

Cowlitz Hydroelectric Project
FERC No. 2016
Cowlitz Fisheries Technical Committee
Final MS Teams Public Meeting Summary
May 3, 2022 from 9:30 – 2:00

FTC Representative Attendees:

Travis Nelson	TPU
Anne Baxter	WA Dept. of Ecology
Bryce Glaser	WDFW
Jonathan Stumpf	Trout Unlimited

Additional Attendees:

James Archibald	NMFS
Josua Holowatz	WDFW
John Serl	WDFW
Peggy Miller	WDFW
Brian Gale	WDFW
Sam Gibbons	WDFW
Matt Bleich	TPU
Eric Shoblom	TPU
Phil Sandstrom	TPU
Tim Hoffnagle	TPU
Melora Shelton	TPU
Chris Foster	TPU
Ann Weckback	Lewis County
Laura Wolfe	LCPUD
Debbie Carlson	BPA
Steve West	LCFRB
Jamie Riche	PDSA Consulting / Facilitator

2022 FTC Meeting Dates: June 7 (Public Meeting), (no meeting in July), Aug. 2, Sept. 6, Oct. 4, Nov. 1, and Dec. 6 (Public Meeting)

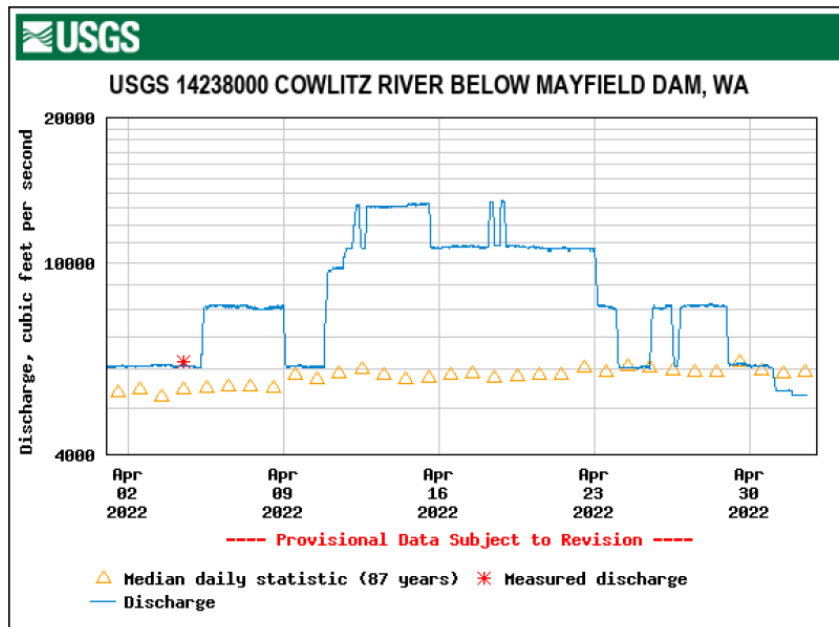
Approval of Last Meeting Summary

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

Updates

Hydro Operations:

- Inflows: April inflows were 6,137 cfs, 75% of historical average.
- Snowpack: Snowpack continued building through April and is near or above-average at this time.
- Storage: Riffe Lake drafted during April; minimum elevation was 714 feet at end of April. Mayfield is operating within its standard band.
- Outflow: Currently at 5,300 cfs (minimum 5,000 cfs). Fish transport flows were provided when outflows were below 8K cfs. There have been no ramp exceedances.
- Forecast for next ten days: Outlook is for rain Thursday – Saturday, otherwise dry. Expecting less than 2 inches total precipitation. Outflows expected to be variable, 5,000 – 8,600 cfs and will include fish transport flow.



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

Water Quality/Monitoring: No update at this time.

Fish Facilities:

Mayfield upstream collector - Adult spring Chinook numbers are continuing to increase: 113 last week, already 117 this week so far. Collecting 100% of HORs for brood stock. Expecting to have plenty of males and females to meet needs.

Mayfield downstream collector - Steelhead numbers are starting to climb; there were about 94 last week. Seeing tiger muskies and rainbow fallbacks. Those plants are isolated to the upper end of the Mayfield Reservoir to try to reduce fallback. The rainbow plants are conducted by WDFW. About 42k have been planted so far.

Release sites - All are in good shape, seeing a lot of use.

Cowlitz Falls Fish Facility - The Cowlitz Falls Fish Facility (CFFF) has been running since March 15. The steelhead are the main focus, and shortly we will see an uptick in the coho outmigration. Two steelhead release groups are in the system for Fish Capture Efficiency (FCE) trials. A third group will be tagged tomorrow. Might be able to tag the first release group of coho.

M&E Subgroup: There was no M&E meeting in April due to APR and other meetings. Monitoring plan material was distributed to the M&E group for their May meeting.

Gravel Augmentation: The edits and inputs received on the initial Gravel Augmentation Plan are being evaluated and finalized. Augmentation will happen in July at the same location and adding 1,200 cubic yards of gravel to the river.

Downstream Adaptive Management Workgroup: At the April meeting they discussed comments the TWG made internally on the draft 2021 report. They received a status update on how the season's collection and operations were happening at the Mayfield counting house (downstream collection facility) and CFFF.

LCPUD Dam Operations Update: No update at this time.

2022 APR Process Update
Presenter: Phil Sandstrom

2022 Cowlitz Annual Program Review (APR) Hatchery Production Plan presentation: The goal is to develop a population management strategy for the coming season.

Preparation for the APR and Science Conference was held April 7th; after which the 2022 Cowlitz Annual Program Review (APR) was held April 21st. Tacoma received some public feedback at that meeting and welcomed online feedback until May 2nd. The second public APR meeting is on hold for June 1 from 2-4 pm. The final 2022 Hatchery Production Plan will be brought back to the FTC as a decision document.

There have been no major changes in the Hatchery Production Plan in the last several years. This year is likely to be consistent as well, with one area of minor adjustments for FTC consideration. The proposed adjustments are in alignment with the transition plans.

Species	Before 2011 FHMP Update	2018 APR Goal	2019 APR Goal	2020 APR Goal	2021 APR Goal	2022 APR Goal
Fall Chinook	4,800,000	3,500,000	3,500,000	3,500,000	3,500,000	3,500,000
Spring Chinook	959,800	1,738,529	1,738,529	1,738,529	1,738,529	1,678,000
Coho	2,835,000	2,178,000	2,178,000	2,178,000	2,178,000	2,178,000
Winter Steelhead	690,000	647,000	647,000	647,000	647,000	647,000
Summer Steelhead	550,000	625,000	650,000	650,000	650,000	650,000
Cutthroat	160,000	100,599	100,599	100,599	100,599	100,599

Winter Steelhead - The overall hatchery production numbers are staying about the same. The changes are to increase the size of the Tilton and Upper Cowlitz program and commensurately reduce the Lower Cowlitz program.

	Current	Transition	Difference
Lower Cowlitz Winters	478,500	308,500	-170,000
Tilton Winters	48,000	100,000	52,000
Upper Cowlitz Winters	118,000	236,000	118,000
Total:	644,500	644,500	0

Summer Run Steelhead and Cutthroat Trout - No changes are proposed from last year's program. Fall Chinook - Numbers are the same, but the proposal is to move to one integrated program rather than one integrated and one segregated program.

Coho – Numbers are the same. A pilot netpen program associated with potential spring Chinook poundage change may be considered.

Spring Chinook - SAR analysis based on CWT data was used to develop potential options.

Option 1: Poundage neutral, no rebalancing necessary between other programs, change in the poundage category (Pounds) is adjusted between number of fish per pound (fpp) categories (Size) and release dates are modified resulting in 3.3% more adults.

16FPP	Population	Size	Pounds	Release Date
Current	500K	16fpp	36,000*	Nov
Proposed	575K*	12fpp	47,917	Dec
Difference:	+75k	4fpp	+11,917	+4 weeks

8FPP	Population	Size	Pounds	Release Date
Current	800K	8fpp	100,000	Early Mar
Proposed	603K	8fpp	75,375	Mid Mar
Difference:	-197k	0fpp	-24,625	+1-2 wks

5FPP	Population	Size	Pounds	Release Date
Current	437K	5fpp	87,600	Early Mar
Proposed	500K	5fpp	100,000	Mid Apr
Difference:	+63k	0fpp	+12,400	+5 wks

Option 2: Increases poundage by 13.6K lbs, requires rebalancing between programs, total number of fish is reduced by 80K, change in the poundage category (Pounds) is adjusted between number of fish per pound (fpp) categories (Size) and release dates are modified resulting in 9.3% more adults.

16FPP	Population	Size	Pounds	Release Date
Current	500K	16fpp	31,250	Nov
Proposed	537K	12fpp	44,750	Dec
Difference:	+37k	4fpp	+13,500	+4 weeks

8FPP	Population	Size	Pounds	Release Date
Current	800K	8fpp	100,000	Early Mar
Proposed	420K	8fpp	52,500	Mid Mar
Difference:	-380k	0fpp	-47,500	+1-2 wks

5FPP	Population	Size	Pounds	Release Date
Current	437K	5fpp	87,400	Early Mar
Proposed	700K	5fpp	140,000	Mid Apr
Difference:	+263k	0fpp	+52,600	+5 wks

Option 2 has a lot of similarities with Option 1. Potential changes fall in line with the hatchery's best ability to approach the SAR analysis recommendations. There are some space limitations in the hatchery. A poundage gain of 13.6K is relatively minimal, would be the equivalent of displacing one pond of coho. At the APR meeting, a rebalance by adjusting other programs in the complex to offset the poundage gain in this program was proposed. The public didn't provide much feedback other than a small paragraph from the CCA. The other option for rebalancing is a one-year netpen pilot program. The pilot program would displace the one pond of coho. Funding for the one-year pilot program would require approval from Tacoma Power's Public Utilities Board. The pilot program would be evaluated before deciding whether to make a permanent change. If successful, the FTC and public would provide recommendations on whether to continue the program. Continuing the netpen program would require a different source of funding.

Public feedback was to go with the netpen pilot project and reduce the fall Chinook program by 13.6K lbs. This wasn't an idea formally presented to the public at the APR meeting. It was noted that reducing the fall run by 13.6K lbs equals over a million fish, or 1/3 of the program. Discussion:

- From WDFW's perspective, they would like to move forward with netpen improvements. They would be supportive of the neutral pound option now and then scoping and trying to secure funding for the coho netpen pilot program and trying to implement that as soon as possible. They've gotten a lot of questions about whether the netpens would work in the upper basin. They also replied after the first transition plan meeting to the CCA comments about the fall

Chinook reduction, noting that this is not something WDFW supports considering right now. The fall Chinook program provides fishing opportunities, supports the recovery objective, and also supports the state's killer whale priorities.

- Peggy asked about Tacoma's process for seeking funding from the board. Eric replied they're looking for more definitive answer from the FTC before taking this to the board.
- Bryce inquired about the location for the netpens: existing site or older Mossyrock site? This could be decided at the 2023 APR meeting. Eric added that if we went with the existing site, it would be more like a year out if the plan is to just replace nets. If the sites were moved, it would likely take at least 2 years. All of the infrastructure questions would have to be worked out, leading to a longer timeline and more expenses. He asked for input: do people even want to entertain the option of piloting one site vs. another? Bryce would like to do a pilot but does not have a site preference, would appreciate perspective on what makes sense logistically and gives the best chance for survival.
- Should the DD reflect the FTC's preference for the neutral poundage option for this year and the FTC recommendation pursuing the pilot project for netpens? Tacoma Power staff made a commitment to take the pilot netpen program forward to the board, likely to take place in the 2023 APR or perhaps the 2024 APR. A formal DD might not be needed because the notes indicate the FTC's recommendation pursue the netpen.
- WDFW has received comments regarding moving the recycling release location of the I-5 bridge downstream to Olequa. WDFW would support assessing the Olequa location as an option. It would spread out the fish more, giving anglers additional opportunities. WDFW suggests the FTC look at places where we can act on public comment, and this seems like one that is reasonable to consider. He also suggests the FTC be sensitive to the potential increase in straying in Olequa, but it seems like the stray risk will likely not be increased by much. This can be brought to the M&E for consideration.
- There were some challenges with getting APR meeting invitations widely shared. A lot of effort was put into the APR meetings, so it is disappointing when only eight or ten people show up. It makes it hard to know if we're getting good feedback. It was suggested to brainstorm additional ways to advertise the APR meeting at the FTC in October / November to help raise awareness.

Those who spoke were in favor of, at least in 2022, focusing on the poundage-neutral approach. The FTC can consider the netpen idea for future years, but not this year because it cannot be implemented without funding and infrastructure modifications (might need new nets). Attendees noted it feels like there is support for the poundage-neutral option while giving the netpen idea additional consideration.

Cowlitz Satellite Rearing Facility Discussion

Presenter: Phil Sandstrom

Cowlitz Satellite Rearing Facility presentation: Topics included context for the Tilton and Upper Cowlitz basins salmonid status, the site evaluation matrix, biological relevance, and sites they evaluated. Satellite facilities are intended to benefit the upper basin populations.

Current state of salmonids: Juvenile estimates in the presentation are strictly the fish handled at the Mayfield counting house. In summary, coho seem to be doing well in the hatchery and in terms of the transported adult NORs in both basins. The spring Chinook run seems like one that could use some help in terms of juveniles and returning adults. The fall Chinook in the Tilton leaves us with a lot of unanswered questions. Steelhead kelts are not included in the numbers presented today. As many as 400+ kelts have been handled at the CFFF in 2022.

Current State of Salmonids in Upper Basins

• Tilton River

- *Fall Chinook*: Adults – 1,444 (914-2,562) NOR 1,199 (775-1,527) HOR;
 - Juveniles 35,236 (7,658-97,000)
- *Coho Salmon*: Adults – 3,442 (1,348-6,585) NOR 11,503 (4,541-18,708) HOR;
 - Juveniles 34,655 (20,808-40,872)
- *Winter Steelhead*: Adults – 187 (72-260) NOR 64 (40-108) HOR;
 - Juveniles 6,367 (5,666-7,720)

• Upper Basin (Upper Cowlitz and Cispus rivers)

- *Spring Chinook*: Adults - 284 (149-549) NOR 3,070 (473-8,635) HOR;
 - Juveniles FPS: 62% (51-78) 33,345 (7,315-56,345)
- *Coho Salmon*: Adults - 6,325 (796-10,568) NOR 11,029 (6,275-21,089) HOR;
 - Juveniles FPS: 74% (52-93) 131,616 (26,196-158,096)
- *Winter Steelhead*: Adults - 332 (168-614) NOR 180 (69-301) HOR;
 - Juveniles FPS: 71% (57-83) 9,893 (4,860-14,450)

Satellite rearing site evaluation: Criteria include physical location, land ownership, land area required, potential water source, adult access, power, road access, permitting, and additional comments. This is a fairly simple list but did prove helpful in narrowing down the initial list of options to three sites.

Biological relevance: The number of returning adults / in gravel production, effects of domestication from program, current spatial distribution, and impacts to NOR populations of interest (does operating a satellite rearing program potentially impact returning adults or juveniles in terms of competition?) were considered.

Sites being considered (in no particular order): Mayfield Netpens, Tower Rock U-Fish, and the Energy Northwest (EN) Power Pool / stilling basin. Additional criteria include screening (<4 cfs), NPDES permits (5,000 pounds of feed (monthly) or 20K pounds of fish (annually)), and water rights (required for any pumping activity).

Mayfield Netpens: Holds approximately 300,000 HOR juvenile coho salmon and frees up one raceway (255K coho) in Salmon Hatchery. Netpens are an indirect approach to increase spring Chinook (50K Chinook could then be raised in that same raceway).

Tower Rock U-Fish: Has a good spring-fed water source, power available nearby, estimated capacity with fish number and size fpp, history of rearing fish in the past, road access, multiple releases possible, good site security, willing landowner however there may be potential long-term uncertainties. Some very rough ideas have been drawn up for this site, leading to high-level estimates of possible costs. Discussion:

- Anne asked about water quality and permitting requirements. Matt is working on this and noted that while it will take time, we have time and want to do this right.
- Bryce asked about the level of interest and relevancy / priorities. Phil noted that there has not been much interest raised regarding coho, but some interest about steelhead, and there has been discussion of utilizing juvenile spring Chinook to create relevancy. A small number of adults could be utilized, taking very few NOR fish and crossing them with HOR fish to get a program going.
- John suggested starting with a segregated, rather than an integrated program. Some benefits of the Tower Rock site include: an increase in spatial distribution, does not require large numbers of NORs (segregated program), potential to recondition kelts, and an increase in life history diversity.

EN Power Pool: Has a cool water source, stable water supply, flat work area near the pool, power nearby, area for potential tank and pump options, multiple release strategies and landowners seem

like willing partners. Tacoma conducted a site visit to measure the edges of the pool and to consider contingencies related to potential outages. They looked at netting off a portion of the pond vs. adding additional screens so that the full pond could be used. Whatever the program size, want to ensure that fish don't get stranded. Benefits to this location are similar to those at Tower Rock. Discussion:

- The BiOp requires the plant to be shut down from August 15 – September 15. During this time, EN is required to seine-net the power pool (aka stilling basin). The Power Pool can heat up and the closest temperature monitoring location is the upper tailrace. The fish screen at the base of the tailrace must remain in place per the BiOp.
- During relicensing, there were six netpens where they acclimated 100K steelhead smolts in this area, with no problems.
- Snyder Creek is being rerouted, so it no longer extends below the tailrace and may not be a good release option.
- An additional benefit is that when there is an outage, EN is able to pass water through the turbine without operating it, so there would no disruption in the flow into the power pool.

Kelt reconditioning is possible at Tower Rock and EN power pool but may not be possible at the Mayfield netpen program. A question was raised about the possibility of injury due to the nets. It is possible the Yakama Nation has reconditioned kelts in a netpen.

Site	Basin	Species Focus	Cost	Owner	Water source	Fish Reared	Permitting	Infrastructure	Kelt Recond	Biological Benefit
Tower Rock U-Fish	Cispus	Spring CK Steelhead	\$\$	Pete & Pam Del Duca	Spring	35,000+	401 NPDES Water Right	Water Road Power River Acc	Yes	<ul style="list-style-type: none"> • 175-525 adults • Alt juvenile LH • Increased Spat Dist • Resiliency/Stability • Program impacts can be controlled
Energy Northwest	Upper Cowlitz	Spring CK Steelhead	\$\$	Energy NW	Power Pool	100,000+	401 NPDES Water Right	Water Road Power River Acc	Yes	<ul style="list-style-type: none"> • 500-1,500 adults • Alt juvenile LH • Increased Spat Dist • Resiliency/Stability • Program impacts can be controlled
Net Pen Program	Tilton	Coho Spring CK	\$\$	NA	Mayfield	300,000	401 NPDES	Inside project boundary	?	<ul style="list-style-type: none"> • Better rearing for HOR spring CK

WDFW would like to have more time to think about what was shared today. All were asked to send comments to Tacoma by June 7. EN has offered to attend the next meeting, as have the owners of the Tower Rock site. Matt suggested it may be helpful to schedule a separate Q&A session with property owners.

CRR / HAP Update

Presenters: Melora Shelton and Steve West

Updates on Funded Projects: The Cispus River / Yellow Jacket Phase 3 project is currently on track for construction in summer 2023. Planning project implementation and logistics work will occur in order to begin construction in 2023. Contract coordination is underway for the Cispus Floodplain Reconnection project.

2022 LCFRB Grant Round: LCFRB ended this year's virtual tours. The three CRR projects are: Upper Cowlitz Culvert Inventory, Upper Cowlitz Tributary Restoration, and the Kiona Creek Restoration. Additionally, the Cispus Phase 4 project funding is from three sources included the CRR.

Final applications are due by noon on June 27. Then, on July 12, the LCFRB TAC will score and competitively rank all Salmon Recovery Fund Board (SRFB) projects and the three CRR-only projects. The final SRFB rankings will be published on July 27.

When conducting their internal project review, WDFW staff did not know to include the CRR-only projects which were new this year. They therefore have asked to be able to provide additional comments. For this year, Steve suggested that WDFW submit comments for CRR-only proposals to the LCFRB as soon as possible so he can share them with project proponents.

There was agreement that the process ensuring the FTC has ample opportunity to provide feedback to CRR proponents prior to project review can be improved. Being able to give project proponents feedback early in the process will help them improve their final applications.

Bryce asked for clarity about what the LCFRB will provide to the FTC. Steve responded that a single combined list would be difficult as the CRR project criteria are slightly different. One option may be to use everything but the CRR-specific criteria to illustrate where the CRR-only projects rank within the SFRB pool for sake of comparison.

Some proposals lacked detailed implementation information. Peggy suggested the CRR application be revised to request additional task and method information. She also asked if the FTC can decide to fund only certain/distinct tasks within a proposal. Steve replied that it would be hard to ask the proponents to parse out a project. It would be like asking them to rescope their proposal. This is something to consider for the future.

RCO has asked for an overview of the CRR work to include in the State of the Salmon report.

Update to the FTC on the HAP Subcommittee's actions to date: They have had four meetings since February and have been sending out notes. Their first task was to finalize the Charter. They then incorporated the HAP Guiding Principles into the CRR Implementation Strategy which will be available for review in advance of the 2023 grant round. Next steps include developing an application process which includes workshops and early feedback to the applicants. After this afternoon's meeting, Melora will distribute the draft work products to the FTC for feedback and will follow up in June.

Review and finalize the DD: The FTC reviewed and approved with edits DD 2022-3 CRR Hatchery-Associated Production (HAP) Subcommittee Charter that was first presented in April. While the HAP subcommittee is largely comprised of reps from the WDFW and Tacoma Power, anyone with technical expertise is welcome. At Anne's request, Travis added Ecology to the list of reps.

Per FTC Protocols FTC reps not present will be provided seven days to respond. If there are no objections, the DD will be approved on May 10.

Topics for June 7 FTC Public Meeting

- Public Comment Protocols
- Usual Updates
- Satellite Rearing
- Gravel Augmentation
- APR Update – DD
- CRR Update
- Downstream Adaptive Management Tech Work Group
- Barrier Dam Update

Meeting Evaluation:

- Jamie thanked everyone for their participation and patience
- MS Teams seemed to work better this time
- Good participation
- Good job, Jamie; thank you for filling in for Lyn
- Great to see Ecology and TU back at the table! (seconded and thirded!)

Josua's quote of the day:

Before sharing a quote, Josua noted that during our sound check this morning, several meeting participants responded in different languages. What a lovely and spontaneous way to demonstrate the diversity of our history and experiences.

In that spirit, the quote he shared comes from Rita Mae Brown: "Language is the roadmap of a culture. It tells you where its people come from and where they are going."