

Cowlitz Hydroelectric Project
FERC No. 2016
Cowlitz Fisheries Technical Committee
Final Conference Call Summary
September 7, 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:

John Serl	WDFW
Peggy Miller	WDFW
Sam Gibbons	WDFW
Brian Gale	WDFW
Matt Bleich	TPU
Eric Shoblom	TPU
Phil Sandstrom	TPU
Chris Foster	TPU
Steve Manlow	LCFRB
Steve West	LCFRB
Laura Wolfe	LCPUD
Russell Page	LCPUD
Kate Day	USFS
Lyn Wiltse	PDSA Consulting / Facilitator

Remaining 2021 FTC Meeting Dates: Oct. 5, Nov. 2, Dec. 7

Approval of Last Meeting Summary

The August FTC meeting summary was approved with edits and will be posted to the FTC public website.

Updates

Hydro Operations

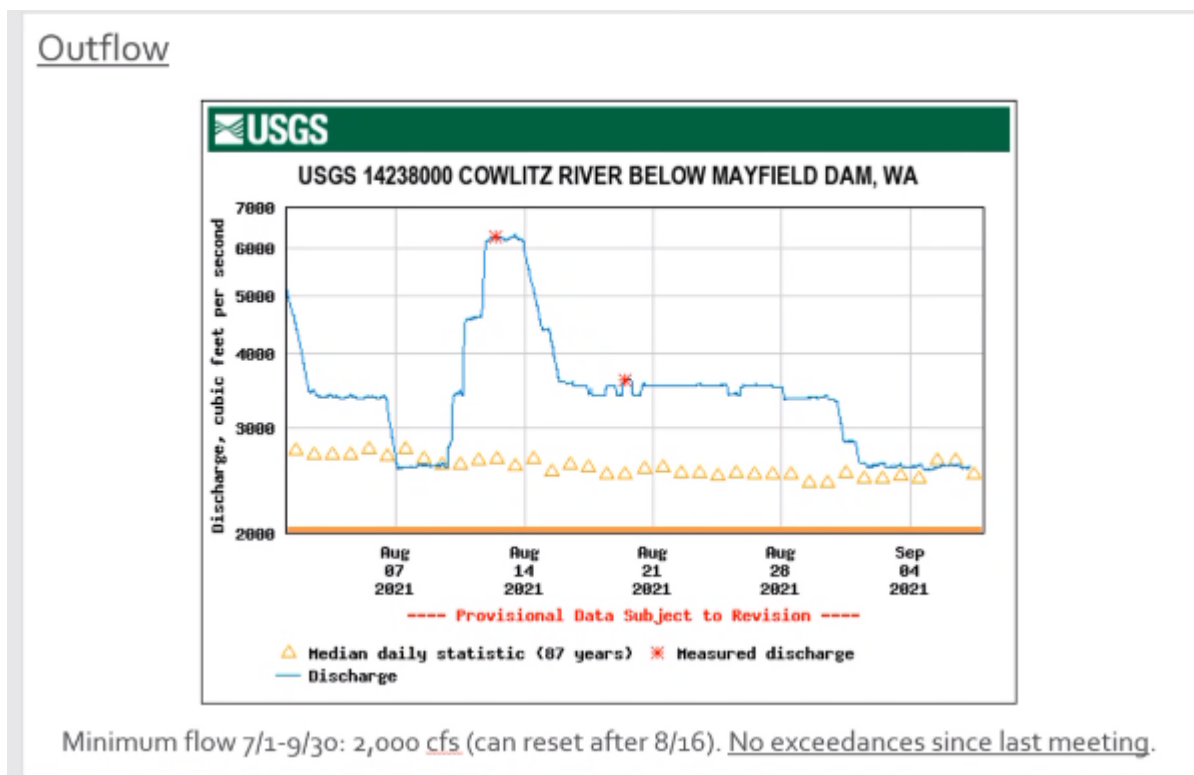
Melora reminded all that Tacoma is still working with USGS on the backwater situation with the USGS Cowlitz River below Mayfield Dam, WA gage. In the meantime, a temporary gage has been installed to provide real-time stage readings. There will be a transition as they deconstruct the Barrier Dam and USGS replaces the temporary gage with the original one. During deconstruction minimum flow will be measured using outflow at Mayfield Dam. Afterward, Tacoma will work with USGS to correct records if needed.

- Inflows: While typical in June, August inflows have since been lower than the historical average. This trend is expected to continue through September.
- Storage: Power Management kept Riffe lake at 728' through Labor Day weekend, After Labor Day the Mayfield operating band goes down to 420'.
- Outflows: The minimum flow remains at 2K cfs through September with potential to reset after August 16 if MDF exceeds 5K cfs for 5 consecutive days. Outflows are

currently running 2.5-3.5K cfs. There were no exceedances since the last meeting. Ramping is being carefully managed to the limit of 1" per hour.

- 10-Day Forecast: Warmer temperatures are expected for the next couple of days and then cooling off to more typical temperatures. Inflows are expected to continue at ~1.4K cfs. Outflows will ramp up between 3K and 3.5K cfs for next couple of days and will cap out 3.6K cfs until the other units come online in mid-October.

Discussion followed including WQPP requirements to do fish stranding surveys after ramping violations. A fish kill mentioned at the August 2021 FTC meeting has still no report or an ERTS submitted to Ecology. Carol read a portion of the January 15, 2002 Water Quality Certification and requested that the minutes of this FTC meeting reflect that Ecology has now asked twice for the fish kill report. Matt and Travis committed to follow up with Carol in the next few days to set a meeting to discuss this further.



Link to the USGS real-time Cowlitz River hydrograph:

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

Melora noted Tacoma has been operating only with Unit 41 at Mayfield. This is because the other units were taken offline to prepare for a planned maintenance outage later in the fall. Due to supply chain issues, that outage will not happen. Tacoma anticipates it will take until mid-October to bring the other units back online. Typically, Tacoma can meet the October 1 3.5K cfs minimum flow requirement running Unit 41 at full gate (100% open). However, there is uncertainty about how the Barrier Dam coffer deconstruction will affect the USGS gage, and whether readings will accurately reflect the flow released from Mayfield Dam (i.e., that the gage will indicate less than 3,500 cfs with Unit 41 at full gate).

Tacoma proposed in the DD operating Unit 41 at full gate (100% open) starting October 1, 2021 to meet the 3.5K cfs minimum flow requirement until additional operating units are available later in the month. Tacoma is not asking for a variance or flow reduction. They are

describing how they intend to comply with their obligation. Tacoma will explain any gage reading within 5% below 3,500 cfs during this time as a function of the gage and not as a minimum flow exceedance, after confirming that Unit 41 was a full gate during the low readings. After coffer dam deconstruction, the compliance point for minimum flow will transition back to the gage and USGS will recalibrate the flow curve to ensure readings are accurate.

The FTC determined this action did not rise to the level of needing a decision document and recommended Tacoma use the flow released from the dam for measuring minimum flow compliance.

Carol asked how the backwatering is impacted by the coffer dam. She reminded all that in regulating for TDG, etc., she needs to be able to monitor at Mayfield Dam as well, especially when the coffer dam is being removed. Melora committed to giving Carol and anyone else who asks the flow information as they deconstruct the coffer dam. Bryce asked and was assured the generation record will document outflow at the dam.

Melora will share generation records when she reports on this at the October FTC meeting. The report on this will go to FERC as part of their annual reporting requirement.

Water Quality/Monitoring:

Barrier Dam: Carol noted there is a Construction Stormwater Water Quality Permit for this project. The August 19, 2021 inspection report just went out and was favorable, although it did not include the work on the upland of the left bank. The inspector was unable to get to the left bank side where the infiltration of stormwater and pH dewatering water was occurring. Carol may have to do this. This project is likely to be done in a two-year timeframe.

Dredging at Blue Creek: No updates or additional challenges to report. The fall rains may bring additional information.

Kosmos: This is a time-consuming project for both Tacoma and Ecology. Ecology's toxics cleanup program has SOPs for managing such sites. There is a 30-day comment period for any interim action that may occur. When covered with water, the hydrocarbon ledge at Rainy Creek leeches into the water. Therefore, Ecology's Water Quality Program (Carol) will work with Tacoma to review and approve a WQPP for cleanup actions for September 2021. Carol noted Tacoma has been really receptive and responsive, especially Kevin Smith and Matt Peter. They talked about how to minimize disturbance as they put together the work plan. There will be BMPs to prevent turbid discharges or capture contaminated sediment from entering waters of the state.

Fish Facilities

Gust Backstrom: Eric showed a series of photos before the repairs showing sloughing of the boat launch there. Tacoma obtained all necessary permits and implemented a safety plan to perform the repairs. He then showed the current, repaired condition of the boat ramp and described how they placed ecology blocks on their sides and tied them together to minimize erosion beneath the ramp. Carol asked if the straw wattle at bottom of the slope / at the water's edge was used to capture fines that may have occurred. She noted that drilling into concrete creates fine dust which is a pH modifier. Eric responded affirmatively that the wattle was part of the project BMPs.

Barrier Dam: Eric Showed photos of pre-existing conditions underneath the Barrier Dam and described the bays that have received concrete, are currently undergoing final finish work and those that are only partially poured. The remaining bays will be poured on September 8.

The newly formed ogee is solid concrete. Flows will not exceed 3.7K cfs through the end of this first construction season. Carol gave kudos to Tacoma for doing such a great job of managing this project which is proceeding on schedule and within budget. Carol asked if the contractor poured concrete in the upland to create a staging area for their large crane. Eric will follow up to ensure that if they do so, it is within the Construction Stormwater Permit work area.

Adult returns / brood collection update:

- Spring Chinook: Broodstock collection goals have been met though they are seeing some lower fecundities.
- Summer Steelhead: These are coming in slowly. It looks like they are on track to meet broodstock goals, while maintaining some excess to recycle (~75/week).
- Fall Chinook: Fishing closure on these as a low return of 3.5K is predicted and brood requires 2.3K.
- Coho: These are just starting to show up at a rate similar to past years. Higher-than-average returns are predicted.
- Mayfield: 2.5K smolts (mostly Chinook sub-yearlings) were collected at the Mayfield trap. This number is down slightly from the prior week.

Cowlitz Falls Fish Facility: Chris reported the spillway flume system has already been shut down (August 31) and full operation of the Northshore Collector will be shut down at the end of September. Tacoma plans to use the first four weeks of October, running the Northshore collector in a block schedule aimed at investigating life history strategy.

Downstream Adaptive Management Technical Work Group: Matt announced the reporting schedule is on track and they will be discussing recommendations for the joint working group meeting with TPU and LCPUD (which will subsequently be shared with the FTC). The TWG is also working on action items previously discussed with the FTC e.g., agreeing that the later water years they have been using are representative and will continue to review them. The FCE calculation is another pending action item. They are tackling this with two different options as they head into the annual report. Matt is optimistic they will be able to do this with the assistance of Thomas Buehrens. The methodology / requirements piece of this will be presented to the FTC. Phil noted they have handed the data off to Thomas and is hoping to schedule next steps with him later this month. Matt noted he appreciates the cooperative solution and effort which all leads to better recovery efforts.

M&E Subgroup

Phil reported the M&E Subgroup last met August 18 from 10-noon. The meeting included status updates on the SAR process. They are looking at using the spring Chinook analysis as a template for other species. They also discussed Coho broodstock sampling rates. They touched on the M&E workplan and distributed a template for comment. Other topics include carcass tagging and continuing to collect genetic information. Their Analytics Meeting will be in mid-November and will include fall Chinook. Phil will also combine the TWG and M&E groups to discuss spring Chinook life history.

Cascade Aqua Farms: Phil showed photos and described the current status of the Cascade Aqua Farms weir and fish ladder. Tacoma is concerned about the condition of the ladder, especially with regard to potential fish passage problems for fish migrating upstream of the new release site at Bremer Bridge. It appears that at current flows, the only way the fish can pass is through the ladder. A lot of gravel has been moved around at the ladder to put water through for the intake. Steve M said it looks like there is a need for an HPA or Section 404,

as this appears not to meet State or NOAA fish passage standards. There may also be other regulatory issues. WDFW originally permitted this facility in 1992. There is a mitigation agreement that includes Cascade Aqua Farm's ability to keep flow moving toward the intake. Bryce's understanding is they are operating within their agreement. LCFRB offered to follow up with regulatory agencies. Carol expressed water quality concerns (e.g., whether the wood installed there had been treated). Bryce responded there have been no observations of fish stacking up below the ladder and there would be a need for evidence that there is a fish passage concern before WDFW would be able to consider reopening the agreement. Bryce offered to have further discussions on this with Steve Manlow and Carol and reiterated to date, there is zero evidence that this is a fish passage issue. Bryce wondered if this is a topic that should be high on the FTC's priority list or if other topics should take precedent. Travis closed the discussion by thanking everyone and noting Tacoma just wanted to raise this for FTC awareness.

APR Data Gathering Meeting

Presenter: Phil Sandstrom

Phil reminded all they are trying to improve this process every year. Many thanks to all who helped bring these data together – WDFW, Tacoma – huge effort to get the numbers to feed into the system. This meeting was on March 19. Each group presented data and discussed data gaps, etc. The data are entered into tabs in an Excel spreadsheet (a stopgap until we have a better storing tool) and used for meeting presentations. More than 70 different metrics were collected over a 5-year period. This year they are filling in all the 2020 data. The next step will be the 2022 science meeting where everyone from the group makes presentations on various data aspects. For 2022 Phil hopes to streamline the process and standardize how various data elements are defined (brood vs, release year, etc.) to ensure better consistency. Bryce agreed and noted managing data across projects and multiple organizations is a huge challenge. He acknowledged they are starting to make headway and collect good information to help inform APR decisions regarding hatchery programs.

Satellite Rearing Program

Presenter: Matt Bleich

At the last meeting we discussed the workplan that Matt drafted based on prior FTC discussions. Feedback he received was that the workplan was reasonable, but the timeline didn't seem realistic. Concurrent to that, Tacoma committed to begin work on one satellite rearing project. Phil will manage this, and the work is to begin immediately, as Tacoma is feeling time pressure to move on the initial installation.

Feedback on DD 2021-07: Explore strategies that fit Option 2 and 5:

- Decision and Justification:
 - Intent is to garner support from the FTC to pursue one of these options.
 - Note there is a plan to move forward with construction of one of these options. Will evaluate the potential and narrow it down to one project within those two options.
 - In this section or the Background section, mention there is a parallel effort / secondary process going on as well – provide the big picture.
- Proposed Decision or Consideration:
 - Second paragraph in the section: FTC can support pursuing Options 2 and 5 with the intent to advance one of them.

- Background:
 - "... request to slow down the pace of progress." The request was not to slow down the pace of the progress. WDFW thought there were additional steps (complete the modeling effort as part feasibility assessment itself) that should be included in the process.
 - R2 report was never finalized. Add the word "draft" in the DD. Matt agreed and noted he didn't see a need for a final report. He sees the draft as sufficient.
 - If the process is changing (moving toward analyzing one rearing pond and evaluating the need for satellite rearing ponds), we need to work on defining the follow-up steps.
 - Matt will work on this, and how to convey it to this group and to the public as well.
 - Why do we need a DD? We don't have a finalized report from R2. We are not diverging from an agreed-upon plan because we don't have one.
 - The thought was to show the FTC is on the same page with Tacoma's direction and initial course of action.
 - Last paragraph in the section: Make sure it is clear the FTC is not slowing things down – make sure focus is on exploring Options 2 and 5.

Action Item: Phil will revise the DD based on this feedback send it out for review.

Lewis County PUD Dam Operations

Presenter: Russell Page

Russell Page, CF Generation Superintendent, explained the outage on Unit 1 should be complete the end of September. LCPUD did spill during the line outage from August 16-18. The outage did not require the entire week as previously anticipated, reducing the need to spill additional days. They have another outage scheduled for all units September 27, 28 in order to have BPA replace the revenue meters onsite with something more current. In addition, they will be testing the automatic voltage regulators (AVR) on each unit. They have requested a 500 cfs reduction in minimum flow from September 27 through October 11 from WDFW for these activities to avoid spill. The timeline Russell provided indicated that testing would be complete before October 11 so Peggy will follow up with him to understand the need for a reduction until October 11. There are no scheduled drawdowns (will depend on inflows, flooding) so a reduction in minimum flow would not be needed to refill the reservoir. Peggy noted that during the block work on the CF Northshore collector, the PUD will have to spill as water will not be going through the collector. Russell agreed. Peggy and Carol will discuss and then follow up with Russell. Carol noted she would like to see the LCPUD document activities related to spill in writing. Chris sent specific dates to Russell re the block study.

WDFW Minimum Flow Letter: Peggy informed the FTC that WDFW was responding to LCPUD's request to modify their minimum instream flow requirement from September 27th through October 11th, with the possibility of extending the time depending on the river conditions. The CF license states the minimum instream flow condition may be temporarily modified upon the agreement of WDFW and LCPUD for short period of time. She outlined WDFW's conditions for support and asked for FTC input. Laura provided that additional time beyond the timeframe Russell provided is to refill the reservoir. Peggy thanked everyone and noted she will follow up with Russell to understand the requested timeframe for the reduction.

Note: Peggy followed up with Russell. The AVR testing requires the units be operated at various openings up to 100%. Time may be needed to refill the reservoir so that there's enough water in the reservoir to test the second unit. WDFW modified some of the conditions to reflect the potential need to refill the reservoir.

FHMP Transition Plans

Presenter: Matt Bleich

Matt reported they continue to meet frequently and make good progress. They currently have a draft of all transition plans except for Coho. John and Phil are doing editorial review of the plans to ensure consistency. The Coho plan is nearly complete and the next meeting on this will be September 15. The next step will be going through the bio programming exercise to bring all the transition plans for the Cowlitz programs together to see if what we are recommending is doable. This probably won't be a massive undertaking because there are no recommendations of sweeping changes.

There are two other steps including engagement with the public to occur before the process is complete. There will also be engagement with FERC. The FHMP was submitted on October 2, 2020 and Tacoma hasn't received an order from FERC yet. Matt will inform FERC we are doing all the plans in this first year, vs. doing some in the first year and some in the second year as was described in the plan.

Gravel Augmentation

Presenter: Travis Nelson

Travis reported things are moving along well with plans to place gravel. The contractor is ahead of schedule but doesn't think they can use the crane to place rock onto Barrier Island due to concerns for worker safety and water quality. They suggested instead hiring a big conveyor truck to shoot the rock out onto the island. However, that truck won't become available until September 30, which would cause a delay. Tacoma has opted instead to set the contents of the bags on the spillway below the framing for the ogee and then flow passing over Barrier Dam will slowly return the gravel downstream. That would happen within the fish window (before September 30). They would use the crane to place the super sacks below the ogee and workers would safely open the bags (up to 1,5K cubic yards) onto the barrier spillway. Carol reminded all of the need for a long-term gravel augmentation plan and cautioned against putting in more than 500 cubic yards of gravel until we see how it will disperse. The WQPP that was approved didn't show where monitoring would occur. In addition, minimum of 500 cubic yards is not specific enough for the WQPP. Carol said since Tacoma is now putting the gravel on the spillway, they will need a new WQPP for a new activity in a new placement location. Travis will follow up with Carol on this.

Jorgensen Property: The long-term gravel augmentation plan is on hold. The DD the FTC approved says to catch up with the 3-year deficit (2019-2022) and then come up with the long-term plan. The DD has dates to complete sections of the plan and these dates are not being met. Tacoma was to finalize the gravel augmentation plan by August 16. Peggy asked for something more than the crosswalk to show the progress Tacoma has made to date. Peggy's much-appreciated comments have been incorporated into the crosswalk document.

Action Items:

- Travis will work with Melora to develop a new timeline for completing the long-term plan.

- Melora will send the draft plan update document to Peggy and Carol.
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CRR Fund / HAP Subcommittee

Presenter: Travis Nelson / Melora Shelton

Travis has been working with LCFRB to finalize the technical details on the Tacoma/LCFRB agreement to have habitat projects integrated into the LCFRB's 2022 grant round. This will require updates to the CRR Implementation Strategy document. Melora noted that Tacoma has drafted an interim update to that document which has been a fundamental source of program information. The update has been reviewed by the LCFRB. The 2021 interim update to the CRR Implementation Strategy will replace the 2017 CRR Implementation Strategy and address the integration of the CRR habitat proposals into the LCFRB salmon recovery grant round. It emphasizes that all funding decisions will be made by the FTC and includes necessary revisions as described to update the Strategy for use in that round.

Melora said they are also working through what they need to do programmatically to incorporate the hatchery projects into the program moving forward. They will put together a subcommittee to focus on the HAP components of this. Tacoma would like folks to think about who they want to put forward from their organizations to serve on the subcommittee.

Steve M thanked Melora and Travis for all their work on this and explained they are in the final stages of working out agreement details and then polishing up the LCFRB program guide for consistency. LCFRB is also doing some outreach for potential partners and looking at what an outreach strategy might be. Steve assured all that leveraging resources will be a priority. He affirmed that CRR money could be used as a match for SRF Board projects. We can expect a presentation on any technically sound projects that may be appropriate for consideration by the FTC at the October meeting.

Action Items:

- Travis/Melora: By September 10 distribute both clean and track-change versions of the 2021 Interim Update along with the decision document (in time for the LCFRB 2022 grant round in early November).
 - All: Send edits/comments back by the end of the day September 21.
 - Travis/Melora: Revise the document accordingly and send it back out by September 28 for review so both the Interim Strategy and DD can be finalized at the October FTC meeting, in time for the LCFRB to incorporate it into their 2022 grant round materials ahead of their November board meeting.
 - All: Consider who from your organization is best qualified to serve on the new HAP CRR Subcommittee being formed.
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Topics for October 5 FTC Meeting

- Updates incl. Hydro Ops, Water Quality
- LC PUD Dam Ops
- Fish Facilities incl. Barrier Dam Project overview
- Satellite Rearing DD
- Downstream Adaptive Mgt. TWG
- FHMP Transition Plan
- Satellite Rearing Program
- APR Process DD?
- CRR Program (1 hour)

- M&E Subgroup
 - Gravel Augmentation
 - Preview November 2 FTC Meeting topics
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Meeting Evaluation

- Once again, appreciate Tacoma's visuals with all the photos. Very helpful!
 - Missed some key participants.
 - Acknowledgement that we are all in this together.
 - Much appreciation for Melora's presentation and Eric's presentations.
 - Phil's quote: Alone we can do so little. Together we can do so much – Helen Keller
 - Loved the High School Musical song Travis played at the end of the meeting.
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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