

**Cowlitz Hydroelectric Project**  
**FERC No. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Meeting Summary**  
Veterans Memorial Museum, Chehalis  
April 4, 2023 from 9:30 – 3:30

**FTC Representative Attendees:**

Matt Peter (for Travis Nelson)	TPU
Anne Baxter	Ecology
Bryce Glaser	WDFW

**Additional Attendees:**

John Serl	WDFW
Peggy Miller	WDFW
Sam Gibbons	WDFW
Josua Holowatz	WDFW
Leah Marquez-Glynn	TPU
Scott Gibson	TPU
Eric Shoblom	TPU
Joe First	LCPUD
Ann Weckback	Lewis County
Michael Boyles	BPA
Lyn Wiltse	PDSA Consulting / Facilitator

**Public Attendees:** Randy LeDuc, Jack Tipping, Buddy Rose, and Larry Pryor

**2023 FTC Meeting Dates:** May 2, June 6, (No meeting in July), August 1, September 5, October 3, November 7, December 5

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**Approval of March Meeting Summary**

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

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**Announcements**

- Bryce announced John Best is a new hydro scientist just hired by WDFW. He will help provide technical support to Thomas Buehrens.
- Eric announced Chris Foster's former position as Manager of the CF Fish Facility has been filled by Gabe McGuire. Tacoma is now seeking to fill Gabe's prior position (Assistant Manager of the facility).

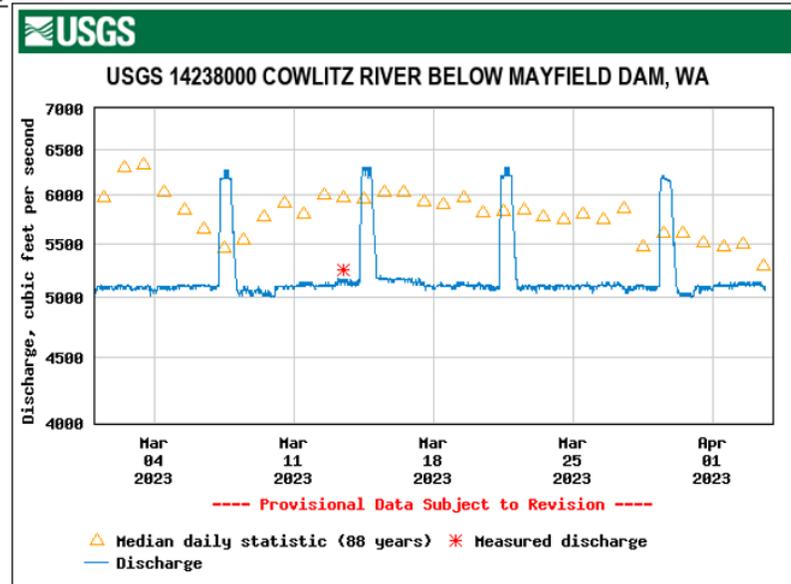
**Updates**

Hydro Operations (presentation emailed after the meeting)

- Inflows: Matt P noted inflows have remained extremely low. February precipitation for the Cowlitz Basin is 50-70% of normal. Moving into March, the picture improved in other areas – not as much in the Cowlitz. Temperatures are much cooler than the historical average. Any precipitation has been coming in the form of snow vs. flows. Average March discharge measured at Randle gage was the second lowest in the 29-year gage record, after 2019.

- Storage: Riffe Lake elevation on March 31 was 674' and is currently at 673' which is nearly 40' below the 2017-2022 average.
- Snowpack: This is near normal.
- Outflows: These have been just above 5K cfs with Fish Transport Flows (FTF) being provided on a weekly basis. There were no flow or ramp exceedances.
- Forecast: Cooler with typical precipitation. Inflows are expected to vary from 3-5K cfs and Riffe Lake will draft as snowpack builds. There will be FTFs today.

## Outflow



Minimum flow 5,000 cfs + fish transport flows.  
No flow or ramp exceedances (critical flow 6,000 cfs).

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/>

## Spring 2023 Minimum Flow Reduction

Leah Marquez-Glynn, Resource Operations Lead for Tacoma, walked through PPT and associated DD sent out to all on March 28. Tacoma is proposing to lower the minimum flows in the Cowlitz River below Mayfield Dam to improve reservoir refill probabilities for this summer. The minimum flow would be reduced from 5,000 cfs plus fish transport flows to 4,000 cfs plus fish transport flows. This will be achieved by reducing flows over two nights to be scheduled as soon as possible following consultation with the FTC. Per the DD, Tacoma will coordinate with the FTC throughout the proposed flow reduction. (Note: Tacoma was able to reduce the flow in one night.)

The refill model used by Tacoma is based on the NOAA's Northwest River Forecast Center Model with a predicted 10-day forecast, and a variety of historic weather scenarios. As of April 3, there was a 45% chance of refill at Riffe with 5K cfs and FTF. Reducing outflows to 4K cfs on April 11 would increase the refill probability to 69%, protecting against the lowest inflows shown on the graph. In late May and June, it may be necessary to drop the reservoir level to make room for snow runoff. Tacoma will continue to update the model through the refill season.

Discussion:

- Bryce reported WDFW seeks a balance of fish protection and survival with recreational opportunities. Boat launch and swim beach usability are also prioritized.
- Tacoma has to balance impacts to recreation and power production. The highest power demand is typically in July and August. It is important to have the water available for production during those months. The 30' capacity reduction for seismic events is further limiting.
- The minimum flow set in the license is 2K cfs from July 1 to August 14 and August 15 to September 30 unless flow exceeds 5K for 5 consecutive days. Tacoma has rarely gone below 2K cfs during this license term.
- Is it still possible to go up to 6K for FTFs? Yes. We haven't done studies on the impact of FTFs on fry in the lower river. Scott noted a study done in 2006 with smolt timing from upper basin and salmon hatchery found no significant relationship with FTFs and timing of juveniles as they exit. (Note: the 2006 *Downstream Migrant Transport Flow Evaluation* considered travel time associated with FTF rather than potential stranding associated with FTF.)
- Side channels become deactivated at 4,800 cfs. When we utilize FTFs, the side channels get activated again which may result in additional fish getting stranded.
- Plan to do additional fish monitoring for stranding or eliminate FTF during this time?
- If FTF were temporarily discontinued, there would be a very small effect on refill probability – would increase by ~100 cfs.
- Monitoring for stranding would start with the flow reduction.
- Do FTFs help with adult collection? Concerned about Spring Chinook this year. Correlation between separator collections and FTFs?
- Scott noted it is unclear if there is a correlation between FTFs and fish coming into the separator.
- Larry wanted the FTC to know that from a fisherman's perspective, when flows go sharply up, level off, and then drop back down, it "turns the bite off."
- If inflows don't go down as much as anticipated, we wouldn't go as low as 4K cfs for reduced minimum flow. We would increase the "floor" as much as possible. It is unlikely the need for the reduction will go away.
- Tacoma is running all the scenarios through the model – it depends on how the inflows come off. Once they go to 4K cfs outflow, they don't plan on picking up again for at least a month. Elevation is completely dictated by what flows come into the reservoir. Leah noted if the 75% exceedance curve reaches 746', they feel pretty good. Tacoma committed to providing updates every two weeks to continue these discussions and they will keep rerunning the probabilities.
- Anne asked, since the climate is changing rapidly, if it would be valuable to use data based on the last 10-year average vs. the 1980-2022 data set. Leah responded the model used to run back to 1950 – but they stopped going back that far due to climate change. The River Forecast Center says running last 10 years is insufficient. Inflows are similar to 2019 except the snowpack is much higher than it was in 2019. Tacoma asked for a reduction to 2,900 cfs that year, which worked out well.
- The target for refill is June to mid-July. The aim is to have boat ramps accessible by Memorial Day. Mossyrock Park boat launch is usable to approximately 708' and Taidnapam North boat launch to approximately 719'.

The following change was made to the Coordination Need section of the DD: "TP will update the FTC on refill status and outlook every 2 weeks through a virtual meeting, conference call, or email. If

further reductions below 4K cfs are needed consultation with the FTC and an additional DD will be required.” The DD was approved by voting members present as edited.

Note: In reviewing and approving the DD via email after the meeting, Jonathan Stumpf of TU suggested: “At a future meeting, I would like to hear from Tacoma Power what, if anything, is being done or can be done to try and prevent this scenario from occurring in the future. I understand that based on the license, this was anticipated, but given the frequency of this happening 10 of the last 26 years, I’d like to hear more about what measures are being taken to mitigate for using this option and process as a tool.”

#### **Action Items:**

- Lyn: Send out revised DD for review and approval by absent FTC voting members.
- Scott: Send out 2006 Meridian Environmental Study of impact of FTF on juveniles.

#### Water Quality/Monitoring

- Cowlitz Falls temperature data associated with fish passage are included in the annual report as covariates and CFNSC temperatures are included in weekly reports.
- Long-term monitoring associated with the license and 401 WQC have been completed. TDG remains, but Tacoma has not been spilling recently so there are no new data to report.
- Courtesy dock extension and turnaround: Tacoma is working with Ecology to provide a Water Quality Protection Plan. Tacoma is in the permitting process with both WDFW and the Corps. Tacoma provided the Corps with a “no effect” letter which should facilitate an increased timeline for obtaining permit coverage. The project does not allow additional capability to launch at lower levels. It increases access to the courtesy dock at lower elevations and provides a turnout. Ecology blocks will be placed on the side of the site to mitigate sloughing.
- Kosmos: Weekly monitoring continues. Tacoma has completed the investigatory phase and is now in the ground water monitoring phase. They are still a few years out from clean- up action once they get remedial investigation report out of the way.

#### WDFW Fishing Regulations

- Josua noted current fishing rules extend through the end of June. Through the North of Falcon process, WDFW is proposing new rules for the Fall. These will include no fall Chinook retention in the Lower Cowlitz – only hatchery coho will be allowed to be retained. The PFMC (Pacific Fishery Management Council) #2 meeting is currently underway in California. WDFW will soon have a better sense of the management decisions and recommendations that come from the meeting when it concludes on April 7. This doesn’t affect the tributaries as much as the lower Columbia River. WDFW is working on updating permits to allow for NOR fish retention and has a proposal to the legislature to update funding – as outlined in the Transition Plan.

#### Fish Facilities

##### Separator:

- Eric noted steelhead numbers continue to increase with 277 returning the week of March 20 and 561 the week of March 27.
- Only six spring Chinook have returned so far with none so far this week. Bryce noted the return of spring Chinook is slow throughout the whole Columbia system. Sam reminded everyone we are still at less than 1% of the 5-year average return timing to date.

- When asked if the barrier Dam project impacted flows at the ladder entrance, Eric responded that flows do not appear to have changed. They are still operating the gates that push the flows through the ladder the same way.

#### Brood Collection:

- As of April 3, for the Tilton steelhead program, 10 males and 10 females were collected for broodstock. There have been 24 HORs and 37 NORs sent to the Tilton.
- As April 3, for the Upper Cowlitz River steelhead program, 19 males and 14 females have been collected for broodstock. 51 HORs and 91 NORs have been sent to the Tilton.
- Spring Chinook broodstock collection started last week. One has been collected for broodstock.

#### Mayfield Counting House:

- Mayfield re-opened on April 1 and the attraction pumps were turned on April 3.
- The 15 Chinook smolts that came in were not in good shape – some had distended bellies, some were emaciated, and many exhibited scale loss. A WDFW pathologist will assess the causes.
- On March 8, Tacoma met with consultants and staff from the Tacoma Hydro Project and Engineering Department to kick off the scoping of the Mayfield Juvenile Bypass remodel.

#### CF Fish Facility:

- The facility came online March 15 for the season, as well as the spillway flumes on March 31. Four flume gate sensors were replaced in the off season.
- 132 smolts year to date (mix of coho, Chinook, steelhead, and cutthroat)
- Greater than 3,300 Chinook fry; fry collection slowing down as of late.
- 10 steelhead adults thus far (8 fallbacks upstream, 2 kelts to Massey Bar).
- Water temperatures have been cold since startup (5.8 to 7.6 C).
- Discharge past the CF Dam has been approximately 2,700 to 3,700 cfs.
- John Serl noted: They started PIT-tagging the kelts at the weirs and we're PIT-tagging at both Cowlitz Falls and Mayfield, so we'll get good respawning data.
- The *Cowlitz Falls North Shore Downstream Fish Passage 2022 Annual Report* is out for FTC review with comments due May 1.

#### Cispus Release Site

Eric reported he has been working with LCPUD, the USFS, and WDFW to expedite a temporary repair to this site (for this year only). He expressed appreciation for the great teamwork and collaboration in this effort. They found that Tacoma was tied to the original USFS Special Use Permit so they are taking the lead after which the PUD will take over and work with the contractor to do the work (by mid-May if all goes well). Of course, much depends on flows in the Cispus (if flows are high, work could be delayed until August). Adam sent the HPA (Hydraulic Project Approval) application to Eric and John for comments. Elliot Johnson (WDFW habitat biologist) will issue the HPA. Anne noted that an Ecology Construction Stormwater permit would be needed. Joe responded the PUD will do that. If this gets pushed to August, it will obviously limit what we can do this spring – for spring Chinook transport. Stay tuned.

#### Monitoring & Evaluation Subgroup

The last meeting was canceled. There is a need to get this group together again and move forward on priorities that have been identified. Bryce offered that WDFW can organize the next meeting if that would be helpful.

- **Action Item:** Bryce to follow up with Matt Bleich (who is out until April 14) about the next meeting on April 19. There are some standing agenda items and also FTFs during this minimum flow period.

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

John noted there is no update from this group as the March 28<sup>th</sup> meeting was canceled.

#### Annual Program Review (APR) Process for 2023

Eric noted there is no update at this time other than this will be a “big data lift.”

- **Action Item:** Eric to follow up with Tim on the PPT and timeline.

### **Blue Creek at Spencer Road Fish Habitat Restoration Design**

**Presenter: Ann Weckback**

Ann is Lewis County’s Environmental Planner. She walked through a presentation providing information on the proposed project for which they are seeking SRFB funding. She has yet to present this proposal to the Technical Advisory Committee (TAC). She looks forward to feedback from the FTC today. The goals of this proposed project are for Lewis County along with Tacoma Power to restore fish passage and enhance habitat for coho, fall Chinook, and winter steelhead. This project aligns well with the LCFRB’s 2010 Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan and other watershed plans. Project objectives are to remove two barriers and replace them with fish passage structures. The remaining low head dam would be modified to provide unimpeded fish passage into the upper reaches of Blue Creek. LWD would be installed to stabilize sediment. There is also the possibility of creating a side channel to remove flows from roadside ditches, reduce the scour of redds, and improve roadway safety.

Phase I: Preliminary design for habitat elements and infrastructure components – 2023 SRFB (Budget: \$348K)

Phase II: Final design and permitting – 2025 SRFB

Phase III: Construction – 2027 SRFB

Discussion:

- Bryce thanked Ann for the presentation. He noted sometimes the fish creating the redds are HORs (of hatchery origin). WDFW is working with Tacoma on that challenge and how to reduce pHOS (the proportion of HORs on the spawning grounds) through that zone by increasing fishing opportunities and/or putting in a temporary weir at certain times of the year.
- Tacoma is planning to cut a notch in the dam down to the sill – the super structure around it would remain. They also are seeking to improve pHOS.
- WDFW is working internally on some improved distribution models. It looks like this is an opportunity for increased habitat usage.
- Ann asked if any members of the FTC might provide a Letter of Support for the Blue Creek at Spencer Rd Fish Passage Project. It was noted that it would be a conflict of interest if organizations with members on the TAC wrote letters.
- Anne noted Ecology might be able to provide letter of support. They are already looking at water quality monitoring in the Blue Creek subbasin (upstream dairies and poultry farms).
- Eric will also see about providing a letter of support.

Ann reported she is working on presenting a project for SRFB funds that she has discussed with Eric Russell, Eric Shoblom, and John Serl to aid in sediment management and fish passage in Blue Creek. Eric recently mentioned that one of the reasons the dam at the hatchery in Blue Creek is still

in place is because the WDFW might want to modify it in the future with a weir to keep the hatchery fish from utilizing Blue Creek. She was hoping to get any design requirements for the modification as the structure is included in the grant application for potential removal or modification. Travis invited her to give a presentation to the FTC on the proposed project and then discuss this particular structure and future plans for it more in depth. She described a map showing the structure. It is Site 981318. Her PowerPoint is also available for review at <https://cloud.lewiscountywa.gov/owncloud/index.php/s/kR9IkX5Q1KvB3NM>.

**Action Item:** All to consider writing letters of support for this proposal.

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## **LCPUD Dam Operations**

**Presenter: Joe First**

We were pleased to welcome Joe First to the group to provide this report on behalf of Russell Page. Joe reported the baffle panels have been installed and the fish flumes are operational.

LCPUD is reviewing the sluice gate 60% design. The 90% design will be completed in late July / early August and the 100% design in late November / early December. Construction is slated to begin in 2025.

They plan to draw down to run-of-river to put in a coffer dam to allow for work to be performed in front of the dam. The coffer dam would likely be in place for a few weeks and would allow flow through one sluice gate at a time.

Trash racks: They will get divers to repair the bent bar on slot 4 on Unit 2.

Generator hatch cover seal replacement project: The plan is to remove one flume collection system from each until as it is being worked on, leaving the other one in place. For Unit 1, they are scheduled to dewater and remove the fish flumes on May 22. On July 17, they will move to Unit 2 and the whole project is expected to be complete in the August / September timeframe.

Debris barrier restoration project: The PUD is coordinating with the Corps on this project. They will probably get a determination this spring and then will do the project in 2024. They plan to remove the sediment around the blocks for two-three weeks in February and then do the work post fish collection season in mid-September and lower the reservoir by 20' for a period of 10 weeks. They will then sandblast, repaint, and recoat the floating debris barrier, refill the reservoir, and move it back in place in front of the dam.

**Action Item:** Russell to let Tacoma know when the outage schedule has been established.

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## **2023 FTC Work Plan/Protocols**

**Presenter: Matt Peter**

The updated draft of the FTC 2023 Work Plan was sent out to all on March 28. After review and discussion, Tacoma agreed to review and update the plan including:

- Needing to complete the Monitoring and Evaluation Plan.
- APR dates may slip.
- Transition plans – should say “Implementation updates”.
- For 2023 in-person meetings, offer a hybrid option.
- Table 2: Add all months.
- Gravel Augmentation – Discuss at April, May, and June

- Add monthly Hydro Ops Report to Monthly Update section along with the other usual FTC Meeting updates.
- Add Downstream Adaptive Management Report (not required by FERC, but still part of the Work Plan).
- Move CF Fish Facilities updates to Monthly instead of Scheduled. Do the same with CF Northshore Collector.
- Add Mayfield Downstream Fish Passage Remodel.
- Add Gravel Augmentation and Satellite Rearing.

**Action Items:**

- Matt P: Coordinate with Eric and Travis an internal review and updates with Tacoma folks and then Travis to send revised draft Work Plan out to all prior to the next meeting.
- Lyn: Review the FTC Protocols and edit Sections 5 and 6 to match our current modes of meeting and send out prior to the next meeting.

**Satellite Rearing Program**

**Presenter: Eric Shoblom**

Eric noted he is working on revising the timeline for this – pushing things out a month. His first priority is getting it out for public feedback. He has revised the public presentation to capture more history and the reasoning behind the recommendations to date. It is being reviewed internally and he hopes to get it out to the public in the next couple of weeks. He will subsequently draft a DD that includes that feedback. He is still currently working on the Easement/Access Agreement with Energy Northwest (EN) to understand nuances of the option. There are still some questions as to how the project would fit into the current license agreement of EN and he is waiting for those discussions to take place between EN and their regulators. He has a survey crew ready to go to acquire more information about the site and further develop plans. He will distribute a new timeline when he receives more information.

**Discussion:**

- Bryce suggested Eric present a PPT at the APR meeting along with Watershed science portion of the meeting. Provide a summary there and then provide a link to a more in-depth description of what is being proposed.
- How does this project fit with EN and their regulators?
- Anne noted Ecology sees key details missing in terms of what Tacoma is actually planning to do and where. The Cowlitz River system can get really warm in the summer which is a concern (a factor that needs consideration especially with regard to nutrient input). Ecology needs more details so they can weigh in appropriately as to whether water quality conditions can be met. Anne hasn't heard anything at all from EN.
- Bryce noted WDFW would also appreciate more details on the plans.

**Action Items:**

- Eric: Set up a joint meeting with EN and Anne to discuss the project in detail.
- Eric: Send out the revised timeline as soon as the presentation is out to the public.

**Cowlitz Restoration and Recovery Fund / Habitat and Production (HAP) Subgroup**

**Presenter: Steve West (via email)**

Steve reported this year the LSFRB has received 19 total projects for SRFB and CRR. For the CRR, they received two project applications- both from Cascade Forest Conservancy:

- Hall Creek Restoration
- Upper Cispus Tributary Restoration- Woods and Crystal

#### Project Presentations:

Although the itinerary is still considered draft, the LCFRB is reserving May 4 for the two CRR proposals. The itinerary should be finalized by April 7. Please also note that on May 4th, WDFW will be presenting their Cowlitz chum Assessment and their region-wide chum monitoring proposal. (These are SRFB proposals only, not CRR proposals, but may be of interest to FTC members.)

The remainder of this week, LCFRB staff will be reviewing all applications for completeness, so expect those to be ready for review April 7. They anticipate posting CRR proposals to our website with links to our Google Drive. Steve will send out the link once they are posted.

A few notes about the Project Presentation meeting, aka “virtual tours” or “site visits”:

- These meetings are considered public; anyone can attend.
- This is the forum for all interested folks to hear presentations and for FTC members, or their delegates, to ask questions to understand projects and inform CRR priorities.
- In prepping for this meeting, it is helpful to review the applications ahead of time to inform any questions or comments. If you have questions or comments for LCFRB staff, please do not hesitate to contact them.
- Questions from FTC members during these meeting will be incorporated by LCFRB into formal feedback (‘lead entity feedback’) for applicants to respond.

#### Ongoing projects:

- Cispus Yellow Jacket Phase III: Construction is on track for this summer. The wood is decked. Contractor selection is underway, with three bids received. They anticipate reimbursement requests to start coming in soon.
- USFS Rd 2801 Cispus Floodplain Reconnection needs an updated contract due to changes in deadlines.

HAP: The deadline was noon today (April 4). No inquiries or requests for pre-application coordination were received. The April 4 HAP Subgroup meeting was cancelled, and further meetings and work will depend on whether drafts are received.

### **Public Comment Period #1 - Agenda related**

Larry:

- So, the Chinook coming out of the Mayfield Collector are looking pretty bad?  
Eric: Yes, as he noted earlier. It is not uncommon to see Chinook in poor condition coming out of there this time of year.  
Scott: These are fall Chinook – 2 different species of gill worms – the infection rate from parasites can be up to 90%.
- Water Quality – are those parasites getting into the hatcheries?  
Scott: No. This impacts reservoirs. We don’t see them in riverine environments.
- Water quality is key in regards to fish health. Environmental DNA, (eDNA) can be useful to see how it impacts fish in hatcheries as well as wild fish (NORs). Anne is an expert in this area. What can we do to improve fall Chinook return? Tacoma has obligations through the Settlement Agreement. From the MyTPU website: last year’s NOR coho returns were 21K. Fishermen should be able to retain coho NORs. Need to improve the harvest of both HOR and NOR fish.

Jack:

- What's the update/status of Cowlitz netpens for coho – with CRR funding?  
Bryce: Hoping Tacoma can fund a pilot study - would be part of this year's APR process - to help set production targets for the year. Timeline to get a pilot test going?  
Sam: We could move coho in the winter if the pens were in place. Would probably implement the additional spring Chinook in the 2024 brood year – or rear some to a larger size. There are logistical considerations with coho – would be helpful to do a pilot project so we could learn from that. Jack was thinking one pen and 20K coho as a pilot test. Eric thinks this would be doable. Bryce suggested teeing this up at the next APR meeting, so it doesn't get left behind.

Larry:

- Would the coho do well in net pens there? Consider water quality, etc.  
Bryce – Yes, that's why we want to do a pilot study. Would take HOR coho up in fall – early winter and rear them until their release in April. The water will be cold and there will be a lower rate of pathogens. Coho are more disease resistant than Chinook.
- Anne: It would be helpful for Tacoma to share more water quality data at these meetings, including collected temperatures, fish status / disease reports. Eric noted much of that information is included in the weekly CF reports. She suggested sharing the temperature data collected at the hatcheries and at the dams.
- Production vs. adult return mentality. As posted on MyTPU, the return timing of spring Chinook has shifted to later than the 10-yr average (June/July vs. May).  
Bryce: We are getting more NOR production out of the Upper Basin. There is a shift happening in the Columbia system. The delay is due to colder water.  
Sam: Run timing is variable. For spring Chinook and all the programs, we look at the running average of all returns and collect representatively over the curve and multiply times total brood need and that says how many fish we can take out. In a normal year, we want to have broodstock collected in July – sometimes have to go later. We will keep watching this. It may be environmental. The trend is also in the Columbia.

Randy:

- Will you be putting bird netting on the site up at Packwood?  
Eric: The original plan was not to. Eric may have large cages for the fish so they can dive down and get predation exposure. If they netted the entire structure, it would change the scope of the project a lot. Also, the densities of fish will be low given the size of the facility.

Buddy:

- The linear relationship of the reservoir levels is associated with flows downstream. The capacity of the reservoir is not linear in relation to the depth. It gets much larger as you increase the depth.  
Bryce: That's exactly right. Recently, due to reduced capacity, impacts due to reduced inflow are exaggerated. The exposed reservoir is growing timber as we speak.

Jack:

- Will Tacoma be modifying Mossyrock Dam to make it seismic compliant?  
Matt P: Yes, an update is coming out on that any day now. This is a high priority for Tacoma.

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### Topics for May 2, 2023 FTC

- Updates incl. Hydro Ops, Water Quality, Fish Facilities
- Riffe Lake Seismicity
- LCPUD Cowlitz Falls Dam Operations

- Update on Cispus Release Site
  - Satellite Rearing
  - Downstream Adaptive Management TWG
  - CRR Fund / HAP Subgroup
  - M&E Subgroup
  - 2023 FTC Work Plan / Protocols
  - 2023 APR Process
  - Preview May FTC Meeting topics
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## **Public Comment Period #2 – Not Agenda related**

Larry:

- Has a presentation to share re SuperSmolt® Feed Only. The technology contributes to the production of earlier and bigger smolts, reduces mortality, betters fish welfare, and leads to significantly higher growth performance after sea transfer. He recommends WDFW (Sam) look into this. This program is being used in Europe and folks in Idaho are starting to look at this. He sees it as a great tool for hatchery management.

Randy:

- Something needs to be done to get permitting so the Taidnapam boat ramp can be accessible / conducive for older fishermen. Many older CCA fishermen are unable to access the Taidnapam boat ramp. They are losing a whole year of fishing. He has repeatedly asked for information on what can be done about this. No one from Tacoma has gotten back to him. Eric and Matt P committed to set up internal TPU review to review how they might be able to make the Taidnapam Launch lower parking lot more accessible.
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## **Meeting Evaluation**

- Several people were unable to attend this meeting due to a lack of a hybrid option.
  - Appreciated the catered lunch, breakfast treats, and Dove chocolates
  - More extension cords with covers.
  - Good participation and information sharing today.
  - Josua's quotes: He started by sharing a couple of quotable quotes from Dove chocolates: "Hands are meant to be held." "When life isn't going right, go left." He then shared this quote from Zonya Brewton: "Friendship is essential in the best and worst of times, whether realizing an achievement or struggling with a success."
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## **Closing Remarks**

Larry noted his definition of success is how many fish he catches. For him it is adult returns.

Matt P thanked everyone for attending this in-person meeting today and assured everyone he will see that the next in-person meeting has a hybrid option.

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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