

**Cowlitz Hydroelectric Project**  
**FERC No. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Meeting Summary**  
August 1, 2023 from 9:30 – 3:30

**FTC Representative Attendees:**

Travis Nelson	TPU
Anne Baxter	Ecology
Peggy Miller (for Bryce Glaser)	WDFW

**Additional Attendees:**

John Serl	WDFW
Matt Peter	TPU
Scott Gibson	TPU
Melora Shelton	TPU
Tim Hoffnagle	TPU
Laura Wolfe	LCPUD
Russell Page	LCPUD
Steve Manlow	LCFRB
Denise Smee	LCFRB
Stephen Lewis	BIA
Michael Boyles	BPA
Ann Weckback	Lewis County
Lyn Wiltse	PDSA Consulting / Facilitator

**Public Attendees:** None today.

**2023 FTC Meeting Dates:** September 5 (in person – location TBA), October 3, November 7, December 5 (in person)

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**Approval of June Meeting Summary**

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

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**Announcements**

- Sam Williams has joined Tacoma as the Cowlitz Falls Fish Facility Biologist working under Gabe. Sam hails from NE Oregon and has worked many years with the Nez Perce Tribe.
- This is Tim Hoffnagle’s last meeting with us as he retires from Tacoma in two weeks. We all thanked him for his excellent work over the past few years. We wish him well.

**Updates**

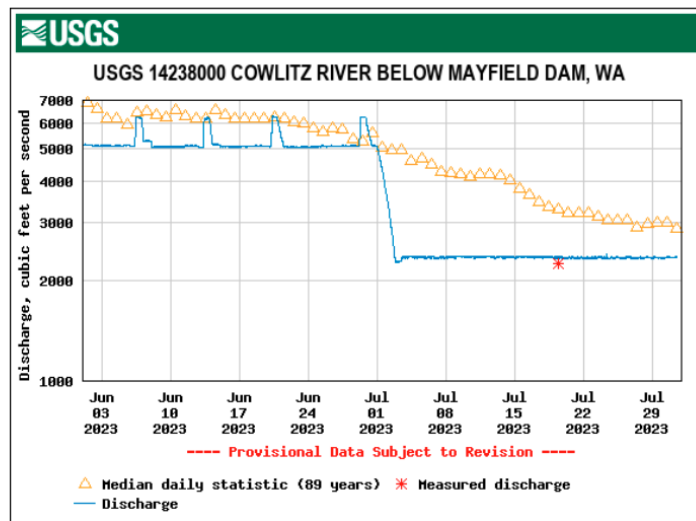
Hydro Operations – Melora (presentation emailed on July 31)

- Hydro status update covered two months (as there was no July meeting).
- Inflows: After the May runoff, inflows returned to well below the historical average (47% in June and 42% in July) with minimal precipitation. Daily average flows for July were 1,700 cfs.
- Storage: The 740’ elevation at Riffe reported at our June meeting has been the highest so far this summer. The current elevation is 727’ which is 15’ lower than the average for the last five years. Tacoma is confident about being able to meet minimum flow obligations through the

rest of the summer. There could be discussion in the fall regarding minimum flow resets (Article 13).

- Snowpack: White Pass melted out the end of May and Paradise did the same in early July.
- Outflows: On July 1 they transitioned from 5K cfs plus (Fish Transport Flows) FTF to 2,360 cfs. This the above the 2,000 cfs minimum flow, but slightly below the typical 2,400 cfs summer operating basement. All ramping is within limits.
- 10-Day Forecast: Typical - warm and dry. The freezing level is above 13K'. Outflows are expected to be 2,360 cfs unless there is a load demand due to extreme heat. Inflows should be ~1.3K cfs.
  - Boat ramps: Due to continued drafting some boat ramps may not have access through Labor Day. Tacoma will continue to coordinate in advance with WDFW on this.
- Melora explained that load is the total amount of energy demand. During times of increased demand (usually August and September) Tacoma may need to respond to an emergency or if market prices are exceedingly high. Tacoma plans ahead to have enough buffer in the system to cover increased demand while, to the extent possible, maintaining recreation levels. This year has been challenging.

### Outflow



From May 10, 5,000 cfs + FTF. Transition to 2,360 cfs starting July 1.  
All ramping within limits (1 inch/hr day and night starting June 16).

Link to the USGS real-time Cowlitz River hydrograph:

[https://waterdata.usgs.gov/wa/nwis/uv/?site\\_no=14238000&PARAMeter\\_cd=00060,00065](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

Milfoil in Lake Scanewa: Stephen observed this and asked if Tacoma was taking measures to minimize its spread. John noted LCPUD has worked to address Milfoil and other noxious weed species in Lake Scanewa but in any event, there are limited location with suitable habitat for milfoil in Lake Scanewa so it is self-limiting. Swofford Pond is really full of Milfoil. This is beyond the purview of the FTC

Temperature Monitoring: Matt shared some charts on hourly data gathered from June 13 to July 25 for the Cispus at the Copper Canyon Creek Whitewater Takeout site (kayak takeout) and Scanewa Day Use Park Boat Launch.

- Copper Canyon takeout: Max = 20.5 °C; Min = 8.5 °C (daily mean temp 9.6 °C -17.3 °C)

- Lake Scanewa: Max = 24 °C; Min = 11.6 °C (daily mean temp 9.6 °C - 22 °C)  
John reported that after doing some temperature monitoring with a regular thermometer at the kayak takeout, he observed that the water at the release point was 2 °F lower than at the TPU temperature logger site and this likely explains the 4 °F daily water temperature variance observed on the temperature logger. He is confident that the site gives fish access to cooler water even in the summer. This is great news! He will share the data when they are ready for posting.

Temperature profile data collected in Cowlitz Falls Dam forebay from March 8 to July 6:

- Boat Barrier Temperature Profile: Max = 20.7 °C; Min = 4.5 °C
  - Debris Deflector South Temperature Profile: Max = 20.7 °C; Min = 4.5 °C
- Matt explained the temperature loggers hang off the debris barrier – but are not touching it. Temperatures on the north deflector loggers are warmer at depth, as predicted by Tacoma. They haven't observed temperature influencing fish behavior.

North Taidnapam Boat Launch: The work on the dock will be completed in the fall when the reservoir elevations are sufficiently low. The boat launch will be closed when they do the construction (would be closed anyway due to low elevation).

North Shore fishing trail adjacent to the Mossyrock Dam: Matt reported they will start the SEPA process. They will be getting permits to do some stabilization work there.

Large Woody Debris: LWD placement at the Blue Creek Boat launch has begun.

Dredging projects: Permitting has been obtained and notifications will be sent out when ready to begin these projects at the Blue Creek weir and Cowlitz Salmon Hatchery intake.

Regarding temperature data from the Mayfield Juvenile Collection Facility, Anne asked if these are surface temperatures. Scott answered in the affirmative. Stephen asked if Tacoma can get more of a vertical temp profile vs. only surface temps. He noted that not all migrating fish are treated equally. It was agreed to save this for further discussion.

**Action Item:** Matt P to ensure temperature data reports from the Mayfield Juvenile Collection Facility are clearly labeled (surface temperatures, etc.).

Cleanup at Kosmos: Anne reported that Cam Penner-Ash is Ecology's Cleanup Project Manager who has been working with Tacoma on this site. He has agreed to attend FTC meetings quarterly, starting in September, to give members updates on the status of the process and be available to answer questions people might have. Since Tacoma still has more samples to collect, he has agreed to give an update/background on the clean-up process itself as a start.

**Action Items:**

- Anne: Send Cam's email address to Lyn and Travis to add to the FTC distribution list.
- Travis and Lyn: Update the distribution list accordingly.

Gravel Augmentation: The remaining 813 cubic yards of gravel will be placed this year. Stay tuned.

Fishing Boundary

John announced WDFW has moved the fishing boundary below Barrier Dam back to the 400' mark as of today to prepare for the expected low fall Chinook return.

Fish Facilities

Scott reported on Eric's behalf that the Cowlitz Facilities Team is currently in the process of hiring three seasonal PSMFC Fisheries Technician positions to assist at the adult separator and Mayfield counting house. They hire these positions annually.

#### Separator:

- There was a small drop for both Spring Chinook and summer steelhead returns over the last week. They are 90% of the way through the spring Chinook return and expect to see 200-300 more through October. There was a slight increase in cutthroat trout collection. They are also seeing a good increase in the cutthroat return which should also extend into the fall
- Tacoma is hauling around three loads of fish to the LCPUD Copper Canyon Creek Whitewater Takeout site each week. They took 17 loads to the release site in July, starting on July 5. 450 spring Chinook have been transported to that site so far.
- 1,391 summer steelhead have been recycled to the I-5 boat ramp so far this year. Total first-time arrivals are ~2K. We are about 55% of the way through the run.

#### Brood Collection:

- Spring Chinook broodstock collection is complete for the year.
- They are currently collecting summer steelhead broodstock. Going well.
- Fall Chinook and cutthroat broodstock collection should start around the beginning of August. Coho will start in Sept. All HOR fall Chinook and a proportion of NOR fall Chinook will be retained for broodstock. NOR fall Chinook that are not retained for broodstock will be transported and released into the Tilton River.

#### Mayfield Counting House:

- All Chinook and coho are getting snout tagged and all steelhead and cutthroat are getting a dorsal sinus tag.
- Total numbers have dropped a little over the last couple of weeks. This is normal for this time of year. We will start to see those numbers climb again in September.
- We are currently seeing about twice as many Chinook as coho. There have only been a few steelhead each week for the last couple of weeks.

Dredging: Tacoma will dredge the Cowlitz Salmon Hatchery intake to disturb/remove *C. shasta* (parasite) habitat on August 8. They will dredge below the Blue Creek weir for flood control on August 10. Both Anne (Ecology) and Elliot (WDFW) have been notified of the project dates.

#### CF Fish Facility (as of July 25):

- Approximately 210K smolts have been collected to date
  - 30K Chinook
  - 170K Coho
  - 9.4K Steelhead
- Approximate FCE
  - Steelhead 66%
  - Coho 75%
  - Chinook 55% (PIT tagging is ongoing)
- Discharge at CFD: John noted that the minimum generation for the Cowlitz Falls Dam turbines used to be 1,800 cfs which only allowed the turbines to be operated part of the day during the low inflow periods (pooling). This caused the flow in the reservoir to stop and flow back upstream once per day and likely had a negative effect on Chinook smolt collection. It was thought that operating the turbines below 1,800 cfs caused damaging cavitation and

vibration. LCPUD subsequently discovered that the turbines will begin operate smoothly again as flow decreased to around 1,000 cfs, which is much better for fish collection because Lake Scanewa can flow continuously 24 hours/ day now.

- Spillway Flumes 3 and 4 have been removed for LCPUD’s unit maintenance and are expected to be back online the week of August 7.

### Copper Canyon Creek Takeout Release Site

Tacoma has been able to make several hauls to release fish into the Cispus at the Copper Canyon Creek Takeout site as temperatures have remained sufficiently low.

Spring Chinook																		
Run Timing: March 2023-October 2023				Upstream Transportation								Lower Cowlitz		Broodstock		Surplus	Mortality	
Week	Total			Tilton River		Lake Scanewa		Cowlitz @ Packwood		Copper Canyon		Hatchery	Natural	Hatchery	Natural	Hatchery	Hatchery	Natural
Ending	Returns	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Natural	Hatchery	Hatchery	Natural
<b>Season to date</b>	<b>3,500</b>	<b>3,097</b>	<b>403</b>	<b>0</b>	<b>0</b>	<b>1,147</b>	<b>269</b>	<b>372</b>	<b>48</b>	<b>293</b>	<b>86</b>	<b>0</b>	<b>0</b>	<b>1,268</b>	<b>0</b>	<b>14</b>	<b>3</b>	<b>0</b>
28-Jul	111	86	25	0	0	0	0	0	0	79	25	0	0	0	0	7	0	0
Weekly 5-Year Average	121	96	25															
Season 5-Yr. Average to Date	2,269	1,916	353															

### Cispus Release Site (Tom Music Bridge)

Laura reported LCPUD is still working through the JARPA with state and federal agencies. There was a mistake on the initial document that led to it not being reviewed by WDFW, so that is being dealt with. They are also considering the potential involvement of the Army Corps of Engineers. She understands the delays are frustrating, but that’s the current status.

### Monitoring & Evaluation Subgroup

This group has met to discuss how to develop the M&E Plan. Tacoma has hired Four Peaks to help with this effort.

### 2023 APR Process

The same contractor will be assisting with this effort. Matt P announced the Science Meeting has been scheduled for August 22 at the Veteran’s Memorial in Chehalis. Stay tuned for more details. Travis noted Tacoma is in the process of hiring some additional staff to assist with this.

**Action Item:** Matt P to ensure proper notification of the August 22 meeting are shared.

### Downstream Adaptive Management Technical Work Group (TWG)

John reported there was a meeting that mostly focused on operations at the CF Fish Facility, how fish are being collected, etc. The spring report from the group will be out to the FTC internal review. Collection at CFFF is going well. He also noted Mayfield collection is proceeding with nothing unusual to report.

## **LCPUD Dam Operations**

**Presenter: Russell Page**

Generator hatch cover seal replacement project: LCPUD completed the repairs on Unit 1, along with Tacoma’s #1 and #2 fish flumes. They now are doing the same with Unit 2 and Tacoma is doing repairs on #3 and #4 fish flumes. The reinstall is scheduled for August 22.

Sluice gate redesign / retrofit: This is currently at 90% review and will go to bid in the spring of 2024 so it can be combined with the stability and crane projects which are scheduled to start in September of 2024 in order to minimize impact to river system.

Peggy asked if the sluice gate work will go down to riverine conditions or the same elevation as debris barrier work? Russell replied this is still under consideration. They may install a bulkhead in front of the gates, so they don't have to go down to riverine conditions. He will follow up with Peggy on this in the next couple of weeks.

Debris barrier restoration project: With permits in hand, LCPUD is planning on doing the first drawdown in Q1 of 2024. They anticipate it requiring 3-4 weeks to repair the moorage site. The second drawdown will occur in Q3 of 2024 after the fish collection season, with a forebay elevation of 842-825'.

Outage: The Unit 1 outage will occur August 1 through October 2. It no longer appears that any divers will be needed, and they won't have to spill during fish collection season.

Trash rack repair: This work will likely occur in October of this year.

Anne noted Ecology wants to ensure sludge discharge from sediment are minimized. They want to be sure LCPUD has proper monitoring protocols, etc. in place. Russell assured her he will discuss with Joe First and coordinate with Ecology to ensure there won't be any water quality issues during the drawdowns.

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## **Gravel Augmentation DD**

**Presenter: Melora Shelton**

Melora reviewed the background on SA-10 (gravel) implementation since placement was put on hold in 2017. This information is included in the DD, the 2023 Gravel Augmentation Plan Supplement, and associated attachments. A two-path approach to resuming gravel placement was finalized in early 2021 (DD 2021-01): initially in conjunction with the Barrier Dam construction project and then moving toward a long-term plan, leaving flexibility for future discussions. Tacoma has worked over the last two years with the FTC and WDFW to formalize long-term activities into the 2023 Supplement. The proposed final DD and 2023 Plan Supplement were distributed to the FTC for final review, and no comments were received. Melora walked through the final DD on screen. It will be attached to the 2023 Supplement to document this FTC consultation. There were no additional questions or suggested edits.

There was a consensus approval of the document by FTC voting members at the meeting.

**Action Item:** Travis to send out the DD and 2023 Supplement approved by consensus at this meeting to other FTC members not at the meeting for electronic approval.

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## **Satellite Rearing Decision Document**

**Presenter: Travis Nelson (for Eric Shoblom)**

Travis reported Tacoma is continuing to research potential configurations for satellite rearing facilities at the Energy Northwest (EN) site. While it is unclear if the EN site will work out due to some complicating factors, it remains on the list. They are also analyzing the option of Tower Rock and the feasibility of Mayfield net pens. In addition to locations, they are also reviewing several

facility options (earthen ponds, etc.). Tacoma is committed to getting something constructed in the time window prescribed. It has not been determined that an additional DD is needed. Stay tuned.

**Cowlitz Restoration and Recovery Fund / Habitat and Production (HAP) Subgroup**  
**Presenters: Denise Smee and Melora Shelton**

2023 CRR Habitat Grant Round:

Denise Smee (LCFRB) reviewed the two proposals being recommended for CRR funding. Both proposals are sponsored by Cascade Forest Conservancy. No SRFB funding was requested, but there were other matching funds for both projects. The LCRFB Board met on July 28 and accepted the TAC’s recommendation that the FTC fund both projects.

Project Number	Project Name	CRR Requests
CRR-2023-01	Restoration of Crystal & Woods Creeks Using Low-tech Structures	\$168,098
CRR-2023-02	Riparian and In-channel Enhancement of Hall Creek	\$61,048
<b>TOTAL CRR REQUEST:</b>		<b>\$229,146</b>

Denise introduced a draft DD for CRR funding recommendations (2023-05). The document includes active links to LCFRB’s Google Drive folders for both project applications along with a description of any changes since the virtual site visits. This includes links to the recorded virtual site visits. These links were also emailed to the FTC last week.

CRR projects landed in the middle of the scoring results using the SFRB’s scoring. The projects scored similarly using both scoring approaches, but Hall Creek was slightly higher under CRR (CRR priorities related to upper basin) and Crystal and Woods were slightly higher under SFRB (more regional perspective). The projects were recommended equally without ranking among them. We may want to discuss the distinctions between scoring and ranking further going forward. More info on TAC member CRR scores will be shared with the FTC when the DD is sent out. The SRFB and CRR evaluation questions will also be shared.

Travis expressed thanks to the LCFRB for all their support and coordination with us. Peggy agreed. She found the presentation to be very informative and easy to follow.

**Action Items:**

- Melora: Send out this DD for all to review in anticipation of review and approval at the September FTC meeting.
- All: Send any comments to Melora by August 22.

HAP Subcommittee:

As discussed at the June FTC Meeting, this group has reengaged to look toward 2024. They met on June 26 and July 18. Discussions included ideas for improving applicant guidance. They worked together to make minor updates to program materials to support the 2024 process and will share them with the FTC. Melora walked through the draft DD 2023-03 to guide the HAP element of the program and subcommittee work for the coming year. The subcommittee will continue to work under the existing charter and SOW. They look forward to discussing with the FTC how to improve project guidance. They will formalize a meeting schedule starting the week of August 14.

CRR Program, General:

There have been many conversations about approving projects for funding. Melora reminded all that the Cispus Yellow Jacket Phase III Project is underway with in-water construction scheduled for this summer and work for other projects is starting up. CRR funds are going out the door to reimburse project sponsors now. It is very exciting that this is finally happening!

Melora noted that the LCFRB and Tacoma are exploring a CRR-focused field trip in the September/October timeframe. Stay tuned for details.

The LCFRB will conduct a lessons learned session with the SRFB and also with CRR. There may be some wording in the Implementation Strategy related to assessments that should be changed to add clarity. They will be looking for feedback from the grant sponsors and the FTC. Any updates to the Implementation Strategy will go through the decision document process.

Peggy suggested that in September FTC meeting Melora share how much funding remains in the CRR Account.

**Action Items:**

- Melora: Send out CRR DD and materials for all to review.
  - All: Send any comments to Melora by August 22.
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**Public Comment Period #1 - Agenda related**

Randy LeDuc contacted Travis to let him know he had a conversation with fishing guides last Saturday. They reported 7 of the 26 fish caught were operco-punched (recycled) fish. That's good news on the recycling program! Travis extended congratulations to Scott and the team on making this happen. These are good successes and opportunities for our angling communities. Randy also reported that a chum salmon was caught recently in the lower river. Scott noted we have both summer and fall chum arriving in the Cowlitz.

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**Topics for September 5, 2023 FTC Meeting**

- Updates incl. Hydro Ops, Water Quality, Fish Facilities
  - Gravel Augmentation Plan DD
  - LCPUD Cowlitz Falls Dam Operations
  - Update on Cispus Release Site
  - Satellite Rearing
  - Downstream Adaptive Management TWG
  - Significance of Performance Metric
  - CRR Fund / HAP Subcommittee Recommendations
  - M&E Subgroup
  - 2023 APR Process Debrief
  - WDFW Topic: Fish Passage Survival (tentative)
  - Preview October FTC Meeting topics
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**Meeting Evaluation**

- Got out early
- Good Participation
- Need more time for updates
- For in-person meeting, make the breaks longer

**Inspirational Quotes**



- Steve M offered this quote from Einstein: “We can’t solve problems by using the same kind of thinking we used to create time.”
  - Anne shared another Einstein quote: “I have never looked upon ease and happiness as ends in themselves -- this critical basis I call the ideal of a pigsty. The ideals that have lighted my way, and time after time have given me new courage to face life cheerfully, have been Kindness, Beauty, and Truth.
  - Tim offered this farewell quote from Bertrand Russell: “In all affairs it's a healthy thing now and then to hang a question mark on the things you have long taken for granted.”
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### **Public Comment Period #2 – Any Topic**

No comments.

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### **Closing Remarks**

Travis remarked on the recent loss of some young people (in their 20s) in an ATV accident. This is very difficult for the families and for the community. Stay safe. Be mindful. Don't be in a hurry. Be cognizant of your surroundings. Life is precious.

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### **Parking Lot**

- Presentation by Tacoma’s Power Management Group and/or from Grant PUD re improving SAR
- Review Steelhead Kelt Recycling Program