Cowlitz Hydroelectric Project FERC No. 2016

Cowlitz Fisheries Technical Committee Draft Conference Call Summary

November 2, 2021, from 9:30 - 3:30

FTC Representative Attendees:

Travis Nelson TPU

Carol Serdar WA Dept. of Ecology

Bryce Glaser WDFW Scott Anderson NMFS

Additional Attendees:

Josua Holowatz **WDFW** John Serl WDFW Peggy Miller **WDFW** Sam Gibbons **WDFW** Brian Gale **WDFW** Matt Bleich TPU TPU Eric Shoblom Phil Sandstrom TPU Steve Manlow **LCFRB** Steve West **LCFRB** Laura Wolfe **LCPUD** Russell Page LCPUD Ann Weckback Lewis County

JD Jones USFS

Lyn Wiltse PDSA Consulting / Facilitator

Remaining 2021 FTC Meeting Date: The December 7 meeting will be open to the public and a call-in number will be provided.

2022 FTC Meeting Dates: Jan. 4, Feb. 1, Mar. 1, Apr. 5, May 3, June 7, (no meeting in July), Aug. 2, Sept. 6, Oct. 4, Nov. 1, and Dec. 6

Approval of Last Meeting Summaries

The September and October FTC meeting Summaries were reviewed and approved with edits and appreciation to WDFW for their careful review and attention to detail.

Updates

Hydro Operations

Melora reviewed the PPT sent out on November 1:

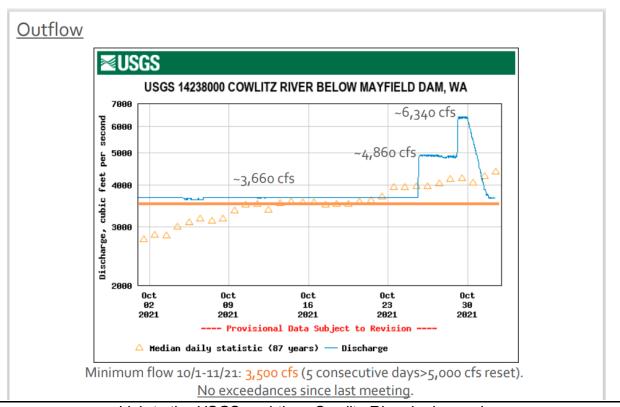
- Inflows: After a typical September, inflows for October were 123% of the historical average. There was lots of rain the last week in October. Inflows were 7,777cfs on 10/31. Inflows are currently running a bit below the 7,279 cfs November historical average.
- Storage: The elevation at Riffe Lake is at 720 ft, down ~2 ft since the September update. Historical average is 737 ft, 2017-2020 average is 719.9 ft. Mayfield has

- been in its normal operating pattern. Snowpack is 3.2" at Paradise and nothing at White Pass.
- Outflows: The 3,500 cfs minimum flow will continue until November 21, unless it resets after 5 consecutive days above 5,000 cfs. Ramping limits were 1" per hour through October 31 and is now at 2" per hour, around the clock. There have been no ramp or flow exceedances, and no unit trips or other unplanned flow changes.
- 10-Day Forecast: Forecast is typical for this time of year. The 10-day forecast is for 3-5" with a variable freezing levels (4-9K'). Inflows are likely to be at or above 5, 000 cfs, peaking on November 5. Outflows may increase to 4,800 cfs later in the week.

Melora shared the following links in the Chat:

- Northwest River Forecast Center: https://www.nwrfc.noaa.gov/rfc/
- Mossyrock Reservoir Station Summary: https://www.nwrfc.noaa.gov/river/station/flowplot/flowplot.cgi?lid=MSRW1
- Mayfield Reservoir Station Summary: https://www.nwrfc.noaa.gov/river/station/flowplot/flowplot.cgi?lid=MYDW1

Bryce and Josua raised a concern about Tacoma operating just below the 5K cfs threshold while creating a period to attract fish into side channel areas. They asked if there was enough water to provide 5K cfs to protect redds and connect side channel habitat (License Article 13 (d)). This would provide more margin habitat as well. Melora will follow up and get back to them.



Link to the USGS real-time Cowlitz River hydrograph: https://waterdata.usgs.gov/wa/nwis/uv/?site_no=14238000&PARAmeter_cd=00060.00065

Action Items:

Melora: Define which years are used to calculate the historical average.

• Melora: Check with Power Management re the feasibility of operating at 5K cfs to protect redds while balancing other needs and let WDFW know their response.

Water Quality/Monitoring

Kosmos: Carol reported Tacoma removed the 10 cubic yards of metal debris from the "debris gulley" to a landfill in Oregon. They also removed the solidified petroleum product sediment along the ledge and capped it with bentonite clay and quarry spalls. There are more big clumps of the petroleum sediment on the left bank of Rainey Creek. On November 1 Tacoma Power did some monitoring there and they have a remedial investigation (part of Ecology's Toxics Cleanup Program Agreed Order). The boundary of the area of interest will be expanded to include all 2019 and 2020 activities. Also included in the cleanup plan will be other activities such as the 1993 removal of the underground storage tank.

Fish Facilities

Barrier Dam: Eric reported Shimmick Construction completed all upland work on October 29. The fishing boundary has been moved to the 100' mark. A survey crew will do as-built drawings on the left bank by the end of the year. There will be continuous construction site monitoring through the winter and spring seasons. Construction activity for the 2022 season will likely begin in May. The in-water work will begin July 15, 2022. Carol questioned if the tree removal was within the CSWGP boundary.

Action Items:

- Carol: Check with Matt Peter on whether downstream monitoring was done in conjunction with the removal of the cottonwood tree, and who will be doing the continuous construction site monitoring, etc.
- Eric: Let Carol know if you would like her to address water quality requirements with Tacoma crews.

Adult Returns /Brood Collection:

- Spring Chinook and Summer Steelhead: All Broodstock goals have been met!
- Fall Chinook: Broodstock goals will be met. Total run size is estimated to exceed 3K.
- Coho: Brood and transport numbers are being met. They have collected 44K HOR coho and 9K NOR coho to date. Peak returns are expected to go through the end of November. The Upper Cowlitz transport cap was increased to 40K. The previous cap was 26K. Crews are transporting 80 fish/week until they reach the Tilton cap of 12K HORs. Bryce reminded all we frontloaded the HOR transport when river and fish conditions were most favorable. To date, we have not released NORs at Gust Backstrom, only Bremer Bridge. It may be time to do so given the strong returns.
- Mayfield Trap: Has been collecting 100-150/day (mostly Chinook smolts).

Cowlitz Falls Fish Facility - Fall Operations Summary:

Eric reported the facility is closed until March 15, 2022. The preliminary data suggest Chinook FCE was ~55%. October 29 was the largest collection day during block collection. October smolt captures included 93 steelhead smolts, 872 coho, and 35 cutthroat during the ascending flow event. John noted the segregated /integrated Coho return time separation seems to be a bit broader this year than in the past.

• **Action Item:** All - Let Eric know if you'd like to be added to the distribution list for Jamie Murphy's weekly report showing where every species is transported.

Satellite Rearing Program

Matt reported since approving the DD at the last FTC meeting, Tacoma has begun developing an internal strategy to start to assess sites that are worthy of additional

investigation. They are also working in a more global assessment of the benefits of satellite rearing compared to potential hatchery options and aim to share this analysis at the December FTC meeting. Bryce clarified that WDFW is seeking more of a benefits analysis from a biological perspective. A cost/benefit analysis would follow if there were more than one option.

M&E Subgroup

Phil reported topics at the last meeting included:

- Coho and fall Chinook harvest rates for SAR analysis Will use the similar approach as used for spring analysis.
- Cascade Aquaculture –WDFW habitat folks will examine the permitting issue.
- Coho broodstock CWT sampling Change to 1 in 3 sampling rates on CWT positive adult coho and jacks.
- Steelhead enumeration project On November 3 crews will PIT tag steelhead.
- Tilton River Transport Plan Over 10,500 HOR coho adults have been transported to Gust Backstrom Park along with 4K jacks. John will send out the prior protocol WDFW used to split up fish coming through the separator. Tacoma will come up with 5- and 10-year curves re run timing for NOR coho.
- Presentations on genetic sampling/run timing and using Tableau Dashboarding to share data widely.
- M&E Monitoring Plan for the FHMP Will discuss at November meeting.

Phil asked if the current process of sending Lyn links to the M&E Subgroup agendas in advance was helpful. Bryce responded affirmatively, saying a week in advance really helps with planning. Josua thanked Phil for being so inclusive in the group.

Gravel Augmentation

Travis reported Tacoma has requested gravel quantities be calculated by their Engineering Group, as well as the subsequent monitoring done with Matt Peter. As reported last month, the amount was ~1100 cubic yards. Photos and a video provided by John showed the gravel pile is distributing well downstream, in the shape of a comet tail. As this gravel is transported downstream, it is felt that this should not create problems for anglers fishing on the hatchery side of the river, but time will tell. An alternate augmentation site is still being considered.

Action Item: John - Send video clip from October 21 flight to Carol. Investigate
creating still photos from the video that can be shared at the December FTC meeting.

Downstream Adaptive Management Technical Work Group Presenter: Matt Bleich

Matt reported this group last met the week of October 25. Discussions included the strategy for moving forward – the annual schedule associated with processing the preliminary annual results and developing a set of recommendations to bring to the FTC for decisions. Tacoma is also partnering with LCPUD to draft 2022 draft recommendations to present to the FTC, likely at the January meeting. He briefly reviewed the five areas of recommendations:

- 1. Evaluate increasing inflow within the collector during spring freshets for salmon and coho.
- 2. Evaluate the effect of steelhead retention efficiency (modify floor geometry of capture zone in CFNSC) using new experimental settings. (Will try to think like a steelhead.)

- 3. Design and implement block study design with pumpback discharge system to evaluate Chinook entrance efficiency using acoustic telemetry data. Tacoma will coordinate with LCPUD and their maintenance activities on this. A decision is required by January 31, 2022.
- 4. Develop methodology to evaluate FCE and FPS for 2022 and beyond including retrospective efficiency calculations/capture evaluations.
- 5. Continue the extended collection seasons (March October) conducted in 2020 and 2021. Tacoma will do this in coordination with LCPUD maintenance activities.
- **Action Item** Matt: send out written summary of recommendations and DD at least two weeks in advance of January 2022 FTC meeting.

LCPUD Dam Operations Presenter: Russell Page

Russell reported that the PUD had just over 15,500 cfs pass through the Cowlitz project on October 29. They spilled ~5,000 cfs. At that time, they had the TDG monitor in. They will remove it for the year in anticipation of the flood season as it would be damaged in high flows. The monitor was in place to monitor water quality for the collector operation that is now off line for the season. The maximum flow at Randle over the week of October 25 was 13,936 cfs on October 29 at 9:45 am. The PUD will be doing a series of drawdowns over the next 5-6 years as per the schedule below. They will get permits in place and then seek a contractor for the work. Once all of the permits are in place and contractors chosen a new schedule will be developed and sent out with firm dates.

CF Reservoir Drawdown Draft Project List

CI Reservoir Brawaewit Brain Frageer List		
Project	Reason for Drawdown Activity	Anticipated Drawdown Timeline
Debris Site Reinforcement / Habitat		
Enhancement	Contract Work - Civil Site Work	Q3 2022, 3 - 4 Weeks
Debris Barrier Rehabilitation	Contract Work - Mandatory Bid Walk	Q3 2022, 2-3 Days
Debris Barrier Rehabilitation	Contract Work - Remove Sediment from Moorage Area	Q1 2023, - 1 - 1.5 Month
Dabaia Ramina Bababilistation	Contract West - Bookint Datain Booking Extension	Immediately after Labor Day - Early November 2023
Debris barrier Renabilitation	Contract Work - Repaint Debris barrier Exterior	November 2023
Man-Made Island Canal	Design Consultant - Dryout & Survey Area to be Excavated	Q1 2023, ~ 1-2 Weeks
Man-Made Island Canal	Contract Work - Civil Site Work	Mid-September - Mid-October 2025
Trash Removal System	Contract Work - Civil Site Work	TBD
Truck Removal System	Contract Work Chili Site Work	TBD
Trash Removal System	Contract Work - Civil Site Work	IBU
Sluice Gate Replacement	Contract Work - Replacing Sluice Gates w/Radial Tainter Gate	TBD
Stuice Gate Replacement	Contract Work - Replacing Sluice Gates w/Radial Tainter Gate	TBD
	Debris Site Reinforcement / Habitat Enhancement Debris Barrier Rehabilitation Debris Barrier Rehabilitation Debris Barrier Rehabilitation Man-Made Island Canal Man-Made Island Canal Trash Removal System Trash Removal System	Debris Site Reinforcement / Habitat Enhancement Contract Work - Civil Site Work Debris Barrier Rehabilitation Contract Work - Mandatory Bid Walk Debris Barrier Rehabilitation Contract Work - Remove Sediment from Moorage Area Debris Barrier Rehabilitation Contract Work - Repaint Debris Barrier Exterior Man-Made Island Canal Design Consultant - Dryout & Survey Area to be Excavated Man-Made Island Canal Contract Work - Civil Site Work Trash Removal System Contract Work - Civil Site Work Trash Removal System Contract Work - Civil Site Work Sluice Gate Replacement Contract Work - Replacing Sluice Gates w/Radial Tainter Gate

FHMP Transition Plans Presenter: Matt Bleich

Matt thanked everyone who has been a part of the many FHMP workshops and reported the transition plans are substantively complete. Still to do: By Thanksgiving, Phil and John hope to align all the plans and edit them for consistency. They will send these to the FTC for review when complete. Eric, Sam, and Brian are planning to complete a bio programming exercise in January to ensure all recommendations fit within the facilities and any decisions that need to be made in this regard will be brought to the FTC and also the public. At this point, the plan is to begin interacting with the public in late January, using an iterative

process very similar to previous APR process. They are also working hard on the bio programming effort – aiming for January

Phil noted steelhead broodstock collection and changes to the marking program are time sensitive issues. If alignment is achieved, it would be best to make this change this year. For now, this will stay as a standing item on FTC agendas. Bryce noted it would make sense to showcase all the transition plan progress at the December FTC meeting while highlighting the public engagement process.

CRR Fund / HAP Subcommittee
Presenters: Melora Shelton / Steve Manlow

CRR 2021 Implementation Strategy Interim Update, and corresponding revised DD: Melora provided an overview of the need for the 2021 interim update to the CRR Implementation Strategy and the review process for the document and Decision Document to date. After the last meeting, Travis and Melora discussed way to allow and evaluate indirect funding with the LCFRB. All agreed to use or adapt the RCO approach to determine indirect rates and calculate costs. Rather than putting limits on indirect funding, they will evaluate these costs as part of the overall funding for the project. The Implementation Strategy Interim Update was edited accordingly. Melora highlighted the changes made to include allowance for indirect costs. There was consensus approval of the 2021 Interim Strategy DD.

CRR 2021 Funding Determination Decision Document:

Steve Manlow reminded all of the LCFRB presentation at the last FTC meeting. The Cowlitz Indian Tribe's Cispus Floodplain Project proposal which was evaluated through LCFRB's 2021 grand round. Steve noted the project ranked quite well despite a competitive grant round with tight scoring. It is a design-only project that targets spring Chinook, steelhead, coho. This could ultimately lead to an on-the-ground project and that was identified in the Upper Cowlitz Cispus Habitat Strategy. \$194,200 is the cost of the project, which was the full proposal less indirect costs which were not eligible for funding during that grant round. There was consensus approval of the CRR 2021 Funding Determination DD.

HAP Update: Tacoma continues to work with the content in the 2017 implementation Strategy that addressed HAP. It is also working internally on guiding principles to discuss with stakeholders. Tacoma's goal is to end the year with a draft of revised materials ready to share with technical reps (hatchery experts) from stakeholder organizations in January within the soon-to-be-formed HAP Subcommittee. This is the group will bring revised principles to the FTC and also consider implementation for the next grant round.

Action Items:

- Melora and Steve M: Send Approved DDs to Lyn and Travis for electronic distribution to mark 7-day approval by absents FTC voting members.
- All: At the December FTC meeting announce which hatchery experts from your organization will become members of the HAP Subcommittee.

Travis thanked everyone for another productive meeting. As Henry Ford said, "Whether you believe you can or can't, you're right." He congratulated everyone for the many great accomplishments made by working together, including work on the FHMP, CRR, and putting gravel in the river!

Topics for December 7 FTC Public Meeting

- Extra time for review of notes
- Updates incl. Hydro Ops, Water Quality
- LCPUD Dam Ops
- Fish Facilities incl. Barrier Dam Project overview
- Satellite Rearing DD
- Downstream Adaptive Mgt. TWG
- FHMP Transition Plan Update
- Satellite Rearing Program
- CRR Program
- M&E Subgroup
- Gravel Augmentation with video
- Preview December 7 Public FTC Meeting topics

Meeting Evaluation

- Great participation
- Appreciations all around
- Humor
- Tech worked great.
- Got through a lot in little time.
- Have funded our second CRR project.
- Loved the video
- Josua's Quote: "I truly believe in positive synergy, that your positive mindset gives
 you a more hopeful outlook, and belief that you can do something great means you
 will do something great." Russell Wilson

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Parking Lot

- Review/Update FTC Protocols to include remote meeting procedures
- Presentation by Tacoma's Power Management Group
- Review Steelhead Recycling Program