

**Cowlitz Hydroelectric Project**  
**FERC No. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Conference Call/GoToMeeting Summary**  
December 1, 2020 from 9:30 – 2:30

**FTC Representative Attendees:**

Travis Nelson	TPU
Bryce Glaser	WDFW
Carol Serdar	WA Dept. of Ecology
Scott Anderson	NMFS

**Additional Attendees:**

Rich Turner	NMFS
James Archibald	NMFS
John Serl	WDFW
Peggy Miller	WDFW
Sam Gibbons	WDFW
Josua Holowatz	WDFW
Brian Gale	WDFW
Jim Pacheco	WA Dept. of Ecology
Matt Bleich	TPU
Eric Shoblom	TPU
Phil Sandstrom	TPU
Tim Hoffnagle	TPU
Chris Foster	TPU
Ann Weckback	Lewis County
Steve West	LCFRB
JD Jones	USFS
Kate Day	USFS
Laura Wolfe	LCPUD
Rudy Salakory	Cowlitz Indian Tribe, Tech Rep for TPU
Lyn Wiltse	PDSA Consulting / Facilitator

**Tentative 2021 FTC Meeting Dates:** Jan. 5 (Public Meeting), Feb. 2, Mar. 2, Apr. 6, May 4, June 1, July 6 (tentative), Aug. 3, Sept. 7, Oct. 5, Nov. 2, Dec. 7

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**Approval of Last Meeting Summary**

The November FTC meeting summary was approved with edits and will be posted to the FTC public website.

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**Updates**

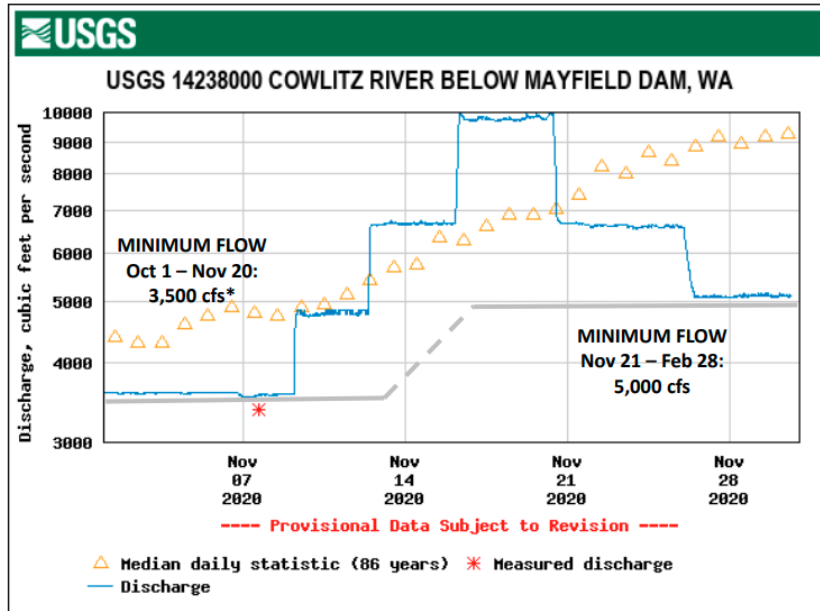
Hydro Operations:

- Presentation distributed to group
- Inflows: After a dry summer, inflows are now more typical (11/29 daily mean).
- Storage:
  - Riffe Lake: Has been increasing the last few days as expected. It is currently at 734' (historic average of 737', operational max 749'). Ecology asked for

assurance that TPU will be monitoring and measuring TDG in the event of any spills.

- Snowpack is starting to build.
- Mayfield Outflows: Current outflow is 5,100 CFS. The minimum flow reset higher at the end of each day Nov. 12-15 and then set at 5,000cfs (highest possible minimum flow) on Nov. 16. Minimum flow 5,000 cfs will last through the end of February. No trips or ramp events occurred.
- Forecast: The next ten days will likely be dry with typical temperatures and variable snow levels. The forecast is for a La Niña year, tilting probabilities toward higher precipitation and lower temperatures.

## Outflow



\* Resets higher if mean daily flow > 5,000 cfs for 5 consecutive days

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)

**Water Quality:** Carol noted that TDG monitoring is important and needs to be done appropriately and permanent TDG monitoring stations have yet to be installed. She is discussing this with Matt Peter. Regarding the Kosmos toxic cleanup program, the upland area has ground water concerns (contamination from the stockpile). A new project manager for this project will soon be announced by Tacoma. For the Barrier Dam Project, there have been changes to the permitting process based on bathymetry discovery of needs for more fill. A scour hole was discovered upstream of the Barrier Dam near the repair area. There is a need to backfill this hole before installing the coffer dam and doing the dewatering. There are still several WQPPs for Project activities in the queue.

**Downstream Adaptive Management TWG:** Matt reported the November and December meetings are being combined into a single meeting on December 9. The main topic will be the preparation of the DD for the January FTC meeting.

**Fish Facilities:** Eric reported they are in the tail end of fall return for Chinook and Coho. For Coho they went from 1500/day two weeks ago to 200/day this week. Stream surveys are currently underway as fish start to spawn. Some temporary staff have been released. They

are still operating Mayfield three days a week where they are getting 150-300 Chinook smolts/day. They are also getting 50-200 Coho adult fallbacks (mostly HOR jacks) coming out of the Tilton each day and these numbers are dropping off.

- Action Item: Eric will put together a summary of Fallbacks by December 4.

Upper Cowlitz Fish Release Site: Tacoma is working with Lewis County on lease agreements. When these are complete, they will be able to work on site development.

CRR 2021: Travis reported Anchor QEA will provide an update on results from the Upper Cowlitz hydraulic model. Tacoma is also reaching out to others in the field of hydraulic modeling (USACE, ECY). While the timeline has yet to be defined, Tacoma is planning to advertise the next grant round in the second quarter of 2021. Resources are limited due to Florian's absence. Rudy noted that Tacoma worked with the LCFRB to develop prioritized actions (the Upper Cowlitz and Cispus Habitat Strategy). He hopes that list and appropriate strategies/approaches will be reviewed at a future FTC meeting. E.g., realignment of the Tom Music Bridge to increase mobility and habitat on the Cispus. There is a need to balance out all the various interests and needs. Peggy suggested a subgroup could help push this effort forward in a timely manner. Steve warned in the second quarter of 2021, would-be sponsors in the southwest part of the State will already be busy with other projects. Travis acknowledged the need to coordinate with ongoing projects and said the round would likely be later in the year.

M&E Subgroup: Phil reported that at their last meeting they discussed the AHA/ISIT model and its status. Bryce brought the STATCAM model to the subgroup to review. The question is: Which tool best supports the HGMP need? They also discussed the Spring Chinook Hatchery SAR project (Josua is the lead on this). They plan to discuss this further at the M&E Subgroup on December 16 and with the FTC hopefully in February. The subgroup will also attend the FHMP transition workshop on December 16 to begin work on the transition plan template. On back burner: Adult handling Protocol (WDFW document that defines fish disposition/release locations) the intent is to incorporate these actions into the transition plans. They hope to review this at their January meeting and discuss this also at the FTC meeting in February.

John welcomed anyone with strong interest in SAR, to participate in this subgroup which is open to everyone in the FTC. He also mentioned that they had an analytics meeting focused on how we get to our estimates for each species and the data collected over the course of the year.

- Action Item: Phil: Send invite to next Analytics meeting to FTC members.

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## **Upper Cowlitz Hydraulic Model**

### **Presenter: Tracy Drury and Kyle List, Anchor QEA**

Anchor used combination of 1D and 2D hydraulic modeling to evaluate a number of flow scenarios in the Packwood to Randle area (using blue-green LiDAR collected in 2017). They looked at modeled depth, velocity and water surface elevation. They also looked at habitat suitability indices (HSIs) and complexity (side channels). Tracy and Kyle, both Sr. Hydraulic Engineers with Anchor, walked through a PPT presentation which included:

- Coarse-level Hydraulic Model
- Fine-Scale Hydraulic Model
- HSI integrates modeled depth and depth-averaged velocity outputs and provides an index of relative habitat suitability (different values for juvenile Chinook and juvenile

steelhead). Tracy described that published HSI values (WDFW and Ecology) are a compilation of data collected from a variety of mostly smaller rivers. Because the Cowlitz is a larger river, Anchor used modified HSI values based in consultation with Eric Beamer at Skagit Systems Coop. This was described in the presentation and the report.

- Kyle showed an example of how the model can be used to evaluate project alternatives smaller scales as well as reach-level modeling.

#### Discussion:

- Concern that the adjusted HSI was not reviewed by WDFW (Kiza Gates) or Ecology (Jim Pacheco) and those entities should be consulted before/if it is used for management decisions.
- This model was used for the LCFRB habitat strategy. The strategy included the Cispus River (outside of the model extent). Consider doing this type of modeling on the Cispus.
- The Cispus release site had issues with a gravel shallowing up under the bridge after a major flood event. Should Tacoma spend more money on hydraulic modeling if it doesn't tell us anything we don't already know?
- This is useful information, but were there any "aha" moments?
- Not interested in flood risk reduction or purchase of land.
- The focus of the presentation was on moderate high-water flows. It would be interesting to examine summer low flows (a limiting factor for fish). Look at ground water infiltration. (Note: Results do cover low flows.)
- The model tells you about the dynamics in the flood plain. It's hard to recognize what types of dynamics that fish want – a detectable flow field. Has this been considered?
- When flows come up in backwater areas, juveniles quickly populate these areas. It is unclear how long they stay.
- Creating preferential habitat is not the same as improving the quality of the stocks.

Anchor's report and map books for depth and velocity outputs are posted, along with the other habitat assessment reports and links to the UCC Habitat Strategy. The CRR Program website shortcut is [mytpu.org/CRR](http://mytpu.org/CRR).

Next steps: Melora noted this is another wealth of information like the geomorphic modelling. It is up to the FTC to determine how and to what extent we use it.

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### **FHMP: Next Steps**

#### **Presenter: Matt Bleich**

Matt reported the transition plan workshops have been scheduled he has developed a draft template for the work plan. The shaded area shows all the detail for the Fall Chinook Transition Plan. The first workshop will be on Dec. 16 immediately following the M&E Subgroup meeting. Fall Chinook Workshop Transition Plan dates:

- Dec. 16 from 1 - 4pm
- Dec. 23 from: 9 - noon
- Jan. 6 from 1 - 4pm
- Jan 13 from 9 - noon
- Jan. 19 from 1 - 4pm
- Jan. 22 from 1 - 4 (as needed)

	A	B	C
2	Task	Responsible	Dates
3	Discuss and Finalize Workplan	FTC	11/3/2020
4	Develop Workshops	FTC	11/3/2020
5	Develop Draft Transition Template	Tacoma/FTC	11/17/2020
6	Finalize Draft Transition Template	FTC	12/8/2020
7	Workshop on marking and escapement	FTC	week of 12/16/20
8	Workshop on trigger points/transition timing	FTC	week of 12/16/20 and 1/11/21
9	Adult Collection plan (i.e. brood source)	FTC	week of 1/4/21
10	Workshop on Bioprogramming needs	FTC	week of 1/11/21
11	Workshop on harvest	FTC	week of 1/18/21
12	Schedule reality checkin	All	1/31/2021
13	Draft final of Fall Chinook Transition Plan	All	2/2/2021
14	Winter Steelhead Transition Plan	All	1/15/21 - 2/28/21
15	Spring Chinook Transition Plan	All	3/1/21 - 4/15/21
16	Coho Transition Plan	All	5/1/21 - 6/15/21
17	Combined review of Transition Plans	FTC	7/1/21 - 7/31/21
18	Solicit public input on Transition Plans	Public	8/1/21 - 9/1/21
19	Edit Transition Plans (as necessary)	FTC	10/1/21 - 10/15/21

The Transition Plan will be a living document. It is intended to serve as a step toward recovery goals. It will be evaluated and revised as needed through the APR process. HSRG guidelines will be evaluated for applicability along the way.

Matt walked through the draft Transition Plan Template and said he would be happy to email out a revised template that incorporates FTC feedback after this meeting. The idea is to have a single document as the Plan to move us from where we are today to where we want to go. As we work through the Transition Plan, we will be able to accommodate different perspectives. He sees each Plan being 2-4 pages long and will lead us from where we are now to the next recovery phase. The Current Recovery Phase table and the Threshold/Triggers/ Decision Rules column will be worked through in the workshops.

Discussion:

- Bryce suggested the Recovery Phase piece needs to include how goals of the program might change. The threshold triggers to move between phases might be premature – focus will be on NOR population. This could be an entire workshop or two on its own. Also, early next year HSRG is coming out with guidance that will help us think about how to develop threshold triggers.
- This captures most of what was talked about in the appendix of the FHMP.
- How best to capture the timing, harvest, mitigation piece?
- Nice to see room to list data gaps and Adaptive Management triggers.
- Like the “table-ized” format – nicely organized. Not too wordy.

Matt will confer further with Bryce on this and send out the draft agenda for the December 16 workshop in the next few days.

**Action Item:** Matt will send out the agenda for the December 16 workshop.

## Satellite Rearing

**Presenters: Matt Bleich and Eric Shoblom**

Matt reported not much has changed since the last FTC meeting. The plan is still in public review. So far, he has received verbal feedback from the FTC and a few comments from the

public via phone calls and emails including from Energy Northwest. Matt will consolidate the comments to share with the FTC.

## Workplan

Task	Responsible	By When
Present <u>Workplan</u> /Next Steps to FTC	Bleich	9/1/20
Develop draft concepts and incorporate into Satellite Rearing Facility Plan	R2	10/6/20
FTC Generated Program Concepts (include Spawning, Egg Incubation, Rearing, Finish/Acclimation, Release and location for each rearing phase)	FTC	9/15/20
Describe/Familiarize with Concepts	FTC	10/6/20
Review and Comment	FTC	10/6/20 – 11/3/20
Incorporate Comments	R2	11/6/20 – 11/15/20
QC	Tacoma	11/15/20 – 11/21/20
<b>Public Review</b>	<b>Public</b>	<b>11/21/20 – 12/21/20</b>
Potential workshop to incorporate public comment	FTC	1/5/20
Finalize Satellite Rearing Facility Plan	Tacoma/R2/ FTC	1/31/20

**Gravel Augmentation**  
**Presenter: Travis Nelson**

Travis walked us through the DD 2020-2 that was sent out just prior to the meeting. This is a modified version of the prior DD that proposed three site locations. He clarified that the current DD was written exclusively for the Barrier Island site. This is separate from the larger, and still to come, long-term DD that summarizes where we are with the entire gravel augmentation program. Carol reminded all this is a (three-year) construction project and therefore the details are subject to change. Once the contractor dries out the piece of Barrier Dam where they want to do the repair work, they may find they have to do something different. Travis wrote the DD is a way to give the contractor flexibility. Tacoma needs to be specific about what they want to have count toward their gravel deficit. They need a tally sheet to account for this on an annual basis. To the extent possible, placement of the gravel should be closer to the thalweg so it can distribute into the river. A WDFW habitat biologist may be present when the gravel is being dumped. Matt and Travis will discuss this with TP engineers to see if there is space for communicating about the placement. Monitoring for gravel migration will be done.

The DD was approved by consensus after collaborative editing. Travis sent the final version of the document to all. Travis noted Tacoma is still evaluating the Jorgenson site for future gravel augmentation.

**Action Item:** Travis will send out the remaining DD including an updated schedule for milestones and work products that will be provided to the FTC for review prior to the January meeting.

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### **Planning for January 5 Public FTC Meeting**

MS Teams was the platform used for the APR/FHMP public meeting last month. Zoom Webinar has been used successfully by WDFW for public meetings they host.

**Action Item:** Travis will determine the appropriate remote meeting platform and advertise the public meeting in the near future.

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### **Meeting Evaluation**

- Great attendance and participation was good
- Need chocolate handy
- Add PM bio break
- Successfully edited DD on the fly and were able to approve it
- Super productive
- We actually made a decision and moved the ball forward on the project
- Travis's creative driving when Bryce was reading
- Quotable Quote: "Teach this triple truth to all: A generous heart, kind speech, and a life of service and compassion are the things which renew humanity." Buddha

### **Potential Topics for January 5 FTC Meeting**

- Updates incl. Hydro Ops, Water Quality (incl. WQ Monitoring Plan Updates), Satellite Rearing Update
- Flow Planning Presentation
- CRR (high-level – provide timeline)
- 2021 FTC Work Plan (Gantt chart with document review timelines, major initiatives, construction projects, FHMP Workshops, etc.)
- FHMP: (30 min)
- LCFRB Presentation (30 min?)
- M&E Subgroup
- Gravel Augmentation Work Plan (second DD?)
  - Key milestones
- Downstream Adaptive Management TWG (DD)
- Preview February FTC Meeting topics
  - February Spring Chinook SAR presentation by M&E Subgroup

### **Action Items:**

- All: Send presentation ideas to Travis and Lyn by December 4.
- Steve: Check about LCFRB staff availability to present at the January 5 meeting.

### **Parking Lot**

- Presentation by Tacoma's Power Management Group
- Review Steelhead Recycling Program