

**Cowlitz Hydroelectric Project**  
**FERC No. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Meeting Summary**  
March 4, 2025 from 9:30 – 2:30

**FTC Representative Attendees:**

Melora Shelton	TPU
Bryce Glaser	WDFW
Andrew Luymes	ECY
Jonathan Stumpf	TU
Bill Sharp	YN

**Additional Attendees:**

Peggy Miller	WDFW
Josua Holowatz	WDFW
Brian Gale	WDFW
John Serl	WDFW
Kris Warner	WDFW
Kevin Young	WDFW
Todd Hillson	WDFW
Sean Toomey	WDFW
Larona Newhouse	WDFW
Sean Luis	TPU
Matt Bleich	TPU
Jenise Bauman	TPU
Scott Gibson	TPU
Sam Gibbons	TPU
Chris Vaughn	TPU
Jamie Murphy	TPU
Michael Boyles	BPA
Ann Weckback	Lewis County
Joe First	LCPUD
Laura Wolfe	LCPUD
Nathan Anderson	LCPUD
Steve Manlow	LCFRB
Steve West	LCFRB
Lyn Wiltse	PDSA Consulting / Facilitator

**Public Attendees:** Greg King, Fred Ming, Larry Pryor, Randy LeDuc, Jack Tipping, Chris Vandenberg, Ryan Johnson, and Buddy Rose

**Remaining 2025 FTC Meeting Dates:** Apr. 1, May 6, June 3, Aug. 5, Sept. 2, Oct. 7, Nov. 4, Dec. 2

**Approval of February Meeting Summary**

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

**M&E Subgroup – Fall Chinook Transition Plan (*Presentation provided Mar. 10*)**

## **Presenter: Scott Gibson**

The M&E Subgroup has been working collaboratively to create a Transition Plan presentation template that can also be used with all species. Scott Gibson kicked off the premiere Transition Plan presentation starting with Fall Chinook, explaining the main focus is on the Upper Cowlitz population in the Tilton River. (The main objective is to integrate Tilton Natural Origin Return (NOR) fall Chinook into the brood, while managing both the Upper and Lower Cowlitz populations separately). The assumption for the Upper and Lower Cowlitz populations is that they are in the local adaptation phase with the ultimate goal being full recovery (maintaining recovery and providing harvest). The ultimate goal is an integration rate of at least 50% and the proportion of hatchery origin fish on the spawning grounds (pHOS) of below 30%. He noted that this is the first year we will see four-year-old adult returns from the out-migrating group that was marked in 2022 at Mayfield Dam. For every NOR collected to brood, two Hatchery Origin Return (HORs) are being sent upstream for demographic replacement. The mining rate target is set at a maximum of 30% of the total NOR return to the Cowlitz Salmon Hatchery.

Program description components include adult brood stock collection curve; return timing, adult transportation and disposition, juvenile releases - quantity, size, location, marking/tagging; hatchery configuration; harvest management strategy; program performance metrics; monitoring needs; and bio programming considerations.

### **Summary of Fall Chinook Transition Plans:**

- Two programs have been combined into one integrated program
- Increasing hatchery rearing space – freeing up ponds for Chinook (in progress)
- Repurposing net pens – coho (in progress)
- Monitoring and Evaluation to improve natural origin spawner estimation in lower Cowlitz (now in the 3<sup>rd</sup> year) and Mayfield marking implemented in 2022 (4-year-olds returning in 2025)

### **Next Steps:**

- “Allow pNOB to be variable to avoid overmining the natural population (30% maximum), which may result in a decrease to PNI in low abundance years.” Use lifecycle modeling to determine carrying capacity (Rmax) to define “full seeding” of Upper Cowlitz/Tilton and Lower Cowlitz populations.
- Continue bypass survival estimates at Mayfield Dam.
- Assess SAR's with new tagging strategy at Mayfield Dam.
- Evaluate hatchery performance based on new net pen strategy improved rearing environment.
- The Transition Plan is intended to serve as a step toward recovery goals evaluated during the Annual Program Review (APR) process and altered through adaptive management.

### **Discussion:**

Bryce Glaser began by thanking Scott for putting together such a thorough presentation. PNI is a combo of looking at the pNOB contribution rate into the hatchery as well as how many hatchery fish are on the spawning grounds. Reducing PNI is a result of balancing not having enough NOR for broodstock without overmining the population. It's a lever providing flexibility to maneuver within those goals.

Matt Bleich also thanked Scott. A lot went into the Transition Plan development, we will begin to layer this into the FTC business. They look forward to hearing what is helpful in this conversation,

what is missing, so we can learn how best to transition the FTC into becoming more of a working group based on the transition plans. NOAA has to approve the Hatchery Genetic Management Plan (HGMP) as we go. Technical staff from NOAA were engaged as the Transition Plans were being developed. This engagement does not constitute approval of the HGMPs. As of yet, no red flags have been identified.

Scott reported the M&E Subgroup is developing a life cycle model to calculate carrying capacity and WDFW is working on a new Fisheries Management and Evaluation Plan (FMEP) that will be submitted to NOAA at the end of June. Since we have been struggling with low returns, hatchery returns in particular, they are trying to understand the cause. They are doing more formal Smolt-to-Adult Returns (SAR) evaluations and the fishery contribution piece as well as kicking off the life cycle modeling.

Matt noted WDFW is developing an automated code to use a standardized method of calculating SARs across all species and is working with Tacoma staff to make it available. Kris Warner noted this is an iterative process – the standardized methodology will likely be further refined overtime.

The FTC opened the discussion to public questions/comments specific to the Transition Plan presentation. Jack Tipping jokingly thanked the FTC for returning hatchery program to 1 million fall Chinook smolts per CCA's request. The APR production goal is 3.5 million but the releases over the past two years have ranged from 1 million to 1.5 million due to poor adult HOR and NOR returns to the Cowlitz Salmon Hatchery. He wanted to hear about the recent wild escapement numbers. They are to be recovered with 3K adult returns (the minimum viability target is 3K NOR spawners). While there is a robust return of wild fish through the basin (this is referring to the Lower Cowlitz population, not basin wide), it is apparent the hatchery population is having some problems. He was hoping to learn how many smolts are released per female and is still concerned about the disposition of the hatchery fall Chinook program. He thinks it should be reduced to under 1 million and use NOR broodstock.

Scott reminded him we are seeing 4-year-old returns in 2025. They have handled few smolts at Mayfield as adult returns into the Tilton have been light over the last few years.

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## Updates

### Announcements

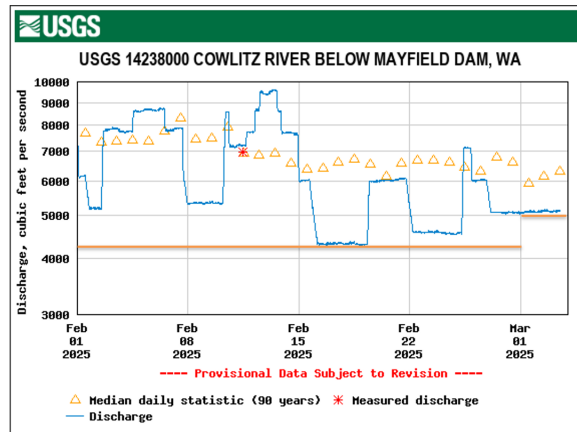
- Anne Baxter (ECY) and Amy Kocourek (NMFS) both expressed regrets that they were unable to attend.
- Larry Pryor was also unable to attend, as he was at the World Aquaculture Society meeting in New Orleans.
- Tacoma is still operating under interim Project Managers (PMs) for the Trout Hatchery and Mayfield Remodels and would appreciate any recommendations for permanent hires.

### Hydro Operations (*Presentation provided Mar. 3.*)

- Inflows: Trend of low inflows has continued. Only December was typical. February inflows were 71% of the historical average. Cowlitz Basin February precipitation was 105% of average (93% for Water Year (WY) 2025 with below normal temperatures.
- Storage: Riffe Lake elevation is 723.5 ft, above the recent and below the long-term averages. Boat ramps have reopened. Upper Cowlitz basin snowpack has maintained and is in the normal range. The reservoir drafted 20 ft to 706 ft during weeks of regional cold and rebounded to about 724 ft following the recent storm.

- Outflow: There was a higher discharge during regional cold in late January through mid-February and then decreased to minimum flow. In the latter half of February, it returned to near minimum except to manage side flows. March minimum flow is 5K cfs + weekly fish transport flows if below 8K cfs.
- 10-day Forecast: Below normal precipitation and typical temperatures are anticipated. Inflows will decrease from 9.2K cfs to below normal range. Snow levels will be 2.5K – 4.5K ft. Outflows will maintain 5.1K cfs plus fish transport flows.

#### Outflow



Current (3/3) discharge 5,120 cfs. 3/1 min 5,000 cfs + weekly fish transport flow (if >8,000 cfs).  
Down ramping limits <6,000 cfs (2/16) 0 in/hr day, 2 in/hr night. No exceedances.

#### Fish Facilities

Separator (shut down February 11-12 for annual maintenance): Sam Gibbons reported that February is typically a slow time. Winter-run steelhead are showing up. Coho and other species have tapered off.

- Winter Steelhead: Usually see 482 on average by this time. So far, 657 have returned. All males and females have been collected for the Lower Cowlitz Winter Program.
- Coho: 5 coho were seen last month.
- Spring Chinook have begun to show up. Spring Chinook broodstock collection starts April 1.

Mayfield Coho Net Pens: Everything is going well as we are 60% through the Phase 1 with the release planned for the first week in May. There has been very low mortality and no signs of predation. Two pens are at a lower density and two are at a higher density. If mortality stays low, this will give hatchery managers options when they go to populate the pens for Phase 2. Sam reviewed upcoming decisions:

- Apr. 1: Decide whether to proceed with Coded Wire Tag (CWT) group for Phase 2 (BY 2024 coho). If so, they will need to purchase the CWTs 90 days ahead. Identify size of CWT grouping. This will be handled through the hatchery operations team meeting in coordination with the M&E.
- May 1: Target date for releasing the Phase 1 fish.
- May 23: Complete Phase 1 evaluation and recommendations. Send out a draft DD with a formal recommendation for Phase 2. (Short turnaround for this DD).
- June 3 FTC meeting: DD seeking FTC approval to move to Phase 2.
- Aug. 15: Consider securing outside funding for ongoing support.

Capital Projects: Cowlitz Trout Hatchery Remodel: We are hoping to have the initial report on the ground water testing for new well locations in the next few weeks.

2025 Spring Chinook: Josua Holowatz and his Region 5 counterpart Matt Gardner recently finalized the preseason forecast factsheet for Spring Chinook returning to the mouth of the Columbia for Washington tributary stocks below Bonneville Dam. The report includes brood needs, juvenile releases, and number of fish needed to prosecute a fishery. All three tributaries (Cowlitz, Kalama, Lewis) will open under permanent rules (the Cowlitz rule includes 2 adults, hatchery Chinook only). More information on Columbia River spring Chinook forecasts is at: <https://wdfw.wa.gov/fishing/management/columbia-river/compact/other-information#2025>.

This year will include 5-year-olds from the Kalama double-clipped (adipose + ventral fin) harvest (the last year of those returns). This component is included as part of the forecasted returns. Hatchery staff will be monitoring this. Josua reminded all that in 2020 the Cowlitz return was insufficient to make brood. The FTC worked with all the parties to bring in gametes from the Kalama to release 300K fish. As they were intended for harvest only, they were ventral and adipose clipped (double clipped).

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## **LCPUD Dam Operations**

### **Presenters: Nate Anderson and Joe First**

We were pleased to welcome Nate Anderson to the group. He has over ten years' experience as an operator at Cowlitz Falls Dam (CFD) and was recently promoted to supervisor of CFD Ops. He will do his best to see LCPUD is operating at peak efficiency and in conjunction with Tacoma for fish collection efforts.

Nate reported they have been seeing diminished inflows. A flood event projected to increase flows to over 20K cfs on Feb. 23 resulted in an increase of less than 10K cfs. They didn't have to change reservoir elevations and were spilling lightly for three days. The CFNSC was not in operation during that time. He emphasized the importance of keeping Tacoma in the loop on reservoir elevation changes that may impact fish. They are now in full operation and everything is running well.

Sluice Gate Repair – They are working on getting Bi-Op coverage and are moving forward with permitting process through NOAA and USACE. They anticipate performing the repair in 2028.

Sediment Removal - This year's sediment removal in front of unit trash racks is scheduled for October 6-31. They are working on the forebay debris removal RFPs.

Unit 1 Maintenance – Scheduled for early July when river flows are below 5K cfs. They will be running Unit 2 for the majority of the summer.

Boat Barrier Replacement – The two north anchors have been poured. They are pouring the lower portion of the south anchor today and the upper portion in two weeks. They still plan to install the boat barrier across the reservoir in mid-to-late April.

Transmission Line Interruption – This is set to occur sometime in September. The 230 kV line between CF and Glenoma will be out of service for 3-4 weeks during which time they will be running Unit 2 at minimum generation to supply station load. There will be limited flow through the plant.

TDG monitors – The monitors were removed in September and will be installed again in late March coinciding with the fish collection season.

## **Capital Projects: Mayfield Downstream Passage Remodel**

### **Presenter: Matt Bleich**

Matt reviewed DD 2025-01 on the Mayfield Juvenile Bypass System. The DD was reflected in the PPT presentations at the last three FTC meetings outlining Tacoma's preferred alternative for improvements to the bypass system. This is based on recommendations from consultants and a series of evaluations dating back from 2013. The version of the DD sent out the day before this meeting includes WDFW edits providing clarity and consistency and also language noting there would be a standard 30-day review period at each of the 60/90%/Final milestones. Coordination needs were also clarified including specificity beyond today's meeting.

Specifically, the DD recommends approval and support of the 25% design of alternative 3b (relocating the Counting House to the opposite shore and eliminating the sagging pipeline). After DD approval they can move forward with funding in hopes of completing construction by 2028.

WDFW engineers weighed in on the design. Matt had a conversation with one of the NOAA engineers on this as well and let them know they were welcome to discuss with WDFW. No red flags were raised with regard to moving the Counting House.

Regarding the plan view of option 3b, Andrew Luymes asked if, on the south shore, are fish returning through the pipeline or is it just water. Matt responded that it is both. No Total Dissolved Gas (TDG) issues are anticipated.

NOAA notified Tacoma in advance of the meeting that they were refraining from voting at this time. All voting members present voted to approve the DD.

**Action Item:** Melora will send this out for the customary 7-day electronic approval.

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## **Annual Program Review (APR)**

### **Presenter: Jenise Bauman**

Jenise noted today is the first of three meetings discussing the upcoming program goals for the hatcheries. The APR is about setting the numbers of fish reared, released, and other important actions. Targets are set through FHMP and Transition Plans, population status, and trends. No production changes are proposed this year as far as overall release goals. The coho number incorporates the net pen numbers. Eric Shoblom will present the draft decision document at the April FTC meeting and finalize with a vote during the May FTC meeting. The APR program will be discussed at the APR meeting on 4/16.

Discussion: Allocations for Friends of the Cowlitz (FOC) net pen programs are still in place. All agreed it is important to discuss the updated objectives for this ahead of the APR meeting, including spring Chinook and cutthroat components. We want to be clear regarding the suballocations and how they shape what is proposed at the APR meeting.

Reminder: The Cowlitz Science Conference and Annual Program Review will take place at the Veterans Memorial Museum on April 16 (with lunch provided). TPU thanked Todd Hillson and Bryce for their help in creating a robust agenda and their help in getting the word out. Jenise will be coordinating with the presenters by April 11.

**Action Item:** Jenise to ensure Eric brings netpen allocations up at one of the hatchery operations meetings.

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

**Presenter: Chris Vaughn**

### Mayfield Counting House

Chris reminded all that the Counting House is in bypass mode each year from Jan. 1 - March 31. During these months, the facility is operated in 24-hour cycles once each month. The first took place on Jan. 28. The next operation will be today. 24-hour tests have yielded very few fish.

### Cowlitz Falls Northshore Collector (CFNSC)

The collector has been shut down since September and will reopen March 14. The trap will be open through September with planned 72-hour blocks through the month of October. The draft 2024 CFNSC Annual Report is being reviewed internally and will soon be out for 30-day review. Sean Luis explained Tacoma is reviewing passage methods within the Cowlitz basin (Mayfield vs. CFD). He will give an update at the next TWG meetings.

### DD 2025-02: CFNSC Evaluation Recommendations

Chris thanked everyone who provided comments on the DD which have been incorporated into the version sent out yesterday for review at this meeting.

The DD contains the three recommendations outlined in the DD 2025-02 that was sent out the day before this meeting.

1. Analysis of alternative tagging strategy for FCE for steelhead, coho, and Chinook
2. CFNSC acoustic telemetry study
3. Begin transporting coho parr downstream of the Barrier Dam (coho fry may be added as a future consideration, but this is not currently possible from a logistical standpoint).

Tacoma will begin 100% coho parr transport and there is no current plan to tag fish. Future performance monitoring will continue to be discussed within the TWG and M&E Subgroup with a recommendation brought to the FTC in the future. Chris walked through the edits made based on feedback received and asked for any additional questions/feedback. He will continue working with the TWG and M&E Subgroup March-May as this unfolds. The timeline is still somewhat vague – likely come to the FTC in June or July.

All voting members present voted in favor of approving the DD.

**Action Item:** Melora to send the approved DD out for 7-day electronic review.

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## **FTC Work Plan / Protocols**

**Presenter: Melora Shelton**

Melora thanked everyone for feedback/suggested edits which have been incorporated into the protocol and workplan. These are considered living documents/our guidebook for how we work together and will continue to update them as needed: there is no associated DD.

**Work Plan:** Melora projected the updated draft Work Plan and noted there had not been any substantial changes except for adding report outs for wood and gravel implementation. Tacoma will consider collapsing the calendar for the monthly meeting topics for a future revision. It was suggested that the Transition Plan presentations occur at the in-person meetings and the schedule was updated accordingly.

**Protocols:** Melora projected the same version (clean copy) that was sent out to everyone and with updates largely suggested by WDFW. Public meeting protocols will be updated as a separate

process. In-person meeting changes include removing the obligation to provide written copies of meeting handouts and adding specific language that subcommittees are convened by the FTC as recommending bodies that provide technical support. Additional discussion around subcommittees including clarity in FTC assignments (reflected in charter) and use of approved meeting templates.

Tacoma has continued to work on protocols for public presentations and will be meeting with stakeholders on that topic later today.

**Action Item:** Melora to send out the “final” 2025 Work Plan and Protocols.

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### **Monitoring & Evaluation (M&E) Subgroup**

**Presenter: Jenise Bauman**

Jenise reported the draft Charter for this group is undergoing internal review and will be discussed at their March 19 meeting and then finalized as a DD for approval by the FTC.

They will draft directed studies to fill in some data gaps in the Fall Chinook Transition Plan. The initial meeting on Life Cycle Modeling will be March 10. WDFW and Tacoma will define roles as a subcommittee and select a consultant and report out at the March 19 meeting.

In reviewing the CCA Steelhead rearing proposal put forward by Jack Tipping, they have determined that Plan B will have management implications, and some logistical considerations e.g., rearing space, tagging strategies, etc. The group feels this would be most appropriate as an M&E study aligned with transition plans.

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### **Cowlitz Restoration and Recovery (CRR) Program**

**Presenters: Steve Manlow and Melora Shelton**

2025 Habitat Grant Round: Steve reminded everyone that the grant round opened on Jan. 13. LCPUD is still working with sponsors and pre-applications. It looks like CRR will have one proposal – at the mouth of Kiona Creek. They are talking with Laura Wolfe to frame up a design for some work there, which would involve adding woody material for complexity, along with some riparian elements. Draft applications are due March 17. Proposal presentations (hybrid and site visits) for eligible projects will take place April 15-24. FTC Voting members and proxies are welcome to attend. May 8 has been reserved for CRR proposal presentations.

Hatchery-Associated Production (HAP) Subgroup: Melora noted the draft Work Plan for 2024-2025 for the subgroup (Brian Gale, Peggy Miller, Melora, Eric, and Matt Peter) has been finalized and serves as a helpful tool. They also reviewed their original Charter from 2022 and agreed to continue to work under the Statement of Work (SOW). Currently there is no regular attendee from Ecology. Meetings were initially twice monthly and are now the third Wednesday of each month after the M&E meeting, and more frequent if needed.

Out-of-the-box ideas such as the CCA Steelhead rearing proposal are much appreciated, and it makes sense for the CCA proposal to be taken on by the M&E Team. Melora has conveyed this to Jack, and he supports this approach. There are still questions about a CRR nexus/funding.

FOC are interested in rebooting their net pen program and are potentially interested in pursuing CRR funding. Currently Cowlitz spring Chinook and sea run cutthroat are the target species, but additional discussions are needed. The draft application is due April 7. The schedule is posted at [MyTPU.org/CRR](https://MyTPU.org/CRR).

**Action Item:** Melora to send out the CRR HAP Subgroup notes.

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

Greg: Thanked the FTC for having the coho net pen program to make more room in the hatchery for spring Chinook. He reminded all there is an obligation in the Settlement Agreement (SA) to recover fish and doesn't want to see any of those numbers change until 2037 when the SA comes up again.

Sam: The coho net pen program is a 2-year pilot. The overall production poundage would not be exceeded by continuing the net pen program. As you move Coho production off site it makes more room in the hatchery for spring Chinook. After Phase 2 (Brood Year 2024) of the net pen program is complete, Brood Year 2025 coho would have to be re-programmed or overall hatchery production would have to be re-configured.

Jack: If we reduce Chinook production to 1 million or less, it should be maintained.

Matt: If we want to make a change through the APR process, we can. Without a change, it can't be accommodated.

Bryce: If the target stays 3.5 million for fall Chinook through the APR process, that will continue to be our goal. Whether there is room because we didn't achieve a release goal, that would be an annual anomaly but wouldn't affect the APR production table. We assume we will achieve those targets.

Randy: Do we know what it would cost to expand the net pen project to 2 million and what we might be able to do to get outside funding? It looks like it's going to be a good program, and we don't want it to fail.

Sam: Once the first 2 trial Phases are done, the intent is to move one raceway of 250K. Technically, we could move more coho out of there (involves a lot of trucking). Sam explained the history of this effort dating back to 2020. The intent was to increase the number of yearling spring Chinook that are being released. One raceway of coho needs to move out to accommodate the 650K lbs of production within the bio-programming parameters.

Bryce: Satellite Rearing is an obligation that Tacoma has. This is one of the ways we are considering moving forward – timing is uncertain.

Jack: Expressed much appreciation to Eric and hatchery staff for the success of the Net Pen project. This is good for spring Chinook as well as coho.

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### **Topics for April 1, 2025 FTC Meeting via Teams**

- Updates incl. Hydro Ops, Water Quality
  - Fish Facilities, Satellite Rearing Ponds, Cispus Release Site, Mayfield Downstream Fish Passage Remodel, Coho Net Pen Project, Trout Hatchery Remodel
  - LCPUD Cowlitz Falls Dam Operations
  - Introduce Coho Net Pen BY 2026 DD
  - FTC Work Plan / Protocols – public presentations
  - CRR Fund HAP Subcommittee
  - Preview May FTC Meeting Topics
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### **Public Comment Period #2 – Any Topic**

Greg King: Spring Chinook – Negative effect of mini-Jacks. Doug Milward (WDFW, now deceased), warned that holding Chinook smolts too long can cause them to jack and that will lead to a false forecast. Tacoma could save a lot of money by not raising these fish to 4-5 to the lb.

Sam: The M&E Subgroup evaluated data back to the 1990s along with various release sizes and timing and found fish released closer to the first week of April and at a larger size produce more adults. On the Cowlitz, the study found yearling spring Chinook produce more adults. Minijacks are not included in the brood. They are also not being passed into the upper watershed where most of the spawning is occurring.

John Serl: It is typical to see a weak return year followed by a strong year and this gives the appearance that the proportion of jack is very high during the low return years.

Randy: Any update on the chum situation?

Todd: Despite some contracting challenges, it is underway.

Randy: Can we get the pool below Barrier Dam open early for elderly anglers? And might it be possible leave it open later if the coho come back in abundance? He is talking about a very small group of anglers, but it would make a world of difference to them. Bank access there is very limited.

Josua: We will take a look at that.

Bryce: The 400' marker is the standard boundary. WDFW tries to liberalize that when they can. Currently winter steelhead are returning, and we are in the spring management period for spring Chinook and winter steelhead.

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### **Meeting Evaluation**

- Record breaking attendance!
- Technology worked well
- Great presentations and discussions
- Very productive
- For future in-person meetings, use the microphone

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### **Josua's Inspirational Quote**

Lately, there has been a lot of change. In uncertain times it is important to remember:

"The secret of health for mind and body is not to mourn the past, worry about the future, or anticipate troubles, but to live in the present moment wisely and earnestly." – Buddha

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### **Closing Remarks**

Melora thanked everyone for taking the time to join the meeting. Lots of work occurred since the last meeting to ensure we had a productive time together today. It feels like there is a sense of grace around the table. We can say we are moving forward working toward common goals. She looks forward to the next meeting in person (with remote option). She is excited about the refocus on how we work together to ensure these meetings are as productive as possible. She also expressed much appreciation for those helping to improve the protocols.

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