SNOHOMISH COUNTY PUD
PUBLIC UTILITY DISTRICT NO. 1

Energizing Life in Our Communities

June 20, 2025

VIA ELECTRONIC FILING

Debbie-Anne A. Reese
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Re: Jackson Hydroelectric Project, FERC No. 2157
Water Quality Monitoring Plan – 2024 Annual Report
License Article 401 (b)

Dear Secretary Reese:

Enclosed is Public Utility District No. 1 of Snohomish County's Water Quality Monitoring Plan Annual Report for 2024 pursuant to License Article 401 (b) for the Jackson Hydroelectric Project. The draft report was provided to the Aquatic Resource Committee for a 30-day review and comment period; Washington State Department of Ecology submitted comments for consideration. Consultation documentation and how comments were addressed are included in the report's Appendices E and F.

If you have any questions on the Water Quality Monitoring Plan Annual Report for 2024, please do not hesitate to contact me.

Sincerely,

/s/ Andrew McDonnell

Andrew McDonnell
Manager, Natural Resources
(425) 783-1841
awmcdonnell@snopud.com

Attached: Water Quality Monitoring Plan Annual Report for 2024

cc: Aquatic Resource Committee

Henry M. Jackson Hydroelectric Project

(FERC No. 2157)

Water Quality Monitoring Plan: 2024 Annual Report

(License Article 401)

Everett, WA

June 2025

Final – This document has been prepared by Snohomish PUD based on information known at the time of its preparation and with that understanding is considered complete. The document may be cited as:

Public Utility District No. 1 of Snohomish County (Snohomish PUD). 2025. Water Quality Monitoring Plan 2024 Annual Report, License Article 401, for the Henry M. Jackson Hydroelectric Project, FERC No. 2157. June 2025.

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LIST OF ACRONYMS AND ABBREVIATIONS

7-DAD Max	seven-day average of the daily maximum
ARC	Aquatic Resource Committee
cfs	cubic feet per second
Ecology	Washington Department of Ecology
FERC	Federal Energy Regulatory Commission
Project	Henry M. Jackson Hydroelectric Project, FERC No. 2157
RM	river mile
Snohomish PUD	Public Utility District No. 1 of Snohomish County
USGS	U.S. Geological Survey
WQMP	Water Quality Monitoring Plan

1.0 INTRODUCTION

Public Utility District No. 1 of Snohomish County (Snohomish PUD) received a license on September 2, 2011 (License), from the Federal Energy Regulatory Commission (FERC) for the Henry M. Jackson Hydroelectric Project (Project). The FERC approved the Water Quality Monitoring Plan (WQMP) on March 30, 2012, pursuant to License Article 401(a). Snohomish PUD is to file a report with the FERC by June 30 of each year detailing the monitoring efforts of the previous calendar year, pursuant to License Article 401(b).

This WQMP Annual Report covers activities conducted in calendar year 2024. Monthly measurements of reservoir water quality are presented in Appendix A. Appendices B, C, and D present the data from continuous monitoring of water temperature in the river and tributary systems. Appendix B shows graphical data, Appendix C shows tabular data, and Appendix D shows seven-day average of the daily maximum water temperature in tabular format. This WQMP Annual Report was provided on May 30, 2025, for a 30-day review and comment period to the Aquatic Resource Committee (ARC) [consisting of the City of Everett, City of Sultan, Snohomish County, Washington Department of Ecology (Ecology), Washington Department of Fish and Wildlife, Tulalip Tribes, U.S. Forest Service, National Marine Fisheries Service, U.S. Fish and Wildlife Service, and American Whitewater]; Ecology provided comments. Consultation documentation and responses to comments are included in Appendices E and F.

The annual report fulfills monitoring and reporting requirements as stipulated in Ecology's 401 Water Quality Certification Order (Order No. 7918, October 18, 2010). As described in the 401 Certification Order (Section 9.0, Monitoring and Reporting Requirements), the report includes summaries of the water quality data, and includes sample dates, times, locations, and results. Compliance with state water quality standards is discussed as well. The report will be submitted to the hydropower certification manager at Ecology's Water Quality Program Northwest Regional Office and FERC.

The WQMP requires Snohomish PUD to collect water quality data in and around Spada Lake Reservoir, the Sultan River between river mile (RM) 15.8 and RM 0.2, and the Skykomish River at RM 14.1 and RM 13.2 (Table 1-1). The following sections of this report are organized and structured as water flows, beginning in the upper portion of the Sultan watershed.

Table 1-1. Parameters to be monitored, standards, locations, and sampling frequency.

Parameter	Unit	Associated Standard	South Fork Sultan River	Spada Lake Reservoir	Sultan River									Skykomish River		Frequency
			*Upriver from bridge	Near log boom	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2	
Water temperature	ºC	16 ºC – 7 DAD Max for river locations. No standard for reservoir samples. Data used for stratification assessment.	●	●	●	●	●	●	●	●	●	●	●	●	●	Year-round in stream reaches at all locations except RM 15.5, 14.3, and 11.3 which are monitored from April 1-October 31 only. Lake profile is monitored monthly between May 1 and October 31.
Dissolved oxygen	mg/L	9.5 mg/L (core summer salmonid habitat) for river locations. No standard for reservoir sampling. Data used for stratification assessment.	●	●					●			●				May 1 to October 31. Monthly in stream reaches. Monthly for lake profile.
Turbidity	NTU	Criteria in WAC 173-201A-200: 5 NTU over background when background is 50 NTU or less, or a 10% increase when background is more than 50 NTU. For river locations, the South Fork location will be used as background.	●	●					●			●				May 1 to October 31. Monthly in stream reaches. Monthly for lake profile.
pH	pH units	Criteria in WAC 173-201A-200: 6.5 to 8.5pH units, with human-caused variation within the above range of less than 0.5 units.	●	●					●			●				May 1 to October 31. Monthly in stream reaches. Monthly for lake profile.
Secchi transparency	meters	None. For purposes of this monitoring, Secchi depth will be used to assess lake conditions, including photic zone depth.		●												May 1 to October 31. Monthly.
Flow discharge	cfs	None.	●		●				●	●	●	●				Year-round. Daily.
Reservoir elevation	Feet	None.		●												Year-round. Daily.

*USGS gaging station is located downstream of the South Fork Sultan River bridge.

2.0 RESERVOIR MONITORING

2.1 Climatic Conditions

2.1.1 Rainfall Data

During 2024, a total of 161.9 inches of rain was recorded at the Culmback Dam Weather Station. The rainfall measured during 2024 was at the historical annual average of 161.8 inches. Monthly rainfall averaged 13.5 inches and ranged between a low of 2.7 inches in September and a high of 25.3 inches in January (Table 2-1.). During 2024, the highest recorded daily rainfall (5.9 inches) occurred on December 8, 2024.

Table 2-1. Monthly rainfall, Culmback Dam Weather Station, 2024.

Month	Rainfall (inches)
January	25.3
February	18.7
March	10.6
April	13.3
May	11.6
June	7.3
July	3.8
August	5.8
September	2.7
October	19.4
November	19.3
December	24.1

2.1.2 Snow Survey Measurements

Beginning in 1986, Snohomish PUD has conducted annual surveys of the snowpack, typically during late March. Since inception, the annual mean snow and water content depth at Stickney Ridge (elevation 3,600 feet) are 100.6 and 42.6 inches, respectively (Figure 2-1). During 2024, the annual helicopter snow survey was not completed due to a combination of weather and marbled murrelet flight restrictions. Staff hiked into Olney Ridge and was able to measure snow depth at 39.4 inches or 70% of average and a water depth of 17.6 inches or 70% of average (Figure 2-1).

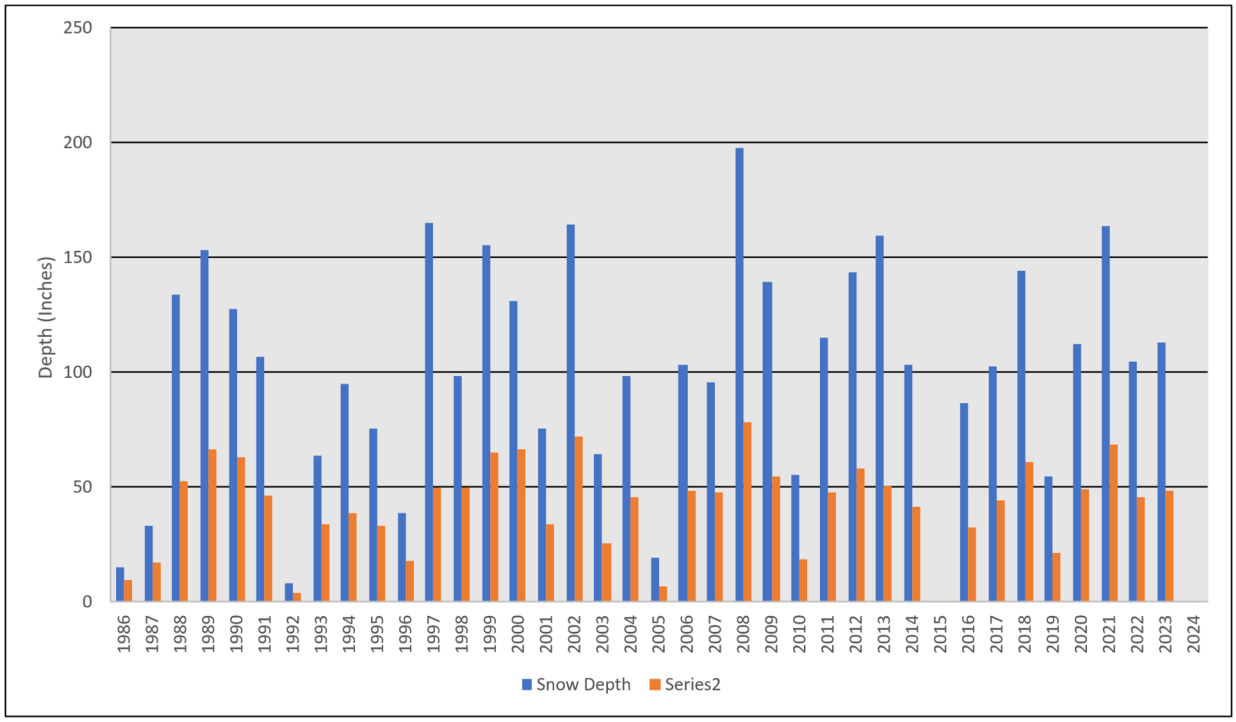


Figure 2-1. Snow survey data, Stickney Ridge, Sultan Watershed, 1986-2024.

2.1.3 Reservoir Inflow

Three tributaries feed into Spada Lake Reservoir: the South Fork Sultan River, Williamson Creek, and the mainstem Sultan River, including Elk Creek. Historically, the U.S. Geological Survey (USGS) has operated gages at several locations within the basin. Currently, the South Fork Sultan River is the only tributary that is actively gaged. At this location, the USGS operates Station No. 12137290, South Fork Sultan River near Sultan, WA, which provides real-time information for Project operations. Hydrologic modeling indicates that the South Fork Sultan River, on average, accounts for between 14 and 22 percent of total inflow into the reservoir, depending on seasonal conditions. The 2024 hydrograph for this station is presented in Figure 2-2. Instantaneous flow values ranged from 7.8 to 1,740 cfs. Mean daily flow during 2024 averaged 110 cfs and ranged between a low of 8 cfs and a high flow of 1,051 cfs. The average mean annual flow, based on the USGS Water Year, for this station is 132 cfs (Period of Record 1992-2024).

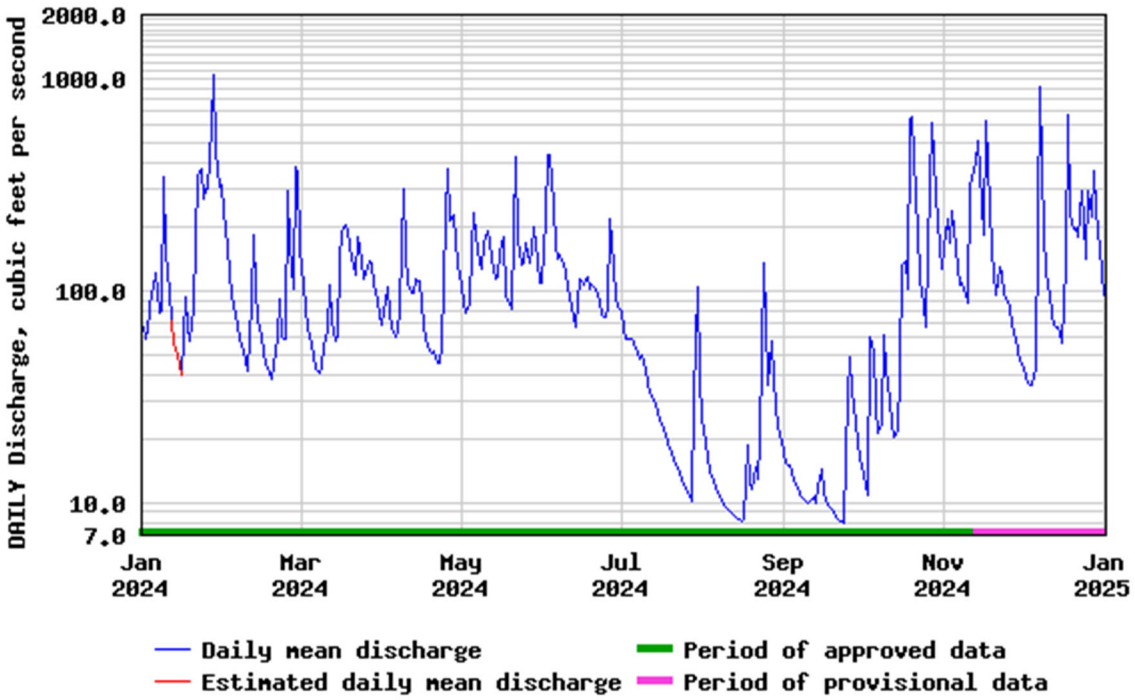


Figure 2-2. Hydrograph for the South Fork Sultan River, USGS Station No. 12137290, 2024 calendar year.

2.2 Reservoir Operations

2.2.1 Project Outflow

In the absence of reservoir spill, the vast majority of Project outflow occurs through the power tunnel, as indexed by daily plant generation. In 2024, the Project did not experience spill. Daily plant generation during 2024 is depicted in Figure 2-3. A total of 368,328 megawatt hours were produced during 2024 equating to 88.6 percent of the historic annual average of 415,499 megawatt hours. The Project had a planned shutdown with no generation in the first week of September for plant maintenance.

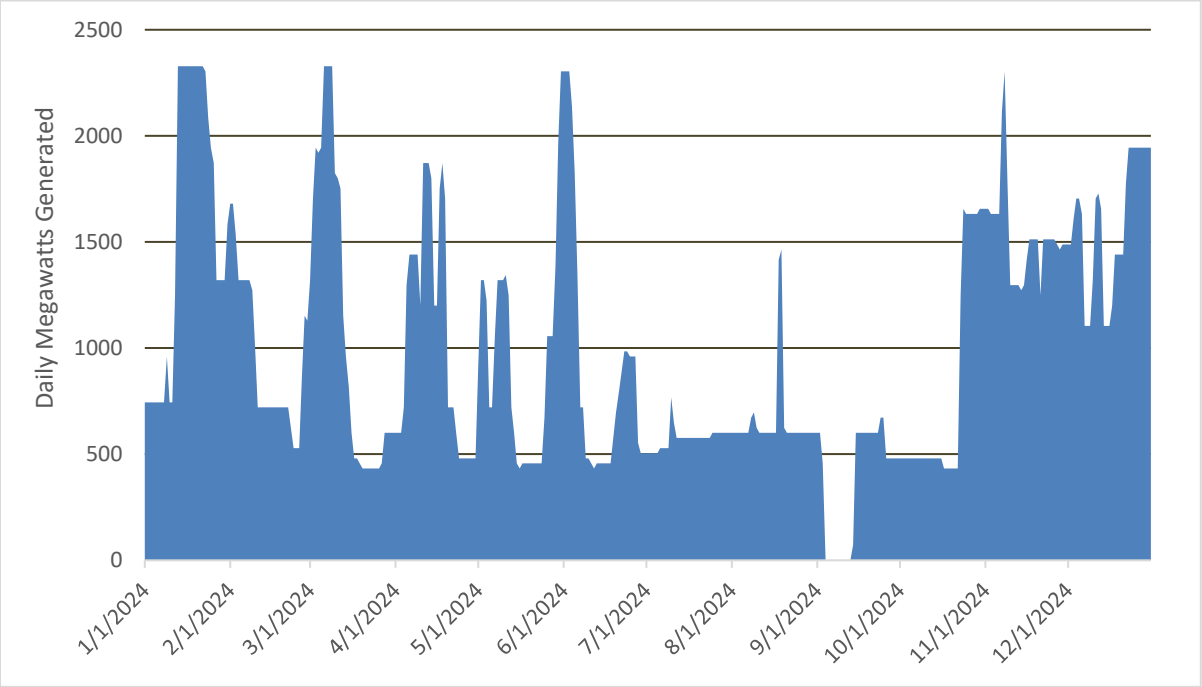


Figure 2-3. Daily plant generation, Jackson Hydroelectric Project, 2024.

2.2.2 Reservoir Elevation

Water surface elevation in Spada Lake Reservoir is partitioned into five states, which define how the Project is to be operated through the year. Generally, States 1 and 2 require full generation to withdraw 1,300 cfs for spill/flood control. State 3 is a discretionary zone, which allows Snohomish PUD to operate in a range defined by the maximum of states 1 and 2 or minimum defined by State 4. State 4 requires minimum generation to maintain the instream flows for fish and habitat protection and water supply for the City of Everett. State 5 lies below reservoir elevation 1,380 feet msl, during which the Project does not operate. During 2024, Spada Lake Reservoir was drafted and filled in accordance with the rule curves established for the Project under its License obligation Aquatic License Article 14: Reservoir Operations and License Article 406: Spada Lake Water Management (Figure 2-4).

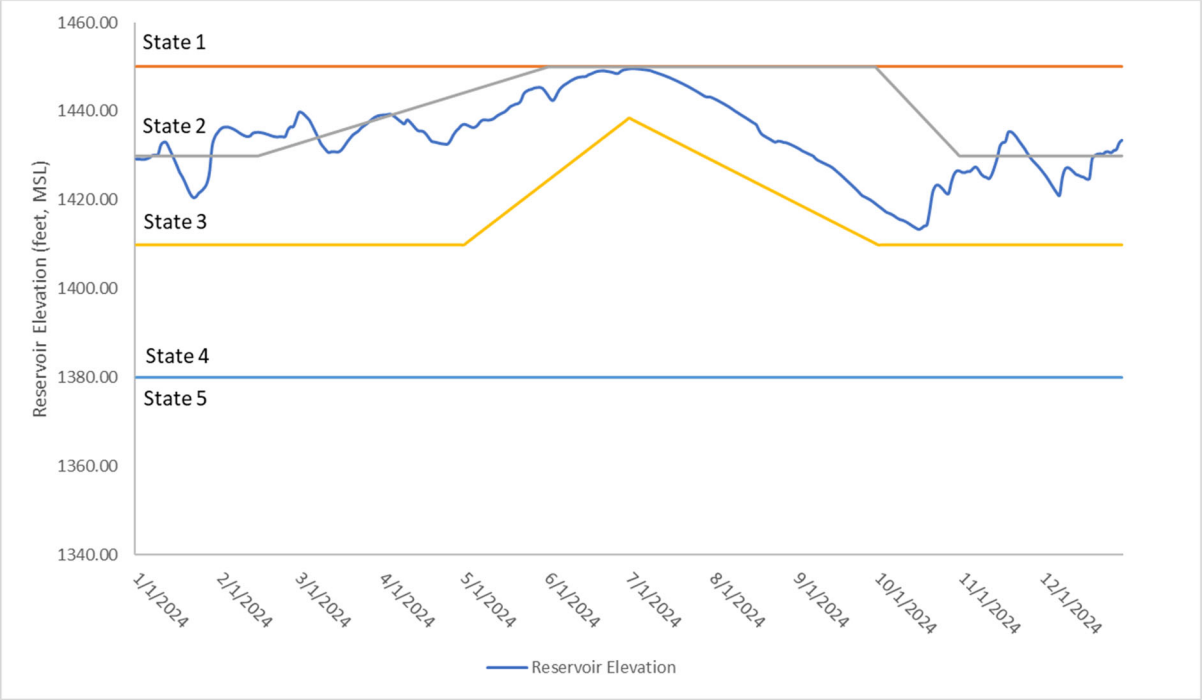


Figure 2-1. Daily water surface elevation, Spada Lake Reservoir, 2024.

2.3 Water Quality

Monthly sampling of water quality in Spada Lake Reservoir occurred on the following dates during 2024: April 23, May 15, June 27, July 23, August 20, September 24, and October 29. Sampling was conducted cooperatively with the City of Everett and included profile measurements of conventional parameters including temperature, pH, dissolved oxygen, and turbidity. Vertical profile data are used to assess stratification within the reservoir and do not have associated State water quality standards. Additional sampling included measurements of nutrients, phytoplankton, and zooplankton; however, summary Phyto and nutrients data are not available yet.

2.3.1 Temperature

Spada Lake Reservoir temperatures ranged from 3.9 to 21.0 °C depending on month and depth (Appendix A). No associated temperature standard exists for the reservoir; however, the temperature data are used to assess stratification. Temperature stratification was first evident during the June sampling session. April had the coolest water temperatures, while July and August had the warmest water temperatures. The thermocline was strongest in August; however, July and September both had a resistance to mixing. The strongest point in the thermocline dropped from 26 feet in July to 36 feet in August. The timing and scale of seasonal stratification in 2024 was consistent with previous years' sampling efforts.

2.3.2 pH

The associated standard for pH is between 6.5 and 8.5 pH units. The highest measured pH was 7.22 in August at a depth of 6 feet. The lowest pH of 5.12 was measured in April at a depth of 151 feet and was likely due to increased bacterial degradation of organic matter. These ranges are typical of those recorded and since License implementation. No action is proposed to address the exceedance because it is a result of naturally occurring conditions within Spada Lake Reservoir.

2.3.3 Dissolved Oxygen

The reservoir does not have an associated standard for dissolved oxygen; however, the data are used to assess stratification. Dissolved oxygen ranged from a low of 7.7 mg/L in October to a high of 11.8 mg/L in April. By saturation values, the maximum of 103 percent in May, June, and July, were likely due to increasing primary production. The minimum of 61 percent of saturation at depth in September was likely due to limited photosynthetic oxygen production and bacterial degradation of organic matter. The timing and scale of seasonal stratification in 2024 was consistent with previous years' sampling efforts.

2.3.4 Turbidity

Turbidity standards for the reservoir are 5 NTU over background when background is 50 NTU or less, or a 10% increase when background is more than 50 NTU. In each month sampled, the surface was less turbid than at depth. Turbidity values at the surface and at depth decreased from May to June, held steady from July to September and increased into October. October had the highest turbidity value recorded (9.8 NTU) at a depth of 161.5 feet, whereas July had the lowest overall turbidity (0.3 NTU) at depths between 3.4 and 13.1 feet. Characterization of monthly turbidity values across the vertical profile were consistent with previous years' sampling efforts

throughout most of the season. The cut-off points between higher and lower turbidity values can be traced to the thermal structure and seasonal inflow patterns of the reservoir and not directly tied to an anthropogenic perturbation or project operations.

2.3.5 Secchi Transparency

No associated standard exists for this sampling; however, the purpose is to use Secchi depth to assess lake conditions, including photic zone depth. Secchi transparency ranged from a high of 28 feet in July to a low of 8 feet in both April and October (Table 2-2).

Table 2-2. Secchi transparency, Spada Lake Reservoir, 2024.

Date	Result (feet)
4/23/2024	8
5/15/2024	16
6/27/2024	21
7/23/2024	28
8/20/2024	15
9/24/2024	14
10/29/2024	8

2.3.6 Nutrients

No data available at this time.

2.3.7 Phytoplankton

No data available at this time.

2.3.8 Zooplankton

Epischura and *Holopedium* were the dominant zooplankters in April and May, respectively. *Holopedium* peaked in July at 5 colonies per liter. *Conochilus* were the dominate zooplankters in September with a peak of 7 colonies per liter. The largest diversity in zooplankton species occurred in July and August. The total number of zooplankton/L ranged from 0.15 (April) to 11.1 (July).

3.0 RIVER MONITORING

3.1 Background

Maintaining suitable water temperatures in the Sultan River is an important aspect of the Project operation. Water temperature influences fish behavior, especially anadromous fish during the freshwater phase of their life cycle. The Sultan River produces chinook, coho, chum, and pink salmon, and steelhead trout, plus resident fish species.

The Project's water storage and conveyance system is complex with discharge into the Sultan River occurring at three facilities – Culmback Dam, Diversion Dam, and Powerhouse (Figure 3-1.). At Culmback Dam, a 10-inch cone valve is used to variably release an annual water budget of 23,831 acre-feet into Reach 3 of the Sultan River, immediately downstream of the dam. Further downstream, the additional water necessary to meet instream flow requirements (at the Diversion Dam) is routed through the Francis turbine units at the Powerhouse, then the Lake Chaplain pipeline to a former City Water diversion tunnel connected to another water line discharging into the river at the Diversion Dam at RM 9.8. Except for infrequent spill at Culmback Dam, these releases, plus tributary flows to the river, provide the instream flow for fish species throughout 11 river miles upstream from the Powerhouse. Pelton turbines, which discharge directly to the river at RM 4.5, provide additional water when needed to meet minimum instream flow requirements below the Powerhouse.

Water temperatures in Reach 3, immediately downstream of Culmback Dam, are seasonally influenced by releases through a 24-inch cone valve blended in concert with water discharged through the 10-inch cone valve. The releases are described in detail in the annual reporting for the Water Temperature Conditioning Plan for Reach 3 (Snohomish PUD 2010). Downstream, water temperatures at the Diversion Dam are influenced by flow volume and the depth of release at Culmback Dam (whether through the selective withdrawal intake structure, fixed elevation 12-inch cone valve, deep water valves located in the valve chamber, or by spill), by tributary flows, and by meteorological conditions. Moveable panels at the Spada Lake Reservoir intake structure control the level and, hence, the temperature at which water is withdrawn from the reservoir and delivered to the powerhouse when conditions allow. When isothermal conditions exist in the reservoir, no change in water temperature can be achieved by moving the panels on the intake structure. The degree of temperature control possible by panel manipulation varies seasonally with the degree of temperature stratification in the reservoir.

Panel position settings during 2024 are presented in Table 3-1.

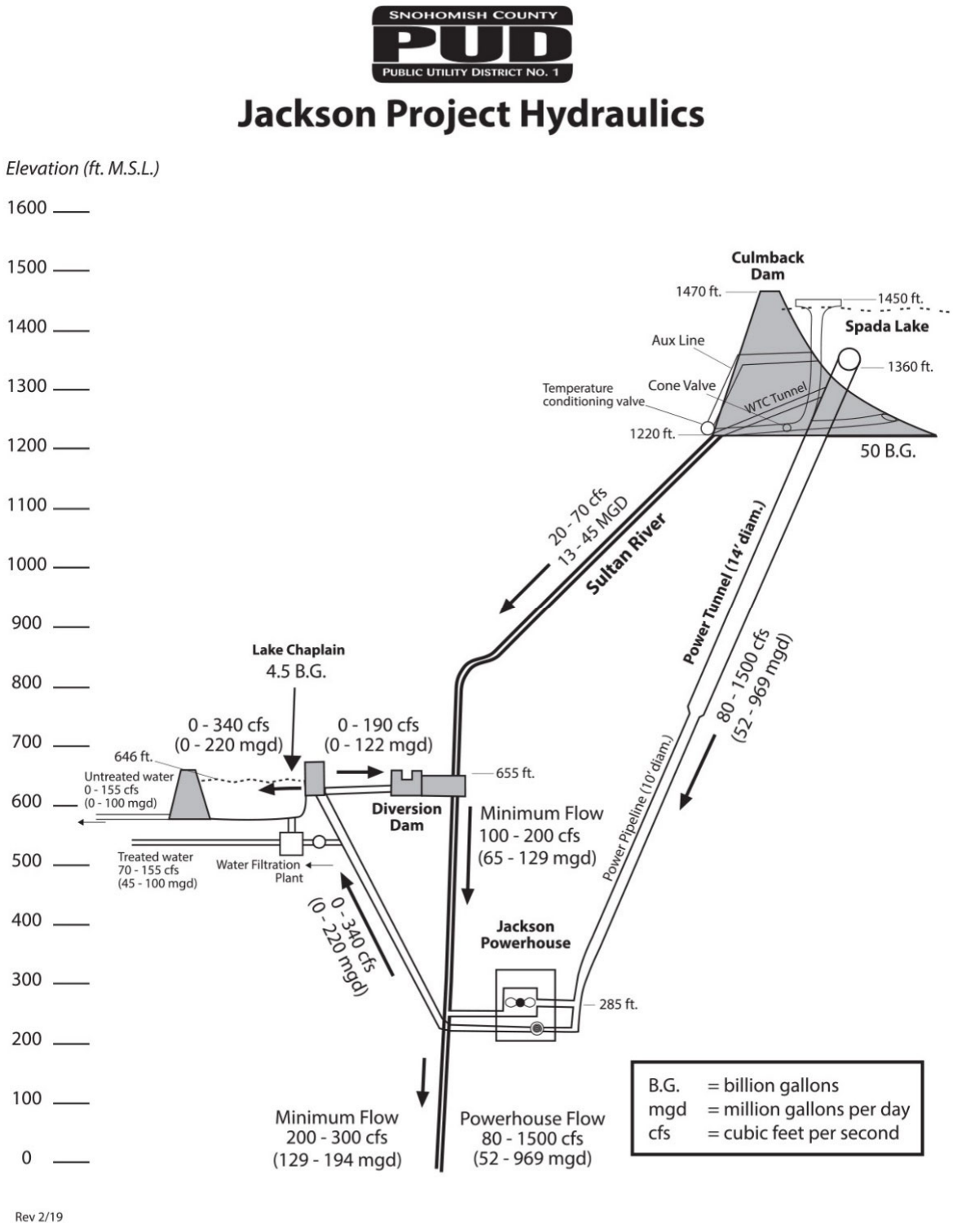


Figure 3-1. Schematic of water conveyance system, Jackson Hydroelectric Project.

Table 3-1. Settings for selective withdrawal panels, Spada Lake Reservoir, 2024.

Dates	Panel Setting	Upper Opening (elevation in feet msl)	Lower Opening (elevation in feet msl)
4/15/2024	C	1425.0	1407.5
5/14/2024	C	1430.0	1407.5
6/13/2024	A	1447.7	1427.5
6/18/2024	C	1425.0	1405.0
7/16/2024	Modified C	1422.5	1400.0
8/1/2024	Modified C	1424.3	1394.4
8/6/2024	Modified C	1417.5	1397.5
8/7/2024	Modified C	1415.0	1397.5
9/16/2024	Modified D/E	1402.5 – 1400.0	1372.5 – 1360.0
9/24/2024	E	1377.5	1360.0

3.2 Continuous Temperature Monitoring

Snohomish PUD monitored water temperature at 12 locations within the Project area during 2024 (Figure 6.). The RM 15.5, 14.3, and 11.3 locations are required to be monitored from April 1 through October 31. All other sites are required to be monitored throughout the year. These locations, in order from upstream to downstream, include:

- South Fork Sultan River, upstream of Culmback Dam, near RM 18.2;
- Sultan River, within the bypass reach immediately downstream of Culmback Dam, at RM 15.8;
- Sultan River, within the bypass reach at the base of the Sultan River Canyon Trail, at RM 15.5;
- Sultan River, within the bypass reach, near RM 14.3;
- Sultan River, within the bypass reach, near RM 11.3;
- Sultan River, within the bypass reach immediately upstream of the Diversion Dam, near RM 9.8;
- Sultan River, immediately downstream of the Diversion Dam, near RM 9.6;
- Sultan River, upstream of the Powerhouse, near RM 4.9;
- Sultan River, downstream of the Powerhouse, near RM 4.4,
- Sultan River, near the confluence with the Skykomish River, at RM 0.2;
- Skykomish River, upstream of the confluence with the Sultan River, at RM 14.1; and
- Skykomish River, downstream of the confluence with the Sultan River, at RM 13.2.

Water temperature monitoring at Sultan River RM 14.3 and 11.3, are part of the Water Temperature Conditioning Plan monitoring sites for Reach 3; the remaining 10 stations are those required for monitoring under the WQMP.

In general, water temperatures in the Sultan Basin during 2024 were cooler than 2023. The associated temperature water quality standard for all river monitoring locations is 16 degrees Celsius for the seven-day average of the daily maximum temperature (7-DAD Max). The 7-DAD

Max was exceeded on 26 days for 4 out of the 10 river monitoring locations. This is due to naturally occurring conditions through longitudinal warming primarily in Reach 3.

Figures depicting water temperatures during 2024 are presented in Appendix B. A tabulation of all mean daily temperature data for 2024 is presented in Appendix C. The 7-DAD Max is presented in Appendix D, with exceedances in State water quality standards highlighted in red. Data gaps are attributed to inaccessibility due to inclement weather conditions, malfunctioning equipment, or equipment lost due to vandalism.

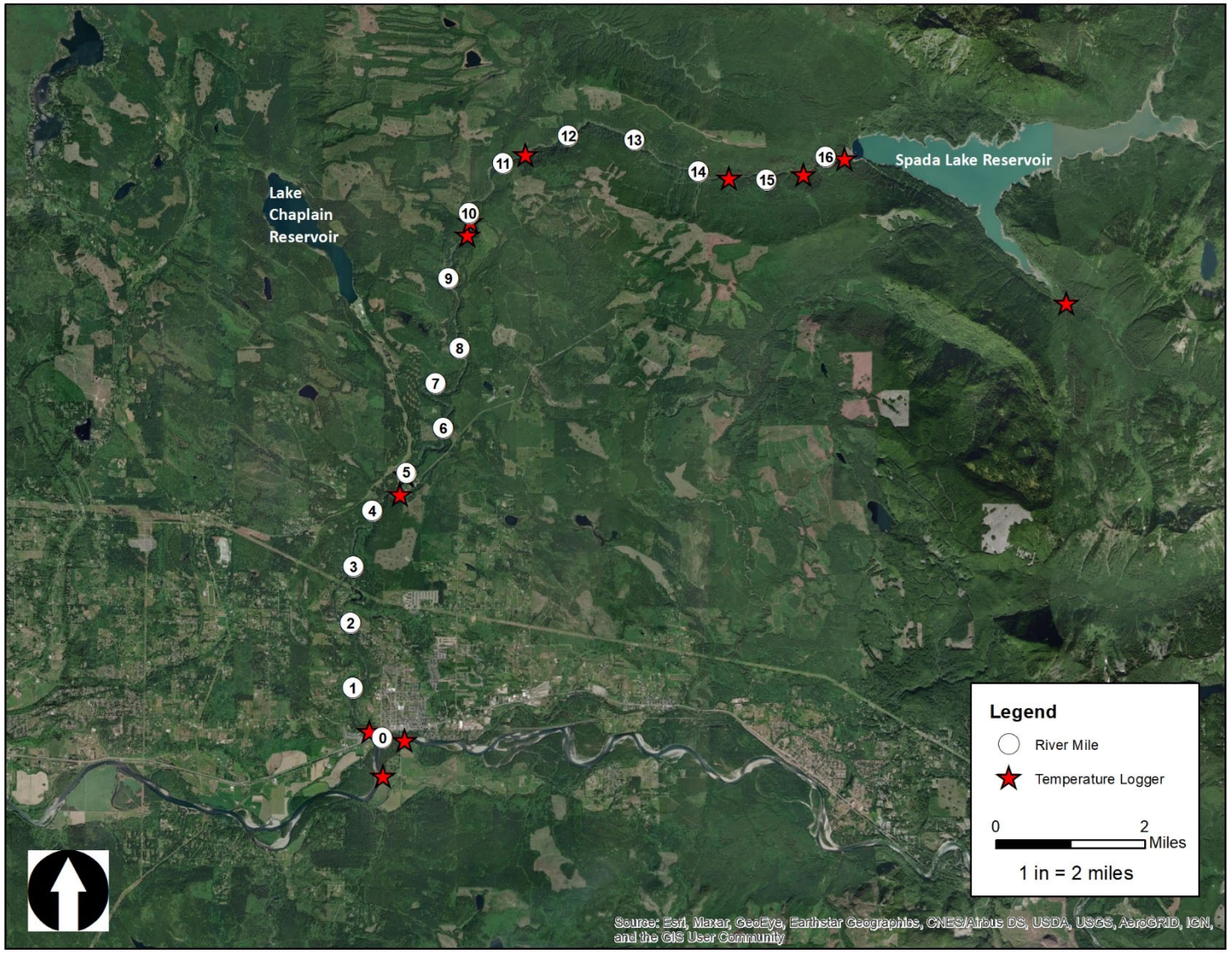


Figure 3-2. Locations of water temperature monitoring, Jackson Hydroelectric Project.

3.3 Synoptic Measurements of Water Quality

Synoptic measurements of water quality were collected during late spring, summer, and early fall 2024 at the South Fork Sultan River (tributary to Spada Lake Reservoir) and at two locations in the Sultan River downstream of Culmback Dam (Table 3-2.). State water quality standards for pH (6.5-8.5 pH units) were exceeded on three occasions for the South Fork and one for downstream of the Powerhouse (RM 4.4) locations. The observed slightly acidic conditions are typical of western Cascade streams and consistent with the 2009 CH2M Hill Water Quality Final Technical Report. As these noted exceedances are not a result of Project actions; no operational changes are proposed. No exceedances were recorded for dissolved oxygen or turbidity at any of the sample locations.

Table 3-2. Synoptic monthly measurements of water quality, Sultan River, 2024.

Location	Date	Temp ºC	pH Units	Turb NTU	LDO mg/L
South Fork Sultan River (SF)					
	4/23/2024	6.2	*6.1	0.2	11.8
	5/15/2024	8.0	*6.1	0.3	11.5
	6/27/2024	8.2	*5.9	0.7	11.4
	7/23/2024	13.1	6.7	0.3	10.2
	8/20/2024	12.3	6.5	0.4	10.2
	9/24/2024	13.9	6.9	0.2	10.6
	10/29/2024	7.2	6.5	0.3	11.6
Sultan River upstream of Diversion Dam (RM 9.8)					
	4/23/2024	10.5	6.7	1.6	11.0
	5/15/2024	12.8	6.9	2.3	10.7
	6/27/2024	10.7	7.0	3.1	11.0
	7/23/2024	14.4	7.0	1.2	10.2
	8/20/2024	12.8	6.9	0.7	10.5
	9/24/2024	13.3	7.0	1.3	11.1
	10/29/2024	9.4	7.2	1.4	11.2
Sultan River downstream of Powerhouse (RM 4.4)					
	4/23/2024	9.1	*6.4	2.3	11.7
	5/15/2024	11.4	6.5	1.6	11.2
	6/27/2024	11.1	6.6	0.9	11.1
	7/23/2024	13.3	6.7	0.9	10.7
	8/20/2024	14.0	6.5	1.3	10.3
	9/24/2024	13.9	6.9	1.2	10.4
	10/29/2024	9.9	6.9	2.2	11.6

* Exceedance of WAC 173-201A(1)(g)

4.0 DATA QUALITY AND COMPLIANCE

Monitoring of water quality during 2024 adhered to the protocols and procedures outlined in the WQMP. All survey locations and parameters of measurement were consistent with those outlined in the WQMP. All data were reviewed and accepted to accurately represent conditions at the time of sampling.

Downstream of Culmback Dam, Sultan River water temperature exceeded the Washington State water temperature criteria on 26 days during summer 2024. These exceedances occurred at four out of the nine sample locations on the Sultan River; typically, at the lower end of each operational reach and occurred during late July and August. No operational changes have been proposed because the exceedances were attributed to natural occurring conditions beyond the control or influence of the Project.

At the water temperature station upstream of the Sultan on the Skykomish River, water temperature exceeded the state criteria on 83 days during summer 2024 (Appendix D). Downstream, the Sultan River cooled the Skykomish River which resulted in the Skykomish River downstream of the Sultan to exceed the State standard on 61 days.

Missing water temperature data are attributed to malfunctioning or missing equipment. Project operations were conducted in accordance with License conditions throughout the sampling period.

No exceedances for dissolved oxygen or turbidity were recorded in 2024. Exceedances for pH were observed during the monthly riverine sampling; however, these are attributed to natural occurring conditions and not a result of project operations. No action is proposed to address these exceedances.

5.0 REFERENCES

CH2M Hill. 2009. Water Quality Final Technical Report. Henry M. Jackson Hydroelectric Project (FERC No. 2157) Water Quality Parameter Study (RSP 1). Prepared for Public Utility District No. 1 of Snohomish County. August 2009.

FERC. 2011. Order Issuing New License, Project No. 2157-188. 136 FERC ¶ 62,188. September 2, 2011.

Snohomish PUD. 2010. Water Temperature Conditioning Plan for Reach 3. Henry M. Jackson Hydroelectric Project (FERC No. 2157). 2010.

APPENDIX A

Monthly Reservoir Water Quality Sampling

Date	Depth	Depth	Elevation	Temperature	Conductivity	pH	Dissolved Oxygen	Chlorophyll	Turbidity
M/D/Y	feet	meters	feet	degrees C	µmhos/cm		mg/L	RFU	NTU
4/23/2024	1.6	0.5	1431.1	8.2	23	7.1	11.7	0.2	3.0
4/23/2024	3.3	1.0	1429.4	8.1	23	7.1	11.7	0.2	3.1
4/23/2024	6.6	2.0	1426.1	8.1	23	7.1	11.7	0.3	3.0
4/23/2024	9.8	3.0	1422.9	8.0	23	7.1	11.8	0.4	3.1
4/23/2024	13.3	4.0	1419.4	8.0	23	7.1	11.7	0.5	3.1
4/23/2024	16.4	5.0	1416.3	8.0	23	7.1	11.7	0.6	3.1
4/23/2024	19.7	6.0	1413.0	8.0	23	7.1	11.7	0.6	3.1
4/23/2024	23.0	7.0	1409.7	8.0	23	7.1	11.7	0.5	3.0
4/23/2024	26.2	8.0	1406.5	7.9	23	7.1	11.7	0.5	3.1
4/23/2024	29.5	9.0	1403.2	7.9	23	7.1	11.7	0.6	3.0
4/23/2024	32.9	10.0	1399.8	7.8	24	7.1	11.7	0.6	3.0
4/23/2024	36.1	11.0	1396.6	7.6	23	7.1	11.7	0.6	3.1
4/23/2024	39.4	12.0	1393.3	7.3	23	7.0	11.7	0.6	3.1
4/23/2024	42.7	13.0	1390.0	6.6	23	6.9	11.7	0.4	3.5
4/23/2024	45.9	14.0	1386.8	6.3	23	6.7	11.7	0.3	3.6
4/23/2024	49.2	15.0	1383.5	5.8	23	6.6	11.7	0.2	3.7
4/23/2024	55.7	17.0	1377.0	5.5	23	6.6	11.7	0.2	3.8
4/23/2024	62.3	19.0	1370.4	5.3	23	6.5	11.7	0.2	3.6
4/23/2024	69.0	21.0	1363.7	5.1	23	6.6	11.8	0.2	3.4
4/23/2024	75.6	23.0	1357.1	4.7	23	6.6	11.8	0.2	3.5
4/23/2024	82.0	25.0	1350.7	4.5	23	6.6	11.8	0.2	3.4
4/23/2024	88.7	27.0	1344.0	4.4	23	6.6	11.8	0.2	3.7
4/23/2024	95.1	29.0	1337.6	4.2	23	6.4	11.8	0.2	3.5
4/23/2024	101.7	31.0	1331.0	4.1	23	6.3	11.8	0.2	3.6
4/23/2024	111.6	34.0	1321.1	4.0	23	6.2	11.8	0.2	3.9
4/23/2024	121.4	37.0	1311.3	4.0	23	6.2	11.7	0.1	4.2
4/23/2024	131.2	40.0	1301.5	3.9	23	6.2	11.7	0.2	4.7
4/23/2024	141.2	43.0	1291.5	3.9	23	6.1	11.6	0.2	5.0
4/23/2024	150.9	46.0	1281.8	3.9	23	5.1	11.4	0.2	5.6
4/23/2024	160.8	49.0	1271.9	3.9	23	5.2	11.4	0.2	5.9
4/23/2024	177.2	54.0	1255.5	3.9	23	5.2	11.3	0.3	7.5
4/23/2024	173.1	53.0	1259.6	3.9	23	5.2	11.2	0.2	6.5

Date	Depth	Depth	Elevation	Temperature	Conductivity	pH	Dissolved Oxygen	Chlorophyll	Turbidity
M/D/Y	feet	meters	feet	degrees C	µmhos/cm		mg/L	RFU	NTU
5/15/2024	1.7	0.5	1437.9	12.5	23	6.9	10.9	0.1	1.2
5/15/2024	3.4	1.0	1436.2	12.3	23	6.9	10.9	0.1	1.3
5/15/2024	6.6	2.0	1433.0	11.8	23	6.9	11.0	0.1	1.3
5/15/2024	9.9	3.0	1429.7	11.6	23	6.9	11.0	0.2	1.2
5/15/2024	13.1	4.0	1426.5	11.5	23	6.9	11.0	0.2	1.1
5/15/2024	16.4	5.0	1423.2	11.4	23	6.8	11.0	0.3	1.2
5/15/2024	19.7	6.0	1419.9	11.2	23	6.8	11.0	0.3	1.3
5/15/2024	23.0	7.0	1416.6	9.7	23	6.9	11.2	0.5	1.2
5/15/2024	26.2	8.0	1413.4	8.5	23	6.8	11.4	0.6	1.4
5/15/2024	29.6	9.0	1410.0	8.1	23	6.8	11.5	0.6	1.6
5/15/2024	32.8	10.0	1406.8	7.6	23	6.8	11.6	0.8	1.8
5/15/2024	36.1	11.0	1403.5	7.2	23	6.8	11.5	0.7	1.8
5/15/2024	39.4	12.0	1400.2	7.1	23	6.8	11.5	0.7	1.9
5/15/2024	42.7	13.0	1396.9	6.7	23	6.8	11.5	0.4	1.9
5/15/2024	45.9	14.0	1393.7	6.5	23	6.8	11.4	0.3	1.9
5/15/2024	49.3	15.0	1390.3	6.2	23	6.8	11.4	0.1	2.4
5/15/2024	55.8	17.0	1383.8	5.9	23	6.8	11.4	0.2	2.4
5/15/2024	62.3	19.0	1377.3	5.5	23	6.8	11.4	0.2	2.9
5/15/2024	68.9	21.0	1370.7	5.4	23	6.7	11.5	0.1	3.0
5/15/2024	75.5	23.0	1364.1	5.2	23	6.7	11.5	0.1	3.1
5/15/2024	82.0	25.0	1357.6	5.0	23	6.7	11.5	0.1	3.1
5/15/2024	88.6	27.0	1351.0	5.0	23	6.7	11.5	0.1	3.3
5/15/2024	95.1	29.0	1344.5	4.9	23	6.6	11.5	0.1	3.4
5/15/2024	101.7	31.0	1337.9	4.8	23	6.5	11.4	0.2	3.6
5/15/2024	111.8	34.0	1327.8	4.7	23	6.0	11.4	0.2	3.8
5/15/2024	121.4	37.0	1318.2	4.5	23	5.8	11.4	0.2	4.2
5/15/2024	131.2	40.0	1308.4	4.4	23	5.6	11.4	0.3	5.0
5/15/2024	141.2	43.0	1298.5	4.3	23	5.5	11.4	0.2	5.7
5/15/2024	150.9	46.0	1288.7	4.2	23	5.5	11.3	0.2	6.0
5/15/2024	160.8	49.0	1278.8	4.2	23	5.4	11.3	0.2	7.1
5/15/2024	163.7	50.0	1275.9	4.1	23	5.4	11.1	0.2	8.1

Date	Depth	Depth	Elevation	Temperature	Conductivity	pH	Dissolved Oxygen	Chlorophyll	Turbidity
M/D/Y	feet	meters	feet	degrees C	µmhos/cm		mg/L	RFU	NTU
6/27/2024	1.7	0.5	1446.9	15.3	23	7.0	9.8	0.2	0.4
6/27/2024	3.4	1.0	1445.2	15.2	23	7.0	9.8	0.2	0.4
6/27/2024	6.6	2.0	1442.0	14.4	23	7.0	10.2	0.3	0.4
6/27/2024	9.8	3.0	1438.8	13.7	24	7.0	10.4	0.3	0.6
6/27/2024	13.2	4.0	1435.4	12.4	23	7.0	10.9	0.4	0.7
6/27/2024	16.5	5.0	1432.1	11.7	22	7.0	11.0	0.5	0.7
6/27/2024	19.7	6.0	1428.9	11.1	22	7.0	11.2	0.6	0.7
6/27/2024	23.0	7.0	1425.6	10.1	21	7.0	11.3	0.6	0.7
6/27/2024	26.2	8.0	1422.4	9.7	21	7.0	11.3	0.7	0.7
6/27/2024	29.6	9.0	1419.0	9.0	21	6.9	11.3	0.7	0.7
6/27/2024	32.8	10.0	1415.8	8.6	21	6.9	11.3	0.9	0.6
6/27/2024	36.1	11.0	1412.5	8.4	21	6.9	11.2	0.9	0.7
6/27/2024	39.4	12.0	1409.2	8.1	22	6.9	11.2	1.1	0.6
6/27/2024	42.7	13.0	1405.9	7.6	22	6.8	11.1	1.0	0.7
6/27/2024	45.9	14.0	1402.7	7.3	22	6.8	11.0	0.7	0.8
6/27/2024	45.9	14.0	1402.7	7.2	22	6.8	10.9	0.6	0.8
6/27/2024	49.2	15.0	1399.4	6.8	23	6.8	10.9	0.4	1.0
6/27/2024	55.8	17.0	1392.8	6.4	23	6.8	10.9	0.3	1.3
6/27/2024	62.3	19.0	1386.3	6.1	23	6.8	11.0	0.3	1.1
6/27/2024	68.9	21.0	1379.7	5.9	23	6.8	11.0	0.3	1.3
6/27/2024	75.5	23.0	1373.1	5.7	23	6.8	11.0	0.2	1.4
6/27/2024	82.0	25.0	1366.6	5.6	23	6.8	10.9	0.2	1.7
6/27/2024	88.5	27.0	1360.1	5.5	23	6.8	10.9	0.1	1.8
6/27/2024	95.1	29.0	1353.5	5.5	23	6.9	10.9	0.1	1.7
6/27/2024	101.8	31.0	1346.8	5.4	23	6.9	10.9	0.2	1.7
6/27/2024	111.6	34.0	1337.0	5.2	23	7.0	10.9	0.2	2.0
6/27/2024	121.5	37.0	1327.1	5.1	23	7.0	10.9	0.2	2.3
6/27/2024	131.2	40.0	1317.4	4.9	23	7.0	10.9	0.1	2.8
6/27/2024	141.2	43.0	1307.4	4.7	23	6.6	10.7	0.2	3.5
6/27/2024	150.9	46.0	1297.7	4.6	23	6.5	10.7	0.2	3.7
6/27/2024	160.8	49.0	1287.8	4.6	23	6.5	10.7	0.1	4.3
6/27/2024	178.3	54.0	1270.3	4.5	24	6.5	10.3	0.3	7.3

Date	Depth	Depth	Elevation	Temperature	Conductivity	pH	Dissolved Oxygen	Chlorophyll	Turbidity
M/D/Y	feet	meters	feet	degrees C	µmhos/cm		mg/L	RFU	NTU
7/23/2024	1.7	0.5	1444.0	21.0	24	7.1	8.6	0.1	0.4
7/23/2024	3.4	1.0	1442.3	21.0	24	7.0	8.6	0.1	0.3
7/23/2024	6.7	2.0	1439.0	20.9	24	7.0	8.7	0.2	0.4
7/23/2024	9.9	3.0	1435.8	20.8	24	7.0	8.6	0.2	0.3
7/23/2024	13.1	4.0	1432.6	20.8	24	7.0	8.6	0.2	0.3
7/23/2024	16.4	5.0	1429.3	20.7	24	7.0	8.7	0.3	0.4
7/23/2024	19.7	6.0	1426.0	19.6	24	6.8	9.3	0.3	0.5
7/23/2024	23.0	7.0	1422.7	17.1	23	6.8	10.0	0.4	0.5
7/23/2024	26.2	8.0	1419.5	14.1	22	6.9	10.5	0.4	0.6
7/23/2024	29.6	9.0	1416.2	13.0	22	6.9	10.7	0.3	0.5
7/23/2024	32.8	10.0	1412.9	11.8	22	6.9	10.8	0.3	0.7
7/23/2024	36.1	11.0	1409.6	10.4	22	6.8	10.8	0.2	0.5
7/23/2024	39.4	12.0	1406.3	9.5	22	6.8	10.9	0.2	0.5
7/23/2024	42.7	13.0	1403.0	9.1	22	6.8	10.9	0.2	0.6
7/23/2024	46.0	14.0	1399.7	8.1	22	6.7	10.8	0.2	0.6
7/23/2024	49.2	15.0	1396.5	7.5	22	6.7	10.7	0.2	0.5
7/23/2024	55.8	17.0	1389.9	6.8	23	6.7	10.6	0.2	0.7
7/23/2024	62.3	19.0	1383.4	6.4	23	6.6	10.5	0.2	0.9
7/23/2024	68.8	21.0	1376.9	6.2	23	6.7	10.5	0.2	1.0
7/23/2024	75.5	23.0	1370.2	6.0	23	6.6	10.5	0.2	1.1
7/23/2024	82.0	25.0	1363.7	5.8	23	6.6	10.6	0.1	1.2
7/23/2024	88.7	27.0	1357.0	5.8	23	6.6	10.5	0.1	1.4
7/23/2024	95.1	29.0	1350.6	5.7	23	6.5	10.6	0.2	1.2
7/23/2024	101.7	31.0	1344.0	5.6	23	6.4	10.6	0.0	1.5
7/23/2024	111.6	34.0	1334.1	5.5	23	6.4	10.6	0.1	1.6
7/23/2024	121.4	37.0	1324.3	5.3	23	6.4	10.6	0.1	1.7
7/23/2024	131.3	40.0	1314.4	5.2	23	6.2	10.6	0.1	1.6
7/23/2024	141.1	43.0	1304.6	5.0	23	5.9	10.5	0.2	2.1
7/23/2024	150.9	46.0	1294.8	4.9	24	5.9	10.4	0.2	2.6
7/23/2024	160.8	49.0	1284.9	4.8	24	5.9	10.3	0.2	2.7
7/23/2024	177.2	54.0	1268.5	4.8	24	5.7	10.2	0.1	3.0
7/23/2024	173.1	53.0	1272.6	4.8	24	6.0	10.1	0.2	3.2

Date	Depth	Depth	Elevation	Temperature	Conductivity	pH	Dissolved Oxygen	Chlorophyll	Turbidity
M/D/Y	feet	meters	feet	degrees C	µmhos/cm		mg/L	RFU	NTU
8/20/2024	1.6	0.5	1433.1	20.0	26	7.2	8.8	0.1	0.8
8/20/2024	3.4	1.0	1431.3	20.0	26	7.2	8.8	0.1	0.8
8/20/2024	6.6	2.0	1428.1	20.0	26	7.2	8.8	0.1	0.8
8/20/2024	9.8	3.0	1424.9	20.0	26	7.2	8.8	0.2	0.7
8/20/2024	13.1	4.0	1421.6	20.0	26	7.2	8.8	0.2	0.7
8/20/2024	16.4	5.0	1418.3	20.0	26	7.2	8.8	0.1	0.8
8/20/2024	19.7	6.0	1415.0	20.0	26	7.2	8.8	0.2	0.8
8/20/2024	23.0	7.0	1411.7	19.8	26	7.2	8.8	0.2	0.9
8/20/2024	26.2	8.0	1408.5	16.9	24	6.8	9.5	0.4	0.7
8/20/2024	29.5	9.0	1405.2	15.3	23	6.7	9.8	0.3	0.6
8/20/2024	32.8	10.0	1401.9	13.4	23	6.7	10.1	0.3	0.7
8/20/2024	36.2	11.0	1398.5	10.8	22	6.6	10.2	0.4	0.8
8/20/2024	39.4	12.0	1395.3	9.2	22	6.6	10.2	0.4	0.8
8/20/2024	42.8	13.0	1391.9	8.0	23	6.6	10.2	0.2	0.8
8/20/2024	45.9	14.0	1388.8	7.4	23	6.6	10.1	0.1	0.8
8/20/2024	49.3	15.0	1385.4	7.0	23	6.6	10.1	0.2	0.7
8/20/2024	55.7	17.0	1379.0	6.5	23	6.6	10.1	0.1	0.8
8/20/2024	62.3	19.0	1372.4	6.2	23	6.6	10.1	0.3	0.8
8/20/2024	68.9	21.0	1365.8	6.0	23	6.6	10.2	0.1	0.8
8/20/2024	75.6	23.0	1359.1	5.9	23	6.6	10.3	0.0	0.8
8/20/2024	82.1	25.0	1352.6	5.8	23	6.6	10.2	0.0	0.9
8/20/2024	88.6	27.0	1346.1	5.8	23	6.6	10.3	0.1	0.8
8/20/2024	95.1	29.0	1339.6	5.7	23	6.6	10.3	0.0	0.9
8/20/2024	101.6	31.0	1333.1	5.6	23	6.6	10.3	0.1	0.9
8/20/2024	111.6	34.0	1323.1	5.5	23	6.6	10.4	0.1	0.9
8/20/2024	121.5	37.0	1313.2	5.3	23	6.6	10.4	0.1	1.0
8/20/2024	131.2	40.0	1303.5	5.1	24	6.5	10.3	0.1	1.3
8/20/2024	141.2	43.0	1293.5	5.0	24	6.5	10.2	0.1	1.6
8/20/2024	150.9	46.0	1283.9	5.0	24	6.5	10.0	0.2	1.8
8/20/2024	154.0	47.0	1280.7	4.9	24	6.4	9.7	0.1	2.9

Date	Depth	Depth	Elevation	Temperature	Conductivity	pH	Dissolved Oxygen	Chlorophyll	Turbidity
M/D/Y	feet	meters	feet	degrees C	µmhos/cm		mg/L	RFU	NTU
9/24/2024	1.7	0.5	1419.8	17.3	27	7.1	9.3	0.1	1.3
9/24/2024	3.4	1.0	1418.1	17.2	27	7.2	9.3	0.2	1.3
9/24/2024	6.7	2.0	1414.8	17.2	27	7.1	9.3	0.2	1.4
9/24/2024	9.8	3.0	1411.7	17.2	27	7.1	9.3	0.3	1.4
9/24/2024	13.1	4.0	1408.4	17.2	27	7.1	9.3	0.3	1.3
9/24/2024	16.5	5.0	1405.0	17.2	27	7.1	9.3	0.3	1.4
9/24/2024	19.8	6.0	1401.7	17.2	27	7.2	9.3	0.3	1.2
9/24/2024	23.0	7.0	1398.5	17.2	27	7.2	9.3	0.3	1.3
9/24/2024	26.2	8.0	1395.3	17.1	27	7.1	9.3	0.2	1.4
9/24/2024	29.5	9.0	1392.0	17.0	27	7.1	9.3	0.3	1.3
9/24/2024	32.8	10.0	1388.7	14.2	25	6.6	9.1	0.2	1.2
9/24/2024	36.2	11.0	1385.3	12.7	24	6.4	8.8	0.2	1.1
9/24/2024	39.4	12.0	1382.1	11.5	24	6.3	8.8	0.2	1.3
9/24/2024	42.7	13.0	1378.8	9.6	23	6.4	9.1	0.3	1.4
9/24/2024	45.9	14.0	1375.6	8.5	23	6.4	9.3	0.3	1.2
9/24/2024	49.3	15.0	1372.2	7.7	23	6.4	9.3	0.1	1.1
9/24/2024	55.8	17.0	1365.7	7.0	24	6.4	9.3	0.1	1.1
9/24/2024	62.3	19.0	1359.2	6.6	24	6.4	9.4	0.1	1.1
9/24/2024	69.0	21.0	1352.5	6.2	23	6.5	9.6	0.1	1.0
9/24/2024	75.5	23.0	1346.0	6.1	24	6.5	9.7	0.1	1.3
9/24/2024	82.1	25.0	1339.4	6.0	24	6.5	9.6	0.1	1.4
9/24/2024	88.7	27.0	1332.9	5.9	24	6.5	9.6	0.1	1.2
9/24/2024	95.1	29.0	1326.4	5.8	24	6.5	9.8	0.1	1.3
9/24/2024	101.8	31.0	1319.7	5.7	24	6.5	9.8	0.1	1.1
9/24/2024	111.8	34.0	1309.7	5.6	24	6.5	10.0	0.2	1.3
9/24/2024	121.4	37.0	1300.1	5.5	24	6.5	9.8	0.1	1.8
9/24/2024	131.2	40.0	1290.3	5.4	24	6.4	9.6	0.2	2.3
9/24/2024	141.1	43.0	1280.4	5.3	25	6.4	9.3	0.2	3.1
9/24/2024	150.9	46.0	1270.6	5.3	25	6.4	9.0	0.1	3.5
9/24/2024	160.8	49.0	1260.7	5.3	25	6.4	8.6	0.1	4.4
9/24/2024	162.2	49.0	1259.3	5.3	25	6.4	8.2	0.2	5.4

Date	Depth	Depth	Elevation	Temperature	Conductivity	pH	Dissolved Oxygen	Chlorophyll	Turbidity
M/D/Y	feet	meters	feet	degrees C	µmhos/cm		mg/L	RFU	NTU
10/29/2024	1.7	0.5	1424.6	10.2	25	6.8	10.0	0.1	3.1
10/29/2024	3.4	1.0	1422.9	10.2	25	6.8	10.0	0.2	3.5
10/29/2024	6.7	2.0	1419.6	10.2	25	6.8	10.0	0.3	3.3
10/29/2024	9.9	3.0	1416.4	10.2	25	6.8	10.0	0.3	3.3
10/29/2024	13.2	4.0	1413.1	10.2	25	6.8	10.0	0.3	3.1
10/29/2024	16.6	5.0	1409.7	10.2	25	6.8	10.0	0.2	3.3
10/29/2024	19.7	6.0	1406.6	10.2	25	6.8	9.8	0.2	3.5
10/29/2024	23.1	7.0	1403.2	10.2	25	6.8	10.0	0.2	3.1
10/29/2024	26.3	8.0	1400.0	10.2	25	6.8	10.0	0.3	3.3
10/29/2024	29.7	9.0	1396.6	10.2	25	6.8	9.9	0.2	3.6
10/29/2024	32.7	10.0	1393.6	10.2	25	6.8	10.0	0.2	3.2
10/29/2024	36.2	11.0	1390.1	10.1	25	6.7	9.9	0.2	3.3
10/29/2024	39.4	12.0	1386.9	9.8	25	6.6	9.8	0.1	3.4
10/29/2024	42.7	13.0	1383.6	9.6	25	6.6	9.6	0.2	3.4
10/29/2024	45.9	14.0	1380.4	9.4	25	6.6	9.7	0.1	3.2
10/29/2024	49.3	15.0	1377.0	9.3	26	6.6	9.7	0.2	3.2
10/29/2024	55.9	17.0	1370.4	8.9	25	6.6	9.6	0.1	3.0
10/29/2024	62.3	19.0	1364.0	8.5	25	6.5	9.3	0.2	3.0
10/29/2024	68.9	21.0	1357.4	7.8	24	6.4	9.0	0.1	2.4
10/29/2024	75.5	23.0	1350.8	6.8	24	6.3	8.8	0.1	1.6
10/29/2024	82.1	25.0	1344.2	6.3	24	6.4	8.9	0.1	1.3
10/29/2024	88.6	27.0	1337.7	6.1	24	6.4	9.0	0.1	1.3
10/29/2024	95.2	29.0	1331.1	6.0	24	6.4	9.2	0.1	1.1
10/29/2024	101.8	31.0	1324.5	5.9	24	6.5	9.3	0.1	1.2
10/29/2024	111.5	34.0	1314.8	5.8	24	6.5	9.4	0.2	1.3
10/29/2024	121.5	37.0	1304.8	5.6	24	6.5	9.3	0.1	1.9
10/29/2024	131.3	40.0	1295.0	5.5	24	6.4	9.1	0.1	2.5
10/29/2024	141.2	43.0	1285.1	5.4	25	6.4	8.6	0.1	3.5
10/29/2024	150.8	46.0	1275.5	5.4	25	6.4	8.3	0.2	5.2
10/29/2024	160.8	49.0	1265.5	5.4	25	6.4	7.9	0.2	8.3
10/29/2024	160.9	49.0	1265.4	5.4	25	6.4	7.8	0.2	6.7
10/29/2024	161.5	49.0	1264.8	5.4	25	6.4	7.7	0.2	9.8

APPENDIX B

Mean Daily Water Temperature Monitoring – Figures

Figure B-1. Mean Daily Water Temperature in the South Fork Sultan (RM 18.2), and the mainstem Sultan River immediately downstream of Culmback Dam (RM 15.8) during 2024

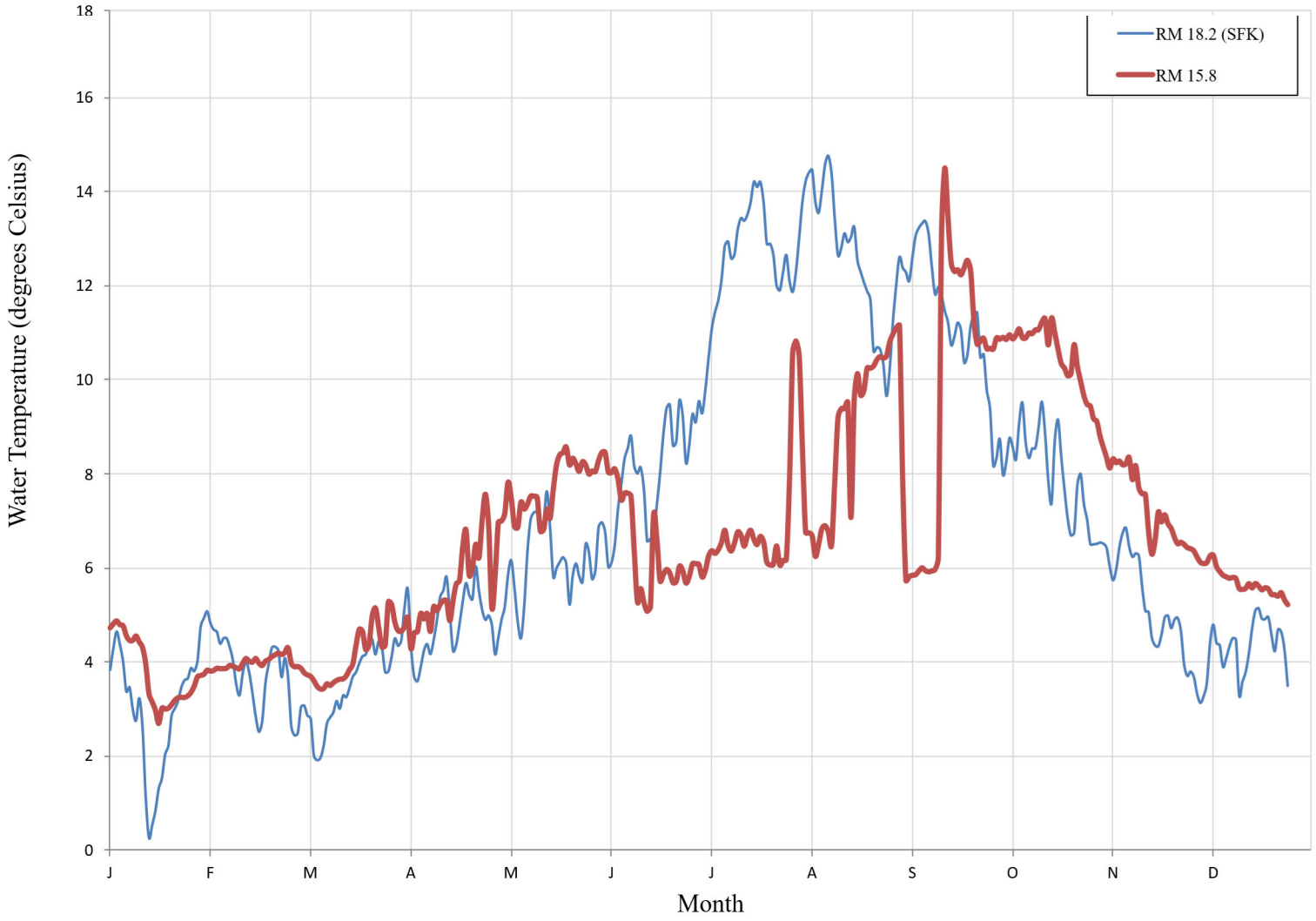


Figure B-2. Longitudinal Depiction of Mean Daily Water Temperature in the Bypass Reach (Reach 3) of the Sultan River during 2024

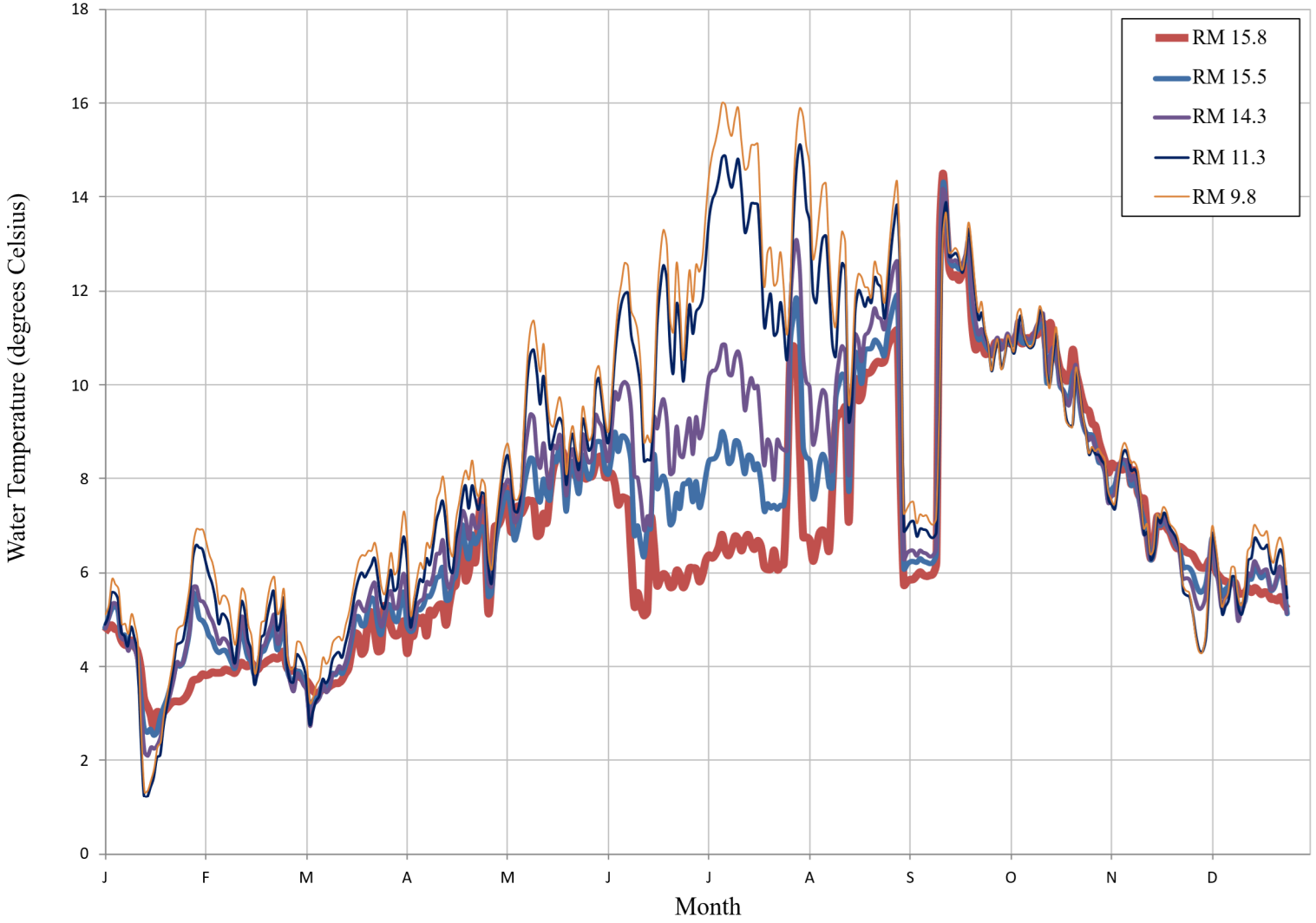


Figure B-3. Longitudinal Depiction of Mean Daily Water Temperature, Sultan River downstream of Culmback Dam during 2024

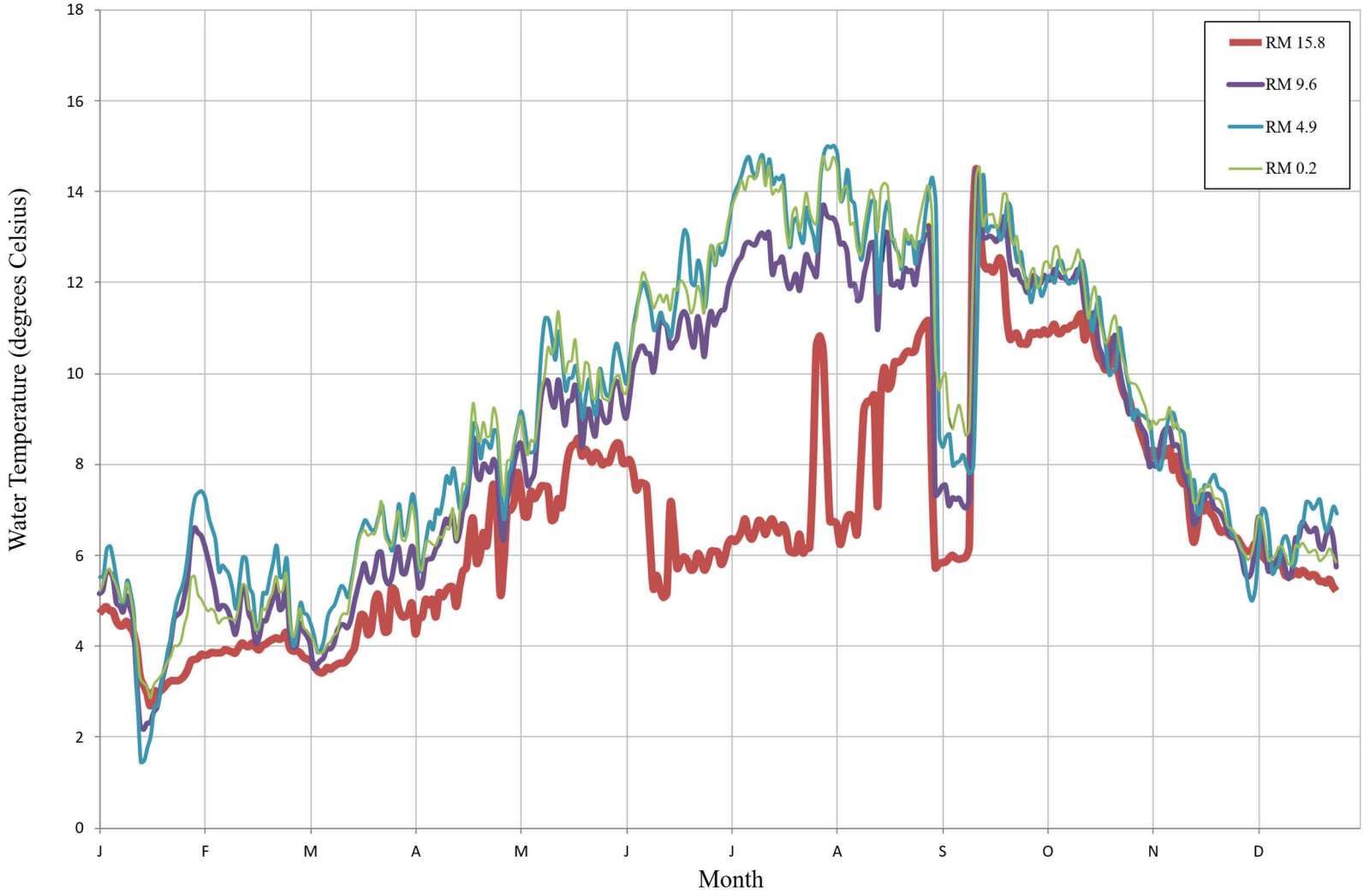
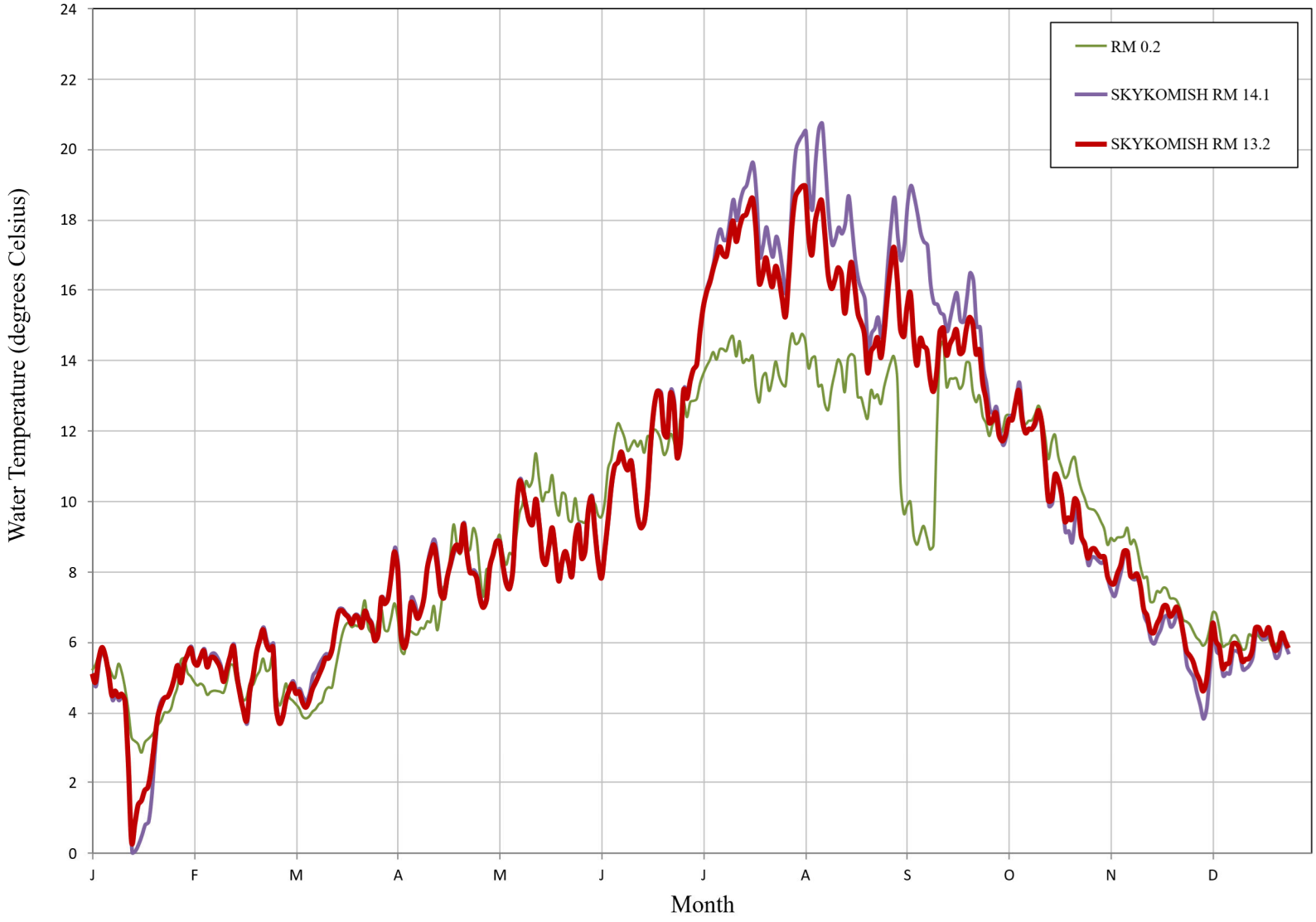


Figure B-4. Mean Daily Water Temperature near confluence of Sultan and Skykomish rivers during 2024



APPENDIX C

Mean Daily Water Temperature Data in Tabular Format

	Sultan River										Skykomish River	
DATE	RM 18.2 (SFK)	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
1/1	3.8	4.7	4.8	4.8	4.9	5.1	5.1	5.5	5.2	5.2	5.0	5.1
1/2	4.3	4.8	5.0	5.0	5.1	5.3	5.2	5.6	5.1	5.4	4.8	4.9
1/3	4.6	4.9	5.2	5.3	5.6	5.9	5.6	6.1	5.3	5.6	5.4	5.5
1/4	4.4	4.8	5.3	5.3	5.6	5.8	5.6	6.2	5.5	5.7	5.8	5.9
1/5	4.0	4.8	5.2	5.2	5.4	5.6	5.5	5.9	5.3	5.5	5.6	5.6
1/6	3.4	4.6	4.6	4.6	4.7	4.9	4.9	5.4	5.2	5.3	5.1	5.1
1/7	3.5	4.5	4.7	4.5	4.7	4.9	4.9	5.0	5.0	5.1	4.4	4.5
1/8	3.0	4.5	4.4	4.3	4.4	4.7	4.7	5.0	4.9	5.0	4.5	4.6
1/9	2.7	4.6	4.5	4.5	4.8	5.1	5.1	5.4	5.4	5.4	4.4	4.5
1/10	3.2	4.4	4.4	4.4	4.6	4.9	4.8	5.2	5.1	5.2	4.5	4.5
1/11	2.6	4.3	4.2	4.0	4.3	4.5	4.5	4.7	4.7	4.7	4.3	4.3
1/12	1.1	4.0	3.4	3.0	2.5	2.6	3.2	2.9	4.2	4.1	2.2	2.6
1/13	0.3	3.3	2.7	2.2	1.3	1.3	2.2	1.4	3.5	3.3	0.0	0.3
1/14	0.5	3.2	2.6	2.1	1.2	1.4	2.2	1.5	3.3	3.2	0.1	0.8
1/15	0.8	3.0	2.7	2.3	1.4	1.6	2.3	1.8	3.1	3.1	0.3	1.4
1/16	1.3	2.7	2.5	2.2	1.6	1.9	2.3	2.0	2.8	2.9	0.5	1.5
1/17	1.5	3.0	2.6	2.3	2.1	2.3	2.5	2.7	3.1	3.2	0.8	1.8
1/18	2.0	3.0	2.9	2.5	2.1	2.4	2.7	2.7	3.2	3.3	0.9	1.9
1/19	2.2	3.0	3.1	2.9	2.7	3.0	3.1	3.1	3.2	3.3	1.7	2.4
1/20	2.9	3.1	3.3	3.2	3.1	3.4	3.4	3.5	3.3	3.5	3.0	3.2
1/21	3.0	3.2	3.5	3.4	3.5	3.8	3.7	3.9	3.5	3.7	4.1	3.9
1/22	3.2	3.2	3.8	3.7	4.0	4.2	4.1	4.2	3.6	3.8	4.4	4.2
1/23	3.5	3.3	4.0	4.1	4.4	4.8	4.6	4.8	3.9	4.0	4.4	4.4
1/24	3.6	3.3	4.0	4.0	4.5	4.9	4.7	5.1	4.0	4.0	4.5	4.5
1/25	3.6	3.3	4.1	4.1	4.6	4.9	4.8	5.3	4.1	4.1	4.7	4.7
1/26	3.9	3.4	4.4	4.5	4.9	5.3	5.1	5.6	4.7	4.5	5.0	5.0
1/27	3.8	3.5	4.8	4.8	5.4	5.8	5.5	6.1	5.1	4.8	5.4	5.3
1/28	4.0	3.7	5.5	5.7	6.3	6.6	6.4	6.8	6.2	5.5	4.9	4.8
1/29	4.8	3.7	5.4	5.7	6.6	6.9	6.6	7.3	6.1	5.5	5.4	5.4
1/30	4.9	3.7	5.0	5.4	6.5	6.9	6.5	7.4	5.4	5.1	5.7	5.6
1/31	5.1	3.8	5.0	5.4	6.5	6.9	6.4	7.4	5.2	5.0	5.9	5.8

	Sultan River										Skykomish River	
DATE	**RM 18.2 (SFK)**	**RM 15.8**	**RM 15.5**	**RM 14.3**	**RM 11.3**	**RM 9.8**	**RM 9.6**	**RM 4.9**	**RM 4.4**	**RM 0.2**	**RM 14.1**	**RM 13.2**
2/1	4.8	3.8	4.9	5.3	6.2	6.7	6.2	7.2	5.1	4.9	5.5	5.4
2/2	4.7	3.8	4.7	5.1	6.0	6.4	5.9	6.8	5.0	4.8	5.4	5.3
2/3	4.6	3.9	4.6	4.9	5.8	6.2	5.6	6.6	5.1	4.8	5.6	5.6
2/4	4.4	3.9	4.4	4.7	5.4	5.8	5.2	6.3	5.0	4.8	5.8	5.8
2/5	4.5	3.9	4.3	4.5	4.9	5.3	4.8	5.6	4.6	4.5	5.4	5.3
2/6	4.5	3.9	4.3	4.6	5.1	5.5	4.9	5.8	4.7	4.6	5.7	5.5
2/7	4.3	3.9	4.3	4.6	5.1	5.5	4.9	5.7	4.7	4.6	5.7	5.6
2/8	4.0	3.9	4.2	4.4	4.9	5.3	4.7	5.6	4.6	4.6	5.6	5.5
2/9	3.5	3.9	4.1	4.2	4.4	4.8	4.5	5.2	4.4	4.6	5.3	5.3
2/10	3.3	3.9	4.0	4.0	4.1	4.5	4.2	4.8	4.3	4.6	4.9	4.9
2/11	3.8	4.0	4.4	4.4	4.7	5.1	4.6	5.4	4.5	4.9	5.3	5.2
2/12	4.0	4.1	5.0	5.1	5.4	5.7	5.3	5.9	5.2	5.3	5.7	5.6
2/13	3.8	4.0	4.5	4.7	5.2	5.5	5.2	5.9	4.9	5.3	5.9	5.9
2/14	3.3	4.0	4.2	4.3	4.6	4.9	4.7	5.3	4.6	4.8	5.1	5.1
2/15	2.8	4.1	4.1	4.1	4.3	4.6	4.5	5.1	4.7	4.8	4.5	4.5
2/16	2.5	4.0	3.8	3.7	3.6	3.9	4.1	4.4	4.3	4.4	4.1	4.1
2/17	2.7	3.9	4.0	3.9	3.9	4.2	4.2	4.5	4.3	4.4	3.7	3.8
2/18	3.5	4.0	4.3	4.4	4.6	4.9	4.5	5.2	4.5	4.8	4.6	4.6
2/19	3.9	4.1	4.3	4.5	4.7	5.0	4.6	5.1	4.5	4.8	5.1	5.1
2/20	4.3	4.1	4.5	4.7	5.1	5.5	4.8	5.5	4.6	5.0	5.8	5.7
2/21	4.3	4.2	4.7	4.9	5.4	5.8	5.0	5.9	4.7	5.2	6.2	6.1
2/22	4.2	4.2	4.8	5.1	5.6	5.9	5.3	6.2	5.2	5.5	6.4	6.4
2/23	3.7	4.2	4.4	4.5	4.8	5.1	4.8	5.5	5.1	5.2	6.1	6.0
2/24	4.1	4.2	4.6	4.7	4.9	5.3	4.8	5.5	5.1	5.2	5.9	5.8
2/25	3.7	4.3	5.1	5.2	5.4	5.6	5.4	5.9	5.7	5.6	6.0	5.9
2/26	2.6	4.0	4.0	4.0	4.1	4.2	4.3	4.5	4.5	4.6	4.2	4.1
2/27	2.4	3.9	3.7	3.6	3.7	3.9	4.0	4.0	4.1	4.2	3.8	3.7
2/28	2.5	3.9	3.6	3.5	3.7	4.0	4.0	4.4	4.3	4.5	3.9	3.9
2/29	3.0	3.9	3.9	3.8	4.2	4.5	4.5	4.9	4.9	4.8	4.4	4.4

	Sultan River										Skykomish River	
DATE	RM 18.2 (SFK)	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
3/1	3.1	3.8	3.9	3.7	4.2	4.5	4.3	4.7	4.4	4.4	4.7	4.6
3/2	2.9	3.7	3.7	3.6	4.0	4.3	4.2	4.7	4.3	4.3	4.9	4.8
3/3	2.8	3.7	3.6	3.5	3.7	4.1	4.0	4.5	4.1	4.2	4.6	4.5
3/4	2.0	3.6	3.1	2.7	2.8	3.2	3.5	4.2	4.0	4.1	4.7	4.6
3/5	1.9	3.5	3.2	3.2	3.0	3.4	3.6	3.9	3.8	3.9	4.5	4.3
3/6	2.0	3.4	3.3	3.2	3.3	3.6	3.7	3.9	3.8	3.8	4.3	4.1
3/7	2.2	3.4	3.4	3.3	3.4	3.8	3.7	4.2	3.8	3.9	4.6	4.3
3/8	2.7	3.5	3.6	3.6	3.7	4.2	3.9	4.6	3.9	4.0	5.1	4.7
3/9	2.8	3.5	3.5	3.4	3.6	4.1	3.9	4.8	4.0	4.1	5.2	4.9
3/10	2.9	3.6	3.6	3.5	3.8	4.2	4.0	4.9	4.2	4.2	5.4	5.1
3/11	3.2	3.6	3.8	3.8	4.1	4.5	4.3	5.1	4.3	4.3	5.6	5.3
3/12	3.0	3.6	3.8	3.9	4.3	4.6	4.5	5.3	4.6	4.6	5.7	5.5
3/13	3.3	3.6	3.9	4.0	4.3	4.6	4.5	5.2	4.5	4.7	5.7	5.5
3/14	3.2	3.7	3.8	3.9	4.2	4.6	4.4	5.1	4.5	4.7	5.9	5.8
3/15	3.4	3.8	4.0	4.1	4.5	4.9	4.6	5.4	5.0	5.2	6.5	6.4
3/16	3.7	4.0	4.2	4.4	4.8	5.1	4.9	5.9	5.4	5.7	6.9	6.9
3/17	3.8	4.4	4.6	4.7	5.1	5.5	5.3	6.3	5.9	6.2	7.0	6.9
3/18	4.0	4.7	5.0	5.2	5.6	5.9	5.6	6.6	6.1	6.5	6.8	6.8
3/19	4.1	4.7	5.1	5.4	5.8	6.3	5.8	6.8	6.3	6.6	6.7	6.7
3/20	4.2	4.3	4.9	5.2	6.0	6.4	5.5	6.7	6.1	6.4	6.6	6.5
3/21	4.4	4.4	4.9	5.2	5.9	6.4	5.4	6.5	6.0	6.5	6.8	6.7
3/22	4.5	5.0	5.2	5.4	6.0	6.5	5.6	6.6	6.1	6.5	6.7	6.7
3/23	4.2	5.2	5.5	5.7	6.2	6.5	6.0	6.8	6.5	6.8	6.4	6.4
3/24	4.4	4.7	5.4	5.8	6.3	6.6	6.1	7.1	6.6	7.2	6.9	6.9
3/25	4.3	4.3	4.9	5.2	5.9	6.3	5.5	6.6	6.0	6.4	6.7	6.7
3/26	3.8	4.4	4.7	4.8	5.4	5.7	5.4	6.3	6.0	6.3	6.5	6.5
3/27	3.8	5.3	5.0	5.1	5.2	5.5	5.5	6.1	6.0	6.2	6.1	6.0
3/28	4.1	5.2	5.3	5.5	5.6	6.0	5.9	6.5	6.3	6.6	6.2	6.2
3/29	4.5	4.9	5.3	5.6	6.1	6.4	6.2	7.1	6.5	7.0	7.3	7.3
3/30	4.3	4.7	5.0	5.2	5.6	6.0	5.6	6.5	6.0	6.4	7.2	7.1
3/31	4.5	4.7	5.0	5.3	5.7	6.1	5.6	6.4	5.9	6.3	7.3	7.2

	Sultan River										Skykomish River	
DATE	RM 18.2 (SFK)	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
4/1	5.2	4.8	5.3	5.7	6.3	6.8	5.9	6.9	6.2	6.7	8.0	7.9
4/2	5.5	5.0	5.6	6.0	6.8	7.3	6.2	7.3	6.5	7.1	8.7	8.6
4/3	4.3	4.3	4.9	5.3	6.2	6.6	5.9	6.9	6.3	6.7	8.2	8.1
4/4	3.7	4.6	4.7	4.8	4.9	5.1	5.3	5.7	5.7	5.8	6.3	6.2
4/5	3.6	4.7	4.8	4.9	5.2	5.5	5.4	5.9	5.6	5.7	5.9	5.8
4/6	3.9	5.0	5.2	5.3	5.5	5.9	5.9	6.4	6.1	6.3	6.2	6.2
4/7	4.2	4.9	5.2	5.4	5.9	6.2	5.9	6.7	6.2	6.3	7.3	7.1
4/8	4.4	5.0	5.3	5.4	5.8	6.1	5.9	6.6	6.2	6.2	7.1	7.0
4/9	4.2	4.7	5.5	5.8	6.3	6.6	6.1	7.0	6.3	6.2	6.8	6.7
4/10	4.5	5.2	5.5	5.7	6.2	6.5	6.3	6.9	6.3	6.4	7.0	6.9
4/11	4.9	5.1	5.6	5.9	6.6	6.9	6.5	7.3	6.3	6.4	7.4	7.3
4/12	5.4	5.2	5.9	6.4	7.1	7.5	6.8	7.7	6.5	6.6	8.3	8.1
4/13	5.5	5.3	5.9	6.4	7.3	7.7	6.7	7.6	6.5	6.6	8.7	8.5
4/14	5.8	5.3	6.1	6.7	7.5	8.0	6.9	7.9	6.9	7.0	8.9	8.8
4/15	5.0	4.9	5.4	5.9	7.0	7.5	6.3	7.5	6.4	6.3	8.4	8.2
4/16	4.2	5.3	5.4	5.7	6.1	6.6	6.5	7.0	6.7	6.9	7.5	7.4
4/17	4.4	5.7	5.8	6.0	6.0	6.4	7.0	7.3	7.4	7.6	7.3	7.3
4/18	4.8	5.7	5.9	6.2	6.6	7.1	7.2	7.5	7.4	7.6	7.9	7.8
4/19	5.3	6.5	6.5	6.8	7.0	7.5	7.9	8.0	8.2	8.5	8.2	8.2
4/20	5.7	6.8	7.0	7.3	7.6	7.9	8.6	8.9	9.0	9.4	8.5	8.6
4/21	5.4	5.9	6.6	7.1	7.9	8.2	7.8	8.8	8.2	8.8	8.8	8.8
4/22	5.3	6.0	6.3	6.7	7.4	8.0	7.7	8.1	8.0	8.5	8.6	8.6
4/23	6.0	6.5	6.8	7.2	7.9	8.4	8.0	8.5	8.4	8.9	9.4	9.4
4/24	5.5	6.2	6.6	6.9	7.6	7.8	7.9	8.5	8.3	8.6	8.6	8.6
4/25	5.1	7.0	6.8	7.0	7.3	7.6	7.8	8.4	8.3	8.6	8.0	8.0
4/26	4.9	7.6	7.0	7.4	7.7	8.0	8.1	8.8	8.7	9.3	8.1	8.0
4/27	5.0	6.9	6.9	7.3	7.6	7.8	7.9	8.7	8.6	9.0	7.9	7.8
4/28	4.8	5.2	5.5	5.8	6.2	6.4	6.7	7.5	7.5	8.0	7.3	7.3
4/29	4.2	5.8	5.6	5.7	5.8	6.1	6.3	6.8	6.9	7.3	7.0	7.0
4/30	4.5	7.0	6.5	6.7	6.6	6.8	7.2	7.7	7.7	8.1	7.2	7.2

	Sultan River										Skykomish River	
DATE	RM 18.2 (SFK)	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
5/1	4.9	7.0	7.0	7.2	7.3	7.5	7.6	7.9	7.7	8.1	8.2	8.1
5/2	5.2	7.2	7.3	7.6	7.8	8.1	8.0	8.5	8.0	8.5	8.5	8.5
5/3	5.8	7.8	7.6	7.8	8.3	8.6	8.3	8.9	8.5	8.8	8.9	8.9
5/4	6.2	7.5	7.7	8.0	8.5	8.7	8.5	9.2	8.8	9.1	8.9	8.9
5/5	5.6	6.9	7.3	7.8	8.1	8.3	8.1	8.8	8.3	8.5	8.2	8.2
5/6	4.8	6.9	6.7	7.1	7.3	7.6	7.5	8.3	8.0	8.2	7.7	7.7
5/7	4.5	7.4	6.9	7.2	7.3	7.6	7.6	8.3	8.2	8.5	7.5	7.5
5/8	5.2	7.3	7.2	7.6	7.7	7.8	7.8	8.3	8.2	8.5	8.1	8.0
5/9	6.3	7.4	7.8	8.4	8.9	9.3	8.7	9.5	8.7	9.0	9.7	9.6
5/10	7.0	7.5	8.2	9.0	10.0	10.5	9.5	10.6	9.2	9.7	10.6	10.6
5/11	7.2	7.5	8.4	9.4	10.6	11.2	9.8	11.2	9.2	9.9	10.4	10.4
5/12	7.2	7.5	8.4	9.3	10.7	11.4	9.8	11.2	9.7	10.6	9.9	9.9
5/13	6.8	6.8	7.7	8.5	10.2	10.8	9.4	10.8	9.7	10.4	9.4	9.5
5/14	7.0	6.8	7.5	8.2	9.6	10.3	9.3	10.3	9.8	10.6	9.4	9.3
5/15	7.6	7.3	8.0	8.7	10.2	10.9	9.9	10.9	10.5	11.4	10.1	10.1
5/16	6.8	7.1	7.6	8.1	9.5	9.9	9.4	10.4	10.1	10.6	9.4	9.4
5/17	5.8	7.7	7.5	7.8	8.6	9.2	8.9	9.6	9.4	10.0	8.4	8.4
5/18	6.0	8.2	8.5	8.7	8.8	9.1	9.4	9.9	9.8	10.3	8.2	8.2
5/19	6.1	8.4	8.4	8.6	9.1	9.5	9.4	9.9	9.8	10.3	8.7	8.7
5/20	6.2	8.5	8.7	8.9	9.3	9.7	9.7	10.2	10.1	10.8	9.2	9.3
5/21	6.1	8.6	8.2	8.5	9.1	9.3	9.3	9.8	9.7	10.0	8.5	8.6
5/22	5.2	8.2	7.3	7.6	7.9	8.1	8.4	9.0	9.1	9.6	7.8	7.7
5/23	5.8	8.3	8.1	8.4	8.6	8.8	9.0	9.5	9.5	10.2	8.3	8.3
5/24	6.1	8.2	8.4	8.6	9.0	9.1	9.2	9.9	9.7	10.2	8.6	8.6
5/25	5.8	8.1	8.0	8.2	8.5	8.6	8.8	9.3	9.2	9.5	8.2	8.2
5/26	5.7	8.3	7.7	8.0	8.2	8.4	8.6	9.1	9.2	9.4	7.9	7.9
5/27	6.5	8.2	8.5	8.9	9.2	9.5	9.4	10.1	9.6	10.1	9.0	9.0
5/28	6.3	8.0	8.2	8.5	9.0	9.2	9.1	9.8	9.3	9.5	9.4	9.3
5/29	5.8	8.1	8.0	8.3	8.6	8.8	8.9	9.5	9.2	9.4	8.4	8.4
5/30	5.9	8.1	8.1	8.4	8.7	9.0	9.0	9.5	9.2	9.4	8.6	8.6
5/31	6.9	8.3	8.8	9.3	9.9	10.2	9.6	10.3	9.4	9.7	9.8	9.8

	Sultan River										Skykomish River	
DATE	RM 18.2 (SFK)	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
6/1	7.0	8.5	8.8	9.2	10.1	10.4	9.8	10.7	9.8	9.9	10.2	10.1
6/2	6.8	8.5	8.7	9.1	9.7	9.9	9.7	10.4	9.8	9.9	9.1	9.2
6/3	6.0	8.0	8.2	8.6	9.1	9.3	9.3	10.0	9.4	9.6	8.3	8.3
6/4	6.1	8.0	8.1	8.4	8.8	9.0	9.0	9.8	9.3	9.6	7.9	7.8
6/5	6.5	8.1	8.5	9.1	9.6	9.8	9.5	10.4	9.6	10.0	8.6	8.6
6/6	7.3	7.9	9.0	9.8	10.6	10.9	10.1	11.0	10.3	10.9	9.5	9.5
6/7	7.8	7.5	8.6	9.7	11.3	11.7	10.4	11.5	10.5	11.2	10.5	10.4
6/8	8.3	7.6	8.9	10.0	11.7	12.2	10.6	11.8	11.2	11.9	11.0	11.0
6/9	8.5	7.6	8.9	10.1	11.9	12.6	10.6	12.0	11.3	12.2	11.1	11.1
6/10	8.8	7.5	8.8	10.0	12.0	12.5	10.4	11.8	11.1	12.1	11.4	11.4
6/11	8.2	6.4	8.3	9.4	11.1	11.6	10.4	11.5	11.0	11.8	11.1	11.1
6/12	8.0	5.3	6.8	8.1	10.7	11.4	10.0	11.0	10.6	11.4	10.9	10.9
6/13	8.1	5.6	7.0	8.0	10.4	11.1	10.5	11.1	10.9	11.6	11.2	11.2
6/14	7.7	5.3	6.6	7.5	9.8	10.3	11.2	11.3	11.4	11.7	10.4	10.4
6/15	6.6	5.1	6.3	6.9	8.4	8.8	11.1	11.1	11.4	11.6	9.5	9.6
6/16	6.6	5.2	6.9	7.2	8.4	8.9	11.0	11.0	11.3	11.7	9.3	9.2
6/17	6.7	7.1	6.9	7.0	8.4	8.8	10.6	10.8	11.0	11.4	9.4	9.4
6/18	7.3	6.6	8.5	9.3	9.4	9.8	10.7	11.3	11.0	11.9	10.2	10.2
6/19	8.0	5.7	7.8	9.1	11.2	11.8	10.8	11.9	10.9	11.8	11.7	11.7
6/20	8.8	5.9	7.9	9.5	12.1	12.8	11.2	12.7	10.8	12.0	12.7	12.7
6/21	9.4	6.0	8.0	9.7	12.5	13.3	11.4	13.2	10.8	12.0	13.2	13.1
6/22	9.5	5.9	7.8	9.2	12.2	13.0	11.2	13.0	10.7	11.8	13.1	13.0
6/23	8.6	5.7	7.0	8.1	10.8	11.4	10.8	12.0	10.9	11.3	12.0	12.0
6/24	8.7	5.7	7.1	8.1	10.2	11.1	10.6	11.9	10.5	11.5	11.9	11.8
6/25	9.6	6.0	7.7	9.1	11.7	12.6	11.2	12.5	10.9	11.9	13.2	13.1
6/26	9.2	5.9	7.4	8.5	11.2	11.8	10.9	12.2	11.2	11.7	12.8	12.8
6/27	8.2	5.7	7.9	8.5	10.1	10.5	10.4	11.4	11.0	11.3	11.3	11.3
6/28	8.6	5.8	7.9	8.9	10.8	11.5	11.0	12.1	11.4	12.4	11.7	11.6
6/29	9.3	6.1	8.0	9.3	11.7	12.4	11.4	12.8	11.8	12.8	13.2	13.2
6/30	9.1	6.1	7.5	8.5	11.1	11.8	11.1	12.4	11.6	12.4	13.0	12.9

	Sultan River										Skykomish River	
DATE	RM 18.2 (SFK)	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
7/1	9.5	6.1	7.9	9.3	11.5	12.6	11.3	12.8	11.8	12.8	13.4	13.4
7/2	9.3	5.8	7.4	8.9	11.6	12.4	11.4	12.6	11.8	12.9	13.8	13.8
7/3	9.8	6.0	7.6	9.0	11.8	12.7	11.4	12.8	11.8	12.9	14.0	13.9
7/4	10.5	6.3	8.1	9.6	12.7	13.7	11.9	13.3	12.2	13.4	14.9	14.8
7/5	11.1	6.4	8.4	10.2	13.5	14.5	12.1	13.7	12.4	13.6	15.7	15.5
7/6	11.4	6.3	8.4	10.3	13.9	14.9	12.3	14.0	12.6	13.9	16.1	16.0
7/7	11.7	6.4	8.4	10.3	14.1	15.2	12.5	14.2	12.8	14.0	16.4	16.2
7/8	12.1	6.6	8.6	10.5	14.4	15.5	12.6	14.4	12.9	14.3	16.8	16.6
7/9	12.8	6.8	9.0	10.8	14.8	16.0	12.8	14.7	12.6	14.0	17.4	16.9
7/10	12.9	6.5	8.8	10.8	14.9	16.0	12.9	14.8	13.1	14.3	17.7	17.2
7/11	12.6	6.4	8.3	10.2	14.4	15.5	12.9	14.5	13.2	14.3	17.4	17.0
7/12	12.7	6.5	8.4	10.2	14.2	15.3	12.8	14.3	13.1	14.3	17.5	17.0
7/13	13.2	6.8	8.8	10.6	14.5	15.7	13.0	14.7	13.4	14.6	18.1	17.5
7/14	13.4	6.7	8.8	10.7	14.8	15.9	13.1	14.8	13.5	14.7	18.6	18.0
7/15	13.4	6.5	8.5	10.4	14.2	15.2	13.0	14.3	13.2	14.1	18.0	17.4
7/16	13.5	6.7	8.1	9.5	13.2	14.6	13.1	14.7	13.7	14.6	18.5	17.8
7/17	13.8	6.8	8.5	9.8	13.4	14.6	12.2	14.2	13.0	14.0	18.9	18.1
7/18	14.2	6.6	8.5	10.1	13.8	15.1	12.4	14.3	13.2	14.1	19.0	18.2
7/19	14.1	6.5	8.2	9.9	13.9	15.1	12.4	14.3	13.1	14.0	19.4	18.4
7/20	14.2	6.7	8.3	10.0	13.8	15.1	12.6	14.3	13.2	14.2	19.6	18.6
7/21	13.8	6.6	7.9	9.1	12.7	13.5	12.1	13.5	12.7	13.2	18.7	17.7
7/22	12.9	6.1	7.3	8.3	11.2	12.1	11.9	12.8	12.4	12.8	17.0	16.2
7/23	12.9	6.1	7.5	8.8	11.6	12.8	12.0	13.3	12.7	13.5	17.3	16.4
7/24	12.7	6.1	7.4	8.7	11.9	12.9	12.2	13.4	12.9	13.7	17.8	16.9
7/25	12.0	6.5	7.4	8.0	11.1	12.1	11.8	13.0	12.5	13.2	17.3	16.4
7/26	11.9	6.1	7.3	8.8	11.1	12.2	12.2	12.9	12.6	13.5	17.0	16.1
7/27	12.3	6.2	7.4	8.7	11.8	12.8	12.6	13.7	13.2	14.0	17.5	16.7
7/28	12.6	6.2	7.4	8.6	11.2	12.1	12.4	13.3	13.0	13.6	17.2	16.3
7/29	12.1	7.9	8.1	8.6	10.5	11.1	12.3	13.0	12.9	13.4	16.5	15.8
7/30	11.9	10.6	10.9	11.6	11.8	12.0	12.1	12.7	12.8	13.3	15.9	15.3
7/31	12.3	10.8	11.4	12.7	13.5	14.1	13.2	14.3	13.5	14.2	17.1	16.4

	Sultan River										Skykomish River	
DATE	RM 18.2 (SFK)	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
8/1	13.0	10.5	11.8	13.1	14.6	15.4	13.7	14.8	14.0	14.8	18.9	17.9
8/2	13.8	8.5	10.9	12.4	15.1	15.9	13.5	15.0	13.7	14.5	20.0	18.7
8/3	14.2	6.8	8.7	10.6	14.6	15.7	13.4	15.0	13.8	14.5	20.3	18.8
8/4	14.4	6.8	8.4	10.0	13.7	15.1	13.4	15.0	13.9	14.8	20.4	19.0
8/5	14.5	6.7	8.4	9.9	13.4	14.6	13.3	14.8	13.8	14.6	20.5	19.0
8/6	13.8	6.3	7.6	8.7	11.9	12.7	12.9	13.8	13.3	13.8	18.9	17.6
8/7	13.5	6.5	7.8	9.0	11.7	13.0	12.9	14.0	13.3	14.1	18.3	17.0
8/8	14.0	6.8	8.3	9.5	12.6	13.7	12.7	14.5	13.1	14.1	19.7	17.9
8/9	14.6	6.9	8.5	9.9	13.1	14.2	11.9	13.8	12.5	13.3	20.6	18.3
8/10	14.8	6.8	8.4	9.8	13.2	14.3	12.0	13.7	12.5	13.3	20.7	18.6
8/11	14.4	6.5	7.8	8.9	12.0	12.8	11.6	13.0	12.1	12.8	19.5	17.6
8/12	13.4	7.8	7.8	8.2	10.8	11.7	11.7	12.5	12.2	12.6	18.1	16.4
8/13	12.6	9.2	9.7	9.9	10.6	11.2	12.2	12.9	12.7	13.2	17.3	16.1
8/14	12.8	9.4	10.0	10.5	11.9	12.4	12.5	13.4	13.0	13.7	17.5	16.3
8/15	13.1	9.4	10.2	10.8	12.6	13.3	12.9	13.8	13.3	14.1	17.8	16.6
8/16	12.9	9.5	10.1	10.7	12.4	13.0	12.9	13.8	13.3	13.9	17.6	16.5
8/17	13.0	7.1	7.7	8.1	9.2	9.6	11.0	11.8	12.5	13.1	17.9	15.4
8/18	13.2	9.6	9.4	9.3	9.7	10.3	12.5	12.8	13.5	14.1	18.7	16.1
8/19	12.5	10.1	10.7	11.1	11.5	11.9	13.1	13.5	13.7	14.2	17.9	16.8
8/20	12.3	9.7	10.5	10.9	12.0	12.4	13.1	13.8	13.5	14.1	16.9	16.2
8/21	12.1	9.8	10.0	10.5	11.9	12.3	12.0	13.1	12.3	13.0	16.3	15.4
8/22	11.9	10.3	10.7	11.0	11.7	12.1	11.9	12.8	12.2	13.0	16.0	15.1
8/23	11.7	10.3	10.8	11.1	11.9	12.1	12.0	12.6	12.3	12.6	15.7	14.8
8/24	10.6	10.3	10.8	11.3	11.7	11.9	11.9	12.3	12.3	12.4	14.3	13.7
8/25	10.7	10.4	10.9	11.6	12.3	12.6	12.3	13.1	12.8	13.2	14.8	14.3
8/26	10.6	10.5	10.9	11.4	12.1	12.4	12.2	12.9	12.6	12.9	14.9	14.4
8/27	10.3	10.5	10.8	11.4	12.0	12.3	12.3	13.0	12.7	13.1	15.2	14.7
8/28	9.6	10.5	10.6	11.2	11.4	11.7	11.9	12.4	12.3	12.8	14.7	14.1
8/29	10.2	10.8	11.1	11.6	12.0	12.4	12.4	12.9	12.7	13.3	15.5	14.8
8/30	11.2	11.0	11.5	12.1	12.8	13.3	12.8	12.9	13.1	13.6	16.8	15.8
8/31	12.0	11.1	11.7	12.5	13.4	14.0	13.1	13.6	13.4	14.0	17.9	16.7

	Sultan River										Skykomish River	
DATE	RM 18.2 (SFK)	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
9/1	12.6	11.2	11.9	12.6	13.8	14.3	13.2	14.0	13.6	14.1	18.6	17.2
9/2	12.4	7.9	9.1	9.9	11.9	12.2	12.2	14.3	13.3	13.5	17.5	16.3
9/3	12.3	5.7	6.1	6.3	6.9	7.3	7.3	13.7	8.8	10.5	16.8	14.9
9/4	12.1	5.8	6.2	6.4	7.0	7.4	7.4	8.6	8.5	9.7	17.3	14.7
9/5	12.6	5.9	6.2	6.5	7.1	7.5	7.5	8.4	8.7	9.9	18.5	15.6
9/6	13.1	5.9	6.2	6.5	7.1	7.5	7.5	8.6	8.8	10.0	19.0	15.9
9/7	13.2	5.9	6.2	6.3	6.8	7.1	7.1	8.7	8.1	9.0	18.6	14.6
9/8	13.3	6.0	6.3	6.5	6.9	7.2	7.3	8.0	8.1	8.8	18.2	13.9
9/9	13.4	6.0	6.2	6.4	6.9	7.2	7.2	8.0	8.1	9.1	17.6	14.6
9/10	13.1	5.9	6.2	6.4	6.9	7.2	7.3	8.1	8.3	9.3	17.4	14.4
9/11	12.4	5.9	6.2	6.3	6.8	7.1	7.1	8.2	8.0	9.0	17.3	14.3
9/12	11.8	6.0	6.2	6.4	6.7	7.0	7.0	8.0	7.9	8.6	16.2	13.5
9/13	12.0	6.2	6.4	6.5	6.9	7.2	7.2	7.8	8.0	8.8	15.6	13.1
9/14	11.8	13.1	12.1	11.4	9.6	9.4	11.6	7.9	11.6	11.9	15.6	13.7
9/15	11.5	14.5	14.2	14.1	13.3	13.0	14.5	10.6	14.3	14.3	15.4	14.8
9/16	11.2	13.4	13.8	14.0	13.9	13.7	14.3	14.0	14.4	14.6	15.3	14.9
9/17	10.7	12.5	12.7	12.7	12.7	12.8	13.0	14.4	13.1	13.3	14.8	14.2
9/18	10.9	12.3	12.5	12.6	12.7	12.8	13.0	13.1	13.2	13.5	15.2	14.5
9/19	11.2	12.3	12.5	12.6	12.8	12.9	13.0	13.2	13.2	13.5	15.7	14.7
9/20	11.1	12.2	12.5	12.6	12.7	12.8	13.0	13.2	13.2	13.5	15.9	14.9
9/21	10.4	12.4	12.5	12.5	12.4	12.4	12.9	13.2	13.0	13.2	15.1	14.2
9/22	10.5	12.5	12.7	12.8	12.7	12.8	13.1	12.9	13.2	13.4	15.1	14.3
9/23	11.1	12.3	12.8	13.0	13.3	13.5	13.5	13.1	13.7	14.0	15.8	14.9
9/24	11.4	11.3	11.7	12.0	12.7	12.9	13.1	13.8	13.5	13.9	16.5	15.2
9/25	11.4	10.8	11.2	11.4	11.9	12.1	12.4	13.7	12.8	13.1	16.3	15.0
9/26	10.5	10.8	11.0	11.1	11.4	11.6	12.2	12.9	12.5	12.8	15.0	14.2
9/27	10.5	10.9	11.1	11.2	11.5	11.8	12.3	12.4	12.7	13.0	15.0	14.3
9/28	9.8	10.7	10.9	11.0	11.1	11.2	12.1	12.7	12.3	12.4	13.8	13.4
9/29	9.4	10.7	10.7	10.8	10.8	10.9	12.0	12.2	12.2	12.2	13.3	12.9
9/30	8.2	10.7	10.7	10.6	10.3	10.3	11.8	12.0	11.8	11.9	12.6	12.2

	Sultan River										Skykomish River	
DATE	RM 18.2 (SFK)	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
10/1	8.3	10.9	10.8	10.9	10.7	10.7	11.9	11.6	12.1	12.2	12.5	12.3
10/2	8.7	10.9	10.9	11.0	10.9	11.0	12.2	11.9	12.3	12.3	12.7	12.5
10/3	8.0	10.9	10.8	10.7	10.4	10.3	12.0	12.1	12.0	11.9	12.1	11.9
10/4	8.3	10.9	10.8	10.9	10.6	10.5	12.0	11.7	12.0	12.0	11.6	11.7
10/5	8.8	11.0	11.0	11.1	11.0	11.0	12.2	11.9	12.3	12.4	11.8	11.9
10/6	8.6	10.9	10.9	10.9	10.8	10.9	12.1	12.1	12.2	12.5	12.4	12.3
10/7	8.3	11.0	10.9	10.9	10.7	10.7	12.1	12.1	12.2	12.3	12.5	12.3
10/8	9.1	11.1	11.2	11.4	11.1	11.5	12.3	12.0	12.5	12.8	12.9	12.8
10/9	9.5	10.9	10.9	11.2	11.5	11.6	12.2	12.5	12.5	12.8	13.4	13.2
10/10	8.7	10.9	10.9	11.0	11.1	11.1	12.1	12.5	12.3	12.4	12.4	12.4
10/11	8.3	11.0	10.9	11.0	10.8	10.9	12.1	12.2	12.2	12.2	12.0	12.0
10/12	8.5	11.0	10.9	11.0	10.8	10.8	12.0	12.0	12.2	12.3	12.1	12.1
10/13	8.5	11.1	11.0	11.1	10.9	10.9	12.0	12.0	12.2	12.3	12.1	12.1
10/14	9.0	11.1	11.2	11.3	11.2	11.3	12.2	12.0	12.4	12.5	12.2	12.3
10/15	9.5	11.2	11.3	11.4	11.6	11.7	12.3	12.3	12.5	12.7	12.6	12.6
10/16	8.9	11.3	11.3	11.5	11.4	11.4	12.1	12.5	12.3	12.4	12.2	12.2
10/17	7.8	10.7	10.0	10.2	10.2	10.3	11.4	12.2	11.8	11.9	11.1	11.1
10/18	7.4	11.3	10.6	10.6	10.0	9.9	11.2	11.5	11.3	11.2	9.9	10.0
10/19	8.7	11.0	10.6	10.8	10.6	10.7	11.2	10.9	11.5	11.7	9.9	10.0
10/20	9.1	10.7	10.7	10.8	11.1	11.2	11.3	11.4	11.7	11.9	10.7	10.8
10/21	8.4	10.4	10.0	10.1	10.3	10.4	10.6	11.7	11.1	11.3	10.6	10.6
10/22	7.7	10.3	9.9	9.9	9.8	9.9	10.4	11.0	10.8	11.0	10.2	10.2
10/23	7.0	10.1	9.7	9.7	9.3	9.2	10.1	10.6	10.5	10.7	9.1	9.4
10/24	6.7	10.1	9.7	9.6	9.1	9.1	10.2	10.0	10.6	10.8	9.2	9.5
10/25	6.7	10.8	10.2	9.9	9.2	9.1	10.6	10.0	10.9	11.2	8.8	9.5
10/26	7.8	10.3	10.3	10.4	10.3	10.3	10.8	10.2	11.1	11.3	9.5	10.1
10/27	8.0	10.0	9.7	9.8	9.9	10.0	10.2	11.0	10.6	10.7	9.8	9.9
10/28	7.4	9.7	9.2	9.3	9.4	9.4	9.8	10.5	10.2	10.4	8.9	9.0
10/29	7.0	9.5	9.0	9.0	9.0	9.0	9.4	10.0	9.9	10.1	8.7	8.8
10/30	6.5	9.4	8.9	8.8	8.5	8.6	9.1	9.6	9.6	9.8	8.2	8.4
10/31	6.5	9.2	8.9	8.9	8.6	8.7	9.2	9.0	9.6	9.8	8.4	8.6

	Sultan River										Skykomish River	
DATE	RM 18.2 (SFK)	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
11/1	6.5	9.1	8.7	8.7	8.5	8.6	9.0	9.2	9.5	9.8	8.4	8.7
11/2	6.5	8.8	8.4	8.4	8.5	8.6	8.9	9.1	9.4	9.6	8.3	8.5
11/3	6.5	8.6	8.3	8.3	8.4	8.5	8.8	9.1	9.2	9.4	8.2	8.4
11/4	6.4	8.4	8.1	8.2	8.3	8.4	8.6	9.0	9.0	9.2	8.3	8.4
11/5	6.0	8.1	7.5	7.5	7.6	7.8	8.0	8.9	8.6	8.8	7.8	7.9
11/6	5.7	8.3	7.8	7.6	7.4	7.6	8.0	8.3	8.8	9.0	7.4	7.7
11/7	6.0	8.2	7.9	7.7	7.4	7.5	8.0	8.0	8.8	8.9	7.3	7.7
11/8	6.4	8.3	8.2	8.1	7.9	8.0	8.3	7.9	8.8	9.0	7.7	8.0
11/9	6.7	8.2	8.3	8.4	8.4	8.5	8.7	8.3	8.8	9.0	8.0	8.2
11/10	6.8	8.2	8.3	8.4	8.6	8.8	8.8	8.8	8.9	9.0	8.5	8.6
11/11	6.5	8.4	8.2	8.3	8.5	8.6	8.8	9.1	9.1	9.3	8.5	8.6
11/12	6.2	7.9	7.9	8.0	8.2	8.3	8.4	9.1	8.6	8.8	7.8	7.9
11/13	6.3	8.2	8.0	8.1	8.2	8.4	8.4	8.8	8.8	8.9	7.8	7.9
11/14	6.3	7.7	7.7	7.8	8.1	8.2	8.3	8.7	8.5	8.7	7.8	7.9
11/15	5.6	7.6	7.3	7.3	7.5	7.7	7.8	8.7	8.1	8.2	7.5	7.6
11/16	5.1	7.6	7.1	6.8	6.8	6.9	7.6	8.0	7.8	7.8	6.8	6.9
11/17	5.1	6.8	6.7	6.7	6.9	7.0	7.3	7.5	7.7	7.9	6.5	6.8
11/18	4.5	6.3	6.3	6.3	6.3	6.4	6.7	7.6	6.9	7.2	6.1	6.3
11/19	4.4	6.6	6.5	6.5	6.4	6.5	6.8	6.9	7.0	7.2	6.0	6.3
11/20	4.3	7.2	7.2	7.2	7.2	7.2	7.3	7.0	7.4	7.5	6.2	6.5
11/21	4.6	7.0	7.0	7.0	7.0	7.2	7.2	7.5	7.4	7.4	6.4	6.7
11/22	4.9	7.1	7.2	7.2	7.3	7.4	7.3	7.5	7.5	7.6	6.7	7.0
11/23	5.0	6.9	7.0	7.0	7.2	7.3	7.3	7.7	7.5	7.5	6.8	7.0
11/24	4.7	6.8	6.9	6.9	6.9	7.1	7.1	7.8	7.2	7.3	6.4	6.7
11/25	4.9	6.7	6.7	6.7	6.8	7.0	7.0	7.5	7.2	7.3	6.5	6.8
11/26	4.9	6.5	6.5	6.6	6.7	6.9	6.9	7.4	7.1	7.2	6.8	7.0
11/27	4.7	6.6	6.5	6.4	6.4	6.6	6.8	7.4	6.9	7.0	6.6	6.8
11/28	3.9	6.5	6.1	5.9	5.6	5.8	6.5	7.0	6.7	6.7	6.1	6.3
11/29	3.7	6.4	6.1	5.9	5.5	5.6	6.4	6.5	6.6	6.6	5.3	5.8
11/30	3.8	6.4	6.1	5.8	5.5	5.6	6.4	6.4	6.5	6.5	5.2	5.6

	Sultan River										Skykomish River	
DATE	RM 18.2 (SFK)	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
12/1	3.7	6.4	6.0	5.7	5.1	5.2	6.3	6.3	6.4	6.3	5.0	5.5
12/2	3.3	6.2	5.7	5.4	4.6	4.7	6.0	6.1	6.2	6.1	4.6	5.1
12/3	3.1	6.1	5.6	5.2	4.3	4.3	5.6	5.8	6.0	6.1	4.2	4.9
12/4	3.3	6.1	5.6	5.3	4.3	4.3	5.5	5.2	5.9	5.9	3.8	4.6
12/5	3.5	6.1	5.8	5.5	4.6	4.6	5.6	5.0	6.0	6.0	4.1	4.9
12/6	4.4	6.3	6.2	6.1	5.7	5.9	6.1	5.3	6.2	6.4	5.2	5.6
12/7	4.8	6.3	6.7	6.7	6.8	7.0	6.8	6.2	6.9	6.9	6.4	6.5
12/8	4.4	6.0	6.1	6.2	6.5	6.7	6.6	7.0	6.9	6.8	5.7	6.0
12/9	4.4	5.9	5.8	5.8	5.9	6.1	6.2	7.0	6.4	6.4	5.6	5.9
12/10	3.9	5.9	5.5	5.2	5.1	5.3	5.6	6.5	5.9	5.9	5.1	5.3
12/11	4.1	5.8	5.6	5.4	5.3	5.4	5.7	5.6	5.9	5.9	5.1	5.4
12/12	4.3	5.8	5.7	5.5	5.4	5.6	5.8	5.7	5.9	6.0	5.1	5.4
12/13	4.5	5.8	5.8	5.8	5.9	6.1	6.0	5.8	6.1	6.2	5.7	5.9
12/14	4.5	5.8	5.8	5.7	5.9	6.1	6.0	6.3	6.0	6.2	5.8	6.0
12/15	3.3	5.6	5.2	5.0	5.2	5.6	5.7	6.4	5.9	6.0	5.7	5.8
12/16	3.6	5.6	5.3	5.2	5.1	5.3	5.5	6.2	5.7	5.8	5.2	5.5
12/17	3.8	5.6	5.4	5.3	5.4	5.6	5.7	5.7	5.8	5.8	5.3	5.5
12/18	4.2	5.7	5.9	6.0	6.3	6.5	6.4	5.9	6.4	6.2	5.4	5.5
12/19	4.7	5.6	5.9	5.9	6.3	6.6	6.4	6.6	6.2	6.2	5.6	5.8
12/20	5.1	5.7	6.1	6.2	6.7	7.0	6.7	6.7	6.4	6.3	6.3	6.4
12/21	5.1	5.6	6.0	6.1	6.6	6.9	6.6	7.2	6.2	6.2	6.3	6.4
12/22	4.9	5.5	5.9	6.0	6.5	6.8	6.5	7.2	6.0	6.1	6.1	6.2
12/23	4.9	5.6	6.0	6.0	6.5	6.8	6.5	7.0	6.1	6.1	6.1	6.2
12/24	5.0	5.6	5.9	6.0	6.6	6.9	6.6	7.1	6.1	6.1	6.3	6.4
12/25	4.6	5.4	5.6	5.6	6.1	6.4	6.2	7.2	5.9	5.9	6.0	6.0
12/26	4.2	5.4	5.7	5.6	6.0	6.2	6.1	6.8	6.0	5.9	5.6	5.8
12/27	4.7	5.4	5.9	5.9	6.3	6.6	6.4	6.5	6.1	6.0	5.6	5.9
12/28	4.6	5.5	6.1	6.1	6.5	6.8	6.6	6.8	6.2	6.2	6.1	6.3
12/29	4.3	5.3	5.7	5.7	6.2	6.5	6.4	7.1	6.1	6.0	5.9	6.0
12/30	3.5	5.2	5.1	5.1	5.5	5.8	5.7	6.9	5.8	5.8	5.7	5.8
12/31	3.7	5.2	5.1	5.1	5.3	5.5	5.5	6.3	5.6	5.6	5.4	5.5

APPENDIX D

Seven-Day Average of the Daily Maximum (7-DAD Max) Water Temperature in Tabular Format

* Red highlight indicates exceedance of State water quality standards per WAC 173-201A-200(1)(c)

	Sultan River										Skykomish River	
	RM 18.2	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
	(SFK) 7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day
DATE	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max
1/1	4.9	5.0	5.4	5.6	6.0	6.3	6.0	6.6	5.5	5.9	6.1	6.2
1/2	4.7	4.9	5.4	5.5	5.8	6.1	5.9	6.4	5.5	5.8	6.0	6.0
1/3	4.5	4.9	5.3	5.4	5.7	5.9	5.8	6.3	5.5	5.7	5.8	5.8
1/4	4.3	4.8	5.2	5.2	5.5	5.7	5.6	6.0	5.4	5.6	5.5	5.6
1/5	4.2	4.8	5.1	5.1	5.4	5.6	5.5	5.9	5.4	5.5	5.4	5.4
1/6	4.0	4.8	5.1	5.1	5.3	5.6	5.5	5.8	5.4	5.5	5.3	5.3
1/7	3.8	4.7	5.0	4.9	5.2	5.4	5.4	5.7	5.4	5.5	5.1	5.2
1/8	3.6	4.6	4.8	4.8	5.0	5.3	5.2	5.5	5.3	5.3	4.9	5.0
1/9	3.3	4.5	4.6	4.6	4.8	5.0	5.0	5.3	5.2	5.2	4.6	4.7
1/10	2.8	4.4	4.3	4.2	4.2	4.4	4.5	4.7	4.9	4.9	3.9	4.0
1/11	2.4	4.2	4.0	3.8	3.7	3.9	4.1	4.2	4.7	4.6	3.2	3.5
1/12	2.1	4.0	3.8	3.5	3.3	3.5	3.8	3.8	4.4	4.4	2.7	3.1
1/13	1.9	3.7	3.5	3.2	2.9	3.1	3.4	3.3	4.1	4.0	2.2	2.7
1/14	1.7	3.5	3.2	2.9	2.5	2.7	3.1	3.0	3.8	3.7	1.6	2.3
1/15	1.5	3.4	3.1	2.7	2.2	2.4	2.8	2.6	3.5	3.5	1.1	1.9
1/16	1.6	3.2	3.0	2.7	2.1	2.3	2.7	2.6	3.3	3.3	1.0	1.8
1/17	2.0	3.1	3.0	2.8	2.4	2.6	2.9	2.8	3.3	3.3	1.4	2.2
1/18	2.3	3.1	3.2	3.0	2.7	2.9	3.1	3.2	3.3	3.4	2.0	2.6
1/19	2.6	3.2	3.4	3.2	3.0	3.3	3.4	3.5	3.4	3.5	2.6	3.0
1/20	2.9	3.2	3.5	3.4	3.4	3.7	3.7	3.9	3.5	3.6	3.1	3.4
1/21	3.1	3.2	3.7	3.6	3.7	4.0	4.0	4.2	3.7	3.8	3.6	3.8
1/22	3.3	3.3	3.9	3.8	4.0	4.4	4.3	4.6	3.8	3.9	4.2	4.2
1/23	3.6	3.3	4.1	4.0	4.4	4.7	4.6	4.9	4.1	4.0	4.6	4.6
1/24	3.7	3.4	4.3	4.3	4.7	5.0	4.9	5.3	4.4	4.2	4.8	4.8
1/25	3.9	3.4	4.6	4.6	5.1	5.4	5.3	5.7	4.8	4.5	4.9	5.0
1/26	4.1	3.5	4.8	4.9	5.5	5.8	5.6	6.2	5.2	4.8	5.1	5.2
1/27	4.4	3.6	5.0	5.1	5.8	6.2	5.9	6.5	5.4	4.9	5.3	5.3
1/28	4.6	3.7	5.1	5.3	6.1	6.4	6.1	6.8	5.8	5.4	5.5	5.5
1/29	4.7	3.7	5.2	5.5	6.3	6.7	6.4	7.1	5.8	5.6	5.6	5.6
1/30	4.9	3.8	5.2	5.6	6.5	6.9	6.5	7.3	5.9	5.6	5.6	5.6
1/31	5.0	3.8	5.2	5.5	6.5	6.9	6.5	7.3	5.9	5.6	5.7	5.7

	Sultan River										Skykomish River	
	RM 18.2	**RM 15.8**	**RM 15.5**	**RM 14.3**	**RM 11.3**	**RM 9.8**	**RM 9.6**	**RM 4.9**	**RM 4.4**	**RM 0.2**	**RM 14.1**	**RM 13.2**
	(SFK) 7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day
DATE	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max
2/1	5.0	3.9	5.0	5.4	6.4	6.8	6.3	7.2	5.7	5.6	5.8	5.8
2/2	5.0	3.9	4.9	5.2	6.1	6.6	6.0	7.0	5.5	5.4	5.8	5.8
2/3	4.9	3.9	4.8	5.1	5.9	6.4	5.8	6.8	5.3	5.3	5.7	5.7
2/4	4.8	3.9	4.7	5.0	5.8	6.3	5.6	6.5	5.1	5.0	5.7	5.7
2/5	4.7	3.9	4.6	4.9	5.6	6.1	5.4	6.3	5.0	5.0	5.8	5.7
2/6	4.6	3.9	4.5	4.8	5.4	5.9	5.2	6.1	4.9	5.0	5.8	5.8
2/7	4.4	3.9	4.5	4.7	5.2	5.7	5.1	5.9	4.8	5.0	5.7	5.7
2/8	4.3	4.0	4.5	4.6	5.1	5.6	5.0	5.8	4.7	5.0	5.6	5.6
2/9	4.2	4.0	4.6	4.7	5.1	5.6	5.1	5.8	4.8	5.1	5.7	5.7
2/10	4.1	4.0	4.7	4.8	5.2	5.7	5.2	5.9	4.9	5.3	5.8	5.8
2/11	4.0	4.0	4.6	4.7	5.1	5.6	5.1	5.8	4.9	5.3	5.8	5.8
2/12	3.8	4.1	4.7	4.7	5.0	5.5	5.1	5.8	4.9	5.4	5.6	5.6
2/13	3.7	4.1	4.6	4.6	4.9	5.3	5.0	5.7	4.9	5.4	5.5	5.5
2/14	3.6	4.1	4.6	4.7	4.9	5.4	5.1	5.6	4.9	5.3	5.3	5.4
2/15	3.6	4.1	4.6	4.7	5.0	5.4	5.1	5.6	4.9	5.3	5.3	5.3
2/16	3.6	4.1	4.5	4.6	4.8	5.3	4.9	5.5	4.8	5.2	5.2	5.3
2/17	3.7	4.1	4.5	4.6	4.8	5.3	4.9	5.5	4.7	5.2	5.2	5.3
2/18	3.8	4.1	4.5	4.7	5.0	5.4	4.9	5.5	4.7	5.2	5.3	5.4
2/19	4.0	4.1	4.6	4.8	5.2	5.6	5.0	5.7	4.8	5.4	5.7	5.7
2/20	4.2	4.2	4.7	4.9	5.4	5.8	5.1	5.9	4.9	5.5	6.0	6.0
2/21	4.4	4.2	4.8	5.0	5.5	5.9	5.2	6.0	5.0	5.6	6.2	6.3
2/22	4.4	4.2	4.9	5.1	5.6	5.9	5.3	6.1	5.2	5.7	6.4	6.4
2/23	4.3	4.2	4.9	5.1	5.5	5.9	5.3	6.1	5.4	5.8	6.3	6.3
2/24	4.0	4.2	4.8	5.0	5.3	5.6	5.2	5.9	5.3	5.6	6.0	6.0
2/25	3.8	4.2	4.7	4.8	5.2	5.4	5.1	5.7	5.3	5.5	5.7	5.7
2/26	3.6	4.2	4.6	4.7	4.9	5.2	5.0	5.5	5.2	5.3	5.3	5.3
2/27	3.5	4.1	4.5	4.6	4.8	5.1	4.9	5.3	5.1	5.1	5.0	5.0
2/28	3.3	4.0	4.4	4.4	4.8	5.0	4.9	5.2	4.9	5.0	5.0	5.0
2/29	3.2	3.9	4.2	4.2	4.5	4.8	4.6	5.0	4.7	4.8	4.8	4.8

	Sultan River										Skykomish River	
	RM 18.2	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
	(SFK) 7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day
DATE	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max
3/1	3.1	3.9	4.1	4.0	4.3	4.6	4.5	4.9	4.5	4.6	4.8	4.8
3/2	3.0	3.8	4.0	3.9	4.3	4.6	4.5	4.9	4.4	4.6	5.0	4.9
3/3	2.9	3.7	3.9	3.8	4.2	4.6	4.4	4.9	4.3	4.6	5.1	5.1
3/4	2.9	3.7	3.8	3.8	4.2	4.6	4.4	4.8	4.1	4.5	5.3	5.1
3/5	2.8	3.6	3.8	3.8	4.2	4.6	4.3	4.9	4.1	4.4	5.4	5.2
3/6	2.8	3.6	3.8	3.7	4.0	4.5	4.2	4.9	4.0	4.4	5.4	5.1
3/7	2.8	3.6	3.8	3.7	4.0	4.5	4.2	4.9	4.0	4.4	5.5	5.2
3/8	3.0	3.6	3.8	3.9	4.2	4.6	4.3	5.0	4.1	4.4	5.6	5.3
3/9	3.1	3.6	3.9	3.9	4.2	4.7	4.4	5.2	4.3	4.5	5.7	5.4
3/10	3.3	3.6	4.0	4.0	4.4	4.8	4.5	5.4	4.4	4.7	5.9	5.6
3/11	3.5	3.7	4.1	4.2	4.5	5.0	4.6	5.5	4.6	4.9	6.1	5.9
3/12	3.6	3.7	4.2	4.3	4.7	5.1	4.8	5.7	4.8	5.2	6.3	6.2
3/13	3.9	3.8	4.4	4.5	4.9	5.3	5.0	5.9	5.1	5.6	6.7	6.7
3/14	4.1	4.0	4.6	4.8	5.2	5.6	5.3	6.2	5.4	6.0	7.0	7.0
3/15	4.3	4.1	4.8	5.1	5.4	5.9	5.6	6.4	5.7	6.5	7.2	7.3
3/16	4.5	4.3	5.0	5.4	5.8	6.2	5.9	6.7	5.9	6.9	7.4	7.5
3/17	4.6	4.4	5.1	5.5	5.9	6.4	6.0	6.9	6.2	7.1	7.5	7.6
3/18	4.7	4.5	5.2	5.7	6.1	6.6	6.0	7.1	6.4	7.4	7.6	7.7
3/19	4.8	4.7	5.4	5.8	6.3	6.8	6.2	7.2	6.5	7.4	7.5	7.6
3/20	4.8	4.9	5.5	5.9	6.4	6.9	6.2	7.2	6.6	7.4	7.2	7.3
3/21	4.9	5.0	5.6	6.0	6.6	7.1	6.3	7.3	6.7	7.6	7.3	7.4
3/22	4.8	4.9	5.5	5.9	6.6	7.0	6.2	7.3	6.6	7.4	7.3	7.3
3/23	4.7	4.9	5.4	5.7	6.5	6.9	6.1	7.1	6.6	7.3	7.2	7.3
3/24	4.7	5.0	5.5	5.7	6.4	6.8	6.1	7.0	6.5	7.2	7.1	7.2
3/25	4.7	5.1	5.5	5.8	6.3	6.7	6.2	7.0	6.6	7.2	7.1	7.1
3/26	4.7	5.1	5.5	5.8	6.4	6.8	6.3	7.2	6.7	7.4	7.3	7.4
3/27	4.8	5.0	5.5	5.8	6.5	6.9	6.3	7.2	6.6	7.4	7.5	7.6
3/28	4.8	5.0	5.5	5.8	6.4	6.8	6.3	7.1	6.5	7.3	7.6	7.6
3/29	5.1	5.0	5.7	6.0	6.6	7.0	6.5	7.3	6.6	7.5	7.8	7.9
3/30	5.4	5.1	5.9	6.3	6.9	7.4	6.7	7.6	6.7	7.7	8.2	8.3
3/31	5.6	5.0	5.9	6.4	7.1	7.6	6.7	7.7	6.8	7.9	8.6	8.6

	Sultan River										Skykomish River	
	RM 18.2	**RM 15.8**	**RM 15.5**	**RM 14.3**	**RM 11.3**	**RM 9.8**	**RM 9.6**	**RM 4.9**	**RM 4.4**	**RM 0.2**	**RM 14.1**	**RM 13.2**
	(SFK) 7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day
DATE	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max
4/1	5.5	4.9	5.8	6.3	7.0	7.5	6.7	7.6	6.7	7.7	8.6	8.6
4/2	5.3	4.9	5.7	6.1	6.7	7.2	6.4	7.3	6.5	7.4	8.2	8.2
4/3	5.1	5.0	5.7	6.1	6.6	7.2	6.4	7.3	6.5	7.3	8.1	8.1
4/4	5.0	5.0	5.6	6.0	6.6	7.1	6.4	7.3	6.5	7.2	8.0	8.0
4/5	4.8	5.1	5.5	5.8	6.3	6.8	6.3	7.1	6.5	7.0	7.7	7.7
4/6	4.5	5.0	5.5	5.7	6.2	6.7	6.2	7.0	6.4	6.7	7.4	7.3
4/7	4.5	5.1	5.6	5.8	6.3	6.7	6.4	7.1	6.4	6.7	7.3	7.2
4/8	4.8	5.2	5.8	6.0	6.6	7.1	6.5	7.3	6.5	6.8	7.3	7.3
4/9	5.2	5.2	6.0	6.4	7.1	7.6	6.9	7.7	6.7	7.0	7.9	7.9
4/10	5.5	5.3	6.2	6.7	7.4	7.9	7.1	8.0	6.8	7.1	8.2	8.2
4/11	5.8	5.4	6.4	7.0	7.8	8.4	7.3	8.2	6.9	7.3	8.5	8.5
4/12	6.0	5.4	6.4	7.1	8.1	8.7	7.4	8.4	7.0	7.3	8.8	8.8
4/13	6.0	5.5	6.4	7.1	8.1	8.7	7.5	8.5	7.1	7.5	9.0	9.0
4/14	6.0	5.5	6.5	7.1	8.1	8.7	7.5	8.5	7.2	7.7	9.1	9.1
4/15	6.1	5.7	6.6	7.3	8.3	8.9	7.7	8.6	7.5	8.0	9.3	9.3
4/16	6.1	5.9	6.7	7.4	8.4	9.0	7.9	8.7	7.8	8.4	9.3	9.3
4/17	6.3	6.2	6.9	7.5	8.6	9.2	8.2	8.9	8.2	8.9	9.4	9.4
4/18	6.1	6.3	6.9	7.4	8.5	9.1	8.3	8.9	8.4	9.1	9.3	9.5
4/19	6.4	6.5	7.1	7.7	8.8	9.4	8.6	9.2	8.7	9.7	9.5	9.7
4/20	6.8	6.6	7.5	8.0	9.2	9.8	8.8	9.4	9.0	10.1	9.8	10.0
4/21	6.8	6.7	7.6	8.1	9.3	9.8	8.9	9.5	9.2	10.1	9.9	10.1
4/22	6.6	6.9	7.6	8.1	9.1	9.6	8.9	9.5	9.2	10.2	9.8	9.9
4/23	6.5	7.0	7.6	8.0	9.0	9.5	8.8	9.5	9.2	10.1	9.6	9.8
4/24	6.1	7.0	7.4	7.9	8.7	9.1	8.6	9.3	9.1	9.9	9.4	9.5
4/25	5.9	7.1	7.4	7.8	8.5	8.8	8.4	9.2	9.0	9.7	9.0	9.1
4/26	5.6	7.2	7.3	7.6	8.1	8.4	8.2	8.9	8.8	9.4	8.7	8.7
4/27	5.3	7.2	7.1	7.4	7.6	8.0	8.1	8.8	8.6	9.1	8.3	8.3
4/28	5.3	7.3	7.2	7.6	7.8	8.1	8.1	8.8	8.5	9.1	8.3	8.3
4/29	5.4	7.3	7.4	7.8	8.2	8.5	8.3	9.0	8.5	9.3	8.5	8.6
4/30	5.7	7.4	7.6	8.0	8.3	8.7	8.4	9.1	8.5	9.2	8.7	8.8

	Sultan River										Skykomish River	
	RM 18.2	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
	(SFK) 7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day
DATE	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max
5/1	5.9	7.6	7.7	8.1	8.4	8.9	8.5	9.1	8.6	9.2	8.8	8.9
5/2	6.0	7.7	8.0	8.3	8.6	9.0	8.7	9.3	8.7	9.3	9.0	9.1
5/3	6.1	7.8	8.1	8.4	8.8	9.1	8.8	9.4	8.8	9.3	9.1	9.2
5/4	6.1	7.8	8.1	8.4	8.9	9.3	8.9	9.5	8.8	9.4	9.1	9.2
5/5	6.2	7.9	8.1	8.5	9.0	9.3	9.0	9.6	8.9	9.4	9.2	9.3
5/6	6.4	7.9	8.2	8.7	9.2	9.5	9.1	9.7	9.1	9.5	9.4	9.4
5/7	6.6	7.8	8.3	9.0	9.6	10.0	9.4	10.1	9.2	9.8	9.6	9.7
5/8	7.0	7.8	8.6	9.4	10.2	10.6	9.7	10.6	9.3	10.1	9.9	10.0
5/9	7.4	7.9	8.8	9.9	10.9	11.3	10.1	11.1	9.5	10.6	10.3	10.3
5/10	7.7	8.0	9.1	10.2	11.3	11.9	10.5	11.5	9.9	11.1	10.5	10.6
5/11	8.2	8.0	9.3	10.5	11.8	12.4	10.9	11.9	10.2	11.5	10.9	11.0
5/12	9.2	8.0	9.5	10.8	12.3	13.0	11.3	12.4	10.7	12.2	11.1	11.2
5/13	9.1	7.9	9.3	10.6	12.1	12.8	11.2	12.4	10.9	12.3	11.0	11.1
5/14	8.8	8.0	9.2	10.2	11.7	12.4	11.0	12.1	10.8	12.3	10.6	10.7
5/15	8.5	8.1	9.0	9.9	11.2	11.9	10.7	11.7	10.8	12.2	10.3	10.3
5/16	8.3	8.2	8.8	9.6	10.9	11.5	10.5	11.5	10.8	12.0	10.1	10.2
5/17	8.2	8.3	8.9	9.6	10.8	11.4	10.5	11.5	10.8	12.2	10.0	10.1
5/18	7.9	8.5	8.8	9.4	10.5	11.0	10.3	11.2	10.6	11.8	9.8	9.9
5/19	6.7	8.7	8.6	9.0	9.9	10.3	9.9	10.7	10.3	11.3	9.3	9.4
5/20	6.6	8.8	8.7	9.1	9.7	10.2	9.8	10.6	10.2	11.3	9.2	9.3
5/21	6.5	8.8	8.7	9.1	9.7	10.0	9.8	10.5	10.2	11.2	9.2	9.3
5/22	6.5	8.7	8.6	9.0	9.6	9.8	9.7	10.4	10.1	11.1	9.1	9.2
5/23	6.3	8.7	8.4	8.8	9.2	9.5	9.5	10.2	9.9	10.8	8.9	9.0
5/24	6.3	8.6	8.4	8.8	9.2	9.4	9.5	10.1	9.8	10.5	8.9	9.0
5/25	6.4	8.6	8.4	8.8	9.3	9.4	9.4	10.1	9.8	10.4	9.0	9.1
5/26	6.5	8.6	8.6	9.0	9.3	9.6	9.5	10.2	9.8	10.5	9.1	9.2
5/27	6.6	8.5	8.7	9.0	9.4	9.7	9.6	10.3	9.7	10.3	9.2	9.2
5/28	6.9	8.6	8.9	9.4	9.9	10.2	9.8	10.6	9.7	10.3	9.5	9.6
5/29	7.1	8.6	9.1	9.6	10.2	10.5	10.0	10.8	9.8	10.4	9.9	9.9
5/30	7.2	8.7	9.3	9.8	10.4	10.7	10.2	11.0	9.9	10.5	10.1	10.1
5/31	7.1	8.7	9.2	9.6	10.2	10.5	10.1	10.8	9.9	10.4	9.9	9.9

	Sult+A173:M206an River										Skykomish River	
	RM 18.2	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
	(SFK) 7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day
DATE	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max
6/1	7.1	8.7	9.2	9.6	10.2	10.5	10.1	10.8	9.9	10.5	9.7	9.7
6/2	7.3	8.6	9.2	9.8	10.5	10.8	10.2	11.1	10.0	10.6	9.9	9.9
6/3	7.6	8.7	9.4	10.2	11.0	11.3	10.5	11.5	10.2	11.0	10.0	10.1
6/4	7.7	8.6	9.4	10.3	11.2	11.5	10.6	11.6	10.4	11.3	10.1	10.1
6/5	8.1	8.5	9.6	10.6	11.7	12.0	10.8	11.9	10.7	11.8	10.2	10.3
6/6	8.5	8.3	9.8	11.0	12.4	12.7	11.1	12.4	11.1	12.4	10.6	10.7
6/7	9.1	8.2	10.0	11.4	13.1	13.5	11.5	12.9	11.4	12.9	11.1	11.2
6/8	9.5	8.1	10.1	11.6	13.5	14.0	11.7	13.2	11.7	13.3	11.6	11.7
6/9	9.8	7.7	9.8	11.4	13.7	14.3	11.8	13.2	11.9	13.7	11.9	12.0
6/10	9.8	7.6	9.4	11.0	13.5	14.2	11.8	13.2	12.0	13.7	12.0	12.1
6/11	9.6	7.2	9.0	10.5	13.1	13.8	11.7	13.0	12.1	13.6	11.9	12.0
6/12	9.2	6.8	8.5	9.9	12.4	13.1	11.6	12.7	12.0	13.4	11.6	11.7
6/13	8.8	6.5	8.1	9.3	11.7	12.4	11.5	12.4	11.9	13.1	11.4	11.4
6/14	8.3	6.6	7.8	8.7	10.9	11.6	11.4	12.1	11.8	12.8	11.0	11.1
6/15	8.2	6.7	7.9	8.8	10.8	11.5	11.5	12.1	11.8	12.8	11.1	11.1
6/16	8.2	6.8	8.2	9.1	11.1	11.7	11.7	12.4	11.9	12.9	11.2	11.4
6/17	8.3	6.6	8.4	9.4	11.5	12.1	11.9	12.6	11.7	13.0	11.6	11.7
6/18	8.8	6.8	8.7	9.9	12.2	12.8	12.1	13.1	11.6	13.2	12.1	12.2
6/19	9.3	6.9	9.1	10.4	12.9	13.5	12.2	13.4	11.5	13.4	12.6	12.7
6/20	9.5	6.9	9.0	10.5	13.1	13.8	12.1	13.6	11.4	13.2	13.0	13.1
6/21	10.0	6.6	9.0	10.8	13.6	14.3	12.2	13.8	11.4	13.4	13.5	13.6
6/22	10.4	6.3	8.9	10.9	14.2	14.9	12.3	14.2	11.3	13.5	13.9	14.0
6/23	10.5	6.3	8.7	10.7	13.8	14.6	12.2	14.1	11.3	13.3	14.0	14.0
6/24	10.2	6.2	8.6	10.3	13.1	13.8	11.8	13.6	11.3	12.9	13.7	13.7
6/25	9.9	6.1	8.5	10.1	12.7	13.5	11.7	13.4	11.5	12.9	13.5	13.5
6/26	9.9	6.2	8.5	10.1	12.7	13.5	11.7	13.4	11.6	13.2	13.5	13.5
6/27	9.9	6.2	8.6	10.1	12.8	13.5	11.8	13.5	11.7	13.4	13.6	13.6
6/28	10.0	6.3	8.8	10.3	13.1	13.9	12.0	13.6	11.9	13.7	13.8	13.8
6/29	9.9	6.2	8.7	10.1	12.8	13.7	12.0	13.5	12.0	13.9	13.8	13.9
6/30	10.1	6.2	8.8	10.3	13.3	14.2	12.2	13.7	12.1	14.3	14.0	14.1

	Sultan River										Skykomish River	
	RM 18.2	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
	(SFK) 7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day
DATE	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max
7/1	10.6	6.4	9.0	10.7	14.1	15.1	12.6	14.3	12.4	14.9	14.7	14.8
7/2	11.0	6.5	9.1	11.0	14.7	15.7	12.8	14.6	12.5	15.2	15.3	15.4
7/3	11.4	6.6	9.2	11.3	15.3	16.2	12.9	14.8	12.7	15.4	15.8	15.9
7/4	12.0	6.7	9.5	11.8	16.1	17.1	13.2	15.3	13.0	15.9	16.4	16.6
7/5	12.5	6.8	9.7	12.0	16.7	17.6	13.4	15.6	13.2	16.2	16.9	17.1
7/6	13.0	7.0	10.0	12.4	17.3	18.3	13.6	16.0	13.4	16.5	17.5	17.6
7/7	13.5	7.0	10.2	12.7	17.8	18.8	13.7	16.3	13.6	16.7	18.0	18.1
7/8	13.8	7.0	10.2	12.8	18.0	19.0	13.8	16.5	13.7	16.8	18.4	18.3
7/9	14.0	7.0	10.2	12.8	18.1	19.1	13.8	16.6	13.8	16.8	18.6	18.5
7/10	14.3	7.1	10.3	12.8	18.2	19.2	13.8	16.7	13.9	16.9	19.0	18.8
7/11	14.5	7.1	10.3	12.8	18.3	19.2	13.9	16.8	14.0	17.0	19.4	19.1
7/12	14.7	7.1	10.2	12.7	18.2	19.1	13.8	16.7	14.0	16.8	19.5	19.1
7/13	14.8	7.1	10.0	12.4	17.9	18.8	13.9	16.7	14.1	16.8	19.7	19.2
7/14	14.9	7.2	9.9	12.2	17.6	18.6	13.8	16.5	14.1	16.6	19.9	19.3
7/15	15.1	7.2	9.9	12.2	17.5	18.6	13.7	16.4	14.1	16.5	20.2	19.5
7/16	15.3	7.2	9.9	12.1	17.4	18.5	13.7	16.4	14.1	16.5	20.5	19.8
7/17	15.5	7.2	9.8	12.0	17.3	18.4	13.6	16.3	14.1	16.4	20.7	19.9
7/18	15.4	7.1	9.5	11.7	16.6	17.8	13.4	15.9	14.0	15.9	20.7	19.8
7/19	15.2	7.0	9.2	11.2	15.8	17.0	13.2	15.6	13.9	15.6	20.5	19.6
7/20	15.0	6.9	9.1	11.2	15.6	16.7	13.1	15.4	13.8	15.4	20.3	19.5
7/21	14.8	6.8	8.9	11.0	15.4	16.5	13.2	15.3	13.8	15.4	20.2	19.3
7/22	14.3	7.0	8.8	10.6	14.7	15.9	13.2	15.0	13.6	15.3	19.8	19.0
7/23	14.0	6.9	8.7	10.4	14.4	15.4	13.2	14.8	13.6	15.2	19.5	18.7
7/24	13.7	6.8	8.5	10.1	13.9	15.0	13.2	14.6	13.5	15.2	19.2	18.4
7/25	13.7	6.8	8.5	10.1	13.8	14.9	13.2	14.6	13.5	15.2	18.9	18.1
7/26	13.6	7.2	8.9	10.3	13.7	14.7	13.3	14.6	13.6	15.3	18.9	18.0
7/27	13.2	7.9	9.3	10.5	13.4	14.3	13.2	14.4	13.5	15.0	18.4	17.6
7/28	13.2	8.7	9.9	11.0	13.5	14.4	13.5	14.4	13.6	15.2	18.4	17.6
7/29	13.5	9.1	10.5	12.0	14.3	15.0	13.7	14.8	13.9	15.5	18.8	17.9
7/30	13.7	9.7	11.0	12.4	14.6	15.4	13.8	15.0	14.0	15.5	19.2	18.2
7/31	14.0	9.7	11.1	12.7	15.0	15.8	13.9	15.2	14.1	15.5	19.6	18.5

	Sultan River										Skykomish River	
	RM 18.2	**RM 15.8**	**RM 15.5**	**RM 14.3**	**RM 11.3**	**RM 9.8**	**RM 9.6**	**RM 4.9**	**RM 4.4**	**RM 0.2**	**RM 14.1**	**RM 13.2**
	(SFK) 7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day
DATE	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max
8/1	14.2	9.8	11.3	12.9	15.4	16.4	14.2	15.5	14.2	15.8	20.2	19.0
8/2	14.7	9.5	11.2	13.1	16.2	17.2	14.4	16.0	14.4	16.3	20.8	19.6
8/3	15.1	8.8	10.7	12.8	16.2	17.3	14.4	16.2	14.6	16.3	21.5	20.1
8/4	15.3	8.1	10.2	12.4	16.0	17.2	14.3	16.2	14.5	16.3	21.6	20.1
8/5	15.4	7.5	9.7	11.8	15.7	16.9	14.2	16.1	14.4	16.2	21.7	20.1
8/6	15.5	7.1	9.3	11.5	15.6	16.8	13.9	16.0	14.2	16.1	21.8	20.1
8/7	15.5	7.1	9.3	11.4	15.4	16.6	13.7	15.8	14.0	15.9	21.8	20.0
8/8	15.4	7.0	9.1	11.0	14.8	16.0	13.3	15.3	13.7	15.4	21.6	19.7
8/9	15.2	7.4	9.0	10.6	14.1	15.2	13.0	14.8	13.5	14.9	21.1	19.2
8/10	14.9	7.8	9.3	10.6	13.9	14.9	12.9	14.6	13.3	14.9	20.7	18.8
8/11	14.7	8.2	9.5	10.6	13.7	14.6	12.7	14.4	13.2	14.7	20.4	18.6
8/12	14.5	8.6	9.7	10.7	13.5	14.5	12.7	14.2	13.2	14.5	20.0	18.3
8/13	14.1	8.9	9.8	10.6	13.1	14.0	12.8	14.1	13.3	14.5	19.5	17.9
8/14	13.9	9.3	9.9	10.5	12.6	13.3	12.8	13.9	13.4	14.4	19.1	17.4
8/15	13.7	9.9	10.2	10.7	12.4	13.1	13.0	14.0	13.6	14.6	18.9	17.2
8/16	13.6	10.0	10.5	11.2	12.7	13.3	13.2	14.2	13.8	14.9	18.9	17.3
8/17	13.6	10.1	10.7	11.3	12.9	13.5	13.4	14.3	13.9	15.0	18.9	17.4
8/18	13.4	10.3	10.7	11.3	12.8	13.4	13.3	14.3	13.8	14.8	18.6	17.1
8/19	13.3	10.4	10.8	11.3	12.5	13.1	13.1	14.1	13.7	14.6	18.3	16.8
8/20	13.1	10.5	10.9	11.4	12.3	12.8	13.0	13.9	13.5	14.4	18.0	16.6
8/21	12.6	10.7	11.0	11.5	12.3	12.8	12.9	13.7	13.3	14.1	17.4	16.3
8/22	12.3	10.7	11.1	11.7	12.6	13.0	12.9	13.7	13.2	14.0	16.9	16.1
8/23	11.9	10.8	11.1	11.7	12.6	13.0	12.8	13.5	13.1	13.8	16.5	15.7
8/24	11.7	10.9	11.1	11.7	12.6	13.0	12.7	13.4	13.0	13.7	16.2	15.5
8/25	11.4	11.0	11.3	11.9	12.7	13.1	12.8	13.4	13.0	13.8	16.2	15.5
8/26	11.2	11.1	11.4	12.1	13.0	13.3	13.0	13.5	13.1	13.9	16.3	15.6
8/27	11.2	11.2	11.6	12.5	13.4	13.8	13.2	13.8	13.3	14.2	16.6	15.9
8/28	11.5	11.4	11.9	12.8	13.9	14.4	13.5	14.2	13.5	14.7	17.3	16.5
8/29	11.8	11.5	12.0	13.1	14.2	14.7	13.6	14.3	13.6	14.8	17.8	16.9
8/30	12.0	11.6	12.1	13.1	14.3	14.8	13.7	14.5	13.7	14.9	18.3	17.3
8/31	12.4	10.8	11.4	12.4	13.4	14.0	12.9	14.1	13.4	14.8	18.6	17.3

	Sultan River										Skykomish River	
	RM 18.2	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
	(SFK) 7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day
DATE	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max
9/1	12.7	10.0	10.7	11.6	12.6	13.2	12.2	13.5	13.0	14.3	19.0	17.3
9/2	13.1	9.2	9.9	10.6	11.7	12.3	11.5	12.9	12.4	13.8	19.3	17.4
9/3	13.4	8.4	9.0	9.7	10.7	11.3	10.7	12.2	11.8	13.2	19.5	17.3
9/4	13.5	7.6	8.1	8.6	9.5	10.0	9.7	11.2	11.1	12.4	19.5	17.0
9/5	13.5	6.8	7.2	7.6	8.3	8.8	8.8	10.3	10.3	11.5	19.3	16.5
9/6	13.7	6.0	6.4	6.7	7.4	7.9	8.0	9.4	9.5	10.9	19.1	16.2
9/7	13.8	6.0	6.4	6.7	7.5	7.9	8.1	9.2	9.3	10.5	19.3	16.2
9/8	13.8	6.0	6.4	6.7	7.4	7.9	8.0	9.0	9.1	10.3	19.1	16.0
9/9	13.5	6.0	6.4	6.6	7.3	7.7	7.8	8.8	8.8	9.9	18.7	15.6
9/10	13.4	6.3	6.5	6.7	7.2	7.7	7.8	8.6	8.7	9.6	18.1	15.1
9/11	13.1	7.6	7.7	7.8	8.1	8.3	8.7	9.3	9.4	10.2	17.6	14.9
9/12	12.8	8.8	8.8	8.9	9.0	9.1	9.7	10.1	10.2	10.9	17.1	14.9
9/13	12.5	10.2	10.1	10.1	10.0	10.1	10.8	11.1	11.2	11.8	16.8	14.9
9/14	12.1	11.2	11.0	11.0	10.8	10.9	11.6	11.7	11.8	12.3	16.4	14.8
9/15	11.9	12.2	12.0	12.0	11.7	11.7	12.4	12.4	12.5	13.0	16.1	14.8
9/16	11.9	13.1	12.9	13.0	12.7	12.6	13.3	13.3	13.2	13.8	16.0	15.1
9/17	11.7	13.8	13.7	13.8	13.5	13.5	14.2	14.0	14.0	14.5	16.1	15.4
9/18	11.5	13.6	13.5	13.7	13.6	13.7	14.1	14.1	13.9	14.6	16.2	15.5
9/19	11.4	13.3	13.3	13.5	13.5	13.7	14.0	14.0	13.8	14.5	16.2	15.4
9/20	11.4	12.9	13.0	13.3	13.5	13.7	13.7	13.9	13.6	14.5	16.3	15.4
9/21	11.7	12.7	12.9	13.2	13.5	13.7	13.8	14.0	13.7	14.6	16.6	15.7
9/22	11.7	12.5	12.7	13.1	13.3	13.6	13.7	13.9	13.6	14.5	16.8	15.7
9/23	11.6	12.3	12.4	12.8	13.1	13.4	13.5	13.8	13.5	14.3	16.6	15.5
9/24	11.5	12.1	12.2	12.5	12.9	13.2	13.4	13.7	13.4	14.2	16.5	15.5
9/25	11.4	11.8	12.0	12.3	12.7	13.0	13.2	13.5	13.3	14.1	16.3	15.3
9/26	11.2	11.6	11.7	12.0	12.4	12.8	13.1	13.3	13.2	13.9	16.0	15.1
9/27	10.8	11.3	11.4	11.6	12.0	12.3	12.9	13.0	12.9	13.6	15.5	14.7
9/28	10.2	11.2	11.3	11.5	11.7	12.0	12.7	12.8	12.8	13.3	14.9	14.2
9/29	9.9	11.2	11.3	11.5	11.6	11.9	12.7	12.7	12.7	13.3	14.3	13.9
9/30	9.6	11.2	11.3	11.5	11.5	11.8	12.7	12.6	12.7	13.3	14.0	13.6

	Sultan River										Skykomish River	
	RM 18.2	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
	(SFK) 7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day
DATE	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max
10/1	9.3	11.2	11.3	11.4	11.3	11.5	12.6	12.5	12.5	13.0	13.5	13.2
10/2	9.1	11.2	11.3	11.5	11.3	11.5	12.6	12.5	12.6	13.0	13.2	13.0
10/3	9.0	11.2	11.3	11.4	11.3	11.5	12.5	12.5	12.6	13.1	13.2	13.0
10/4	9.0	11.2	11.3	11.5	11.4	11.5	12.6	12.5	12.6	13.1	13.2	13.0
10/5	9.1	11.2	11.3	11.5	11.4	11.6	12.6	12.6	12.6	13.2	13.2	13.1
10/6	9.2	11.2	11.3	11.5	11.3	11.7	12.5	12.6	12.7	13.2	13.3	13.1
10/7	9.2	11.2	11.3	11.4	11.3	11.7	12.5	12.6	12.7	13.1	13.3	13.1
10/8	9.3	11.2	11.3	11.5	11.4	11.8	12.5	12.7	12.7	13.2	13.3	13.2
10/9	9.2	11.2	11.3	11.5	12.1	11.7	12.5	12.7	12.7	13.2	13.3	13.2
10/10	9.2	11.2	11.3	11.5	11.4	11.8	12.5	12.7	12.7	13.2	13.2	13.2
10/11	9.3	11.2	11.3	11.5	11.5	11.8	12.5	12.7	12.7	13.2	13.1	13.1
10/12	9.3	11.3	11.3	11.5	11.3	11.8	12.5	12.6	12.7	13.1	13.0	13.0
10/13	9.3	11.4	11.4	11.6	11.5	11.7	12.4	12.6	12.6	13.0	12.8	12.8
10/14	9.2	11.4	11.3	11.5	11.6	11.6	12.4	12.5	12.6	13.0	12.6	12.6
10/15	9.0	11.5	11.2	11.4	11.8	11.3	12.2	12.3	12.4	12.7	12.3	12.3
10/16	9.0	11.5	11.1	11.4	11.8	11.3	12.1	12.2	12.2	12.5	11.9	12.0
10/17	9.1	11.5	11.1	11.3	11.0	11.3	12.0	12.1	12.1	12.4	11.6	11.7
10/18	9.0	11.4	10.9	11.1	10.2	11.2	11.8	11.9	12.0	12.2	11.3	11.5
10/19	8.7	11.2	10.7	10.9	11.0	11.0	11.6	11.6	11.7	12.0	11.0	11.1
10/20	8.4	11.0	10.5	10.6	11.4	10.7	11.3	11.3	11.5	11.7	10.6	10.7
10/21	8.2	10.8	10.4	10.5	10.7	10.5	11.0	11.1	11.3	11.6	10.4	10.5
10/22	8.1	10.8	10.4	10.4	10.3	10.4	11.0	11.1	11.3	11.6	10.2	10.5
10/23	8.0	10.7	10.4	10.4	9.7	10.4	11.0	11.0	11.2	11.6	10.2	10.5
10/24	7.9	10.6	10.2	10.2	9.6	10.2	10.8	10.9	11.1	11.4	10.0	10.4
10/25	7.7	10.4	10.1	10.1	9.9	10.1	10.7	10.7	10.9	11.3	9.8	10.1
10/26	7.6	10.3	10.0	10.0	10.8	9.9	10.5	10.6	10.8	11.1	9.6	9.9
10/27	7.5	10.3	9.9	9.9	10.4	9.8	10.3	10.4	10.6	10.9	9.4	9.7
10/28	7.5	10.2	9.8	9.8	9.5	9.7	10.2	10.2	10.5	10.8	9.2	9.6
10/29	7.4	9.9	9.5	9.5	9.3	9.5	9.9	10.0	10.2	10.5	9.1	9.4
10/30	7.2	9.6	9.2	9.2	8.7	9.2	9.6	9.7	10.0	10.2	8.9	9.1
10/31	6.9	9.4	9.0	9.0	8.9	9.0	9.4	9.5	9.7	10.1	8.7	8.9

	Sultan River										Skykomish River	
	RM 18.2	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
	(SFK) 7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day
DATE	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max
11/1	6.8	9.2	8.8	8.9	8.7	8.9	9.2	9.3	9.6	9.9	8.6	8.8
11/2	6.7	9.0	8.6	8.7	8.7	8.7	9.0	9.2	9.4	9.7	8.5	8.7
11/3	6.5	8.8	8.5	8.6	8.6	8.6	8.9	9.0	9.3	9.6	8.4	8.6
11/4	6.5	8.7	8.3	8.2	8.4	8.4	8.7	8.9	9.2	9.5	8.2	8.5
11/5	6.5	8.5	8.2	8.2	8.2	8.4	8.7	8.8	9.1	9.4	8.2	8.4
11/6	6.5	8.4	8.2	8.2	7.7	8.4	8.6	8.8	9.0	9.3	8.1	8.4
11/7	6.6	8.4	8.2	8.2	7.5	8.4	8.6	8.8	9.0	9.2	8.2	8.4
11/8	6.6	8.4	8.3	8.3	8.3	8.4	8.6	8.8	9.0	9.3	8.2	8.4
11/9	6.6	8.4	8.3	8.3	8.6	8.5	8.6	8.8	9.0	9.3	8.2	8.4
11/10	6.7	8.4	8.3	8.3	8.8	8.5	8.7	8.9	9.0	9.2	8.2	8.4
11/11	6.7	8.3	8.3	8.3	8.6	8.7	8.7	9.0	9.0	9.2	8.2	8.4
11/12	6.5	8.2	8.2	8.2	8.3	8.6	8.6	8.9	8.9	9.1	8.1	8.3
11/13	6.3	8.2	8.0	8.0	8.3	8.3	8.5	8.7	8.8	8.9	8.0	8.1
11/14	6.1	8.0	7.9	7.8	8.3	8.2	8.3	8.6	8.6	8.7	7.7	7.9
11/15	5.8	7.7	7.6	7.5	7.7	7.8	8.0	8.2	8.3	8.4	7.3	7.5
11/16	5.5	7.6	7.5	7.4	7.0	7.6	7.8	8.0	8.0	8.2	7.0	7.3
11/17	5.3	7.5	7.4	7.3	7.6	7.5	7.7	7.8	7.8	8.0	6.8	7.1
11/18	5.1	7.3	7.2	7.2	6.4	7.3	7.5	7.6	7.7	7.8	6.7	7.0
11/19	5.0	7.3	7.1	7.1	7.1	7.3	7.4	7.6	7.6	7.7	6.6	6.9
11/20	5.0	7.2	7.1	7.1	7.4	7.3	7.4	7.6	7.6	7.7	6.5	6.9
11/21	4.9	7.1	7.1	7.1	7.2	7.3	7.3	7.5	7.5	7.5	6.5	6.9
11/22	4.9	7.1	7.1	7.1	7.5	7.3	7.3	7.6	7.5	7.5	6.6	7.0
11/23	5.0	7.0	7.0	7.1	7.3	7.3	7.3	7.6	7.5	7.6	6.7	7.1
11/24	5.0	6.9	6.9	6.9	7.1	7.2	7.2	7.5	7.4	7.5	6.8	7.1
11/25	4.9	6.8	6.8	6.8	6.9	7.1	7.1	7.4	7.3	7.4	6.8	7.0
11/26	4.8	6.7	6.7	6.6	6.8	6.8	7.0	7.2	7.1	7.2	6.5	6.9
11/27	4.6	6.6	6.6	6.5	6.7	6.6	6.8	7.0	7.0	7.1	6.4	6.7
11/28	4.5	6.6	6.4	6.3	6.2	6.4	6.7	6.9	6.9	7.0	6.2	6.5
11/29	4.2	6.5	6.3	6.2	5.8	6.0	6.6	6.6	6.7	6.8	5.9	6.3
11/30	4.0	6.5	6.2	6.0	5.7	5.7	6.4	6.4	6.6	6.7	5.5	6.0

	Sultan River										Skykomish River	
	RM 18.2	RM 15.8	RM 15.5	RM 14.3	RM 11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	RM 14.1	RM 13.2
	(SFK) 7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day	7 Day
DATE	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max	Avg Max
12/1	3.8	6.4	6.0	5.8	5.5	5.4	6.2	6.1	6.4	6.5	5.1	5.7
12/2	3.7	6.3	6.0	5.7	4.8	5.2	6.1	6.0	6.3	6.4	4.9	5.5
12/3	3.8	6.3	6.0	5.8	4.4	5.3	6.1	6.0	6.3	6.4	4.9	5.5
12/4	4.0	6.3	6.1	5.9	4.4	5.5	6.2	6.1	6.4	6.4	5.1	5.6
12/5	4.1	6.2	6.2	6.0	5.1	5.7	6.2	6.2	6.5	6.5	5.2	5.7
12/6	4.3	6.2	6.2	6.1	6.3	5.9	6.3	6.3	6.5	6.5	5.3	5.8
12/7	4.4	6.2	6.2	6.1	7.2	6.1	6.3	6.4	6.5	6.5	5.5	5.9
12/8	4.5	6.1	6.2	6.1	6.7	6.3	6.4	6.5	6.5	6.5	5.6	6.0
12/9	4.6	6.1	6.2	6.1	6.3	6.4	6.4	6.6	6.5	6.5	5.8	6.1
12/10	4.6	6.0	6.2	6.1	5.4	6.4	6.3	6.6	6.5	6.5	5.8	6.1
12/11	4.5	5.9	6.0	5.9	5.7	6.2	6.2	6.4	6.3	6.4	5.7	5.9
12/12	4.5	5.9	5.9	5.8	5.8	6.1	6.1	6.4	6.2	6.3	5.7	5.9
12/13	4.3	5.8	5.8	5.7	6.2	6.0	6.0	6.3	6.0	6.2	5.6	5.9
12/14	4.3	5.8	5.8	5.7	6.0	6.0	6.0	6.3	6.0	6.2	5.6	5.9
12/15	4.3	5.8	5.9	5.8	5.9	6.2	6.1	6.4	6.1	6.2	5.6	5.9
12/16	4.4	5.7	5.9	5.8	5.5	6.3	6.2	6.5	6.2	6.2	5.7	6.0
12/17	4.5	5.7	5.9	5.9	5.7	6.4	6.3	6.7	6.2	6.3	5.8	6.1
12/18	4.6	5.7	5.9	6.0	6.5	6.5	6.4	6.8	6.3	6.2	5.8	6.1
12/19	4.7	5.7	6.0	6.0	6.7	6.7	6.5	6.9	6.3	6.2	5.9	6.1
12/20	4.9	5.7	6.0	6.1	6.9	6.8	6.6	7.0	6.3	6.3	6.0	6.2
12/21	5.1	5.7	6.1	6.2	6.8	7.0	6.7	7.2	6.3	6.3	6.2	6.4
12/22	5.1	5.6	6.1	6.2	6.6	7.0	6.7	7.2	6.3	6.2	6.2	6.4
12/23	5.1	5.6	6.0	6.1	6.6	6.9	6.6	7.2	6.2	6.2	6.2	6.4
12/24	5.0	5.6	6.0	6.1	6.8	6.9	6.6	7.1	6.2	6.1	6.1	6.3
12/25	4.9	5.5	6.0	6.1	6.5	6.8	6.6	7.1	6.2	6.1	6.1	6.3
12/26	4.8	5.5	6.1	6.1	6.4	6.9	6.6	7.1	6.2	6.2	6.1	6.3
12/27	4.7	5.5	5.9	6.0	6.5	6.7	6.5	7.0	6.2	6.1	6.0	6.2
12/28	4.5	5.4	5.8	5.9	6.7	6.5	6.4	6.8	6.1	6.0	5.9	6.1
12/29	4.3	5.4	5.7	5.7	6.7	6.4	6.3	6.7	6.0	6.0	5.8	6.0
12/30	4.2	5.3	5.6	5.6	5.6	6.2	6.1	6.6	5.9	5.9	5.7	6.0
12/31	4.1	5.3	5.6	5.5	5.5	6.1	6.0	6.4	5.9	5.8	5.6	5.9

APPENDIX E

Consultation Documentation Regarding Draft Report

From:	Presler, Dawn
To:	Anne Savery; Anna Thelen; Anne Baxter; Applegate, Brock A (DFW); Elizabeth Babcock; Jeff Garnett; Mike Rustay; Nate Morgan; Pete Verhey; Richard Vacirca; Scott Bohling; Tom O"Keefe
Cc:	McDonnell, Andrew; Nobles, Matthew; Legare, Kyle
Subject:	Jackson Hydro (FERC No. 2157) - WQMP 2024 DRAFT Annual Rpt for your 30-day review - by May 30
Date:	Wednesday, April 30, 2025 8:00:00 AM
Attachments:	image001.png JHP WQMP 2024 DRAFT Annual Report to ARC for 30day review.pdf

Dear ARC,

Attached is the Jackson Hydro Project's Water Quality Monitoring Plan 2024 DRAFT Annual Report for your 30-day review and comment period. If you have any comments, please provide them back to me (cc: Kyle) via email by May 30 end of day. Emails of concurrence or no concerns are appreciated too. If you have any questions regarding the report in the meanwhile, please reach out to Kyle for assistance. Thank you.

Cheers,

Dawn Presler, MSIM MSSM *(she/her)*
Lead – Environmental & Licensing Compliance
Natural Resources, Generation | Snohomish PUD

O: 425-783-1709 | **C:** 425-725-0745
2320 California Street, Everett WA 98201
www.snopud.com

From:	Bohling, Scott (ECY)
To:	Presler, Dawn
Cc:	Legare, Kyle
Subject:	[External Sender] ckson Hydro (FERC No. 2157) - WQMP 2024 DRAFT Annual Rpt for your 30-day review - by May 30
Date:	Wednesday, May 28, 2025 11:43:40 AM

Dawn and Kyle,

Thank you for the opportunity to review the Water Quality Monitoring Plan 2024 DRAFT Annual Report for the Jackson Hydro project. I do have some questions regarding the table 3.1 in the document (Settings for selective withdrawal panels, Spada Lake Reservoir, 2024), as well as the general process regarding temperature management and consultations with the ARC.

Could you provide additional description regarding the panel settings as described in table 3-1. What is a “modified C” or “modified D/E” as opposed to a “C” or “E” setting? Is there another document that describes what the modifications mean in terms in upper and lower openings, or how the openings are adjusted based on the stratification within the reservoir?

Thank you for noting the duration of the temperature exceedances, as well as highlighting the exceedances in the tabular data in Appendix D as per the 401 requirement. In the event of an exceedance, one of the questions that Ecology will typically ask is “what were the environmental conditions that led to the exceedance”? I believe that you have provided enough context in the document regarding the temperatures in the Sultan and Skykomish River systems in Appendix B.

Another important question Ecology asks in the event of an exceedance is “are the conditions that led to the exceedance likely happen again in the future”? Understanding the temperature dynamics in reach three (the cold water released from the base of the dam can and will warm up to exceed temperature standards as it moves downstream to reach two), warming in the lower river, the limited volume of cold water in the reservoir, and the ongoing impacts of climate change, it may be important to document any decision made with the ARC or the at the PUD to determine how to best manage temperatures in the system.

For example, if the ARC felt it best to conserve a volume of cold water to ensure that the Sultan River meets temperature standards during salmon spawning, it may be useful to document that discussion and decision within the report. This is not a requirement of the 401, but providing information regarding how the water is managed will be useful in demonstrating how the PUD is actively managing the system to provide maximum benefit to the aquatic life, while also meeting the generation needs of the utility. This would also provide Ecology the opportunity to comment or concur with the ARC (of which Ecology is a member) or PUD

process in regards to managing water temperatures.

Sorry for the long email. If you have any questions, please feel free to reach out to me.

-Scott

Scott Bohling
Hydropower Project Manager

Department of Ecology, NWRO
PO Box 330316
Shoreline, WA 98133-9716

Cell Phone - **425-758-7928 – Prefered method due to teleworking.**
24-hour reception line: 206-594-0000

APPENDIX F

Response to Comments Regarding Draft Report

No.	Comment	Response
S. Bohling at Ecology via Email Dated May 28, 2025		
1	Thank you for the opportunity to review the Water Quality Monitoring Plan 2024 DRAFT Annual Report for the Jackson Hydro project. I do have some questions regarding the table 3.1 in the document (Settings for selective withdrawal panels, Spada Lake Reservoir, 2024), as well as the general process regarding temperature management and consultations with the ARC. Could you provide additional description regarding the panel settings as described in table 3-1. What is a "modified C" or "modified D/E" as opposed to a "C" or "E" setting? Is there another document that describes what the modifications mean in terms in upper and lower openings, or how the openings are adjusted based on the stratification within the reservoir?	The Operation and Maintenance Manual for the Jackson intake facility identifies five panel configurations (A through E) that are appropriate for difference reservoir elevations. The modified configurations indicate that the setpoint elevations have been adjusted slightly, but the three panel configuration (i.e. single panel on top and double panel on the bottom) remains the same. The modified configurations are slight adjustments made in response to changes in reservoir temperature and elevation. The adjustments help maintain required spacing between panel openings and blending of temperature as conditions in the reservoir change. Snohomish PUD's Technical Memorandum to the Department of Ecology dated December 26, 2023, provides additional explanation regarding panel settings, temperature monitoring, and operational philosophy while the reservoir is stratified. Additionally, Table 3-1 was updated to correct transposed numbers in the draft version of the report.
2	Thank you for noting the duration of the temperature exceedances, as well as highlighting the exceedances in the tabular data in Appendix D as per the 401 requirement. In the event of an exceedance, one of the questions that Ecology will typically ask is "what were the environmental conditions that led to the exceedance"? I believe that you have provided enough context in the document regarding the temperatures in the Sultan and Skykomish River systems in Appendix B.	Agree; no changes made to this report.

3	Another important question Ecology asks in the event of an exceedance is "are the conditions that led to the exceedance likely happen again in the future"? Understanding the temperature dynamics in reach three (the cold water released from the base of the dam can and will warm up to exceed temperature standards as it moves downstream to reach two), warming in the lower river, the limited volume of cold water in the reservoir, and the ongoing impacts of climate change, it may be important to document any decision made with the ARC or the at the PUD to determine how to best manage temperatures in the system. For example, if the ARC felt it best to conserve a volume of cold water to ensure that the Sultan River meets temperature standards during salmon spawning, it may be useful to document that discussion and decision within the report. This is not a requirement of the 401, but providing information regarding how the water is managed will be useful in demonstrating how the PUD is actively managing the system to provide maximum benefit to the aquatic life, while also meeting the generation needs of the utility. This would also provide Ecology the opportunity to comment or concur with the ARC (of which Ecology is a member) or PUD process in regards to managing water temperatures.	Snohomish PUD actively monitors and manages water temperature to provide maximum benefit to aquatic life. When Spada Lake Reservoir is stratified, Snohomish PUD implements temperature targets for the river. These targets are based on a species and life stage matrix developed from best available science. Water is selectively withdrawn at the intake and delivered to all river reaches to meet optimal in-reach temperatures, when longitudinal warming rates are low to moderate. As previously noted, exceedances to the State Water Temperature Criteria in the Sultan River typically manifest through natural processes influenced by a combination of long daylight hours, increased air temperature, and low runoff volumes associated with summer. Snohomish PUD acknowledges the importance of cold-water management and understanding of seasonal temperature dynamics in both the reservoir and river systems, especially in light of climate change. Seasonal temperature data and operational decisions (i.e. panel configurations) will continue to be collected and presented in the annual report. Additional discussion can be included with respect to results of panel moves to help clarify outcomes of operational decisions. Snohomish PUD supports exploring the concept of a revised temperature criteria, as noted in the 2023 Technical Memorandum to the Department of Ecology dated December 26, 2023, that could help preserve cold water for late season flows when salmon are returning to spawn.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served via e-mail a copy of the foregoing filing upon each person of the Jackson Hydroelectric Project's Aquatic Resource Committee. Dated at Everett, WA, this June 20, 2025.

/s/ Dawn J. Presler

Dawn J. Presler
Lead – License & Environmental Compliance
Public Utility District No. 1 of Snohomish County
2320 California Street
PO Box 1107
Everett, WA 98206-1107
Telephone: (425) 783-1709
Cell: (425) 725-0745

Presler, Dawn

From: Presler, Dawn
Sent: Friday, June 20, 2025 9:45 AM
To: Anne Savery; Anna Thelen; Anne Baxter; Applegate, Brock A (DFW); Jeff Garnett; Kathleen Wells; Legare, Kyle; McDonnell, Andrew; Mike Rustay; Nate Morgan; Nobles, Matthew; Pete Verhey; Richard Vacirca; Scott Bohling; Tom O'Keefe
Subject: Jackson Hydro (FERC No. P-2157) - cc: of WQ Monitoring Plan 2024 Annual Report
Attachments: 2024 JHP WQMP Annual Report.pdf

Dear ARC Members,
Attached is your cc: of the *Water Quality Monitoring Plan 2024 Annual Report, License Article 401, for the Henry M. Jackson Hydroelectric Project, FERC No. 2157*; I will be e-filing this report with FERC shortly. Response to Ecology's comments is included in the report's appendix F.

Hope you have/had a great weekend.

Cheers,

Dawn Presler, MSIM MSSM *(she/her)*
Lead – Environmental & Licensing Compliance
Natural Resources, Generation | Snohomish PUD

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