SNOHOMISH COUNTY PUD
PUBLIC UTILITY DISTRICT NO. 1

Your Northwest renewables utility

October 31, 2016

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
Operation Compliance Monitoring Plan Annual Report
License Article 407

Dear Secretary Bose:

Enclosed is Public Utility District No. 1 of Snohomish County's Operation Compliance Monitoring Plan Annual Report for the Water Year July 2015 – June 2016 pursuant to License Article 407 for the Jackson Hydroelectric Project.

If you have any questions on the report, please contact Keith Binkley, Natural Resources Manager, at (425) 783-1769 or KMBinkley@snopud.com.

Sincerely,

/s/ Tom DeBoer

Tom DeBoer
Assistant General Manager of Generation, Power, Rates and Transmission Management
TADeBoer@snopud.com
(425) 783-1825

Enclosed: OCMP Annual Report

cc: ARC
Keith Binkley, District

Henry M. Jackson Hydroelectric Project
(FERC No. 2157)

Operation Compliance Monitoring Plan
(License Article 407)

Annual Report for Water Year July 2015 – June 2016

Prepared By:

SNOHOMISH COUNTY PUD
PUBLIC UTILITY DISTRICT NO. 1

Everett, WA

October 2016

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). 2015. License Article 407: Operation Compliance Monitoring Plan Annual Report for Water Year July 2015 through June 2016, for the Henry M. Jackson Hydroelectric Project, FERC No. 2157. October 2016.

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Acronyms and Abbreviations

A-LA	Aquatic License Article
ARC	Aquatic Resource Committee
cfs	cubic feet per second
District	Public Utility District No. 1 of Snohomish County
FERC	Federal Energy Regulatory Commission
MW	megawatt
OCMP	Operation Compliance Monitoring Plan
PF Plan	Process Flow Plan
Project	Henry M. Jackson Hydroelectric Project, FERC No. 2157
SCADA	Supervisory Control and Data Acquisition
USGS	United States Geological Survey
WY	Water year

1. INTRODUCTION

Public Utility District No. 1 of Snohomish County (the District) received from the Federal Energy Regulatory Commission (FERC) a new license for the existing 111.8-megawatt (MW) Henry M. Jackson Hydroelectric Project (FERC No. 2157) (Project) on September 2, 2011. The District filed with the FERC the Operation Compliance Monitoring Plan (OCMP) in response to License Article 407. The FERC approved the OCMP on April 10, 2012. Per Section 9 of the OCMP, the District is to file an Annual Report by November 1 of each year, which documents the following for the previous water year (July through June):

> (a) the dates, duration, and quantities of the process flow released in accordance with the Process Flow Plan (PF Plan) required by Article 416;
>
> (b) Spada Lake Reservoir daily water surface elevations; and
>
> (c) if deviations from the targeted State 3 water surface elevations occurred, the reasons for the deviations and any proposals for corrective actions to avoid future occurrences, as appropriate.

This OCMP Annual Report covers activities for water year (WY) July 2015 – June 2016.

A copy of the draft report was provided to National Marine Fisheries Service, U.S. Forest Service, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, Tulalip Tribes, Snohomish County, City of Everett, City of Sultan, and American Whitewater (collectively known as the Aquatic Resource Committee or ARC) for a 30-day review and comment period. No comments were received on the draft report.

Spada Lake Reservoir data in tabular format are included in Appendix 1. Letters regarding the reservoir elevation deviation are included as Appendix 2. Consultation with the ARC regarding the draft report is included in Appendix 3.

2. PROCESS FLOWS

The District provided process flow events pursuant to the PF Plan on four occasions during the July 2015 – June 2016 timeframe to serve multiple habitat benefits. These included, in chronological order: 1) a scheduled fall 2015 event for flushing surficial fine sediment from the streambed and to stimulate the upstream migration of spawning adults, 2) a channel maintenance event during November 2015, and 3) two scheduled events during spring 2016 to aid in flushing of fine sediment to assist the outmigration of juvenile fish. Reaches are identified in Figure 1. The process flow events for the Sultan River are summarized, by reach, in Table 1. The District followed each process flow event with License-required downramping; downramping is evident on the descending limb of the hydrograph associated with each process flow event as shown in Figures 2 through 10.

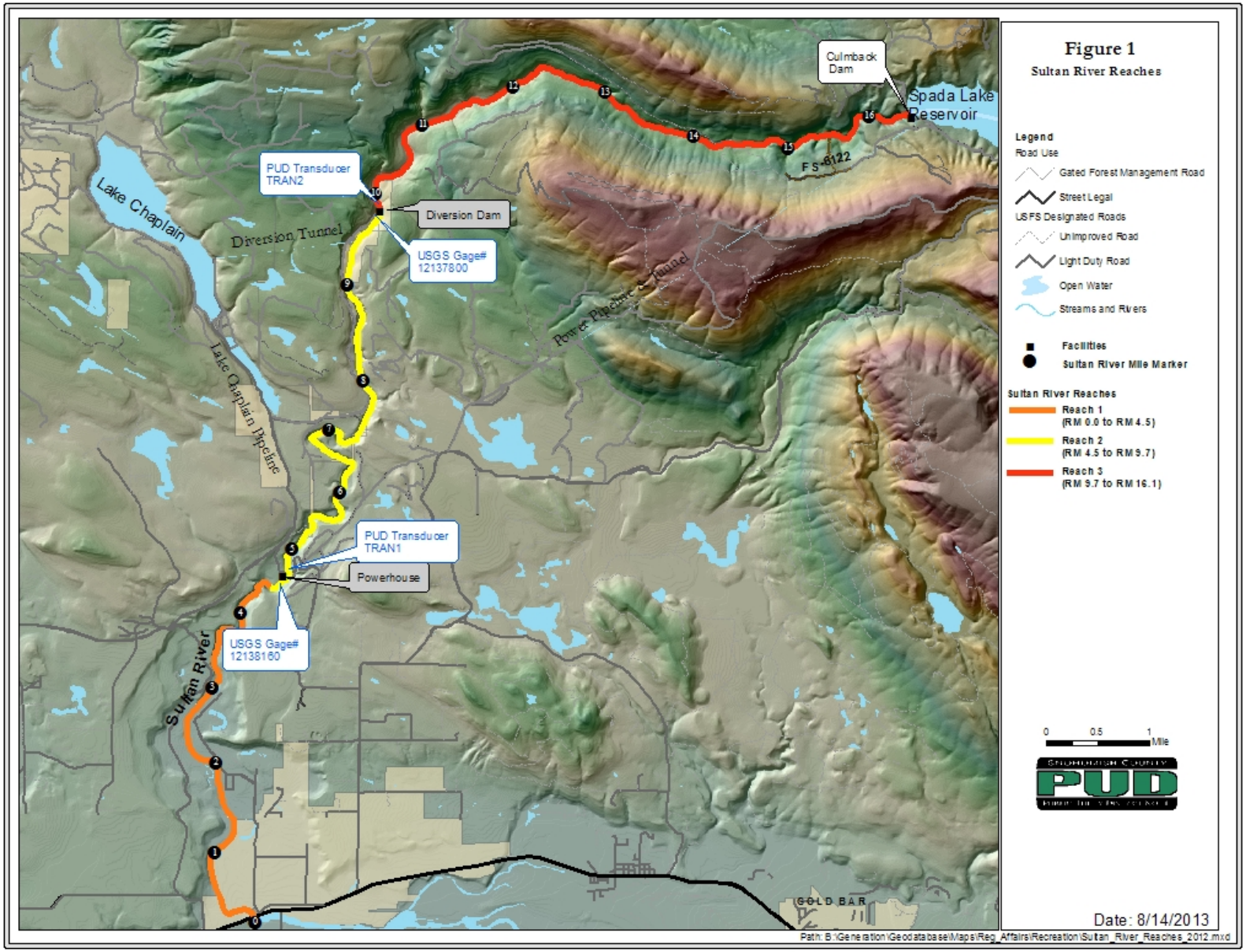

Figure 1. Sultan River reaches.

Table 1. Process Flow Log, July 2015 – June 2016.

Date[1]	Time[2]	Magnitude[3] (cfs)	Duration[4] (hours)	Accretion[5] (cfs)	Notes[6]	Counts as PF Type[7]
9/12/15	12:15 to 18:15	R3 – 464 (average), range: 404 to 483	6 hours greater than 400 cfs	Estimated at 10 cfs	Reference Figure 2	U, FL
9/12/15	13:45 to 19:45	R2 – 569 (average), range: 509 to 588 cfs	6 hours greater than 500 cfs	Estimated at 15 cfs	Reference Figure 3	U, FL
9/12/15	14:15 to 20:15	R1 – 1,038 (average), range: 997 to 1,050 cfs	8 hours greater than 1,000 cfs		Reference Figure 4	U
11/17/15 to 11/18/15	18:45 to 20:15	R1 – 5,917 (average), range: 4,230 to 7,320	25.5 hours greater than 4,100 cfs	R1- cumulative accretion (including spill), measured at Powerhouse: 3,330 to 6,420 cfs	Reference Figure 5	CM
4/23/16	13:30 to 20:15	R1 – 1,611 (average), range: 1,510 to 1,840	6.75 hours greater than 1,500 cfs,	R1 – cumulative accretion estimated at 132 cfs	Reference Figure 6	FL, O
4/23/16	13:30 to 18:15	R2 – 917 (average), range: 700 to 1,047	4.75 hours greater than 700 cfs	Estimated at 76 cfs	Reference Figure 7	FL
4/23/16	13:30 to 23:30	R2 – 732 (average), range: 402 – 1,047	10 hours greater than 400 cfs	Estimated at 76 cfs	Reference Figure 7	O
4/23/16	12:00 to 16:30	R3 – 824 (average), range: 638 to 906	4.5 hours greater than 600 cfs	Estimated at 56 cfs	Reference Figure 8	FL
5/15-16/2016	22:30 to 04:30	R1 – 908 (average), range: 832 to 951	6 hours greater than 800 cfs		Reference Figure 9	O

[1] Start Date of Event (MM/DD/YYYY)
[2] Start Time to End Time
[3] Magnitude of the Event for Each Compliance Location (R1-Reach 1, R2-Reach 2, R3-Reach 3)
[4] Duration of Event
[5] Portion of Event Attributed to Accretion Flows
[6] Notes of Day's Event, Sequencing with Other Flow Events/Maintenance
[7] Channel Forming (CF), Channel Maintenance (CM), Flushing (FL), Outmigration (O), Upmigration (U) as defined in the PF Plan

5/15-16/2016	22:30 to 04:30	R2 – 541 (average), range: 487 to 579	6 hours greater than 400 cfs	Estimated at 55 cfs	Reference Figure 10	O

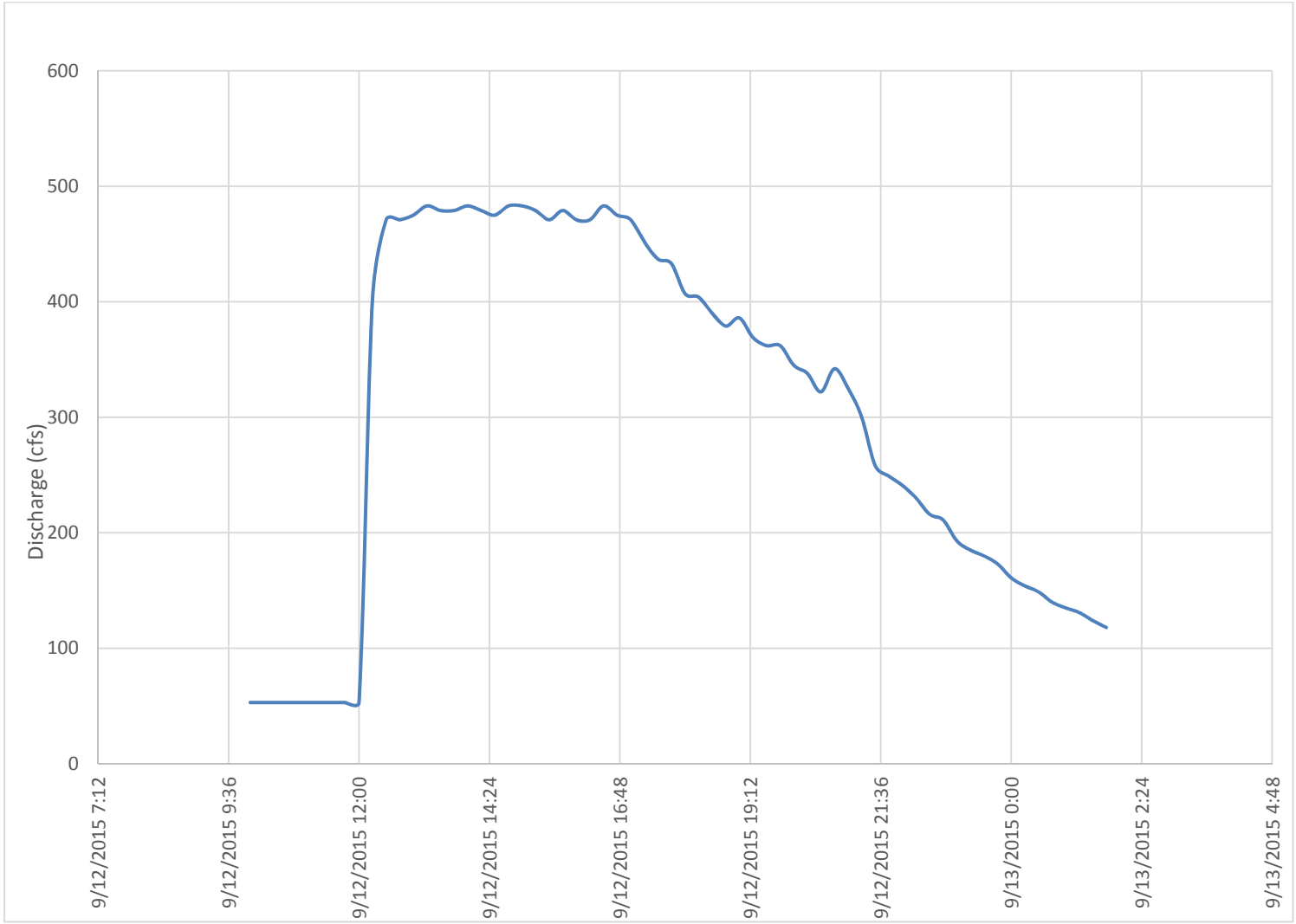

Figure 2. Reach 3 of the Sultan River immediately upstream of Diversion Dam Upmigration and Flushing hydrograph – 09/12/2015.

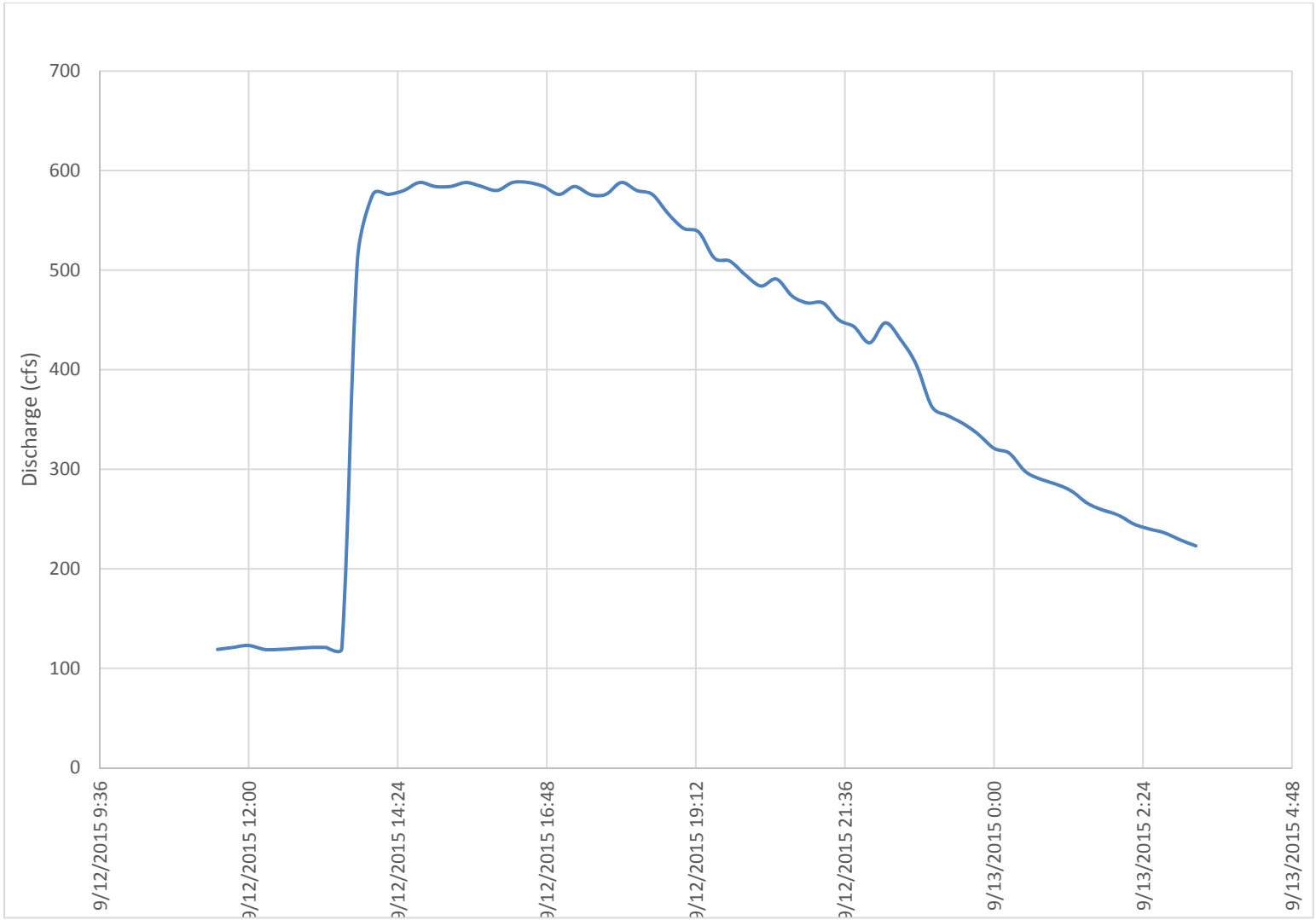

Figure 3. Reach 2 of the Sultan River immediately upstream of Powerhouse at RM 4.7 Upmigration and Flushing hydrograph – 09/12/2015.

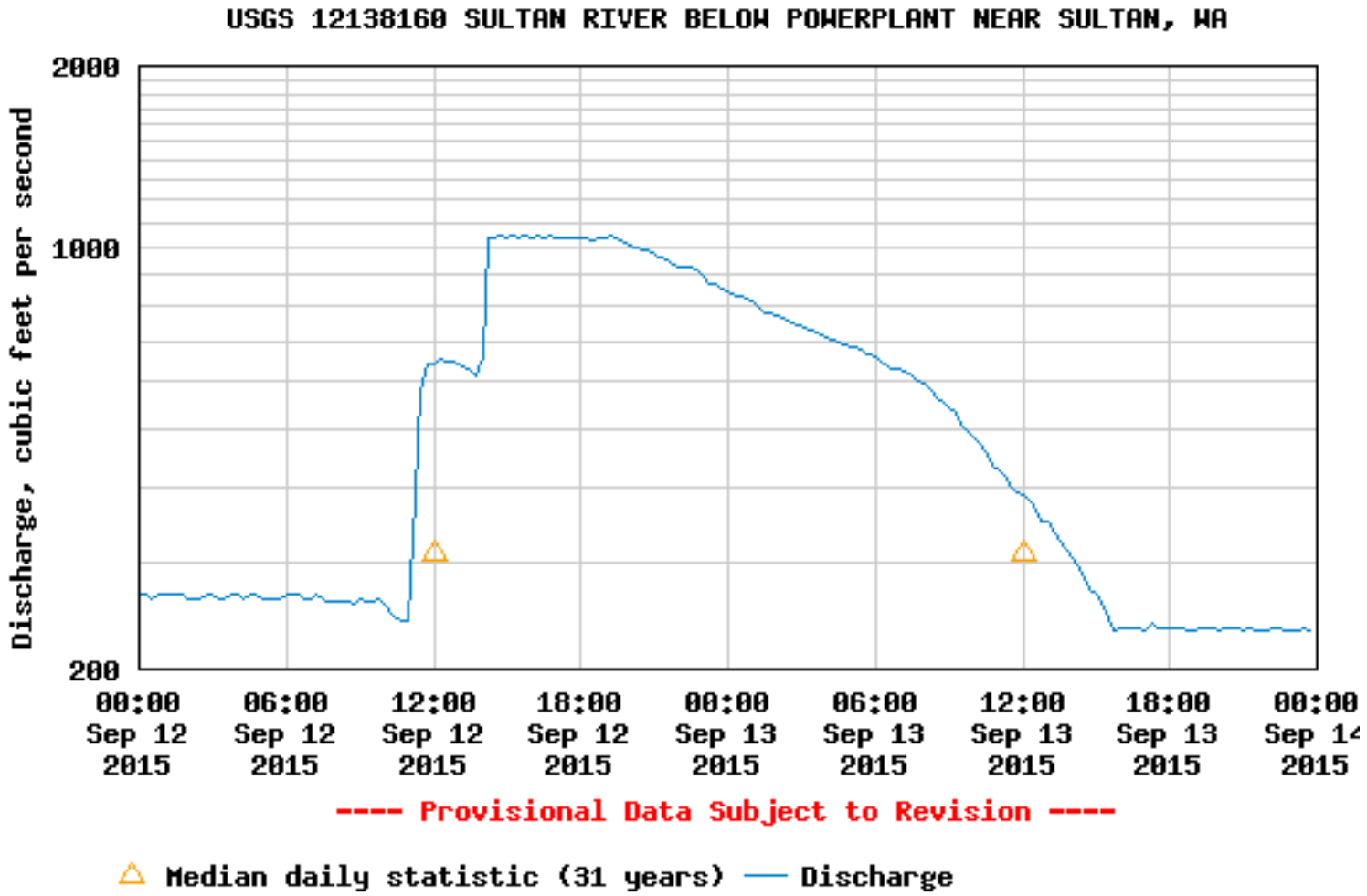

Figure 4. Reach 1 of the Sultan River below Powerplant Upmigration hydrograph– 09/12/2015.

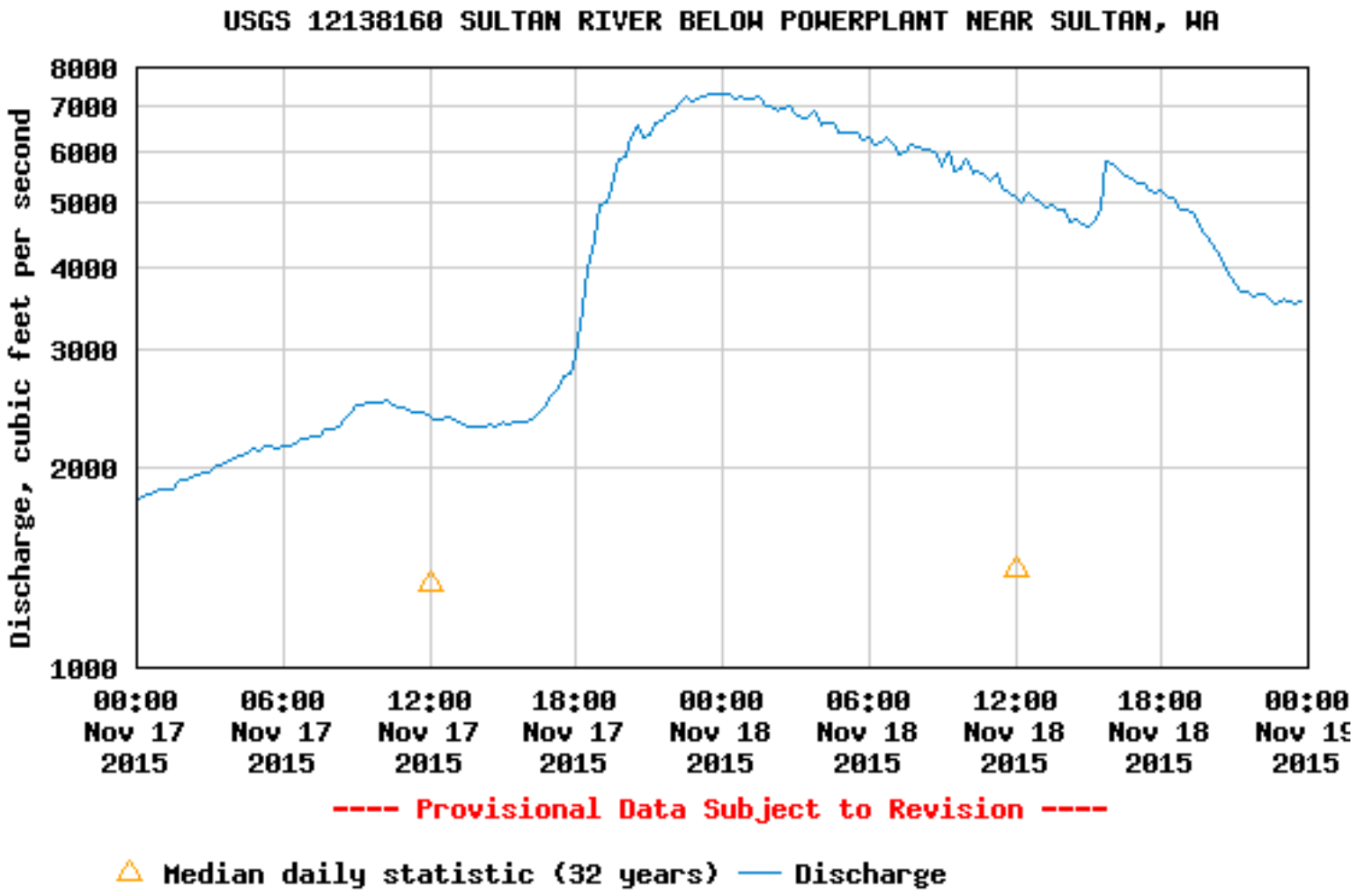

Figure 5. Reach 1 of the Sultan River below Powerplant Channel Maintenance hydrograph– 11/17/2015 to 11/18/2015.

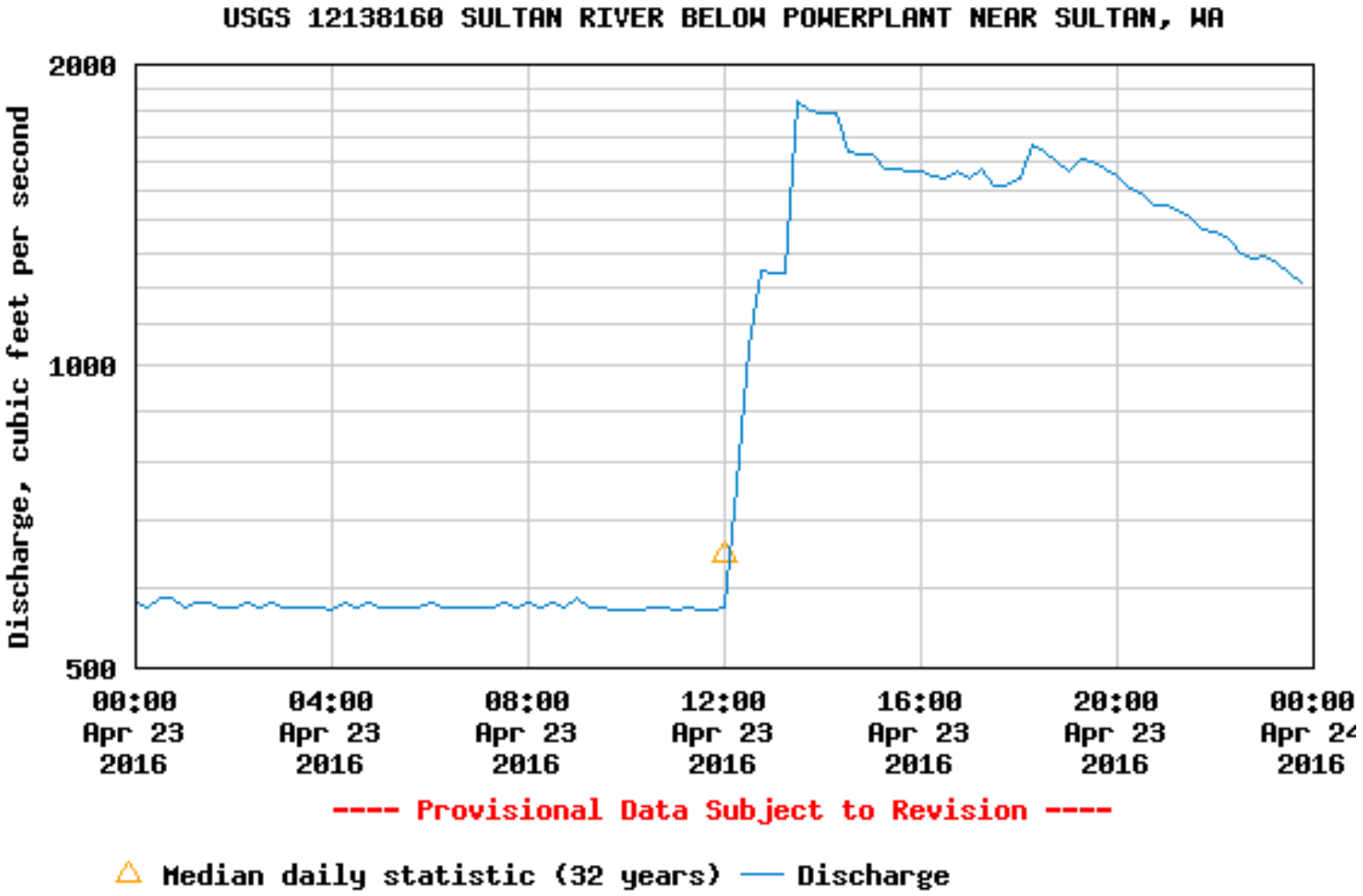

Figure 6. Reach 1 of the Sultan River below Powerplant Flushing and Outmigration hydrograph – 4/23/2016.

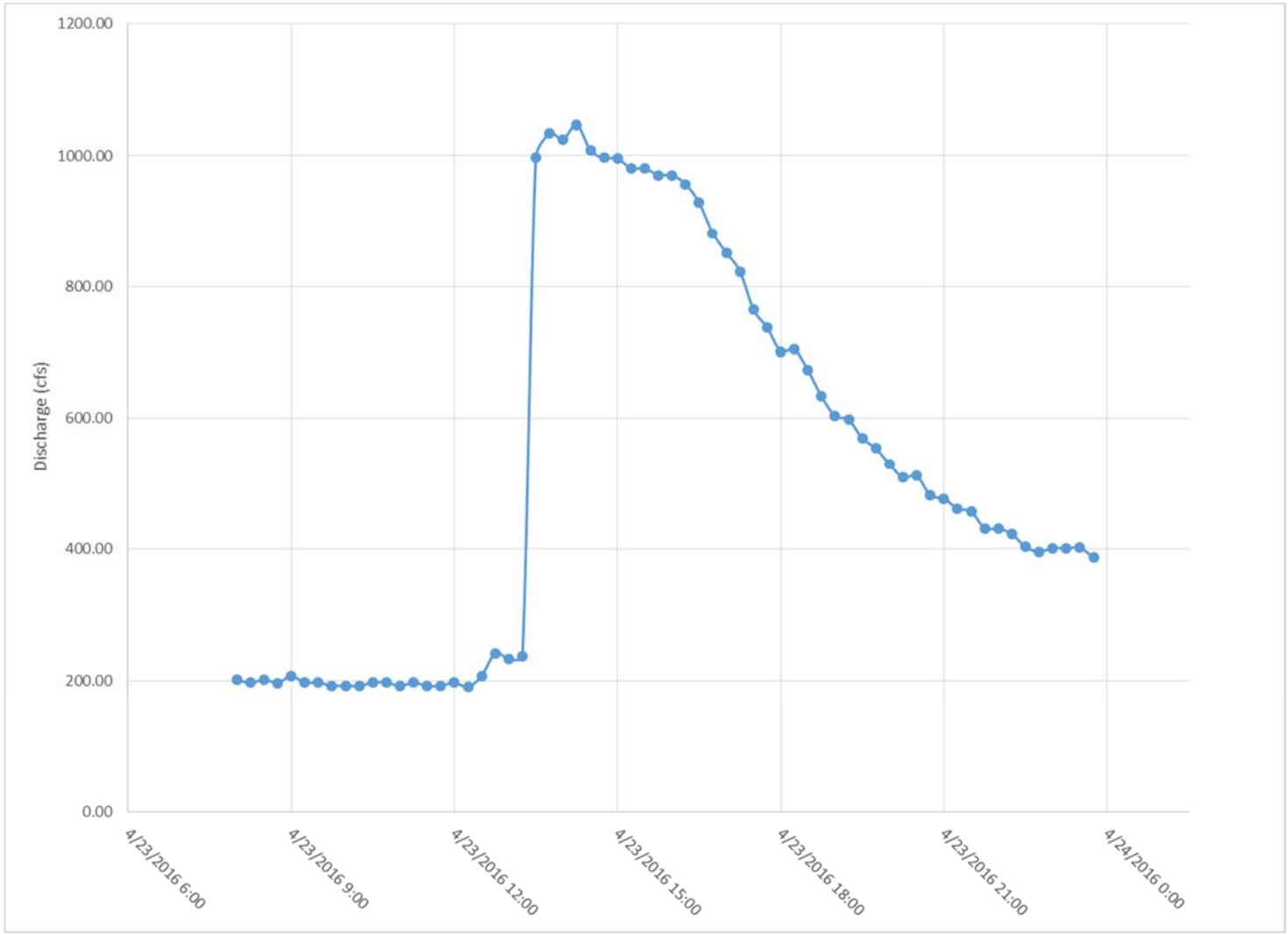

Figure 7. Reach 2 of the Sultan River immediately upstream of Powerhouse at RM 4.7 Flushing hydrograph – 4/23/2016.

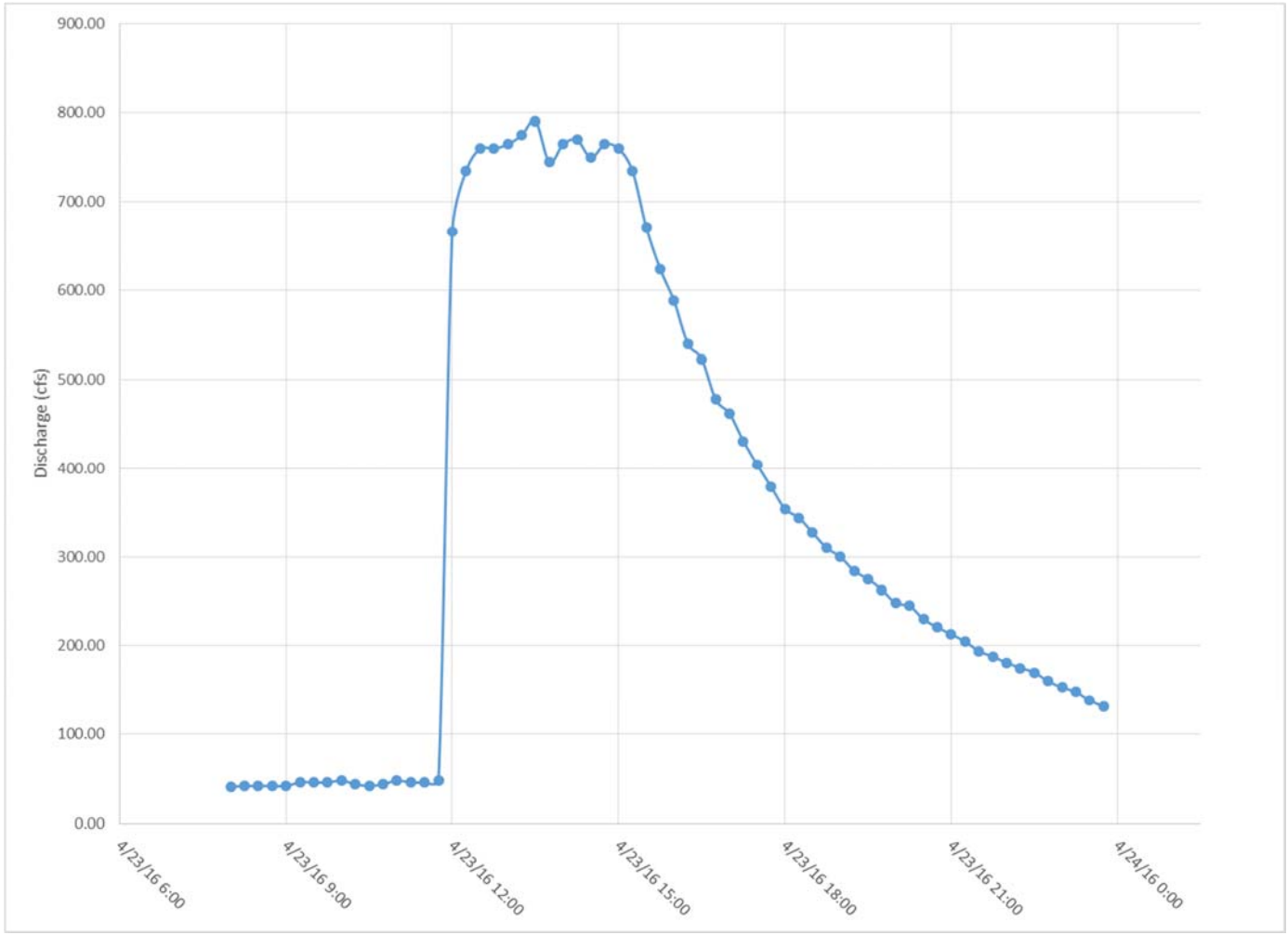

Figure 8. Reach 3 of the Sultan River immediately upstream of Diversion Dam Flushing hydrograph – 4/23/2016.

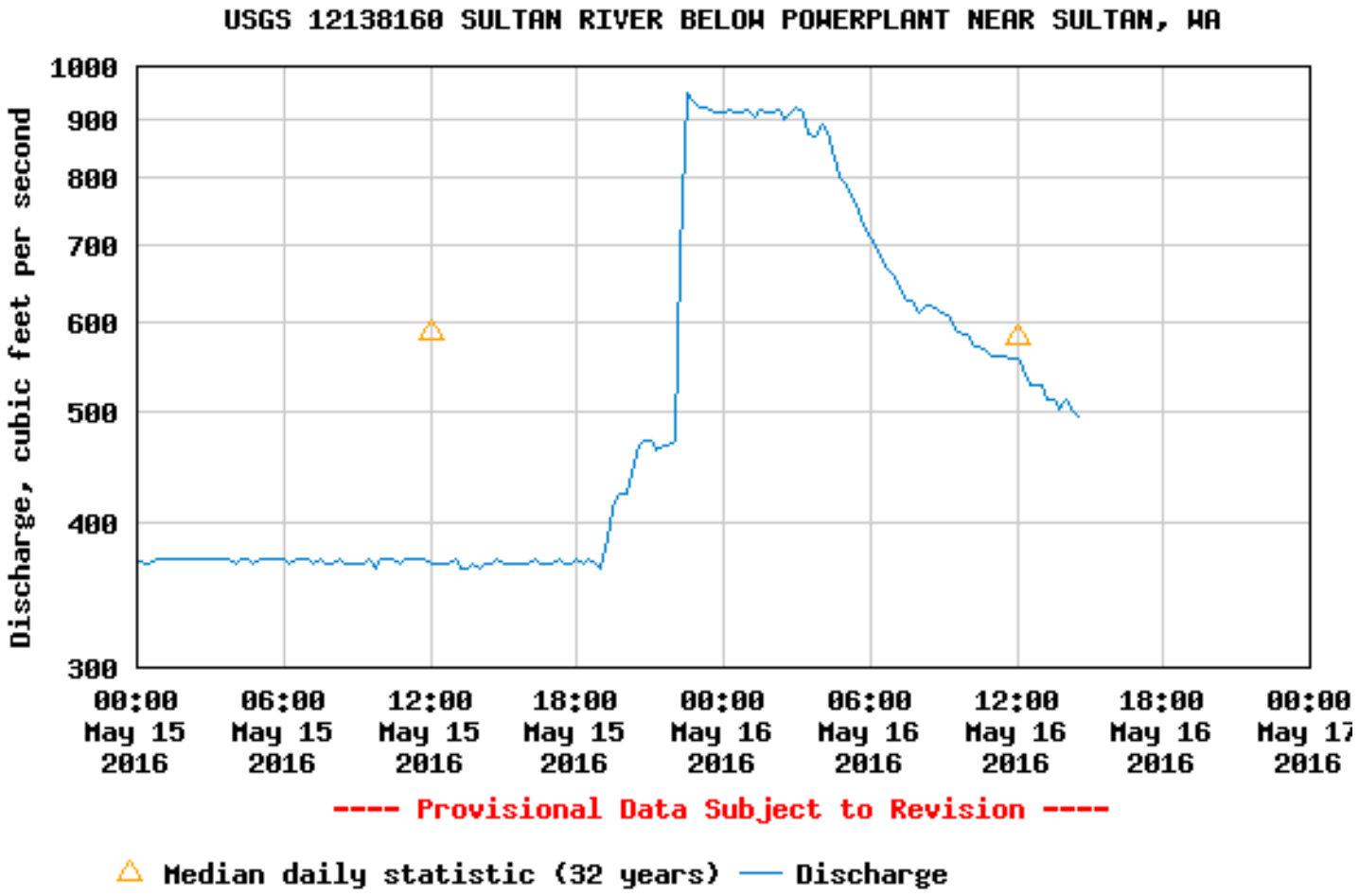

Figure 9. Reach 1 of the Sultan River below Powerhouse Outmigration hydrograph – 5/15-16/2016.

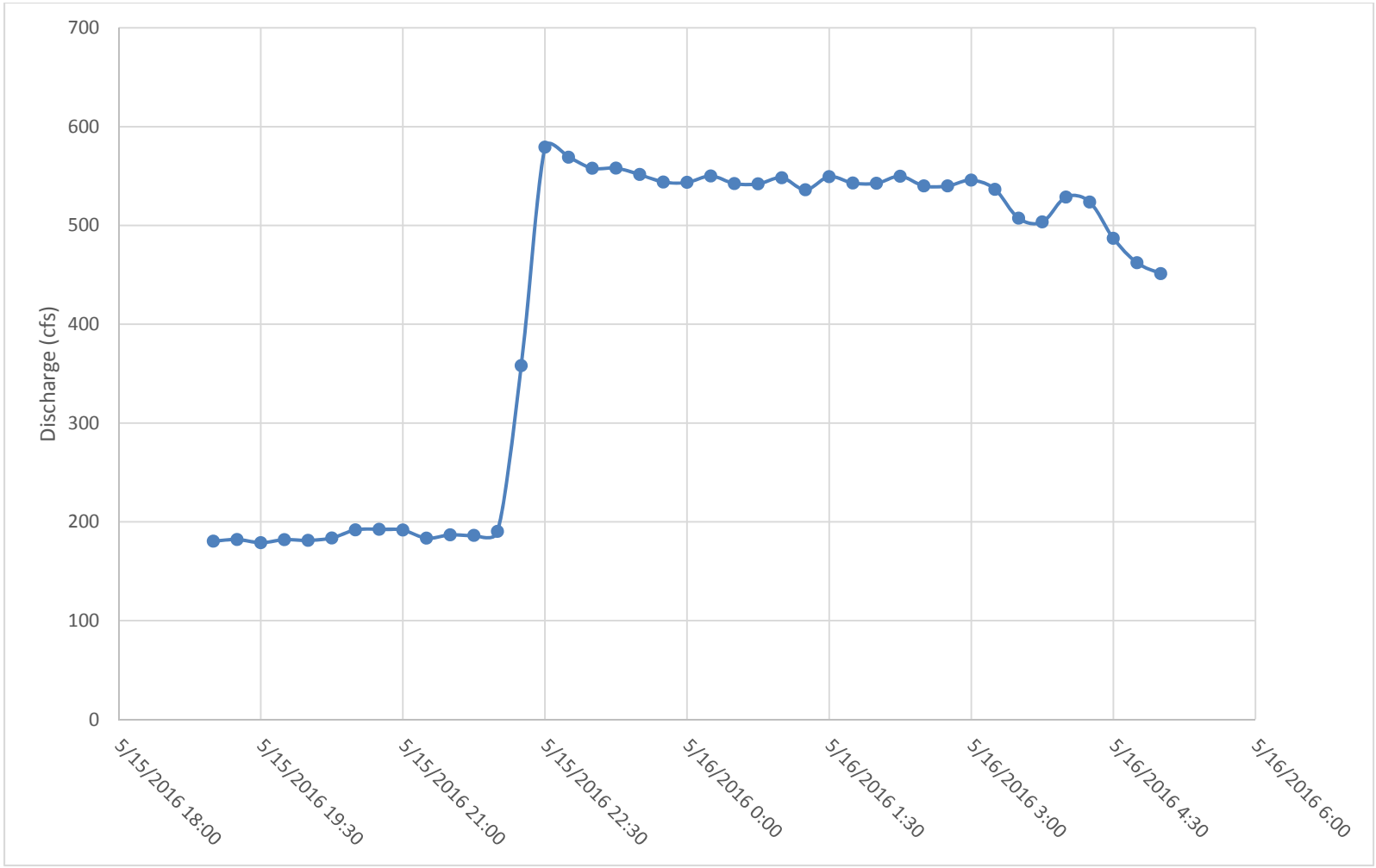

Figure 10. Reach 2 of the Sultan River immediately upstream of Powerhouse at RM 4.7 Outmigration hydrograph – 5/15-16/2016.

3. SPADA LAKE RESERVOIR WATER SURFACE ELEVATIONS

During this reporting period, Spada Lake Reservoir mean daily water surface elevations ranged between 1,398.2 and 1,453.2 feet msl, with the low on August 28, 2015, and the high on November 17, 2015. The low reservoir elevation on August 28, 2015, was the cumulative result of an unprecedented and extended drought in western Washington. Despite conservation measures imposed by the City of Everett on its water users and reduced minimum flows, persistent record low inflows resulted in the reservoir being in State 4 for much of the summer and early fall during 2015. These environmental conditions restricted operations and made achievement of target reservoir elevations not possible. Figure 11 displays the mean daily water surface elevations of Spada Lake Reservoir, and Appendix 1 contains the data in tabular format. See Appendix 2 for letters regarding drought conditions.

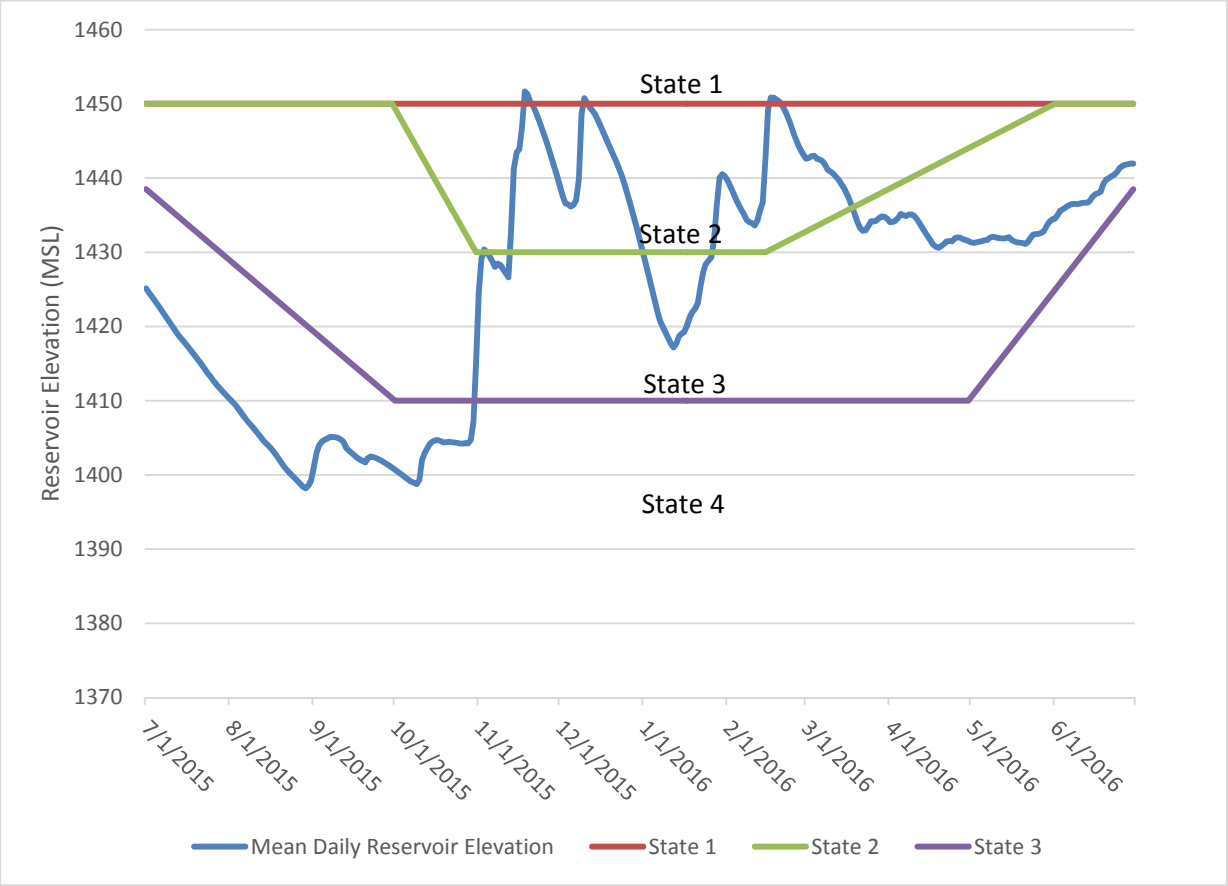

Figure 11. Mean daily water surface elevation, Spada Lake Reservoir, July 1, 2015 – June 30, 2016.

4. DEVIATIONS FROM STATE 3

License Article 406 requires:

> *When Spada Lake is in State 3, subject to meeting the (1) City of Everett's water supply requirements and other conditions of this license, the licensee shall maintain a minimum impoundment water surface elevation in Spada Lake above 1,430 feet mean sea level*

> *(msl), as measured at U.S. Geological Survey gage no. 12137300, Spada Lake near Startup, Washington, between July 1 and August 15. Until the temperature conditioning structure required by Appendix A, condition 5.2 (A-LA 3), and Appendix B, condition 2 (A-LA 3) is installed and operational (from license issuance until the earlier of (a) two years after the date the District completes the Sultan River diversion dam's volitional fish passage modifications, described in A-LA 13 or (b) January 1, 2020), the licensee shall maintain a minimum impoundment water surface elevation in Spada Lake Reservoir at or above 1,420 feet msl from August 16 through September 15.*[8]

No deviations occurred while in State 3; see Section 3 above for reservoir water surface elevations.

[8] *Public Utility District No. 1 of Snohomish County*, 137 FERC ¶ 61,221 (2011), Order Denying Rehearing And Granting Clarification, issued December 15, 2011.

Appendix 1

Spada Lake Reservoir Mean Daily Elevations Tabular Format

Date	Reservoir Elevation (feet)	Date	Reservoir Elevation (feet)	Date	Reservoir Elevation (feet)
7/1/2015	1424.86	8/1/2015	1410.09	9/1/2015	1402.02
7/2/2015	1424.38	8/2/2015	1409.68	9/2/2015	1403.66
7/3/2015	1423.76	8/3/2015	1409.20	9/3/2015	1404.34
7/4/2015	1423.28	8/4/2015	1408.72	9/4/2015	1404.62
7/5/2015	1422.81	8/5/2015	1408.24	9/5/2015	1404.82
7/6/2015	1422.26	8/6/2015	1407.69	9/6/2015	1405.10
7/7/2015	1421.71	8/7/2015	1407.22	9/7/2015	1405.16
7/8/2015	1421.16	8/8/2015	1406.81	9/8/2015	1405.16
7/9/2015	1420.69	8/9/2015	1406.39	9/9/2015	1404.96
7/10/2015	1420.14	8/10/2015	1405.98	9/10/2015	1404.89
7/11/2015	1419.52	8/11/2015	1405.57	9/11/2015	1404.62
7/12/2015	1419.04	8/12/2015	1405.03	9/12/2015	1403.93
7/13/2015	1418.57	8/13/2015	1404.48	9/13/2015	1403.39
7/14/2015	1418.16	8/14/2015	1404.21	9/14/2015	1403.18
7/15/2015	1417.68	8/15/2015	1403.80	9/15/2015	1402.84
7/16/2015	1417.20	8/16/2015	1403.39	9/16/2015	1402.43
7/17/2015	1416.72	8/17/2015	1402.91	9/17/2015	1402.22
7/18/2015	1416.31	8/18/2015	1402.43	9/18/2015	1402.02
7/19/2015	1415.90	8/19/2015	1401.88	9/19/2015	1401.81
7/20/2015	1415.42	8/20/2015	1401.40	9/20/2015	1401.81
7/21/2015	1414.87	8/21/2015	1400.99	9/21/2015	1402.50
7/22/2015	1414.39	8/22/2015	1400.45	9/22/2015	1402.43
7/23/2015	1413.85	8/23/2015	1400.04	9/23/2015	1402.36
7/24/2015	1413.37	8/24/2015	1399.76	9/24/2015	1402.16
7/25/2015	1412.96	8/25/2015	1399.42	9/25/2015	1401.95
7/26/2015	1412.41	8/26/2015	1399.01	9/26/2015	1401.88
7/27/2015	1411.93	8/27/2015	1398.60	9/27/2015	1401.61
7/28/2015	1411.59	8/28/2015	1398.19	9/28/2015	1401.40
7/29/2015	1411.11	8/29/2015	1398.19	9/29/2015	1401.06
7/30/2015	1410.84	8/30/2015	1398.94	9/30/2015	1400.86
7/31/2015	1410.36	8/31/2015	1400.04		

Date	Reservoir Elevation (feet)	Date	Reservoir Elevation (feet)	Date	Reservoir Elevation (feet)
10/1/2015	1400.51	11/1/2015	1427.39	12/1/2015	1438.19
10/2/2015	1400.31	11/2/2015	1430.19	12/2/2015	1436.89
10/3/2015	1400.04	11/3/2015	1430.33	12/3/2015	1436.41
10/4/2015	1399.83	11/4/2015	1429.71	12/4/2015	1436.41
10/5/2015	1399.49	11/5/2015	1429.10	12/5/2015	1436.00
10/6/2015	1399.22	11/6/2015	1428.34	12/6/2015	1436.75
10/7/2015	1399.08	11/7/2015	1428.07	12/7/2015	1437.30
10/8/2015	1398.81	11/8/2015	1428.48	12/8/2015	1444.89
10/9/2015	1398.67	11/9/2015	1428.00	12/9/2015	1450.63
10/10/2015	1400.79	11/10/2015	1427.32	12/10/2015	1450.43
10/11/2015	1402.70	11/11/2015	1426.91	12/11/2015	1449.75
10/12/2015	1403.25	11/12/2015	1426.91	12/12/2015	1449.34
10/13/2015	1403.93	11/13/2015	1439.08	12/13/2015	1448.86
10/14/2015	1404.41	11/14/2015	1442.70	12/14/2015	1448.17
10/15/2015	1404.69	11/15/2015	1443.86	12/15/2015	1447.42
10/16/2015	1404.75	11/16/2015	1444.00	12/16/2015	1446.60
10/17/2015	1404.62	11/17/2015	1453.23	12/17/2015	1445.71
10/18/2015	1404.48	11/18/2015	1451.66	12/18/2015	1445.03
10/19/2015	1404.41	11/19/2015	1451.30	12/19/2015	1444.14
10/20/2015	1404.41	11/20/2015	1450.09	12/20/2015	1443.32
10/21/2015	1404.34	11/21/2015	1449.40	12/21/2015	1442.43
10/22/2015	1404.34	11/22/2015	1448.45	12/22/2015	1441.47
10/23/2015	1404.28	11/23/2015	1447.56	12/23/2015	1440.65
10/24/2015	1404.21	11/24/2015	1446.60	12/24/2015	1439.63
10/25/2015	1404.28	11/25/2015	1445.44	12/25/2015	1438.33
10/26/2015	1404.28	11/26/2015	1444.34	12/26/2015	1437.10
10/27/2015	1404.21	11/27/2015	1443.25	12/27/2015	1435.80
10/28/2015	1404.28	11/28/2015	1441.95	12/28/2015	1434.43
10/29/2015	1405.30	11/29/2015	1440.79	12/29/2015	1433.13
10/30/2015	1409.81	11/30/2015	1439.42	12/30/2015	1431.69
10/31/2015	1421.37			12/31/2015	1430.19

Date	Reservoir Elevation (feet)	Date	Reservoir Elevation (feet)	Date	Reservoir Elevation (feet)
1/1/2016	1428.69	2/1/2016	1439.35	3/1/2016	1442.70
1/2/2016	1427.32	2/2/2016	1438.39	3/2/2016	1442.70
1/3/2016	1425.88	2/3/2016	1437.57	3/3/2016	1443.04
1/4/2016	1424.38	2/4/2016	1436.82	3/4/2016	1442.77
1/5/2016	1422.81	2/5/2016	1436.07	3/5/2016	1442.43
1/6/2016	1421.30	2/6/2016	1435.59	3/6/2016	1442.43
1/7/2016	1420.41	2/7/2016	1434.70	3/7/2016	1442.16
1/8/2016	1419.59	2/8/2016	1434.16	3/8/2016	1441.40
1/9/2016	1418.84	2/9/2016	1433.95	3/9/2016	1440.79
1/10/2016	1418.09	2/10/2016	1433.81	3/10/2016	1440.86
1/11/2016	1417.40	2/11/2016	1433.40	3/11/2016	1440.31
1/12/2016	1417.06	2/12/2016	1435.25	3/12/2016	1440.04
1/13/2016	1418.36	2/13/2016	1436.07	3/13/2016	1439.49
1/14/2016	1418.91	2/14/2016	1438.12	3/14/2016	1438.94
1/15/2016	1419.04	2/15/2016	1446.74	3/15/2016	1438.33
1/16/2016	1419.66	2/16/2016	1450.70	3/16/2016	1437.51
1/17/2016	1420.69	2/17/2016	1450.84	3/17/2016	1436.62
1/18/2016	1421.71	2/18/2016	1450.70	3/18/2016	1435.66
1/19/2016	1422.26	2/19/2016	1450.57	3/19/2016	1434.64
1/20/2016	1422.60	2/20/2016	1450.09	3/20/2016	1433.68
1/21/2016	1424.31	2/21/2016	1449.54	3/21/2016	1432.92
1/22/2016	1426.70	2/22/2016	1448.79	3/22/2016	1432.92
1/23/2016	1428.07	2/23/2016	1448.04	3/23/2016	1432.99
1/24/2016	1428.69	2/24/2016	1446.94	3/24/2016	1433.95
1/25/2016	1428.96	2/25/2016	1445.98	3/25/2016	1434.16
1/26/2016	1430.46	2/26/2016	1444.96	3/26/2016	1434.02
1/27/2016	1432.92	2/27/2016	1444.14	3/27/2016	1434.50
1/28/2016	1439.42	2/28/2016	1443.52	3/28/2016	1434.77
1/29/2016	1440.45	2/29/2016	1442.77	3/29/2016	1434.91
1/30/2016	1440.45			3/30/2016	1434.70
1/31/2016	1440.04			3/31/2016	1434.22

Date	Reservoir Elevation (feet)	Date	Reservoir Elevation (feet)	Date	Reservoir Elevation (feet)
4/1/2016	1433.88	5/1/2016	1431.22	6/1/2016	1434.63
4/2/2016	1434.22	5/2/2016	1431.22	6/2/2016	1435.39
4/3/2016	1434.29	5/3/2016	1431.28	6/3/2016	1435.66
4/4/2016	1434.98	5/4/2016	1431.56	6/4/2016	1435.86
4/5/2016	1435.11	5/5/2016	1431.56	6/5/2016	1436.14
4/6/2016	1434.91	5/6/2016	1431.56	6/6/2016	1436.34
4/7/2016	1434.98	5/7/2016	1431.76	6/7/2016	1436.48
4/8/2016	1435.18	5/8/2016	1432.10	6/8/2016	1436.48
4/9/2016	1435.04	5/9/2016	1431.97	6/9/2016	1436.48
4/10/2016	1435.70	5/10/2016	1431.90	6/10/2016	1436.62
4/11/2016	1434.22	5/11/2016	1431.83	6/11/2016	1436.75
4/12/2016	1433.54	5/12/2016	1431.83	6/12/2016	1436.75
4/13/2016	1432.92	5/13/2016	1431.90	6/13/2016	1436.75
4/14/2016	1432.38	5/14/2016	1431.97	6/14/2016	1437.23
4/15/2016	1431.83	5/15/2016	1431.90	6/15/2016	1437.78
4/16/2016	1431.28	5/16/2016	1431.63	6/16/2016	1437.92
4/17/2016	1430.81	5/17/2016	1431.35	6/17/2016	1437.98
4/18/2016	1430.67	5/18/2016	1431.35	6/18/2016	1438.53
4/19/2016	1430.67	5/19/2016	1431.22	6/19/2016	1439.69
4/20/2016	1431.01	5/20/2016	1431.15	6/20/2016	1439.76
4/21/2016	1431.28	5/21/2016	1431.08	6/21/2016	1440.17
4/22/2016	1431.63	5/22/2016	1431.63	6/22/2016	1440.38
4/23/2016	1431.22	5/23/2016	1432.31	6/23/2016	1440.65
4/24/2016	1431.69	5/24/2016	1432.38	6/24/2016	1441.13
4/25/2016	1432.04	5/25/2016	1432.51	6/25/2016	1441.54
4/26/2016	1431.97	5/26/2016	1432.51	6/26/2016	1441.68
4/27/2016	1431.90	5/27/2016	1432.65	6/27/2016	1441.81
4/28/2016	1431.63	5/28/2016	1433.13	6/28/2016	1441.92
4/29/2016	1431.56	5/29/2016	1433.88	6/29/2016	1441.98
4/30/2016	1431.42	5/30/2016	1434.36	6/30/2016	1442.0
		5/31/2016	1434.43		

Appendix 2

Letters Regarding Reservoir Elevation Deviation

SNOHOMISH COUNTY PUD
PUBLIC UTILITY DISTRICT NO. 1

Your Northwest renewables utility

July 31, 2015

VIA ELECTRONIC FILING

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Re: Jackson Hydroelectric Project, FERC No. 2157
A-LA 9 Instream Flow Modification Pursuant to Drought Declaration and Adaptive Management Plan

Dear Secretary Bose:

Public Utility District No. 1 of Snohomish County (the District) is notifying the Commission of temporary modification of the instream flows for the Jackson Hydroelectric Project (Project), FERC No. 2157. The modification has been deemed necessary by the Project's Aquatic Resource Committee (ARC) for the protection of water supply and the fishery resource of the Sultan River due to the extraordinary situation of an extended drought. The District is reducing the instream flows in Reach 1 of the Sultan River to 200 cubic feet per second (cfs).

Background
On May 15, 2015, Washington State Governor Jay Inslee declared a statewide drought. Within the Sultan Basin, the Project area is facing lower than normal water supply with inflows are at record low levels. Snowpack was at 0 inches when measured on March 26, 2015, and rainfall has been 71% of normal since January 1, 2015. The City of Everett supplies drinking water to 80% of Snohomish County, Washington, water of which is stored in Spada Lake Reservoir and conveyed through the Project. On July 27, 2015, the City of Everett, along with the cities of Seattle and Tacoma, issued a Stage 1 Drought declaration. See Attachment 1.

Due to the combined impact of low inflow, high demand, and required minimum instream flows, the water surface elevation of Spada Lake Reservoir has been steadily declining and is currently at 1,411 feet msl, in State 4 Zone of Water Conservation according to the rule curves. The reservoir is currently at 68% of normal storage volume for this time of year. Based on a Stage 1 Drought declaration, time of year, and reservoir elevation, the License requirement under Aquatic-License Article 9: Minimum Flows (A-LA9) is 250 cfs. Projections call for a continued drawdown of the reservoir at 0.5-foot per day with eventual reductions in instream flows to 225 cfs by approximately August 4 and then to 200 cfs by approximately August 15. Projected weather conditions are for continued dry/below normal levels of rainfall until November. See Attachment 2.

License Requirements
The Project License (and corresponding 401 water quality certification (License Appendix A) and 4(e) (License Appendix B) conditions which are identified in the License's ordering paragraphs D and E) require minimum instream flows for the Sultan River. A stair-step approach, based on reservoir levels, was developed in settlement negotiations to adjust instream flows when a Stage 1 declaration is announced as articulated in A-LA9. In Section 4.2 of the Adaptive Management Plan (AMP), approved by the FERC on May 3, 2012, the ARC can initiate adaptive management and recommend a course of action when an extraordinary situation is occurring or imminent. As indicated in Section 3 of the AMP, this can include course of action for minimum instream flows. If the ARC concurs on a recommended course of action, the District is to implement those changes and notify the FERC within 10 days.

Fishery Resource
Currently, no spawning is occurring in the Sultan River; steelhead egg incubation is complete and fry have fully emerged. Upmigration of fall spawning anadromous salmon species (mainly Chinook, pink, and chum salmon) does not commence until early September.

Consultation
The District has been communicating with the ARC regarding these extreme hydrologic conditions since June. The City of Everett requested the ARC meet on Monday July 27, 2015, to discuss adaptive management of the instream flows based on the City of Everett's Stage 1 Drought declaration and the continued and updated forecast for persistently dry conditions. During this meeting, the ARC members in attendance requested that additional and immediate precautions be taken to protect the water resource, and in turn the fishery/aquatic resources, by being even more conservative with instream flows releases. Therefore, ARC members requested the District move immediately to 200 cfs for Reach 1 and avoid the prolonged stair-stepped reduction in flows. This will allow for the conservation of water (quantity and cooler temperatures) to ensure long range protection of aquatic resources in to late fall/early winter when rains are projected to return. ARC member concurrence with modifying the instream flows is included as Attachment 3.[1]

As such, on the evening of July 29, 2015, the District initiated downramping of the Project and reduced instream flows in Reach 1 consistent with a minimum instream flow of 200 cfs.

[1] Pursuant to the ARC Guidelines, "Since not all ARC members have a stake, responsibility, or interest in all areas of fishery resources, a quorum for decision making will be actualized in different ways for the various different topics." By their choice, American Whitewater and City of Sultan are not a voting member for instream flow matters per the ARC Guidelines.

If you have any questions, please do not hesitate to contact Keith Binkley, Natural Resources Manager, at (425) 783-1769.

Sincerely,

Craig W. Collar, P.E.
Assistant General Manager of Generation
CWCollar@snopud.com
(425) 783-1825

Enclosed: Attachments 1 – 3

ATTACHMENT 1

Drought Declaration

Presler, Dawn

From: Presler, Dawn
Sent: Friday, July 31, 2015 7:40 AM
To: Presler, Dawn
Subject: FW: JHP (P2157) - ARC - FW: Water Supply Update
Importance: High

From: News_Release_from_SPU [mailto:News_Release_from_SPU@seattle.gov]
Sent: Monday, July 27, 2015 09:58 AM Pacific Standard Time
Subject: NEWS: Everett, Seattle, Tacoma activate water shortage response plans

City of Seattle
Edward B. Murray, Mayor

NEWS RELEASE

JOINTLY FROM THE CITIES OF EVERETT, SEATTLE AND TACOMA

FOR IMMEDIATE RELEASE

Contacts:

City of Everett: Marla Carter, Public Information and Education Manager, 425.257.8875

City of Seattle: Andy Ryan, Seattle Public Utilities, 206.684.7688

Tacoma Water: Nora Doyle, Community Relations Specialist, 253.502.8117

Everett, Seattle, Tacoma activate water shortage response plans

Region's customers advised to carefully manage water use

Puget Sound Region (July 27, 2015) Historic low river levels — combined with record-setting hot and dry weather that have significantly increased the demand for water — have led Everett, Seattle and Tacoma to implement the first stage of their water shortage response plans.

The three cities are all activating their response plans as a precautionary measure and have joined together to ensure that the entire region is ready for a potential water shortage.

Everett
Everett's water outlook is fair. Calculations show that Everett has adequate water to supply Snohomish County through the summer and fall when the region typically gets rainfall that replenishes water supplies.

“The weather has not been normal this year,” said Mayor Ray Stephanson. “We want to be cautious to ensure that we have adequate supply for all Everett’s customers, which includes most of Snohomish County, and sufficient water to meet instream flow requirements for fish.”

Everett is activating Stage 1 of its Drought Response Plan as a proactive measure.

Everett operates a regional water supply system that serves 80 percent of the homes and businesses in Snohomish County. This includes Everett and 95 other cities and water districts and serves a population of about 570,000.

Seattle
Seattle’s water supply outlook is fair and, like Everett, supply is projected to be adequate until fall rains typically return. With today’s activation of its Water Shortage Contingency Plan, the city is taking the needed steps to further maximize its water supply for people and fish in the event this unusual weather continues.

“The City is making water system adjustments and I know Seattle customers will continue to do their part as we plan for more hot and dry weather,” said Mayor Edward Murray. “We want Seattle and the entire region to be in the best possible shape with water supply when the fall rains return.”

Seattle operates a regional water supply system that serves Seattle as well as 25 other cities and water districts in King County.

Tacoma
Tacoma’s normal use of the Green River for summer demands is being heavily augmented with groundwater wells in this unusual year. This shift allows water stored from the Green River to be primarily dedicated to protecting fish. Although Tacoma’s modeling shows supplies adequate to meet instream flow and customer demands, initiating stage 1 of the Water Shortage Response Plan will provide a cushion.

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Tacoma Water supplies water directly to about 316,000 people in Tacoma, University Place, Ruston and areas of unincorporated Pierce and south King counties. We also serve relatively small areas within the cities of Puyallup, Fircrest, Lakewood and Bonney Lake. Through wholesale connections, we serve water to people in Auburn, Bonney Lake, Fife, Puyallup and parts of Pierce and King counties.

Advisory Stage of Response Plans
The first stage in each city’s response plan is “advisory.” It’s issued when utilities believe a potential water supply problem may exist. During this time Everett, Seattle and Tacoma are asking customers to carefully manage their water use and make sure they are not wasting water.

Important examples include:

- **Watering early or late:** Water before 8 a.m. or after 7 p.m., which reduces evaporation.
- **Watering deeply, but infrequently:** It’s better to have one or two deep waterings, rather than several shallow waterings.

- **Fixing leaks:** Fix obvious indoor and outdoor leaks such as at faucets, hose bibs and sprinkler spray heads. Check for less obvious leaks such as silent toilet leaks. Put several drops of food coloring in your toilet tank; after 10 minutes if you have color in the toilet bowl, you have a flapper leak.
- **Washing vehicles wisely:** Wash your vehicle(s) at locations that recycle their water.
- **Using a broom, not a hose:** Use a broom, rather than a hose, to clean sidewalks, driveways and patios.
- **Washing full loads:** Wait until your clothes washer and dishwasher are full before starting.

Find more water saving tips at www.savingwater.org, www.everettwa.gov/conservationtips and www.tacomawater.com/smart.

All three cities are making operational changes and activating supplementary water supplies – all in an effort to stretch their water supplies as far as possible.

Everett, Seattle and Tacoma are all fortunate to have robust water supplies that allow the water utilities to meet customer needs for water and contribute to healthy fish populations. Available supplies this year have declined more quickly than is typical.

Activating our response plans is a prudent management step given current conditions and supply outlook.

Everett, Seattle and Tacoma work collaboratively on a wide range of water supply, treatment and resource issues. Collectively, we serve close to half the state's population, and each draws its primary water supply from watersheds on the western slopes of the Cascades.

If conditions worsen, each city may move to the "voluntary" phase of water shortage response and ask customers to reduce the amount of water they normally use each day.

More Information
For more information about Everett's water supply situation visit Everett's website at www.everettwa.gov/droughtresponse.

A weekly report on Seattle's water supply is available on the Seattle Public Utilities (SPU) website. Learn more about SPU at: www.seattle.gov/util.

A weekly report on Tacoma's water supply is available at MyTPU.org/watersupply.

Get a map of the three cities' distribution areas.

###

Water Supply & Drought Response

Spada Lake Reservoir

Due to higher than normal temperatures and lower than normal precipitation Everett has activated Stage 1 of its Drought Response Plan as a proactive measure.

Storage at Spada Lake Reservoir is at 68 percent of normal and precipitation from May through July has been 23 percent of normal. The forecast is for continued hot, dry weather.

Everett wants to ensure that there is an adequate supply for all customers in the Everett Water Service Area, which includes most of Snohomish County and sufficient water to meet instream flow requirements for fish.

The graphs below depict the situation as of July 15, 2015 and will updated regularly as the situation unfolds.

Spada Lake Reservoir Demand (PDF)

Spada Lake Reservoir Elevation PDF)

Spada Lake Reservoir Precipitation (PDF)

Water Conservation Tips

Conservation Tips

Water Conservation Program

Water Conservation Program

Contact Us

Email the Department
Phone: 425-257-8800
Fax: 425-257-8882

Address

3200 Cedar Street
Everett, WA 98201

After Hours & 24-hour Emergency Number

Phone: 425-257-8821

Staff Directory

Quick Links

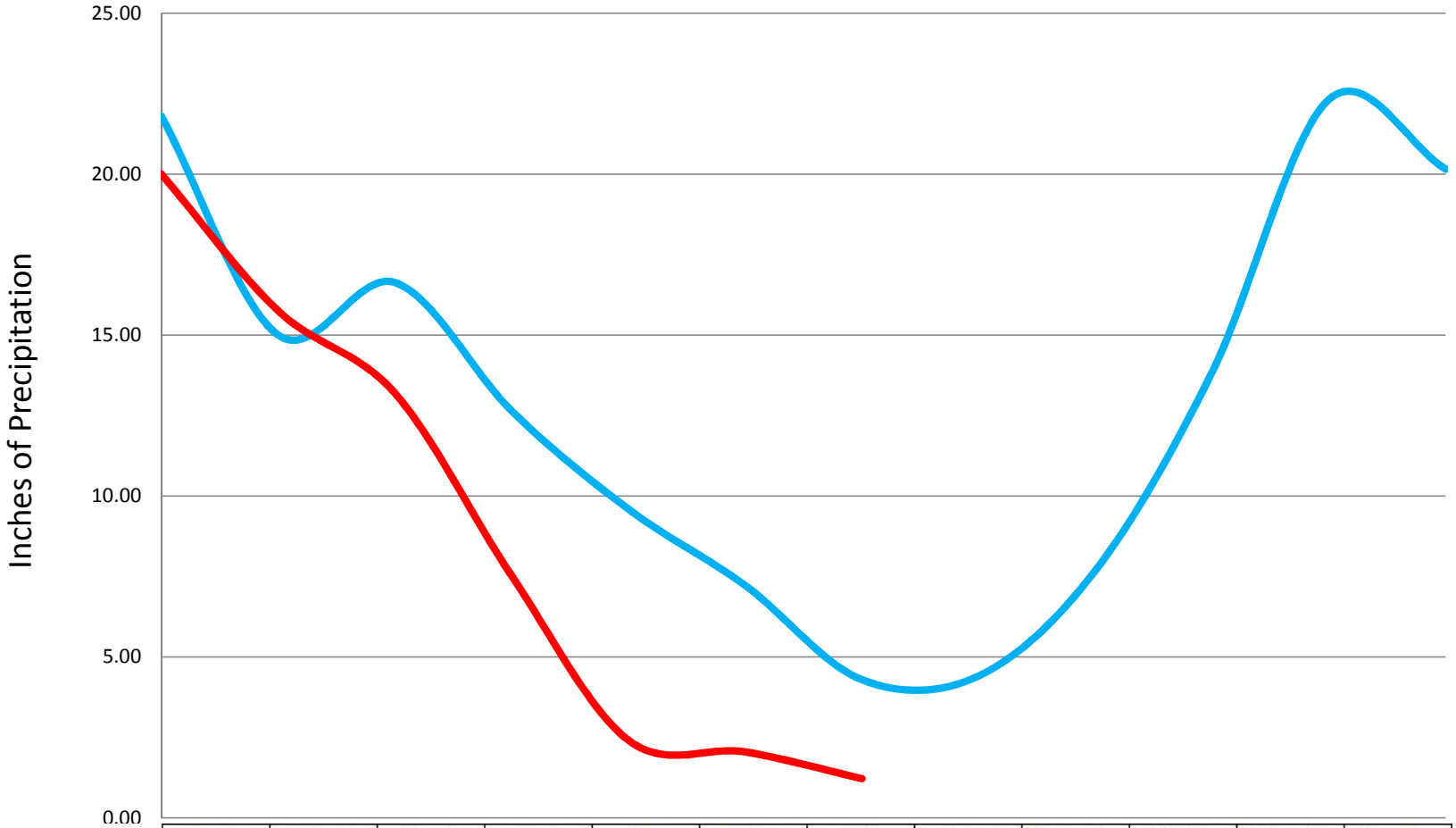
- Everett Water Service Area Map (PDF)
- Water Conservation Program
- Water Conservation Tips

View All

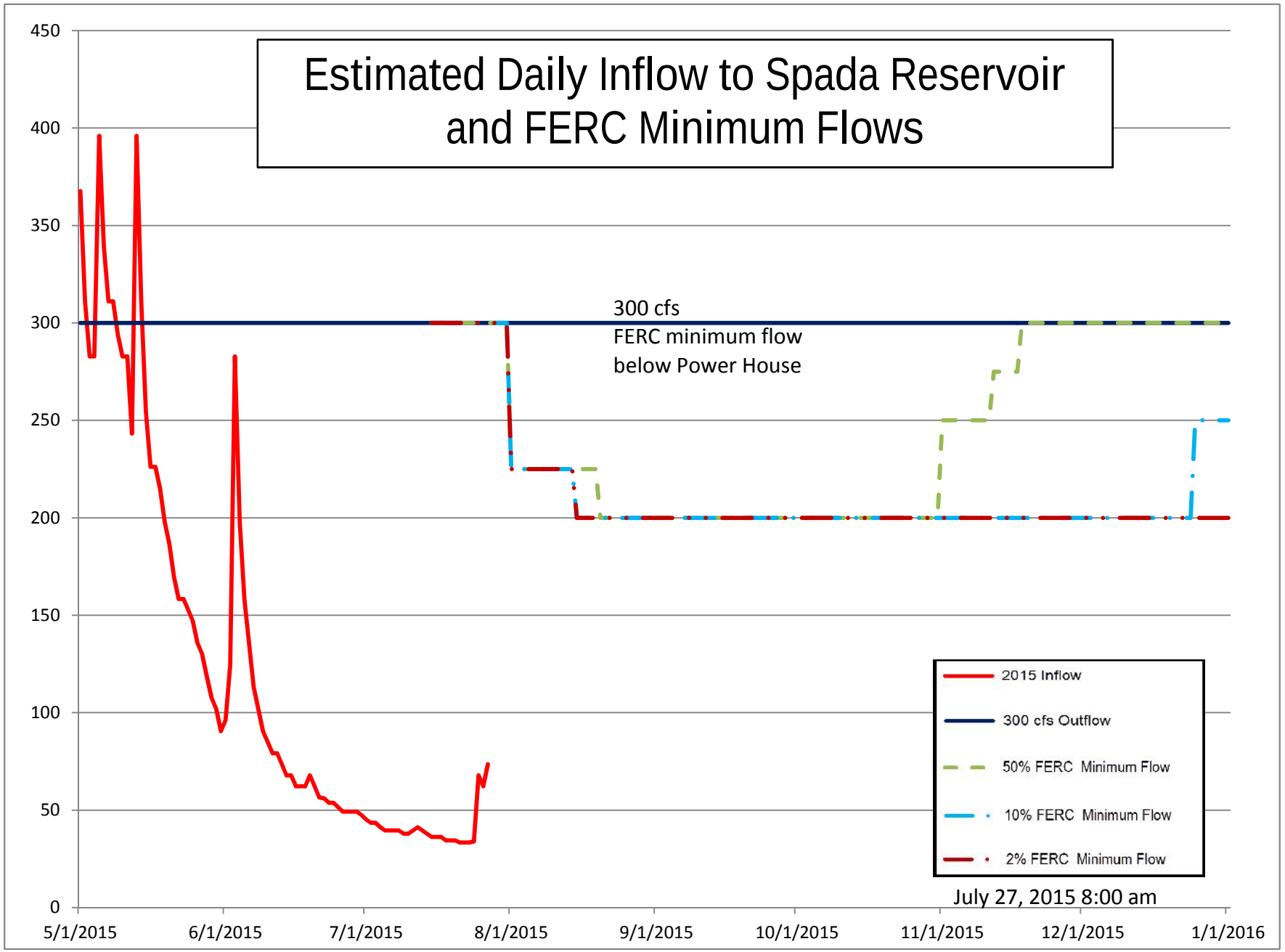
ATTACHMENT 2

Spada and Water Supply Data

SPADA LAKE PRECIPITATION (1973 to Present)

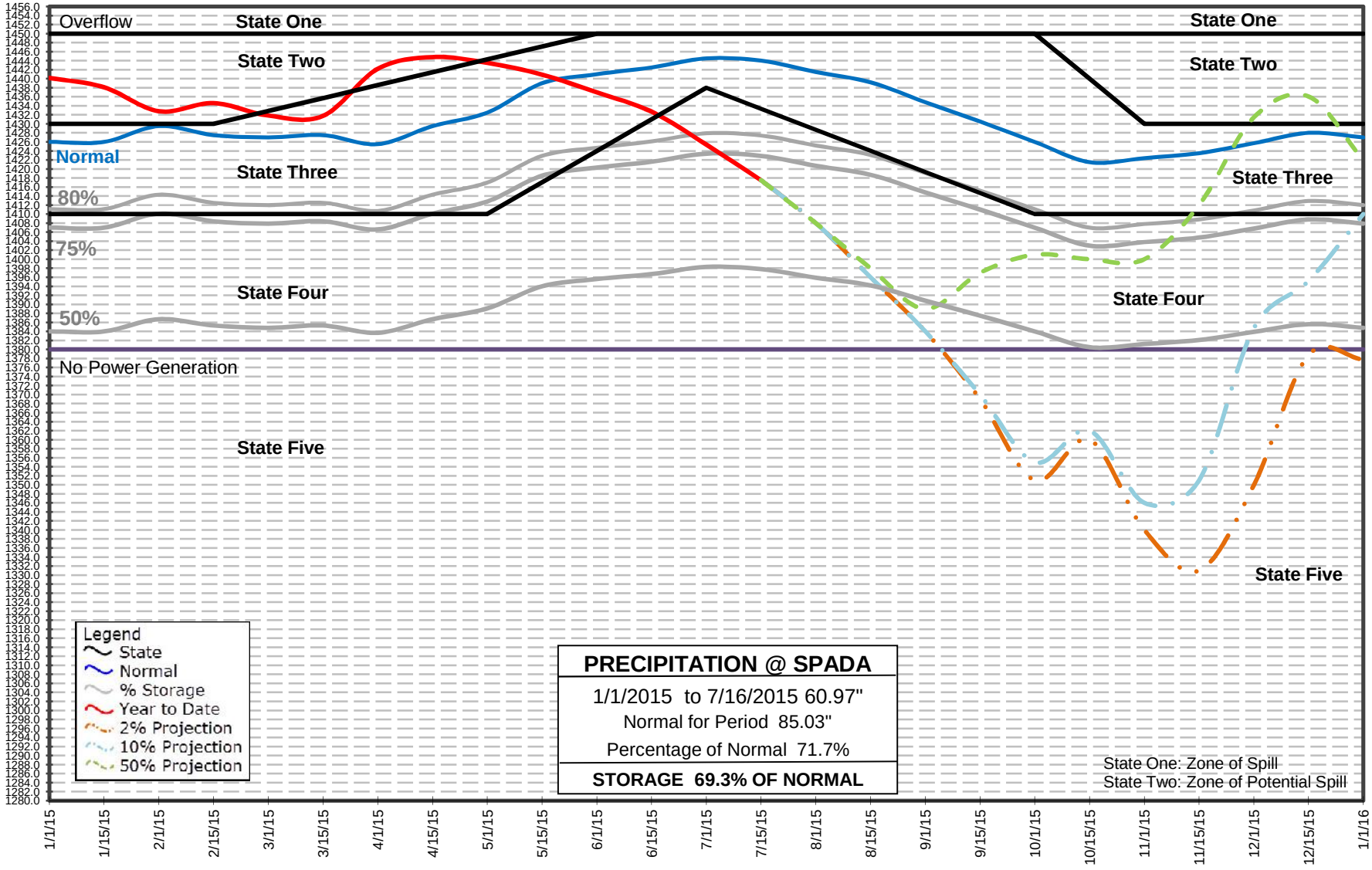


	January	February	March	April	May	June	July	August	September	October	November	December
2015 Monthly/Cumulative	20.00/20.20	15.75/35.75	13.19/48.94	7.52/56.46	2.41/58.59	2.05/60.92	1.22/62.14					
Average/Cumulative	21.80/21.80	15.00/36.80	16.63/53.43	12.64/66.07	9.59/75.66	7.22/82.88	4.29/87.17	4.41/91.58	7.69/99.27	13.86/113.13	22.32/135.45	20.15/155.6
Cumulative Percentage	91.74%	97.15%	91.60%	85.45%	77.81%	73.50%	71.30%					

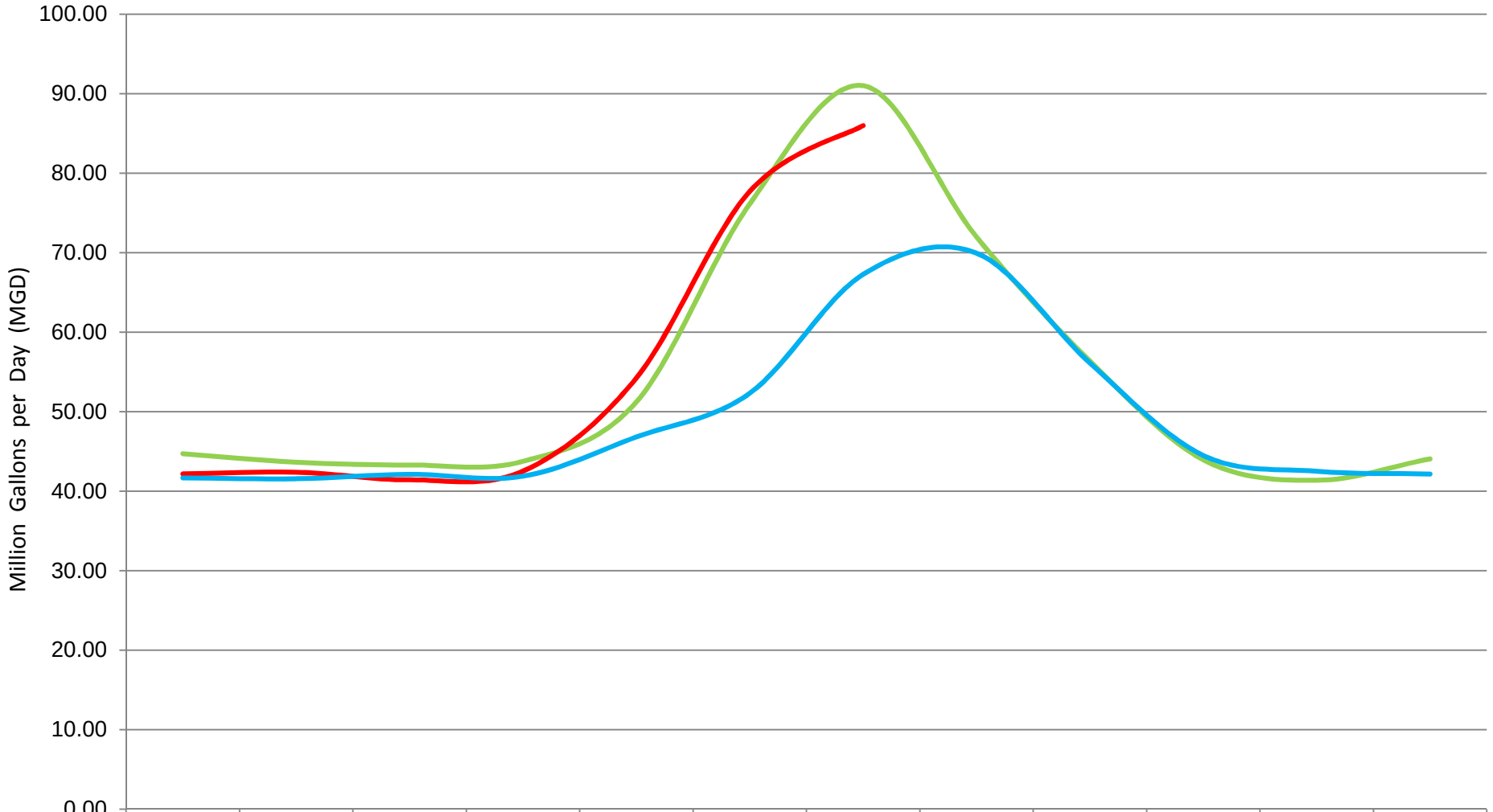

Estimated Daily Inflow to Spada Reservoir and FERC Minimum Flows
450
400
350
300
250
200
150
100
50
0
5/1/2015
6/1/2015
7/1/2015
8/1/2015
9/1/2015
10/1/2015
11/1/2015
12/1/2015
1/1/2016
300 cfs
FERC minimum flow
below Power House
2015 Inflow
300 cfs Outflow
50% FERC Minimum Flow
10% FERC Minimum Flow
2% FERC Minimum Flow
July 27, 2015 8:00 am

EVERETT WATER STORAGE
SPADA ELEVATION

As of 7/16/15



CITY OF EVERETT WATER USAGE



	January	February	March	April	May	June	July	August	September	October	November	December
2009	44.72	43.64	43.30	43.76	51.23	76.15	91.02	71.97	56.38	43.95	41.37	44.08
2015	42.17	42.39	41.43	42.52	54.25	77.72	86.00					
Average	41.68	41.56	42.13	41.88	46.83	52.33	67.28	69.95	56.13	44.50	42.52	42.16

7/27/2015

EVERETT'S WATER SITUATION – FACT SHEET

As of 7/27/15

Source of Water: Sultan River Watershed, Spada Lake Reservoir

Location: On west slope of Cascade Mountain Range, Culmback Dam is 24 miles east of Everett.

Population Served: About 580,000; 80% of Snohomish County

Water Storage: Spada Reservoir held back by Culmback Dam on the Sultan River and Chaplain Reservoir west of Spada Reservoir.

Storage Capacity: (Full)
Spada: 153,000 Acre-Ft; 50 billion gallons (BG)
Chaplain: 15,000 Acre-Ft; 4.9 billion gallons (BG)

Elevation (Full): Spada: 1450 overflow; Chaplain; 650 overflow

Water Usage: Annual Average: = 50 million gallons/day (MGD)
Last 30 days: 86 MGD or 28% above normal.
Peak Water Use: = **105 MGD**

Fish Flows below Power House:
Year around (min.) 300 cfs = 194 MGD
If in Stage 1 of Drought Response: 200 cfs (min.)

How long will present storage last?
Spada**:** About **four (4) months** for water supply and fish flows without any precipitation or inflow.
Chaplain: About **three (3) months** for water supply.
Total: seven (7) months' supply.

Present Situation: Spada Res.at elev. **1412.4 = 91,000 Ac-ft. = 29.7 BG**
This is **68%** of normal storage at this time of year.
Chaplain Res.@ Elev. **647= 15,136 Ac-ft = 4.9 BG**
Total: 34.6 BG Storage = 63% total capacity.

Precipitation: Annual Average is 164 inches at Culmback Dam.
Normal year-to-date = **86 inches**
2015 year-to-date = 61 inches (71 % of normal)
Last 3 months: 23% normal

Reservoir Inflows: **About 33cfs or about 10% of average at this time of year.**

Snowpack: **There was very little snowpack this year**.

Forecast: **Continued higher than normal temperature and Lower than normal precipitation.**

Water Supply Outlook: **Fair; lower than normal inflows and much higher than normal water usage will cause reservoirs to continue to drop quickly. The projection is that there will be adequate water supply though the rest of year, but Everett may need to enter into Stage 1 of its Drought Response Plan as a precautionary measure.**

ATTACHMENT 3

Consultation Documentation

Presler, Dawn

From: Jim Miller <JMiller@everettwa.gov>
Sent: Tuesday, July 21, 2015 10:19 AM
To: Presler, Dawn; Binkley, Keith
Cc: Flury, Mark; Spangler, Brad; John McClellan; Dave Davis
Subject: ARC Special conference call

Importance: High

Dawn/Keith:

At our City/PUD meeting yesterday, we discussed the need to consult with the ARC relative to the drought situation. The City of Everett would like to have you schedule a special ARC conference call for next Monday, July 27th in the afternoon. This is to consult with them according to FERC License Appendix G; A-LA 9 Section 1.2 which reads:

"If the Licensee determines in consultation with the ARC that a drought event resulting in advisory reductions in domestic water consumption (as described by the 2007 City of Everett's Drought Response Plan as a Stage 1 response to a drought event) is occurring, the Licensee shall release water from the powerhouse to maintain instantaneous minimum flow at USGS Streamflow Gage No. 12138160 at all times in accordance with the following:

From September 15 through October 31:

Reservoir Level:	Minimum Flow:
Above 1420 ft	300 cfs
Between 1420 and 1410 ft	275 cfs
Between 1410 and 1405 ft	250 cfs
Below 1405 ft	200 cfs

From November 1 through September 14:

Reservoir Level:	Minimum Flow:
Above 1420 ft	300 cfs
Between 1420 and 1415 ft	275 cfs
Between 1415 and 1410 ft	250 cfs
Between 1410 and 1405 ft	225 cfs
Below 1405 ft	200 cfs

At present the Spada Reservoir level is about 1415.
The projection for July 27th is a reservoir level of about 1412.

Sincerely,
Jim Miller
Engineering Superintendent
City of Everett

Presler, Dawn

From: Binkley, Keith
Sent: Thursday, July 23, 2015 9:13 AM
To: 'Steven Fransen - NOAA Federal'; 'Romanski, Tim'; Anne Savery (asavery@tulaliptribes-nsn.gov); 'Everest, Loren -FS'; 'Mick Matheson'; 'mike.rustay@co.snohomish.wa.us'; 'Pacheco, James (ECY)'; 'Thomas O'Keefe'; Jim Miller (JMiller@everettwa.gov); Applegate, Brock A (DFW)
Cc: Presler, Dawn; Flury, Mark; Spangler, Brad
Subject: Jackson Hydro Project - Minimum Instream Flow Discussion

ARC Members – Given the current status and forecasted dry conditions in western Washington, it is urgent for the ARC to convene a meeting to discuss potential seasonal modifications to the instream flow schedule for the Sultan River. We will hold a conference call this coming Monday at 2 PM and hope that everyone can participate. We will be sending out the call in information later today.

Thanks in advance for your attention to this matter.

Keith

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

Presler, Dawn

From: Binkley, Keith
Sent: Monday, July 27, 2015 1:17 PM
To: Presler, Dawn; 'Steven Fransen' (steven.m.fransen@noaa.gov); 'Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov); 'Loren Everest - USFS' (leverest@fs.fed.us); Anne Savery; 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV); 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov); 'Mike.Rustay@co.snohomish.wa.us'; 'Jim Miller' (JMiller@ci.everett.wa.us); Mick Matheson; Tom O'Keefe
Cc: Spangler, Brad; Flury, Mark
Subject: RE: JHP (P2157) - ARC - FW: Water Supply Update

What this means, per A-LA 9 (Minimum Flows), is that we will move to immediately set minimum flows at 250 cfs in Reach 1, downstream of the powerhouse. Additional reductions, each in 25 cfs increments, will be made when the reservoir drops below 1,410' and 1,405'.

A Stage 1 advisory also requires the development of a Drought Controlled Release Schedule for whitewater events. This will need to happen quickly but we will need Tom's input for that.

If a Stage 2 Response to a Drought is initiated, then additional actions will be triggered.

I hope this helps inform our discussion at 2 pm today.

Keith

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

From: Presler, Dawn
Sent: Monday, July 27, 2015 11:20 AM
To: 'Steven Fransen' (steven.m.fransen@noaa.gov) <steven.m.fransen@noaa.gov>; 'Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov) <Tim_Romanski@fws.gov>; 'Loren Everest - USFS' (leverest@fs.fed.us) <leverest@fs.fed.us>; Anne Savery <asavery@tulaliptribes-nsn.gov>; 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV) <JPAC461@ECY.WA.GOV>; 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov) <brock.applegate@dfw.wa.gov>; 'Mike.Rustay@co.snohomish.wa.us' <Mike.Rustay@co.snohomish.wa.us>; 'Jim Miller' (JMiller@ci.everett.wa.us) <JMiller@ci.everett.wa.us>; Mick Matheson <mick.matheson@ci.sultan.wa.us>; Tom O'Keefe <okeefe@americanwhitewater.org>
Cc: Binkley, Keith <KMBinkley@SNOPUD.com>; Spangler, Brad <BRSpangler@SNOPUD.com>; Flury, Mark <MMFlury@SNOPUD.com>
Subject: JHP (P2157) - ARC - FW: Water Supply Update
Importance: High

For our call today, please review the attachments and email below.

Dawn

From: Jim Miller [mailto:JMiller@everettwa.gov]
Sent: Monday, July 27, 2015 10:59 AM
To: Presler, Dawn <DJPresler@SNOPUD.com>
Cc: Binkley, Keith <KMBinkley@SNOPUD.com>
Subject: Water Supply Update
Importance: High

Dawn:

Below is the news release implementing Stage 1 of Everett's Drought Response Plan.

I've attached an info sheet and graphs that I'd like to send out prior to our 2:00 PM ARC meeting today.

Thx, Jim Miller

Engineering Superintendent

City of Everett

From: News_Release_from_SPU [mailto:News_Release_from_SPU@seattle.gov]
Sent: Monday, July 27, 2015 09:58 AM Pacific Standard Time
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JOINTLY FROM THE CITIES OF EVERETT, SEATTLE AND TACOMA

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- **Watering early or late:** Water before 8 a.m. or after 7 p.m., which reduces evaporation.
- **Watering deeply, but infrequently:** It's better to have one or two deep waterings, rather than several shallow waterings.
- **Fixing leaks:** Fix obvious indoor and outdoor leaks such as at faucets, hose bibs and sprinkler spray heads. Check for less obvious leaks such as silent toilet leaks. Put several drops of food coloring in your toilet tank; after 10 minutes if you have color in the toilet bowl, you have a flapper leak.
- **Washing vehicles wisely:** Wash your vehicle(s) at locations that recycle their water.
- **Using a broom, not a hose:** Use a broom, rather than a hose, to clean sidewalks, driveways and patios.
- **Washing full loads:** Wait until your clothes washer and dishwasher are full before starting.

Find more water saving tips at www.savingwater.org, www.everettwa.gov/conservationtips and www.tacomawater.com/smart.

All three cities are making operational changes and activating supplementary water supplies – all in an effort to stretch their water supplies as far as possible.

Everett, Seattle and Tacoma are all fortunate to have robust water supplies that allow the water utilities to meet customer needs for water and contribute to healthy fish populations. Available supplies this year have declined more quickly than is typical.

Activating our response plans is a prudent management step given current conditions and supply outlook.

Everett, Seattle and Tacoma work collaboratively on a wide range of water supply, treatment and resource issues. Collectively, we serve close to half the state's population, and each draws its primary water supply from watersheds on the western slopes of the Cascades.

If conditions worsen, each city may move to the "voluntary" phase of water shortage response and ask customers to reduce the amount of water they normally use each day.

More Information
For more information about Everett's water supply situation visit Everett's website at www.everettwa.gov/droughtresponse.

A weekly report on Seattle's water supply is available on the Seattle Public Utilities (SPU) website. Learn more about SPU at: www.seattle.gov/util.

A weekly report on Tacoma's water supply is available at MyTPU.org/watersupply.

Get a map of the three cities' distribution areas.

###

ARC Meeting Summary

June 27, 2015

Present:

- District – Keith Binkley, Dawn Presler, Mark Flury
- City of Everett – Jim Miller
- Snohomish County – Mike Rustay
- U.S. Forest Service – Loren Everest
- WA Department of Fish and Wildlife – Brock Applegate
- U.S. Fish and Wildlife Service – Tim Romanski
- National Marine Fisheries Service – Steve Fransen

Absent:

- City of Sultan – Mick Matheson
- American Whitewater – Tom O'Keefe
- Tulalip Tribes – Anne Savery
- WA Department of Ecology – Jim Pacheco

TOPICS DISCUSSED – ADAPTIVE MGMT OF INSTREAM FLOWS DUE TO DROUGHT CONDITIONS

Jim Miller reviewed the materials routed (see attached). Earlier in the day (7/27/15), Everett went to Stage 1 of its Drought Response Plan. According to A-LA-9 Section 1.2 in the FERC License, the minimum instream flow in Reach 1 of the Sultan River would be lowered to 250 cfs if the Spada Lake Reservoir was below 1,415 feet msl. Spada Lake Reservoir was at 1,420 feet msl on July 10, dropped below 1,415 feet msl on July 21, and currently at ~1,412 feet msl; likely at 1,410 feet msl by August 1 at which point it would drop to 225 cfs. Tim Romanski and Steve Fransen expressed interest in immediately going to 200 cfs as a precautionary action instead of the slow stair-step down from 250 cfs to 225 cfs to 200 cfs. This will allow the water to be stored for later use in the event of a prolonged drought. Keith noted that 200 cfs was the minimum instream flow under the previous license, steelhead have fully emerged, and no active spawning is presently occurring in the Sultan River. Dawn noted that this may be a deviation in the minimum flow and 401 conditions but permissible under the Adaptive Management Plan; FERC notification is needed. Letters from the ARC members indicating a preference to go immediately to 200 cfs would be good to show ARC support and consultation for filing with FERC. The ARC Guidelines indicate that AW and City of Sultan did not want voting quorum status for minimum instream flows, and typically 10 days for non-attendees to concur. Due to the pressing nature of this item, Keith will contact Ecology and Tulalip Tribes for their immediate concurrence and prior to going to 200 cfs. Steve Fransen requested that downramping occur at night if feasible to minimize risk to steelhead fry; Keith said he will take that into consideration and discuss with operations staff. Keith indicated the flow would be reduced to 250 cfs within the next day.

The August 10 ARC meeting will include the following discussion items on the agenda:

- Likelihood of Stage 2 drought declaration
- Adaptive Management Plan – plan for process / special purpose flows (whether they should occur or not) and options for whitewater flows in concert with process flows

ACTION ITEMS:

ARC –

- Email letters to Dawn re: concurrence with proposed action of going immediately to 200 cfs (with associated downramping)

KEITH –

- Contact Ecology and Tulalip for their concurrence

DAWN –

- Letter to FERC re: modification

Presler, Dawn

From: Steven Fransen - NOAA Federal <steven.m.fransen@noaa.gov>
Sent: Monday, July 27, 2015 3:51 PM
To: Binkley, Keith
Cc: Presler, Dawn; 'Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov); 'Loren Everest - USFS' (leverest@fs.fed.us); Anne Savery; 'James (ECY) Pacheco' (JPAC461 @ECY.WA.GOV); 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov); Mike.Rustay@co.snohomish.wa.us; 'Jim Miller' (JMiller@ci.everett.wa.us); Mick Matheson; Tom O'Keefe; Spangler, Brad; Flury, Mark
Subject: Re: JHP (P2157) - ARC - FW: Water Supply Update

Keith,

As discussed in today's conference call, NMFS recommends adjusting from the present minimum instream flow in Reach 1 of 300 cfs toward 200 cfs as soon as concurrence from the other committee members can be obtained.

SF

On Mon, Jul 27, 2015 at 1:16 PM, Binkley, Keith <KMBinkley@snopud.com> wrote:

> What this means, per A-LA 9 (Minimum Flows), is that we will move to immediately set minimum flows at 250 cfs in Reach 1, downstream of the powerhouse. Additional reductions, each in 25 cfs increments, will be made when the reservoir drops below 1,410' and 1,405'.
>
> A Stage 1 advisory also requires the development of a Drought Controlled Release Schedule for whitewater events. This will need to happen quickly but we will need Tom's input for that.
>
> If a Stage 2 Response to a Drought is initiated, then additional actions will be triggered.
>
> I hope this helps inform our discussion at 2 pm today.
>
> Keith
>
> *Keith Binkley*
>
> *Natural Resources Manager*
>
> *Snohomish County PUD*
>
> *425 783 1769 (office)*
>
> *425 293 6201 (cell)*

Presler, Dawn

From: Everest, Loren -FS <leverest@fs.fed.us>
Sent: Monday, July 27, 2015 4:23 PM
To: Binkley, Keith
Cc: Presler, Dawn; 'Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov); Anne Savery; 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV); 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov); Mike.Rustay@co.snohomish.wa.us; 'Jim Miller' (JMiller@ci.everett.wa.us); Mick Matheson; okeefe@americanwhitewater.org; Spangler, Brad; Flury, Mark; Steven Fransen - NOAA Federal
Subject: RE: JHP (P2157) - ARC - FW: Water Supply Update

Keith,
The Forest Service also supports conservative water management, moving to 200 cfs in reach 1 as soon as concurrence is obtained.

Loren Everest
Fisheries Program Manager

Forest Service
Mt. Baker Snoqualmie National Forest

p: 425-783-6040
c: 425-238-2721
leverest@fs.fed.us

2930 Wetmore Ave. Suite 3A
Everett, WA 98282
www.fs.fed.us/mbs

Caring for the land and serving people

From: Steven Fransen - NOAA Federal [mailto:steven.m.fransen@noaa.gov]
Sent: Monday, July 27, 2015 3:51 PM
To: Binkley, Keith
Cc: DJPRESLER@SNOPUD.COM; 'Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov); Everest, Loren -FS; Anne Savery; 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV); 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov); Mike.Rustay@co.snohomish.wa.us; 'Jim Miller' (JMiller@ci.everett.wa.us); Mick Matheson; okeefe@americanwhitewater.org; Spangler, Brad; Flury, Mark
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Presler, Dawn

From: Romanski, Tim <tim_romanski@fws.gov>
Sent: Monday, July 27, 2015 2:37 PM
To: Binkley, Keith
Cc: Presler, Dawn; 'Steven Fransen' (steven.m.fransen@noaa.gov); 'Loren Everest - USFS' (leverest@fs.fed.us); Anne Savery; 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV); 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov); Mike.Rustay@co.snohomish.wa.us; 'Jim Miller' (JMiller@ci.everett.wa.us); Mick Matheson; Tom O'Keefe; Spangler, Brad; Flury, Mark
Subject: Re: JHP (P2157) - ARC - FW: Water Supply Update

Per our conf. call conversation on drought response, FWS recommends that the PUD and City of Everett pursue adjusting flows in the Sultan River from its current state down to 200 cfs as quickly as practical.

Tim Romanski
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
Washington Fish and Wildlife Office
Branch Manager, Conservation and Hydropower Planning
510 Desmond Drive SE, Lacey, WA 98503
360.753.5823 (phone) 360.753.9518 (fax)

On Mon, Jul 27, 2015 at 1:16 PM, Binkley, Keith <KMBinkley@snopud.com> wrote:

> What this means, per A-LA 9 (Minimum Flows), is that we will move to immediately set minimum flows at 250 cfs in Reach 1, downstream of the powerhouse. Additional reductions, each in 25 cfs increments, will be made when the reservoir drops below 1,410' and 1,405'.
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> I hope this helps inform our discussion at 2 pm today.
>
> Keith
>
> *Keith Binkley*
>
> *Natural Resources Manager*
>
> *Snohomish County PUD*

Presler, Dawn

From: Presler, Dawn
Sent: Friday, July 31, 2015 7:13 AM
To: Presler, Dawn
Subject: FW: Jackson Hydroproject - ARC - Reduction in Minimum Flows on the Sultan
Attachments: image002.wmz

From: Applegate, Brock A (DFW) [mailto:Brock.Applegate@dfw.wa.gov]
Sent: Monday, July 27, 2015 2:47 PM
To: Binkley, Keith <KMBinkley@SNOPUD.com>
Cc: dawn.presler@snopud.com; Pacheco, James (ECY) <JPAC461@ECY.WA.GOV>
Subject: Jackson Hydroproject - ARC - Reduction in Minimum Flows on the Sultan

Hi Keith, WDFW approves of the reduction in minimum flows to 200 cfs as soon as possible as agreed upon by the Services and other conference call participants. As stated by Keith, "We have no redds incubating," so we should save water now for a possible dry and hot August and September or longer.

As mentioned by Steve F. from NMFS, let's conduct downramping during the night, which will lower predation on steelhead juveniles.

I will be on vacation on August 10. Please let me know ahead of time if you need WDFW's approval of any additional actions.

Thanks for arranging the conference call.

Sincerely, Brock

Brock Applegate
Renewable Energy/Major Projects Mitigation Biologist
Washington Department of Fish and Wildlife
P.O. Box 1100
111 Sherman St. (physical address)
La Conner, WA 98257-9612

(360) 466-4345 x244 (office)
(360) 789-0578 (cell)
(360) 466-0515 (fax)

From: Binkley, Keith [mailto:KMBinkley@SNOPUD.com]
Sent: Monday, July 27, 2015 1:17 PM
To: Presler, Dawn; 'Steven Fransen' (steven.m.fransen@noaa.gov); 'Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov); 'Loren Everest - USFS' (leverest@fs.fed.us); Anne Savery; Pacheco, James (ECY); Applegate, Brock A (DFW); 'Mike.Rustay@co.snohomish.wa.us'; 'Jim Miller' (JMiller@ci.everett.wa.us); Mick Matheson; Tom O'Keefe
Cc: Spangler, Brad; Flury, Mark
Subject: RE: JHP (P2157) - ARC - FW: Water Supply Update

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Presler, Dawn

From: Rustay, Michael <mike.rustay@co.snohomish.wa.us>
Sent: Tuesday, July 28, 2015 10:58 AM
To: Binkley, Keith; Presler, Dawn; 'Steven Fransen' (steven.m.fransen@noaa.gov); 'Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov); 'Loren Everest - USFS' (leverest@fs.fed.us); Anne Savery; 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV); 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov); 'Jim Miller' (JMiller@ci.everett.wa.us); Mick Matheson; Tom O'Keefe
Cc: Spangler, Brad; Flury, Mark
Subject: RE: JHP (P2157) - ARC - FW: Water Supply Update

Keith,

I share the sentiment of being conservative with water in the reservoir and reducing the flow to 200 cfs sooner rather than waiting for the trigger elevations to be reached… especially since it is inevitable that they will be reached. I assume the 25 cfs increments after 250 cfs were put in place so that there would be gradual changes to downstream conditions so fish could adapt. As a newcomer to the ARC, I do have some questions about the impact of a sudden reduction on downstream habitat. Mainly, will surface/hyporheic flow into the new side channels be impacted? If so, I see a need to monitor and perhaps mitigate for large scale stranding that may occur as a result. If the channels are already disconnected, then this is less of a concern, but I still hope we will get to the 200 cfs flows in a way that has the least impact on fish. My preference is to get to 200 cfs quickly but carefully.

Thanks for the chance to chime in,

Mike

Mike Rustay | Senior Habitat Specialist
Surface Water Management

Snohomish County
Department of Public Works
3000 Rockefeller Ave, M/S 607
Everett, WA 98201

Phone: (425) 388-3464 x 4666
FAX: (425) 388-6455
EMAIL: mike.rustay@snoco.org
WEB: www.snoco.org

From: Binkley, Keith [mailto:KMBinkley@SNOPUD.com]
Sent: Monday, July 27, 2015 1:17 PM
To: Presler, Dawn; 'Steven Fransen' (steven.m.fransen@noaa.gov); 'Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov); 'Loren Everest - USFS' (leverest@fs.fed.us); Anne Savery; 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV); 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov); Rustay, Michael; 'Jim Miller' (JMiller@ci.everett.wa.us);

Presler, Dawn

From: Binkley, Keith
Sent: Tuesday, July 28, 2015 11:37 AM
To: 'Daryl Williams'; Anne Savery
Cc: Presler, Dawn
Subject: RE: JHP (P2157) - ARC - FW: Water Supply Update

Thank you Daryl. You are correct on your assumptions regarding reaches 2 and 3.

FYI – I also spoke with Anne earlier this morning and we are all on the same page.

Keith

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

From: Daryl Williams [mailto:darylwilliams@tulaliptribes-nsn.gov]
Sent: Tuesday, July 28, 2015 11:34 AM
To: Binkley, Keith <KMBinkley@SNOPUD.com>; Anne Savery <asavery@tulaliptribes-nsn.gov>
Subject: RE: JHP (P2157) - ARC - FW: Water Supply Update

Keith,

Due to how early in the year the drought started and the fact that weather reports are not showing any rain in the near future, we concur with the ARC's recommendations for reducing the flows in reach 1 to 200 cfs. We presume that the flows in reaches 2 and 3 will continue to meet the flow schedule as agreed to in the settlement agreement and included in A-LA 9.

Thank you,
Daryl

From: Binkley, Keith [mailto:KMBinkley@SNOPUD.com]
Sent: Monday, July 27, 2015 3:04 PM
To: Anne Savery; Daryl Williams
Subject: FW: JHP (P2157) - ARC - FW: Water Supply Update

FYI – the consensus of folks on the call this afternoon was clearly toward moving to 200 cfs as soon as possible rather than the stair stepped reduction based on reservoir elevation. Is Tulalip supportive of this water action to converse water? The thinking was that we will be going to 200 cfs anyway, why not go sooner and conserve.

Your perspective, as always, is appreciated.

Keith

Keith Binkley
Natural Resources Manager

Presler, Dawn

From: Binkley, Keith
Sent: Wednesday, July 29, 2015 3:17 PM
To: Presler, Dawn
Cc: Jim Miller
Subject: Fwd: Jackson Hydroproject - ARC - Reduction in Minimum Flows on the Sultan

FYI

Sent from my iPhone

Begin forwarded message:

> **From:** "Holderman, Jennifer (ECY)" <jeho461@ecy.wa.gov>
> **Date:** July 29, 2015 at 2:14:17 PM PDT
> **To:** "Binkley, Keith" <KMBinkley@snopud.com>, "Loranger, Thomas (ECY)" <tlor461@ecy.wa.gov>, "Christensen, Dave (ECY)" <davc461@ecy.wa.gov>
> **Cc:** "Pacheco, James (ECY)" <JPAC461@ecy.wa.gov>
> **Subject: RE: Jackson Hydroproject - ARC - Reduction in Minimum Flows on the Sultan**
>
> HI Keith,
>
> Ecology concurs with the reductions of flows to 200 cfs from the Jackson Hydroelectric Project scheduled to occur as soon as possible.
>
> Thanks,
>
> Jennifer Holderman
> Water Resources Program
> Department of Ecology
> Program Development and Operations Support Section
> P.O. Box 47600
> Olympia, WA 98504-7600
> Phone: (360) 407-6094
> Email: jennifer.holderman@ecy.wa.gov
>
> ---
>
> **From:** Binkley, Keith [mailto:KMBinkley@SNOPUD.com]
> **Sent:** Wednesday, July 29, 2015 10:46 AM

To: Loranger, Thomas (ECY); Holderman, Jennifer (ECY); Christensen, Dave (ECY)
Subject: FW: Jackson Hydroproject - ARC - Reduction in Minimum Flows on the Sultan

Hi Tom – thanks for taking time this morning to discuss the issue of minimum flow reductions on the Sultan River with me. We are invoking the Adaptive Management Plan for the Jackson Hydro Project License to pursue this temporary adjustment to minimum flows for the purpose of conserving water. We held a conference call on Monday with the Aquatic Resource Committee (ARC) that oversees the implementation of our license and had unanimous support for this change from all participating parties, as reflected in the email below. Jim Pacheco, DOE's representative to the ARC, was not present for that call so we were unable to get the necessary concurrence from DOE required to take action. Therefore, the PUD is hereby formally requesting concurrence from DOE.

Thanks for your time and immediate consideration of this request,

Keith

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

From: Applegate, Brock A (DFW) [mailto:Brock.Applegate@dfw.wa.gov]
Sent: Monday, July 27, 2015 2:47 PM
To: Binkley, Keith <KMBinkley@SNOPUD.com>
Cc: dawn.presler@snopud.com; Pacheco, James (ECY) <JPAC461@ECY.WA.GOV>
Subject: Jackson Hydroproject - ARC - Reduction in Minimum Flows on the Sultan

Hi Keith, WDFW approves of the reduction in minimum flows to 200 cfs as soon as possible as agreed upon by the Services and other conference call participants. As stated by Keith, "We have no redds incubating," so we should save water now for a possible dry and hot August and September or longer.

As mentioned by Steve F. from NMFS, let's conduct downramping during the night, which will lower predation on steelhead juveniles.

I will be on vacation on August 10. Please let me know ahead of time if you need WDFW's approval of any additional actions.

Thanks for arranging the conference call.

Sincerely, Brock

Brock Applegate
Renewable Energy/Major Projects Mitigation Biologist
Washington Department of Fish and Wildlife
P.O. Box 1100
111 Sherman St. (physical address)
La Conner, WA 98257-9612

(360) 466-4345 x244 (office)

Presler, Dawn

From: Binkley, Keith
Sent: Wednesday, July 29, 2015 3:24 PM
To: Presler, Dawn; 'Steven Fransen' (steven.m.fransen@noaa.gov); 'Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov); 'Loren Everest - USFS' (leverest@fs.fed.us); Anne Savery; 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV); 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov); 'Mike.Rustay@co.snohomish.wa.us'; 'Jim Miller' (JMiller@ci.everett.wa.us)
Cc: Spangler, Brad; Flury, Mark; Tom O'Keefe; Mick Matheson
Subject: RE: JHP (FERC No. 2157) - ARC mtg summary re Stage 1 drought/AMP/instream flows

FYI – we have full concurrence so we will immediately be setting minimum flows at 200 cfs. We will downramp the project overnight and be just above the minimum tomorrow morning.

Thanks for all the cooperation and timely responses to make this happen.

Keith

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

From: Presler, Dawn
Sent: Wednesday, July 29, 2015 12:53 PM
To: Binkley, Keith <KMBinkley@SNOPUD.com>; 'Steven Fransen' (steven.m.fransen@noaa.gov) <steven.m.fransen@noaa.gov>; 'Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov) <Tim_Romanski@fws.gov>; 'Loren Everest - USFS' (leverest@fs.fed.us) <leverest@fs.fed.us>; Anne Savery <asavery@tulaliptribes-nsn.gov>; 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV) <JPAC461@ECY.WA.GOV>; 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov) <brock.applegate@dfw.wa.gov>; 'Mike.Rustay@co.snohomish.wa.us' <Mike.Rustay@co.snohomish.wa.us>; 'Jim Miller' (JMiller@ci.everett.wa.us) <JMiller@ci.everett.wa.us>
Cc: Spangler, Brad <BRSpangler@SNOPUD.com>; Flury, Mark <MMFlury@SNOPUD.com>; Tom O'Keefe <okeefe@americanwhitewater.org>; Mick Matheson <mick.matheson@ci.sultan.wa.us>
Subject: JHP (FERC No. 2157) - ARC mtg summary re Stage 1 drought/AMP/instream flows

Dear ARC,

Attached is the draft meeting summary from our conference call on Monday to discuss the Stage 1 drought declaration and changes in minimum instream flows for Reach 1. Please review/edit as needed ASAP as I will be including this in the letter we submit to FERC along with the other consultation info/emails of concurrence. Keith is just awaiting the official email from Ecology since they have 401 – supposed to be soon.

Dawn

SNOHOMISH COUNTY PUD
PUBLIC UTILITY DISTRICT NO. 1

Your Northwest renewables utility

September 2, 2015

VIA ELECTRONIC FILING

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Re: Jackson Hydroelectric Project, FERC No. 2157
License Article 416: Process Flow Plan - Drought Controlled Flow Release Schedule Fall 2015

Dear Secretary Bose:

Public Utility District No. 1 of Snohomish County (the District) is submitting a Drought Controlled Flow Release Schedule for fall 2015 pursuant to License Article 416: Process Flow Plan (PF Plan) and Section 3.3 Drought Years of the PF Plan under the Jackson Hydroelectric Project (Project) License. Section 3.3 requires the Federal Energy Regulatory Commission to be notified within 7 days of providing notice of a Drought Controlled Flow Release Schedule; this letter constitutes fulfilling such obligation.

Background
The PF Plan Section 3.3 allows for plan modification when: 1) a Stage 2 drought is occurring, 2) interim modifications are required to manage water supply during weather-related shortages, and 3) modifications do not undermine the purpose of the process flow measures.

This Drought Controlled Flow Release Schedule has been necessitated by the Stage 2 Drought Declaration by the City of Everett on August 11, 2015 (see Attachment 1). In accordance with the PF Plan, the District engaged with the Aquatic Resource Committee (ARC) on the development of a Drought Controlled Flow Release Schedule in response to the drought declaration. The District, in consultation with ARC, prepared a modified flow release schedule for the annual September process flow release for upmigration and channel flushing (see Attachment 2).

Drought Controlled Flow Release Schedule for Process Flows
The modification reduces the emphasis on the channel flushing objective, specifically in Reach 1, and maintains a moderate process flow event focused on stimulating the upstream migration of adult salmon. When the water surface elevation in Spada Lake Reservoir is below 1,420 feet, a channel flushing event in Reach 1 is achieved with a 1,200 cfs release for 6 hours. The modified flow schedule calls for a 6-hour release of 400 cubic feet per second (cfs) in Reach 3, 500 cfs in

Reach 2, and 1,000 cfs in Reach 1. This reduction in the Reach 1 component translates to a significant water conservation action. This process flow release is scheduled for September 12, 2015.

If you have any questions regarding the Drought Controlled Flow Release Schedule, please do not hesitate to contact Keith Binkley, Generation Natural Resources Manager, at (425) 783-1769.

Sincerely,

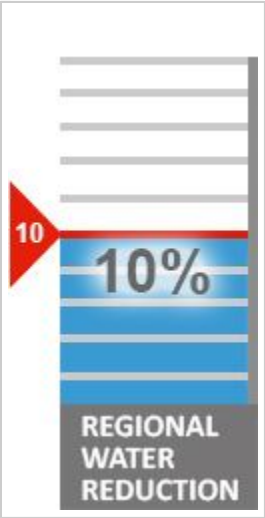
Giuseppe Fina
Interim Assistant General Manager of Generation
(425) 783-1825
GFina@snopud.com

Attachment 1

City of Everett – Stage 2 Drought Declaration

ATTACHMENT 1

Water Supply & Drought Response



We Are Asking for Your Voluntary Water Use Reduction

We are asking customers to reduce their water use by 10%. Seattle, Tacoma and Everett collectively reduced water use by 10% since asking customers to help on August 11.

Learn How to Save Even More

Go to the Saving Water Partnership for conservation tips.

Estimate your water use with this water use calculator.

Current Situation & FAQs

Everett's water situation fact sheet (PDF) as of 9/1/2015.

Everett Water Supply FAQs for Voluntary Stage (PDF).

Graphs

The graphs below depict the situation as of September 1, 2015 and will updated regularly as the situation unfolds.

Spada Lake Reservoir Demand (PDF)

Spada Lake Reservoir Elevation PDF)

Spada Lake Reservoir Precipitation (PDF)

Everett Water Supply FAQ
"Voluntary Stage"

August 25, 2015

1. **What's the latest information on water supply?**

   After the driest May-July on record and in preparation for a potentially drier-than-normal fall, Everett, Seattle and Tacoma have moved to the second stage of their water shortage contingency plans – voluntary reduction – and ask customers to reduce water use by 10 percent. The three cities continue to work in partnership to ensure that the entire region is ready for a potential water shortage, if fall rains return late.

2. **Why was the "Voluntary Stage" of the Water Shortage Contingency Plan activated?**

   Water supply conditions constantly change based on river and reservoir conditions, current and forecasted weather, customer water demand, forecasted water supply conditions, and other factors. We want people to start reducing their water use now, which will increase our supply for the winter.

3. **How will reducing water use by 10 percent address the potential water shortage situation? Will it buy us an extra week of supply? Two weeks? A day?**

   Water supply conditions are highly variable and weather-dependent. Given that variability, it's difficult to give a precise answer. However, a 10 percent reduction equates to about 7 to 10 million gallons per day, given current water consumption rates. That is a substantial amount of water that will help extend the water supply.

4. **Does Everett have enough water for the fall and winter?**

   Everett has sufficient water for people and fish flows for the fall, when it typically begins to rain. In the event that fall rains return late, it will be necessary to have additional water stored in our reservoirs. That is why we are asking customers to reduce water use now, in case we need extra water for the winter.

5. **If water consumption drops by 10 percent by the end of August, will Everett's water supply be back to normal? If not, what will it take to get back to normal?**

   Everett's reservoir is at about 60 percent of normal storage for this time of year. A 10 percent reduction in water use will not bring it back up to normal levels, but it will help reduce withdrawals from the reservoir and support fish flows. To return to normal we need significant rainfall in the fall and winter.

6. If I reduce water consumption by 10 percent, will I see a reduction in my water bill?

Flat rate customers will not see a reduction because your bill is not based on consumption. Likewise, metered customers that use less than the minimum (10 ccf or 7,500 gallons/month), will not see a reduction. However, single family metered accounts that use more than the minimum, could see a slight reduction in the water portion of their bills (sewer is a flat rate), and metered commercial or multi-family accounts that use more than the minimum, could see a slight reduction in both the water and sewer portion their bill.

7. Why did the region choose 10 percent? That doesn't seem like a lot. Why aren't you asking customers to reduce their water use by 20 or 30 percent?

A 10 percent reduction should give us an adequate cushion at this time and we believe it can be attained through voluntary reductions. Should the situation worsen, we may need to go the "Mandatory Stage" of the Water Shortage Contingency Plan and, at that point, customers would be required to reduce water use by a larger percentage.

8. What can customers do to reduce water use?

Outdoor Tips:

- Let lawns go dormant and limit plant watering to twice a week.
- Water plants before 8 a.m. (best) or after 7 p.m.
- Wash vehicle(s) at locations that recycle water
- Do only essential pressure washing.
- Minimize refilling swimming pools and hot tubs.
- Turn off water features.
- Do new plantings in the fall.

Indoor Tips:

- Reduce showering time
- Check for and fix leaks.
- Wash only full loads of laundry and dishes.
- Turn off the tap while brushing teeth or shaving
- Don't pre-rinse dishes.
- If purchasing fixtures/equipment, choose water-efficient models.

Business Tips:

- Encourage reduced showering times at facilities.
- Serve water only on request.
- Check for and fix leaks.
- Wash only full loads of laundry and dishes.
- Provide new towels only on request.
- Check cooling towers for overflow and excessive blowdown.
- If purchasing fixtures/equipment, choose water-efficient models.

9. Where can I find more water saving tips?

Additional water saving tips are available at savingwater.org.

10. I'm worried about our fish population. What is Everett doing to protect fish during this drought?

Everett continues to release water from its reservoirs to help with stream flows for fish on the Sultan River. This provides protection for salmon and steelhead trout.

11. How important is the reduction of demand compared to the arrival of the rain?

Our customers are key partners in making sure there is enough water until fall rains return. We won't have a water supply problem if fall rains return as expected.

12. When did you first know there could be a potential water shortage? Why didn't you implement the water shortage plan then?

We constantly monitor our water system and use hydrologic models to forecast our water supply. In May, reservoirs were full and the outlook was "good." Unusually hot and dry conditions in June and early July changed the water supply outlook, so we activated the "Advisory Stage" of our Water Shortage Contingency Plan. In August, we moved to the "Voluntary Stage" of the plan because hot, dry conditions are forecasted into the fall.

13. How are you measuring whether the 10 percent voluntary reduction is being met?

The 10 percent target is met if actual water consumption is at least 10 percent less than what was anticipated with no reductions. We determine this by comparing the amount of water supplied by the water system since the Voluntary Stage went into effect, to the projected weekly water use for the same period. These projections assume no water use reduction and continued warm, dry conditions persist through the summer.

14. We're in the voluntary stage now. How do we determine whether we need to move to the mandatory stage?

Everett is constantly monitoring our water supplies and system demands. We are also coordinating with local, state, federal and tribal agencies in the management of river flows and fisheries, and together making decisions to optimize the use of water resources. If the continued analysis of this data shows that a further reduction in demands is needed to meet the needs of our customers, or rivers, we will move to the next step in the Water Shortage Contingency Plan, which is a mandatory reduction in water use.

15. What is the Water Shortage Contingency Plan?

The Water Shortage Contingency Plan provides guidelines for Everett to manage water supply and demand when there's a potential or actual water shortage. The plan has four stages that may be phased in over time:

- Stage I: Advisory
- Stage II: Voluntary
- Stage III: Mandatory
- Stage IV: Emergency Curtailment

16. What's the difference between the four stages?

- The advisory stage lets customers know that the potential exists for a water supply shortage and that customers should be especially thoughtful in their use of water.
- The voluntary stage could be put in place when available water sources are not expected to be enough to support normal demands and river flow requirements. In that stage, we request that customers voluntarily reduce water use and take steps to reduce water use at the City.
- The mandatory stage could be implemented when available water sources plus voluntary reductions are not expected to be enough to meet demands and river flow requirements. Requiring a reduction or elimination of lawn watering is an example of mandatory curtailment.
- The emergency stage would only be implemented in the event of a critical water shortage threatening public health and safety. This type of situation has never occurred in the Everett's history. At this stage, Everett would be authorized to require increasingly stringent water use restrictions, and to establish rate surcharges designed to reduce water demand.

17. You say Everett monitors water supply carefully. What is involved with that?

We measure precipitation, stream flows, reservoir storage, water consumption and more. This gives a snapshot that we review on a daily basis. We also look at historical trends and use complex hydrologic models that can help project reservoir elevations and river flows, taking into account reservoir inflow, water use for people and fish, and other factors.

EVERETT'S WATER SITUATION – FACT SHEET

As of 9/1/15

Source of Water:	Sultan River Watershed, Spada Lake Reservoir
Location:	On west slope of Cascade Mountain Range, Culmback Dam is 24 miles east of Everett.
Population Served:	About 580,000; 80% of Snohomish County
Water Storage:	Spada Reservoir held back by Culmback Dam on the Sultan River and Chaplain Reservoir west of Spada Reservoir.
Storage Capacity: (Full)	Spada: 153,000 Acre-Ft; 50 billion gallons (BG) Chaplain: 15,000 Acre-Ft; 4.9 billion gallons (BG)
Elevation (Full):	Spada: 1450 overflow; Chaplain; 650 overflow
Water Usage:	Annual Average = 50 million gallons/day (MGD) **Last 31 days: 70 MGD which is normal for August and 12% below projection based on Temp. & Precip.** Peak Water Use to date: = **105 MGD**
Fish Flows below Power House:	Year around (min.) 300 cfs = 194 MGD **Now in Stage 2 of Drought Response: 200 cfs (min.)**
How Long Will Current Storage Last?	Spada**:** About **five (5) months** for fall/winter water supply and drought fish flows without any precipitation or inflow. Chaplain: About **three (3) months** for water supply. **Total: eight (8) months' supply.**
Current Situation:	Spada Res.at elev. **1400 = 74,500 Ac-ft. = 24.3 BG** This is **63% of normal storage** at this time of year. Chaplain Res.@ Elev. **647.8 = 15,400 Ac-ft = 5.0 BG** **Total: 29.3 BG Storage.**
Precipitation:	Annual Average is 164 inches at Culmback Dam. Normal year-to-date = **91.6 inches** **2015 year-to-date = 70 inches (76% of normal)** **Last 4 months: 51% normal**
Reservoir Inflows:	**About 600 cfs or 350% of average at this time of year.**
Snowpack:	**There was very little snowpack this year**.
Forecast:	**New 8-day outlook: lower than normal temperature and higher than normal precipitation.**
Water Supply Outlook:	**Fair; lower than normal inflows and normal water usage will cause reservoirs to continue to drop. The projection is that there will be adequate water supply through the rest of year, but on Aug. 11 Everett entered into Stage 2 of its Drought Response Plan as a precautionary measure.**

Attachment 2

Documentation of ARC Consultation

Presler, Dawn

From: Presler, Dawn
Sent: Tuesday, August 25, 2015 10:55 AM
To: Binkley, Keith; 'Applegate, Brock A (DFW)'; Daryl Williams; 'Steven Fransen - NOAA Federal'; 'Romanski, Tim'; 'Loren Everest - USFS' (leverest@fs.fed.us); 'Rustay, Michael'; Jim Miller (JMiller@everettwa.gov); Pacheco, James (ECY); 'Mick Matheson'; Tom O'Keefe
Cc: Anne Savery
Subject: RE: Jackson Hydro - ARC: Stage 2 Drought Flow Release Schedule

Importance: High

Dear ARC,
Attached is a link to a doodle poll to select a day/time to discuss issue below. Please take the poll to respond with your availability ASAP (by 1:30 today). Thanks!
http://doodle.com/mhb2gu5kysrdu7v6

Dawn

From: Binkley, Keith
Sent: Tuesday, August 25, 2015 10:31 AM
To: 'Applegate, Brock A (DFW)' <Brock.Applegate@dfw.wa.gov>; Daryl Williams <darylwilliams@tulaliptribes-nsn.gov>; 'Steven Fransen - NOAA Federal' <steven.m.fransen@noaa.gov>
Cc: 'Romanski, Tim' <tim_romanski@fws.gov>; 'Loren Everest - USFS' (leverest@fs.fed.us) <leverest@fs.fed.us>; 'Rustay, Michael' <mike.rustay@co.snohomish.wa.us>; Jim Miller (JMiller@everettwa.gov) <JMiller@everettwa.gov>; Anne Savery <asavery@tulaliptribes-nsn.gov>; Pacheco, James (ECY) <JPAC461@ECY.WA.GOV>; Presler, Dawn <DJPresler@SNOPUD.com>; 'Mick Matheson' <mick.matheson@ci.sultan.wa.us>; Tom O'Keefe <okeefe@americanwhitewater.org>
Subject: RE: Jackson Hydro - ARC: Stage 2 Drought Flow Release Schedule

We will plan on discussing these items once we set up the call.

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

From: Applegate, Brock A (DFW) [mailto:Brock.Applegate@dfw.wa.gov]
Sent: Tuesday, August 25, 2015 9:20 AM
To: Daryl Williams <darylwilliams@tulaliptribes-nsn.gov>; Binkley, Keith <KMBinkley@SNOPUD.com>; 'Steven Fransen - NOAA Federal' <steven.m.fransen@noaa.gov>
Cc: 'Romanski, Tim' <tim_romanski@fws.gov>; 'Loren Everest - USFS' (leverest@fs.fed.us) <leverest@fs.fed.us>; 'Rustay, Michael' <mike.rustay@co.snohomish.wa.us>; Jim Miller (JMiller@everettwa.gov) <JMiller@everettwa.gov>; Anne Savery <asavery@tulaliptribes-nsn.gov>; Pacheco, James (ECY) <JPAC461@ECY.WA.GOV>; Presler, Dawn <DJPresler@SNOPUD.com>; 'Mick Matheson' <mick.matheson@ci.sultan.wa.us>; Tom O'Keefe <okeefe@americanwhitewater.org>
Subject: RE: Jackson Hydro - ARC: Stage 2 Drought Flow Release Schedule

Hi Keith, I would like to concur with Daryl on having further discussion. I would like to see at least two issues discussed:

1) How much water do we need to conserve until the fall/winter rains? If we release a large volume of water for upmigration, will we have enough water for incubation flows for redds at a great distance from the thalweg? If we choose the lowest upmigration flow, do we endanger redds to scour from a near future flood?

2) Can we help the Skykomish River with any temperature problems? How much water and when?

Anyway, I recommend we balance these questions with any additional issues that the ARC suggests.

Thanks for having this discussion.

Sincerely, Brock

Brock Applegate
Renewable Energy/Major Projects Mitigation Biologist
Washington Department of Fish and Wildlife
P.O. Box 1100
111 Sherman St. (physical address)
La Conner, WA 98257-9612

(360) 466-4345 x244 (office)
(360) 789-0578 (cell)
(360) 466-0515 (fax)

From: Daryl Williams [mailto:darylwilliams@tulaliptribes-nsn.gov]
Sent: Monday, August 24, 2015 5:13 PM
To: 'Binkley, Keith'; 'Steven Fransen - NOAA Federal'
Cc: 'Romanski, Tim'; 'Loren Everest - USFS' (leverest@fs.fed.us); 'Rustay, Michael'; Jim Miller (JMiller@everettwa.gov); Applegate, Brock A (DFW); Anne Savery; Pacheco, James (ECY); Presler, Dawn; 'Mick Matheson'; Tom O'Keefe
Subject: RE: Jackson - ARC: Stage 2 Drought Flow Release Schedule

Keith,

I think we need further discussion on this issue. A-LA 8: Process flows, requires an annual upstream migration flow in September of between 800 and 1200 cfs as ***determined by the ARC*** and maintained for at least 6 hours. A-LA 1: Aquatic Resources Committee states that the Licensee shall attempt to meet consensus of the ARC members. Not much of an attempt has been made to even get a majority opinion, much less a consensus agreement. While consensus is not required, I do think that more of an effort should be made to at least reach a majority agreement. While I agree that under our current drought conditions that requiring the highest flow regime may not be necessary, I want to hear discussion about why it may be necessary. The water temperatures in the Skykomish River are probably higher than those in the Sultan and the Sultan River flows may be helping to cool the Skykomish to help attract fish up into the river. While I may be swayed not to vote for the highest flows, I may not want to vote for the lowest flows either. I think this issue needs further discussion rather than just a quick e-mail exchange.

Daryl

From: Binkley, Keith [mailto:KMBinkley@SNOPUD.com]
Sent: Monday, August 24, 2015 4:14 PM
To: 'Steven Fransen - NOAA Federal'
Cc: 'Romanski, Tim'; 'Loren Everest - USFS' (leverest@fs.fed.us); 'Rustay, Michael'; Jim Miller (JMiller@everettwa.gov); 'Applegate, Brock A (DFW)'; Anne Savery; 'Pacheco, James (ECY)'; Presler, Dawn; 'Mick Matheson'; Tom O'Keefe; Daryl

Williams

Subject: RE: Jackson - ARC: Stage 2 Drought Flow Release Schedule

Thanks for your response Steve. I am sharing it with the group because you bring forward some valid points that warrant consideration.

Ten of the ARC members voted, 5 for Option 4 and 5 for Option 2. The District favors Option 2, the low end of the license compliant range for upstream migration. This is a conservative position which one would expect to initiate under a Stage 2 Declaration and is in line with the thinking during the relicensing process. Also, in light of conditions in the Skykomish River (currently 312 cfs), this option "manages" the level of attraction into the Sultan River.

Let me know if there are any objections to implementing this option.

Thanks all,

Keith

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

From: Steven Fransen - NOAA Federal [mailto:steven.m.fransen@noaa.gov]
Sent: Monday, August 17, 2015 8:46 AM
To: Binkley, Keith <KMBinkley@SNOPUD.com>
Subject: Re: Jackson - ARC: Stage 2 Drought Flow Release Schedule

Keith,

I suggest choice #2, the low upmigration emphasis. Part of our reasoning for migration, flushing, and whitewater recreation flows was to restore a resemblance of normative stream flow functions. Droughts, unfavorable as they are, fall within the bounds of normative, just as flooding does. Because of the extreme low flow and warm temperature of the Skykomish River, I think the Sultan River will attract many upstream migrating fish whether we have increased migration flows or not. The reduced minimum instream flows are not the most favorable for upstream migration, but they are well above the level that would preclude or inhibit upstream migration. As for flushing and whitewater recreation, well, that will happen when it rains.

SF

On Mon, Aug 10, 2015 at 3:37 PM, Binkley, Keith <KMBinkley@snopud.com> wrote:

> ARC members – thanks for the discussion this morning around the crafting of a Stage 2 Drought Flow Release Schedule. Per your request, I have prepared the attached. You will note the reductions in reservoir volume associated with different scenarios. That is the first step in defining our collective comfort level given the extended forecast. If folks believe that the impact is minimal, then we can proceed with the program as exactly outlined in the license. If the group feels that some custom, more conservation minded schedule is in order, then the next step is to look at which aspect (upmigration or flushing) we want to place emphasis on. If upmigration, you will see low, medium, and high scenarios in the corresponding tab. You will also notice how they accomplish other objectives in flushing and whitewater recreation. If the emphasis is on flushing, you will see a lower volume hit and notice that you only get 50% of the duration for an upmigration event. You do

however get a full whitewater experience. The dovetailing and interplay between the types of releases gets confusing but you should have all the information you need.

I see 5 possible choices:

1) No Drought Flow Release Schedule – no change to the program outlined in the license

2) Upmigration emphasis (low)

3) Upmigration emphasis (medium)

4) Upmigration emphasis (high)

5) Flushing

Please keep in mind that in the past these type of releases have drawn a lot of fish into the Sultan River. I imagine that under the current conditions of record low flow and high water temperatures in the Skykomish, that we will see an even more pronounced attraction this year.

Please reply by the end of the week with your vote.

Thanks

Keith

Keith Binkley

Natural Resources Manager

Snohomish County PUD

425 783 1769 (office)

425 293 6201 (cell)

Presler, Dawn

From: Binkley, Keith
Sent: Tuesday, September 01, 2015 12:22 PM
To: 'Daryl Williams'; 'Steven Fransen - NOAA Federal'; ''Loren Everest - USFS' (leverest@fs.fed.us)'; 'Jim Miller (JMiller@everettwa.gov)'; Presler, Dawn; 'Tom O'Keefe'; 'Applegate, Brock A (DFW)'
Cc: 'Romanski, Tim'; 'Rustay, Michael'; 'Anne Savery'; 'Pacheco, James (ECY)'; 'Mick Matheson'
Subject: RE: Jackson - ARC: Stage 2 Drought Flow Release Schedule

Thanks for taking time to discuss the Drought Flow Release Schedule last week. I thought we had a productive discussion and that Option 3, the "middle of the road scenario", represented a good compromise and resolution of this issue. As such, the 6 hour release, by reach, will be:

- Reach 3 – 400 cfs
- Reach 2 – 500 cfs
- Reach 1 – 1,000 cfs

Since the call, I checked with our operations folks on status of the work in the switchyard. Work is proceeding as scheduled and should be complete next week. The flow release is scheduled for Saturday September 12.

Thanks again for your participation,

Keith

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

From: Binkley, Keith
Sent: Tuesday, August 25, 2015 10:29 AM
To: 'Daryl Williams' <darylwilliams@tulaliptribes-nsn.gov>; 'Steven Fransen - NOAA Federal' <steven.m.fransen@noaa.gov>
Cc: 'Romanski, Tim' <tim_romanski@fws.gov>; 'Loren Everest - USFS' (leverest@fs.fed.us) <leverest@fs.fed.us>; 'Rustay, Michael' <mike.rustay@co.snohomish.wa.us>; Jim Miller (JMiller@everettwa.gov) <JMiller@everettwa.gov>; 'Applegate, Brock A (DFW)' <Brock.Applegate@dfw.wa.gov>; Anne Savery <asavery@tulaliptribes-nsn.gov>; 'Pacheco, James (ECY)' <JPAC461@ecy.wa.gov>; Presler, Dawn <DJPresler@SNOPUD.com>; 'Mick Matheson' <mick.matheson@ci.sultan.wa.us>; Tom O'Keefe <okeefe@americanwhitewater.org>
Subject: RE: Jackson - ARC: Stage 2 Drought Flow Release Schedule

Thanks for the email Daryl. Per your request, we will plan on additional discussion. We will send out a Doodle poll to get folks availability.

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)

SNOHOMISH COUNTY PUD
PUBLIC UTILITY DISTRICT NO. 1

Your Northwest renewables utility

September 2, 2015

VIA ELECTRONIC FILING

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Re: Jackson Hydroelectric Project, FERC No. 2157
License Article 412: Whitewater Recreation Plan – Drought Controlled Flow Release Schedule for Fall 2015 Whitewater Boating

Dear Secretary Bose:

Public Utility District No. 1 of Snohomish County (the District) is submitting a Whitewater Recreation (WR) Drought Controlled Flow Release Schedule for fall 2015 pursuant to License Article 412: Whitewater Recreation Plan (WR Plan) and Section 2.3.3 Drought Years of the WR Plan under the Jackson Hydroelectric Project (Project) License. Section 2.3.3 requires the Federal Energy Regulatory Commission to be notified within 7 days of providing notice of a Drought Controlled Flow Release Schedule; this letter constitutes fulfilling such obligation.

Background
The WR Plan Section 2.3.3 allows for modification to the WR Plan when: 1) a Stage 1 drought is occurring, 2) interim modifications are required to manage water supply during weather-related shortages, and 3) modifications do not undermine the purpose of the process flow measures. It also states that temporary alternatives could include reducing the magnitude of the event, among other possible alternatives.

This WR Drought Controlled Flow Release Schedule has been necessitated by the Stage 1 Drought Declaration on July 27, 2015, and the subsequent Stage 2 Drought Declaration on August 11, 2015, by the City of Everett (see Attachment 1). In accordance with the WR Plan, the District engaged with the American Whitewater, City of Everett, and National Park Service on the development of a WR Drought Controlled Flow Release Schedule in response to the drought declarations. American Whitewater confirmed that a scheduled flow event that coincides with the September process flow release for upmigration and channel flushing is appropriate given drought conditions (see Attachment 2).

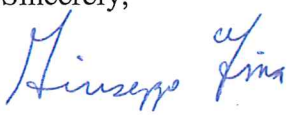
WR Drought Controlled Flow Release Schedule
The modification is a temporary alternative that reduces the magnitude below that of a viable scheduled whitewater event by 200 cfs in Reach 3 (boating Segment 2) and 100 cfs in Reach 2 (boating Segment 3) per the WR Plan, and schedules it to coincide with a moderate process flow event focused for salmon upmigration. The flow schedule calls for a 6-hour release of 400 cubic

feet per second (cfs) in Reach 3 (boating Segment 2), 500 cfs in Reach 2 (boating Segment 3), and 1,000 cfs in Reach 1 (boating Segments 4 and 5). At the downstream end of the Reach/Segment, this translates into the "lowest acceptable technical trip" for whitewater boating in Segment 2, between the "lowest acceptable technical trip" and "lowest optimal technical trip" in Segment 3, and the "lowest optimal standard trip" in Segment 4.[1] All Segments will receive a longer duration (6 hours compared to 3 hours required under the WR Plan) flow release in order to meet the multiple objectives. The flow release is scheduled for September 12, 2015, and will be the first event that will be deducted from the WR water budget. American Whitewater was notified on August 27, 2015, and information was posted to the Project web site for pre-registration.

This dual purpose release translates to significant water conservation action.

If you have any questions regarding the WR Drought Controlled Flow Release Schedule, please do not hesitate to contact Keith Binkley, Generation Natural Resources Manager, at (425) 783-1769.

Sincerely,



Giuseppe Fina
Interim Assistant General Manager of Generation
(425) 783-8649
GFina@snopud.com

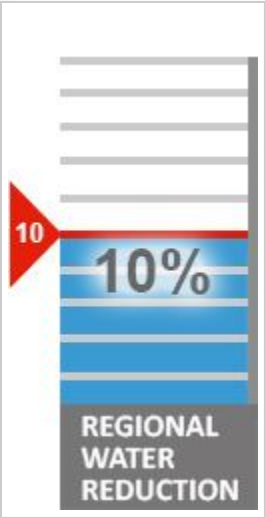
[1] Confluence Research and Consulting. 2008. Flow-Recreation Study Technical Report for the Henry M. Jackson Hydroelectric Project, FERC No. 2157. Prepared by Doug Whittaker, Ph.D. and Bo Shelby Ph.D. Prepared for Public Utility District No. 1 of Snohomish County. July 2008. Available at: http://www.snopud.com/Site/Content/Documents/relicensing/Study%20Reports/SP14_July2008.pdf, last viewed September 1, 2015.

Attachment 1

City of Everett – Stage 2 Drought Declaration

ATTACHMENT 1

Water Supply & Drought Response



We Are Asking for Your Voluntary Water Use Reduction

We are asking customers to reduce their water use by 10%. Seattle, Tacoma and Everett collectively reduced water use by 10% since asking customers to help on August 11.

Learn How to Save Even More

Go to the Saving Water Partnership for conservation tips.

Estimate your water use with this water use calculator.

Current Situation & FAQs

Everett's water situation fact sheet (PDF) as of 9/1/2015.

Everett Water Supply FAQs for Voluntary Stage (PDF).

Graphs

The graphs below depict the situation as of September 1, 2015 and will updated regularly as the situation unfolds.

Spada Lake Reservoir Demand (PDF)

Spada Lake Reservoir Elevation PDF)

Spada Lake Reservoir Precipitation (PDF)

Everett Water Supply FAQ
"Voluntary Stage"

August 25, 2015

1. **What's the latest information on water supply?**

   After the driest May-July on record and in preparation for a potentially drier-than-normal fall, Everett, Seattle and Tacoma have moved to the second stage of their water shortage contingency plans – voluntary reduction – and ask customers to reduce water use by 10 percent. The three cities continue to work in partnership to ensure that the entire region is ready for a potential water shortage, if fall rains return late.

2. **Why was the "Voluntary Stage" of the Water Shortage Contingency Plan activated?**

   Water supply conditions constantly change based on river and reservoir conditions, current and forecasted weather, customer water demand, forecasted water supply conditions, and other factors. We want people to start reducing their water use now, which will increase our supply for the winter.

3. **How will reducing water use by 10 percent address the potential water shortage situation? Will it buy us an extra week of supply? Two weeks? A day?**

   Water supply conditions are highly variable and weather-dependent. Given that variability, it's difficult to give a precise answer. However, a 10 percent reduction equates to about 7 to 10 million gallons per day, given current water consumption rates. That is a substantial amount of water that will help extend the water supply.

4. **Does Everett have enough water for the fall and winter?**

   Everett has sufficient water for people and fish flows for the fall, when it typically begins to rain. In the event that fall rains return late, it will be necessary to have additional water stored in our reservoirs. That is why we are asking customers to reduce water use now, in case we need extra water for the winter.

5. **If water consumption drops by 10 percent by the end of August, will Everett's water supply be back to normal? If not, what will it take to get back to normal?**

   Everett's reservoir is at about 60 percent of normal storage for this time of year. A 10 percent reduction in water use will not bring it back up to normal levels, but it will help reduce withdrawals from the reservoir and support fish flows. To return to normal we need significant rainfall in the fall and winter.

6. If I reduce water consumption by 10 percent, will I see a reduction in my water bill?

Flat rate customers will not see a reduction because your bill is not based on consumption. Likewise, metered customers that use less than the minimum (10 ccf or 7,500 gallons/month), will not see a reduction. However, single family metered accounts that use more than the minimum, could see a slight reduction in the water portion of their bills (sewer is a flat rate), and metered commercial or multi-family accounts that use more than the minimum, could see a slight reduction in both the water and sewer portion their bill.

7. Why did the region choose 10 percent? That doesn't seem like a lot. Why aren't you asking customers to reduce their water use by 20 or 30 percent?

A 10 percent reduction should give us an adequate cushion at this time and we believe it can be attained through voluntary reductions. Should the situation worsen, we may need to go the "Mandatory Stage" of the Water Shortage Contingency Plan and, at that point, customers would be required to reduce water use by a larger percentage.

8. What can customers do to reduce water use?

Outdoor Tips:

- Let lawns go dormant and limit plant watering to twice a week.
- Water plants before 8 a.m. (best) or after 7 p.m.
- Wash vehicle(s) at locations that recycle water
- Do only essential pressure washing.
- Minimize refilling swimming pools and hot tubs.
- Turn off water features.
- Do new plantings in the fall.

Indoor Tips:

- Reduce showering time
- Check for and fix leaks.
- Wash only full loads of laundry and dishes.
- Turn off the tap while brushing teeth or shaving
- Don't pre-rinse dishes.
- If purchasing fixtures/equipment, choose water-efficient models.

Business Tips:

- Encourage reduced showering times at facilities.
- Serve water only on request.
- Check for and fix leaks.
- Wash only full loads of laundry and dishes.
- Provide new towels only on request.
- Check cooling towers for overflow and excessive blowdown.
- If purchasing fixtures/equipment, choose water-efficient models.

9. Where can I find more water saving tips?

Additional water saving tips are available at savingwater.org.

10. I'm worried about our fish population. What is Everett doing to protect fish during this drought?

Everett continues to release water from its reservoirs to help with stream flows for fish on the Sultan River. This provides protection for salmon and steelhead trout.

11. How important is the reduction of demand compared to the arrival of the rain?

Our customers are key partners in making sure there is enough water until fall rains return. We won't have a water supply problem if fall rains return as expected.

12. When did you first know there could be a potential water shortage? Why didn't you implement the water shortage plan then?

We constantly monitor our water system and use hydrologic models to forecast our water supply. In May, reservoirs were full and the outlook was "good." Unusually hot and dry conditions in June and early July changed the water supply outlook, so we activated the "Advisory Stage" of our Water Shortage Contingency Plan. In August, we moved to the "Voluntary Stage" of the plan because hot, dry conditions are forecasted into the fall.

13. How are you measuring whether the 10 percent voluntary reduction is being met?

The 10 percent target is met if actual water consumption is at least 10 percent less than what was anticipated with no reductions. We determine this by comparing the amount of water supplied by the water system since the Voluntary Stage went into effect, to the projected weekly water use for the same period. These projections assume no water use reduction and continued warm, dry conditions persist through the summer.

14. We're in the voluntary stage now. How do we determine whether we need to move to the mandatory stage?

Everett is constantly monitoring our water supplies and system demands. We are also coordinating with local, state, federal and tribal agencies in the management of river flows and fisheries, and together making decisions to optimize the use of water resources. If the continued analysis of this data shows that a further reduction in demands is needed to meet the needs of our customers, or rivers, we will move to the next step in the Water Shortage Contingency Plan, which is a mandatory reduction in water use.

15. What is the Water Shortage Contingency Plan?

The Water Shortage Contingency Plan provides guidelines for Everett to manage water supply and demand when there's a potential or actual water shortage. The plan has four stages that may be phased in over time:

- Stage I: Advisory
- Stage II: Voluntary
- Stage III: Mandatory
- Stage IV: Emergency Curtailment

16. What's the difference between the four stages?

- The advisory stage lets customers know that the potential exists for a water supply shortage and that customers should be especially thoughtful in their use of water.
- The voluntary stage could be put in place when available water sources are not expected to be enough to support normal demands and river flow requirements. In that stage, we request that customers voluntarily reduce water use and take steps to reduce water use at the City.
- The mandatory stage could be implemented when available water sources plus voluntary reductions are not expected to be enough to meet demands and river flow requirements. Requiring a reduction or elimination of lawn watering is an example of mandatory curtailment.
- The emergency stage would only be implemented in the event of a critical water shortage threatening public health and safety. This type of situation has never occurred in the Everett's history. At this stage, Everett would be authorized to require increasingly stringent water use restrictions, and to establish rate surcharges designed to reduce water demand.

17. You say Everett monitors water supply carefully. What is involved with that?

We measure precipitation, stream flows, reservoir storage, water consumption and more. This gives a snapshot that we review on a daily basis. We also look at historical trends and use complex hydrologic models that can help project reservoir elevations and river flows, taking into account reservoir inflow, water use for people and fish, and other factors.

EVERETT'S WATER SITUATION – FACT SHEET

As of 9/1/15

Source of Water:	Sultan River Watershed, Spada Lake Reservoir
Location:	On west slope of Cascade Mountain Range, Culmback Dam is 24 miles east of Everett.
Population Served:	About 580,000; 80% of Snohomish County
Water Storage:	Spada Reservoir held back by Culmback Dam on the Sultan River and Chaplain Reservoir west of Spada Reservoir.
Storage Capacity: (Full)	Spada: 153,000 Acre-Ft; 50 billion gallons (BG) Chaplain: 15,000 Acre-Ft; 4.9 billion gallons (BG)
Elevation (Full):	Spada: 1450 overflow; Chaplain; 650 overflow
Water Usage:	Annual Average = 50 million gallons/day (MGD) **Last 31 days: 70 MGD which is normal for August and 12% below projection based on Temp. & Precip.** Peak Water Use to date: = **105 MGD**
Fish Flows below Power House:	Year around (min.) 300 cfs = 194 MGD **Now in Stage 2 of Drought Response: 200 cfs (min.)**
How Long Will Current Storage Last?	Spada**:** About **five (5) months** for fall/winter water supply and drought fish flows without any precipitation or inflow. Chaplain: About **three (3) months** for water supply. **Total: eight (8) months' supply.**
Current Situation:	Spada Res.at elev. **1400 = 74,500 Ac-ft. = 24.3 BG** This is **63% of normal storage** at this time of year. Chaplain Res.@ Elev. **647.8 = 15,400 Ac-ft = 5.0 BG** **Total: 29.3 BG Storage.**
Precipitation:	Annual Average is 164 inches at Culmback Dam. Normal year-to-date = **91.6 inches** **2015 year-to-date = 70 inches (76% of normal)** **Last 4 months: 51% normal**
Reservoir Inflows:	**About 600 cfs or 350% of average at this time of year.**
Snowpack:	**There was very little snowpack this year**.
Forecast:	**New 8-day outlook: lower than normal temperature and higher than normal precipitation.**
Water Supply Outlook:	**Fair; lower than normal inflows and normal water usage will cause reservoirs to continue to drop. The projection is that there will be adequate water supply through the rest of year, but on Aug. 11 Everett entered into Stage 2 of its Drought Response Plan as a precautionary measure.**

Attachment 2

Documentation of Consultation

Presler, Dawn

From: Binkley, Keith
Sent: Wednesday, September 02, 2015 1:17 PM
To: Presler, Dawn
Subject: FW: Opportunity?

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

From: Thomas O'Keefe [mailto:okeefe@americanwhitewater.org]
Sent: Wednesday, August 26, 2015 4:20 PM
To: Binkley, Keith <KMBinkley@SNOPUD.com>
Subject: Re: Opportunity?

Keith,

I think so. I suspect there may be some particular interest in heading in to the diversion dam.

— Tom

Thomas O'Keefe, PhD
Pacific Northwest Stewardship Director
American Whitewater
3537 NE 87th St.
Seattle, WA 98115
425-417-9012
okeefe@americanwhitewater.org
@AmerWhitewater

> On Aug 26, 2015, at 4:17 PM, Binkley, Keith <KMBinkley@SNOPUD.com> wrote:
>
> Tom - Given that the Controlled Flow Assessment identified 300 cfs as the lowest boatable flow in Segments 2 and 3 and we will be releasing 400 cfs for upstream migration, are you interested in a scheduled event? This would be a longer duration event at lower flow. Segment 3 would get 500 cfs which is above the low end for an acceptable technical trip. This would be the first flow event under the 3 year accounting cycle. I would need to know by Friday to have it occur on Saturday September 12th. Want to make a quick check with other AW members?
>
> Keith
>
> *Keith Binkley*

Presler, Dawn

From: Binkley, Keith
Sent: Wednesday, September 02, 2015 1:17 PM
To: Presler, Dawn
Subject: FW: Any update?

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

From: Thomas O'Keefe [mailto:okeefe@americanwhitewater.org]
Sent: Friday, August 28, 2015 2:27 PM
To: Binkley, Keith <KMBinkley@SNOPUD.com>
Subject: Re: Any update?

I think 9:30. We could do 10 but I like encouraging an early start which is important especially at lower flows.

Thomas O'Keefe, PhD
Pacific Northwest Stewardship Director
American Whitewater
3537 NE 87th St
Seattle, WA 98115

ph 425-417-9012

On Aug 28, 2015, at 10:00 AM, Binkley, Keith <KMBinkley@SNOPUD.com> wrote:

> Ok - great. We will need to have meeting next week. Also, give me start and stop times for 6 hour peak flow.
>
> Sent from my iPhone
>
> On Aug 27, 2015, at 6:09 PM, Thomas O'Keefe <okeefe@americanwhitewater.org> wrote:
>
> > Let's go for it. I put the word out last night and 6 people already responded they would do it and I got a few more who are a maybe.
> >
> > Thomas O'Keefe, PhD
> > Pacific Northwest Stewardship Director
> > American Whitewater
> > 3537 NE 87th St
> > Seattle, WA 98115
> >
> > ph 425-417-9012

On Aug 27, 2015, at 2:23 PM, Binkley, Keith <KMBinkley@SNOPUD.com> wrote:

I need to post on our website tomorrow if at all possible.

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

Presler, Dawn

From: Binkley, Keith
Sent: Wednesday, September 02, 2015 3:15 PM
To: 'Ozog, Eric -FS'
Cc: Presler, Dawn
Subject: RE: September WW Flow

Great – let's also seize the opportunity and chat about the trail maintenance agreement after the meeting

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

From: Ozog, Eric -FS [mailto:eozog@fs.fed.us]
Sent: Wednesday, September 02, 2015 2:46 PM
To: Binkley, Keith <KMBinkley@SNOPUD.com>
Subject: RE: September WW Flow

I'll be there! -Eric

From: Binkley, Keith [mailto:KMBinkley@SNOPUD.com]
Sent: Wednesday, September 02, 2015 2:45 PM
To: Ozog, Eric -FS
Subject: RE: September WW Flow

Yes

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

From: Ozog, Eric -FS [mailto:eozog@fs.fed.us]
Sent: Wednesday, September 02, 2015 2:33 PM
To: Binkley, Keith <KMBinkley@SNOPUD.com>
Subject: RE: September WW Flow

Thanks, I can make it at 9:00 – is it a go?

From: Binkley, Keith [mailto:KMBinkley@SNOPUD.com]
Sent: Wednesday, September 02, 2015 2:26 PM
To: Ozog, Eric -FS
Subject: RE: September WW Flow

How about tomorrow morning's meeting?

Welcome back

Keith Binkley
Natural Resources Manager
Snohomish County PUD
425 783 1769 (office)
425 293 6201 (cell)

From: Ozog, Eric -FS [mailto:eozog@fs.fed.us]
Sent: Wednesday, September 02, 2015 1:58 PM
To: Binkley, Keith <KMBinkley@SNOPUD.com>
Subject: RE: September WW Flow

Hi Keith- I'm back from fire duty and a short vacation- I'm pretty open through September except for the morning of the 15th (I could meet in the pm).

Eric Ozog
Realty Specialist
Forest Service
Mt. Baker-Snoqualmie National Forest, Verlot Public Service Center
p: 360-691-4396
f: 360-691-7122
eozog@fs.fed.us
33515 Mountain Loop Highway
Granite Falls, WA 98252
www.fs.fed.us
Caring for the land and serving people

-----Original Appointment-----
From: Binkley, Keith [mailto:KMBinkley@SNOPUD.com]
Sent: Wednesday, September 02, 2015 12:45 PM
To: okeefe@americanwhitewater.org; Julie Sklare (JSklare@everettwa.gov); Joe Dreimiller; Ozog, Eric -FS; Davis, Tom -FS
Subject: September WW Flow
When: Thursday, September 03, 2015 9:00 AM-10:00 AM (UTC-08:00) Pacific Time (US & Canada).
Where: Conf Rm E1-C (#133) (Cap 6)

Hold for now – not sure if we get a response from USFS due to fire situation. Susan is on vacation until September 8th.

FEDERAL ENERGY REGULATORY COMMISSION
Washington D.C. 20426

OFFICE OF ENERGY PROJECTS

Project No. 2157-204—Washington
Henry Jackson Hydroelectric Project
Snohomish County Public Utility District No. 1

September 28, 2015

Mr. Kim Moore
Snohomish County Public Utility District No. 1
P.O. Box 1107
Everett, WA 98206

Subject: Minimum instream flow deviation in Reach 1

Dear Mr. Moore:

This is in response to your report filed with the Commission on July 31, 2015, regarding a deviation from the minimum instream flow required by Appendix A of the license for the Henry Jackson Hydroelectric Project No. 2157.[1] Specifically, Appendix A, Condition No. 5.2[2] and Appendix B, Condition 2 requires you to operate the project in accordance with the established minimum flow regime. The minimum flows are specific to Reaches 1, 2, and 3 of the Sultan River and vary depending on time of year, reservoir elevation, and drought declaration. In accordance with Article 408, if you deviate from the required flows, you must notify the Commission within ten days of the deviation. Your filing is in regard to a deviation from the minimum instream flow in Reach 1 that began in July.

According to your report, the entire state of Washington is facing drought conditions. Within the Sultan River Basin where the project is located, the project area is facing lower than normal water supply with inflows at record-low levels. On July 27,

[1] Order Issuing New License. 136 FERC ¶ 62, 188 (issued September 2, 2011).

[2] Appendices A and B, which contain the project's water quality certificate and the U.S. Forest Service 4(e) Conditions, respectively, were made a part of the project license via ordering paragraphs D and E, respectively, of the Commission's Order Issuing New License.

2015, the nearby City of Everett issued a Stage 1 Drought declaration. As a result of the drought conditions, high water demand, and providing the required minimum instream flows, the water surface elevation of Spada Lake reservoir has been steadily declining. Based on the updated forecast, drought conditions are expected to persist until November. At the time of the report, the reservoir level elevation was falling from 1,411 feet (ft) mean sea level (msl) to 1,410 ft msl, which is 68 percent of normal storage volume for that time of year. Based on this drought stage, your required minimum instream flow for Reach 1 is 250 cubic feet per second (cfs). Once the Spada Lake reservoir level falls to 1,405 ft. msl, your required minimum instream flow release is 200 cfs. You refer to the change in required minimum instream flow based on reservoir level as a "stair-step reduction in flow."

Because the project has multiple water use issues, you have an Adaptive Management Plan (Plan) that serves as a framework for evaluating and adaptively managing water use within the constraints of your license requirements. The Plan outlines certain processes that you must follow when addressing any water use conflicts associated with Spada Lake refill, project operations, and flow releases. The Plan also provides a process for prioritizing the use of Spada Lake water, as it also serves as a source of drinking water for the City of Everett. Any activities under this Plan must be coordinated with the Aquatic Resource Committee[3] (Committee). The framework embodied in this Plan, along with Article 15 of Appendix G of the license,[4] allows you to initiate adaptive management and recommend a course of action when an extraordinary situation, such as a drought, is occurring or imminent. As indicated by Section 3 of the Plan, this can include a course of action for minimum instream flows.

Thus, immediately following the declaration of Stage 1 drought, you met with the Committee on July 27 to discuss adaptive management of instream flows. During the meeting, the Committee requested that you take immediate precautions to protect aquatic resources downstream of Spada Lake reservoir. Specifically, the Committee advised you to quickly reduce minimum instream flow releases from 250 cfs to 200 cfs by bypassing the stair-step reduction in flow protocol specified in Conditions 5.2 and 2 of Appendices A and B, respectively. The Committee agreed that you should reduce the minimum

[3] The Aquatic Resource Committee is comprised of representatives from: the licensee; National Marine Fisheries Service; U.S. Forest Service; U.S. Fish and Wildlife Service; Washington Department of Fish and Wildlife; Washington Department Ecology; Tulalip Tribes of Washington; Snohomish County, Washington; City of Everett, Washington; City of Sultan, Washington; and American Whitewater.

[4] Appendix G incorporates portions of the October 14, 2009 Settlement Agreement into the project license via ordering paragraphs (D) and (E).

instream flow release by 50 cfs per day for two consecutive days. By the end of the second day, the minimum instream flow would be 200 cfs. Although you will be releasing less than the required minimum instream flow per the minimum flow regime, you will be able to ensure that enough water remains in Spada Lake reservoir to provide at least 200 cfs for downstream aquatic resources until late fall/early winter, when rains are projected to return and water demands are reduced.

With respect to any short-term impacts to aquatic resources, the Committee acknowledged that the reduction in minimum instream flow is not expected to negatively affect any fish populations, most notably steelhead, as steelhead fry have already fully emerged and no active spawning is occurring in the Sultan River basin. The Committee recommended, however, that downramping occur at night, if feasible, in order to minimize predation of steelhead fry.

Following discussions with the Committee, beginning on the evening of July 29, you initiated downramping to reduce the minimum instream flow release in Reach 1 from 250 cfs to 200 cfs. You anticipate operating in this manner until November 2015, when water demands subside or until Spada Lake reservoir reaches and remains at an elevation of less than 1,405 ft. msl, which correlates to a required minimum instream flow release of 200 cfs.

Based on our review of the available information, we have concluded that the deviation from the required minimum instream flow release beginning on July 29 will not be considered a violation of your license. The deviation is exercised in accordance with your Adaptive Management Plan, which provides the Committee authority to exercise an adaptive management approach in order to balance water use conflicts and protect aquatic resources downstream of Spada Lake reservoir. In order to keep us apprised of your actions under the Adaptive Management Plan, please notify the Commission as soon as you resume normal operations under the established minimum flow regime required by Appendix A, Condition No. 5.2 and Appendix B, Condition 2 for Reach 1, or by November 30, 2015, whichever occurs first.

Thank you for your cooperation. If you have any questions regarding this letter, please contact Joy Kurtz at (202) 502-6760 or via email at joy.kurtz@ferc.gov.

Sincerely,

Thomas J. LoVullo
Branch Chief, Aquatic Resources Branch
Division of Hydropower Administration
and Compliance

SNOHOMISH COUNTY PUD
PUBLIC UTILITY DISTRICT NO. 1

Your Northwest renewables utility

November 12, 2015

VIA ELECTRONIC FILING

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

Re: Jackson Hydroelectric Project, FERC No. 2157-204
A-LA 9 Instream Flow Modification Pursuant to Drought Declaration and Adaptive Management Plan – Returned to Normal Operation

Dear Secretary Bose:

Public Utility District No. 1 of Snohomish County (the District) is notifying the Commission of its returning to normal operations and instream flows for the Jackson Hydroelectric Project (Project), FERC No. 2157. On July 31, 2015, the District notified the Commission of the modification of instream flow schedule deemed necessary by the Project's Aquatic Resource Committee (ARC)[1] for the conservation of water supply and continued protection of the fisheries and aquatic resources of the Sultan River due to the extraordinary situation of an extended drought. On September 28, 2015, the FERC issued a letter indicating that the District should notify the Commission when the Project resumes normal operations under the established minimum flow regime required by Appendix A, Condition No. 5.2 and Appendix B, Condition 2 for Reach 1.

Starting on October 30, 2015 and continuing for several days thereafter, the Sultan River Basin experienced heavy precipitation and a dramatic increase in inflow into Spada Lake Reservoir. As a result, the water surface elevation of Spada Lake Reservoir increased to greater than 1,430 feet msl, a rise of nearly 25 feet in a matter of days. This increase brought the reservoir into State 2 and triggered the move to full generation and resumption of normal Project operations. This reservoir level is well above the highest level listed in drought induced minimum flow schedule and is close to typical levels for this time of year.

Although the City of Everett is still under a Stage 1 Drought declaration,[2] the District has returned to normal operations under the established minimum flow regime required by the License Appendix A, Condition No. 5.2 and Appendix B, Condition 2 for Reach 1.

[1] The ARC consists of the U.S. Fish and Wildlife Service, National Marine Fisheries Service, U.S. Forest Service, Tulalip Tribes, Washington Department of Fish and Wildlife, Washington Department of Ecology, City of Everett, City of Sultan, Snohomish County, and American Whitewater.
[2] The City of Everett moved from a Stage 2 to Stage 1 Drought declaration on November 10, 2015.

If you have any questions, please do not hesitate to contact Keith Binkley, Natural Resources Manager, at (425) 783-1769.

Sincerely,

/s Giuseppe Fina

Giuseppe Fina
Interim Assistant General Manager of Generation
GFina@snopud.com
(425) 783-1825

Cc: Keith Binkley, District
Aquatic Resource Committee

CERTIFICATE OF SERVICE

I hereby certify that I have this day served via e-mail a copy of the foregoing filing upon each person on the Project's Aquatic Resource Committee in accordance with ordering paragraph K of the Project license issued by the Federal Energy Regulatory Commission on September 2, 2011.

Dated at Everett, Washington, this 12th day of November, 2015.

Dawn Presler, Sr. Environmental Coordinator
Public Utility District No. 1 of Snohomish County
PO Box 1107
Everett, WA 98206-1107
Phone: (425) 783-1709
E-mail: DJPresler@snopud.com

Presler, Dawn

From: Presler, Dawn
Sent: Thursday, November 12, 2015 7:36 AM
To: 'Steven Fransen' (steven.m.fransen@noaa.gov); 'Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov); 'Loren Everest - USFS' (leverest@fs.fed.us); 'Anne Savery'; 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov); 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV); 'Rustay, Michael'; 'Jim Miller (JMiller@everettwa.gov)'; 'Mick Matheson'; 'Thomas O'Keefe'
Cc: Binkley, Keith
Subject: JHP (FERC No. 2157) - cc ltr to FERC re: back to normal operation
Attachments: 20151112 ltr to FERC ALA9 back to normal operation.pdf

Dear ARC,
Attached is your cc: of the letter I will be e-filing with FERC shortly. It notifies FERC that we are back to normal operations under the minimum flow regime based on the heavy rainfall and subsequent filling of the reservoir. Please contact Keith if you have any questions regarding this filing. Thanks!

Dawn Presler
Sr. Environmental Coordinator
Generation Resources
(425) 783-1709
****
Public Utility District No. 1 of Snohomish County
PO Box 1107
Everett, WA 98206-1107

FEDERAL ENERGY REGULATORY COMMISSION
Washington D.C. 20426

OFFICE OF ENERGY PROJECTS

Project No. 2157-204—Washington
Henry M. Jackson Hydroelectric Project
Snohomish County Public Utility District No. 1

December 21, 2015

Mr. Giuseppe Fina
Snohomish County Public Utility District No. 1
2320 California St.
P.O. Box 1107
Everett, WA 98206

Subject: Notification of return to normal operations - Article 408

Dear Mr. Fina:

This is in response to your report filed with the Federal Energy Regulatory Commission (Commission) on November 12, 2015, notifying the Commission of the return to normal operations at Henry M. Jackson Hydroelectric Project No. 2157 following Stage 1 drought conditions during the summer of 2015. Your report was filed pursuant to the Commission's September 28, 2015 letter, which requested that you notify the Commission once you resume normal operations and operate within the required minimum flow regime for Reach 1 specified in Appendix A, condition 5.2 and Appendix B, condition 2[1] of the project license.[2]

According to your letter, starting on October 30 and continuing for several days thereafter, the Sultan River Basin experienced heavy rainfall, resulting in a dramatic increase of flow into Spada Lake Reservoir. As a result, the water surface elevation of Spada Lake Reservoir rose nearly 25 feet to 1,430 feet mean sea level. This rainfall

[1] Appendices A and B, which contain the project's water quality certificate and the U.S. Forest Service 4(e) conditions, respectively, were made a part of the project license via ordering paragraphs D and E, respectively, of the Commission's Order Issuing New License.

[2] Order Issuing New License (136 FERC ¶ 62, 188), issued September 2, 2011.

shifted the drought status from Stage 1 to Stage 2, which triggered full generation and resumption of normal project operations. Although the project has since shifted back to Stage 1 drought status,[3] you are still operating as normal and meeting the minimum instream flow requirements for Reach 1.

Thank you for your cooperation. If you have any questions regarding this letter, please contact me at (202) 502-6760 or via email at joy.kurtz@ferc.gov.

Sincerely,

Joy M. Kurtz
Aquatic Ecologist
Division of Hydropower Administration
and Compliance

[3] The City of Everett, Washington, declared the shift from a Stage 2 drought to Stage 1 drought on November 10, 2015.

Appendix 3

Consultation Documentation Regarding Draft Report

Presler, Dawn

From: Presler, Dawn
Sent: Tuesday, September 20, 2016 1:42 PM
To: 'Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov); 'Bryden, Andy -FS'; 'Anne Savery'; 'Elizabeth Babcock - NOAA Federal'; 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov); 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV); 'Jim Miller (JMiller@everettwa.gov)'; 'Mick Matheson'; 'okeefe@americanwhitewater.org'; 'Rustay, Michael'
Cc: Binkley, Keith; McDonnell, Andrew
Subject: JHP (FERC No. 2157) - OCMP draft annual report for your 30-day review and comment
Attachments: OCMP_reservoir elevation WY 15-16.xlsx; OCMP Annual Report 2016.docx

Dear ARC,
Attached is the Operations Compliance Monitoring Plan Draft Annual Report for Water Year 2015-2016 for the Jackson Hydro Project, and associated appendix of water surface elevations. Please take the next 30 days to review and provide comments, if any, back to me (with cc: to Keith) **by October 20, 2016**. If you have any questions regarding the report, please contact Keith. Thanks.

Dawn Presler
Sr. Environmental Coordinator
(425) 783-1709

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

CERTIFICATE OF SERVICE

I hereby certify that I have this day served via e-mail a copy of the foregoing filing upon each person on the Project's Aquatic Resource Committee in accordance with ordering paragraph K of the Project license issued by the Federal Energy Regulatory Commission on September 2, 2011.

Dated at Everett, Washington, this 31st day of October, 2016.

Dawn Presler, Sr. Environmental Coordinator
Public Utility District No. 1 of Snohomish County
PO Box 1107
Everett, WA 98206-1107
Phone: (425) 783-1709
E-mail: DJPresler@snopud.com

Presler, Dawn

From: Presler, Dawn
Sent: Monday, October 31, 2016 1:19 PM
To: ''Tim_Romanski@fws.gov' (Tim_Romanski@fws.gov)'; 'Anne Savery'; 'Bryden, Andy -FS'; 'Elizabeth Babcock - NOAA Federal'; ''James (ECY) Pacheco' (JPAC461@ECY.WA.GOV)'; ''brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov)'; 'Mick Matheson'; 'okeefe@americanwhitewater.org'; 'Jim Miller (JMiller@everettwa.gov)'; 'Rustay, Michael'
Cc: Binkley, Keith
Subject: JHP (FERC No. 2157) - cc OCMP Annual Report
Attachments: 20161031 OCMP Annual Report WY2015-2016 FINAL.pdf

Dear ARC Members:
Attached is your cc: of the OCMP Annual Report for Water Year 2-15-2016 that I will be submitting to FERC shortly. Have a great week.

Sincerely,
Dawn Presler
Sr. Environmental Coordinator
(425) 783-1709

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