



Energizing Life in Our Communities

May 18, 2021

VIA ELECTRONIC FILING

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

**Re: Jackson Hydro Project, FERC No. 2157
Instream Flow Schedule for Reach 3 of the Sultan River - Water Year 2021-2022**

Dear Secretary Bose:

With this letter, Public Utility District No. 1 of Snohomish County (the District) is transmitting the instream flow schedule for the Jackson Hydroelectric Project (Project) within Reach 3 (River Mile [RM] 9.7 to 16.1) of the Sultan River for the 2021-2022 Water Year, see Attachment 1. This instream flow schedule is consistent with the requirements identified under "A-LA 9: Minimum Flows" in Appendix G of the Project's License. This flow schedule reshapes the default flow schedule identified in A-LA 9 based on consultation with the Aquatic Resource Committee, see Attachment 2; no requests for modification were received.

The shaping of the annual 23,831-acre-foot water budget is largely for the benefit of anadromous species using Reach 3 of the Sultan River since completion of volitional fish passage at the City of Everett's Diversion Dam at RM 9.7. Specifically, the post-passage emphasis of flow management and budgeting focuses on meeting the physical habitat and water quality needs of fall (Chinook and coho salmon) and spring (steelhead trout) spawning populations. The instream flow schedule for Water Year 2021-2022 continues to balance the physical habitat and temperature requirements of the evolving fish community.

Please contact me if you have questions regarding this filing.

Sincerely,

/s/ Keith Binkley

Keith Binkley
Manager, Natural Resources
(425) 783-1760
KMBinkley@snopud.com

Attachments: 1 – Instream Flow Schedule Reach 3; 2 – ARC Consultation

cc: Aquatic Resource Committee

**ATTACHMENT 1:
Water Year 2021-2022
Instream Flow Schedule for Reach 3**

Timeframe	Release Flow (cfs)
July 1*-15	25
July 16-31	25
August 1-15	30
August 16-31	31
September 1-14	75
September 15-21	73
September 22-30	73
October 1-15	63
October 16-31	51
November 1-15	25
November 16-30	20
December 1-15	24
December 16-31	32
January 1-15	31
January 16-31	32
February 1-14	20
February 15-28	20
March 1-15	20
March 16-31	38
April 1-15	33
April 16-30	22
May 1-15	33
May 16-31	25
June 1-15	20
June 16-30	20

* July 1 begins the water year.

ATTACHMENT 2:
Consultation Documentation

Presler, Dawn

From: Anne Savery <asavery@tulaliptribes-nsn.gov>
Sent: Monday, May 10, 2021 11:00 AM
To: Presler, Dawn
Cc: Binkley, Keith; McDonnell, Andrew
Subject: Re: JHP (FERC No. 2157) - A-LA 9 - R3 flow schedule for WY21-22 - 30 day review and comment
Attachments: image001.png

Yes, good to go.

Thanks

Anne Savery
Hydrologist
503-984-0667

From: Presler, Dawn <DJPresler@SNOPUD.com>
Sent: Friday, May 7, 2021 8:44:07 AM
To: Anne Savery
Cc: Binkley, Keith; McDonnell, Andrew
Subject: RE: JHP (FERC No. 2157) - A-LA 9 - R3 flow schedule for WY21-22 - 30 day review and comment

WARNING: This email originated outside of our organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi – just verifying that we’re good to go. I’m planning filing this with FERC later next week if we don’t hear from you.

Hope you have a great Mother’s Day this weekend and get pampered by your kiddo.

Dawn

From: Presler, Dawn
Sent: Thursday, April 22, 2021 1:30 PM
To: 'Anne Savery' <asavery@tulaliptribes-nsn.gov>
Cc: Tim Romanski <tim_romanski@fws.gov>; McDonnell, Andrew <AWMcDonnell@SNOPUD.com>; Binkley, Keith <KMBinkley@SNOPUD.com>; 'Pacheco, James M. (ECY)' <JPAC461@ECY.WA.GOV>; Applegate, Brock A (DFW) <brock.applegate@dfw.wa.gov>; Janet Curran <janet.curran@noaa.gov>; Jeff Garnett <Jeffrey_Garnett@fws.gov>; Jen Ford <jennifer.ford@usda.gov>; Mike Rustay <mike.rustay@co.snohomish.wa.us>; Nate Morgan <nate.morgan@ci.sultan.wa.us>; snasr@everettwa.gov; Tom O'Keefe <okeefe@americanwhitewater.org>
Subject: RE: JHP (FERC No. 2157) - A-LA 9 - R3 flow schedule for WY21-22 - 30 day review and comment

Hi Anne – wanted to circle back with you to see if you had any additional comments or questions regarding the proposed Reach 3 flow schedule for WY21-22, or if the responses provided need any clarification. There no additional comments at the ARC meeting, except to follow up with you to see if you had any additional questions.

Thanks.

Presler, Dawn

From: McDonnell, Andrew
Sent: Thursday, March 18, 2021 8:42 AM
To: Binkley, Keith; 'Anne Savery'; 'Pacheco, James M. (ECY)'; Presler, Dawn; Applegate, Brock A (DFW); Janet Curran; Jeff Garnett; Jen Ford; Mike Rustay; Nate Morgan; snasr@everettwa.gov; Tom O'Keefe
Cc: Tim Romanski
Subject: RE: JHP (FERC No. 2157) - A-LA 9 - R3 flow schedule for WY21-22 - 30 day review and comment
Attachments: R3_Min flow and accretion_070120-031621.xlsx

Follow Up Flag: Follow up
Flag Status: Completed

Hi Anne,

Following up on Keith's email I have attached a spreadsheet that contains flow related data in the form of a table and figure. The data show the minimum flow release schedule at Culmback Dam and corresponding mean daily flow at the lower end of Reach 3, upstream of the Diversion Dam. The data contained begins with the current Water Year (July 1, 2020) and extends through March 16, 2021.

Regarding spawning, I agree with Keith that spawning habitat and utilization of that habitat is distributed throughout much of Reach 3. From our field notes, the uppermost spawning habitat is located near River Mile 14.4, upstream of the Stringer Bridge.

Below is a table from our supplemental Chinook surveys during October 2020.

Reach 3 Chinook Redd locations by River Mile (RM)
RM 13.4 (6 redds)
RM 13.1 (1 redd)
RM 12.7 (1 redd)
RM 12.6 (6 redds)
RM 12.2 (1 redd)
RM 11.9 (2 redds)
RM 11.1 (3 redds)
RM 11.05 (2 redds)
RM 11.0 (1 redd)
RM 10.9 (4 redds)
RM 10.8 (1 redd)

Overall, spatial distribution of Chinook redds in 2020 was quite representative of what we typically observe in Reach 3. It is noteworthy to mention that 13% of Sultan River Chinook redds were located in Reach 3 during 2020.

Thank you,

Andrew

Andrew McDonnell

Senior Environmental Coordinator
Generation – Natural Resources
Snohomish County PUD
2320 California Street
Everett, WA 98206
O: 425-783-1841
C: 425-308-7937

-----Original Message-----

From: Binkley, Keith <KMBinkley@SNOPUD.com>

Sent: Tuesday, March 16, 2021 10:43 AM

To: 'Anne Savery' <asavery@tulaliptribes-nsn.gov>; McDonnell, Andrew <AWMcDonnell@SNOPUD.com>; 'Pacheco, James M. (ECY)' <JPAC461@ECY.WA.GOV>; Presler, Dawn <DJPresler@SNOPUD.com>; Applegate, Brock A (DFW) <brock.applegate@dfw.wa.gov>; Janet Curran <janet.curran@noaa.gov>; Jeff Garnett <Jeffrey_Garnett@fws.gov>; Jen Ford <jennifer.ford@usda.gov>; Mike Rustay <mike.rustay@co.snohomish.wa.us>; Nate Morgan <nate.morgan@ci.sultan.wa.us>; snasr@everettwa.gov; Tom O'Keefe <okeefe@americanwhitewater.org>

Cc: Tim Romanski <tim_romanski@fws.gov>

Subject: RE: JHP (FERC No. 2157) - A-LA 9 - R3 flow schedule for WY21-22 - 30 day review and comment

Hi Anne - thanks for your email. While we are proposing to not change the shaping of the flow budget for the coming year, we are of course open to discussing. As a refresher, the budget was expanded last year and all indications from the field are that the shaping / distribution of flows over the course of the year met the intended objectives. I will provide a little context here around the logic we have applied to past shaping discussions. The approach we took was largely informed by the instream flow study and the balancing of the species and lifestage requirements, primarily Chinook and steelhead. However, one important thing to remember is that while the reach wide physical habitat conditions are a big part of the equation, migration flows and getting fish to the grounds are important as well. The current, heavier weighting towards the spring and fall spawning seasons capitalizes on accretion to provide physical habitat but also to ensure that the fish migrate effectively and that the difference between Reach 2 and Reach 3 flows is not too extreme. Our observations of the widespread distribution and utilization of spawning habitats throughout Reach 3 are confirming and that no change is warranted, in our opinion. Andrew will provide some specifics on his observations, including river mile locations and notes. I have also asked him to provide the lower Reach 3 hydrograph which will give a sense of seasonal accretion.

Thanks engaging on this,

Keith

-----Original Message-----

From: Anne Savery <asavery@tulaliptribes-nsn.gov>

Sent: Friday, March 12, 2021 9:33 AM

To: McDonnell, Andrew <AWMcDonnell@SNOPUD.com>; Binkley, Keith <KMBinkley@SNOPUD.com>; 'Pacheco, James M. (ECY)' <JPAC461@ECY.WA.GOV>; Presler, Dawn <DJPresler@SNOPUD.com>; Applegate, Brock A (DFW) <brock.applegate@dfw.wa.gov>; Janet Curran <janet.curran@noaa.gov>; Jeff Garnett <Jeffrey_Garnett@fws.gov>; Jen Ford <jennifer.ford@usda.gov>; Mike Rustay <mike.rustay@co.snohomish.wa.us>; Nate Morgan <nate.morgan@ci.sultan.wa.us>; snasr@everettwa.gov; Tom O'Keefe <okeefe@americanwhitewater.org>

Cc: Tim Romanski <tim_romanski@fws.gov>

Subject: Re: JHP (FERC No. 2157) - A-LA 9 - R3 flow schedule for WY21-22 - 30 day review and comment

Can you send out a chart that shows the following:

last years Flow schedule/ this years schedule/ accretion flows

If there are tradeoffs being made to allow for a big increase in spawning flows that don't create better depths over spawning gravels, it would be worthwhile to discuss.

It might make sense to measure water depth over spawning gravels to understand what benefit there is to the change in the flows.

Is spawning dispersed over a range of available habitat or is it concentrated in one or two spots?

Anne

Anne Savery
Hydrologist
503-984-0667

From: McDonnell, Andrew <AWMcDonnell@SNOPUD.com>

Sent: Friday, March 12, 2021 7:59:12 AM

To: Binkley, Keith; 'Pacheco, James M. (ECY)'; Presler, Dawn; Anne Savery; Applegate, Brock A (DFW); Janet Curran; Jeff Garnett; Jen Ford; Mike Rustay; Nate Morgan; snasr@everettwa.gov; Tom O'Keefe

Cc: Tim Romanski

Subject: RE: JHP (FERC No. 2157) - A-LA 9 - R3 flow schedule for WY21-22 - 30 day review and comment

Thanks Keith.

Hi Jim,

Thank you for your questions. Short answer to your first question is no we don't have these measurements over spawning riffles. In general what we observe in terms of spawning ground characteristics are similar throughout the entire river and redds are located where you would expect to see them.

Regarding your second question, Reach 3 has areas of great spawning habitat. During supplemental surveys last fall, we definitely noticed more water in certain areas of Reach 3 after the bump in water budget and re-shaping of that water for fall spawners. We found redds at the typical locations and overall I would estimate 5% of the spawning habitat was used.

There wasn't a noticeable difference in available spawning habitat with the additional water. The quantity of spawning habitat doesn't change much because the associated elevation change across the channel is minimal. Even at lower minimum flow releases in the past, we did not observe any issues with redd dewatering or limited spawning habitat based on water surface elevation.

It seems that the flow provided to Reach 3 meets the needs of spawners, now, let's hope we get more fish up there to put that habitat to good use!

Thanks Jim,

Andrew

Andrew McDonnell
Senior Environmental Coordinator
Generation – Natural Resources
Snohomish County PUD
2320 California Street
Everett, WA 98206
O: 425-783-1841
C: 425-308-7937

From: Binkley, Keith <KMBinkley@SNOPUD.com>
Sent: Thursday, March 11, 2021 4:52 PM
To: 'Pacheco, James M. (ECY)' <JPAC461@ECY.WA.GOV>; Presler, Dawn <DJPresler@SNOPUD.com>; Anne Savery <asavery@tulaliptribes-nsn.gov>; Applegate, Brock A (DFW) <Brock.Applegate@dfw.wa.gov>; Janet Curran <janet.curran@noaa.gov>; Jeff Garnett <Jeffrey_Garnett@fws.gov>; Jen Ford <jennifer.ford@usda.gov>; Mike Rustay <mike.rustay@co.snohomish.wa.us>; Nate Morgan <nate.morgan@ci.sultan.wa.us>; snasr@everettwa.gov; Tom O'Keefe <okeefe@americanwhitewater.org>
Cc: McDonnell, Andrew <AWMcdonnell@SNOPUD.com>; Tim Romanski <tim_romanski@fws.gov>
Subject: RE: JHP (FERC No. 2157) - A-LA 9 - R3 flow schedule for WY21-22 - 30 day review and comment

Hey Jim – I am going to have Andrew respond to your questions since his direct observations on the spawning grounds are most relevant.

Keith

P.S. Just as a reminder for all, since passage was completed, we have monitored escapement to Reach 3 through index area surveys, supplemental surveys in non-index areas, and use of the ARIS system. Currently, we are operating a smolt trap within Reach 3 and simultaneously operating the one in the lower river.

From: Pacheco, James M. (ECY) <JPAC461@ECY.WA.GOV<mailto:JPAC461@ECY.WA.GOV>>
Sent: Wednesday, March 10, 2021 11:40 AM
To: Presler, Dawn <DJPresler@SNOPUD.com<mailto:DJPresler@SNOPUD.com>>; Anne Savery <asavery@tulaliptribes-nsn.gov<mailto:asavery@tulaliptribes-nsn.gov>>; Applegate, Brock A (DFW) <Brock.Applegate@dfw.wa.gov<mailto:Brock.Applegate@dfw.wa.gov>>; Janet Curran <janet.curran@noaa.gov<mailto:janet.curran@noaa.gov>>; Jeff Garnett <Jeffrey_Garnett@fws.gov<mailto:Jeffrey_Garnett@fws.gov>>; Jen Ford <jennifer.ford@usda.gov<mailto:jennifer.ford@usda.gov>>; Mike Rustay <mike.rustay@co.snohomish.wa.us<mailto:mike.rustay@co.snohomish.wa.us>>; Nate Morgan <nate.morgan@ci.sultan.wa.us<mailto:nate.morgan@ci.sultan.wa.us>>; snasr@everettwa.gov<mailto:snasr@everettwa.gov>; Tom O'Keefe <okeefe@americanwhitewater.org<mailto:okeefe@americanwhitewater.org>>
Cc: McDonnell, Andrew <AWMcdonnell@SNOPUD.com<mailto:AWMcdonnell@SNOPUD.com>>; Binkley, Keith <KMBinkley@SNOPUD.com<mailto:KMBinkley@SNOPUD.com>>; Tim Romanski <tim_romanski@fws.gov<mailto:tim_romanski@fws.gov>>
Subject: RE: JHP (FERC No. 2157) - A-LA 9 - R3 flow schedule for WY21-22 - 30 day review and comment

CAUTION: THIS EMAIL IS FROM AN EXTERNAL SENDER.

Do not click on links or open attachments if the sender is unknown or the email is suspect.

Keith,

Have you done any measurements of the depth and velocities over spawning areas from the released flows? Do we have any data of the effectiveness of the fall and spring flows?

Jlm

From: Presler, Dawn <DJPresler@SNOPUD.com<mailto:DJPresler@SNOPUD.com>>

Sent: Wednesday, March 10, 2021 11:33 AM

To: Anne Savery <asavery@tulaliptribes-nsn.gov<mailto:asavery@tulaliptribes-nsn.gov>>; Applegate, Brock A (DFW) <Brock.Applegate@dfw.wa.gov<mailto:Brock.Applegate@dfw.wa.gov>>; Janet Curran

<janet.curran@noaa.gov<mailto:janet.curran@noaa.gov>>; Jeff Garnett

<Jeffrey_Garnett@fws.gov<mailto:Jeffrey_Garnett@fws.gov>>; Jen Ford

<jennifer.ford@usda.gov<mailto:jennifer.ford@usda.gov>>; Pacheco, James M. (ECY)

<JPAC461@ECY.WA.GOV<mailto:JPAC461@ECY.WA.GOV>>; Mike Rustay

<mike.rustay@co.snohomish.wa.us<mailto:mike.rustay@co.snohomish.wa.us>>; Nate Morgan

<nate.morgan@ci.sultan.wa.us<mailto:nate.morgan@ci.sultan.wa.us>>;

snasr@everettwa.gov<mailto:snasr@everettwa.gov>; Tom O'Keefe

<okeefe@americanwhitewater.org<mailto:okeefe@americanwhitewater.org>>

Cc: McDonnell, Andrew <AWMcDonnell@SNOPUD.com<mailto:AWMcDonnell@SNOPUD.com>>; Binkley, Keith

<KMBinkley@SNOPUD.com<mailto:KMBinkley@SNOPUD.com>>; Tim Romanski

<tim_romanski@fws.gov<mailto:tim_romanski@fws.gov>>

Subject: JHP (FERC No. 2157) - A-LA 9 - R3 flow schedule for WY21-22 - 30 day review and comment

THIS EMAIL ORIGINATED FROM OUTSIDE THE WASHINGTON STATE EMAIL SYSTEM - Take caution not to open attachments or links unless you know the sender AND were expecting the attachment or the link Hi ARC, Below is the Sultan River Reach 3 (Culmback Dam to Diversion Dam) flow schedule for the upcoming water year (July 1, 2021-June 30, 2022) for the Jackson Hydro Project. The shaping of the annual 23,831-acre-foot water budget is largely for the benefit of anadromous species using Reach 3 since completion of volitional fish passage at the City of Everett's Diversion Dam. Specifically, the post-passage emphasis of flow management and budgeting focuses on meeting the physical habitat and water quality needs of fall (Chinook and coho salmon) and spring (steelhead trout) spawning populations. The instream flow schedule for Water Year 2021-2022 continues to balance the physical habitat and temperature requirements of the evolving fish community, and is consistent with this year's flow schedule (WY20-21).

Please take the next 30 days to review and provide comment, if any, back to me (cc: Keith) by April 9. Thanks.

[cid:image001.png@01D71714.9C5F1220]

Cheers,

Dawn Presler

Sr. Environmental Coordinator

Generation – Natural Resources

Snohomish County PUD No. 1

Everett, WA

(425) 783-1709 (work)

Presler, Dawn

From: Presler, Dawn
Sent: Wednesday, March 10, 2021 11:33 AM
To: Anne Savery; Brock Applegate; Janet Curran; Jeff Garnett; Jen Ford; Jim Pacheco; Mike Rustay; Nate Morgan; snasr@everettwa.gov; Tom O'Keefe
Cc: Andrew McDonnell; Keith Binkley; Tim Romanski
Subject: JHP (FERC No. 2157) - A-LA 9 - R3 flow schedule for WY21-22 - 30 day review and comment

Hi ARC,

Below is the Sultan River Reach 3 (Culmback Dam to Diversion Dam) flow schedule for the upcoming water year (July 1, 2021-June 30, 2022) for the Jackson Hydro Project. The shaping of the annual 23,831-acre-foot water budget is largely for the benefit of anadromous species using Reach 3 since completion of volitional fish passage at the City of Everett's Diversion Dam. Specifically, the post-passage emphasis of flow management and budgeting focuses on meeting the physical habitat and water quality needs of fall (Chinook and coho salmon) and spring (steelhead trout) spawning populations. The instream flow schedule for Water Year 2021-2022 continues to balance the physical habitat and temperature requirements of the evolving fish community, and is consistent with this year's flow schedule (WY20-21).

Please take the next 30 days to review and provide comment, if any, back to me (cc: Keith) by April 9. Thanks.

Timeframe	Release Flow (cfs)
July 1*-15	25
July 16-31	25
August 1-15	30
August 16-31	31
September 1-14	75
September 15-21	73
September 22-30	73
October 1-15	63
October 16-31	51
November 1-15	25
November 16-30	20
December 1-15	24
December 16-31	32
January 1-15	31
January 16-31	32
February 1-14	20
February 15-28	20
March 1-15	20
March 16-31	38
April 1-15	33
April 16-30	22
May 1-15	33
May 16-31	25
June 1-15	20
June 16-30	20

* July 1 begins the water year.

Cheers,

Dawn Presler

Sr. Environmental Coordinator
 Generation – Natural Resources
 Snohomish County PUD No. 1
 Everett, WA

(425) 783-1709 (work)

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 18th day of May, 2021.



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: Tuesday, May 18, 2021 9:39 AM
To: Anne Savery; Brock Applegate; Janet Curran; Jeff Garnett; Jen Ford; Jim Pacheco; Mike Rustay; Nate Morgan; snasr@everettwa.gov; Tom O'Keefe
Cc: Andrew McDonnell; Keith Binkley; Tim Romanski
Subject: JHP (FERC No. 2157) - cc ALA 9 Reach 3 Flow Schedule for WY 21-22 to FERC
Attachments: 20210518 ALA9 WY2020-21 Reach 3 Flows.pdf

Dear ARC,

Attached is your cc: of the e-filing I will be making soon regarding the Jackson Project's Reach 3 flow schedule for Water Year 2021-2022 which starts July 1, pursuant to A-LA 9.

Regards,

Dawn Presler

Sr. Environmental Coordinator
Generation – Natural Resources
Snohomish County PUD No. 1
Everett, WA

(425) 783-1709 (work)