Cowlitz Hydroelectric Project FERC No. 2016 Cowlitz Fisheries Technical Committee Veterans Memorial Museum, Chehalis, WA Final FTC Public Meeting Summary March 5, 2019 from 10:00 – 2:00

Attendees:	
Travis Nelson	TPU
Tom Wadsworth	WDFW
Carol Serdar	WA Dept. of Ecology
Michelle Day	NMFS
Rich Turner	Tech Rep for NMFS
Brian Gale	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
Steve West	LCFRB
Laura Wolfe	LCPUD
Lyn Wiltse	PDSA Consulting / Facilitator

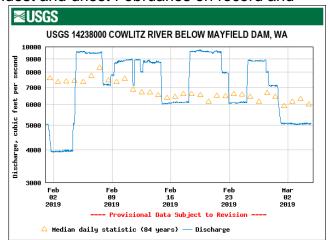
2019 FTC Meeting Dates: Apr. 2, Apr. 30 (Cutthroat and Chum FHMP Workshop in AM and FTC in PM), June 4, July 2 (FHMP Placeholder), Aug. 6, Sept. 5 (Thurs.), Oct.1, Nov. 5, Dec. 3 from 9:30-3:00 at Cowlitz Salmon Hatchery unless otherwise specified.

FHMP Workshop Dates: Feb. 21:10:30-2:30 for Coho; Apr. 4: 9:30-3:30 for Steelhead; Apr. 30: 9:30-Noon for Cutthroat and Chum.

Announcements

 Hydro Operations: Florian reported inflows are 51% of normal. Outflows have been 7,500 cfs on average (90% of normal). The reservoir has been drafting rapidly and Riffe lake is currently at 679' which is its lowest in nearly 20 years. On March 3, TPU reduced outflows to 5K. This was one of coldest and driest Februaries on record and

low temperatures have increased load demand. TPU is running projections on how best to address this. Snow pack is 90% of average. Inflows are below 2K cfs. During the meeting, TPU received word from Chris Foster that the inflows had dropped low enough to cause LCPUD to spill 1K cfs (or inflow) with 500 cfs of this required spill passing through the fish collector. While spilling is unfortunate, it was noted that being able to collect fish during a spill event is something to



celebrate, as that was not possible prior to building the fish collector. There may be a need to request a temporary modification of the minimum downstream flow requirement from FERC. Expect an email update in a couple of weeks. Any request to reduce the required minimum flows would be discussed at the next FTC meeting.

Link to the USGS real-time Cowlitz River hydrograph: https://waterdata.usgs.gov/wa/nwis/uv/?site_no=14238000&PARAmeter_cd=00060,00065

- CF Fish Facilities Update: Eric reported this facility just started up March 1 for the 2019 season. For the last two years, they were building the Northshore collector and are just now finishing a remodel of the existing fish facilities. Very preliminary numbers for the first 4 days of operation are: 885 Chinook fry, 1 Chinook parr, 17 Chinook smolts, 1 steelhead smolt, 4 Coho parr, 3 Coho smolts, and 1 Cutthroat smolt.
- CRR Program Update: Erich Gaedeke at FERC has indicated that TPU will receive a response from them in the near future on the abandonment of upstream volitional passage. The next meeting of the CRR Fund Subgroup is March 7 at the Cowlitz Salmon Hatchery. Afterward, there will be the Upper Cowlitz/Cispus Habitat Strategy Work Group meeting (formed by the Lower Columbia Fish Recovery Board). The CRR Subgroup is providing this group technical information from the habitat assessments. The geomorphic analysis of the upper Cowlitz is nearly complete. Preliminary results of the hydraulic model of the upper Cowlitz will be presented at the next CRR meeting. Habitat project applications are being submitted to CRR and SRF Board for consideration. At the next FTC meeting a decision document regarding the hatchery-associated project applications will be submitted to the FTC for review and approval.
- Downstream Adaptive Management TWG: Matt reported the CFFF is now up and running with the idea of gaining info on the shoulders of the run timing for spring-time fish. The M&E group supported gathering this information, though recognizing this may not necessarily represent a strategy for the future. It is, rather an information gathering time to inform the operational strategy as we move forward. The lead operator of the facility is learning a lot about how to respond to the various operational challenges there. The TWG recommended expanding from just the baseline studies to directed studies to reach the ultimate goal of 95% FPS (or at least the minimal 75%) with best available technology). They will also be performing steelhead directed studies sometime in April. Additional studies will include Chinook. Matt noted that this season they are projecting low spring Chinook return rates which would translate to fewer study fish for the 2020 season and these studies may have to be delayed for a year. He also noted that while spring Chinook are the lowest performing species at the juvenile collector, they are also the most improved. For now, the TWG continues working on adaptive management for Coho and steelhead. Tom reminded all there is an ESA requirement to meet the broodstock goals.
- Additional Tilton Release Site: Eric explained that the purpose of the site was to offset some of the pressure on the natural origin fish released at the Gus Backstrom site. Initial plans have been submitted to TPU engineering. As they are targeting the fall Chinook season for next year, they hope to complete the site this July. The schedule is still uncertain as there was a three-week delay due to snow. TPU engineers will be at the site March 7 to consider permitting requirements. Eric will provide an updated schedule by the end of this week.
- M& E Subgroup: Phil explained this group has been working on three primary tasks: getting task orders in place; making technical contributions to the FHMP; and

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evaluating programs as best as possible including trout counting and evaluating size at release in order to optimize hatchery production.

 Gravel Augmentation: Florian explained the Settlement Agreement requires TPU to deploy 500 cubic yards of gravel annually into the river below the dam. They have been doing this for many years, placing the gravel immediately below Barrier Dam. The current pile isn't really moving as anticipated and is starting to encroach on the ADA fishing and boat launch areas. The interim strategy for 2019 through 2022 is to relocate gravel augmentation activities from the current location on the right bank below barrier dam to the right bank immediately downstream of the mouth of Mill Creek. Tacoma anticipates that gravel placed at the Mill Creek location will be more readily mobilized by the typical winter flow than where the gravel has been placed in the past. They are working on the designs to place 7K yards over the next four years. Eventually, they want to be able to place gravel at multiple elevations. Construction will take place over four weeks in August and will include constructing a long bridge to get at the downstream side of Mill Creek. The added gravel will enlarge the downstream alluvial fan. They anticipate the material will move quickly from there so they can add more at other sites. Tom noted WDFW supports this plan with the understanding of the need to work through the permitting process. WDFW has heard some concerns from the public as this is a fishing site and wants that to be taken into consideration through the gravel placement process. Travis noted that the augmentation of gravel at this site may actually create more fishing access as they will be enlarging an existing gravel bar and will spread it over a much larger area to provide habitat as well as being taken downstream. They have been deploying smaller sized gravel $(\frac{1}{4})$ - 2") to supplement the coarse gravel that is already there. They will monitor the effectiveness of placing gravel in this new location and will be able to adaptively manage accordingly.

Meeting Summary Approval

The February 5, 2019 FTC conference call meeting summary was approved with one edit and will be posted to the FTC public website.

Mayfield Unit 41 – Exciter Replacement Presenter: Florian Leischner

Florian explained that the main unit at the powerhouse needs to be replaced as it has reached its 21-year life span. TPU has other units that can make up for this exciter being out while it is being replaced. The new exciter will undergo two tests. First, they will run the unit at full capacity for a half day. The second test is a load rejection test where they run it at 25-40% of capacity, and then make the unit trip by turning it off. Since this is a planned trip, they can ensure they won't have a MIF violation, but there will be ramping violations when the trip occurs, as they anticipate a sudden 2' drop in flow. While TPU Engineering was hoping to replace the exciter sooner, they have delayed this project until the May-June timeframe so there will be less impact on young fry in the margins. They are still considering a spring night-time operation to minimize impact on recreation / fishing opportunities. They will bring a plan asking for a temporary increase in allowance on the ramping rate to cover the planned outage for a 10-24-hour period to the next FTC meeting for approval. They will inform the stakeholder committee when to expect the drop.

FHMP Process Update Presenter Matt Bleich

Matt explained TPU is still waiting to hear back from FERC on their request for an EOT to mid of February of 2020. He distributed a work plan showing a series of workshops to flesh out key issues in each of the species chapters. Each chapter includes a review period for the FTC, including consolidated comments from the agencies. After TPU works with their consultant to address those comments, a revised draft will be available for public review. Matt assured all that TPU has worked to address concerns expressed by FTC members about redundancy, seeking to find the "sweet spot" that allows each chapter to stand on its own should readers choose to do so. He will provide continual updates of the chapters. For the steelhead workshop, they will be looking at all the different populations and the different concerns for return timing. While the FHMP will not address orcas directly, there will be flexibility to manage with existing tools while respecting ESA constraints, etc.

Public Comment Period

Travis extended appreciation to members of the public present, including Dale Lewis who was attending as a representative from Jaime Herrera Beutler's Office.

Greg King: The Friends of the Cowlitz support increasing hatchery production to meet orca and other future needs.

Chris Vandenberg: What contribution do the salmon and steelhead coming out of the Cowlitz and Columbia River have on the southern resident orca prey base?

• Action Item: Rich Turner to provide analysis of populations that contribute to orcas. He noted that Columbia River spring Chinook contribute to the prey base. Travis will post the analysis on the TPU website.

Randy LeDuc: Can we improve summer run steelhead opportunities? In the past, we have had a 3K limit due to recycling of summer run steelhead. Can we increase this to 6K? It would be nice to have a brighter future outlook and the science supports a higher number.

• Action Item: Phil Sandstrom to discuss the recycling program with Randy; Michelle to discuss this from NMFS' perspective; Lyn to add this topic to the Parking Lot at the end of this meeting summary so it can be addressed by the FTC.

Randy LeDuc: Is there a way we can address bird predation between river and the ocean? Can we start a process to deal with this as was done with the pinnipeds being removed from the Lower Columbia? Travis responded that hazing is a federally regulated activity. Mammals are under the jurisdiction of NMFS, while birds are under USFWS jurisdiction.

• Action Item: Travis Nelson to provide Randy with the appropriate USFWS contact for this discussion.

Greg King: The summer-run Steelhead recycling stray rate was studied by the USGS and estimated at 2%. How can we get the lower Toledo Sand and Gravel net pen program back? Outside TPU's efforts, what might the cap be and how would that relate to southern resident orcas? Of the three satellite ponds, can TPU negotiate one of the ponds for net pens? The Friends of the Cowlitz are interested in this. They would like to know which species are best suited to net pens? How much beyond the 650K lbs. can we go? What would best serve the southern resident orcas, keeping in mind this is for recovery of fish, recovery of the orcas, and also harvest. The net pens would be in Mayfield Lake. Michelle observed that Greg's questions are highly dependent on net pen placement and operation.

Net pens would have to be upper river for recovery. It is important not to negatively impact ESA species.

Lee Roy Wisner: Sports and recreational fishermen and RV-ers all have a feeling that TPU is not being transparent and is retaliating against them. Travis agreed that TPU needs to do a better job of communicating and letting people know they are operating their facilities in the hopes of being a good neighbor. TPU is also eager to get Riffe back to full operation.

Greg King: The USACE was taking care of bird predation and now birds are congregating on the Astoria bridge now. Who is responsible? Travis responded: USACE and USFWS.

Travis closed the Public Comment Session by thanking everyone and reminding them that if they think of anything else, to feel free to contact Keith Underwood or Travis directly. Travis displayed the FTC public website with his contact information.

Topics for April 2 FTC Meeting

- Hydro Operations
- CF Fish Facilities Update
- Cowlitz Restoration & Recovery Fund

 Hatchery Decision Document
- Downstream Adaptive Mgt. Tech Work Group
- Additional Tilton Release Site
- M&E Subgroup Report
- FHMP Process Update
 - Chinook Chapters out for review
 - Preview April 4 Steelhead Workshop
- Gravel Augmentation
- Dam Safety Update
- Debrief of Public Meeting
 - Plan for next Public Meeting
- Other?

Parking Lot

• Steelhead Recycling Program