



*Energizing Life in Our Communities*

June 27, 2019

**VIA ELECTRONIC FILING**

Kimberly D. Bose, Secretary  
Nathaniel J. Davis, Sr., Deputy Secretary  
Federal Energy Regulatory Commission  
888 First Street NE  
Washington, DC 20426

**Re: Jackson Hydroelectric Project, FERC No. 2157  
Fisheries and Habitat Monitoring Plan – 2018 Annual Report  
License Article 410**

Dear Secretary Bose:

Enclosed is Public Utility District No. 1 of Snohomish County's Fisheries and Habitat Monitoring Plan Annual Report for 2018 pursuant to License Article 410 for the Jackson Hydroelectric Project. The draft report was provided to the Aquatic Resource Committee for a 30-day review and comment period. Consultation documentation is included in the report's Appendix E.

If you have any questions on the Fisheries and Habitat Monitoring Plan Annual Report for 2018, please contact Keith Binkley, Natural Resources Manager, at (425) 783-1769 or [KMBinkley@sopud.com](mailto:KMBinkley@sopud.com).

Sincerely,

/s/ Tom DeBoer

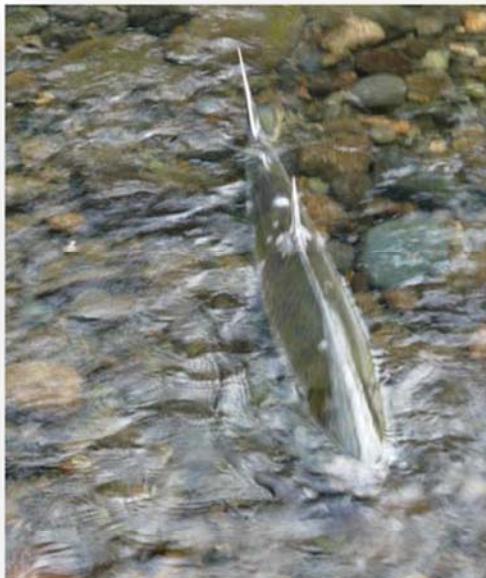
Tom DeBoer  
Assistant General Manager of Generation, Power, Rates and Transmission Management  
[TADeBoer@sopud.com](mailto:TADeBoer@sopud.com)  
(425) 783-1825

Enclosed: Fisheries and Habitat Monitoring Plan Annual Report for 2018

cc: Aquatic Resource Committee

# Henry M. Jackson Hydroelectric Project

(FERC No. 2157)



## License Article 410: Fisheries and Habitat Monitoring Plan – 2018 Annual Report



Everett, WA

June 2019

**Final** – This document has been prepared for the District. It has been peer-reviewed by the District for accuracy and formatting based on information known at the time of its preparation and with that understanding is considered complete by the District. The document may be cited as:

Public Utility District No. 1 of Snohomish County (District), 2019. License Article 410: Fisheries and Habitat Monitoring Plan – 2018 Annual Report for the Henry M. Jackson Hydroelectric Project, FERC No. 2157. June 2019.

## Table of Contents

---

1. INTRODUCTION .....	1
2. MONITORING OF FISH HABITAT IN THE SULTAN RIVER.....	1
2.1. Riverine Habitat Monitoring.....	1
2.2. Water Temperature Monitoring .....	1
3. MONITORING OF FISH POPULATIONS IN THE SULTAN RIVER .....	4
3.1. Spawner Abundance, Distribution, and Timing in the Sultan River.....	4
3.2. Flow Ceiling, Implemented for Chinook Salmon .....	6
3.3. Juvenile Production in the Sultan River.....	6
4. SIDE CHANNEL MAINTENANCE AND MONITORING .....	6
5. FUTURE MONITORING .....	7
6. REFERENCES .....	7

APPENDIX A 2018 Water Temperature Figures

APPENDIX B 2018 Mean Daily Water Temperature Data in Tabular Format

APPENDIX C 2018 Seven-Day Average of the Daily Maximum (7-DAD Max) Water Temperature in Tabular Format

APPENDIX D Consultation Documentation Regarding Draft Report

## List of Figures

---

Figure 1. Locations of water temperature monitoring, Sultan watershed.....	3
Figure 2. Locations of steelhead and salmon escapement surveys, Sultan River.....	5
Figure 3. Mean Daily Discharge in the Sultan River downstream of the Powerhouse between September 15 and October 15, 2018.....	6

## Acronyms and Abbreviations

---

7-DAD Max	seven-day average of the daily maximum water temperature
ARC	Aquatic Resource Committee
cfs	cubic feet per second
District	Public Utility District No. 1 of Snohomish County
FERC	Federal Energy Regulatory Commission
FHM Plan	Fisheries and Habitat Monitoring Plan
Project	Henry M. Jackson Hydroelectric Project, FERC No. 2157
RM	River Mile
SC	Side channel
USGS	United States Geological Survey
WDFW	Washington Department of Fish and Wildlife
WY	Water year

## 1. INTRODUCTION

Public Utility District No. 1 of Snohomish County (the District) received a license on September 2, 2011 (License) from the Federal Energy Regulatory Commission (FERC) for the Henry M. Jackson Hydroelectric Project (Project) (FERC 2011). License Article 410 approved the Fisheries and Habitat Monitoring Plan (FHM Plan) filed with the FERC on September 2, 2010, with modification. Per Section 4.1 of the FHM Plan, the District is to prepare a report by June 30 of each year detailing the monitoring efforts of the previous calendar year.

This FHM Plan Annual Report covers activities conducted in calendar year 2018. Appendices A, B, and C contain water temperature data. Appendix A contains mean daily temperature in graphical format and Appendix B contains the same data in tabular format. Appendix C contains seven-day average of the daily maximum water temperature (7-DAD Max) in tabular format. This Annual Report will be provided to the Aquatic Resources Committee (ARC) [consisting of the City of Everett, City of Sultan, Snohomish County, Washington Department of Ecology, Washington Department of Fish and Wildlife (WDFW), Tulalip Tribes, U.S. Forest Service, National Marine Fisheries Service, U.S. Fish and Wildlife Service and American Whitewater] for a 30-day review and comment period. Consultation documentation will be included in Appendix D.

## 2. MONITORING OF FISH HABITAT IN THE SULTAN RIVER

### 2.1. *Riverine Habitat Monitoring*

As articulated in the FHM Plan and as prescribed in the Process Flow Plan, Marsh Creek Slide Modification Plan, Side Channel Enhancement/Large Woody Debris Plan, and the Side Channel Ramping Rate Evaluation Report, the District is required to conduct a habitat survey after a high flow event or other major event causing changes in habitat conditions. In response to the flow event of November 18, 2015, the District contracted for subsequent data collection during 2016. Stillwater Sciences conducted detailed quantitative monitoring of physical habitat to document high flow induced changes in the lower, alluvial portion of the Sultan River as well as habitat changes attributable to the large scale side channel enhancement project and placement of engineered log jams. This work was in addition to prior surveys conducted by Stillwater Sciences in 2014 and prior to license issuance in 2007 and 2010. The most recent evaluation was provided in the FHM Annual Report for 2016. During 2018, there were no significant high flow events triggering the requirement for riverine habitat monitoring.

### 2.2. *Water Temperature Monitoring*

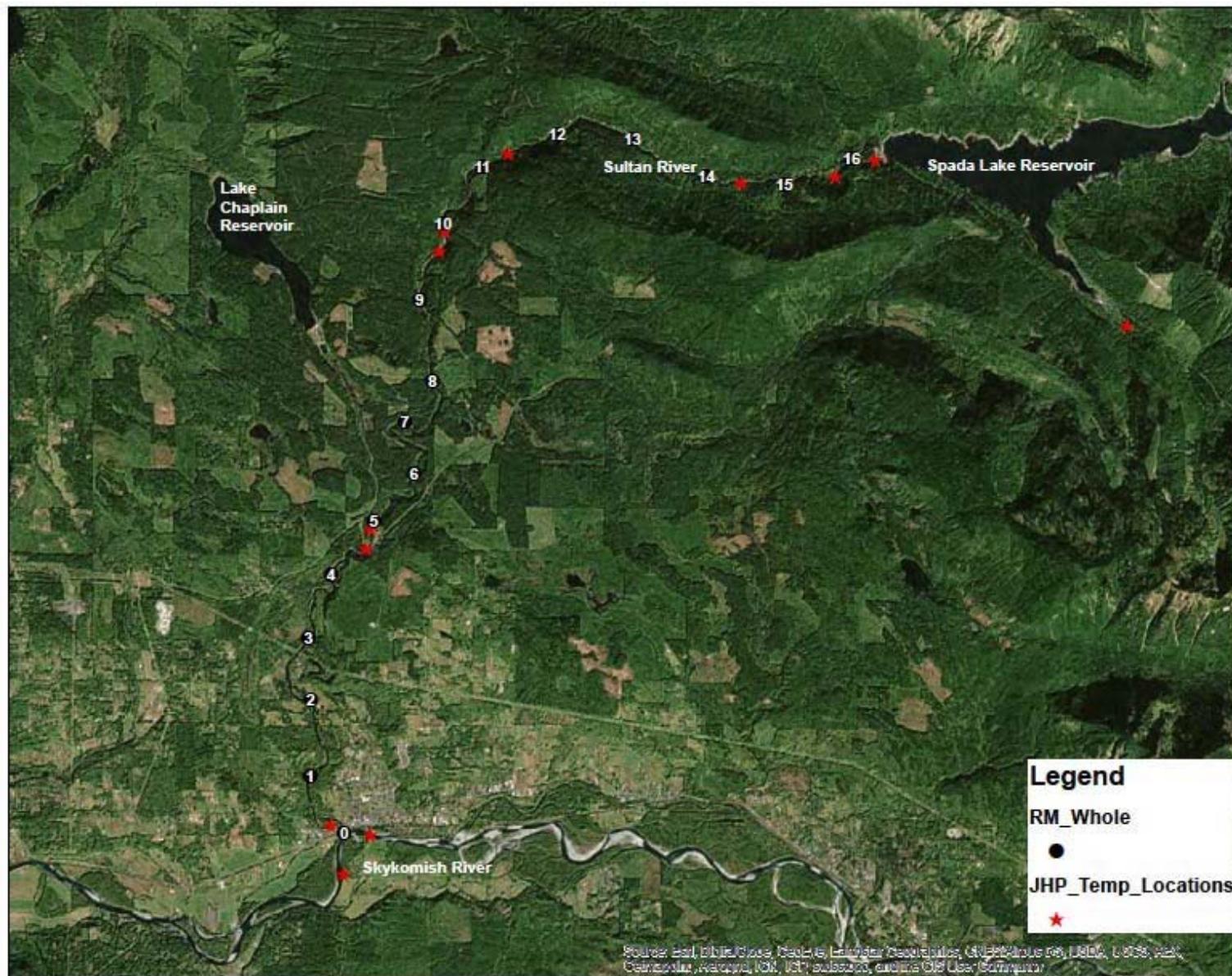
Water temperature was monitored at 12 locations (Figure 1). Nine of these locations were continuously monitored (twelve months/year) and 3 locations were seasonally monitored (April through October). Monitoring locations, in order from upstream to downstream, include:

- South Fork Sultan River, upstream of Culmback Dam, near river mile (RM) 18.2;
- Sultan River, within the bypass reach immediately downstream of Culmback Dam, at RM 15.8;
- Sultan River, at the base of the Sultan River Canyon Trail, at RM 15.5 (April through October);
- Sultan River, within the bypass reach, near RM 14.3 (April through October);
- Sultan River, within the bypass reach, near RM 11.3 (April through October);
- 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 RM 14.3 and 11.3 in the Sultan River is part of the Water Temperature Conditioning Plan monitoring program; the other sites represent requirements under the original FHM Plan or subsequent revisions.

In general, water temperature in the Sultan Basin during 2018 was slightly cooler than 2017 and were consistent with those collected during 2008 and 2009 by CH2M Hill and presented in the Water Quality Final Technical Report (CH2M Hill 2009). Figures depicting water temperatures during 2018 are presented in Appendix A. A tabulation of all mean daily temperature data for 2018 is presented in Appendix B. The seven-day average of the daily maximum temperature (7- DAD Max) for 2018 is presented in Appendix C.



**Figure 1. Locations of water temperature monitoring, Sultan watershed.**

### **3. MONITORING OF FISH POPULATIONS IN THE SULTAN RIVER**

#### ***3.1. Spawner Abundance, Distribution, and Timing in the Sultan River***

In the Sultan River, steelhead and Chinook salmon escapement surveys are conducted during the spring and fall, respectively. These surveys are conducted, as conditions allow, within four index areas located downstream of the Diversion Dam (RM 9.7) and one index area located upstream of the Diversion Dam (Figure 2). During 2018, water visibility and flow conditions were generally favorable during both the spring and fall surveys. Spring surveys were used to develop an escapement estimate of 28 steelhead based on the direct observation of 11 redds and expanded count of 17 redds.

Fall surveys occurred between September and October 2018. These surveys were used to generate an escapement estimate of 585 Chinook based on field observations and extrapolation of 234 redds. Both the steelhead and Chinook escapement estimates were developed cooperatively with WDFW.

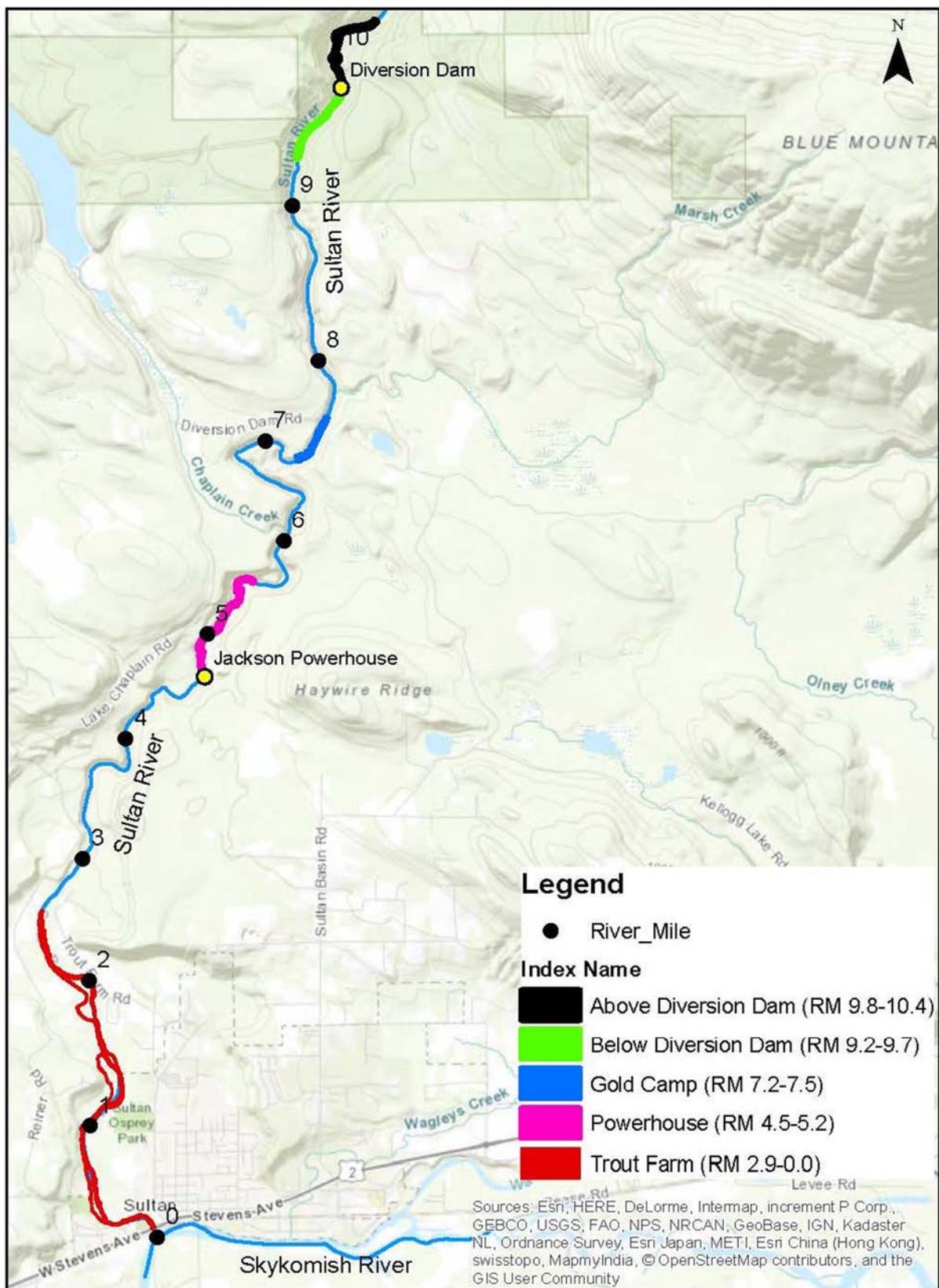
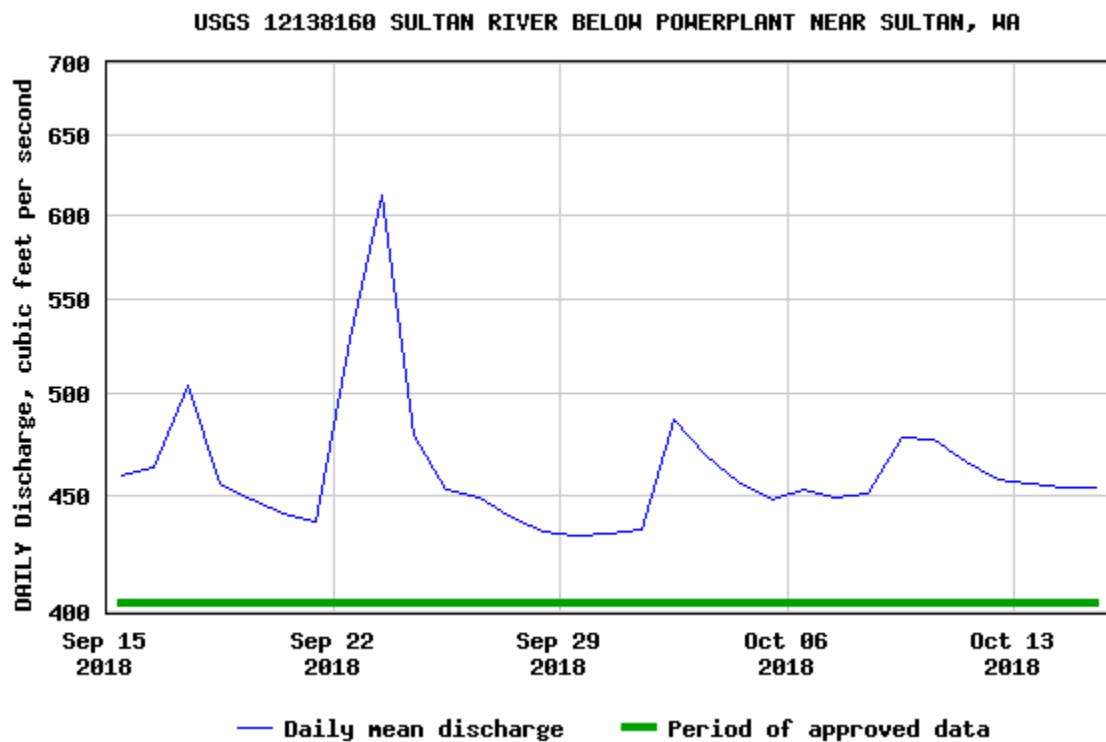


Figure 2. Locations of steelhead and salmon escapement surveys, Sultan River.

### 3.2. Flow Ceiling, Implemented for Chinook Salmon

An operational flow ceiling of 550 cfs is implemented annually between September 15 and October 15 in Reach 1 of the Sultan River, located downstream of the Powerhouse (RM 4.5). This ceiling ensures that areas used by spawning Chinook salmon remain wetted through the incubation and emergence periods should flows from the Project approach the minimum instream flow of 300 cfs. During 2018, mean daily discharge downstream of the Powerhouse averaged 463 cfs during the ceiling period. During 2018, there were no deviations to the flow ceiling that were tied to Project operations. On September 23, heavy rainfall did result in a mean daily discharge above 550 cfs,



**Figure 3. Mean Daily Discharge in the Sultan River downstream of the Powerhouse between September 15 and October 15, 2018.**

### 3.3. Juvenile Production in the Sultan River

The sixth year of smolt trapping to estimate the outmigration of juvenile salmonids and production within the Sultan River was completed on June 29, 2017. In accordance with license obligations and following discussions with the ARC, the smolt trap was not deployed in 2018. The first of two years of smolt sampling to occur over the six-year period spanning between 2018 and 2024 will commence in 2019.

## 4. SIDE CHANNEL MAINTENANCE AND MONITORING

Since construction, the District has completed a series of detailed flow and aquatic habitat surveys in the constructed side channels in the lower Sultan River. These side channels (SC) – SC1, SC2, SC3, and SC4 – had each undergone varying degrees of construction during summer 2012 to restore and/or enhance salmonid habitat. The primary objective of the District's surveys was to assess flow behavior and

distribution and to determine whether additional downramping rate restrictions were necessary to prevent juvenile fish stranding in these side channels.

In addition to the aforementioned detailed survey effort, qualitative monitoring to assess the performance of both constructed and modified side channels, as well as the engineered log jams, was initiated after construction was completed in 2012 and has been conducted annually since. No maintenance of side channels was necessary during 2018.

## **5. FUTURE MONITORING**

The 2018 calendar year marks the seventh calendar year under the License. Monitoring methodologies employed in 2018 were consistent with those identified in the FHM Plan. Monitoring of physical habitat and water quality conditions will continue in 2019. Monitoring of spawner abundance, distribution, and timing will take place per the FHM Plan. Future monitoring of juvenile outmigration will occur in January 2019.

## **6. REFERENCES**

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

September 2, 2011. Available at:

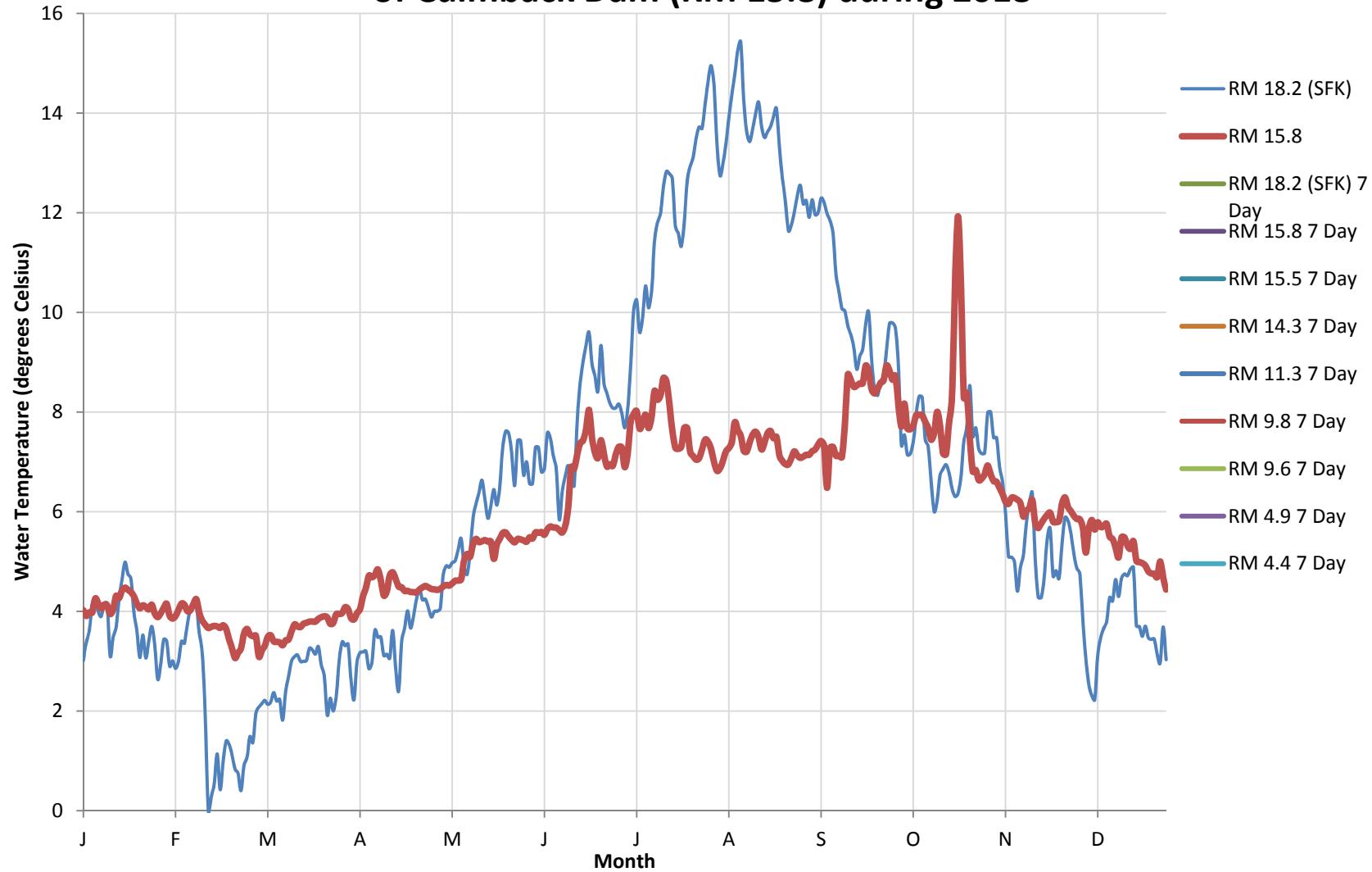
<http://www.snopud.com/Site/Content/Documents/relicensing/License/20110902LICENSE.pdf>

## APPENDIX A

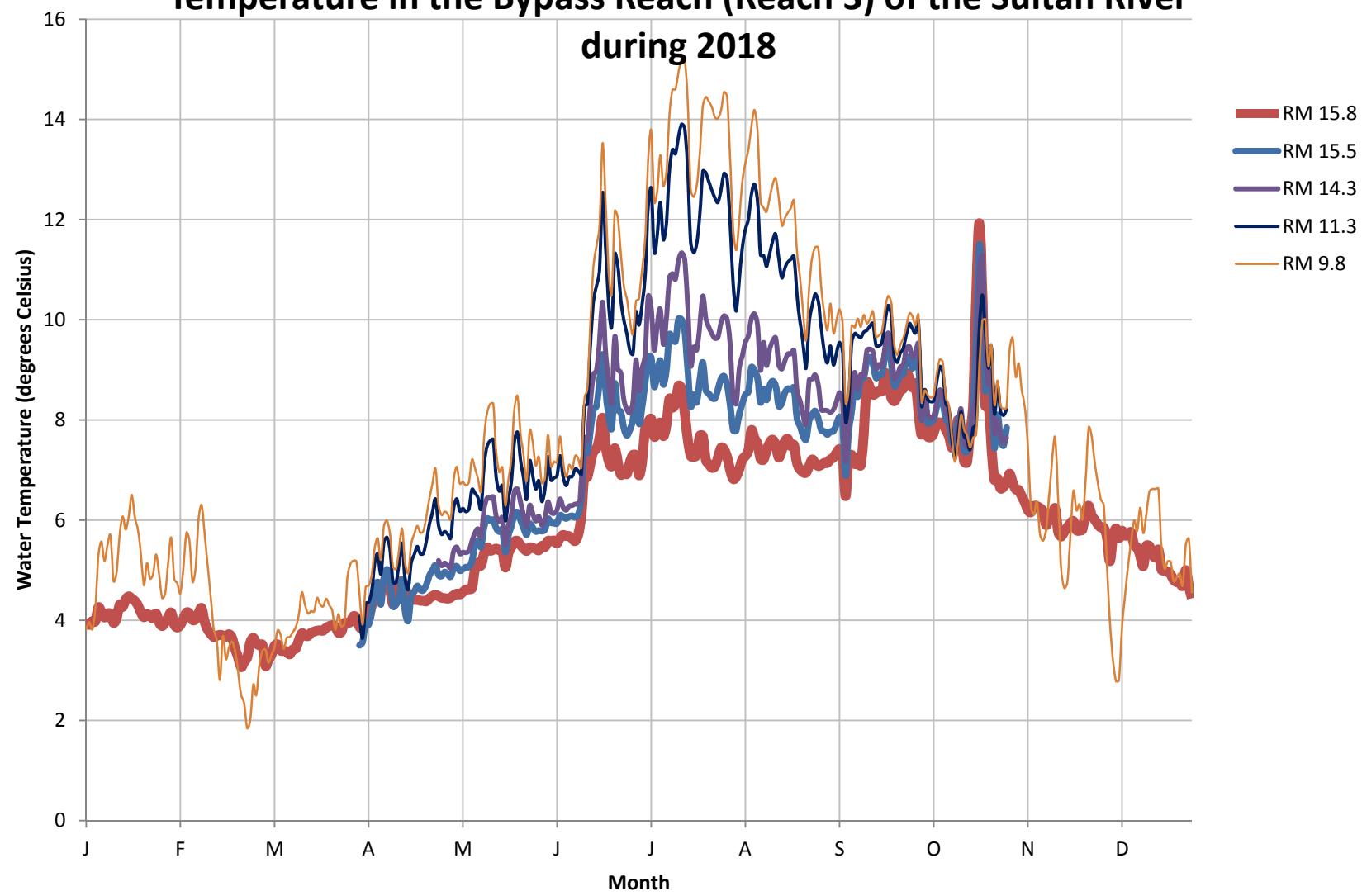
---

### *2018 Water Temperature Figures*

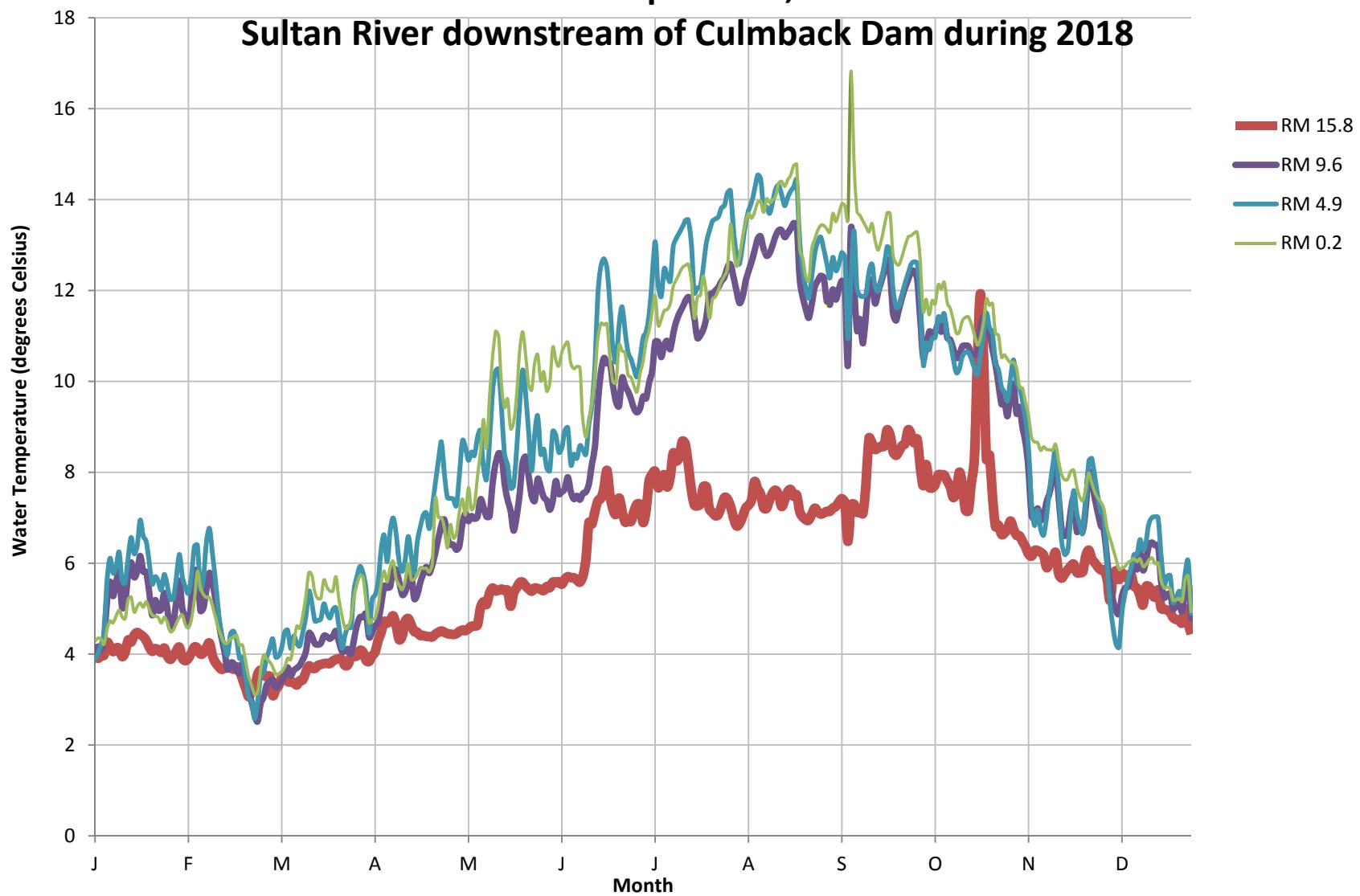
**Figure A-1. Mean Daily Water Temperature in the South Fork Sultan (RM 18.2), and the mainstem Sultan River immediately downstream of Culmback Dam (RM 15.8) during 2018**



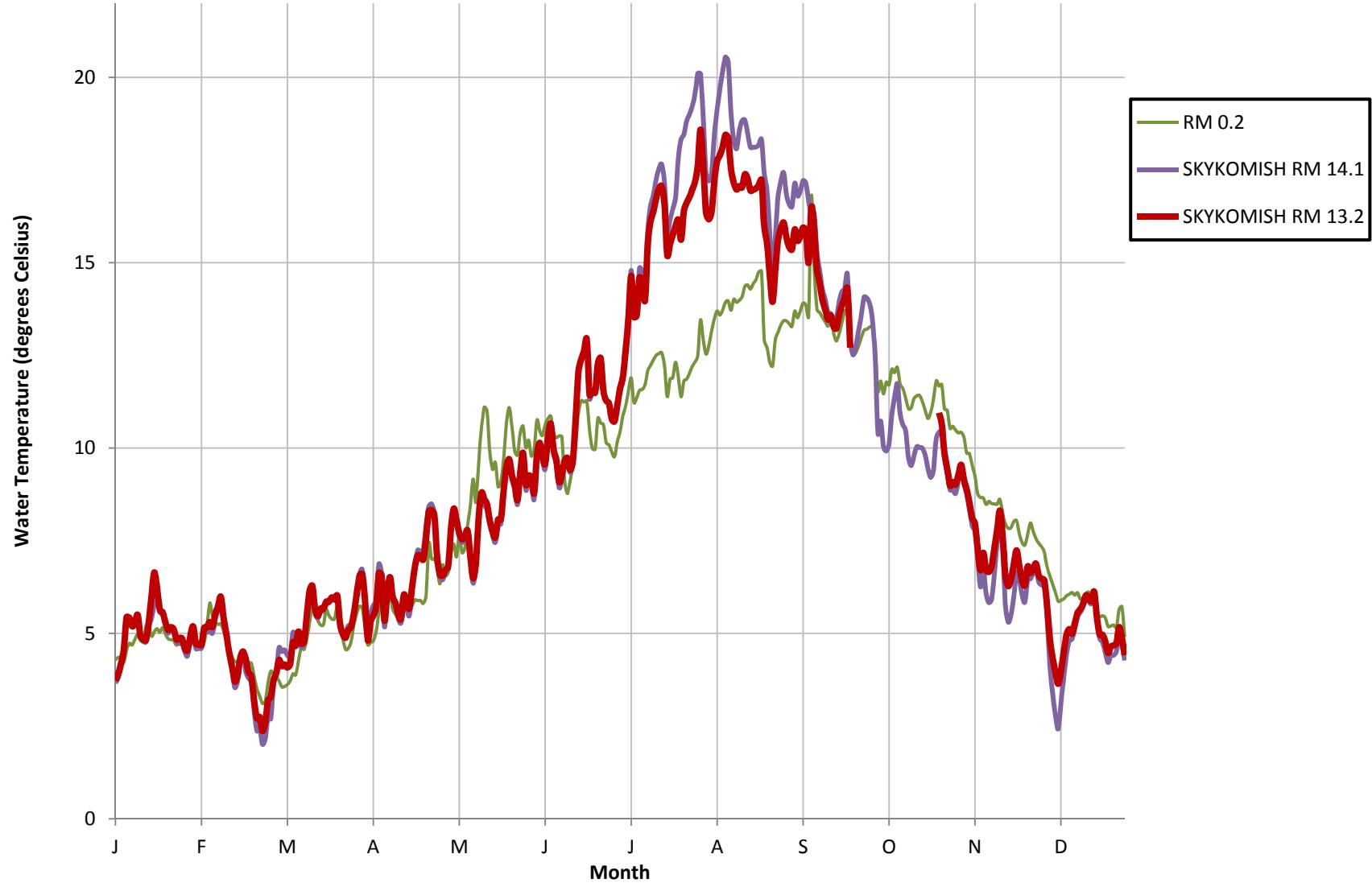
**Figure A-2. Longitudinal Depiction of Mean Daily Water Temperature in the Bypass Reach (Reach 3) of the Sultan River during 2018**



**Figure A-3. Longitudinal Depiction of Mean Daily Water Temperature,  
Sultan River downstream of Culmback Dam during 2018**



**Figure A-4. Mean Daily Water Temperature  
near confluence of Sultan and Skykomish rivers during 2018**



## **APPENDIX B**

---

*2018 Mean Daily Water Temperature Data in Tabular Format*

DATE	RM 18.2 (SFK)	RM 15.8	Sultan River								Skykomish River	
			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	3.0	4.0				3.8	4.0	3.9	4.2	4.3	3.7	3.7
1/2	3.4	3.9				4.0	4.2	4.0	4.3	4.4	3.8	3.9
1/3	3.6	4.0				3.8	4.1	4.2	4.3	4.3	4.1	4.2
1/4	4.2	4.0				4.2	4.3	4.5	4.0	4.2	4.5	4.6
1/5	4.3	4.3				5.3	5.2	5.6	4.4	4.5	5.4	5.4
1/6	4.0	4.2				5.6	5.6	6.1	4.7	4.7	5.4	5.4
1/7	3.9	4.1				5.2	5.3	5.8	4.6	4.7	5.2	5.2
1/8	4.2	4.1				5.5	5.6	5.9	4.8	4.8	5.2	5.3
1/9	4.2	4.1				5.7	5.8	6.2	5.0	5.0	5.5	5.5
1/10	3.1	3.9				4.8	5.0	5.6	4.7	4.8	4.9	4.9
1/11	3.5	4.0				4.9	5.1	5.6	4.7	4.8	4.8	4.8
1/12	3.7	4.3				5.7	5.8	6.1	5.4	5.2	4.8	4.8
1/13	4.2	4.3				6.1	6.0	6.6	5.3	5.3	5.2	5.3
1/14	4.6	4.4				5.8	5.7	6.2	4.9	4.9	5.4	6.0
1/15	5.0	4.5				6.1	5.8	6.4	4.9	5.0	5.8	6.6
1/16	4.7	4.4				6.5	6.2	6.9	5.0	5.1	5.9	6.2
1/17	4.7	4.4				6.1	5.8	6.6	4.9	5.0	5.6	5.6
1/18	4.0	4.3				5.8	5.8	6.5	5.1	5.2	5.5	5.6
1/19	3.6	4.2				5.3	5.4	6.0	4.9	5.0	5.2	5.3
1/20	3.1	4.1				4.7	4.9	5.5	4.7	4.9	5.0	5.1
1/21	3.5	4.1				5.1	5.2	5.7	4.7	4.8	5.1	5.2
1/22	3.1	4.1				4.8	5.0	5.6	4.7	4.8	5.1	5.1
1/23	3.4	4.0				4.9	5.0	5.4	4.6	4.7	4.8	4.8
1/24	3.7	4.1				5.3	5.3	5.8	4.7	4.8	4.7	4.9
1/25	3.3	4.0				4.9	5.0	5.5	4.6	4.7	4.8	4.9
1/26	2.6	3.9				4.4	4.6	5.2	4.3	4.5	4.5	4.6

1/27	2.9	4.0				4.5	4.7	5.2	4.4	4.5	4.4	4.5
1/28	3.4	4.1				5.1	5.2	5.7	4.6	4.7	4.9	4.9
1/29	3.4	4.2				5.7	5.6	6.2	4.8	4.8	5.1	5.2
1/30	2.9	3.9				4.8	5.0	5.7	4.7	4.9	4.6	4.7
1/31	3.0	3.9				4.7	4.8	5.5	4.5	4.6	4.6	4.7

DATE	RM 18.2 (SFK)	Sultan River								Skykomish River		
		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	2.9	3.9				4.5	4.7	5.3	4.4	4.6	4.6	4.7
2/2	3.0	4.0				5.0	5.2	5.7	4.7	4.8	5.1	5.1
2/3	3.4	4.2				5.7	5.8	6.4	5.4	5.2	5.0	5.2
2/4	3.4	4.1				5.6	5.8	6.4	6.2	5.8	5.1	5.3
2/5	3.8	4.0				4.8	5.0	5.4	5.4	5.5	5.0	5.2
2/6	4.0	4.0				5.0	5.0	5.7	5.3	5.3	5.4	5.5
2/7	4.2	4.1				6.0	5.4	6.5	5.2	5.2	5.6	5.7
2/8	4.1	4.2				6.3	5.8	6.8	5.2	5.3	5.9	6.0
2/9	3.6	4.0				5.7	5.5	6.2	4.9	5.1	5.3	5.4
2/10	3.1	3.8				5.1	5.2	5.6	4.6	4.8	4.9	5.0
2/11	1.9	3.7				4.5	4.7	4.9	4.3	4.6	4.4	4.5
2/12	0.0	3.7				3.8	4.4	4.4	4.1	4.4	4.0	4.1
2/13	0.3	3.7				3.6	4.1	4.2	4.0	4.2	3.5	3.7
2/14	0.5	3.7				2.8	3.7	4.0	4.0	4.2	3.7	3.9
2/15	1.1	3.7				3.7	3.8	4.4	4.1	4.3	4.3	4.3
2/16	0.4	3.7				3.2	3.8	4.5	4.1	4.4	4.5	4.5
2/17	1.0	3.7				3.5	3.6	4.3	4.1	4.4	4.0	4.3
2/18	1.4	3.7				3.6	3.6	3.9	3.9	4.2	3.8	4.0
2/19	1.3	3.4				3.4	3.8	3.9	3.9	4.2	3.7	3.8
2/20	1.1	3.3				3.0	3.5	3.5	3.5	3.9	2.9	3.2
2/21	0.8	3.1				2.5	3.2	3.1	3.2	3.5	2.4	2.7
2/22	0.8	3.2				2.3	2.9	2.9	3.1	3.3	2.5	2.7

2/23	0.4	3.3				1.8	2.7	2.6	2.8	3.1	2.0	2.4
2/24	0.9	3.6				2.0	2.5	3.0	3.0	3.2	2.1	2.6
2/25	1.1	3.6				2.7	2.9	3.5	3.7	3.7	2.7	3.2
2/26	1.5	3.5				2.5	3.1	3.6	3.8	4.0	2.7	3.3
2/27	1.4	3.5				3.1	3.3	3.9	3.7	3.9	3.6	3.7
2/28	2.0	3.5				3.4	3.4	4.1	3.6	3.8	3.9	3.9
Sultan 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	2.1	3.1				3.4	3.4	4.3	3.4	3.7	4.6	4.3
3/2	2.1	3.2				3.2	3.3	3.9	3.3	3.6	4.5	4.1
3/3	2.2	3.3				3.3	3.3	4.0	3.4	3.6	4.6	4.2
3/4	2.1	3.5				3.5	3.4	4.2	3.4	3.6	4.4	4.1
3/5	2.2	3.5				3.8	3.6	4.5	3.6	3.7	4.4	4.2
3/6	2.4	3.4				3.7	3.7	4.5	3.8	3.9	5.0	4.8
3/7	2.2	3.4				3.4	3.5	4.1	3.9	3.9	4.9	4.7
3/8	2.2	3.4				3.6	3.6	4.4	4.5	4.3	5.0	5.0
3/9	1.8	3.3				3.7	3.7	4.2	4.3	4.6	4.6	4.7
3/10	2.4	3.4				3.8	3.8	4.2	4.5	4.6	4.7	4.8
3/11	2.7	3.4				3.9	3.9	4.5	4.8	4.9	5.4	5.5
3/12	3.0	3.6				4.1	4.0	4.8	5.1	5.3	6.1	6.1
3/13	3.1	3.7				4.6	4.5	5.4	5.5	5.8	6.2	6.3
3/14	3.1	3.7				4.3	4.4	5.1	5.3	5.7	5.5	5.6
3/15	3.0	3.7				4.1	4.2	4.7	5.0	5.4	5.4	5.5
3/16	3.0	3.8				4.2	4.2	4.7	5.0	5.2	5.6	5.7
3/17	3.0	3.8				4.2	4.2	4.8	5.0	5.2	5.6	5.7
3/18	3.3	3.8				4.4	4.4	5.1	5.3	5.6	5.8	5.9
3/19	3.2	3.8				4.3	4.4	4.9	5.1	5.5	5.8	5.9
3/20	3.1	3.8				4.3	4.3	4.8	5.1	5.4	6.0	6.0
3/21	3.3	3.9				4.4	4.4	5.0	5.2	5.4	5.9	5.9

3/22	2.9	3.9				4.3	4.5	5.0	5.2	5.7	5.9	6.0
3/23	2.7	3.9				4.2	4.3	4.6	4.8	5.2	5.2	5.3
3/24	1.9	3.9				3.8	4.1	4.1	4.4	4.9	5.0	5.0
3/25	2.3	3.8				4.1	4.1	4.4	4.3	4.6	5.0	4.9
3/26	2.0	3.8				3.9	4.1	4.6	4.4	4.6	5.2	5.1
3/27	2.3	3.9				3.9	4.0	4.6	4.6	4.8	5.2	5.2
3/28	3.0	3.9				4.9	4.3	5.4	5.3	5.2	5.6	5.6
3/29	3.4	4.0				5.1	4.6	5.7	5.4	5.5	6.1	6.1
3/30	3.3	4.1				5.2	4.8	5.9	5.6	5.7	6.6	6.5
3/31	3.3	4.0				5.2	4.8	5.8	5.4	5.7	6.7	6.6

DATE	Sultan River										Skykomish River	
	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	2.6	3.9	4.4	4.8	5.5	4.5	4.9	5.4	4.9	5.2	5.9	5.9
4/2	2.2	3.8	3.6	0.0	3.6	3.9	4.4	4.5	4.3	4.7	4.8	4.8
4/3	3.0	4.0	4.0	0.0	4.3	4.7	4.5	5.2	4.5	4.8	5.5	5.3
4/4	3.2	4.0	3.9	0.0	4.4	4.7	4.6	5.3	4.6	4.8	5.8	5.5
4/5	3.2	4.3	4.2	0.0	4.6	4.9	4.7	5.6	4.9	5.0	5.9	5.7
4/6	3.2	4.5	4.6	0.0	5.2	5.5	5.1	6.3	5.4	5.6	6.9	6.6
4/7	2.8	4.7	4.8	0.0	5.3	5.6	5.5	6.6	5.6	5.8	6.6	6.6
4/8	3.0	4.7	4.3	0.0	4.9	5.2	5.5	6.0	5.5	5.6	5.2	5.3
4/9	3.6	4.7	4.8	0.0	5.6	5.9	5.5	6.7	5.7	5.9	6.0	6.1
4/10	3.5	4.8	5.0	0.0	5.7	6.0	5.9	7.0	5.8	6.0	6.4	6.5
4/11	3.5	4.6	4.8	0.0	5.4	5.7	5.8	6.6	5.5	5.7	5.9	6.0
4/12	3.1	4.3	4.3	0.0	4.8	5.1	5.6	6.0	5.3	5.5	5.8	5.8
4/13	3.1	4.4	4.3	0.0	4.8	5.0	5.3	5.8	5.2	5.4	5.4	5.5
4/14	3.1	4.7	4.5	0.0	5.1	5.4	5.4	6.1	5.5	5.6	5.3	5.4
4/15	3.6	4.8	4.8	0.0	5.5	5.8	5.6	6.6	5.9	6.0	5.9	6.0
4/16	2.9	4.6	4.2	0.0	4.8	5.1	5.7	6.2	5.5	5.6	5.7	5.8
4/17	2.4	4.5	4.0	0.0	4.6	4.9	5.2	5.8	5.4	5.6	5.5	5.7

4/18	3.4	4.5	4.5	0.0	5.2	5.5	5.3	6.5	5.5	5.8	6.2	6.3
4/19	3.7	4.4	4.6	0.0	5.3	5.7	5.6	6.8	5.6	5.9	6.8	6.8
4/20	4.0	4.4	4.7	0.0	5.5	5.9	5.8	7.1	5.7	5.9	7.2	7.1
4/21	3.7	4.4	4.6	0.0	5.3	5.7	5.9	7.1	5.7	5.9	7.2	7.1
4/22	3.9	4.4	4.6	0.0	5.3	5.8	5.8	6.8	5.5	5.8	7.2	7.0
4/23	4.2	4.4	4.7	0.0	5.6	6.1	6.0	7.3	5.8	6.0	7.9	7.6
4/24	4.5	4.4	4.9	0.0	5.9	6.4	6.2	7.8	7.1	7.4	8.4	8.3
4/25	4.2	4.5	5.0	0.0	6.2	6.7	6.5	8.2	6.6	7.0	8.5	8.3
4/26	4.2	4.5	5.1	0.0	6.4	7.0	6.8	8.7	6.8	7.0	8.2	8.2
4/27	4.1	4.5	4.9	5.2	5.9	6.3	7.0	8.0	6.5	6.8	7.0	7.1
4/28	3.9	4.4	4.9	5.1	5.7	6.1	6.6	7.4	6.2	6.3	6.5	6.6
4/29	4.0	4.4	5.0	5.1	5.8	6.2	6.4	7.4	6.6	6.9	6.4	6.6
4/30	4.0	4.4	4.9	5.1	5.7	6.1	6.4	7.4	6.3	6.6	6.6	6.7

DATE	RM 18.2 (SFK)	Sultan River								Skykomish River		
		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	4.1	4.5	4.9	5.1	5.6	6.0	6.3	7.3	6.6	6.6	6.7	6.8
5/2	4.7	4.5	5.0	5.4	6.3	6.8	6.4	8.0	7.0	7.1	7.8	7.8
5/3	4.9	4.5	5.1	5.5	6.4	7.1	6.9	8.7	7.4	7.4	8.3	8.4
5/4	4.9	4.5	5.0	5.3	6.2	6.7	7.1	8.5	7.1	7.1	8.0	8.1
5/5	5.0	4.6	5.0	5.4	6.2	6.8	6.9	8.3	7.4	7.7	7.6	7.7
5/6	5.0	4.6	5.1	5.4	6.2	6.7	7.0	8.4	7.2	7.2	7.5	7.5
5/7	5.2	4.6	5.1	5.4	6.2	6.8	7.0	8.4	7.2	7.3	7.6	7.6
5/8	5.5	4.6	5.2	5.6	6.6	7.2	7.0	8.8	7.5	7.9	7.7	7.8
5/9	4.9	5.0	5.5	5.7	6.5	7.0	7.4	8.9	8.3	8.5	6.9	7.1
5/10	4.7	5.2	5.6	5.8	6.4	6.8	7.2	8.1	8.5	9.2	6.4	6.5
5/11	5.2	5.1	5.5	5.7	6.2	6.6	7.0	7.8	7.9	8.5	6.8	6.9
5/12	5.9	5.3	5.9	6.2	7.1	7.7	7.0	8.7	8.8	9.7	8.0	8.1
5/13	6.2	5.5	6.0	6.4	7.5	8.2	7.7	9.8	9.6	10.5	8.6	8.8
5/14	6.4	5.4	6.0	6.4	7.6	8.3	8.2	10.2	10.0	11.1	8.5	8.6

5/15	6.6	5.4	6.0	6.5	7.6	8.3	8.4	10.3	9.9	11.0	8.3	8.5
5/16	6.2	5.4	5.8	6.1	6.8	7.3	8.4	9.4	9.1	9.9	7.9	8.1
5/17	5.9	5.4	5.8	6.0	6.6	7.0	7.8	8.4	8.7	9.4	7.6	7.8
5/18	6.1	5.4	5.8	6.0	6.7	7.1	7.4	8.2	8.8	9.6	7.5	7.6
5/19	6.4	5.1	5.4	5.5	6.0	6.3	7.2	7.7	8.0	9.0	7.9	8.1
5/20	6.1	5.3	5.7	5.9	6.4	6.8	6.7	7.7	8.4	9.1	8.0	8.1
5/21	6.5	5.5	5.9	6.1	6.8	7.3	7.0	8.5	8.8	9.7	8.8	8.9
5/22	7.3	5.6	6.1	6.6	7.6	8.3	7.5	9.5	9.6	10.7	9.4	9.5
5/23	7.6	5.6	6.2	6.6	7.8	8.5	8.2	10.3	10.0	11.1	9.6	9.7
5/24	7.6	5.5	6.0	6.4	7.2	7.7	8.3	9.7	9.6	10.6	9.1	9.3
5/25	7.2	5.4	5.8	6.1	6.8	7.3	7.9	8.9	9.1	9.9	8.9	9.0
5/26	6.5	5.4	5.7	5.9	6.4	6.8	7.5	8.0	8.9	9.8	8.5	8.6
5/27	7.4	5.5	5.9	6.3	7.2	7.8	7.4	8.8	9.3	10.4	9.2	9.3
5/28	7.4	5.4	5.8	6.1	6.9	7.6	7.9	9.2	9.5	10.6	9.7	9.9
5/29	6.7	5.4	5.8	6.0	6.6	7.1	7.7	8.4	9.1	10.0	8.9	9.0
5/30	7.0	5.4	5.8	6.1	6.8	7.3	7.5	8.5	9.1	10.2	9.1	9.3
5/31	6.6	5.5	5.8	5.9	6.4	6.7	7.4	8.1	8.9	9.8	9.1	9.2

DATE	RM 18.2 (SFK)	Sultan River								Skykomish River		
		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	6.6	5.5	5.8	6.0	6.6	6.8	7.2	8.0	9.0	10.0	8.6	8.8
6/2	7.3	5.6	6.0	6.4	7.3	7.7	7.4	8.9	9.7	10.8	9.7	9.8
6/3	7.3	5.6	5.9	6.2	6.8	7.1	7.8	8.8	9.5	10.5	10.0	10.1
6/4	6.8	5.6	5.9	6.1	6.8	7.2	7.5	8.4	9.3	10.3	9.7	9.8
6/5	6.9	5.5	5.9	6.2	6.9	7.2	7.6	8.5	9.5	10.6	9.4	9.6
6/6	7.6	5.6	6.1	6.4	7.3	7.7	7.6	8.9	9.6	10.8	10.2	10.3
6/7	7.5	5.7	6.1	6.3	6.9	7.2	7.9	9.0	9.8	10.9	10.6	10.7
6/8	7.1	5.7	6.0	6.2	6.7	6.9	7.6	8.2	9.4	10.4	9.9	10.0
6/9	6.8	5.7	6.1	6.3	6.9	7.1	7.4	8.4	9.3	10.3	9.6	9.7
6/10	5.8	5.6	6.1	6.3	6.9	7.0	7.5	8.3	9.2	10.3	8.9	9.1

6/11	6.4	5.6	6.1	6.3	7.0	7.3	7.4	8.6	8.9	10.3	9.2	9.3
6/12	6.7	5.7	6.1	6.3	7.0	7.2	7.5	8.5	8.3	9.1	9.6	9.7
6/13	6.9	6.1	6.4	6.5	6.9	7.1	7.6	8.4	8.2	8.8	9.7	9.7
6/14	6.6	6.9	7.4	7.6	8.3	8.4	7.7	9.1	8.7	9.1	9.3	9.4
6/15	6.5	6.9	7.3	7.6	8.3	8.6	8.2	9.5	8.9	9.5	9.6	9.7
6/16	7.8	7.1	7.8	8.3	9.5	10.0	8.6	10.4	9.0	10.2	10.8	10.8
6/17	8.6	7.4	8.2	8.9	10.4	11.1	9.5	11.9	9.6	11.0	12.1	12.1
6/18	9.0	7.4	8.3	9.0	10.7	11.5	10.2	12.5	9.9	11.3	12.3	12.4
6/19	9.3	7.7	8.8	9.6	11.0	11.9	10.5	12.7	10.1	11.2	12.6	12.6
6/20	9.6	8.0	9.3	10.4	12.5	13.5	10.4	12.5	10.2	11.3	12.9	12.9
6/21	9.0	7.5	8.6	9.3	11.5	12.3	10.4	11.7	9.9	10.5	11.3	11.4
6/22	8.7	7.2	8.1	8.8	10.3	11.0	9.9	10.7	9.3	10.0	11.5	11.5
6/23	8.4	7.1	7.8	8.4	9.9	10.5	9.5	10.4	9.3	10.0	11.5	11.5
6/24	9.3	7.4	8.7	9.7	11.3	12.2	9.5	11.2	9.7	10.8	12.3	12.3
6/25	8.6	7.2	8.2	9.0	11.1	12.0	10.1	11.6	10.2	10.7	12.4	12.4
6/26	8.4	6.9	8.2	8.9	10.4	11.3	9.9	11.1	9.7	10.6	11.5	11.5
6/27	8.2	7.0	7.8	8.4	10.0	10.7	9.8	10.6	9.4	10.1	11.3	11.3
6/28	8.1	6.9	7.7	8.2	9.7	10.4	9.6	10.5	9.5	10.1	11.2	11.2
6/29	8.1	7.2	7.8	8.1	9.4	10.0	9.4	10.3	9.3	9.9	10.8	10.8
6/30	8.2	7.3	8.0	8.4	9.3	9.7	9.3	10.1	9.3	9.8	10.7	10.7

DATE	RM 18.2 (SFK)	Sultan River									Skykomish River	
		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	8.0	7.3	8.7	9.2	10.1	10.4	9.4	10.5	9.7	10.2	11.2	11.2
7/2	7.7	6.9	7.9	8.6	9.9	10.4	9.7	11.0	10.1	10.4	11.7	11.6
7/3	8.1	7.2	8.3	9.0	10.3	11.0	9.6	11.1	9.9	10.9	12.0	11.9
7/4	8.9	7.8	8.7	9.3	10.9	11.6	10.0	11.5	10.3	11.1	12.7	12.6
7/5	10.0	8.0	9.2	10.5	12.3	13.2	10.2	12.3	10.6	11.5	13.6	13.5
7/6	10.3	8.0	9.2	10.2	12.6	13.8	10.9	13.1	10.8	11.9	14.8	14.6
7/7	9.6	7.7	8.7	9.4	11.4	12.4	10.9	12.1	10.4	11.2	13.6	13.5

7/8	9.9	7.8	8.9	9.9	11.7	12.6	10.5	11.9	10.4	11.4	13.7	13.6
7/9	10.5	7.9	9.2	10.2	12.3	13.3	10.8	12.5	10.6	11.6	14.9	14.6
7/10	10.1	7.7	8.7	9.5	11.6	12.7	10.9	12.3	10.6	11.6	14.7	14.5
7/11	10.4	7.9	9.0	10.0	11.9	12.9	10.7	12.2	10.7	11.7	14.2	14.0
7/12	11.4	8.4	9.7	10.8	13.0	14.1	11.1	13.0	11.0	12.1	15.9	15.5
7/13	11.8	8.2	9.6	10.9	13.4	14.6	11.3	13.1	11.1	12.2	16.5	16.1
7/14	11.7	8.3	9.6	10.8	13.3	14.6	11.5	13.3	11.2	12.4	16.8	16.4
7/15	12.1	8.7	10.0	11.2	13.7	14.9	11.6	13.4	11.3	12.5	17.2	16.7
7/16	11.6	8.6	10.0	11.3	13.9	15.2	11.8	13.5	11.5	12.5	17.5	17.0
7/17	11.3	8.2	9.8	11.2	13.8	15.2	11.9	13.5	11.5	12.6	17.6	17.1
7/18	12.1	7.6	9.0	10.3	13.0	14.4	11.8	13.0	11.3	12.2	17.2	16.6
7/19	12.2	7.3	8.3	9.1	11.5	12.6	11.4	11.9	10.8	11.4	15.8	15.2
7/20	11.9	7.3	8.5	9.5	11.3	12.5	11.0	12.1	10.9	11.9	16.2	15.5
7/21	12.1	7.3	8.4	9.4	11.5	12.7	11.0	12.1	11.0	11.9	16.5	15.7
7/22	12.6	7.7	8.8	9.9	12.1	13.3	11.1	12.5	11.3	12.3	16.7	16.0
7/23	13.1	7.7	9.1	10.5	13.0	14.3	11.4	13.0	11.1	11.9	17.8	16.2
7/24	13.1	7.2	8.6	10.0	12.9	14.4	11.9	13.3	11.1	11.4	18.3	15.6
7/25	13.6	7.1	8.5	9.9	12.7	14.4	11.9	13.5	11.1	11.8	18.5	16.4
7/26	13.7	7.0	8.4	9.7	12.6	14.2	12.0	13.6	11.1	11.9	18.8	16.6
7/27	13.4	7.1	8.4	9.6	12.4	14.0	12.1	13.6	11.2	12.0	19.0	16.8
7/28	13.4	7.3	8.6	9.7	12.3	14.0	12.2	13.8	11.3	12.2	19.2	17.0
7/29	13.4	7.4	8.8	9.9	12.6	14.2	12.3	13.9	11.5	12.3	19.5	17.2
7/30	13.5	7.4	8.9	10.1	12.9	14.5	12.5	14.1	11.7	12.5	20.1	17.6
7/31	13.7	7.3	8.7	10.0	12.8	14.5	12.6	14.2	12.8	13.5	20.1	18.6

DATE	Sultan River										Skykomish River	
	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	14.2	13.5	14.1	13.2	11.9	13.2	12.3	14.3	10.8	11.8	19.2	17.6
8/2	13.4	6.8	7.8	8.4	10.7	11.8	12.0	12.8	12.1	12.5	17.4	16.3
8/3	12.7	6.9	7.8	8.3	10.2	11.4	11.7	12.6	12.0	12.8	17.2	16.2

8/4	13.0	7.0	8.1	9.0	10.8	12.0	11.8	13.0	12.3	13.2	17.4	16.4
8/5	13.4	7.2	8.3	9.3	11.4	12.8	12.2	13.5	12.6	13.5	18.5	17.2
8/6	13.9	7.3	8.5	9.6	11.8	13.1	12.4	13.8	12.8	13.7	19.1	17.7
8/7	14.4	7.4	8.6	9.7	12.0	13.4	12.6	13.9	12.7	13.6	19.7	17.9
8/8	14.8	7.8	9.0	10.0	12.5	13.9	12.9	14.2	12.9	13.7	20.2	18.1
8/9	15.3	7.6	9.0	10.1	12.7	14.2	13.1	14.5	13.1	13.9	20.5	18.4
8/10	15.4	7.5	8.8	9.9	12.4	13.8	13.2	14.5	13.2	14.0	20.4	18.4
8/11	14.3	7.2	8.4	9.0	11.3	12.4	12.9	13.8	13.2	13.7	19.0	17.5
8/12	13.6	7.2	8.6	9.5	11.3	12.2	12.8	13.8	13.3	14.0	18.3	17.2
8/13	13.4	7.4	8.4	9.1	11.1	12.2	12.8	13.7	13.3	13.9	18.1	17.0
8/14	13.7	7.5	8.7	9.4	11.3	12.4	13.0	13.9	13.4	14.0	18.6	17.1
8/15	14.0	7.6	8.8	9.6	11.6	12.7	13.2	14.2	13.5	14.1	18.8	17.0
8/16	14.2	7.5	8.7	9.6	11.7	12.8	13.3	14.3	13.8	14.4	18.8	17.4
8/17	13.7	7.2	8.3	9.1	11.2	12.4	13.3	14.1	13.7	14.4	18.5	17.3
8/18	13.5	7.4	8.3	9.0	10.8	11.9	13.2	13.9	13.7	14.3	18.1	16.9
8/19	13.6	7.6	8.5	9.2	11.0	12.0	13.3	14.0	13.8	14.4	18.1	17.0
8/20	13.7	7.6	8.6	9.3	11.2	12.1	13.4	14.2	14.0	14.5	18.1	17.0
8/21	13.9	7.5	8.6	9.3	11.2	12.2	13.5	14.3	14.1	14.7	18.2	17.1
8/22	14.1	7.5	8.6	9.4	11.3	12.4	13.4	14.4	13.8	14.8	18.3	17.2
8/23	13.3	7.1	8.0	8.6	10.5	11.3	12.3	13.0	12.3	12.9	17.4	16.0
8/24	12.7	7.0	7.9	8.4	10.0	10.8	11.9	12.5	12.1	12.7	16.9	15.5
8/25	12.2	7.0	7.7	8.1	9.5	10.2	11.6	12.1	12.0	12.3	15.8	14.7
8/26	11.6	6.9	7.6	7.9	9.0	9.6	11.4	11.8	11.9	12.2	14.8	13.9
8/27	11.7	7.1	8.0	8.8	9.9	10.6	11.7	12.3	12.2	12.9	15.7	14.8
8/28	12.0	7.2	8.1	8.8	10.3	11.3	12.1	12.8	12.5	13.1	16.8	15.6
8/29	12.3	7.1	8.2	8.9	10.5	11.5	12.2	13.1	12.6	13.3	17.2	15.9
8/30	12.5	7.1	8.0	8.7	10.4	11.4	12.3	13.2	12.9	13.4	17.4	16.1
8/31	12.2	7.1	7.8	8.2	9.8	10.6	12.3	12.9	12.9	13.4	16.8	15.7
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	12.2	7.1	7.8	8.2	9.4	10.1	11.8	12.6	12.8	13.4	16.6	15.4
9/2	11.9	7.1	7.7	8.2	9.1	9.8	11.7	12.3	12.8	13.3	16.5	15.4
9/3	12.3	7.2	7.8	8.2	9.5	10.3	12.0	12.7	13.1	13.7	17.1	15.9
9/4	12.0	7.2	7.8	8.2	9.1	9.7	11.8	12.4	13.0	13.5	16.8	15.6
9/5	12.0	7.3	7.9	8.4	9.3	10.0	12.0	12.6	13.2	13.7	16.9	15.7
9/6	12.3	7.4	8.1	8.5	9.5	10.2	12.2	12.8	13.3	13.9	17.2	15.9
9/7	12.2	7.3	7.9	8.4	9.4	10.0	12.1	12.7	13.3	13.9	17.1	15.9
9/8	12.0	6.5	6.9	7.2	8.0	8.3	10.4	10.9	13.1	13.5	16.7	15.0
9/9	11.8	7.3	7.8	7.9	8.3	8.6	13.3	12.2	16.1	16.8	16.3	16.5
9/10	11.6	7.3	8.2	8.6	9.5	9.9	12.2	13.3	13.9	14.9	16.3	15.9
9/11	10.8	7.1	8.8	9.0	9.7	9.8	11.1	12.0	13.1	13.7	15.3	14.8
9/12	10.4	7.1	8.5	8.6	9.7	10.0	11.4	11.9	13.1	13.7	14.8	14.4
9/13	10.1	7.1	8.8	8.9	9.6	9.9	10.8	11.9	13.0	13.5	14.3	14.0
9/14	10.0	7.7	8.8	8.9	9.8	10.1	11.5	11.9	12.8	13.4	14.0	13.7
9/15	9.7	8.7	9.2	9.4	9.8	9.9	12.2	12.4	12.8	13.3	13.7	13.5
9/16	9.6	8.6	9.2	9.4	9.9	10.0	12.2	12.6	12.9	13.5	13.6	13.6
9/17	9.3	8.5	9.1	9.4	9.9	10.2	11.7	12.1	12.4	13.1	13.5	13.3
9/18	8.9	8.5	8.8	9.0	9.5	9.7	11.9	12.0	12.4	12.9	13.5	13.2
9/19	9.1	8.6	8.9	9.1	9.5	9.7	12.2	12.2	12.6	13.1	13.9	13.6
9/20	9.3	8.6	8.9	9.1	9.5	9.8	12.4	12.5	12.9	13.4	14.2	13.8
9/21	9.8	8.9	9.3	9.5	10.0	10.2	12.7	13.0	13.2	13.7	14.3	14.0
9/22	10.0	8.8	9.5	9.7	10.3	10.5	12.4	12.9	13.0	13.7	14.7	14.3
9/23	9.0	8.5	9.2	9.5	10.1	10.4	11.5	12.0	12.3	12.8	12.9	12.7
9/24	8.4	8.4	8.7	8.8	9.3	9.5	11.3	11.6	12.1	12.6	12.5	
9/25	8.3	8.5	8.8	8.9	9.1	9.3	11.6	11.7	12.1	12.6	12.7	
9/26	8.6	8.6	8.9	9.1	9.3	9.5	11.8	11.9	12.3	12.8	13.2	
9/27	8.7	8.6	8.9	9.1	9.4	9.6	12.1	12.2	12.5	13.0	13.6	
9/28	9.2	8.9	9.2	9.4	9.7	9.9	12.2	12.4	12.7	13.2	14.1	

9/29	9.8	8.8	9.2	9.5	9.9	10.1	12.4	12.6	12.8	13.2	14.0	
9/30	9.8	8.6	9.0	9.3	9.8	10.1	12.4	12.6	12.9	13.3	13.9	
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
10/1	9.7	8.7	9.3	9.3	9.7	9.9	12.2	12.6	12.9	13.3	13.4	
10/2	8.9	8.1	9.1	9.5	10.0	10.1	11.4	11.9	12.2	12.7	12.5	
10/3	7.3	7.7	8.0	8.0	8.3	8.4	10.5	10.4	11.1	11.5	10.4	
10/4	7.5	8.2	8.5	8.6	8.6	8.6	10.8	10.8	11.3	11.8	10.7	
10/5	7.1	7.7	7.9	8.1	8.4	8.5	11.1	10.7	11.3	11.5	10.0	
10/6	7.2	7.7	8.0	8.1	8.4	8.4	11.1	11.0	11.4	11.8	9.9	
10/7	7.4	7.7	8.0	8.1	8.4	8.5	11.1	11.0	11.5	11.7	10.1	
10/8	8.0	7.9	8.3	8.3	8.8	8.9	11.3	11.4	11.7	12.1	10.9	
10/9	8.3	7.9	8.4	8.6	9.1	9.2	11.1	11.3	11.6	12.0	11.4	
10/10	8.3	7.9	8.3	8.5	9.0	9.2	11.3	11.5	11.8	12.2	11.7	
10/11	7.5	7.8	8.0	8.1	8.3	8.5	11.0	11.0	11.3	11.7	10.9	
10/12	7.3	7.7	7.9	8.1	8.2	8.3	10.9	10.8	11.3	11.6	10.6	
10/13	6.6	7.4	7.6	7.6	7.6	7.7	10.7	10.5	11.0	11.3	10.5	
10/14	6.0	7.6	7.5	7.4	7.2	7.2	10.5	10.2	10.8	11.1	9.7	
10/15	6.2	8.0	8.0	7.8	7.6	7.5	10.6	10.3	10.8	11.1	9.5	
10/16	6.7	7.7	8.0	8.2	8.2	8.1	10.8	10.6	11.1	11.3	9.8	
10/17	6.9	7.2	7.4	7.6	7.7	7.8	10.8	10.6	11.2	11.4	10.0	
10/18	6.9	7.2	7.4	7.5	7.6	7.7	10.8	10.6	11.2	11.4	10.0	
10/19	6.8	7.8	7.7	7.5	7.4	7.4	10.6	10.5	11.0	11.3	10.0	
10/20	6.5	8.3	8.3	8.2	7.8	7.6	10.6	10.3	10.8	11.0	9.8	
10/21	6.3	10.5	9.6	8.5	7.9	7.7	10.6	10.1	10.7	10.8	9.5	
10/22	6.4	11.9	11.5	10.9	9.8	9.0	11.2	10.6	11.0	11.0	9.2	
10/23	6.7	10.6	11.0	11.3	10.5	10.0	11.4	11.1	11.3	11.3	9.4	
10/24	7.4	8.3	8.6	9.4	9.8	10.0	11.3	11.5	11.6	11.8	10.2	
10/25	7.7	8.4	8.6	8.7	9.0	9.1	11.1	11.2	11.4	11.7	10.4	11.0

10/26	8.5	7.5	8.7	9.0	9.5	9.5	10.7	11.1	11.2	11.7	10.5	10.7
10/27	7.5	6.8	7.4	7.8	8.1	8.3	10.4	10.4	10.8	11.1	9.7	9.9
10/28	7.7	6.8	8.1	8.0	8.7	8.8	9.9	10.3	10.5	11.0	9.3	9.5
10/29	7.3	6.6	7.6	7.7	8.2	8.3	9.5	9.9	10.2	10.5	8.9	9.0
10/30	7.2	6.7	7.5	7.5	8.1	8.2	9.6	9.8	10.3	10.6	8.9	9.1
10/31	7.2	6.8	7.8	7.6	8.2	8.3	9.2	9.6	10.1	10.5	8.8	9.0
Sultan 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	8.0	6.9				9.4	9.8	10.1	10.2	10.4	9.1	9.3
11/2	8.0	6.7				9.6	9.9	10.5	10.3	10.4	9.4	9.5
11/3	7.5	6.6				8.9	9.3	10.0	10.1	10.3	9.0	9.2
11/4	7.5	6.6				9.1	9.4	9.9	9.7	9.9	8.8	8.9
11/5	6.9	6.5				8.6	9.0	9.5	9.6	9.8	8.3	8.5
11/6	6.6	6.4				8.3	8.6	9.2	9.3	9.5	7.9	8.1
11/7	6.0	6.2				7.5	8.0	8.5	9.0	9.2	7.8	8.0
11/8	5.1	6.2				6.3	7.0	7.3	8.6	8.8	7.0	7.3
11/9	5.1	6.3				6.1	7.0	6.8	8.5	8.7	6.3	6.7
11/10	5.0	6.3				6.4	7.2	7.2	8.5	8.7	6.7	7.2
11/11	4.4	6.2				5.7	6.9	6.8	8.4	8.5	6.1	6.7
11/12	4.9	6.2				5.6	7.1	6.6	8.5	8.6	5.8	6.7
11/13	5.1	5.9				5.8	7.4	7.0	8.4	8.5	5.9	6.8
11/14	5.8	6.0				6.5	7.5	7.7	8.3	8.5	6.6	7.3
11/15	6.2	6.1				7.2	7.9	8.1	8.3	8.5	7.4	7.8
11/16	6.4	6.2				7.6	8.1	8.5	8.4	8.6	8.1	8.3
11/17	5.0	5.8				6.4	7.4	7.6	8.1	8.2	7.2	7.6
11/18	4.3	5.7				5.0	6.7	6.5	7.9	7.9	5.7	6.5
11/19	4.3	5.8				4.6	6.6	6.2	7.8	7.8	5.3	6.3
11/20	4.7	5.9				4.8	6.7	6.3	7.8	7.9	5.5	6.5
11/21	5.4	5.9				5.7	7.2	7.0	7.8	8.0	6.0	6.9

11/22	5.7	6.0				6.6	7.4	7.6	7.9	8.0	6.6	7.2
11/23	4.7	5.8				6.2	6.7	7.1	7.4	7.7	6.5	6.8
11/24	4.8	5.8				6.3	6.8	6.8	7.2	7.5	6.0	6.4
11/25	4.7	5.8				6.0	6.7	6.7	7.2	7.4	5.8	6.3
11/26	5.4	6.2				6.8	7.2	7.4	7.5	7.7	6.4	6.8
11/27	5.9	6.3				7.8	8.0	8.2	7.9	8.0	6.5	6.6
11/28	5.8	6.1				7.7	7.8	8.3	7.7	7.8	6.6	6.8
11/29	5.6	6.0				7.2	7.4	7.9	7.5	7.6	6.7	6.9
11/30	5.1	5.9				6.8	7.1	7.5	7.3	7.4	6.4	6.6

DATE	Sultan River										Skykomish River	
	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	4.9	5.9				6.4	6.8	7.1	7.2	7.3	6.3	6.5
12/2	4.7	5.8				6.3	6.7	7.0	7.1	7.2	6.2	6.4
12/3	3.8	5.7				5.2	6.1	6.1	6.8	6.8	5.5	5.8
12/4	3.1	5.2				4.0	5.6	5.2	6.6	6.6	4.1	4.9
12/5	2.5	5.7				3.2	5.2	4.6	6.4	6.3	3.4	4.3
12/6	2.3	5.8				2.8	5.0	4.2	6.1	6.1	2.8	4.0
12/7	2.2	5.6				2.8	4.9	4.2	5.8	5.9	2.4	3.6
12/8	3.1	5.8				3.9	5.3	4.9	5.8	5.9	3.1	4.0
12/9	3.5	5.7				4.5	5.5	5.3	5.8	5.9	3.8	4.5
12/10	3.7	5.7				5.1	5.5	5.6	5.9	6.0	4.4	5.0
12/11	3.8	5.8				5.6	5.7	5.9	5.9	6.1	4.8	5.1
12/12	4.3	5.5				6.0	6.0	6.2	6.0	6.1	4.8	5.0
12/13	4.2	5.5				5.8	5.9	6.2	6.0	6.0	5.1	5.3
12/14	4.6	5.3				6.2	6.2	6.5	6.1	6.1	5.4	5.6
12/15	4.3	5.1				5.7	5.8	6.3	5.9	5.9	5.6	5.7
12/16	4.7	5.5				6.1	6.1	6.5	5.9	6.0	5.7	5.8
12/17	4.7	5.5				6.6	6.4	6.9	6.1	6.1	6.0	6.0
12/18	4.7	5.3				6.6	6.5	7.0	6.1	6.1	5.9	6.0

12/19	4.8	5.3				6.6	6.4	7.0	6.0	6.0	5.8	5.9
12/20	4.9	5.4				6.6	6.4	7.0	6.0	6.0	6.1	6.1
12/21	3.7	5.0				5.4	5.6	6.2	5.6	5.6	5.3	5.4
12/22	3.7	5.0				5.0	5.2	5.5	5.4	5.5	4.9	5.0
12/23	3.5	5.0				5.2	5.3	5.7	5.4	5.5	4.8	5.0
12/24	3.7	4.9				5.2	5.3	5.7	5.4	5.4	4.5	4.8
12/25	3.5	4.8				4.8	5.0	5.1	5.1	5.2	4.2	4.5
12/26	3.4	4.8				4.9	5.1	5.2	5.1	5.2	4.4	4.6
12/27	3.4	4.8				4.9	5.1	5.4	5.2	5.2	4.4	4.7
12/28	3.1	4.7				4.7	5.0	5.2	5.1	5.2	4.5	4.7
12/29	3.0	5.0				5.5	5.5	5.8	5.7	5.6	4.9	5.2
12/30	3.7	4.7				5.6	5.7	6.0	5.8	5.7	4.7	4.9
12/31	3.0	4.4				4.6	4.8	4.9	4.9	4.9	4.3	4.4

## **APPENDIX C**

---

*2018 Seven-Day Average of the Daily Maximum (7-DAD Max) Water Temperature in Tabular Format*

DATE	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	Skykomish	Skykomish
	(SFK) 7 Day	7 Day Avg Max	Above 7 Day Avg Max	Below 7 Day Avg Max								
	Avg Max											
1/1	3.7	4.3				4.7	4.8	5.0	4.7	4.7	4.5	4.6
1/2	3.8	4.2				4.7	4.8	5.1	4.6	4.7	4.7	4.7
1/3	3.9	4.2				4.8	4.9	5.1	4.5	4.6	4.8	4.8
1/4	4.0	4.1				4.9	4.9	5.2	4.5	4.6	4.9	4.9
1/5	4.1	4.2				5.1	5.2	5.5	4.5	4.7	5.1	5.1
1/6	4.2	4.2				5.3	5.4	5.8	4.6	4.7	5.3	5.3
1/7	4.2	4.2				5.5	5.5	6.0	4.7	4.8	5.4	5.4
1/8	4.1	4.2				5.5	5.6	6.1	4.8	4.9	5.4	5.4
1/9	4.0	4.2				5.6	5.6	6.1	5.0	5.0	5.3	5.3
1/10	4.1	4.2				5.7	5.7	6.2	5.1	5.0	5.3	5.3
1/11	4.2	4.2				5.8	5.8	6.3	5.1	5.1	5.3	5.5
1/12	4.3	4.3				5.9	5.8	6.4	5.1	5.1	5.4	5.7
1/13	4.4	4.3				6.0	5.9	6.5	5.2	5.2	5.5	5.9
1/14	4.6	4.4				6.2	6.0	6.6	5.2	5.2	5.6	6.0
1/15	4.8	4.5				6.3	6.1	6.8	5.2	5.2	5.7	6.1
1/16	4.8	4.5				6.2	6.1	6.7	5.1	5.2	5.8	6.1
1/17	4.6	4.4				6.0	5.9	6.6	5.0	5.1	5.7	6.1
1/18	4.4	4.4				6.0	5.8	6.5	5.0	5.1	5.7	5.9
1/19	4.2	4.3				5.8	5.7	6.3	5.0	5.1	5.5	5.7
1/20	4.0	4.3				5.5	5.5	6.1	4.9	5.0	5.4	5.4
1/21	3.8	4.2				5.4	5.4	6.0	4.9	5.0	5.2	5.3
1/22	3.6	4.1				5.3	5.3	5.9	4.8	4.9	5.1	5.2
1/23	3.5	4.1				5.2	5.2	5.8	4.7	4.8	5.0	5.1
1/24	3.5	4.1				5.1	5.2	5.7	4.7	4.8	4.9	5.0

1/25	3.5	4.1				5.1	5.2	5.7	4.7	4.8	4.9	5.0
1/26	3.5	4.1				5.2	5.3	5.8	4.7	4.8	4.9	5.0
1/27	3.5	4.1				5.3	5.3	5.9	4.8	4.8	5.0	5.1
1/28	3.4	4.1				5.2	5.2	5.9	4.7	4.8	4.9	5.0
1/29	3.3	4.0				5.1	5.2	5.8	4.7	4.8	4.9	5.0
1/30	3.3	4.1				5.2	5.3	5.9	4.8	4.8	5.0	5.1
1/31	3.4	4.1				5.4	5.5	6.1	5.0	4.9	5.1	5.2
<b>RM 18.2</b>		<b>15.8</b>	<b>15.5</b>	<b>14.3</b>	<b>11.3</b>	<b>RM 9.8</b>	<b>RM 9.6</b>	<b>RM 4.9</b>	<b>RM 4.4</b>	<b>RM 0.2</b>	<b>Skykomish</b>	<b>Skykomish</b>
DATE	(SFK) 7 Day	7 Day Avg Max	Above 7 Day Avg Max	Below 7 Day Avg Max								
2/1	3.4	4.1				5.5	5.6	6.2	5.3	5.1	5.1	5.3
2/2	3.5	4.1				5.3	5.5	6.1	5.3	5.2	5.1	5.3
2/3	3.6	4.1				5.4	5.4	6.1	5.4	5.3	5.2	5.3
2/4	3.8	4.2				5.6	5.5	6.2	5.5	5.4	5.4	5.5
2/5	4.0	4.2				5.9	5.7	6.4	5.6	5.4	5.6	5.7
2/6	4.0	4.2				5.9	5.7	6.5	5.6	5.5	5.6	5.8
2/7	4.0	4.1				5.8	5.6	6.4	5.4	5.4	5.6	5.7
2/8	3.9	4.1				5.6	5.4	6.2	5.1	5.2	5.5	5.6
2/9	3.4	4.0				5.6	5.4	6.0	4.9	5.0	5.4	5.5
2/10	3.3	4.0				5.3	5.2	5.8	4.7	4.9	5.2	5.3
2/11	2.8	3.9				4.9	5.0	5.5	4.6	4.7	4.9	5.0
2/12	2.6	3.8				4.6	4.7	5.2	4.4	4.6	4.7	4.8
2/13	2.2	3.8				4.3	4.5	5.0	4.3	4.5	4.6	4.6
2/14	1.9	3.8				4.1	4.2	4.8	4.2	4.4	4.4	4.5
2/15	1.8	3.8				4.0	4.1	4.7	4.2	4.4	4.4	4.5
2/16	2.0	3.7				4.0	4.0	4.6	4.2	4.4	4.4	4.4
2/17	1.7	3.7				3.9	3.9	4.5	4.1	4.3	4.3	4.4

2/18	1.8	3.6				3.8	3.8	4.4	4.0	4.2	4.1	4.2
2/19	1.6	3.5				3.6	3.7	4.1	3.9	4.1	3.9	4.0
2/20	1.5	3.5				3.4	3.5	3.9	3.7	3.9	3.5	3.7
2/21	1.5	3.5				3.2	3.4	3.7	3.6	3.8	3.3	3.5
2/22	1.4	3.5				3.0	3.3	3.6	3.5	3.7	3.1	3.3
2/23	1.5	3.5				2.9	3.2	3.6	3.5	3.7	3.0	3.3
2/24	1.5	3.5				2.9	3.1	3.6	3.5	3.7	3.1	3.3
2/25	1.6	3.5				3.1	3.1	3.7	3.6	3.7	3.3	3.5
2/26	1.7	3.5				3.2	3.2	3.9	3.6	3.8	3.7	3.8
2/27	2.0	3.5				3.4	3.3	4.1	3.6	3.8	4.0	4.0
2/28	2.2	3.5				3.6	3.4	4.3	3.7	3.9	4.5	4.3
	<b>RM 18.2</b>	<b>15.8</b>	<b>RM 15.5</b>	<b>RM 14.3</b>	<b>RM 11.3</b>	<b>RM 9.8</b>	<b>RM 9.6</b>	<b>RM 4.9</b>	<b>RM 4.4</b>	<b>RM 0.2</b>	<b>Skykomish</b>	<b>Skykomish</b>
<b>DATE</b>	<b>(SFK) 7 Day Avg Max</b>	<b>7 Day Avg Max</b>	<b>Above 7 Day Avg Max</b>	<b>Below 7 Day Avg Max</b>								
3/1	2.3	3.5				3.8	3.4	4.4	3.6	3.8	4.7	4.4
3/2	2.4	3.5				3.9	3.5	4.5	3.6	3.8	4.9	4.5
3/3	2.6	3.5				4.1	3.6	4.6	3.6	3.8	5.2	4.8
3/4	2.7	3.5				4.1	3.6	4.6	3.8	3.9	5.4	4.9
3/5	2.7	3.5				4.1	3.6	4.6	3.9	4.0	5.3	5.0
3/6	2.7	3.5				4.2	3.7	4.7	4.1	4.2	5.4	5.1
3/7	2.8	3.5				4.2	3.8	4.8	4.4	4.3	5.4	5.2
3/8	2.9	3.5				4.3	3.9	4.9	4.7	4.5	5.7	5.6
3/9	3.0	3.5				4.3	4.0	5.0	5.0	4.8	6.0	5.9
3/10	3.1	3.6				4.4	4.1	5.1	5.2	5.1	6.0	6.0
3/11	3.2	3.6				4.5	4.2	5.2	5.4	5.3	6.1	6.1
3/12	3.4	3.6				4.6	4.3	5.3	5.5	5.5	6.2	6.3
3/13	3.5	3.7				4.7	4.4	5.5	5.6	5.6	6.5	6.5

3/14	3.6	3.7				4.7	4.4	5.5	5.7	5.7	6.6	6.6
3/15	3.6	3.8				4.8	4.5	5.5	5.7	5.8	6.5	6.6
3/16	3.6	3.8				4.8	4.5	5.5	5.7	5.8	6.4	6.5
3/17	3.7	3.8				4.8	4.5	5.5	5.6	5.8	6.5	6.6
3/18	3.7	3.8				4.9	4.5	5.5	5.7	5.8	6.7	6.8
3/19	3.7	3.9				4.9	4.6	5.5	5.7	5.9	6.7	6.7
3/20	3.6	3.9				4.8	4.5	5.5	5.6	5.9	6.6	6.6
3/21	3.5	3.9				4.8	4.5	5.3	5.5	5.8	6.5	6.5
3/22	3.4	3.9				4.8	4.5	5.3	5.4	5.6	6.4	6.4
3/23	3.2	3.9				4.7	4.4	5.2	5.2	5.5	6.3	6.2
3/24	3.0	3.9				4.6	4.4	5.1	5.1	5.3	6.0	6.0
3/25	2.9	3.9				4.6	4.3	5.1	5.1	5.3	5.9	5.8
3/26	3.0	4.0				4.8	4.4	5.2	5.1	5.3	5.9	5.9
3/27	3.1	4.0				4.9	4.4	5.4	5.2	5.4	6.1	6.0
3/28	3.3	4.0				5.2	4.5	5.7	5.4	5.6	6.4	6.3
3/29	3.4	4.1				5.3	4.6	5.8	5.5	5.7	6.6	6.5
3/30	3.4	4.1				5.4	4.7	5.9	5.5	5.8	6.6	6.5
3/31	3.6	4.1				5.5	4.8	6.0	5.5	5.8	6.7	6.6
	<b>RM 18.2</b>	<b>15.8</b>	<b>15.5</b>	<b>14.3</b>	<b>11.3</b>	<b>RM 9.8</b>	<b>RM 9.6</b>	<b>RM 4.9</b>	<b>RM 4.4</b>	<b>RM 0.2</b>	<b>Skykomish</b>	<b>Skykomish</b>
	(SFK) 7 Day	7 Day Avg	7 Day Avg	7 Day Avg	7 Day Avg	7 Day Avg	Above 7 Day Avg	Below 7 Day Avg				
DATE	Avg Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
4/1	3.6	4.1	4.4			5.5	4.8	5.9	5.3	5.7	6.7	6.5
4/2	3.5	4.2	4.4			5.4	4.8	5.9	5.2	5.6	6.6	6.5
4/3	3.6	4.2	4.4		5.1	5.6	4.9	6.1	5.2	5.6	6.7	6.5
4/4	3.4	4.3	4.5		5.1	5.5	5.0	6.1	5.2	5.5	6.7	6.5
4/5	3.4	4.4	4.6		5.1	5.5	5.1	6.2	5.2	5.5	6.5	6.3
4/6	3.7	4.5	4.7		5.4	5.7	5.3	6.5	5.4	5.6	6.7	6.5

4/7	3.7	4.7	4.8		5.6	5.9	5.4	6.8	5.6	5.8	6.8	6.7
4/8	3.7	4.8	4.9		5.7	6.1	5.6	7.0	5.8	5.9	6.9	6.8
4/9	3.7	4.8	4.9		5.7	6.1	5.8	7.1	5.8	6.0	6.8	6.8
4/10	3.6	4.7	4.9		5.6	5.9	5.8	6.9	5.8	5.9	6.5	6.5
4/11	3.6	4.7	4.8		5.6	5.9	5.8	6.8	5.7	5.9	6.2	6.3
4/12	3.8	4.7	4.9		5.7	6.1	5.8	7.0	5.8	6.0	6.3	6.4
4/13	3.7	4.7	4.9		5.6	5.9	5.8	6.8	5.8	5.9	6.2	6.3
4/14	3.6	4.7	4.7		5.5	5.8	5.7	6.7	5.7	5.9	6.1	6.2
4/15	3.7	4.6	4.8		5.5	5.9	5.6	6.8	5.8	6.0	6.3	6.4
4/16	3.8	4.6	4.9		5.7	6.1	5.6	7.0	5.8	6.1	6.5	6.6
4/17	4.1	4.6	4.9		5.9	6.3	5.7	7.3	5.9	6.2	6.8	6.9
4/18	4.2	4.6	5.0		5.9	6.4	5.8	7.5	5.9	6.3	7.1	7.1
4/19	4.3	4.5	5.0		6.0	6.6	5.8	7.5	5.9	6.3	7.4	7.3
4/20	4.6	4.5	5.0		6.2	6.9	5.9	7.8	6.0	6.4	7.9	7.7
4/21	5.0	4.5	5.2		6.5	7.2	6.0	8.1	6.3	6.7	8.3	8.1
4/22	5.2	4.5	5.3		6.7	7.5	6.2	8.4	6.4	6.9	8.6	8.4
4/23	5.4	4.5	5.3		6.9	7.8	6.4	8.6	6.7	7.1	8.8	8.6
4/24	5.4	4.5	5.4		6.9	7.8	6.6	8.9	6.9	7.3	8.9	8.7
4/25	5.4	4.5	5.4		7.0	7.8	6.7	8.9	7.1	7.4	8.9	8.7
4/26	5.3	4.5	5.4		6.9	7.7	6.8	8.9	7.2	7.5	8.7	8.5
4/27	5.1	4.5	5.3		6.8	7.5	6.8	8.7	7.2	7.5	8.3	8.3
4/28	4.9	4.5	5.3		6.6	7.2	6.8	8.5	7.1	7.4	8.0	8.0
4/29	5.0	4.5	5.3	5.8	6.6	7.3	6.8	8.5	7.2	7.5	8.0	8.0
4/30	5.1	4.5	5.3	5.8	6.6	7.3	6.8	8.5	7.2	7.6	8.0	8.0
RM RM 18.2		15.8	15.5	14.3	11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	Skykomish	Skykomish
DATE	(SFK) 7 Day	7 Day Avg	Above 7 Day Avg	Below 7 Day Avg								
	Avg Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max

5/1	5.2	4.5	5.3	5.9	6.8	7.4	6.8	8.5	7.2	7.6	8.1	8.1
5/2	5.5	4.6	5.4	6.0	7.0	7.7	6.9	8.8	7.4	7.9	8.2	8.2
5/3	5.7	4.6	5.4	6.1	7.1	7.8	7.0	9.0	7.5	8.1	8.4	8.4
5/4	6.1	4.6	5.5	6.3	7.2	8.0	7.0	9.2	7.6	8.3	8.6	8.7
5/5	6.5	4.7	5.6	6.3	7.5	8.4	7.2	9.5	7.9	8.6	8.9	8.9
5/6	6.3	4.8	5.6	6.2	7.4	8.3	7.3	9.6	8.1	8.7	8.7	8.8
5/7	6.1	4.9	5.6	6.2	7.3	8.0	7.3	9.4	8.2	8.9	8.4	8.4
5/8	6.1	5.0	5.7	6.4	7.2	7.9	7.3	9.2	8.3	9.1	8.2	8.3
5/9	6.3	5.1	5.9	6.7	7.4	8.2	7.4	9.4	8.6	9.5	8.4	8.4
5/10	6.6	5.3	6.0	6.9	7.8	8.6	7.5	9.7	9.0	10.2	8.6	8.7
5/11	6.8	5.4	6.2	7.1	8.1	9.0	7.7	10.0	9.4	10.9	8.7	8.9
5/12	6.9	5.5	6.3	7.1	8.4	9.3	7.9	10.2	9.7	11.4	8.9	9.0
5/13	7.1	5.5	6.3	7.1	8.4	9.3	8.1	10.4	9.8	11.6	9.0	9.1
5/14	7.3	5.6	6.4	7.1	8.4	9.3	8.2	10.5	9.8	11.6	9.2	9.4
5/15	7.4	5.6	6.4	6.8	8.4	9.4	8.2	10.5	9.9	11.8	9.3	9.5
5/16	7.3	5.6	6.2	6.6	8.1	8.9	8.2	10.2	9.8	11.6	9.1	9.3
5/17	7.1	5.6	6.1	6.4	7.7	8.4	8.0	9.8	9.5	11.2	9.0	9.1
5/18	7.1	5.6	6.0	6.5	7.4	8.1	7.8	9.5	9.3	10.9	9.0	9.1
5/19	7.2	5.6	6.1	6.7	7.5	8.1	7.8	9.5	9.3	10.9	9.2	9.3
5/20	7.6	5.6	6.2	6.9	7.8	8.6	7.8	9.6	9.4	11.3	9.4	9.5
5/21	8.0	5.6	6.2	6.9	8.1	8.9	7.9	9.9	9.5	11.6	9.6	9.7
5/22	8.2	5.7	6.2	6.9	8.1	8.9	8.0	10.1	9.6	11.7	9.9	10.0
5/23	8.1	5.7	6.3	7.1	8.2	9.1	8.1	10.1	9.6	11.7	10.1	10.2
5/24	8.5	5.7	6.4	7.1	8.5	9.5	8.2	10.4	9.8	12.1	10.3	10.4
5/25	8.6	5.7	6.3	7.0	8.6	9.6	8.3	10.6	9.9	12.3	10.4	10.5
5/26	8.3	5.7	6.2	6.8	8.3	9.2	8.3	10.3	9.8	12.0	10.2	10.3
5/27	8.2	5.7	6.2	6.6	8.1	8.9	8.1	10.0	9.7	11.7	10.2	10.3
5/28	7.9	5.6	6.1	6.6	7.8	8.7	8.0	9.7	9.5	11.6	10.1	10.2
5/29	7.8	5.6	6.1	6.8	7.8	8.6	7.9	9.6	9.5	11.5	10.0	10.1
5/30	8.0	5.6	6.2	6.6	8.1	9.0	7.9	9.8	9.7	11.7	10.3	10.4

5/31	7.8	5.7	6.1	6.6	7.8	8.6	7.9	9.8	9.8	11.5	10.3	10.4
DATE	RM 18.2 (SFK) 7 Day	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	Skykomish	Skykomish
	Avg Max	7 Day Avg Max	Above 7 Day Avg Max	Below 7 Day Avg Max								
6/1	7.7	5.7	6.1	6.6	7.8	8.5	7.9	9.7	9.7	11.4	10.3	10.4
6/2	7.8	5.7	6.1	6.7	7.9	8.6	7.8	9.6	9.8	11.5	10.5	10.6
6/3	7.9	5.7	6.2	6.8	8.0	8.7	7.9	9.8	9.8	11.7	10.6	10.7
6/4	8.1	5.8	6.2	6.8	8.1	8.8	7.9	10.0	10.0	11.9	10.8	10.9
6/5	8.1	5.8	6.3	6.7	8.1	8.8	8.0	10.0	10.0	11.9	11.0	11.1
6/6	7.9	5.8	6.2	6.7	7.9	8.5	7.9	9.8	10.0	11.8	10.9	11.0
6/7	7.7	5.8	6.3	6.8	7.9	8.5	7.9	9.5	9.9	11.8	10.7	10.8
6/8	7.7	5.8	6.3	6.8	7.9	8.5	7.9	9.6	9.8	11.8	10.7	10.8
6/9	7.7	5.8	6.4	6.8	7.9	8.5	7.9	9.6	9.7	11.6	10.7	10.8
6/10	7.4	6.0	6.4	7.0	7.6	8.1	7.8	9.4	9.4	11.1	10.5	10.5
6/11	7.3	6.2	6.7	7.2	7.8	8.2	7.8	9.4	9.3	10.8	10.3	10.3
6/12	7.2	6.3	6.9	7.7	8.1	8.5	7.8	9.5	9.2	10.7	10.2	10.3
6/13	7.6	6.6	7.2	8.4	8.7	9.3	8.1	10.0	9.2	10.9	10.6	10.6
6/14	8.2	6.8	7.6	8.9	9.5	10.2	8.5	10.6	9.2	11.1	11.2	11.2
6/15	8.6	7.1	8.0	9.6	10.2	11.0	8.9	11.2	9.3	11.4	11.5	11.6
6/16	9.1	7.4	8.5	10.4	11.0	11.9	9.3	11.7	9.6	11.8	12.1	12.1
6/17	9.6	7.6	9.0	10.7	12.2	13.1	9.7	12.4	9.9	12.4	12.6	12.6
6/18	9.9	7.8	9.2	10.8	12.7	13.7	10.1	12.8	10.1	12.5	13.0	13.0
6/19	10.3	7.8	9.3	10.6	12.9	14.0	10.3	12.9	10.2	12.5	13.2	13.2
6/20	10.1	7.8	9.3	10.8	12.7	13.7	10.4	12.8	10.2	12.3	13.1	13.1
6/21	10.3	7.9	9.4	10.6	13.0	13.9	10.3	12.7	10.3	12.3	13.2	13.2
6/22	10.1	7.9	9.3	10.4	12.8	13.7	10.2	12.5	10.4	12.0	13.2	13.2
6/23	9.9	7.7	9.1	9.9	12.6	13.5	10.1	12.3	10.3	11.8	13.1	13.1

6/24	9.6	7.5	8.8	9.7	11.9	12.8	10.1	11.9	10.2	11.4	12.8	12.8
6/25	9.4	7.4	8.6	9.6	11.6	12.5	9.9	11.7	10.0	11.5	12.7	12.7
6/26	9.3	7.4	8.6	9.6	11.4	12.3	9.8	11.6	10.1	11.4	12.6	12.6
6/27	9.2	7.4	8.6	9.3	11.3	12.1	9.8	11.5	10.1	11.3	12.4	12.4
6/28	8.8	7.3	8.5	9.2	10.8	11.6	9.8	11.3	10.0	11.0	12.1	12.1
6/29	8.6	7.3	8.5	9.3	10.5	11.4	9.7	11.2	10.0	11.0	12.0	11.9
6/30	8.6	7.4	8.6	9.5	10.6	11.4	9.7	11.3	10.1	11.2	12.1	12.1
<b>RM</b>		<b>RM</b>		<b>RM</b>		<b>RM</b>						
<b>DATE</b>	<b>RM 18.2 (SFK) 7 Day</b>	<b>15.8</b>	<b>15.5</b>	<b>14.3</b>	<b>11.3</b>	<b>RM 9.8</b>	<b>RM 9.6</b>	<b>RM 4.9</b>	<b>RM 4.4</b>	<b>RM 0.2</b>	<b>Skykomish</b>	<b>Skykomish</b>
<b>DATE</b>	Avg Max	7 Day Avg Max	7 Day Avg Max	7 Day Avg Max	7 Day Avg Max	7 Day Avg Max	7 Day Avg Max	7 Day Avg Max	7 Day Avg Max	7 Day Avg Max	Above 7 Day Avg Max	Below 7 Day Avg Max
7/1	8.8	7.6	8.7	10.1	10.8	11.6	9.7	11.4	10.3	11.4	12.3	12.3
7/2	9.3	7.8	9.1	10.5	11.6	12.4	9.9	11.8	10.6	11.8	12.9	12.8
7/3	9.7	7.9	9.4	10.6	12.3	13.1	10.1	12.4	10.8	12.3	13.5	13.4
7/4	9.9	7.9	9.6	10.9	12.7	13.6	10.3	12.7	11.0	12.5	14.1	14.0
7/5	10.4	8.1	9.7	11.3	13.2	14.2	10.5	13.0	11.1	12.9	14.6	14.5
7/6	11.0	8.2	10.0	11.2	13.8	14.7	10.6	13.3	11.2	13.1	15.1	14.9
7/7	11.1	8.3	10.0	11.5	13.8	14.7	10.8	13.5	11.3	13.1	15.3	15.2
7/8	11.4	8.2	10.1	11.6	14.3	15.1	10.9	13.6	11.2	13.4	15.7	15.6
7/9	11.6	8.3	10.1	11.8	14.4	15.2	11.0	13.8	11.3	13.4	16.0	15.8
7/10	11.9	8.4	10.2	12.3	14.6	15.4	11.0	13.8	11.3	13.5	16.4	16.1
7/11	12.5	8.5	10.5	12.5	15.2	16.0	11.1	14.2	11.4	13.9	16.9	16.6
7/12	13.7	8.6	10.7	12.7	15.5	16.4	11.3	14.4	11.6	14.0	17.4	17.1
7/13	12.1	8.7	10.8	13.2	15.8	16.7	11.4	14.6	11.7	14.2	17.8	17.5
7/14	13.7	8.8	11.1	13.1	16.3	17.2	11.6	14.9	11.8	14.4	18.3	17.9
7/15	13.8	8.7	11.1	12.7	16.2	17.2	11.7	15.0	11.9	14.3	18.6	18.2
7/16	12.5	8.5	10.7	12.4	15.7	16.8	11.7	14.6	11.9	14.0	18.5	18.0
7/17	13.1	8.3	10.5	12.2	15.3	16.5	11.7	14.5	11.8	13.9	18.5	18.0

7/18	14.0	8.2	10.2	12.0	14.9	16.2	11.6	14.3	11.8	13.8	18.5	17.9
7/19	14.0	8.0	10.1	11.9	14.7	16.0	11.6	14.2	11.8	13.8	18.5	17.9
7/20	12.4	7.9	10.0	11.7	14.6	15.9	11.5	14.1	11.8	13.7	18.6	17.7
7/21	13.4	7.7	9.8	11.7	14.5	15.8	11.5	14.1	11.7	13.3	18.8	17.5
7/22	14.1	7.6	9.7	12.0	14.6	15.9	11.6	14.2	11.8	13.3	19.1	17.5
7/23	14.7	7.6	9.9	12.1	15.0	16.3	11.7	14.6	11.8	13.5	19.6	17.8
7/24	15.0	7.6	9.9	12.1	15.2	16.5	11.9	14.8	11.9	13.4	20.0	17.9
7/25	15.5	7.6	9.9	12.0	15.3	16.6	12.1	15.0	12.0	13.3	20.4	18.1
7/26	15.5	7.5	9.9	11.9	15.3	16.7	12.3	15.1	12.0	13.2	20.8	18.2
7/27	14.9	7.5	9.8	11.9	15.2	16.6	12.4	15.2	12.1	13.2	21.0	18.4
7/28	15.1	7.5	9.8	11.8	15.2	16.6	12.5	15.3	12.3	13.7	21.2	18.9
7/29	15.1	7.5	9.7	11.4	15.0	16.2	12.6	15.1	12.5	13.8	21.2	18.9
7/30	15.2	7.4	9.5	11.0	14.4	15.6	12.6	14.9	12.5	13.8	20.8	18.8
7/31	15.4	7.4	9.3	10.9	13.9	15.2	12.5	14.6	12.6	13.9	20.5	18.6
	RM 18.2	15.8	15.5	14.3	11.3	RM 9.8	RM 9.6	RM 4.9	RM 4.4	RM 0.2	Skykomish	Skykomish
	(SFK) 7 Day	7 Day Avg Max	Above 7 Day Avg Max	Below 7 Day Avg Max								
DATE	Avg Max	7.4	9.2	10.8	13.8	15.0	12.5	14.5	12.7	14.2	20.3	18.6
8/1	15.9	7.4	9.2	10.8	13.8	15.0	12.5	14.5	12.7	14.2	20.3	18.6
8/2	16.3	7.3	9.1	10.7	13.6	14.7	12.5	14.4	12.9	14.5	20.2	18.7
8/3	16.4	7.3	9.1	10.7	13.4	14.5	12.5	14.3	12.9	14.8	20.0	18.8
8/4	16.4	7.3	9.1	10.8	13.3	14.4	12.5	14.3	12.9	14.8	20.1	18.6
8/5	15.3	7.5	9.2	11.2	13.5	14.7	12.6	14.5	13.0	14.9	20.4	18.8
8/6	15.8	7.6	9.5	11.5	13.9	15.2	12.7	14.9	13.2	15.3	20.9	19.2
8/7	16.4	7.7	9.7	11.3	14.3	15.5	12.9	15.2	13.3	15.4	21.5	19.5
8/8	16.5	7.7	9.6	11.2	14.1	15.3	13.1	15.2	13.4	15.3	21.6	19.5
8/9	16.3	7.7	9.6	11.1	13.9	15.1	13.2	15.2	13.5	15.3	21.4	19.4
8/10	16.1	7.7	9.5	10.9	13.7	14.9	13.2	15.1	13.6	15.2	21.2	19.2

8/11	15.9	7.7	9.5	10.7	13.5	14.7	13.3	15.0	13.7	15.2	20.9	19.0
8/12	15.7	7.7	9.4	10.6	13.2	14.4	13.3	14.9	13.7	15.2	20.7	18.8
8/13	15.5	7.6	9.3	10.5	13.0	14.2	13.3	14.9	13.8	15.3	20.4	18.6
8/14	15.1	7.6	9.2	10.6	12.8	14.0	13.3	14.8	13.9	15.3	20.0	18.5
8/15	15.1	7.6	9.3	10.6	12.8	14.0	13.4	14.8	14.0	15.5	19.9	18.5
8/16	15.1	7.7	9.3	10.6	12.8	14.0	13.4	14.9	14.1	15.6	19.9	18.4
8/17	15.1	7.7	9.3	10.5	12.8	14.0	13.5	15.0	14.2	15.7	19.9	18.4
8/18	15.1	7.7	9.3	10.5	12.7	13.9	13.6	15.0	14.2	15.8	19.8	18.4
8/19	15.2	7.7	9.2	10.2	12.7	13.8	13.6	15.0	14.3	15.9	19.7	18.4
8/20	14.9	7.6	9.1	10.0	12.4	13.5	13.5	14.9	14.2	15.6	19.4	18.2
8/21	14.6	7.6	9.0	9.7	12.1	13.2	13.3	14.6	13.9	15.3	19.2	17.9
8/22	14.3	7.5	8.8	9.4	11.7	12.7	13.1	14.3	13.6	14.9	18.8	17.5
8/23	13.9	7.4	8.6	9.4	11.3	12.2	12.8	13.9	13.3	14.4	18.2	16.9
8/24	13.6	7.3	8.5	9.4	11.2	12.1	12.7	13.7	13.1	14.2	18.0	16.7
8/25	13.4	7.3	8.5	9.3	11.1	12.0	12.5	13.6	12.9	14.0	17.8	16.6
8/26	13.1	7.2	8.4	9.4	11.0	11.9	12.4	13.4	12.7	13.8	17.6	16.4
8/27	13.0	7.2	8.5	9.4	11.0	12.0	12.4	13.4	12.7	14.0	17.6	16.4
8/28	13.0	7.3	8.5	9.4	11.0	12.0	12.4	13.4	12.8	14.0	17.6	16.4
8/29	13.2	7.3	8.5	9.6	11.1	12.1	12.5	13.5	12.9	14.3	17.7	16.5
8/30	13.5	7.4	8.6	9.4	11.3	12.3	12.7	13.7	13.1	14.6	18.1	16.9
8/31	13.6	7.4	8.5	9.3	11.2	12.2	12.7	13.8	13.1	14.7	18.3	17.0
<b>DATE</b>	<b>RM 18.2 (SFK) 7 Day</b>	<b>RM 15.8</b>	<b>RM 15.5</b>	<b>RM 14.3</b>	<b>RM 11.3</b>	<b>RM 9.8</b>	<b>RM 9.6</b>	<b>RM 4.9</b>	<b>RM 4.4</b>	<b>RM 0.2</b>	<b>Skykomish</b>	<b>Skykomish</b>
		7 Day Avg	7 Day Avg	7 Day Avg	7 Day Avg	7 Day Avg	7 Day Avg	7 Day Avg	7 Day Avg	7 Day Avg	Above 7 Day Avg	Below 7 Day Avg
<b>Avg Max</b>	<b>Max</b>	<b>Max</b>	<b>Max</b>	<b>Max</b>	<b>Max</b>	<b>Max</b>	<b>Max</b>	<b>Max</b>	<b>Max</b>	<b>Max</b>	<b>Max</b>	<b>Max</b>
9/1	13.7	7.4	8.5	9.2	10.9	12.0	12.7	13.7	13.2	14.8	18.2	16.9
9/2	13.6	7.5	8.4	9.2	10.7	11.8	12.7	13.6	13.3	14.8	18.2	17.0
9/3	13.6	7.5	8.4	9.3	10.7	11.6	10.9	13.6	13.4	15.0	18.2	17.0

9/4	13.7	7.5	8.4	9.2	10.6	11.6	11.6	13.6	13.5	15.2	18.3	17.1
9/5	13.5	7.5	8.4	9.2	10.5	11.4	12.8	13.6	13.8	15.3	18.2	17.0
9/6	13.4	7.5	8.4	9.2	10.3	11.2	13.1	13.7	14.3	15.7	18.2	17.1
9/7	13.1	7.5	8.4	9.2	10.2	10.9	13.2	13.7	14.4	15.9	18.0	17.0
9/8	12.7	7.5	8.6	9.1	10.1	10.8	13.1	13.6	14.4	15.8	17.6	16.8
9/9	12.3	7.4	8.6	9.1	10.1	10.6	12.9	13.4	14.4	15.8	17.3	16.5
9/10	11.9	7.4	8.7	9.1	10.0	10.4	12.6	13.1	14.3	15.5	16.7	16.1
9/11	11.4	7.6	8.8	9.3	10.0	10.3	12.6	13.0	14.2	15.4	16.2	15.7
9/12	11.2	7.8	9.1	9.4	10.1	10.4	12.6	13.0	13.9	15.1	15.8	15.4
9/13	10.7	8.0	9.2	9.5	10.2	10.5	12.3	12.8	13.4	14.5	15.4	14.9
9/14	10.4	8.2	9.4	9.5	10.3	10.6	12.1	12.6	13.2	14.2	15.0	14.6
9/15	10.2	8.4	9.3	9.6	10.3	10.6	12.2	12.6	13.1	14.1	14.9	14.5
9/16	10.1	8.6	9.4	9.5	10.3	10.7	12.4	12.7	13.0	14.1	14.8	14.5
9/17	10.0	8.8	9.4	9.6	10.2	10.7	12.6	12.9	13.0	14.1	14.8	14.5
9/18	9.9	8.9	9.4	9.7	10.3	10.7	12.6	13.0	13.1	14.1	14.8	14.5
9/19	9.9	8.9	9.5	9.8	10.4	10.8	12.7	13.0	13.1	14.2	15.0	14.7
9/20	9.9	8.9	9.5	9.7	10.4	10.9	12.6	12.9	13.1	14.1	15.0	14.6
9/21	9.8	8.8	9.4	9.7	10.3	10.7	12.5	12.9	13.0	14.0	14.9	14.4
9/22	9.7	8.8	9.5	9.7	10.2	10.6	12.4	12.8	13.0	13.9	14.7	14.4
9/23	9.6	8.9	9.5	9.8	10.2	10.6	12.4	12.8	12.9	13.9	14.6	14.3
9/24	9.6	8.9	9.5	9.8	10.1	10.6	12.4	12.7	12.9	13.8	14.6	
9/25	9.5	8.9	9.5	9.7	10.1	10.6	12.4	12.7	12.8	13.8	14.7	
9/26	9.9	8.9	9.4	9.6	10.0	10.6	12.4	12.6	12.8	13.8	14.6	
9/27	9.6	8.9	9.4	9.7	10.0	10.5	12.5	12.7	12.9	13.8	14.7	
9/28	9.4	9.0	9.5	9.8	10.0	10.5	12.6	12.8	12.9	13.8	14.7	
9/29	9.1	9.0	9.7	9.7	10.2	10.5	12.5	12.8	13.0	13.8	14.6	
9/30	8.6	8.9	9.6	9.7	10.0	10.3	12.3	12.6	12.8	13.5	14.1	
	<b>RM 18.2</b>	<b>15.8</b>	<b>15.5</b>	<b>14.3</b>	<b>11.3</b>	<b>RM 9.8</b>	<b>RM 9.6</b>	<b>RM 4.9</b>	<b>RM 4.4</b>	<b>RM 0.2</b>	<b>Skykomish</b>	<b>Skykomish</b>

<b>DATE</b>	(SFK) 7 Day	7 Day Avg	<b>Above</b>	<b>Below</b>							
	Avg Max	Max	Max	Max	Max	Max	Max	Max	Max	7 Day Avg	7 Day Avg
10/1	8.1	9.1	9.7	9.6	9.9	10.1	12.1	12.4	12.6	13.3	13.7
10/2	8.1	8.9	9.5	9.4	9.8	9.8	11.9	12.1	12.4	13.0	13.0
10/3	8.1	8.7	9.3	9.2	9.5	9.5	11.7	11.8	12.2	12.8	12.3
10/4	8.1	8.6	9.2	9.0	9.4	9.4	11.5	11.6	12.0	12.6	11.8
10/5	7.9	8.4	8.9	8.8	9.2	9.2	11.4	11.5	11.8	12.4	11.4
10/6	7.6	8.4	8.7	8.8	9.0	9.1	11.3	11.3	11.7	12.3	11.2
10/7	7.4	8.4	8.7	8.6	9.1	9.2	11.4	11.5	11.8	12.4	11.4
10/8	7.3	8.1	8.4	8.5	9.0	9.2	11.4	11.5	11.8	12.4	11.5
10/9	7.2	8.1	8.4	8.5	9.0	9.2	11.4	11.5	11.8	12.4	11.7
10/10	7.1	8.1	8.4	8.4	8.9	9.1	11.3	11.5	11.7	12.4	11.8
10/11	7.1	8.1	8.3	8.3	8.7	8.9	11.2	11.4	11.6	12.3	11.8
10/12	7.1	8.1	8.3	8.3	8.5	8.7	11.2	11.3	11.5	12.3	11.7
10/13	7.1	8.1	8.3	8.2	8.4	8.6	11.1	11.2	11.5	12.3	11.6
10/14	7.1	8.0	8.2	8.1	8.3	8.4	11.0	11.1	11.4	12.2	11.3
10/15	7.2	7.9	8.1	8.0	8.1	8.3	11.0	11.0	11.4	12.2	11.2
10/16	7.3	7.9	8.1	8.0	8.0	8.2	11.0	11.0	11.3	12.1	11.0
10/17	7.5	8.0	8.2	8.3	8.0	8.2	11.0	10.9	11.3	12.0	10.9
10/18	7.7	8.6	8.7	8.7	8.2	8.2	11.0	10.9	11.3	12.0	10.7
10/19	7.9	9.1	9.1	9.2	8.5	8.5	11.1	11.0	11.3	11.9	10.6
10/20	7.9	9.6	9.6	9.5	8.9	8.8	11.2	11.1	11.3	11.9	10.5
10/21	8.0	9.8	9.7	9.7	9.3	9.1	11.3	11.2	11.4	11.9	10.5
10/22	8.0	9.9	9.9	9.9	9.5	9.3	11.3	11.2	11.4	11.8	10.4
10/23	8.0	9.9	10.0	9.9	9.8	9.5	11.2	11.2	11.4	11.8	10.4
10/24	7.9	9.7	9.9	9.7	9.9	9.7	11.2	11.2	11.4	11.8	10.3
10/25	7.8	9.0	9.5	9.3	9.9	9.8	11.1	11.2	11.4	11.8	10.3
10/26	7.8	8.3	9.0	8.7	9.6	9.6	10.8	11.1	11.2	11.6	10.2
											10.6

10/27	7.8	7.5	8.4	8.3	9.2	9.3	10.6	10.9	11.1	11.5	10.0	10.4
10/28	7.7	7.3	8.3	8.3	8.9	9.1	10.3	10.6	10.9	11.2	9.8	10.0
10/29	7.5	7.1	8.4	8.4	9.0	9.1	10.1	10.5	10.7	11.1	9.6	9.8
10/30	7.1	6.9	8.4	8.4	9.0	9.1	10.0	10.4	10.5	10.8	9.4	9.6
10/31	6.6	6.9	8.5	7.0	9.0	9.1	9.8	10.3	10.4	10.7	9.3	9.5
<b>RM 18.2</b>		<b>RM 15.8</b>	<b>RM 15.5</b>	<b>RM 14.3</b>	<b>RM 11.3</b>	<b>RM 9.8</b>	<b>RM 9.6</b>	<b>RM 4.9</b>	<b>RM 4.4</b>	<b>RM 0.2</b>	<b>Skykomish</b>	<b>Skykomish</b>
<b>DATE</b>	<b>RM (SFK) 7 Day</b>	7 Day Avg Max	7 Day Avg Max	7 Day Avg Max	7 Day Avg Max	7 Day Avg Max	7 Day Avg Max	<b>Above 7 Day Avg Max</b>	<b>Below 7 Day Avg Max</b>			
	<b>Avg Max</b>											
11/1	7.8	6.9				9.2	9.8	10.2	10.3	10.5	9.2	9.3
11/2	7.8	6.8				9.2	9.7	10.2	10.2	10.4	9.1	9.3
11/3	7.7	6.8				9.2	9.5	10.0	10.0	10.2	9.0	9.1
11/4	7.5	6.7				9.0	9.4	9.9	9.9	10.1	8.9	9.0
11/5	7.1	6.6				8.6	9.0	9.5	9.6	9.9	8.6	8.7
11/6	6.6	6.5				8.1	8.6	9.1	9.4	9.6	8.1	8.3
11/7	6.3	6.4				7.8	8.3	8.6	9.1	9.4	7.8	8.1
11/8	5.9	6.4				7.3	8.0	8.2	9.0	9.2	7.5	7.8
11/9	5.6	6.4				6.9	7.7	7.9	8.8	9.0	7.2	7.6
11/10	5.4	6.3				6.6	7.5	7.6	8.7	8.9	6.9	7.4
11/11	5.4	6.3				6.5	7.5	7.5	8.5	8.8	6.8	7.3
11/12	5.5	6.2				6.6	7.5	7.6	8.5	8.7	6.8	7.4
11/13	5.7	6.3				6.8	7.7	7.8	8.5	8.7	7.1	7.6
11/14	5.8	6.3				6.9	7.8	7.9	8.4	8.7	7.3	7.7
11/15	5.8	6.2				6.8	7.7	7.9	8.4	8.6	7.2	7.7
11/16	5.7	6.1				6.6	7.6	7.8	8.3	8.5	7.1	7.6
11/17	5.6	6.1				6.5	7.6	7.7	8.2	8.4	7.1	7.6
11/18	5.5	6.1				6.4	7.5	7.6	8.1	8.3	7.0	7.5
11/19	5.5	6.1				6.3	7.4	7.5	8.0	8.3	6.9	7.4

11/20	5.2	5.9				6.1	7.2	7.4	7.9	8.1	6.6	7.2
11/21	5.1	5.9				6.0	7.1	7.2	7.8	8.0	6.4	7.0
11/22	5.2	6.0				6.1	7.1	7.2	7.7	7.9	6.4	6.9
11/23	5.4	6.0				6.4	7.2	7.4	7.7	7.9	6.5	7.0
11/24	5.5	6.1				6.9	7.4	7.6	7.7	7.9	6.6	7.0
11/25	5.5	6.1				7.1	7.5	7.8	7.7	7.9	6.6	7.0
11/26	5.5	6.1				7.2	7.5	7.8	7.7	7.8	6.6	6.9
11/27	5.6	6.1				7.3	7.5	7.8	7.6	7.8	6.6	6.8
11/28	5.6	6.1				7.2	7.5	7.9	7.6	7.8	6.6	6.8
11/29	5.6	6.1				7.3	7.5	7.9	7.6	7.7	6.7	6.8
11/30	5.4	6.0				7.1	7.3	7.7	7.5	7.6	6.6	6.7
<b>RM 18.2</b>		<b>15.8</b>	<b>15.5</b>	<b>14.3</b>	<b>11.3</b>	<b>RM 9.8</b>	<b>RM 9.6</b>	<b>RM 4.9</b>	<b>RM 4.4</b>	<b>RM 0.2</b>	<b>Skykomish</b>	<b>Skykomish</b>
<b>DATE</b>	<b>(SFK) 7 Day</b>	7 Day Avg	7 Day Avg	7 Day Avg	7 Day Avg	7 Day Avg	Above 7 Day Avg	Below 7 Day Avg				
	<b>Avg Max</b>	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
12/1	5.0	5.9				6.5	7.0	7.3	7.3	7.4	6.3	6.5
12/2	4.5	5.9				5.9	6.6	6.8	7.1	7.2	5.8	6.2
12/3	4.0	5.9				5.2	6.2	6.3	6.9	7.0	5.3	5.8
12/4	3.6	5.8				4.7	5.9	5.8	6.7	6.8	4.8	5.4
12/5	3.4	5.8				4.4	5.7	5.5	6.5	6.6	4.3	5.0
12/6	3.2	5.8				4.1	5.5	5.3	6.3	6.4	4.0	4.8
12/7	3.2	5.8				4.1	5.4	5.2	6.2	6.2	3.8	4.6
12/8	3.3	5.9				4.3	5.5	5.2	6.1	6.2	3.9	4.6
12/9	3.5	5.8				4.7	5.6	5.4	6.0	6.1	4.1	4.7
12/10	3.8	5.8				5.1	5.7	5.7	6.0	6.1	4.4	4.9
12/11	4.1	5.7				5.6	5.9	6.0	6.0	6.1	4.8	5.2
12/12	4.3	5.6				5.8	6.0	6.2	6.0	6.1	5.2	5.4
12/13	4.4	5.6				6.1	6.1	6.4	6.0	6.1	5.4	5.6

12/14	4.6	5.6				6.3	6.2	6.6	6.1	6.1	5.6	5.7
12/15	4.7	5.5				6.4	6.3	6.7	6.1	6.1	5.7	5.8
12/16	4.8	5.4				6.5	6.4	6.8	6.1	6.1	5.8	5.9
12/17	4.9	5.5				6.6	6.4	6.9	6.1	6.1	6.0	6.0
12/18	4.8	5.4				6.5	6.4	6.9	6.1	6.1	6.0	6.0
12/19	4.7	5.4				6.4	6.3	6.8	6.0	6.0	5.9	5.9
12/20	4.6	5.3				6.3	6.2	6.7	5.9	6.0	5.7	5.8
12/21	4.4	5.2				6.1	6.0	6.5	5.8	5.9	5.6	5.7
12/22	4.2	5.1				5.9	5.8	6.3	5.7	5.7	5.3	5.5
12/23	4.0	5.1				5.6	5.6	6.0	5.5	5.6	5.1	5.3
12/24	3.8	5.0				5.4	5.4	5.8	5.4	5.5	4.9	5.1
12/25	3.7	4.9				5.2	5.3	5.6	5.3	5.4	4.7	4.9
12/26	3.7	4.9				5.3	5.4	5.7	5.5	5.5	4.8	5.0
12/27	3.7	4.9				5.4	5.5	5.8	5.6	5.6	4.8	5.0
12/28	3.7	4.8				5.3	5.4	5.7	5.5	5.5	4.7	4.9
12/29	3.6	4.8				5.3	5.4	5.7	5.5	5.5	4.7	4.9
12/30	3.7	4.8				5.3	5.4	5.7	5.5	5.4	4.8	4.9
12/31	3.7	4.8				5.4	5.5	5.7	5.5	5.4	4.8	5.0

## **APPENDIX D**

---

### *Consultation Documentation Regarding Draft Report*

## Presler, Dawn

---

**From:** Presler, Dawn  
**Sent:** Thursday, May 23, 2019 9:36 AM  
**To:** 'Ford, Jennifer - FS'; 'Janet Curran - NOAA Federal'; 'Asman, Lindsy'; 'Anne Savery'; "brock.applegate@dfw.wa.gov" (brock.applegate@dfw.wa.gov); "James (ECY) Pacheco" (JPAC461@ECY.WA.GOV); 'Rustay, Michael'; 'okeefe@americanwhitewater.org'; 'Jim Miller (JMILLER@everettwa.gov)'; 'nate.morgan@ci.sultan.wa.us'  
**Cc:** Binkley, Keith  
**Subject:** JHP (FERC No. 2157) - DRAFT FHMP Annual Report for your 30-day review

Dear ARC,

Just noticed that I sent this out with the wrong header on Monday. Want to make sure it is flagged properly for your review.

Dawn

---

**From:** Presler, Dawn  
**Sent:** Monday, May 20, 2019 10:24 AM  
**To:** 'Ford, Jennifer - FS' <jford@fs.fed.us>; 'Janet Curran - NOAA Federal' <janet.curran@noaa.gov>; 'Asman, Lindsy' <lindsay\_asman@fws.gov>; 'Anne Savery' <asavery@tulaliptribes-nsn.gov>; "brock.applegate@dfw.wa.gov" (brock.applegate@dfw.wa.gov) <brock.applegate@dfw.wa.gov>; "James (ECY) Pacheco" (JPAC461@ECY.WA.GOV) <JPAC461@ECY.WA.GOV>; 'Rustay, Michael' <mike.rustay@co.snohomish.wa.us>; 'okeefe@americanwhitewater.org' <okeefe@americanwhitewater.org>; 'Jim Miller (JMILLER@everettwa.gov)' <JMILLER@everettwa.gov>; 'nate.morgan@ci.sultan.wa.us' <nate.morgan@ci.sultan.wa.us>  
**Cc:** Binkley, Keith <KMBinkley@SNOPUD.com>  
**Subject:** RE: JHP (FERC No. 2157) - cc: ALA-9 Water Year 2019-2020 Reach 3 instream flow schedule

Dear ARC Members:

Attached is the draft Fisheries and Habitat Monitoring Plan 2018 Annual Report for your 30-day review. Comments, if any, can be email to me (cc: to Keith) by June 19. Any questions regarding the report can be direct to Keith. Thank you.



Sincerely,

*Dawn Presler*  
Sr. Environmental Coordinator  
Generation – Natural Resources  
(425) 783-1709

PUD No. 1 of Snohomish County  
PO Box 1107  
Everett, WA 98206-1107

## Presler, Dawn

---

**From:** Asman, Lindsy <lindsay\_asman@fws.gov>  
**Sent:** Friday, June 07, 2019 7:30 AM  
**To:** Presler, Dawn  
**Cc:** Ford, Jennifer - FS; Janet Curran - NOAA Federal; Anne Savery; 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov); 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV); Rustay, Michael; okeefe@americanwhitewater.org; Jim Miller (JMILLER@everettwa.gov); nate.morgan@ci.sultan.wa.us; Binkley, Keith  
**Subject:** Re: [EXTERNAL] JHP (FERC No. 2157) - DRAFT FHMP Annual Report for your 30-day review

**CAUTION: THIS EMAIL IS FROM AN EXTERNAL SENDER.**  
**Do not click on links or open attachments if the sender is unknown or the email is suspect.**

---

I've reviewed the attached report and I have no comments. Thank you.

Lindsay Aurora Asman (Wright) M.E.S.  
U.S. Fish and Wildlife Service  
Conservation and Hydropower Planning  
510 Desmond Drive SE, Lacey, WA 98503  
360-753-6037 [lindsay\\_asman@fws.gov](mailto:lindsay_asman@fws.gov)

*"The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people."*

On Thu, May 23, 2019 at 9:38 AM Presler, Dawn <[DJPresler@snopud.com](mailto:DJPresler@snopud.com)> wrote:

Dear ARC,

Just noticed that I sent this out with the wrong header on Monday. Want to make sure it is flagged properly for your review.

Dawn

---

**From:** Presler, Dawn  
**Sent:** Monday, May 20, 2019 10:24 AM  
**To:** 'Ford, Jennifer - FS' <[jford@fs.fed.us](mailto:jford@fs.fed.us)>; 'Janet Curran - NOAA Federal' <[janet.curran@noaa.gov](mailto:janet.curran@noaa.gov)>; 'Asman, Lindsay' <[lindsay\\_asman@fws.gov](mailto:lindsay_asman@fws.gov)>; 'Anne Savery' <[asavery@tulaliptribes-nsn.gov](mailto:asavery@tulaliptribes-nsn.gov)>; '[brock.applegate@dfw.wa.gov](mailto:brock.applegate@dfw.wa.gov)' ([brock.applegate@dfw.wa.gov](mailto:brock.applegate@dfw.wa.gov)) <[brock.applegate@dfw.wa.gov](mailto:brock.applegate@dfw.wa.gov)>; "James (ECY) Pacheco" ([JPAC461@ECY.WA.GOV](mailto:JPAC461@ECY.WA.GOV)) <[JPAC461@ECY.WA.GOV](mailto:JPAC461@ECY.WA.GOV)>; 'Rustay, Michael' <[mike.rustay@co.snohomish.wa.us](mailto:mike.rustay@co.snohomish.wa.us)>; '[okeefe@americanwhitewater.org](mailto:okeefe@americanwhitewater.org)' <[okeefe@americanwhitewater.org](mailto:okeefe@americanwhitewater.org)>; 'Jim Miller' ([JMILLER@everettwa.gov](mailto:JMILLER@everettwa.gov)) <[JMILLER@everettwa.gov](mailto:JMILLER@everettwa.gov)>; '[nate.morgan@ci.sultan.wa.us](mailto:nate.morgan@ci.sultan.wa.us)' <[nate.morgan@ci.sultan.wa.us](mailto:nate.morgan@ci.sultan.wa.us)>  
**Cc:** Binkley, Keith <[KMBinkley@SNOPUD.com](mailto:KMBinkley@SNOPUD.com)>  
**Subject:** RE: JHP (FERC No. 2157) - cc: ALA-9 Water Year 2019-2020 Reach 3 instream flow schedule

Dear ARC Members:

Attached is the draft Fisheries and Habitat Monitoring Plan 2018 Annual Report for your 30-day review. Comments, if any, can be email to me (cc: to Keith) by June 19. Any questions regarding the report can be direct to Keith. Thank you.

Sincerely,

*Dawn Presler*

Sr. Environmental Coordinator  
Generation – Natural Resources  
(425) 783-1709

PUD No. 1 of Snohomish County  
PO Box 1107  
Everett, WA 98206-1107