

Cowlitz Hydroelectric Project
FERC No. 2016
Cowlitz Fisheries Technical Committee
Final MS Teams Meeting Summary
January 4, 2022, from 9:30 – 3:30

FTC Representative Attendees:

Travis Nelson	TPU
Carol Serdar	WA Dept. of Ecology
Bryce Glaser	WDFW

Additional Attendees:

Josua Holowatz	WDFW
John Serl	WDFW
Peggy Miller	WDFW
Sam Gibbons	WDFW
Brian Gale	WDFW
Todd Hillson	WDFW
Matt Bleich	TPU
Eric Shoblom	TPU
Chris Foster	TPU
Phil Sandstrom	TPU
Steve West	LCFRB
Debbie Carlson	BPA
Laura Wolfe	LCPUD
Russell Page	LCPUD
Lyn Wiltse	PDSA Consulting / Facilitator

2022 FTC Meeting Dates: 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 Summary

The December FTC public meeting summary was reviewed and approved with minor edits and will be posted for public review.

Review of FTC Protocols / Work Plan

All were asked to review the protocols and be prepared with comments for discussion at the February meeting. Pay special attention to the section for actual meetings (e.g., remote meetings, and how public comments are handled at public meetings). We will also review the draft 2022 work plan at that time including the frequency of the public meetings.

Announcements

- Carol announced that she will retire from Ecology on February 5. She looks forward to introducing her “replacement” (though there will be no replacing her) at the February 1 FTC meeting. In the meantime, she welcomes calls if anyone can recommend any potential candidates for the position.
- Russell Page announced they are currently recruiting for an operator and an engineer. Let Russell know if you know of any qualified applicants. They can apply through the PUD’s website.

- Chris noted Tacoma is seeking to fill two Cowlitz Falls Fish Facilities vacancies (7pm-7am shift). Let Chris know if you are aware of anyone who would be interested.

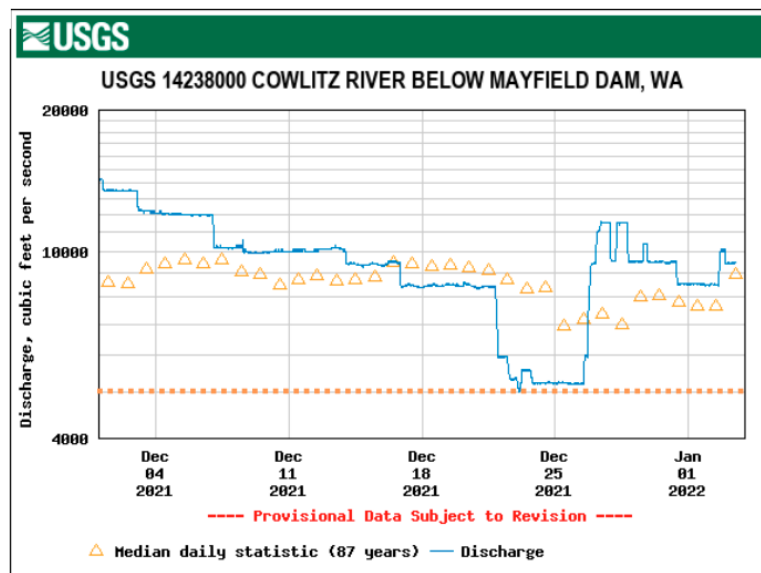
Updates

Hydro Operations

Melora reviewed the PPT emailed out during the meeting.

- Inflows: December daily mean inflows were 8,196 cfs, 88% of the historical average. The first two days of January were only about half the historical average (cold/dry), inflow likely to trend upward with precipitation through the month.
- Storage: Riffe Lake January 3 elevation was 730'. Max elevation since the last meeting was 736' on December 26. Mayfield has been operating in the typical 720-724' range.
- Snowpack is at or above average levels and there is more snow at lower elevations than we would typically see at this time of year.
- Outflows: There have been no exceedances on the minimum flow of 5K cfs. During a December 23 downramp Tacoma Power observed the USGS gage at Mayfield was reading below anticipated flow and also below 5K cfs. Tacoma increased flow and contacted the USGS. The USGS determined it was likely a stage calibration issue, adjusted the rating table, and retroactively adjusted discharge data, and will recalibrate the gage at the next low flow opportunity. The current USGS provisional data shows no exceedance. This event will be included in the 2022 annual 402 report to FERC. There were no unit trips or other unplanned flow changes or disruptions.
- 10-Day Forecast: 5-7" precipitation in Packwood with freezing levels from 500-5,000 ft. Inflows will stay above 10K cfs and storage may increase 3-4 ft after the Thursday rain event. Outflows are likely to increase to above 12K cfs.

Outflow



Minimum flow 5,000 cfs, no exceedances.

Link to the USGS real-time Cowlitz River hydrograph:

https://waterdata.usgs.gov/wa/nwis/uw/?site_no=14238000&PARAMeter_cd=00060.00065

Action Item: Melora – Follow up with Carol on the documentation shared with USGS re the gage issue.

Water Quality/Monitoring

Kosmos: Carol reported the Kosmos WQPP is not yet finalized. Ecology is working closely with Tacoma on this. Noting her retirement after the February FTC meeting, Carol thanked everyone for the great collaboration and fine work done over the years.

Fish Facilities: Eric provided the following on what turned out to be a great year! He noted in particular the strength of the NOR numbers:

Coho Adults

	Hatchery	Natural	Total
Total Returns	39,539	17,046	56,585
Shipped			
Tilton	11,773	6,510	18,283
Scanewa	10,388	7,593	17,981
Cispus	4,924	1,086	6,010
Upper Cowlitz	5,527	1,043	6,570

Brood Collection: Cowlitz broodstock targets have been met for all five species. Brood collection for winter steelhead started in early December (vs. February) to push the Lower Cowlitz program to an earlier return timing. The Tilton and Upper Cowlitz steelhead programs continue into May. Ten Lower Cowlitz winter steelhead have been collected so far. Collections for the Upper Cowlitz have not yet begun.

Ladder Outage at the Cowlitz Salmon Hatchery: Eric announced there will be an outage February 7-11 for ladder inspection, valve replacements, and repair of the electro-anesthesia basket.

Mayfield Downstream Juvenile Collector: Eric reminded all this collector operates April 1 – December 30, so operations have wrapped up for the year. On November 24, they shifted to bypass mode but operated for 24 hours every week as a spot check. Spot checks revealed only a slight decrease (a range of 18-45%) in Chinook mortality. Although mortality was significant, there were very low numbers of fish (a range of 6 to 62 total fish per spot check). Chinook are arriving in very poor condition - emaciated with heavy scale loss. By contrast, coho mortality continues to be below 1%.

Carol reminded Tacoma that their Water Quality Certification is for the protection of all aquatic life. She will follow up with a letter requesting documentation on this. The need to broaden the distribution of those informed of such events in the future was underscored.

Bryce requested an estimate of the total number of fish that have out-migrated. These data will be attached at the end of the CF Annual report which will be out Q1.

Cowlitz Falls Fish Facility: Chris reported they are still performing maintenance operations and the facility will start back up in mid-March.

Gravel Augmentation: Travis reminded all that on December 16 he emailed the engineering group report that Tacoma placed a total of 1,193 cubic yards immediately below the Barrier Dam. Travis is working with Melora to create the Gravel Augmentation Draft Long-Term Plan. He committed this plan will be out for FTC review in Q1 of 2022. Tacoma is still looking at future appropriate augmentation sites. This involves securing access to property downstream. Carol is still awaiting a report from the Barrier Dam gravel augmentation. The report is to include permit requirements, e.g., for going into the riparian area. This is another concern for Water Quality Certification. Travis will follow up with Carol offline.

Satellite Rearing

Presenter: Phil Sandstrom

Phil reported Tacoma is currently conducting an internal review of the potential impact for restoration/recovery (biological impact) of the various sites being considered. They are also working with their civil engineering group on associated cost estimates. He apologized for not being able to provide more detail at this time and looks forward to sharing more detail in at the February FTC meeting. Bryce indicated that WDFW looks forward to the review and/or assessment of the biological benefit of the proposed sites and scenarios being considered alongside the site evaluations and infrastructure alternatives.

Hatchery Alternative perspective: Eric reported this is still a work in progress. He looks forward to returning to evaluating the infrastructure alternatives after he finished with the bio-programming efforts associated with the FHMP transition planning.

M&E Subgroup

Presenter: Phil Sandstrom

Phil reported the topics discussed at the last meeting on December 15 included:

- M&E Monitoring plan that will be appended to the FHMP
 - Coordinated assessments data dictionary – Tacoma is reviewing this for the next meeting.
- Reviewed table to characterize all monitoring and evaluation activities and data collection needs in preparation for a prioritization exercise. WDFW and Tacoma are evaluating how their current work fits with the table. A subgroup will meet on January 12 to try to complete this work.
- Coho and fall Chinook harvest rates – WDFW working on this for SAR analysis with the idea of completing a similar analysis as what was done for spring Chinook.
- Steelhead enumeration project – ongoing with the next round of PIT-tagging to occur on January 11. There will be January 26 ponding for winter steelhead and the last rounds of winter steelhead will be put into lake 4 in mid-February.
- NOR coho were transported to Bremer Bridge to avoid angling impact. As angling subsided, NORs were transported up to the Gust Backstrom release site.
- Reviewed 2022 Tilton River transport plan. This may be included in APR discussions. The Subgroup will bring a recommendation on this to the FTC for discussion / approval.
- Genetics sampling / run timing – Tacoma is still considering the management implications of a genetics study. This includes how / if to move such a study forward given competing priorities.

Phil also reported the Analytics Meeting will be February 11 from 12:30-3:30. He will (through Lyn) send the agenda out ahead of time and all FTC folks are welcome to attend.

Downstream Adaptive Management Technical Work Group

Presenter: Matt Bleich

Cowlitz Falls Collector: Matt reported this group has been discussing the DD on what evaluations and operating period this work group is recommending. They are coordinating closely with LCPUD on this to ensure what they recommend works with the PUD's O&M activities from PUD. A decision needs to be made by the end of this month if it will be able to

conduct acoustic telemetry studies in 2022 regarding spring Chinook use of the entrance to the collector (acoustic tag studies – supply chain issues).

Mayfield Collector: Matt showed a plan view of Mayfield Dam – including the apex of the intake, the secondary separator, the path through the dam, the existing counting house, and the suspension bridge pipe. Studies over the past few years indicate Chinook survival challenges in the secondary separator and the pipe bridge. Tacoma has hired engineering consultants to help to identify how to solve problems with the pipe bridge (sagging and changes based on temperature). Tacoma has automated the flushing sequence in the secondary separator and will evaluate how that impacts Chinook survival.

After reviewing a number of other options to address the issues with the pipe bridge, Tacoma is recommending an option which will involve rerouting the pipe (Matt noted this happens to be the most expensive option). This option will also allow the transfer and handling systems in the existing counting house to be rectified, including even possible relocating it at some time in the future. Rerouting the pipe will also provide continuous velocities and include a budget for PIT-tag monitoring improvements and an auto-gated system for bypass.

Matt explained this recommended option is currently going through Tacoma's budgeting process. If approved, the design process would occur in 2022 – 2023 and construction would follow in 2024. Carol noted anything over an acre of disturbance requires a construction stormwater general permit. She encouraged Matt to see if Tacoma can tie this project into the water main activity.

Action Item: Matt - Send out written summary of recommendations and DD at least two weeks in advance of our next meeting.

LCPUD Dam Operations

Presenter: Russell Page

Russell reported the PUD is working closely with Tacoma on developing a 2022 schedule for maintenance and outage activities will impact fish collection. Planned activities include:

- Hatch cover replacement – involves removing associated flumes. They plan to start with Unit 2 in June, followed by Unit 1 in mid-July to August.
- Will also replace the flood control for Tacoma to adjust the flow in the flumes.
- Investigate moorage site for a debris deflector in 2023.
- Unit 2 outage will begin in late June. If they bring in divers to clear seals of any debris so they can dewater the units, the PUD would shut down both units and pass all water through spill gate 4. This usually only takes a half a day.
- Smaller projects include installing turbidity and sonar detectors, doing maintenance on transformers – one unit at a time. This is scheduled for the fall.

Russell reported the PUD is currently continuing to deal with effects of extreme weather. Considerable effort is required to continually thaw the spill gates. He will meet with Tacoma to discuss the schedule for these activities in a couple of weeks and then share a more detailed schedule at the next FTC meeting.

FHMP Transition Plans

Presenter: Matt Bleich

Matt thanked everyone, and notably John and Phil, for their help in getting the Transition Plans out for FTC review over Thanksgiving. Though the official deadline has passed, Tacoma will continue to accept comments over the next week. They are planning to hold a (virtual) public meeting the end of February and will send the documents out for public review three weeks in advance of that meeting which he and Bryce will lead. They will also have the bio-programming plan in time for those discussions.

The FTC will review a preliminary DD with the content of the transition plans at the February FTC meeting. At the March FTC meeting, we will discuss and modify the DD/transition plans based on feedback from the public. Bryce thanked Matt for allowing additional time for comments and assured him WDFW plans to wrap up their comments by early next week.

CRR Fund / Habitat and Production (HAP) Subcommittee

Presenters: Melora Shelton and Steve West

Melora reported Tacoma has been pulling together a consolidated version of HAP strategy and guiding principles. She was also pleased to report they are very close to getting a grant agreement finalized with the Cowlitz Tribe for their 2019 award.

The CRR annual report will be out later today for 30-day FTC review. She invited everyone to reach out during review if needed and to send comments to her and copy Travis.

Ongoing LCFRB Grant Round: Steve reminded everyone the LCFRB grant round opened on December 6 and preliminary applications are due March 1. They have received two pre-proposals to date – one from the Conservation District and another from the PUD and Conservation District. He reached out to the Forest Service to see if they plan to put forth a proposal but hasn't heard back yet.

Action Item: All – Send comments on the Cowlitz Article 3 CRR Report to Melora and copy Travis by February 4 (end of 30-day review period).

Topics for February 1, 2022 FTC Meeting

- Review of Protocols and 2022 FTC Work Plan
 - Public meeting frequency and protocols
 - Updates incl. Hydro Ops, Water Quality
 - LCPUD Dam Ops
 - Fish Facilities
 - Finalize Fish Protocols / Spring Chinook Fishery options for the Cowlitz
 - Satellite Rearing
 - Downstream Adaptive Mgt. TWG
 - DD - Alternatives analysis for improvements to Mayfield Collector
 - FHMP Transition Plan Update / DD
 - Planning for 2022 APR Process
 - Satellite Rearing Program
 - CRR Program
 - M&E Subgroup
 - Marking Strategies
 - Gravel Augmentation Timeline / Presentation
 - Preview February 1 FTC Meeting topics
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Meeting Evaluation

- Great participation
 - Good use of time – being flexible
 - Technology worked well
 - Josua's Quote: "Friendship takes time and energy if it's going to work. You can luck into something great, but it doesn't last if you don't give it proper appreciation. Friendship can be so comfortable, but nurture it - don't take it for granted." – Betty White
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Closing Remarks

Travis noted that just as new years signify new beginnings, every day can be seen as New Year's day. He looks forward to working with everyone and is very appreciative of everyone's dedication to natural resources protection during these meeting and outside of these meetings as well.

Parking Lot

- Presentation by Tacoma's Power Management Group
- Review Steelhead Recycling Program