

Cowlitz Hydroelectric Project
FERC No. 2016
Cowlitz Fisheries Technical Committee
Final MS Teams Public Meeting Summary
September 6, 2022 from 9:30 – 3:30

FTC Representative Attendees:

Travis Nelson	TPU
Bryce Glaser	WDFW
Jonathan Stumpf	TU
Anne Baxter	Ecology

Additional Attendees:

John Serl	WDFW
Peggy Miller	WDFW
Sam Gibbons	WDFW
Brian Gale	WDFW
Matt Bleich	TPU
Eric Shoblom	TPU
Chris Foster	TPU
Tim Hoffnagle	TPU
Melora Shelton	TPU
Matt Peter	TPU
Laura Wolfe	LCPUD
Russell Page	LCPUD
Steve Manlow	LCFRB
Steve West	LCFRB
Nick Grant	USFS
Steve Lewis	BIA
Ann Weckback	Lewis County
Lyn Wiltse	PDSA Consulting / Facilitator

Public Attendees: Larry Pryor, Jack Tipping, and Greg King

Remaining 2022 FTC Meeting Dates: Oct. 4, Nov. 1, and Dec. 6

Approval of August Meeting Summary

The revised version of the August FTC Meeting Summary was reviewed and approved with clarifying edits and will be posted for public review.

Updates

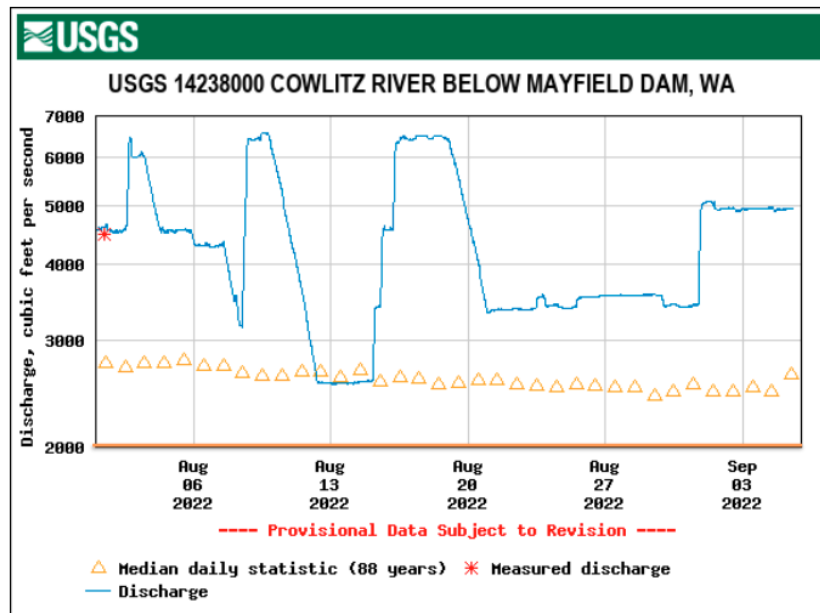
Hydro Operations (presentation emailed before the meeting):

- Inflows: August inflows were 1,945 cfs (93% of historical average). September inflows month to date are 1,436 cfs (82% of historical average). September is the annual low inflow period.
- Storage: Riffe Lake elevation on 9/5 was ~729 ft and has been drafting since August 1 (746 ft). This is a bit below the long-term average and is right at the average since 2017. Mayfield Lake continued its typical summer fluctuation of 421.5-424'.
- Outflow: The minimum flow requirement has been 2,000 cfs since the last meeting with no exceedances. On 9/5 total discharge was 4,900 cfs (3,500 cfs generation,

plus spill); the project is downramping today. There were two short-duration ramp exceedances (August 10 and 20), each less than 2 inches per hour. Both exceedances will be reported to FERC in the Annual Report. There were no unit trips or other unplanned flow changes or disruptions.

- Forecast: Dry with temperatures at/above normal. The freezing level is variable above 13,000'. Inflows are expected to be below 2,000 cfs and Riffe will continue to draft. Outflows: Downramping from 4,900 cfs, then 3,500 cfs through the week.

Outflow



Minimum flow 2,000 cfs. No exceedances.

9/5: ~4,900 cfs (3,500 cfs generation, plus spill starting 8/31)

Link to the USGS real-time Cowlitz River hydrograph:

https://waterdata.usgs.gov/wa/nwis/uv/?site_no=14238000&PARAMeter_cd=00060,00065

<https://www.mytpu.org/community-environment/parks-recreation/river-flows-lake-levels/>

Water Quality/Monitoring: Matt Peter reviewed the recent boat launch work at Barrier Dam and Mill Creek. Both Anne Baxter and Elliot Johnson (HPA Biologist from WDFW) have been onsite to ensure compliance with the Water Quality Protection Plan (WQPP) and Hydraulic Project Approval (HPA). Visual monitoring during the maintenance actions was ongoing at both sites.

Kosmos: WDFW and Ecology took part in a site tour in August. Shallow monitoring wells have been installed and they expect to install the deep-water wells in November to monitor ground water in the area.

Total Dissolved Gas (TDG): Matt Peter described a 1,000 cfs spill at Mayfield initiated on August 31 by Tacoma which resulted in TDG peaking at 108% saturation. As they increased the spill to 1,500 cfs there was a slight decrease in TDG. He showed a photo of water being spilled from Gate 3 and the path it takes – from the flip lip of the dam into a pool and then passing over a weir downstream to allow for off gassing if there is an increase in TDG. This will be documented in the year-end report. There were no violations. What drove the TDG reduction seems to be the temperature change.

Leak in Barrier Dam Construction: Anne Baxter reported she was notified of a leak that was discovered the morning of August 9 in the contained area of the cofferdam after Tacoma

ramped up flows to close to 7K cfs overnight. The contractors on site were very responsive. Flows were reduced after the incident and water was pumped out of the area. She showed photos of the Barrier Dam during the incident. The construction company employs a safety practice that involves removing their equipment from inside that area to upland secondary containers each night. This proved to be valuable as there were only a couple of boxes left in the area. Pads were used to absorb the oil sheen from the boxes and had the area cleaned up by 3pm the same day. They were also monitoring pH. WDFW was notified through Anne. It doesn't appear that any fish were present/ impacted. We look forward to getting an update on the actual cause of the leak. Anne noted this was an example of when it would have been appropriate to make use of the Environmental Report Tracking System (ERTS) so Ecology can broadcast the spill or environmental problem to a number of external partners. She will address this more thoroughly with the FTC at a future meeting. They can add Tacoma Power to the list for such instances.

- Action Item: Travis and Matt Peter to follow up with Anne Baxter on ERTS reporting, etc.

Barrier Dam Repair: Eric showed photos of progress on Phase 2 of the Barrier Dam repair. In-water work should be complete the end of September and the goal is to complete all repairs by November. Photos included concrete being poured into forms in the bays. Water quality is being monitored on a daily basis. The Embankment Dam at the site was re-worked to achieve the desired 2:1 slope. John reported his appreciation that this project is being completed in two years instead of three.

Fish Facilities:

Separator Collections: Staff have been running the separator 5 days a week and are seeing more fall Chinook and cutthroat returns as well as coho. They have just started collecting broodstock for these three species and will continue to do so through the end of this month.

Adult Return Summary:

- Spring Chinook: So far these returns are close to the 10-year average. They have completed broodstock collection. As of September 2, adult returns totaled 4,785 HOR and 889 NOR. Mini jack numbers (totaling 4,081) are dropping off. There are currently 1.39 adults per mini jack. Crews previously tagged each hatchery pond separately for this juvenile release of Cowlitz stock spring Chinook. Stay tuned for a summary of the tag data being processed.
- Summer-Run Steelhead: Started collecting broodstock in early July and easily met broodstock goals. These will be spawned in December. 3,022 summer steelhead been recycled. There have been 4 NOR returns this season to date.
- Coho: 10 showed up since September 2. They have begun collecting brood. For this year's single integrated coho program, in addition to HORs, collection includes up to one in three NORs from the Upper Cowlitz River will be collected for brood with the remainder transported to the Upper Cowlitz River.
- Fall Chinook: These appear to be average adult returns to date, though a little behind in the collection schedule. These fish will all be part of an integrated broodstock this year. Collection includes one in three NORs to brood, with the other two being transported to the Tilton River.

Mayfield Juvenile Collection:

- Primarily Chinook: 600-800/week (should increase into October)
- Coho: 110/week (have dropped off as expected)

MCH Season Totals to Date:

September 06, 2022 FTC Meeting Summary

- Steelhead Juveniles: 7.2K
- Coho Juveniles: 30K
- Chinook Juveniles: 9.8K
- Cutthroat: 620

Boat Launch Dredging: On August 23, Tacoma used a big excavator to remove 25 cubic yards of sediment from the base of the Barrier Dam boat launch. This work restored the launch to a usable site. While the excavator was still on site, the following day they removed another 12 cubic yards of sediment that had formed a mound at the end of the Blue Creek boat launch.

Cispus Release Site: This site is still not usable. Laura noted the PUD is still working on it and the Copper Canyon site is still an alternative if temperatures are too high.

Cowlitz Falls Fish Facility: Chris noted at the end of August they shut down the spillway flume system. This will allow Lewis County PUD to pull out baffle panels and do some spillway testing in early September. They are still performing a directed study on Chinook using the pumpback discharge structure (no eddy condition and directed entrance flow).

Over 115K smolts have been collected to date (2022). This is less than the last 5 years of prior collection. There hasn't been much activity in the last month due to warm water temperatures. As temperatures cool off, more spring Chinook are starting to come in. Crews have continued releasing around 100 PIT-tagged spring Chinook weekly to monitor Fish Capture Efficiency (FCE). They are still seeing some fish from the earlier release groups coming back into the facility. They may continue to tag later into the season.

Average Capture Efficiencies:

- Chinook = ~30%
- Coho = ~28%
- Steelhead = ~45%

Chris also reported the Downstream Adaptive Management Technical Working Group (TWG) just completed its review of the Draft Cowlitz Falls North Shore Collector (CFNSC) Spring Summary. All were invited to let Chris know if they want to be added to the distribution list for the weekly report.

Downstream Adaptive Management Technical Work Group: Matt reported that in addition to the Spring Summary mentioned by Chris, there will be another seasonal report the end of the summer. At the next meeting of this group, they will start to discuss what the 2023 Annual Work Plan might look like. This will be done in coordination with the FTC and LCPUD. The August 17 Meeting was cancelled due to scheduling conflicts.

How will the LCPUD drawdown in September affect collection efficiency? They have been tagging later in the season based on number of fish available. This allows a better understanding of the later season collection efficiency (with flow distribution change) as we try to improve FCE going forward. Some fish will be lost during the drawdown, and we won't be able to collect during the drawdown and until the reservoir has refilled. It has been a challenging season.

M&E Subgroup:

Eric noted recent HOM meeting on Aug 26 included representatives from WDFW and Tacoma. They discussed communications procedures for last minute / emergency decisions at the separator, including which decisions should go to the FTC. Eric is working on a flow

chart to illustrate communication pathways when at the separator. They still need to work through some examples. There is general agreement that subgroups can move forward with decisions and communicate them to the FTC if they are laid out in a Transition Plan. In the event that something changes the direction or the program, then associated decisions should be made by the FTC.

Though the August 17 M&E meeting was canceled, Bryce reported he and Phil met on August 19 and made good progress on the spreadsheet on monitoring prioritization. The spreadsheet will be reviewed internally by both organizations before continuing discussions at the next meeting on September 21.

Satellite Rearing Program

Presenter: Chris Foster

DD 2022-07, reflecting the current intended direction and focus of this program, was sent out to all a week prior to this meeting. Bryce reported he and his team reviewed it and, in general, have no issues with the decision being proposed. They do have feedback on the structure of the DD itself.

Two main options were added into the DD: Recommendations including focusing on spring Chinook and kelt reconditioning and starting with a segregated program. WDFW is happy to see recognition that through the review process to date, these two options came forth. They would like to see that documented in the record. Discussions at the last FTC meeting included whether it was more appropriate to update the original DD (similar to what was done for the Gravel Augmentation DD update) or to draft a new one. At a minimum, there was a desire for the new DD to point to the original one (noting that we continue to concurrently move forward with alternative analysis of additional Satellite Rearing sites and also noting that nothing else is changing since the original DD except for the addition of those two options.) Bryce noted the schedule of completion also needs to be updated. Chris thanked Bryce for this feedback, and he will work with Phil on revising the DD accordingly.

- **Action Item:** Chris to work with Phil on addressing this feedback and send out a revised version of the DD for review and approval at the next FTC meeting.

LCPUD Dam Operations

Presenter: Russell Page

Russell provided the following update on the PUD's many maintenance activities:

- Today they began Transformer Maintenance on Unit 2.
- September 9: Maintenance on Unit 2 should be complete.
- September 10: Plan to start the drawdown so they can inspect the debris barrier moorage site. The drawdown will be 2-3 days and they will fill back up immediately after.
- September 12: Begin line outage for Unit 1 CT replacement which may take up to 2 weeks if they end up having to do a full CT replacement.
 - Laura and Joe are working on a letter to WDFW asking for a flow variance to increase the rate of reservoir refill. Laura agreed, saying the letter should be to Peggy this week.
- In mid-October (at full pool) they plan to clean out the debris in front of the units. The debris may have caused issues with fish operations. It will be good to get this taken care of.

- The debris barrier retrofit project is slated for next year.

Chris thanked Russell for the updates at this meeting. Russell invited everyone to let him know if they have any concerns and if the FTC would like a higher-level or more detailed LCPUD Dam Operation updates going forward.

CRR Fund / Habitat and Production (HAP) Subgroup
Presenters: Melora Shelton and Steve West

Steve W began by reviewing the 2022 grant round process to date. The TAC reviewed, scored, and ranked final CRR proposals in July and the LCFRB presented them to the FTC in August. With draft DD 2022-06, the LCFRB recommends approval all CRR proposals on the TAC’s ranked list (see below), including three habitat restoration projects and one assessment for a total of \$2,800,420.

Table 1.

CRR Project Proposal	Total Project	CRR Request	Match
22-1273 <u>Cispus-Yellowjacket</u> Phase IV Restoration	\$ 3,469,260	\$ 2,457,187	\$ 1,012,000
CRR 2022-002 Creating Habitat on <u>Cispus</u> Tributaries	\$ 838,387	\$ 138,355	\$ 700,032
CRR-2022-003 <u>Kiona</u> Creek Restoration	\$ 140,141	\$ 70,071	\$ 70,070
CRR-2022-001 Upper Cowlitz Culvert Assessment	\$ 134,820	\$ 134,820	0*
	\$ 4,582,608	\$ 2,800,430	\$ 2,414,352

*Although not providing match, they are partnering with a region-wide culvert assessment funded through the SRFB grant program.

Steve welcomed any comments / feedback. There was clarifying discussion around total funding and match. This round closes the current \$3 million biennium; another \$3 million of CRR program funding will become available in the 2023-2024 fiscal biennium (starting calendar year).

- Action Item: All were asked to send any edits to DD to Travis and Steve West.

HAP Subgroup (Melora)

The Hatchery Associated Production (HAP) Subgroup has continued to meet, usually on the heels of an FTC meeting and once in between (most recently August 2 and 22). They have been reviewing draft scoring questions with an eye toward improving proposal evaluation and helping with project outreach efforts (will allow project proponents to better prepare). The subgroup is also drafting a project information form to help applicants to develop their projects and also kickstart the application process. They developed a recorded PowerPoint presentation that will be posted and distributed with an announcement about the program. They have also developed a tentative workshop calendar:

- Sept. 27 from 1-3: Initial workshop (in a virtual setting) with the Technical Advisory Group available
- October: Second workshop, similarly structured.

Their next meeting will begin at the close of this meeting and September 21. Melora expressed appreciation to her colleagues who have worked to diligently and moving this program forward! She also invited everyone to reach out to her, with any ideas and suggestions. All FTC attendees are welcome to attend the Subgroup meetings.

- Action Item: Melora will let the FTC know when a link is set up for the virtual workshop.

FTC Public Meeting Process Review

Presenter: Travis Nelson

Travis walked through the initial draft of DD 2022-08. He explained how FTC meeting summaries indicated the idea of opening up FTC meetings to the public was first proposed in 2008. In 2018, opening these meetings to the public began on a quarterly basis. Through the CRR program, as we vote to spend public funding for projects, Travis reminded all that the Open Public Meetings Act (OPMA) applies. This DD is in the interest of honoring that process and that law. The FTC can still have closed meetings as needed for sensitive projects / discussions. The DD recommends that starting in 2023, all FTC meetings will be open to the public. The venue for these meetings has yet to be decided. Tacoma will seek public input on preferred locations which will likely vary from the usual Chehalis Veterans' Memorial Museum.

DFW supports this idea and hopes the protocols do not limit public participation in any way. It is important to make these meetings open and accessible to as many people as possible.

- **Action Item:** Travis will edit the DD and Public Meeting Protocol document based on this discussion and send out for review ahead of the October FTC meeting where the DD will be reviewed for approval.

Topics for October 4, 2022 FTC Meeting

- Updates incl. Hydro Ops, Water Quality
- LCPUD Dam Operations
- Fish Facilities
- Satellite Rearing
- Downstream Adaptive Management. TWG
- CRR Fund / HAP Subgroup
- M&E Subgroup
- Review DD on FTC Meetings being open to the public
- Preview November FTC Meeting topics
 - Water Quality – ERTS

Meeting Evaluation

- Got out early.
- Lyn invited all to a CCR Concert!
- Everyone followed the norms and was respectful of each other's time
- Very productive – Making progress with DDs.
- Travis' Quote: "Whether you believe you can or not you're right." - Henry Ford

Public Comments

Larry: Is public participation limited to a 3-minute time slot at the end of the meeting? Why are only two members of the public attending today? Public participation in public meetings has fallen off since going remote due to the pandemic.

Bryce: The rules re public participation in DD 2022-08 can be updated. The idea is that the rules would be similar to those used in a Commission meeting. The intent is not to have the public sit at the table and interject throughout the meeting. It is making sure the meetings are open to the public and there is a period of public comment in each meeting. If folks want to discuss a particular item in more detail, they are also welcome to reach out to FTC members for offline discussions (as has been the practice).

Anne: It would be helpful to better define “public participation” in the protocols, so expectations are clear.

Bryce: Maybe say “public attendance” instead of “participation.” These are not public meetings such as the annual science meeting and APR meetings where we are soliciting public input/feedback. The FTC meetings are regularly scheduled monthly to implement the terms of the Settlement Agreement.

Travis: It would be good if, starting in January, we can start meeting in person at least periodically. In the meantime, he will follow up with folks to discuss this further as needed.

Bryce: Important to balance structure in the protocols re the 3-minute max along with flexibility.

Larry: Why release coho into Skate Creek? (Why are fry and parr returned to the reservoir instead of moved downstream?)

Chris: We aren't able to CWT some of the smaller fish to send downstream. We worked with M&E group to discuss release options for fry and parr. The M&E Subgroup can reevaluate if it makes sense to send coho downstream.

John: Since the new collector was built, the number of fry and parr collected at the CFFF have increased by an order of magnitude. Coho put in Riffe Lake are lost to anadromy. There probably is no good answer. Again, this is something the M&E subgroup can reevaluate.

Larry: Doing that with only coho?

Chris: Mostly coho – also with a handful of Chinook (680 Chinook fry this year). We have seen 87K coho fry at the collector this year. There are days when we get 10K fry. We are relocating parr back above CF Dam. Have several locations they use to redistribute parr. Some near the Cowlitz, some near Packwood, some down in the Cispus, colder bodies of water.

Jack: Eric mentioned the number of summer steelhead recycled. They are only recycled one time and through August. It would be good to see data showing why they can't be recycled twice and if they can be recycled through September.

Bryce: Some of the initial recycling work showed diminishing value the more often the fish were recycled. There is a cost/benefit to trying to recycle maiden fish. There is limited funding for this. There is guidance through the Mitchell Act Consultation with Fisheries. While that is WDFW's standard, it doesn't mean they can't look into that question. Where WDFW has monitored hatchery fish in the wild through snorkeling surveys, it is clear that as the fish begin to mature, they are less desirable for anglers. The cutoff date for recycling was extended this year from August 1 to August 15.

Jack: Even if fish that are recycled twice don't contribute as much to the sports fishery, if the percent goes from 20% to 15% (historically), and if under the 6,600 fish cap, it still makes sense to recycle fish twice unless tests show a detriment. Jack noted a study where fish recycled through September had a higher harvest rate.

Bryce: Thank you. This is definitely worth exploring.

John S: We also recycled a bit earlier this year as well as adding the extra 2 weeks at the end. And we had a higher cap. These are three things done this year to help harvest.

Larry: Is budget a driver that limits more recycling?

Bryce: Not necessarily. Trying to balance spreading the recycling across the return, not knowing what the return will be, and staying within the (expanded) cap. The primary driver is reintroduction.

Eric: The other species are not getting recycled as they are going into the upper basin – giving anglers more opportunity. As fish age, they are not in as good of shape, and just want

to drop their eggs. There are also space issues if we wait to start recycling after reaching transport capacity.

Jack: It is premature to spend millions of dollars on habitat restoration with smolt Collection Efficiency at 30-40%.

John: This has been a down year for CFFF collection. It takes a while to build and mature habitat projects.

Travis: We are trying to build out the habitat. It will take time to see the impact. We hope the impact aligns with the fish passage improvements we look forward to in the future.

Bryce: CE is the primary driver in all of this. The CRR funds are specifically devoted toward hatchery/habitat options that can promote faster recovery.

Jack: It would be good to prioritize hatchery production initially and then move into habitat improvement.

Jack: Tilton River flows are low – not a lot of water for (the large) adult Chinook which are vulnerable in that they could be plucked out of the water easily by animals or locals.

John: Water at Gust Backstrom park is typically low this time of year. That's why Tacoma has been using the second release site for fall Chinook – Bremer Bridge. It looks like we are getting better fall Chinook distribution and spawning. How this relates to Mayfield collection/passage remains to be seen.

Bryce: This is not much different from elsewhere in the Columbia. How much production comes out of the Tilton and how to adapt to that will help us answer some of those questions.

Jack: Glad you are tagging the fish at Mayfield so we can see their disposition.

Larry: Is there a Disaster Management Plan for the Tacoma / Cowlitz fish hatcheries? Disaster management and disaster management planning is a big deal. It includes the human side of things and fish side of things. It is very important to have a good list of available resources along with what-if scenarios.

Travis: Tacoma has an Emergency Action Plan (EAP) that is aimed more at personnel than infrastructure.

- Action Item: Travis will follow up internally re this question.

Jack: What is the status of CCA's written request for chum eggs?

Bryce to follow up.

Larry: Forecast for fall Chinook Returns?

Bryce: Started off with one-fish bag limit. WDFW watches the returns as they come in. At a 50% average return, they reevaluate the bag limit number. They are not anticipating making any changes right away.

John: The return is expected to be slightly above average.

Brian: 9,300 back to the Cowlitz and 3,400 getting back to the separator. NOR is around 4,700.

Bryce: The Transition plan (life cycle modeling, etc.) will inform next steps.

Larry: What's happening with satellite rearing?

Travis: After evaluating different alternatives and strategies, we narrowed it to sub-yearling program for spring Chinook and kelt reconditioning. More details are to come. Phil gave a nice presentation on this at the last FTC meeting.

Closing Remarks

Travis thanked everyone for the thoughtful input at today's meeting. This is what makes the FTC effective. He also hoped everyone would enjoy the last gasps of summer.

Parking Lot

- Review/Update FTC Protocols to include remote meeting procedures
- Presentation by Tacoma's Power Management Group and/or from Grant PUD re improving SAR
- Review Steelhead Recycling Program