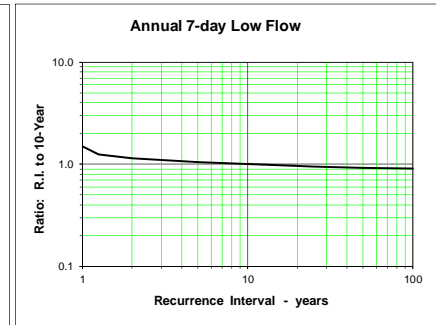
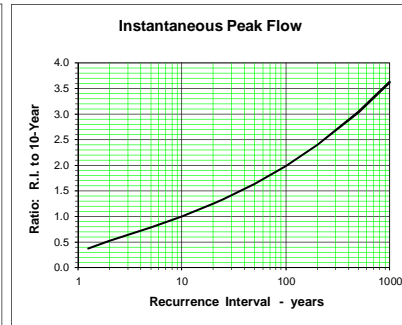
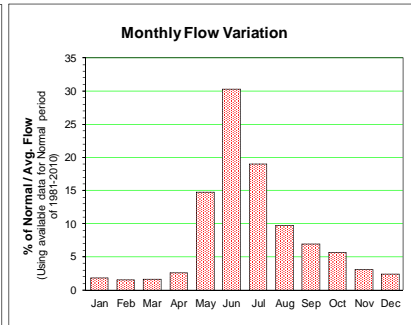
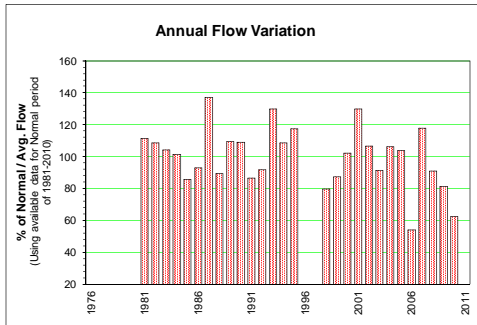
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 3764.13 km <sup>2</sup>		Median Elevation = 1259 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976																			1976		
1977																			1977		
1978	7.40	6.34	5.68	11.50	62.60	108.00	30.20	21.40	27.90	18.50	14.00	7.02	26.73	May 31	223.00	19.014	4.791	1978			
1979	3.17	2.38	3.14	7.42	30.00	61.80	92.20	29.40	63.80	35.20	16.20	6.80	29.43	Jul 03	289.00	18.543	2.279	1979			
1980	4.01	3.07	4.36	8.85	19.30	113.00	96.90	42.50	45.70	35.40	15.30	9.54	33.19	Jun 19	557.00	31.529	2.830	1980			
1981	5.96	3.86	3.59	8.96	121.00	126.00	60.20	29.50	32.60	17.90	11.20	7.96	35.89	May 27	464.00	15.657	3.330	1981			
1982	5.53	5.02	4.98	12.20	92.10	121.00	63.70	30.80	22.60	17.20	9.59	6.84	32.76	May 18	309.00	18.500	4.609	1982			
1983	4.73	4.46	4.62	9.30	33.10	103.00	128.00	38.60	19.10	12.40	6.88	4.66	30.91	Jul 08	313.00	15.400	3.921	1983			
1984	3.44	4.22	5.49	8.13	39.30	259.00	56.60	28.60	35.00	25.70	14.80	10.70	40.70	Jun 08	528.00	23.071	2.981	1984			
1985	7.01	4.74	4.85	11.00	33.60	89.40	51.10	11.20	59.80	23.80	9.08	8.28	26.15	Jun 23	408.00	8.711	4.491	1985			
1986	6.15	4.56	4.44	8.47	45.00	63.30	120.00	61.80	29.20	37.50	17.30	10.00	34.27	Jul 15	645.00	21.571	3.947	1986			
1987	7.29	6.06	5.13	12.80	58.80	98.00	125.00	178.00	43.60	23.10	13.10	8.94	48.74	Aug 02	555.00	34.271	5.014	1987			
1988	5.88	5.38	5.45	28.80	101.00	119.00	66.50	27.60	13.30	11.20	7.98	7.32	33.34	Jun 07	294.00	9.763	4.996	1988			
1989	5.07	4.46	4.83	16.40	86.50	95.10	83.80	78.90	44.80	31.80	9.42	9.18	39.45	Jul 08	149.00	33.743	4.014	1989			
1990	7.12	4.99	5.47	13.40	87.50	192.00	84.10	28.70	16.40	12.10	8.00	5.35	38.83	Jun 01	984.00	13.371	4.753	1990			
1991	4.94	4.99	4.38	11.00	52.80	74.60	55.20	21.30	23.20	16.90	10.70	6.94	24.00	Jun 04	102.00	17.486	4.111	1991			
1992	4.77	4.33	5.15	21.50	44.40	99.80	42.60	17.10	15.30	19.90	9.13	5.23	24.07	Jun 11	161.00	12.700	3.929	1992			
1993	4.01	4.18	3.73	9.84	44.40	140.00	179.00	142.00	51.60	19.60	10.30	8.01	51.76	Jun 28	468.00	29.357	3.457	1993			
1994	6.42	5.55	6.75	26.60	79.10	108.00	169.00	70.20	31.00	22.60	10.90	7.25	45.62	Jul 03	576.00	28.800	5.130	1994			
1995	5.90	5.31	5.77	9.58	42.90	140.00	163.00	66.30	43.90	22.20	14.20	11.60	44.46	Jul 05	494.00	30.230	5.110	1995			
1996																		1996			
1997																		1997			
1998																		1998			
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2007																		2007			
2008																		2008			
2009																		2009			
2010																		2010			
2011																		2011			
Avg.	5.49	4.66	4.88	13.10	59.63	117.28	92.62	51.33	35.07	23.22	11.96	7.99	35.57	35.58	417.72	21.21	4.09	m <sup>3</sup> /s			
S. D.	1.31	0.97	0.87	6.29	28.41	46.62	45.28	44.40	15.09	8.62	3.49	1.91	8.33		215.40	8.27	0.85	m <sup>3</sup> /s			
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	5.61	4.81	4.98	13.87	64.10	121.88	96.52	55.37	32.09	20.93	10.84	7.88	36.73	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	4	3	4	10	46	84	69	39	22	15	7	6	308	mm	10-Year	725.3	11.322	2.940	m <sup>3</sup> /s		



**GRAHAM RIVER ABOVE COLT CREEK 7FA005**

Station Longitude Latitude: -122.356387 56.458825

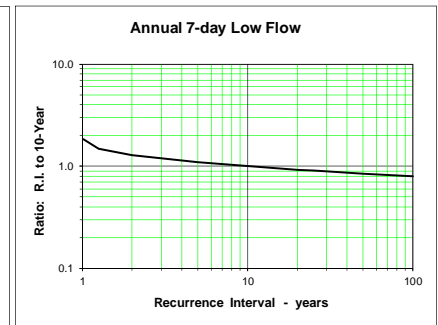
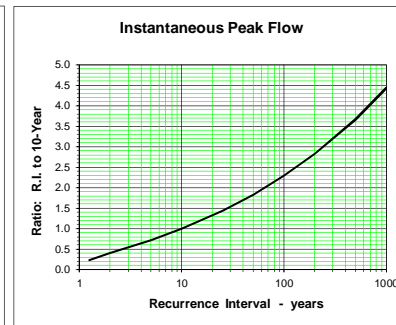
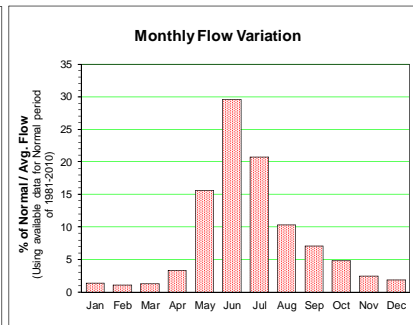
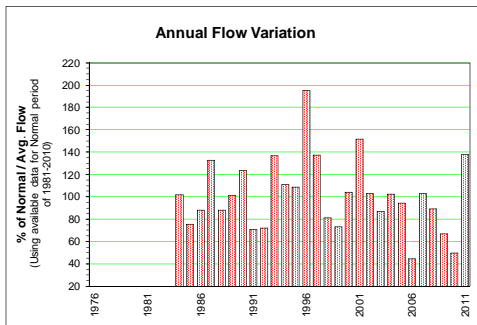
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 2138.76 km <sup>2</sup>		Median Elevation = 1359 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981	6.34	4.87	4.44	5.95	77.00	99.10	51.40	21.80	19.30	13.10	9.55	7.66	26.81		May 28	277.00	12.99	3.88	1981		
1982	5.42	4.65	4.45	4.52	33.00	105.00	66.90	30.70	20.00	15.30	12.60	10.30	26.14		Jun 14	145.00	15.19	4.20	1982		
1983	6.12	5.21	4.28	7.80	37.00	76.50	92.00	27.30	16.90	13.20	8.24	5.34	25.13		Jul 03	203.00	14.53	3.67	1983		
1984	4.27	4.51	4.77	5.95	23.90	118.00	49.10	20.60	22.80	25.00	8.45	6.49	24.44		Jun 14	198.00	16.44	3.85	1984		
1985	5.36	3.97	4.09	8.28	28.40	64.30	49.80	17.30	32.00	18.70	7.61	7.29	20.65		Jul 01	117.00	13.24	3.80	1985		
1986	6.28	4.73	4.72	6.55	23.40	63.50	68.10	30.40	16.00	23.70	11.90	8.47	22.43		Jul 16	207.00	13.03	4.02	1986		
1987	6.16	5.13	4.29	6.79	46.00	101.00	62.60	83.70	35.70	22.70	11.70	8.13	32.99		Aug 02	199.00	26.63	4.14	1987		
1988	5.02	4.51	4.58	10.50	58.80	74.20	38.40	20.80	13.30	13.40	8.21	5.93	21.51		Jun 09	139.00	11.26	4.20	1988		
1989	4.49	4.32	4.66	8.20	61.60	81.50	58.20	32.10	19.10	21.00	10.10	8.93	26.32		Jun 05	131.00	16.04	3.93	1989		
1990	7.28	6.05	6.72	8.98	56.70	136.00	45.60	16.40	11.20	9.09	6.22	4.77	26.26		Jun 02	489.00	9.62	4.16	1990		
1991	4.40	4.47	4.03	10.30	59.10	73.10	36.90	13.40	13.60	14.60	8.81	7.08	20.89		May 16	104.05	10.79	3.81	1991		
1992	5.66	5.35	6.39	13.70	43.60	98.30	34.70	11.10	10.00	22.50	8.90	5.26	22.10		Jun 17	135.00	6.96	4.07	1992		
1993	4.11	4.85	4.89	8.99	60.10	77.80	76.80	67.30	36.90	15.30	9.83	6.69	31.32		Aug 24	164.00	23.14	3.54	1993		
1994	5.32	5.57	5.67	10.90	51.00	78.10	68.80	29.60	22.70	16.40	10.80	7.48	26.15		Jul 03	158.00	17.93	5.01	1994		
1995	5.37	4.72	4.70	6.40	46.80	71.90	99.10	41.30	24.80	13.50	9.42	9.05	28.28		Jul 05	259.00	17.26	4.48	1995		
1996																			1996		
1997																			1997		
1998	5.13	5.71	7.36	11.60	74.00	45.20	26.50	16.10	11.20	12.70	7.57	6.51	19.24		May 26	133.00	10.41	4.78	1998		
1999	4.80	4.34	4.65	11.10	20.80	101.00	46.50	21.40	14.40	11.30	7.20	5.68	21.10		Jun 17	184.50	12.17	4.11	1999		
2000	4.17	3.90	3.71	4.04	11.80	93.40	73.60	30.40	34.00	18.60	11.50	6.57	24.63		Jun 10	179.00	18.46	3.36	2000		
2001	4.39	4.02	3.91	5.98	24.00	173.00	85.30	32.10	16.10	11.10	8.79	6.38	31.26		Jun 13	461.00	14.67	3.63	2001		
2002	4.62	4.10	3.98	5.59	31.70	133.00	56.90	22.60	18.60	15.70	6.12	4.22	25.69		Jun 17	195.00	15.23	3.73	2002		
2003	4.07	4.82	4.41	6.82	30.20	70.30	69.70	23.50	15.80	15.20	10.30	7.81	22.01		Jul 02	190.00	13.73	3.91	2003		
2004	6.61	4.61	4.82	7.18	34.00	57.80	53.60	28.70	50.40	31.60	15.80	11.00	25.54		Jul 04	97.50	21.66	4.24	2004		
2005	6.84	5.72	5.60	13.00	66.40	82.70	35.00	29.40	23.20	15.70	9.85	6.25	25.05		May 30	147.00	20.31	4.82	2005		
2006	6.32	6.35	5.54	6.86	29.60	48.80	19.60	10.80	7.00	6.25	4.91	4.23	13.03		May 30	84.60	6.69	4.13	2006		
2007	3.97	3.53	3.34	5.26	35.50	155.00	50.20	27.50	22.40	17.10	10.50	6.56	28.39		Jun 06	389.00	17.41	3.25	2007		
2008	6.11	5.03	4.83	5.56	48.50	79.30	34.70	31.80	18.60	12.90	8.26	6.82	21.89		May 30	136.00	14.49	4.64	2008		
2009	5.86	4.66	3.59	4.01	23.80	79.30	47.30	26.90	15.40	10.60	7.22	5.55	19.56		Jun 05	128.00	13.11	3.37	2009		
2010	4.61	4.11	4.16	8.73	37.50	52.70	18.90	10.50	9.98	14.70	8.21	6.23	15.06		May 20	85.60	8.52	4.01	2010		
2011																			2011		
Avg.	5.33	4.78	4.74	7.84	41.94	88.92	54.15	27.70	20.41	16.14	9.23	6.88	24.07	24.06			190.54	14.71	4.03	m <sup>3</sup> /s	
S. D.	0.95	0.68	0.93	2.63	17.23	31.05	20.49	15.66	9.76	5.39	2.24	1.64	4.53				102.47	4.67	0.44	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	5.33	4.78	4.74	7.84	41.94	88.92	54.15	27.70	20.41	16.14	9.23	6.88	24.07	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	7	5	6	10	53	108	68	35	25	20	11	9	355	mm	10-Year	311.4	9.049	3.497	m <sup>3</sup> /s		



**Halfway River near Farrell Creek 7FA006**

Station Longitude Latitude: -121.627500 56.251110

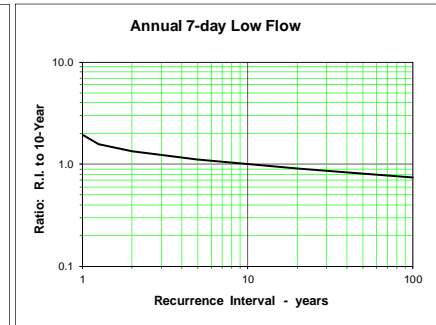
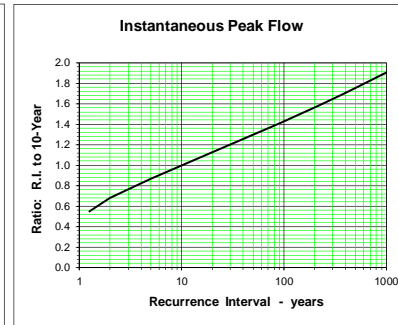
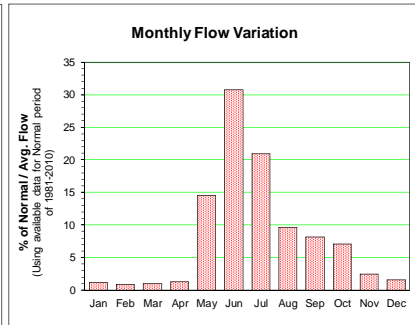
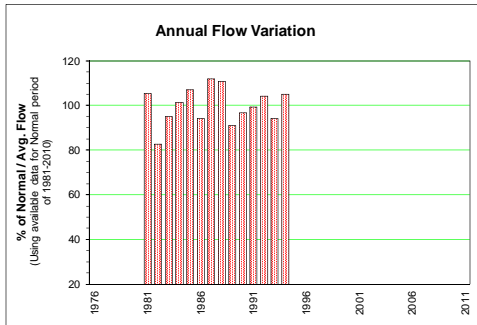
Year	Monthly and Annual Discharge in m <sup>3</sup> /s					Drainage Area = 9288.29 km <sup>2</sup>					Median Elevation = 1062 m					Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual		
1976																			1976	
1977																			1977	
1978																			1978	
1979																			1979	
1980																			1980	
1981																			1981	
1982																			1982	
1983																			1983	
1984	8.25	9.27	10.40	17.50	120.00	399.00	116.00	46.10	67.50	52.40	23.60	17.40	73.73		Jun 09	894.00	35.14	7.757	1984	
1985	12.60	9.27	9.13	23.20	55.80	168.00	130.00	43.90	118.00	51.10	18.40	16.70	54.75		Jun 24	453.00	35.97	8.707	1985	
1986	14.00	10.30	9.43	22.70	114.00	123.00	213.00	93.40	45.50	60.40	30.50	19.90	63.53		Jul 16	941.00	32.93	8.449	1986	
1987	14.40	12.00	9.84	33.60	143.00	229.00	211.00	311.00	87.60	50.30	25.90	16.00	96.00		Aug 02	1050.00	65.59	9.220	1987	
1988	11.00	10.90	11.20	50.90	193.00	218.00	113.00	53.10	31.70	30.60	22.40	19.00	63.84		Jun 07	575.00	27.59	9.874	1988	
1989	11.90	9.09	10.00	33.10	206.00	198.00	149.00	116.00	56.80	45.50	20.50	18.50	73.34		May 11	314.00	39.77	8.154	1989	
1990	12.40	8.61	9.46	29.00	218.00	497.00	183.00	43.00	25.30	19.90	14.30	11.60	89.39		Jun 02	2166.40	21.01	8.299	1990	
1991	9.13	10.10	9.26	19.90	130.00	198.00	110.00	29.60	36.30	31.30	17.80	13.90	51.43		Jun 05	366.00	22.19	8.650	1991	
1992	10.40	10.10	14.70	53.50	107.00	228.00	83.00	26.00	24.80	41.00	18.60	11.60	52.31		Jun 11	478.00	18.97	8.914	1992	
1993	8.25	7.74	8.34	21.90	100.00	262.00	306.00	266.00	112.00	43.10	23.40	18.00	98.73		Aug 25	924.00	64.21	7.186	1993	
1994	14.30	12.30	15.10	64.60	155.00	233.00	233.00	96.70	55.00	20.30	20.00	80.05		Jul 04	1050.71	50.26	11.39	1994		
1995	11.70	10.60	11.80	20.80	99.10	194.00	296.00	135.00	72.30	36.20	25.40	22.00	78.46		Jul 05	984.00	44.27	10.50	1995	
1996	16.30	13.40	14.80	30.30	149.00	584.00	599.00	111.00	61.30	52.50	32.80	20.80	140.73		Jul 19	1780.00	52.04	12.10	1996	
1997	17.30	13.80	11.40	30.30	232.00	300.00	198.00	93.60	126.00	110.00	35.50	15.70	99.06		Jun 28	577.00	59.79	10.64	1997	
1998	12.20	13.50	20.30	65.40	239.00	143.00	81.80	39.60	26.40	29.50	17.10	14.30	58.83		May 16	363.00	24.53	11.37	1998	
1999	12.50	12.10	12.50	42.70	79.40	251.00	118.00	43.20	22.50	16.30	12.60	10.40	52.78		Jun 17	408.00	17.81	9.60	1999	
2000	7.90	8.10	8.45	15.60	45.00	277.00	261.00	94.70	98.50	42.60	26.30	15.90	75.13		Jun 10	1070.00	60.77	7.06	2000	
2001	15.80	13.80	12.10	16.40	95.40	687.00	274.00	95.80	46.90	29.20	15.60	12.30	109.41		Jun 12	3020.00	39.93	10.74	2001	
2002	10.10	10.10	9.25	19.20	176.00	334.00	133.00	70.60	55.20	37.80	20.80	14.50	74.38		Jun 07	615.00	47.03	8.29	2002	
2003	11.80	10.90	9.31	18.60	101.00	171.00	248.00	70.40	35.20	31.10	25.10	18.90	63.04		Jul 02	945.00	34.31	8.59	2003	
2004	15.50	11.10	11.40	22.40	82.80	136.00	168.00	77.60	221.00	85.00	33.00	21.60	73.81		Jul 04	529.00	43.29	9.99	2004	
2005	15.50	14.00	13.20	52.00	158.00	228.00	111.00	94.40	60.10	37.00	21.30	14.10	68.42		Jun 12	416.00	51.41	11.21	2005	
2006	11.90	11.50	9.20	18.60	81.20	124.00	48.20	26.60	18.50	16.60	11.80	10.30	32.42		May 31	235.00	17.37	7.96	2006	
2007	8.80	8.32	7.41	25.80	137.00	365.00	122.00	76.10	61.90	38.10	23.00	16.90	74.25		Jun 07	726.00	43.16	7.00	2007	
2008	15.20	11.10	9.51	15.40	181.00	205.00	89.90	125.00	52.80	31.70	20.30	13.80	64.42		Aug 11	541.00	37.80	9.31	2008	
2009	10.70	8.68	7.17	12.80	95.20	163.00	123.00	62.40	39.70	26.70	17.90	13.00	48.57		Jul 08	264.00	33.21	6.95	2009	
2010	10.60	9.63	9.80	34.50	93.20	108.00	49.20	25.90	25.60	34.20	18.40	10.50	35.89		May 21	208.00	23.10	8.06	2010	
2011	6.00	6.06	6.98	13.80	241.00	360.00	368.00	76.30	40.10	35.80	17.70	13.70	99.45		Jun 26	1613.97	35.87	5.54	2011	
Avg.	12.02	10.58	10.77	29.45	136.68	263.68	183.40	87.25	61.59	41.16	21.80	15.76	73.08	73.07		839.54	38.55	8.98		
S. D.	2.87	2.04	2.88	15.21	56.04	139.67	115.68	65.09	42.99	19.45	5.99	3.50	23.31			639.74	14.23	1.60		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	12.24	10.75	10.91	30.03	132.82	260.11	176.56	87.66	62.39	41.36	21.95	15.84	72.10	m <sup>3</sup> /s						
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	4	3	3	8	38	73	51	25	17	12	6	5	245	mm	10-Year	1611.0	21.394	6.954	m <sup>3</sup> /s	



**STIKINE RIVER BELOW SPATSIZI RIVER 8CA002**

Station Longitude Latitude: -128.112331 57.734069

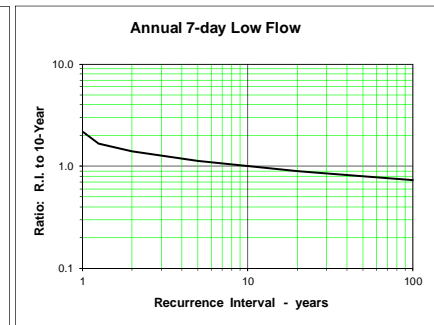
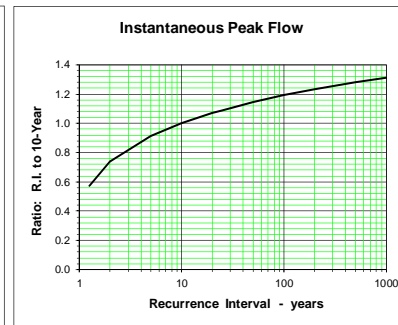
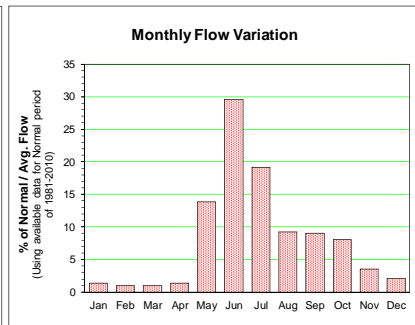
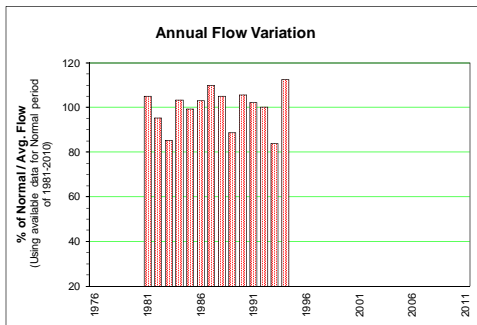
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 7588.26 km <sup>2</sup>		Median Elevation = 1556 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981	26.10	21.30	17.70	21.90	348.00	502.00	345.00	136.00	172.00	194.00	76.20	31.30			May 27	903.00	88.757	15.043	1981		
1982	15.80	15.60	13.30	11.80	55.10	518.00	230.00	124.00	161.00	103.00	38.50	23.10	109.07		Jun 14	714.00	97.029	11.486	1982		
1983	17.60	16.80	15.40	16.20	218.00	513.00	254.00	160.00	153.00	82.90	33.50	18.90	125.24		Jun 02	1070.00	120.571	12.786	1983		
1984	14.40	14.20	15.00	19.00	107.00	458.00	345.00	274.00	186.00	115.00	30.20	20.30	133.39		Jun 11	695.00	120.571	13.743	1984		
1985	17.40	14.90	17.10	19.40	183.00	439.00	555.00	160.00	143.00	89.10	26.50	17.20	140.98		Jul 07	1000.00	108.714	13.414	1985		
1986	12.70	9.21	9.75	11.50	90.40	436.00	407.00	133.00	80.50	200.00	58.60	31.30	124.01		Jun 08	707.00	55.214	8.143	1986		
1987	22.50	17.50	12.60	14.00	174.00	541.00	443.00	131.00	147.00	175.00	50.00	36.10	147.59		Jul 03	961.00	90.614	12.129	1987		
1988	21.90	16.80	15.60	19.30	265.00	528.00	389.00	215.00	107.00	103.00	44.40	23.00	146.05		Jun 12	998.00	74.243	15.500	1988		
1989	18.30	16.20	16.10	23.60	275.00	412.00	256.00	172.00	95.20	90.40	33.80	25.00	120.08		Jun 05	670.00	71.357	14.657	1989		
1990	17.90	17.30	16.50	22.80	306.00	641.00	235.00	95.90	68.30	52.60	28.80	26.80	127.62		Jun 02	1530.00	64.086	16.057	1990		
1991	20.50	15.50	11.70	15.40	272.00	401.00	238.00	134.00	198.00	161.00	62.90	35.00	130.93		Jun 23	545.00	108.286	10.414	1991		
1992	24.50	21.80	25.40	42.40	160.00	672.00	284.00	96.20	112.00	139.00	42.70	32.00	137.43		Jun 16	1150.00	61.514	20.300	1992		
1993	23.10	18.10	15.30	33.30	438.00	419.00	224.00	111.00	71.30	59.30	45.10	24.40	124.15		May 22	842.00	61.486	13.829	1993		
1994	18.00	15.90	16.60	23.90	271.00	428.00	344.00	161.00	197.00	112.00	37.20	28.10	138.36		Jul 10	630.00	120.57	14.64	1994		
1995	21.40	16.40	14.80															13.83	1995		
1996																			1996		
1997																			1997		
1998																			1998		
1999																			1999		
2000																			2000		
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2002																			2002		
2003																			2003		
2004																			2004		
2005																			2005		
2006																			2006		
2007																			2007		
2008																			2008		
2009																			2009		
2010																			2010		
2011																			2011		
Avg.	19.47	16.50	15.52	21.04	225.89	493.43	324.93	150.22	134.62	116.09	42.39	26.11	131.69	131.64		886.79	88.79	13.73	m <sup>3</sup> /s		
S. D.	3.79	2.91	3.48	8.40	105.62	83.52	98.13	47.66	44.25	47.69	14.40	6.02	10.73		259.92		24.21	2.75	m <sup>3</sup> /s		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	19.47	16.50	15.52	21.04	225.89	493.43	324.93	150.22	131.95	110.52	39.97	25.74	131.69	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	7	5	5	7	80	169	115	53	45	39	14	9	548	mm	10-Year	1232.6	59.400	10.212	m <sup>3</sup> /s		



**PITMAN RIVER NEAR THE MOUTH 8CA003**

Station Longitude Latitude: 53.234169

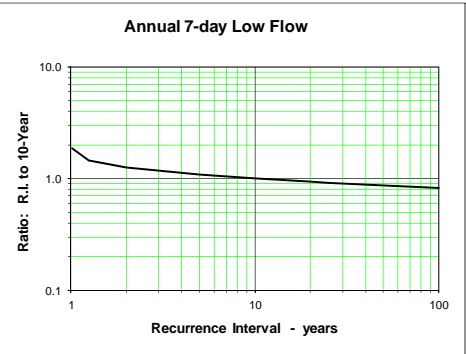
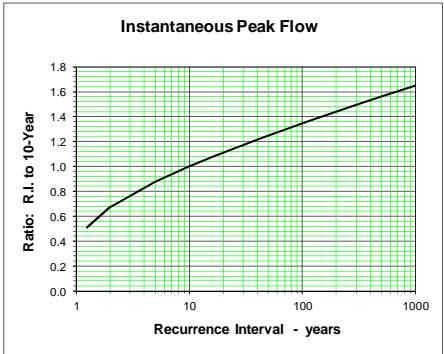
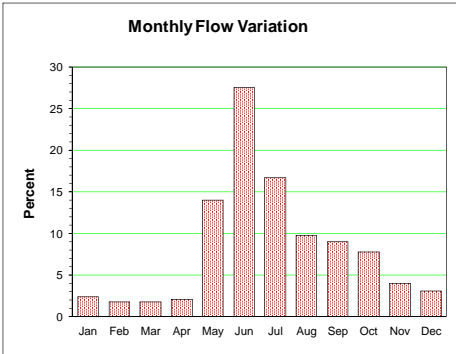
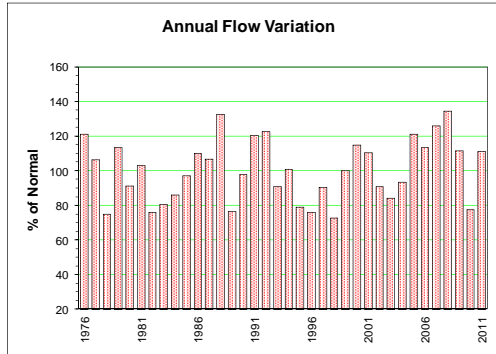
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 2,730 km <sup>2</sup>		Median Elevation = 1442 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981	9.37	7.62	6.38	7.72	119.00	176.00	103.00	37.60	63.20	68.00	30.10	12.00	48.21		Jun 01	330.00	23.89	5.36	1981		
1982	6.03	5.87	4.60	3.21	32.10	197.00	88.40	53.30	65.30	40.10	17.80	11.00	43.74		Jun 14	278.00	38.43	3.12	1982		
1983	8.28	7.67	6.45	6.25	48.40	144.00	71.60	61.90	60.60	32.00	14.50	7.53	39.17		Jun 02	327.00	44.67	5.77	1983		
1984	5.02	4.55	5.16	6.69	34.00	163.00	123.00	98.30	67.40	36.70	15.30	9.54	47.45		Jun 25	339.00	34.70	4.35	1984		
1985	6.77	6.36	6.83	7.63	56.50	140.00	196.00	50.40	32.20	19.10	12.30	9.90	45.62		Jul 12	471.00	29.66	5.96	1985		
1986	7.05	4.48	4.36	5.02	34.30	144.00	122.00	48.60	36.10	99.80	41.10	18.00	47.31		Oct 07	259.00	26.66	4.00	1986		
1987	10.50	7.79	4.92	5.70	64.90	167.00	123.00	48.30	62.70	73.00	21.30	14.20	50.47		Jun 22	318.00	34.24	4.64	1987		
1988	7.82	6.13	6.00	7.06	86.60	194.00	114.00	53.90	34.90	38.20	19.60	10.20	48.26		Jun 12	369.00	30.27	5.86	1988		
1989	6.94	6.59	6.49	9.06	102.00	140.00	76.10	46.70	34.10	29.50	17.40	11.80	40.73		Jun 05	218.00	22.79	6.09	1989		
1990	9.12	7.25	7.15	9.04	109.00	236.00	88.50	36.10	33.50	23.10	14.30	9.04	48.58		Jun 01	471.00	29.87	6.79	1990		
1991	6.60	5.98	4.12	5.96	88.00	126.00	68.50	46.50	93.60	69.90	30.30	16.30	46.96		Jun 22	162.00	27.19	3.97	1991		
1992	9.73	7.66	8.11	10.60	60.00	223.00	88.60	31.70	39.50	45.80	16.60	11.60	46.00		Jun 16	367.00	20.80	6.88	1992		
1993	7.64	4.86	4.39	9.83	129.00	120.00	67.30	31.20	21.60	28.30	24.10	12.10	38.57		May 21	300.00	18.80	3.59	1993		
1994	7.16	6.21	6.03	13.20	91.90	149.00	128.00	59.20	84.50	46.50	14.80	10.50	51.64		Jul 10	286.00	46.83	5.22	1994		
1995	7.11	6.15	5.10															4.96	1995		
1996																			1996		
1997																			1997		
1998																			1998		
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2007																			2007		
2008																			2008		
2009																			2009		
2010																			2010		
2011																			2011		
Avg.	7.68	6.34	5.74	7.64	75.41	165.64	104.14	50.26	51.73	45.66	20.51	11.58	45.91	45.91		321.07	30.63	5.10	m <sup>3</sup> /s		
S. D.	1.48	1.12	1.18	2.55	32.67	35.44	34.35	16.75	21.08	22.38	7.87	2.76	4.00			84.63	8.43	1.15	m <sup>3</sup> /s		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	7.68	6.34	5.74	7.64	75.41	165.64	104.14	50.26	50.91	44.06	19.82	11.55	45.91	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	6	6	7	74	157	102	49	48	43	19	11	531	mm	10-Year	432.4	20.968	3.645	m <sup>3</sup> /s		



**LIARD RIVER AT UPPER CROSSING 10AA001**

Station Longitude Latitude: -128.899990 60.049999

Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 31957.66 km <sup>2</sup>		Median Elevation = 1166 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			
1976	77.9	66.6	64.5	87.0	668.0	1560.0	1290.0	577.0	393.0	281.0	169.0	107.0	446.0		Jun 12	2090	345.14	63.40	1976			
1977	95.4	92.9	82.0	104.0	602.0	1410.0	883.0	487.0	361.0	303.0	150.0	104.0	390.7		Jun 05	1950	291.71	77.37	1977			
1978	74.6	65.0	58.1	67.7	327.0	756.0	525.0	420.0	301.0	329.0	201.0	169.0	275.5		Jun 09	961	260.86	56.71	1978			
1979	108.0	76.0	75.8	76.2	518.0	1470.0	1220.0	541.0	334.0	288.0	176.0	107.0	417.6		Jun 04	1947	291.29	70.19	1979			
1980	94.0	90.0	73.1	81.2	564.0	923.0	535.0	466.0	358.0	483.0	224.0	120.0	334.9		Jun 11	1260	318.14	68.53	1980			
1981	116.0	103.0	88.4	81.7	903.0	1120.0	627.0	320.0	435.0	338.0	233.0	159.0	378.3		May 29	2080	242.43	77.93	1981			
1982	99.1	62.9	57.6	62.2	393.0	1150.0	522.0	280.0	274.0	231.0	124.0	91.4	279.4		Jun 05	1870	239.00	55.64	1982			
1983	70.2	54.0	58.3	64.8	428.0	1100.0	529.0	361.0	389.0	259.0	138.0	87.1	295.4		Jun 03	1720	298.29	52.66	1983			
1984	62.9	56.9	58.9	74.5	469.0	1170.0	687.0	391.0	362.0	225.0	138.0	99.3	316.3		Jun 10	1770	267.86	55.96	1984			
1985	78.4	64.5	57.1	62.8	376.0	1360.0	950.0	440.0	362.0	271.0	145.0	109.0	357.3		Jun 07	2310	345.29	56.06	1985			
1986	89.3	68.4	67.6	81.2	412.0	1330.0	1040.0	478.0	374.0	433.0	290.0	177.0	404.9		Jun 09	1890	316.86	64.77	1986			
1987	115.0	86.6	77.9	84.0	562.0	1300.0	887.0	441.0	394.0	377.0	208.0	157.0	392.1		Jun 02	2270	371.00	76.20	1987			
1988	113.0	86.4	78.6	91.5	921.0	1450.0	1340.0	581.0	392.0	372.0	235.0	169.0	487.4		Jul 15	2500	381.57	77.63	1988			
1989	115.0	90.9	77.4	142.0	753.0	820.0	423.0	199.0	199.0	226.0	138.0	117.0	281.4		Jun 08	1000	179.43	65.71	1989			
1990	89.8	71.3	63.3	83.2	642.0	1500.0	704.0	309.0	321.0	257.0	152.0	115.0	359.6		Jun 02	2800	246.71	62.33	1990			
1991	94.0	89.6	83.6	151.0	715.0	1080.0	826.0	647.0	464.0	489.0	267.0	207.0	443.1		Jun 01	1200	500.57	77.14	1991			
1992	153.0	116.0	91.9	90.1	403.0	2080.0	1060.0	520.0	364.0	283.0	124.0	127.0	450.5		Jun 17	2870	345.00	72.31	1992			
1993	100.0	83.5	74.8	88.6	709.0	1070.0	632.0	350.0	288.0	351.0	145.0	108.0	334.7		Jun 05	1510	260.43	70.54	1993			
1994	118.0	90.5	74.2	93.9	684.0	1200.0	642.0	347.0	397.0	481.0	150.0	153.0	370.5		Jun 13	1500	283.86	70.86	1994			
1995	118.0	97.3	82.2	108.0	605.0	699.0	446.0	419.0	405.0	280.0	99.4	110.0	290.2		May 15	1000	355.00	65.43	1995			
1996	98.9	82.0	69.6	69.0	387.0	846.0	555.0	376.0	458.0	201.0	111.0	102.0	279.7		Jun 05	1060	355.86	59.70	1996			
1997	75.9	64.2	54.3	81.4	652.0	988.0	729.0	502.0	330.0	225.0	160.0	114.0	332.9		Jun 07	1630	300.29	46.67	1997			
1998	87.8	73.4	69.0	111.0	744.0	850.0	226.0	215.0	214.0	215.0	146.0	97.7	267.8		May 29	1740	195.00	67.80	1998			
1999	76.8	64.9	56.3	68.7	458.0	1520.0	765.0	430.0	371.0	312.0	176.0	115.0	368.5		Jun 18	2190	344.71	52.66	1999			
2000	84.9	81.6	82.4	81.3	305.0	1130.0	865.0	723.0	741.0	561.0	249.0	165.0	422.9		Jun 15	1380	508.43	80.29	2000			
2001	123.0	96.5	78.2	82.7	337.0	1620.0	836.0	425.0	487.0	406.0	227.0	157.0	406.7		Jun 15	2120	348.29	74.79	2001			
2002	106.0	85.3	73.6	67.0	552.0	958.0	546.0	493.0	520.0	326.0	147.0	126.0	334.4		May 31	1380	397.00	65.14	2002			
2003	90.4	73.7	66.4	101.0	395.0	856.0	729.0	325.0	338.0	381.0	190.0	152.0	309.4		Jun 21	1120	279.29	63.50	2003			
2004	108.0	89.2	80.7	132.0	692.0	1280.0	474.0	277.0	322.0	342.0	195.0	128.0	343.2		Jun 10	1680	238.86	77.21	2004			
2005	93.9	83.9	76.9	103.0	1330.0	1350.0	702.0	456.0	437.0	356.0	196.0	137.0	445.6		May 19	2890	380.86	71.67	2005			
2006	112.0	99.5	92.3	112.0	667.0	1620.0	640.0	429.0	492.0	415.0	182.0	141.0	417.4		Jun 17	2160	401.86	89.89	2006			
2007	125.0	110.0	99.3	96.6	624.0	1540.0	995.0	719.0	446.0	393.0	215.0	167.0	462.5		Jun 08	2850	403.57	86.43	2007			
2008	133.0	108.0	106.0	95.3	842.0	1640.0	1040.0	528.0	585.0	453.0	233.0	158.0	494.0		Jun 25	2510	448.00	85.57	2008			
2009	116.0	98.3	88.4	105.0	705.0	1530.0	675.0	393.0	471.0	399.0	192.0	133.0	409.5		Jun 09	2130	315.57	87.54	2009			
2010	114.0	100.0	93.1	177.0	566.0	788.0	494.0	266.0	265.0	259.0	173.0	123.0	285.6		Jun 04	959	233.71	91.60	2010			
2011	100.0	86.2	68.8	70.1	559.0	1200.0	803.0	700.0	620.0	363.0	200.0	112.0	408.2		Jun 23	1840	502.71	60.37	2011			
Avg.	100.76	83.58	75.02	92.46	596.4	1229.6	749.58	441.83	401.31	337.86	180.51	131.13	369.28	376.67		1837	327.62	69.39	m <sup>3</sup> /s			
S. D.	19.36	15.61	12.91	25.64	204.42	314.48	246.23	128.71	115.72	89.55	45.19	28.56	65.50			573.42	81.75	11.32	m <sup>3</sup> /s			
Normal	102.58	84.41	75.94	94.75	607.70	1231.50	724.30	423.83	402.67	337.20	179.28	133.38	367.37	m <sup>3</sup> /s								
Normal	9	6	6	8	51	100	61	36	33	28	15	11	363	mm	10-Year	2705.60	239.40	53.11	m <sup>3</sup> /s			

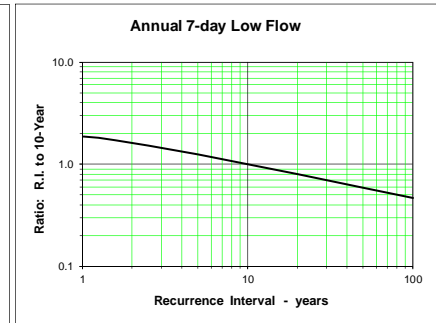
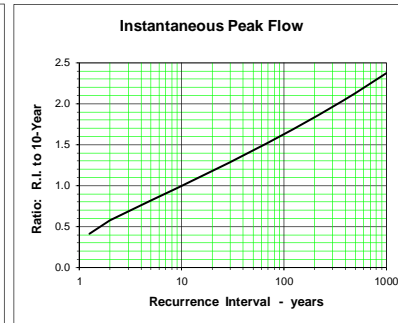
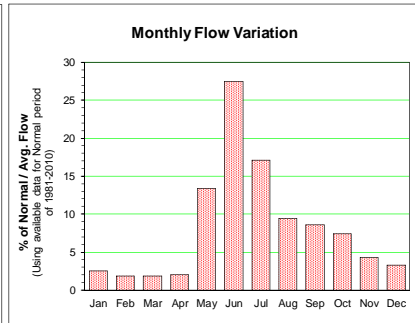
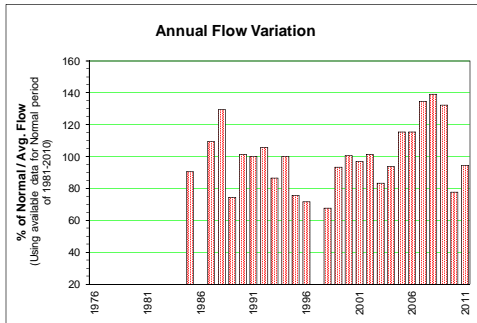




**RANCHERIA RIVER NEAR THE MOUTH 10AA004**

Station Longitude Latitude: -129.550000 60.204170

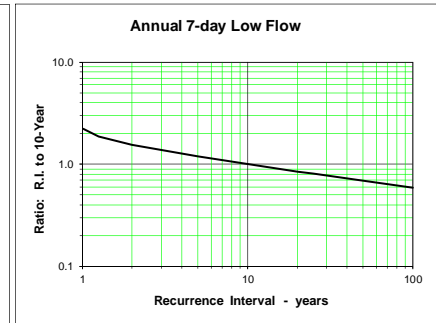
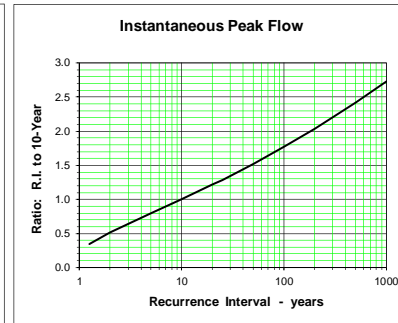
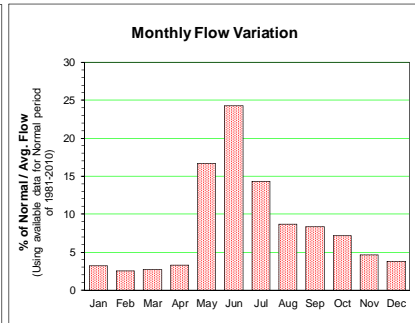
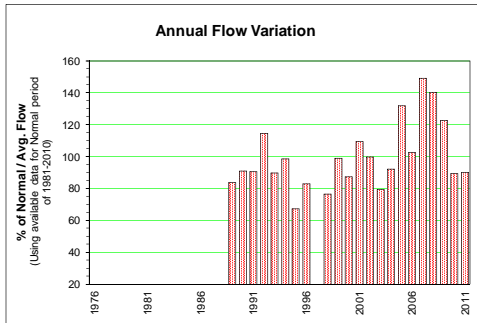
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 5286.27 km <sup>2</sup>		Median Elevation = 1250 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981																			1981		
1982																			1982		
1983																			1983		
1984																			1984		
1985	12.10	11.00	10.70	9.77	51.70	172.00	131.00	54.70	48.40	38.30	19.70	15.60	48.06	Jun 05	355.00	42.94	9.59	1985			
1986	12.50	8.02	8.81	14.00							46.20	26.70		Nov 30	261.00		7.62	1986			
1987	21.90	15.00	12.80	14.50	70.90	209.00	139.00	63.50	52.60	49.40	27.60	18.60	58.06	Jun 23	516.00	47.27	12.51	1987			
1988	16.90	14.30	12.10	13.10	83.60	206.00	240.00	85.70	54.50	44.30	31.10	20.60	68.73	Jul 14	652.00	47.87	11.81	1988			
1989	15.10	12.70	7.85	3.43	54.10	135.00	73.00	48.30	39.40	42.70	24.20	18.40	39.61	Jun 05	191.00	32.30	3.29	1989			
1990	14.20	12.50	11.30	12.40	92.90	251.00	111.00	46.30	33.30	25.00	19.50	15.50	53.80	Jun 01	581.00	31.47	10.79	1990			
1991	13.20	11.50	9.88	13.90	76.80	146.00	86.10	49.50	92.20	69.90	40.00	28.60	53.26	Jun 23	184.00	41.06	9.61	1991			
1992	21.30	17.30	13.80	13.00	60.00	240.00	121.00	61.40	47.30	38.70	22.10	19.10	56.20	Jun 16	365.00	43.50	11.79	1992			
1993	13.60	11.00	9.59	11.20	104.00	126.00	79.00	47.00	40.00	66.00	23.40	18.60	46.02	May 30	205.00	31.47	9.26	1993			
1994	11.40	8.33	6.85	7.82	84.50	163.00	117.00	58.20	70.40	61.30	25.20	21.70	53.19	Jul 02	246.00	42.77	6.47	1994			
1995	20.60	18.70	15.90	27.60	114.00	70.60	44.30	51.20	46.10	34.10	20.70	18.50	40.36	May 12	225.82	34.51	15.17	1995			
1996	15.40	12.80	10.70	9.42	51.20	129.00	78.20	48.10	41.00	29.80	18.60	13.90	38.19	Jun 08	175.00	39.19	8.95	1996			
1997	10.00	10.50	9.84	11.30	73.00				49.90	31.40	22.00	15.40				45.17	9.35	1997			
1998	12.50	12.00	11.90	13.90	102.00	100.00	49.30	29.60	29.80	31.60	22.00	16.00	36.02	May 28	307.00	26.00	11.90	1998			
1999	13.00	11.90	12.00	13.50	55.90	220.00	91.50	56.60	43.70	38.30	23.40	16.20	49.70	Jun 17	372.00	40.40	11.74	1999			
2000	11.70	10.80	10.90	11.30	40.60	163.00	115.00	73.50	90.30	53.30	33.70	26.50	53.38	Jun 15	222.00	65.84	10.80	2000			
2001	18.20	12.10	9.62	10.50	38.90	206.00	119.00	60.50	53.00	40.70	28.60	21.50	51.62	Jun 15	300.00	50.43	9.31	2001			
2002	16.30	13.30	11.40	10.30	78.10	148.00	93.40	78.30	82.30	58.70	31.80	23.80	53.98	Jun 08	246.00	60.27	10.10	2002			
2003	17.50	14.70	12.80	15.50	56.50	113.00	101.00	48.40	46.70	52.50	31.20	19.90	44.30	Jul 05	143.00	40.67	11.66	2003			
2004	15.10	12.80	11.50	19.80	121.00	161.00	63.30	42.40	46.60	49.30	28.70	25.50	49.80	Jun 10	264.00	36.20	11.30	2004			
2005	19.10	14.30	12.20	16.60	171.00	190.00	105.00	58.60	50.80	39.90	30.90	24.00	61.30	May 18	351.00	45.76	11.39	2005			
2006	17.80	14.90	13.70	13.60	108.00	258.00	88.20	52.10	61.50	53.00	32.20	21.20	61.23	Jun 03	469.00	44.09	12.93	2006			
2007	15.60	14.30	12.60	15.60	88.60	243.00	172.00	120.00	72.40	55.10	26.90	19.80	71.59	Jun 06	522.00	63.57	11.44	2007			
2008	18.00	15.40	14.90	13.90	123.00	258.00	173.00	85.40	75.30	56.10	29.00	23.50	73.89	Jun 24	412.00	70.49	13.64	2008			
2009	19.20	17.90	16.00	16.00	118.00	244.00	118.00	64.70	79.50	72.10	45.80	29.50	70.20	Jun 09	383.05	49.56	14.41	2009			
2010	19.70	15.70	14.30	20.40	82.50	114.00	62.10	32.60	44.30	38.10	27.80	24.00	41.39	Jun 04	165.00	29.26	14.07	2010			
2011	17.40	13.60	11.90	11.30	88.10	136.00	77.50	61.60	83.50	46.00	30.30	23.30	50.17	May 23	215.00	54.13	11.09	2011			
Avg.	15.90	13.24	11.70	13.47	84.19	176.06	105.92	59.13	56.72	46.75	28.24	20.96	52.96		52.96	320.30	44.47	10.81	m <sup>3</sup> /s		
S. D.	3.27	2.59	2.24	4.46	30.57	54.87	43.09	18.81	17.99	12.59	7.20	4.26	10.53			137.33	11.36	2.50	m <sup>3</sup> /s		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	15.84	13.22	11.69	13.55	84.03	177.73	107.10	59.03	55.65	46.78	28.17	20.87	53.08		m <sup>3</sup> /s						
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	6	6	7	43	87	54	30	27	24	14	11	317	mm	10-Year	505.6	31.252	7.154	m <sup>3</sup> /s		



**BIG CREEK AT KM 1084.8 ALASKA HIGHWAY 10AA005**

Station Longitude Latitude: -129.702770 60.158329

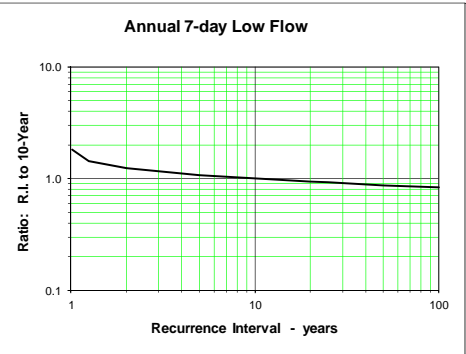
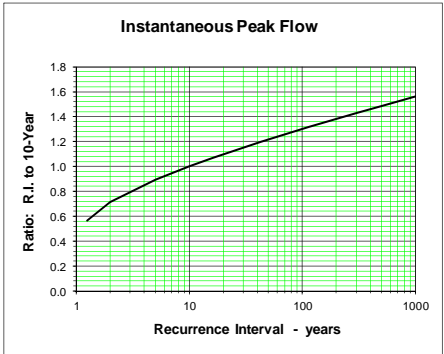
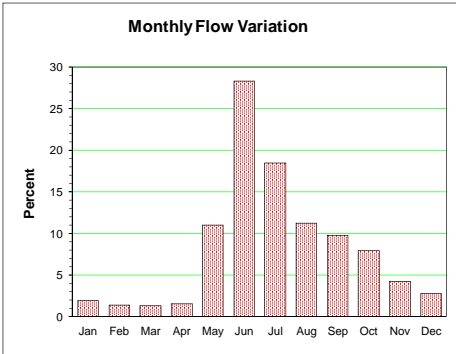
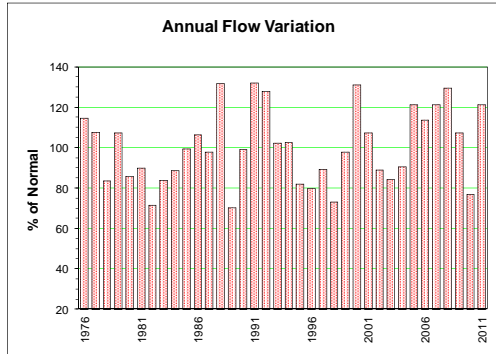
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 1003.18 km <sup>2</sup>		Median Elevation = 1176 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976																			1976		
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	4.11	3.01	2.59	3.88	17.00	12.90	8.82	6.35	5.80	5.71	4.04	3.32	6.49	May 08	28.50		5.22	2.26	1989		
1990	2.72	2.38	2.56	3.13	15.70	27.30	10.50	4.94	4.83	4.09	3.30	2.81	7.03	Jun 01	52.90		4.34	2.30	1990		
1991	2.32	2.22	2.08	3.02	11.20	13.50	9.38	5.84	13.40	9.61	6.48	4.96	7.02	May 31	18.00		4.73	2.03	1991		
1992	4.09	3.73	3.20	3.20	11.60	38.00	15.20	8.07	7.44	5.14	3.87	3.14	8.87	Jun 16	53.10		6.26	2.09	1992		
1993	2.18	1.94	2.25	4.13	15.60	15.30	11.90	7.62	6.72	7.84	3.75	3.90	6.96	May 30	25.50		5.72	1.89	1993		
1994	2.18	1.29	1.28	3.46	13.30	18.90	18.00	9.02	9.40	7.85	3.11	3.16	7.62	Jul 02	35.90		6.50	1.14	1994		
1995	3.04	2.85	2.78	3.65	12.30	8.49	6.45	6.14	5.59	4.61	3.10	2.97	5.20	May 12	23.50		4.87	2.76	1995		
1996	2.60	2.33	2.16	2.09	11.40	20.60	10.90	7.00	7.06	4.79	3.65	2.37	6.41	Jun 03	32.30		6.54	2.05	1996		
1997	2.05	2.16	2.18	3.19	16.90	24.20		7.68	7.17	3.45	2.84			Jun 06	105.00		7.42	1.99	1997		
1998	2.57	2.46	2.41	2.77	20.80	15.00	8.32	4.18	3.88	4.54	2.42	1.35	5.92	May 27	51.80		3.12	1.25	1998		
1999	1.17	1.08	1.03	2.26	13.20	33.90	13.10	7.59	6.97	6.06	3.43	2.19	7.68	Jun 14	52.00		6.60	1.01	1999		
2000	1.88	1.82	1.81	2.61	7.95	17.70	12.40	8.63	10.50	6.82	5.19	4.02	6.78	Jun 15	22.30		7.99	1.79	2000		
2001	3.30	2.49	2.06	2.21	9.74	31.30	16.50	9.99	9.04	6.07	5.13	4.16	8.46	Jun 03	73.90		7.73	2.02	2001		
2002	3.39	2.81	2.42	2.18	15.30	18.30	11.80	9.34	9.61	6.95	5.64	4.58	7.72	Jun 08	34.60		7.43	2.13	2002		
2003	3.48	2.90	2.63	3.28	9.24	12.90	12.70	6.11	5.74	5.97	4.82	3.82	6.15	Jul 01	19.70		5.07	2.60	2003		
2004	3.03	2.66	2.42	3.05	15.50	22.00	8.18	6.10	6.66	7.19	4.80	4.07	7.14	Jun 10	36.60		5.10	2.37	2004		
2005	3.79	3.62	3.18	3.48	33.30	28.90	15.70	8.23	6.67	5.31	5.70	4.21	10.22	May 18	66.60		5.91	2.86	2005		
2006	3.08	2.52	2.71	3.11	15.70	32.00	10.60	6.71	6.34	5.13	4.03	3.36	7.95	Jun 03	68.60		5.34	2.46	2006		
2007	2.86	2.57	2.41	2.34	15.40	36.10	27.00	18.80	11.50	9.17	5.71	3.92	11.53	Jun 06	87.90		9.82	2.18	2007		
2008	3.19	2.90	3.30	3.39	22.50	34.60	22.90	11.70	9.70	7.74	4.54	3.56	10.85	Jun 23	71.40		8.92	2.70	2008		
2009	3.25	3.31	2.91	2.82	15.90	26.90	15.00	9.67	12.20	10.70	6.30	4.86	9.51	Jun 12	40.50		7.45	2.47	2009		
2010	4.36	4.09	3.58	5.15	15.00	15.00	9.37	5.59	7.06	5.89	4.27	3.44	6.91	May 20	33.20		4.92	3.32	2010		
2011	3.27	3.10	2.64	2.40	13.20	16.60	10.50	7.69	8.60	6.44	4.91	4.30	6.99	May 31	25.90		6.71	2.37	2011		
Avg.	2.95	2.62	2.46	3.08	15.12	22.63	12.96	7.94	7.93	6.56	4.42	3.54	7.70		7.70		46.07	6.25	2.18		
S. D.	0.78	0.72	0.60	0.72	5.23	8.72	4.90	3.00	2.41	1.69	1.10	0.88	1.62				23.49	1.57	0.54		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	2.94	2.60	2.45	3.11	15.21	22.90	13.08	7.95	7.90	6.57	4.40	3.50	7.73		m <sup>3</sup> /s						
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	6	7	8	41	59	35	21	20	18	11	9	243	mm	10-Year	78.1	4.302	1.431	m <sup>3</sup> /s		



**FRANCES RIVER NEAR WATSON LAKE 10AB001**

Station Longitude Latitude: -129.118900 60.473888

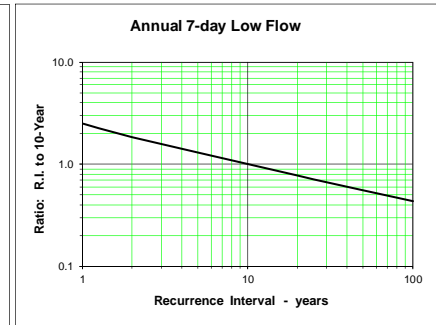
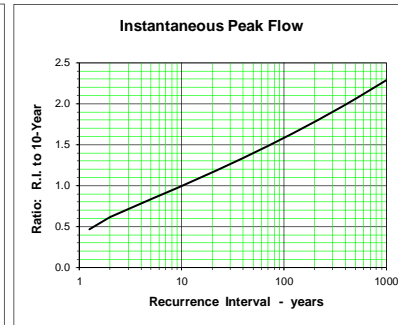
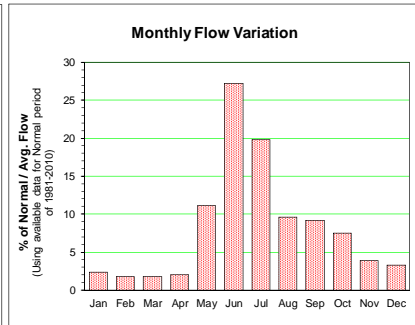
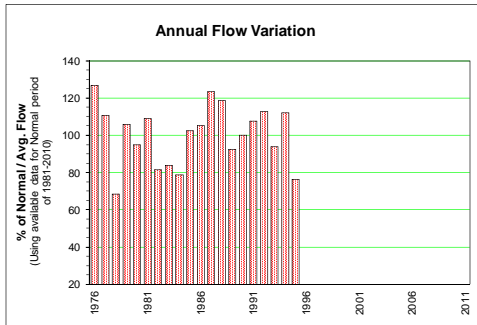
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 13012.74 km <sup>2</sup>		Median Elevation = 1164 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976	27.5	25.1	24.4	28.4	267.0	604.0	595.0	232.0	144.0	110.0	63.7	38.8	180.5		Jul 04	929	131.29	23.49	1976			
1977	32.2	27.0	23.1	24.4	231.0	613.0	411.0	240.0	164.0	154.0	72.5	36.4	169.7		Jun 05	671	137.00	20.56	1977			
1978	26.9	22.3	20.4	25.9	116.0	383.0	330.0	237.0	139.0	138.0	86.6	51.3	132.0		Jun 11	456	118.29	19.97	1978			
1979	30.5	23.4	23.7	23.0	148.0	657.0	497.0	267.0	126.0	112.0	68.7	44.0	169.0		Jun 13	756	108.43	22.06	1979			
1980	33.5	31.2	28.5	27.4	166.0	389.0	239.0	217.0	156.0	191.0	97.1	47.7	135.5		Jun 12	497	140.14	26.07	1980			
1981	37.4	26.4	26.7	25.0	280.0	467.0	276.0	134.0	157.0	125.0	86.5	54.3	141.9		May 31	734	107.57	24.53	1981			
1982	34.0	27.5	24.0	23.6	123.0	449.0	227.0	122.0	114.0	98.8	66.5	45.5	113.1		Jun 15	586	103.43	22.41	1982			
1983	30.2	22.7	19.9	20.4	136.0	481.0	252.0	187.0	203.0	124.0	66.1	43.1	132.4		Jun 05	592	160.71	19.50	1983			
1984	31.2	19.2	20.5	31.3	148.0	472.0	361.0	215.0	185.0	99.9	53.3	38.1	139.7		Jun 14	636	125.86	18.20	1984			
1985	30.3	23.5	20.5	19.6	122.0	583.0	454.0	229.0	176.0	127.0	61.4	28.7	156.8		Jun 08	783	159.57	18.86	1985			
1986	23.8	23.6	22.7	21.5	120.0	588.0	465.0	237.0	180.0	155.0	109.0	60.3	167.7		Jul 04	699	152.00	21.31	1986			
1987	45.0	29.2	21.1	25.9	164.0	499.0	394.0	194.0	190.0	163.0	77.8	38.6	154.0		Jun 09	601	175.00	20.10	1987			
1988	31.1	29.1	28.4	35.0	372.0	656.0	551.0	267.0	187.0	174.0	104.0	53.3	207.9		Jun 16	794	180.14	27.90	1988			
1989	37.2	30.8	25.3	30.8	240.0	397.0	193.0	112.0	75.8	83.2	59.0	41.5	110.8		Jun 16	477	70.40	24.01	1989			
1990	29.3	24.1	22.8	31.3	208.0	613.0	321.0	153.0	193.0	153.0	74.4	50.2	156.4		Jun 03	778	124.71	22.60	1990			
1991	37.6	30.9	26.9	37.3	298.0	540.0	458.0	384.0	267.0	211.0	115.0	76.5	207.9		Aug 01	591	238.57	25.90	1991			
1992	53.8	42.2	30.7	28.0	140.0	920.0	560.0	250.0	167.0	120.0	63.5	45.1	201.5		Jun 18	1200	160.86	25.44	1992			
1993	34.8	28.4	24.8	34.2	260.0	588.0	338.0	186.0	149.0	143.0	87.5	57.2	161.4		Jun 07	774	142.71	24.11	1993			
1994	42.5	27.1	21.9	30.3	257.0	585.0	298.0	148.0	156.0	215.0	104.0	52.4	161.9		Jun 12	701	122.00	21.59	1994			
1995	36.0	27.8	22.7	29.4	241.0	377.0	222.0	191.0	180.0	120.0	52.0	43.8	129.0		Jun 12	430	146.43	21.53	1995			
1996	35.8	28.9	23.9	22.9	117.0	359.0	281.0	208.0	230.0	115.0	45.4	38.5	125.6		Jun 09	400	188.57	20.50	1996			
1997	25.4	21.3	18.7	22.0	179.0	383.0	347.0	291.0	174.0	105.0	66.9	45.3	140.6		Jun 18	453	150.14	17.04	1997			
1998	32.5	25.2	21.5	29.2	282.0	423.0	179.0	108.0	94.1	92.3	55.8	36.7	115.3		Jun 01	740	88.10	21.10	1998			
1999	26.1	21.2	18.7	23.8	136.0	552.0	356.0	238.0	185.0	148.0	87.3	51.5	154.1		Jun 17	820	175.43	18.33	1999			
2000	31.2	26.0	24.1	22.9	117.0	468.0	495.0	432.0	373.0	275.0	126.0	83.7	206.7		Jun 14	559	206.00	21.43	2000			
2001	53.4	34.9	27.0	28.3	103.0	675.0	366.0	185.0	199.0	183.0	103.0	67.9	169.0		Jun 16	919	145.00	26.10	2001			
2002	43.9	29.5	22.1	19.4	159.0	409.0	251.0	224.0	244.0	124.0	92.1	62.0	140.3		Jun 12	504	164.86	18.81	2002			
2003	27.8	21.1	19.4	28.2	131.0	446.0	345.0	148.0	153.0	156.0	71.6	40.8	132.8		Jun 21	547	123.57	19.01	2003			
2004	36.4	32.2	25.0	34.3	216.0	598.0	227.0	130.0	147.0	142.0	76.2	52.4	142.9		Jun 10	756	119.43	23.60	2004			
2005	40.5	32.9	29.4	53.3	457.0	616.0	312.0	214.0	201.0	170.0	101.0	60.3	191.3		Jun 03	837	174.71	27.34	2005			
2006	42.4	33.5	27.7	29.5	221.0	709.0	298.0	223.0	243.0	173.0	91.6	57.0	179.3		Jun 17	1020	195.00	25.20	2006			
2007	41.5	33.4	27.4	32.1	221.0	638.0	450.0	319.0	199.0	169.0	97.7	58.0	191.2		Jun 09	992	185.00	22.91	2007			
2008	43.7	35.1	30.8	35.3	273.0	699.0	446.0	222.0	283.0	205.0	102.0	72.8	204.1		Jun 24	850	186.00	27.31	2008			
2009	47.5	35.2	32.3	36.8	246.0	703.0	297.0	169.0	184.0	150.0	80.5	44.6	169.0		Jun 11	932	137.86	32.04	2009			
2010	33.4	28.2	23.9	35.5	182.0	384.0	269.0	136.0	119.0	112.0	76.4	54.2	121.5		Jun 12	442	107.57	21.67	2010			
2011	33.2	25.7	24.9	28.0	182.0	570.0	466.0	369.0	302.0	170.0	69.7	46.7	191.4		Jun 22	755	242.00	24.60	2011			
Avg.	35.54	27.99	24.33	28.73	201.6	541.5	356.31	217.17	184.41	147.39	80.88	50.53	158.45	159.93		700	149.84	22.70	m <sup>3</sup> /s			
S. D.	7.43	4.97	3.54	6.56	78.98	126.22	109.59	74.54	58.41	40.31	19.58	11.94	29.04			189.79	38.54	3.27	m <sup>3</sup> /s			
Normal	36.52	28.44	24.36	29.24	204.97	542.57	342.97	208.53	186.93	147.71	81.78	51.81	157.54	m <sup>3</sup> /s								
Normal	8	5	5	6	42	108	71	43	37	30	16	11	382	mm	10-Year	972.80	106.12	17.64	m <sup>3</sup> /s			



**BLUE RIVER NEAR THE MOUTH 10AC004**

Station Longitude Latitude: -129.127780 59.758331

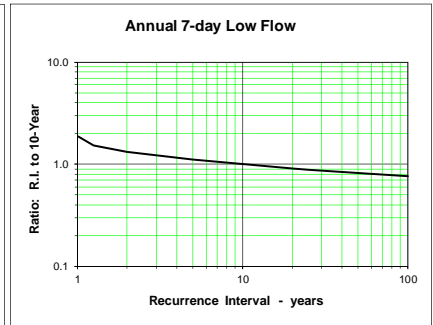
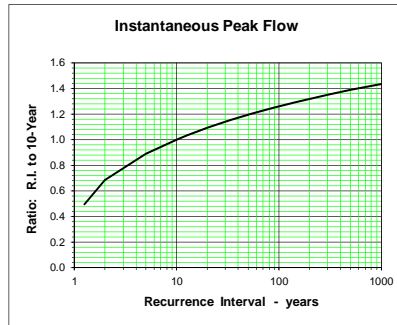
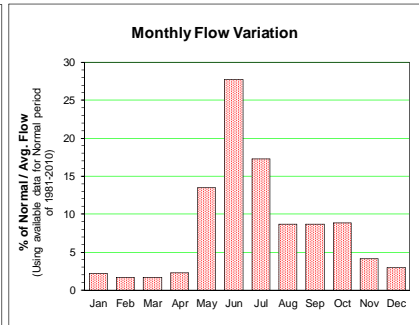
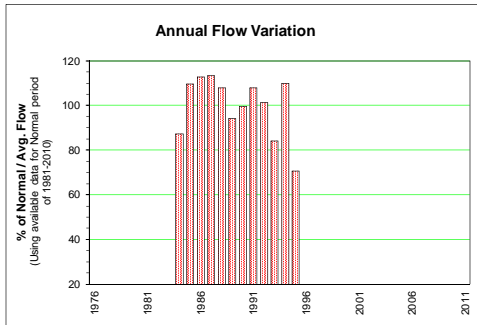
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual	
1976	5.11	4.08	3.58	4.06	17.40	73.30	71.70	37.40	26.10	17.40	11.00	7.09	23.23	Jul 01	155.00	23.10	3.47	1976
1977	6.30	5.45	4.30	6.24	18.80	67.10	53.50	29.70	22.80	14.10	7.34	6.55	20.24	Jul 18	113.00	19.31	4.18	1977
1978	5.07	3.86	2.63	2.64	13.30	34.40	19.00	15.80	18.40	17.20	10.70	7.10	12.54	Jun 08	64.80	12.84	2.31	1978
1979	4.83	3.75	3.86	4.87	19.00	60.70	61.40	20.50	20.80	16.60	8.81	6.34	19.37	Jul 03	123.00	14.40	3.51	1979
1980	5.00	4.74	4.44	4.68	23.00	54.00	30.40	21.10	16.50	27.10	11.00	6.16	17.37	Jun 08	103.00	14.37	4.32	1980
1981	5.12	4.26	4.12	3.65	42.00	57.40	33.00	20.70	27.90	20.00	12.90	7.35	19.93	May 27	164.00	12.84	3.44	1981
1982	5.23	5.09	4.68	4.21	14.70	57.40	29.20	14.10	16.80	12.90	8.90	6.00	14.94	Jun 10	91.00	11.87	4.09	1982
1983	3.97	3.54	3.24	4.57	18.90	48.30	29.50	23.20	23.10	14.70	6.68	3.98	15.34	Jun 01	115.00	18.19	3.06	1983
1984	2.97	2.95	2.67	3.39	16.10	50.10	31.10	21.40	18.70	12.20	6.58	4.72	14.41	Jun 11	79.00	15.81	2.60	1984
1985	3.96	3.78	4.14	4.36	16.00	57.60	65.70	22.00	20.30	14.10	6.88	5.38	18.77	Jul 12	131.00	16.19	3.58	1985
1986	4.55	2.60	3.32	4.56	10.10	63.60	61.40	20.00	19.90	23.90	9.95	6.14	19.25	Jul 03	109.00	14.10	2.29	1986
1987	4.41	2.73	2.44	2.99	26.20	78.50	59.80	24.80	25.30	22.80	10.10	9.80	22.58	Jun 22	259.00	20.11	2.36	1987
1988	7.59	5.20	4.39	5.35	24.70	67.80	63.80	28.40	20.50	14.30	7.91	9.79	21.69	Jul 13	165.00	14.94	4.25	1988
1989	6.22	4.75	4.22	4.76	34.10	56.40	30.70	18.20	13.20	13.80	8.90	6.96	16.91	Jun 05	114.00	11.24	4.07	1989
1990	5.40	4.99	4.75	5.83	31.10	78.30	36.50	16.70	12.20	9.49	7.35	6.49	18.28	Jun 01	201.00	11.33	4.47	1990
1991	5.40	4.90	4.33	5.78	23.50	54.90	33.40	19.90	33.70	22.50	14.90	12.80	19.71	Jun 25	80.10	17.67	4.07	1991
1992	8.35	6.48	5.31	5.41	18.70	88.80	53.90	22.10	14.10	11.30	7.31	6.05	20.64	Jun 15	161.00	13.23	4.63	1992
1993	4.77	4.08	3.81	5.61	35.20	54.20	32.20	16.80	13.80	18.60	9.13	6.74	17.15	Jun 06	90.70	11.81	3.75	1993
1994	4.87	3.54	2.30	1.67	21.90	63.30	58.70	23.60	29.30	20.20	8.05	7.54	20.50	Jul 02	117.00	14.03	1.42	1994
1995	5.77	4.93	4.34	7.31	27.00	33.20	21.20	20.00	18.40	11.80	6.31	6.68	13.96	Jun 13	64.00	15.74	4.20	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
Avg.	5.24	4.29	3.84	4.60	22.59	59.97	43.81	21.82	20.59	16.75	9.04	6.98	18.34	18.23	124.98	15.16	3.50	m <sup>3</sup> /s
S. D.	1.21	0.98	0.83	1.32	8.12	13.68	16.89	5.31	5.73	4.76	2.25	1.93	2.96		48.16	3.18	0.89	m <sup>3</sup> /s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	5.24	4.25	3.87	4.63	24.01	60.65	42.67	20.79	20.48	16.17	8.79	7.09	18.27	m <sup>3</sup> /s				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	6	6	7	39	95	69	34	32	26	14	11	348	mm 10-Year	196.3	11.800	1.855	m <sup>3</sup> /s



**DEASE RIVER NEAR THE MOUTH 10AC006**

Station Longitude Latitude: -128.597713 59.858657

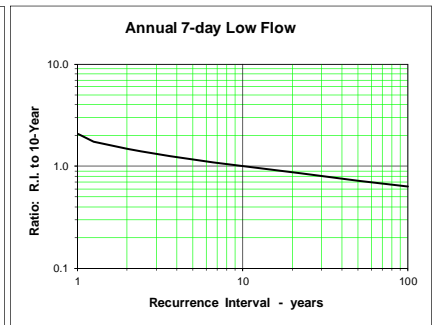
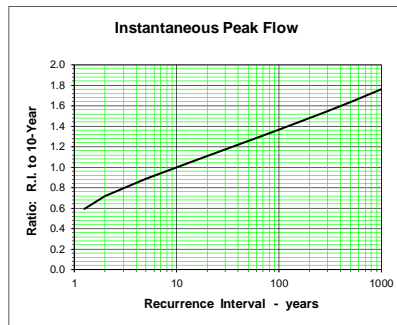
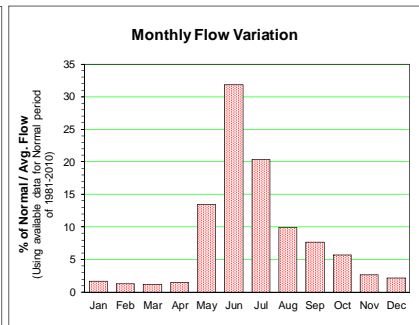
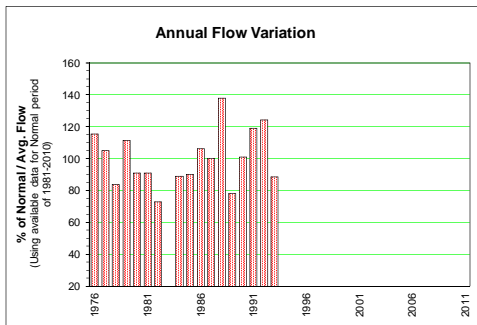
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976																			1976
1977																			1977
1978																			1978
1979																			1979
1980																			1980
1981																			1981
1982																			1982
1983																			1983
1984	37.60	32.00	29.30	38.00	208.00	511.00	315.00	205.00	201.00	156.00	86.90	57.60	156.55	Jun 26	716.00	182.86	28.83	1984	
1985	43.00	35.60	35.20	41.60	178.00	737.00	582.00	205.00	212.00	163.00	70.90	45.80	196.31	Jun 06	1160.00	145.29	33.29	1985	
1986	44.20	34.60	34.40	32.30	132.00	600.00	442.00	188.00	181.00	434.00	186.00	109.00	202.30	Jun 09	868.00	146.00	31.01	1986	
1987	67.90	53.10	50.10	51.80	286.00	663.00	455.00	181.00	212.00	247.00	99.30	64.80	203.22	Jun 23	1130.00	123.29	46.96	1987	
1988	53.60	45.90	40.40	46.70	330.00	585.00	476.00	266.00	175.00	145.00	85.60	67.80	193.56	Jul 14	907.00	142.71	37.46	1988	
1989	47.70	42.70	38.40	56.90	447.00	554.00	266.00	173.00	111.00	127.00	90.20	66.80	169.05	Jun 06	892.00	97.07	35.43	1989	
1990	47.10	41.50	47.50	53.00	348.00	827.00	324.00	142.00	110.00	87.50	57.50	52.20	178.31	Jun 03	1440.00	103.43	38.93	1990	
1991	44.60	40.60	34.50	50.50	327.00	520.00	293.00	178.00	333.00	275.00	133.00	87.70	193.60	Jun 08	634.00	130.14	33.40	1991	
1992	62.10	44.70	39.70	43.30	201.00	899.00	371.00	157.00	137.00	130.00	58.30	39.90	181.55	Jun 17	1380.00	104.00	33.50	1992	
1993	39.00	33.80	29.80	51.00	381.00	487.00	267.00	146.00	106.00	140.00	85.00	39.90	151.07	Jun 03	733.00	97.16	28.99	1993	
1994	31.00	25.20	22.30	37.80	321.00	598.00	419.00	185.00	328.00	234.00	88.70	64.30	196.86	Jun 14	860.00	155.29	21.79	1994	
1995	49.60	44.70	42.40	94.60	254.00	273.00	180.00	177.00	168.00	121.00	52.80	56.40	126.56	Jun 14	408.00	138.00	39.70	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	
Avg.	47.28	39.53	37.00	49.79	284.42	604.50	365.83	183.58	189.50	188.29	91.18	62.68	179.08	179.00	927.33	130.44	34.11	m <sup>3</sup> /s	
S. D.	10.24	7.56	7.84	15.90	92.10	165.09	112.56	32.71	76.20	95.90	36.93	19.82	23.96		303.14	26.52	6.39	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	47.28	39.53	37.00	49.79	284.42	604.50	365.83	183.58	189.50	188.29	91.18	62.68	179.08	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	9	7	7	9	52	108	67	34	34	35	16	12	388	mm	10-Year	1338.0	98.475	25.908	m <sup>3</sup> /s



**HYLAND RIVER NEAR LOWER POST 10AD001**

Station Longitude Latitude: -128.150830 59.950829

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 9342.75 km <sup>2</sup>		Median Elevation = 1196 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			
1976	23.80	20.30	19.60	26.00	255.00	560.00	478.00	180.00	111.00	72.60	42.60	29.70	151.90		Jun 11	991.00	102.17	19.09	1976		
1977	26.00	23.20	21.30	24.20	254.00	545.00	291.00	181.00	132.00	86.40	44.40	27.80	138.44		Jun 04	665.00	108.57	19.90	1977		
1978	23.50	19.50	16.90	19.40	112.00	328.00	293.00	164.00	102.00	130.00	66.30	41.10	110.17		Jul 03	600.00	95.70	16.47	1978		
1979	25.70	21.10	20.10	19.60	162.00	577.00	439.00	184.00	115.00	99.50	61.10	32.50	146.90		Jul 04	748.00	89.74	17.70	1979		
1980	21.70	20.00	17.90	28.30	197.00	382.00	220.00	169.00	128.00	159.00	64.20	28.70	119.86		Jun 11	601.00	113.86	17.54	1980		
1981	27.70	25.50	22.70	21.30	317.00	406.00	215.00	107.00	132.00	77.10	49.20	32.00	119.79		May 28	785.00	90.77	19.30	1981		
1982	21.90	13.60	8.96	16.80	133.00	409.00	188.00	117.00	93.80	71.50	46.50	31.60	96.15		Jun 12	611.00	82.07	8.17	1982		
1983																			1983		
1984	16.70	13.30	10.90	26.40	163.00	479.00	271.00	172.00	114.00	68.10	42.70	30.60	117.35		Jun 10	827.00	83.00	10.59	1984		
1985	22.00	18.80	17.40	16.30	119.00	494.00	365.00	153.00	106.00	64.60	24.20	23.30	119.00		Jun 06	860.00	99.56	15.33	1985		
1986	23.30	19.10	16.00	18.20	133.00	529.00	455.00	179.00	107.00	105.00	50.70	34.70	139.75		Jul 03	906.00	86.36	15.03	1986		
1987	24.80	21.00	18.20	21.00	163.00	487.00	329.00	168.00	142.00	112.00	47.50	46.00	132.07		Jun 01	791.00	112.00	17.71	1987		
1988	34.90	24.50	20.50	23.00	357.00	611.00	506.00	198.00	166.00	129.00	61.80	44.90	181.87		Jun 11	867.00	134.57	20.00	1988		
1989	34.50	26.60	22.30	29.30	232.00	400.00	178.00	105.00	70.00	66.00	36.10	32.20	102.95		Jun 16	672.00	62.83	20.84	1989		
1990	26.60	22.40	20.70	28.40	205.00	563.00	251.00	138.00	151.00	98.10	47.10	45.00	133.23		Jun 02	1040.00	116.14	20.49	1990		
1991	37.70	30.90	24.60	42.80	294.00	509.00	344.00	195.00	172.00	120.00	63.20	43.60	156.99		Jun 08	740.00	138.14	22.27	1991		
1992	35.90	32.60	27.60	25.80	135.00	786.00	452.00	199.00	125.00	79.50	36.60	32.60	163.82		Jun 18	1190.00	116.14	20.66	1992		
1993	20.90	16.30	13.80	22.10	267.00	468.00	247.00	129.00	98.10	77.90	17.30	19.70	116.86		May 31	783.00	89.26	10.06	1993		
1994																			1994		
1995																			1995		
1996																			1996		
1997																			1997		
1998																			1998		
1999																			1999		
2000																			2000		
2001																			2001		
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2003																			2003		
2004																			2004		
2005																			2005		
2006																			2006		
2007																			2007		
2008																			2008		
2009																			2009		
2010																			2010		
2011																			2011		
Avg.	26.33	21.69	18.79	24.05	205.76	501.94	324.82	161.06	121.46	95.08	47.15	33.88	132.18	136.57		804.53	101.23	17.13	m <sup>3</sup> /s		
S. D.	5.98	5.26	4.69	6.32	74.91	106.89	107.33	31.06	26.34	27.38	13.79	7.74	22.86			162.54	19.47	4.11	m <sup>3</sup> /s		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	27.24	22.05	18.64	24.28	209.83	511.75	316.75	155.00	123.08	89.07	43.58	34.68	131.65	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	6	5	7	60	142	91	44	34	26	12	10	445	mm	10-Year	1110.9	80.093	11.893	m <sup>3</sup> /s		



**TURNAGAIN RIVER ABOVE SANDPILE CREEK 10BA001**

Station Longitude Latitude: -127.846616 59.064847

Monthly and Annual Discharge in m<sup>3</sup>/s

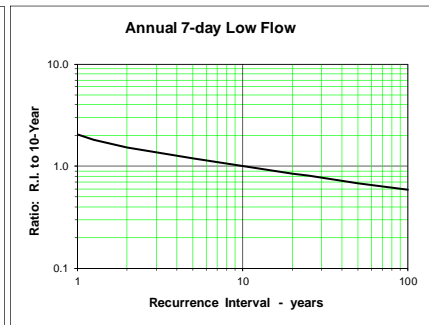
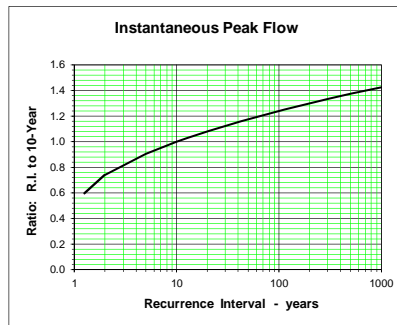
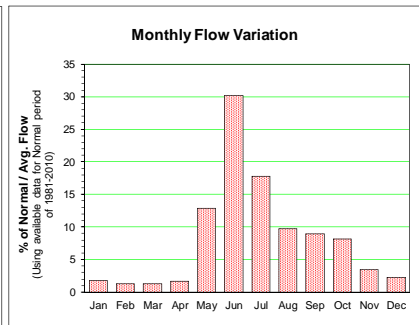
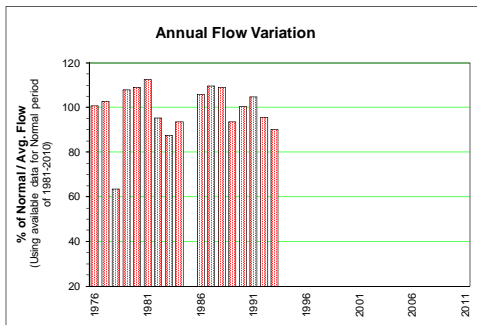
Drainage Area = 6629.11 km<sup>2</sup>

Median Elevation = 1435 m

Instantaneous Peak Flow

7-Day Low Flow

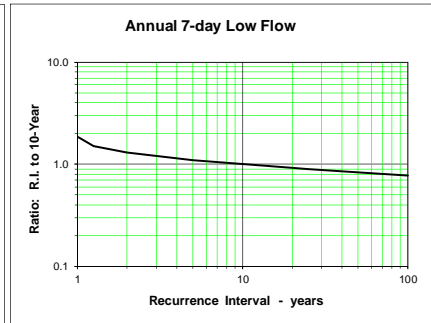
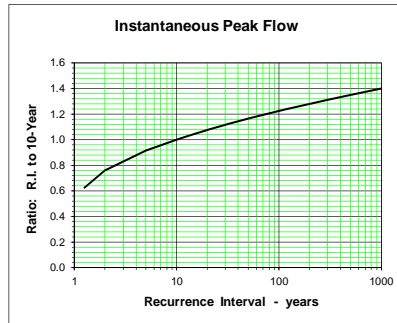
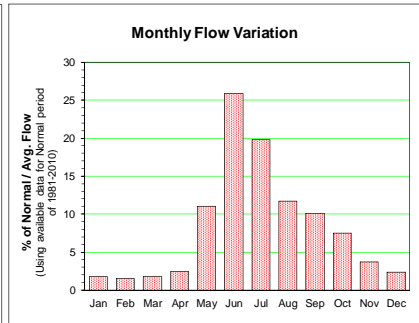
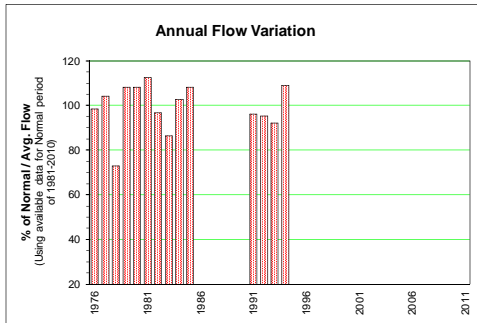
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1976	17.80	14.10	12.70	16.20	93.10	289.00	254.00	135.00	114.00	69.40	39.30	21.80	89.84		Jun 29	484.00	93.11	12.40	1976
1977	20.10	17.90	14.70	21.80	119.00	345.00	239.00	122.00	88.30	61.50	29.40	17.40	91.62		Jun 16	504.00	80.67	13.94	1977
1978	12.90	11.50	10.60	13.50	54.70	192.00	84.10	76.10	80.30	82.40	37.30	23.00	56.64		Jun 05	317.00	58.86	10.39	1978
1979	15.00	11.00	10.50	16.40	97.90	407.00	309.00	91.20	75.40	70.20	32.30	16.10	96.30		Jun 03	555.00	58.04	9.94	1979
1980	12.80	12.80	11.60	16.40	134.00	265.00	218.00	159.00	117.00	131.00	55.30	30.30	97.21		Jul 24	513.00	103.23	11.11	1980
1981	24.60	19.30	18.20	17.60	232.00	349.00	197.00	85.00	96.40	83.90	57.00	20.20	100.35		May 27	681.00	59.73	14.89	1981
1982	13.20	12.40	7.29	5.85	37.20	420.00	179.00	105.00	110.00	77.30	33.30	20.10	85.02		Jun 12	632.00	73.16	5.50	1982
1983	16.80	15.40	14.90	21.50	109.00	275.00	143.00	112.00	110.00	68.70	34.00	16.60	78.24		Jun 01	610.00	84.59	13.76	1983
1984	12.40	12.10	11.50	18.70	45.10	295.00	194.00	169.00	134.00	69.40	24.00	17.70	83.59		Jun 25	499.00	71.29	10.71	1984
1985	15.00	11.80	12.70	14.30						123.00	82.70	27.50	20.00					10.73	1985
1986	18.80	12.90	13.50	16.30	50.60	282.00	246.00	98.50	80.60	194.00	68.60	45.60	94.42		Jun 08	499.00	65.67	11.36	1986
1987	27.70	19.90	15.10	17.50	101.00	320.00	239.00	122.00	118.00	127.00	37.50	25.50	97.87		Jun 22	576.00	80.97	13.79	1987
1988	20.00	16.60	15.90	20.20	154.00	330.00	249.00	129.00	84.90	75.70	40.90	29.90	97.38		Jun 11	627.00	73.07	15.90	1988
1989	20.30	16.60	15.50	25.10	217.00	299.00	140.00	85.70	61.40	56.10	35.10	24.70	83.35		Jun 05	497.00	50.26	14.77	1989
1990	20.10	18.30	17.50	19.70	175.00	396.00	180.00	83.60	68.50	44.40	27.40	21.90	89.53		Jun 02	821.00	62.16	17.39	1990
1991	18.00	15.80	14.70	21.30	174.00	267.00	159.00	94.30	164.00	110.00	50.10	30.60	93.52		Jun 22	326.00	64.93	14.59	1991
1992	22.70	18.50	17.00	24.70	88.80	420.00	173.00	72.10	62.40	71.80	32.40	23.30	85.39		Jun 16	704.00	46.11	16.79	1992
1993	17.10	14.10	12.20	20.70	245.00	278.00	151.00	79.10	48.20	54.50	25.40	16.30	80.53		May 21	479.00	43.76	11.89	1993
1994																			1994
1995																			1995
1996																			1996
1997																			1997
1998																			1998
1999																			1999
2000																			2000
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2009																			2009
2010																			2010
2011																			2011
Avg.	18.07	15.06	13.67	18.21	125.14	319.35	197.30	106.98	96.47	85.00	38.16	23.39	88.28	87.62		548.47	68.80	12.77	m <sup>3</sup> /s
S. D.	4.24	2.91	2.80	4.48	65.50	63.43	55.08	28.74	29.60	35.69	12.16	7.26	10.52			126.64	16.22	2.90	m <sup>3</sup> /s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	18.98	15.67	14.31	18.73	135.73	327.58	187.50	102.94	97.03	85.81	37.94	24.03	89.10	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	6	6	7	55	128	76	42	38	35	15	10	424	mm	10-Year	745.0	51.543	8.214	m <sup>3</sup> /s



**KECHIKA RIVER AT THE MOUTH 10BB001**

Station Longitude Latitude: -127.308424 59.614046

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 22937.99 km <sup>2</sup>		Median Elevation = 1320 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			
1976	57.30	50.10	46.20	56.70	257.00	626.00	693.00	428.00	312.00	193.00	116.00	72.10	242.95	Jul 02	1150.00	255.86	45.17	1976			
1977	68.50	56.20	48.00	78.60	310.00	870.00	682.00	406.00	237.00	170.00	93.30	55.50	257.21	Jun 17	1220.00	221.29	46.03	1977			
1978	48.90	42.60	39.30	60.20	157.00	528.00	292.00	298.00	271.00	231.00	117.00	75.60	180.48	Jun 06	756.00	197.43	38.21	1978			
1979	54.00	37.70	42.60	53.30	251.00	902.00	867.00	342.00	254.00	209.00	115.00	62.90	267.04	Jul 04	1360.00	232.86	35.76	1979			
1980	51.10	52.10	49.00	51.50	300.00	648.00	656.00	422.00	349.00	370.00	164.00	89.30	267.61	Jul 25	1160.00	321.86	48.01	1980			
1981	69.00	58.30	60.40	60.60	573.00	905.00	586.00	309.00	299.00	210.00	136.00	59.40	278.14	May 28	1530.00	218.29	48.46	1981			
1982	44.10	45.90	49.00	53.30	160.00	965.00	510.00	325.00	314.00	206.00	118.00	72.40	238.78	Jun 15	1360.00	223.86	40.40	1982			
1983	59.50	57.30	53.40	60.80	232.00	734.00	425.00	328.00	265.00	177.00	107.00	57.20	213.43	Jun 02	1340.00	230.29	49.00	1983			
1984	44.20	42.90	47.90	66.60	176.00	736.00	605.00	530.00	351.00	199.00	134.00	110.00	253.95	Jun 26	1250.00	248.14	40.14	1984			
1985	58.20	42.30	46.90	63.90	298.00	672.00	842.00	330.00	396.00	267.00	105.00	66.80	267.03	Jul 13	1370.00	253.71	38.00	1985			
1986																			1986		
1987																			1987		
1988																			1988		
1989																			1989		
1990																			1990		
1991	50.80	49.00	49.80	91.60	400.00	618.00	475.00	293.00	366.00	269.00	100.00	78.40	237.63	Jun 30	801.00	260.57	45.80	1991			
1992	61.00	56.00	76.60	97.50	221.00	986.00	493.00	257.00	189.00	226.00	107.00	61.80	235.79	Jun 17	1692.98	152.29	48.50	1992			
1993	49.70	51.00	50.50	80.00	468.00	721.00	482.00	295.00	179.00	174.00	108.00	64.10	227.81	May 31	1150.00	160.00	46.93	1993			
1994	42.90	34.90	36.10	84.60	364.00	681.00	767.00	414.00	382.00	247.00	93.10	66.80	269.23	Jul 11	1360.00	254.43	33.97	1994			
1995	56.00	49.80	54.30																1995		
1996																			1996		
1997																			1997		
1998																			1998		
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2007																			2007		
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2009																			2009		
2010																			2010		
2011																			2011		
Avg.	54.35	48.41	50.00	68.51	297.64	756.57	598.21	355.50	297.43	224.86	115.24	70.88	245.51	245.48	1250.00	230.78	43.36	m <sup>3</sup> /s			
S. D.	8.13	7.20	9.42	15.12	120.07	143.44	164.32	74.09	68.31	52.42	18.95	14.50	26.36		249.32	42.77	5.09	m <sup>3</sup> /s			
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	53.54	48.74	52.49	73.21	321.33	779.78	576.11	342.33	304.56	219.44	112.01	70.77	246.87	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	6	5	6	8	38	88	67	40	34	26	13	8	340	mm	10-Year	1646.0	174.682	33.267	m <sup>3</sup> /s		

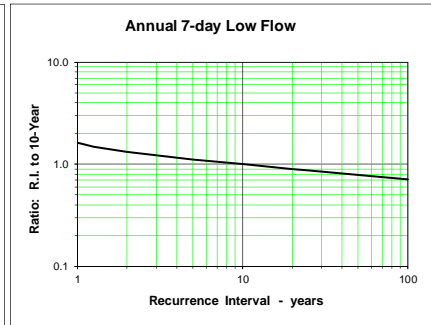
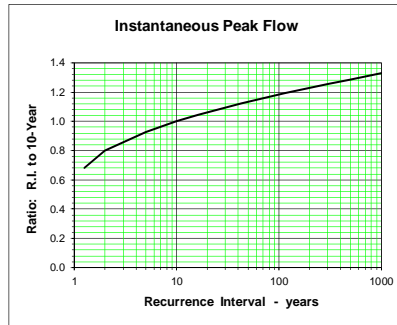
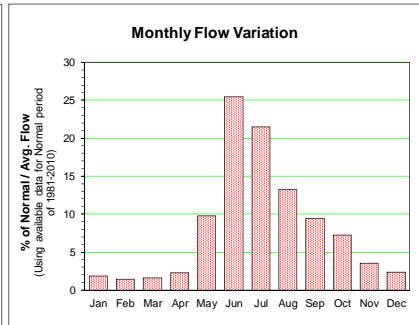
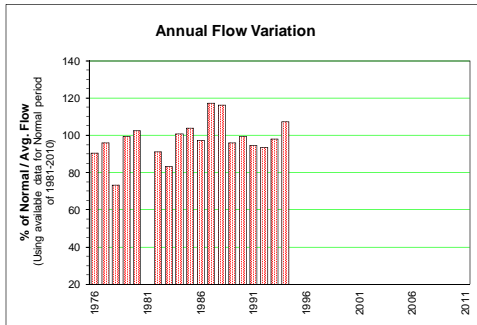




**KECHIKA RIVER ABOVE BOYA CREEK 10BB002**

Station Longitude Latitude: -127.534614 59.097497

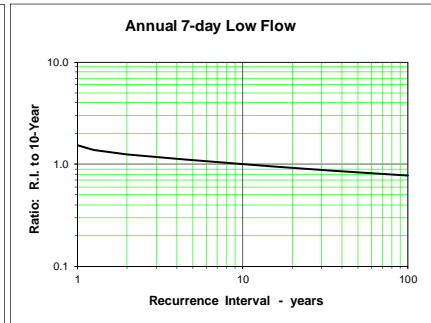
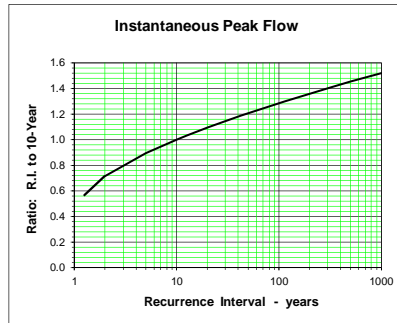
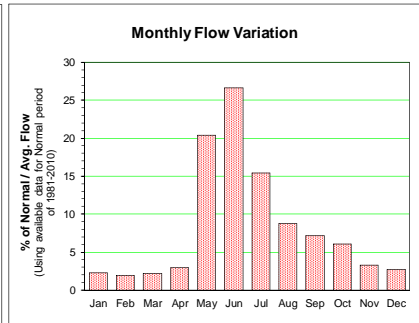
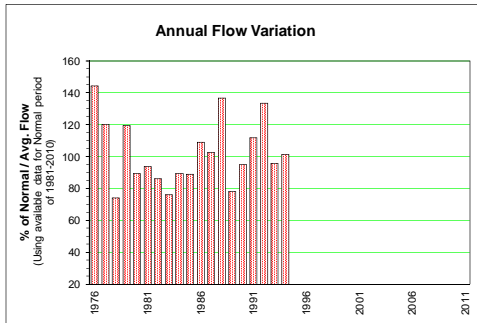
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 11276.41 km <sup>2</sup>		Median Elevation = 1433 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976	30.50	25.60	23.90	33.70	146.00	311.00	384.00	264.00	163.00	103.00	62.00	37.10	132.45	Jul 02	634.00	133.29	23.53	1976			
1977	34.40	29.00	25.40	46.10	167.00	436.00	372.00	255.00	129.00	95.10	56.00	33.00	140.45	Jun 21	646.00	117.43	23.81	1977			
1978	24.90	21.90	21.30	35.20	81.60	315.00	188.00	198.00	161.00	125.00	66.40	44.10	107.15	Jun 09	433.00	111.96	20.33	1978			
1979	33.10	25.20	29.30	32.90	117.00	426.00	472.00	217.00	152.00	120.00	75.80	36.90	145.45	Jul 04	719.00	140.43	23.51	1979			
1980	28.90	29.70	26.90	27.10	153.00	352.00	403.00	229.00	198.00	205.00	92.10	52.00	150.19	Jul 17	686.00	168.57	25.70	1980			
1981	42.20	36.30	35.20						166.00	104.00	72.70	36.60						1981			
1982	26.70	28.10	28.50	29.50	99.00	489.00	300.00	196.00	183.00	115.00	65.30	38.60	133.45	Jun 15	732.00	130.29	25.17	1982			
1983	31.10	28.90	27.00	31.60	123.00	418.00	372.00	202.00	140.00	95.70	56.40	31.50	121.75	Jun 02	690.00	118.43	24.44	1983			
1984	24.40	24.60	29.10	44.40	96.00	422.00	381.00	341.00	199.00	111.00	55.40	37.90	147.46	Jun 25	685.00	143.14	22.76	1984			
1985	32.20	23.60	25.50	34.90	142.00	353.00	467.00	217.00	252.00	161.00	63.70	43.30	152.05	Jul 12	655.46	161.14	21.06	1985			
1986	36.50	25.10	30.20	36.30	86.20	369.00	464.00	203.00	112.00	192.00	86.80	61.30	142.73	Jul 15	698.00	96.79	22.96	1986			
1987	41.30	32.10	32.20	36.30	165.00	472.00	468.00	276.00	241.00	188.00	61.40	37.10	171.66	Jul 04	763.00	176.29	28.50	1987			
1988	34.90	31.40	32.00	46.00	225.00	542.00	451.00	288.00	156.00	114.00	74.30	45.50	170.39	Jun 13	864.00	116.29	30.20	1988			
1989	32.70	29.20	26.80	45.40	217.00	436.00	297.00	249.00	141.00	103.00	63.30	37.80	140.41	Jun 06	612.00	110.29	25.49	1989			
1990	30.50	27.30	27.70	32.60	198.00	624.00	332.00	188.00	119.00	77.10	50.10	36.30	145.52	Jun 03	1030.00	104.33	26.99	1990			
1991	30.40	27.10	25.60	46.60	219.00	359.00	308.00	184.00	196.00	140.00	72.70	48.20	138.63	Jun 30	509.00	172.29	25.29	1991			
1992	38.00	32.70	30.90	54.80	126.00	545.00	310.00	167.00	112.00	130.00	56.90	40.30	136.93	Jun 17	840.00	89.29	29.70	1992			
1993	27.40	23.40	22.80	51.70	300.00	448.00	320.00	208.00	126.00	104.00	52.50	31.10	143.60	May 31	597.00	107.43	22.59	1993			
1994	24.10	20.20	18.10	37.80	202.00	418.00	454.00	262.00	216.00	125.00	53.20	44.90	157.12	Jul 11	679.00	169.29	17.79	1994			
1995																		1995			
1996																		1996			
1997																		1997			
1998																		1998			
1999																		1999			
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2009																		2009			
2010																		2010			
2011																		2011			
Avg.	31.80	27.44	27.28	39.05	159.04	429.72	369.06	230.22	166.42	126.73	65.11	40.71	143.19	141.12	692.91	131.50	24.43	m <sup>3</sup> /s			
S. D.	5.27	4.03	4.09	7.96	58.50	83.16	83.18	44.28	41.81	35.50	11.52	7.46	15.23		132.00	27.98	3.17	m <sup>3</sup> /s			
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	32.31	27.86	27.97	40.61	169.09	453.46	371.08	229.31	168.50	125.70	63.19	40.74	146.28	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	6	7	9	40	104	88	54	39	30	15	10	409	mm	10-Year	840.7	100.122	18.480	m <sup>3</sup> /s		



**COAL RIVER AT THE MOUTH 10BC001**

Station Longitude Latitude: -126.951584 59.690637

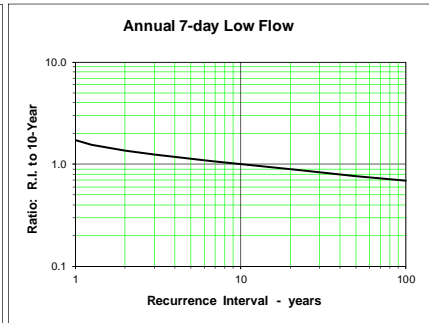
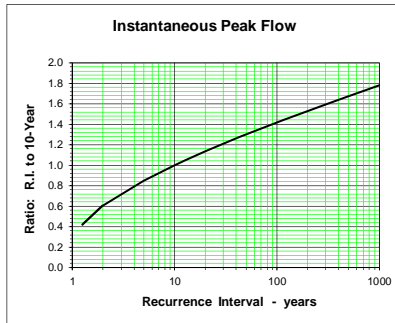
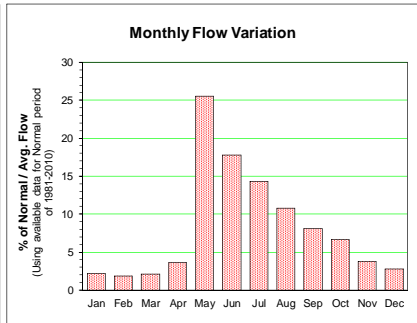
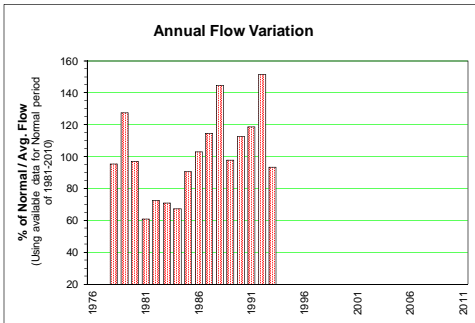
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual	Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			Date	Annual	Jun-Sep	Annual	
1976	22.80	22.10	22.20	26.70	314.00	376.00	306.00	165.00	128.00	77.60	56.80	34.80	129.73	Jun 10	1200.00	101.73	21.74	1976	
1977	30.50	27.60	26.70	40.40	280.00	305.00	199.00	147.00	106.00	69.80	33.90	26.00	108.17	May 26	776.00	95.66	25.07	1977	
1978	23.70	20.70	19.60	28.40	122.00	145.00	156.00	92.50	67.50	72.50	27.20	20.80	66.69	Jul 02	663.00	60.31	18.94	1978	
1979	22.10	21.80	23.70	30.00	244.00	317.00	259.00	111.00	114.00	68.00	42.20	30.40	107.43	May 27	824.00	71.81	18.91	1979	
1980	23.10	22.60	21.60	32.00	197.00	193.00	114.00	91.10	92.90	111.00	39.20	26.10	80.52	Jun 18	475.00	76.74	20.66	1980	
1981	22.70	21.70	22.60	25.00	251.00	239.00	108.00	59.90	82.80	74.00	62.90	38.40	84.31	May 27	580.00	49.76	20.14	1981	
1982	25.00	24.90	23.10	26.80	198.00	266.00	93.90	89.00	61.80	49.90	36.90	29.80	77.29	May 19	729.00	51.29	22.56	1982	
1983	22.30	19.60	19.60	46.70	164.00	215.00	106.00	80.80	55.50	40.80	27.20	20.50	68.37	Jun 01	581.00	50.94	19.03	1983	
1984	16.40	13.60	13.70	23.50	168.00	336.00	125.00	78.50	79.50	52.40	31.70	27.00	80.40	Jun 09	941.00	63.80	13.06	1984	
1985	22.00	19.10	19.50	21.30	213.00	292.00	152.00	75.00	60.70	41.70	19.90	19.80	79.96	Jun 05	602.00	55.70	18.19	1985	
1986	23.60	19.00	17.80	20.10	215.00	318.00	262.00	106.00	71.00	77.80	19.80	20.40	98.08	May 31	890.00	61.50	16.86	1986	
1987	21.40	23.10	22.10	26.60	212.00	300.00	165.00	113.00	88.30	80.60	27.00	24.60	92.34	May 31	706.00	78.44	20.47	1987	
1988	23.10	21.40	22.20	25.70	280.00	373.00	355.00	128.00	96.00	76.10	39.00	29.10	122.81	Jul 02	808.00	90.59	20.40	1988	
1989	25.30	24.10	24.80	38.40	162.00	221.00	110.00	75.90	54.20	45.20	30.30	27.70	70.11	Jun 16	378.34	49.11	22.81	1989	
1990	23.30	22.60	23.70	29.90	208.00	303.00	145.00	89.70	68.10	49.50	31.20	27.10	85.35	Jun 01	953.00	62.00	22.14	1990	
1991	23.50	24.10	25.00	46.00	287.00	230.00	187.00	101.00	113.00	83.20	44.50	34.90	100.46	May 15	591.00	78.49	21.31	1991	
1992	34.20	30.90	30.90	43.60	167.00	510.00	204.00	134.00	104.00	85.50	63.30	35.10	120.04	Jun 02	1000.00	81.87	22.24	1992	
1993	22.60	29.70	30.30	43.60	247.00	225.00	152.00	84.00	63.20	62.30	37.20	33.70	86.28	May 30	522.00	60.20	19.86	1993	
1994	26.00	22.40	23.60	41.00	248.00	256.00	125.00	88.50	97.70	83.50	41.70	37.30	91.26	Jun 11	614.00	71.34	21.60	1994	
1995	30.20	26.50	29.10													24.76		1995	
1996																		1996	
1997																		1997	
1998																		1998	
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2010																		2010	
2011																		2011	
Avg.	24.19	22.88	23.09	32.41	219.84	285.26	174.94	100.52	84.43	68.49	37.47	28.61	92.08	97.77	728.07	69.02	20.54	m <sup>3</sup> /s	
S. D.	3.79	3.91	4.16	8.80	50.82	81.43	73.39	26.97	22.20	18.24	12.61	5.91	18.57		205.68	15.87	2.71	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	24.11	22.85	23.20	32.73	215.71	291.71	163.56	93.09	78.27	64.46	36.61	28.96	89.79	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	7	6	7	9	64	84	49	28	23	19	11	9	316	mm	10-Year	1052.4	52.831	16.343	m <sup>3</sup> /s



**BEAVER RIVER BELOW WHITEFISH RIVER 10BD001**

Station Longitude Latitude:

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 7280.00 km <sup>2</sup>		Median Elevation = 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			
1976																			1976		
1977																			1977		
1978	14.80	13.90	13.40	42.30	144.00	61.10	148.00	92.80	51.00	63.30	34.70	26.10	59.28		Jul 02	851.49	37.09	12.36	1978		
1979	16.60	12.40	12.80	71.00	301.00	193.00	126.00	67.00	68.40	38.60	22.00	16.50	79.21		May 27	614.00	48.93	11.83	1979		
1980	14.40	15.10	14.80	40.70	118.00	80.70	124.00	62.10	92.40	84.70	48.40	24.90	60.20		Jul 16	320.00	52.66	13.66	1980		
1981	18.80	15.00	14.40	14.70	98.10	102.00	40.90	46.00	35.20	25.60	17.30	37.90			May 27	257.00	20.36	13.64	1981		
1982	10.90	12.20	12.10	16.60	125.00	117.00	40.10	91.90	44.00	30.70	20.70	17.00	45.07		Aug 12	309.00	28.91	10.19	1982		
1983	15.30	14.00	14.90	27.60	146.00	94.40	57.80	63.10	29.90	28.90	20.40	14.40	44.15		May 31	302.80	26.51	13.54	1983		
1984	9.03	8.78	12.30	19.60	94.30	105.00	87.10	55.70	47.80	30.10	15.70	13.90	41.73		Jun 21	234.00	35.17	7.74	1984		
1985	12.50	12.10	12.50	13.40	201.00	99.90	91.40	55.20	76.70	49.80	26.50	19.80	56.28		May 21	519.00	46.80	11.53	1985		
1986	17.10	16.50	17.40	20.80	116.00	129.00	184.00	84.90	59.40	66.00	30.60	21.90	64.06		Jul 03	754.00	48.01	15.77	1986		
1987	16.70	15.00	15.10	21.20	191.00	156.00	144.00	104.00	73.40	54.50	34.10	25.30	71.31		Jul 15	527.00	55.96	13.67	1987		
1988	19.30	17.10	15.70	38.30	280.00	148.00	240.00	128.00	64.30	58.10	34.00	27.90	89.82		Jul 01	702.00	60.13	15.26	1988		
1989	22.20	18.40	14.10	55.70	256.00	93.70	72.60	64.60	44.00	38.00	24.10	20.60	60.74		May 06	500.00	37.60	13.21	1989		
1990	17.10	15.10	16.60	23.70	248.00	166.00	108.00	93.50	56.60	41.40	26.50	21.00	69.92		May 31	615.00	44.66	14.89	1990		
1991	17.50	18.30	18.40	48.40	290.00	82.70	130.00	76.20	75.50	63.90	32.60	24.30	73.75		May 14	631.00	64.37	15.51	1991		
1992	19.70	19.00	18.80	26.00	204.00	371.00	60.30	105.00	128.00	99.70	53.00	25.20	94.00		Jun 06	748.00	37.19	17.91	1992		
1993	18.20	17.70	17.50	35.40	184.00	81.60	112.00	82.70	49.20	43.50	27.90	22.90	58.15		May 07	340.00	44.29	14.97	1993		
1994																			1994		
1995																			1995		
1996																			1996		
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2006																			2006		
2007																			2007		
2008																			2008		
2009																			2009		
2010																			2010		
2011																			2011		
Avg.	16.26	15.04	15.05	32.21	187.28	130.07	110.39	78.28	63.24	51.19	29.60	20.94	62.85	62.84		514.02	43.04	13.48	m <sup>3</sup> /s		
S. D.	3.38	2.78	2.18	16.30	70.67	73.56	53.52	24.69	22.81	19.72	9.59	4.34	16.39			199.14	12.20	2.42	m <sup>3</sup> /s		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	16.49	15.32	15.37	27.80	187.18	134.33	105.25	79.28	61.14	49.22	28.59	20.88	62.07	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	6	5	6	10	69	48	39	29	22	18	10	8	269	mm	10-Year	801.8	27.253	10.155	m <sup>3</sup> /s		



**LIARD RIVER AT LOWER CROSSING 10BE001**

Station Longitude Latitude: -126.097218 59.412492

Monthly and Annual Discharge in m<sup>3</sup>/s

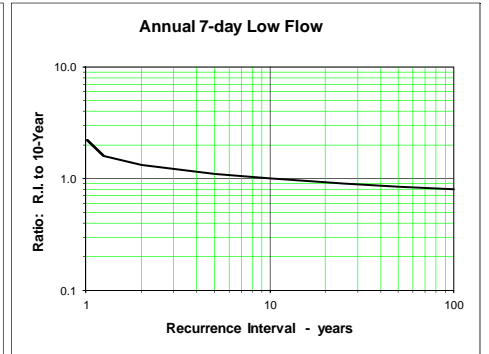
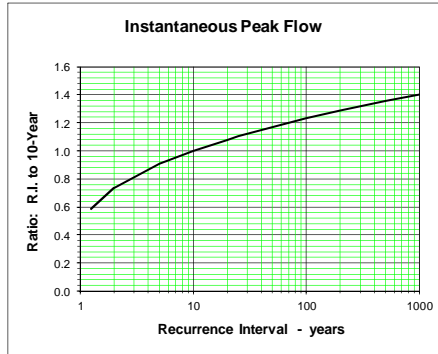
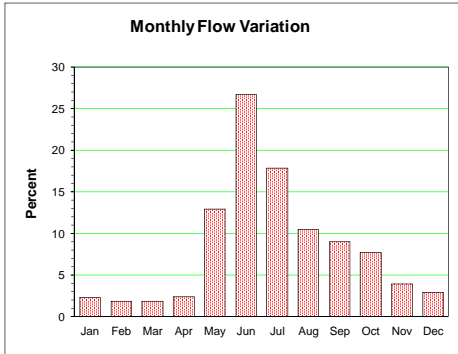
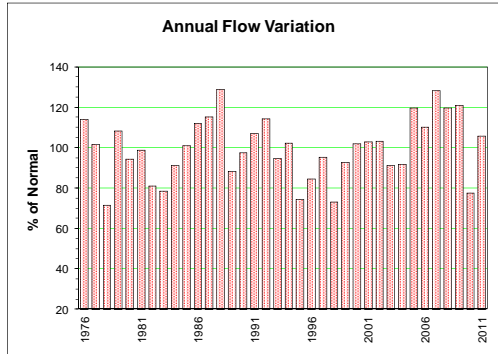
Drainage Area = 104327.96 km<sup>2</sup>

Median Elevation = 1151 m

Instantaneous Peak Flow

7-Day Low Flow

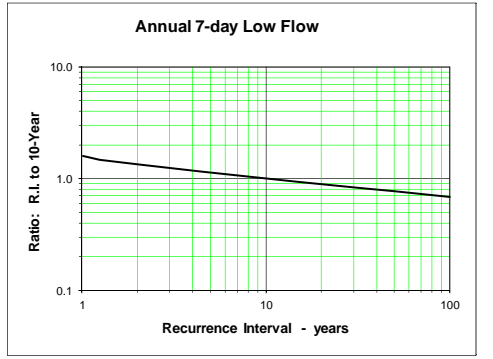
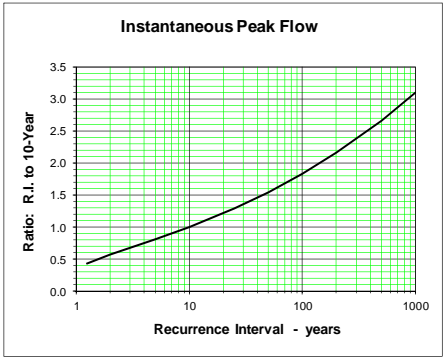
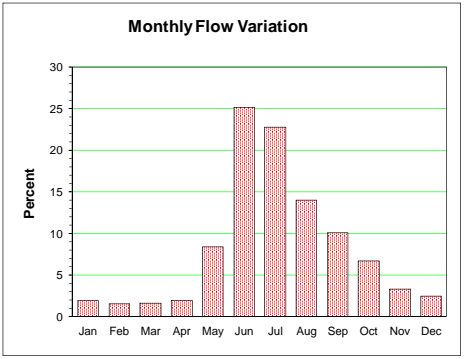
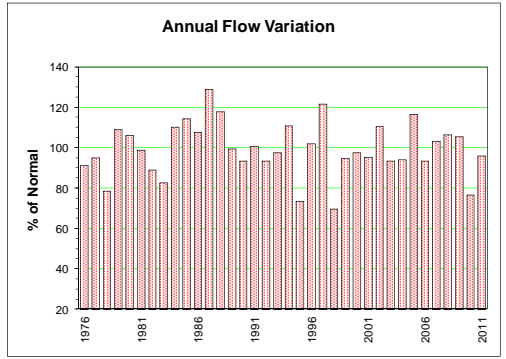
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1976	275.0	254.0	232.0	259.0	1890.0	3930.0	3770.0	1930.0	1310.0	871.0	506.0	363.0	1302.7		Jul 03	5610	1104.29	222.57	1976
1977	329.0	298.0	247.0	258.0	1720.0	4110.0	2690.0	1600.0	1110.0	834.0	380.0	314.0	1161.2		Jun 04	5040	970.00	233.43	1977
1978	266.0	237.0	214.0	228.0	864.0	2240.0	1540.0	1220.0	1020.0	1010.0	557.0	395.0	818.5		Jun 10	2940	877.00	205.86	1978
1979	271.0	213.0	229.0	228.0	1560.0	4380.0	3670.0	1500.0	1050.0	905.0	449.0	332.0	1237.4		Jul 05	5610	943.57	203.00	1979
1980	300.0	294.0	268.0	266.0	1500.0	2800.0	2060.0	1580.0	1260.0	1510.0	712.0	336.0	1076.1		Jun 11	3970	1170.00	243.14	1980
1981	315.0	283.0	257.0	252.0	2610.0	3690.0	1970.0	1020.0	1230.0	935.0	562.0	366.0	1127.7		May 29	6250	805.29	232.71	1981
1982	259.0	170.0	160.0	171.0	963.0	3840.0	1830.0	1100.0	1040.0	782.0	447.0	336.0	926.1		Jun 14	5390	821.71	156.71	1982
1983	273.0	206.0	200.0	200.0	1170.0	3230.0	1620.0	1210.0	1160.0	814.0	424.0	225.0	896.1		Jun 03	5460	1031.43	183.43	1983
1984	187.0	217.0	228.0	271.0	1220.0	3610.0	2280.0	1560.0	1270.0	809.0	504.0	339.0	1041.7		Jun 11	5090	986.71	182.57	1984
1985	220.0	191.0	187.0	207.0	1210.0	3880.0	3270.0	1380.0	1400.0	1010.0	484.0	352.0	1153.4		Jun 07	6510	1184.29	182.00	1985
1986	285.0	232.0	217.0	259.0	1250.0	3770.0	3490.0	1560.0	1140.0	1680.0	853.0	555.0	1280.3		Jul 04	5751	995.00	212.29	1986
1987	378.0	319.0	277.0	284.0	1560.0	4120.0	3070.0	1650.0	1460.0	1400.0	672.0	528.0	1314.4		Jun 02	5760	1321.43	267.86	1987
1988	411.0	319.0	274.0	300.0	2510.0	4470.0	4030.0	1910.0	1280.0	1050.0	571.0	475.0	1470.9		Jul 15	6640	1154.29	251.43	1988
1989	431.0	290.0	196.0	812.0	2320.0	3020.0	1580.0	1090.0	762.0	730.0	462.0	363.0	1007.7		Jun 07	4000	671.71	184.57	1989
1990	262.0	213.0	225.0	285.0	1860.0	4630.0	2240.0	1140.0	1000.0	785.0	376.0	334.0	1114.8		Jun 03	7350	953.57	206.71	1990
1991	271.0	267.0	244.0	411.0	2160.0	3170.0	2340.0	1570.0	1780.0	1400.0	552.0	431.0	1221.3		Jun 10	3680	1340.00	236.57	1991
1992	353.0	308.0	317.0	413.0	1430.0	5530.0	2890.0	1480.0	1070.0	980.0	492.0	428.0	1306.8		Jun 18	7360	985.86	267.57	1992
1993	317.0	310.0	281.0	386.0	2300.0	3280.0	2030.0	1180.0	879.0	959.0	610.0	395.0	1081.2		May 31	4610	851.43	264.43	1993
1994	250.0	176.0	177.0	400.0	1920.0	3530.0	2480.0	1370.0	1500.0	1360.0	501.0	288.0	1167.3		Jun 11	4660	1108.57	167.14	1994
1995	255.0	239.0	266.0	417.0	1690.0	1930.0	1400.0	1270.0	1110.0	797.0	447.0	333.0	849.7		May 16	2900	1007.14	230.43	1995
1996	254.0	229.0	229.0	287.0	1150.0	2890.0	2240.0	1450.0	1290.0	817.0	420.0	330.0	966.7		Jun 08	3670	1165.71	213.14	1996
1997	255.0	231.0	192.0	230.0	1860.0	3280.0	2430.0	1670.0	1250.0	798.0	451.0	353.0	1087.9		Jun 07	5020	1102.86	179.43	1997
1998	222.0	220.0	209.0	315.0	2240.0	2350.0	1250.0	916.0	715.0	733.0	473.0	322.0	834.0		May 30	5070	660.71	194.29	1998
1999	249.0	216.0	198.0	309.0	1300.0	4260.0	2280.0	1310.0	1000.0	750.0	488.0	337.0	1060.0		Jun 20	5770	968.00	195.00	1999
2000	273.0	263.0	258.0	276.0	912.0	3120.0	2630.0	2050.0	1860.0	1380.0	554.0	362.0	1163.2		Jun 16	4040	1200.00	247.00	2000
2001	331.0	321.0	277.0	360.0	827.0	4470.0	2780.0	1440.0	1270.0	1040.0	517.0	448.0	1175.2		Jun 16	5880	1117.14	236.43	2001
2002	393.0	315.0	253.0	260.0	1660.0	3220.0	2620.0	1640.0	1550.0	1120.0	616.0	445.0	1178.8		Jun 12	4490	1265.71	230.71	2002
2003	366.0	327.0	310.0	379.0	1310.0	2850.0	2450.0	1150.0	1110.0	1150.0	584.0	455.0	1040.5		Jun 21	3590	941.43	276.57	2003
2004	315.0	290.0	266.0	305.0	1840.0	3580.0	1770.0	1020.0	1050.0	986.0	667.0	470.0	1046.8		Jun 10	4600	911.71	259.57	2004
2005	340.0	288.0	261.0	395.0	3650.0	4170.0	2240.0	1430.0	1330.0	1030.0	734.0	466.0	1366.7		May 19	6560	1194.29	245.57	2005
2006	339.0	310.0	303.0	383.0	1880.0	4760.0	2040.0	1410.0	1460.0	1220.0	532.0	440.0	1258.4		Jun 18	6820	1188.57	301.00	2006
2007	375.0	340.0	309.0	360.0	1660.0	4830.0	3610.0	2260.0	1420.0	1220.0	664.0	450.0	1463.4		Jun 09	7800	1298.57	297.43	2007
2008	397.0	323.0	285.0	255.0	2150.0	4520.0	3210.0	1550.0	1470.0	1170.0	565.0	461.0	1365.0		Jun 25	6480	1385.71	235.29	2008
2009	374.0	343.0	318.0	375.0	2040.0	5070.0	2500.0	1610.0	1700.0	1360.0	522.0	317.0	1380.0		Jun 11	7200	1280.00	303.00	2009
2010	402.0	388.0	369.0	437.0	1500.0	2330.0	1580.0	911.0	945.0	862.0	524.0	348.0	885.1		Jun 06	3050	821.71	318.29	2010
2011	301.0	272.0	248.0	299.0	1820.0	3460.0	2300.0	2030.0	1890.0	1050.0	435.0	345.0	1208.4		Jun 23	5280	1475.71	241.00	2011
Avg.	308.17	269.78	249.47	320.33	1708.5	3675.6	2449.44	1449.08	1253.92	1036.31	536.31	384.36	1139.87	1143.42		5275	1062.81	230.78	m <sup>3</sup> /s
S. D.	61.03	52.87	45.91	109.85	571.75	843.88	708.84	323.75	282.20	246.97	103.88	71.08	174.21			1318.58	196.11	40.30	m <sup>3</sup> /s
Normal	311.73	271.47	251.43	333.13	1738.40	3713.33	2405.00	1410.23	1250.03	1037.57	542.27	391.73	1141.04	m <sup>3</sup> /s					
Normal	8	6	6	8	45	92	62	36	31	27	13	10	345	mm	10-Year	7161.40	754.05	164.25	m <sup>3</sup> /s



**TOAD RIVER ABOVE NONDA CREEK 10BE004**

Station Longitude Latitude: -125.382675 58.855382

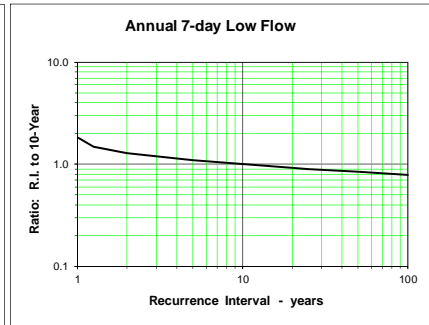
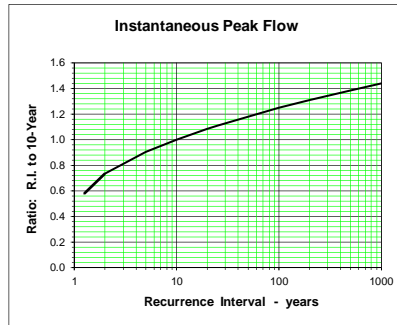
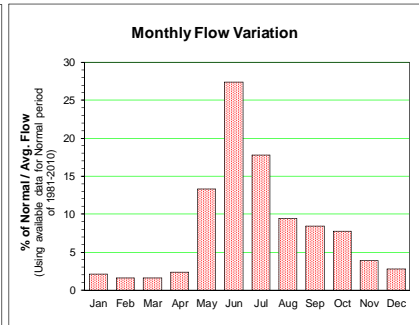
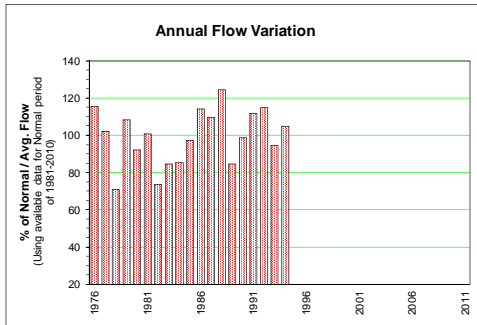
Monthly and Annual Discharge in m <sup>3</sup> /s																Drainage Area = 2540.73 km <sup>2</sup>		Median Elevation = 1634 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year					
1976	7.95	6.70	6.19	8.78	34.20	89.60	139.00	82.30	46.00	25.60	14.80	9.72	39.4		Jul 10	248	32.57	5.94	1976					
1977	9.27	8.02	6.60	9.92	38.70	137.00	122.00	72.10	39.20	24.10	12.80	9.92	41.0		Jun 20	244	33.29	6.11	1977					
1978	7.88	6.69	6.18	7.12	16.90	105.00	59.60	69.90	58.10	36.50	18.20	13.50	33.9		Jun 17	165	32.99	5.87	1978					
1979	9.53	6.61	6.95	8.67	27.40	123.00	199.00	62.90	52.70	35.70	17.20	11.20	47.0		Jul 03	552	45.30	6.27	1979					
1980	8.07	8.59	9.04	10.90	42.60	119.00	126.00	59.90	68.40	62.80	21.70	11.60	45.8		Jul 16	288	49.84	7.42	1980					
1981	10.20	7.67	7.17	7.36	102.00	120.00	86.10	53.90	48.80	29.80	22.40	13.30	42.6		May 27	483	35.74	6.85	1981					
1982	8.42	8.19	8.15	9.43	27.60	155.00	80.70	57.20	48.40	31.10	15.80	10.80	38.4		Jun 15	272	34.44	7.85	1982					
1983	8.96	7.32	6.70	7.37	30.90	126.00	76.30	66.20	44.30	29.20	14.20	9.35	35.7		Jun 01	235	37.39	6.36	1983					
1984	7.13	6.70	7.49	8.74	23.40	146.00	147.00	110.00	54.30	29.50	15.50	12.80	47.5		Jul 09	279	38.21	6.32	1984					
1985	8.69	7.56	7.78	8.68	33.30	119.00	141.00	73.80	105.00	47.70	21.50	15.10	49.3		Jun 05	218	55.47	7.33	1985					
1986	10.50	8.51	8.53	9.17	22.40	116.00	174.00	63.00	35.40	63.30	26.10	17.00	46.5		Jul 14	283	32.30	7.75	1986					
1987	12.40	10.50	9.31	9.92	38.10	133.00	155.00	115.00	89.00	54.70	21.50	15.10	56.6		Jul 03	280	57.27	9.14	1987					
1988	11.10	9.94	9.07	11.50	62.00	145.00	161.00	85.20	50.10	36.30	15.40	11.50	50.8		Jul 14	443	43.11	8.71	1988					
1989	10.20	8.92	7.44	13.10	58.00	148.00	87.50	72.10	46.20	31.80	16.90	12.60	42.9		Jun 05	220	40.10	7.11	1989					
1990	9.76	7.87	7.99	10.40	51.30	168.00	100.00	52.70	35.80	18.20	11.40	9.96	40.4		Jun 01	301	30.23	7.29	1990					
1991	7.94	7.72	7.87	11.00	57.00	111.00	105.00	63.30	68.80	42.60	21.40	15.10	43.4		Jun 29	170	51.01	7.43	1991					
1992	11.60	9.68	9.86	11.90	30.00	149.00	94.70	63.40	35.40	37.60	19.20	10.90	40.3		Jun 16	247	30.00	8.74	1992					
1993	8.79	8.52	7.57	10.20	71.60	130.00	99.40	61.90	39.20	33.10	20.30	13.10	42.2		May 30	182	35.84	7.13	1993					
1994	10.70	9.46	9.81	11.50	53.90	129.00	145.00	71.00	66.00	35.10	16.00	14.50	47.9		Jul 12	242	52.21	8.90	1994					
1995	11.00	9.20	8.57	10.60	39.70	78.70	61.80	71.60	40.50	23.50	12.60	11.20	31.7		Aug 18	117	33.77	8.41	1995					
1996	8.13	7.93	8.06	9.95	22.70	87.50	152.00	106.00	57.40	34.10	18.10	14.00	44.0		Jul 20	243	45.84	6.31	1996					
1997	11.50	10.30	8.48	10.70	46.50	166.00	136.00	102.00	70.20	34.40	17.50	13.80	52.5		Jun 25	210	58.86	7.92	1997					
1998	8.67	8.64	8.21	9.23	60.90	71.90	67.70	44.20	29.30	40.20	14.40	10.80	30.1		May 31	145	25.96	7.83	1998					
1999	9.01	7.96	7.28	11.60	26.10	154.00	117.00	68.40	38.30	23.30	13.40	12.20	40.8		Jun 17	372	31.97	7.12	1999					
2000	9.28	7.16	6.83	7.93	14.70	108.00	124.00	81.90	79.80	35.70	17.60	11.20	42.1		Jun 29	178	22.10	6.37	2000					
2001	10.70	8.50	8.24	9.05	14.80	127.00	136.00	73.80	46.70	29.30	15.10	12.30	41.1		Jul 19	280	30.53	7.59	2001					
2002	9.92	8.59	7.37	7.63	32.20	159.00	153.00	70.90	48.40	37.80	21.60	14.10	47.7		Jun 16	245	40.16	6.62	2002					
2003	11.50	9.94	9.81	11.60	33.80	120.00	110.00	57.30	48.40	37.80	18.70	13.50	40.3		Jun 10	171	42.10	8.86	2003					
2004	10.20	9.22	8.11	10.10	43.10	136.00	92.50	54.40	53.80	35.40	20.40	13.70	40.6		Jun 10	190	43.87	7.85	2004					
2005	9.49	9.37	9.47	14.10	85.50	154.00	113.00	81.40	65.10	30.70	16.80	12.30	50.3		Jun 03	238	52.21	8.14	2005					
2006	10.40	9.83	8.74	10.00	43.10	147.00	85.10	64.30	40.40	33.70	16.30	13.80	40.3		Jun 15	272	30.53	8.49	2006					
2007	10.80	9.51	9.35	11.00	30.50	162.00	128.00	65.00	49.00	31.40	16.40	10.30	44.6		Jun 06	285	46.40	8.68	2007					
2008	10.20	9.48	8.75	8.76	50.30	151.00	147.00	65.40	46.10	29.20	13.10	10.30	45.9		Jul 06	278	39.09	8.02	2008					
2009	8.59	8.49	8.07	8.95	35.80	167.00	117.00	69.50	59.00	38.00	15.10	9.41	45.5		Jun 12	262	52.10	7.83	2009					
2010	9.24	9.69	9.23	11.80	34.20	85.60	79.60	50.00	53.30	27.30	13.50	11.70	33.0		Jul 04	128	37.59	8.50	2010					
2011	10.30	9.07	7.50	8.38	47.50	119.00	86.20	78.60	68.10	31.40	15.10	13.30	41.3		Jun 21	197	49.40	7.40	2011					
Avg.	9.67	8.56	8.10	9.92	41.19	129.51	116.78	71.13	53.47	34.52	17.17	12.36	42.85	43.14		255	40.27	7.51	m <sup>3</sup> /s					
S. D.	1.26	1.08	1.02	1.63	19.01	25.89	33.53	16.31	15.92	9.80	3.36	1.88	5.70			91.27	9.35	0.94	m <sup>3</sup> /s					
Normal	9.83	8.75	8.31	10.11	42.51	132.32	115.75	71.16	53.08	34.22	17.27	12.52	43.13	m <sup>3</sup> /s										
Normal	10	8	9	10	45	135	122	75	54	36	18	13	536	mm	10-Year	419.52	28.59	5.58	m <sup>3</sup> /s					



**LIARD RIVER ABOVE KECHIKA RIVER 10BE006**

Station Longitude Latitude: -127.231992 59.700140

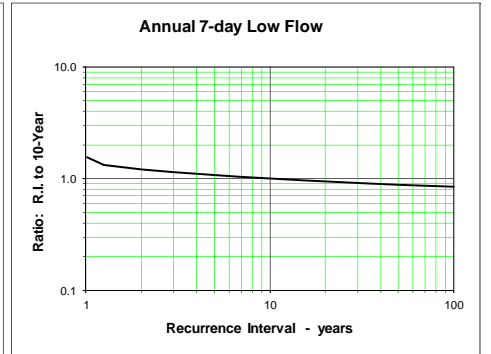
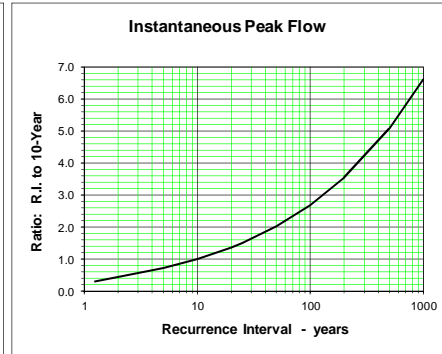
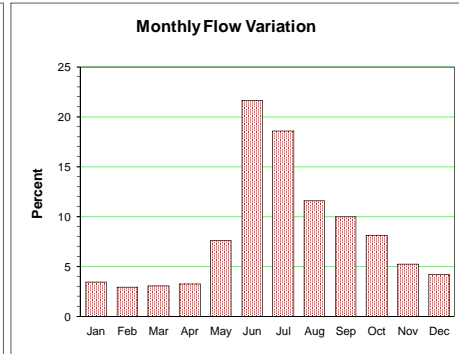
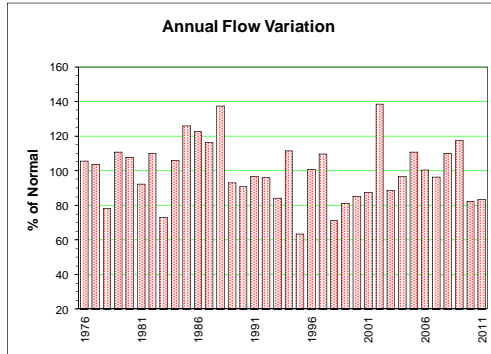
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976	161.00	150.00	135.00	157.00	1190.00	2740.00	2400.00	1080.00	772.00	538.00	315.00	196.00	821.23	Jul 03	3910.00	674.00	128.14	1976	
1977	172.00	167.00	151.00	171.00	1100.00	2680.00	1650.00	941.00	689.00	541.00	171.00	256.00	726.20	Jun 05	3310.00	585.86	143.57	1977	
1978	122.00	109.00	99.70	118.00	579.00	1440.00	1020.00	753.00	587.00	619.00	327.00	253.00	504.19	Jun 10	1900.00	504.14	97.93	1978	
1979	179.00	142.00	152.00	140.00	936.00	2890.00	2200.00	881.00	622.00	565.00	287.00	192.00	768.22	Jun 05	3570.00	553.43	133.86	1979	
1980	157.00	157.00	147.00	166.00	963.00	1780.00	1130.00	982.00	727.00	948.00	460.00	215.00	653.95	Jun 11	2510.44	665.14	143.86	1980	
1981	197.00	176.00	160.00	155.00	1620.00	2260.00	1250.00	603.00	806.00	647.00	406.00	273.00	715.04	May 29	4020.00	455.71	141.71	1981	
1982	168.00	101.00	93.90	104.00	592.00	2210.00	973.00	541.00	542.00	449.00	276.00	207.00	522.00	Jun 13	3040.00	447.29	92.21	1982	
1983	168.00	124.00	122.00	122.00	854.00	2120.00	1100.00	781.00	802.00	549.00	298.00	148.00	600.31	Jun 03	3510.00	666.57	109.14	1983	
1984	115.00	120.00	124.00	164.00	827.00	2140.00	1340.00	799.00	716.00	463.00	273.00	174.00	604.84	Jun 11	3138.05	555.57	109.43	1984	
1985	121.00	98.90	85.70	93.10	665.00	2540.00	2000.00	865.00	718.00	547.00	309.00	232.00	691.94	Jun 07	4260.00	652.00	83.51	1985	
1986	192.00	147.00	146.00	171.00	803.00	2540.00	2130.00	896.00	707.00	1020.00	555.00	367.00	809.53	Jul 05	3846.65	620.86	139.43	1986	
1987	242.00	177.00	157.00	168.00	955.00	2630.00	1820.00	898.00	822.00	804.00	380.00	264.00	778.89	Jun 02	3900.00	769.14	153.86	1987	
1988	194.00	153.00	134.00	170.00	1620.00	2730.00	2410.00	1090.00	755.00	681.00	356.00	285.00	884.16	Jul 15	3990.00	708.00	133.00	1988	
1989	264.00	204.00	151.00	514.00	1470.00	1860.00	912.00	567.00	403.00	422.00	239.00	187.00	600.97	Jun 07	2470.00	365.29	140.43	1989	
1990	153.00	133.00	142.00	186.00	1190.00	2910.00	1390.00	648.00	624.00	500.00	297.00	229.00	701.50	Jun 03	4930.00	549.29	129.43	1990	
1991	153.00	143.00	138.00	253.00	1340.00	2160.00	1520.00	1070.00	1190.00	919.00	332.00	261.00	793.11	Jun 09	2520.00	879.71	129.86	1991	
1992	204.00	174.00	167.00	206.00	911.00	3620.00	1920.00	906.00	646.00	524.00	269.00	235.00	814.63	Jun 18	5070.00	606.29	139.43	1992	
1993	176.00	172.00	155.00	211.00	1390.00	2130.00	1300.00	708.00	537.00	634.00	375.00	245.00	671.93	May 31	2910.00	501.43	146.14	1993	
1994	163.00	115.00	115.00	304.00	1310.00	2340.00	1430.00	755.00	905.00	952.00	322.00	181.00	743.66	Jun 14	2990.00	614.86	108.86	1994	
1995	170.00	174.00	197.00	300.00	1210.00	1370.00	857.00	797.00	752.00					May 16	1970.00	683.00	164.14	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
Avg.	173.55	146.85	138.62	193.66	1076.25	2354.50	1537.60	828.05	716.10	648.53	333.26	227.11	705.59	708.16	3388.26	602.38	128.40	m <sup>3</sup> /s	
S. D.	36.60	29.03	26.45	94.24	318.29	529.97	500.41	163.81	161.11	187.58	76.97	51.28	104.70		879.29	118.47	21.39	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	178.67	147.46	139.17	208.07	1117.13	2370.67	1490.13	794.93	728.33	650.79	334.79	234.86	709.46	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	6	6	9	49	100	65	35	31	28	14	10	365	mm	10-Year	4673.0	470.026	96.113	m <sup>3</sup> /s



**TROUT RIVER AT KILOMETRE 783.7 ALASKA HIGHWAY 10BE007**

Station Longitude Latitude: -125.939734 59.336210

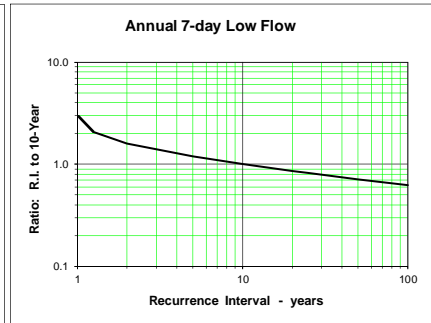
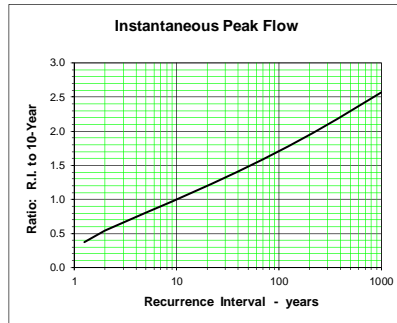
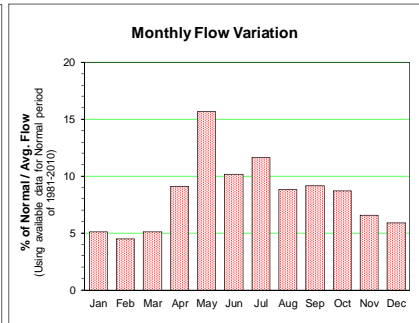
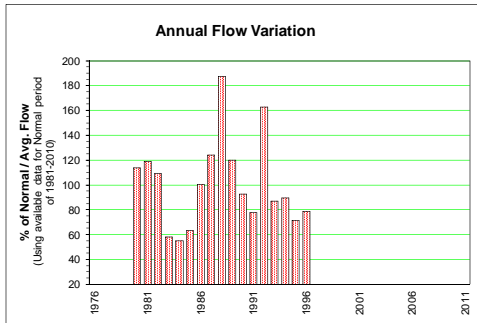
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area =	1190.93 km <sup>2</sup>		Median Elevation =	1415 m		Instantaneous Peak Flow		7-Day Low Flow	
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year				
1976	6.17	6.12	5.57	6.26	13.20	34.80	58.70	26.50	19.70	13.30	10.80	7.49	17.44		Jul 09	84.70	16.43	5.43	1976				
1977	7.00	6.91	6.98	7.49	15.40	52.00	40.10	24.00	16.10	12.80	9.53	7.19	17.16		Jun 19	72.86	15.06	6.70	1977				
1978	6.55	6.18	6.01	6.68	8.38	36.70	20.60	18.20	16.30	12.20	9.50	7.48	12.91		Jun 16	49.30	11.38	5.39	1978				
1979	6.30	5.39	5.53	6.60	9.52	49.30	62.60	19.60	18.90	14.90	12.00	7.88	18.28		Jul 02	227.00	16.79	5.24	1979				
1980	5.90	5.75	5.63	6.61	16.90	35.00	34.50	26.20	25.10	25.90	17.00	9.03	17.82		Jul 16	68.10	22.31	5.46	1980				
1981	8.58	7.79	7.63	7.33	34.60	40.10	21.10	13.70	15.70	11.00	8.68	6.69	15.27		May 27	112.00	12.53	6.12	1981				
1982	5.48	5.30	5.07	5.73	10.30	51.70	32.40	28.90	27.00	19.70	16.40	9.73	18.17		Jun 14	76.30	22.00	4.92	1982				
1983	5.15	3.95	4.66	6.08	9.96	36.80	22.40	17.10	15.10	10.80	6.95	5.73	12.08		May 31	51.00	13.04	3.80	1983				
1984	4.65	4.68	4.90	5.48	6.91	54.80	49.80	32.10	22.30	10.30	6.65	7.20	17.50		Jun 25	119.00	8.93	4.47	1984				
1985	5.38	5.03	5.21	5.98	13.00	47.50	46.70	24.60	47.90	26.80	12.50	8.25	20.78		Jun 05	99.16	22.49	4.95	1985				
1986	6.94	6.45	6.24	6.66	9.69	41.30	67.60	24.60	19.30	29.90	12.30	10.50	20.24		Jul 03	142.00	17.19	6.02	1986				
1987	9.18	8.57	7.73	7.38	14.00	48.70	37.70	29.50	25.40	19.00	13.20	9.58	19.20		Jun 22	80.80	20.36	7.25	1987				
1988	8.07	7.43	6.90	7.42	22.80	50.20	60.60	36.00	24.40	21.10	15.60	11.00	22.69		Jul 14	139.00	22.69	6.56	1988				
1989	7.44	6.18	5.94	8.58	23.60	38.00	25.60	21.70	15.30	13.20	10.10	8.52	15.39		Jun 05	46.50	14.03	5.75	1989				
1990	6.84	6.02	5.97	6.59	15.30	56.60	27.80	16.10	12.70	10.70	8.67	6.66	15.00		Jun 01	98.60	12.00	5.85	1990				
1991	6.03	6.68	6.18	6.79	20.20	36.90	28.10	16.80	21.10	19.70	12.80	10.20	16.00		Jun 26	48.50	14.39	5.35	1991				
1992	8.19	6.67	6.50	6.79	11.50	55.60	28.10	21.40	13.40	14.40	11.00	7.18	15.88		Jun 15	77.60	12.80	5.57	1992				
1993	5.36	6.63	5.88	6.44	18.70	31.80	29.50	17.80	13.70	12.30	10.20	8.06	13.91		Jul 05	44.30	13.30	5.05	1993				
1994	6.26	5.75	6.09	7.08	20.70	42.50	45.90	26.60	22.90	18.50	11.10	6.63	18.41		Jul 11	71.00	19.33	5.42	1994				
1995	5.98	5.94	5.55	6.45	10.20	22.30	13.90	17.00	13.50	10.20	7.66	6.73	10.47		Jun 06	35.54	11.59	5.43	1995				
1996	5.76	5.66	5.60	6.37	7.61	29.60	39.90	36.80	28.00	15.10	10.40	8.28	16.63		Jul 06	51.20	12.14	5.19	1996				
1997	7.24	6.64	5.57	5.91	13.80	44.60	39.00	29.80	25.90	16.10	12.10	9.93	18.10		Jun 05	58.90	22.11	5.22	1997				
1998	6.71	6.56	6.45	7.45	19.30	25.10	22.40	13.20	9.92	9.26	7.83	6.76	11.78		Jun 01	42.10	9.42	6.17	1998				
1999	6.13	6.05	5.57	5.93	7.77	44.50	25.00	19.80	13.70	10.00	8.28	7.95	13.40		Jun 19	86.00	11.30	5.19	1999				
2000	6.69	5.99	5.50	5.71	6.62	26.10	30.00	23.00	28.30	14.30	9.35	7.70	14.11		Jun 19	48.70	7.32	5.33	2000				
2001	7.05	5.80	5.57	5.86	8.04	38.00	36.10	21.00	15.10	12.60	9.40	8.62	14.47		Jul 19	66.90	13.23	5.36	2001				
2002	7.59	6.75	6.31	7.00	9.38	63.90	68.80	31.90	22.20	24.90	13.70	10.90	22.87		Jul 02	111.00	16.77	5.87	2002				
2003	9.39	8.65	7.57	7.29	9.10	31.10	30.70	17.30	17.40	15.80	11.80	9.34	14.64		Jun 13	44.60	12.55	6.61	2003				
2004	6.19	5.77	5.22	6.40	14.90	50.60	37.60	16.10	14.20	17.00	10.70	7.17	15.99		Jun 15	96.60	6.97	5.12	2004				
2005	5.66	5.55	5.43	6.47	42.60	52.30	26.00	22.10	21.60	14.10	9.30	7.91	18.31		May 28	100.00	17.04	5.07	2005				
2006	6.62	5.97	5.61	7.08	14.00	55.40	29.80	23.20	17.10	16.50	10.10	7.40	16.59		Jun 07	104.95	13.69	5.50	2006				
2007	6.78	6.31	6.05	6.20	9.75	41.40	36.30	23.10	18.90	16.60	10.60	8.26	15.90		Jun 06	111.00	17.40	5.98	2007				
2008	6.96	6.34	5.92	6.17	18.00	55.50	56.60	19.20	16.10	11.60	8.30	6.75	18.15		Jul 07	109.00	15.06	5.85	2008				
2009	5.98	5.56	5.20	6.08	12.00	68.90	41.40	21.80	24.20	19.80	12.00	9.34	19.38		Jun 13	96.50	18.09	5.14	2009				
2010	8.05	7.70	6.88	7.04	11.20	23.50	29.60	15.70	20.10	13.90	10.00	9.51	13.63		Jul 04	52.70	14.33	6.65	2010				
2011	7.80	6.88	6.42	6.36	15.10	33.80	23.10	21.30	16.10	11.40	9.07	8.04	13.81		Jun 22	44.30	13.67	6.23	2011				
Avg.	6.72	6.27	5.97	6.60	14.6	43.0	36.83	22.60	19.85	15.71	10.71	8.21	16.45	16.30		82	14.99	5.59	m <sup>3</sup> /s				
S. D.	1.11	0.96	0.74	0.64	7.53	11.47	14.13	5.98	6.82	5.12	2.44	1.34	2.89			38.15	4.23	0.67	m <sup>3</sup> /s				
Normal	6.74	6.28	5.96	6.59	14.85	43.51	36.21	22.60	20.08	15.84	10.59	8.28	16.50	m <sup>3</sup> /s									
Normal	15	13	13	14	33	95	81	51	44	36	23	19	437	mm	10-Year	166.23	9.71	4.58	m <sup>3</sup> /s				



**GEDDES CREEK AT THE MOUTH 10BE008**

Station Longitude Latitude: -126.668229 59.598447

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976																			1976
1977																			1977
1978																			1978
1979								0.204	0.232	0.202	0.174	0.166							1979
1980	0.157	0.166	0.173	0.375	0.331	0.222	0.242	0.190	0.237	0.224	0.152	0.115	0.215		Apr 27	0.975	0.1681	0.1064	1980
1981	0.103	0.103	0.140	0.160	0.605	0.341	0.220	0.186	0.243	0.231	0.201	0.162	0.225		May 11	1.010	0.1487	0.0909	1981
1982	0.138	0.134	0.131	0.190	0.705	0.180	0.138	0.232	0.207	0.180	0.125	0.112	0.207		May 18	1.280	0.1217	0.1056	1982
1983	0.094	0.078	0.084	0.174	0.207	0.144	0.098	0.097	0.106	0.111	0.076	0.055	0.110		Apr 27	0.470	0.0759	0.0531	1983
1984	0.061	0.071	0.078	0.188	0.118	0.089	0.139	0.146	0.118	0.096	0.076	0.074	0.105		Jul 27	0.340	0.0429	0.0429	1984
1985	0.068	0.061	0.053	0.090	0.224	0.111	0.131	0.116	0.202	0.145	0.097	0.140	0.120		Sep 17	0.490	0.0913	0.0493	1985
1986	0.108	0.078	0.083	0.198	0.477	0.142	0.268	0.260	0.318	0.178	0.156	0.190					0.1051	0.0696	1986
1987	0.136	0.127	0.152	0.196	0.218	0.366	0.289	0.349	0.322	0.281	0.205	0.173	0.235		Jun 23	0.760	0.2237	0.1250	1987
1988	0.146	0.117	0.108	0.156	0.474	0.524	1.230	0.384	0.341	0.291	0.255	0.217	0.355		Jul 06	2.210	0.2773	0.1031	1988
1989	0.199	0.167	0.144	0.254	0.362	0.311	0.344	0.182	0.213	0.188	0.176	0.179	0.227		May 01	1.020	0.1193	0.1193	1989
1990	0.136	0.123	0.141	0.177	0.335	0.306	0.197	0.165	0.147	0.148	0.124	0.108	0.176		May 31	0.986	0.1201	0.0990	1990
1991	0.105	0.124	0.096	0.141	0.204	0.144	0.139	0.150	0.206	0.158	0.176	0.128	0.148		Oct 22	0.589	0.0626	0.0494	1991
1992	0.125	0.148	0.135	0.600	0.778	0.432	0.262	0.309	0.282	0.284	0.212	0.128	0.308		Apr 21	1.280	0.2136	0.0909	1992
1993	0.097	0.131	0.171	0.292	0.229	0.163	0.157	0.122	0.166	0.184	0.145	0.117	0.164		Apr 21	0.610	0.1113	0.0839	1993
1994	0.104	0.119	0.127	0.211	0.240	0.173	0.169	0.152	0.217	0.198	0.163	0.157	0.169		May 03	0.713	0.1403	0.0967	1994
1995	0.122	0.102	0.095	0.200	0.138	0.207	0.224	0.096	0.127	0.138	0.092	0.090	0.136		Jun 06	1.000	0.0663	0.0663	1995
1996	0.080	0.088	0.089	0.139	0.283	0.129	0.154	0.199	0.220	0.170	0.134	0.107	0.150		May 02	0.636	0.0889	0.0720	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
Avg.	0.116	0.114	0.118	0.220	0.349	0.234	0.258	0.197	0.214	0.197	0.153	0.132	0.191	0.19		0.90	0.13	0.08	m <sup>3</sup> /s
S. D.	0.034	0.032	0.035	0.117	0.195	0.124	0.267	0.083	0.065	0.064	0.050	0.040	0.068			0.45	0.06	0.03	m <sup>3</sup> /s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)																			
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.114	0.111	0.114	0.210	0.350	0.235	0.259	0.197	0.211	0.195	0.152	0.131	0.189	m <sup>3</sup> /s					
	4	4	4	7	12	8	9	7	7	7	5	5	78	mm	10-Year	1.5	0.061	0.051	m <sup>3</sup> /s

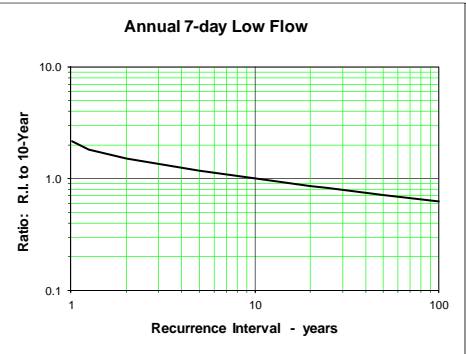
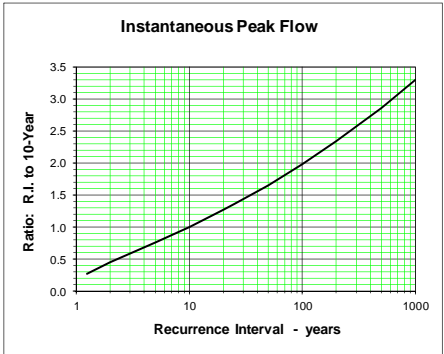
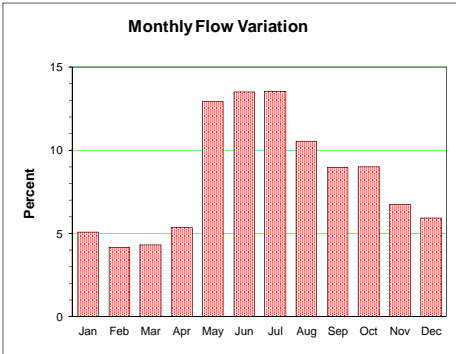
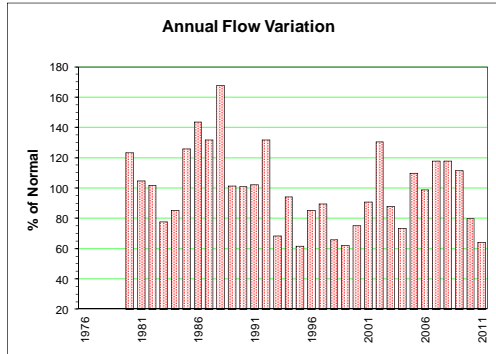




**TEETER CREEK NEAR THE MOUTH 10BE009**

Station Longitude Latitude: -126.228783 59.453953

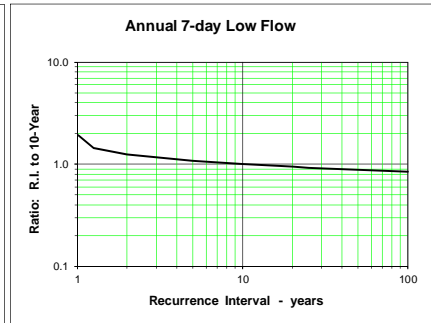
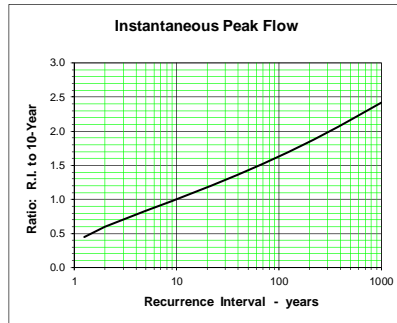
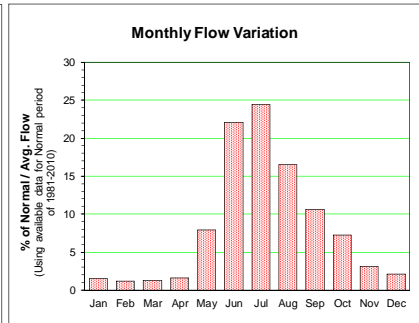
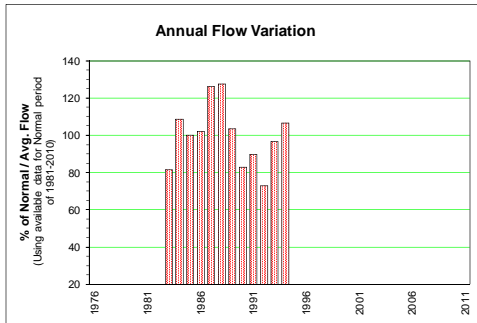
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 209.96 km <sup>2</sup>		Median Elevation = 1034 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976																			1976			
1977																			1977			
1978																			1978			
1979								2,000	1,520	1,260	0,983	0,774							1979			
1980	0.631	0.666	0.684	1.000	1.790	1.900	1.680	1.490	1.940	2.510	1.690	1.280	1.441		Oct 06	3.22	1.397	0.611	1980			
1981	1.040	0.704	0.611	0.584	2.790	2.480	1.720	1.260	1.210	1.040	0.811	0.423	1.226		May 22	3.47	1.090	0.304	1981			
1982	0.235	0.226	0.220	0.437	2.530	2.300	1.540	1.770	1.700	1.390	1.030	0.843	1.191		May 18	4.81	1.321	0.211	1982			
1983	0.692	0.626	0.645	0.779	1.340	1.550	1.190	1.050	0.924	0.881	0.653	0.541	0.907		May 24	2.80	0.901	0.496	1983			
1984	0.414	0.386	0.442	0.646	0.981	1.560	1.590	1.350	1.410	1.290	1.050	0.836	0.998		Jul 02	2.34	1.013	0.364	1984			
1985	0.773	0.785	0.753	0.820	2.340	2.070	1.690	1.550	2.110	2.060	1.460	1.210	1.472		May 19	3.17	1.504	0.707	1985			
1986	0.792	0.618	0.651	0.904	2.190	2.060	4.590	2.340	1.680	2.080	1.080	1.020	1.678		Jul 03	7.86	1.556	0.581	1986			
1987	0.979	0.935	0.756	0.870	2.020	2.940	2.290	2.150	1.760	1.480	1.200	1.050	1.539		Jun 22	4.74	1.576	0.744	1987			
1988	0.582	0.460	0.391	0.830	2.650	4.000	4.920	3.110	1.990	1.720	1.410	1.370	1.960		Jul 15	7.56	1.897	0.370	1988			
1989	1.110	0.948	0.763	1.070	2.640	1.800	1.480	1.130	0.965	0.910	0.683	0.685	1.184		May 05	3.80	0.923	0.637	1989			
1990	0.669	0.719	0.744	0.845	1.750	2.310	1.940	1.430	1.120	1.000	0.847	0.758	1.180		May 31	4.45	1.064	0.616	1990			
1991	0.640	0.646	0.614	0.808	1.810	1.440	1.200	1.060	1.250	1.930	1.580	1.290	1.193		May 14	2.81	1.000	0.577	1991			
1992	1.040	0.884	0.825	1.190	2.810	3.570	1.960	1.750	1.380	1.220	1.030	0.842	1.543		Jun 02	5.51	1.286	0.683	1992			
1993	0.637	0.628	0.569	0.740	1.180	0.990	0.945	0.827	0.778	0.788	0.761	0.755	0.801		May 21	1.43	0.731	0.538	1993			
1994	0.617	0.571	0.616	0.728	1.580	1.540	1.480	1.320	1.280	1.310	1.110	1.040	1.103		Jun 07	1.96	1.223	0.555	1994			
1995	0.851	0.764	0.682	0.766	0.823	0.742	0.708	0.767	0.717	0.685	0.570	0.609	0.724		Aug 15	1.05	0.627	0.533	1995			
1996	0.511	0.460	0.462	0.532	1.310	1.510	1.370	1.350	1.330	1.170	1.030	0.891	0.996		May 30	2.03	1.204	0.423	1996			
1997	0.690	0.622	0.508	0.746	1.700	1.580	1.610	1.510	1.250	1.020	0.665	0.646	1.049		Apr 27	2.97	1.171	0.475	1997			
1998	0.467	0.462	0.442	0.815	1.450	1.130	0.970	0.786	0.717	0.714	0.644	0.611	0.769		May 14	4.66	0.687	0.416	1998			
1999	0.551	0.534	0.500	0.607	0.940	1.070	0.892	0.798	0.769	0.740	0.684	0.641	0.728		Jun 19	1.64	0.731	0.492	1999			
2000	0.553	0.508	0.433	0.549	0.919	0.919	0.928	1.160	1.580	1.270	0.970	0.783	0.882		Sep 12	1.68	0.825	0.404	2000			
2001	0.708	0.620	0.574	0.613	1.070	2.420	1.810	1.330	1.130	0.990	0.776	0.710	1.064		Jun 03	5.96	1.071	0.537	2001			
2002	0.670	0.628	0.673	0.608	1.720	2.220	3.000	2.610	1.640	1.830	1.430	1.190	1.526		Jun 07	5.80	1.409	0.580	2002			
2003	0.932	0.848	0.768	0.904	1.450	1.290	1.280	1.060	0.987	1.020	0.906	0.861	1.027		Apr 30	2.18	0.931	0.684	2003			
2004	0.795	0.730	0.598	0.655	1.130	1.270	1.080	0.950	0.976	0.942	0.674	0.520	0.860		May 25	1.71	0.889	0.473	2004			
2005	0.598	0.691	0.683	0.943	3.260	2.470	1.440	1.190	1.080	1.070	1.000	0.956	1.286		May 17	8.61	1.020	0.504	2005			
2006	0.815	0.637	0.597	0.754	2.170	2.490	1.550	1.260	1.090	1.030	0.891	0.563	1.156		May 14	10.60	1.020	0.453	2006			
2007	0.362	0.376	0.433	0.639	1.690	1.690	3.570	2.190	1.670	1.900	1.090	0.816	1.378		Jul 03	7.00	1.403	0.343	2007			
2008	1.020	0.717	0.687	0.817	1.540	2.430	3.640	1.850	1.400	1.120	0.694	0.563	1.377		Jun 23	9.55	1.273	0.539	2008			
2009	0.535	0.550	0.561	0.705	2.160	2.690	2.190	1.470	1.360	1.570	1.070	0.727	1.303		May 30	3.19	1.260	0.517	2009			
2010	0.632	0.603	0.618	0.949	1.370	1.050	1.260	1.090	1.000	0.951	0.862	0.762	0.931		May 03	1.90	0.940	0.592	2010			
2011	0.621	0.533	0.528	0.593	0.992	0.968	0.917	0.959	0.954	0.881	0.645	0.394	0.750		Jun 21	1.59	0.866	0.375	2011			
Avg.	0.693	0.628	0.595	0.764	1.753	1.889	1.826	1.452	1.293	1.266	0.969	0.817	1.163	1.163		4.13	1.119	0.510	m <sup>3</sup> /s			
S. D.	0.206	0.161	0.133	0.166	0.647	0.775	1.039	0.553	0.377	0.454	0.290	0.252	0.303			2.57	0.293	0.123	m <sup>3</sup> /s			
Normal	0.697	0.630	0.594	0.762	1.777	1.919	1.861	1.449	1.275	1.237	0.955	0.817	1.168	m <sup>3</sup> /s								
Normal	9	7	8	9	23	24	24	18	16	16	12	10	176	mm	10-Year	7.64	0.77	0.34	m <sup>3</sup> /s			



**TOAD RIVER NEAR THE MOUTH 10BE010**

Station Longitude Latitude: -124.700495 59.186410

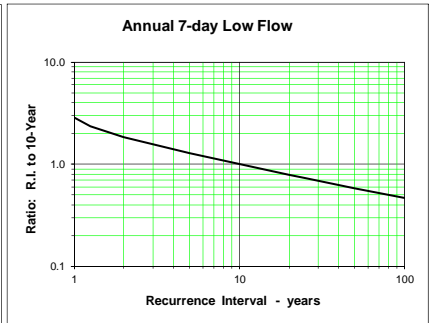
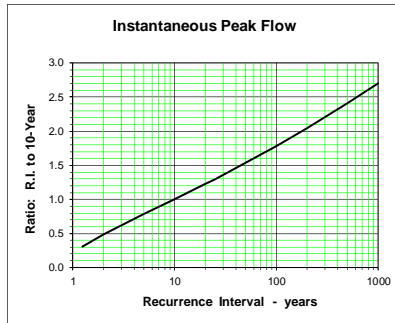
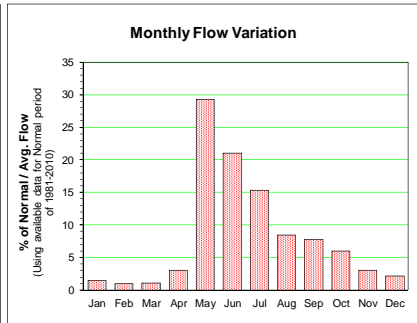
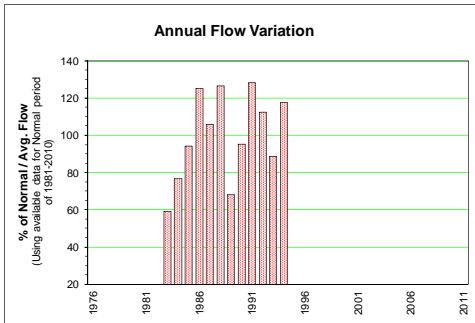
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 6889.65 km <sup>2</sup>		Median Elevation = 1468 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981																			1981		
1982																			1982		
1983	17.70	14.30	12.60	14.90	74.30	260.00	222.00	186.00	113.00	76.00	34.00	15.90	87.11	Jun 01	482.87	97.34	12.01	1983			
1984	11.00	13.80	16.40	20.90	66.60	361.00	347.00	280.00	143.00	69.90	35.30	28.70	116.43	Jul 07	833.00	90.76	10.23	1984			
1985	18.90	15.00	15.20	16.00	68.40	209.00	269.00	208.00	260.00	134.00	41.20	24.40	107.07	Sep 17	351.00	145.71	14.37	1985			
1986	16.00	12.30	13.90	16.50	72.90	224.00	398.00	164.00	100.00	158.00	75.30	51.40	109.37	Jul 04	646.00	89.47	11.30	1986			
1987	29.40	20.60	19.20	21.60	79.50	310.00	407.00	312.00	205.00	124.00	49.00	32.80	134.97	Jun 23	892.00	144.86	17.56	1987			
1988	25.50	19.00	15.50	24.70	123.00	289.00	543.00	338.00	143.00	71.50	20.50	15.20	136.47	Jul 14	1260.00	88.81	14.31	1988			
1989	14.90	15.80	16.10	28.60	169.00	355.00	211.00	214.00	140.00	92.70	42.40	24.30	110.75	Jun 26	532.00	120.71	14.34	1989			
1990	20.00	16.30	16.30	22.50	130.00	351.00	201.00	113.00	83.50	47.80	33.70	27.00	88.73	May 31	868.00	66.43	14.97	1990			
1991	21.20	20.70	20.80	25.40	105.00	221.00	265.00	157.00	138.00	86.40	49.50	38.10	96.15	Jul 17	461.00	124.29	19.44	1991			
1992	26.80	18.60	18.20	25.40	57.30	279.00	198.00	130.00	69.50	67.40	31.20	16.30	78.21	Jun 16	461.00	59.99	13.24	1992			
1993	13.40	16.30	14.50	23.20	139.00	295.00	264.00	190.00	114.00	94.50	48.40	23.70	103.52	May 03	476.38	103.71	12.64	1993			
1994	17.60	14.30	14.20	19.60	120.00	304.00	370.00	208.00	161.00	80.30	29.10	23.00	114.08	Jul 11	666.00	129.57	13.04	1994			
1995	18.60	16.90	16.40															1995			
1996																		1996			
1997																		1997			
1998																		1998			
1999																		1999			
2000																		2000			
2001																		2001			
2002																		2002			
2003																		2003			
2004																		2004			
2005															Nov 18	112.00		2005			
2006															Jun 09	143.00		2006			
2007															Jun 16	126.00		2007			
2008															Jun 21	257.00		2008			
2009															Jun 10	144.00		2009			
2010															Jun 19	148.00		2010			
2011															Jun 12	134.00		2011			
Avg.	19.31	16.45	16.10	21.61	100.42	288.17	307.92	208.33	139.17	91.88	40.80	26.73	106.91	106.94	473.33	105.14	14.12	m <sup>3</sup> /s			
S. D.	5.33	2.62	2.25	4.24	35.53	52.46	106.24	69.67	52.44	31.68	14.02	10.32	17.83		325.03	28.20	2.53	m <sup>3</sup> /s			
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	19.31	16.45	16.10	21.61	100.42	288.17	307.92	208.33	139.17	91.88	40.80	26.73	106.91	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	6	6	8	39	108	120	81	52	36	15	10	490	mm	10-Year	1007.6	69.599	11.155	m <sup>3</sup> /s		



**GRAYLING RIVER NEAR THE MOUTH 10BE011**

Station Longitude Latitude: -125.068966 59.374181

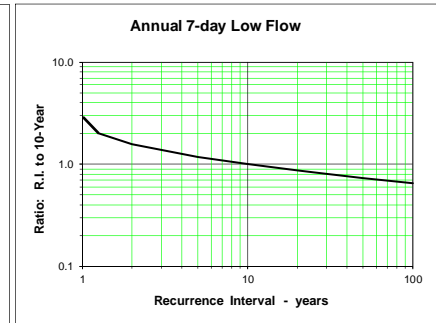
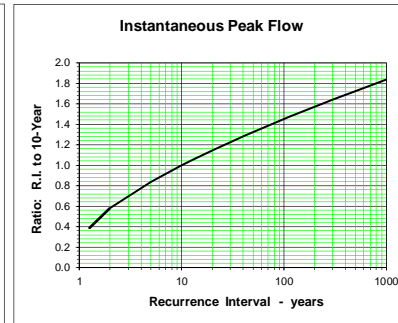
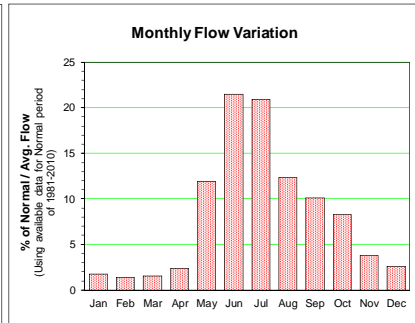
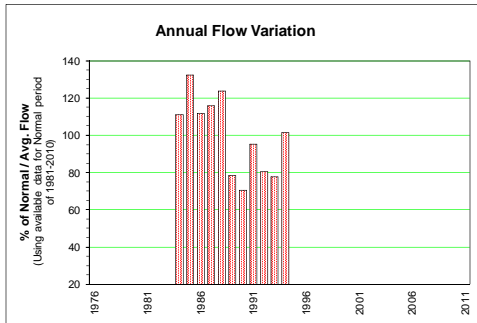
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976																			1976
1977																			1977
1978																			1978
1979																			1979
1980																			1980
1981																			1981
1982																			1982
1983	1.95	1.76	1.85	6.17	40.20	29.70	11.10	8.33	5.52	5.23	3.32	2.15	9.82	May 21	90.00	5.09	1.66	1983	
1984	1.34	1.24	1.49	2.42	28.40	51.00	22.80	13.30	16.00	8.36	3.48	2.80	12.72	Jun 07	154.00	8.63	1.13	1984	
1985	2.17	2.05	2.08	2.17	43.80	37.90	28.30	13.20	32.10	10.90	6.11	5.74	15.61	May 17	109.00	7.68	1.97	1985	
1986	4.00	3.52	3.20	3.39	30.80	50.10	75.20	22.60	16.50	21.50	10.20	5.85	20.72	Jul 03	359.00	12.84	3.10	1986	
1987	3.96	3.24	2.91	3.76	41.50	52.90	26.20	30.30	21.10	13.60	5.94	4.26	17.55	Jun 22	234.00	15.03	2.78	1987	
1988	3.02	2.56	2.28	6.05	64.60	61.60	72.60	8.89	11.00	7.34	5.64	4.74	20.96	Jul 13	368.00	6.43	2.20	1988	
1989	3.04	2.01	1.91	12.50	54.30	18.70	10.80	10.30	7.85	6.83	3.44	2.59	11.27	May 06	99.11	6.84	1.67	1989	
1990	1.94	1.88	2.16	3.71	62.20	54.10	21.20	21.70	8.46	5.05	3.19	2.80	15.79	Jun 01	329.00	6.13	1.84	1990	
1991	2.37	2.57	2.00	6.22	123.00	18.00	20.90	10.10	25.50	25.90	10.90	4.82	21.24	May 14	292.00	6.55	1.78	1991	
1992	2.86	0.96	1.18	8.22	65.40	76.30	19.40	16.10	11.70	11.40	5.96	3.87	18.63	Aug 07	318.00	1.02	0.67	1992	
1993	3.04	2.22	2.00	14.40	64.20	24.10	22.00	11.60	8.63	10.60	7.80	4.23	14.68	May 07	111.00	6.50	1.86	1993	
1994	2.83	2.28	2.39	6.57	66.90	34.30	28.60	32.00	24.30	15.40	8.53	7.76	19.47	Aug 01	120.00	13.46	2.24	1994	
1995	4.65	2.60	2.39														2.33	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	
Avg.	2.86	2.22	2.14	6.30	57.11	42.39	29.93	16.54	15.72	11.84	6.21	4.30	16.54	16.54	215.26	8.02	1.94	m <sup>3</sup> /s	
S. D.	0.94	0.71	0.53	3.83	24.99	18.18	21.30	8.23	8.39	6.44	2.68	1.63	3.88		111.96	3.95	0.64	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	2.86	2.22	2.14	6.30	57.11	42.39	29.93	16.54	15.72	11.84	6.21	4.30	16.54	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	4	3	3	9	87	62	46	25	23	18	9	7	297	mm 10-Year	384.3	2.762	1.078	m <sup>3</sup> /s	



**RABBIT RIVER NEAR THE MOUTH 10BE012**

Station Longitude Latitude: -127.097911 59.610324

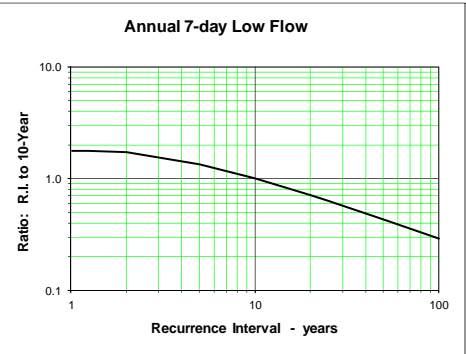
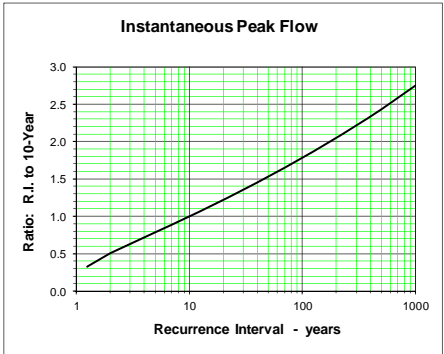
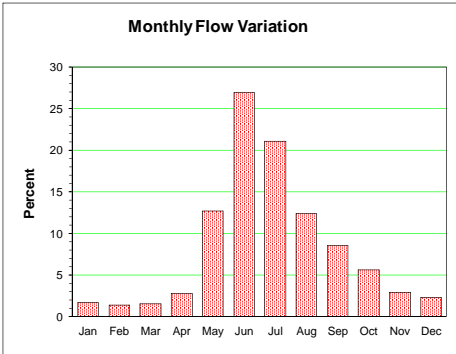
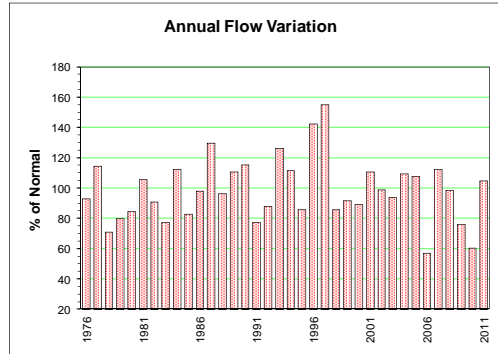
Year	Monthly and Annual Discharge in m <sup>3</sup> /s					Drainage Area = 3718.10 km <sup>2</sup>				Median Elevation = 1305 m				Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep		Annual
1976																			1976
1977																			1977
1978																			1978
1979																			1979
1980																			1980
1981																			1981
1982																			1982
1983	3.73	3.73	4.72					38.80	35.80	30.10	16.40	9.59					30.10	3.34	1983
1984	6.39	6.25	7.17	10.10	27.40	145.00	118.00	105.00	53.60	28.40	15.80	10.90	44.58	Jun 25	384.00		30.39	5.64	1984
1985	8.66	7.72	6.73	6.85	45.10	96.60	135.00	69.80	139.00	66.30	31.30	21.90	53.11	Jul 07	361.00		57.09	6.31	1985
1986	13.80	9.74	8.04	8.17	19.40	90.70	173.00	69.10	33.60	64.10	27.70	17.40	44.90	Jul 03	325.77		30.29	7.41	1986
1987	12.90	11.80	10.10	10.50	91.30	127.00	106.00	69.90	43.50	39.60	19.60	12.70	46.48	Jun 22	208.00		30.19	9.76	1987
1988	10.30	9.23	8.41	11.00	59.10	118.00	148.00	90.10	58.10	44.20	22.40	14.70	49.65	Jul 14	403.00		51.41	8.07	1988
1989	10.40	9.59	9.54	20.00	67.60	80.90	52.50	45.60	30.70	25.70	14.00	10.50	31.54	Jun 05	112.00		26.09	9.11	1989
1990	7.90	6.88	7.27	9.06	57.30	107.00	57.30	29.50	25.40	17.60	8.36	5.79	28.36	Jun 01	217.00		22.23	5.28	1990
1991	5.18	5.31	5.50	12.30	86.00	88.00	64.20	35.00	56.30	61.80	20.20	15.80	38.17	May 14	124.00		23.19	4.56	1991
1992	8.20	4.10	5.57	14.70	41.80	130.00	53.90	52.40	26.40	28.40	13.60	8.03	32.26	Jun 15	222.00		23.36	3.67	1992
1993	6.63	7.72	7.44	11.60	63.20	78.50	66.80	45.60	30.20	27.60	18.00	8.98	31.18	May 31	134.00		28.40	6.06	1993
1994	6.99	6.91	7.18	15.20	64.10	93.30	114.00	51.20	61.60	37.60	16.70	11.90	40.77	Jul 10	287.00		43.27	6.73	1994
1995	9.15	7.12	7.39															6.56	1995
1996																			1996
1997																			1997
1998																			1998
1999																			1999
2000																			2000
2001																			2001
2002																			2002
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2005																			2005
2006																			2006
2007																			2007
2008																			2008
2009																			2009
2010																			2010
2011																			2011
Avg.	8.48	7.39	7.31	11.77	56.57	105.00	98.97	58.50	49.52	39.28	18.67	12.35	40.09	40.10	252.52		33.00	6.35	m <sup>3</sup> /s
S. D.	2.88	2.31	1.53	3.71	22.10	22.06	42.42	22.83	31.06	16.49	6.25	4.48	8.37		106.18		11.40	1.93	m <sup>3</sup> /s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8.48	7.39	7.31	11.77	56.57	105.00	98.97	58.50	49.52	39.28	18.67	12.35	40.09	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	6	5	5	8	41	73	71	42	35	28	13	9	340	mm	10-Year	408.3	22.135	3.962	m <sup>3</sup> /s



**SIKANNI CHIEF RIVER NEAR FORT NELSON 10CB001**

Station Longitude Latitude: -122.694139 57.235762

Monthly and Annual Discharge in m <sup>3</sup> /s															Drainage Area = 2181.30 km <sup>2</sup>		Median Elevation = 1420 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				
1976	3.95	3.61	3.39	4.39	28.70	62.30	49.10	77.50	27.90	14.70	10.80	7.67	24.6		Aug 04	166.7	20.60	3.23	1976				
1977	5.84	5.03	4.98	10.60	36.40	92.50	80.00	51.50	33.30	21.40	11.80	7.59	30.2		Jun 10	289.1	27.51	4.81	1977				
1978	6.10	5.67	5.52	19.10	32.00	61.70	26.10	20.60	21.20	13.20	8.60	5.54	18.8		Jun 04	115.7	14.57	4.52	1978				
1979	3.36	3.27	3.85	4.63	13.90	51.60	84.90	26.70	33.90	14.70	7.00	3.74	21.1		Jul 03	289.0	20.63	2.57	1979				
1980	2.79	3.25	3.34	14.40	27.70	57.70	58.60	28.00	27.00	25.10	12.00	7.32	22.3		Jun 19	178.0	20.86	2.66	1980				
1981	5.59	4.22	4.49	6.13	80.40	72.70	59.10	33.10	34.70	13.60	11.10	7.79	27.9		May 28	240.4	16.70	4.01	1981				
1982	5.20	4.49	4.27	6.38	48.50	85.60	48.70	33.90	20.60	13.30	8.72	6.89	24.0		May 18	201.0	16.17	3.92	1982				
1983	5.17	4.67	3.95	6.88	22.90	64.10	68.50	27.10	17.00	12.30	6.43	4.31	20.4		Jul 03	152.0	13.99	3.71	1983				
1984	3.54	3.78	4.19	5.63	27.20	128.00	67.10	46.00	33.30	21.80	8.99	6.54	29.7		Jun 12	253.0	23.70	3.42	1984				
1985	4.85	4.26	3.99	6.92	23.70	59.50	54.70	21.30	45.60	20.20	9.85	7.17	21.9		Jun 23	186.0	16.60	3.70	1985				
1986	5.71	5.00	4.50	6.43	28.80	54.40	96.30	38.50	20.30	29.50	10.30	8.04	25.8		Jul 15	433.0	15.07	4.33	1986				
1987	6.24	5.57	4.95	7.02	38.70	85.70	68.40	97.60	43.00	28.50	14.20	8.25	34.2		Aug 01	249.0	30.67	4.76	1987				
1988	5.06	4.74	4.96	14.70	62.40	76.10	57.00	30.50	16.70	14.30	9.95	8.43	25.5		May 14	174.0	14.29	4.40	1988				
1989	5.54	4.64	3.67	11.00	53.30	81.20	51.50	71.30	28.20	20.30	10.90	6.94	29.2		Aug 10	205.0	23.57	3.53	1989				
1990	5.26	5.19	5.79	7.71	63.60	123.00	82.10	32.90	16.20	8.61	7.21	6.80	30.5		May 31	627.0	11.34	4.99	1990				
1991	5.04	4.46	4.48	6.69	38.00	54.70	58.90	18.40	21.20	16.10	8.90	7.22	20.4		Jul 06	125.0	15.54	4.31	1991				
1992	5.76	5.64	8.84	11.20	32.40	102.00	49.50	19.60	14.50	18.40	7.28	4.09	23.2		Jun 10	184.0	10.79	2.84	1992				
1993	2.92	4.76	4.80	8.71	39.70	90.20	97.00	78.20	33.40	18.10	11.20	8.64	33.3		Jun 28	210.0	23.26	2.46	1993				
1994	6.60	5.58	5.78	11.10	47.40	80.60	81.20	48.70	30.80	18.00	8.62	7.74	29.5		Jul 03	261.0	24.71	5.38	1994				
1995	5.28	4.23	4.00	5.61	40.80	55.80	60.40	41.70	24.50	13.40	8.67	6.41	22.7		Jun 08	124.0	18.24	3.92	1995				
1996	5.78	5.50	5.68	14.70	26.10	86.00	141.00	66.80	47.90	25.90	15.50	8.92	37.6		Jul 19	493.0	38.57	5.10	1996				
1997	6.57	5.94	5.09	8.70	50.50	153.00	84.70	52.20	63.20	33.80	15.10	11.00	40.9		Jun 21	336.0	32.33	4.82	1997				
1998	6.11	6.28	4.62	23.90	76.10	52.90	35.40	21.70	13.80	14.60	8.37	6.61	22.6		May 25	138.0	12.23	4.31	1998				
1999	5.31	4.33	4.01	10.40	29.60	107.00	61.00	27.80	17.00	11.50	6.91	5.55	24.2		Jun 16	240.0	13.50	3.87	1999				
2000	4.25	4.10	4.07	6.09	13.20	85.90	67.90	39.70	33.20	12.40	6.46	5.29	23.6		Jun 09	217.0	19.03	3.79	2000				
2001	5.23	4.07	4.12	5.55	18.80	156.00	82.40	36.90	18.30	9.57	4.80	4.67	29.2		Jun 11	603.0	16.03	3.83	2001				
2002	4.77	4.39	4.32	6.82	36.20	114.00	60.30	23.10	15.30	23.10	9.50	7.29	26.1		Jun 11	191.0	18.41	4.19	2002				
2003	5.67	5.16	5.43	7.26	32.50	67.20	83.50	35.10	19.70	16.10	10.10	8.06	24.8		Jul 01	266.0	18.57	4.83	2003				
2004	5.96	5.50	5.17	7.24	28.10	63.70	75.80	37.00	58.40	32.00	16.30	11.20	28.9		Jul 03	205.0	24.77	5.00	2004				
2005	7.13	5.49	5.15	17.20	61.40	93.10	49.30	38.00	28.70	15.80	10.60	8.61	28.5		Jun 11	138.0	23.44	4.99	2005				
2006	5.59	5.46	4.72	7.76	31.80	49.30	29.50	16.20	10.30	9.44	5.37	5.03	15.1		Jun 16	74.8	9.41	4.29	2006				
2007	4.52	4.23	4.10	5.93	30.50	133.00	72.60	38.60	27.50	16.70	9.72	7.70	29.6		Jun 06	261.0	20.30	4.02	2007				
2008	6.66	4.47	3.98	10.30	56.30	99.10	50.30	34.60	20.50	12.90	6.89	5.48	26.0		Jun 14	300.0	15.67	3.87	2008				
2009	4.66	4.37	4.00	6.03	23.10	72.20	48.20	27.90	22.00	12.50	8.51	6.47	20.0		Jun 05	105.0	17.61	3.87	2009				
2010	5.09	4.26	4.02	7.94	25.30	45.90	27.20	17.30	18.50	21.20	8.39	6.53	16.0		May 20	65.1	13.80	3.91	2010				
2011	6.19	5.33	4.48	4.60	51.20	104.00	76.10	29.00	21.20	15.40	6.91	5.93	27.6		Jun 25	367.0	18.83	4.19	2011				
Avg.	5.26	4.75	4.63	9.05	38.3	83.9	65.12	38.57	27.41	17.52	9.50	6.99	26.00	26.30		240.6	19.20	4.07	m <sup>3</sup> /s				
S. D.	1.02	0.74	0.97	4.41	16.42	28.93	22.32	18.98	12.10	6.31	2.73	1.68	5.52			130.12	6.29	0.73	m <sup>3</sup> /s				
Normal	5.37	4.83	4.70	8.93	39.58	86.40	65.65	38.51	27.40	17.54	9.49	7.12	26.38	m <sup>3</sup> /s					m <sup>3</sup> /s				
Normal	7	5	6	11	49	103	81	47	33	22	11	9	382	mm	10-Year	406.01	11.40	2.53	m <sup>3</sup> /s				



## Zone 4 Northern Interior Plains

**LIARD RIVER ABOVE BEAVER RIVER 10BE005**

Station Longitude Latitude: -124.474643 59.743805

Monthly and Annual Discharge in m<sup>3</sup>/s

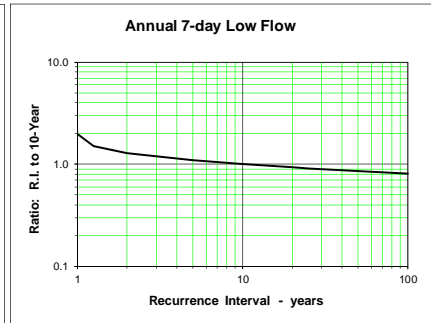
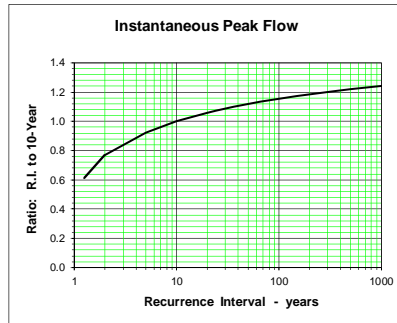
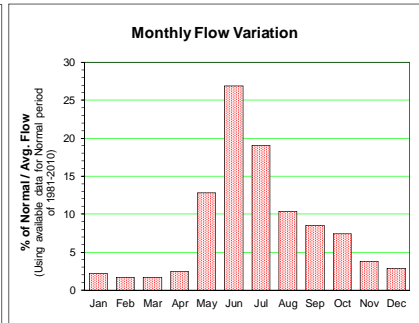
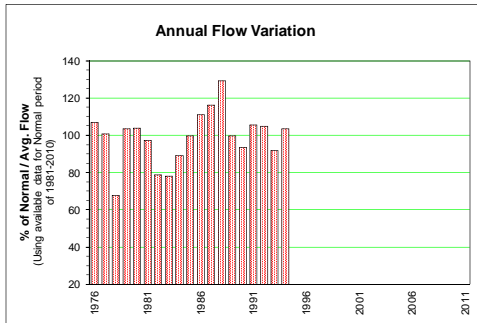
Drainage Area = 117873.81 km<sup>2</sup>

Median Elevation = 1149 m

Instantaneous Peak Flow

7-Day Low Flow

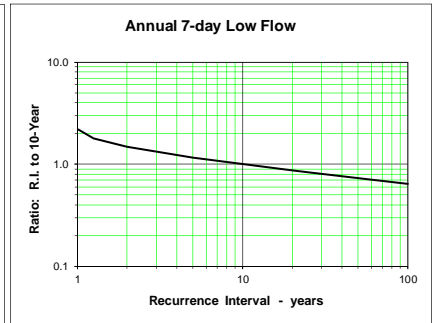
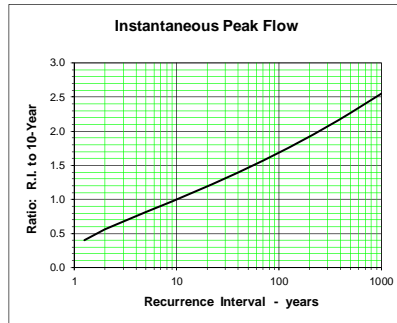
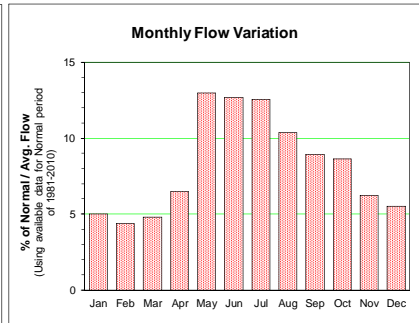
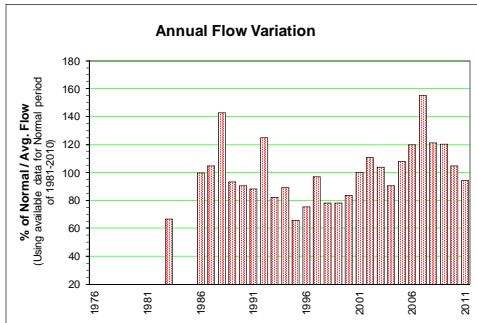
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year	
1976	335.00	302.00	270.00	333.00	2210.00	4520.00	4550.00	2440.00	1680.00	1080.00	588.00	399.00	1563.37		Jul 03	6340.00	1371.43	261.43	1976	
1977	380.00	376.00	329.00	459.00	2130.00	4980.00	3530.00	2170.00	1430.00	1040.00	447.00	349.00	1473.36		Jun 05	5860.00	1272.86	318.71	1977	
1978	288.00	268.00	250.00	267.00	1030.00	2520.00	1810.00	1560.00	1360.00	1270.00	738.00	493.00	991.19		Jun 10	3200.00	1101.43	244.14	1978	
1979	357.00	315.00	308.00	281.00	1870.00	5110.00	4630.00	1870.00	1340.00	1040.00	534.00	390.00	1510.10		Jul 03	7500.00	1147.14	261.57	1979	
1980	350.00	368.00	362.00	416.00	1870.00	3500.00	3070.00	2420.00	1920.00	2300.00	1100.00	504.00	1518.87		Jun 11	4800.00	1780.00	330.14	1980	
1981	403.00	354.00	318.00	314.00	3130.00	4560.00	2450.00	1310.00	1530.00	1190.00	885.00	534.00	1419.09		May 30	8141.57	1038.57	289.14	1981	
1982	348.00	249.00	231.00	234.00	1430.00	4550.00	2290.00	1380.00	1270.00	902.00	522.00	384.00	1151.14		Jun 14	6340.00	951.14	219.57	1982	
1983	302.00	231.00	242.00	262.00	1390.00	4280.00	2250.00	1510.00	1370.00	951.00	545.00	309.00	1139.05		Jun 03	6520.00	1255.71	226.14	1983	
1984	235.00	234.00	260.00	329.00	1430.00	4390.00	3150.00	2100.00	1610.00	922.00	559.00	382.00	1301.30		Jun 12	5970.00	1197.14	222.00	1984	
1985	250.00	235.00	232.00	260.00	1550.00	4710.00	4130.00	1850.00	1940.00	1290.00	561.00	393.00	1455.49		Jun 07	7410.00	1588.57	228.14	1985	
1986	334.00	288.00	278.00	324.00	1570.00	4630.00	4580.00	1960.00	1400.00	2160.00	1110.00	724.00	1621.29		Jul 04	7460.00	1234.29	270.14	1986	
1987	485.00	403.00	374.00	399.00	1940.00	5010.00	3930.00	2330.00	2080.00	1820.00	861.00	667.00	1697.84		Jun 03	6590.00	1844.29	370.29	1987	
1988	522.00	420.00	361.00	405.00	3270.00	5390.00	5240.00	2660.00	1720.00	1320.00	693.00	561.00	1886.27		Jul 16	8390.00	1501.43	347.00	1988	
1989	527.00	407.00	301.00	1260.00	3230.00	4620.00	2640.00	1450.00	896.00	845.00	671.00	590.00	1457.20		Jun 04	7195.83	751.00	284.86	1989	
1990	361.00	274.00	289.00	387.00	2330.00	5750.00	2820.00	1400.00	1120.00	846.00	416.00	387.00	1367.90		Jun 04	8970.00	1080.00	265.43	1990	
1991	337.00	331.00	285.00	493.00	2640.00	3960.00	3110.00	1980.00	2290.00	1780.00	677.00	556.00	1543.00		Jun 10	4450.00	1715.71	273.43	1991	
1992	445.00	387.00	392.00	522.00	1750.00	6560.00	3320.00	1670.00	1210.00	1100.00	550.00	473.00	1530.42		Jun 18	8730.00	1115.71	338.43	1992	
1993	333.00	320.00	301.00	482.00	2790.00	4120.00	2630.00	1550.00	1100.00	1190.00	749.00	476.00	1342.08		May 31	5660.00	1043.71	283.86	1993	
1994	395.00	373.00	293.00	541.00	2460.00	4400.00	3340.00	1800.00	1780.00	1600.00	637.00	438.00	1510.38		Jun 12	5700.00	1375.71	253.57	1994	
1995	362.00	317.00	347.00															294.71	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	
Avg.	367.45	322.60	301.15	419.37	2106.32	4608.42	3340.53	1863.68	1528.74	1297.16	675.95	474.16	1446.28	1416.19		6590.92	1282.41	279.14	m <sup>3</sup> /s	
S. D.	78.95	61.61	47.87	224.51	668.88	841.50	946.76	404.82	362.88	435.61	195.60	110.53	205.40			1499.92	293.27	43.54	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)																				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	375.93	321.53	300.27	443.71	2207.86	4780.71	3277.14	1782.14	1522.57	1279.71	674.00	491.00	1458.75	m <sup>3</sup> /s						
9	7	7	10	50	105	74	40	33	29	15	11	391	mm	10-Year	8738.8	962.744	202.434	m <sup>3</sup> /s		



**SMITH RIVER ABOVE SMITH FALLS 10BE013**

Station Longitude Latitude: -126.480421 59.552348

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 3874.08 km <sup>2</sup>		Median Elevation = 864 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			
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981																			1981		
1982																			1982		
1983	14.60	12.10	11.60	16.80	26.20	26.60	20.60	19.60	17.90	17.90	14.50	12.30	17.59		May 26	32.30	17.64	11.37	1983		
1984	11.80	13.60	15.00	18.40	19.50							15.00	13.50				17.71	11.50	1984		
1985	13.10	11.70	11.00	10.70	32.60							6.51					20.09	6.21	1985		
1986	7.58	8.54	12.30	23.70	35.10	38.50	49.40	36.60	31.40	30.60	23.20	17.20	26.29		Jul 05	62.90	29.31	6.84	1986		
1987	15.70	18.00	16.00	17.70	37.20	53.10	43.60	35.90	28.10	28.90	19.20	17.40	27.62		Jun 24	79.20	24.71	14.73	1987		
1988	18.30	19.70	18.50	20.50	51.20	59.90	85.20	55.30	38.80	34.20	24.40	23.90	37.61		Jul 15	130.00	37.16	17.31	1988		
1989	23.60	19.90	18.70	25.40	41.50	30.50	27.90	26.60	22.10	22.20	19.30	17.90	24.68		May 12	50.30	21.10	16.93	1989		
1990	14.40	13.80	15.20	20.90	35.80	42.30	36.40	26.50	23.60	22.00	18.10	16.90	23.88		Jun 04	48.80	22.30	13.29	1990		
1991	15.00	15.00	14.70	18.30	38.70	31.40	27.10	22.10	25.30	27.80	24.70	19.40	23.34		May 15	54.80	20.03	13.67	1991		
1992	18.50	16.60	17.40	22.00	54.10	70.90	41.80	45.00	36.60	30.70	22.40	18.70	32.93		Jun 10	87.80	35.47	14.44	1992		
1993	14.70	15.80	14.00	24.10	32.60	26.90	27.10	25.60	23.30	23.20	18.60	14.70	21.75		Apr 22	37.00	21.04	13.19	1993		
1994	11.60	10.50	10.80	21.10	33.70	32.70	29.90	29.20	32.40	30.00	20.80	19.40	23.58		Jun 11	42.80	24.53	9.98	1994		
1995	15.10	12.60	11.70	19.40	24.50	20.40	19.40	21.20	18.60	13.30	12.90	17.38			Apr 29	30.60	16.90	11.27	1995		
1996	11.40	11.80	13.20	18.70	28.30	27.40	24.30	22.80	24.30	22.00	18.70	16.30	19.95		May 31	35.00	21.24	10.47	1996		
1997	14.10	12.80	10.50	16.60	42.30	36.10	39.70	41.30	29.50	24.00	19.60	18.80	25.55		May 18	55.10	26.76	9.83	1997		
1998	15.10	15.20	14.80	21.60	37.00	29.90	25.70	19.60	18.60	19.70	17.00	13.30	20.66		May 16	52.70	17.79	11.64	1998		
1999	11.30	10.80	10.60	19.70	33.10	35.50	30.70	24.80	21.60	19.80	16.10	13.10	20.64		Jun 23	43.40	20.46	10.41	1999		
2000	11.80	11.60	11.70	13.40	28.00	26.10	27.60	38.50	32.50	27.00	19.90	16.60	22.11		Jul 31	51.20	23.54	11.46	2000		
2001	15.20	13.80	13.40	17.00	33.20	54.00	43.30	31.40	28.20	26.10	21.10	19.80	26.44		Jun 04	112.00	26.41	13.13	2001		
2002	18.90	18.40	19.10	18.40	41.80	40.50	45.70	40.20	34.40	32.00	22.00	18.50	29.25		Jul 16	63.40	31.21	17.21	2002		
2003	16.20	15.50	16.30	27.90	37.30	32.90	45.50	35.20	31.30	28.50	21.50	19.30	27.37		Apr 27	70.30	29.11	15.20	2003		
2004	16.20	15.00	15.20	26.40	41.90	35.90	28.30	24.80	26.20	25.20	17.70	14.20	23.94		May 03	67.60	22.87	13.27	2004		
2005	12.50	13.00	12.40	23.80	61.10	54.70	38.70	29.20	28.70	27.50	23.00	16.00	28.46		May 22	109.00	25.60	12.00	2005		
2006	16.90	18.10	19.10	24.90	82.00	62.90	33.50	29.20	27.00	24.80	19.40	19.90	31.56		Jun 18	139.00	25.87	14.16	2006		
2007	19.70	18.90	18.30	22.30	57.50	47.50	96.80	70.40	43.70	40.10	28.40	25.10	40.96		Jul 05	127.00	39.81	17.79	2007		
2008	25.80	22.60	23.50	23.30	47.90	52.70	50.00	35.30	33.50	28.20	21.70	19.00	32.00		Jun 25	93.17	32.30	18.70	2008		
2009	19.50	19.40	18.20	19.60	50.90	55.60	40.60	33.00	40.60	35.40	26.00	21.30	31.73		Jun 02	69.41	27.43	18.10	2009		
2010	17.80	15.00	15.20	31.80	44.60	34.20	35.10	29.60	32.50	33.00	23.50	19.10	27.69		May 04	58.52	26.94	14.37	2010		
2011	18.20	17.80	17.30	20.40	44.90	33.90	28.30	26.00	29.70	25.10	17.50	18.90	24.89		May 18	54.20	23.96	16.76	2011		
Avg.	15.68	15.09	15.02	20.86	40.50	40.48	38.60	32.00	28.78	26.76	20.00	17.24	26.29	26.30			68.80	25.15	13.28	m <sup>3</sup> /s	
S. D.	3.82	3.38	3.24	4.31	12.70	13.16	17.46	11.28	6.55	5.34	3.71	3.73	5.63				30.98	5.90	3.21	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	15.59	14.99	14.94	20.87	40.34	40.73	39.00	32.22	28.74	26.83	20.09	17.18	26.34	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	11	9	10	14	28	27	27	22	19	19	13	12	215	mm	10-Year	110.0	18.520	8.998	m <sup>3</sup> /s		

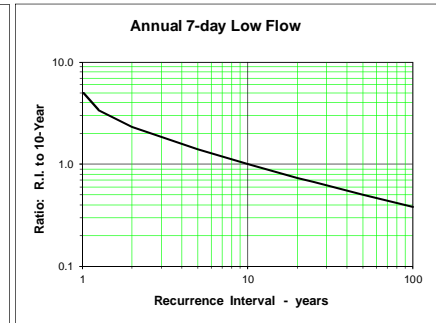
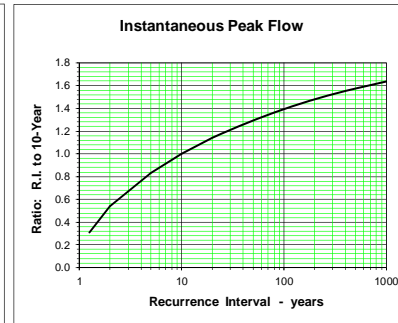
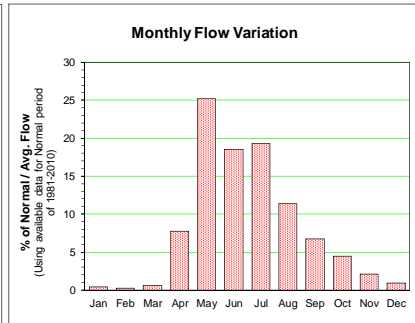
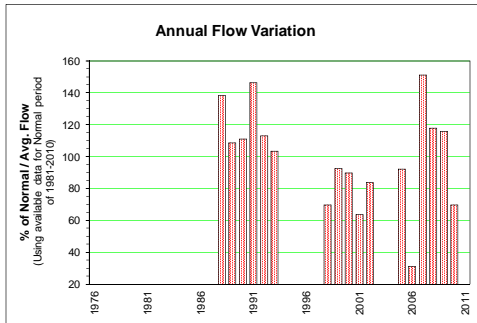




**FONTAS RIVER NEAR THE MOUTH 10CA001**

Station Longitude Latitude: -121.463900 58.270830

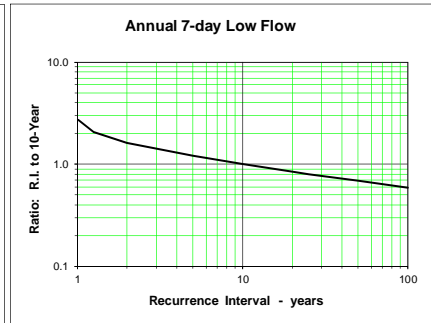
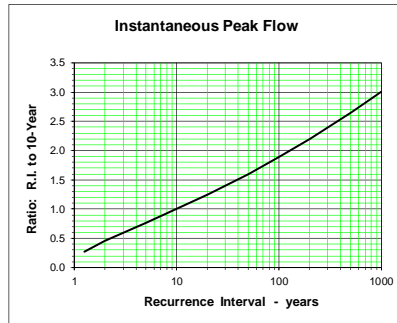
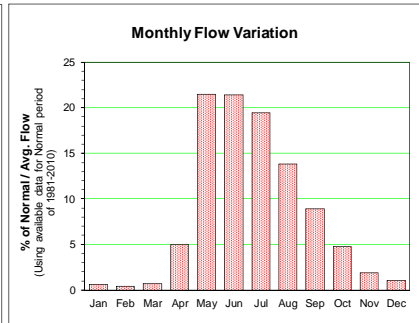
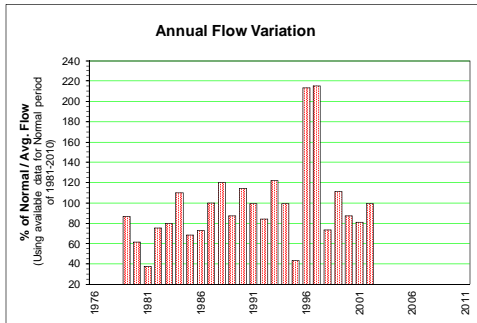
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 7514.18 km <sup>2</sup>		Median Elevation = 598 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981																			1981		
1982																			1982		
1983																			1983		
1984																			1984		
1985																			1985		
1986																			1986		
1987															Jul 16	421.00		13.443	1.036	1987	
1988	1.57	1.08	1.07	16.30	136.00	104.00	149.00	51.70	16.60	11.20	9.09	8.79	42.49	May 26	297.00		11.843	1.173	1988		
1989	2.92	1.46	1.23	27.20	197.00	53.10	15.20	18.50	38.50	26.10	10.50	6.23	33.43	Jun 03	332.00		2.111	1.234	1989		
1990	2.42	1.95	5.88	73.70	136.00	117.00	53.30	6.87	3.09	3.60	2.48	1.88	34.11	Jun 19	479.00		12.829	0.596	1990		
1991	0.83	0.79	1.08	47.10	73.70	182.00	175.00	27.30	15.30	9.45	3.95	1.32	44.99	May 05	286.00		5.477	0.681	1991		
1992	1.45	1.78	21.20	57.20	116.00	103.00	19.70	8.47	26.80	44.60	14.00	2.43	34.73	Aug 14	498.00		5.723	0.275	1992		
1993	0.56	0.32	0.91	12.00	9.70	27.20	43.70	195.00	51.00	22.30	10.70	4.38	31.81						1993		
1994																				1994	
1995																				1995	
1996																				1996	
1997																				1997	
1998	1.38	1.20	1.20	14.20	30.40	24.80	143.00	22.30	3.93	5.63	3.61	1.80	21.39	Jul 17	680.45		3.010	1.130	1998		
1999	1.18	0.99	0.89	33.10	53.80	101.00	54.60	44.00	25.20	15.00	6.78	4.21	28.48	Jun 11	406.16		22.786	0.854	1999		
2000	2.13	1.79	2.37	19.40	78.90	73.90	38.50	40.70	46.90	18.20	6.19	1.64	27.59	May 30	146.00		11.279	1.474	2000		
2001	1.71	1.37	1.33	7.39	25.10	79.20	60.10	35.90	9.03	6.33	4.12	2.29	19.58	Jul 24	233.00		7.410	1.229	2001		
2002	1.75	1.27	0.94	2.59	83.30	39.00	32.80	97.80	18.10	15.30	9.39	3.77	25.79	Aug 04	327.00		13.157	0.875	2002		
2003	1.08	0.63	0.65	65.60								2.48		Apr 26	295.39			0.455	2003		
2004	1.19	1.12	1.10	14.00	44.90	29.30	20.50	38.00						Aug 02	81.23		11.779	1.063	2004		
2005	1.57	1.25	1.21	73.80	96.60	47.60	30.00	31.50	20.90	18.10	9.90	6.67	28.37	Apr 26	237.00		19.214	1.161	2005		
2006	0.59	0.53	0.39	0.49	29.50	16.80	26.20	29.60	3.87	2.85	1.52	1.10	9.57	Aug 07	78.10		2.279	0.301	2006		
2007	0.86	0.51	0.32	31.60	162.00	49.00	188.00	34.70	31.10	30.20	17.80	5.08	46.45	Jul 06	565.00		18.914	0.277	2007		
2008	2.36	1.67	1.57	10.20	155.00	131.00	97.00	18.80	5.34	4.43	2.74	1.91	36.17	Jun 16	326.00		4.163	1.480	2008		
2009	1.48	1.21	1.02	8.23	154.00	50.60	74.60	13.00	70.90	29.00	15.70	4.41	35.62	May 07	279.00		7.873	0.959	2009		
2010	1.97	1.46	1.31	37.30	60.70	19.50	35.70	27.70	45.90	14.80	6.68	3.65	21.49	Apr 25	117.00		8.653	1.300	2010		
2011																				2011	
Avg.	1.53	1.18	2.40	29.02	91.26	69.33	69.83	41.21	25.44	16.30	7.95	3.56	30.71		30.72		320.23	10.11	0.92	m <sup>3</sup> /s	
S. D.	0.64	0.47	4.70	23.93	55.51	45.54	56.17	43.44	19.62	11.37	4.80	2.11	9.58				161.63	6.05	0.39	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1.53	1.18	2.40	29.02	91.26	69.33	69.83	41.21	25.44	16.30	7.95	3.56	30.71		m <sup>3</sup> /s						
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1	0	1	10	33	24	25	15	9	6	3	1	129	mm	10-Year	558.2		3.162	0.387	m <sup>3</sup> /s	



**FORT NELSON RIVER ABOVE MUSKWA RIVER 10CC002**

Station Longitude Latitude: -122.637714 58.670418

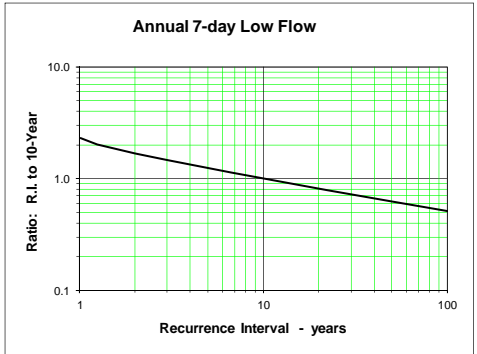
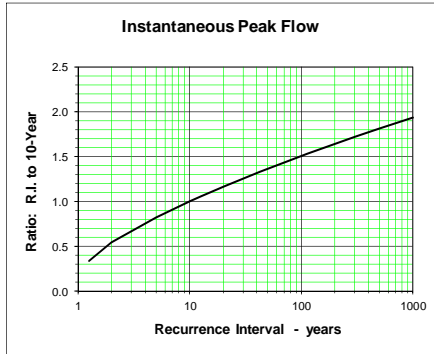
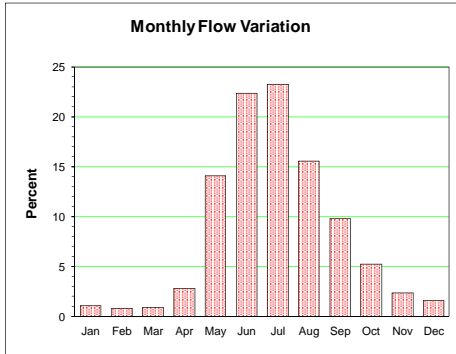
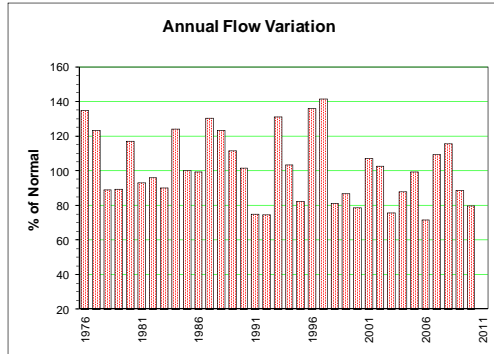
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 22632.15 km <sup>2</sup>		Median Elevation = 670 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976																			1976		
1977																			1977		
1978																			1978		
1979	6.60	3.63	4.39	78.00	297.00	367.00	392.00	101.00	144.00	66.80	36.80	19.00	122.66		Jul 04	1330.00	77.40	3.54	1979		
1980	3.71	4.09	4.05	20.90	65.20	213.00	301.00	126.00	142.00	50.60	15.20	4.61	86.80		Jun 20	676.00	71.59	3.54	1980		
1981	9.77	6.11	6.02	7.79	131.00	193.00	105.00	51.70	57.10	37.70	23.90	12.10	53.63		May 26	349.98	25.21	5.69	1981		
1982	7.15	5.67	5.52	19.70	716.00	220.00	94.30	79.50	53.50	31.20	15.60	12.30	106.16		May 19	1605.42	41.39	4.93	1982		
1983	7.12	5.66	5.66	165.00	389.00	315.00	209.00	123.00	63.30	36.90	15.80	8.21	112.54		Jun 21	773.00	49.67	5.41	1983		
1984	6.14	6.31	7.01	50.10	378.00	587.00	335.00	171.00	192.00	87.00	22.50	14.80	154.91		Jun 08	1700.00	111.00	5.78	1984		
1985	10.10	7.71	8.53	50.30	149.00	166.00	115.00	79.90	352.00	151.00	46.10	21.10	96.50		Sep 16	873.00	58.14	7.33	1985		
1986	12.30	9.18	9.39	12.10	320.00	127.00	379.00	157.00	57.10	84.50	36.40	18.10	103.08		Nov 30	1284.34	40.80	8.64	1986		
1987	11.10	8.04	7.14	87.40	236.00	317.00	140.00	653.00	111.00	58.10	30.70	18.00	140.91		Aug 04	3040.00	40.89	6.63	1987		
1988	11.10	7.62	7.75	67.20	640.00	410.00	563.00	144.00	59.70	42.50	32.70	31.60	169.26		May 16	1780.00	50.66	7.24	1988		
1989	15.00	9.94	7.52	81.40	468.00	208.00	146.00	189.00	150.00	122.00	46.60	28.80	123.63		Nov 30	1252.23	95.21	7.18	1989		
1990	12.30	9.97	21.20	220.00	602.00	613.00	325.00	50.60	29.00	21.30	12.90	10.50	161.25		Jun 02	1870.00	22.74	8.01	1990		
1991	7.67	7.40	8.13	131.00	237.00	489.00	505.00	110.00	95.20	40.90	21.90	16.60	139.74		Jun 17	1140.00	56.49	6.83	1991		
1992	12.90	13.40	86.00	185.00	318.00	451.00	120.00	44.30	53.40	95.60	39.50	12.70	119.21		Jun 11	1470.00	36.56	6.09	1992		
1993	5.80	5.43	3.44	40.50	79.80	348.00	311.00	782.00	301.00	97.00	50.10	21.10	171.63		Aug 11	1810.00	111.86	2.60	1993		
1994	14.00	10.10	11.20	271.00	586.00	237.00	348.00	95.70	44.40	32.20	12.40	10.20	140.39		Jul 04	1230.00	40.59	8.60	1994		
1995	6.86	6.30	5.87	22.60	99.80	144.00	163.00	144.00	61.70	36.10	21.00	14.40	60.89		Nov 30	449.52	48.50	5.77	1995		
1996	9.84	8.24	8.67	88.10	405.00	422.00	1300.00	525.00	589.00	139.00	59.30	29.70	300.34		Jul 20	5520.00	219.43	6.14	1996		
1997	18.20	16.00	13.10	189.00	698.00	689.00	444.00	641.00	498.00	300.00	78.40	28.40	302.75		Aug 09	1470.00	366.14	12.34	1997		
1998	12.50	10.50	10.80	97.90	221.00	175.00	397.00	172.00	44.00	51.30	29.10	14.10	103.87		Jul 15	1240.00	38.54	10.09	1998		
1999	9.16	7.92	7.08	75.40	392.00	616.00	276.00	238.00	136.00	74.60	27.90	16.80	157.00		Jun 11	1310.00	104.29	6.90	1999		
2000	8.39	7.24	9.56	49.90	258.00	367.00	212.00	179.00	240.00	89.60	36.60	15.30	122.79		Jun 12	868.00	89.96	6.66	2000		
2001	12.40	7.55	7.47	22.90	147.00	621.00	274.00	115.00	66.60	48.00	29.40	18.90	114.29		Jun 13	1600.00	58.81	6.73	2001		
2002	12.10	8.86	6.86	8.66	366.00	370.00	354.00	298.00	105.00	74.20	37.40	20.90	139.65		Jun 09	814.00	80.04	6.47	2002		
2003	10.10	8.45	10.10	33.00								15.30			May 01	385.30		7.80	2003		
2004																			2004		
2005																			2005		
2006																			2006		
2007																			2007		
2008																			2008		
2009																			2009		
2010																			2010		
2011																			2011		
Avg.	10.09	8.05	11.30	82.99	341.62	361.04	325.35	219.57	151.88	79.00	32.60	17.24	137.66	137.75		1433.63	80.66	6.68	m <sup>3</sup> /s		
S. D.	3.32	2.71	15.96	71.96	195.59	171.06	244.96	208.63	147.06	57.78	15.51	6.68	58.92			1028.32	73.58	2.04	m <sup>3</sup> /s		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	10.52	8.42	11.91	85.91	356.21	367.50	323.42	229.21	152.68	79.58	33.01	17.82	140.66	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1	1	1	10	42	42	38	27	17	9	4	2	196	mm	10-Year	2600.2	30.963	4.090	m <sup>3</sup> /s		



**MUSKWA RIVER NEAR FORT NELSON 10CD001**

Station Longitude Latitude: -122.659200 58.788330

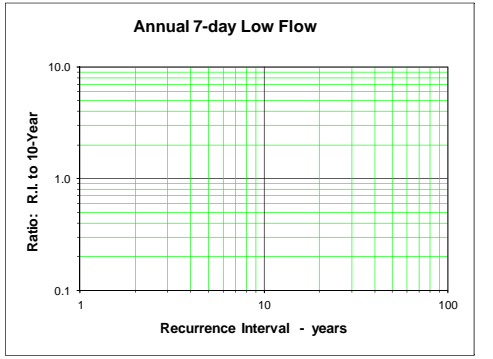
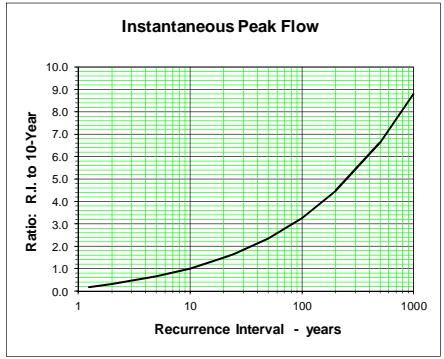
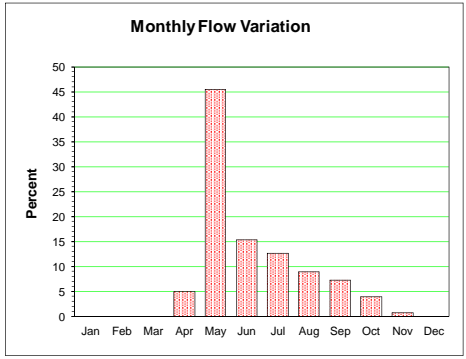
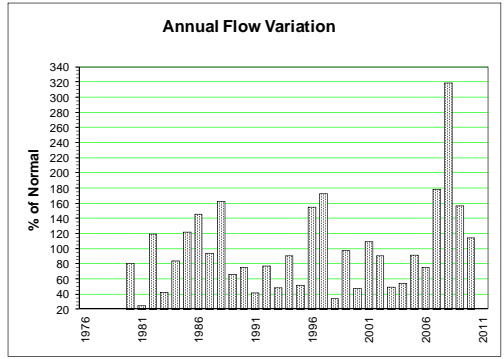
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 20253.26 km <sup>2</sup>		Median Elevation = 984 m		Instantaneous Peak Flow		7-Day Low Flow	
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976	20.6	17.7	17.1	76.4	155.0	756.0	909.0	906.0	329.0	162.0	63.7	32.9	288.4	Jul 13	2107	162.00	16.49	1976			
1977	24.4	22.9	21.8	54.6	403.0	967.0	753.0	445.0	240.0	135.0	59.9	28.1	264.1	Jun 10	3400	197.86	20.81	1977			
1978	21.1	18.6	16.6	82.7	321.0	466.0	266.0	337.0	525.0	128.0	62.6	33.2	190.2	Sep 02	2770	205.00	16.00	1978			
1979	14.4	11.4	11.8	55.8	174.0	402.0	867.0	160.0	394.0	137.0	42.0	14.1	191.4	Jul 02	3280	117.43	11.20	1979			
1980	11.4	14.2	14.4	58.2	160.0	784.0	895.0	378.0	324.0	259.0	69.6	32.0	250.6	Jul 24	3300	210.43	10.10	1980			
1981	27.2	23.1	22.5	30.6	610.0	575.0	370.0	294.0	237.0	97.5	58.1	34.7	199.5	May 28	2085	133.86	20.96	1981			
1982	22.9	19.0	18.3	37.7	762.0	560.0	376.0	309.0	183.0	86.5	38.7	31.6	205.2	May 19	2890	139.29	15.87	1982			
1983	22.6	19.1	18.4	119.0	239.0	590.0	561.0	376.0	189.0	100.0	44.4	20.8	192.5	Jun 20	1940	135.29	17.34	1983			
1984	15.9	15.8	17.8	75.6	439.0	937.0	634.0	462.0	346.0	139.0	59.6	37.7	265.3	Jun 07	2930	203.71	14.86	1984			
1985	29.0	21.4	19.7	90.4	218.0	374.0	437.0	354.0	676.0	217.0	81.7	49.1	214.5	Sep 15	1990	203.29	18.30	1985			
1986	33.4	24.3	22.3	25.7	365.0	361.0	839.0	264.0	185.0	265.0	89.3	51.3	212.5	Jul 15	2070	116.57	21.69	1986			
1987	32.2	24.5	21.7	38.5	247.0	626.0	698.0	939.0	411.0	183.0	72.4	33.8	279.2	Jul 27	2860	271.43	20.06	1987			
1988	21.6	18.7	19.7	84.6	749.0	693.0	928.0	296.0	149.0	93.3	57.9	41.3	264.2	Jul 13	2630	110.57	17.81	1988			
1989	32.6	23.7	19.0	113.0	534.0	633.0	495.0	523.0	222.0	144.0	55.9	47.9	238.5	Aug 12	1490	184.14	18.16	1989			
1990	27.1	21.6	34.2	113.0	514.0	832.0	568.0	239.0	143.0	51.4	26.4	28.3	217.4	Jun 01	3120	110.76	19.11	1990			
1991	23.0	21.7	24.7	68.2	207.0	355.0	557.0	215.0	224.0	113.0	61.5	39.9	160.1	Jul 17	1150	177.14	20.36	1991			
1992	33.5	23.0	26.8	127.0	243.0	614.0	365.0	210.0	106.0	105.0	37.1	21.7	159.4	Jun 11	1270	86.43	17.97	1992			
1993	17.4	17.0	15.0	53.3	235.0	792.0	832.0	757.0	325.0	173.0	88.8	36.9	280.3	Jun 29	2240	215.71	14.19	1993			
1994	29.0	26.4	25.9	146.0	344.0	537.0	756.0	386.0	196.0	114.0	43.9	34.8	221.4	Jul 03	2540	178.29	23.93	1994			
1995	25.9	21.5	20.2	34.3	169.0	453.0	374.0	549.0	237.0	121.0	60.4	41.2	176.6	Aug 20	1820	171.14	19.81	1995			
1996	31.7	27.6	26.3	63.6	344.0	526.0	1140.0	575.0	351.0	201.0	116.0	67.3	290.8	Jul 20	4170	265.71	24.99	1996			
1997	39.6	34.6	28.1	35.3	242.0	906.0	609.0	753.0	549.0	261.0	99.6	58.6	302.5	Aug 08	2380	389.86	26.27	1997			
1998	28.2	24.9	25.4	140.0	327.0	458.0	542.0	247.0	115.0	83.8	52.1	31.4	173.9	Jul 14	1730	90.57	24.27	1998			
1999	23.0	20.4	18.6	97.3	366.0	671.0	445.0	289.0	145.0	71.2	40.3	28.1	185.3	Jun 20	1040	109.57	18.16	1999			
2000	17.8	16.2	18.0	33.5	107.0	381.0	495.0	394.0	348.0	120.0	52.4	35.7	168.7	Aug 11	774	120.39	15.31	2000			
2001	30.0	21.9	21.4	44.5	164.0	887.0	806.0	381.0	176.0	98.2	61.6	49.7	229.4	Jul 20	2920	148.71	19.93	2001			
2002	33.5	23.3	19.8	23.8	364.0	633.0	777.0	385.0	173.0	96.6	50.7	36.3	219.6	Jul 04	1550	134.86	18.27	2002			
2003	26.7	25.1	29.5	50.1	242.0	381.0	655.0	225.0	126.0	84.0	49.5	33.3	161.8	Jul 02	2170	96.43	23.91	2003			
2004	21.7	20.1	18.5	24.4	216.0	486.0	547.0	284.0	338.0	162.0	73.4	57.1	187.8	Jul 04	895	215.43	18.17	2004			
2005	35.0	27.4	24.9	152.0	357.0	599.0	389.0	457.0	262.0	119.0	77.0	45.4	212.9	Aug 02	1290	190.43	23.89	2005			
2006	23.9	19.6	18.2	40.5	340.0	388.0	483.0	230.0	115.0	81.0	48.4	37.2	153.2	Jul 11	1090	84.50	17.97	2006			
2007	27.1	23.3	19.1	113.0	316.0	648.0	491.0	417.0	300.0	201.0	86.5	46.9	233.5	Jul 02	1290	257.29	17.94	2007			
2008	29.6	24.6	25.1	45.3	805.0	735.0	534.0	405.0	168.0	96.2	52.6	35.1	247.5	May 22	2640	125.29	23.83	2008			
2009	24.7	21.0	18.9	45.1	249.0	505.0	503.0	321.0	330.0	134.0	69.3	42.6	189.5	Jun 27	1000	175.86	18.41	2009			
2010	27.6	23.3	22.9	152.0	331.0	339.0	294.0	236.0	349.0	161.0	68.0	38.8	170.8	Sep 12	987	213.57	22.37	2010			
2011																			2011		
Avg.	25.87	21.68	21.22	72.71	338.8	595.7	608.29	399.94	271.03	136.96	62.04	38.14	217.10		211.94	169.97	19.11	m <sup>3</sup> /s			
S. D.	6.27	4.29	4.62	39.96	175.14	181.47	207.70	190.08	131.87	54.84	18.91	10.89	42.77		863.66	64.19	3.73	m <sup>3</sup> /s			
Normal	27.11	22.47	22.03	73.91	354.83	582.50	586.67	392.40	255.80	132.42	62.45	39.82	213.79		m <sup>3</sup> /s			m <sup>3</sup> /s			
Normal	4	3	3	9	47	75	78	52	33	18	8	5	333	mm	10-Year	3586.09	91.45	10.71	m <sup>3</sup> /s		



**RASPBERRY CREEK NEAR THE MOUTH 10CD003**

Station Longitude Latitude: -123.319900 58.892949

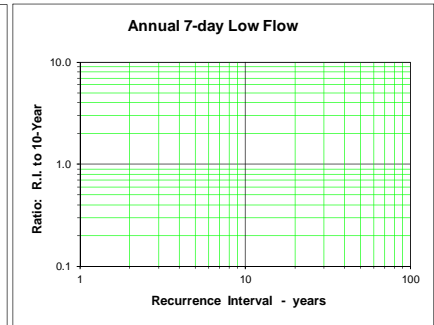
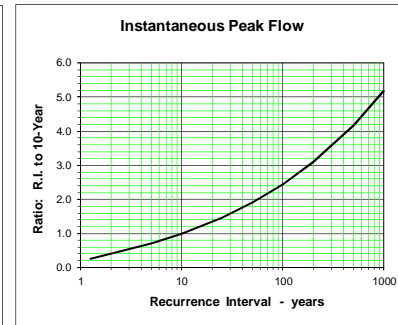
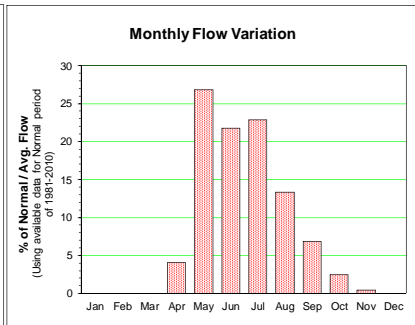
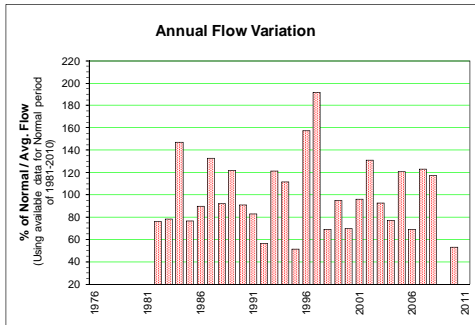
Monthly and Annual Discharge in m <sup>3</sup> /s													Drainage Area = 274.02 km <sup>2</sup>		Median Elevation = 547 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976																		1976			
1977																		1977			
1978																		1978			
1979							2.210	0.739	1.440	0.425	0.031	0.000		Jul 03	10.30			1979			
1980	0.000	0.000	0.003	0.243	1.610	3.520	2.010	0.549	2.010	1.310	0.401	0.098	0.979	Jun 03	28.10	0.352	0.000	1980			
1981	0.004	0.000	0.000	0.006	1.710	1.640	0.090	0.011	0.018	0.062	0.077	0.036	0.306	Jun 02	4.18	0.001	0.000	1981			
1982	0.005	0.000	0.000	0.012	14.900	1.660	0.107	0.156	0.134	0.114	0.026	0.000	1.448	May 18	44.55	0.002	0.000	1982			
1983	0.000	0.000	0.000	0.440	3.480	1.110	0.511	0.236	0.192	0.177	0.018	0.000	0.519	May 09	9.10	0.014	0.000	1983			
1984	0.000	0.000	0.000	0.101	2.660	4.680	1.700	0.508	2.050	0.510	0.021	0.000	1.017	Jun 08	20.35	0.192	0.000	1984			
1985	0.000	0.000	0.000	0.055	2.700	0.464	0.601	8.100	4.990	0.590	0.007	0.000	1.472	Aug 25	67.40	0.121	0.000	1985			
1986	0.000	0.000	0.000	0.567	12.900	1.340	2.330	0.301	0.821	2.290	0.273	0.001	1.760	May 18	29.70	0.035	0.000	1986			
1987	0.000	0.000	0.000	0.019	5.120	2.910	1.730	2.110	1.200	0.327	0.100	0.022	1.138	May 13	9.26	0.530	0.000	1987			
1988	0.001	0.000	0.000	0.011	9.910	3.410	8.980	0.654	0.128	0.146	0.077	0.023	1.967	Jul 14	93.40	0.100	0.000	1988			
1989	0.004	0.000	0.000	1.520	6.730	0.715	0.172	0.094	0.070	0.161	0.074	0.019	0.805	May 01	21.60	0.020	0.000	1989			
1990	0.001	0.000	0.001	0.191	7.060	3.170	0.370	0.011	0.007	0.027	0.006	0.001	0.912	May 02	22.80	0.000	0.000	1990			
1991	0.000	0.000	0.000	1.020	1.720	0.452	1.330	0.282	0.839	0.310	0.071	0.005	0.506	Jul 17	7.58	0.091	0.000	1991			
1992	0.000	0.001	0.009	2.570	6.460	1.380	0.241	0.184	0.083	0.203	0.068	0.008	0.938	May 05	17.90	0.042	0.000	1992			
1993	0.000	0.003	0.018	0.406	1.990	1.060	1.360	1.470	0.283	0.235	0.152	0.001	0.587	May 26	6.24	0.203	0.000	1993			
1994	0.000	0.000	0.041	3.430	5.430	1.470	1.160	0.909	0.363	0.248	0.008	0.000	1.095	May 04	22.30	0.255	0.000	1994			
1995	0.000	0.000	0.009	1.270	1.790	1.260	0.235	2.240	0.394	0.186	0.063	0.022	0.626	Aug 20	13.60	0.088	0.000	1995			
1996	0.003	0.000	0.004	0.586	7.620	3.260	4.420	2.430	2.320	1.120	0.454	0.148	1.876	Jul 21	12.10	0.722	0.000	1996			
1997	0.001	0.001	0.000	0.990	4.780	7.090	3.410	3.990	2.600	1.970	0.077	0.002	2.086	Jun 05	16.90	1.589	0.000	1997			
1998	0.000	0.000	0.005	0.637	1.260	0.869	1.530	0.393	0.079	0.091	0.044	0.002	0.413	Jul 21	5.49	0.049	0.000	1998			
1999	0.000	0.000	0.001	0.593	7.670	3.240	0.334	1.700	0.350	0.183	0.007	0.000	1.184	Nov 30	13.00	0.117	0.000	1999			
2000	0.000	0.000	0.003	0.051	1.120	0.617	1.400	1.600	1.640	0.453	0.028	0.001	0.579	Sep 03	4.69	0.387	0.000	2000			
2001	0.000	0.000	0.001	0.492	4.680	5.490	3.770	0.659	0.388	0.247	0.078	0.003	1.325	Jul 20	21.00	0.319	0.000	2001			
2002	0.000	0.000	0.000	0.006	6.460	3.330	1.360	0.278	0.329	0.070	0.036	0.000	1.098	May 15	29.60	0.124	0.000	2002			
2003	0.002	0.000	0.002	0.188	4.270	1.260	0.646	0.295	0.200	0.194	0.030	0.002	0.597	May 05	9.20	0.082	0.000	2003			
2004	0.000	0.000	0.001	0.956	4.720	0.786	0.303	0.116	0.654	0.319	0.018	0.000	0.660	May 21	10.40	0.038	0.000	2004			
2005	0.000	0.000	0.000	0.723	3.180	2.760	2.030	2.770	1.070	0.480	0.206	0.012	1.111	Aug 02	17.00	0.557	0.000	2005			
2006	0.000	0.000	0.000	0.133	7.850	0.765	1.290	0.435	0.094	0.207	0.026	0.000	0.914	May 14	30.80	0.075	0.000	2006			
2007	0.000	0.000	0.000	1.000	4.940	2.100	5.820	2.780	4.890	3.430	0.768	0.005	2.162	Jul 01	33.92	0.892	0.000	2007			
2008	0.000	0.000	0.000	0.063	34.900	5.950	3.500	0.800	0.260	0.126	0.017	0.001	3.847	May 21	169.59	0.151	0.000	2008			
2009	0.000	0.000	0.000	1.100	9.560	3.100	2.500	0.186	3.740	1.780	0.466	0.072	1.888	May 02	34.03	0.102	0.000	2009			
2010	0.011	0.002	0.010	3.090	6.600	0.691	1.190	1.540	2.320	0.733	0.280	0.059	1.386	May 10	12.80	0.310	0.001	2010			
2011																		2011			
Avg.	0.001	0.000	0.003	0.725	6.315	2.308	1.833	1.232	1.122	0.593	0.126	0.018	1.200		27	0.24	0.00	m <sup>3</sup> /s			
S. D.	0.002	0.001	0.008	0.883	6.273	1.728	1.892	1.599	1.372	0.771	0.175	0.033	0.715		32.04	0.33	0.00	m <sup>3</sup> /s			
Normal	0.00	0.00	0.00	0.74	6.47	2.27	1.81	1.27	1.08	0.57	0.12	0.02	1.21					m <sup>3</sup> /s			
Normal	0	0	0	7	63	21	18	12	10	6	1	0	139	10-Year	54.54	0.01	0.00	m <sup>3</sup> /s			



**BOUGIE CREEK AT KILOMETRE 368 ALASKA HIGHWAY 10CD004**

Station Longitude Latitude: -122.720000 58.030030

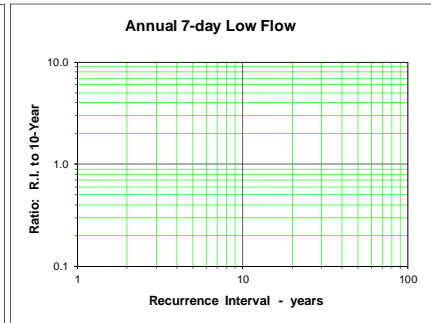
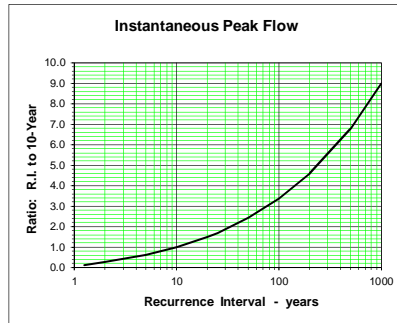
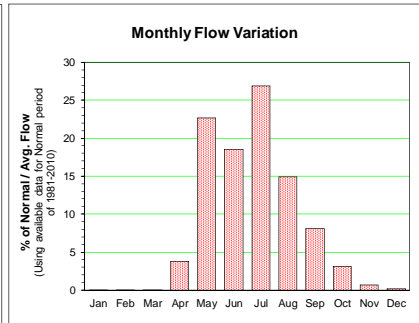
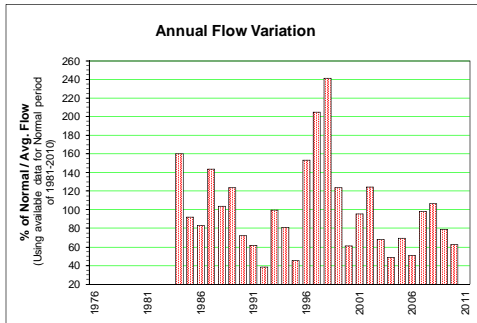
Year	Monthly and Annual Discharge in m <sup>3</sup> /s										Drainage Area = 334.19 km <sup>2</sup>			Median Elevation = 733 m			Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual				
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981								1.170	1.060	0.902	0.379	0.087							1981		
1982	0.009	0.000	0.000	0.009	16.100	2.340	0.402	2.870	1.400	0.508	0.094	0.000	2.005	May 18	50.20	0.245	0.0000	1982			
1983	0.000	0.000	0.000	1.160	7.490	7.910	3.940	2.390	1.010	0.582	0.160	0.004	2.065	Jun 20	36.60	0.429	0.0000	1983			
1984	0.000	0.001	0.010	0.945	17.200	14.900	6.600	1.860	3.960	0.683	0.031	0.000	3.858	May 21	115.00	1.236	0.0000	1984			
1985	0.000	0.000	0.005	0.073	4.520	4.120	1.610	2.020	9.440	2.260	0.105	0.001	2.014	Sep 14	37.00	0.582	0.0000	1985			
1986	0.000	0.000	0.000	0.196	9.250	1.430	13.200	1.590	0.787	1.270	0.145	0.001	2.360	Jul 13	123.00	0.266	0.0000	1986			
1987	0.000	0.000	0.000	1.060	4.340	6.290	7.290	21.000	0.797	0.324	0.148	0.018	3.482	Aug 01	430.00	0.398	0.0000	1987			
1988	0.000	0.000	0.000	0.044	17.300	2.250	8.110	0.653	0.216	0.017	0.022	0.093	2.424	May 15	85.00	0.011	0.0000	1988			
1989	0.007	0.001	0.001	4.300	15.400	4.500	1.270	8.860	0.936	2.110	0.560	0.118	3.205	Aug 09	41.90	0.109	0.0000	1989			
1990	0.009	0.023	0.242	1.460	11.600	9.800	5.130	0.234	0.077	0.004	0.006	0.008	2.397	Jun 01	58.30	0.008	0.0000	1990			
1991	0.004	0.005	0.068	1.930	4.650	5.170	12.100	0.737	0.921	0.219	0.137	0.063	2.186	Jul 14	76.10	0.194	0.0014	1991			
1992	0.050	0.059	0.428	2.290	6.440	7.000	0.616	0.295	0.215	0.285	0.175	0.018	1.487	Jun 10	54.40	0.079	0.0000	1992			
1993	0.001	0.002	0.017	0.448	1.190	12.000	9.220	12.800	1.460	0.522	0.214	0.126	3.189	Aug 09	107.00	0.414	0.0000	1993			
1994	0.024	0.000	0.004	7.220	12.800	4.850	9.340	0.424	0.087	0.144	0.003	0.000	2.930	Jul 11	49.90	0.027	0.0000	1994			
1995	0.000	0.000	0.004	0.463	0.508	3.680	1.500	8.900	0.577	0.201	0.180	0.019	1.348	Aug 19	49.40	0.043	0.0000	1995			
1996	0.000	0.001	0.008	0.065	4.760	8.740	21.700	6.960	5.390	1.090	0.402	0.092	4.128	Jul 19	133.00	1.584	0.0000	1996			
1997	0.007	0.000	0.000	4.910	10.000	13.800	9.260	12.900	6.700	2.400	0.124	0.010	5.035	Aug 08	100.00	2.243	0.0000	1997			
1998	0.000	0.000	0.008	1.270	5.160	4.670	9.160	0.762	0.133	0.271	0.201	0.005	1.821	Jul 14	153.00	0.110	0.0000	1998			
1999	0.000	0.000	0.001	3.200	10.000	11.400	2.550	1.570	0.830	0.300	0.010	0.000	2.494	May 13	73.50	0.361	0.0000	1999			
2000	0.000	0.001	0.003	0.591	4.270	4.280	1.200	3.980	7.060	0.677	0.024	0.000	1.838	Sep 05	32.65	0.460	0.0000	2000			
2001	0.000	0.000	0.002	0.255	4.320	11.800	11.200	0.926	0.948	0.586	0.091	0.002	2.523	Jul 20	128.00	0.270	0.0000	2001			
2002	0.000	0.000	0.000	0.041	10.700	7.740	15.500	3.770	1.920	0.905	0.189	0.066	3.441	Jul 02	127.00	0.117	0.0000	2002			
2003	0.004	0.000	0.002	0.055	6.640	4.060	14.300	2.930	0.489	0.285	0.032	0.001	2.433	Jul 01	102.00	0.325	0.0000	2003			
2004	0.000	0.000	0.002	1.390	6.260	5.690	5.590	0.617	3.580	0.964	0.132	0.018	2.024	May 21	50.30	0.302	0.0000	2004			
2005	0.001	0.000	0.000	1.410	3.930	10.600	4.990	9.700	6.170	0.869	0.327	0.018	3.178	Aug 02	60.00	1.164	0.0000	2005			
2006	0.000	0.000	0.000	0.077	11.600	1.880	5.980	1.520	0.221	0.226	0.026	0.001	1.823	May 14	84.50	0.196	0.0000	2006			
2007	0.000	0.000	0.000	2.280	8.590	4.670	11.800	5.270	2.310	3.210	0.241	0.006	3.233	Jul 01	137.00	0.671	0.0000	2007			
2008	0.000	0.000	0.000	0.089	12.900	20.300	2.320	0.947	0.240	0.170	0.061	0.013	3.081	Jun 14	218.00	0.211	0.0000	2008			
2009	0.000	0.000	0.000	0.484	7.830	4.330					0.085	0.000		Sep 08	30.60	1.159	0.0000	2009			
2010	0.000	0.000	0.001	0.255	4.770	1.480	2.110	2.200	5.060	0.631	0.257	0.012	1.405	Sep 12	34.40	0.675	0.0000	2010			
2011																		2011			
Avg. S. D.	0.004	0.003	0.028	1.309	8.294	6.954	7.071	4.133	2.207	0.780	0.152	0.027	2.622	2.62	95.78	0.48	0.00	m <sup>3</sup> /s			
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.010	0.012	0.089	1.708	4.625	4.551	5.319	4.934	2.667	0.785	0.132	0.039	0.878		78.40	0.53	0.00	m <sup>3</sup> /s			
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.004	0.00	0.03	1.31	8.29	6.95	7.07	4.13	2.21	0.78	0.15	0.03	2.62	m <sup>3</sup> /s							
	0	0	0	10	66	54	57	33	17	6	1	0	248	mm	10-Year	178.2	0.039	0.000	m <sup>3</sup> /s		



**ADSETT CREEK AT KILOMETRE 386.0 ALASKA HIGHWAY 10CD005**

Station Longitude Latitude: -122.715600 58.106110

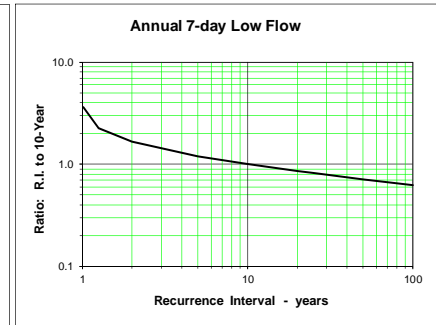
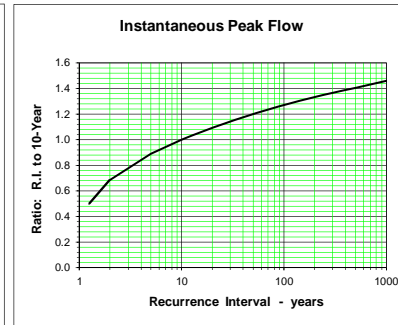
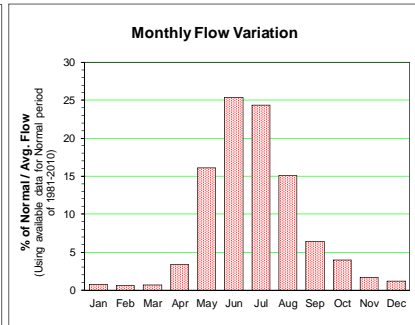
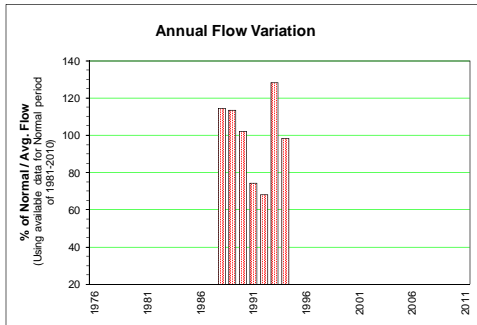
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 109.19 km <sup>2</sup>		Median Elevation = 693 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981																			1981		
1982																			1982		
1983				0.334	2.180	3.110	1.120	0.868	0.531	0.304	0.080	0.002			Jun 19	19.00			1983		
1984	0.000	0.001	0.011	0.653	5.520	3.070	2.170	2.140	2.150	0.341	0.139	0.072	1.361		May 21	29.60	0.5529	0.0000	1984		
1985	0.038	0.003	0.014	0.646	1.790	0.875	0.699	1.020	3.380	0.758	0.141	0.061	0.787		Sep 16	10.60	0.2239	0.0000	1985		
1986	0.032	0.017	0.005	0.029	2.660	0.534	3.540	0.622	0.346	0.483	0.058	0.026	0.707		Jul 13	16.30	0.1150	0.0024	1986		
1987	0.011	0.003	0.002	0.224	1.080	2.260	2.230	8.030	0.409	0.153	0.059	0.028	1.222		Aug 01	150.00	0.2313	0.0003	1987		
1988	0.009	0.002	0.002	0.003	5.680	1.610	2.450	0.406	0.183	0.067	0.031	0.060	0.885		May 29	48.20	0.1170	0.0010	1988		
1989	0.006	0.001	0.000	0.944	4.160	1.540	0.740	3.110	1.030	0.724	0.206	0.073	1.054		Aug 09	35.70	0.4736	0.0000	1989		
1990	0.008	0.019	0.125	0.498	3.060	2.040	1.140	0.120	0.263	0.052	0.012	0.007	0.616		Jun 01	7.43	0.0750	0.0000	1990		
1991	0.004	0.005	0.033	0.602	1.210	1.330	2.400	0.240	0.275	0.146	0.033	0.013	0.528		Jul 14	18.70	0.1337	0.0024	1991		
1992	0.006	0.009	0.121	0.570	1.440	1.380	0.148	0.096	0.061	0.054	0.045	0.006	0.328		Jun 10	10.10	0.0216	0.0000	1992		
1993	0.000	0.001	0.004	0.199	0.403	1.910	2.210	3.920	0.585	0.489	0.239	0.105	0.847		Aug 09	30.20	0.1383	0.0000	1993		
1994	0.053	0.024	0.033	1.550	2.020	1.900	2.340	0.270	0.093	0.085	0.005	0.000	0.693		Jul 11	18.10	0.0500	0.0000	1994		
1995	0.000	0.000	0.001	0.074	0.323	0.711	0.441	2.650	0.237	0.125	0.057	0.009	0.390		Aug 17	21.50	0.0944	0.0000	1995		
1996	0.000	0.000	0.003	0.148	1.620	2.440	7.490	1.810	1.440	0.354	0.151	0.048	1.302		Jul 06	60.30	0.4910	0.0000	1996		
1997	0.001	0.000	0.000	1.440	3.140	4.140	1.760	6.520	2.710	0.929	0.121	0.031	1.743		Aug 08	53.50	1.0843	0.0000	1997		
1998	0.001	0.000	0.011	0.218	0.894	0.929	20.700	1.170	0.072	0.164	0.033	0.000	2.051		Jul 15	222.00	0.0599	0.0000	1998		
1999	0.000	0.000	0.000	0.506	4.620	5.250	1.190	0.534	0.313	0.152	0.010	0.000	1.051		Jun 08	38.40	0.1340	0.0000	1999		
2000	0.001	0.002	0.006	0.129	0.949	1.430	0.543	0.956	1.950	0.260	0.015	0.001	0.519		Sep 05	7.31	0.0893	0.0000	2000		
2001	0.000	0.000	0.001	0.124	1.750	3.440	3.650	0.393	0.175	0.120	0.028	0.001	0.812		Jul 19	36.00	0.1014	0.0000	2001		
2002	0.000	0.000	0.000	0.025	2.540	2.270	5.690	1.190	0.480	0.290	0.056	0.009	1.058		Jul 01	94.30	0.1306	0.0000	2002		
2003	0.001	0.001	0.001	0.023	1.230	1.020	3.200	0.935	0.238	0.163	0.055	0.007	0.580		Jul 01	34.70	0.1619	0.0000	2003		
2004	0.000	0.000	0.001	0.276	1.350	1.310	1.090	0.150	0.562	0.221	0.052	0.001	0.419		Jul 21	5.70	0.0734	0.0000	2004		
2005	0.000	0.000	0.000	0.262	0.939	1.610	0.943	1.530	1.320	0.289	0.143	0.013	0.590		Aug 02	9.06	0.3111	0.0000	2005		
2006	0.000	0.000	0.000	0.018	1.960	0.683	1.860	0.397	0.079	0.110	0.019	0.000	0.433		Jul 11	7.01	0.0700	0.0000	2006		
2007	0.000	0.000	0.000	0.622	2.220	1.880	2.260	0.724	0.803	1.290	0.134	0.004	0.835		Jul 01	48.30	0.1746	0.0000	2007		
2008	0.000	0.000	0.000	0.001	5.290	3.470	1.280	0.551	0.149	0.102	0.014	0.001	0.910		May 21	48.30	0.0936	0.0000	2008		
2009	0.000	0.000	0.000	0.522	1.980	1.380	1.710	0.269	1.870	0.273	0.066	0.000	0.675		Sep 08	18.00	0.1617	0.0000	2009		
2010	0.000	0.001	0.004	0.455	1.600	0.369	0.489	1.150	1.870	0.239	0.155	0.047	0.534		Sep 12	11.10	0.2264	0.0000	2010		
2011																			2011		
Avg.	0.006	0.003	0.014	0.396	2.272	1.921	2.696	1.492	0.842	0.312	0.077	0.022	0.849	0.849		39.62	0.21	0.00	m <sup>3</sup> /s		
S. D.	0.013	0.006	0.033	0.400	1.509	1.156	3.875	1.894	0.898	0.293	0.064	0.029	0.412			47.12	0.22	0.00	m <sup>3</sup> /s		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)																					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.006	0.003	0.014	0.396	2.272	1.921	2.696	1.492	0.842	0.312	0.077	0.022	0.849	m <sup>3</sup> /s							
10-Year	0.155	0.074	0.343	9.41	55.72	45.60	66.13	36.59	19.99	7.65	1.83	0.548	245	mm	10-Year	86.2	0.052	0.000	m <sup>3</sup> /s		



**PROPHET RIVER ABOVE CHEVES CREEK 10CD006**

Station Longitude Latitude: -122.829947 58.485005

Year	Monthly and Annual Discharge in m <sup>3</sup> /s					Drainage Area = 7278.10 km <sup>2</sup>					Median Elevation = 994 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		
1976																			1976	
1977																			1977	
1978																			1978	
1979																			1979	
1980																			1980	
1981																			1981	
1982																			1982	
1983																			1983	
1984																			1984	
1985																			1985	
1986																			1986	
1987															May 15	1200.00			1987	
1988	4.95	4.40	4.69	35.80	286.00	210.00	283.00	88.70	43.30	28.60	17.90	13.50	85.60	Aug 11	776.00		29.51	4.21	1988	
1989	8.39	5.88	2.97	21.60	170.00	229.00	142.00	269.00	72.60	51.00	21.50	15.40	84.73	Jun 01	1420.00		53.53	2.19	1989	
1990	9.24	8.62	11.90	34.60	185.00	299.00	214.00	73.90	41.40	16.00	10.00	9.01	76.39	Jul 06	540.00		31.06	8.01	1990	
1991	6.83	6.66	7.58	32.80	81.50	137.00	209.00	60.20	63.00	31.50	15.50	11.50	55.58	Jun 10	720.00		49.77	6.13	1991	
1992	9.62	6.96	8.23	32.10	87.20	240.00	95.80	49.20	32.50	32.40	11.20	5.89	50.86	Jun 29	1100.00		27.10	4.59	1992	
1993	4.54	4.45	3.92	15.60	65.30	317.00	277.00	274.00	94.60	51.60	24.40	10.30	95.78	Jul 03	1160.00		63.33	3.73	1993	
1994	6.22	4.86	4.77	45.90	118.00	186.00	281.00	115.00	60.60	35.80	9.54	6.78	73.40				56.29	4.44	1994	
1995	5.13	4.26	4.02																3.94	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
Avg.	6.87	5.76	6.01	31.20	141.86	231.14	214.54	132.86	58.29	35.27	15.72	10.34	74.62	74.59	988.00		44.37	4.65	m <sup>3</sup> /s	
S. D.	2.00	1.56	3.00	9.90	77.99	62.46	73.48	97.02	21.31	12.60	5.84	3.44	16.34		313.89		14.78	1.74	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	6.87	5.76	6.01	31.20	141.86	231.14	214.54	132.86	58.29	35.27	15.72	10.34	74.62	m <sup>3</sup> /s						
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	3	2	2	11	52	82	79	49	21	13	6	4	324	mm	10-Year	1426.1	26.558	2.669	m <sup>3</sup> /s	



Zone 6 Southern Interior Plains





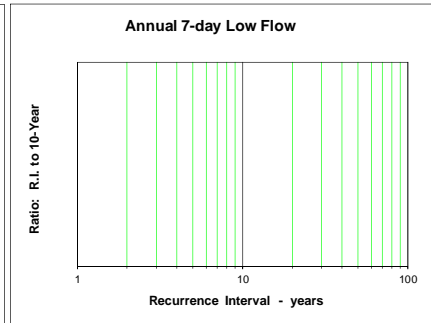
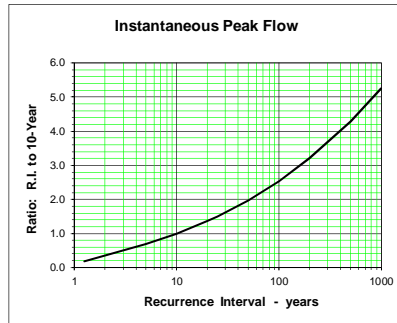
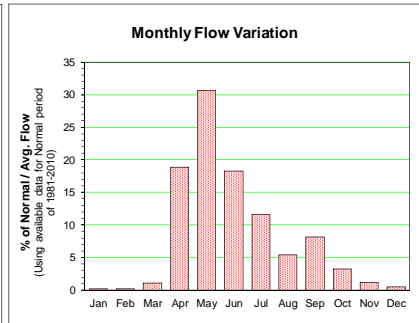
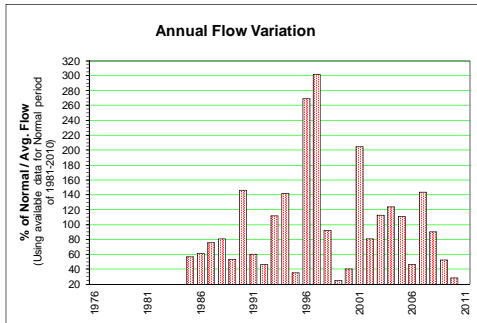




**ALCES RIVER AT 22ND BASE LINE 07FD004**

Station Longitude Latitude: -120.154667 56.333316

Year	Monthly and Annual Discharge in m <sup>3</sup> /s					Drainage Area = 319.27 km <sup>2</sup>					Median Elevation = 763 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		
1976																			1976	
1977																			1977	
1978																			1978	
1979																			1979	
1980																			1980	
1981																			1981	
1982																			1982	
1983																			1983	
1984																			1984	
1985	0.015	0.005	0.005	0.397	0.374	0.567	0.298	0.212	0.932	0.928	0.131	0.037	0.326		Jun 23	2.37	0.0521	0.0034	1985	
1986	0.009	0.013	0.051	0.358	2.250	0.418	0.940	0.059	0.002	0.037	0.027	0.019	0.353		May 14	6.51	0.0000	0.0000	1986	
1987	0.009	0.012	0.018	0.254	0.489	0.969	0.667	2.290	0.255	0.074	0.071	0.040	0.433		Aug 03	8.70	0.1509	0.0050	1987	
1988	0.025	0.031	0.213	0.799	1.800	0.935	0.675	0.425	0.345	0.246	0.033	0.009	0.463		May 17	6.76	0.1891	0.0039	1988	
1989	0.001	0.000	0.002	0.949	1.720	0.553	0.099	0.065	0.036	0.087	0.076	0.051	0.305		May 10	5.26	0.0027	0.0000	1989	
1990	0.036	0.019	0.021	1.250	3.430	4.980	0.302	0.001	0.000	0.002	0.014	0.014	0.838		Jun 12	27.30	0.0000	0.0000	1990	
1991	0.006	0.004	0.006	1.340	0.777	1.760	0.250	0.000	0.000	0.000	0.001	0.002	0.344		Apr 12	4.33	0.0000	0.0000	1991	
1992	0.003	0.004	0.557	1.060	1.230	0.348	0.001	0.001	0.000	0.001	0.001	0.002	0.268		May 02	5.20	0.0000	0.0000	1992	
1993	0.000	0.001	0.097	0.249	0.142	1.630	2.280	2.190	0.310	0.112	0.060	0.638	0.810		Jul 31	8.05	0.0004	0.0000	1993	
1994	0.040	0.051	0.263	3.980	2.560	0.761	1.370	0.322	0.062	0.191	0.077	0.021	0.810		Apr 22	16.40	0.0146	0.0121	1994	
1995	0.010	0.009	0.008	0.625	0.304	0.468	0.417	0.252	0.125	0.098	0.065	0.063	0.204		Apr 11	2.19	0.0610	0.0056	1995	
1996	0.034	0.032	0.031	2.190	3.750	1.500	2.190	1.580	5.780	0.855	0.318	0.166	1.534		Sep 01	40.70	0.2737	0.0207	1996	
1997	0.031	0.039	0.049	5.220	10.300	1.820	0.877	0.145	0.998	0.432	0.471	0.149	1.720		Apr 25	24.00	0.0013	0.0013	1997	
1998	0.046	0.059	0.096	2.170	1.850	0.832	0.910	0.084	0.015	0.169	0.042	0.023	0.526		Aug 06	5.36	0.0006	0.0006	1998	
1999	0.014	0.012	0.017	0.809	0.283	0.403	0.134	0.030	0.003	0.012	0.011	0.144	0.144		Apr 17	7.09	0.0010	0.0010	1999	
2000	0.006	0.007	0.031	0.041	0.345	0.169	0.518	0.141	1.090	0.362	0.103	0.013	0.235		Jun 10	2.42	0.0016	0.0016	2000	
2001	0.003	0.002	0.014	0.931	1.950	8.250	2.210	0.181	0.096	0.341	0.044	0.015	1.167		May 30	21.30	0.0034	0.0020	2001	
2002	0.020	0.022	0.018	0.271	3.210	1.250	0.389	0.111	0.116	0.072	0.037	0.015	0.465		May 15	6.28	0.0000	0.0000	2002	
2003	0.001	0.001	0.001	2.240	2.040	0.984	1.910	0.174	0.145	0.102	0.054	0.035	0.643		Apr 25	8.26	0.1259	0.0010	2003	
2004	0.023	0.033	0.048	0.392	0.726	0.395	1.220	0.631	3.600	0.977	0.373	0.086	0.707		Sep 18	8.04	0.2273	0.0174	2004	
2005	0.034	0.033	0.288	3.640	1.660	0.904	0.343	0.235	0.217	0.185	0.063	0.043	0.636		Apr 17	6.21	0.0554	0.0269	2005	
2006	0.018	0.010	0.004	0.091	2.310	0.638	0.023	0.016	0.002	0.010	0.012	0.014	0.265		May 24	9.50	0.0006	0.0004	2006	
2007	0.020	0.021	0.022	2.210	4.100	1.400	1.030	0.303	0.385	0.211	0.088	0.027	0.822		Apr 24	12.30	0.0624	0.0146	2007	
2008	0.003	0.001	0.003	0.734	4.530	0.597	0.284	0.000	0.000	0.000	0.000	0.517	0.517		May 01	13.20	0.0000	0.0000	2008	
2009	0.001	0.000	0.000	1.030	1.140	0.200	0.828	0.111	0.127	0.094	0.039	0.000	0.299		Apr 19	7.02	0.0000	0.0000	2009	
2010	0.008	0.012	0.036	0.861	0.457	0.346	0.215	0.000	0.007	0.013	0.003	0.000	0.163		Apr 08	3.07	0.0004	0.0000	2010	
2011																			2011	
Avg.	0.016	0.017	0.073	1.311	2.066	1.272	0.784	0.368	0.572	0.223	0.087	0.035	0.570	0.57		10.30	0.0471	0.0045	m <sup>3</sup> /s	
S. D.	0.014	0.016	0.127	1.296	2.104	1.708	0.697	0.636	1.291	0.285	0.118	0.042	0.398			9.00	0.0792	0.0074	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)																				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.016	0.017	0.073	1.311	2.066	1.272	0.784	0.368	0.572	0.223	0.087	0.035	0.570	m <sup>3</sup> /s						
10-Year	0.134	0.127	0.613	10.65	17.34	10.33	6.58	3.08	4.64	1.87	0.708	0.295	56.36	mm	10-Year	22.1	0.000	0.000	m <sup>3</sup> /s	

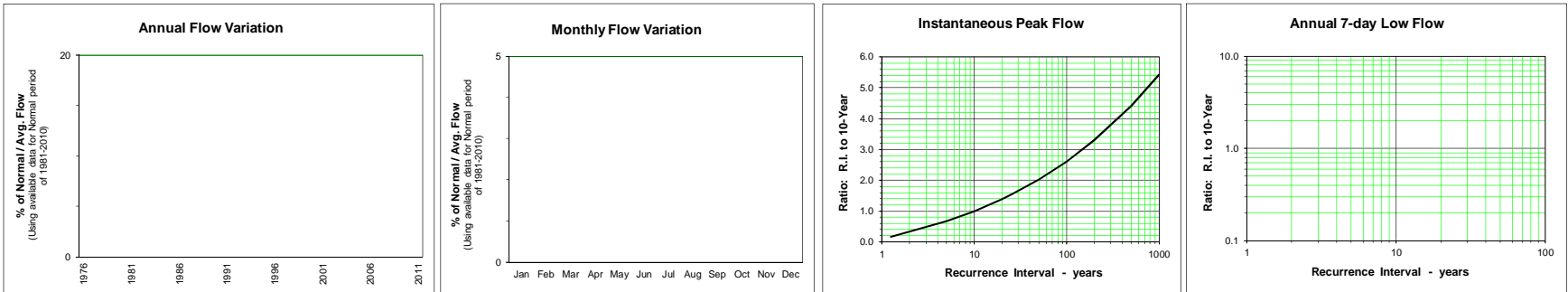




**CLEAR RIVER NEAR BEAR CANYON 07FD009**

Station Longitude Latitude: -119.680500 56.307830

Monthly and Annual Discharge in m³/s													Drainage Area = 2921.17 km²		Median Elevation = 704 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				
1976			0.000	8.940	7.430	6.970	7.010	16.000	2.330	0.904				Aug 19	55.50		0.9527	1976				
1977			0.169	25.100	31.500	21.700	2.730	1.480	0.846	1.060				May 13	167.00		0.5619	1977				
1978			0.053	7.480	24.200	3.510	0.325	0.162	2.260	1.120				May 23	78.40		0.0601	1978				
1979			0.069	8.340	24.300	13.700	16.800	2.840	1.410	0.601				Apr 28	84.30		0.6647	1979				
1980			0.006	2.940	2.550	2.510	1.240	0.932	1.950	1.220							0.4916	1980				
1981			0.121	34.900	34.700	6.010	1.860	0.199	0.079	0.119				Apr 25	207.00		0.0403	1981				
1982			0.000	7.000	16.400	0.940	0.249	2.630	0.491	0.376				Apr 24	46.30		0.1409	1982				
1983			0.006	12.000	5.810	7.660	7.120	2.120	0.314	0.423				Apr 23	57.80		0.1506	1983				
1984			0.654	7.250	32.800	15.000	10.500	0.291	0.378	0.601				May 22	219.00		0.1666	1984				
1985			0.006	12.000	10.400	2.890	1.050	0.181	2.780	2.690				Apr 13	39.00		0.0749	1985				
1986			0.152	12.300	15.800	1.450	3.460	0.255	0.027	0.305				May 14	32.40			1986				
1987			0.000	16.100	5.670	5.420	1.250	5.760	0.438	0.181				Apr 12	50.60		0.1287	1987				
1988			0.019	13.400	14.300	8.590	26.900	1.770	0.464	0.392				Jul 13	90.80		0.3506	1988				
1989			0.022	29.600	24.300	4.090	1.440	4.470	2.990	2.910				Apr 20	113.00		0.6340	1989				
1990			0.710	38.900	24.500	18.700	4.740	0.156	0.020	0.082				Jun 12	98.20		0.0073	1990				
1991			0.038	11.900	7.690	9.330	2.660	0.078	0.121	0.104				Jun 15	31.80		0.0054	1991				
1992			5.780	24.100	14.100	2.340	0.378	0.024	0.675	0.907				May 01	74.80		0.0014	1992				
1993			0.058	3.950	3.290	6.860	13.100	5.090	1.300	0.597				Jun 29	39.98		0.5897	1993				
1994			0.112	42.900	15.900	2.370	4.350	2.110	0.268	0.380				Apr 23	91.00		0.1586	1994				
1995			0.000	10.400	5.580	1.560	2.660	0.904	0.151	0.131				Apr 19	29.20		0.0923	1995				
1996			0.074	30.700	21.400	7.260	5.660	2.320	25.100	3.280				Sep 02	199.00		0.9023	1996				
1997			0.167	68.600	59.200	14.900	12.600	7.580	5.170	9.110				Apr 26	352.00		2.1971	1997				
1998			0.216	13.900	10.000	1.910	2.760	0.371	0.029	0.156				Apr 07	52.90		0.0226	1998				
1999			0.035	4.730	2.700	2.860	0.461	0.261	0.019	0.067				Apr 26	15.30		0.0151	1999				
2000			0.002	0.908	4.580	4.860	13.400	4.870	9.680	2.120				Jul 09	61.90		1.9986	2000				
2001			0.003	8.570	13.500	36.100	15.200	2.890	0.261	0.325				Jun 12	102.00		0.1753	2001				
2002			0.061	7.630	53.600	5.690	1.760	1.210	0.815	0.698				May 02	244.00		0.3284	2002				
2003			0.000					0.342	0.163	0.331				Apr 25	222.00			2003				
2004			0.000	5.710	4.560	1.810	5.030	0.827	11.800	2.740				Sep 19	25.90		0.4049	2004				
2005			4.960	47.000	10.700	4.100	2.860	3.030	0.844	1.110				Apr 13	78.80		0.2959	2005				
2006			0.031	11.900	13.100	3.630	0.946	0.427	0.017	0.072				May 24	53.40		0.0044	2006				
2007			0.000	50.000	47.700	8.650	8.950	5.430	3.310	0.717				Apr 27	298.35		0.3101	2007				
2008			0.060	20.300	34.600	2.830	0.141	0.016	0.016	0.021				May 01	328.00		0.0104	2008				
2009			0.000	20.300	16.100	1.940	0.691	0.036	0.074	0.205				Apr 17	157.53		0.0093	2009				
2010			0.018	6.640	4.640	1.090	0.227	0.005	0.000	0.034				Apr 07	25.90			2010				
2011																		2011				
Avg.	#DIV/0!	#DIV/0!	0.39	18.42	18.16	7.04	5.31	2.20	2.19	1.03	#DIV/0!	#DIV/0!	#DIV/0!		112.44		0.3733	#DIV/0!	m³/s			
S. D.	#DIV/0!	#DIV/0!	1.26	15.88	14.71	7.30	6.13	3.13	4.76	1.66	#DIV/0!	#DIV/0!	#DIV/0!		92.96		0.5259	#DIV/0!	m³/s			
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	#DIV/0!	#DIV/0!	0.44	19.78	18.19	6.58	5.26	1.86	2.26	1.04	#DIV/0!	#DIV/0!	#DIV/0!						m³/s			
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	#DIV/0!	#DIV/0!	0	18	17	6	5	2	2	1	#DIV/0!	#DIV/0!	#DIV/0!	mm	10-Year	256.4		0.009	0.000	m³/s		

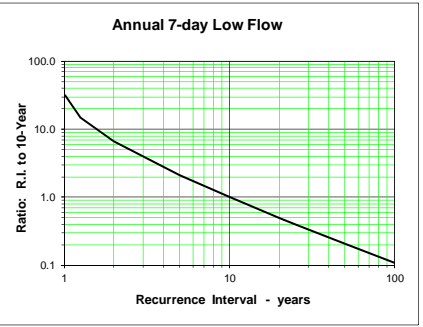
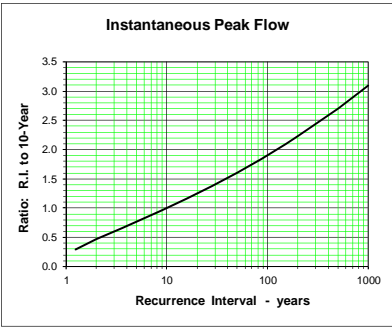
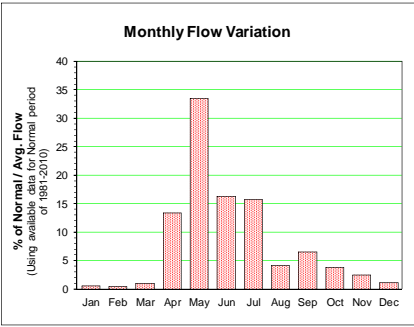
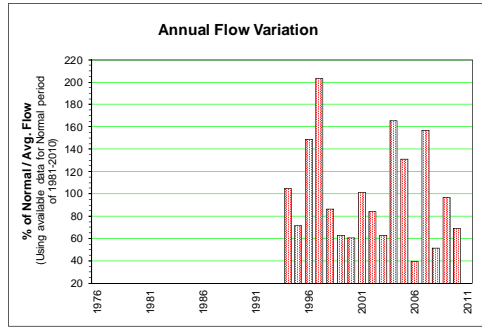




**REDWILLOW RIVER NEAR RIO GRANDE 07GD004**

Station Longitude Latitude: -119.701600 55.078820

Year	Monthly and Annual Discharge in m <sup>3</sup> /s										Drainage Area = 1280.26 km <sup>2</sup>		Median Elevation = 1023 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		
1976																			1976
1977																			1977
1978																			1978
1979																			1979
1980																			1980
1981																			1981
1982																			1982
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1987																			1987
1988																			1988
1989																			1989
1990																			1990
1991																			1991
1992																			1992
1993																			1993
1994	0.282	0.283	0.852	15.000	15.700	21.400	7.200	1.980	2.670	0.767	0.761	0.377	5.75	Jun 15	96.70	1.311	0.270	1994	
1995	0.572	0.494	0.520	9.090	19.200	6.650	5.350	2.790	0.703	0.645	0.531	0.555	3.95	May 12	29.80	0.340	0.270	1995	
1996	0.484	0.426	1.120	17.700	28.900	15.700	9.740	4.390	6.690	8.520	2.660	1.520	8.17	Jun 01	48.10	1.123	0.394	1996	
1997	0.873	0.729	0.923	17.000	46.500	21.500	23.500	9.250	3.490	5.990	2.810	0.531	11.18	Jul 14	97.50	1.681	0.473	1997	
1998	0.422	0.371	0.688	4.230	9.490	9.510	22.600	0.695	0.390	4.890	2.380	0.690	4.74	Jul 03	122.00	0.293	0.293	1998	
1999	0.460	0.515	0.497	15.100	17.700	5.080	1.080	0.344	0.156	0.273	0.139	0.110	3.46	Apr 26	52.00	0.104	0.095	1999	
2000	0.132	0.116	0.189	1.010	3.000	7.800	5.560	1.180	14.400	3.880	2.520	0.468	3.34	Sep 06	44.70	0.847	0.096	2000	
2001	0.186	0.066	0.108	1.970	6.370	10.700	39.200	5.510	0.425	0.458	0.525	0.351	5.56	Jul 19	192.00	0.366	0.041	2001	
2002	0.209	0.147	0.140	4.130	25.700	15.400	2.120	1.680	2.650	1.460	0.956	0.478	4.61	May 23	56.00	0.727	0.133	2002	
2003	0.052	0.073	0.155	10.400	18.800	6.750	3.370	0.432	0.252	0.301	0.470	0.260	3.46			0.182	0.005	2003	
2004	0.088	0.146	0.581	4.310	7.750	17.400	14.800	8.250	37.100	7.990	8.630	2.630	9.10	Sep 03	137.00	3.584	0.054	2004	
2005	1.010	0.789	3.430	15.300	32.700	15.000	4.100	2.830	2.450	4.410	2.280	1.640	7.20	May 09	75.80	1.048	0.599	2005	
2006	0.422	0.364	0.351	4.080	9.250	6.220	1.240	1.600	0.366	0.438	1.080	0.731	2.19	May 30	31.50	0.309	0.267	2006	
2007	0.601	0.589	0.729	13.700	67.900	9.180	2.220	2.790	1.550	1.630	1.050	0.587	8.63	May 05	136.00	0.699	0.492	2007	
2008	0.366	0.288	0.497	0.891	21.400	7.620	0.479	0.471	0.513	0.498	0.499	0.390	2.84	May 26	47.20	0.388	0.249	2008	
2009	0.181	0.122	0.054	3.550	18.800	3.760	29.700	2.340	0.734	1.250	1.480	0.990	5.32	Jul 09	134.00	0.480	0.030	2009	
2010	0.707	0.516	0.617	14.700	20.000	6.540	0.762	0.119	0.151	0.527	0.467	0.346	3.80	Apr 23	43.30	0.080	0.080	2010	
2011																			2011
Avg.	0.41	0.35	0.67	8.95	21.72	10.95	10.18	2.74	4.39	2.53	1.69	0.75	5.49	5.49	83.98	0.80	0.226	m <sup>3</sup> /s	
S. D.	0.27	0.23	0.77	6.18	16.01	5.65	11.69	2.69	9.14	2.73	1.94	0.62	2.54		48.22	0.85	0.181	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.41	0.35	0.67	8.95	21.72	10.95	10.18	2.74	4.39	2.53	1.69	0.75	5.49	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1	1	1	18	45	22	21	6	9	5	3	2	135	mm	10-Year	152.4	0.144	0.027	m <sup>3</sup> /s

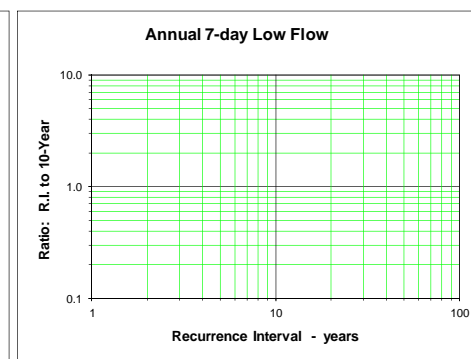
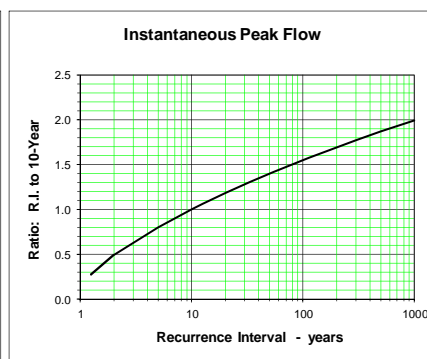
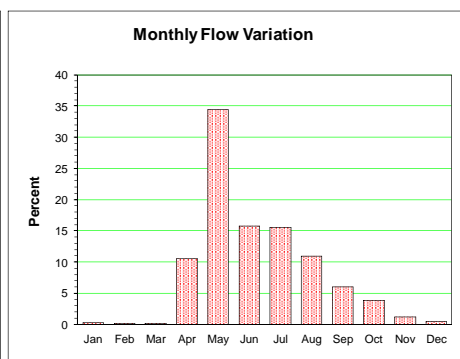
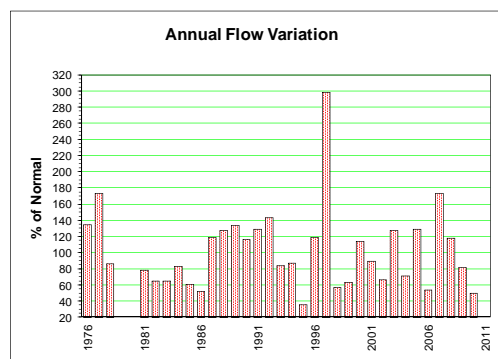




### CHINCHAGA RIVER NEAR HIGH LEVEL 07OC001

Station Longitude Latitude: -118.334100 58.597080

Monthly and Annual Discharge in m <sup>3</sup> /s													Drainage Area = 10858.44 km <sup>2</sup>		Median Elevation = 702 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		
1976	0.383	0.193	0.136	43.30	48.50	76.80	84.90	123.00	40.50	18.30	6.10	1.67	37.1	Aug 20	433.00	17.97	0.054	1976		
1977	1.630	1.430	1.260	59.20	103.00	304.00	54.40	21.10	13.90	10.30	3.39	0.96	47.7	Jun 13	725.00	10.32	0.695	1977		
1978	0.786	0.791	0.669	10.40	124.00	47.30	8.50	10.50	52.10	22.30	4.61	2.42	23.8	May 01	348.00	3.83	0.594	1978		
1979	1.110	0.771	0.597	8.08	265.00	180.00	113.00	22.00	17.30	8.53				Jul 06	412.00	9.15	0.330	1979		
1980			0.000	6.23	5.15	13.40	13.80	18.30	16.50	20.00	4.13	0.60		Jul 30	46.70	5.04	0.000	1980		
1981	0.319	0.238	0.393	39.60	177.00	19.10	12.40	3.31	1.00	1.16	1.59	0.53	21.6	May 04	497.00	0.78	0.053	1981		
1982	0.179	0.119	0.138	0.90	182.00	10.30	2.04	5.63	4.64	3.09	0.97	0.62	17.8	May 05	328.00	1.72	0.087	1982		
1983	0.452	0.378	0.374	30.40	76.70	32.40	22.00	26.00	14.60	7.02	2.86	0.68	17.9	Apr 27	163.00	8.42	0.348	1983		
1984	0.376	0.285	0.188	11.30	44.20	53.00	108.00	15.70	25.40	10.90	4.05	1.21	23.0	Jul 11	237.00	6.64	0.162	1984		
1985	0.535	0.082	0.102	34.00	98.90	12.80	6.36	4.59	16.40	19.30	5.00	2.59	16.9	May 08	240.00	3.11	0.048	1985		
1986	1.350	0.836	0.569	16.70	84.20	18.50	26.80	9.94	3.21	5.79	2.92	1.40	14.5	May 15	131.00	2.08	0.393	1986		
1987	0.571	0.060	0.037	52.10	89.60	89.70	16.40	123.00	10.50	5.49	2.44	1.28	32.8	Aug 06	476.00	6.62	0.022	1987		
1988	0.490	0.335	0.458	22.80	88.90	91.50	169.00	21.80	8.00	5.96	5.32	3.33	35.0	Jul 04	395.00	6.16	0.251	1988		
1989	1.120	0.520	0.253	30.20	273.00	56.20	11.30	18.60	18.50	18.90	5.91	3.89	36.9	May 04	557.00	9.30	0.201	1989		
1990	2.190	1.180	0.928	78.70	156.00	115.00	20.30	4.48	2.20	1.71	0.87	0.68	32.1	Apr 26	294.00	1.93	0.464	1990		
1991	0.201	0.109	0.088	28.10	67.10	137.00	140.00	17.90	21.90	8.20	3.23	1.76	35.6	Jun 18	508.00	8.49	0.079	1991		
1992	2.330	1.930	7.100	111.00	164.00	77.70	20.20	7.88	31.90	41.50	6.65	1.22	39.5	May 04	413.00	5.86	0.461	1992		
1993	0.335	0.240	0.336	10.60	21.20	27.40	68.80	90.40	33.10	14.10	5.53	3.39	23.2	Aug 16	205.84	7.70	0.205	1993		
1994	2.010	1.550	1.510	105.00	128.00	19.80	15.50	6.91	2.56	2.86	1.01	0.50	24.0	Apr 27	400.00	2.22	0.385	1994		
1995	0.404	0.314	0.295	11.80	47.30	13.30	23.10	14.30	4.47	1.65	0.66	0.53	9.9	May 01	87.90	2.15	0.290	1995		
1996	0.641	0.503	0.407	39.20	130.00	46.30	37.10	45.40	66.20	15.10	7.35	3.62	32.7	May 03	290.00	14.13	0.321	1996		
1997	1.640	1.110	0.943	42.90	262.00	129.00	117.00	201.00	101.00	90.00	26.00	4.99	82.2	Aug 04	477.00	47.36	0.898	1997		
1998	2.100	1.350	1.470	29.70	32.90	25.00	69.00	18.30	3.17	2.42	0.65	1.38	15.7			2.20	0.259	1998		
1999	0.813	0.359	0.548	14.50	33.20	71.30	41.10	31.20	8.12	4.64	2.25	1.48	17.5	Jun 13	205.00	6.69	0.338	1999		
2000	1.110	0.773	0.622	3.84	94.00	87.90	55.60	75.20	37.40	11.50	4.39	1.55	31.3	Aug 14	201.00	20.60	0.585	2000		
2001	0.713	0.566	0.431	11.60	52.70	75.10	74.20	59.30	11.70	4.82	1.79	1.33	24.7	Jul 26	246.00	7.84	0.414	2001		
2002	1.170	0.882	0.596	0.63	76.50	30.00	16.50	57.40	16.60	12.10	2.91	1.55	18.3	Aug 05	179.22	6.52	0.573	2002		
2003	0.054	0.000	0.000	79.00	156.00	40.50	92.90	26.90	7.53	9.03	3.84	0.88	35.0	Apr 28	343.00	4.94	0.000	2003		
2004	0.829	0.597	0.603	21.30	41.40	22.30	13.80	31.50	62.50	29.00	9.58	2.92	19.7	Sep 27	99.10	5.83	0.503	2004		
2005	1.140	0.664	0.882	117.00	160.00	56.70	27.70	37.20	9.53	9.61	1.69	1.11	35.4	Apr 27	415.00	8.05	0.550	2005		
2006	0.407	0.403	0.355	24.30	31.30	22.80	38.40	49.10	4.05	3.09	2.15	1.31	14.9	Aug 08	129.00	2.48	0.311	2006		
2007	0.969	0.692	0.402	57.10	251.00	44.10	128.00	17.00	37.90	20.00	5.60	2.88	47.6	May 09	641.00	10.15	0.168	2007		
2008	1.740	0.926	1.170	3.84	173.00	92.40	77.60	22.30	6.19	4.69	2.47	1.42	32.6	May 08	270.00	3.94	0.762	2008		
2009	1.120	0.925	0.877	13.60	127.00	44.40	42.40	8.23	15.30	7.86	2.59	1.88	22.4	May 10	235.54	3.89	0.793	2009		
2010	0.916	0.842	0.837	19.20	36.80	24.90	26.60	16.60	25.20	9.25	2.83	1.72	13.9	Apr 27	86.90	11.63	0.701	2010		
2011																			2011	
Avg.	0.945	0.646	0.731	33.95	111.5	63.1	51.28	36.06	21.46	13.15	4.22	1.74	28.29		315	7.878	0.351	m <sup>3</sup> /s		
S. D.	0.622	0.467	1.178	31.37	74.03	58.24	43.88	41.92	21.82	15.92	4.38	1.11	13.81		165.98	8.188	0.247	m <sup>3</sup> /s		
Normal	0.941	0.626	0.764	35.36	111.86	52.88	50.67	35.57	20.36	12.69	4.17	1.79	27.50		m <sup>3</sup> /s					
Normal	0	0	0	8	28	13	12	9	5	3	1	0	80	10-Year	602.57	2.04	0.00	m <sup>3</sup> /s		

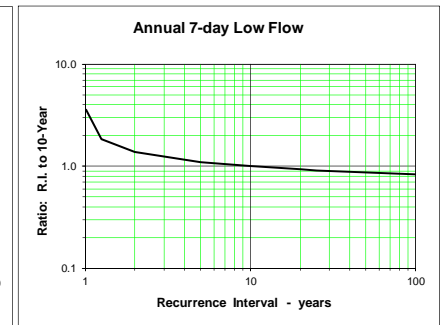
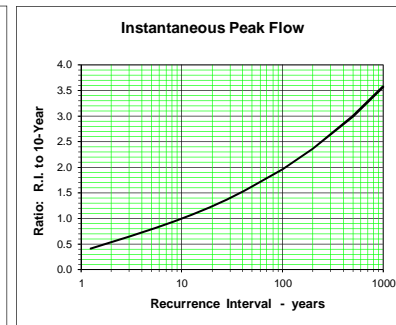
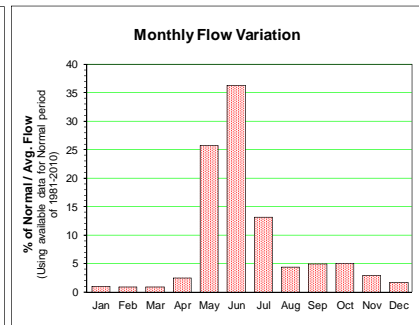
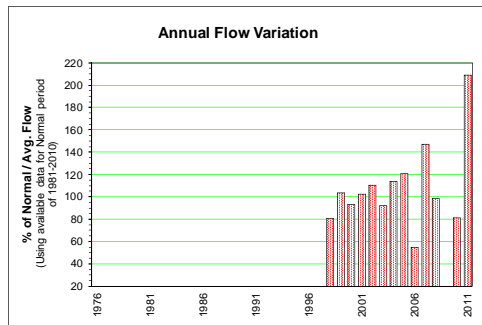


Zone 7 Southern Rocky Mountain Foothills

**CARBON CREEK NEAR THE MOUTH 07EF004**

Station Longitude Latitude: -122.658433 55.946026

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976																		1976	
1977																		1977	
1978																		1978	
1979																		1979	
1980																		1980	
1981																		1981	
1982																		1982	
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1994																		1994	
1995																		1995	
1996																		1996	
1997																		1997	
1998	1.49	1.38	1.41	2.74	71.60	17.70	6.15	2.60	1.76	5.04	3.51	1.80	9.87	May 27	147.00	1.70	1.219	1998	
1999	1.25	1.17	1.11	5.54	30.70	77.70	18.70	6.65	2.42	2.76	2.51	1.74	12.68	Jun 16	181.00	1.94	1.030	1999	
2000	1.32	1.20	0.92	1.03	9.21	56.10	23.20	7.06	18.20	9.10	7.89	2.58	11.44	Jun 09	92.10	5.82	0.667	2000	
2001	1.62	1.10	1.00	1.67	23.10	67.50	32.50	7.72	5.56	3.60	2.83	2.40	12.57	Jun 10	124.00	4.15	0.840	2001	
2002	1.78	1.42	1.34	1.66	29.40	78.90	21.10	8.03	5.98	5.79	3.30	3.50	13.52	Jun 04	142.00	4.50	1.197	2002	
2003	1.94	1.33	1.01	1.83	25.30	54.80	25.20	3.52	5.41	7.70	4.95	2.56	11.32	Jun 10	135.00	2.14	0.863	2003	
2004	1.40	1.36	1.49	5.32	32.90	38.20	24.50	11.80	26.20	14.30	6.27	3.45	13.95	Jun 07	103.00	6.56	1.193	2004	
2005	2.21	3.12	3.30	14.10	63.90	45.30	11.10	5.39	7.48	11.10	6.97	3.03	14.80	May 29	139.00	3.51	2.066	2005	
2006	1.71	1.48	1.19	2.54	32.50	29.30	5.04	2.33	1.35	1.18	1.06	1.10	6.75	Jun 02	78.90	1.25	0.948	2006	
2007	1.10	0.96	1.02	1.91	34.60	98.90	33.20	13.60	6.55	15.20	6.32	2.66	18.03	Jun 05	199.00	5.05	0.761	2007	
2008	1.48	1.03	0.72	1.11	61.30	50.00	10.90	6.43	4.41	3.19	2.10	1.69	12.06	May 17	166.81	3.38	0.659	2008	
2009	1.62	1.36	1.12	1.83	28.10	55.80	28.60				3.31	2.31		Jul 07	225.00	5.08	1.104	2009	
2010	1.75	1.40	1.20	7.01	41.30	34.40	6.64	2.32	4.12	9.93	6.14	2.91	9.96	May 20	111.00	1.73	1.023	2010	
2011	1.55	0.95	0.70	0.79	64.40	123.00	83.40	6.92	7.05	9.06	4.70	3.39	25.60	Jun 25	403.00	3.77	0.640	2011	
Avg.	1.59	1.38	1.25	3.51	39.17	59.11	23.59	6.49	7.42	7.53	4.42	2.51	13.27		160.49	3.61	1.015	m <sup>3</sup> /s	
S. D.	0.29	0.53	0.63	3.59	18.68	28.33	19.73	3.45	7.03	4.42	2.06	0.73	4.58		80.85	1.68	0.365	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1.59	1.41	1.29	3.71	37.22	54.20	18.99	6.45	7.45	7.41	4.40	2.44	12.25		m <sup>3</sup> /s				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	6	5	5	13	135	191	69	23	26	27	15	9	525	mm	10-Year	255.1	1.605	0.669	m <sup>3</sup> /s



**PINE RIVER AT EAST PINE 07FB001**

Station Longitude Latitude: -121.207800 55.720000

Monthly and Annual Discharge in m<sup>3</sup>/s

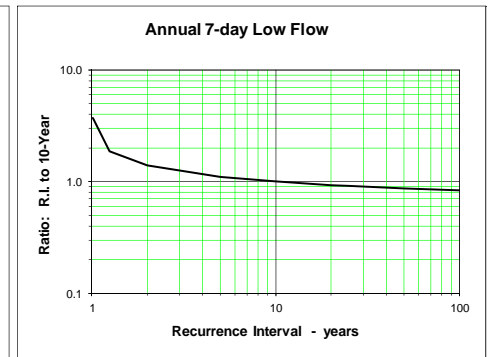
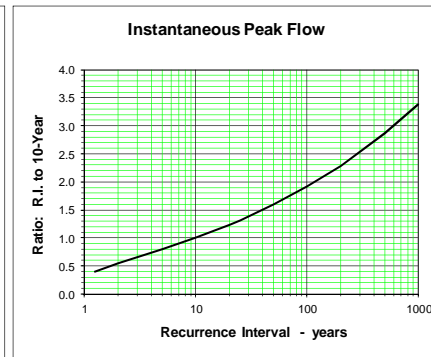
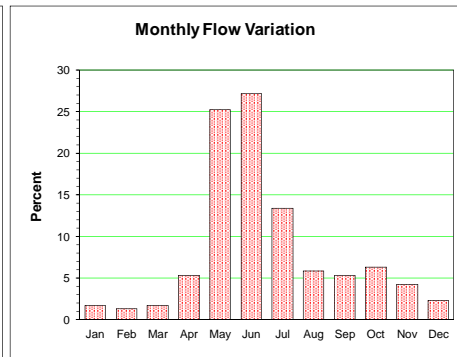
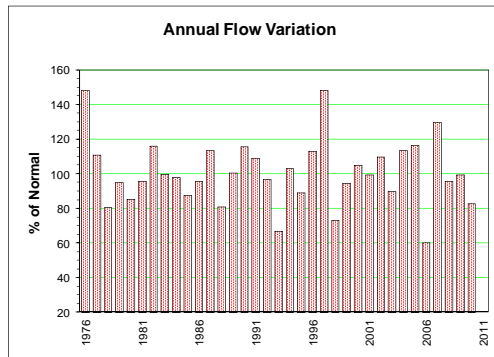
Drainage Area = 12138.14 km<sup>2</sup>

Median Elevation = 1125 m

Instantaneous Peak Flow

7-Day Low Flow

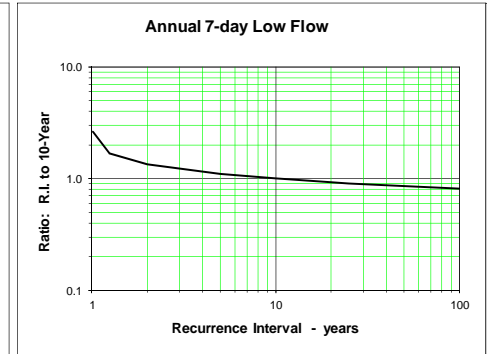
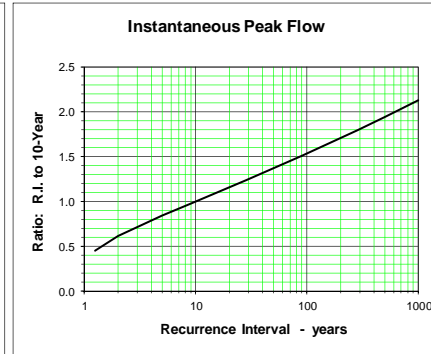
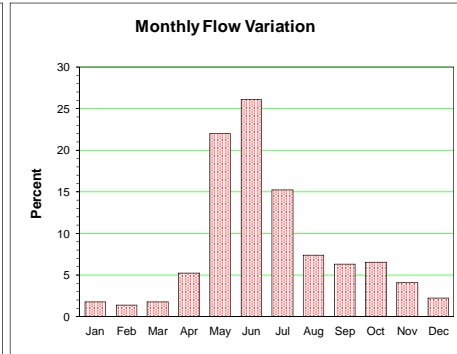
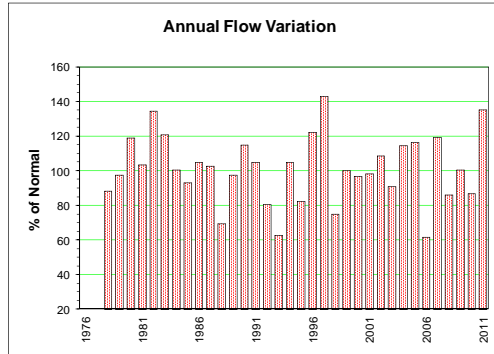
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year	
1976	38.7	28.2	25.8	88.6	726.0	863.0	554.0	484.0	158.0	130.0	87.5	56.6	271.0	Jun 19	1243	101.36	24.64	1976	
1977	43.9	51.7	50.0	176.0	611.0	559.0	327.0	152.0	158.0	175.0	84.6	36.9	202.9	May 12	1264	102.84	30.79	1977	
1978	30.2	25.1	23.8	73.8	376.0	422.0	162.0	116.0	119.0	136.0	220.0	55.5	146.9	Nov 02	898	91.79	21.69	1978	
1979	29.3	18.9	28.8	73.5	522.0	835.0	253.0	83.3	71.7	80.2	51.6	28.8	173.3	May 27	1480	66.74	17.44	1979	
1980	18.1	17.2	15.8	70.9	387.0	495.0	230.0	128.0	183.0	145.0	117.0	66.5	156.2	Jun 19	1466	91.93	15.14	1980	
1981	56.1	58.3	64.2	99.8	788.0	471.0	170.0	93.6	53.6	68.1	120.0	44.7	174.8	May 23	1646	43.23	36.16	1981	
1982	24.0	20.3	17.4	31.6	436.0	743.0	572.0	223.0	172.0	147.0	95.2	47.1	211.7	Jul 15	2770	126.00	15.97	1982	
1983	27.6	24.5	26.3	116.0	471.0	442.0	532.0	126.0	126.0	126.0	114.0	46.2	182.6	Jul 15	1490	90.74	21.53	1983	
1984	39.6	42.9	46.6	89.6	337.0	621.0	240.0	104.0	183.0	293.0	101.0	46.2	178.6	Jun 13	999	91.73	37.27	1984	
1985	33.6	25.0	28.3	66.6	511.0	527.0	188.0	99.0	202.0	133.0	64.8	35.9	160.0	May 31	1010	82.90	23.21	1985	
1986	32.8	28.9	29.7	84.8	497.0	720.0	341.0	93.2	55.6	96.0	57.6	42.4	175.2	May 28	1640	43.53	25.66	1986	
1987	46.4	40.2	45.6	126.0	684.0	640.0	215.0	356.0	78.0	64.8	151.0	48.3	207.5	Aug 02	2220	57.09	28.70	1987	
1988	29.9	29.8	34.9	128.0	524.0	470.0	170.0	102.0	59.3	91.8	74.3	59.3	148.0	Jun 07	1160	42.57	26.03	1988	
1989	44.8	33.4	29.3	77.2	581.0	549.0	206.0	165.0	82.4	103.0	181.0	146.0	184.0	May 08	1060	66.79	28.50	1989	
1990	51.6	32.4	42.9	138.0	641.0	1100.0	251.0	83.6	47.5	54.9	50.0	42.4	211.4	Jun 13	4000	38.57	30.91	1990	
1991	29.4	29.2	31.4	207.0	727.0	629.0	242.0	105.0	101.0	170.0	61.4	50.0	199.4	May 14	1200	64.70	26.61	1991	
1992	44.1	38.7	112.0	301.0	427.0	510.0	130.0	60.0	159.0	243.0	71.6	28.5	176.9	Jun 02	886	49.39	19.89	1992	
1993	20.6	21.6	23.4	71.0	451.0	195.0	243.0	140.0	67.7	76.4	98.2	45.9	122.1	May 14	1020	61.23	19.27	1993	
1994	27.7	22.6	39.6	263.0	664.0	582.0	258.0	92.4	85.6	103.0	72.1	43.7	188.5	Jun 14	1630	64.29	20.41	1994	
1995	35.0	33.8	41.9	103.0	661.0	442.0	244.0	137.0	63.7	88.1	49.3	40.8	162.7	May 16	1190	53.41	32.47	1995	
1996	30.9	27.2	27.6	167.0	396.0	750.0	435.0	185.0	169.0	188.0	62.0	40.6	206.6	Jun 05	1572	120.71	25.50	1996	
1997	32.6	34.6	40.0	159.0	805.0	980.0	396.0	163.0	112.0	321.0	147.0	48.2	270.9	May 17	1740	98.14	30.24	1997	
1998	36.1	32.0	32.2	101.0	689.0	245.0	164.0	53.3	42.3	106.0	57.4	34.9	133.8	May 27	854	40.40	28.87	1998	
1999	25.9	24.6	27.0	155.0	471.0	671.0	301.0	141.0	71.2	72.7	54.1	52.3	172.7	May 26	1350	54.29	22.64	1999	
2000	36.9	24.9	32.7	56.3	270.0	612.0	369.0	147.0	389.0	188.0	149.0	30.9	191.9	Jul 04	1050	83.56	22.44	2000	
2001	27.0	25.2	24.1	69.8	362.0	625.0	628.0	162.0	86.8	63.1	48.6	42.6	181.3	Jul 21	2540	74.73	20.97	2001	
2002	34.7	23.8	20.2	32.6	486.0	993.0	305.0	112.0	134.0	150.0	53.3	59.9	200.7	Jun 18	1780	74.99	18.59	2002	
2003	40.8	27.7	25.3	118.0	451.0	603.0	232.0	81.3	101.0	173.0	70.2	37.8	163.9	May 25	1260	64.91	18.19	2003	
2004	33.3	30.8	46.8	125.0	442.0	509.0	300.0	149.0	345.0	188.0	226.0	93.3	207.3	Jun 07	1560	97.51	26.06	2004	
2005	56.0	59.4	72.5	224.0	707.0	506.0	221.0	140.0	117.0	225.0	137.0	78.6	212.8	May 17	1170	90.91	50.04	2005	
2006	51.2	36.9	30.3	84.1	435.0	335.0	122.0	71.2	43.0	42.1	36.7	26.9	110.0	May 24	810	36.24	23.63	2006	
2007	22.1	20.9	25.2	112.0	650.0	997.0	312.0	158.0	120.0	242.0	122.0	54.1	236.9	Jun 05	2210	79.99	20.34	2007	
2008	36.5	28.8	26.9	38.6	759.0	593.0	203.0	111.0	84.9	67.0	91.1	52.0	174.8	May 19	1470	55.81	25.57	2008	
2009	36.1	27.2	21.5	34.4	451.0	678.0	548.0	97.7	70.6	60.0	93.2	50.5	181.5	Jul 08	2410	51.46	20.81	2009	
2010	41.2	38.0	36.7	180.0	509.0	411.0	111.0	51.8	128.0	149.0	108.0	47.3	151.2	May 20	1020	41.16	33.56	2010	
2011																			2011
Avg.	35.56	30.99	35.62	115.49	540.1	609.2	290.71	136.18	121.14	135.98	96.51	50.33	183.72		1516	71.30	25.42	m <sup>3</sup> /s	
S. D.	9.54	10.04	18.10	63.80	141.48	207.04	136.59	81.98	76.20	69.21	47.35	21.35	34.81		654.95	24.19	7.00	m <sup>3</sup> /s	
Normal	36.15	31.45	36.75	118.65	542.77	604.97	288.30	126.77	118.34	136.43	93.90	50.58	182.66		m <sup>3</sup> /s			m <sup>3</sup> /s	
Normal	8	6	8	25	120	129	64	28	25	30	20	11	475	mm	10-Year	2664.47	45.85	18.07	m <sup>3</sup> /s



**MURRAY RIVER NEAR THE MOUTH 07FB002**

Station Longitude Latitude: -121.200492 55.553868

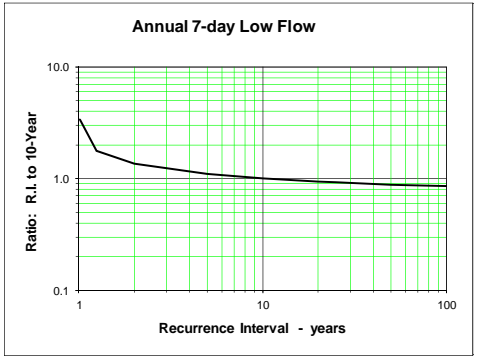
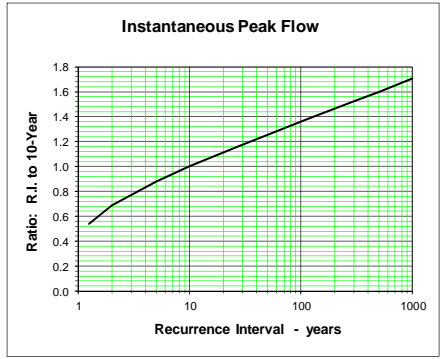
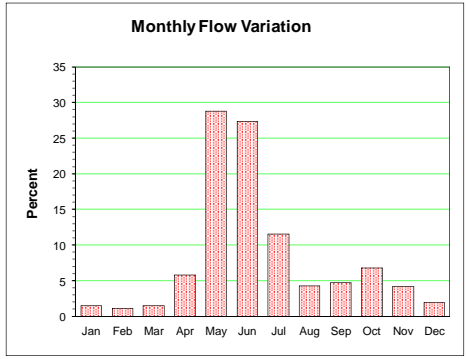
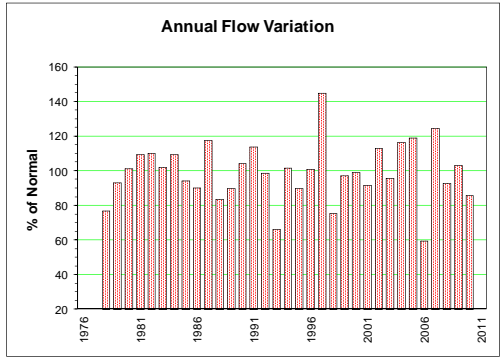
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 5554.35 km <sup>2</sup>		Median Elevation = 1162 m		Instantaneous Peak Flow		7-Day Low Flow	
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976																		1976			
1977									91.7	103.0	45.7	20.1						1977			
1978	15.1	12.2	11.1	27.1	156.0	201.0	110.0	80.3	72.1	73.6	96.7	20.6	73.2	May 22	357.00	54.33	10.69	1978			
1979	13.9	10.3	12.9	25.1	172.0	395.0	183.0	61.7	38.7	35.1	12.2	9.5	81.0	Jun 06	654.00	29.70	8.98	1979			
1980	8.5	8.3	7.7	35.3	193.0	296.0	180.0	110.0	151.0	106.0	52.8	34.3	98.7	Jun 18	689.00	84.93	7.56	1980			
1981	27.2	28.2	31.4	47.8	358.0	241.0	106.0	47.9	28.8	30.0	54.7	23.0	85.7	May 23	665.00	22.37	19.04	1981			
1982	13.6	11.5	9.8	17.4	201.0	361.0	290.0	161.0	137.0	66.3	39.6	26.3	111.7	Jul 16	781.42	82.93	8.86	1982			
1983	17.4	13.4	13.4	64.6	211.0	262.0	311.0	84.6	67.9	73.6	59.9	17.7	100.2	Jul 16	632.00	51.63	12.64	1983			
1984	14.8	16.3	17.7	32.6	118.0	246.0	123.0	60.7	94.4	187.0	62.5	28.2	83.5	Oct 10	575.00	49.09	12.96	1984			
1985	19.1	12.1	13.7	35.9	190.0	247.0	108.0	61.1	109.0	75.3	34.9	19.3	77.3	May 31	412.00	43.10	11.11	1985			
1986	17.5	15.7	26.7	51.0	229.0	308.0	182.0	60.2	40.7	56.1	31.0	22.3	87.0	May 27	671.00	32.16	13.81	1986			
1987	24.3	21.1	16.2	60.3	230.0	247.0	92.2	183.0	41.9	32.8	50.4	18.9	85.2	Aug 02	759.00	31.20	15.34	1987			
1988	13.3	13.2	16.0	50.4	171.0	192.0	91.6	50.3	24.2	35.3	19.9	14.9	57.8	Jun 12	294.00	14.70	11.71	1988			
1989	13.3	11.7	10.3	30.8	238.0	286.0	110.0	80.1	43.7	43.4	62.4	36.8	80.8	Jun 10	577.00	36.37	10.03	1989			
1990	23.4	16.2	21.1	60.9	269.0	466.0	135.0	49.9	32.1	30.3	22.4	17.2	95.4	Jun 12	1072.33	28.69	15.40	1990			
1991	13.7	13.7	14.7	95.9	278.0	299.0	121.0	56.4	46.0	52.6	28.3	21.5	87.0	Jun 11	411.00	34.89	12.83	1991			
1992	18.4	15.2	40.4	102.0	157.0	185.0	56.7	32.4	65.9	84.2	31.8	14.1	66.9	Jun 02	357.00	25.56	9.70	1992			
1993	9.7	8.8	10.1	29.0	163.0	89.7	115.0	63.8	34.0	35.7	40.4	21.1	52.1	May 14	423.00	29.81	8.29	1993			
1994	13.0	10.8	20.9	115.0	270.0	275.0	146.0	54.2	44.7	45.0	27.5	18.4	87.0	Jun 14	700.00	36.17	9.99	1994			
1995	15.8	15.5	18.8	45.9	246.0	184.0	101.0	80.1	35.5	33.8	21.7	19.1	68.5	May 16	465.00	27.73	15.09	1995			
1996	14.7	13.6	14.7	82.5	206.0	338.0	209.0	102.0	92.8	89.8	35.6	19.4	101.6	Jun 05	622.00	63.44	12.23	1996			
1997	16.1	16.1	19.3	95.1	323.0	381.0	213.0	85.4	60.8	134.0	54.6	21.2	118.8	May 17	613.00	52.53	15.01	1997			
1998	17.7	16.1	16.0	36.0	268.0	116.0	112.0	39.2	26.2	48.9	28.5	17.8	62.4	Jul 02	420.00	23.89	14.43	1998			
1999	13.4	12.9	14.1	68.1	211.0	295.0	158.0	81.0	44.2	43.4	27.8	26.3	83.2	May 26	623.00	34.91	11.71	1999			
2000	18.3	12.3	14.8	25.9	98.6	254.0	165.0	72.6	164.0	75.3	52.7	12.8	80.4	Jun 09	478.00	49.61	10.96	2000			
2001	11.5	10.5	10.8	26.2	131.0	254.0	318.0	83.5	45.7	34.0	28.4	20.6	81.7	Jul 18	1340.00	35.99	9.21	2001			
2002	14.9	10.9	9.6	15.6	172.0	445.0	147.0	63.6	72.9	69.7	29.0	30.7	90.2	Jun 18	838.00	45.47	8.58	2002			
2003	20.4	15.0	14.4	57.2	195.0	242.0	104.0	54.6	61.3	87.9	31.0	19.1	75.4	May 26	547.00	45.91	11.26	2003			
2004	15.8	13.5	17.7	44.0	168.0	248.0	147.0	77.6	155.0	90.0	117.0	47.2	95.0	Jun 08	887.00	60.33	12.13	2004			
2005	30.8	27.7	26.4	91.2	287.0	228.0	115.0	83.6	72.2	99.9	62.0	29.8	96.5	May 17	487.00	62.86	23.26	2005			
2006	24.0	18.7	13.6	38.3	174.0	147.0	72.3	49.1	25.6	21.4	15.9	13.1	51.3	May 24	335.00	20.89	11.81	2006			
2007	11.7	10.5	13.9	52.7	263.0	373.0	152.0	76.9	62.6	98.5	48.1	22.2	99.1	Jun 05	915.00	42.66	10.16	2007			
2008	20.1	15.7	13.8	15.4	260.0	217.0	104.0	67.8	49.8	34.3	35.1	20.7	71.4	May 19	506.00	34.09	13.17	2008			
2009	16.5	13.3	11.9	16.2	169.0	268.0	295.0	61.1	48.5	32.3	42.6	22.6	83.5	Jul 08	1120.00	36.94	11.83	2009			
2010	21.9	19.8	17.7	79.0	204.0	200.0	79.5	37.7	72.9	74.2	41.0	15.9	72.1	May 20	416.00	25.69	14.39	2010			
2011	12.4	9.7	10.9	31.3	334.0	379.0	301.0	88.7	77.5	57.2	18.8	19.5	112.3	Jul 10	955.00	41.31	7.15	2011			
Avg.	16.83	14.43	16.25	50.05	215.1	269.6	154.51	73.59	66.77	65.26	41.80	21.78	83.94		635	40.94	12.10	m <sup>3</sup> /s			
S. D.	4.94	4.54	6.71	27.32	61.19	86.49	72.48	30.77	37.75	34.93	21.60	7.31	16.17		243.90	16.36	3.27	m <sup>3</sup> /s			
Normal	17.41	15.00	17.00	52.76	215.29	263.16	149.31	72.05	63.53	63.64	41.22	21.94	82.96		m <sup>3</sup> /s			m <sup>3</sup> /s			
Normal	8	7	8	25	104	123	72	35	30	31	19	11	471	10-Year	959.18	23.06	8.57	m <sup>3</sup> /s			



**SUKUNKA RIVER NEAR THE MOUTH 07FB003**

Station Longitude Latitude: -121.625781 55.543663

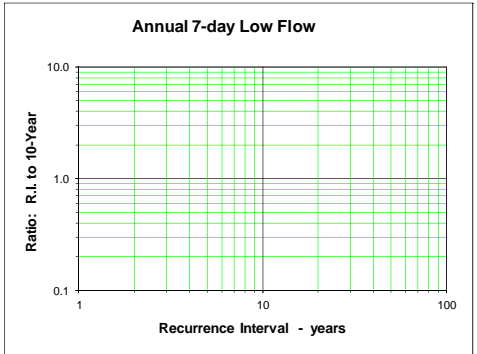
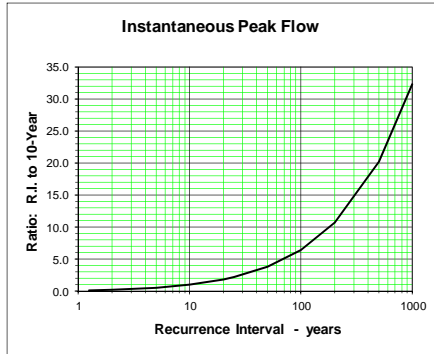
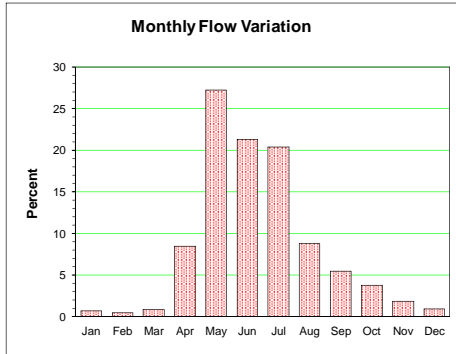
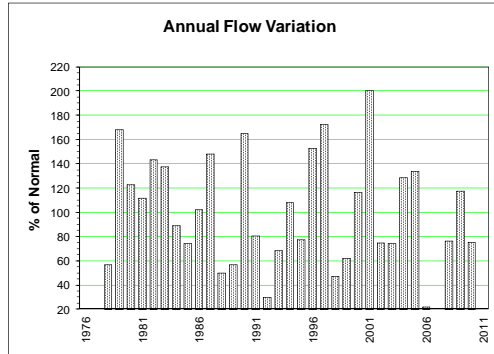
Monthly and Annual Discharge in m <sup>3</sup> /s													Drainage Area = 2591.32 km <sup>2</sup>		Median Elevation = 1198 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976																		1976			
1977									50.3	63.3	32.6	13.7						1977			
1978	7.4	5.7	5.2	16.0	117.0	120.0	38.2	25.5	33.9	45.6	78.4	15.5	42.4	Nov 02	362.00	16.37	4.96	1978			
1979	7.3	4.6	8.3	20.5	152.0	252.0	91.1	22.9	15.6	24.2	9.8	6.9	51.4	May 27	507.00	11.33	4.22	1979			
1980	5.4	4.2	3.9	72.6	143.0	123.0	75.2	33.0	101.0	44.7	46.8	16.4	55.7	Sep 06	399.00	22.59	3.74	1980			
1981	16.4	18.7	20.6	42.6	298.0	161.0	51.4	16.1	9.1	22.7	49.4	13.4	60.2	May 22	684.00	7.54	7.54	1981			
1982	7.1	5.9	5.1	8.2	151.0	211.0	144.0	52.6	55.8	47.8	25.6	10.5	60.7	Jul 15	808.00	28.37	4.63	1982			
1983	6.3	5.5	6.5	47.4	175.0	134.0	137.0	18.2	37.4	47.9	46.4	9.8	56.3	Jul 15	470.00	10.77	4.87	1983			
1984	8.3	8.6	11.2	31.2	119.0	202.0	84.6	37.0	69.6	112.0	24.3	14.7	60.3	Oct 09	567.00	29.97	7.70	1984			
1985	8.5	5.6	5.9	26.3	189.0	181.0	52.6	15.2	68.2	43.7	16.0	9.9	52.0	May 21	388.00	11.13	5.24	1985			
1986	9.5	8.7	14.7	27.7	176.0	184.0	82.7	24.2	13.0	26.2	15.7	11.0	49.7	May 27	627.00	9.38	7.68	1986			
1987	10.7	9.3	8.1	47.1	247.0	213.0	57.5	79.0	17.5	21.6	45.2	17.4	64.7	Jun 13	541.00	12.31	7.93	1987			
1988	7.2	5.1	7.1	46.0	189.0	148.0	46.3	24.7	13.9	28.1	20.1	15.3	46.0	Jun 06	437.00	8.53	4.33	1988			
1989	10.9	6.4	5.8	29.7	189.0	151.0	44.3	28.2	15.7	31.1	54.9	25.1	49.5	May 08	375.00	12.73	5.66	1989			
1990	11.2	9.1	11.1	38.5	205.0	277.0	65.2	18.0	8.3	20.9	14.4	9.3	57.4	Jun 12	788.00	4.54	4.39	1990			
1991	7.3	8.3	10.0	66.9	246.0	192.0	62.7	24.3	25.6	70.5	18.0	16.3	62.6	Oct 11	446.00	13.00	6.94	1991			
1992	16.3	14.5	31.7	88.6	141.0	152.0	31.5	8.0	68.7	76.3	17.9	7.8	54.4	Jun 02	319.00	5.01	5.01	1992			
1993	5.5	4.7	4.7	25.6	158.0	58.7	65.9	29.4	14.2	22.4	34.0	11.2	36.5	May 13	412.00	11.86	4.21	1993			
1994	8.0	7.8	19.1	82.7	235.0	185.0	52.3	13.6	16.9	26.5	13.6	8.1	55.9	Jun 14	404.74	8.91	7.47	1994			
1995	8.3	9.2	10.7	29.0	239.0	140.0	51.8	34.2	12.4	28.9	14.1	11.3	49.4	May 16	450.00	8.57	7.37	1995			
1996	7.7	6.2	6.2	53.4	120.0	203.0	115.0	36.4	38.1	52.4	18.0	10.3	55.6	Jun 05	409.23	21.76	5.71	1996			
1997	7.3	8.1	10.9	65.5	259.0	293.0	91.4	33.6	24.0	108.0	41.7	10.4	79.7	May 16	607.00	20.26	6.97	1997			
1998	7.9	7.3	8.1	37.5	250.0	68.9	35.0	10.5	7.6	34.8	16.7	9.1	41.5	May 03	342.00	6.81	6.57	1998			
1999	6.9	6.6	7.2	52.3	166.0	216.0	77.6	30.3	19.3	22.9	18.3	18.4	53.6	May 25	522.00	14.46	6.01	1999			
2000	12.1	6.6	7.5	15.5	89.4	187.0	92.4	33.6	99.8	60.5	42.8	8.9	54.6	Jul 03	392.00	19.41	6.02	2000			
2001	7.7	5.8	5.4	18.4	126.0	184.0	156.0	34.6	18.6	18.3	15.9	12.9	50.6	Jul 21	813.00	14.56	4.81	2001			
2002	8.9	5.4	4.6	9.4	164.0	342.0	80.9	22.8	36.1	40.3	15.2	16.3	62.2	May 30	668.00	16.46	4.22	2002			
2003	10.7	7.8	7.3	32.2	172.0	200.0	68.6	16.5	26.3	54.1	25.4	11.0	52.8	May 25	589.00	12.27	5.68	2003			
2004	10.6	10.7	14.2	45.3	164.0	154.0	100.0	41.3	81.9	53.4	70.8	21.9	64.0	Jun 07	606.00	21.64	9.39	2004			
2005	17.1	21.4	22.6	69.8	246.0	140.0	56.8	38.2	32.3	79.3	43.5	15.9	65.5	May 15	709.00	21.41	15.19	2005			
2006	14.3	11.3	8.2	31.4	150.0	93.5	31.2	18.0	7.8	9.9	9.4	7.8	32.9	May 23	285.00	6.62	6.62	2006			
2007	7.6	7.0	8.0	33.7	192.0	316.0	84.7	37.5	28.4	67.6	27.7	10.9	68.6	Jun 04	704.00	18.80	6.84	2007			
2008	8.6	6.5	6.0	9.2	246.0	173.0	50.5	25.7	20.6	20.6	31.3	13.7	51.1	May 18	544.00	13.99	5.85	2008			
2009	9.0	6.3	4.6	18.2	147.0	228.0	162.0	21.1	18.5	18.6	29.8	15.0	56.7	Jul 08	744.00	13.30	4.35	2009			
2010	13.3	12.3	10.8	54.5	159.0	121.0	30.6	11.6	49.9	56.3	34.7	12.6	47.3	Sep 26	415.00	9.47	9.47	2010			
2011																		2011			
Avg.	9.43	8.22	9.73	39.18	182.4	181.9	74.76	27.75	34.01	44.16	29.95	12.91	54.60		525	14.06	6.29	m <sup>3</sup> /s			
S. D.	3.09	3.84	6.08	21.39	50.19	64.52	35.49	13.66	26.12	24.94	17.11	4.10	9.27		151.31	6.37	2.20	m <sup>3</sup> /s			
Normal	9.71	8.56	10.12	39.46	186.91	183.64	75.42	27.81	31.85	44.12	28.36	12.88	55.08		m <sup>3</sup> /s			m <sup>3</sup> /s			
Normal	10	8	10	39	193	184	78	29	32	46	28	13	671	10-Year	730.82	6.91	4.25	m <sup>3</sup> /s			



**DICKEBUSCH CREEK NEAR THE MOUTH 7FB004**

Station Longitude Latitude: -121.596657 55.537778

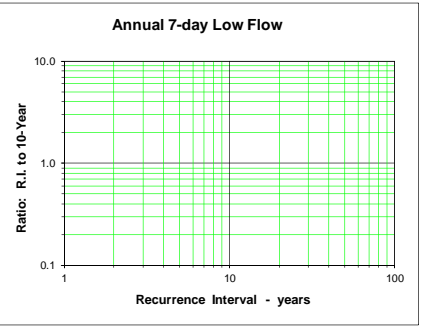
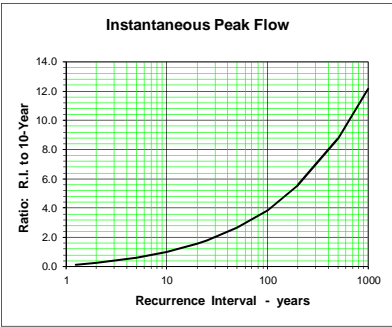
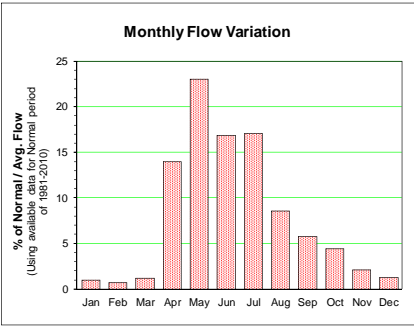
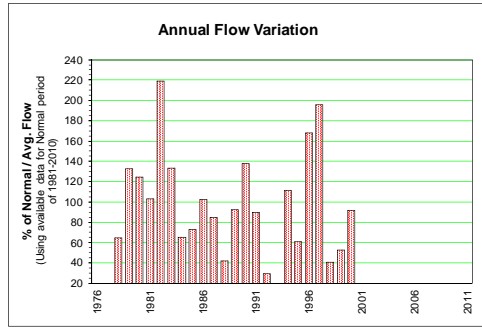
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 84.83 km <sup>2</sup>		Median Elevation = 1053 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year				
1976																		1976				
1977																		1977				
1978	0.023	0.022	0.025	0.104	1.240	1.150	0.502	0.246	0.319	0.140	0.121	0.031	0.328	Jun 06	2.83	0.133	0.020	1978				
1979	0.009	0.003	0.014	1.100	6.740	1.980	1.250	0.227	0.164	0.071	0.007	0.005	0.974	May 25	18.01	0.092	0.002	1979				
1980	0.002	0.000	0.005	0.224	0.765	3.070	1.230	1.230	1.190	0.440	0.219	0.156	0.710	Jun 19	19.45	0.522	0.000	1980				
1981	0.177	0.117	0.114	1.010	3.470	1.840	0.596	0.206	0.088	0.074	0.040	0.006	0.648	May 31	12.50	0.074	0.001	1981				
1982	0.001	0.004	0.009	0.021	1.960	1.260	3.910	1.690	0.241	0.422	0.217	0.079	0.829	Jul 15	23.20	0.166	0.000	1982				
1983	0.032	0.018	0.015	0.696	1.620	2.340	4.170	0.240	0.123	0.147	0.069	0.006	0.796	Jul 14	36.60	0.113	0.002	1983				
1984	0.002	0.014	0.039	0.255	1.910	1.730	0.272	0.162	0.548	0.767	0.328	0.145	0.515	May 17	5.75	0.150	0.001	1984				
1985	0.083	0.046	0.057	0.688	1.760	0.520	0.118	0.171	1.130	0.442	0.085	0.061	0.431	Sep 13	5.09	0.083	0.037	1985				
1986	0.057	0.038	0.050	0.392	2.950	1.390	1.000	0.193	0.271	0.497	0.115	0.104	0.593	May 26	6.39	0.105	0.028	1986				
1987	0.090	0.082	0.068	0.946	1.210	0.246	0.559	6.540	0.187	0.109	0.082	0.029	0.857	Aug 01	273.00	0.114	0.022	1987				
1988	0.015	0.024	0.035	0.885	0.622	1.360	0.210	0.113	0.093	0.094	0.020	0.028	0.290	Jun 06	13.90	0.089	0.007	1988				
1989	0.010	0.004	0.004	0.213	0.914	0.765	0.448	0.704	0.285	0.347	0.143	0.092	0.330	Jun 27	3.47	0.209	0.000	1989				
1990	0.048	0.018	0.076	0.660	2.510	7.400	0.398	0.199	0.087	0.055	0.026	0.037	0.955	Jun 11	99.50	0.060	0.010	1990				
1991	0.031	0.041	0.075	0.705	2.090	2.070	0.221	0.073	0.091	0.101	0.050	0.052	0.467	May 13	8.72	0.064	0.013	1991				
1992	0.048	0.027	0.221	0.763	0.557	0.223	0.052	0.028	0.054	0.086	0.033	0.009	0.175	Apr 03	1.71	0.021	0.001	1992				
1993	0.000	0.005	0.017	0.203	0.595	0.825	1.870	0.643	0.317	0.155	0.060	0.014	0.396	Jun 23	4.35	0.169	0.000	1993				
1994	0.010	0.009	0.055	1.050	1.430	2.460	1.630	0.448	0.161	0.161	0.041	0.034	0.626	Jun 14	16.50	0.130	0.006	1994				
1995	0.041	0.044	0.055	0.741	2.430	0.489	1.190	0.140	0.068	0.046	0.037	0.030	0.447	May 10	4.85	0.053	0.013	1995				
1996	0.021	0.017	0.035	1.140	2.430	3.250	1.390	0.736	0.799	0.451	0.194	0.157	0.885	May 31	20.30	0.389	0.006	1996				
1997	0.163	0.080	0.051	0.900	3.970	2.980	0.654	0.803	0.489	1.200	0.480	0.143	0.998	May 16	12.97	0.265	0.047	1997				
1998	0.069	0.061	0.100	0.452	1.520	0.469	0.320	0.064	0.045	0.111	0.046	0.028	0.276	May 03	4.04	0.036	0.019	1998				
1999	0.015	0.011	0.019	0.646	1.140	1.270	0.842	0.133	0.074	0.071	0.037	0.035	0.359	Jun 09	4.63	0.053	0.010	1999				
2000	0.014	0.001	0.009	0.133	0.291	1.120	2.740	0.465	2.760	0.306	0.245	0.024	0.675	Jul 03	36.50	0.291	0.000	2000				
2001	0.016	0.010	0.009	0.105	0.917	2.220	9.780	0.410	0.129	0.095	0.046	0.021	1.162	Jul 18	164.28	0.034	0.006	2001				
2002	0.012	0.007	0.006	0.040	2.330	1.570	0.244	0.274	0.341	0.170	0.127	0.056	0.434	May 14	4.97	0.110	0.005	2002				
2003	0.003	0.000	0.002	0.573	2.560	1.180	0.367	0.119	0.082	0.098	0.100	0.048	0.431	May 25	5.10	0.058	0.000	2003				
2004	0.017	0.002	0.007	0.453	0.761	0.602	2.140	1.430	1.840	0.726	0.564	0.352	0.744	Jul 04	11.20	0.300	0.002	2004				
2005	0.218	0.156	0.429	2.710	3.000	1.250	0.485	0.358	0.346	0.187	0.076	0.063	0.775	May 06	16.80	0.136	0.039	2005				
2006	0.008	0.003	0.004	0.122	0.507	0.256	0.158	0.145	0.116	0.120	0.054	0.040	0.129	May 26	1.26	0.039	0.003	2006				
2007	0.028	0.020	0.014	0.139	2.880						0.112	0.066		May 05	7.49		0.013	2007				
2008	0.047	0.045	0.044	0.219	2.720	0.991	0.146	0.357	0.221	0.157	0.226	0.088	0.441	May 24	6.72	0.084	0.033	2008				
2009	0.050	0.039	0.034	0.104	1.900	0.831	4.260	0.384	0.105	0.149	0.132	0.073	0.681	Jul 07	51.88	0.077	0.034	2009				
2010	0.060	0.064	0.084	0.995	2.760	0.680	0.095	0.050	0.156	0.119	0.072	0.051	0.435	May 21	11.80	0.035	0.035	2010				
2011																		2011				
Avg.	0.043	0.031	0.054	0.587	1.953	1.556	1.351	0.593	0.404	0.254	0.127	0.066	0.587		28	0.13	0.01	m <sup>3</sup> /s				
S. D.	0.052	0.036	0.080	0.522	1.281	1.354	1.942	1.157	0.584	0.257	0.127	0.067	0.259		54.43	0.11	0.01	m <sup>3</sup> /s				
Normal	0.046	0.034	0.058	0.599	1.857	1.503	1.388	0.596	0.388	0.257	0.129	0.066	0.579					m <sup>3</sup> /s				
Normal	1	1	2	18	59	46	44	19	12	8	4	2	215	10-Year	57.71	0.04	0.00	m <sup>3</sup> /s				



**QUALITY CREEK NEAR THE MOUTH 07FB005**

Station Longitude Latitude: -120.923388 55.145094

Year	Monthly and Annual Discharge in m <sup>3</sup> /s										Drainage Area = 26.30 km <sup>2</sup>		Median Elevation = 1087 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		
1976																			1976
1977																			1977
1978	0.031	0.027	0.032	0.070	0.247	0.150	0.273	0.144	0.247	0.084	0.134	0.067	0.126	Jul 11	1.50	0.0707	0.0270	1978	
1979	0.036	0.018	0.022	0.197	1.310	1.070	0.186	0.081	0.096	0.040	0.024	0.015	0.259	Jun 04	3.26	0.0493	0.0129	1979	
1980	0.009	0.006	0.005	0.097	0.270	1.120	0.499	0.268	0.334	0.157	0.092	0.061	0.243	Jun 18	5.75	0.1331	0.0050	1980	
1981	0.053	0.037	0.036	0.283	1.100	0.458	0.154	0.108	0.047	0.043	0.059	0.013	0.200	May 08	2.59	0.0330	0.0049	1981	
1982	0.008	0.005	0.006	0.016	1.430	0.311	1.670	0.912	0.293	0.234	0.111	0.051	0.427	Jul 14	24.50	0.0903	0.0000	1982	
1983	0.029	0.019	0.020	0.440	0.349	0.558	1.370	0.124	0.066	0.059	0.046	0.018	0.260	Jul 15	3.88	0.0527	0.0159	1983	
1984	0.009	0.019	0.023	0.062	0.498	0.249	0.047	0.019	0.132	0.261	0.125	0.077	0.127	May 17	3.39	0.0136	0.0043	1984	
1985	0.051	0.029	0.039	0.557	0.369	0.092	0.040	0.039	0.249	0.169	0.044	0.033	0.142	Apr 13	2.02	0.0191	0.0191	1985	
1986	0.036	0.032	0.073	0.274	0.575	0.372	0.581	0.075	0.088	0.137	0.072	0.059	0.199	Jul 07	1.84	0.0379	0.0233	1986	
1987	0.050	0.036	0.030	0.293	0.336	0.140	0.201	0.696	0.074	0.047	0.041	0.029	0.166	Aug 01	7.81	0.0433	0.0239	1987	
1988	0.016	0.013	0.047	0.285	0.109	0.156	0.169	0.083	0.025	0.026	0.037	0.083	0.037	Jul 12	0.89	0.0107	0.0069	1988	
1989	0.015	0.002	0.003	0.122	0.495	0.399	0.321	0.521	0.202	0.020	0.010	0.034	0.180	Jun 27	1.59	0.1019	0.0009	1989	
1990	0.035	0.018	0.028	0.470	0.624	1.470	0.381	0.047	0.039	0.049	0.037	0.035	0.269	Jun 12	11.00	0.0360	0.0033	1990	
1991	0.013	0.015	0.013	0.769	0.603	0.462	0.074	0.023	0.036	0.027	0.032	0.045	0.176	Apr 25	2.44	0.0113	0.0060	1991	
1992	0.044	0.033	0.114	0.321	0.106	0.041	0.015	0.006	0.009	0.006	0.003	0.001	0.058	Apr 02	1.16	0.0026	0.0000	1992	
1993	0.000	0.001	0.001	0.030	0.037	0.734	0.522	0.124	0.027	0.031	0.022	0.008	0.000	Jun 13	4.45	0.0737	0.0000	1993	
1994	0.006	0.002	0.008	0.593	0.267	0.132	0.094	0.069	0.011	0.019	0.013	0.016	0.119	Apr 27	1.06	0.0037	0.0023	1994	
1995	0.053	0.064	0.078	0.393	0.485	0.132	0.094	0.069	0.011	0.019	0.013	0.016	0.119	Apr 27	1.06	0.0037	0.0023	1995	
1996	0.013	0.014	0.017	0.653	1.230	0.414	0.564	0.288	0.411	0.264	0.031	0.016	0.327	May 18	4.90	0.0810	0.0123	1996	
1997	0.015	0.017	0.027	0.703	1.240	0.766	0.843	0.199	0.179	0.337	0.175	0.052	0.382	Jul 12	6.40	0.1000	0.0143	1997	
1998	0.024	0.021	0.026	0.152	0.322	0.157	0.154	0.014	0.000	0.051	0.022	0.008	0.080	Jul 01	0.88	0.0000	0.0000	1998	
1999	0.002	0.001	0.005	0.437	0.484	0.140	0.084	0.027	0.009	0.017	0.011	0.015	0.103	Apr 24	2.57	0.0041	0.0010	1999	
2000	0.007	0.001	0.006	0.079	0.227	0.396	0.165	0.361	0.667	0.170	0.067	0.005	0.179	Sep 05	3.21	0.0441	0.0000	2000	
2001	0.005	0.005	0.004	0.030	0.210	0.538								Jul 18	23.40		0.0030	2001	
2002																			2002
2003																			2003
2004																			2004
2005																			2005
2006																			2006
2007																			2007
2008																			2008
2009																			2009
2010																			2010
2011																			2011
Avg. S. D. Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.02	0.02	0.03	0.31	0.54	0.45	0.38	0.19	0.15	0.10	0.05	0.03	0.20	0.20	5.24	0.0460	0.0078	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.02	0.02	0.03	0.23	0.41	0.37	0.43	0.24	0.16	0.10	0.05	0.02	0.10		6.39	0.0380	0.0086	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.02	0.02	0.03	0.33	0.53	0.40	0.39	0.20	0.14	0.10	0.05	0.03	0.19	m <sup>3</sup> /s					
	2	2	3	33	54	39	40	20	13	10	5	3	233	mm	10-Year	11.3	0.000	0.000	m <sup>3</sup> /s

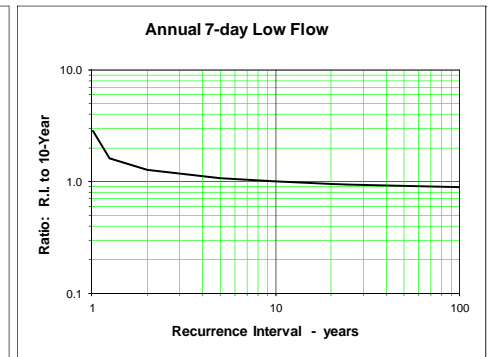
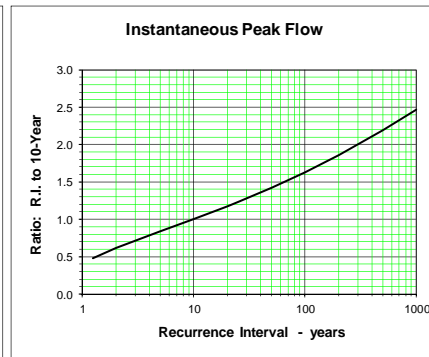
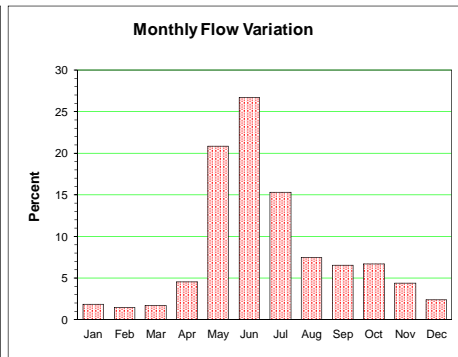
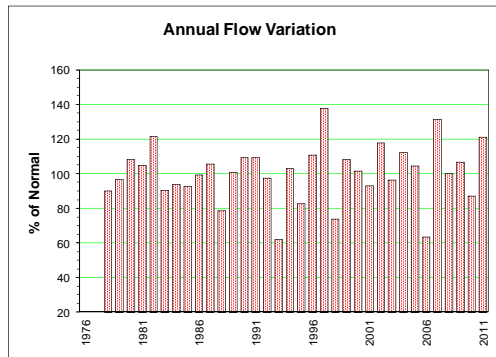




**MURRAY RIVER ABOVE WOLVERINE RIVER 07FB006**

Station Longitude Latitude: -121.015666 55.066147

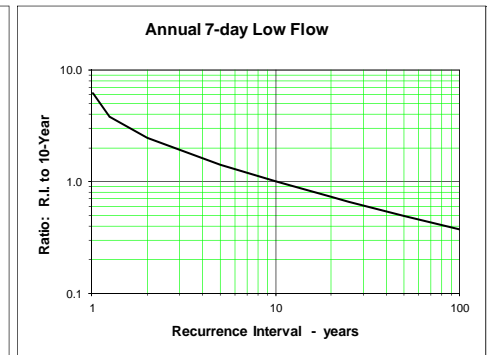
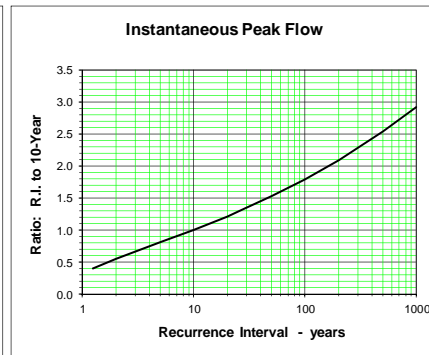
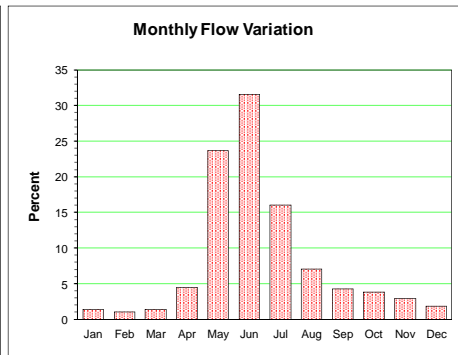
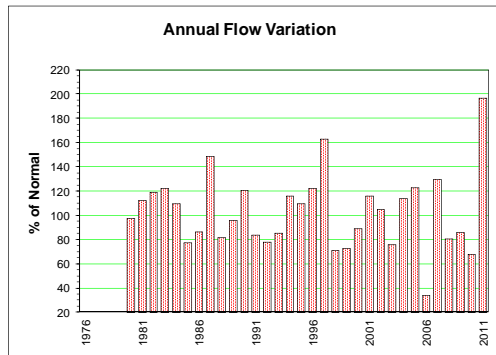
Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 2385.37 km <sup>2</sup>		Median Elevation = 1303 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year		
1976																		1976		
1977																		1977		
1978	11.4	8.5	7.5	17.2	101.0	143.0	70.8	60.1	46.4	53.8	76.9	18.6	51.4	Jun 05	269.00	38.26	7.13	1978		
1979	9.8	7.2	9.1	18.5	124.0	253.0	127.0	43.7	26.3	26.2	10.7	6.9	55.4	Jun 04	420.10	20.44	6.40	1979		
1980	6.1	5.9	5.4	25.7	137.0	187.0	102.0	64.7	90.4	61.8	30.5	24.8	61.8	Jun 18	317.74	52.64	5.34	1980		
1981	20.4	21.5	24.5	35.0	240.0	151.0	82.3	41.6	22.7	20.6	39.6	15.8	59.9	May 22	451.02	13.61	12.59	1981		
1982	8.9	7.4	6.4	11.3	111.0	242.0	185.0	83.5	95.9	40.8	23.8	14.4	69.4	Jul 16	669.00	51.41	5.88	1982		
1983	10.6	8.8	8.8	33.8	125.0	137.0	118.0	45.3	45.2	38.0	34.2	13.6	51.8	May 31	278.00	32.04	8.16	1983		
1984	11.0	10.9	10.2	22.6	73.3	164.0	89.7	43.8	62.3	97.5	35.5	22.4	53.6	Oct 09	419.00	34.24	9.54	1984		
1985	13.8	9.2	10.8	21.5	142.0	166.0	86.7	41.8	65.9	43.1	19.7	11.8	52.9	May 22	287.00	25.19	8.45	1985		
1986	11.8	10.4	15.4	26.2	132.0	222.0	122.0	43.8	24.6	33.6	22.3	15.7	56.8	May 27	445.00	15.21	9.01	1986		
1987	15.6	13.6	10.9	38.4	184.0	189.0	77.1	75.7	30.2	28.7	42.5	14.5	60.2	Jun 13	408.00	22.99	10.64	1987		
1988	9.2	8.6	9.5	33.3	142.0	143.0	64.2	42.8	24.5	32.3	16.8	11.7	44.9	May 13	288.00	13.91	8.04	1988		
1989	9.6	7.8	6.8	17.1	147.0	201.0	81.8	57.6	34.3	37.0	57.1	31.4	57.6	Jun 10	362.00	28.26	6.26	1989		
1990	15.8	10.8	14.2	36.2	159.0	310.0	100.0	39.4	20.1	18.2	13.9	10.8	62.4	Jun 13	872.00	17.40	9.67	1990		
1991	8.5	8.5	9.3	49.5	186.0	196.0	104.0	53.0	38.3	48.6	25.0	19.3	62.4	Jun 11	286.00	25.99	7.88	1991		
1992	15.4	12.1	24.0	78.1	123.0	159.0	49.9	24.3	67.8	79.0	25.9	11.6	55.8	Oct 25	286.00	15.73	7.66	1992		
1993	8.0	6.8	6.5	21.2	120.0	63.3	65.8	40.7	22.0	24.5	29.7	14.8	35.5	May 14	294.00	16.51	6.15	1993		
1994	9.7	8.1	15.8	71.7	185.0	177.0	97.8	40.2	32.8	34.3	18.0	12.5	58.8	Jun 14	307.00	26.29	7.49	1994		
1995	10.8	10.2	11.5	21.5	165.0	137.0	67.3	59.1	25.2	24.7	17.8	13.8	47.3	May 16	326.00	17.99	9.97	1995		
1996	9.6	9.0	9.7	42.7	126.0	222.0	139.0	60.7	52.5	54.1	21.5	11.7	63.3	Jun 05	425.00	35.54	8.01	1996		
1997	9.2	9.2	11.2	43.7	196.0	275.0	145.0	64.6	42.2	90.7	39.5	14.8	78.8	Jun 02	466.00	35.57	8.46	1997		
1998	11.1	10.2	10.3	24.7	173.0	83.8	70.9	29.8	19.6	37.7	20.0	12.3	42.3	May 28	252.00	17.83	9.23	1998		
1999	9.4	9.0	9.6	38.9	138.0	223.0	131.0	67.2	36.3	35.3	22.3	19.6	61.9	May 26	435.00	28.24	8.20	1999		
2000	13.8	9.3	11.0	16.3	74.7	187.0	127.0	55.0	97.0	52.0	43.5	9.6	58.0	Jul 03	309.00	36.21	8.17	2000		
2001	9.2	7.2	7.0	15.7	90.9	168.0	179.0	58.7	35.9	24.9	20.9	16.1	53.1	Jul 19	624.00	26.96	5.88	2001		
2002	10.6	7.5	6.7	11.2	104.0	323.0	121.0	64.6	62.2	52.0	22.1	22.6	67.4	Jun 18	622.00	40.07	6.07	2002		
2003	14.5	10.6	10.2	33.0	129.0	178.0	78.9	41.8	48.5	72.7	25.9	16.1	55.1	May 26	398.00	36.50	7.74	2003		
2004	13.1	11.3	15.0	31.8	116.0	184.0	87.6	45.6	85.6	61.0	83.8	34.2	64.0	Jun 07	671.00	31.81	10.19	2004		
2005	25.1	25.7	23.5	43.5	138.0	127.0	83.0	55.2	51.9	74.2	42.9	23.0	59.6	May 30	267.00	41.54	19.40	2005		
2006	17.8	14.0	10.2	24.6	124.0	102.0	52.3	32.8	17.8	14.7	12.6	10.7	36.3	May 25	260.16	13.74	8.90	2006		
2007	11.0	10.1	11.9	29.4	140.0	310.0	139.0	59.2	56.5	80.6	37.7	14.8	75.2	Jun 05	655.00	35.07	9.56	2007		
2008	10.6	9.9	9.3	10.5	190.0	175.0	93.1	63.6	41.8	28.3	32.4	18.5	57.1	May 19	390.00	27.36	9.06	2008		
2009	13.1	9.4	6.7	18.5	116.0	213.0	185.0	45.1	38.8	27.7	36.8	17.8	60.9	Jul 08	644.00	28.96	6.35	2009		
2010	12.4	11.5	11.1	41.1	121.0	146.0	64.0	32.0	58.8	52.2	32.3	14.1	49.8	Sep 26	306.00	19.84	10.87	2010		
2011	10.6	8.7	7.7	10.8	172.0	229.0	169.0	69.5	64.5	43.2	21.1	19.1	69.1	Jul 10	455.00	32.46	7.51	2011		
Avg.	11.98	10.26	11.11	29.86	139.6	187.8	104.59	51.37	46.61	45.41	31.10	16.46	57.34	57.40	416.59	28.11	8.53	m <sup>3</sup> /s		
S. D.	3.77	3.87	4.82	15.71	36.09	60.65	37.81	13.73	22.46	21.39	16.06	5.75	9.47		154.84	10.33	2.53	m <sup>3</sup> /s		
Normal	12.31	10.62	11.60	31.43	140.36	185.80	102.91	50.28	45.24	45.30	30.53	16.33	57.07	m <sup>3</sup> /s				m <sup>3</sup> /s		
Normal	14	11	13	34	158	202	116	56	49	51	33	18	755	mm 10-Year	615.93	15.97	6.21	m <sup>3</sup> /s		



**MOBERLY RIVER NEAR FORT ST. JOHN 07FB008**

Station Longitude Latitude: -121.347415 56.093436

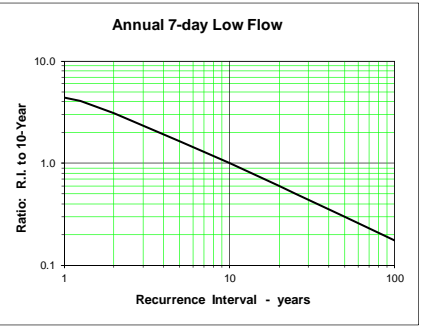
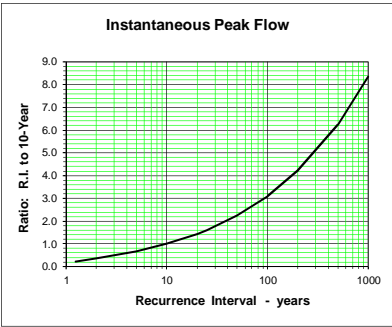
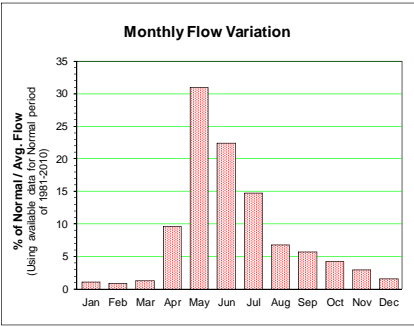
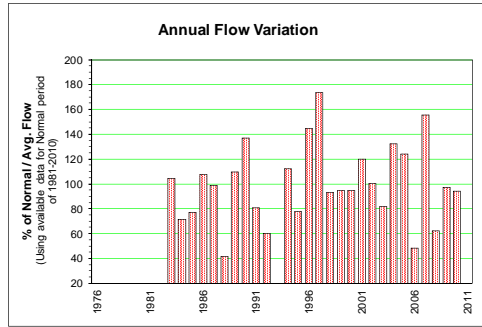
Monthly and Annual Discharge in m <sup>3</sup> /s						Drainage Area = 1521.74 km <sup>2</sup>			Median Elevation = 938 m			Instantaneous Peak Flow		7-Day Low Flow				
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1976																		1976
1977																		1977
1978																		1978
1979																		1979
1980	0.60	0.48	0.50	1.79	13.30	41.70	24.50	10.60	13.50	13.50	7.17	4.83	11.0	Jun 20	77.4	7.921	0.451	1980
1981	3.63	2.71	2.61	8.46	61.80	51.50	11.40	3.38	1.41	1.40	2.27	1.71	12.7	Jun 02	94.3	1.181	1.181	1981
1982	1.22	0.98	0.86	2.24	18.80	43.50	39.20	23.60	8.97	6.49	10.10	5.30	13.5	Jul 17	60.3	6.807	0.839	1982
1983	2.97	1.92	1.62	7.44	27.50	37.50	56.70	14.90	4.49	4.47	3.49	2.07	13.9	Jul 07	75.2	3.996	1.479	1983
1984	1.65	1.55	1.94	3.26	24.60	58.30	21.70	5.16	7.55	12.80	7.30	3.62	12.4	Jun 09	77.0	2.871	1.501	1984
1985	2.62	1.98	2.04	5.32	26.40	36.10	10.50	3.04	5.20	7.11	3.01	2.07	8.8	Jun 05	53.1	2.184	1.743	1985
1986	2.03	1.69	1.87	3.09	19.70	44.30	19.00	8.56	3.12	6.26	4.23	3.22	9.8	Jun 03	61.0	2.587	1.534	1986
1987	2.37	1.83	1.35	8.89	40.80	40.40	24.50	55.30	11.70	4.06	5.11	4.35	16.8	Aug 01	119.0	6.601	1.319	1987
1988	1.90	0.91	1.09	7.09	33.00	43.30	11.30	4.15	2.61	2.64	1.73	1.19	9.2	Jun 10	72.3	2.031	0.833	1988
1989	0.99	0.82	0.86	2.84	31.40	30.90	20.40	12.90	11.20	5.64	6.13	5.57	10.9	May 13	44.8	6.734	0.788	1989
1990	3.91	1.87	2.55	8.46	38.20	83.20	17.00	4.03	1.77	1.15	1.03	1.44	13.7	Jun 13	150.0	1.350	0.939	1990
1991	1.48	1.88	2.04	5.41	32.00	39.60	14.20	3.12	2.40	3.80	4.20	3.34	9.5	Jun 16	49.3	2.070	1.151	1991
1992	2.51	1.96	8.08	14.80	24.70	30.60	9.67	2.52	0.61	5.67	3.66	1.50	8.9	Jun 17	36.9	0.490	0.490	1992
1993	0.70	0.47	0.61	1.54	23.00	18.70	25.50	22.10	13.00	5.41	2.92	1.62	9.7	May 24	40.4	9.264	0.449	1993
1994	1.71	1.76	2.41	15.70	47.60	48.70	19.50	6.32	3.44	3.56	4.22	2.41	13.2	Jun 14	90.5	3.303	1.441	1994
1995	1.63	1.29	1.49	3.41	40.90	36.30	43.50	8.76	4.22	2.69	2.23	1.93	12.5	Jul 08	79.1	2.979	1.249	1995
1996	1.47	1.44	1.55	13.20	36.10	57.20	27.00	9.31	6.81	7.25	3.09	2.13	13.9	Jun 07	88.0	6.036	1.277	1996
1997	1.50	1.32	1.62	17.10	68.80	61.50	29.30	8.39	5.16	12.60	11.20	2.61	18.5	May 20	106.0	4.727	1.226	1997
1998	2.08	1.92	2.06	6.17	44.00	24.60	7.66	1.97	0.95	0.97	1.62	1.65	8.1	May 24	63.0	0.645	0.645	1998
1999	1.47	1.42	1.54	5.74	25.00	38.90	17.00	4.88	1.61	0.54	0.41	0.41	8.3	Jun 20	47.3	0.903	0.345	1999
2000	0.48	0.81	1.29	1.91	4.51	34.60	28.00	9.87	20.10	8.82	7.03	4.01	10.1	Jun 13	53.7	7.861	0.447	2000
2001	2.09	1.56	1.47	2.12	14.20	60.30	45.20	19.00	4.44	2.66	2.36	2.20	13.2	Jun 12	92.6	3.579	1.353	2001
2002	1.68	1.40	1.35	1.93	29.60	66.50	20.50	6.63	3.99	2.02	2.82	2.37	11.9	Jun 19	79.1	3.586	1.226	2002
2003	1.96	1.61	1.41	3.53	20.30	40.70	19.00	5.24	2.21	2.83	2.36	2.17	8.6	Jun 12	51.1	1.907	1.309	2003
2004	1.11	0.72	1.44	4.85	21.80	27.10	17.40	8.57	32.40	20.80	11.00	7.63	12.9	Sep 22	51.6	7.764	0.445	2004
2005	5.34	4.65	4.66	18.00	51.70	48.30	13.40	5.52	3.73	4.86	4.53	2.34	13.9	May 23	71.3	3.374	1.973	2005
2006	1.70	1.34	1.07	2.42	12.00	20.30	4.75	1.51	0.34	0.23	0.44	0.37	3.9	Jun 04	30.1	0.204	0.161	2006
2007	0.30	0.27	0.46	2.54	40.40	75.00	22.00	10.90	8.38	6.69	6.74	2.71	14.7	Jun 09	121.0	5.223	0.259	2007
2008	1.96	1.85	2.41	2.76	38.00	42.00	10.10	3.83	3.08	1.90	1.16	0.81	9.2	Jun 01	78.4	2.467	0.747	2008
2009	0.65	0.77	0.93	1.56	22.40	39.10	32.00	9.36	3.75	2.27	2.02	1.37	9.7	Jul 11	58.4	2.901	0.617	2009
2010	1.09	1.27	2.16	5.73	31.40	30.50	6.70	1.66	0.74	4.02	4.25	2.78	7.7	May 25	60.3	0.600	0.600	2010
2011	1.92	1.66	1.51	3.29	61.90	91.60	81.60	12.20	2.53	3.71	2.40	1.75	22.3	Jun 27	227.0	1.680	1.480	2011
Avg.	1.84	1.50	1.84	6.02	32.1	45.1	23.44	9.63	6.11	5.34	4.13	2.61	11.67		77	3.620	0.984	m <sup>3</sup> /s
S. D.	1.05	0.79	1.39	4.81	15.04	17.07	15.91	10.04	6.59	4.41	2.88	1.58	3.52		38.06	2.538	0.477	m <sup>3</sup> /s
Normal	1.87	1.53	1.89	6.25	31.69	43.65	21.47	9.51	5.98	5.12	4.09	2.56	11.34					m <sup>3</sup> /s
Normal	3	2	3	11	56	74	38	17	10	9	7	5	235	10-Year	122.10	0.77	0.38	m <sup>3</sup> /s



**FLATBED CREEK AT KILOMETRE 110 HERITAGE HIGHWAY 07FB009**

Station Longitude Latitude: -120.939896 55.089381

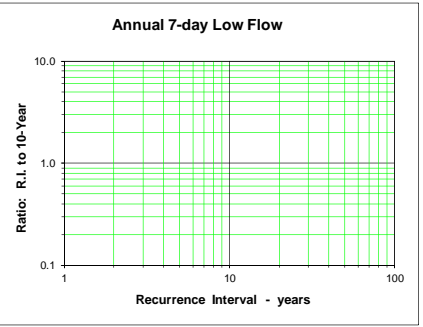
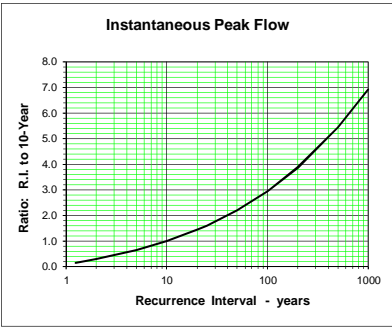
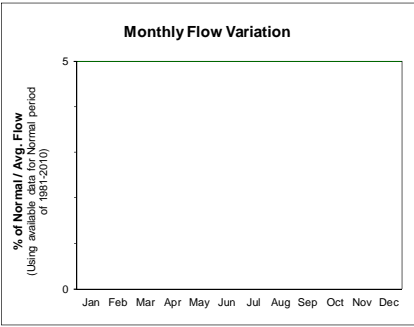
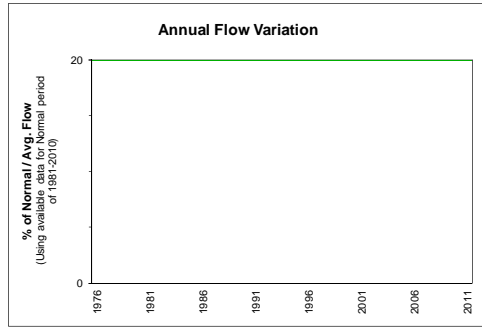
Year	Monthly and Annual Discharge in m <sup>3</sup> /s										Drainage Area = 478.72 km <sup>2</sup>			Median Elevation = 1129 m			Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual				
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981																			1981		
1982						13.10	18.50	21.70	8.94						Jul 16	90.00			1982		
1983	0.56	0.45	0.53	5.84	9.39	9.27	17.40	2.73	1.74	1.46	1.16	0.47	4.28	Jun 25	39.50	1.510	0.4204	1983			
1984	0.35	0.40	0.46	1.73	8.68	9.13	1.93	0.63	3.82	4.79	2.05	1.16	2.93	May 18	20.90	0.489	0.2816	1984			
1985	0.64	0.38	0.49	2.17	14.30	7.47	1.47	0.98	5.08	3.19	0.91	0.65	3.16	May 18	27.90	0.499	0.3324	1985			
1986	0.66	0.58	0.89	3.17	19.40	12.10	8.32	1.42	1.52	2.20	1.20	0.97	4.40	May 26	48.40	1.087	0.4746	1986			
1987	1.22	1.05	0.68	5.25	14.90	5.38	2.15	14.40	0.72	0.66	1.30	0.55	4.06	Aug 01	140.00	0.355	0.3376	1987			
1988	0.30	0.32	0.39	3.52	6.98	5.01	1.12	0.96	0.43	0.55	0.52	0.45	1.71	Jun 06	25.60	0.017	0.0173	1988			
1989	0.18	0.11	0.17	2.48	16.40	13.60	6.20	5.93	2.71	2.10	1.82	1.89	4.49	Jun 10	62.00	1.911	0.0924	1989			
1990	1.08	0.73	1.20	6.33	16.60	31.50	6.43	0.83	0.52	0.71	0.65	0.80	5.61	Jun 12	173.00	0.390	0.3903	1990			
1991	0.68	0.61	0.48	8.64	14.20	9.33	2.03	0.66	0.74	0.68	0.80	0.73	3.30	May 10	32.70	0.492	0.4584	1991			
1992	0.54	0.43	2.33	9.72	8.31	3.38	0.39	0.51	1.18	1.75	0.83	0.28	2.47	Apr 03	19.40	0.238	0.1566	1992			
1993		0.22	0.33	3.35	13.30					0.90	1.14	0.94						1993			
1994	0.49	0.39	0.78	10.60	14.10	13.80	8.05	1.80	1.53	1.54	1.06	0.90	4.60	Jun 13	66.40	0.960	0.3611	1994			
1995	0.73	0.63	0.73	3.91	17.90	6.24	3.36	2.24	0.57	0.75	0.53	0.23	3.18	May 12	36.60	0.490	0.2129	1995			
1996	0.15	0.15	0.18	6.79	17.50	18.60	10.40	5.39	5.15	5.27	0.72	0.69	5.93	May 31	56.10	3.690	0.1317	1996			
1997	0.63	0.67	0.60	6.25	28.40	18.00	17.10	3.36	2.55	4.17	2.11	0.78	7.10	Jul 12	133.00	1.527	0.2243	1997			
1998	0.60	0.59	0.59	3.74	17.00	4.51	11.60	1.35	1.22	2.31	1.12	0.65	3.81	Jul 01	104.00	1.184	0.5229	1998			
1999	0.54	0.51	0.56	8.31	16.40	11.70	4.60	1.22	0.71	0.80	0.57	0.55	3.88	May 25	38.30	0.461	0.4593	1999			
2000	0.40	0.33	0.72	1.24	5.34	11.80	7.21	2.96	10.90	2.78	2.34	0.73	3.89	Jul 03	54.10	2.164	0.2814	2000			
2001	0.36	0.27	0.26	2.31	9.91	15.10	23.90	3.45	0.86	0.71	0.66	0.65	4.91	Jul 18	390.00	0.683	0.2093	2001			
2002	0.50	0.33	0.29	1.09	16.10	18.40	3.27	2.75	2.59	2.21	0.86	0.92	4.12	Jun 17	47.00	0.861	0.2666	2002			
2003	0.60	0.44	0.42	5.09	14.50	9.75	2.86	1.06	1.13	1.90	1.52	0.81	3.35	May 25	35.00	0.667	0.3263	2003			
2004	0.51	0.37	0.77	2.94	8.93	12.10	9.18	4.04	14.20	3.51	6.93	1.64	5.41	Jun 06	51.70	1.527	0.3020	2004			
2005	0.88	0.91	1.13	7.66	19.20	10.40	3.99	3.39	3.23	4.40	4.75	0.93	5.09	May 13	33.50	1.867	0.7807	2005			
2006	0.70	0.54	0.38	3.31	9.70	4.12	1.68	1.13	0.81	0.52	0.43	0.39	1.98	May 26	27.10	0.197	0.1967	2006			
2007	0.39	0.37	0.40	6.00	35.10	18.40	2.82	4.50	1.82	3.92	1.59	0.54	6.36	Jun 04	87.60	1.354	0.3503	2007			
2008	0.43	0.38	0.36	0.76	17.50	6.04	1.17	0.98	0.99	0.69	0.64	0.50	2.55	May 25	44.20	0.586	0.3534	2008			
2009	0.41	0.33	0.28	0.42	12.70	6.45	20.80	0.95	1.10	1.18	1.70	0.86	3.98	Jul 07	128.00	0.507	0.2729	2009			
2010	0.54	0.56	0.79	11.90	16.30	8.08	1.24	0.43	2.62	1.77	1.33	0.80	3.87	Apr 22	46.40	0.372	0.3723	2010			
2011																		2011			
Avg.	0.56	0.47	0.61	4.80	14.97	11.17	7.11	3.28	2.83	2.05	1.47	0.77	4.09	4.09	73.51	0.96	0.31	m <sup>3</sup> /s			
S. D.	0.24	0.21	0.42	3.09	6.18	6.06	6.71	4.55	3.34	1.43	1.37	0.36	1.29		73.88	0.78	0.15	m <sup>3</sup> /s			
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.56	0.47	0.61	4.80	14.97	11.17	7.11	3.28	2.83	2.05	1.47	0.77	4.09	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	3	2	3	26	84	60	40	18	15	11	8	4	270	mm	10-Year	141.5	0.179	0.110	m <sup>3</sup> /s		



**CUTBANK RIVER NEAR GRANDE PRAIRIE 07GB001**

Station Longitude Latitude: -118.963100 54.515690

Monthly and Annual Discharge in m <sup>3</sup> /s																	Drainage Area = 840.77 km <sup>2</sup>		Median Elevation = 1138 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						
1976					19.600	11.000	9.150	21.900	6.460	2.960				Jul 02	106.00		2.573	1976						
1977					29.600	10.700	16.900	6.050	6.630	10.200				May 06	227.00		3.717	1977						
1978					11.600	8.970	8.640	4.490	11.700	3.770				Sep 18	78.70		2.881	1978						
1979					24.100	13.600	7.280	1.980	1.770	1.380				May 16	87.10		0.991	1979						
1980					5.190	39.100	9.230	5.920	10.800	3.770				Jun 04	274.00		2.439	1980						
1981					10.500	6.900	7.480	4.250	1.320	1.290				Jul 29	89.50		0.994	1981						
1982					23.600	6.820	38.000	20.500	5.400	4.190				Jul 15	800.00		3.317	1982						
1983			0.517	6.780	7.510	10.700	25.200	3.740	1.920	1.580				Jul 15	103.00		1.746	1983						
1984			0.582	3.110	14.500	11.800	1.870	1.200	8.150	5.000				May 17	71.20		0.982	1984						
1985			0.462	4.880	10.500	5.910	2.160	2.440	14.800	7.050				Sep 13	58.20		1.127	1985						
1986			2.120	9.560	19.500	9.040	12.300	2.020	3.670	5.400				Jul 18	79.30		1.334	1986						
1987			0.531	6.370	7.770	2.310	1.940	25.900	2.400	1.440				Aug 02	232.00		1.164	1987						
1988			0.801	2.850	1.680	4.410	2.400	0.745	0.666	0.638				Jun 07	13.30		0.624	1988						
1989			0.109	2.830	13.600	12.200	16.100	31.000	11.300	4.280				Aug 23	160.00		3.629	1989						
1990			0.726	4.010	14.000	42.500	8.020	1.620	1.670	1.380				Jun 12	552.00		1.159	1990						
1991			0.669	14.900	18.900	9.330	5.800	3.640	3.000	1.590				May 10	95.60		1.794	1991						
1992			4.100	12.200	7.670	3.780	1.510	0.973	1.200	1.300				Apr 03	22.20		0.884	1992						
1993			0.379	4.400	5.190	16.100	12.400	3.500	2.920	1.900				Jun 24	130.62		2.026	1993						
1994			1.040	10.400	15.200	16.100	17.200	5.150	3.710	2.620				Jul 04	161.00		2.201	1994						
1995			0.500	7.050	11.400	8.010	6.650	7.210	2.280	1.640				Jun 21	53.30		1.789	1995						
1996			0.676	9.420	24.100	20.000	10.000	10.200	5.060	4.630				May 31	230.00		3.270	1996						
1997			0.757	7.530	26.200	16.800	24.700	13.900	6.370	4.680				Jul 12	227.00		2.871	1997						
1998			0.673	2.700	6.200	5.540	10.700	1.690	1.170	3.280				Jul 02	95.70		0.985	1998						
1999			0.836	15.300	15.100	8.490	7.330	1.800	1.060	0.890				Apr 25	59.50		0.904	1999						
2000			0.253	1.890	8.970	9.570	10.500	2.710	10.300	5.600				Sep 03	43.50		1.126	2000						
2001			0.218	1.890	7.050	10.600	37.000	6.460	1.690	1.070				Jul 18	209.00		1.461	2001						
2002			0.276	2.250	20.600	7.110	1.790	2.810	2.860	2.860				May 21	60.60		1.246	2002						
2003			0.010	8.080	11.800	8.800	6.210	1.340	1.090	0.933				Jun 22	56.50		0.896	2003						
2004			0.432	5.090	7.100	14.600	12.200	5.870	16.900	4.430				Sep 02	177.00		2.950	2004						
2005			2.950	10.100	27.800	20.100	5.960	2.940	3.240	3.660				May 07	114.00		2.123	2005						
2006			0.368	2.960	6.500	3.840	1.460	0.734	1.530	1.170				May 27	37.70		0.480	2006						
2007			0.657	16.600	35.700	11.100	3.860	6.650	2.790	2.090				May 04	80.70		2.306	2007						
2008			0.484	5.980	30.300	6.670	1.910	1.660	1.770	1.350				May 24	80.10		1.096	2008						
2009			0.417	2.400	21.400	4.270	27.300	2.060	1.260	1.620				Jul 08	188.00		1.131	2009						
2010			1.110	4.590	13.500	5.350	1.680	1.390	4.720	2.670				May 27	41.00		1.060	2010						
2011																		2011						
Avg.	#DIV/0!	#DIV/0!	0.809	6.647	15.255	11.489	10.652	6.184	4.674	2.980	#DIV/0!	#DIV/0!	#DIV/0!		145.55		1.751	#DIV/0!	m <sup>3</sup> /s					
S. D.	#DIV/0!	#DIV/0!	0.874	4.276	8.499	8.577	9.580	7.474	4.223	2.063	#DIV/0!	#DIV/0!	#DIV/0!		152.29		0.92	#DIV/0!	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	#DIV/0!	#DIV/0!	0.81	6.65	14.79	10.63	10.72	5.87	4.21	2.74	#DIV/0!	#DIV/0!	#DIV/0!	m <sup>3</sup> /s										
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	#DIV/0!	#DIV/0!	3	20	47	33	34	19	13	9	#DIV/0!	#DIV/0!	#DIV/0!	mm	10-Year	326.4	0.798	0.000	m <sup>3</sup> /s					





Zone 8 Nechako Plateau

**OMINECA RIVER ABOVE OSILINKA RIVER 07EC002**

Station Longitude Latitude: -124.566457 55.916021

Monthly and Annual Discharge in m<sup>3</sup>/s

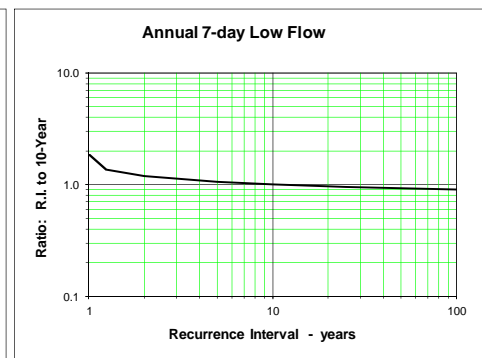
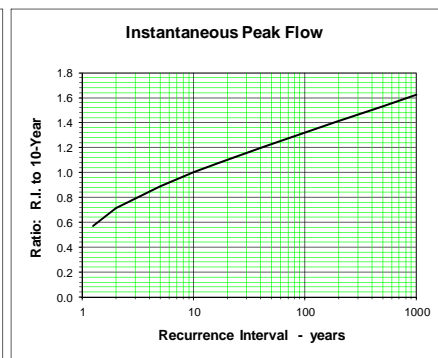
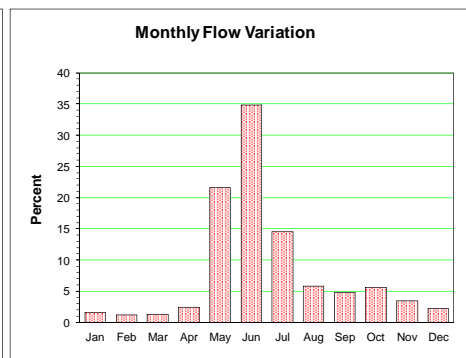
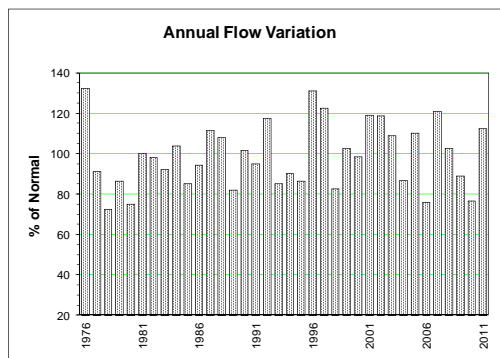
Drainage Area = 5390.84 km<sup>2</sup>

Median Elevation = 1281 m

Instantaneous Peak Flow

7-Day Low Flow

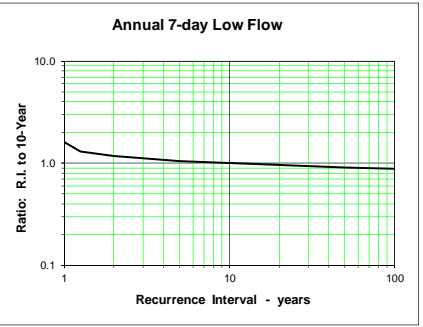
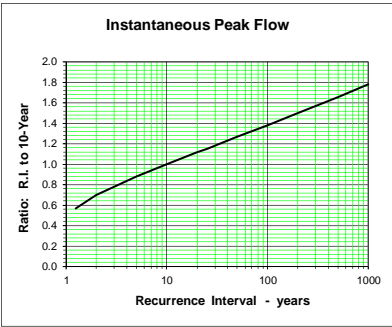
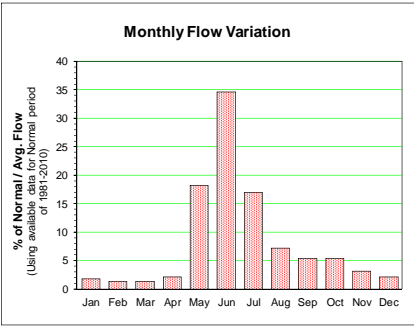
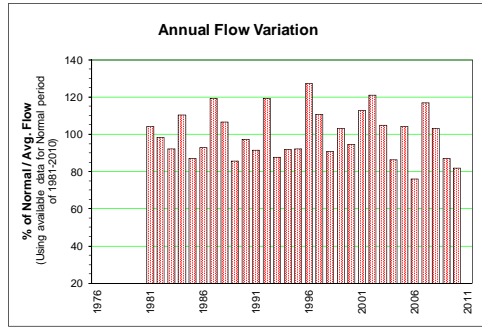
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year
1976	13.5	12.6	11.2	14.4	245.0	435.0	361.0	134.0	69.7	71.9	45.3	27.3	120.4	Jul 02	606.0	60.80	10.30	1976
1977	17.5	15.0	13.8	36.2	223.0	270.0	184.0	70.8	46.5	54.9	39.6	21.5	83.1	Jun 02	377.0	35.76	13.09	1977
1978	15.7	12.9	11.2	17.6	104.0	292.0	77.8	39.9	53.1	89.6	52.2	25.7	66.0	Jun 07	464.0	36.14	11.00	1978
1979	18.5	14.5	13.3	16.9	162.0	371.0	160.0	52.1	52.2	45.6	20.7	16.7	78.8	Jun 05	530.0	36.23	12.24	1979
1980	13.8	10.5	10.6	16.8	185.0	196.0	79.7	43.8	62.3	77.6	75.2	48.5	68.4	May 17	333.0	38.64	10.00	1980
1981	28.1	20.1	19.4	24.5	334.0	349.0	141.0	42.8	32.1	43.6	32.8	20.5	91.0	May 28	817.0	29.27	18.01	1981
1982	14.0	11.7	11.8	12.5	114.0	467.0	168.0	77.5	59.4	67.3	44.1	25.7	89.4	Jun 16	624.0	42.60	11.16	1982
1983	18.0	15.0	13.9	27.6	218.0	297.0	181.0	86.1	55.0	43.9	32.3	17.0	84.1	Jun 04	589.0	48.13	12.94	1983
1984	14.0	11.7	13.3	21.8	120.0	417.0	230.0	82.7	64.8	92.7	42.1	26.8	94.7	Jun 15	619.0	51.36	11.10	1984
1985	17.0	13.3	13.3	15.2	174.0	341.0	197.0	47.2	44.1	33.4	18.3	13.4	77.5	Jun 07	617.0	33.09	12.47	1985
1986	14.2	12.2	10.6	13.7	117.0	442.0	196.0	52.7	35.2	69.2	42.8	26.4	86.1	Jun 10	573.0	26.94	9.31	1986
1987	21.3	17.9	15.7	20.0	222.0	454.0	179.0	55.2	64.3	59.5	70.9	37.5	101.6	Jun 08	588.7	34.91	15.04	1987
1988	21.2	16.6	14.6	30.2	344.0	387.0	151.0	64.5	31.7	56.8	36.7	23.1	98.3	May 17	599.0	25.49	13.37	1988
1989	17.0	13.1	12.3	29.0	257.0	243.0	98.5	56.7	36.4	44.7	36.7	74.8	88.8	May 10	398.0	30.49	11.69	1989
1990	22.1	15.0	14.7	30.8	263.0	506.0	133.0	44.1	28.7	22.9	16.6	13.8	92.6	Jun 03	998.0	23.09	12.71	1990
1991	11.7	12.9	11.7	31.7	296.0	296.0	111.0	51.6	63.6	89.1	34.4	25.4	86.6	May 22	425.0	34.47	10.27	1991
1992	22.3	18.0	22.5	86.6	235.0	518.0	123.0	33.5	47.7	100.0	51.1	30.9	107.1	Jun 16	696.0	21.60	16.86	1992
1993	17.8	16.4	14.0	35.3	351.0	210.0	100.0	73.6	39.0	26.2	25.7	16.2	77.6	May 23	633.0	29.96	12.31	1993
1994	15.1	11.4	12.0	31.9	281.0	270.0	114.0	51.9	56.5	55.9	43.0	24.6	82.4	May 27	429.0	34.97	9.89	1994
1995	18.6	16.7	14.7	28.5	288.0	226.0	119.0	81.8	52.5	45.2	29.8	20.6	78.9	May 17	503.0	33.94	13.86	1995
1996	17.5	15.2	12.7	41.1	175.0	514.0	320.0	99.1	77.9	94.3	42.5	24.2	119.5	Jun 09	728.0	68.11	12.09	1996
1997	18.2	15.1	14.3	28.5	308.0	464.0	163.0	84.5	64.9	87.6	53.1	35.7	111.7	Jun 07	722.0	53.51	12.97	1997
1998	21.1	16.9	15.6	20.9	356.0	190.0	61.8	45.8	42.0	68.6	34.7	23.8	75.3	May 29	641.0	33.57	14.27	1998
1999	20.4	15.8	14.6	32.5	181.0	466.0	177.0	60.7	50.8	45.8	35.1	21.1	93.5	Jun 19	848.0	39.57	13.77	1999
2000	16.8	14.6	12.5	16.6	125.0	427.0	180.0	71.8	79.1	66.3	43.3	25.5	89.7	Jun 11	597.0	53.24	12.03	2000
2001	19.8	15.6	12.9	18.1	118.0	532.0	272.0	94.3	89.2	58.5	43.3	28.5	108.6	Jun 13	602.0	64.10	11.91	2001
2002	18.9	15.8	13.4	15.2	192.0	607.0	204.0	59.0	61.4	61.1	28.6	21.8	108.2	Jun 18	910.0	37.57	12.26	2002
2003	18.3	16.9	14.4	26.5	196.0	379.0	201.0	55.7	95.8	92.3	59.0	32.7	99.2	Jun 04	594.0	36.93	13.01	2003
2004	21.2	15.5	14.3	31.3	250.0	254.0	106.0	69.0	61.8	61.0	35.8	25.2	78.9	Jun 09	461.0	44.50	13.90	2004
2005	20.9	19.2	17.9	60.0	364.0	314.0	124.0	85.8	59.4	60.5	47.6	25.9	100.4	Jun 02	584.0	44.44	17.36	2005
2006	20.5	18.1	16.2	20.1	226.0	352.0	85.3	32.0	18.5	16.1	13.4	12.6	69.3	Jun 05	582.0	17.27	11.61	2006
2007	10.6	11.4	12.1	19.7	156.0	575.0	80.6	71.8	93.5	50.6	22.7	110.1	80.6	Jun 07	1090.0	53.90	10.34	2007
2008	12.9	12.7	14.8	14.1	292.0	395.0	147.0	75.8	50.2	38.2	40.8	26.1	93.4	Jun 01	765.0	33.44	12.01	2008
2009	18.1	14.0	11.5	14.9	181.0	429.0	126.0	41.6	52.7	37.5	26.5	18.5	80.9	Jun 09	687.0	31.10	11.30	2009
2010	15.9	13.9	12.7	37.1	231.0	258.0	72.6	30.1	32.3	68.5	38.9	23.6	69.8	May 30	440.0	22.26	11.80	2010
2011	17.0	13.4	12.1	11.2	231.0	446.0	173.0	91.5	78.2	85.4	37.8	27.8	102.3	Jun 06	632.0	53.20	10.01	2011
Avg.	17.76	14.77	13.79	26.36	225.4	377.9	159.27	64.44	55.02	61.94	39.70	24.83	90.29	90.29	619.5	38.74	12.45	m <sup>3</sup> /s
S. D.	3.50	2.35	2.43	14.44	75.21	111.18	66.11	22.38	17.39	22.20	13.34	7.26	14.64		166.55	12.25	2.03	m <sup>3</sup> /s
Normal	18.12	15.09	14.15	27.86	232.17	386.53	156.61	62.92	53.96	60.16	38.62	24.22	91.04		m <sup>3</sup> /s			
Normal	9	7	7	13	115	186	78	31	26	30	19	12	533	10-Year	840.03	24.44	10.21	m <sup>3</sup> /s



**OSILINKA RIVER NEAR END LAKE 07EC004**

Station Longitude Latitude: -124.800698 56.126614

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 1945.19 km <sup>2</sup>		Median Elevation = 1381 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				
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981	10.90	7.39	6.80	7.59	119.00	139.00	70.90	25.40	16.80	19.80	13.80	8.08	37.29	May 27	350.00	13.50	6.38	1981			
1982	6.41	5.29	4.98	5.33	32.50	176.00	79.40	33.90	26.30	26.80	15.50	9.87	35.21	Jun 15	253.00	19.34	4.78	1982			
1983	7.95	6.55	6.17	8.98	67.80	122.00	74.30	36.30	25.70	19.40	11.70	7.68	32.99	Jun 03	268.00	21.63	5.63	1983			
1984	6.20	5.35	5.54	7.63	36.50	166.00	101.00	49.40	27.50	38.40	18.40	12.00	39.51	Jun 14	270.00	22.40	5.11	1984			
1985	7.62	5.95	5.96	6.50	56.60	120.00	91.40	28.60	22.80	14.80	7.48	5.11	31.19	Jun 04	235.45	16.73	4.67	1985			
1986	5.60	5.15	5.60	6.36	37.90	158.00	84.80	28.80	17.90	24.50	13.90	9.47	33.22	Jun 08	213.00	14.03	4.38	1986			
1987	7.72	6.49	6.58	6.64	68.10	195.00	91.90	31.80	37.60	26.20	21.50	12.30	42.70	Jun 23	266.00	20.79	5.78	1987			
1988	9.04	7.02	6.55	10.40	113.00	152.00	71.50	30.20	15.20	21.30	12.10	8.80	38.16	Jun 10	242.00	11.01	5.99	1988			
1989	6.99	5.55	5.12	9.93	84.50	115.00	50.20	28.80	16.30	20.40	13.40	10.40	30.67	Jun 06	183.00	13.67	4.81	1989			
1990	8.71	6.65	6.00	9.14	82.10	190.00	58.30	21.50	13.40	9.40	7.30	6.15	34.90	Jun 02	435.00	10.39	5.43	1990			
1991	5.17	5.62	5.20	10.40	96.80	122.00	52.20	23.50	24.10	25.00	12.90	9.44	32.81	May 21	159.00	16.39	4.82	1991			
1992	8.65	7.23	7.66	21.00	76.70	215.00	61.60	18.50	24.10	43.30	19.30	11.00	42.74	Jun 15	300.00	11.43	6.80	1992			
1993	6.79	7.48	6.58	11.70	120.00	87.00	47.40	37.80	20.80	12.70	10.30	7.13	31.49	May 22	235.00	14.83	6.17	1993			
1994	8.25	5.28	5.56	10.70	86.90	114.00	59.00	26.50	30.10	23.60	15.80	9.95	32.96	Jun 09	168.00	17.83	4.47	1994			
1995	8.25	7.52	6.73	9.89	102.00	106.00	66.50	33.40	19.90	14.80	10.70	9.05	33.06	May 16	185.00	14.01	6.41	1995			
1996	7.75	6.76	5.91	11.30	51.90	184.00	135.00	47.80	34.50	35.00	16.00	10.50	45.57	Jun 08	265.00	30.11	5.78	1996			
1997	8.02	6.72	6.10	8.05	94.50	170.00	67.70	33.60	25.40	28.60	15.80	10.30	39.67	Jun 06	286.00	22.31	5.77	1997			
1998	8.57	6.96	5.84	9.68	146.00	90.50	33.70	21.10	16.80	24.80	13.30	10.60	32.53	May 29	323.00	13.71	5.14	1998			
1999	9.70	7.73	6.30	11.70	59.20	176.00	82.80	31.40	21.00	16.60	13.00	8.29	37.01	Jun 17	344.00	16.81	5.92	1999			
2000	6.34	5.46	5.55	7.19	41.40	151.00	81.80	34.40	30.30	23.50	12.40	8.08	33.93	Jun 11	199.00	25.99	5.20	2000			
2001	7.42	6.09	5.19	7.40	36.20	196.00	109.00	40.40	33.10	21.00	14.70	8.39	40.44	Jun 17	259.00	24.54	5.00	2001			
2002	7.03	6.19	5.65	6.69	63.50	241.00	92.80	30.10	27.30	20.50	10.90	8.65	43.36	Jun 17	399.00	20.31	5.55	2002			
2003	7.35	6.38	6.19	8.91	61.10	144.00	89.50	29.20	37.20	32.30	17.10	11.30	37.64	Jul 02	241.00	19.44	6.17	2003			
2004	8.53	7.21	7.07	11.70	79.80	110.00	49.20	30.10	23.50	21.70	13.10	9.63	31.00	Jun 08	203.00	19.37	6.85	2004			
2005	8.40	7.48	5.60	15.90	125.00	132.00	52.50	32.10	21.80	19.80	16.40	9.63	37.36	May 31	240.00	17.37	4.77	2005			
2006	8.58	7.55	6.61	7.98	75.40	135.00	40.10	16.20	10.20	8.15	5.67	5.14	27.24	Jun 04	241.00	9.46	4.95	2006			
2007	4.70	4.46	4.65	8.08	51.20	213.00	95.20	35.50	26.90	28.40	18.90	11.20	41.88	Jun 06	442.00	20.86	4.32	2007			
2008	7.55	6.38	5.70	5.62	104.00	143.00	67.10	37.60	21.30	18.20	14.60	11.40	36.94	May 31	284.00	16.19	5.13	2008			
2009	8.47	6.89	5.86	6.24	55.20	158.00	53.60	21.40	25.60	15.50	10.10	7.66	31.20	Jun 11	268.00	16.10	5.47	2009			
2010	6.78	6.00	5.53	12.10	81.70	113.00	37.10	16.60	18.20	32.10	13.80	8.62	29.38	May 21	173.00	11.04	5.38	2010			
2011																			2011		
Avg.	7.60	6.43	5.96	9.36	76.88	151.12	71.58	30.40	23.72	22.89	13.66	9.19	35.80	35.80	264.31	17.39	5.43	m <sup>3</sup> /s			
S. D.	1.32	0.87	0.67	3.23	29.61	38.79	23.20	8.01	6.78	8.05	3.60	1.84	4.67		72.98	4.93	0.70	m <sup>3</sup> /s			
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	7.60	6.43	5.96	9.36	76.88	151.12	71.58	30.40	23.72	22.89	13.66	9.19	35.80	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	10	8	8	12	106	201	99	42	32	32	18	13	581	mm	10-Year	360.9	11.546	4.590	m <sup>3</sup> /s		

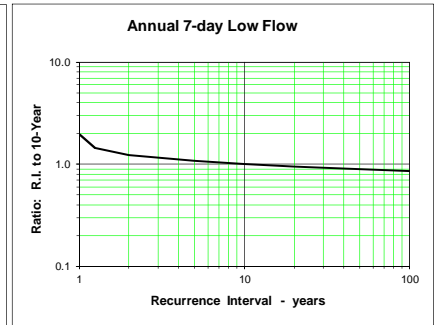
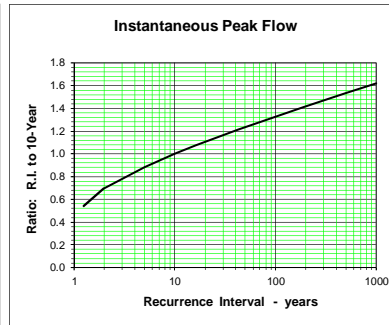
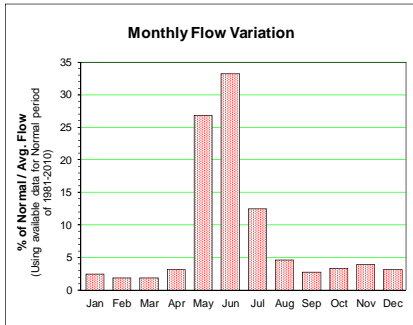
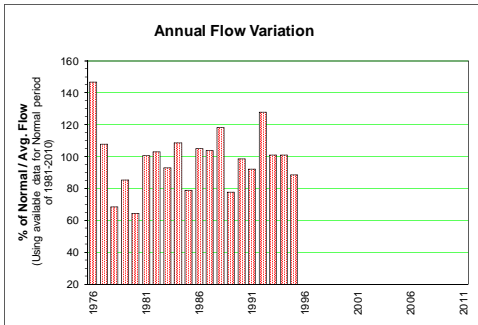




**NATION RIVER NEAR FORT ST. JAMES 07ED001**

Station Longitude Latitude: -124.231290 55.202210

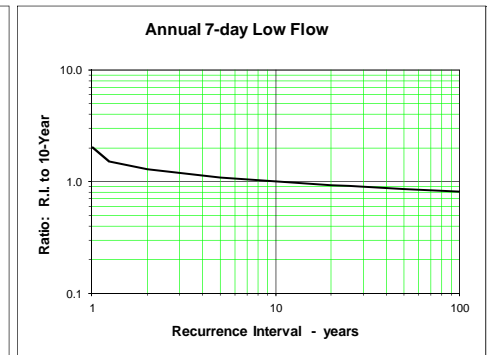
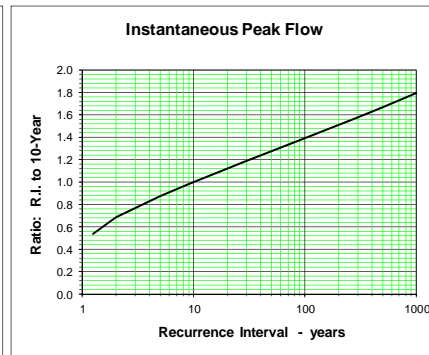
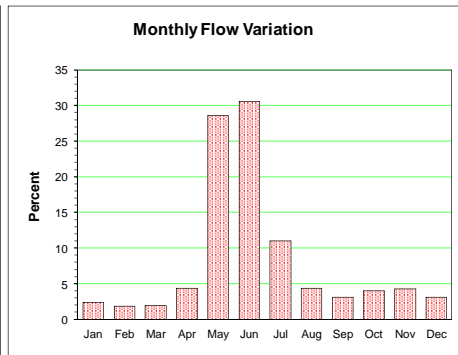
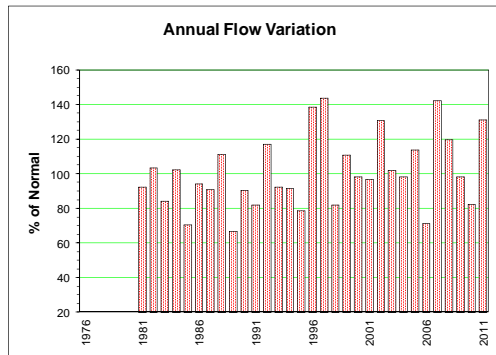
Year	Monthly and Annual Discharge in m3/s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976	15.20	12.50	10.70	18.60	226.00	307.00	167.00	73.20	51.50	37.60	32.80	21.90	81.31	Jun 12	351.00	44.34	10.60	1976	
1977	15.50	13.80	11.90	20.30	222.00	188.00	98.20	44.60	26.40	27.30	27.30	18.80	59.82	May 13	283.00	23.47	11.33	1977	
1978	13.90	11.00	11.30	14.10	89.80	159.00	46.80	15.90	18.70	28.70	26.60	20.30	38.05	Jun 06	206.00	14.80	10.29	1978	
1979	15.50	11.00	8.54	9.64	113.00	241.00	84.40	26.90	16.90	16.40	13.60	12.10	47.46	Jun 06	323.00	16.27	8.33	1979	
1980	10.30	8.71	7.93	8.94	103.00	85.60	44.50	23.70	21.30	26.60	50.10	38.60	35.86	May 19	151.00	17.20	7.35	1980	
1981	25.60	15.00	12.10	16.10	216.00	234.00	66.50	21.20	10.40	14.00	17.90	17.40	55.70	May 28	405.00	9.57	9.57	1981	
1982	13.70	11.30	10.40	10.00	81.20	300.00	101.00	45.00	30.70	26.20	34.70	22.60	57.21	Jun 05	385.00	24.46	9.63	1982	
1983	17.00	14.50	13.40	20.50	152.00	148.00	113.00	54.00	28.10	20.80	20.70	14.80	51.67	May 25	198.00	26.26	12.79	1983	
1984	12.10	10.10	10.70	19.60	120.00	269.00	133.00	35.50	24.20	36.60	28.80	23.10	60.22	Jun 13	345.00	21.47	9.54	1984	
1985	15.80	10.80	9.81	11.80	107.00	210.00	78.10	22.00	16.10	18.00	15.40	10.80	43.86	Jun 05	331.00	13.27	9.39	1985	
1986	11.00	8.91	8.67	11.10	76.70	333.00	122.00	37.80	15.90	24.70	27.50	20.90	58.16	Jun 09	401.00	13.14	7.60	1986	
1987	16.90	16.10	14.30	18.40	169.00	260.00	80.00	26.00	14.90	13.70	30.40	30.40	57.59	Jun 01	334.00	13.86	12.60	1987	
1988	19.40	16.60	14.30	21.70	260.00	276.00	74.00	29.70	14.10	17.30	23.40	19.40	65.56	May 18	377.00	11.47	11.47	1988	
1989	15.10	12.30	10.70	23.00	186.00	125.00	47.00	22.10	12.60	13.00	24.30	24.60	43.19	May 12	244.00	10.23	10.23	1989	
1990	21.90	15.00	14.10	22.30	183.00	261.00	67.30	23.00	12.60	11.00	12.30	10.80	54.60	Jun 02	416.00	10.06	9.48	1990	
1991	8.74	10.20	9.42	17.30	208.00	161.00	61.40	19.50	22.40	30.80	34.80	26.70	51.10	May 21	290.00	13.67	8.26	1991	
1992	22.30	19.10	20.10	65.30	221.00	293.00	71.90	14.90	11.30	39.70	46.20	27.80	70.97	Jun 03	367.00	8.27	8.27	1992	
1993	16.00	12.50	11.00	21.10	233.00	145.00	79.30	55.60	33.50	19.90	22.40	18.50	56.01	May 23	367.00	25.60	10.27	1993	
1994	16.80	12.90	12.60	24.20	218.00	201.00	70.70	23.90	16.20	21.50	32.20	20.10	56.06	May 26	292.00	14.91	11.17	1994	
1995	16.80	15.10	13.10	18.10	206.00	147.00	58.00	25.60	19.70	22.50	25.90	20.30	49.25	May 18	318.00	16.80	12.61	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	
Avg.	15.98	12.87	11.75	19.60	169.54	217.18	83.21	32.01	20.88	23.32	27.37	21.00	54.68	56.95	319.20	17.46	10.04	m <sup>3</sup> /s	
S. D.	4.09	2.74	2.74	11.76	58.78	70.07	31.32	15.32	9.74	8.41	9.71	6.70	10.68		73.29	8.39	1.62	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	16.61	13.36	12.31	21.37	175.79	224.20	81.55	30.39	18.85	21.98	26.46	20.55	55.41	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	10	7	8	13	108	133	50	19	11	14	16	13	401	mm	10-Year	473.9	10.623	8.133	m <sup>3</sup> /s



**NATION RIVER NEAR THE MOUTH 07ED003**

Station Longitude Latitude: -123.621239 55.434048

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 6799.77 km <sup>2</sup>		Median Elevation = 1097 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				
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980																			1980		
1981	39.0	23.0	18.5	27.2	347.0	276.0	74.1	25.7	13.8	20.4	27.7	28.0	77.0	May 26	585.00	12.53	12.53	1981			
1982	22.6	18.2	16.0	16.3	183.0	397.0	140.0	67.9	42.3	45.6	51.9	33.4	86.3	Jun 04	612.00	35.23	15.07	1982			
1983	24.6	20.9	19.0	51.5	227.0	172.0	144.0	62.1	34.6	31.7	30.7	20.7	70.3	May 23	267.00	32.63	17.94	1983			
1984	18.0	15.2	16.7	34.1	214.0	366.0	151.0	42.6	36.4	56.3	41.5	32.9	85.4	Jun 13	482.00	30.11	14.34	1984			
1985	21.6	15.6	14.7	20.2	189.0	247.0	87.2	27.8	23.6	25.2	20.0	13.9	59.0	May 31	430.00	18.17	13.40	1985			
1986	15.1	13.2	15.4	20.1	139.0	434.0	150.0	41.8	20.0	32.9	34.5	24.9	78.4	Jun 08	559.00	16.90	11.56	1986			
1987	21.3	21.2	19.8	28.0	268.0	294.0	91.8	35.1	21.9	21.4	44.4	41.0	75.9	Jun 01	425.00	19.94	18.76	1987			
1988	26.6	22.7	19.9	44.2	412.0	349.0	94.0	37.9	20.5	25.6	32.3	25.8	92.7	May 14	604.00	16.64	16.64	1988			
1989	20.3	16.3	14.1	39.3	258.0	144.0	55.0	25.9	15.0	17.6	29.9	29.4	55.7	May 10	345.00	11.96	11.96	1989			
1990	25.1	18.5	19.2	44.8	262.0	346.0	88.3	27.2	18.6	18.9	19.5	17.6	75.6	Jun 01	574.00	15.16	14.87	1990			
1991	14.2	17.2	14.3	44.7	293.0	184.0	75.0	27.3	33.8	41.0	40.5	30.7	68.3	May 21	366.00	19.96	12.41	1991			
1992	29.1	26.2	31.4	135.0	321.0	342.0	84.7	23.0	22.5	62.6	62.0	33.2	97.6	Jun 03	464.00	13.97	13.97	1992			
1993	19.1	18.4	15.9	52.0	321.0	182.0	106.0	74.4	42.8	27.6	32.9	25.2	76.9	May 22	469.00	31.66	13.90	1993			
1994	22.8	17.8	19.3	60.9	313.0	226.0	87.7	30.1	25.5	35.3	44.0	29.9	76.4	May 21	366.00	22.36	15.21	1994			
1995	23.8	17.6	18.1	41.9	296.0	163.0	73.0	37.4	26.9	34.6	29.3	20.1	65.5	May 17	460.00	21.96	16.07	1995			
1996	17.2	15.6	35.3	98.2	267.0	500.0	197.0	69.9	55.3	54.1	48.6	30.4	115.6	Jun 07	686.00	48.94	14.83	1996			
1997	25.4	25.4	24.0	47.0	460.0	462.0	131.0	43.7	35.7	63.1	76.5	40.9	119.9	May 17	768.00	34.40	20.66	1997			
1998	24.8	20.1	20.2	38.1	330.0	151.0	50.6	26.9	21.2	52.4	46.1	34.1	68.4	May 14	382.00	20.17	18.51	1998			
1999	26.2	22.9	20.7	59.7	283.0	396.0	134.0	43.2	31.0	25.0	31.8	34.9	92.5	Jun 18	496.00	25.26	20.31	1999			
2000	23.3	17.2	16.0	29.6	206.0	288.0	104.0	49.0	60.8	66.3	87.9	35.3	81.9	Jun 10	393.00	38.56	15.11	2000			
2001	25.8	21.9	19.5	27.8	158.0	334.0	150.0	57.2	40.7	39.9	58.0	35.2	80.8	Jun 02	427.00	35.67	18.60	2001			
2002	27.8	23.0	20.3	25.6	297.0	561.0	183.0	43.5	30.6	33.3	30.3	29.9	108.9	Jun 07	744.00	27.43	19.53	2002			
2003	26.3	23.4	21.1	43.4	237.0	299.0	118.0	36.5	37.4	63.6	70.1	43.1	85.1	Jun 01	454.00	27.54	20.50	2003			
2004	30.4	25.1	23.0	60.5	276.0	207.0	108.0	64.6	50.5	54.4	46.4	33.8	81.8	May 22	322.00	43.86	22.64	2004			
2005	26.0	21.9	20.7	78.9	381.0	239.0	97.3	71.5	49.6	54.8	52.7	40.6	95.0	May 16	547.00	39.40	19.94	2005			
2006	28.9	25.7	23.9	32.6	248.0	231.0	49.9	20.4	11.8	11.9	12.6	14.7	59.4	May 26	468.00	10.83	10.83	2006			
2007	14.2	15.1	16.3	30.0	259.0	585.0	158.0	78.7	57.5	82.2	77.4	49.6	118.7	Jun 07	884.08	45.30	13.39	2007			
2008	29.7	21.8	20.1	25.3	418.0	386.0	103.0	43.6	35.2	34.5	45.3	32.0	99.7	May 30	781.00	29.40	19.90	2008			
2009	21.2	18.5	17.5	33.8	314.0	324.0	109.0	31.9	23.6	24.8	33.0	27.3	81.8	May 27	487.00	21.51	17.33	2009			
2010	22.7	19.7	17.9	53.3	271.0	230.0	57.9	21.9	17.6	38.6	43.0	29.5	68.8	May 22	420.00	14.47	14.47	2010			
2011	22.4	20.2	16.2	16.8	335.0	446.0	205.0	79.0	41.8	57.9	39.2	27.8	109.4	May 24	781.00	35.71	15.21	2011			
Avg.	23.73	19.98	19.52	43.90	283.3	314.9	111.53	44.12	32.21	40.44	43.23	30.51	84.16		518	26.38	16.14	m <sup>3</sup> /s			
S. D.	5.19	3.50	4.56	24.76	74.09	119.24	41.60	18.38	13.37	17.53	17.63	8.08	17.42		153.24	10.64	3.13	m <sup>3</sup> /s			
Normal	23.77	19.98	19.63	44.80	281.60	310.50	108.42	42.96	31.89	39.85	43.36	30.60	83.32		m <sup>3</sup> /s			m <sup>3</sup> /s			
Normal	9	7	8	17	111	118	43	17	12	16	17	12	387	10-Year	722.40	13.97	12.33	m <sup>3</sup> /s			

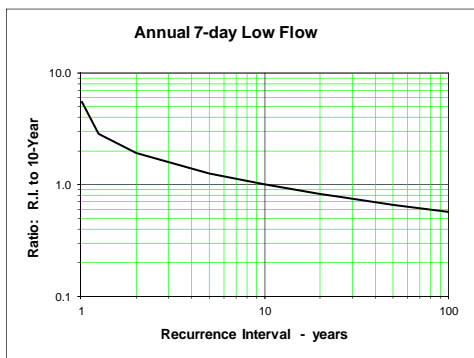
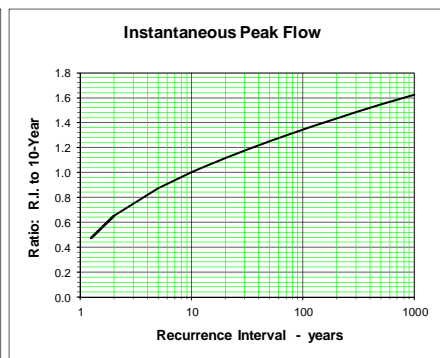
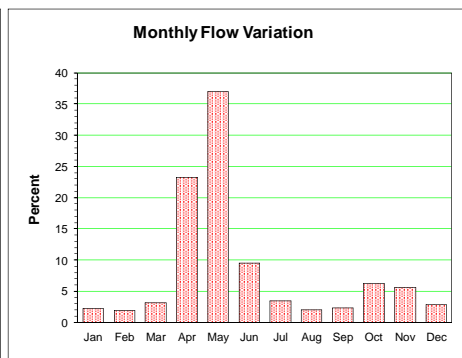
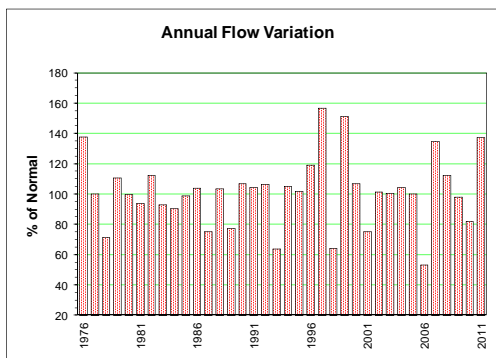


# CHUCHINKA CREEK NEAR THE MOUTH 07EE009

Station Longitude Latitude: -122.600000 54.529171

Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 315.82 km <sup>2</sup>		Median Elevation = 961 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			
1976	1.11	1.06	1.01	11.20	38.20	11.90	3.74	4.14	3.67	2.73	1.89	1.64	6.89	May 03	80.70	2.239	0.955	1976			
1977	1.56	1.65	1.72	16.80	18.20	4.47	3.76	1.49	2.58	3.70	2.57	1.45	5.01	Apr 27	64.30	0.863	0.863	1977			
1978	1.07	0.71	1.06	12.00	13.50	2.15	0.49	1.14	2.18	2.32	4.59	1.52	3.57	Apr 28	34.80	0.219	0.219	1978			
1979	0.77	0.65	2.05	7.65	36.10	12.60	2.25	0.58	0.68	1.19	0.77	0.52	5.52	May 27	77.30	0.438	0.438	1979			
1980	0.52	0.47	0.51	10.60	12.70	6.05	4.62	1.40	5.02	4.86	5.81	7.18	4.98	Apr 29	30.70	0.892	0.442	1980			
1981	5.01	2.87	2.97	14.00	20.20	5.84	1.35	0.54	0.40	0.65	1.24	0.97	4.68	Apr 24	35.00	0.337	0.337	1981			
1982	0.48	0.49	0.58	3.17	35.70	11.60	4.07	2.92	2.20	2.37	2.06	1.24	5.62	May 18	54.00	1.789	0.438	1982			
1983	0.84	1.28	2.47	8.34	10.10	5.32	6.40	4.28	4.04	4.16	5.46	2.85	4.64	Apr 26	41.40	3.469	0.743	1983			
1984	1.23	1.12	2.20	9.87	12.20	6.02	2.46	0.58	1.19	11.10	3.78	2.23	4.51	Oct 08	46.00	0.513	0.513	1984			
1985	0.94	0.71	0.72	12.60	24.20	4.09	0.71	0.34	2.37	8.35	3.02	0.89	4.94	May 19	34.10	0.228	0.228	1985			
1986	1.25	1.25	2.37	11.50	29.70	7.82	2.19	0.90	0.67	1.33	2.03	1.04	5.20	May 20	62.10	0.532	0.532	1986			
1987	1.01	1.84	3.10	12.50	18.70	2.37	0.66	0.56	0.49	0.64	1.87	1.19	3.75	May 02	70.50	0.398	0.398	1987			
1988	0.74	0.62	0.84	21.20	24.80	6.46	1.74	0.93	0.67	1.25	1.61	1.09	5.16	Apr 29	59.60	0.469	0.469	1988			
1989	0.92	0.65	0.76	14.90	15.40	1.94	1.07	0.51	0.51	1.25	4.74	3.51	3.85	Apr 21	42.80	0.306	0.306	1989			
1990	3.60	1.15	1.24	18.40	23.00	10.10	1.23	0.36	0.39	1.56	1.45	1.43	5.34	May 31	64.20	0.304	0.304	1990			
1991	1.42	2.34	1.98	19.90	22.70	5.39	1.18	0.57	0.85	2.19	1.92	2.18	5.22	Apr 23	52.00	0.334	0.334	1991			
1992	2.34	2.55	3.83	19.30	15.50	4.30	0.59	0.23	1.79	6.52	5.24	1.71	5.31	Apr 28	52.70	0.184	0.184	1992			
1993	0.89	0.85	0.91	14.60	7.84	3.02	2.72	1.45	0.71	1.18	2.71	1.49	3.19	Apr 23	28.50	0.599	0.599	1993			
1994	1.30	1.09	2.50	24.60	20.30	2.92	1.89	0.39	0.60	3.34	2.65	1.45	5.26	Apr 22	58.50	0.310	0.310	1994			
1995	1.05	1.83	3.98	17.50	16.40	1.95	2.26	5.05	1.53	4.45	3.16	1.67	5.09	Apr 29	34.70	0.970	0.970	1995			
1996	2.11	2.42	4.35	28.50	16.00	5.24	2.91	1.13	1.86	3.38	2.36	1.33	5.95	Apr 25	45.60	0.903	0.903	1996			
1997	0.83	0.98	1.94	18.00	41.70	11.70	2.80	1.02	0.81	6.64	5.55	1.46	7.83	May 16	82.00	0.681	0.681	1997			
1998	0.87	0.84	1.78	14.50	12.00	1.23	0.78	0.39	0.33	3.23	1.59	0.96	3.21	Apr 24	50.90	0.244	0.244	1998			
1999	0.71	0.68	1.27	18.90	45.30	13.50	1.57	1.42	1.78	2.16	1.76	1.22	7.56	Apr 25	81.30	0.566	0.566	1999			
2000	0.99	0.72	0.75	15.00	22.40	4.70	4.08	1.56	4.37	3.51	4.34	1.60	5.34	May 01	50.78	0.828	0.657	2000			
2001	1.00	0.90	0.70	5.21	14.20	4.47	2.81	2.71	1.56	2.56	6.60	2.15	3.76	May 02	19.72	1.018	0.565	2001			
2002	1.23	1.26	0.95	4.56	28.50	13.50	2.18	0.55	1.53	3.01	2.06	1.21	5.07	May 21	57.28	0.420	0.420	2002			
2003	0.78	0.63	1.42	19.00	15.30	3.95	1.90	0.62	2.24	7.52	4.64	2.28	5.03	Apr 25	59.30	0.530	0.530	2003			
2004	1.08	0.71	1.68	15.40	15.50	6.37	2.24	0.74	2.29	4.40	10.00	2.28	5.21	May 03	40.80	0.389	0.389	2004			
2005	2.18	3.05	4.12	14.60	9.41	2.16	3.58	2.07	2.45	10.50	3.86	1.88	5.00	Apr 25	36.30	1.132	1.129	2005			
2006	1.31	0.87	0.98	9.92	13.30	2.14	0.57	0.39	0.36	0.62	0.73	0.73	2.67	Apr 29	28.10	0.240	0.240	2006			
2007	0.75	0.85	2.67	17.20	32.60	8.19	1.22	0.78	1.47	5.84	6.47	2.27	6.72	May 08	55.30	0.640	0.640	2007			
2008	1.33	1.26	1.34	3.29	41.20	6.30	1.43	1.75	1.73	2.71	3.57	1.03	5.62	May 17	88.20	0.644	0.644	2008			
2009	0.74	0.68	0.81	3.05	35.90	8.63	2.28	0.54	0.65	1.05	2.48	1.48	4.90	May 18	63.20	0.426	0.426	2009			
2010	1.29	1.23	1.79	14.30	14.30	3.10	0.78	0.33	1.86	3.00	3.65	3.46	4.10	Apr 21	37.80	0.180	0.180	2010			
2011	2.13	1.88	0.89	3.09	36.00	5.45	15.80	2.89	3.38	2.89	3.68	3.43	6.86	May 12	91.40	1.026	0.781	2011			

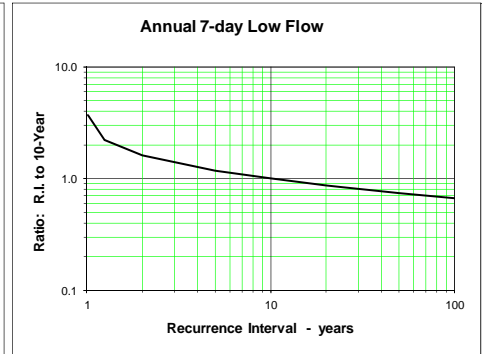
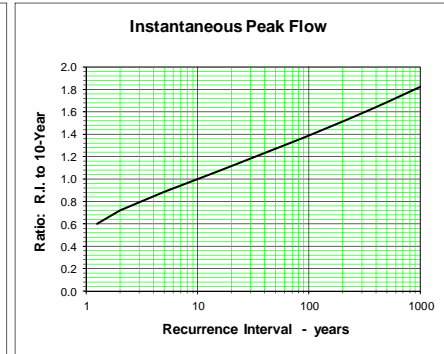
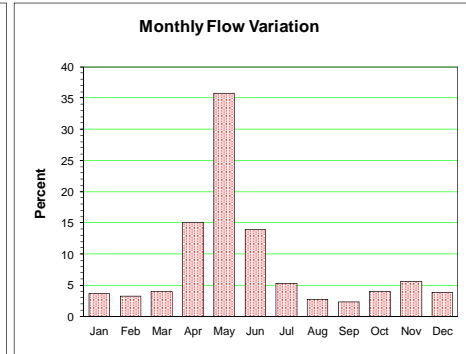
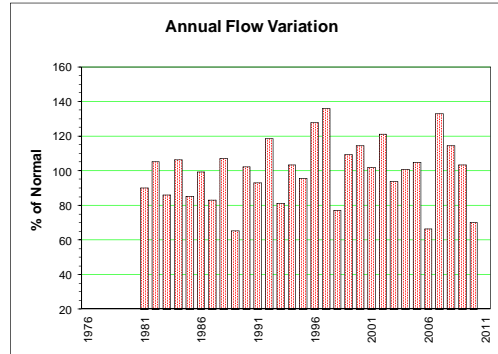
Avg. 1.32 1.23 1.78 13.48 22.5 6.0 2.56 1.31 1.70 3.56 3.39 1.83 5.07 5.07 53 0.70 0.52 m<sup>3</sup>/s  
S. D. 0.88 0.69 1.08 6.15 10.53 3.57 2.63 1.21 1.21 2.64 1.97 1.18 1.15 18.35 0.64 0.24 m<sup>3</sup>/s  
Normal 1.34 1.26 1.90 14.13 21.81 5.81 2.05 1.19 1.46 3.68 3.42 1.67 4.99 m<sup>3</sup>/s  
Normal 11 10 16 116 185 48 17 10 12 31 28 14 499 mm 10-Year 78.29 0.23 0.25 m<sup>3</sup>/s



**PACK RIVER AT OUTLET OF MCLEOD LAKE 07EE010**

Station Longitude Latitude: -123.036890 54.995855

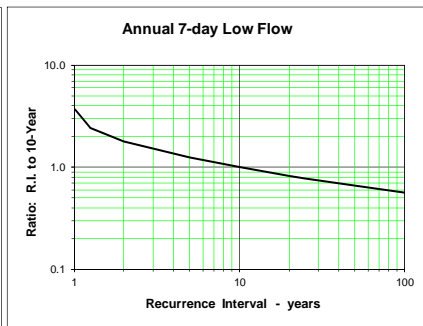
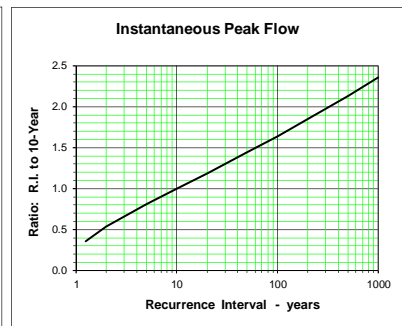
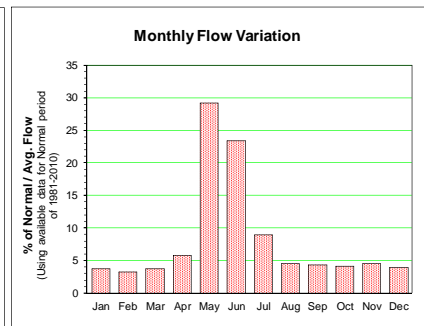
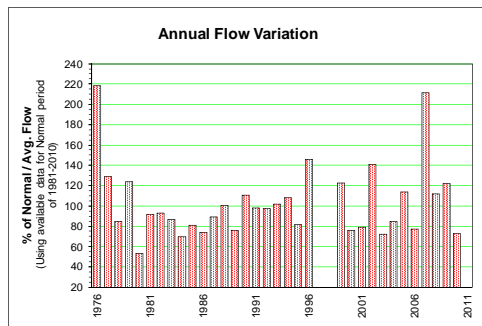
Monthly and Annual Discharge in m <sup>3</sup> /s													Drainage Area = 3704.77 km <sup>2</sup>			Median Elevation = 874 m			Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year					
1976																		1976					
1977																		1977					
1978																		1978					
1979																		1979					
1980																		1980					
1981	33.70	27.70	24.90	62.20	187.00	58.80	19.40	8.00	5.74	7.78	12.70	12.80	38.5	May 10	242	5.36	5.36	1981					
1982	11.80	12.30	11.50	12.90	219.00	126.00	31.70	24.30	21.10	24.30	25.80	17.30	45.1	May 22	368	19.09	10.50	1982					
1983	11.90	11.60	15.90	81.60	132.00	41.20	61.80	25.50	9.35	10.00	24.30	14.40	36.8	May 01	207	8.60	7.14	1983					
1984	14.80	17.90	20.20	94.00	161.00	94.60	37.50	13.40	17.30	36.90	22.00	16.20	45.5	May 21	209	11.43	11.29	1984					
1985	13.50	13.10	13.10	42.40	166.00	68.10	15.20	6.78	11.30	38.80	32.80	14.50	36.5	May 22	226	5.27	5.27	1985					
1986	15.20	16.10	28.40	71.90	179.00	106.00	31.10	14.60	8.36	12.00	14.20	12.20	42.6	May 28	240	7.01	7.01	1986					
1987	13.20	15.40	18.10	99.00	161.00	44.80	16.70	10.20	7.61	6.04	16.60	16.50	35.5	May 09	236	6.53	5.65	1987					
1988	12.60	14.70	16.00	76.90	254.00	87.80	25.30	12.30	7.38	9.92	17.90	13.80	45.9	May 14	317	6.10	6.10	1988					
1989	13.10	10.70	10.10	46.60	147.00	28.90	13.80	7.40	6.20	7.21	20.70	22.40	28.0	May 07	232	5.39	5.37	1989					
1990	34.30	20.30	17.20	92.60	174.00	94.90	26.00	9.28	7.75	12.70	17.80	16.60	43.7	May 07	232	6.36	6.31	1990					
1991	14.10	19.60	20.80	89.20	188.00	49.60	20.90	9.16	10.10	12.80	18.60	22.70	39.8	May 10	241	6.93	6.93	1991					
1992	24.30	28.50	49.90	145.00	166.00	55.90	14.40	6.33	9.65	34.50	49.40	24.90	50.7	May 01	247	4.57	4.57	1992					
1993	16.80	14.30	14.20	95.50	122.00	34.80	42.50	19.50	12.20	10.60	18.50	15.10	34.8	Apr 29	192	9.92	9.65	1993					
1994	16.50	16.90	24.30	130.00	186.00	49.50	26.00	10.40	9.94	16.50	24.90	18.60	44.2	May 03	250	8.11	8.11	1994					
1995	16.40	16.60	19.40	108.00	171.00	38.10	20.10	24.60	17.10	20.90	19.40	18.10	41.0	May 13	224	11.46	11.11	1995					
1996	30.50	25.70	27.60	137.00	188.00	101.00	35.50	17.60	17.70	25.10	28.40	21.30	54.6	Apr 27	259	14.30	14.30	1996					
1997	18.80	20.80	24.30	48.90	279.00	133.00	38.90	14.80	10.10	29.80	53.50	23.40	58.2	May 17	422	9.39	9.39	1997					
1998	18.70	16.40	19.20	77.10	153.00	27.20	13.00	6.67	5.22	22.70	20.00	15.90	33.1	May 04	269	5.02	5.02	1998					
1999	17.20	16.90	16.20	91.60	198.00	101.00	25.00	13.80	13.90	14.20	25.50	25.50	46.7	Apr 29	285	10.79	10.79	1999					
2000	18.40	14.30	14.00	52.80	171.00	65.70	37.50	19.50	35.20	42.20	89.30	27.40	49.0	May 06	221	15.76	13.19	2000					
2001	20.30	17.20	15.20	39.40	160.00	70.10	36.10	33.60	18.70	21.50	56.10	31.90	43.5	May 09	187	16.24	14.79	2001					
2002	22.80	20.30	16.70	51.20	233.00	149.00	39.60	14.00	13.60	19.30	20.60	19.50	51.8	May 21	314	11.40	11.40	2002					
2003	14.10	14.40	14.30	101.00	155.00	63.00	21.10	9.62	11.30	26.70	32.70	16.90	40.1	Apr 30	238	8.31	8.31	2003					
2004	15.10	15.80	16.10	99.90	130.00	56.70	24.00	14.90	19.10	27.30	60.00	39.80	43.2	May 05	190	9.82	9.82	2004					
2005	30.40	52.00	58.40	100.00	115.00	39.00	26.30	18.10	13.70	36.10	31.10	18.90	44.8	Apr 27	202	12.29	12.29	2005					
2006	20.60	16.60	15.00	70.20	126.00	40.10	11.10	7.13	5.04	7.15	10.50	11.30	28.5	May 01	155	4.27	4.27	2006					
2007	12.30	12.90	18.40	85.30	261.00	116.00	27.10	15.40	13.00	31.30	56.20	31.20	56.9	May 10	305	11.91	11.37	2007					
2008	21.10	17.80	18.60	27.50	272.00	106.00	23.00	15.90	15.50	17.20	26.10	24.00	48.9	May 22	404	13.61	13.47	2008					
2009	20.80	18.20	15.90	46.20	241.00	94.50	29.10	9.10	8.52	9.33	19.90	15.50	44.2	May 14	300	7.29	7.29	2009					
2010	13.40	13.10	16.40	81.10	117.00	41.60	13.30	6.98	8.71	16.10	17.70	14.10	30.0	May 02	183	6.00	6.00	2010					
2011																		2011					
Avg.	18.56	18.27	20.34	78.57	180.4	72.8	26.77	13.96	12.35	20.23	29.44	19.76	42.74		253	9.28	8.74	m <sup>3</sup> /s					
S. D.	6.42	7.69	10.24	31.49	46.36	33.84	11.13	6.68	6.18	10.65	17.82	6.58	7.78		63.33	3.85	3.14	m <sup>3</sup> /s					
Normal	18.56	18.27	20.34	78.57	180.40	72.76	26.77	13.96	12.35	20.23	29.44	19.76	42.74		m <sup>3</sup> /s								
Normal	13	12	15	55	130	51	19	10	9	15	21	14	364	10-Year	335.77	5.10	5.09	m <sup>3</sup> /s					



**PINKUT CREEK NEAR TINTAGEL 08EC004**

Station Longitude Latitude: -125.426058 54.414570

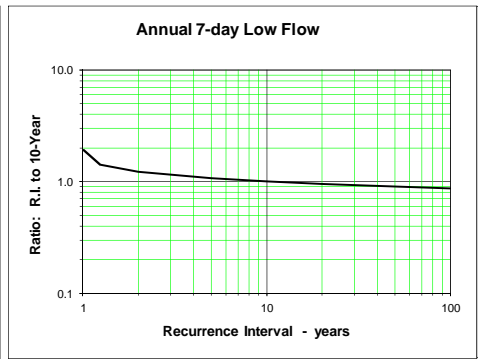
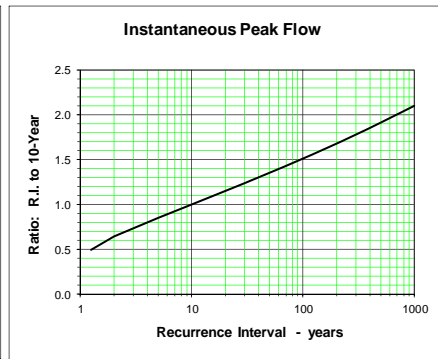
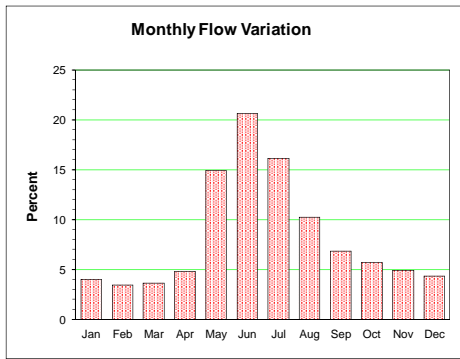
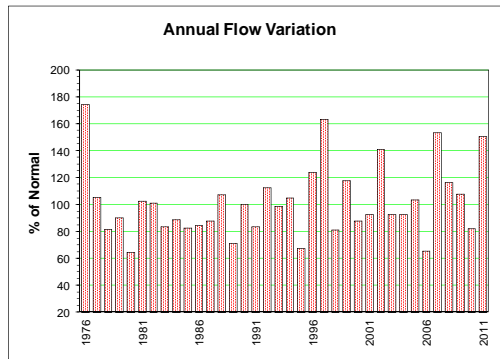
Year	Monthly and Annual Discharge in m³/s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976	4.62	4.38	3.40	3.52	40.10	34.60	11.80	8.56	5.72	3.88	3.40	3.52	10.65	May 12	71.40	4.08	3.036	1976	
1977	3.58	3.11	2.84	3.90	26.00	10.80	6.65	4.01	3.00	4.36	3.91	2.90	6.29	May 10	46.38	2.27	2.273	1977	
1978	2.61	2.70	2.76	3.11	11.70	10.80	3.55	2.82	2.59	2.53	2.36	2.21	4.15	May 23	24.20	1.20	1.204	1978	
1979	2.02	1.96	2.23	2.40	24.00	21.80	6.28	2.49	3.06	2.67	1.90	1.45	6.04	May 29	46.70	1.59	1.240	1979	
1980	1.61	1.62	1.62	1.84	2.61	3.41	3.92	2.72	3.37	2.64	2.82	3.25	2.62	Jul 05	4.93	1.99	1.459	1980	
1981	3.40	2.75	2.53	3.11	9.30	13.50	4.87	4.13	3.28	2.62	2.17	1.94	4.47	Jun 05	16.08	3.09	1.883	1981	
1982	1.57	1.52	1.81	2.27	7.61	21.60	6.22	2.89	2.89	2.07	1.97	2.05	4.54	Jun 02	39.80	2.44	1.493	1982	
1983	1.94	1.89	2.18	2.85	10.50	7.47	9.05	5.07	3.07	2.28	2.26	1.97	4.23	May 16	15.10	2.29	1.857	1983	
1984	2.24	1.72	3.35	3.28	6.44	10.40	4.15	1.66	2.01	1.97	1.97	1.87	3.42	Jun 10	14.30	1.02	1.019	1984	
1985	1.64	1.68	1.95	2.26	13.20	14.30	2.88	1.86	2.06	1.84	1.86	1.85	3.95	May 27	34.80	0.99	0.985	1985	
1986	1.87	1.77	1.90	2.01	3.04	17.60	6.34	1.80	1.90	1.84	1.72	1.70	3.62	Jun 05	20.90	1.42	1.424	1986	
1987	2.00	2.21	2.28	2.64	24.70	8.28	1.29	1.36	1.89	1.75	1.86	1.87	4.37	May 13	39.50	0.41	0.411	1987	
1988	1.78	1.68	1.71	2.16	18.20	18.40	5.46	1.96	2.04	1.80	1.78	1.85	4.91	May 15	31.10	1.64	1.636	1988	
1989	2.28	1.92	2.11	2.67	16.40	6.06	1.63	2.26	2.18	2.27	2.30	2.36	3.72	May 13	25.60	1.30	1.297	1989	
1990	2.39	2.17	2.26	3.22	19.30	18.60	6.86	1.94	2.07	1.98	2.05	1.95	5.41	Jun 04	24.10	1.59	1.594	1990	
1991	1.78	1.81	1.83	2.45	22.80	10.20	5.92	2.22	2.19	2.03	2.03	1.97	4.80	May 11	33.80	1.94	1.580	1991	
1992	1.93	2.06	2.64	13.30	19.00	7.98	1.55	1.35	1.92	1.69	1.86	1.75	4.75	Apr 30	25.80	0.72	0.724	1992	
1993	1.46	1.77	2.12	2.60	12.70	11.40	9.75	6.36	4.10	2.31	2.67	2.20	4.98	May 24	23.10	3.05	1.287	1993	
1994	2.07	2.05	1.89	7.44	26.90	10.80	3.65	1.36	1.77	1.85	1.71	1.70	5.29	May 04	32.40	0.98	0.980	1994	
1995	1.79	1.83	1.76	2.31	22.40	7.24	2.04	1.58	1.74	1.60	1.51	1.57	3.97	May 16	40.90	1.07	1.070	1995	
1996	1.64	1.81	1.94	9.13	28.00	22.30	7.16	2.64	2.22	1.71	3.90	3.06	7.13	May 28	37.10	1.87	1.544	1996	
1997	2.11	1.79	1.68															1997	
1998	2.29	1.91	1.86	1.98														1998	
1999	2.02	2.12	2.24	2.61	19.50	19.10	10.40	2.98	2.94	2.50	2.59	2.53	5.98	May 25	31.80	2.22	1.951	1999	
2000	2.34	2.24	2.05	2.20	5.52	11.00	4.20	2.42	2.91	2.00	5.32	2.44	3.71	Jun 13	14.80	2.03	1.721	2000	
2001	1.81	1.75	2.06	2.55	8.90	12.30	4.20	2.44	2.81	2.49	2.53	2.48	3.86	Jun 02	20.20	1.60	1.597	2001	
2002	2.39	2.37	2.18	2.49	22.90	29.60	7.81	2.10	2.84	2.66	2.58	2.53	6.88	May 24	65.50	1.29	1.287	2002	
2003	2.82	2.57	2.48	2.78	5.30	10.20	3.86	1.77	2.90	2.63	2.71	2.51	3.54	Jun 02	18.70	1.58	1.580	2003	
2004	2.28	2.41	2.36	2.47	9.17	6.57	5.14	2.64	2.61	4.08	5.71	4.24	4.15	May 14	13.00	2.13	2.127	2004	
2005	3.34	2.70	2.73	7.24	21.90	9.49	5.11	3.61	2.53	2.47	2.58	2.58	5.55	Apr 29	29.20	2.15	2.154	2005	
2006	2.58	2.47	2.50	2.63	10.30	11.30	2.38	2.54	2.46	2.22	2.09	1.87	3.78	May 28	23.00	1.78	1.780	2006	
2007	1.83	1.88	1.82	2.57	40.80	30.40	10.80	6.98	4.30	7.34	9.95	4.45	10.31	May 29	55.50	3.14	1.783	2007	
2008	3.07	2.56	2.17	2.08	26.00	14.30	3.42	2.26	2.84	2.40	2.23	2.08	5.47	May 21	55.80	1.27	1.267	2008	
2009	2.01	2.02	1.95	2.43	26.90	17.40	5.89	2.40	2.54	2.72	2.50	2.32	5.95	May 17	42.20	1.12	1.120	2009	
2010	2.01	1.88	1.83	2.18	11.70	10.90	1.77	1.38	3.01	2.15	1.95	1.89	3.56	May 25	29.10	0.87	0.872	2010	
2011																		2011	
Avg.	2.26	2.15	2.20	3.37	17.39	14.25	5.33	2.87	2.72	2.53	2.75	2.33	5.03	5.14	31.72	1.76	1.49	m³/s	
S. D.	0.67	0.54	0.44	2.39	9.77	7.35	2.79	1.67	0.82	1.08	1.61	0.71	1.76		15.42	0.79	0.50	m³/s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	2.16	2.04	2.14	3.45	16.76	13.88	5.14	2.64	2.57	2.40	2.73	2.27	4.87	m³/s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	7	6	7	11	57	45	17	9	8	8	9	8	193	mm	10-Year	58.0	0.873	0.772	m³/s



BABINE RIVER AT OUTLET OF NILKITKWA LAKE 08EC013

Station Longitude Latitude: -126.697563 55.426682

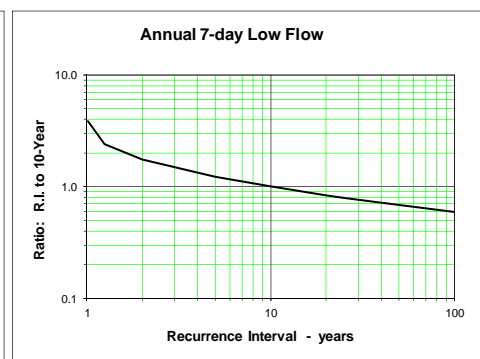
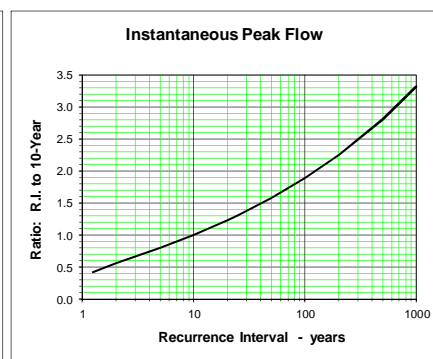
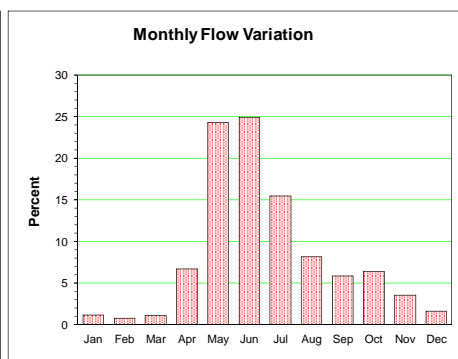
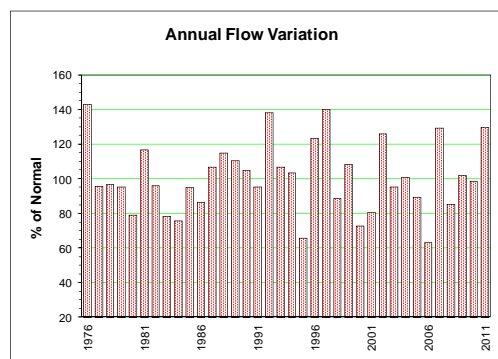
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 6731.93 km <sup>2</sup>		Median Elevation = 973 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year				
1976	30.70	29.50	27.80	32.80	146.00	222.00	186.00	125.00	83.40	59.60	46.20	36.30	85.6	Jun 19	243.0	69.16	27.06	1976				
1977	30.80	28.40	25.60	38.10	102.00	111.00	84.10	58.20	43.10	38.70	32.10	27.80	51.8	Jun 01	120.0	41.06	24.66	1977				
1978	26.30	23.50	22.00	25.30	62.30	91.00	68.60	45.10	33.80	30.60	28.00	23.40	40.1	Jun 04	103.0	29.16	21.54	1978				
1979	20.60	20.70	19.80	21.70	70.00	119.00	94.90	56.70	37.70	29.90	22.00	17.80	44.4	Jun 15	127.0	32.01	17.43	1979				
1980	16.30	16.00	16.30	18.40	55.50	60.90	49.50	35.80	30.20	26.90	29.50	26.10	31.8	May 31	67.6	28.10	15.71	1980				
1981	25.10	22.40	20.70	25.00	94.40	139.00	98.70	57.10	40.20	29.90	27.00	22.70	50.3	Jun 03	152.0	35.97	20.23	1981				
1982	21.40	22.30	22.40	21.10	60.40	144.00	108.00	68.70	45.70	33.30	26.20	21.60	49.7	Jun 13	160.0	38.64	20.44	1982				
1983	18.30	17.00	16.20	22.00	65.50	76.60	85.60	64.80	44.00	31.60	26.60	21.60	41.0	Jul 07	98.4	40.24	15.61	1983				
1984	21.00	18.80	18.50	26.70	67.40	103.00	85.90	53.30	39.90	37.20	27.80	23.50	43.7	Jun 12	113.0	34.64	18.01	1984				
1985	21.10	20.50	19.50	20.80	58.00	101.00	80.20	49.30	36.50	30.40	26.10	22.40	40.6	Jun 04	118.0	32.56	18.90	1985				
1986	19.90	19.60	19.90	21.50	50.90	106.00	88.30	52.60	35.50	32.50	27.70	22.40	41.5	Jun 27	128.9	31.59	18.96	1986				
1987	20.50	20.00	19.80	27.70	93.50	110.00	72.40	44.90	32.10	24.00	28.30	24.10	43.2	May 29	123.8	28.64	19.60	1987				
1988	20.00	20.50	19.20	26.90	98.90	144.00	108.00	66.70	42.90	33.90	29.20	22.80	52.8	Jun 15	158.0	36.13	18.59	1988				
1989	20.70	18.50	18.20	24.10	80.30	83.90	56.70	36.90	23.50	19.40	18.10	18.30	35.0	May 31	99.1	19.63	17.40	1989				
1990	19.50	19.00	18.90	29.80	88.40	132.00	105.00	62.40	38.30	29.00	24.30	21.30	49.2	Jun 04	146.0	32.59	18.33	1990				
1991	18.00	18.90	17.60	24.80	85.60	93.60	70.20	45.10	30.30	29.10	28.50	28.30	41.0	May 31	106.0	26.06	17.10	1991				
1992	26.50	26.20	29.40	65.00	131.00	140.00	88.70	48.20	30.10	27.90	27.50	22.80	55.3	Jun 01	153.0	27.34	21.76	1992				
1993	20.60	17.70	16.50	26.30	80.80	105.00	91.90	74.50	52.30	36.60	32.00	25.60	48.5	Jun 02	123.0	45.00	15.99	1993				
1994	23.20	22.90	22.00	39.40	116.00	128.00	96.90	61.40	40.10	27.90	21.60	18.40	51.7	Jun 14	145.0	34.43	17.64	1994				
1995	16.70	17.00	16.90	25.20	77.80	77.50	53.60	35.50	23.90	19.10	16.30	16.30	33.1	May 27	96.3	19.91	15.67	1995				
1996	18.10	17.80	17.70	32.50	101.00	165.00	130.00	84.00	53.60	42.60	36.20	31.70	61.0	Jun 12	181.0	43.97	16.40	1996				
1997	30.10	29.00	27.50	37.00	165.00	233.00	153.00	91.10	57.30	49.20	48.20	40.30	80.3	Jun 04	265.0	49.57	27.04	1997				
1998	34.00	30.90	27.60	31.10	91.10	85.30	57.50	34.90	23.60	22.50	20.40	18.70	39.9	May 26	121.0	19.94	18.31	1998				
1999	18.10	19.40	20.10	27.40	90.20	149.00	125.00	81.50	60.20	42.20	31.70	26.30	57.8	Jun 20	166.4	50.31	17.87	1999				
2000	23.00	20.80	20.10	27.10	68.00	98.30	70.80	48.70	35.20	32.30	37.70	32.00	43.3	Jun 11	112.0	31.49	19.70	2000				
2001	28.50	26.00	24.00	25.80	51.90	100.00	91.30	60.60	43.00	34.10	32.80	28.20	45.6	Jun 29	113.0	38.66	22.59	2001				
2002	23.60	22.70	21.90	24.90	97.90	223.00	164.00	91.10	58.50	42.50	32.30	27.50	69.4	Jun 17	250.0	54.81	21.41	2002				
2003	25.00	24.90	24.50	28.50	70.00	96.60	84.10	54.10	38.90	35.60	34.50	27.40	45.5	Jun 07	109.0	35.97	23.79	2003				
2004	24.90	24.00	23.10	33.30	75.60	77.80	67.30	42.40	45.30	44.60	40.20	45.6	56.6	Jun 06	88.9	37.44	22.67	2004				
2005	34.10	31.80	29.50	44.90	104.00	104.00	79.90	58.40	38.80	32.50	28.00	23.20	50.9	May 27	122.0	33.54	22.24	2005				
2006	21.20	19.20	17.90	21.50	51.50	87.50	57.40	34.50	21.90	18.30	17.50	17.00	32.2	Jun 03	117.0	20.31	15.80	2006				
2007	17.20	17.00	17.00	21.90	101.00	201.00	161.00	112.00	81.70	62.20	59.90	49.70	75.4	Jun 11	221.0	69.29	16.66	2007				
2008	40.60	34.00	30.50	27.20	101.00	144.00	96.40	64.30	49.10	36.70	33.10	29.80	57.3	Jun 02	168.0	43.84	26.67	2008				
2009	26.80	24.80	22.80	26.10	99.50	102.00	58.70	40.20	29.50	29.00	22.90	22.90	52.9	Jun 08	167.0	34.97	21.23	2009				
2010	20.50	20.00	18.40	29.60	80.40	111.00	72.30	42.60	29.00	23.80	19.00	16.00	40.3	Jun 12	122.0	25.79	15.30	2010				
2011	17.00	18.60	18.80	18.20	90.20	224.00	179.00	123.00	73.40	51.10	38.60	32.00	73.9	Jun 06	240.0	62.20	15.34	2011				
Avg.	23.33	22.23	21.35	28.32	86.8	126.1	96.35	61.93	42.51	34.11	30.24	25.73	50.04		143	37.08	19.55	m <sup>3</sup> /s				
S. D.	5.67	4.65	4.10	8.64	25.67	45.81	35.01	23.17	14.90	10.21	9.06	7.32	13.17		48.33	12.45	3.40	m <sup>3</sup> /s				
Normal	23.27	22.12	21.28	28.84	86.57	123.67	93.55	59.52	40.96	33.04	29.74	25.43	49.13		m <sup>3</sup> /s							
Normal	9	8	8	11	34	48	37	24	16	13	11	10	230	mm	10-Year	211.43	23.95	15.83	m <sup>3</sup> /s			



**GOATHORN CREEK NEAR TELKWA 08EE008**

Station Longitude Latitude: -127.122505 54.649021

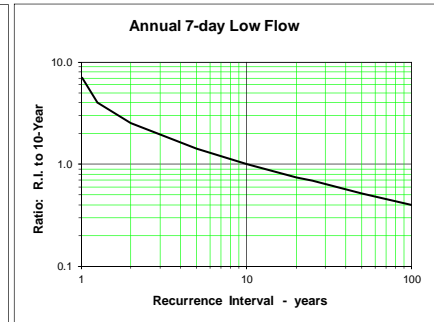
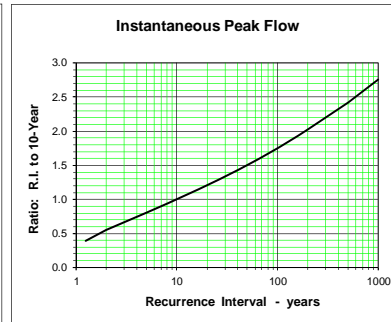
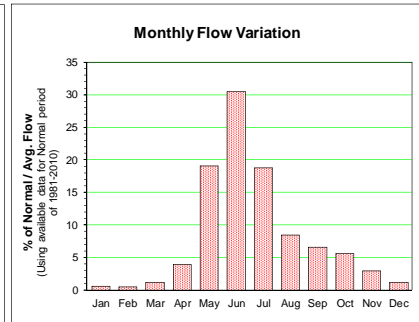
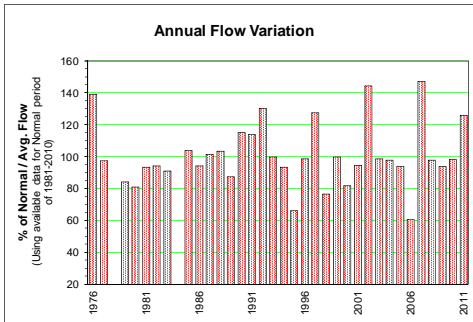
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 121.66 km <sup>2</sup>		Median Elevation = 1164 m		Instantaneous Peak Flow		7-Day Low Flow		
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year				
1976	0.291	0.283	0.206	0.456	6.72	6.51	5.74	4.16	1.96	1.460	1.250	0.614	2.48	Jun 18	12.70	1.394	0.187	1976				
1977	0.318	0.262	0.214	2.530	3.50	3.49	3.43	1.96	1.56	1.480	0.808	0.302	1.66	Apr 26	14.10	0.947	0.194	1977				
1978	0.166	0.119	0.112	0.744	3.65	5.51	2.32	1.71	1.19	1.390	2.990	0.240	1.68	Nov 01	32.60	0.832	0.102	1978				
1979	0.152	0.113	0.124	0.955	5.40	3.98	3.51	1.88	1.44	1.690	0.367	0.131	1.66	Jun 03	13.00	0.901	0.081	1979				
1980	0.094	0.080	0.071	0.549	3.86	3.52	2.00	0.98	1.19	1.370	2.250	0.532	1.38	Jul 05	10.70	0.863	0.067	1980				
1981	0.384	0.251	0.191	0.463	7.35	4.40	3.33	2.14	1.11	3.280	0.966	0.246	2.03	May 25	20.30	0.836	0.181	1981				
1982	0.185	0.121	0.112	0.149	4.80	7.61	3.00	1.19	1.27	0.873	0.472	0.165	1.67	Jun 01	18.50	0.814	0.103	1982				
1983	0.127	0.121	0.124	0.940	4.57	3.74	3.46	1.26	0.88	0.586	0.334	0.095	1.36	May 30	11.00	0.554	0.090	1983				
1984	0.143	0.148	0.199	0.724	2.61	4.14	3.15	1.73	0.91	1.570	0.209	0.197	1.32	Jun 11	10.77	0.565	0.095	1984				
1985	0.179	0.139	0.141	0.284	5.84	5.42	3.70	2.14	1.00	0.543	0.221	0.077	1.65	May 24	15.20	0.717	0.069	1985				
1986	0.070	0.066	0.096	0.389	3.56	7.34	2.94	1.14	0.77	0.914	0.455	0.228	1.50	Jun 15	31.10	0.430	0.054	1986				
1987	0.189	0.187	0.157	1.150	5.36	4.34	3.37	2.02	2.23	1.270	1.450	0.443	1.86	Sep 21	10.50	1.104	0.143	1987				
1988	0.181	0.152	0.171	1.890	5.09	5.74	3.02	2.41	2.31	1.840	0.717	0.424	2.00	Sep 29	51.50	0.631	0.133	1988				
1989	0.252	0.045	0.118	2.830	6.70	4.48	2.61	1.79	0.94	0.820	1.490	0.859	1.92	May 06	14.40	0.695	0.035	1989				
1990	0.443	0.191	0.219	1.720	5.80	6.54	3.79	1.51	0.59	0.445	0.258	0.271	1.82	May 28	22.10	0.516	0.180	1990				
1991	0.165	0.128	0.126	2.040	3.70	3.65	2.19	1.39	0.70	4.190	0.917	0.554	1.66	Oct 10	26.50	0.566	0.116	1991				
1992	0.498	0.548	1.420	4.070	5.36	7.23	2.36	0.98	1.75	3.020	1.110	0.470	2.40	Sep 29	13.70	0.622	0.339	1992				
1993	0.207	0.272	0.190	1.430	6.59	6.25	2.24	1.87	0.73	0.532	1.560	0.327	1.86	Jun 15	20.40	0.494	0.163	1993				
1994	0.246	0.210	0.272	3.440	5.21	5.03	3.09	1.39	1.24	0.697	0.455	0.208	1.80	Jun 13	10.50	0.734	0.194	1994				
1995	0.160	0.119	0.108	0.634	4.67	3.32	2.43	0.86	0.60	0.429	0.199	0.121	1.15	May 15	10.80	0.417	0.091	1995				
1996	0.252	0.164	0.268	2.220	3.78	6.05	5.75	2.13	2.35	1.670	0.735	0.307	2.14	Jul 18	19.80	1.014	0.098	1996				
1997	0.203	0.254	0.231	2.350	7.75	6.85	4.09	2.54	1.55	2.160	0.766	0.260	2.43	Jun 04	18.20	0.970	0.128	1997				
1998	0.162	0.163	0.174	1.360	6.79	3.28	2.34	1.18	0.77	1.260	0.582	0.262	1.54	May 27	12.90	0.596	0.145	1998				
1999	0.170	0.145	0.190	1.300	4.05	6.71	4.24	2.92	1.14	0.908	0.437	0.270	1.88	Jun 16	17.80	0.878	0.133	1999				
2000	0.190	0.147	0.165	0.690	2.01	4.25	2.62	1.07	1.27	1.120	1.300	0.371	1.27	Jun 10	10.40	0.717	0.142	2000				
2001	0.234	0.156	0.147	0.895	2.62	5.26	3.36	1.73	1.04	0.587	0.484	0.265	1.40	Jun 28	17.10	0.597	0.138	2001				
2002	0.209	0.186	0.158	0.561	7.62	9.06	3.58	1.56	1.48	0.704	0.635	0.449	2.19	May 21	28.90	0.784	0.139	2002				
2003	0.535	0.272	0.155	1.120	3.90	4.54	3.52	1.48	1.33	1.870	0.847	0.246	1.66	Jun 30	11.30	0.969	0.124	2003				
2004	0.146	0.125	0.166	2.360	4.01	4.12	2.38	1.29	2.13	1.640	1.660	0.983	1.75	Jun 07	11.60	0.725	0.119	2004				
2005	0.366	0.289	0.391	2.920	4.59	3.68	2.17	1.47	0.67	0.935	0.742	0.357	1.55	Apr 26	11.70	0.446	0.209	2005				
2006	0.200	0.152	0.123	0.515	3.11	4.14	2.13	1.09	0.71	0.473	0.261	0.196	1.10	Jun 02	11.60	0.448	0.115	2006				
2007	0.155	0.156	0.168	1.240	5.74	7.50	4.56	3.35	1.13	1.710	0.854	0.235	2.25	Jun 05	21.00	0.657	0.127	2007				
2008	0.235	0.182	0.155	0.415	6.02	2.78	2.40	2.10	1.12	0.868	0.841	0.551	1.48	May 18	12.80	0.879	0.142	2008				
2009	0.273	0.208	0.141	0.884	4.28	6.15	4.77	1.34	1.26	0.700	0.834	0.318	1.77	Jul 08	18.80	0.870	0.125	2009				
2010	0.235	0.175	0.141	1.540	5.60	4.81	2.23	1.16	1.91	1.660	0.781	0.261	1.72	Sep 25	15.80	0.683	0.129	2010				
2011	0.168	0.137	0.122	0.222	7.76	7.87	4.32	1.89	2.23	1.440	0.514	0.240	2.25	May 17	24.10	0.923	0.116	2011				
Avg.	0.227	0.180	0.202	1.33	5.00	5.26	3.23	1.74	1.29	1.336	0.854	0.335	1.76	1.77	18	0.74	0.13	m <sup>3</sup> /s				
S. D.	0.105	0.088	0.217	0.975	1.526	1.580	0.971	0.695	0.520	0.827	0.595	0.196	0.354		8.42	0.21	0.05	m <sup>3</sup> /s				
Normal	0.23	0.18	0.21	1.42	4.97	5.28	3.16	1.67	1.23	1.31	0.75	0.33	1.74	m <sup>3</sup> /s		0.49	0.07	m <sup>3</sup> /s				
Normal	5	4	5	30	109	112	70	37	26	29	16	7	450	mm	10-Year	28.39	0.49	0.07	m <sup>3</sup> /s			



**SIMPSON CREEK AT THE MOUTH 08EE012**

Station Longitude Latitude: -127.205093 54.809861

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 13.21 km <sup>2</sup>		Median Elevation = 1311 m		Instantaneous Peak Flow		7-Day Low Flow	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year		
1976	0.033	0.034	0.014	0.143	0.537	1.040	1.070	0.676	0.415	0.286	0.135	0.039	0.370	Jun 18	2.69	0.269	0.012	1976		
1977	0.009	0.023	0.025	0.300	0.386	0.686	0.714	0.413	0.326	0.145	0.051	0.016	0.259	Jul 09	2.40	0.215	0.007	1977		
1978	0.007	0.005	0.012	0.084	0.294			0.421	0.198	0.332	0.314	0.006		Nov 01	5.07	0.106	0.004	1978		
1979	0.003	0.009	0.024	0.143	0.438	0.642	0.589	0.270	0.248	0.267	0.036	0.007	0.224	Jun 02	2.09	0.148	0.003	1979		
1980	0.004	0.003	0.002	0.061	0.543	0.634	0.419	0.183	0.267	0.163	0.216	0.083	0.215	May 12	1.54	0.124	0.002	1980		
1981	0.047	0.023	0.021	0.082	0.773	0.578	0.584	0.273	0.166	0.235	0.142	0.031	0.248	May 25	3.60	0.062	0.011	1981		
1982	0.008	0.005	0.005	0.016	0.403	1.460	0.470	0.253	0.263	0.093	0.021	0.008	0.250	Jun 27	3.78	0.084	0.005	1982		
1983	0.008	0.008	0.008	0.098	0.771	0.872	0.521	0.216	0.190	0.108	0.077	0.016	0.242	Jun 02	6.38	0.098	0.007	1983		
1984	0.006	0.022	0.091		0.287	0.874	0.779				0.026	0.019		Aug 06	4.01		0.002	1984		
1985	0.013	0.016	0.083	0.156	0.752	0.848	0.662	0.260	0.404	0.075	0.019	0.006	0.276	Jun 30	3.74	0.112	0.006	1985		
1986	0.005	0.005	0.034	0.054	0.269	1.270	0.600	0.237	0.141	0.271	0.103	0.015	0.251	Jun 15	9.48	0.033	0.002	1986		
1987	0.015	0.019	0.030	0.115	0.467	0.915	0.692	0.248	0.344	0.140	0.202	0.047	0.270	Sep 21	2.39	0.134	0.013	1987		
1988	0.006	0.006	0.014	0.103	0.616	0.901	0.563	0.458	0.312	0.225	0.067	0.016	0.275	Sep 29	9.55	0.052	0.005	1988		
1989	0.013	0.011	0.017	0.059	0.639	0.833	0.458	0.216	0.151	0.101	0.110	0.163	0.232	Jun 04	2.61	0.083	0.009	1989		
1990	0.084	0.027	0.046	0.148	0.832	1.350	0.773	0.233	0.079	0.040	0.024	0.016	0.306	Jun 03	4.67	0.054	0.011	1990		
1991	0.016	0.033	0.032	0.190	0.648	0.862	0.469	0.258	0.142	0.674	0.208	0.081	0.303	Oct 15	4.34	0.116	0.011	1991		
1992	0.047	0.056	0.207	0.254	0.508	1.500	0.500	0.166	0.430	0.334	0.123	0.040	0.346	Jun 13	5.25	0.079	0.024	1992		
1993	0.015	0.022	0.019	0.119	1.210	0.772	0.355	0.273	0.077	0.064	0.208	0.032	0.265	May 20	5.95	0.037	0.014	1993		
1994	0.022	0.018	0.055	0.312	0.647	0.848	0.587	0.192	0.163	0.081	0.027	0.013	0.248	Jun 23	2.30	0.053	0.012	1994		
1995	0.011	0.013	0.022	0.076	0.668	0.674	0.357	0.166	0.048	0.039	0.014	0.010	0.176	May 14	3.00	0.024	0.009	1995		
1996	0.019	0.017	0.033	0.154	0.379	0.932	0.892	0.331	0.169	0.147	0.050	0.018	0.262	Jul 18	3.06	0.087	0.009	1996		
1997	0.009	0.012	0.037	0.236	0.833	1.240	0.706	0.377	0.174	0.294	0.097	0.032	0.339	Jun 12	4.52	0.127	0.008	1997		
1998	0.016	0.013	0.036	0.067	1.150	0.467	0.246	0.144	0.083	0.121	0.054	0.023	0.204	May 26	4.74	0.059	0.010	1998		
1999	0.010	0.004	0.008	0.158	0.369	1.030	0.749	0.406	0.184	0.127	0.081	0.042	0.265	Jun 16	5.14	0.088	0.004	1999		
2000	0.022	0.010	0.018	0.050	0.221	0.910	0.587	0.230	0.217	0.189	0.128	0.032	0.218	Jun 10	1.61	0.105	0.008	2000		
2001	0.013	0.007	0.018	0.061	0.196	0.961	0.849	0.379	0.246	0.107	0.127	0.046	0.252	Jun 28	2.96	0.160	0.006	2001		
2002	0.023	0.013	0.008	0.044	0.673	1.770	0.788	0.309	0.536	0.212	0.173	0.058	0.384	Jun 15	5.11	0.162	0.006	2002		
2003	0.050	0.020	0.013	0.118	0.429	0.878	0.678	0.244	0.248	0.334	0.093	0.030	0.262	Oct 25	3.09	0.147	0.008	2003		
2004	0.016	0.014	0.024	0.233	0.695	0.692	0.327	0.180	0.376	0.282	0.201	0.083	0.260	Jun 06	2.25	0.085	0.013	2004		
2005	0.021	0.021	0.048	0.314	0.726	0.644	0.469	0.377	0.113	0.107	0.095	0.044	0.250	May 14	1.96	0.068	0.012	2005		
2006	0.021	0.018	0.021	0.032	0.447	0.767	0.291	0.089	0.115	0.068	0.034	0.027	0.161	Jun 03	3.42	0.043	0.017	2006		
2007	0.023	0.018	0.050	0.179	0.473	1.900	1.030	0.475	0.171	0.225	0.114	0.026	0.391	Jun 07	6.19	0.084	0.018	2007		
2008	0.014	0.023	0.039	0.074	0.772	0.602	0.570	0.381	0.249	0.152	0.129	0.096	0.260	Aug 20	3.20	0.175	0.009	2008		
2009	0.032	0.025	0.018	0.115	0.420	1.270	0.639	0.138	0.124	0.086	0.081	0.038	0.249	Jul 14	4.55	0.096	0.017	2009		
2010	0.027	0.024	0.057	0.118	0.638	0.983	0.453	0.187	0.290	0.232	0.083	0.029	0.261	Jun 12	2.47	0.072	0.022	2010		
2011	0.022	0.017	0.043	0.137	0.850	1.350	0.850	0.352	0.235	0.076	0.040	0.024	0.334	Jun 02	2.92	0.129	0.012	2011		
Avg.	0.020	0.017	0.034	0.132	0.582	0.970	0.608	0.286	0.226	0.184	0.103	0.036	0.268		2.67	3.95	0.102	0.010	m <sup>3</sup> /s	
S. D.	0.016	0.010	0.036	0.080	0.236	0.337	0.198	0.119	0.114	0.124	0.070	0.032	0.053			1.89	0.053	0.005	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)																				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.021	0.017	0.037	0.129	0.597	0.987	0.588	0.265	0.214	0.178	0.097	0.038	0.266		m <sup>3</sup> /s					
	4	3	8	25	121	194	119	54	42	36	19	8	635	mm	10-Year	6.1	0.045	0.004		m <sup>3</sup> /s

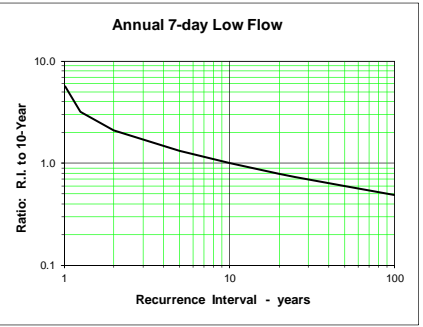
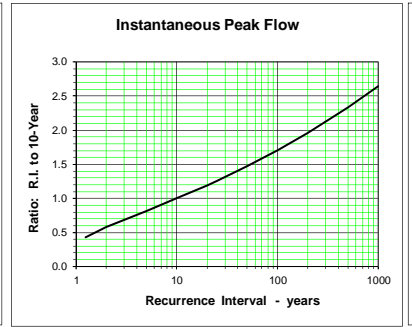
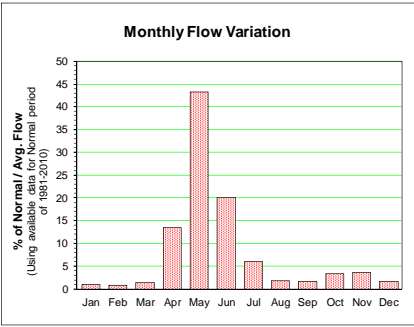
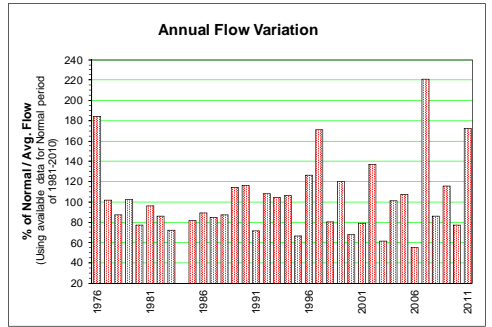




**BUCK CREEK AT THE MOUTH 08EE013**

Station Longitude Latitude: -126.653389 54.398513

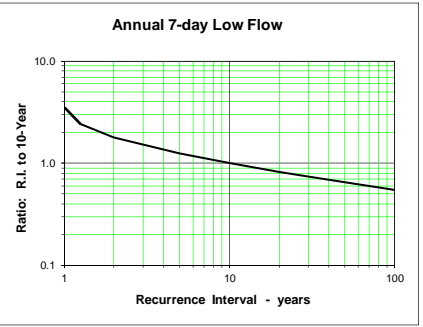
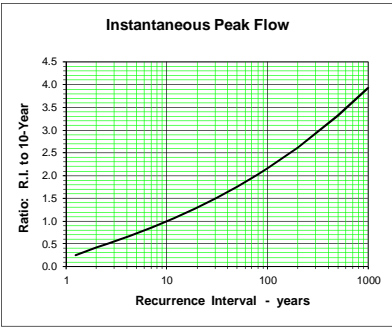
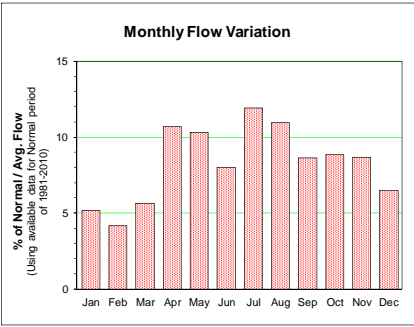
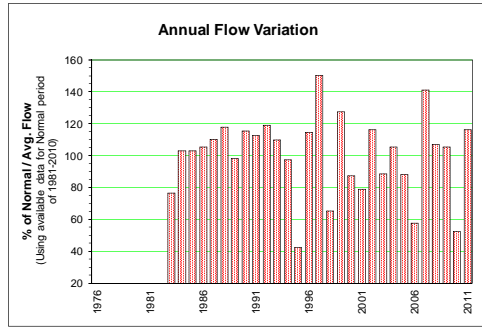
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976	1.07	0.87	0.58	1.95	41.60	29.90	5.95	3.16	3.01	2.79	2.24	1.26	7.89	May 11	61.70	2.314	0.532	1976	
1977	0.88	0.80	0.64	14.30	21.50	5.02	3.04	0.75	1.27	2.46	0.97	0.62	4.37	Apr 27	62.00	0.411	0.411	1977	
1978	0.41	0.34	0.44	3.12	16.20	15.40	2.58	0.66	0.58	1.99	2.61	0.63	3.76	Jun 14	41.60	0.448	0.320	1978	
1979	0.32	0.23	0.25	4.11	30.50	11.90	2.65	0.62	0.38	0.72	0.36	0.28	4.39	May 03	68.80	0.276	0.169	1979	
1980	0.26	0.22	0.24	2.96	18.60	2.74	4.06	0.88	2.08	2.28	4.16	1.10	3.32	May 13	36.50	0.574	0.207	1980	
1981	0.70	0.50	0.42	3.23	29.60	9.87	1.70	0.47	0.23	1.01	0.95	0.29	4.11	May 15	49.60	0.170	0.170	1981	
1982	0.16	0.22	0.26	0.66	17.30	16.40	4.08	1.04	0.84	1.53	1.20	0.47	3.70	Jun 02	58.60	0.443	0.150	1982	
1983	0.37	0.32	0.32	4.70	14.10	5.77	6.71	1.50	0.86	0.88	1.06	0.30	3.10	Apr 30	25.20	0.643	0.262	1983	
1984	0.40	0.44	0.60	4.07	14.50	8.33	2.40				0.57	0.53		May 20	24.00	0.687	0.267	1984	
1985	0.50	0.41	0.53	1.39	25.50	8.68	2.85	0.44	0.41	0.53	0.29	0.09	3.50	May 21	56.38	0.150	0.069	1985	
1986	0.06	0.03	0.37	2.54	16.30	20.90	2.23	0.27	0.40	1.28	0.96	0.58	3.83	Jun 15	43.80	0.196	0.000	1986	
1987	0.58	0.68	0.81	7.01	23.00	4.91	0.39	0.63	0.43	0.70	3.64	0.69	3.64	May 09	39.90	0.273	0.273	1987	
1988	0.39	0.43	0.59	5.92	17.70	12.30	1.66	0.89	0.58	1.92	1.52	1.02	3.75	Jun 09	45.20	0.288	0.283	1988	
1989	0.68	0.34	0.40	16.70	24.10	3.86	1.89	0.99	0.54	0.91	4.18	3.94	4.90	May 04	50.60	0.346	0.305	1989	
1990	1.42	0.67	1.07	11.20	24.30	12.10	5.54	0.75	0.18	0.68	0.83	0.63	4.97	May 30	39.10	0.134	0.134	1990	
1991	0.33	0.31	0.35	7.33	17.80	4.70	2.23	0.35	0.22	0.98	1.02	1.02	3.07	May 10	31.10	0.146	0.146	1991	
1992	1.04	1.06	6.49	18.80	16.60	6.35	0.78	0.14	0.39	1.75	1.53	0.65	4.63	Apr 20	29.80	0.093	0.093	1992	
1993	0.36	0.43	0.45	6.12	20.20	12.60	4.96	3.72	1.05	0.82	2.10	0.61	4.47	May 22	35.50	0.741	0.328	1993	
1994	0.48	0.38	1.10	16.90	21.00	6.22	2.87	0.93	0.53	1.87	1.38	0.66	4.54	Apr 30	34.90	0.325	0.325	1994	
1995	0.39	0.34	0.33	6.39	20.60	2.87	0.93	0.56	0.30	0.46	0.37	2.86		May 15	39.70	0.255	0.254	1995	
1996	0.61	0.54	0.52	10.90	22.40	15.60	4.19	1.14	2.91	2.88	2.38	0.84	5.41	May 27	38.40	0.747	0.378	1996	
1997	0.61	0.72	0.76	11.30	45.30	15.10	2.60	0.69	0.70	4.64	3.45	1.24	7.31	May 15	94.50	0.294	0.294	1997	
1998	0.56	0.46	0.44	5.30	22.50	2.97	3.75	0.51	0.48	1.71	1.59	0.64	3.44	May 04	42.60	0.382	0.382	1998	
1999	0.39	0.30	0.53	7.31	20.80	16.20	8.97	1.43	1.95	1.47	1.18	0.88	5.14	May 25	39.70	0.855	0.285	1999	
2000	0.46	0.29	0.33	2.92	12.40	8.99	1.67	0.36	0.54	1.61	4.24	1.02	2.90	Jun 11	24.50	0.199	0.199	2000	
2001	0.47	0.33	0.32	3.07	13.40	13.70	3.59	0.82	0.83	1.07	1.99	1.12	3.40	Jun 02	32.80	0.409	0.295	2001	
2002	0.66	0.45	0.28	1.27	38.20	22.00	2.50	0.36	1.13	1.24	1.05	0.69	5.86	May 22	97.20	0.175	0.175	2002	
2003	0.48	0.38	0.31	4.86	10.60	4.35	4.69	0.49	0.60	2.65	1.59	0.63	2.65	Apr 27	25.40	0.295	0.269	2003	
2004	0.37	0.31	0.46	10.00	15.30	5.26	3.49	0.97	4.26	4.69	4.74	2.22	4.34	May 05	50.10	0.468	0.290	2004	
2005	1.02	1.31	1.41	17.90	17.70	3.07	1.44	1.61	1.05	4.37	2.75	1.43	4.60	Apr 27	63.50	0.677	0.677	2005	
2006	0.61	0.38	0.31	3.09	12.20	7.61	0.82	0.76	0.44	0.59	0.91	0.58	2.37	Jun 03	28.60	0.216	0.216	2006	
2007	0.59	0.57	1.20	6.29	43.40	38.50	7.44	4.12	2.03	3.60	3.69	1.38	9.44	Jun 07	84.90	1.593	0.514	2007	
2008	1.02	0.81	0.75	1.86	27.80	5.47	1.04	0.90	1.09	0.76	1.36	1.02	3.69	May 19	59.90	0.405	0.405	2008	
2009	0.71	0.32	0.10	5.88	30.60	13.30	3.96	0.41	0.37	0.63	2.39	0.55	4.97	May 03	39.20	0.147	0.076	2009	
2010	0.20	0.13	0.29	5.84	18.00	5.92	0.75	0.25	1.46	3.06	2.46	1.01	3.30	May 21	32.80	0.115	0.109	2010	
2011	0.86	0.91	0.54	1.62	43.60	22.30	9.35	2.55	1.47	2.49	1.13	0.83	7.36	May 28	104.00	0.380	0.339	2011	
Avg.	0.57	0.48	0.69	6.63	22.92	11.14	3.33	1.03	1.02	1.80	1.91	0.88	4.43		48.11	0.452	0.267	m <sup>3</sup> /s	
S. D.	0.29	0.27	1.04	5.05	9.42	8.02	2.23	0.95	0.91	1.19	1.23	0.66	1.56		20.77	0.429	0.138	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.55	0.46	0.74	7.02	21.77	10.46	3.07	0.95	0.93	1.74	1.92	0.90	4.27		m <sup>3</sup> /s				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	3	2	3	32	103	48	15	4	4	8	9	4	238	mm	10-Year	74.6	0.144	0.116	m <sup>3</sup> /s



**TWO MILE CREEK IN DISTRICT LOT 4834 08EE025**

Station Longitude Latitude: -127.620979 55.296123

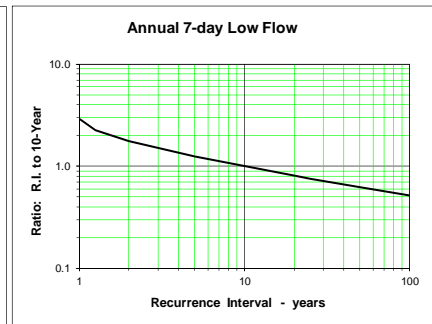
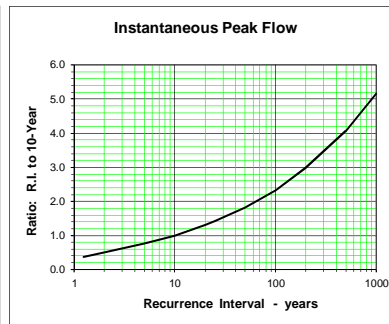
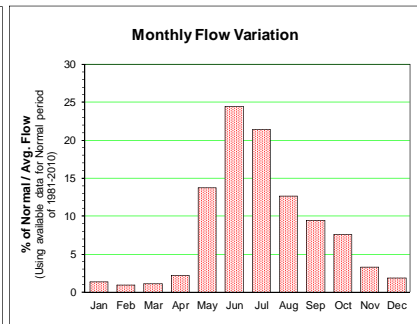
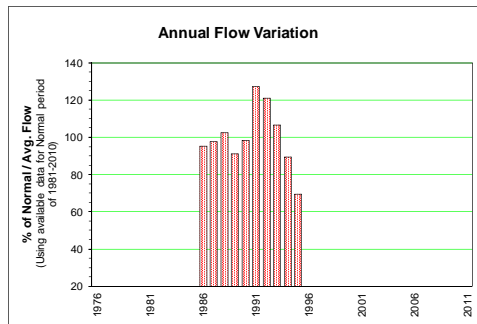
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976																			1976
1977																			1977
1978																			1978
1979																			1979
1980																			1980
1981																			1981
1982																			1982
1983	0.062	0.064	0.083	0.092	0.082	0.085	0.138	0.141	0.136	0.130	0.096	0.044	0.094	Jul 10	0.16	0.063	0.038	1983	
1984	0.047	0.056	0.147	0.133	0.182	0.124	0.143	0.180	0.149	0.165	0.103	0.085	0.127	May 18	0.26	0.105	0.039	1984	
1985	0.076	0.082	0.080	0.166	0.249	0.154	0.162	0.157	0.150	0.123	0.076	0.044	0.127	May 04	0.54	0.123	0.040	1985	
1986	0.054	0.050	0.057	0.137	0.160	0.166	0.166	0.156	0.135	0.200	0.147	0.120	0.129	Jun 16	0.29	0.108	0.039	1986	
1987	0.118	0.113	0.141	0.245	0.155	0.074	0.106	0.131	0.130	0.106	0.177	0.133	0.136	Apr 10	0.41	0.055	0.055	1987	
1988	0.074	0.087	0.127	0.185	0.156	0.172	0.205	0.193	0.150	0.154	0.140	0.093	0.145	Sep 29	0.30	0.131	0.062	1988	
1989	0.089	0.065	0.051	0.201	0.195	0.101	0.126	0.106	0.086	0.083	0.139	0.205	0.121	Apr 21	0.46	0.076	0.019	1989	
1990	0.181	0.074	0.107	0.145	0.095	0.209	0.329	0.211	0.113	0.088	0.081	0.066	0.142	Jul 02	2.11	0.096	0.045	1990	
1991	0.041	0.028	0.018	0.160	0.161	0.067	0.094	0.132	0.098	0.254	0.324	0.277	0.138	Nov 12	1.07	0.056	0.017	1991	
1992	0.201	0.192	0.185	0.135	0.134	0.082	0.172	0.128	0.128	0.166	0.139	0.094	0.146	Nov 05	0.59	0.056	0.056	1992	
1993	0.077	0.073	0.076	0.127	0.161	0.204	0.207	0.192	0.126	0.086	0.201	0.091	0.135	Nov 02	0.64	0.104	0.063	1993	
1994	0.069	0.062	0.133	0.343	0.130	0.076	0.146	0.142	0.119	0.098	0.075	0.046	0.120	Apr 05	0.57	0.065	0.044	1994	
1995	0.035	0.033	0.042	0.099	0.048	0.033	0.059	0.088	0.063	0.060	0.038	0.026	0.052	May 24	0.61	0.027	0.017	1995	
1996	0.027	0.037	0.095	0.187	0.185	0.097	0.193	0.216	0.195	0.220	0.152	0.086	0.141	Jul 04	0.46	0.071	0.021	1996	
1997	0.063	0.059	0.060	0.397	0.237	0.171	0.448	0.255	0.153	0.163	0.127	0.078	0.185	May 21	1.42	0.129	0.051	1997	
1998	0.060	0.061	0.076	0.085	0.087	0.090	0.118	0.116	0.090	0.079	0.058	0.043	0.080	May 26	0.26	0.080	0.037	1998	
1999	0.036	0.034	0.055	0.200	0.239	0.222	0.276	0.223	0.172	0.160	0.141	0.116	0.157	Apr 20	0.54	0.154	0.034	1999	
2000	0.074	0.060	0.072	0.184	0.095	0.090	0.124	0.165	0.130	0.105	0.109	0.084	0.108	Apr 02	0.50	0.081	0.057	2000	
2001	0.044	0.030	0.035	0.076	0.077	0.153	0.160	0.180	0.132	0.100	0.102	0.071	0.097	Aug 04	0.26	0.113	0.029	2001	
2002	0.061	0.039	0.028	0.124	0.243	0.171	0.217	0.176	0.175	0.156	0.190	0.127	0.143	Nov 20	0.61	0.144	0.024	2002	
2003	0.102	0.079	0.075	0.140	0.105	0.055	0.163	0.134	0.130	0.139	0.111	0.071	0.109	Apr 28	0.57	0.047	0.047	2003	
2004	0.049	0.045	0.080	0.133	0.085	0.067	0.097	0.116	0.153	0.174	0.334	0.225	0.130	Nov 05	0.93	0.054	0.040	2004	
2005	0.123	0.115	0.133	0.146	0.099	0.098	0.143	0.129	0.098	0.086	0.076	0.057	0.109	Jul 20	0.22	0.082	0.049	2005	
2006	0.059	0.057	0.055	0.075	0.083	0.075	0.083	0.113	0.090	0.063	0.047	0.049	0.071	May 25	0.26	0.046	0.039	2006	
2007	0.068	0.078	0.105	0.230	0.179	0.186	0.312	0.246	0.193	0.184	0.187	0.110	0.174	Jul 07	1.28	0.133	0.055	2007	
2008	0.077	0.074	0.073	0.118	0.218	0.122	0.162	0.174	0.135	0.114	0.161	0.146	0.131	May 17	0.33	0.092	0.065	2008	
2009	0.095	0.082	0.066	0.176	0.282	0.158	0.209	0.151	0.111	0.088	0.074	0.059	0.130	Apr 22	0.45	0.103	0.056	2009	
2010	0.046	0.036	0.046	0.058	0.077	0.061	0.083	0.097	0.084	0.079	0.064	0.041	0.065	May 21	0.14	0.055	0.034	2010	
2011	0.034	0.024	0.033	0.114	0.256	0.183	0.249	0.246	0.201	0.152	0.134	0.081	0.143	May 23	0.86	0.142	0.021	2011	
Avg.	0.074	0.065	0.080	0.159	0.154	0.122	0.176	0.162	0.132	0.129	0.130	0.094	0.124		0.124	0.059	0.04	m <sup>3</sup> /s	
S. D.	0.040	0.034	0.040	0.075	0.066	0.053	0.084	0.046	0.034	0.048	0.069	0.058	0.030			0.43	0.03	0.01	m <sup>3</sup> /s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.075	0.067	0.082	0.161	0.150	0.120	0.173	0.159	0.129	0.129	0.130	0.094	0.123		m <sup>3</sup> /s				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	10	8	11	21	20	16	23	22	17	17	13	197	mm	10-Year	1.1	0.047	0.022	m <sup>3</sup> /s	



**STATION CREEK ABOVE DIVERSIONS 08EE028**

Station Longitude Latitude: -127.571800 55.229625

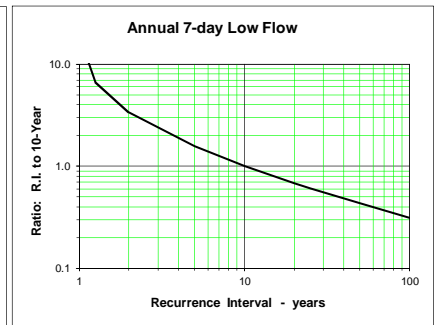
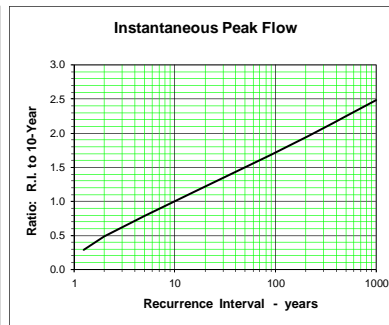
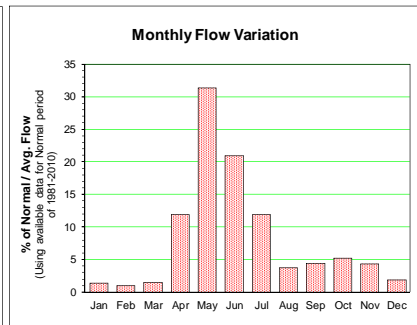
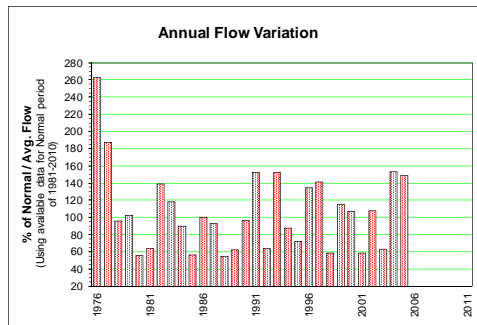
Year	Monthly and Annual Discharge in m <sup>3</sup> /s					Drainage Area = 9.79 km <sup>2</sup>		Median Elevation = 1495 m		Instantaneous Peak Flow		7-Day Low Flow		Year					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)		Date	Annual	Jun-Sep	Annual	
1976																		1976	
1977																		1977	
1978																		1978	
1979																		1979	
1980																		1980	
1981																		1981	
1982																		1982	
1983																		1983	
1984																		1984	
1985														Jun 30	2.53			1985	
1986	0.035	0.023	0.023	0.033	0.217	0.748	0.904	0.438	0.450	0.121	0.078	0.042	0.266	Jun 15	3.07	0.094	0.013	1986	
1987	0.048	0.044	0.049	0.082	0.316	0.704	0.760	0.323	0.501	0.187	0.170	0.081	0.273	Sep 21	2.61	0.239	0.037	1987	
1988	0.050	0.035	0.033	0.061	0.433	0.809	0.749	0.566	0.276	0.256	0.101	0.054	0.286	Sep 29	3.58	0.095	0.030	1988	
1989	0.051	0.032	0.035	0.082	0.409	0.710	0.640	0.423	0.264	0.171	0.126	0.100	0.255	Jun 14	1.61	0.171	0.029	1989	
1990	0.051	0.023	0.023	0.054	0.543	0.983	0.801	0.408	0.190	0.095	0.063	0.048	0.275	Jul 01	2.51	0.144	0.021	1990	
1991	0.032	0.026	0.019	0.082	0.554	0.903	0.690	0.499	0.300	0.866	0.162	0.094	0.355	Oct 15	8.23	0.249	0.018	1991	
1992	0.054	0.056	0.081	0.141	0.433	1.180	0.719	0.333	0.581	0.319	0.106	0.060	0.338	Jun 13	2.25	0.190	0.039	1992	
1993	0.036	0.033	0.031	0.064	0.838	0.818	0.550	0.565	0.229	0.178	0.147	0.062	0.298	Jul 29	3.81	0.135	0.028	1993	
1994	0.046	0.035	0.041	0.103	0.388	0.748	0.651	0.339	0.353	0.144	0.081	0.055	0.250	Jul 02	2.41	0.158	0.030	1994	
1995	0.040	0.034	0.034	0.050	0.388	0.612	0.506	0.318	0.148	0.094	0.059	0.039	0.195	Jun 11	1.68	0.099	0.031	1995	
1996	0.055	0.046	0.038															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	
Avg.	0.045	0.035	0.037	0.075	0.452	0.832	0.706	0.417	0.320	0.249	0.112	0.063	0.279	0.279	3.12	0.16	0.03	m <sup>3</sup> /s	
S. D.	0.008	0.010	0.017	0.031	0.167	0.159	0.116	0.092	0.137	0.219	0.039	0.020	0.045		1.83	0.06	0.01	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.045	0.035	0.037	0.075	0.452	0.832	0.706	0.417	0.320	0.249	0.112	0.063	0.279	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	12	9	10	20	124	220	193	114	85	68	30	17	899	mm	10-Year	5.1	0.094	0.015	m <sup>3</sup> /s



**VAN TINE CREEK NEAR THE MOUTH 08JA014**

Station Longitude Latitude: -125.412415 53.256981

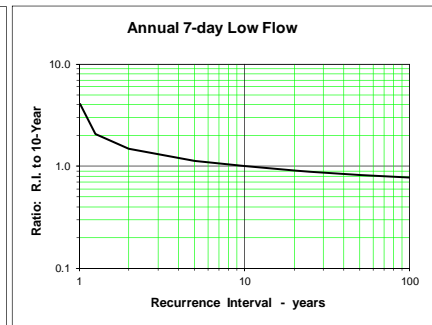
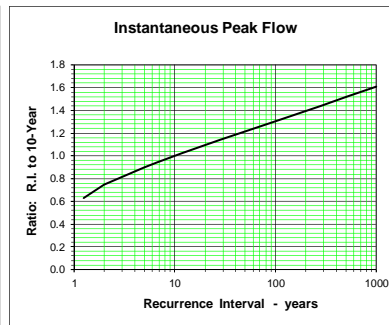
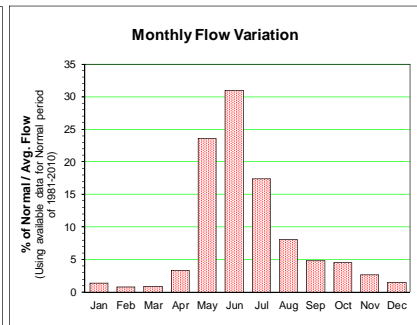
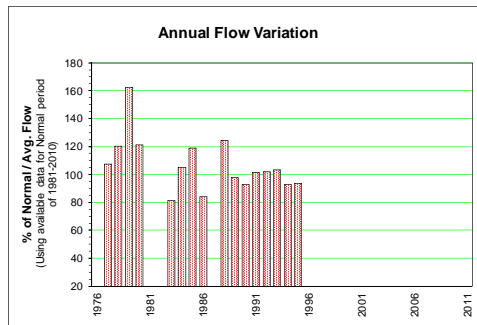
Year	Monthly and Annual Discharge in m <sup>3</sup> /s					Drainage Area = 145.21 km <sup>2</sup>		Median Elevation = 1252 m					Instantaneous Peak Flow		7-Day Low Flow		Year		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep		Annual	
1976	0.637	0.426	0.275	0.992	10.400	6.470	1.980	2.030	1.000	0.848	1.050	0.609	2.23	May 10	25.90	0.614	0.227	1976	
1977	0.414	0.454	0.400	4.930	4.230	1.620	3.610	0.784	1.000	0.806	0.432	0.400	1.59	Apr 26	29.70	0.359	0.307	1977	
1978	0.345	0.109	0.095	1.510	4.630	1.760	0.420	0.241	0.217	0.235	0.131	0.069	0.82	Apr 25	12.00	0.131	0.056	1978	
1979	0.049	0.044	0.079	0.562	5.660	2.930	0.850	0.113	0.040	0.043	0.035	0.035	0.88	May 04	18.00	0.031	0.031	1979	
1980	0.031	0.027	0.047	0.521	1.320	1.040	0.507	0.414	0.967	0.351	0.306	0.153	0.47	Sep 07	2.30	0.151	0.027	1980	
1981	0.130	0.068	0.058	0.208	2.750	2.130	0.451	0.124	0.090	0.143	0.268	0.076	0.54	May 26	8.08	0.060	0.039	1981	
1982	0.042	0.063	0.055	0.094	4.390	2.330	2.680	0.501	1.630	1.380	0.696	0.274	1.19	Jul 22	13.80	0.189	0.025	1982	
1983	0.139	0.084	0.084	0.843	1.950	1.940	4.090	0.781	0.720	0.580	0.637	0.141	1.01	Jul 14	22.50	0.293	0.076	1983	
1984	0.146	0.139	0.309	1.630	2.750	2.230	0.905	0.182	0.303	0.351	0.164	0.123	0.77	Apr 16	9.88	0.150	0.104	1984	
1985	0.091	0.081	0.091	0.652	3.120	0.791	0.140	0.077	0.123	0.402	0.129	0.077	0.49	May 18	7.76	0.059	0.059	1985	
1986	0.087	0.070	0.083	0.410	4.220	3.100	1.000	0.214	0.226	0.376	0.275	0.149	0.86	May 31	10.20	0.110	0.064	1986	
1987	0.530	0.443	0.421	2.380	4.380	0.629	0.242	0.124	0.059	0.082	0.120	0.044	0.79	May 01	11.80	0.042	0.012	1987	
1988	0.007	0.007	0.028	0.524	1.400	2.530	0.365	0.135	0.178	0.211	0.179	0.091	0.47	Jun 09	11.50	0.079	0.005	1988	
1989	0.059	0.032	0.034	0.878	2.530	0.507	0.499	0.640	0.231	0.188	0.391	0.355	0.53	May 01	5.04	0.179	0.031	1989	
1990	0.213	0.090	0.115	1.270	3.010	3.010	1.380	0.166	0.056	0.158	0.251	0.179	0.83	Jun 13	10.10	0.043	0.043	1990	
1991	0.078	0.135	0.092	2.790	4.780	5.470	1.310	0.117	0.066	0.212	0.341	0.210	1.30	Jun 08	14.40	0.054	0.054	1991	
1992	0.177	0.123	0.576	2.130	1.570	0.655	0.258	0.033	0.214	0.305	0.416	0.133	0.55	Apr 03	5.84	0.020	0.020	1992	
1993	0.080	0.091	0.124	1.010	5.110	4.740	2.040	1.230	0.323	0.172	0.375	0.194	1.30	Jun 28	28.80	0.162	0.062	1993	
1994	0.152	0.119	0.139	2.950	1.820	0.588	1.850	0.188	0.167	0.489	0.299	0.183	0.75	Jul 03	14.40	0.114	0.110	1994	
1995	0.073	0.081	0.108	1.030	3.000	0.847	0.532	0.605	0.252	0.395	0.207	0.211	0.62	May 14	6.19	0.157	0.064	1995	
1996	0.365	0.212	0.217	3.220	3.240	2.910	0.913	0.319	1.210	0.437	0.526	0.258	1.15	Apr 17	7.81	0.208	0.175	1996	
1997	0.198	0.249	0.250	2.110	6.560	2.830	0.716	0.199	0.172	0.543	0.368	0.182	1.20	May 15	12.40	0.092	0.092	1997	
1998	0.109	0.103	0.143	0.197	2.090	0.826	1.150	0.123	0.074	0.607	0.360	0.168	0.50	Jul 02	5.14	0.060	0.060	1998	
1999	0.127	0.106	0.132	1.030	3.940	3.940	1.300	0.288	0.340	0.241	0.181	0.156	0.98	Jun 09	10.30	0.177	0.098	1999	
2000	0.091	0.065	0.057	0.655	1.870	2.950	2.080	0.441	0.692	1.090	0.729	0.214	0.91	Jul 05	9.86	0.231	0.056	2000	
2001	0.094	0.061	0.054	0.341	2.720	1.710	0.383	0.213	0.082	0.117	0.126	0.103	0.50	Jun 01	4.08	0.063	0.051	2001	
2002	0.117	0.092	0.069	0.515	5.370	3.030	0.699	0.161	0.366	0.312	0.136	0.120	0.92	May 22	12.10	0.077	0.058	2002	
2003	0.045	0.035	0.042	0.408	1.390	0.885	0.933	0.282	0.594	0.868	0.693	0.288	0.54	May 25	3.42	0.140	0.020	2003	
2004	0.158	0.123	0.147	1.270	2.060	1.740	2.570	0.915	2.120	1.430	2.590	0.548	1.31	Nov 09	8.30	0.401	0.108	2004	
2005	0.309	0.253	0.417	2.680	2.610	1.890	1.350	1.420	1.170	1.950	0.778	0.351	1.27	Apr 27	9.01	0.526	0.205	2005	
2006	0.174	0.103	0.086	1.020														2006	
2007																		2007	
2008																		2008	
2009																		2009	
2010																		2010	
2011																		2011	
Avg.	0.170	0.132	0.156	1.315	3.496	2.268	1.240	0.435	0.489	0.511	0.440	0.203	0.909	0.906	11.69	0.166	0.078	m <sup>3</sup> /s	
S. D.	0.149	0.117	0.138	1.107	1.920	1.472	0.992	0.458	0.523	0.451	0.471	0.137	0.401		7.04	0.144	0.069	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.146	0.116	0.151	1.240	3.145	2.168	1.193	0.379	0.458	0.522	0.449	0.193	0.851	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	3	2	3	22	58	39	22	7	8	10	8	4	185	mm	10-Year	20.7	0.042	0.017	m <sup>3</sup> /s



**MACIVOR CREEK NEAR THE MOUTH 08JA016**

Station Longitude Latitude: -126.360000 53.800560

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 55.68 km <sup>2</sup>		Median Elevation = 1533 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				
1976																			1976		
1977	0.193	0.171	0.152	0.506	1.380	3.410	1.910	0.799	1.020	0.867	0.666	0.249							1977		
1978	0.130	0.090	0.070	0.266	2.220	4.810	1.710	1.130	0.706	0.950	0.456	0.186	0.929	Jun 18	7.45		0.476	0.146	1978		
1979	0.077	0.068	0.111	0.231	3.520	6.140	4.390	1.050	0.398	0.671	0.580	0.112	1.043	Jun 04	11.20		0.516	0.059	1979		
1980	0.051	0.043	0.046	0.188	1.590	3.790	1.260	0.624	0.780	0.266	0.111	0.393	1.404	Jun 02	10.80		0.237	0.063	1980		
1981	0.546	0.131	0.131							0.945	1.230	2.030	1.049	May 31	12.20		0.541	0.038	1981		
1982	0.082	0.066	0.065	0.069						0.442	0.223	0.148					0.334	0.055	1982		
1983	0.094	0.065	0.061	0.208	2.310	2.590	1.440	0.511	0.499	0.344	0.200	0.093	0.705	May 30	7.38		0.280	0.051	1983		
1984	0.148	0.101	0.100	0.205	1.140	3.300	2.510	1.240	1.080	0.769	0.172	0.140	0.910	Jun 14	6.98		0.585	0.076	1984		
1985	0.116	0.088	0.070	0.491	3.340	3.830	2.480	0.665	0.503	0.525	0.111	0.053	1.028	May 26	8.00		0.286	0.048	1985		
1986	0.059	0.055	0.083	0.084	0.826	3.760	2.100	0.635	0.327	0.365	0.274	0.145	0.727	Jun 15	9.44		0.260	0.050	1986		
1987								1.100	0.467	0.390	0.383	0.177					0.378		1987		
1988	0.083	0.073	0.107	0.454	1.740	3.610	2.380	1.850	1.260	0.740	0.420	0.199	1.078	Jun 06	7.00		1.080	0.071	1988		
1989	0.074	0.059	0.060	0.217	2.820	3.080	1.400	0.918	0.341	0.472	0.371	0.472	0.305	0.848	Jun 02	6.87		0.310	0.057	1989	
1990	0.216	0.094	0.089	0.343	2.490	3.450	1.640	0.586	0.183	0.239	0.141	0.116	0.802	Jun 03	5.91		0.150	0.081	1990		
1991	0.087	0.085	0.075	0.254	2.240	3.790	1.930	0.780	0.267	0.497	0.315	0.205	0.881	Jun 10	6.68		0.240	0.070	1991		
1992	0.139	0.123	0.210	1.160	2.330	3.580	0.928	0.262	0.557	0.780	0.389	0.173	0.884	Jun 13	9.56		0.166	0.109	1992		
1993	0.153	0.136	0.074	0.179	3.850	2.580	1.210	1.060	0.420	0.355	0.458	0.201	0.896	Jun 28	9.82		0.345	0.065	1993		
1994	0.145	0.120	0.133	0.733	2.270	2.550	1.900	0.499	0.367	0.526	0.215	0.127	0.802	Jul 02	9.40		0.226	0.109	1994		
1995	0.087	0.073	0.072	0.201	3.530	2.990	1.390	0.571	0.248	0.221	0.137	0.137	0.810	May 16	7.22		0.181	0.064	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		
Avg.	0.138	0.091	0.095	0.341	2.350	3.579	1.911	0.840	0.556	0.540	0.366	0.273	0.925	0.925		8.49	0.366	0.071	m <sup>3</sup> /s		
S. D.	0.112	0.034	0.041	0.271	0.892	0.895	0.810	0.375	0.304	0.240	0.265	0.432	0.170			1.87	0.220	0.027	m <sup>3</sup> /s		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.145	0.091	0.095	0.354	2.407	3.259	1.776	0.821	0.507	0.469	0.279	0.159	0.864	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	7	4	5	16	116	152	85	40	24	23	13	8	490	mm	10-Year	11.0	0.169	0.044	m <sup>3</sup> /s		



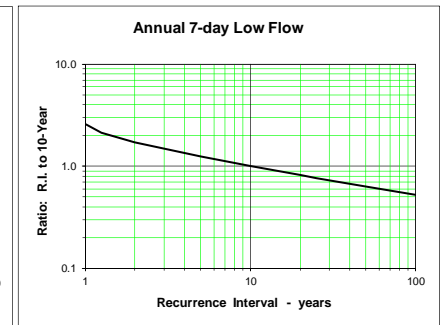
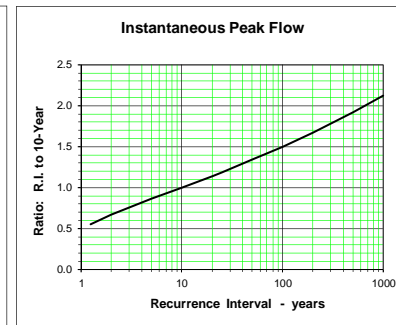
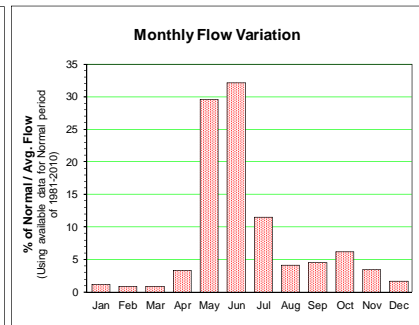
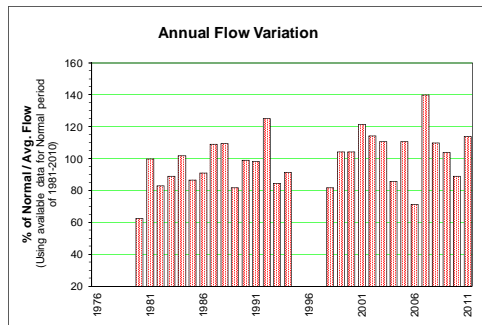




**DRIFTWOOD RIVER ABOVE KASTBERG CREEK 08JD006**

Station Longitude Latitude: -126.642532 55.969078

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 400.45 km <sup>2</sup>		Median Elevation = 1115 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				
1976																			1976		
1977																			1977		
1978																			1978		
1979																			1979		
1980	0.62	0.45	0.47	1.80	13.60	14.90	4.36	2.44	5.36				1.83	4.95					1980		
1981	2.91	1.82	1.53	2.23	37.80	29.40	10.60	2.87	1.72	6.33	8.57	4.52	5.29		May 17	138.93		2.01	0.426	1981	
1982	0.50	0.25	0.43	0.53	15.60	37.30	11.90	2.91	3.38	6.10	3.12	1.74	6.99		Jun 03	61.90		1.79	0.239	1982	
1983	1.17	0.95	0.86	2.21	28.70	22.60	14.70	5.35	5.11	3.92	3.03	1.19	7.53		Jun 02	65.50		3.44	0.830	1983	
1984	0.92	0.77	0.78	2.31	22.10	35.30	16.80	6.34	4.51	10.90	1.40	0.83	8.60		Jun 13	56.70		3.30	0.706	1984	
1985	0.77	0.76	0.61	1.03	26.20	33.60	13.80	3.19	3.54	2.28	1.04	0.75	7.32		Jun 04	71.10		2.05	0.545	1985	
1986	0.70	0.53	0.58	0.94	19.10	36.70	14.00	2.65	2.85	8.27	3.89	1.69	7.68		Jun 07	64.20		1.18	0.449	1986	
1987	1.28	1.04	0.90	2.23	28.10	37.20	12.00	3.04	8.03	6.28	8.05	2.15	9.21		Jun 21	66.00		2.34	0.831	1987	
1988	1.38	0.90	0.82	3.93	36.80	30.70	13.30	5.45	3.83	7.60	3.73	1.87	9.22		May 14	85.30		1.51	0.666	1988	
1989	1.31	1.01	0.79	3.60	31.90	22.20	6.70	2.87	1.72	3.90	3.80	2.51	6.90		Jun 03	55.60		1.20	0.730	1989	
1990	2.14	1.53	1.41	4.50	34.30	36.40	10.60	2.93	1.52	1.80	1.53	1.31	8.36		Jun 01	90.10		1.29	1.090	1990	
1991	0.96	0.90	0.63	4.26	35.20	25.00	7.82	4.39	4.15	10.80	2.92	1.68	8.28		May 20	50.00		2.37	0.579	1991	
1992	1.41	1.21	2.13	9.46	28.20	52.70	10.20	2.17	5.06	8.86	3.77	1.77	10.55		Jun 01	97.40		1.20	1.074	1992	
1993	1.00	1.32	1.03	6.21	40.50	18.20	6.32	3.83	1.55	1.80	2.14	1.33	7.15		May 21	93.20		1.14	0.870	1993	
1994	0.85	0.65	0.61	5.17	32.10	23.50	9.10	3.74	5.54	6.06	3.04	1.86	7.73		May 22	50.60		1.96	0.579	1994	
1995	1.15	1.14	1.02	3.95				3.64													1995
1996																					1996
1997								3.64	3.76	7.97	4.54	2.13							2.31		1997
1998	1.16	0.90	1.00	2.92	39.60	13.10	3.97	3.87	3.60	6.82	3.23	1.91	6.90		May 25	65.30		1.84	0.900	1998	
1999	1.26	1.03	1.00	4.38	22.00	39.00	13.40	4.29	3.75	7.56	4.95	2.75	8.80		Jun 16	71.60		2.73	0.907	1999	
2000	1.53	0.99	0.89	2.76	21.50	37.70	13.30	6.50	6.91	6.70	4.60	2.09	8.79		Jun 06	75.30		3.89	0.848	2000	
2001	1.44	1.10	0.92	2.20	18.50	47.50	19.90	8.99	9.23	6.16	4.93	2.08	10.26		Jun 10	77.60		4.73	0.884	2001	
2002	1.35	1.13	0.75	1.51	23.40	48.40	14.90	4.64	8.60	5.95	3.02	1.85	9.63		Jun 16	78.40		2.79	0.670	2002	
2003	2.03	1.33	0.99	4.20	29.30	31.80	14.00	2.98	11.00	9.12	3.59	1.52	9.35		May 25	81.70		1.98	0.750	2003	
2004	0.89	0.81	0.78	4.89	31.10	19.50	7.04	3.86	6.27	5.42	3.70	2.52	7.25		May 20	52.20		2.35	0.725	2004	
2005	1.36	1.40	1.77	7.17	39.60	29.20	8.20	5.26	4.03	6.55	5.01	2.01	9.34		May 16	63.50		2.66	1.173	2005	
2006	1.50	1.09	0.92	2.39	28.00	25.10	6.30	2.11	1.31	1.35	1.07	0.89	6.03		Jun 02	87.90		1.03	0.743	2006	
2007	0.70	0.71	0.72	2.79	25.00	61.80	20.20	6.90	6.16	10.80	3.99	1.63	11.80		Jun 06	151.00		3.72	0.577	2007	
2008	1.10	0.89	0.70	1.02	40.30	32.90	12.60	6.62	3.19	3.72	5.70	2.30	9.28		May 30	112.00		2.32	0.580	2008	
2009	1.17	0.97	0.67	1.39	27.70	43.20	13.20	4.09	6.59	2.56	2.30	1.33	8.78		Jun 06	89.00		3.27	0.591	2009	
2010	1.14	0.95	1.00	6.74	31.80	23.40	5.13	2.06	3.55	9.66	3.17	1.28	7.52		May 19	65.80		1.13	0.781	2010	
2011	0.99	0.88	0.68	0.78	29.40	40.40	12.00	6.03	8.87	9.26	3.76	2.08	9.62		Jun 03	82.00		3.27	0.616	2011	
Avg.	1.22	0.98	0.91	3.32	28.88	32.71	11.25	4.18	4.82	6.29	3.66	1.93	8.36	8.37		78.84		2.28	0.745	m <sup>3</sup> /s	
S. D.	0.49	0.32	0.37	2.12	7.46	11.40	4.25	1.67	2.50	2.78	1.71	0.89	1.41			23.78		0.95	0.212	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1.25	1.00	0.94	3.46	29.42	33.09	11.48	4.18	4.66	6.19	3.54	1.73	8.43	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8	6	6	22	197	214	77	28	30	41	23	12	664	mm	10-Year	109.1		1.214	0.438	m <sup>3</sup> /s	

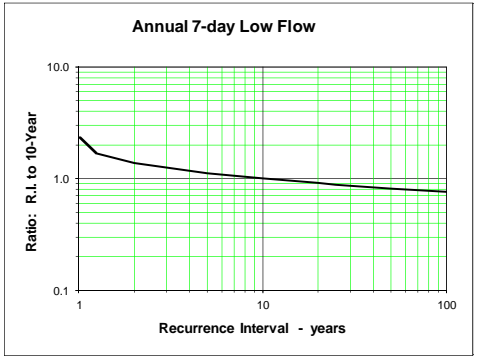
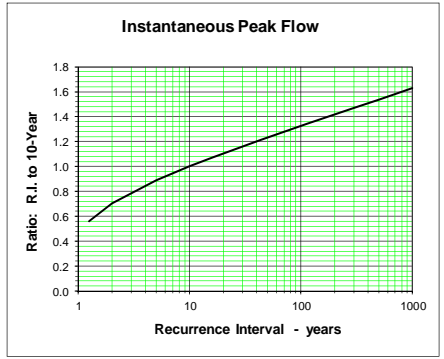
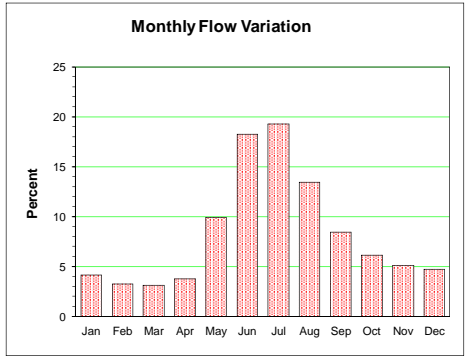
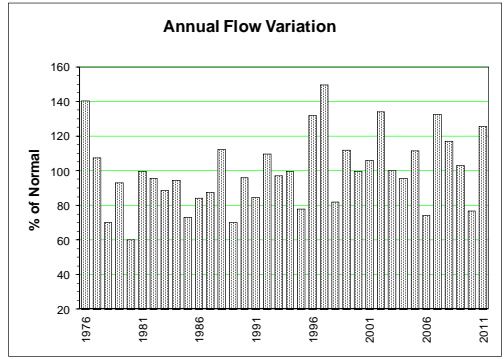




**STUART RIVER NEAR FORT ST. JAMES 08JE001**

Station Longitude Latitude: -124.271149 54.416630

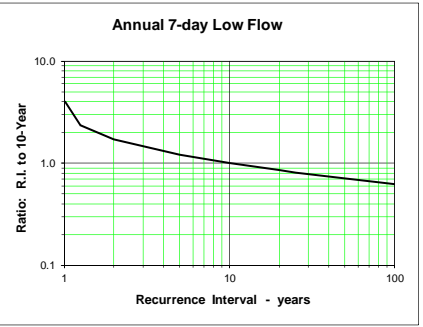
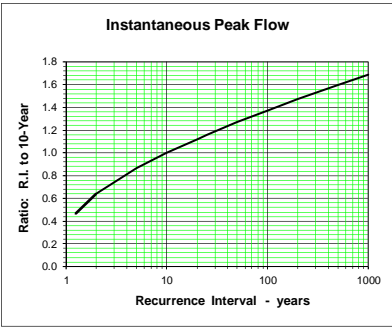
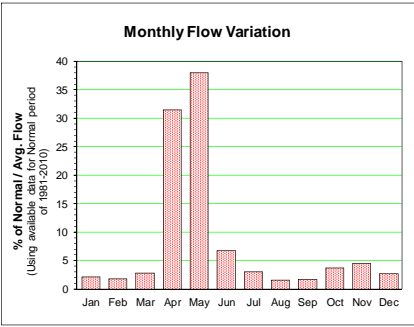
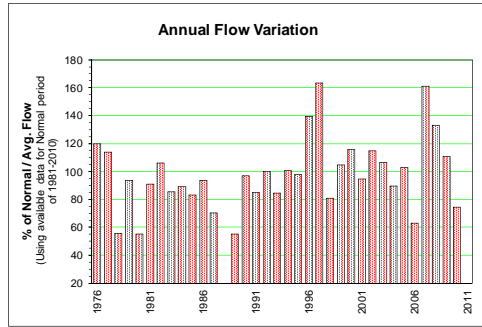
Monthly and Annual Discharge in m <sup>3</sup> /s													Drainage Area = 14234.66 km <sup>2</sup>		Median Elevation = 900 m		Instantaneous Peak Flow		7-Day Low Flow	
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year		
1976	61.4	51.9	43.9	56.0	210.0	406.0	427.0	326.0	223.0	152.0	114.0	93.7	180.9	Jun 28	462.6	192.86	42.07	1976		
1977	72.7	58.4	49.1	65.7	190.0	301.0	288.0	212.0	144.0	110.0	90.9	72.5	138.4	Jun 20	322.8	128.29	47.30	1977		
1978	56.1	44.0	35.2	40.3	92.3	175.0	197.0	138.0	95.4	70.0	67.6	67.5	90.2	Jul 01	214.9	79.11	33.96	1978		
1979	61.9	52.8	44.0	43.6	136.0	278.0	297.0	201.0	126.0	87.1	63.2	44.4	120.0	Jul 05	330.0	107.57	39.41	1979		
1980	39.2	32.7	29.7	30.9	74.1	150.0	156.0	117.0	83.8	66.9	69.6	78.3	77.5	Jul 05	171.7	75.24	28.17	1980		
1981	80.4	71.5	58.7	58.3	142.0	325.0	314.0	197.0	118.0	75.8	54.3	42.7	128.5	Jun 26	374.2	96.81	41.84	1981		
1982	39.4	37.5	35.9	34.3	98.5	266.0	320.0	233.0	152.0	104.0	80.6	68.2	123.0	Jul 03	345.4	130.71	33.53	1982		
1983	56.5	49.0	43.3	47.7	115.0	192.0	233.0	220.0	154.0	108.0	82.3	64.5	114.3	Jul 26	256.0	133.57	40.86	1983		
1984	50.8	42.6	39.2	51.8	112.0	238.0	287.0	216.0	146.0	108.0	91.0	74.0	121.7	Jul 07	307.4	125.57	37.94	1984		
1985	55.5	46.0	39.7	42.6	78.8	185.0	222.0	166.0	109.0	76.9	57.8	45.5	94.1	Jul 09	237.5	93.74	38.16	1985		
1986	37.7	32.2	31.8	41.1	83.1	206.0	286.0	211.0	129.0	91.5	77.5	70.3	108.7	Jul 15	305.3	109.14	30.13	1986		
1987	60.5	50.9	46.6	56.8	141.0	254.0	262.0	183.0	103.0	72.4	60.8	57.8	112.8	Jul 01	288.0	86.77	44.53	1987		
1988	47.2	44.3	45.6	54.9	166.0	386.0	369.0	238.0	144.0	95.1	75.6	68.5	144.8	Jun 27	441.0	114.14	42.81	1988		
1989	55.4	44.4	37.8	41.1	127.0	214.0	195.0	137.0	85.9	52.8	42.6	46.3	90.3	Jun 19	241.0	70.56	34.07	1989		
1990	52.7	51.4	49.0	64.3	144.0	291.0	314.0	208.0	127.0	80.6	54.5	42.7	123.7	Jun 22	361.0	104.37	39.16	1990		
1991	36.9	36.9	34.5	46.5	150.0	252.0	238.0	164.0	108.0	76.8	77.8	81.2	109.0	Jul 02	281.0	93.06	33.36	1991		
1992	78.1	72.4	67.3	112.0	232.0	317.0	295.0	183.0	108.0	78.9	78.8	71.9	141.4	Jul 02	345.0	91.96	64.30	1992		
1993	61.1	49.3	40.0	53.2	137.0	275.0	268.0	207.0	154.0	106.0	80.4	63.0	124.9	Jun 19	304.0	133.43	37.97	1993		
1994	56.0	50.6	48.5	80.6	193.0	299.0	278.0	189.0	122.0	86.1	71.8	60.3	128.4	Jun 26	324.0	104.56	47.66	1994		
1995	56.9	48.0	43.8	62.7	147.0	224.0	194.0	133.0	96.2	73.0	62.4	60.1	100.4	Jun 25	238.0	85.74	43.30	1995		
1996	58.3	53.0	49.7	84.4	207.0	359.0	390.0	288.0	189.0	133.0	114.0	107.0	169.8	Jul 05	424.0	161.14	48.31	1996		
1997	89.2	70.0	58.6	75.7	290.0	516.0	433.0	263.0	161.0	117.0	117.0	112.0	192.6	Jun 18	549.0	136.71	56.23	1997		
1998	94.9	77.4	62.9	63.7	142.0	238.0	204.0	130.0	80.0	60.2	58.3	54.3	105.7	Jun 19	251.0	65.61	52.81	1998		
1999	53.5	49.2	43.2	55.0	174.0	341.0	366.0	244.0	155.0	102.0	75.8	65.0	144.3	Jul 04	410.0	131.00	41.33	1999		
2000	58.7	46.7	40.2	50.6	125.0	242.0	280.0	211.0	145.0	108.0	119.0	113.0	128.6	Jun 30	308.0	127.57	39.51	2000		
2001	90.8	73.6	57.9	54.0	102.0	214.0	306.0	244.0	168.0	123.0	104.0	97.5	136.8	Jul 18	323.0	133.00	50.54	2001		
2002	84.3	67.2	63.6	63.6	174.0	418.0	461.0	286.0	169.0	119.0	90.3	76.2	172.7	Jul 01	515.0	143.00	53.29	2002		
2003	64.0	58.0	52.9	62.1	140.0	251.0	270.0	201.0	132.0	104.0	107.0	102.0	129.1	Jul 04	288.0	114.86	51.56	2003		
2004	81.9	65.9	55.5	67.8	146.0	232.0	224.0	168.0	122.0	104.0	107.0	104.0	123.4	Jul 06	252.0	111.86	53.49	2004		
2005	78.1	85.9	68.9	90.5	197.0	295.0	273.0	207.0	149.0	106.0	91.4	81.2	143.9	Jun 19	316.0	129.43	66.59	2005		
2006	72.1	61.6	52.0	60.8	101.0	209.0	216.0	145.0	86.0	54.1	44.3	40.6	95.4	Jun 28	248.0	71.46	39.87	2006		
2007	39.0	37.4	36.5	51.9	184.0	368.0	397.0	289.0	204.0	151.0	146.0	134.0	170.7	Jun 30	439.0	177.43	35.84	2007		
2008	107.0	77.9	61.5	55.3	162.0	387.0	335.0	219.0	147.0	103.0	81.2	71.3	150.8	Jun 22	424.0	126.00	52.86	2008		
2009	62.6	53.8	46.6	50.4	185.0	333.0	322.0	211.0	124.0	104.0	64.8	53.7	132.5	Jun 26	370.0	102.47	42.01	2009		
2010	47.1	41.8	39.6	51.2	136.0	253.0	234.0	149.0	84.9	54.6	48.4	44.8	99.1	Jun 30	289.0	67.99	39.14	2010		
2011	43.0	42.0	41.4	41.1	141.0	400.0	424.0	301.0	191.0	129.0	97.6	82.6	161.9	Jul 03	483.0	160.14	39.21	2011		
Avg.	62.25	53.56	46.83	57.29	149.3	285.8	293.75	206.53	134.31	94.92	81.10	72.57	128.62		334	114.36	43.42	m <sup>3</sup> /s		
S. D.	17.53	13.69	9.94	16.24	45.85	80.91	76.12	51.70	35.35	25.54	23.82	23.09	27.48		88.44	30.69	8.84	m <sup>3</sup> /s		
Normal	63.55	54.88	48.09	59.50	151.05	286.00	292.87	204.67	132.40	93.41	80.56	72.45	128.71		m <sup>3</sup> /s					
Normal	12	9	9	11	28	52	55	39	24	18	15	14	285	10-Year	455.51	80.66	29.10	m <sup>3</sup> /s		



**TSILCOH RIVER NEAR THE MOUTH 08JE004**

Station Longitude Latitude: -124.246124 54.610115

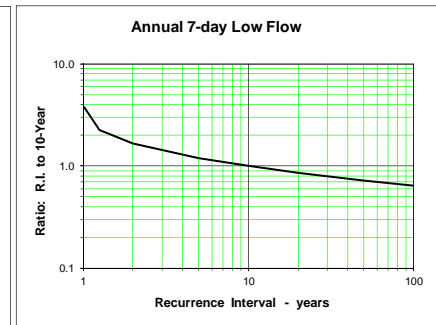
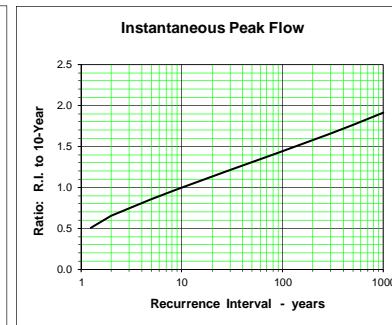
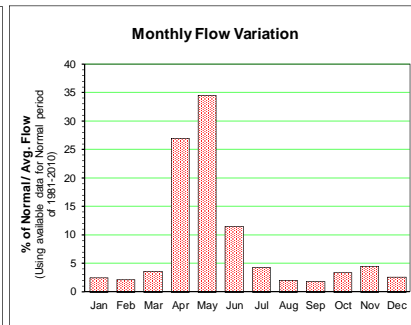
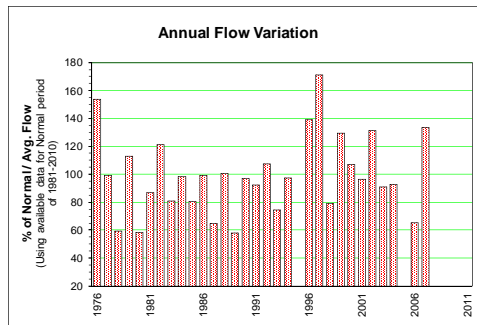
Year	Monthly and Annual Discharge in m <sup>3</sup> /s					Drainage Area = 437.90 km <sup>2</sup>					Median Elevation = 835 m					Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual			
1976	0.581	0.559	0.485	6.43	17.30	5.38	0.898	1.050	0.675	0.95	0.89	0.64	3.00	May 03	44.02	0.600	0.476	1976		
1977	0.618	0.722	0.802	11.20	10.40	3.52	1.430	0.507	0.901	1.80	1.46	0.80	2.85	Apr 28	42.80	0.407	0.407	1977		
1978	0.616	0.528	0.514	4.84	5.43	1.25	0.350	0.272	0.378	0.66	0.99	0.84	1.39	Apr 29	17.00	0.240	0.240	1978		
1979	0.499	0.443	0.702	2.01	18.50	2.59	0.893	0.538	0.368	0.51	0.45	0.29	2.34	May 02	43.00	0.320	0.235	1979		
1980	0.372	0.347	0.363	3.90	4.30	1.01	0.738	0.353	0.724	0.73	2.38	1.34	1.38	Apr 26	12.30	0.318	0.317	1980		
1981	0.807	0.737	0.706	7.55	13.40	1.77	0.372	0.197	0.214	0.41	0.56	0.40	2.27	May 03	30.80	0.164	0.164	1981		
1982	0.275	0.194	0.270	1.50	21.90	2.03	0.881	0.487	0.635	0.96	1.36	1.00	2.65	May 12	39.80	0.309	0.139	1982		
1983	0.554	0.443	0.565	9.11	4.54	0.69	5.340	1.160	0.642	0.95	1.08	0.58	2.14	Apr 26	22.50	0.408	0.408	1983		
1984	0.509	0.627	0.566	6.98	10.30	3.45	1.050	0.295	0.424	1.10	0.80	0.66	2.23	Apr 18	16.57	0.259	0.259	1984		
1985	0.506	0.506	0.592	6.89	11.10	1.60	0.412	0.222	0.788	1.28	0.54	0.44	2.08	May 07	20.90	0.211	0.211	1985		
1986	0.431	0.376	1.110	6.50	13.50	2.74	0.814	0.310	0.307	0.76	0.73	0.36	2.34	May 23	21.50	0.243	0.243	1986		
1987	0.363	0.370	0.504	6.96	9.23	1.06	0.332	0.213	0.268	0.37	0.75	0.64	1.76	May 04	28.10	0.178	0.178	1987		
1988	0.389	0.388	0.602	12.30	15.50	2.42	0.545							Apr 30	43.60			1988		
1989	0.410	0.409	0.426	6.47	6.15	0.47	0.250	0.200	0.219	0.35	0.55	0.68	1.38	Apr 30	20.80	0.169	0.169	1989		
1990	0.945	0.635	0.673	11.60	8.13	4.19	0.836	0.204	0.213	0.60	0.61	0.50	2.42	Apr 26	24.50	0.154	0.154	1990		
1991	0.483	0.624	0.823	10.20	8.17	1.38	0.751	0.274	0.370	0.66	0.85	0.98	2.13	Apr 27	32.80	0.187	0.187	1991		
1992	0.952	1.250	3.290	14.20	4.98	0.86	0.310	0.161	0.356	1.24	1.87	0.69	2.50	Apr 21	27.80	0.125	0.125	1992		
1993	0.351	0.380	0.529	8.91	7.11	2.61	2.170	0.872	0.459	0.52	0.88	0.80	2.12	Apr 27	16.60	0.386	0.270	1993		
1994	0.665	0.660	1.070	15.90	7.73	1.21	0.412	0.212	0.370	0.77	0.76	0.54	2.52	Apr 24	37.20	0.182	0.182	1994		
1995	0.463	0.567	0.935	15.70	6.48	0.69	0.560	0.563	0.364	1.18	1.20	0.71	2.44	Apr 28	32.21	0.303	0.303	1995		
1996	0.746	0.770	1.070	18.00	11.30	3.32	1.030	0.416	0.889	1.58	1.86	1.08	3.49	Apr 26	32.50	0.382	0.382	1996		
1997	0.817	0.875	0.876	13.80	22.00	4.10	1.370	0.530	0.545	1.23	1.75	0.98	4.09	Apr 27	41.20	0.445	0.445	1997		
1998	0.814	0.795	1.230	8.92	6.75	0.93	0.487	0.304	0.348	1.59	1.27	0.85	2.02	Apr 26	27.10	0.246	0.246	1998		
1999	0.561	0.678	0.741	12.40	11.10	2.49	0.526	0.396	0.471	0.57	0.66	0.77	2.61	Apr 25	40.60	0.283	0.283	1999		
2000	0.713	0.572	0.572	7.85	11.10	2.02	0.759	0.701	1.180	3.35	5.20	0.74	2.90	May 02	24.75	0.465	0.403	2000		
2001	0.571	0.488	0.442	6.75	9.39	2.47	1.060	0.630	0.613	1.05	3.10	1.75	2.37	Apr 30	21.30	0.378	0.378	2001		
2002	0.872	0.661	0.469	4.23	20.20	4.37	0.905	0.349	0.476	0.58	0.53	0.56	2.87	May 03	40.20	0.291	0.291	2002		
2003	0.575	0.416	0.622	14.90	7.15	1.74	0.712	0.391	0.609	1.45	2.31	1.18	2.67	Apr 27	32.10	0.325	0.253	2003		
2004	0.692	0.561	1.020	10.60	6.20	1.63	0.721	0.671	0.721	1.42	1.62	1.17	2.25	Apr 15	19.20	0.340	0.340	2004		
2005	0.773	0.782	1.630	11.40	6.40	1.57	1.860	0.868	1.180	1.94	1.62	0.89	2.58	Apr 25	22.30	0.583	0.583	2005		
2006	0.730	0.584	0.677	6.12	7.20	1.63	0.342	0.210	0.184	0.28	0.51	0.44	1.58	Apr 29	15.00	0.130	0.130	2006		
2007	0.507	0.556	0.712	15.50	18.40	2.68	0.656	0.463	0.558	2.74	3.91	1.51	4.03	Apr 29	35.20	0.328	0.328	2007		
2008	0.971	0.977	1.040	2.95	24.60	1.85	0.517	1.520	0.856	1.61	1.63	1.11	3.33	May 05	49.80	0.404	0.404	2008		
2009	0.835	0.710	0.638	5.55	19.00	1.69	0.921	0.447	0.445	0.61	1.19	0.93	2.77	May 03	43.00	0.360	0.360	2009		
2010	0.795	0.776	0.838	7.88	6.79	1.92	0.484	0.336	0.501	0.77	0.72	0.55	1.86	Apr 23	18.50	0.302	0.302	2010		
2011																			2011	
Avg.	0.622	0.599	0.803	9.03	11.19	2.15	0.906	0.480	0.534	1.08	1.37	0.80	2.45	2.45	29.64	0.307	0.288	m <sup>3</sup> /s		
S. D.	0.19	0.20	0.51	4.25	5.72	1.17	0.88	0.31	0.26	0.67	1.03	0.33	0.65		10.34	0.118	0.110	m <sup>3</sup> /s		
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.636	0.612	0.841	9.59	11.19	2.05	0.913	0.469	0.521	1.10	1.39	0.803	2.50	m <sup>3</sup> /s						
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	4	3	5	57	68	12	6	3	3	7	8	5	180	mm	10-Year	44.1	0.165	0.157	m <sup>3</sup> /s	



**SALMON RIVER NEAR PRINCE GEORGE 08KC001**

Station Longitude Latitude: -122.679100 54.096458

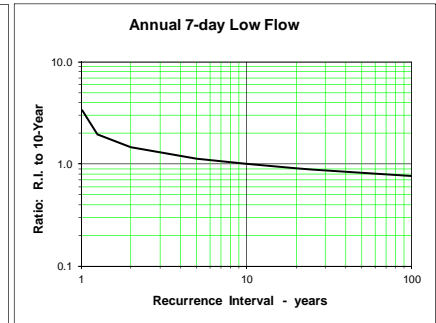
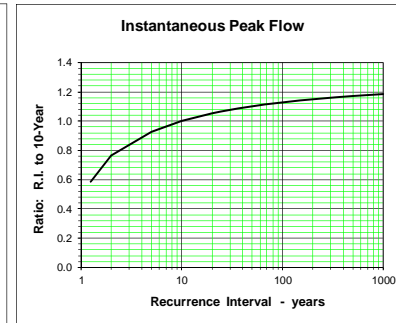
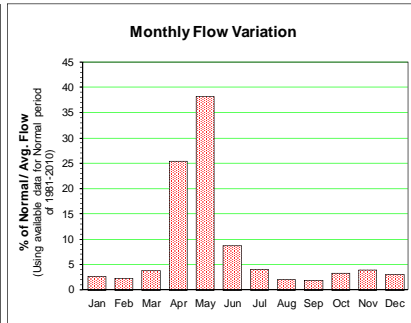
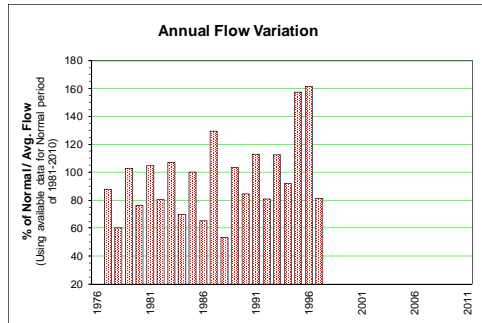
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976	8.99	9.34	9.49	82.50	222.00	97.30	23.10	14.90	10.40	9.55	9.21	8.56	42.21	May 06	337.74	8.57	7.71	1976	
1977	9.09	10.50	10.60	108.00	93.20	31.90	15.50	8.01	8.88	13.40	10.50	7.36	27.24	May 01	195.64	5.67	5.67	1977	
1978	5.92	6.09	6.62	53.40	67.20	18.80	6.04	3.41	4.86	6.03	9.21	7.94	16.32	Apr 30	132.83	3.10	3.10	1978	
1979	5.38	4.00	7.89	33.20	208.00	71.90	15.00	5.75	4.34	5.07	4.73	3.74	30.99	May 05	286.00	4.09	3.09	1979	
1980	3.82	3.73	4.46	45.00	42.70	11.70	8.11	4.37	12.10	9.46	20.70	26.80	16.08	Apr 27	97.80	3.53	3.53	1980	
1981	23.40	14.70	18.00	59.70	105.00	31.50	9.59	4.41	3.25	4.53	6.45	4.84	23.84	Apr 28	175.00	3.10	3.10	1981	
1982	3.16	4.30	4.83	16.50	222.00	62.40	21.90	12.20	10.40	11.30	15.10	11.30	33.26	May 19	328.00	7.38	2.86	1982	
1983	9.13	7.24	5.65	81.30	61.30	21.70	36.40	12.20	5.91	6.68	12.40	6.71	22.25	Apr 27	158.00	5.50	4.14	1983	
1984	7.02	7.77	13.80	80.80	101.00	51.00	18.00	5.05	5.89	12.80	10.80	9.75	26.97	May 21	144.00	4.19	4.19	1984	
1985	6.16	5.88	6.14	54.50	103.00	32.20	5.08	3.16	5.72	25.30	12.90	4.08	22.10	May 06	142.00	2.62	2.62	1985	
1986	5.45	5.78	8.84	80.70	131.00	53.40	15.10	5.95	4.29	5.83	5.41	4.97	27.31	Apr 23	173.00	3.75	3.75	1986	
1987	5.72	6.60	9.59	70.50	73.50	19.00	5.46	3.05	2.73	3.63	7.36	6.59	17.83	May 06	142.00	2.32	2.32	1987	
1988	5.42	4.82	6.40	92.10	139.00	45.60	9.95	5.03	3.51	4.78	8.51	5.88	27.60	Apr 26	215.00	3.16	3.16	1988	
1989	4.76	4.11	4.99	57.40	72.60	12.90	5.28	3.42	2.57	3.77	6.79	12.00	15.94	May 01	133.00	2.26	2.26	1989	
1990	16.40	8.54	8.27	104.00	91.20	51.20	12.40	3.45	2.78	5.85	8.50	6.68	26.59	Apr 25	201.00	2.36	2.36	1990	
1991	5.15	9.40	10.50	101.00	101.00	24.90	10.60	3.29	4.13	6.15	12.40	16.00	25.40	Apr 27	205.00	2.45	2.45	1991	
1992	15.20	15.20	49.50	115.00	72.60	23.70	5.99	2.34	4.11	16.90	27.00	7.36	29.51	Apr 23	155.00	1.53	1.53	1992	
1993	4.34	4.97	6.60	81.60	62.60	22.30	24.40	11.60	5.00	4.93	9.16	8.37	20.52	Apr 29	124.00	4.20	4.01	1993	
1994	7.01	4.55	11.20	136.00	99.40	23.50	8.98	4.01	5.25	8.11	8.74	4.16	26.74	Apr 23	209.00	2.81	2.81	1994	
1995	3.14	7.14	16.20	121.00	94.60	18.10								Apr 27	173.00	9.22	2.66	1995	
1996	11.30	9.36	20.10	155.00	121.00	67.40	19.40	8.58	8.77	13.20	14.60	9.96	38.13	Apr 27	257.42	6.73	6.73	1996	
1997	9.42	10.30	15.80	123.00	246.00	87.10	21.00	8.65	5.40	13.90	14.50	5.70	46.91	Apr 28	368.63	4.71	4.71	1997	
1998	7.06	7.97	8.41	80.20	88.80	16.40	6.63	3.59	3.42	15.90	11.50	10.50	21.74	Apr 29	212.00	2.68	2.68	1998	
1999	8.11	10.30	18.50	144.00	143.00	52.80	11.60	6.12	5.43	6.17	8.66	10.90	35.48	Apr 27	380.00	4.66	4.66	1999	
2000	9.74	6.39	6.95	69.00	99.00	35.30	15.90	7.81	13.30	28.70	53.50	7.61	29.41	Apr 30	174.00	6.48	5.50	2000	
2001	4.56	4.20	6.51	55.80	105.00	42.10	21.50	14.70	8.98	12.10	30.60	10.80	26.50	May 01	173.00	7.66	3.90	2001	
2002	10.60	9.75	7.88	64.10	197.00	78.60	19.20	7.85	7.99	9.23	9.93	9.07	36.10	May 02	280.00	6.39	6.20	2002	
2003	7.90	6.86	9.70	106.00	80.50	30.90	12.10	5.08	5.91	14.10	12.30	8.30	24.97	Apr 27	188.00	4.25	4.25	2003	
2004	5.20	5.32	14.30	92.70	63.80	25.00	10.10	7.53	11.00	15.60	40.30	16.50	25.54	Apr 14	151.00	5.76	4.34	2004	
2005								10.40	9.37	17.00	12.80	7.24				8.61	6.57	2005	
2006	8.07	8.63	13.60	79.80	65.20	18.90	4.62	3.22	2.81	3.40	3.72	3.90	17.97	Apr 14	154.00	2.64	2.64	2006	
2007	5.03	6.07	7.82	127.00	159.00	46.00	13.30	8.13	7.86	21.50	27.90	9.39	36.66	Apr 28	391.00	6.87	4.21	2007	
2008																		2008	
2009																		2009	
2010																		2010	
2011																		2011	
Avg.	7.80	7.41	11.26	86.15	113.91	39.53	13.74	6.69	6.33	10.80	14.39	8.81	27.27	28.84	208.26	4.66	3.87	m <sup>3</sup> /s	
S. D.	4.26	2.90	8.29	32.77	53.89	22.93	7.36	3.57	3.02	6.46	10.94	4.58	7.71		80.66	2.15	1.49	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	8.02	7.54	11.93	90.33	111.47	38.23	13.78	6.57	5.99	11.21	15.07	8.41	27.41	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	5	4	8	55	71	23	9	4	4	7	9	5	204	mm	10-Year	312.3	2.457	2.382	m <sup>3</sup> /s



**MUSKEG RIVER NORTH OF JOANNE LAKE 08KC003**

Station Longitude Latitude: -123.236088 54.608179

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Drainage Area = 296.86 km <sup>2</sup>		Median Elevation = 886 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				
1976																			1976		
1977	0.780	0.908	0.959	6.960	6.320	2.050	1.020	0.594	0.649	0.819	0.802	0.712	1.881	Apr 27	21.70	0.498	0.498	1977			
1978	0.605	0.580	0.602	4.100	4.550	1.250	0.413	0.382	0.563	0.592	0.911	0.876	1.287	Apr 28	8.92	0.288	0.288	1978			
1979	0.808	0.571	0.520	0.908	14.800	4.470	0.969	0.541	0.494	0.647	0.751	0.704	2.201	May 26	21.90	0.457	0.425	1979			
1980	1.390	0.877	1.120	3.870	7.410	1.960	0.410	0.290	0.288	0.429	0.775	0.780	1.636					1980			
1981	0.536	0.479	0.548	2.230	14.300	3.500	1.080	0.765	0.691	0.810	1.000	0.749	2.242	Apr 28	11.08	0.259	0.259	1981			
1982	0.605	0.553	0.707	5.710	5.280	1.170	2.640	0.896	0.662	0.757	0.941	0.712	1.725	May 18	24.80	0.538	0.464	1982			
1983	0.944	0.978	0.929	5.670	10.600	3.240	1.130	0.467	0.570	1.030	0.980	0.822	2.287	Apr 26	14.60	0.525	0.523	1983			
1984	0.592	0.603	0.632	2.530	8.200	1.450	0.449	0.309	0.624	1.050	0.893	0.520	1.494	May 10	16.90	0.417	0.417	1984			
1985	0.530	0.535	0.651	5.080	12.900	2.880	0.837	0.321	0.394	0.484	0.476	0.458	2.141	May 19	10.70	0.243	0.243	1985			
1986	0.515	0.559	0.583	4.360	7.330	0.998	0.405	0.248	0.226	0.307	0.608	0.546	1.396	May 21	24.00	0.268	0.268	1986			
1987	0.409	0.368	0.510	7.110	16.300	3.330	0.764	0.426	0.373	0.581	1.580	1.220	2.763	May 03	18.50	0.194	0.194	1987			
1988	0.817	0.507	0.445	3.000	5.640	0.583	0.278	0.296	0.276	0.393	0.554	0.854	1.141	May 14	23.40	0.333	0.308	1988			
1989	1.110	0.584	0.515	5.770	9.860	4.860	1.190	0.389	0.346	0.646	0.702	0.534	2.214	May 03	13.70	0.239	0.239	1989			
1990	0.344	0.589	0.632	5.460	8.650	1.470	0.913	0.395	0.440	0.648	0.976	1.070	1.806	Apr 25	17.10	0.312	0.312	1990			
1991	0.922	0.973	3.230	11.200	6.900	1.060	0.405	0.254	0.625	1.170	1.530	0.776	2.419	May 10	17.80	0.277	0.277	1991			
1992	0.479	0.474	0.581	5.760	5.460	1.900	1.890	0.985	0.648	0.652	1.200	0.721	1.729	Apr 21	20.00	0.222	0.222	1992			
1993	0.826	0.529	1.430	9.930	9.780	1.800	0.862	0.504	0.718	1.210	0.812	0.377	2.403	Apr 27	16.20	0.584	0.422	1993			
1994	0.273	0.449	0.766	6.720	9.220	1.260	0.754	0.710	0.507	0.930	1.030	0.888	1.967	Apr 25	21.30	0.462	0.334	1994			
1995	0.785	0.784	1.800	12.700	12.300	4.330	1.910	0.680	0.814	1.340	1.650	1.250	3.367	Apr 29	18.50	0.459	0.243	1995			
1996	1.110	1.270	1.170	11.800	14.900	4.130	1.590	0.672	0.481	1.190	1.950	1.200	3.455	Apr 25	21.60	0.621	0.621	1996			
1997	0.845	0.897	1.040	7.310	5.950	0.919	0.532	0.367	0.351	1.140	0.892	0.613	1.738	May 16	23.50	0.442	0.442	1997			
1998														Apr 25	21.44	0.282	0.282	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			
Avg.	0.725	0.670	0.922	6.104	9.364	2.315	0.973	0.500	0.511	0.801	1.001	0.780	2.061	2.062	18.46	0.377	0.347	m <sup>3</sup> /s			
S. D.	0.278	0.229	0.632	3.151	3.616	1.342	0.605	0.214	0.164	0.302	0.382	0.245	0.606		4.61	0.131	0.116	m <sup>3</sup> /s			
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.685	0.655	0.951	6.61	9.62	2.29	1.04	0.511	0.514	0.843	1.05	0.783	2.13	m <sup>3</sup> /s							
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	6	5	9	58	87	20	9	5	4	8	9	7	227	mm	10-Year	24.5	0.226	0.221	m <sup>3</sup> /s		



## LOWER NECHAKO RIVER

(Nechako River at Isle Pierre less Stuart Lake and Skins Lake releases)

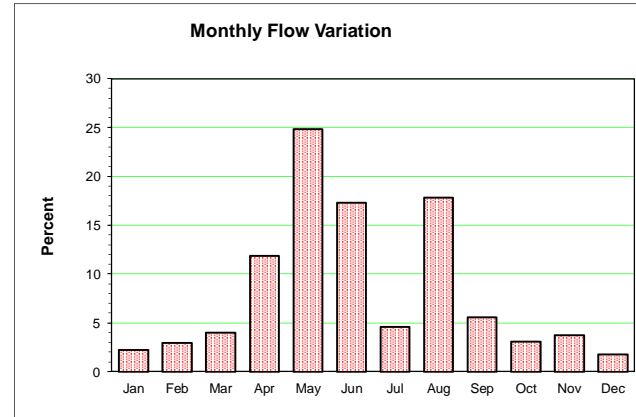
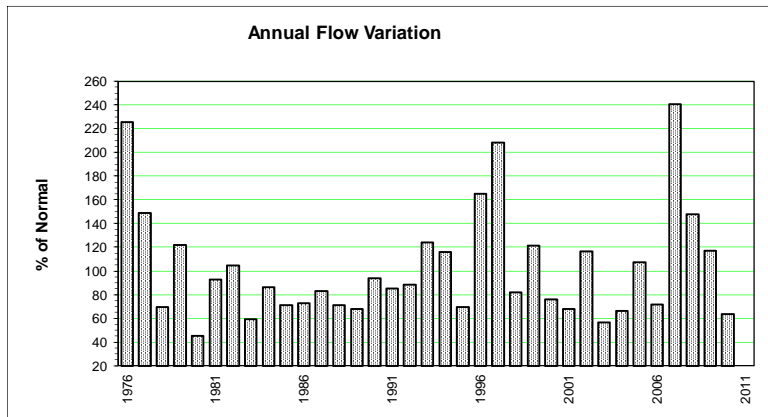
Monthly and Annual Inflow in m<sup>3</sup>/s

Drainage Area = 13768 km<sup>2</sup>

Median Elevation = m

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	% of Normal	Year
1976	16.9	19.9	7.9	59.0	446.0	211.0	141.0	123.0	111.0	30.0	64.0	46.3	106.8	226	1976
1977	28.3	39.6	43.9	216.3	261.0	22.0	77.0	46.0	64.7	28.4	15.8	0.2	70.4	149	1977
1978	2.4	8.8	12.9	54.5	125.7	88.5	47.1	20.8	11.5	7.6	3.7	11.7	33.1	70	1978
1979	16.4	18.3	29.2	65.5	256.5	141.6	46.6	63.3	20.4	10.6	17.3	4.8	57.8	122	1979
1980	4.3	1.2	10.1	47.3	42.7	35.8	23.1	16.0	29.1	20.7	18.9	10.1	21.6	46	1980
1981	23.6	26.7	30.6	40.9	97.5	116.6	10.0	96.0	38.5	19.0	20.4	8.4	44.0	93	1981
1982	8.1	9.4	5.3	18.1	202.4	126.0	9.0	121.5	39.3	23.9	16.3	11.7	49.6	105	1982
1983	10.1	10.3	3.1	16.7	48.4	42.8	24.0	105.0	37.5	18.1	14.5	5.6	28.2	60	1983
1984	14.8	20.0	21.9	47.6	98.8	93.9	7.0	111.0	30.1	15.7	11.8	15.9	40.8	86	1984
1985	13.7	14.8	14.6	38.0	89.6	89.6	-16.0	105.0	20.5	16.9	13.8	2.0	33.6	71	1985
1986	6.4	10.8	19.7	34.0	75.1	78.5	38.0	88.0	30.0	12.7	8.2	9.3	34.4	73	1986
1987	6.5	18.8	26.3	58.7	119.8	77.4	-3.0	87.0	30.4	21.6	15.3	10.6	39.2	83	1987
1988	19.7	19.5	8.2	34.6	69.2	78.5	26.0	80.7	30.1	12.9	10.9	12.8	33.6	71	1988
1989	16.2	9.4	10.1	47.1	94.8	65.9	-3.0	85.0	24.5	13.8	11.5	10.6	32.3	68	1989
1990	16.0	16.7	18.9	11.7	168.5	109.6	25.0	121.8	22.2	13.2	4.8	2.5	44.5	94	1990
1991	1.5	-2.5	-7.2	63.9	157.9	97.3	33.0	74.0	26.4	11.7	12.6	13.5	40.4	86	1991
1992	11.9	18.0	51.3	107.1	113.4	53.9	-4.0	106.0	12.6	9.0	12.8	10.0	41.9	89	1992
1993	14.4	25.7	30.3	52.9	112.5	117.4	119.0	130.0	46.4	20.5	11.3	19.6	58.6	124	1993
1994	17.0	19.9	32.4	153.4	173.4	108.1	9.0	105.0	19.2	10.6	2.8	7.3	55.0	116	1994
1995	-13.6	-6.5	3.7	74.7	124.7	83.8	9.0	79.0	18.0	10.6	-0.9	9.5	32.9	70	1995
1996	14.6	67.2	57.1	157.4	217.0	155.5	67.0	105.0	21.9	-3.0	64.0	14.8	78.0	165	1996
1997	17.5	41.7	43.3	181.7	369.0	185.0	106.0	117.0	34.9	32.2	43.9	4.7	98.4	208	1997
1998	17.9	25.6	31.6	55.0	105.3	68.3	-26.0	106.0	23.4	23.8	20.8	12.5	38.8	82	1998
1999	24.7	22.4	32.0	68.4	144.8	123.9	75.0	99.0	42.1	25.5	21.0	7.3	57.4	121	1999
2000	5.1	12.7	22.9	73.7	64.1	61.7	9.0	75.0	36.1	25.3	40.8	6.7	36.0	76	2000
2001	14.8	23.8	31.6	42.7	69.4	74.9	6.0	67.0	27.8	15.0	10.0	2.8	32.1	68	2001
2002	-3.9	-0.6	1.2	29.8	204.0	208.9	51.0	107.0	41.8	7.0	17.0	-3.2	55.2	117	2002
2003	22.6	17.0	14.5	58.7	63.4	50.5	-17.0	78.3	22.3	18.2	3.1	-8.5	26.9	57	2003
2004	-1.6	6.6	15.5	61.2	70.7	49.6	-9.0	66.0	39.9	30.3	39.5	8.9	31.4	67	2004
2005	15.8	8.7	21.4	68.5	119.0	104.0	72.0	83.0	38.9	13.5	42.6	20.9	50.9	108	2005
2006	22.0	35.8	23.4	68.4	77.4	67.4	-12.0	65.0	21.0	15.6	14.7	10.4	34.0	72	2006
2007	10.2	4.7	14.3	115.1	358.0	169.0	163.0	241.0	92.1	13.0	127.0	49.3	113.8	241	2007
2008	52.9	79.4	73.1	89.0	220.9	126.4	29.0	77.0	41.9	27.9	19.4	1.8	69.8	148	2008
2009	-7.5	-10.2	-8.9	132.5	245.4	132.0	4.0	107.0	29.7	18.9	17.2	2.0	55.5	117	2009
2010	0.4	5.2	27.1	47.2	74.3	74.7	-35.0	89.0	31.5	24.7	-0.3	20.3	30.0	64	2010
2011															2011

Normal	12.39	18.37	22.31	68.29	138.29	99.70	25.53	99.24	32.37	17.27	21.56	10.00	47.24	m <sup>3</sup> /s
Normal	2	3	4	13	27	19	5	19	6	3	4	2	108	mm



## NECHAKO RESERVOIR INFLOW

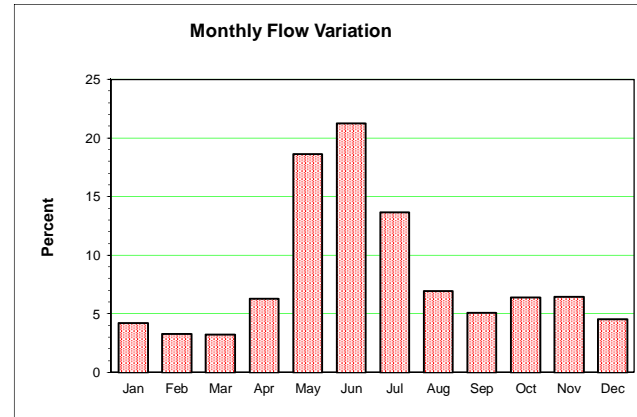
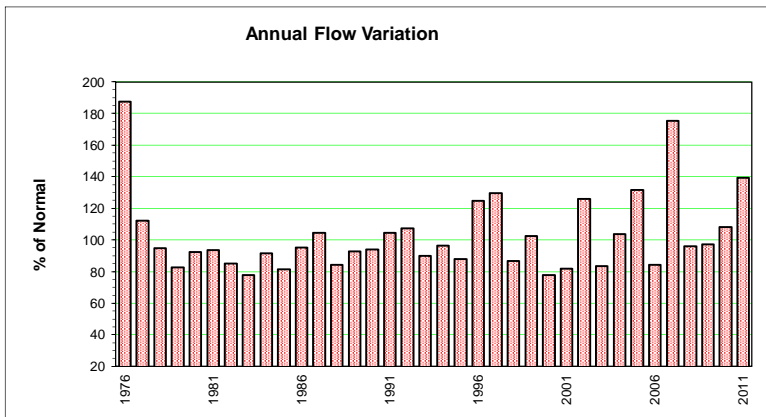
Monthly and Annual Inflow in m<sup>3</sup>/s

Drainage Area = 14132 km<sup>2</sup>

Median Elevation = m

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	% of Normal	Year
1976	127.8	96.6	86.0	140.8	676.4	835.1	713.7	479.6	283.7	221.8	263.1	202.5	344.9	188	1976
1977	173.5	147.1	108.7	279.1	414.0	387.9	289.3	180.3	115.0	170.2	123.8	85.6	206.5	112	1977
1978	63.0	49.6	47.8	103.5	358.3	482.3	237.0	176.6	92.6	129.9	237.8	113.5	174.8	95	1978
1979	46.0	64.7	50.8	92.3	508.6	439.9	268.0	132.2	79.2	64.3	18.0	58.9	152.6	83	1979
1980	61.2	51.0	38.4	76.8	331.8	332.1	197.8	117.3	180.3	176.0	195.8	277.0	170.0	93	1980
1981	155.5	95.6	69.1	102.9	474.9	390.1	279.6	133.7	81.4	90.5	129.2	53.9	171.9	94	1981
1982	75.9	64.1	45.2	48.7	276.1	580.1	279.0	123.5	133.7	120.7	76.4	55.7	156.8	85	1982
1983	70.4	53.5	40.4	138.6	324.2	373.1	276.2	132.9	94.3	79.2	91.3	37.9	143.1	78	1983
1984	103.1	95.0	84.7	116.9	263.0	381.7	292.6	193.3	127.0	166.0	105.8	92.1	168.7	92	1984
1985	62.9	81.0	55.1	97.4	413.9	440.7	293.4	123.8	67.9	77.9	41.8	42.5	150.3	82	1985
1986	77.1	60.6	67.6	101.5	297.6	612.9	355.8	180.1	96.4	83.9	104.0	61.4	175.3	95	1986
1987	83.3	76.5	68.7	132.4	436.6	514.1	333.7	133.9	118.7	134.7	193.8	77.8	192.4	105	1987
1988	69.4	66.0	58.2	85.9	312.3	397.6	228.3	151.2	127.5	142.3	111.0	114.1	155.5	85	1988
1989	97.7	57.6	54.2	103.3	428.8	397.8	220.9	154.2	63.3	67.5	182.2	213.1	170.8	93	1989
1990	138.0	90.9	59.0	157.3	406.0	426.2	283.3	122.9	40.5	98.3	113.3	135.0	173.1	94	1990
1991	86.4	103.0	70.6	157.4	476.4	505.3	305.1	153.0	76.6	109.7	143.2	113.6	192.1	105	1991
1992	96.3	123.5	137.9	240.7	357.4	467.7	250.3	88.6	156.2	233.3	139.8	83.2	197.7	108	1992
1993	49.1	58.9	58.0	122.2	533.2	438.5	236.2	128.6	46.0	61.7	167.3	84.2	165.9	90	1993
1994	88.8	78.8	83.1	254.1	432.2	394.2	266.6	114.4	113.8	111.5	100.9	87.4	177.5	97	1994
1995	61.7	65.2	55.2	111.5	531.1	444.2	255.3	128.1	64.0	71.4	71.8	75.0	161.9	88	1995
1996	142.6	83.7	72.1	298.8	422.0	588.1	395.8	193.5	187.1	149.4	132.6	90.6	229.7	125	1996
1997	92.1	87.5	92.2	213.9	686.6	660.3	329.7	157.2	103.7	190.7	129.0	108.5	238.4	130	1997
1998	78.1	57.9	52.2	87.4	530.6	366.7	219.8	103.6	78.2	154.7	84.5	91.7	159.7	87	1998
1999	74.9	69.0	55.5	115.0	321.4	572.1	414.8	238.5	120.5	106.8	86.9	78.2	188.4	103	1999
2000	53.6	40.8	49.6	79.3	215.0	400.3	273.5	129.1	106.0	136.8	150.7	82.5	143.2	78	2000
2001	76.8	49.4	45.8	77.2	207.5	399.2	302.2	167.2	129.5	99.8	150.9	93.9	150.4	82	2001
2002	81.9	76.7	52.2	95.4	422.2	796.5	437.2	197.9	224.3	108.3	181.9	104.0	231.8	126	2002
2003	107.9	58.8	57.8	146.8	319.1	365.9	206.4	115.7	116.9	171.7	104.5	64.6	153.4	84	2003
2004	75.7	54.0	65.3	167.0	341.0	276.1	219.8	139.2	199.9	217.7	320.3	210.8	190.7	104	2004
2005	155.3	205.2	188.7	306.7	513.6	382.2	243.9	155.1	123.1	269.6	232.3	128.7	242.1	132	2005
2006	97.8	63.6	56.6	102.3	299.4	413.8	225.2	113.9	58.4	95.0	181.4	145.7	154.8	84	2006
2007	132.5	113.8	122.8	228.2	610.0	950.0	644.9	319.6	163.5	248.3	202.2	117.9	322.1	175	2007
2008	84.3	69.3	56.6	76.9	497.6	392.3	264.9	185.3	101.2	94.5	174.9	116.6	176.7	96	2008
2009	81.6	64.4	60.0	122.9	378.5	520.8	320.5	109.9	92.3	113.2	194.2	86.6	179.1	97	2009
2010	99.5	71.9	57.4	142.5	365.5	417.0	216.2	119.4	200.8	348.7	231.8	108.2	198.7	108	2010
2011	90.6	91.1	71.4	83.1	565.0	685.0	453.1	208.6	282.5	208.9	169.6	154.0	256.0	139	2011

Normal	91.68	77.87	69.73	141.02	403.13	475.52	295.70	150.24	113.76	138.47	144.33	98.52	183.74	m <sup>3</sup> /s
Normal	17	13	13	26	76	87	56	28	21	26	26	19	410	mm

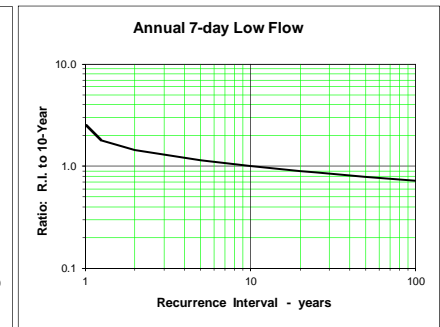
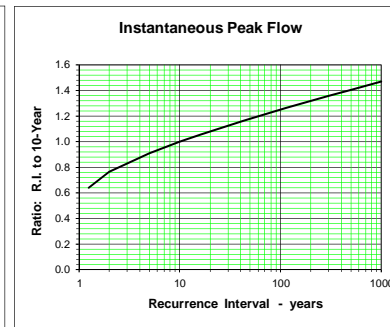
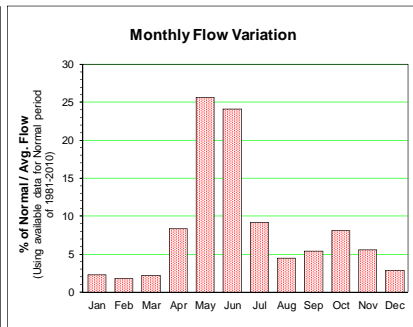
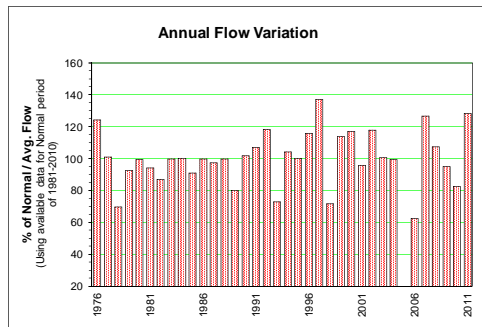


Zone 12 McGregor Basin

**PARSNIP RIVER ABOVE MISINCHINKA RIVER 07EE007**

Station Longitude Latitude: -122.904700 55.078060

Year	Monthly and Annual Discharge in m <sup>3</sup> /s					Drainage Area = 4905.00 km <sup>2</sup>				Median Elevation = 1101 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		
1976	35.30	27.40	23.80	78.40	537.00	545.00	374.00	201.00	131.00	120.00	61.30	40.90	181.85	Jun 20	759.00	78.93	22.44	1976	
1977	43.50	45.20	40.90	204.00	474.00	372.00	233.00	78.70	86.30	94.50	62.00	33.50	147.77	May 13	827.00	45.21	31.50	1977	
1978	29.20	21.20	19.80	110.00	284.00	241.00	57.10	74.60	104.00	116.00	130.00	34.70	101.98	Jun 06	490.00	37.50	16.26	1978	
1979	23.50	19.30	24.80	63.30	427.00	598.00	223.00	50.30	43.00	81.30	37.10	26.50	135.15	May 29	921.00	33.30	17.53	1979	
1980	20.40	18.40	17.40	147.00	382.00	216.00	192.00	85.00	264.00	110.00	126.00	163.00	145.32	Sep 08	770.00	58.33	16.54	1980	
1981	88.70	56.80	49.20	139.00	587.00	347.00	110.00	43.60	34.20	52.00	93.70	44.00	137.58	May 24	922.00	26.66	26.66	1981	
1982	25.40	18.40	16.00	21.30	295.00	451.00	217.00	111.00	148.00	111.00	66.80	39.40	127.09	Jun 03	868.00	70.64	15.03	1982	
1983	32.30	27.90	40.50	179.00	360.00	301.00	239.00	133.00	147.00	121.00	121.00	43.70	145.96	Jun 01	543.00	98.04	27.09	1983	
1984	32.50	30.00	32.70	144.00	275.00	416.00	186.00	73.20	161.00	275.00	73.90	55.50	146.29	Oct 10	916.00	49.14	27.40	1984	
1985	30.70	26.50	25.60	54.40	460.00	432.00	128.00	48.50	148.00	149.00	63.00	27.90	133.22	May 25	770.00	33.47	22.03	1985	
1986	26.00	25.80	47.20	103.00	401.00	585.00	219.00	63.60	42.00	98.90	94.10	38.90	145.69	Jun 02	941.00	30.27	21.60	1986	
1987	32.10	35.70	60.50	131.00	499.00	416.00	102.00	75.70	49.20	70.00	158.00	73.90	142.29	Jun 14	791.00	36.17	27.54	1987	
1988	43.00	33.00	31.90	205.00	548.00	366.00	144.00	89.60	56.70	95.50	84.20	51.10	145.93	May 15	891.00	34.74	27.49	1988	
1989	33.90	21.10	17.40	130.00	417.00	280.00	86.10	52.60	47.60	93.30	139.00	86.70	117.50	May 12	722.00	28.57	16.23	1989	
1990	74.20	34.70	29.50	163.00	497.00	610.00	137.00	46.80	31.30	78.30	46.20	32.10	148.57	Jun 02	1320.00	24.23	24.23	1990	
1991	29.90	32.60	31.60	182.00	535.00	430.00	137.00	70.00	74.20	175.00	79.20	93.10	156.42	May 21	787.00	42.46	24.21	1991	
1992	85.30	91.40	113.00	302.00	377.00	429.00	81.40	32.80	210.00	233.00	90.60	36.40	173.02	Oct 26	741.00	22.17	22.17	1992	
1993	21.70	27.50	30.10	158.00	415.00	153.00	118.00	90.70	49.50	68.40	99.00	40.50	106.50	May 15	897.00	36.83	19.96	1993	
1994	39.80	29.60	35.70	246.00	547.00	391.00	178.00	49.40	78.20	125.00	66.10	39.60	152.65	May 13	751.00	36.84	23.16	1994	
1995	38.50	40.90	45.40	168.00	474.00	300.00	146.00	171.00	58.70	148.00	79.60	75.10	146.23	May 17	713.00	39.67	35.34	1995	
1996	75.20	64.90	69.00	227.00	364.00	509.00	257.00	86.10	141.00	143.00	59.30	38.20	169.34	Jun 07	800.00	75.04	30.96	1996	
1997	30.50	35.10	33.50	189.00	628.00	701.00	205.00	81.80	67.40	250.00	134.00	43.30	200.44	Jun 03	1070.00	57.33	28.30	1997	
1998	29.00	25.20	34.30	151.00	527.00	139.00	64.20	37.60	28.90	135.00	49.70	29.20	104.96	May 04	685.00	26.36	22.20	1998	
1999	24.90	21.60	29.90	205.00	435.00	559.00	215.00	120.00	96.30	102.00	127.00	57.80	166.43	May 26	889.00	59.80	20.47	1999	
2000	32.50	25.20	25.10	139.00	403.00	503.00	218.00	114.00	223.00	181.00	146.00	41.10	170.81	Jun 08	750.00	57.31	23.86	2000	
2001	29.60	21.40	17.90	101.00	360.00	431.00	204.00	113.00	87.50	90.20	174.00	50.50	140.34	May 30	751.00	59.01	17.14	2001	
2002	32.20	22.70	19.00	45.70	412.00	761.00	248.00	65.80	138.00	155.00	113.00	54.40	172.45	Jun 19	1060.00	53.20	18.19	2002	
2003	33.10	25.80	31.70	188.00	383.00	380.00	161.00	58.50	123.00	248.00	77.80	48.10	146.99	May 27	859.00	50.63	23.11	2003	
2004	43.90	36.90	39.40	199.00	397.00	338.00	109.00	61.40	111.00	156.00	188.00	68.80	145.60	Jun 08	867.00	40.97	30.93	2004	
2005																			2005
2006	43.70	30.10	28.60	126.00	382.00	243.00	83.70	41.30	27.40	46.60	19.50	21.10	91.44	May 25	661.00	20.84	16.76	2006	
2007	25.60	47.80	59.70	184.00	474.00	649.00	193.00	81.90	120.00	228.00	122.00	36.90	185.37	Jun 06	1200.00	72.29	18.29	2007	
2008	27.50	28.30	34.00	49.10	612.00	514.00	160.00	117.00	89.40	90.20	110.00	48.50	157.00	May 31	1030.00	56.44	25.73	2008	
2009	31.60	28.60	24.10	52.00	436.00	536.00	200.00	51.60	69.30	65.00	111.00	58.40	138.95	Jun 07	782.00	35.94	23.43	2009	
2010	53.40	49.40	46.40	156.00	318.00	262.00	82.20	43.60	127.00	147.00	94.70	65.40	120.58	May 21	680.00	33.96	33.96	2010	
2011	44.50	36.50	37.40	61.60	592.00	522.00	374.00	162.00	162.00	113.00	85.10	46.40	187.37	May 25	1040.00	73.56	35.36	2011	
Avg.	38.37	33.23	36.09	142.91	443.26	426.46	173.02	82.51	101.78	134.01	97.05	51.55	146.72	147.38	841.83	47.13	23.80	m <sup>3</sup> /s	
S. D.	17.22	14.78	18.47	63.96	93.28	150.80	74.87	39.27	57.43	61.55	38.39	25.45	24.98		167.99	18.46	5.68	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	39.54	34.31	37.89	149.57	442.00	428.69	159.19	77.29	95.80	139.65	99.75	50.36	146.06	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	22	17	21	79	241	227	87	42	51	76	53	27	940	mm	10-Year	1085.3	27.856	15.371	m <sup>3</sup> /s

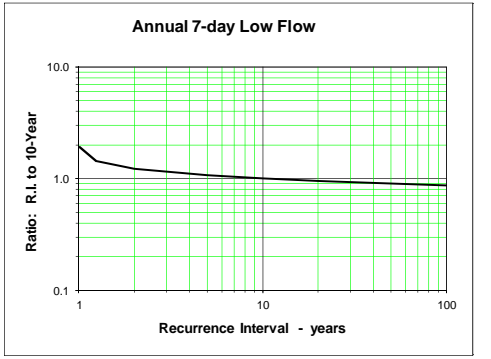
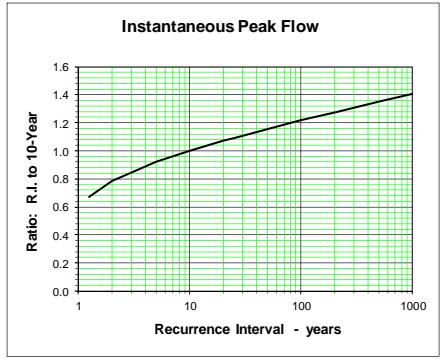
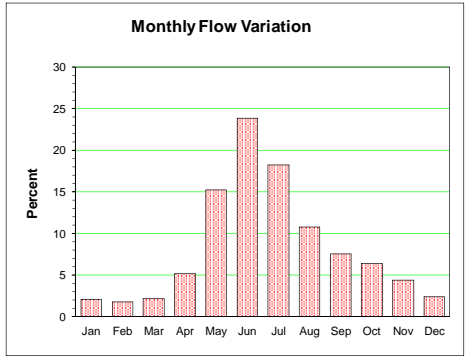
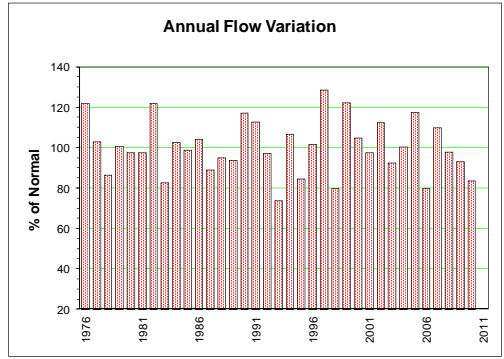




**FRASER RIVER AT HANSARD 08KA004**

Station Longitude Latitude: -121.847800 54.078610

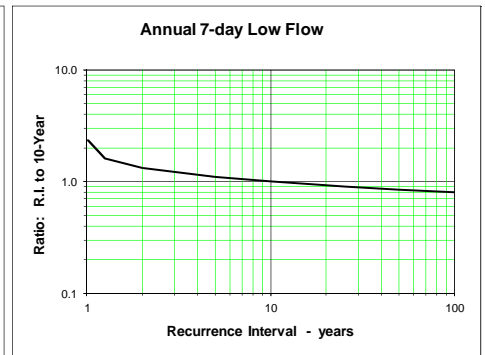
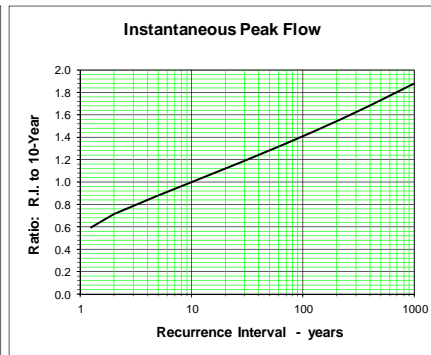
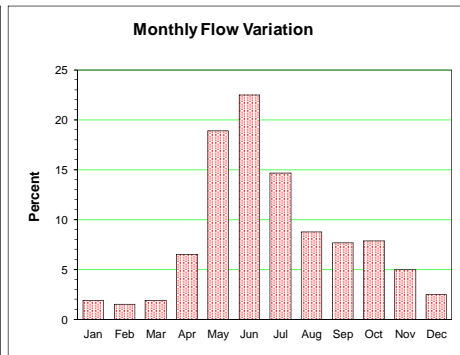
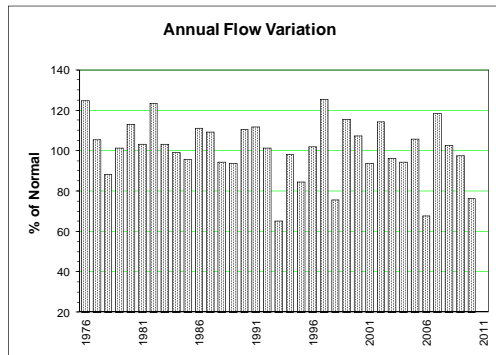
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 17972.77 km <sup>2</sup>		Median Elevation = 1460 m		Instantaneous Peak Flow		7-Day Low Flow	
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976	99.4	89.8	81.1	159.0	1020.0	1150.0	1340.0	1040.0	658.0	389.0	207.0	169.0	535.8	Jun 21	2040.0	431.14	79.43	1976			
1977	145.0	118.0	104.0	381.0	743.0	1270.0	1060.0	699.0	406.0	254.0	139.0	82.5	451.8	Jun 09	1900.0	321.86	72.79	1977			
1978	78.6	74.0	74.9	212.0	494.0	969.0	843.0	540.0	487.0	399.0	246.0	123.0	379.8	Jun 06	1430.0	380.00	70.37	1978			
1979	88.3	69.5	116.0	199.0	855.0	1450.0	1140.0	533.0	363.0	258.0	127.0	90.9	442.8	Jun 07	2450.0	300.14	64.80	1979			
1980	72.9	60.4	64.5	375.0	962.0	946.0	716.0	492.0	519.0	389.0	218.0	318.0	428.8	Jun 19	1540.0	404.86	58.04	1980			
1981	238.0	176.0	158.0	237.0	955.0	1020.0	847.0	577.0	334.0	181.0	274.0	124.0	428.4	May 27	1970.0	214.57	107.57	1981			
1982	84.7	73.4	67.3	94.3	807.0	1750.0	1320.0	861.0	732.0	333.0	178.0	97.1	535.2	Jun 22	2190.0	448.00	63.47	1982			
1983	81.5	84.0	104.0	198.0	539.0	1010.0	841.0	497.0	362.0	241.0	291.0	85.9	362.3	Jun 01	1440.0	280.43	75.43	1983			
1984	95.7	89.0	88.1	226.0	383.0	1210.0	1230.0	668.0	692.0	492.0	131.0	101.0	451.2	Jul 07	1910.0	486.00	76.00	1984			
1985	89.1	80.7	82.0	226.0	994.0	1290.0	898.0	472.0	411.0	368.0	173.0	105.0	434.3	May 26	2190.0	311.00	77.47	1985			
1986	99.8	97.6	159.0	293.0	713.0	1760.0	988.0	532.0	322.0	265.0	164.0	85.6	457.6	Jun 02	2630.0	202.86	79.53	1986			
1987	100.0	98.0	166.0	228.0	835.0	1210.0	717.0	535.0	260.0	187.0	221.0	116.0	390.8	Jun 14	1870.0	220.86	90.39	1987			
1988	67.5	63.6	90.0	466.0	990.0	1150.0	714.0	525.0	316.0	257.0	230.0	128.0	417.0	May 15	1840.0	192.43	58.23	1988			
1989	84.4	71.7	74.7	164.0	741.0	1300.0	795.0	609.0	293.0	238.0	351.0	193.0	411.1	Jun 16	1800.0	252.71	69.31	1989			
1990	143.0	94.3	92.8	413.0	937.0	1930.0	1110.0	566.0	302.0	230.0	203.0	133.0	514.1	Jun 02	2810.0	264.29	89.41	1990			
1991	100.0	180.0	120.0	344.0	925.0	1280.0	1210.0	765.0	512.0	271.0	117.0	92.2	494.8	May 19	1727.4	288.86	85.29	1991			
1992	109.0	110.0	216.0	368.0	765.0	1280.0	575.0	395.0	452.0	478.0	266.0	111.0	427.0	Jun 15	1700.0	255.14	85.39	1992			
1993	78.2	76.4	112.0	232.0	968.0	734.0	479.0	453.0	264.0	170.0	187.0	112.0	323.8	May 16	1900.0	173.57	72.14	1993			
1994	116.0	107.0	177.0	526.0	1070.0	1220.0	1040.0	507.0	294.0	277.0	150.0	107.0	468.0	Jul 04	1620.0	278.71	93.81	1994			
1995	91.0	87.1	103.0	232.0	669.0	1010.0	718.0	658.0	328.0	271.0	145.0	121.0	471.1	Jun 07	1380.0	230.71	78.77	1995			
1996	106.0	95.2	109.0	336.0	479.0	1160.0	1200.0	638.0	479.0	367.0	238.0	139.0	346.3	Jul 06	1690.0	322.86	90.50	1996			
1997	99.1	99.2	108.0	374.0	1010.0	1680.0	1310.0	701.0	393.0	606.0	274.0	91.9	564.7	Jun 03	2460.0	336.57	85.63	1997			
1998	91.3	96.2	132.0	216.0	1010.0	695.0	652.0	435.0	248.0	314.0	181.0	105.0	350.2	May 29	1380.0	202.00	79.31	1998			
1999	96.8	87.4	111.0	389.0	782.0	1580.0	1350.0	807.0	409.0	321.0	333.0	153.0	537.0	Jun 21	2520.0	316.29	77.00	1999			
2000	101.0	98.4	104.0	218.0	548.0	1240.0	1250.0	584.0	617.0	372.0	269.0	116.0	460.4	Jul 04	2010.0	396.57	90.33	2000			
2001	86.4	82.7	75.0	197.0	622.0	1100.0	1150.0	727.0	391.0	285.0	254.0	136.0	427.7	Jul 20	2310.0	301.57	73.20	2001			
2002	101.0	78.8	62.8	147.0	645.0	1820.0	1090.0	449.0	562.0	538.0	267.0	155.0	494.1	Jun 19	2620.0	371.86	58.43	2002			
2003	128.0	101.0	115.0	381.0	603.0	1160.0	777.0	455.0	328.0	456.0	224.0	131.0	406.1	May 30	1610.0	265.43	85.41	2003			
2004	85.3	79.5	86.1	319.0	690.0	1120.0	710.0	450.0	676.0	436.0	450.0	197.0	441.4	Jun 08	1680.0	378.86	71.91	2004			
2005	244.0	241.0	254.0	352.0	988.0	1240.0	937.0	564.0	421.0	490.0	289.0	149.0	515.7	Jun 02	2010.0	361.43	105.57	2005			
2006	130.0	102.0	86.3	238.0	845.0	977.0	683.0	405.0	243.0	173.0	170.0	129.0	349.8	May 23	1800.0	183.14	73.26	2006			
2007	97.3	74.0	72.3	236.0	892.0	1620.0	1090.0	425.0	368.0	452.0	328.0	111.0	482.1	Jun 08	2750.0	281.86	69.60	2007			
2008	82.8	81.5	84.5	113.0	1010.0	1220.0	901.0	595.0	394.0	278.0	258.0	123.0	429.6	May 22	2100.0	314.29	74.81	2008			
2009	90.6	84.0	68.5	274.0	679.0	1430.0	951.0	462.0	356.0	199.0	193.0	98.8	408.3	Jun 18	1942.1	303.43	62.53	2009			
2010	84.7	81.5	132.0	263.0	555.0	1070.0	715.0	433.0	383.0	370.0	200.0	111.0	367.6	Jun 26	1492.3	295.57	80.79	2010			
2011																			2011		
Avg.	105.33	96.65	110.03	275.04	792.0	1258.6	952.77	572.97	416.43	331.54	227.20	126.88	440.19		1963	302.00	77.88	m <sup>3</sup> /s			
S. D.	38.25	35.46	43.09	100.56	188.27	292.34	241.72	143.26	132.65	111.81	72.06	43.35	59.40		402.49	77.65	11.98	m <sup>3</sup> /s			
Normal	106.74	99.04	113.68	276.68	788.23	1275.53	941.60	558.33	404.73	330.50	233.83	121.92	438.92		m <sup>3</sup> /s						
Normal	16	13	17	40	117	184	140	83	58	49	34	18	771	mm	10-Year	2555.95	218.63	62.36	m <sup>3</sup> /s		



**MCGREGOR RIVER AT LOWER CANYON 08KB003**

Station Longitude Latitude: -121.669599 54.232093

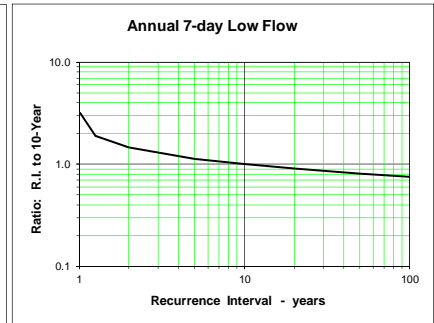
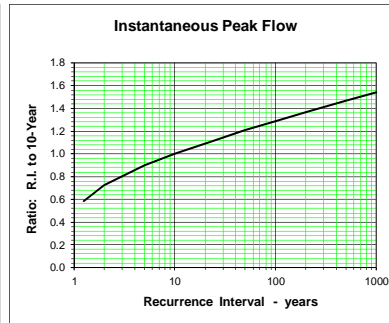
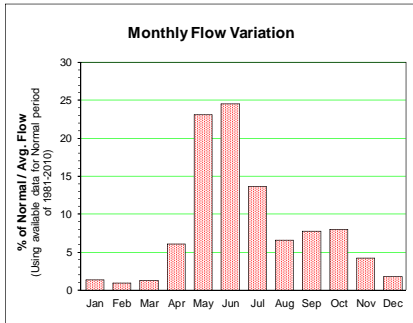
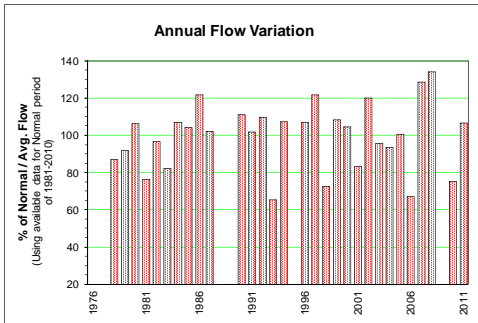
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 4760.86 km <sup>2</sup>		Median Elevation = 1368 m		Instantaneous Peak Flow		7-Day Low Flow	
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976	45.00	32.00	24.00	80.40	544.00	576.00	579.00	469.00	309.00	197.00	74.00	60.10	250.19	Jul 02	1170.0	188.86	22.90	1976			
1977	60.40	49.10	39.80	199.00	462.00	573.00	461.00	277.00	165.00	143.00	69.60	33.50	211.92	Jun 09	957.0	114.29	31.20	1977			
1978	29.20	23.00	25.60	130.00	277.00	416.00	281.00	257.00	219.00	222.00	191.00	52.60	177.54	Nov 07	1090.0	162.43	17.51	1978			
1979	30.90	23.70	37.20	104.00	414.00	735.00	465.00	211.00	137.00	158.00	67.70	49.90	203.62	Jun 05	1650.0	107.00	21.40	1979			
1980	28.00	23.60	22.90	220.00	482.00	481.00	362.00	219.00	326.00	176.00	121.00	254.00	226.74	Dec 17	1083.3	185.29	21.59	1980			
1981	109.00	63.90	55.90	157.00	617.00	444.00	326.00	228.00	153.00	113.00	150.00	59.20	207.29	May 26	1090.0	96.87	43.77	1981			
1982	35.80	28.30	23.20	30.50	441.00	749.00	512.00	365.00	424.00	182.00	112.00	60.80	247.87	Sep 09	1870.0	216.86	22.17	1982			
1983	36.50	31.80	44.70	188.00	410.00	505.00	378.00	220.00	229.00	187.00	178.00	72.50	207.40	May 31	839.0	170.00	30.27	1983			
1984	37.20	40.00	42.80	131.00	237.00	510.00	402.00	256.00	306.00	276.00	86.80	60.10	198.96	Sep 17	1020.0	137.29	35.07	1984			
1985	32.10	27.70	27.10	96.80	541.00	550.00	319.00	173.00	237.00	174.00	80.90	38.80	192.25	May 25	1250.0	118.57	25.64	1985			
1986	39.80	39.20	73.30	162.00	466.00	720.00	422.00	203.00	134.00	181.00	138.00	87.20	222.90	May 27	1280.0	97.63	31.71	1986			
1987	115.00	129.00	152.00	182.00	482.00	539.00	256.00	273.00	140.00	149.00	154.00	57.70	219.42	Jun 13	1200.0	94.13	40.26	1987			
1988	34.50	32.90	44.40	189.00	530.00	502.00	267.00	207.00	136.00	160.00	106.00	57.00	189.18	May 14	942.5	70.64	28.70	1988			
1989	37.40	28.70	25.80	131.00	446.00	530.00	290.00	240.00	134.00	133.00	176.00	79.30	188.30	May 10	835.0	107.20	24.26	1989			
1990	63.50	37.90	36.10	162.00	590.00	804.00	406.00	189.00	105.00	133.00	71.00	55.10	221.85	Jun 01	2010.0	92.66	34.39	1990			
1991	44.20	62.70	57.50	184.00	559.00	624.00	396.00	248.00	173.00	201.00	72.80	56.80	224.13	May 20	1033.0	116.14	37.03	1991			
1992	45.40	42.20	81.30	257.00	384.00	542.00	185.00	126.00	348.00	287.00	99.20	48.80	203.53	Oct 24	1180.0	83.09	39.29	1992			
1993	31.50	28.90	40.90	147.00	431.00	238.00	166.00	159.00	95.20	84.60	90.20	48.30	130.74	May 14	1110.0	60.17	26.57	1993			
1994	44.30	30.90	42.40	230.00	523.00	529.00	396.00	168.00	129.00	146.00	70.90	45.30	197.12	May 12	837.0	110.29	26.26	1994			
1995	37.80	40.00	45.20	133.00	440.00	403.00	273.00	242.00	110.00	167.00	83.70	52.60	169.85	May 16	887.0	74.87	37.06	1995			
1996	41.10	39.90	52.40	224.00	308.00	535.00	473.00	234.00	228.00	196.00	83.30	40.20	204.79	Jun 05	957.0	131.29	32.37	1996			
1997	28.10	37.30	48.00	267.00	575.00	717.00	448.00	234.00	145.00	300.00	139.00	70.90	251.80	Jun 01	1500.0	112.49	26.39	1997			
1998	47.20	39.90	45.30	147.00	555.00	250.00	193.00	140.00	93.80	187.00	74.60	39.00	152.00	May 27	784.0	83.50	34.01	1998			
1999	34.60	34.10	41.70	264.00	435.00	703.00	476.00	270.00	160.00	173.00	135.00	50.90	232.14	Jul 29	1360.0	106.93	31.09	1999			
2000	30.80	32.40	37.40	159.00	347.00	646.00	474.00	165.00	310.00	207.00	136.00	44.00	215.66	Jul 03	1130.0	108.14	27.11	2000			
2001	35.90	31.50	33.40	115.00	353.00	480.00	394.00	252.00	169.00	135.00	169.00	76.70	187.81	Jul 19	1120.0	122.00	29.79	2001			
2002	48.80	28.40	22.60	65.90	363.00	868.00	421.00	174.00	289.00	240.00	157.00	67.90	229.17	Jun 18	1760.0	137.71	21.74	2002			
2003	48.20	36.40	39.20	188.00	352.00	504.00	328.00	182.00	189.00	298.00	88.40	53.70	192.97	Oct 19	1170.0	148.57	29.19	2003			
2004	36.80	32.00	35.20	190.00	381.00	453.00	255.00	166.00	139.00	222.00	283.00	76.20	189.12	Nov 09	1320.0	111.00	26.97	2004			
2005	78.30	57.90	52.70	213.00	462.00	440.00	327.00	199.00	211.00	270.00	144.00	84.80	212.46	Jun 01	914.0	149.29	37.63	2005			
2006	62.60	45.80	32.10	83.90	386.00	337.00	228.00	136.00	93.20	93.20	76.90	53.10	136.26	May 24	877.5	73.40	28.77	2006			
2007	43.60	38.90	46.30	180.00	464.00	764.00	431.00	167.00	225.00	290.00	138.00	57.30	237.74	Jun 05	1620.0	121.76	38.16	2007			
2008	35.50	27.10	29.20	56.30	604.00	552.00	364.00	309.00	169.00	130.00	126.00	59.50	205.88	May 20	1410.0	122.29	26.81	2008			
2009	34.50	29.80	26.10	100.00	415.00	680.00	403.00	173.00	179.00	110.00	141.00	52.70	195.83	Jun 06	1030.0	123.71	25.21	2009			
2010	34.70	35.00	35.40	144.00	303.00	384.00	227.00	151.00	200.00	168.00	102.00	49.10	153.13	May 20	832.0	70.69	34.26	2010			
2011																			2011		
Avg.	45.09	38.91	43.40	157.45	445.1	550.9	359.54	219.49	194.55	185.39	119.60	63.02	202.50	214.22	1175	117.91	29.90	m <sup>3</sup> /s			
S. D.	20.03	18.57	23.16	58.99	95.93	148.50	101.04	68.05	81.41	58.63	46.34	35.67	29.42		310.54	35.85	6.23	m <sup>3</sup> /s			
Normal	46.16	40.35	45.65	159.25	446.67	550.07	347.87	208.30	188.44	186.43	122.09	58.52	200.59	m <sup>3</sup> /s							
Normal	26	21	26	87	251	299	196	117	103	105	66	33	1330	mm 10-Year	1589.90	81.71	21.71	m <sup>3</sup> /s			



**MULLER CREEK NEAR THE MOUTH 08KB006**

Station Longitude Latitude: -120.976400 54.296670

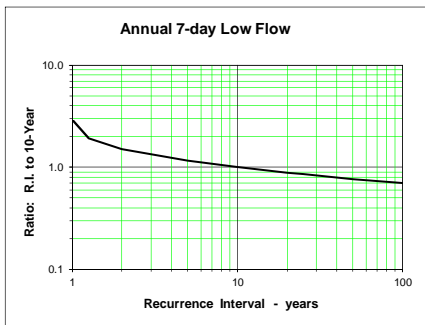
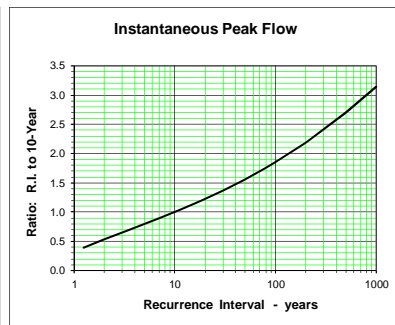
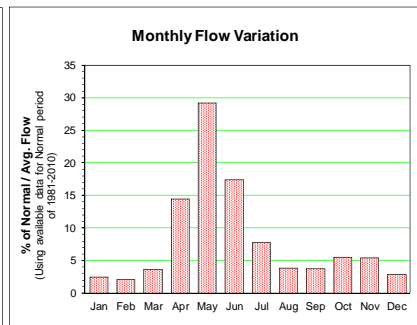
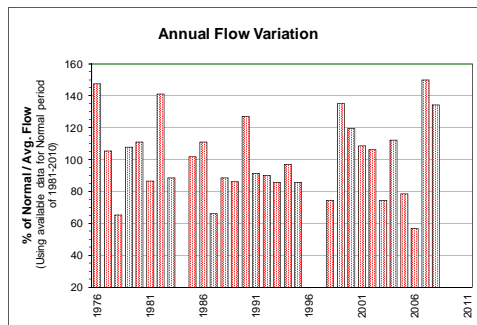
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual			
1976																			1976	
1977		0.432	0.272	0.266	2.710	7.480	9.350	4.280	5.390	5.710	6.190	5.350	1.260	4.070		Nov 07	39.60	2.683	0.227	1977
1978		0.491	0.360	0.727	0.654	9.920	18.800	10.500	3.120	1.810	3.130	1.110	1.110	4.296		Jun 05	37.90	1.431	0.339	1978
1979		0.458	0.403	0.378	3.830	13.300	11.500	6.630	3.640	7.420	3.990	2.720	5.290	4.973		Jun 18	33.40	2.803	0.356	1979
1980		2.300	0.511	0.372	2.810	15.100	8.820	4.360	2.400	1.230	1.070	2.940	0.867	3.586		May 26	27.00	0.428	0.289	1980
1981		0.600	0.425	0.369	0.502	9.920	17.100	9.210	4.420	6.490	2.780	1.580	0.766	4.526		Jul 15	57.32	2.150	0.344	1981
1982		0.411	0.367	0.614	3.530	10.800	9.800	6.070	2.240	4.070	3.690	3.240	1.200	3.850		May 20	25.40	1.661	0.330	1982
1983		0.598	0.648	0.762	6.390	7.850	13.200	9.770	5.040	7.090	6.350	1.510	0.963	5.016		Sep 17	35.10	3.024	0.579	1983
1984		0.516	0.407	0.396	1.370	15.400	14.700	7.040	3.110	7.050	5.310	2.350	0.699	4.882		Sep 16	47.30	1.860	0.366	1984
1985		0.732	0.915	1.970	4.020	14.700	19.800	10.500	3.650	2.040	4.880	3.540	1.340	5.695		May 26	45.80	1.253	0.390	1985
1986		1.220	1.140	1.060	3.860	17.000	16.300	5.730	4.660	1.830	1.960	1.680	0.763	4.784		Jun 12	37.30	1.607	0.568	1986
1987																			1987	
1988																			1988	
1989																			1989	
1990		1.560	0.519	0.311	2.900	17.800	21.200	8.620	2.690	1.460	2.640	1.580	0.838	5.197		May 31	63.00	1.020	0.300	1990
1991		0.432	0.554	0.621	2.720	14.300	14.600	8.530	4.430	3.610	4.720	1.490	0.955	4.772		May 20	48.46	2.671	0.406	1991
1992		0.834	0.977	2.340	7.060	11.600	13.800	3.620	1.710	9.530	7.290	2.090	0.965	5.142		Sep 20	50.20	0.972	0.771	1992
1993		0.475	0.441	0.883	4.310	12.200	4.710	2.650	2.230	1.770	3.250	2.720	0.911	3.064		May 13	40.70	1.125	0.343	1993
1994		0.714	0.380	0.410	7.050	16.800	14.700	9.540	2.490	2.270	3.230	1.750	0.804	5.034		May 12	28.70	1.759	0.308	1994
1995																			1995	
1996		0.615	0.437	0.440	3.050	9.520	15.200	11.800	6.590	5.230	4.940	1.570	0.655	5.015		Jun 04	32.00	2.937	0.388	1996
1997		0.500	0.582	0.765	2.730	16.200	17.900	10.000	4.170	3.080	7.270	3.580	1.270	5.700		Oct 16	57.30	2.019	0.486	1997
1998		0.474	0.427	0.503	3.710	16.800	6.020	2.810	1.620	1.510	4.090	1.710	0.873	3.405		May 02	29.30	1.169	0.411	1998
1999		0.584	0.474	0.554	2.590	10.100	15.600	11.800	6.280	4.000	4.940	2.620	1.100	5.079		Jul 29	46.00	2.523	0.427	1999
2000		0.659	0.538	0.427	2.180	9.750	16.200	9.420	4.780	7.400	4.730	1.970	0.714	4.899		Jun 06	32.30	3.079	0.388	2000
2001		0.411	0.289	0.215	0.731	7.070	12.800	9.620	4.430	3.520	2.450	3.670	1.390	3.898		Jul 18	50.50	2.416	0.199	2001
2002		0.923	0.589	0.361	0.793	9.850	21.900	6.390	5.120	10.500	8.160	1.710	1.010	5.616		Jun 17	55.00	2.143	0.322	2002
2003		0.747	0.574	0.617	2.670	10.500	12.500	6.910	2.850	5.200	7.810	1.890	1.170	4.473		Oct 18	36.10	1.999	0.506	2003
2004		0.584	0.444	0.498	3.780	11.900	11.500	4.740	2.270	6.000	3.610	5.700	1.540	4.376		Jun 06	44.70	1.139	0.396	2004
2005		1.460	1.400	1.280	2.580	11.100	10.200	7.300	4.170	6.340	6.830	2.290	1.300	4.707		Sep 29	41.50	2.444	0.611	2005
2006		0.820	0.585	0.462	3.400	12.200	8.720	3.710	1.840	1.040	1.330	2.230	1.300	3.150		May 23	27.90	0.772	0.421	2006
2007		1.000	1.030	1.530	2.500	13.300	22.400	9.950	2.990	6.190	7.760	2.700	0.688	6.017		Jun 03	55.90	2.130	0.608	2007
2008		0.499	0.331	0.288	13.100	21.200	14.600	8.120	6.970	4.030	2.320	2.760	1.020	6.277		May 17	40.70	2.224	0.279	2008
2009		0.480	0.367	0.328	0.342			10.300	2.680	3.350	2.640	2.430	1.140					1.584	0.326	2009
2010		0.661	0.487	0.416	3.330	8.920	10.200	4.720	2.180	4.110	3.840	2.390	1.080	3.537		May 19	27.10	1.236	0.398	2010
2011		0.719	0.408	0.267	0.569	14.400	15.900	11.600	5.100	5.310	3.050	1.320	0.868	4.988		Jul 09	41.80	0.248	0.248	2011
Avg.		0.739	0.552	0.647	3.303	12.532	14.172	7.792	3.751	4.501	4.357	2.435	1.126	4.667	4.67		41.07	1.88	0.398	m <sup>3</sup> /s
S. D.		0.409	0.262	0.497	2.471	3.394	4.482	2.907	1.470	2.456	1.940	1.042	0.783	0.823			10.28	0.72	0.126	m <sup>3</sup> /s
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)		0.771	0.587	0.696	3.482	12.765	14.018	7.527	3.630	4.442	4.414	2.408	1.008	4.681	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)		20	14	18	88	332	353	196	94	112	115	61	26	1436	mm	10-Year	54.9	0.892	0.251	m <sup>3</sup> /s



**WILLOW RIVER ABOVE HAY CREEK 08KD006**

Station Longitude Latitude: -122.374016 54.045837

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976	13.20	11.90	12.40	36.30	210.00	149.00	61.50	57.80	35.90	21.90	19.70	15.90	53.95	May 12	380.87	22.70	11.20	1976	
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	7.84	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	5.60	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	4.40	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	3.50	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	6.91	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	5.02	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	7.85	1983	
1984	9.24	10.70	16.00	58.10													8.48		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	7.06	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	7.27	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	3.93	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	3.21	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	7.32	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	5.95	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	7.48	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	4.98	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	6.18	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	6.52	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	39.78	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		2009
2010	8.51	8.52	9.61				13.90	5.36	12.00	14.90	16.80	11.30					4.85		2010
2011																			2011
Avg.	10.69	9.97	14.97	62.77	128.17	79.65	35.15	18.01	18.20	23.65	23.80	13.95	37.04	37.05	252.27	10.02	6.51	m <sup>3</sup> /s	
S. D.	6.19	3.98	9.82	26.91	52.13	39.43	18.96	13.52	13.85	13.00	13.15	10.91	9.03		124.27	5.28	1.92	m <sup>3</sup> /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 <sup>3</sup> /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	406.4	5.087	4.204	m <sup>3</sup> /s

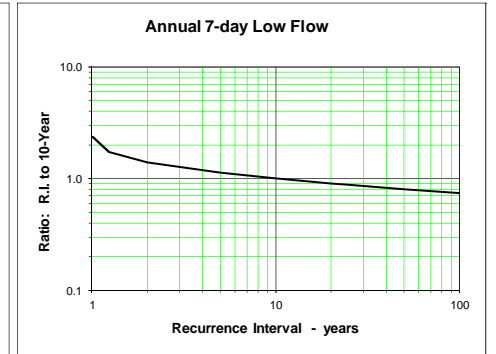
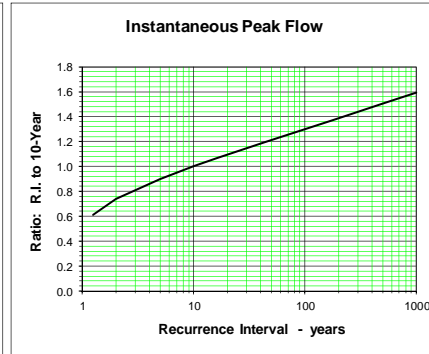
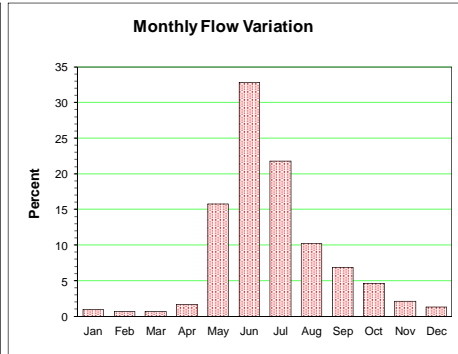
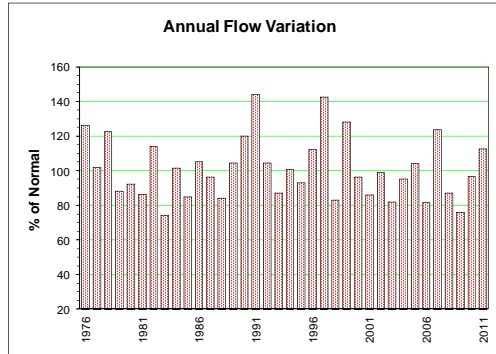


## Zone 13 Upper Fraser Basin

**MIETTE RIVER NEAR JASPER 07AA001**

Station Longitude Latitude: -118.107200 52.864120

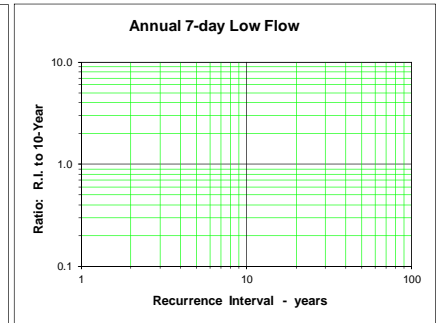
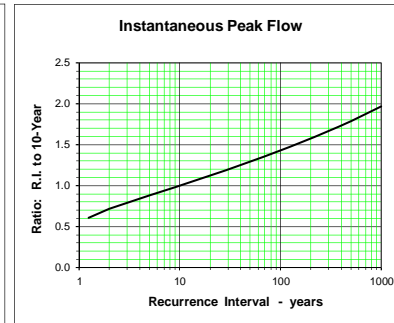
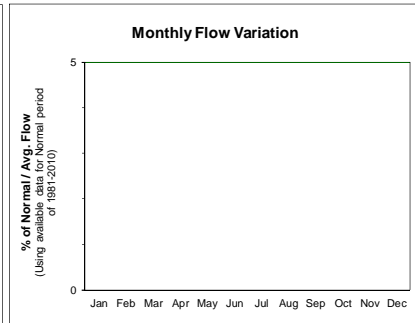
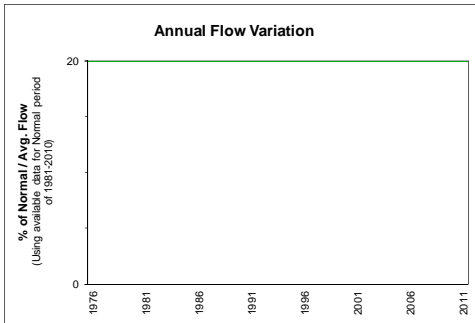
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 644.69 km <sup>2</sup>		Median Elevation = 1955 m		Instantaneous Peak Flow		7-Day Low Flow	
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976	1.38	1.17	1.11	2.21	23.60	34.90	39.50	26.60	13.30	6.33	2.13	1.65	12.9	Jun 19	72.80	7.53	0.662	1976			
1977	1.14	0.88	0.61	2.14	13.90	38.40	30.40	14.90	12.80	5.39	2.35	1.36	10.4	Jun 08	80.70	9.23	0.569	1977			
1978	0.85	0.49	0.83	1.72	12.20	47.50	31.70	13.60	25.40	10.10	3.41	2.03	12.5	Jun 05	87.80	10.74	0.463	1978			
1979	0.51	0.71	0.62	1.12	10.90	43.40	28.90	10.30	5.67	3.45	0.96	1.02	9.0	Jun 04	83.90	4.51	0.406	1979			
1980	0.55	0.51	0.52	4.12	23.80	32.90	16.60	11.10	9.67	6.47	3.21	3.41	9.4	Jun 04	49.40	6.87	0.424	1980			
1981	2.01	0.85	0.88	1.40	23.90	25.80	24.60	11.70	7.37	3.13	1.93	1.60	8.8	May 26	69.30	4.04	0.723	1981			
1982	0.89	0.73	0.65	0.85	9.90	54.80	34.80	14.90	11.90	6.29	2.01	1.58	11.6	Jun 15	86.30	6.79	0.587	1982			
1983	1.19	0.84	0.88	1.55	15.40	27.20	19.10	8.58	6.97	3.86	3.72	1.34	7.6	May 31	68.70	5.35	0.771	1983			
1984	0.96	0.88	0.84	1.67	5.16	44.80	30.60	12.00	16.70	7.34	2.20	1.29	10.4	Jun 29	123.00	7.51	0.678	1984			
1985	0.99	0.86	0.75	1.37	23.60	32.30	19.90	8.59	8.12	4.06	1.99	1.05	8.7	May 25	79.40	5.99	0.637	1985			
1986	0.72	0.62	0.74	1.19	20.70	52.60	27.70	10.50	6.04	4.21	2.08	1.26	10.7	May 31	116.00	3.73	0.546	1986			
1987	0.91	0.56	0.95	2.07	26.70	40.20	15.50	6.49	3.27	2.16	1.15	9.8	Jun 13	77.20	4.63	0.371	1987				
1988	0.75	0.79	0.75	4.26	21.20	33.50	15.20	12.20	5.91	4.23	2.78	1.44	8.6	Jun 08	68.00	4.20	0.532	1988			
1989	1.10	0.89	0.84	1.60	16.50	46.60	23.90	17.20	7.49	5.83	3.48	2.16	10.7	Jun 06	74.20	6.17	0.625	1989			
1990	1.64	1.26	1.02	3.73	21.90	53.10	33.10	12.50	7.25	5.00	3.61	2.19	12.2	Jun 24	84.20	5.34	0.940	1990			
1991	1.12	0.98	0.92	3.66	28.10	50.30	43.40	25.80	11.30	4.85	2.92	1.73	14.7	Jun 12	94.20	6.63	0.687	1991			
1992	1.21	1.19	1.40	4.71	28.50	45.20	15.00	7.17	9.32	9.08	3.46	1.61	10.7	Jun 02	71.20	5.24	1.039	1992			
1993	0.95	0.66	0.75	1.25	33.40	25.50	15.80	12.90	7.55	3.52	1.84	1.57	8.9	May 15	86.29	5.25	0.482	1993			
1994	1.25	0.85	0.95	3.95	27.90	41.10	23.60	10.10	4.89	5.09	1.84	1.37	10.3	Jun 07	58.20	4.06	0.595	1994			
1995	0.96	0.99	0.84	1.08	17.90	36.30	23.80	18.90	5.17	3.22	2.21	1.89	9.5	May 30	65.40	3.48	0.674	1995			
1996	1.14	0.91	1.02	2.82	12.20	47.30	42.10	14.50	6.86	4.60	2.14	1.46	11.4	Jul 04	83.10	4.82	0.747	1996			
1997	1.19	1.04	1.02	1.27	19.80	54.50	39.90	17.50	14.30	16.40	4.58	1.96	14.5	Jun 01	78.80	11.05	0.717	1997			
1998	1.51	1.20	1.07	1.90	30.90	20.30	12.0	8.78	5.26	5.08	2.62	1.93	8.5	May 27	46.80	4.36	1.003	1998			
1999	1.34	1.28	1.35	2.66	12.90	49.60	45.20	20.90	9.36	5.30	3.89	2.33	13.1	Jun 18	103.00	6.64	0.990	1999			
2000	1.39	1.17	0.94	1.23	8.13	41.10	34.80	11.60	9.20	4.72	2.26	1.43	9.8	Jul 01	64.80	5.89	0.856	2000			
2001	0.98	0.67	0.71	1.22	15.00	29.50	29.30	13.40	6.27	3.81	2.35	1.58	8.8	Jul 18	72.20	5.01	0.630	2001			
2002	1.17	0.76	0.65	1.14	8.71	56.80	24.80	8.82	8.43	5.73	2.58	1.24	10.1	Jun 16	92.90	6.18	0.620	2002			
2003	0.78	0.81	0.76	2.31	14.50	42.30	17.40	6.68	3.82	7.10	2.19	1.61	8.4	Jun 10	71.20	3.41	0.612	2003			
2004	0.83	0.71	0.74	2.16	13.70	37.90	22.10	9.44	15.40	8.04	3.61	1.89	9.7	Jun 11	75.30	8.28	0.639	2004			
2005	1.80	1.44	1.12	3.78	23.50	33.30	18.70	12.00	9.17	4.08	1.79	1.79	10.6	Jun 02	68.20	8.79	0.979	2005			
2006	1.46	1.19	0.85	2.05	25.10	32.90	16.60	8.81	5.08	2.70	1.68	1.18	8.3	May 24	65.60	4.15	0.762	2006			
2007	1.18	0.97	1.08	2.20	19.80	57.30	40.80	9.59	6.51	6.46	3.25	1.77	12.6	Jun 06	138.00	4.29	0.779	2007			
2008	1.09	0.82	0.82	0.95	20.90	36.50	20.80	9.41	7.55	4.52	2.35	0.92	8.9	Jun 04	61.20	6.07	0.721	2008			
2009	0.88	0.79	0.82	1.06	10.20	38.50	22.80	7.73	4.65	2.33	1.94	1.42	7.8	Jun 05	60.70	3.59	0.554	2009			
2010	0.92	0.78	0.87	2.75	13.40	35.50	24.10	10.30	15.20	9.52	2.89	1.70	9.9	Sep 28	84.30	7.20	0.725	2010			
2011	1.05	0.97	0.80	0.91	18.00	46.90	31.10	15.70	7.78	9.21	2.59	1.93	11.5	Jun 30	72.80	5.74	0.762	2011			
Avg.	1.10	0.90	0.87	2.11	18.7	40.7	26.78	12.84	9.21	5.82	2.65	1.63	10.31		79	5.91	0.68	m <sup>3</sup> /s			
S. D.	0.32	0.23	0.20	1.10	7.05	9.55	8.91	4.75	4.52	2.75	0.80	0.46	1.80		18.79	1.94	0.17	m <sup>3</sup> /s			
Normal	1.14	0.92	0.89	2.13	18.98	40.75	26.19	12.33	8.56	5.62	2.69	1.58	10.18					m <sup>3</sup> /s			
Normal	5	3	4	9	79	164	109	51	34	23	11	7	498	10-Year	105.56	3.83	0.48	m <sup>3</sup> /s			



**WHIRLPOOL RIVER NEAR THE MOUTH 07AA009**

Station Longitude Latitude: -117.924700 52.724720

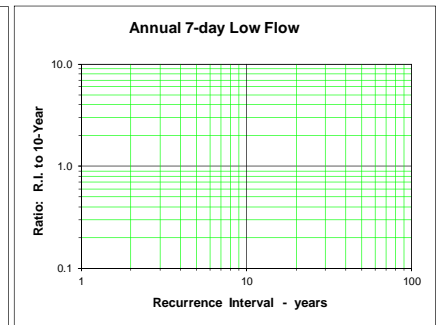
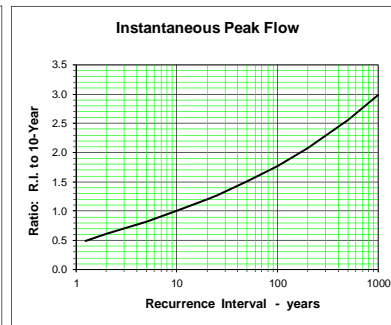
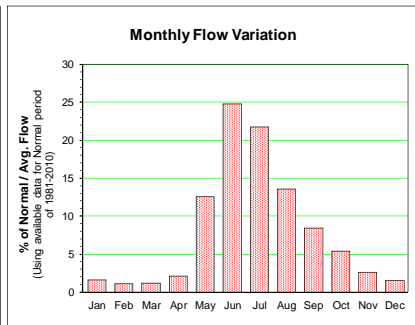
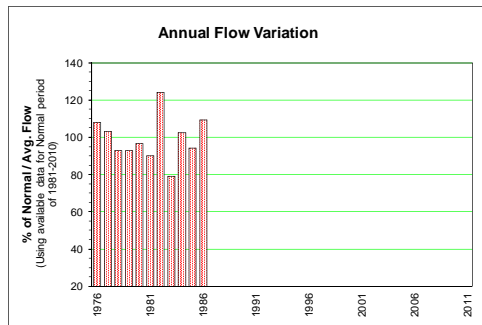
Year	Monthly and Annual Discharge in m <sup>3</sup> /s					Drainage Area = 602.03 km <sup>2</sup>		Median Elevation = 2037 m		Instantaneous Peak Flow		7-Day Low Flow		Year					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)		Date	Annual	Jun-Sep	Annual	
1976					17.20	29.60	57.00	51.40	28.40	10.30				Jul 09	74.80	13.99	1976		
1977					10.50	42.20	38.70	39.00	16.10	5.52				Jun 08	81.30	9.99	1977		
1978					10.80	53.70	60.80	38.10	40.00	13.30				Sep 03	108.00	13.51	1978		
1979						39.10	49.00	35.90	21.20	8.56				Jul 21	72.20	15.79	1979		
1980					25.90	39.00	37.20	29.10	16.80	10.70				Jun 17	69.40	12.74	1980		
1981					20.50	28.90	47.00	45.00	21.00	5.28				Jul 05	68.90	9.71	1981		
1982					5.13	55.90	54.50	37.60	29.90	9.92				Jun 22	101.00	10.20	1982		
1983					13.50	37.90	43.90	37.00	17.00	7.92				Jul 12	84.20	10.79	1983		
1984					4.84	50.40	43.70	41.20	23.60	9.82				Jun 29	169.00	12.01	1984		
1985					19.30	34.40	45.40	29.00	12.60	5.32				Jun 30	70.20	8.17	1985		
1986					18.10	56.10	49.30	36.60	15.70	6.74				May 31	107.00	7.37	1986		
1987					20.70	55.80	43.50	31.90	19.30	6.78				Jun 13	109.00	14.33	1987		
1988					17.30	45.20	36.70	37.70	18.20	9.35				Jun 08	83.00	8.09	1988		
1989					12.90	47.00	45.10	44.30	14.30					Jun 15	85.60	12.44	1989		
1990					15.40	52.00	61.10	43.40	20.40	8.31				Jul 13	106.00	16.46	1990		
1991					20.20	48.70	64.30	56.80	21.60					Aug 10	120.00	13.59	1991		
1992					18.70	55.50	38.70	31.70	15.60					Jun 13	76.70	11.46	1992		
1993					23.20	36.20	32.80	35.30	16.60					Jun 19	66.23	8.33	1993		
1994					25.20	41.30	50.10	35.30	18.70					Jul 02	69.60	15.39	1994		
1995					14.70	47.10	47.30	33.00	18.30					Aug 06	78.50	11.81	1995		
1996					10.10	41.50	57.40	35.80	17.40					Jul 04	112.00	10.71	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		
Avg. S. D.					16.21	44.64	47.79	38.34	20.13	8.42					91.08	11.76	#DIV/0!	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)					5.95	8.61	8.77	6.89	6.21	2.34					24.73	2.65	#DIV/0!	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)					16.24	45.87	47.55	38.23	18.76	7.72					m <sup>3</sup> /s				
					72	197	212	170	81	34				mm	10-Year	120.4	7.978	0.000	m <sup>3</sup> /s



**SMOKY RIVER ABOVE HELLS CREEK 07GA001**

Station Longitude Latitude: -119.161100 53.946510

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual	
1976	12.50	13.50	12.00	28.60	140.00	184.00	228.00	199.00	115.00	52.00	25.10	21.40	86.30	Jun 21	385.00	81.49	1976	
1977	15.30	13.40	10.30	27.30	112.00	259.00	231.00	158.00	74.30	42.30	22.80	19.70	82.53	Jun 09	515.00	58.29	1977	
1978	13.80	10.20	11.90	19.80	72.60	222.00	213.00	107.00	91.90	67.90	35.40	21.80	74.26	Jul 12	459.00	74.03	1978	
1979	14.70	11.00	12.40	13.10	79.20	268.00	239.00	121.00	67.30	37.70	14.90	10.10	74.37	Jun 05	424.00	52.44	1979	
1980	10.00	9.33	9.07	34.10	136.00	257.00	153.00	114.00	85.60	60.80	26.80	31.60	77.39	Jun 05	520.00	76.00	1980	
1981	24.20	12.70	13.80	19.40	168.00	157.00	191.00	139.00	69.00	28.50	25.10	11.80	72.15	May 27	426.00	36.76	1981	
1982	11.40	11.10	9.07	12.90	88.20	352.00	301.00	177.00	128.00	56.90	23.20	15.40	99.24	Jun 16	558.00	82.23	1982	
1983	13.90	11.20	11.30	19.40	91.80	165.00	174.00	109.00	71.70	41.00	34.20	14.10	63.37	Jul 15	281.98	54.46	1983	
1984	14.80	13.00	11.20	19.10	49.60	263.00	232.00	136.00	116.00	82.70	29.20	15.50	81.94	Jun 15	442.00	85.49	1984	
1985	12.80	13.00	15.80	15.80	129.00	241.00	216.00	103.00	76.20	43.10	20.90	14.60	75.46	Jul 01	420.81	66.83	1985	
1986	13.40	9.83	13.20	13.90	138.00	326.00	267.00	110.00	64.50	48.80	23.50	17.30	87.54	May 30	617.00	35.71	1986	
1987	16.00	12.70	10.80	18.20	144.00	252.00	155.00	157.00	72.10	34.10				Jun 14	459.00	57.04	1987	
1988			10.80	29.30	124.00	194.00	130.00	110.00	58.70	40.20				Jun 09	279.00	31.56	1988	
1989			9.51	15.80	127.00	294.00	201.00	196.00	80.80	44.40				Jun 07	468.00	63.53	1989	
1990			13.10	26.30	149.00	339.00	230.00	127.00	80.10	38.00				Jun 01	563.00	68.79	1990	
1991			10.60	29.50	163.00	252.00	251.00	185.00	85.10	43.10				Aug 15	394.00	59.67	1991	
1992			18.70	37.60	124.00	243.00	132.00	99.90	88.60	66.90				Jun 03	365.00	77.14	1992	
1993			10.80	15.90	161.00	135.00	113.00	106.00	64.20	30.60				May 15	444.67	37.37	1993	
1994			11.30	34.30	157.00	239.00	208.00	115.00	62.70	45.70				Jun 09	351.00	55.59	1994	
1995			12.40	14.10	123.00	219.00	155.00	121.00	66.50	31.60				May 31	381.00	47.54	1995	
1996			10.50	28.60	68.60	225.00	219.00	126.00	70.80	51.30				Jul 05	359.00	46.24	1996	
1997			11.20	15.50	135.00	286.00	302.00	140.00	89.60	78.20				Jul 14	1012.00	85.27	1997	
1998			11.30	18.70	155.00	139.00	191.00	126.00	64.50	43.60				Jul 01	291.00	45.10	1998	
1999			11.80	24.70	105.00	243.00	251.00	164.00	74.60	45.20				Jun 17	459.00	57.50	1999	
2000			10.30	13.00	52.30	212.00	243.00	116.00	109.00	54.20				Jul 25	384.00	74.00	2000	
2001			10.40	16.10	73.50	156.00	244.00	117.00	60.70	30.50				Jul 19	811.00	50.24	2001	
2002			9.42	11.40	53.60	295.00	169.00	107.00	103.00	70.30				Jun 19	499.00	77.71	2002	
2003			11.00	21.70	109.00	249.00	181.00	122.00	75.30	70.30				May 27	421.00	57.84	2003	
2004			11.60	22.20	91.20	276.00	203.00	181.00	153.00	83.10				Jun 07	496.00	95.27	2004	
2005			18.60	39.60	173.00	267.00	175.00	112.00	93.40	71.50				Jun 02	455.00	81.03	2005	
2006			14.30	18.90	129.00	168.00	141.00	97.80	65.40	38.90				May 25	323.00	48.30	2006	
2007			8.21	23.30	150.00	357.00	246.00	105.00	70.00	53.80				Jun 07	904.00	47.59	2007	
2008			11.80	11.50	151.00	221.00	186.00	108.00	68.40	44.60				Jun 05	432.00	58.73	2008	
2009			10.00	16.90	87.30	300.00	287.00	116.00	82.20	33.20				Jul 09	571.00	64.74	2009	
2010			11.50	25.60	81.60	186.00	165.00	104.00	106.00	93.60				Sep 29	447.00	64.09	2010	
2011																		2011
Avg.	14.40	11.75	11.71	21.49	116.90	241.17	206.37	129.48	82.98	51.39	25.55	17.57	79.51		474.78	61.59	#DIV/0!	
S. D.	3.51	1.48	2.31	7.63	35.93	58.33	48.34	29.10	21.37	17.04	5.83	5.94	9.51		158.67	16.10	#DIV/0!	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	15.21	11.93	11.81	20.97	118.39	241.70	205.30	127.76	82.34	51.26	26.02	14.78	79.95	m <sup>3</sup> /s				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	11	8	8	14	84	167	146	91	57	37	18	11	671	mm	10-Year	726.0	40.937	0.000

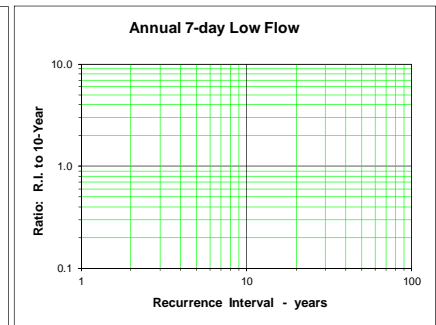
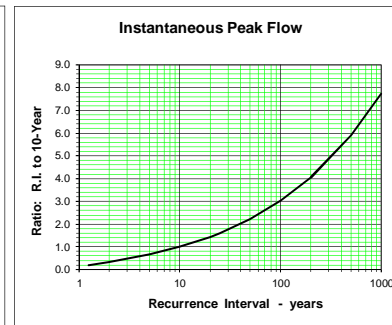
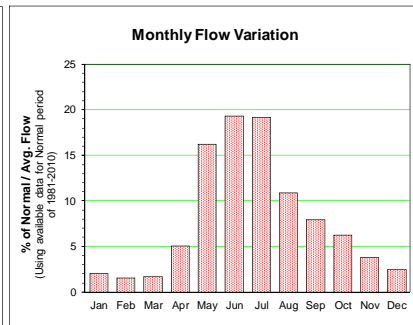
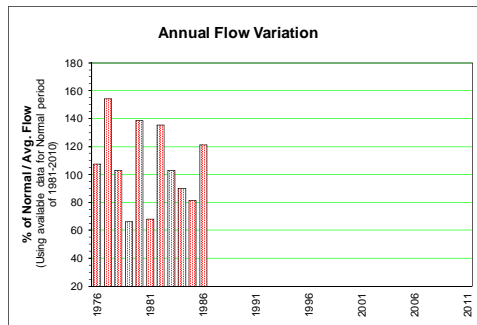




**MUSKEG RIVER NEAR GRANDE CACHE 07GA002**

Station Longitude Latitude: -118.816400 53.926200

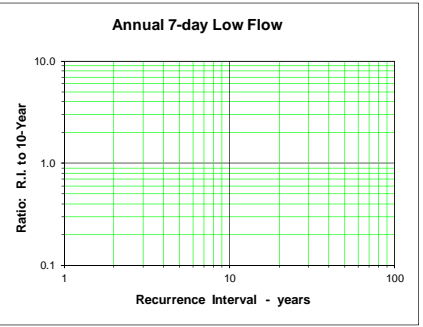
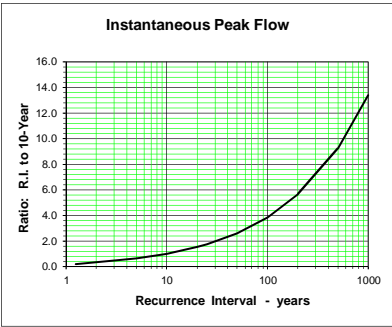
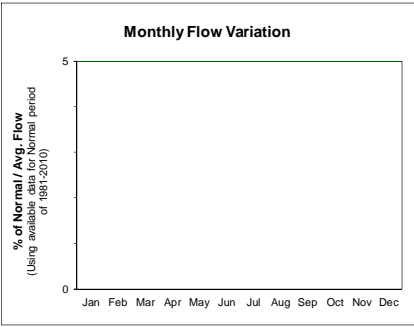
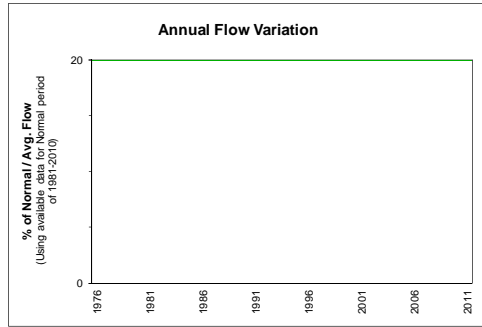
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976	1.17	1.09	1.01	3.99	17.60	11.60	7.83	14.60	7.43	3.92	2.18	1.75	6.21	Aug 17	41.90	4.51	1976		
1977	1.40	1.22	1.07	3.07	25.00	21.10	17.70	14.40	9.95	6.82	2.40	1.82	8.89	May 11	58.40	7.62	1977		
1978	1.10	0.96	0.99	3.83	8.56	15.60	13.90	5.87	8.87	5.61	3.48	2.31	5.94	Jul 11	53.50	4.65	1978		
1979	1.14	0.98	1.34	3.87	12.00	10.60	6.16	3.42	2.27	2.03	1.07	0.80	3.82	May 27	32.40	1.87	1979		
1980	0.98	0.84	0.83	4.82	7.93	42.10	11.90	7.80	8.73	5.02	3.03	2.53	8.01	Jun 04	200.00	5.57	1980		
1981	1.96	1.36	1.05	2.22	10.40	9.08	6.60	5.72	3.17	2.36	1.95	0.97	3.92	Jul 30	21.80	2.70	1981		
1982	0.62	0.90	0.79	1.15	14.80	14.40	23.60	16.10	9.25	6.65	2.87	1.82	7.81	Jul 15	65.90	7.28	1982		
1983	1.52	1.60	1.48	3.44	6.28	11.10	24.60	8.02	5.29	3.45	2.73	1.29	5.94	Jul 26	87.90	4.02	1983		
1984	1.22	1.21	1.25	3.22	8.72	15.90	6.32	3.44	6.32	10.10	3.05	1.76	5.21	Jun 09	32.40	2.54	1984		
1985	1.32	0.59	0.56	2.95	8.62	7.50	6.55	4.95	10.90	7.53	2.26	2.47	4.70	Sep 13	22.40	2.78	1985		
1986	1.43	1.19	0.88	2.44	16.00	15.40	20.40	6.76	5.27	8.42	3.10	1.91	6.99	Jul 18	73.20	3.66	1986		
1987	1.74	1.39	1.15	2.01	8.80	6.83	5.43	23.00	4.80	3.22				Aug 02	126.00	3.85	1987		
1988			1.13	2.10	3.14	6.07	4.31	2.43	1.61	1.54				Jun 12	16.40	1.59	1988		
1989			0.69	3.51	14.30	16.00	21.50	31.10	12.60	5.94				Aug 03	76.90	8.49	1989		
1990			1.25	3.54													1990		
1991			1.14	4.53	18.80	15.20	12.80	10.00	4.77	3.02				Jul 07	30.90	3.64	1991		
1992			2.71	5.55	10.30	9.14	3.71	2.72	3.31	3.10				Jun 02	17.00	2.07	1992		
1993			1.70	5.37	7.41	7.39	12.90	5.59	5.35	3.12				Jul 17	20.80	3.76	1993		
1994			0.93	5.65	10.10	12.20	9.61	6.34	3.30	2.93				Jul 05	21.60	2.56	1994		
1995			1.17	3.05	11.20	16.10	10.20	10.00	4.40	2.61				Jun 21	47.90	3.24	1995		
1996			1.28	4.73	15.90	22.50	7.63	4.43	2.75	1.88				May 31	108.00	2.18	1996		
1997			0.75	2.62	12.40	22.60	39.90							Jul 13	312.00	6.45	1997		
1998			1.12	2.51	7.47	12.00	15.50	4.61	2.84	3.67				Jul 01	59.20	2.47	1998		
1999			1.14	5.67	19.00	14.70	21.50	7.18	3.95	2.64				Jul 04	48.60	2.95	1999		
2000			0.76	2.85	8.10	17.40	19.30	6.42	11.70	5.91				Jun 11	46.10	4.60	2000		
2001			1.09	1.48	5.47	7.75	28.70	8.90	3.04	1.79				Jul 18	95.30	2.42	2001		
2002			0.80	2.28	8.55	11.60	3.33	3.18	3.74	4.87				May 30	19.20	1.77	2002		
2003			1.05	9.92	13.70	14.60	8.00	3.61	2.48	1.99				Apr 25	38.70	2.22	2003		
2004			1.68	2.52	9.66	25.00	13.80	6.09	11.20	5.16				Jun 06	59.70	4.09	2004		
2005			2.02	5.28	11.90	22.10	12.70	7.91	12.70	8.18				Jun 28	39.80	4.94	2005		
2006			1.10	3.64	5.14	6.79	4.01	3.99	5.15	4.98				Jun 10	14.20	2.15	2006		
2007			1.49	5.16	20.70	21.10	5.97	4.29	2.87	2.32				Jun 06	49.10	2.44	2007		
2008			1.35	1.54	19.50	15.30	4.76	2.51	2.42	1.85				May 18	47.40	2.08	2008		
2009			0.64	3.15	8.69	9.93	19.30	4.14	2.19	2.10				Jul 09	76.90	1.79	2009		
2010			1.05	2.44	5.35	8.04	5.65	3.48	8.80	7.61				Sep 29	23.70	2.60	2010		
2011			0.75	2.04	11.00	28.60	24.70	6.74	3.18	2.11				Jun 18	94.30	2.56	2011		
Avg.	1.30	1.11	1.14	3.56	11.50	14.95	13.16	7.64	5.78	4.25	2.56	1.77	6.13		62.27	3.55	#DIV/0!	m <sup>3</sup> /s	
S. D.	0.35	0.28	0.41	1.67	5.05	7.41	8.58	6.06	3.40	2.31	0.68	0.57	1.67		57.56	1.76	#DIV/0!	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1.40	1.18	1.17	3.55	11.05	13.58	13.05	7.39	5.58	4.25	2.66	1.70	5.76	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	5	4	4	13	41	49	48	27	20	16	10	6	252	mm	10-Year	129.9	1.886	0.000	m <sup>3</sup> /s



**KAKWA RIVER NEAR GRANDE PRAIRIE 07GB002**

Station Longitude Latitude: -118.594400 54.372220

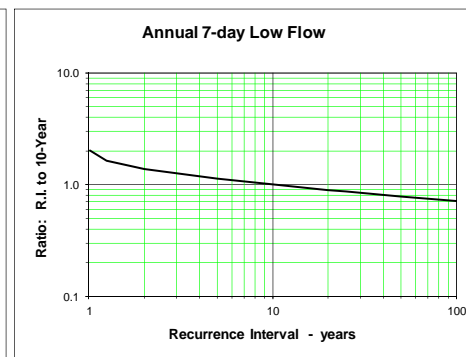
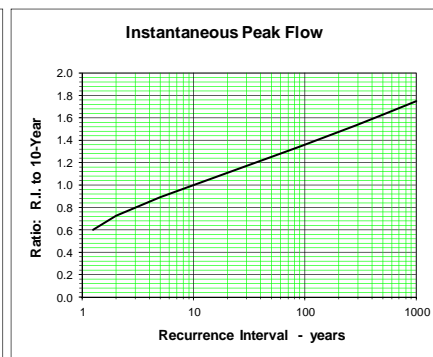
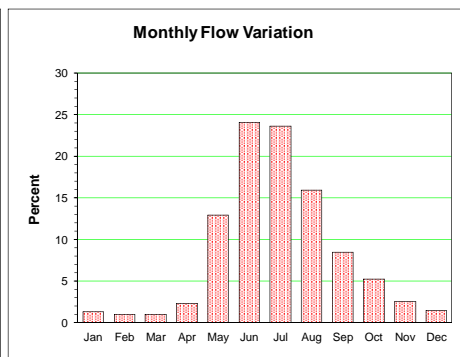
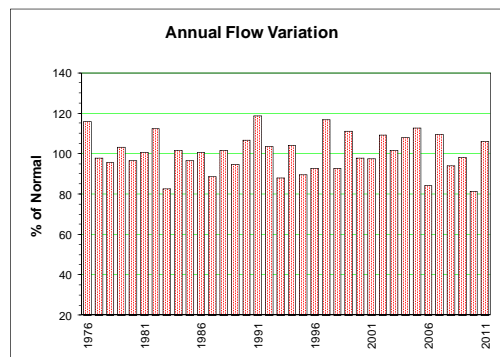
Year	Monthly and Annual Discharge in m <sup>3</sup> /s										Drainage Area = 3253.62 km <sup>2</sup>		Median Elevation = 1396 m		Instantaneous Peak Flow		7-Day Low Flow		Year
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual		
1976							87.40	99.70	50.90	21.60				Jun 27	276.00	28.04		1976	
1977					126.00	122.00	99.60	52.90	48.40	47.80				May 06	368.00	35.84		1977	
1978					66.90	102.00	68.00	26.40	43.50	28.20				Jul 11	292.00	18.86		1978	
1979					89.60	155.00	79.10	22.80	13.30	11.70				May 27	317.00	11.39		1979	
1980					74.00	196.00	46.50	25.90	36.90	25.80				Jun 04	736.00	15.77		1980	
1981					100.00	67.10	44.80	25.60	11.20	8.05				May 26	226.00	9.22		1981	
1982					92.60	150.00	215.00	89.90	46.30	25.50				Jul 15	2700.00	34.09		1982	
1983			3.09	14.70	62.20	93.20	128.00	31.30	16.50	12.90				Jul 15	587.00	14.06		1983	
1984			5.07	15.20	43.00	117.00	53.90	20.10	47.80	53.90				Jun 07	192.00	13.81		1984	
1985			4.02	12.80	82.70	100.00	49.60	24.40	55.30	32.10				May 23	184.00	17.87		1985	
1986			5.21	11.30	98.60	145.00	108.00	21.80	17.10	27.30				May 29	356.00	11.23		1986	
1987			4.19	21.30	99.50	97.20	44.40	99.50	18.10	10.30				Aug 02	538.00	13.21		1987	
1988			3.55	16.40	61.80	71.50	34.90	14.60	8.57	10.20				May 13	137.00	6.95		1988	
1989			1.63	9.23	84.90	134.00	102.00	143.00	55.50	23.30				Aug 23	330.00	29.81		1989	
1990			4.06	14.20	110.00	234.00	74.70	20.30	15.80	12.10				Jun 12	1120.00	13.07		1990	
1991			3.92	41.30	177.00	153.00	85.60	52.60	32.20	14.40				May 10	477.00	16.73		1991	
1992			15.50	43.90	81.00	78.60	23.10	12.20	19.70	23.90				Jun 02	164.00	10.16		1992	
1993			3.70	12.80	74.20	49.10	52.60	24.90	17.40	12.40				May 14	212.59	13.39		1993	
1994			5.10	36.90														1994	
1995																		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	
Avg.	#DIV/0!	#DIV/0!	4.92	20.84	89.65	121.45	77.62	44.88	30.80	22.30	#DIV/0!	#DIV/0!	#DIV/0!		511.81	17.42	#DIV/0!	m <sup>3</sup> /s	
S. D.	#DIV/0!	#DIV/0!	3.47	12.42	30.12	47.85	44.45	37.63	17.01	12.81	#DIV/0!	#DIV/0!	#DIV/0!		597.95	8.65	#DIV/0!	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	#DIV/0!	#DIV/0!	4.92	20.84	89.81	114.59	78.20	44.63	27.81	20.49	#DIV/0!	#DIV/0!	#DIV/0!	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	#DIV/0!	#DIV/0!	4	17	74	91	64	37	22	17	#DIV/0!	#DIV/0!	#DIV/0!	mm	10-Year	990.5	8.968	0.000	m <sup>3</sup> /s



**DORE RIVER NEAR MCBRIDE 08KA001**

Station Longitude Latitude: -120.247107 53.310970

Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 408.66 km <sup>2</sup>		Median Elevation = 1913 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				
1976	2.20	1.75	1.63	3.03	21.40	31.40	46.60	40.80	24.90	9.69	4.14	2.62	15.92	Aug 17	99.1	14.86	1.58	1976				
1977	1.93	1.83	1.97	5.03	15.10	40.80	38.80	31.20	10.70	6.33	3.86	2.70	13.43	Jul 16	88.9	8.15	1.72	1977				
1978	2.06	1.36	1.10	2.53	11.70	37.60	42.40	24.80	14.20	10.80	5.19	3.20	13.15	Jun 30	77.9	8.96	1.07	1978				
1979	1.93	1.50	1.43	2.34	13.90	44.20	46.30	27.70	17.00	8.12	2.82	2.05	14.18	May 26	82.1	12.29	1.43	1979				
1980	1.69	1.42	1.16	4.94	23.40	34.30	29.60	21.30	16.90	11.10	4.57	8.56	13.29	Jun 26	62.8	11.79	1.01	1980				
1981	5.84	3.33	2.61	2.72	27.60	26.90	38.70	29.70	15.00	4.94	5.31	2.10	13.83	Jul 03	73.8	5.65	1.92	1981				
1982	1.93	1.33	0.98	1.68	13.30	55.90	45.40	27.20	23.10	8.17	3.57	2.22	15.45	Jun 21	106.0	12.99	0.86	1982				
1983	2.04	1.87	1.54	3.05	16.70	28.60	30.30	24.40	12.10	6.52	5.62	2.65	11.35	Jul 13	72.3	7.52	1.40	1983				
1984	2.04	1.77	1.80	2.61	7.97	40.80	41.30	29.90	18.30	15.40	3.07	2.22	13.97	Sep 17	105.0	10.47	1.72	1984				
1985	1.69	1.60	1.57	2.51	25.80	38.20	40.70	24.50	11.70	6.29	2.21	1.20	13.25	May 24	71.9	9.96	1.15	1985				
1986	1.60	1.53	1.38	2.39	23.00	51.10	35.70	23.00	11.30	7.32	4.30	2.72	13.84	Jun 01	115.3	4.81	1.17	1986				
1987	2.26	2.28	1.77	3.84	22.20	42.90	32.70	18.50	7.40	4.67	4.26	2.73	12.18	Jun 13	121.0	3.76	1.48	1987				
1988	2.15	1.47	1.24	5.76	25.60	39.80	32.10	28.70	16.50	7.96	3.65	2.40	13.99	May 13	68.8	10.48	1.20	1988				
1989	1.89	1.72	1.49	2.93	19.20	42.70	32.80	29.50	10.60	5.24	4.70	2.30	12.99	Jun 14	80.0	7.29	1.31	1989				
1990	1.83	0.79	0.61	4.12	23.90	52.70	41.70	27.20	11.90	4.66	3.48	2.22	14.67	May 06	102.0	9.15	0.60	1990				
1991	1.46	1.59	1.51	5.03	24.20	40.00	46.40	43.10	16.90	8.84	2.78	2.40	16.30	Aug 30	128.0	11.56	1.24	1991				
1992	2.22	1.93	3.10	7.93	21.50	45.50	29.00	22.70	12.60	15.40	5.30	3.28	14.23	Oct 24	93.8	5.83	1.82	1992				
1993	2.18	1.83	1.79	3.12	33.30	30.50	25.30	24.10	11.90	5.39	3.13	1.44	12.08	May 04	76.0	5.32	1.26	1993				
1994	1.57	1.24	2.04	8.36	28.30	40.00	39.60	20.60	15.50	7.26	3.13	3.03	14.30	Oct 01	82.9	11.52	1.04	1994				
1995	1.71	1.40	1.18	2.23	19.60	34.40	36.90	23.70	15.20	4.84	3.19	2.56	12.32	Jul 26	106.6	10.54	1.07	1995				
1996	2.25	1.98	2.07	5.85	11.40	33.80	39.00	26.50	13.20	9.07	4.58	2.74	12.74	Jul 04	64.2	7.32	1.89	1996				
1997	1.67	1.69	1.71	2.80	25.50	40.70	47.00	30.00	15.40	15.80	6.37	2.45	16.04	Jul 11	114.0	11.03	1.51	1997				
1998	1.59	1.62	1.74	3.07	31.30	30.10	35.80	23.80	11.20	5.98	3.23	2.12	12.73	Jul 30	67.3	6.57	1.48	1998				
1999	2.03	1.64	1.64	4.89	17.20	42.40	49.10	37.00	12.20	8.43	4.03	1.54	15.28	Jul 29	133.0	9.10	1.34	1999				
2000	1.39	2.13	1.74	2.67	13.10	36.40	42.30	25.80	20.30	8.92	4.18	1.97	13.44	Sep 17	76.8	11.97	1.08	2000				
2001	1.60	1.45	1.59	2.69	15.10	33.50	45.90	31.10	14.30	5.41	4.23	2.75	13.39	Jul 18	113.0	9.52	1.40	2001				
2002	1.80	1.58	1.37	1.86	14.30	55.80	40.60	19.60	13.00	5.18	2.86	2.86	15.00	Jun 26	99.6	12.67	1.29	2002				
2003	2.45	1.96	1.86	4.74	18.40	41.80	36.20	25.70	13.60	12.70	4.87	2.43	13.96	May 25	72.8	7.64	1.75	2003				
2004	1.84	1.57	1.42	5.51	18.10	42.30	36.30	26.40	21.00	11.70	8.12	3.52	14.84	Sep 04	83.2	12.37	1.27	2004				
2005	3.65	3.45	3.09	8.12	33.40	41.60	34.70	21.80	13.30	12.60	5.95	3.44	15.50	Jul 06	81.8	10.45	1.94	2005				
2006	2.17	1.83	1.57	3.13	22.20	35.00	34.50	18.00	10.70	3.95	3.03	2.16	11.58	Jun 03	67.5	5.88	1.51	2006				
2007	1.75	1.59	1.64	3.65	23.80	53.20	48.60	17.90	10.30	10.60	4.72	2.20	15.07	Jun 06	100.0	6.23	1.54	2007				
2008	1.92	1.44	1.31	1.58	25.60	35.20	37.50	25.40	10.20	7.27	4.68	2.45	12.94	Aug 19	81.9	7.67	1.30	2008				
2009	1.70	1.48	1.36	2.19	13.70	44.50	42.20	24.10	18.00	5.30	4.06	2.68	13.50	Jun 15	83.7	11.27	1.34	2009				
2010	2.09	1.75	1.67	5.00	13.80	32.40	27.70	20.30	13.30	8.87	4.24	2.28	11.16	Sep 28	98.9	7.40	1.58	2010				
2011	1.80	1.42	1.12	1.71	20.80	52.20	42.90	27.00	15.00	6.85	2.21	1.41	14.59	Jun 29	153.0	9.70	1.05	2011				
Avg.	2.05	1.73	1.63	3.77	20.4	40.3	38.68	26.25	14.59	8.48	4.22	2.60	13.79		92	9.16	1.37	m <sup>3</sup> /s				
S. D.	0.75	0.49	0.50	1.81	6.36	7.65	6.24	5.62	3.89	3.28	1.21	1.15	1.32		21.48	2.69	0.31	m <sup>3</sup> /s				
Normal	2.08	1.76	1.68	3.87	20.97	40.29	38.20	25.74	14.22	8.42	4.31	2.44	13.73		m <sup>3</sup> /s							
Normal	14	11	11	25	137	256	250	169	90	55	27	16	1060	10-Year	127.21	5.76	0.97	m <sup>3</sup> /s				

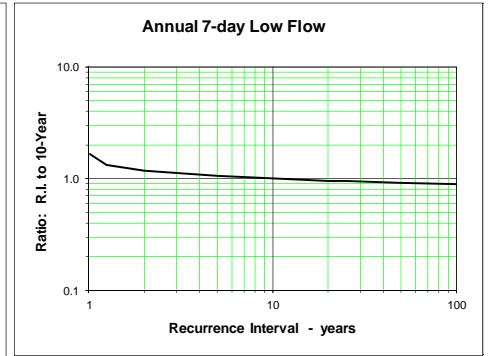
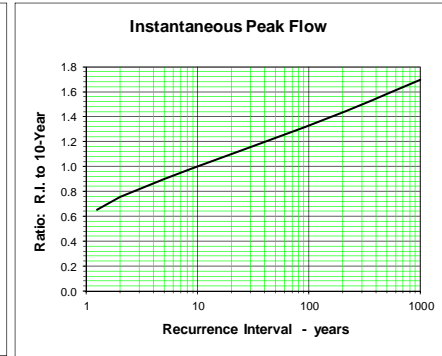
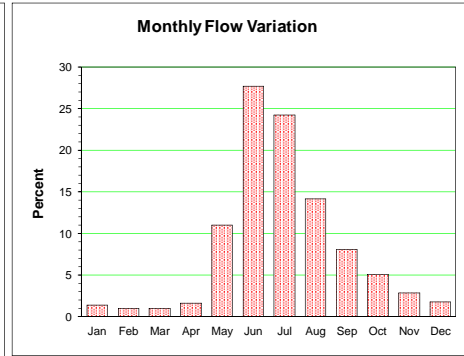
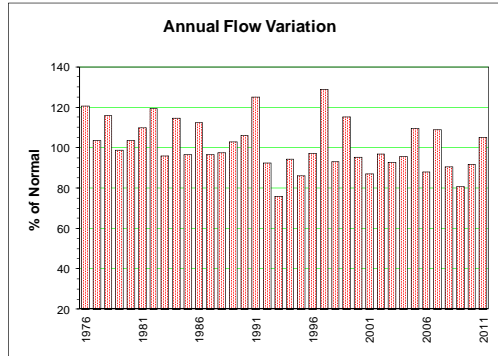




**FRASER RIVER AT RED PASS 07KA007**

Station Longitude Latitude: -119.003729 52.985209

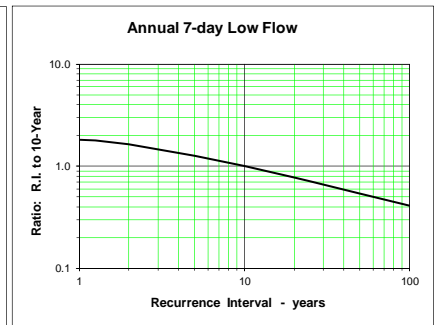
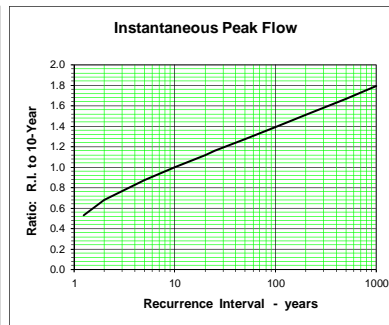
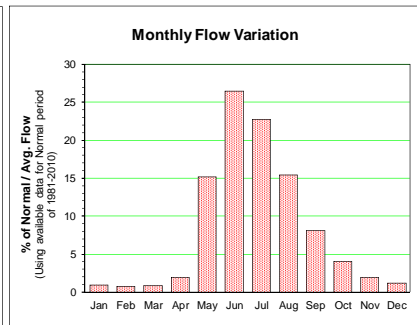
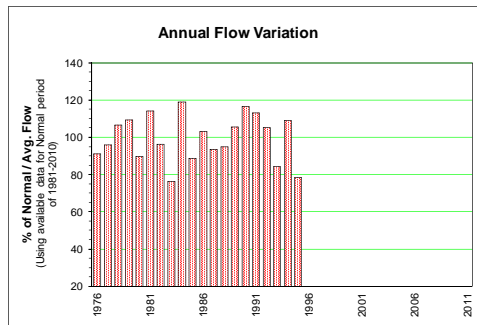
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 1696.88 km <sup>2</sup>		Median Elevation = 1954 m		Instantaneous Peak Flow		7-Day Low Flow	
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976	9.02	6.37	4.78	8.48	69.90	109.00	168.00	128.00	71.10	35.90	14.90	10.70	53.3	Jul 10	214.27	49.40	4.59	1976			
1977	6.83	5.67	4.88	8.41	52.40	143.00	135.00	93.30	53.40	21.90	12.60	8.35	45.7	Jun 22	212.24	38.94	4.56	1977			
1978	6.12	5.22	4.70	6.68	41.50	151.00	140.00	77.90	96.20	52.10	19.60	11.30	51.2	Jun 06	204.11	55.66	4.48	1978			
1979	7.15	6.07	5.60	5.42	34.70	149.00	145.00	80.10	48.60	22.70	9.81	7.43	43.7	Jun 06	219.35	39.44	5.16	1979			
1980	6.15	5.09	4.52	11.40	98.60	132.00	94.70	69.60	53.40	42.40	14.90	14.20	45.7	Jun 18	180.76	45.94	4.11	1980			
1981	11.80	7.63	6.38	7.91	86.10	120.00	139.00	99.30	54.80	17.50	19.10	9.54	48.6	May 27	209.19	29.21	5.89	1981			
1982	6.89	5.62	5.21	5.01	37.00	202.00	158.00	91.60	67.30	30.70	13.40	8.69	52.8	Jun 23	303.63	42.96	4.87	1982			
1983	6.64	5.45	5.43	6.52	46.10	132.00	127.00	80.00	41.20	22.70	24.20	9.44	42.4	Jun 01	211.22	29.17	4.61	1983			
1984	7.78	6.59	5.70	7.70	19.00	158.00	169.00	100.00	73.10	37.00	13.10	9.44	50.6	Jun 30	385.89	43.50	5.61	1984			
1985	7.34	5.92	5.40	7.29	76.80	138.00	138.00	62.40	34.00	17.00	9.81	6.94	42.7	Jul 03	272.15	26.10	5.12	1985			
1986	6.90	5.52	5.48	7.00	50.40	214.00	142.00	85.20	40.30	17.80	11.30	8.28	49.7	Jun 03	345.27	17.66	5.09	1986			
1987	6.72	5.38	7.21	10.30	75.80	144.00	101.00	83.20	41.90	16.80	10.70	6.87	42.7	Jun 12	214.27	28.70	4.84	1987			
1988	5.11	5.22	4.94	12.30	72.20	153.00	103.00	76.60	38.80	23.10	13.30	8.56	43.1	Jun 28	205.13	19.13	4.57	1988			
1989	6.83	6.07	4.96	7.12	66.40	169.00	112.00	86.60	35.00	20.00	16.90	11.00	45.5	Jun 15	258.00	29.70	4.76	1989			
1990	8.62	6.85	5.95	11.10	55.90	173.00	141.00	72.80	39.30	20.80	15.50	9.59	46.9	Jun 25	263.00	32.87	5.65	1990			
1991	7.53	7.30	5.84	10.80	74.10	158.00	181.00	114.00	54.10	22.40	13.50	9.99	55.2	Jul 04	255.00	33.04	5.58	1991			
1992	7.74	6.47	6.50	14.30	65.30	163.00	77.70	49.00	32.50	38.10	19.20	9.71	40.8	Jun 14	222.00	26.76	5.75	1992			
1993	6.74	5.35	5.03	5.97	93.40	95.60	61.20	61.10	34.50	15.50	9.06	7.23	33.6	May 16	195.00	19.97	4.64	1993			
1994	6.21	5.12	5.09	12.40	80.30	129.00	118.00	63.20	34.60	25.10	11.00	8.27	41.8	Jul 02	181.00	31.79	4.79	1994			
1995	5.80	5.08	4.47	5.72	49.20	139.00	101.00	67.40	35.70	19.20	12.30	9.73	38.0	Jun 06	186.00	24.53	4.37	1995			
1996	6.63	5.39	4.92	11.80	33.10	128.00	148.00	82.70	43.60	28.20	13.10	8.57	43.0	Jul 10	202.00	28.89	4.68	1996			
1997	5.45	4.96	5.39	6.63	58.70	180.00	157.00	90.10	59.30	73.00	25.60	14.10	57.0	Jun 18	248.00	54.09	4.42	1997			
1998	9.24	6.97	5.97	8.50	109.00	101.00	105.00	64.10	35.50	21.80	13.70	8.98	41.1	May 28	181.00	27.40	5.67	1998			
1999	7.38	6.18	5.67	9.08	40.00	159.00	171.00	110.00	44.40	22.50	20.20	12.70	51.0	Jun 19	314.80	34.96	5.39	1999			
2000	8.09	6.06	5.47	6.78	28.50	123.00	163.00	72.00	44.90	23.70	13.70	8.23	42.1	Jul 02	235.00	33.53	5.40	2000			
2001	6.36	4.84	4.19	5.15	38.60	110.00	126.00	83.10	36.60	20.50	13.90	9.21	38.4	Jul 19	175.00	28.09	4.07	2001			
2002	6.87	5.49	4.77	5.58	25.00	197.00	131.00	50.80	41.60	25.10	12.00	8.14	42.9	Jun 28	299.00	35.74	4.49	2002			
2003	6.31	5.30	5.11	9.48	44.60	165.00	107.00	56.40	28.10	35.00	18.40	9.82	41.0	Jun 11	225.00	20.91	4.78	2003			
2004	6.34	5.21	4.92	10.40	43.80	136.00	105.00	57.20	64.00	39.10	22.20	12.80	42.3	Jun 12	196.00	44.16	4.77	2004			
2005	9.43	9.58	7.16	14.90	83.50	153.00	111.00	62.40	54.90	39.40	22.90	11.50	48.5	Jun 02	223.00	40.70	6.60	2005			
2006	9.12	6.74	5.64	9.43	85.60	139.00	95.80	50.40	29.10	13.90	11.70	7.82	38.9	May 24	215.00	19.66	5.38	2006			
2007	6.50	5.42	5.93	9.44	58.70	188.00	153.00	56.40	36.60	28.00	20.50	10.30	48.2	Jun 07	370.00	22.71	4.99	2007			
2008	7.44	5.68	4.85	4.86	57.70	130.00	119.00	66.00	37.60	22.50	14.60	8.91	40.0	Jul 03	221.00	28.63	4.28	2008			
2009	6.44	5.21	4.45	5.97	25.80	143.00	110.00	55.90	38.50	13.90	10.70	6.80	35.7	Jun 18	218.00	33.27	4.24	2009			
2010	5.41	4.46	4.52	11.00	43.70	130.00	112.00	60.00	48.30	39.50	16.00	9.53	40.5	Jun 25	205.00	34.31	4.19	2010			
2011	7.08	5.82	4.76	4.59	50.60	159.00	138.00	74.70	43.10	40.70	15.40	10.40	46.4	Jun 30	233.00	33.86	4.42	2011			
Avg.	7.17	5.87	5.33	8.48	57.5	147.6	127.87	75.93	46.28	27.99	15.24	9.53	44.74		236.06	32.93	4.91	m <sup>3</sup> /s			
S. D.	1.33	0.96	0.72	2.74	22.45	27.30	27.85	18.89	14.36	12.17	4.30	1.86	5.46		52.76	9.59	0.58	m <sup>3</sup> /s			
Normal	7.19	5.90	5.42	8.68	57.38	148.99	126.09	73.66	43.34	26.39	15.39	9.36	44.16					m <sup>3</sup> /s			
Normal	11	8	9	13	91	228	199	116	66	42	24	15	821	10-Year	316.09	22.06	4.13	m <sup>3</sup> /s			



**MOOSE RIVER NEAR RED PASS 08KA008**

Station Longitude Latitude: -118.800273 52.920612

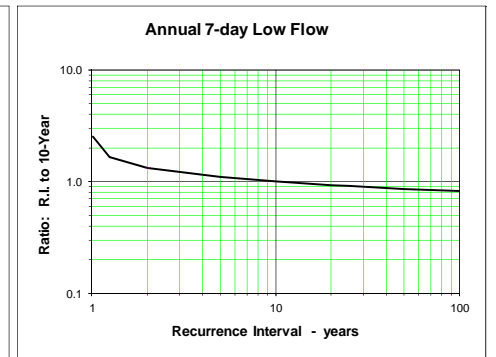
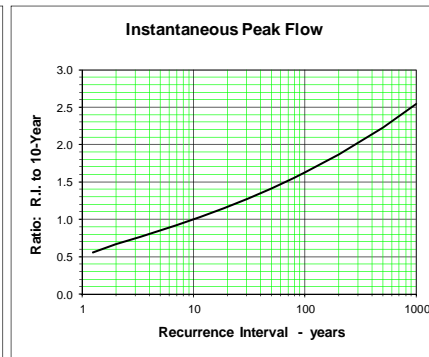
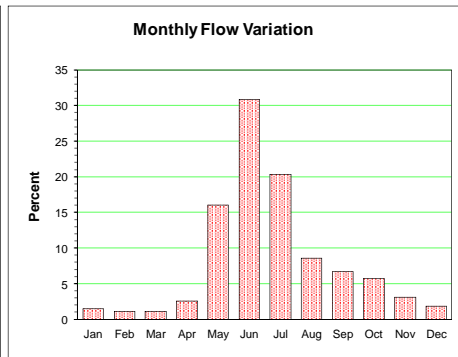
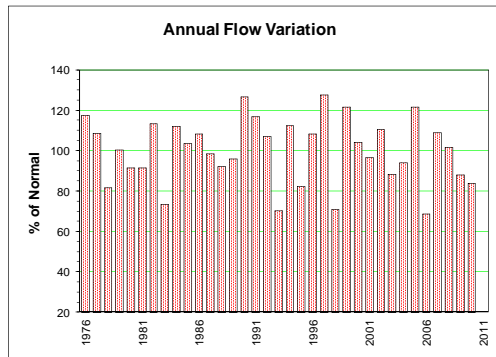
Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976	1.55	1.30	1.25	3.05	17.70	27.90	37.80	24.80	16.50	7.21	3.24	2.27	12.10	Jul 02	72.50	13.51	1.176	1976	
1977	1.58	1.36	1.18	3.27	16.00	44.80	36.60	26.90	11.30	4.52	2.73	1.60	12.71	Jun 09	107.25	7.19	0.991	1977	
1978	1.27	1.21	0.95	2.14	12.80	45.60	45.20	23.10	21.10	9.30	3.67	2.69	14.15	Jul 01	90.30	10.41	0.741	1978	
1979	1.70	1.36	1.32	1.32	13.30	57.20	48.60	24.40	13.40	6.48	2.63	1.89	14.53	Jun 06	89.99	11.10	1.030	1979	
1980	1.41	1.06	0.89	4.78	24.90	35.30	25.20	18.70	14.10	9.67	3.35	3.22	11.91	Jun 17	55.70	11.11	0.850	1980	
1981	2.69	1.81	1.53	2.95	50.20	30.20	37.20	28.00	14.90	4.25	4.60	1.72	15.13	May 27	157.65	6.03	1.500	1981	
1982	1.28	1.16	1.19	1.28	12.30	29.60	42.60	27.80	21.50	8.48	3.05	2.33	12.80	Jul 20	75.30	12.25	1.140	1982	
1983	1.78	1.53	1.29	1.80	18.20	29.80	32.60	14.50	6.09	5.65	5.38	2.07	10.12	Jun 02	71.92	4.78	1.209	1983	
1984	1.68	1.34	1.12	1.97	5.77	66.50	46.60	29.60	21.00	9.84	2.25	1.76	15.79	Jun 30	149.00	10.49	0.982	1984	
1985	1.20	1.23	1.51	1.90	24.30	35.80	35.30	20.20	10.70	4.93	2.21	1.30	11.79	Jul 01	87.70	7.29	1.103	1985	
1986	1.25	1.06	1.46	2.42	25.70	48.70	36.60	23.60	11.70	6.51	2.84	1.85	13.71	Jun 01	151.00	6.19	0.980	1986	
1987	1.60	1.29	1.80	3.15	21.00	45.00	30.90	22.30	11.80	5.19	2.72	1.53	12.41	Jun 14	124.28	7.44	1.157	1987	
1988	1.30	1.29	1.22	5.79	22.90	41.40	31.30	25.50	10.60	4.85	2.81	1.72	12.59	Jun 28	69.97	3.68	1.171	1988	
1989	1.48	1.25	1.14	2.97	24.20	51.60	33.90	29.80	10.50	5.09	3.40	2.19	14.03	Jun 15	109.32	7.27	1.104	1989	
1990	1.68	1.41	1.26	2.27	24.60	54.70	45.60	26.90	14.80	5.76	3.65	2.12	15.47	Jun 25	112.00	11.37	1.209	1990	
1991	1.23	1.23	1.21	4.01	22.50	41.70	45.00	35.00	17.10	5.69	2.64	1.85	15.03	Sep 01	99.60	9.55	1.166	1991	
1992	1.60	1.31	1.80	6.77	24.40	55.70	25.20	19.40	11.00	13.40	4.41	2.28	13.95	Oct 25	80.40	6.60	1.133	1992	
1993	1.42	1.20	1.35	2.38	34.80	31.00	20.80	21.40	10.50	4.22	2.38	1.83	11.18	May 15	106.56	5.32	1.073	1993	
1994	1.68	1.14	1.60	5.32	27.60	45.80	42.50	22.00	12.90	7.46	2.74	1.78	14.46	Jul 02	75.90	9.67	0.952	1994	
1995	1.30	1.04	1.19	1.97	18.00	33.70	27.90	17.00	12.60	4.44	2.86	2.26	10.40	May 31	56.40	8.90	0.923	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	
Avg.	1.53	1.28	1.31	3.08	22.06	42.60	36.37	24.05	13.70	6.65	3.18	2.01	13.21	14.33	97.14	8.52	1.08	m <sup>3</sup> /s	
S. D.	0.33	0.18	0.24	1.52	9.29	10.93	7.99	4.89	4.04	2.41	0.82	0.43	1.66		30.18	2.71	0.16	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	1.54	1.29	1.38	3.13	23.76	42.75	35.60	24.20	13.18	6.38	3.20	1.91	13.26	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	9	7	8	18	140	243	209	142	75	38	18	11	918	mm	10-Year	148.2	5,654	0,704	m <sup>3</sup> /s



**MCKALE RIVER NEAR 940 M CONTOUR 08KA009**

Station Longitude Latitude: -120.219220 53.444220

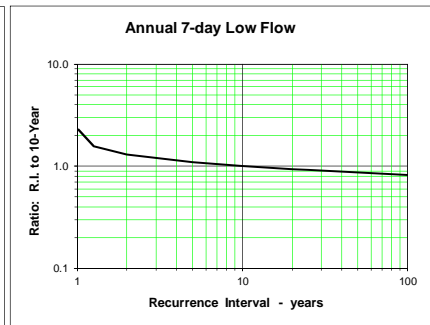
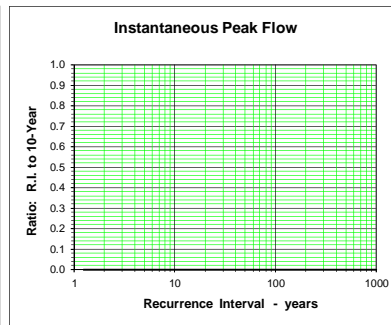
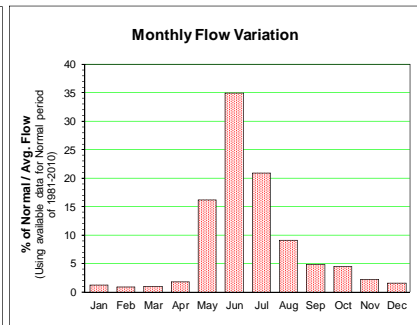
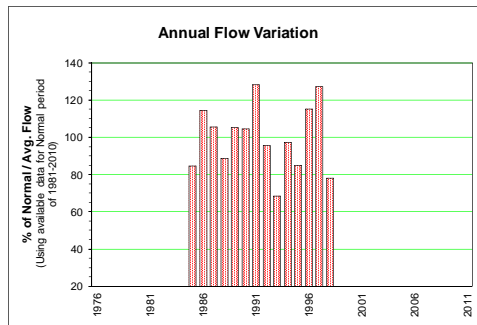
Monthly and Annual Discharge in m <sup>3</sup> /s														Drainage Area = 253.66 km <sup>2</sup>		Median Elevation = 1835 m		Instantaneous Peak Flow		7-Day Low Flow	
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Avg Yr (MAD)	Date	Annual	Jun-Sep	Annual	Year			
1976	1.61	1.34	1.10	2.09	14.30	23.70	29.70	20.20	11.10	5.74	2.96	2.11	9.70	Jun 19	66.0	6.19	1.08	1976			
1977	1.62	1.46	1.24	3.79	12.90	32.80	25.80	12.30	6.99	4.24	2.52	1.46	8.96	Jun 07	80.4	5.41	1.19	1977			
1978	1.12	1.04	0.83	1.93	8.68	26.30	14.80	6.74	7.35	6.63	3.24	2.09	6.74	Jun 04	58.3	5.12	0.73	1978			
1979	1.31	1.09	1.31	1.58	10.40	34.90	27.80	7.70	4.50	4.21	2.46	1.66	8.27	Jun 05	56.9	3.43	1.03	1979			
1980	1.05	0.89	0.74	4.37	19.40	21.90	10.80	6.60	9.05	6.41	3.16	6.05	7.55	Jun 18	63.2	5.63	0.69	1980			
1981	2.92	1.88	1.67	2.00	20.40	20.30	20.00	6.73	4.50	3.94	3.76	1.85	7.54	May 26	75.8	3.65	1.53	1981			
1982	1.51	1.23	0.85	1.23	8.75	40.10	25.80	12.90	10.60	4.29	2.84	1.78	9.34	Jun 20	81.1	5.97	0.82	1982			
1983	1.28	1.15	0.93	2.13	11.30	21.20	13.80	4.73	6.96	4.50	3.36	1.35	6.07	May 31	55.7	3.30	0.88	1983			
1984	1.10	0.99	1.03	1.45	5.33	33.40	29.60	12.80	12.60	7.83	2.69	1.99	9.24	Jun 27	72.8	7.51	0.98	1984			
1985	1.41	1.16	1.15	1.68	18.60	31.60	20.40	7.51	9.70	5.41	2.13	1.32	8.54	Jun 29	65.2	4.63	1.06	1985			
1986	1.60	1.21	1.05	1.45	15.60	38.10	23.00	8.51	4.65	5.87	3.63	2.18	8.93	Jun 15	81.8	2.93	0.95	1986			
1987	1.82	1.78	1.48	2.94	17.70	33.90	14.20	11.50	3.83	3.28	2.94	1.98	8.13	Jun 12	79.4	2.86	1.23	1987			
1988	1.25	1.05	1.02	4.58	18.80	30.00	17.00	7.43	4.22	4.09	2.75	1.85	7.59	May 13	54.4	2.78	0.98	1988			
1989	1.40	1.32	1.14	2.13	15.20	34.80	17.00	8.89	4.20	3.43	3.37	1.77	7.91	Jun 05	63.6	3.22	1.02	1989			
1990	1.86	1.26	1.12	3.15	20.60	48.40	29.40	8.41	3.76	3.35	2.15	1.65	10.46	Jun 23	96.1	2.69	1.06	1990			
1991	1.11	1.13	0.93	3.06	19.00	33.90	27.60	12.60	7.12	4.60	2.15	1.95	9.64	Jul 02	62.5	4.72	0.88	1991			
1992	1.66	1.54	2.46	6.10	18.00	33.60	10.30	4.66	12.30	9.45	3.88	2.14	8.82	Jun 02	81.0	3.86	1.50	1992			
1993	1.45	1.19	1.18	1.96	25.60	16.00	7.77	4.63	3.13	2.60	2.23	1.45	5.80	May 14	81.9	2.41	1.05	1993			
1994	1.35	0.99	1.37	5.16	22.80	36.10	24.10	6.75	4.16	4.26	2.21	1.52	9.27	Jul 01	67.4	3.21	0.84	1994			
1995	1.01	0.89	0.79	1.41	16.00	23.50	13.50	12.80	4.03	3.28	2.18	1.66	6.79	May 28	45.1	2.90	0.74	1995			
1996	1.38	1.20	1.16	2.57	9.30	35.30	26.10	11.00	7.44	6.37	3.37	1.82	8.92	Jun 04	86.2	5.08	1.10	1996			
1997	0.97	1.05	1.00	1.65	18.20	35.20	29.60	12.00	6.83	12.10	4.47	2.39	10.51	Jul 12	84.8	5.13	0.88	1997			
1998	1.59	1.32	1.11	2.39	26.40	15.50	7.98	3.09	2.12	4.56	2.22	1.43	5.85	May 27	46.3	1.84	1.04	1998			
1999	1.22	1.08	1.18	2.87	11.90	35.50	31.70	15.00	6.76	5.80	4.31	2.41	10.02	Jun 15	84.6	5.06	1.02	1999			
2000	1.63	1.34	1.02	1.57	8.80	31.60	27.10	10.40	9.94	5.80	2.92	0.84	8.59	Jun 30	62.2	6.62	0.66	2000			
2001	0.86	0.79	1.06	2.18	11.20	25.40	29.10	10.40	5.75	3.18	2.90	2.12	7.96	Jul 18	185.0	4.58	0.68	2001			
2002	1.46	1.10	0.89	1.16	8.09	43.10	18.00	6.84	11.80	11.90	3.29	1.89	9.13	Jun 26	89.8	5.31	0.82	2002			
2003	1.32	1.03	1.21	4.10	13.30	27.40	14.50	5.06	5.17	7.94	3.96	2.21	7.29	May 25	58.4	2.98	0.94	2003			
2004	1.25	1.13	1.28	3.50	11.40	28.20	11.30	5.80	13.50	7.47	5.35	3.24	7.77	Jun 06	58.3	4.27	1.07	2004			
2005	3.02	2.60	2.07	5.50	25.30	30.80	19.00	6.58	9.02	9.07	4.30	2.56	10.02	May 30	92.6	4.55	1.95	2005			
2006	1.74	1.28	1.09	2.43	16.60	19.80	10.40	5.03	2.65	2.62	2.32	1.87	5.68	May 21	45.8	2.38	1.07	2006			
2007	1.37	1.08	1.05	1.81	15.60	39.60	22.70	6.04	5.66	7.08	3.73	1.81	8.98	Jun 02	109.0	3.94	1.03	2007			
2008	1.42	1.10	1.09	1.40	18.30	27.70	19.90	11.40	7.75	4.77	3.33	2.07	8.37	May 20	58.1	6.34	1.08	2008			
2009	1.37	1.18	1.07	1.63	8.90	32.40	21.70	6.45	4.52	3.45	2.40	1.78	7.25	Jun 15	59.5	3.57	1.05	2009			
2010	1.46	1.18	1.07	3.57	12.20	27.90	13.40	5.29	7.53	5.08	2.85	1.39	6.92	Jun 13	55.7	3.88	1.05	2010			
2011	0.99	0.88	0.79	1.05	15.70		11.20	5.69	4.67			1.61				4.57	0.77	2011			
Avg.	1.46	1.22	1.15	2.60	15.3	30.6	20.05	8.78	6.86	5.54	3.09	1.98	8.25		73	4.24	1.01	m <sup>3</sup> /s			
S. D.	0.44	0.33	0.34	1.31	5.31	7.45	7.28	3.63	3.04	2.35	0.78	0.81	1.33		24.80	1.36	0.25	m <sup>3</sup> /s			
Normal	1.49	1.24	1.18	2.63	15.64	31.01	19.77	8.37	6.74	5.58	3.13	1.88	8.25		m <sup>3</sup> /s						
Normal	16	12	13	27	165	317	209	88	69	59	32	20	1026	10-Year	99.40	2.66	0.71	m <sup>3</sup> /s			



**SWIFT CREEK NEAR THE MOUTH 08KA012**

Station Longitude Latitude: -119.267315 52.838809

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976																			1976
1977																			1977
1978																			1978
1979																			1979
1980																			1980
1981																			1981
1982																			1982
1983																			1983
1984	0.59	0.48	0.42	0.54	1.71	17.80											0.374		1984
1985	0.45	0.31	0.29	0.45	6.33	13.00	5.73	2.30	1.75	1.48	0.58	0.42	2.76			1.41	0.242	1985	
1986	0.48	0.35	0.36	0.41	6.59	18.50	9.05	4.12	1.97	1.36	0.90	0.62	3.73			1.20	0.262	1986	
1987	0.48	0.42	0.42	0.71	7.54	15.50	7.06	5.03	1.64	0.95	0.87	0.58	3.44			1.13	0.326	1987	
1988	0.41	0.31	0.29	1.34	5.99	12.20	6.29	3.22	1.61	1.51	1.04	0.54	2.90			1.28	0.272	1988	
1989	0.55	0.46	0.36	0.59	5.71	16.30	8.39	4.27	1.64	1.22	1.04	0.64	3.44			1.22	0.344	1989	
1990	0.54	0.44	0.49	0.89	6.19	17.10	9.14	2.19	1.31	1.00	0.89	0.67	3.41			0.98	0.401	1990	
1991	0.49	0.47	0.35	0.84	6.46	16.00	13.70	6.35	2.97	1.16	0.63	0.57	4.19			1.54	0.338	1991	
1992	0.52	0.51	0.53	1.22	6.45	14.80	3.77	1.84	2.07	3.79	1.34	0.68	3.12			1.36	0.480	1992	
1993	0.44	0.38	0.41	0.37	8.44	6.44	2.82	3.39	1.94	0.92	0.60	0.54	2.24			1.25	0.322	1993	
1994	0.43	0.32	0.38	1.29	7.56	13.40	8.19	2.20	1.60	1.29	0.73	0.56	3.17			1.24	0.286	1994	
1995	0.44	0.41	0.29	0.36	4.84	13.00	5.73	4.02	1.59	1.14	0.76	0.66	2.78			1.18	0.251	1995	
1996	0.53	0.46	0.48	0.89	2.35	12.60	16.50	4.26	2.40	2.37	1.32	0.78	3.76			2.13	0.440	1996	
1997	0.42	0.39	0.31	0.51	5.86	15.00	11.80	4.28	3.98	4.88	1.40	0.81	4.16			2.69	0.280	1997	
1998	0.63	0.58	0.51	0.70	11.60	6.92	4.52	1.42	0.89	1.16	0.88	0.60	2.55			0.86	0.436	1998	
1999																			1999
2000																			2000
2001																			2001
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2003																			2003
2004																			2004
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2006																			2006
2007																			2007
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2009																			2009
2010																			2010
2011																			2011
Avg.	0.49	0.42	0.39	0.74	6.24	13.90	8.05	3.49	1.95	1.73	0.93	0.62	3.26	3.26		1.39	0.337	m <sup>3</sup> /s	
S. D.	0.07	0.08	0.08	0.33	2.32	3.51	3.85	1.38	0.76	1.18	0.27	0.10	0.58			0.47	0.075	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	0.49	0.42	0.39	0.74	6.24	13.90	8.05	3.49	1.95	1.73	0.93	0.62	3.26	m <sup>3</sup> /s					
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	10	8	8	14	126	272	163	71	38	35	18	12	777	mm	10-Year	0.0	0.935	0.251	m <sup>3</sup> /s

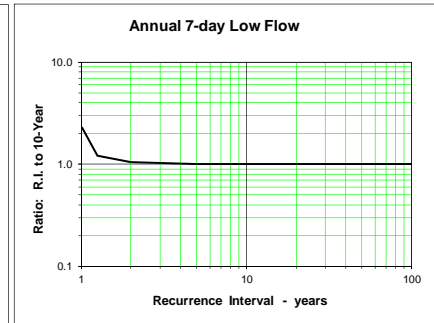
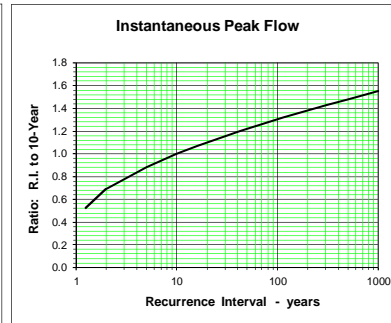
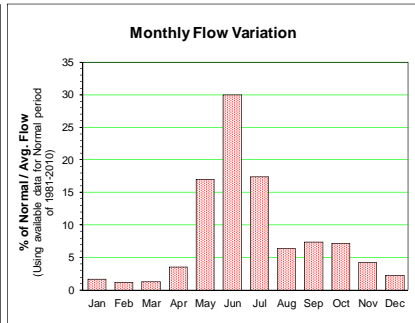
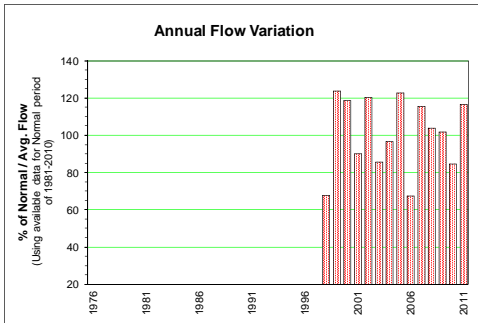




**MORKILL RIVER BELOW HELLROARING CREEK 08KA013**

Station Longitude Latitude: -120.590874 53.681346

Year	Monthly and Annual Discharge in m <sup>3</sup> /s												Annual Avg Yr (MAD)	Instantaneous Peak Flow		7-Day Low Flow		Year	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Date	Annual	Jun-Sep	Annual		
1976																		1976	
1977																		1977	
1978																		1978	
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1994																		1994	
1995																		1995	
1996																		1996	
1997																		1997	
1998	6.49	5.46	5.35	15.60	111.00	50.90	31.40	15.10	11.20	26.40	15.20	7.76	25.34	May 28	164.00	10.01	4.41	1998	
1999	5.93	4.78	5.69	21.80	69.90	172.00	125.00	50.30	26.80	36.30	24.30	11.40	46.36	Jun 16	375.00	20.11	4.36	1999	
2000	6.93	5.79	4.83	14.40	53.80	161.00	123.00	42.10	62.50	33.30	18.40	7.08	44.42	Jul 02	285.00	28.81	4.56	2000	
2001	5.52	4.72	4.42	12.50	59.40	119.00	102.00	31.40	23.10	16.60	16.30	8.50	33.76	Jul 18	484.42	18.10	4.21	2001	
2002	6.48	5.32	4.54	7.68	46.60	205.00	90.00	32.10	58.10	52.00	21.50	10.90	45.04	Jun 17	365.00	24.54	4.38	2002	
2003	8.01	5.88	5.52	19.80	64.60	117.00	52.00	18.20	25.40	40.60	17.80	8.25	31.99	May 25	228.00	11.59	4.44	2003	
2004	5.76	4.84	5.17	20.30	64.70	121.00	45.40	20.90	60.60	37.50	34.00	14.60	36.15	Jun 06	318.00	13.83	4.32	2004	
2005	13.60	12.40	13.50	33.50	122.00	137.00	70.80	25.50	40.20	44.30	23.80	13.40	45.97	Jun 01	347.00	20.27	8.20	2005	
2006	9.14	6.74	5.14	15.40	81.10	84.10	36.00	20.00	10.10	13.40	12.00	8.03	25.19	May 21	208.00	8.61	4.79	2006	
2007	6.38	5.66	6.64	14.50	85.70	187.00	88.40	24.60	28.40	41.60	18.80	9.19	43.17	Jun 06	415.00	19.04	5.48	2007	
2008	6.74	5.24	4.80	5.98	101.00	136.00	80.30	41.70	33.50	22.70	17.10	10.20	38.85	Jun 03	247.00	26.63	4.20	2008	
2009	7.26	5.28	4.40	11.10	55.80	169.00	106.00	26.00	22.50	19.20	17.90	11.50	38.08	Jun 16	300.00	16.20	4.06	2009	
2010	7.81	5.09	4.75	21.10	60.70	115.00	50.20	21.00	38.30	29.20	17.10	8.55	31.61	Sep 28	217.00	15.74	4.50	2010	
2011	7.32	6.16	4.72	5.95	89.30	179.00	118.00	43.80	24.10	21.20	13.30	8.46	43.62	Jun 29	423.00	18.34	4.02	2011	
Avg.	7.38	5.95	5.68	15.69	76.11	139.50	79.89	29.48	33.20	31.02	19.11	9.84	37.82		312.60	17.99	4.71	m <sup>3</sup> /s	
S. D.	2.03	1.94	2.33	7.39	22.93	42.34	32.70	11.02	16.98	11.58	5.52	2.24	7.37		93.89	5.97	1.07	m <sup>3</sup> /s	
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	7.39	5.94	5.75	16.44	75.10	136.46	76.96	28.38	33.90	31.78	19.55	9.95	37.38		m <sup>3</sup> /s				
Normal/Avg. Flow (Using available data for Normal period, 1981-2010)	16	11	12	34	159	280	163	60	70	67	40	21	934	mm	10-Year	441.9	10.648	4.064	m <sup>3</sup> /s



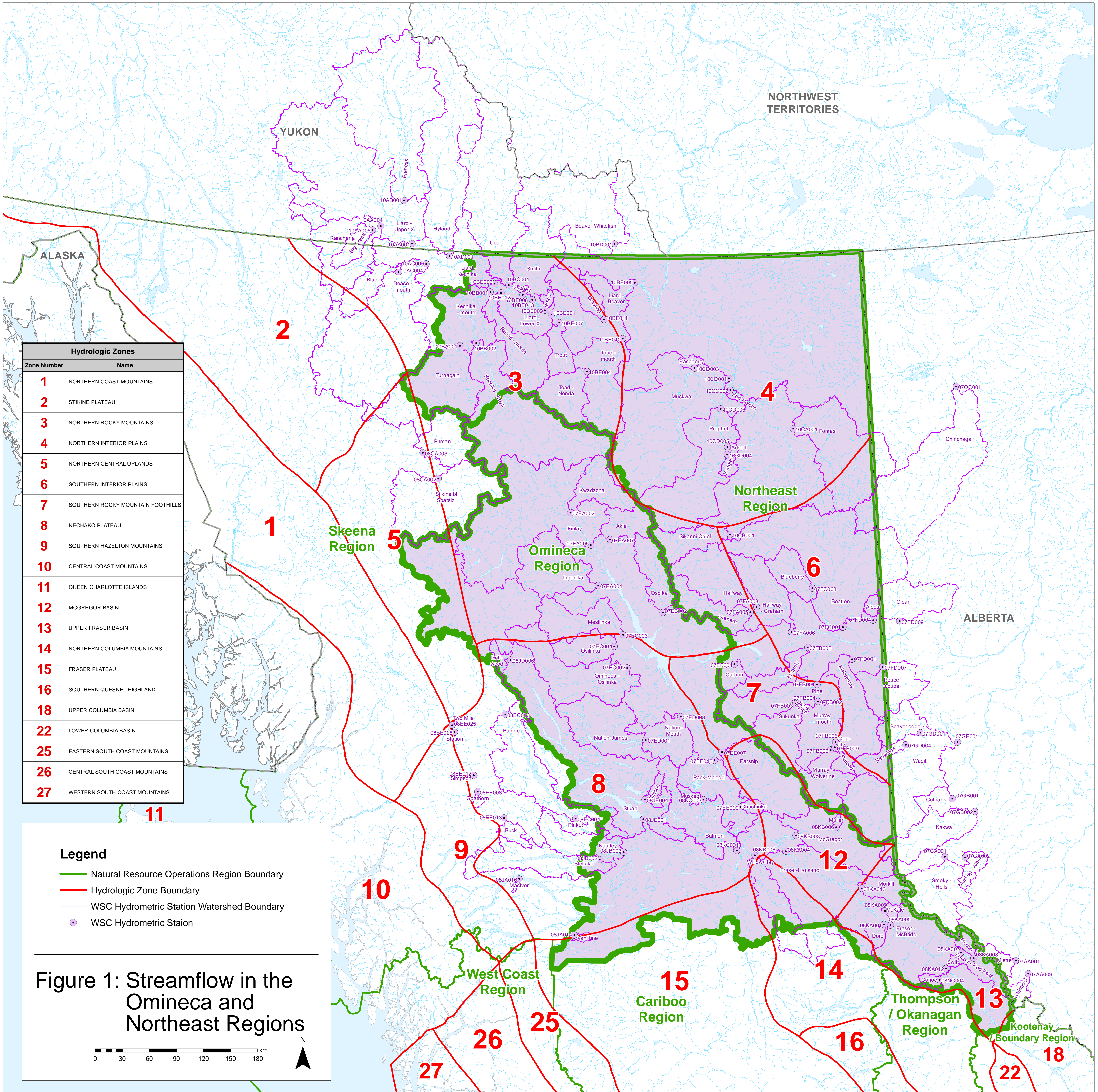


## **OVERSIZED FIGURES**

Figure 1: Streamflow in the Omineca and Northeast Regions 30 x 30"

Figure 2: Hydrologic Zones 22 x 34"





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
18	UPPER COLUMBIA BASIN
22	LOWER COLUMBIA BASIN
25	EASTERN SOUTH COAST MOUNTAINS
26	CENTRAL SOUTH COAST MOUNTAINS
27	WESTERN SOUTH COAST MOUNTAINS

**Legend**

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

**Figure 1: Streamflow in the Omineca and Northeast Regions**

0 30 60 90 120 150 180 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

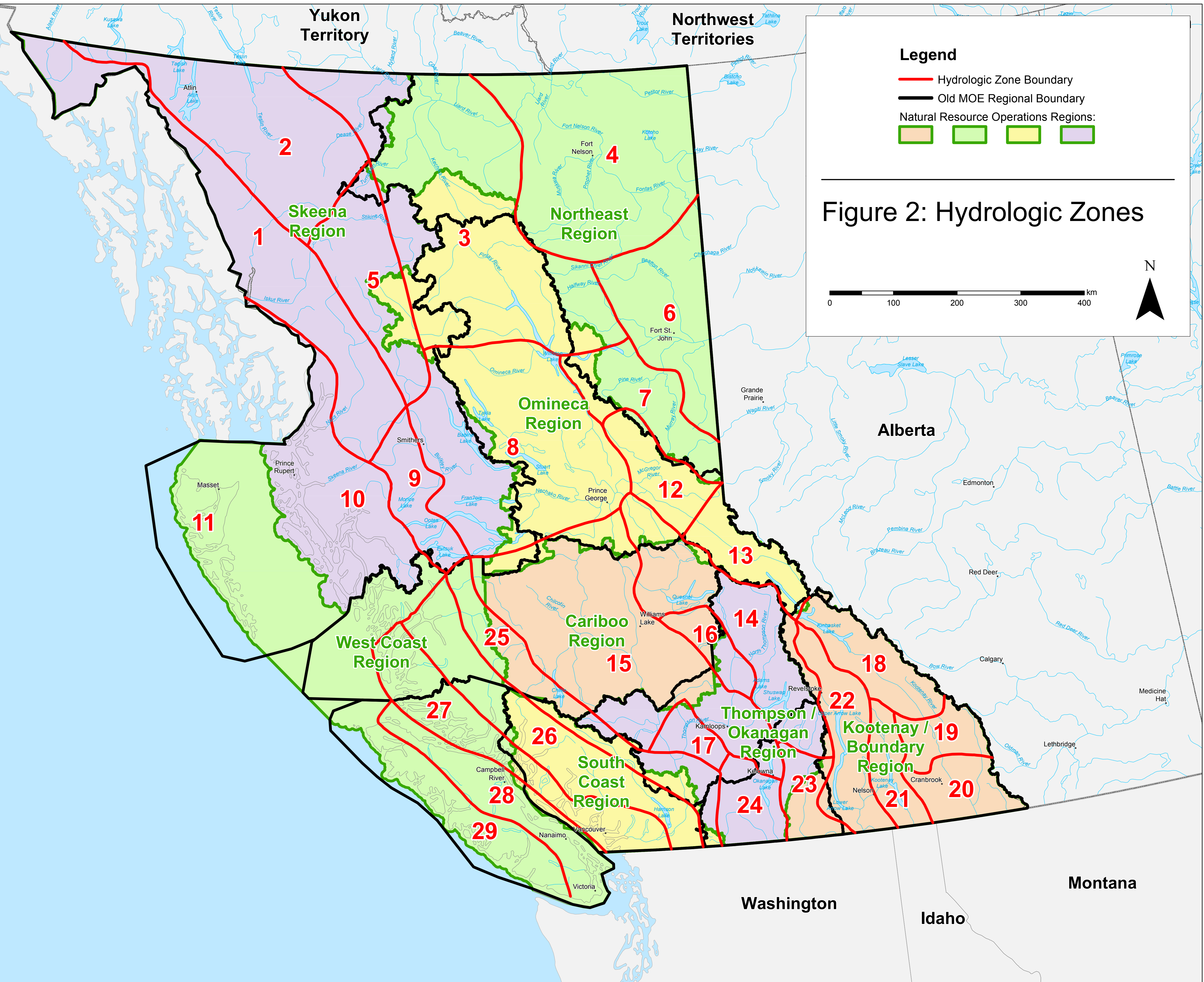


Figure 2: Hydrologic Zones