

**Cowlitz Hydroelectric Project
FERC No. 2016
Cowlitz Fisheries Technical Committee
Meeting Summary**

March 3, 2026 from 9:30 am-3:30 pm

FTC Representative Attendees

Ecology: Andrew Luymes

Tacoma: Melora Shelton

TU: Jonathan Stumpf

WDFW: Bryce Glaser

Yakama Nation: Bill Sharp

Additional Attendees

BIA: Stephen Lewis

BPA: Michael Boyles

LC: Ann Weckback

LCPUD: Joe First

LCFRB: Steve West

Tacoma: Jenise Bauman, Matt Bleich, Ben Caviness, Sam Gibbons, Scott Gibson, Sean Luis, Eric Shoblom, Chris Vaughn

WDFW: Brian Gale, Todd Hillson, Josua Holowatz, Chris Kopack, Peggy Miller, Larona Newhouse, John Serl, Phil Sandstrom, Matt Siskey, Sean Toomey, Kris Warner, Kevin Young

Facilitator: Jennifer Arnold, Reciprocity Consulting, LLC

Public Attendees: Loren Carlson, Randy LeDuc (Coastal Conservation Association), Greg King (sports fisherman), Alexa Lee (Tapani, Inc.), Fred Ming (Friends of the Cowlitz River), Larry Pryor (Northwest Fisheries Enhancement), Jack Tipping (Coastal Conservation Association), Linda Gibson and Butch Gibson (sports fishermen).

2026 FTC Meeting Dates: Apr 7, May 5, June 2 (in person), July 7, Aug 4, Sep 1 (in person), Oct 6, Nov 3, Dec 1 (in person)

Review of Agenda and Action Items

We reviewed the agenda and action items. We previewed a new format for the agenda, which we will use next month.

Approval of Last Month's Meeting Summary

FTC members reviewed and edited the February FTC Meeting Summary for clarity. It will be posted on the public website.

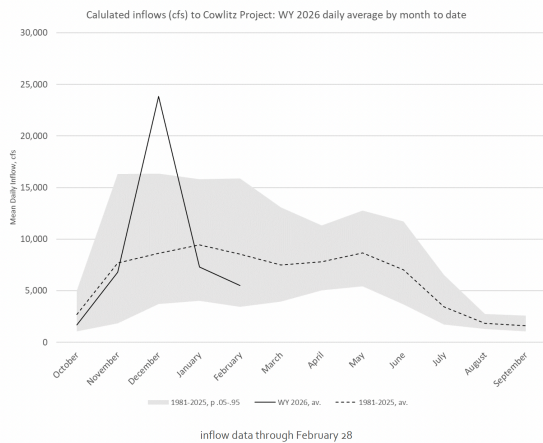
Updates

Announcements

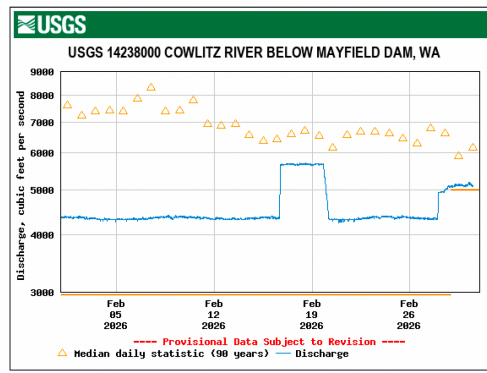
- **Cowlitz FTC website:** TPU is doing an overhaul of their website. M. Shelton has been the point person to post materials to the FTC website, but the TPU Communications team will take over this role going forward. With these changes in progress, M. Shelton will hold off on the task of re-evaluating the use of the password-protected site. She will make sure that everything available stays accessible and will give a heads up if there will be any changes to accessibility. The Communications team might decide to archive some things, but those documents or links would still be available to the FTC. If any web addresses change, M. Shelton will let FTC know so that they can keep their bookmarks up-to-date.

Hydro Operations Update by Melora Shelton (Tacoma) (emailed 3/2)

- Except for December storms, inflows have been below normal.
- Reservoir has been managed to above typical elevations (>740 ft).
- Snowpack is extremely low.
- Tacoma is maintaining outflow at 5,000 cfs minimum, plus fish transport flows.
- Forecast is for consistent precipitation, but inflows will depend on snow levels.
- Climate outlook is neutral – no precipitation/temperature tilts



Outflow



3/1 Spring minimum 5,000 cfs + fish transport flow (12 hrs at 120% if <8,000 cfs)
No ramp or flow deviations.

Winter-Spring Outlook

- Conditions forecasted to be similar to last month
- Anticipate a spring flow reduction consistent with Settlement Agreement Article 13(a)

Fish Facilities Update by Eric Shoblom (Tacoma) (emailed 3/5)

Tacoma conducted their normal Annual Ladder Shutdown February 9-11. This shutdown provides the opportunity to inspect the fence crowders, the holding pool, pumps, and the ladder. There were no issues found during the inspection. Tacoma conducted several minor maintenance actions, and the ladder water supply was back up and running the next day. However, after a maintenance action, there was an issue getting the ladder crowder to run, but they were able to resolve it the following day.

Separator Returns:

February is typically the slowest time of the year with returns increasing in March. Currently at the separator there are mostly winter steelhead with a few coho, spring Chinook, and cutthroats. The 2025 return year Coho returns were below the 5-year average but above the 10-year average. Tacoma finished collecting coho for broodstock in early February, and they are almost done spawning. Winter steelhead returns are significantly above 5-year and 10-year averages. Winter steelhead broodstock collection runs December 1 through May 17 depending on the program. Cutthroat trout returns are much lower than 5-year and 10-year averages to date. (See FTC Fish Facilities Mar 2026.pdf slides for more detail.)

Capital Projects: Cowlitz Trout Hatchery Remodel

Tacoma defined a treated water supply target range, which will help outline needed infrastructure upgrades. The preferred water-supply alternative will likely require upgrading the ozone plant and incorporating additional groundwater sources. Tacoma met with WDFW Hatchery staff to discuss the treated water target and potential options to achieve it. Currently, Tacoma's consultant is working on a series of technical memos to help define alternatives for the incubation, early rearing, hatchery building, and PA pond. The memos are scheduled for first review by Tacoma in late March.

Mayfield Juvenile Bypass System (JBS) Remodel

Tacoma is meeting with the new Project Manager on March 4th for onboarding. Tacoma is working through their contracting process. Kleinschmidt is the design consultant.

- S. Lewis asked, what is Tacoma designing solutions for?
- M. Bleich provided a summary: Effective downstream fish passage at Mayfield is part of the Settlement Agreement, Article 2. Addressing the fish passage survival issue is required for Tacoma to meet their license requirements. Tacoma has been working with TWG and FTC for probably a decade on how to best address this. There were a series of studies from 2013 to 2015 to identify what was influencing downstream passage survival. The juvenile bypass system was identified as the biggest problem. The team looked at limiting factors to bring the bypass system to industry standards and did another series of studies to determine how it performed. The bypass performed poorly highlighting three areas as priorities to address: 1) the secondary separator leading into the juvenile bypass system, 2) a bypass pipe with a sag, which runs from the handling facility to the release point, and 3) the collection and handling facility. The team already came up with a series of solutions for the secondary separator. This scope of work for the remodel design will address the other two problems.
- M. Shelton added that the decision for the remodel design was captured in DD 2025-01. Tacoma conducted an alternatives analysis and did engineering work to get some of the top solutions to a 25% design. The top design was brought to FTC for support. Now, Tacoma is seeking support from their board for the funding and approval. Then, Tacoma will bring the designs back to this group for input at 60%, 90%, and final design stages.
- J. Holowatz asked if there will be an ad-hoc committee to provide feedback on the designs. M. Bleich responded that there probably won't be time for an ad-hoc

committee. Once there is a project manager, they can come in and set up the process for FTC input.

Cowlitz Release Sites:

The Cispus release site is still high and dry and not available for use. Tacoma and LCPUD have been in contact with the US Forest Service and are coordinating to get a permit to dredge.

- B. Glaser asked about the timeline for completion. Will it be operational for this spring?
- E. Shoblom responded that he is not sure how long it will take. Tacoma is responsible for the permit to gain access. LCPUD is responsible for the maintenance action of sediment removal. There may need to be a US Army Corps of Engineers permit if what is dredged is put back into the river.
- B. Glaser emphasized that we need a timeline so we don't lose another year for releasing spring Chinook. If it will take longer, then we need to look at alternate options for a release site. In the past on a temporary basis, we've used release trucks, shoots, tubes and other things.
- A. Weckback and B. Caviness provided detail on USACE permit thresholds: <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll9/id/3167>

Update on the Mayfield Net Pens

Fish are doing well with single digit losses per pen for all of February. The fish are rearing well with no issues to date. The target plant date is May 1st.

Satellite Rearing

- Tacoma defined the scope of work with internal engineers and the project manager for upgrades required to facilitate extended operations and raceway rearing. They selected an engineering consultant and are going through the contracting process.
- They met with security staff about plans to install more security cameras for the net pens.
- The M&E and HOM group developed final fish program recommendations, which matches the DD.

Water Quality Update by Ben Caviness (Tacoma)

- Next week, Tacoma will begin monitoring Lake Scanewa water quality.
- Tacoma usually removes large woody debris in the spring. They don't have an exact date set yet, but he will reach out to A. Luymes and WDFW with the proper notification when they have a date for removal.
- There are no permitting updates. Tacoma is developing internal documents and reports to proceed with actions.

Monitoring & Evaluation (M&E) Subcommittee by Jenise Bauman (Tacoma)

Life Cycle Model (LCM)

Tacoma is in the final stages of contracting to get the consultant onboard. They have also added activities to WDFW's existing task orders to cover the cost of WDFW lab work for genetic analysis and scale aging along with LCM technical assistance.

Ultrasound Technology

Tacoma is looking into the feasibility of testing ultrasound technology to more reliably determine the sex of early spring Chinook to increase the accuracy of broodstock counts. The M&E subcommittee is working on an annual operating plan and will make a recommendation to the FTC whether to include the ultrasound study or not.

Cowlitz Annual Program Review and Science Conference

Planning is continuing with confirmed speakers in coordination with WDFW.

Mayfield Net Pens Assessment – Phase II

Tacoma is routinely coordinating with WDFW hatchery staff to track growth and mortality of the approximately 250,000 coho in the net pens which includes 50,000 marked fish (CWT) and just under 4,000 PIT tagged fish. Fish health looks good and is comparable to fish being reared in the hatchery. There will be a presentation on this topic at the science conference.

TWG Subcommittee Update by Jenise Bauman (Tacoma)

TWG is meeting monthly. They reviewed standard operational updates for Mayfield winterizing and are getting ready for next season.

They worked through comments on the 2026 Evaluations and brought back an updated DD 2026-01 for today's agenda.

TWG reviewed proposals for differential opercle punching on spring Chinook to understand the rate at which fish are falling back from different upstream release locations. They will provide an update to the FTC next month.

They are working with engineers and contractors for debris removal.

They have brought back seasonal workers for extended contracts.

They have seen more Western toads in the collector and got advice from WDFW to return them upstream to Day Use Park or Copper Canyon Creek.

Cowlitz Restoration and Recovery (CRR) Update by Melora Shelton (Tacoma)

The HAP subcommittee has not had a need to meet and has been coordinating by email. There was a deadline in February for applicants to provide a letter of intent to submit a proposal and received none.

S. West explained that LCFRB is operating grant rounds for three different funding opportunities this year: Energy Northwest, Salmon Recovery Funding Board (SRFB), and CRR funding. So far they have interest from three applicants:

- Cowlitz Indian Tribe applying for the Yellow Jacket 5a project downstream from the bridge, which will request blended funding from more than one source;
- Cascade Forest Conservancy on Woods Creek, which will request both Energy Northwest and CRR funding, and
- A project on North Cispus, which will likely request CRR funding only.

LCFRB staff have not heard back from L. Wolfe yet on Kiona Creek, but they don't expect to yet as she is currently on vacation. Although not related to the CRR process, S. West has been attending the Siler Creek SRFB project meetings. WDFW has been making good progress. They are still working on design, but it could be an interesting topic for FTC at some point. This project is in the Upper Cowlitz.

WDFW Cowlitz Fishery Update by Josua Holowatz (WDFW) (emailed 3/5)

J. Holowatz presented the recently released [2026 Cowlitz Kalama Lewis Spring Chinook fact sheet](#). The purpose of the fact sheet is to improve messaging to the public and explain some of the complexities of the Lower Columbia tributary spring Chinook fisheries. There is more opportunity to collect information in the Upper Columbia and monitor in season abundance because of the Columbia River dams. It is more challenging in the Lower Cowlitz because in season return data are only available at the terminal area of the Lower Cowlitz (Barrier Dam Separator). However, the WDFW team is still able to come up with preseason forecasts of abundance based on the prior year's data collected through hatchery collections, carcasses collected in the wild, and fishery sampling.

He emphasized that the natural origin component is changing (improving) since the Cowlitz Falls North Shore Collector (CFNSC) came online in 2017. As juvenile collection efficiency improves, more natural origin adult returns are expected. Some natural and hatchery origin fish spawn on the spawning grounds, and do not enter the hatchery. These are accounted for in the table. There will be some variability every year, but we do see signs that natural origin spring Chinook returns in general are improving due to improved numbers of adults being transported to the upper basin. NOR returns will continue to improve if the collection efficiency at the CFNSC also continues to improve. Ocean conditions will play a role, which is why the NOAA chart is included in the fact sheet.

The target is ~1,300 adult spring Chinook to have a full brood for the hatchery program. The escapement numbers are developed based on collections at the Barrier Dam and fisheries are managed in a way to achieve brood goals and hopefully still offer opportunity. When all is said and done, there are about 6,900 spring Chinook forecasted to be available for harvest.

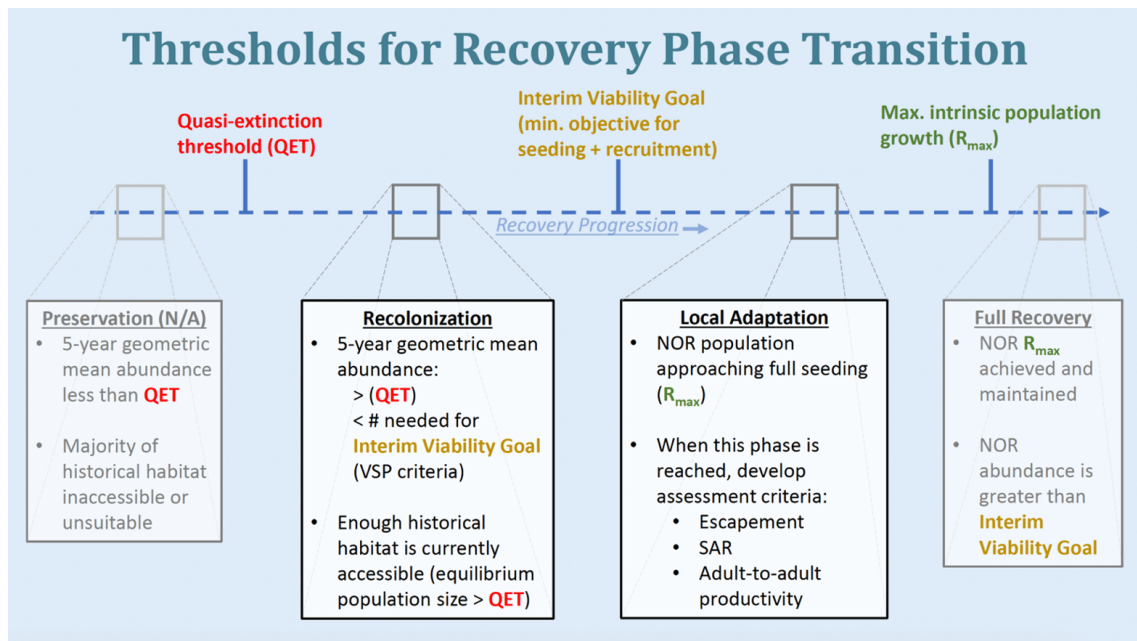
WDFW closely monitors collections at the hatchery every week and can make changes to fishery rules throughout the season if needed. (See 2026 FTC Pres. Cowlitz Kalama Lewis Spring Chinook Factsheet.pdf for details)

Fall Chinook Transition Plan by Scott Gibson (Tacoma)

(FINALFallChinook_TT_Presentation.pdf emailed 3/5)

S. Gibson began by thanking everyone who helped collect the data and provide input for this presentation. The purpose of the presentation was to explain how we move from one phase of recovery to another by collecting data and analyzing results to understand juvenile and adult abundance, timing, and distribution. In summary:

- Aerial redd counts were shown to underestimate Lower fall Chinook NORs and HORs.
- Mark-Recapture Surveys started in 2021 corrected for this.
- Improved estimates for adult abundance were shown to align with the juvenile abundance estimates in both NOR and HOR populations.
- Next steps will use improved methods to quantify current population status and apply that to development of transition goals and triggers.



Specifically, the next steps will focus on:

- **Escapement:** Set goals for the number of fish required to escape and spawn to maximize long-term, sustainable yield,
- **Rmax:** Calculate the maximum intrinsic rate of population increase or the upper limit of a populations productivity,

- **Adult to adult productivity:** Calculate how many adult offspring are produced by each spawning adult in a given generation, and
- **pHOS:** Calculate percent of hatchery origin spawners in nature.

Comments:

- S. Lewis asked based on the morphology of the river, is there an assumption that you were sampling 100% of the runs with the screw trap? S. Gibson responded that based on the location of screw trap, they estimate they are sampling at least 75% of the channel of the river where the juveniles are expected to be migrating through.
- J. Serl emphasized that if more adult hatchery fall Chinook made it to the hatchery (rather than spawn in the Lower Cowlitz River), it would be easier to make the broodstock goals.
- J. Holowatz commented that it could be that the return to the Lower Cowlitz is different from the hatchery and separator. Data from coded wire tag recoveries and ages from scales could help with forecasting by getting a more representative sample of the whole population, not just the area under the curve but the entire season from beginning to end. Having boots-on-the-ground can be more informative to what's happening.
- K. Warner asked if both estimates also have estimates of uncertainty associated with them. S. Gibson responded that they do have estimates of uncertainty but the error bars weren't included in this presentation. B. Glaser and J. Serl emphasized that the more important point is that there is no way to estimate uncertainty associated with the aerial surveys, which is why they had to do more work to figure out where the discrepancies were coming from. It is not possible to calculate the overlap of the uncertainties from current estimates with the aerial flight estimates.
- M. Bleich emphasized the great work done to pull together this presentation and the strong collaboration with WDFW.

LCPUD Updates by Joe First (LCPUD)

- All units are running and stable.
- Cowlitz Falls turbidity monitors were ordered and will be installed this month.
- Contractors have begun removing debris behind the trash racks and will continue March 2-27 removing as much as they can. They are off to a good start with 20 truckloads removed in the first day. There is about 10' of sediment on the fourth rack right now, which tends to have the most.
- LCPUD will install baffle panels one day during the window March 30-April 2. They will coordinate with Tacoma.
- P. Miller asked if it would be possible to install the baffle panels before March 15 when the CFFF extended operations begin. J. First responded that they can't install the baffle panels until the contractor is done removing debris, and the window they chose for debris removal is the best time to remove sediment.

Sediment removal is so helpful to fish collection and hatchery operations overall that it outweighs the delay for the baffle panels. Others agreed. E. Shoblom emphasized that the start date for extended operations will be March 15 this year instead of March 8 in future years, so at least that gives a bit more time.

**Annual Program Review by Eric Shoblom (Tacoma) (2026_Mar_3_APR
Presentation at FTC meeting.pdf emailed 3/5)**

The purpose of APR is to review Tacoma's hatchery programs on the Cowlitz and set next year's hatchery production levels. Hatchery production needs to stay within Tacoma's cap of 650,000 lbs. of production per year although production from satellite rearing is considered separate and not included within this cap. The 2026 proposal for hatchery production is very similar to the 2025 plan:

- **Winter steelhead** – no change – Following the transition plan, for the past several years, the focus has shifted to integrated programs in the Upper Cowlitz with broodstock collection matching natural origin return timing, and a segregated program in the Lower Cowlitz where broodstock collection has shifted earlier to broaden the return timing.
- **Fall Chinook** – no change – Following the FHMP and transition plan, it's been managed as a fully integrated population for a few years. It is a high priority of the M&E subcommittee to understand the survival pressures on this program and make an action plan to address them.
- **Coho** – no change except to move one pond of coho from the hatchery to the Mayfield net pens as part of the satellite rearing program to make more space for spring Chinook at the hatchery.
- **Spring Chinook** – no change except to increase the number of fish released at 5 fpp using the extra space from the satellite rearing options.

A few years ago, FTC made the decision to shift some coho to the Mayfield net pens (Tacoma funded pilot) in order to make space to raise some of the 12 fpp spring Chinook up to 5 fpp. Similarly, now that the raceways at Cowlitz Falls Fish Facility have been approved for a satellite rearing program, Tacoma is transferring another 12 fpp release group there to be raised to 5 fpp as well. Water temperature may limit growth rates at Cowlitz Falls, so they'll have to see what size is actually achievable. However, the potential is exciting. They will tag (CWT) each of these fish to assess success over time. Similar to the coho net pens satellite rearing program, once the spring Chinook are transferred out of the hatchery, all future growth (poundage) gained before release will not be counted towards Tacoma's 650,000 lb. cap.

- **Summer steelhead** – no change
- **Cutthroat trout** – no change, except that if it looks like Tacoma's production will top the 650,000 lbs. cap, then the cutthroat will be released at a smaller size –

4.4 fpp instead of 4 fpp. If Tacoma is not expected to exceed their cap, then they will be released at 4 fpp.

E. Shoblom presented a table of previous production levels and 2026 proposed levels for transparency. He explained that there will be APR-specific public comment periods at this meeting, the April 7 FTC meeting, and the April 22 Cowlitz Science Conference and APR meeting. At the May 5 FTC meeting, FTC will decide on hatchery production levels.

APR Public Comment Period

L. Pryor's comments and questions:

- A lot of people are doing great work for Cowlitz fisheries.
- Reading the Settlement Agreement, Tacoma has been short of the 650,000 lbs. in the past, even as much as 100,000 lbs. short according to a report 4-5 years ago. Is there anyone who is critical of Tacoma when they come up short? Does FERC hold Tacoma accountable?

E. Shoblom responded that Tacoma has a requirement to produce up to 650,000 lbs. They are accountable to the program goals. Ideally, Tacoma works to produce up to 650,000 lbs., but if the adults don't come in or there is disease, Tacoma might not hit it. Tacoma collaborates with FTC members including organizations that regulate Tacoma, which provides accountability. There is plenty of visibility and transparency.

- What helps benefit the adult return goals? How can we build back adult returns? As a fisherman, it is concerning that the fishery has had severe declines over the last few years.
- The Northwest Power Council has long-term goals of 2-6% adult returns, and they monitor their effectiveness. Why isn't FTC held to the same standard? FTC has not identified adult return goals. I hear that FERC requires production goals not SAR goals. Why is this?

G. King's comments and questions:

- Where are we with the FHMP?

Matt B. explained that the Fish Hatchery Management Plan (FHMP) was submitted to Federal Energy Regulatory Commission (FERC) in 2020. At that time, Tacoma requested that it be a 10-year plan. It has now been almost 6 years. FERC has not yet responded or shared any feedback.

- What is the success of the 5 fpp, 8 fpp, and 12 fpp size classes for spring Chinook?

E. Shoblom responded that with the transition plans, WDFW and Tacoma did an in-depth SAR evaluation and found all sizes have a benefit: 5 fpp were the highest performers, but on some years 8 fpp were high performers as well. With all 3 sizes, there is a measure of resiliency so that if one size doesn't do as well one year, there are the other sizes to make up for it. Also, Tacoma doesn't have space to grow all spring Chinook to 5 fpp.

- Will net pens be beneficial to the spring Chinook?

E. Shoblom responded, yes, it creates more space so that Tacoma can grow up more spring Chinook to 5 fpp.

J. Tipping's comments and questions:

- What are we supposed to comment on?

E. Shoblom responded that the hatchery production numbers are a proposal. Tacoma and the FTC welcome public comment that they will consider as they make their decision.

- J. Tipping, representing CCA, would like to see fall Chinook reduced down to 1 million fish with wild broodstock, not integrated. And then the production poundage shifted to spring chinook as much as possible.

B. Glaser responded that this comment was received last year but also confirmed that it is okay to submit the comment again this year for renewed consideration. FTC identified a process for how we are trying to assess the fall Chinook program. We will hear more about that at the science meeting. We want to understand what is going on before we shift production.

- J. Tipping hopes the APR gets into a bigger discussion of fall Chinook management on the Tilton River. In 2016, FTC's recovery goal was 3,000 wild Chinook, and now there are 12,000 returning. As sports fisherman, they would like to access those.

Matt B. thanked J. Tipping for his comment. Whether they take action now or later, he emphasized that it is super helpful to receive direct comments like that. Then, they can consider what they can do and what they can't. They can come up with a plan that's actionable. He encouraged other members of the public to share direct comments like this if they have them.

R. LeDuc comments and questions:

- What size fish will be installed in the raceways at Cowlitz Falls? The quickest way to kill a spring Chinook is to move it. He expressed concern that moving healthy fish could lead to mortality, especially if they are moved at a vulnerable time. He asked that Tacoma be clear about how they are going to move them along with what they are doing to try to reach their outcome. E. Shoblom

acknowledged that spring Chinook are sensitive to hauling and that he agreed that Tacoma staff should consider this when making haul plans.

- Can you vary release times to hopefully reduce predation by seals and sea lions? There are 400-500 seals at the mouth of the river, and it will get worse. They are killing adults and smolts. If you set up varying release times, it might create a gap so that seals and sea lions get interrupted and move elsewhere.
- CCA would like to support a live catch derby. They could organize a couple of days of fishing to match with the timing of broodstock collection to help with Tacoma's broodstock goals.

G. King shared comments:

- He disagreed with J. Tipping's proposal related to fall Chinook on the Lower Cowlitz noting the health and success of fish coming out of the Tilton are poor.
- Fall Chinook support fisheries from southeast Alaska all the way down to the Columbia along the coast. Reducing fall Chinook releases would be detrimental to those fisheries.
- He referenced a study from the Alsea River where broodstock from fisherman-caught fish produced double the steelhead.
- He emphasized that releases shouldn't occur over a 1-2 week period. Fish need to be spread out to increase the return times. Predation is out of control, including eagles and cormorants, now nesting on the bridge.

L. Pryor shared a follow-up comment:

- S. Gibson's escapement report for fall Chinook was phenomenal. On average, they found 1,200 fall Chinook returned back from hatchery releases of 3.5 million. That is not very good. The timing and size of natural origin fish coming back is important info that could be and should be used to determine hatchery release. Natural releases are much earlier, and they can adjust sizes to avoid predation. The same for spring Chinook.

S. Gibson replied that they are using data and analysis to make decisions about changes. Specifically for fall Chinook, there are changes they can make for timing and sizes. They acknowledge that they have a deficiency with fall Chinook in the facility. However, before making changes, they want to determine a pathway to see what's appropriate so we can make the right decision with some certainty. They are collecting and analyzing data to understand all the limiting factors that could be the leading cause for why we are seeing poor returns for adults. Once they identify the primary limiting factors, then they will identify what changes they can make. They are definitely working on this.

TWG 2026 Evaluations by Jenise Bauman (Tacoma) (emailed 2/24, 3/4)

J. Bauman presented the revised DD 2026-01 incorporating the change since last meeting related to the coho parr study (#3 in the studies listed).

B. Glaser suggested minor changes in the Coordination section that further clarified that the TWG will continue developing recommendations for study design, which will be decided on by the FTC in a DD for implementation of the study design.

FTC members in attendance were supportive of those clarifications and approved DD 2026-01.

Action Item: M. Shelton will send out DD 2026-01 to FTC members not present for a 7-day hold.

2026 Spring Flow Reduction by Melora Shelton (Tacoma) (*FTC Spring Flow Reduction March outlook 03032026.pdf emailed 3/6*)

M. Shelton informed the FTC that Tacoma expects to have to reduce flow later in the spring referencing License Article 13(a) that addresses the time period March 1 to June 30. Referencing the hydro status update, this is expected due to current limited storage capacity and overall slow fill anticipated into April and May due to lack of snowpack.

Tacoma is beginning consultation now to keep everyone informed and engaged, so that when they have to make a decision, they can be nimble. They would like to record the consultation in a decision document (DD) requesting FTC support for Tacoma's decision to implement an Article 13(a) flow reduction. When M. Shelton submits Tacoma's Article 402 report to FERC, she will include this DD documenting the consultation with FTC members.

M. Shelton gave an overview of the forecasting tools that Tacoma's Hydro Resource Operations team uses to predict daily inflows and reservoir elevations. She offered that their team could provide more explanation on their forecasts if it is of interest to FTC members.

Tacoma is prioritizing keeping the elevation high through June 30 to benefit summer and fall operations and flow management even though it carries higher risk with limited capacity for additional precipitation events. They are doing weekly evaluations to determine when and how much to reduce flows based on conditions and forecasts.

Once Tacoma identifies a need to implement an Article 13(a) reduced flow, they want to implement the flow reduction within 2 weeks. This will establish a new "basement" minimum (will not operate below), which they will hold through June 30. Tacoma will continue weekly fish transport flows and conduct stranding surveys to assess impact to fish.

Because of the need for timely implementation, Tacoma will shorten the typical 3-month process for a DD, which is an example described in the protocols. They will prepare a draft DD for the April FTC meeting or sooner for FTC review and feedback. They will

send a proposed final DD with a 2-week notice before implementing an Article 13(a) flow reduction. They will allow up to 7 days for final consultation, with additional 7-day hold to finalize the DD if needed.

Discussion:

- P. Miller asked if the Settlement Agreement establishes a target date for refill. M. Shelton responded that there is not a target date that is defined in the license. The goal is to refill as soon as possible, while also maintaining as much as possible through the spring. Operationally, different groups have different things they look at. Tacoma is trying to be as prepared as possible, so they want to make sure the reservoir is as high as possible when they transition to summer flows on July 1. Inflows will decrease throughout the month of June. Having to hold 5,000 cfs puts us in a position to draft. The drafting can happen very quickly over the last few weeks of the month.
- P. Miller said that it would be beneficial to step down flows to gradually implement a decrease, for example not going straight from 5,000 cfs to 2,000 cfs. However, she noted this was her initial suggestion without talking with the WDFW team yet. M. Bleich emphasized that this is good direct feedback to take to Tacoma's Hydro Resource Operations team to ask what kind of flexibility they have.
- P. Miller liked seeing the reservoir traces from different scenarios.
- P. Miller thanked Tacoma for keeping the reservoir high understanding the risks. She emphasized to please keep it up if possible. M. Shelton responded that they are being very conservative although she recognized that there may be things like a cold snap or resource adequacy where they would have to adjust.
- M. Bleich emphasized that even if we do get another big precipitation event, Tacoma needs to get ready to reduce spring flows. Because of the current hydro status, it is clear that they will need to do something at some point.
- M. Shelton further clarified that even if we lower the "basement" and subsequently get a big rainfall event, the new minimum will stay the same. P. Miller agreed noting not wanting to have to another reduction in the summer or fall, but she acknowledged she would want to talk with Ecology further about this.
- B. Glaser agreed it is good to keep levels high now. He acknowledged we don't understand what the impacts of low flows are on fish especially when flushing flows are needed. FTC will have to discuss what the basement will be. FTC has been working on the assumption that it's better to have more flow in the fall than spring if we have to choose, but we have not set up studies to evaluate those things. He suggested that FTC should set up studies so we can make informed decisions about reduced flow.
- A. Luymes emphasized that it is good to be having this conversation now and it is appropriate given the dry conditions. He added that it would be helpful to hear from Tacoma's hydro resource group – whether they talk to the full FTC or a subset of interested people – to provide a bit of explanation about the models they are using and the factors they are balancing.
- A. Luymes asked if Tacoma will be bringing a few different proposed options to the April FTC for the group to consider. He tended to agree with P. Miller and B.

Glaser on keeping the new minimum even if there is another precipitation event afterward, but he would want to talk about it further with WDFW. It sounds like in 2023, FTC did a min flow reduction and then increased it back to 5,000 cfs. He wasn't a part of FTC then and emphasized that he would like to understand what happened. It is interesting and would help him understand the current situation and what is best in the future. He is wondering, what is the impact on redds or habitats with reducing flows from 5,000 cfs to 4,000 cfs or 3,000 cfs? He emphasized that a better idea of losses would create a better discussion. He and M. Peter have had robust discussions about establishing a strong process for minimum flow reductions. For Ecology, this fulfills the consultation requirement in a healthy way.

- P. Miller emphasized that if there are lower flows and flushing flows that there could be a disconnect with side channels and stranding surveys will be important. M. Shelton confirmed that Tacoma will conduct stranding surveys.

Action item: M. Shelton will develop and distribute a DD describing Tacoma's implementation plan for an Article 13(a) spring flow reduction before the April FTC meeting.

CRR Charter Review by Melora Shelton (Tacoma)

The FTC work plan requires subcommittees to review their charters annually. The Hatchery Associated Production (HAP) Subcommittee has been working under their charter since 2022. The subcommittee met and discussed that it does reflect how they are working together. They recommend that the FTC allow them to continue working under the existing charter. The meeting frequency is out of date and A. Baxter is no longer on the subcommittee, but this level of detail doesn't warrant a new DD. FTC members were supportive of this recommendation. Current membership includes: P. Miller, M. Shelton, E. Shoblom, M. Peter and B. Gale. Anyone from FTC can join if they are interested.

FTC Work Plan and protocols by Melora Shelton (Tacoma) (emailed 3/5)

M. Shelton thanked WDFW for their comments, which were incorporated into the revised documents. The level of changes shared do not warrant a new DD. The changes since the last version were reviewed:

Work Plan

- The in-person and virtual meetings are visually shown in the work plan table.
- Downstream Adaptive Management process is extended into March and then starts again in December.
- Programmed updates are scheduled every few months for: fish collections at Mayfield, CFFF, and the separator and the WDFW Cowlitz fishery update.

- The CRR program was originally planned for December. It was moved up to finish in November.

Protocols

- Some clarifications were added related to capturing decisions in meeting summaries.
- New language added flexibility with the 7-day hold in the case that FTC member organizations are not working, for example with a federal furlough.

WDFW and Tacoma recognized that DDs have not been consistent about how the justifications section is being filled out. This needs more discussion before recommending any changes in the protocol. M. Shelton will check-in with people individually on this.

M. Shelton proposed that FTC accepts the changes, and there was general agreement. B. Glaser appreciated the effort to update the protocols to match how FTC is operating.

Public Comment Period #1 - Agenda related

G. King asked about the full pool elevation of Riffe Lake and if there were any updates.

- M. Bleich shared that the full operating pool elevation is about 778 ft., and right now, the elevation is about 30 ft. below that due to updated seismic loading concerns. With respect to restoring Riffe Lake, Tacoma is on the same path to forecasting full operations targeting 2031. They have a website (mytpu.org/riffe) that tracks progress and future benchmarks, which are updated by the project manager.

R. LeDuc asked if they are anticipating any changes to the boat ramps this summer because of the dry conditions. He explained that a lot of people call him asking about their status. If he knows ahead of time, he can have his comments ready.

- M. Shelton responded that predictions about the duration of summer boat ramp access are too far out to be realistic. As the time gets closer, if Tacoma thinks they will lose boat ramps, they will post it on their website: mytpu.org/lakelevels (scroll down to section on boat launches). Tacoma can also provide a heads up to FTC, if that's of interest, to show what drafts look like relative to boat ramp closures. Matt B. also highlighted that Tacoma now has a livestream camera at Mossyrock to monitor conditions with a link from the Mossyrock Park website https://www.mytpu.org/community-environment/parks-recreation/mossyrock-park/#pattern_7.

R. LeDuc also asked if Tacoma has been monitoring signs of disease with the smolt counts. Fish on the Cowlitz seem to have a lot of parasites.

- S. Gibson responded that they do not collect data on disease since it is not within the scope of their study. They did take some fin samples, but just for genetic analysis.
- J. Serl added that they didn't see a lot of diseased or dead fish in the Lower Cowlitz River rotary screw trap operated below the confluence with Olequa Creek. They are mostly Chinook fry with maybe a few hatchery fish that have some easily detectable disease although overall they have not witnessed many diseased fish.
- J. Holowatz added that they are doing smolt counts 50 miles from the hatchery, so they would only detect disease if the fish picked up some disease along the way.
- S. Gibson emphasized that they are currently going through the limiting factors analysis to look at what is impacting the hatchery program in general, including disease.

L. Pryor expressed interest in the upcoming Science Conference and APR meeting and that he is looking forward to seeing the agenda. Specifically, he is interested in what science reports and practices could turn around the severe declines, especially with fall Chinook. Those are the presentations that he is most interested in, along with new systems and tools to address the problems.

L. Pryor asked about the Disease Management Plan (DMP). Is it a part of the APR? The last DMP for the fish hatchery he saw was from 2004.

- E. Shoblom responded that Tacoma submits a DMP every 5 years. They submitted one in 2023, and the next one is due 2028. It is not a part of the APR, but you can share comments on them relative to the hatchery program.

L. Pryor emphasized the importance of comparing SARs on the Cowlitz to other watersheds taking into account ocean conditions.

L. Pryor agreed with P. Miller that flow reductions should be gradual to reduce stranding and impacts to fish. He also emphasized the importance of advising the public ahead of low flows so they can be prepared for boating in low water conditions. M. Shelton responded that Tacoma publishes a twice-weekly Mayfield Flow Forecast on the river flow and lake levels website: mytpu.org/lakelevels.

Topics for April 7, 2026 FTC Meeting on Teams

Potential topics include:

- 2026 Annual Program Review and proposed hatchery programs (DD step 2)
- Fall Chinook Transition Plan follow-up
- Follow-up on Spring Flow Reduction
- Usual Updates

Public Comment Period #2 – Any topic

F. Ming asked if there are plans to relocate the barrier dam boat launch.

- E. Shoblom responded that Tacoma has looked at it. They have no plans to relocate it yet, but they plan to maintain the boat launches, which will be completed in August.

R. LeDuc expressed excitement about 6,900 spring Chinook forecasted to be available for harvest. He asked J. Holowatz if this number accounted for predation and if WDFW is studying predation.

- J. Holowatz does not know what the predation rate is. The 2025, pre-season forecast was for about 13,000 fish. Run reconstruction showed that there were about 9,000 fish with a full fishery. Some swam around, some got eaten, and we still had a full fishery, met brood goals, and had fish for transport to the upper basin, so it was a win/win. He is not sure about studies related to predation, which is managed by WDFW's Wildlife Program.

L. Pryor commented on the DMP as it relates to the APR: C. Shasta may be relevant to release timing and handling in the hatchery. He also commented on attraction water and that there is not enough time at hatchery.

L. Pryor asked about the FTC's Decision Documents. Is the FTC making a decision to recommend something to Tacoma? Or are they making the decision? When he has gone to the TPU Board or Director Chris Mattson, they defer to the FTC as the decision-making group. If FTC is a decision-making body, then it turns into a regulatory body. He emphasized that FTC should be making recommendations, not decisions, except maybe in a few cases like water flow. Tacoma is the one with the FERC license and the one that makes the decisions. So why do they tell me to talk with the FTC?

- M. Bleich responded that what he hears when TPU leadership points L. Pryor back to the FTC is that they are not experts in fisheries, so they ask please go work with the fisheries experts.
- The second part of the comment is clarifying recommender versus decider. M. Bleich agrees with the way the license is written and that there is some nuance. When Tacoma enters into a Settlement Agreement and license, they are doing it collaboratively. The decision is for Tacoma to exercise our license. When signatories enter into a license, they also don't give up their authorities. Sometimes, there are topics that move from regulatory and non-regulatory. It's a good point, and it's how FTC has worked together effectively. Tacoma has used DDs to be intentional, so that they don't let something stall. It documents that we are making a decision collaboratively.
- P. Miller emphasized that the DDs evolved as a way to record the agreement of FTC members and our collaboration because people weren't remembering what the group landed on. This provides a way to reference what was agreed on and when. She agreed they are recommendations to Tacoma. DDs represent how

FTC members want to move forward, not regulatory actions. It is Tacoma's responsibility to implement their license, and FTC members appreciate that Tacoma usually takes FTC's recommendations. Each FTC member has their specific roles. They take on their regulatory role separately when it comes up.

- M. Shelton added that the DDs create documentation of Tacoma's consultation with FTC. DDs are clearer than meeting summaries or letters of support. With satellite rearing, Tacoma did solicit some support letters, but this was to complement the consultation and recommendation that was summarized in the DD. With the spring flow reduction, Tacoma will include the DD in their report to FERC to document the consultation.

G. King commented on the North of Falcon process and the designated constrained stock again on the Columbia. He emphasized that the low water conditions are unfortunate this year, to no one's fault, which is compounded by predation in the Lower Cowlitz. Everyone loves spring Chinook, which is why the CRAG recommended satellite rearing to make more room for spring Chinook. When it comes to fall Chinook, Scott's presentation was great. We just don't know where the fish are going. Are they getting caught in trawl fishing in the Bering Sea? Are they being caught by Canadian fisherman? Sports or commercial? It's a mystery. WDFW and Tacoma are obligated to recover wild fish. Hatcheries are a tool in the toolbox. We can't cut one program to satisfy another program. He emphasized this is the best group of people that he's had to work with. Working with their predecessors were like pulling teeth. There are problems to be solved. He worked with his state legislators to propose a donation option when you register your license plate to fund predation by seals and sea lions. It didn't make it through. WDFW is constrained when politicians don't give them funding for monitoring and enforcement.

Meeting Evaluation

What went well? What can we change or improve in the future?

- The food was great.
- Scott's talk was very strong.
- Tacoma thanked WDFW for their input and collaboration on Scott's transition plan talk.
- A lot of great people are doing great work.
- We went longer than planned with the meeting, but they were all good discussions that we would not have wanted to cut-off sooner.
- The separate APR comment period was helpful to focus and track those comments.
- It's nice to have an option for anonymous feedback with the blue comment cards. It allows people an option and sometimes it helps them share nuances that are harder to express directly.
- Everyone appreciated the presentation and discussion on flow – giving everyone a heads up and starting the consultation process now.

Josua's Inspirational Quote

“Cooperation is the thorough conviction that nobody can get there unless everybody gets there.” Virginia Burden, American psychologist and author

Closing Remarks

People are working hard and doing great work. FTC members have been collaborating well recognizing their own individual missions alongside the value of working together.