Cowlitz Hydroelectric Project FERC No. 2016 Cowlitz Fisheries Technical Committee Cowlitz Salmon Hatchery Final Meeting Summary April 2, 2019 from 10:00 – 2:00

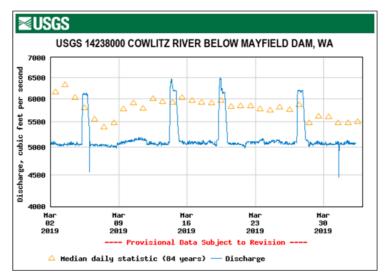
Attendees:	
Travis Nelson	TPU
Tom Wadsworth	WDFW
Paul Sparks	WA Council of TU / TU / American Rivers
Carol Serdar	WA Dept. of Ecology
Sam Gibbons	Tech Rep for WDFW
John Serl	Tech Rep for WDFW
Peggy Miller	Tech Rep for WDFW
Matt Bleich	Tech Rep for TPU
Eric Shoblom	Tech Rep for TPU
Tim Hoffnagle	Tech Rep for TPU
Phil Sandstrom	Tech Rep for TPU
Florian Leischner	Tech Rep for TPU
Leah Marquez-Glynn, by phone	Tech Rep for TPU
Steve West	LCFRB
Laura Wolfe	LCPUD
Lyn Wiltse	PDSA Consulting / Facilitator

2019 FTC Meeting Dates: Apr. 30 (Cutthroat and Chum FHMP Workshop in AM and FTC in PM), June 4, July 2 (FHMP Placeholder), Aug. 6, Sept. 5 (Thurs.), Oct.1, Nov. 5, Dec. 3 from 9:30-3:00 at Cowlitz Salmon Hatchery unless otherwise specified.

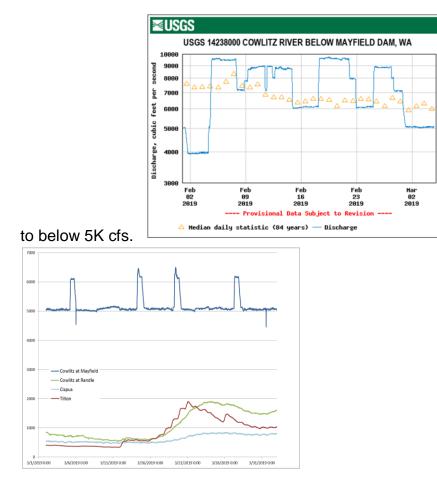
FHMP Workshop Dates: Apr. 4: 9:30-3:30 for Steelhead; Apr. 30: 9:30-Noon for Cutthroat and Chum.

Announcements

 Hydro Operations: Florian reported inflows continue to be very low, similar to summer low flows. Some lowland snow recently melted, and the high-elevation snow should start melting with the rain anticipated later this week. Outflows have been 7,500 cfs on average (90% of normal). The reservoir has been drafting rapidly and Riffe Lake is currently at 668' (historic average is 736'). As shown in the graph to the right, there were two incidents (March 6 and 31) where Tacoma Power Dispatch,



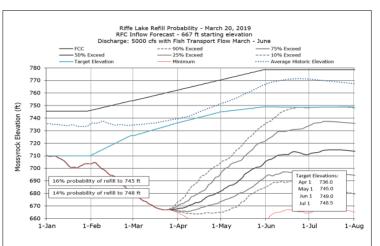
while switching from one unit to another, inadvertently caused two brief (15 min.) drops



Carol requested Ecology be provided the presentations from these meetings, so Ecology has it available when they are reviewing the end-of-year reporting on instream flow.

Florian explained TPU will now put redundant flow monitoring at the unit, so these drops don't happen again. TPU uses NOAA's Northwest River Forecast Center inflow forecasts. Refill now is at 14% probability to refill to 748'. These predictions include rain and associated snow melt.

Link to the USGS real-time Cowlitz River hydrograph:



https://waterdata.usgs.gov/wa/nwis/uv/?site no=14238000&PARAmeter cd=00060,00065

- Cowlitz Falls Minimum Flows: Peggy reported she will continue to reach out to FERC's Erich Gaedeke in hopes of addressing minimum flows by this fall.
- Gravel Augmentation: Florian reported the designs for this are being reviewed by contractors. TPU had a pre-application meeting with the regulators and they are nearly ready to begin to apply for the JARPA application. They plan to close off one of

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the boat launches in the summer and create a temporary road and a temporary bridge to access downstream side of Mill Creek and place ~3K cubic yards of material to extend the downstream alluvial fan. The contractors suggest the design be altered to allow for annual placement of material using an excavator. They will be doing permitting with the USACE – due to the fill and need for ESA consultation. If they have to go through full consultation, the permitting timing will be pushed out beyond this summer. They hope the original license and Bi-Op will be sufficient. The permit will be for five years. If this is delayed, Peggy recommended TPU work on the permanent plan and Florian agreed.

- Downstream Adaptive Management TWG Update: Matt reported the 2018 annual report will be reviewed by the TWG and then will be out for FTC review in the May timeframe. The efforts from the TWG recommendations for 2019 are now underway. They have started operating the collector ahead of schedule with the intent to better understand the initial timing for all the life history stages for all of the fish in the basin. TPU is also initiating an acoustic telemetry study focused on steelhead (The Decision Document for this was approved a couple of months ago.). This is a new directed study focused on Chinook and steelhead to better understand limiting factors on the collector itself (discovery zone, entrance zone, retention, etc.). Discussions are underway about whether the juvenile collection facility for Mayfield should be addressed in the TWG or the M&E Group. When this recommendation is finalized, the FTC will be informed.
- M&E Subgroup: Phil explained this group has begun working on an outline for the M&E chapter for the FHMP. WDFW is drafting a plan for the group to consider regarding how an alternate Tilton release site might be used in terms of disposition (NOR/HOR). The next presentation to the FTC will be on either adult Coho or Spring Chinook.
- Additional Tilton Release Site: Eric explained that the TPU engineer assigned to this
 project has come up with a structural concept for the site. The road approach
 alignment design is nearly complete, after which Eric will run it by the DOT in hopes of
 gaining their approval so the project can move forward in a timely manner. Eric further
 explained that the current design calls for bolting the structure onto the original bridge
 footing and placing additional gravel on the existing road. The more extensive work
 would be done upland as there is a need for more fill for the road and there may be
 associated run-off challenges.
 - Action Item: Eric will share the schedule for the expected completion of the site design for DOT review.
- Plan to remove 600-800 tires from Mayfield this September: Travis has discussed this with the USACE and Ecology, which has a tire recycling program. The tires are located below the ordinary high elevation for the lake. They plan to remove these when the reservoir is already drawn down this September. Stay tuned.
- Dam spill gate repairs: Matt explained the analysis required for this project will be going on through 2019. TPU will be considering various design options. The FTC will be informed once a plan is in place.

Cowlitz Spring Flow Reduction Decision Document 2019-5 Presenter: Florian Leischner

Florian and Leah explained the proposed decision seeking to mitigate for the exceptionally low inflows into Riffe Lake. TPU is asking for a reduction to 2,900 cfs (down from the

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originally requested 3,500 cfs). Leah suggested 2,900 with an average of 3,000 cfs for the weekly fish pulse flows. 2,900 cfs allows TPU to use only one unit which would provide for a smoother transition process. Florian reported that due to the extremely low inflows, TPU purchased \$6 million worth of power in February and early March. Without that power purchase, Riffe Lake would be 30-40' lower than its current elevation.

In the event TPU is unable to refill Riffe Lake, License Article 13 calls for them to consult with the FTC for a minimum flow reduction. Florian reminded all that the FTC approved a similar decision document in 2015. There was concern that on average, in one of every four years, TPU's failure to meet the MIF requirements impacts recovery. In 2017, the reservoir elevation was reduced due to seismic concerns (dam safety). Leah explained that in the very cold and dry month of February, TPU had to start balancing between meeting high power demand and keeping water in the reservoir. As the water supply forecast was low, Leah reported TPU would be in a similar position even without the seismic limits, as they would have started at a higher elevation and would be trying to reach a higher elevation for refill. Paul expressed concern for impact on ESA fish, including stranding. TPU will monitor for stranding after the flow reduction. Florian edited the Coordination Need section of the Decision Document to include Water Quality and the need for a larger planning effort if low water is the new norm. Phil agreed on the importance of using monitoring data to get a biological calendar of the major impacts to species.

After much discussion, this Decision Document was approved by consensus of members present. As per FTC protocols, Travis will follow up with absent FTC members to get their concurrence so that the action can take place the evening of April 2.

Action Items:

- Phil: Ensure the M&E group discussed how best to address this in the future.
- All: Send any specific limiting factors of concern to Phil so they can be consolidated and addressed appropriately.
- Florian: In addition to the edits made during the meeting, update second chart in the Decision Document to show 3K cfs.

Fry Disposition at CF Northshore Collector Presenter: Matt Bleich

Matt explained that this report represented a combination of information from M&E and Downstream Adaptive Management TWG where there have been discussions about fry being collected at a much higher rate (20-40K/year vs. hundreds) since the construction of the Northshore Collector. A disposition document that was prepared before the collector was built indicated how to respond to an increased collection of fry. Previously, all fry were taken back upstream to convenient locations close to Lake Scanewa so they could grow out to a smolt life history stage resulting in higher SARs. The M&E Subgroup and the TWG recommend continuing with a two-phased approach:

- 1. Continue bringing fry back to convenient locations but place them further upstream where they can grow larger than the prior locations allowed.
- 2. Recognizing that this may not be the best long-term strategy for all species, look at life stage dependencies and utilization of the habitat and decide if they should take different actions for different species (M&E will address this).

FHMP Process Update Presenter: Matt Bleich

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Matt explained the next FHMP Workshop will focus on steelhead. He briefly recounted how each workshop starts with reviewing key themes from the prior workshop, making any final edits, and then memorializing the list for inclusion in the FHMP. Then participants are asked to look at the current workshop species from the perspectives of different audience groups. Finally, they review the current hatchery program for that species and discuss potential changes. Matt distributed a Winter Steelhead handout for review prior to the workshop on April 6.

Matt reminded everyone that the FHMP Chinook Chapter is out and comments are to be back by April 12. After TPU works with their consultant to address those comments, a revised draft will be available for public review. The Coho Chapter will be out for review on April 17. The Steelhead Chapter will come after that. The Cutthroat and Chum Workshop will take place the morning of the Apr. 30 FTC meeting and the FTC meeting will occur that afternoon.

March 5 FTC Public Meeting Debrief Presenter: Travis Nelson

All agreed the last meeting went well and many heard appreciative feedback from participating members of the public. After some discussion, there was agreement to hold public questions and comments until the official public comment period near the end of the meeting. At the last meeting during the comment period, several questions came up that weren't related to the FTC meeting topics. For the next meeting (June 4), all agreed to set the expectation that we will respond (verbally) to comments that pertain to the current agenda and let people know that we may not be able to immediately respond to other topics. Tom noted that many of the same topics as were raised at the CRAG meetings.

Action Item:

• Travis: Secure location for the June 4 Public FTC Meeting.

CRR Fund Decision Document: Hatchery Materials Presenter: Florian Leischner

CRR: Florian distributed a draft Hatchery-Associated Application Instruction and Forms packet to all. He asked for feedback and reminded all that he will be distributing a related Decision Document for this later this week for an electronic one-week review and approval.

Action Items:

- Florian: By April 8, send this out electronically for all to review and approve.
- Florian: Check with TPU Legal Department about "Some of the organization's members must be active in Lewis County or Cowlitz County, Washington." Also ensure omission of limits on administrative / overhead costs occurred.

Meeting Summary Approval

The March 5 FTC Public Meeting summary was approved with edits and will be posted to the FTC public website.

Topics for April 30 FTC Meeting (12:30-3:30, following FHMP Workshop in AM)

- Hydro Operations, incl. changes to minimum flows
- Tire Removal at Mayfield
- Boat ramps and recreational levels
- Trout Hatchery Remodel Update

- Cowlitz Restoration & Recovery Fund
- Downstream Adaptive Management TWG
- Additional Tilton Release Site
- M&E Subgroup Report
- FHMP Process Update
- Gravel Augmentation
- Mayfield Unit 41 Exciter Replacement
- Set Agenda for June 4 Public FTC Meeting

Parking Lot

• Steelhead Recycling Program