Cowlitz Hydroelectric Project FERC No. 2016 Cowlitz Fisheries Technical Committee Final Meeting Summary January 14, 2015, 9:00 AM – 3:00 PM

Mayfield Office

Participating Members

Cindy LeFleur Mark LaRiviere Michelle Day Paul Sparks Jim Pacheco Bob Rose

Other Participants

Peggy Miller (by phone) Mark Johnson John Serl Keith Underwood Jane Hannuksela (by phone) Shannon Wills (by phone) Pat Frazier Ann Weckback Lyn Wiltse WDFW Tacoma Power NMFS Trout Unlimited WA Dept. of Ecology Yakama Nation

WDFW WDFW Tacoma Power NMFS Technical Advisor to Yakama Nation Technical Advisor to Tacoma Power Technical Advisor to Tacoma Power PDSA Consulting

Conference Call Dial-In Instructions

1-866-206-2831. Then dial meeting number: *7772519* to join the meeting.

Proposed 2015 FTC Meeting Dates

Feb 3, Mar 3, Apr 7, May 5, June 2, July 7, Aug 4, Sept 1, Oct 6, Nov 3, Dec 1

ISIT Model Data Meeting: February 27, 9 AM- 4 PM, Cowlitz Salmon Hatchery conference room.

Joint Meeting with FTC and WDFW's Ad Hoc Committee: March 13 from 1 - 4 PM, Lewis County Public Works conference room, Chehalis. At this meeting we will review the initial ISIT model results (e.g., impact of recycling on production, stray rates, average escapement numbers, max. program sizes, etc.).

 Action Item: All to check availability of suitable venues to host this meeting and let Mark L know ASAP.

APR / Public Meeting Dates

- March 26 (pre-season workshop where we would listen to the public's issues)
- Apr. 23 (technical meeting where we would run through the data and present a draft hatchery production plan)
- TBD: Third meeting to explain what the program will be and why
- TBD: Fourth meeting in Morton in the autumn (as was done in 2014)

Announcements

- Mark thanked all for condolences regarding the sudden passing of his brother Paul. He encouraged everyone to be mindful and proactive in matters concerning their health.
- Cowlitz Falls Facilities Manager Position: Mark explained this position closed on Friday. Tacoma anticipates re-opening the advertising for this position as they are seeking a larger pool of candidates. They are looking of a candidate with a lot of experience. The person would be in charge of all facilities that handle fish on the Cowlitz Hydro Project.
- Salmon Hatchery Fish Ladder: Mark announced they just concluded a record breaking season at the Cowlitz Salmon Hatchery adult separator system and the coho are still coming in! Tacoma would like to shut down the ladder for maintenance for three days at the end of February.
- Protocol review: Lyn reminded all that we will do our annual review of the FTC meeting protocols at our February meeting. We will discuss protocols for those participating by phone. We will address the appropriate level of detail for the meeting notes and also the protocols for those attending out meetings remotely. Lyn further suggested that in terms of note taking for these meetings, less is more. This will allow us to focus more on the substance of the meetings and less on its representation in these notes. We also discussed how more frequent bio breaks and calling out the purpose of each agenda topic can be helpful in keeping discussions focused at the appropriate level.
- Plan to Abandon Volitional Upstream Fish Passage: In response to FERC's order approving the FHMP Update, Tacoma is filing a request for a 6-month extension to file the plan (July 17, 2015). All approved Tacoma requesting the extension from FERC.
- Cowlitz HGMP Status: Tacoma and WDFW have agreed meet in the near future to infuse Tacoma's comments into the draft HGMPs.
- Cispus River Adult Release Site MOU (Tom Music Bridge): Tacoma got comments back from the Forest Service saying they want to do an impact study to see if the release site attracts more people to the areas and therefore required more maintenance to the site. Cost discussions are continuing.
- 2015 CF Downstream Collection Plan / Status of NMFS Bi-Op: This plan is out for review. It memorializes the decisions approved by the FTC regarding operations in 2015. It also reports on the 2014 results. NMFS Bi-Op: Michelle is working on getting it finalized and approved. Tacoma hopes to break ground in March.
- Lewis Co. Water / Sewer District 6 Update: Keith and WDFW representatives toured the treatment facilities and met with some board members to discuss possibly alleviating some of the insurance requirements. Discussions are continuing. Tacoma will get back to them about those requirements in the next few weeks. Peggy explained we want to evaluate the risks to the hatchery and then adjust the insurance accordingly.
- DAMW Update: There is no update this month as they have not met since our last meeting. This will not adversely affect the construction schedule.

FTC Membership / Interaction with non-FTC Members: Attorney Perspective

Presenter: Keith Underwood

After an in-depth discussion of this at our November meeting, all were asked to get their attorneys' counsel on this and consider various options and associated risks regarding adding members to the FTC (whether or not they have signed the SA and whether or not they would be voting members of the FTC).

Michelle explained that NMFS believes the current process is working. Other entities (Lewis County and LCFRB) are currently participating in an advisory capacity, without voting capabilities. The Cowlitz Tribe has also indicated a desire to become more engaged and begin to attend FTC meetings in an advisory role to Tacoma.

NMFS attorney Jane Hannuksela cited SA 12.3 provides a mechanism for all parties, including non-voting members, to provide review and comment. With the fisheries focus and the ESA aspect, NMFS would like to continue with the current process. Paul explained that, in checking with TU attorneys, they are in agreement with NMFS that there is no need to deviate from the terms of membership outlined in the original SA. (The SA does not currently include an option for adding members to the FTC.) NMFS and TU observed that the make-up of this committee is fishery experts and that is appropriate as the committee is dealing the protection, mitigation, and enhancement measures.

All agreed that the strength of the FTC is in working together and moving forward together in a way that honors everyone's interests.

Keith proposed we proceed this year with adding other interested parties as advisors to Tacoma, as is currently the case with LCRFB and Lewis County. He also proposed that anyone who wants to pursue signing the SA would be free to proceed by sending a letter to the original signatories to see if they concur. We all agreed that being a signatory to the SA is not necessarily the same as being a voting member of the FTC.

Action Item:

• Keith will bring a decision document to our February meeting for all to consider.

CRR FUND Project Evaluation Process

Presenters: Pat Frazier and Peggy Miller

At our last meeting Pat and Peggy walked us through a PowerPoint outlining a process recommended by the CRR Fund Subcommittee to meet the CRR program needs and also coordinate with the LCFRB TAC (Technical Advisory Committee) to help evaluate projects. All FTC members agreed to pursue this direction.

Next Steps / Timing: The subcommittee will meet again to continue work on this.

Action Items:

- Mark to bring a decision document on this to the next meeting.
- Pat to draft an MOA between LCFRB and Tacoma.
- Pat to reconvene the subcommittee where they will begin to define the technical basis for applying for projects. This process will be open and transparent.
- Mark to get concurrence from absent FTC members about LCFRB's role in this process.

Population Designations Presenter: Keith Underwood

Marking Strategy / Schedule: Tacoma plans to hire a consultant to build biological arguments (e.g., possible strengthening the gene pool by adding some diversification) for possibly adding the Tilton to the upper or lower basin. WDFW is interested in bringing forward some options – possibly for an ESU-wide study. Pat explained that LCFRB would be willing and able to participate in some kind of a discussion on this. We need significant progress on this in the first quarter of this year in order to give NMFS sufficient time to respond to it in their 5-Year Status Review.

Tacoma needs to know where they are going to put their tagging infrastructure in the next year.

Action Item:

• Keith to hire a consultant and get a group together to discuss this ASAP.

CFD 2015 Downstream Fish Collection Efforts Presenter: Mark LaRiviere

The 2015 plan is posted for review. Most of the energy will be going to the Riffe Collector (perhaps it should be called the "CF Tailrace Collector"?) with a focus on getting better guidance to the net. Debris on trash racks is an ongoing challenge.

As of the week of January 5, all of the pre-qualified bidders requested a 4-week extension to estimate costs. Tacoma is considering providing a 2-3 week extension.

2015 RCO Conference Presenter: Mark LaRiviere

Mark distributed an updated version of the abstract to present at the Washington State Salmon Recovery Funding Conference in May, 2015 in Vancouver. The new version incorporates feedback he received at our last meeting. It must be submitted by Jan. 16. LCFRB will collaborate with WDFW to present on the Conservation Recovery Plan. Frank Schrier will also be putting together a presentation for the Lewis.

Action Items:

- Cindy will check into a logical "clumping" of these presentations at the conference.
- If the abstract is accepted, Mark will do a dry run of the presentation at our April meeting and ask for feedback.

Review of 2011 FHMP Update Presenter: Mark LaRiviere

Mark L walked us through the "2011 FHMP Update". He also provided a sneak-peek of the 2015 ISIT tool. We will be using this version of the tool for the APR process this year. He encouraged all to continue to become familiar with the document (posted on the FTC website). We will discuss the "2016 FHMP" at our March meeting.

Since we included many changes in the 2011 FHMP Update, compared to the original FHMP, Mark L suggested that the 2016 FHMP will likely include more tweaking than wholesale changes. We will provide more detail in the Annual Report which will be submitted on October 31. We can explore linking this to the 2016 FHMP. Chapter 5 contains many previously unresolved issues that have now been resolved and therefore need to be updated. We will also want to update tables or handle this through the APR process. It may be helpful to rethink the need for all the tables that are in the 2011 document. Maybe we could remove the tables and put them in the Annual Report. We need to keep in mind the tables have certain decision rules, key assumptions, and biological targets.

Process for the 2016 FHMP: We discussed how best to do this. Ideas included having each entity make edits in track changes to the document. We will be careful to provide context for what is in the existing document.

In the interest of openness and transparency, Keith suggested having at least two joint meetings with WDFW's Ad Hoc Group (focused on the Cowlitz River). Then the debate can shift to a more productive direction. Perhaps the initial meeting could occur before the first public meeting. This would occur before we start confirming program sizes. We would explain our existing parameters and also the opportunity to provide input. This would be in addition to our public meeting process.

Note: We agreed that, from this point forward, we are going to stop using the term "Update" when referring to the FHMP as it is confusing.

Action Items:

- Tacoma will provide a "walk through" of the 2011 FHMP at the next meeting. Tacoma will also develop a plan and schedule for completing the 2016 FHMP.
- All to review the FHMP and become familiar with it and identify potential issues and things to possibly change.

Steelhead Recycling Program Size

Presenter: Cindy LeFleur

Cindy explained that the constituents were in strong favor of this last year and she expects a similar request this year. WDFW will work through the ISIT model spreadsheet to look at the impacts of recycling or releasing more fish the first time around. In the name of transparency and openness, this will go through the APR.

John explained that, since October, only three hatchery steelhead were observed at the weir. WDFW has received a request to do a study on some rearing strategies for summer run steelhead.

Action Item:

• Cindy will send the proposal to all to review.

Review / Approval of December 4, 2014 Meeting Summary and Action Items

Presenter: Lyn

The December meeting summary was approved with minor edits.

Action Item

• Mark to send out Final meeting summary from November to all.

Meeting Evaluation

- Appreciated seeing Bob again!
- Protocol issues with the phone were largely resolved.
- Started earlier and got out early
- Another enjoyable meeting extremely collaborative
- From now on, start promptly at 9:00 regardless of who is in the room. Appreciated the chocolate

Handouts

- Draft January 14, 2014 FTC meeting agenda
- FERC extension request letter
- Tacoma Power letter to FERC re Lewis County FTC membership request
- RCO conference abstract
- December 2, 2014 FTC meeting summary
- •

Potential February 3 Meeting Agenda Items

- Welcome / Announcements (30 min.)
- Steelhead Integration NOR Broodstock Collection (10 min.)
- FTC Membership Decision Document (30 min.)

- FTC Interaction with Non-Members (30 min.)
- "Walk through" of 2011 FHMP Update (45 min.)
- Review / Revise Meeting Protocols (30 min.)
 - Include Consensus Process
- Downstream Fish Passage Study Mayfield (45 min.) Lyn to check
- Plan for initial public meeting
- Plan for joint meeting with Ad Hoc Group
- CRR Fund Subcommittee Update (15 min.)
- Review Action Items / Finalize January 14 meeting summary (10 min.)
- Set agenda for Mar. 3 FTC meeting
 - RCO Conference Presentation (dry run) (20 min.)
 - o LWD Presentation
 - o FHMP 2016 Update
 - o DAMW Update

Suggestion: Include a glossary of terms in all plans and reports.

Parking Lot / Potential Future Agenda Topics

- Create an FTC Mission statement
- Tagging fall Chinook juveniles from the Upper Cowlitz River basin.
- What to do about smelt potential future FTC presentation by the Cowlitz Tribe
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River

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Other Participants

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Joint Meeting with FTC and WDFW's Ad Hoc Committee: March 13 from 1 - 4 PM, Lewis County Public Services Building, in the large conference room, 2025 NE Kresky Avenue, Chehalis 98532. At this meeting we will review the initial ISIT model results (e.g., impact of recycling on production, stray rates, average escapement numbers, max. program sizes, etc.).

APR / Public Meeting Dates

- March 26 (pre-season workshop where we would listen to the public's issues)
- Apr. 23 (technical meeting where we would run through the data and present a draft hatchery production plan)
- TBD: Third meeting to explain what the program will be and why
- TBD: Fourth meeting in Morton in the autumn (as was done in 2014)

Announcements

 RCO Conference Abstract: Mark reported that he has yet to hear whether our abstract has been accepted for the conference. He will keep us posted. The LCFRB abstract has been received. WDFW through Eric Kinne has also submitted an abstract. Jeff Breckel is working to try to "clump" these similar topics together.

- Plan to Abandon Volitional Upstream Fish Passage: In response to FERC's order approving the FHMP Update, Tacoma has filed a request for a 6-month extension to file the plan (July 17, 2015). They are still awaiting NMFS approval for the Plan.
- Cowlitz HGMP Status: Tacoma and WDFW are co-authoring this document. The goal is to have it complete by the end of February. The changes include Tacoma in the activities and provide greater details including take tables. These changes do not constitute a change to the Plan that would require additional public review.
- Cispus River Adult Release Site MOU: Keith reported he is setting up a time to discuss the terms of the Special Use Permit with the Forest Service.
- 2015 CF Downstream Collection Plan / Status of NMFS Bi-Op: This plan has been out for review since November. Tacoma received the Bi-Op from NMFS on January 30. Mark L will post it to the FTC website.
- Developing scope for NMFS 5-Year Review: By the end of the week Keith will send out a draft scope for all to review. He welcomes feedback and suggestions. He has asked Ray Beamesderfer to list the strengths and weaknesses of various population designations. The write-up would include recommendations to NMFS on other population designations if we end up recommending changes for the Cowlitz.
- Lewis Co. Water / Sewer District 6 Update: Discussions are continuing. Tacoma and WDFW submitted a request for additional information and hopes to hear back by the end of this week. At that point WDFW and Tacoma will make recommendations regarding the amount of the insurance bond. The intent is for it to adequately cover the risk and not to be excessive.
- DAMW Update: There is no update this month as they have not met since our last meeting. This will not adversely affect the construction schedule. Tacoma plans to break ground this spring.
- Cowlitz Fish Facilities Manager Position: Mark explained that this position is now open continuously.
- The Cowlitz Tribe has contracted with Natural Systems Design and they have developed a 60% design for the Otter Creek Side Channel Habitat Restoration Project (across from the Cowlitz Trout Hatchery intake). They are seeking funding partners. The recent slide changes significantly the original design. Pat will keep us posted on this.
- The ladder shutdown is scheduled for February 24-26 at the Cowlitz Salmon Hatchery. If the work gets done earlier Tacoma will open it sooner. Mark Johnson has been informed of these dates.
- WDFW has a new Director, Dr. Unsworth (former Deputy Director from Idaho Fish and Game where he did a lot of work with wolves).

FTC Protocol Review

Presenter: Lyn

We reviewed the FTC protocols that were last updated in May of 2014. We added the new phone protocol that we successfully tried out at the last meeting. We reworded the protocol around encouraging participation in the meetings. We discussed how best to include the signatories who are not attending FTC meetings. Keith suggested we adopt a modified version of Robert's Rules of Order into our meeting protocol as this would make the meetings more efficient and help to codify decisions.

Next steps: Lyn will coordinate with Peggy and send out a track change version of the Protocols that takes into account the discussion at today's meeting. We will continue this discussion at our March meeting.

Action Items:

• Keith will draft and distribute a description of how we might integrate Robert's Rules of Order without compromising the collaborative nature of this group.

FTC Membership

Presenter: Keith Underwood

All agreed that the strength of the FTC is in working together and moving forward together in a way that honors everyone's interests. We discussed the Draft Decision Document. We agreed to maintain the status quo regarding membership for a one-year period. We will review this document again at our next meeting.

Action Items:

- Mark will distribute a revised version of this Decision Document that includes the edits we agreed on at this meeting and also an expanded discussion of the roles of FTC members (in the Background portion of the document).
- Keith will check with Tacoma Power attorneys regarding the path forward for entities interested in signing the Settlement Agreement.

FTC Interaction with non-FTC Members: Plan March 13 Ad Hoc Group Joint Meeting

Presenter: Keith Underwood

This meeting is scheduled for March 13 from 1 - 4 PM, Lewis County Public Services Building, in the large conference room, 2025 NE Kresky Avenue, Chehalis 98532. At this meeting we will review the initial ISIT model results (e.g., impact of recycling on production, stray rates, average escapement numbers, max. program sizes, etc.).

This meeting was discussed at the last Ad Hoc Meeting on January 28 as an opportunity to provide / discuss information relative to the 2015 APR process prior to the FTC making decisions.

Potential discussion items:

- Role of the FTC (include goals and constraints).
- Go through each of the populations and ask the Ad Hoc Group what their goals are (as long as they don't impact our ability to recover fish).
- Where can they (Ad Hoc members) put their resources to improve fisheries in a way that is win-win?
- Focus on lower river programs.
- Recognize that this may be the first of several joint meetings.

Meeting Protocol:

- This meeting would be tightly facilitated. Everyone gets a card and holds it up to signal a desire to talk and the facilitator recognize each person to speak in a way that ensures balanced participation.
- We want to ensure we are talking with them and not "at" them.

Action Items:

• Cindy to find out what species they would like us to focus on at our meeting on March 13 and their specific goals (range of opinions on number of days the fishery should be open along with catch rates) for those species. Share this information at the March FTC meeting so we can ensure we build an agenda that is relevant and meaningful for all.

Plan for March 26 APR Public Meeting #1

Presenter: Mark LaRiviere

This initial public meeting will be held at Centralia College. Our hope is that this can be a meeting of substance that lays the foundation for working together in a collaborative manner. Anticipated topics include:

- Steelhead Recycling expectations for 2015
 - Acknowledge the strong desire to increase the recycling program
 Discuss stray rates, etc.
- Spring Chinook size of release and how we are operating the program
- Fall Chinook Net Pen Program for 2015
- ADA site plans
- Other?

Potential meeting handouts:

- Notes from the joint FTC / Ad-Hoc meeting
- Cindy's handout on surplus fish

The content of this meeting will be shaped by the ISIT data interpretation meeting and also discussions from the Ad-Hoc Joint meeting. We may want to invite a member of the The Ad-Hoc Group to provide some introductory remarks. Cindy could discuss the results of the joint meeting between the FTC and the Ad Hoc Group.

Draft Agenda Topics:

- 1:00-1:15 Welcome, Introductions, Review Agenda Review Meeting Protocols, Meeting Goals
- 1:15-3:45 Goals, Constraints and Opportunities for:
 - Spring Chinook
 - Fall Chinook
 - Coho
 - Summer Run Steelhead
 - Winter Run Steelhead
 - Cutthroat

3:45-4:00 Wrap up / Next Steps Set additional meeting date?

The second meeting is scheduled for April 23. This will be the first of two *Annual Project review* meetings. Another meeting will be held in early summer to discuss the data from the M&E program and their use in the ISIT model. A fourth meeting will occur in the fall regarding the upper Cowlitz River issues.

Review of 2011 FHMP Presenter: Mark LaRiviere

Mark L walked us through a PowerPoint outlining the contents of the "2011 FHMP Update". At our last meeting he encouraged all to continue to become familiar with the document (posted on the FTC website). We will discuss the "2016 FHMP" at our May meeting.

Action Items:

- Tacoma will also develop a plan and schedule for completing the 2016 FHMP and present it for feedback at our May meeting.
- All to review the FHMP and become familiar with it and identify potential issues and things to possibly change.

How do we consider extra-FHMP Studies and Usage of the Cowlitz Complex?

Presenter: Keith Underwood

There are outside interests that want to use the Cowlitz Complex (Tacoma, WDFW, NGOs, the Ad Hoc Group, etc.). Keith observed that the FTC doesn't currently have a process to consider these types of activities especially as they impact the primary population at the hatchery which is spring Chinook.

We need to know the objectives and outcomes of any proposed studies that would involve additional use of Cowlitz Hatchery facilities. Keith also pointed out how activities outside the scope of the FHMP may adversely affect hatchery operations (there may be unintended consequences). Our M&E program measures how we are doing at meeting our goals as set by the HSRG. This is different from a targeted research study.

Keith suggested that we agree on our current priorities so we can respond to outside requests in a clear and consistent manner. These priorities can be included in the FHMP and also the APR process. We agreed to address these priorities (as a more micro level) as we work through the 2016 FHMP. It was suggested that, in the meantime, we turn down any and all requests for extra-FHMP use of the hatchery.

Action Item:

• Mark to draft a list of priorities for all to consider.

CRR Fund Project Evaluation Process

Presenters: Pat Frazier and Peggy Miller

The CRR Fund Subcommittee has not met since our last meeting. We reviewed the Draft Decision Document to integrate LCFRB's TAC in the project review and evaluation process (in an advisory role). There were questions and differing assumptions around the funding of the administrative costs incurred by the TAC. We will continue this discussion at our next meeting after gathering more information as outlined in the action items below.

Action Items:

- Pat to see if he can get specific costs associated with LCFRB's administrative review process.
- Mark to check on language in the CRR Plan regarding funding for administrative support.
- Pat to draft an MOA between LCFRB and Tacoma.
- Pat to reconvene the subcommittee where they will begin to define the technical basis for applying for projects. This process will be open and transparent.

Steelhead Integration – NOR Broodstock Presenter: John Serl and Mark Johnson

Mark explained they will soon start collection of NOR broodstock for the UCR and Tilton populations. They are considering the possibility of cryo-preservation of milt from the males at the weir to alleviate any timing concerns. The metric would be whether it produces viable offspring at the same rate as in a hatchery. They have two more weirs this year than in previous years so they might be getting more fish this year. They do not to spawn any HORs prior to April 1.

WDFW plans on proceeding with 1 in 10 fish from the weirs according to the plan. They are still waiting for the early winters to go away. All agreed that this is worth continuing to explore. We want to minimize our impacts. We are trying to integrate at a 30% rate.

Next Steps: WDFW will discuss the protocols for the cyro-genetic process.

2014 Mayfield Downstream Fish Passage Study Presenter: Mark LaRiviere

Mark walked us through a PowerPoint that highlighted the survival rates of various fish populations on a reach-by-reach basis.

Action Item:

- Mark to bring a draft proposal of how to proceed for the 2015 study plan to our March meeting. Test for potential operational changes such as more water or running attraction pumps on different schedule.
- Mark to email out the Draft Report for all to review
- All to review the Draft Report and be prepared to discuss at our next meeting. Contact Mark with any questions.

Draft Decision Document: CF Dam 2015 Smolt Study Method

Presenter: Keith Underwood

Keith distributed Draft Decision Document 2015-3 that Matt prepared for all to review and consider. It proposes not to do radio tagging at CF Dam. We will consider this at our March meeting.

Action Item

• All to review this document and be ready to make a decision on it at our next meeting.

Review / Approval of January 14, 2014 Meeting Summary and Action Items

Presenter: Lyn

The January meeting summary was approved with minor edits, pending approval by NMFS attorney who attended the last meeting by phone and has not yet reviewed the notes.

Action Item

• By February 6 Lyn to coordinate with Michelle and send out proposed final meeting summary from January 14, in track changes as needed.

Meeting Evaluation

- Started 3 min. late and got out late
- Another enjoyable meeting extremely collaborative
- From now on, start promptly at 9:00 regardless of who is in the room.
- Appreciated the chocolate

Handouts

- Draft February 3, 2015 FTC meeting agenda
- Decision Documents: 2015-1, 2015-2, 2015-3
- FTC Draft Protocols, in track changes
- FHMP Proposal 2015 Annual Project review (APR)
- Table of Contents 2011 FHMP
- Agenda from January 28 Cowlitz Ad-Hoc Meeting
- Preliminary Information re: 2014 Sumer Steelhead Recycling on the Cowlitz River, by John Serl and Mark Johnson
- PowerPoint Presentation: Cowlitz Fisheries & Hatchery Management Plan
- PowerPoint Presentation: Results from the 2014 Mayfield Dam Juvenile Bypass Smolt Survival Study
- January 14, 2015 FTC meeting summary

Potential March 3 Meeting Agenda Items

- Welcome / Announcements (30 min.)
- Plan for March 13 Joint Meeting with Ad-Hoc Group (2 hours)
- Plan for March 26 Public Meeting (45 min.)
- FHMP: Modeling Update and M&E Plan (30 min.)
 - Review Table 3.17: Hatchery Production
- Decision Document 2015-2: FTC Membership (30 min.)
- Decision Document 2015-1: CRR Fund Process Use of LCFRB TAC (20 min.)
- Review / Revise Meeting Protocols (30 min.)
- Decision Document 2015-3: Not to Radio-Tag at Cowlitz Falls (20 min.)
- Suggested Approach for 2015 Downstream Fish Passage Study Mayfield (30 min.)
- Review Action Items / Finalize February 3 meeting summary (10 min.)
- Set agenda for Apr. 7 FTC meeting
 - o RCO Conference Presentation (dry run) (20 min.)
 - o Debrief of March 13 and March 26 meetings
 - Implications for next APR Public meeting
 - FHMP 2016 Update Process
 - o LWD Study Update (20 min.)
 - o DAMW Update
 - Plan for April 23 APR Public Meeting
 - o Decision Document: Approach for 2015 Mayfield D/S Fish Passage Study
 - CFD 2015 Fish Collection Efforts
 - CF Northshore Collection Facility

Suggestion: Include a glossary of terms in all plans and reports.

Parking Lot / Potential Future Agenda Topics

- Create an FTC Mission statement
- Tagging fall Chinook juveniles from the Upper Cowlitz River basin.
- What to do about smelt potential future FTC presentation by the Cowlitz Tribe
- Standards and conditions for outside parties to join the FTC
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WDFW WDFW Technical Advisor to WA Dept. of Ecology WA Dept. of Ecology NMFS NMFS Tacoma Power Tacoma Power Tacoma Power Technical Advisor to Tacoma Power Technical Advisor to Tacoma Power Tacoma Power Tacoma Power Tacoma Power PDSA Consulting

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- June 3 or 4 (public to decide at Apr. 23 meeting): Third meeting to explain what the program will be and why
- Sept. 15, 16, or 17 (public to decide at Apr. 23 meeting): Fourth meeting in Morton

Announcements

- The 2014 Mayfield survival report will be posted on the FTC website for a 30-day review. It will also be emailed out to all.
- On Jan 29, 2015 FERC issued an order granting an extension of time to City of Tacoma to file plan to discontinue the Upper Cowlitz Basin Productivity Plan until July 17, 2015.
- HGMPs: Cindy reported that WDFW has incorporated edits suggested by Tacoma Power. The HGMPs will be submitted on March 13.
- Scope of NMFS 5 Year Review: Keith explained that Ray Beamesderfer has submitted a proposed SOW to Tacoma to review. Keith is seeking a landscape approach that would include recommendations and justifications to NMFS on other population designations if we end up recommending changes for the Cowlitz. Michelle announced that NMFS has issued a Federal Register Notice on the 5-Year Status Review, requesting comments by May 7.
- Lewis Co. Water / Sewer District 6 Update: Discussions are continuing. Tacoma and WDFW have received the additional information they requested and are now considering an appropriate amount for the insurance bond.
- Monika has been brought on as a project employee for the next two years. She is
 in the Communications Group and has been detailed to the Natural Resources
 Department. The majority of her time will be on the Cushman Project. She will
 take over the responsibilities that have been assumed by Tom Santee (including
 the Cowlitzfish.net website.) Welcome Monika!
- New Technical Rep: Carol Serdar will be attending these meetings as a technical rep to WA Dept. of Ecology. Welcome Carol!
- CF North Shore Collector: Matt explained bids for the construction of the collector were open last week and a contractor has been selected. The kick-off (pre-construction) meeting will be set near the end of the month.
- Lou Ellyn Jones will retire the end of March. We wish her well. Mark has been in touch with her replacement, Mark Celedonia, who is looking forward to representing USFWS at these meetings.

Proposed Mayfield Operational Changes

Presenter: Todd Lloyd and Leah Marquez-Glynn

Tacoma is currently experiencing the lowest snowpack on record with forecasts for very little precipitation over the next few weeks. There is literally no snowpack at 4K ft. and White Pass has the second lowest snowpack on record. The entire basin is sitting at 35-40% of average snowpack. Tacoma Power has been monitoring snowpack across the whole season. During the last rain event they took proactive measures, getting permission from the USACOE (Corps) to impound water 5' above the flood control

curve. They are now 23 ft. above where they usually are this time of year (historic normal elevation). They have requested permission to exceed the flood level by another 5' and are awaiting a reply from the Corps.

If we maintain the 5K cfs discharge, there is a very low chance of reservoir refill. Reduction below 5K has been done in previous years (illustrated in a table within the handout). A full reservoir provides more options to manage for better fish habitat.

They distributed a handout listing two different Mayfield outflow alternatives for this spring and asked for feedback on which would be preferred from a fish perspective. The handouts included elevation charts showing Mossyrock reservoir elevation probabilities for each of two alternatives:

- 1. Employ a step-down approach reducing to 4,100 cfs in March, 3,100 cfs in April, and 2,600 cfs in May and June; or
- 2. Reduce to 3,100 now and hold

Discussion included how the step-down approach provides the most stability and maximizes the habits now available for the fish. With this approach, if things improve from a precipitation standpoint, we may not end up having to drop the elevation all the way down to 2,600 cfs.

The other approach includes reducing flows to 3,100 cfs with the idea they could maintain those flows through the March - June run-off season. Typically the minimum drops to 2K cfs July 1 – Oct. 1 when it gets back up to 3,500 cfs.

Weekly pulsing (fish transport) flows are required by the license. The flows provide artificial pulses weekly throughout the migration season. For 12 hours, the flows are at 120% of the previous week's flow. There are no data indicating whether fish are benefiting from these flows (faster migration out of the basin). Previous research showed that most NORs need only about 2-7 days to get out of the basin.

The FTC agreed to go forward with the step-down approach. The next question was whether to drop to 4K cfs with or without the transport flows. It was suggested that in an effort to save water due to concern for low water resources, it might be prudent to suspend the pulsing flows, especially since there are no data on the effectiveness of the flows. It was also observed that an absence of justification is not necessarily a negative correlation. We discussed possibly changing the frequency of the flows to a bi-weekly basis. Tacoma would like to have the water savings and also wants to make good databased decisions. Keith pointed out that screw traps are going into the river this year and might allow us to gain some data on the effectiveness of the pulsing flows.

Flow reductions would negatively affect side channel habitats, creating a reduction in this habitat. Mark L cited the Otter Creek Side Channel (across from the Trout Hatchery) which stays wetted at 3,100 cfs and starts to close off at flows of 2,500 cfs.

To be conservative it may be good to assume we will have another dry winter this year. With climate change this type of event will likely occur more frequently. Todd explained what we are currently experiencing is a weather phenomenon (not due to climate change). There is an expectation of very little inflow coming into the reservoir over the season. If it continues to be very dry we would be starting the next water year 60-70% below normal. That's why we want to refill the lake now to the extent possible.

One of Tacoma's requirements is to refill the reservoir for recreation. Meeting nonpower priorities (recreation, fish, and cultural resource protection) are the first priority for this basin. In Riffe Lake functional boat ramps require an elevation of 750' or so (28 ft. below max). They aim to keep the reservoir level above 767' for the recreation season. They try to start there with the expectation that they will be losing elevation through the summer.

Decision: We agreed to go forward with the step-down approach, using 4K cfs as the minimum (not the average) and to maintain the weekly pulsing flows.

Action Item:

• Mark to send out weekly updates from Todd and Leah starting March11.

FHMP: Modeling Update / Review Table 3.17 on Hatchery Production

Presenter: Mark LaRiviere

Mark explained that the Annual Project Review (APR) is a component of the FHMP. It is where we are using an adaptive management approach, using data collection to calculate NOR populations of fish in the Lower Cowlitz River. We are operating the hatchery within the confines of recovery efforts (HSRG criteria). The subgroup met with Lars Mobrand of DJ Warren and Associates on February 27 to get familiar with the latest version of the ISIT model. Mark walked us through some tables in the model which had been populated with the latest data based on a 5-year running average. Given the huge amounts of data, the ISIT model this year is divided into two separate files: one for Chinook and one for coho and steelhead.

The 650K is the annual cap for hatchery production out of the Cowlitz facilities. This is a negotiated limit that we program to each year as our annual target.

The FTC suggested edits to the hatchery production table layout in order to make it more transparent and easier to understand.

Action Item: Mark to make suggested edits and convene another teamlet meeting by the end of the week. Members to include Mark, Keith, Cindy, Jim, and Pat.

Plan March 13 Ad Hoc Group Joint Meeting

Presenter: Cindy LeFleur

Cindy explained the solicitation for new members of the Ad Hoc Group is closed. New members may not be selected in time for this meeting on the 13th. Members of this group are interested in steelhead recycling, steelhead programs, and the Mayfield net pens. Keith reported they would like to see 750K lbs. of fish in the hatchery. They want up-river acclimation ponds for 100K lbs. of fish. They see the pre-smolts (in acclimation ponds) as separate from the 650K production cap at the hatchery.

The language in the SA article on the difference between a "limit" and a "cap" is not clear. It is important to communicate this as clearly as possible to the Ad Hoc members at the meeting on the 13th from 1 - 4 PM, Lewis County Public Services Building, in the large conference room.

With this meeting we hope to establish a dialogue with the Ad Hoc members. Maybe we could begin by asking them what they want out of steelhead compared with spring Chinook. We could use a Parking Lot to list ideas brought up during the meeting that warrant future discussions. Perhaps we could wait to discuss particulars at a subsequent meeting.

When Cindy requested what they would like to see in terms of meeting topics they said:

- Steelhead recycling (2% stray buffer?)
- Mayfield net pens
- 650K cap net pens upriver / acclimation ponds
 - o Pre smolts
 - Clarify language explain floors and ceilings. Which numbers can change and under what criteria?
 - Possible to do some acclimating at the facility?
- ISIT Model
 - Introduce the model
 - List all of the model inputs
 - o Discuss constraints and how to deal with uncertainties
 - Credit explanation?
 - Are we invoking credits? Why or why not?
- Plan to abandon volitional upstream passage
 - o Up to 750K
 - Need language on this

Perhaps in this initial meeting we can capture what they want for various species and then meet with them again after the initial APR public meeting and summarize what we heard and how we can respond. We will do this in an open and transparent manner. We want to be careful not to raise expectations for things we can't deliver. These discussions will be informational – not decision making. This input, along with the diversity of the FTC will give rise to good decision making.

Draft Agenda:	
1:00 – 1:20	Welcome / Introductions
	Review purpose: Informational
	Meeting ground rules
1:20 – 1:50	Review list of topics identified by Ad Hoc Group
	Gain consensus on the order of items to be discussed and how
	much time to devote to each; also that items not covered will be
	first to be covered at next meeting
1:50 – 2:50	Begin discussion of topics
2:50 - 3:30	What programs are they proposing?
	What are their species-specific goals?
3:30 - 4:00	Review / Feedback on Draft Agenda for March 26 Public Meeting
	Ad Hoc Member Volunteer for opening remarks?
	Evaluate the meeting / Define next steps, incl. next meeting date

Meeting Protocol:

- This meeting will be tightly facilitated to allow for balanced participation. Everyone gets a card and holds it up to signal a desire to talk and the facilitator recognizes each person to speak in a way that ensures balanced participation.
- Facilitator will also take notes.

Logistics:

- Sign-in sheet
- Cards (to signal when want to speak)
- Coffee? Water?
- Lyn will bring chocolates
- Handout: Agenda

Action Items:

- John to email to FTC the steelhead recycling paper that was provided to the Ad Hoc Group. (This was distributed at the February FTC meeting.)
- Mark and Lyn to finalize agenda and send out to all.

Plan for March 26 APR Public Meeting #1

Presenter: Mark LaRiviere

This initial public meeting will be held at the Museum, following the Cowlitz River Fisheries & Watershed Conference. The start time will be 6:00pm. Our hope is that this can be a meeting of substance that lays the foundation for working together in a collaborative manner.

Mark distributed a draft agenda for the initial public meeting. Anticipated topics include:

- Welcome Speakers (15 min)
 - o TP Rep
 - Ad Hoc Group Rep

- o WDFW Rep
- Introductions (10 min)
 - Cowlitz FTC members
 - o TP and WDFW staff
 - Ad Hoc Group Members
- Update from Conference (15 min)
- Public Process (15 min)
 - APR Meetings (Choose between June 3 and 4)
 - Morton Meeting: Choose between Sept. 16, 17, 18
- Ad Hoc Reps to summarize Joint meeting on March 13 (15 min.)
- Public Input (30 min.)
- Opportunities and Desires (15 min)
 - Spring Chinook
 - o Summer run steelhead
- Annual Project Review process (10 min. PowerPoint)
- Wrap up, Plan for Apr. 23 meeting (5 min.)

Potential meeting handouts:

- Settlement Agreement (on CD?)
- APR PPT presentation
- FAQs
- Glossary of acronyms as handout
- Cindy's handout on surplus fish

The content of this meeting will be shaped by the ISIT data interpretation meeting and also discussions from the Ad-Hoc Joint meeting.

We discussed the possibility of using polling equipment to ask specific questions that can help to inform management decisions. We could also do a larger online poll that includes conservation groups as well to get broader representation.

Action Items:

- Mark to update agenda and send out to all
- Monika to investigate using polling tool
- Lyn to work with Mark to prep for meeting (logistics, etc.)

DECISION DOCUMENTS:

FTC Membership

Presenter: Keith Underwood

All agreed that the strength of the FTC is in working together and moving forward together in a way that honors everyone's interests. We discussed the Draft Decision Document. We agreed to maintain the status quo regarding membership for a one-year period.

Decision: This was approved.

Action Items:

- Mark will distribute a revised version of this Decision Document that includes the edits we agreed on at this meeting and also an expanded discussion of the roles of FTC members (in the Background portion of the document).
- Keith will check with Tacoma Power attorneys regarding the path forward for entities interested in signing the Settlement Agreement.

CRR Fund Project Evaluation Process

Presenters: Pat Frazier and Keith Underwood

We reviewed the Draft Decision Document to integrate LCFRB's TAC in the project review and evaluation process (in an advisory role). There were questions and differing assumptions around the funding of the administrative costs (~\$5,000) incurred by the TAC. This amount includes food (~\$2K, printing ~\$1,700, and administration).

As there were still questions about how these costs will be funded, we agreed to continue this discussion at our next meeting after gathering more information as outlined in the action items below.

Action Items:

- Pat to draft an MOA between LCFRB and Tacoma.
- Keith to send out a decision document saying that the FTC wants the LCFRB TAC to review projects for the CRR Fund. To that end they will work together to see how to fund this effort.
- Pat to reconvene the subcommittee where they will begin to define the technical basis for applying for projects. This process will be open and transparent.

Draft Decision Document: CF Dam 2015 Smolt Study Method

Presenter: Matt Bleich

Matt distributed Draft Decision Document 2015-3 suggesting that we move forward evaluating the Smolt Collector at Cowlitz Falls Tailrace in 2015 using PIT and VIE and not using radio telemetry to evaluate the Smolt Collector. This is based on knowledge gained in 2014. Matt is considering 50' guide nets attached to each side of the entrance.

Decision: This was approved with minor edits.

Action Item:

• Mark to post the final version.

Suggested Approach for 2015 Mayfield Downstream Fish Passage Study

Presenter: Mark LaRiviere

Mark reminded all the final report for 2014 was just received this week so he will replace the one on the website. He explained there are two major issues:

- Coho hold up at the barrier dam (for almost a week at a time)
- Issues with Chinook survival through the by-pass this year (at less than 28%)

There were no issues with steelhead. NMFS would like to sit down with Tacoma and talk through the various study results – maybe do this on a field trip.

Action Item:

• Mark to bring a decision document on this to the April 7 meeting.

Review / Approval of February 3, 2014 Meeting Summary and Action Items

Presenter: Lyn

The February meeting summary was approved with minor edits and will be posted for public review.

Meeting Evaluation

- Started 3 min. late and got out late
- Another enjoyable meeting extremely collaborative
- From now on, start promptly at 9:00 regardless of who is in the room.
- Appreciated the chocolates.

Handouts

- Draft March 3, 2015 FTC meeting agenda
- Decision Documents: 2015-1, 2015-2, 2015-3
- Riffe Lake Minimum Flow Regime Spring 2015, dated March 3, 2015
- February 3, 2015 FTC meeting summary

Potential April 7 Meeting Agenda Items

- Welcome / Announcements (30 min.)
- FHMP 2016 Update Process (15 min.)
- Update on Mayfield Operations (30 min.)
 - Decision on pulsing / transport flows
- Debrief March 13 Joint Meeting with Ad-Hoc Group and March 26 Public Meeting (60 min.)
 - Plan for April 23 APR Public Meeting
- FHMP: ISIT Model Update (Teamlet) (45 min.)

- Review Table 3.17: Hatchery Production
- Decision Document 2015-1: CRR Fund Process Funding for LCFRB TAC (20 min.) (15 min.)
- CF Northshore Collection Facility (15 min.)
- CFD 2015 Fish Collection Efforts (10 min.)
- Decision Document 2015-4: Approach for 2015 Mayfield Downstream Fish Study (30 min.)
- LWD Presentation (20 min.)
- Approval of Changes to FTC protocols (10 min.)
- Responding to requests for Extra-FHMP Studies (10 min.)
- Review Action Items / Finalize March 3 meeting summary (10 min.)
 - Set agenda AND LOCATION for May 7 FTC meeting (10 min.)
 - FHMP 2016 Update Process
 - Plan to Abandon Volitional Upstream Passage
 - Update on Mayfield Operations
 - Debrief of Apr. 23 APR Public meeting
 - o ISIT Model
 - o FHMP M&E
 - CFD 2015 Fish Collection Efforts
 - Responding to request for Extra-FHMP Studies
 - Decision Document: 205 Mayfield Downstream Fish Passage Study Approach
 - CF Northshore Collection Facility
 - o Decision Document: Approach for 2015 Mayfield D/S Fish Passage Study
 - RCO Conference Presentation (dry run) (20 min.)

Suggestion: Include a glossary of terms in all plans and reports.

Parking Lot / Potential Future Agenda Topics

- Create an FTC Mission statement
- Tagging fall Chinook juveniles from the Upper Cowlitz River basin.
- What to do about smelt potential future FTC presentation by the Cowlitz Tribe
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River

Cowlitz Hydroelectric Project FERC No. 2016 Cowlitz Fisheries Technical Committee Final Meeting Summary April 7, 2015, 9:00 AM – 3:00 PM

Mayfield Office

Participating Members

Mark LaRiviere Michelle Day Paul Sparks Cindy LeFleur Jim Pacheco

Other Participants

Shannon Wills (by phone) Ed Meyer (by phone) Carol Serdar (by phone) Debbie Carlson Peggy Miller Mark Johnson John Serl Keith Underwood Matt Bleich Leah Marquez-Glynn Pat Frazier Ann Weckback Lyn Wiltse Tacoma Power NMFS Trout Unlimited WDFW WA Dept. of Ecology

Technical Advisor to the Yakama Nation NMFS WA Dept. of Ecology BPA WDFW WDFW WDFW Tacoma Power Tacoma Power Tacoma Power Tacoma Power Technical Advisor to Tacoma Power Technical Advisor to Tacoma Power PDSA Consulting

Remaining 2015 FTC Meeting Dates

May 5 (Cowlitz Salmon Hatchery), June 2, July 7, Aug 4, Sept 1, Oct 6, Nov 3, Dec 1

Joint Meeting with FTC and WDFW's Ad Hoc Committee

April 23 from 1 - 4 PM, Rm 111 of the Walton Science Center at Centralia College.

ISIT Model Teamlet Meeting

The next meeting will be April 21 at Salmon Hatchery at 9 AM.

APR / Public Meeting Dates

- Apr. 23: 6-8 PM in room 121 of the Walton Science Center, Centralia College. This will be a technical meeting where we would run through the data and present a draft hatchery production plan.
- June 3: 6-8 PM in Centralia to explain what the program will be and why.
- Sept. 17: Meeting in Morton (upper Cowlitz issues). Details TBA.

Announcements

 Scope of NMFS 5 Year Review: Keith explained that they are working on figuring out what NMFS needs to have by May 7 (when comments are due) – will be a placeholder for an argument recommending changes for the Cowlitz.

- LWD 10-year study: Mark reported this study is out for review with comments due April 28.
- Keith reported he met with Lewis County Commissioner Gary Stamper and they
 agreed to send a joint letter to FERC indicating that Lewis County is willing to
 wait a year (as outlined in the FTC decision document) before continuing the
 conversation about their involvement. Tacoma will pursue setting up a meeting of
 all SA signatories (policy level) later this year to celebrate the settlement and also
 discuss protocols to possibly establish FTC membership.
 - Keith will follow up with Pat McCarty about the request for FTC members to review a draft of the letter before it is sent to FERC.
- The RCO Conference agenda has been published. Pat's abstract was accepted, John Serl's was rejected and Mark L's is in limbo.
- Lou Ellyn Jones retired the end of March. Mark Celedonia is the new USFWS rep for these meetings.
- Mark Johnson is retiring and this is his last FTC meeting. We thanked him for his many years of service and wished him well in the next chapter of his life.

Update on Mayfield Operations

Presenter: Leah Marquez-Glynn

Tacoma proposed staying at 4,100 cfs for now with the warning that we are heading into the runoff season. They plan to lower flows to 3,100 cfs in May and 2,600 cfs in June. Currently, snowpack is at 49% of average and the reservoir refill probability is at 75%. They want to stay below 770' by May 1 to minimize the likelihood that they would have to spill during the runoff season.

Action Items:

- Mark to continue to send out weekly updates from Todd and Leah.
- Mark will post the handout from this meeting the morning of April 8.

Debrief of Public Meetings

Presenter: Lyn / All

FTC / Ad Hoc Group Joint Meetings: Since the last FTC meeting on March 3 we have met with the Ad Hoc Group twice, on March 13 and March 26. Both meetings were well attended. Ground rules were established and we have begun working through issues that Ad Hoc Group members submitted to Cindy for discussion. Information is being shared regarding the issues and constraints related to Cowlitz fisheries. While no decisions are made at these meetings, they provide the FTC the opportunity to demonstrate to Ad Hoc members how their input was used to inform FTC decisions. The intent is to consider interests when possible while fulfilling the mission of the FTC. The frequency of these meetings has yet to be determined. The next meeting will be on April 23 at the Walton Science Center Classroom 111 at Centralia College from 1-4 pm. Initial Public Informational Meeting: This meeting was lightly attended (~10 members of the public) though it was well advertised. Nearly all of the FTC was in attendance as were several members of the Ad Hoc group. The meeting was also very cordial and lots of information was shared. Tacoma successfully deployed an electric polling device to measure the demographics and interests of those in the room. Tacoma will post to its public website responses to the questions raised at the meeting. Tacoma is looking into purchasing this electronic polling system and they will be able to better understand various stakeholder groups by coding the responses accordingly.

Action Items:

- Mark to post the responses to the public, pending FTC approval.
- Mark to ensure Monika posts the results of the polling data for public review. Include a disclaimer about the limited small sample size.

HPMP: Modeling Update / Review Table 3.17 on Hatchery Production

Presenter: Mark LaRiviere

Mark reviewed a couple of versions of the Hatchery Production Table and explained the headings that were changed according to the suggestions at the last meeting. The table showed little change in what is being proposed this year compared to last year.

the group suggested edits to the table.

The subgroup will meet again at the Cowlitz Salmon Hatchery at 9 am on April 21.

Action Items:

- Mark to make suggested edits and send out the edited table to all. Subgroup members to include Mark, Keith, Cindy, Jim, and Pat. Others are welcome.
- All to consider what story we want to tell at the APR meeting. The data we present should be easy to understand and relevant to the story.

Plan for April 23 APR Public Meeting

Presenter: Mark LaRiviere

This initial APR meeting will be held at Centralia College as it was last year. The start time will be 6:00 PM. Our hope is that this can be a meeting of substance that lays the foundation for working together in a collaborative manner.

Suggestions for this meeting included taking two or three populations and explaining:

- 1. Which are the relevant data
- 2. How we collect the data
 - a. Include uncertainties surrounding the data
- 3. How we use the data in the ISIT Model
 - a. Include how it affects FTC decision making
 - Show various scenarios with different species being prioritized 650K lb. cap and choice between species
 - i. For steelhead:

- 1. Use two different examples and show how inputs impact the result
- 2. Show several options and out-of-basin straying
- c. Describe how it fits into the 5-year rolling average and how we need to be conservative until the 5-year rolling average is fully established

Potential meeting handouts (some were distributed at the March 26 meeting):

- Settlement Agreement (on CD?)
- APR PPT presentation
- FAQs
- Glossary of acronyms
- WDFW handout on surplus fish (?)

Action Items:

- Mark to update draft agenda and send out to all
- Lyn to work with Mark to prep for meeting (logistics, etc.)

Plan to Abandon Volitional Upstream Passage / Status of Productivity Testing

Presenter: Mark LaRiviere

Mark walked us through a flow chart describing the process around abandoning volitional passage, including the action the FTC took four years ago when looking at productivity testing for steelhead – only NOR could be measured in terms of adult returns. They checked to see if, for each adult that went upstream, more than one adult would return in the future (productivity level of >1.0, using a 5-year rolling average). Only three years after implementing this, the data indicated this result in the upper basin was not possible. We are currently in the recolonization phase. The fishery has been open but the harvest opportunities in the Tilton have been with coho and fall Chinook. Action Item:

• Cindy to email out relevant section of the FHMP and her thoughts for all to consider in order to further this conversation.

Approach for 2015 Mayfield Downstream Fish Study

Presenter: Mark LaRiviere

Mark distributed a handout describing the following 2015 study approach. Tacoma is working with HTI to develop a scope of work for the study.

- 1. Focus on both coho and Chinook, forego steelhead
- 2. Repeat 2014 study design
- 3. Use PIT tags instead of VIE tags
- 4. If possible introduce two new variables:
 - a. All four pumps on continuously
 - b. Regular secondary drawdowns
- 5. Conduct routine juvenile Chinook pathology / smolt condition evaluations

6. Investigate the possibility of turning off the barrier dam electrical grid during the coho outmigration period. (Risk: adult summer steelhead will jump above the barrier dam and may potentially spread pathogens such as IHN to the hatchery.)

Chinook will be the primary species of focus and if they can fit in coho as well they will.

Action Item:

• Mark to send out SOW asap and send out draft discussion document for our May meeting.

Large Woody Debris (LWD) Presentation

Presenter: Mark L

Mark walked us through the goals and activities related to this study. Objectives include resuming LWD (> 20' in length & 10" across at chest height), migration to the lower river, monitoring including safety issues, and creating a record of consultation. They make wood available to habitat projects throughout the Cowlitz River basin.

Review / Approval of March 3, 2014 Meeting Summary and Action Items

Presenter: Lyn

The March meeting summary was approved with minor edits and will be posted for public review.

Meeting Evaluation

- Started 5 min. late and got out late
- Another enjoyable meeting extremely collaborative

Handouts

- Draft April 7, 2015 FTC meeting agenda
- April 6, 2015 Riffe Lake refill probability graph
- Cowlitz Hatchery Fish Production Table
- FTC 2015 APR Document prepared by Monika
- Public Informational Meeting Questions from March 26 meeting
- 2009 Protocol for questions / issues raised at public meetings requiring follow-up
- Mayfield Dam Downstream Fish Survival Study 2015 Study Approach
- Flowchart: Upstream Fish Passage Barrier, Mayfield and Mossyrock
- March 3, 2015 FTC meeting summary

Potential May 5 Meeting (at the Cowlitz Salmon Hatchery) Agenda Items

- Welcome / Announcements (30 min.)
- FHMP 2016 Update Process (60 min.)
 - Incl. 650K cap for recovering natural populations, harvest allocation concepts (for each population: yes/no, how much, sideboards)
- Update on Mayfield Operations (15 min.)

- Debrief April 23 Joint Meeting with Ad-Hoc Group and Public Meeting (60 min.)
 Plan for June 3 APR Public Meeting
- FHMP: ISIT Model Update (Teamlet) (45 min.)
 - Review Table 3.17: Hatchery Production
- Decision Document 2015-1: CRR Fund Process (10 min.)
- Decision Document 2015-4: 2015 Mayfield D/S Fish Study Approach (30 min.)
- Decision Document: Annual Marking Protocols (10 min.)
- Plan to Abandon Volitional Upstream Passage / Productivity Testing (30 min.)
- Approval of FTC Protocols: Incl. Decision Process and responding to questions raised at public meetings (20 min.)
- Review Action Items / Finalize April 7 meeting summary (10 min.)
 - Set agenda for June 2 FTC meeting (10 min.)
 - FHMP 2016 Update Process
 - FTC Role: Technical vs. Policy
 - Update on Mayfield Operations
 - Debrief of June 3 APR Public meeting
 - o ISIT Model
 - FHMP M&E (?)
 - CFD 2015 Fish Collection Efforts (?)
 - Responding to request for Extra-FHMP Studies
 - CF Northshore Collection Facility Update (?)

Parking Lot / Potential Future Agenda Topics

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the Upper Cowlitz River basin
- What to do about smelt potential future FTC presentation by the Cowlitz Tribe
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River

Cowlitz Hydroelectric Project FERC No. 2016 Cowlitz Fisheries Technical Committee Final Meeting Summary May 5, 2015, 9:00 AM – 2:00 PM

Mayfield Office

Participating Members

Mark LaRiviere Michelle Day Paul Sparks Cindy LeFleur Jim Pacheco

Other Participants

Shannon Wills (by phone) Ed Meyer (by phone) Carol Serdar (by phone) Debbie Carlson Peggy Miller **Eric Kinne** John Serl Keith Underwood Matt Bleich Monika Sundbaum Leah Marquez-Glynn Chris Juchau Hen Ho Pat Frazier (by phone) Ann Weckback Lyn Wiltse

Tacoma Power NMFS Trout Unlimited WDFW WA Dept. of Ecology

Technical Advisor to the Yakama Nation NMFS WA Dept. of Ecology **BPA** WDFW WDFW WDFW Tacoma Power Tacoma Power Tacoma Power Tacoma Power **Tacoma Power Tacoma Power** Technical Advisor to Tacoma Power Technical Advisor to Tacoma Power PDSA Consulting

Remaining 2015 FTC Meeting Dates

June 2, July 7, Aug 4, Sept 1, Oct 6, Nov 3, Dec 1

Joint Meeting with FTC and WDFW's Ad Hoc Committee September timeframe (TBD)

ISIT Model Teamlet Meeting

The next meeting will be April 21 at Salmon Hatchery at 9 AM.

APR / Public Meeting Dates

- June 3: 6-8 PM in Centralia to explain what the program will be and why.
- Sept. 17: Meeting in Morton (upper Cowlitz issues). Details TBA.

Announcements

 Scope of NMFS 5 Year Review: Keith explained that they are working on figuring out what NMFS needs to have by May 7 (when comments are due) – will be a placeholder for an argument recommending changes for the Cowlitz.

- Cindy to touch base with WDFW folks re how to get a message to NMFS on plans to revisit population designations in the Lower Columbia.
- Cispus River Adult Release Project: On track for signing MOA and submitting a special use permit by May 15 with goal of a June 1 bid for the project. LCPUD will get a special use permit from Tacoma and LCPUD will be their agent when they build the release site (USFS property with Scenic Rivers and NEPA requirements).
- Cowlitz HGMP Coverage: All have been submitted. Based on discussions at the Joint Meeting with the Ad Hoc Group, Eric will be submitting an amendment for two or three of the programs. Take tables need to be updated with the maximum numbers. Tacoma will meet with NMFS to get agreement on the best path forward. Tacoma will send these out for a quick review when they are close to complete.
- Mayfield Net Pens: There are 1.6 million in Mayfield now. Approximately 300K will be released on station. They are hoping to get the CWT group to the net pens tomorrow. Unfortunately, they are seeing signs of C. shasta (second year in a row) in pens 4 and 5. They will be shipped up to the Salmon hatchery and be put in the raceways. There is ongoing funding for this program. There is concern in having incidents of disease in the water upstream of the hatchery intake. This might also affect our downstream passage studies. Would Riffe Lake be a better location for the nursery than Mayfield? Original discussions were to have the net pens up in Mayfield near the arm of the Tilton.
- Winter Steelhead Programs: The hatchery program goal is 655,141. GOALS MET!
 - 555,664 HOR + 110,124 NOR = 665,788 eggs on hand. They are having high egg losses on the NOR program (100% losses on the cryo-preserved milt). The Upper Cowlitz River program goal is 153,598. GOALS MET! Eggs on hand are 159,792 and program goal is met. It took an additional 15 HOR females crossed with 15 NOR males to make the program. The Tilton River Program goal is 62,480. The Tilton program was a little short due to fecundity issues. Will make it up with NOR eggs. They were not successful with cryo-preserving milt. To date eggs taken is 37,050 green eggs with 3 NOR females and males remaining. With the 3 NORs included the program will reach 46,000 eggs short program 16,500 eggs. If we cross the remaining NORs with HOR we will a program of 65,000 eggs and make program.
 - But do we want to cross the program and stay NOR? The run is pretty much over on both the HOR & NOR adults. They will be spawning today (May 5).
 - Cindy to determine the integration rate on lower river program.
 - o John to provide details of the cryo-preservation efforts to Mark L.

CRR Subcommittee Update

Presenter: Pat Frazier

The subcommittee (Peggy, Pat, Paul, Michelle, and Mark) met again after a long pause. They discussed differences between the monitoring, program implementation, and administrative costs. They are awaiting further work on this from NMFS and TP after they discuss this. The subcommittee will meet again before our next meeting.

They started discussing the overall plan and how best to proceed with the plan as a whole. E.g., do an assessment for funding projects, spilt the funds, how does this fit in the TP budget cycle, etc. The subcommittee plans to bring some suggested goals and species priorities for FTC consideration. Included is the Plan to Abandon Volitional Passage. They plan to bring various topics to the FTC one-by-one and present them to the FTC for feedback / concurrence. The end result would be to create a guidance document – CRR Program Document. This would include more detail than what we need to submit to FERC - the CRR Implementation Plan and the Plan to Abandon Volitional Passage. Within 6 months of FERC approval, the FTC will approve the process for project solicitation and selection.

Is there nexus to these funds for satellite acclimation facilities in the upper basin (likely temporary and for seeding / imprinting purposes)? This is important to discuss before submitting any documents to FERC. We hope to build that flexibility into the guidance document. This document will lay out the steps that will lead to a decision on what programs to fund and how they lead up to program goals.

We need to keep in mind that the purpose of the CRR Fund is to benefit the production of listed fish. We also need to keep in mind we have only a few months to submit the documents to FERC and we also want to get the CRR Fund up and running.

Action Item:

• Keith: Work with NMFS about the details of CRR

Update on Mayfield Operations

Presenter: Leah Marquez-Glynn

Tacoma proposed staying at 3K cfs for the rest of this month and possibly drop to 2,500 cfs on June 1. It appears likely that they may be able to stay at 3K cfs through the end of June. Doing the fish transport flow reduces the refill probability number a little. That number is currently at 52%. They are trying to guard against the low probability scenarios and they have been successfully eliminated. Pulse flows are currently 12 hours once a week. There was agreement by the FTC to reduce these to max capacity of a single unit (~3,500 cfs). We are currently at 770' reservoir elevation. They are aiming to get to 778'. For purposes of the projections shown on the charts, they are calling 775' full pool. There are cultural and recreational considerations for lake elevations in addition to aquatic resource considerations.

Action Item:

• Mark to continue to send out weekly updates from Leah.

Debrief of Public Meetings

Presenter: Lyn / All

FTC / Ad Hoc Group Joint Meetings: Since the last FTC meeting on March 3 we have met with the Ad Hoc Group three times, on March 13, March 26, and April 23. All meetings were well attended and discussions resulted in mutual understanding of various perspectives and constraints around the capacity and operations of Cowlitz fish facilities. While no decisions are made at these meetings, they provide the FTC the opportunity to demonstrate to Ad Hoc members how their input was used to inform FTC decisions. The intent is to consider interests when possible while fulfilling the mission of the FTC. The next meeting will likely occur in the fall. In the meantime, the Ad Hoc Group and FTC are continuing to meet on their own. Perhaps we can open the next meeting up to the public.

April 23 APR Meeting: Attendance was very light. In addition to Ad Hoc Group members and FTC members, there were 2 attendees plus reporter Buddy Rose. Stan Bartle shared some additional suggestions on how best to advertise for the next meeting on June 3. There were 38K views of the announcement on the flier board on the News Tribune and the Olympian. They also advertised in the Reel News and several other places. Boat launches and blogs were suggested in addition, as well as radio and boosted Facebook ads. It seems these public meetings are well attended when Cowlitz fishermen are either upset about something or really want something.

Upcoming June 3 APR Meeting: We need to talk to the fishermen in terms of understanding what action could produce what range of return sizes. We could discuss the returns to the Cowlitz River and then show how many are getting by them because they are not being harvested. All of this is spelled out in Table 2-4 of the 2011 FHMP Update.

We discussed the pros and cons of walking through the ISIT Model at this meeting to explain what the program will be and why, including how input from the Ad Hoc Group and public was considered. Maybe we should just have a short presentation on where we are (no change from last year), and also summer run steelhead and the associated tagging program. Also discuss spring Chinook return – with over 7K as of today. Offer for anyone who wants to stay afterward to go through the ISIT model.

Note: Our FHMP process approved by FERC calls for 2 public meetings a year. We have been doing 4 meetings instead. We have flexibility in terms of how these meetings are structured.

Action Item:

• Mark to send out June 3 APR meeting agenda to all prior to our next meeting.

Decision Documents

Presenter: Matt Bleich and Mark LaRiviere

Annual Marking Protocols: Matt distributed the Decision Document for all to review. The document memorializes that we are not making any changes to the program from last year. This was approved by FTC members.

Mayfield 2015 D/S Fish Survival Study: The Decision Document represents a slight change from the last two years as we zero in on dealing with issues around the health of Chinook passing at Mayfield this year. This will establish a baseline on what condition these fish are when they enter the facility. The detailed SOW for HTI is nearly complete. Mark will send that out prior to our next meeting and then we officially will make the decision.

Action Items:

- Mark to distribute the SOW on Mayfield Downstream study to all when complete and we will decide on the Decision Document at our June 2 meeting.
- All to review the SOW and let Mark know ASAP if there are any red flags.

Initial Brainstorm of Topics ("Hot Buttons") for the 2016 FHMP

- Satellite rearing facilities
- Resident fish
- Harvest management
- Hatchery programs
- Mayfield net pens
- 650K lb cap
- Population designations
 - Fall Chinook in the Upper Cowlitz
 - One population fall Chinook?
 - On population winter steelhead?
- Objectives and goals
 - o License Article 6
- Marking
- CFFF Operations in HGMPs
- How to increase production at the hatchery
- How to increase hatchery survival
- Research needs
- Research needs
- How to increase the number of fish in recovery program
- CRR funding / implementation
- FHMP prescriptive vs. process
- How to rewrite / revise the FHMP document
- Engaging the public in an effective way
 - Simplify the document

• Plain language summary?

Action Item:

• All to review this list and consider what else should be added. We will discuss this at our next meeting.

ISIT Model Teamlet Report

Presenter: Mark LaRiviere

The subgroup met at the Cowlitz Salmon Hatchery on April 21. They tried to answer questions about how fall Chinook was being managed. They walked through the new ISIT model. It is not easy to work with because we lack the knowledge base. On May 12 WDFW staff will have a second training session from DJ Warren and Associates.

There was a discussion of maximum production under ESA at the last joint meeting with the Ad Hoc Group. Since then, Cindy and Eric ran the AHA model (within the ISIT tool) to come up with the following (making sure all the HSRG standards were met, including the PNI (Proportion of Natural Influence). The exercise was to see the maximum ESA limit that this program could grow to within the HGMP. Note: NMFS looks at the maximum and also the mechanisms to get there. The goal of running these models was to determine HGMP maximum limits (lower river).

Lower Cowlitz Fall Chinook:

- Assumptions:
 - Integration rate of 15% (vs. 30%): Would take longer for the natural environment to expand through the whole hatchery program.
 - NOR population of 3,400 (current average is ~ 2,800 for Lower Cowlitz)
 - Reduced productivity from 5.9 to 5.0 (adult to adult value)

Table 2.3 from 2011 update: Summary of minimum goals for fall Chinook, the pHOS is less than 30% and pNOB is greater than 30%. This was with a spawner abundance of 3,400.

- Integrated program could be 4.5 million + 2.4 million segregated
 - This would provide an additional 3.4 million

Action Items:

- Eric: During the training with DJ Warren discuss: What are our ESA limits with our current knowledge? If we still met the criteria and did additional production in satellite rearing facilities? When we talk about net pens in the lower river, we need to remember stray rates (e.g., if do new pen program for fall Chinook in the Lower Wallace).
- Eric: Run the AHA model again with a 30/30 scenario.

Lower Cowlitz Coho:

• Assumptions

- o 5% pHOS
- o 2 million segregated program for the Lower Cowlitz program
- Increase of 800K segregated for the Lower Cowlitz program
 - 978K integrated Upper Cowlitz continue as is with no increase

Lower Cowlitz Steelhead:

• No increases due to the size of wild winter population in the lower river

Lower Cowlitz Spring Chinook

• No limits because all the recovery is in the upper river (not an ESA issue)

Summer Steelhead Recycling: The FTC still has not made a decision on the stray rate. The last 2 years show .45 and 1.3% (for ave. of .9% which was also the stray rate from the USGS study) for the recycle stray rate for the last two years. Mara also did a stray rate for strays outside the Cowlitz combined and came up with a stray rate of 3.7% (went to the Toutle or the Kalama).

Maiden Stray Rate	Recycle Stray Rate	# Fish Recycled
2%	.5%	6,700
2%	1%	3,300
2%	1.5%	2,200
2%	2%	1,600
2%	4%	800

Note: The WDFW recommended approach is the bolded second row of the table.

Might weirs be influencing fish stray rate? Is it representative? Are we being conservative enough? The un-weired areas are being surveyed and strays are not being seen there either so it appears that we are being representative and conservative.

WDFW is comfortable using 2% for the Maiden Stray Rate. Cindy is also confident using 1% for the recycle stray rate which translates to 3,300 recycled fish which is double what it was last year, keeping the time period (mid-June to mid-August) and release point as was used in the study.

Keith suggested anchor (floy) tagging all the fish that would be recycled. This could be coupled with an angler-involvement voluntary program (with drop boxes) and there would be increased visibility on spawning grounds, etc. Tacoma will do some double tagging and fund the tagging. They might even offer a reward.

Action Items:

- Shannon to check with tribal leadership (Cowlitz and Yakama) about their concern about recycling.
- Eric to look for additional unused tags and coordinate with Tacoma.
- John to work with Mark to prepare a decision document for review at our next meeting.

• Mark to check with Clint on how to maximize loading capacity within safe limits.

Review / Approval of April 7, 2015 Meeting Summary and Action Items

Presenter: Lyn

The April meeting summary was approved and will be posted for public review.

Meeting Evaluation

- Started 20 min. late due to being at the Salmon Hatchery
- Got out 5 min. early
- Felt the tension between so much to do and honoring the timing of the agenda
- Another collaborative meeting

Handouts

- Draft April 7, 2015 FTC meeting summary
- Draft May 5, 2015 FTC Meeting Agenda
- May 4, 2015 Mossyrock Elevation Probability graph
- Updated Cowlitz Hatchery Fish Production Table
- Decision Document 2015-5: 2015 Mayfield Downstream Fish Survival Study
- Decision Document 2015-4: Coded Wire Tag Strategy Cowlitz Basin
- Cowlitz Complex Hatchery Program: 2015
- FTC Protocols Table prepared by Peggy

Potential June 2 Meeting Agenda Items

- Welcome / Announcements (30 min.)
- Final look at plans for June 3 APR meeting
- FHMP 2016 Update Process (60 min.)
 - Incl. 650K cap for recovering natural populations, harvest allocation concepts (for each population: yes/no, how much, sideboards)
- Update on Mayfield Operations (15 min.)
 - Last prep for June 3 APR Public Meeting
- ISIT Model Update (Teamlet) (45 min.)
 - Review Table 3.17: Hatchery Production
- Decision Document 2015-4: 2015 Mayfield D/S Fish Study Approach (30 min.)
- Decision Document: Summer Steelhead Recycling
- Plan to Abandon Volitional Upstream Passage / Productivity Testing
- Approval of FTC Protocols: Incl. Decision Process and responding to questions raised at public meetings (20 min.)
 - Include addition of subcommittee meeting dates and times being send out to all.
- Review Action Items / Finalize May 5 meeting summary (10 min.)
- Set Agenda topics for July 7 Meeting
 - o FHMP 2016 Update Process
 - FTC Role: Technical vs. Policy

- o Update on Mayfield Operations
- o Debrief of June 3 APR Public meeting
- o ISIT Model
- FHMP M&E (?)
- CFD 2015 Fish Collection Efforts (?)
- Responding to request for Extra-FHMP Studies
- CF Northshore Collection Facility Update (?)

Parking Lot / Potential Future Agenda Topics

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the Upper Cowlitz River basin
- What to do about smelt potential future FTC presentation by the Cowlitz Tribe
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River

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

June 2, 2015, 9:00 AM – 2:00 PM Mayfield Office

Participating Members

Mark LaRiviere Michelle Day Paul Sparks Jim Pacheco Tacoma Power NMFS Trout Unlimited WA Dept. of Ecology

Other Participants

Shannon Wills (by phone) Peggy Miller Eric Kinne John Serl Ed Meyer Keith Underwood (by phone) Matt Bleich (by phone) Monika Sundbaum (by phone) Ann Weckback Lyn Wiltse Technical Advisor to the Yakama Nation WDFW WDFW NMFS Tacoma Power Tacoma Power Tacoma Power Technical Advisor to Tacoma Power PDSA Consulting

Remaining 2015 FTC Meeting Dates

July 7, Aug 4, Sept 1, Oct 6, Nov 3, Dec 1

Joint Meeting with FTC and WDFW's Ad Hoc Committee September timeframe (TBD)

APR / Public Meeting Dates

- June 3: 6-8 PM in Centralia to explain the program.
- Sept. 17: Meeting in Morton (upper Cowlitz issues). Details TBA.

Announcements

- Scope of NMFS 5 Year Review: There will be a placeholder for an argument recommending changes for the Cowlitz.
 - Cindy to touch base with WDFW folks re how to get a message to NMFS on plans to revisit population designations in the Lower Columbia.
- Cispus River Adult Release Project: The special use permit was submitted to the USFS on May 15. The MOA between the utilities is in final review. It is currently unknown if it will be possible to construct the project this summer. The USFS engineer (Sarah Rockee) just gave drawings to LCPUD to put into the bid. The USFS did issue their NEPA determination. Things are progressing slowly.
- Cowlitz HGMP Coverage: We are trying to determine the maximum level of production possible for each species. Eric will follow up with Rich regarding spring Chinook.

- Mayfield Net Pens: All the fish have been moved back to the Cowlitz Salmon Hatchery (observed issues with low DO at the net pens). They all have left the hatchery in good condition. Their size was between 80 and 95/ lb. From a fish cultural standpoint it makes sense to reevaluate the program for next year.
- Salmon Recovery Conference: Mark, Pat, and Eric presented at the conference last week. The conference was well attended with a record 763 participants.
- Update on Mayfield Operations: Tacoma indicated they are still planning to maintain a minimum flow of 3,000 cfs through the end of June (given that the current elevation of 770 ft. provides adequate protection against event risks). There is a very low probability of refill, however Tacoma is comfortable that, at the current elevation, there is sufficient water to manage tail-risks. Weekly pulse flows will continue through the end of June. A drop to 2,500 cfs may occur – or not be necessary - on July 1. Mark will continue to send out weekly updates. Kudos to Tacoma Power on their proactive work on managing the reservoir in the midst of a low snowpack
- CRR Subcommittee: This subcommittee has not met since our last meeting. Action items are pending – Tacoma discussions with NMFS. They have committed to meet again before our July meeting.
- Cowlitz Rotary Screw Trap (RST): Mark reported it started fishing last weekend and is successfully catching NOR and HOR juvenile Chinook.
- The Ad Hoc Group met on May 22. Keith, Eric, John and Buddy Rose were in attendance. The rules of this group have always been that the meetings are open to the public and they can speak at the end of the meeting if they so choose. There was good attendance. The new members were there. It was a 2-hour introductory meeting.

June 3 APR Public Meeting

Presenter: Lyn / All

This meeting will be from 6-8pm in room 121 of the Walton Science Center of Centralia College.

Monika explained the extensive advertising being done in advance of this second meeting in the APR Process. We do not have demographic data indicating what proportion of the anglers on the Cowlitz are from Portland and Seattle. This is something to explore. We can target future ad campaigns accordingly. Monika indicated that her group is going to working on getting these types of data.

She also discussed the agenda for the meeting and her plan to use the voting tool again at the end of the meeting. Aims of the meeting include continued trust and relationship building and a presenting of materials that are interesting and relevant to participants. The meeting will include a final opportunity for public input. There will be a meeting survey at the end conducted via the ever-popular electronic polling tool.

We will host a separate workshop for those interested in exploring various scenarios through the ISIT Model. This will be announced at the end of the meeting on June 3 and

folks will be encouraged to sign up as this is a way to provide input into the 2016 FHMP Update. Note: We want to be careful that this workshop doesn't lead to any false expectations. There will be what-if scenarios and data that show what data were used for this year.

Michelle regretted that neither she nor Rich is able to attend the meeting tomorrow night. She can be available by email or phone if any issue is raised that required immediate response.

Action Item:

• All to attend the meeting if possible.

ISIT Model

Presenter: Mark LaRiviere

The subgroup has not met since the last FTC meeting. On May 12 WDFW staff attended a second training session from DJ Warren and Associates.

Mark walked us through the 2014-2015 Hatchery Production Plan: Changes in fish released due to implementation of the FHMP. The only significant change is in summer steelhead (up from 625K to 650K).

There was a discussion of maximum production under ESA at the last joint meeting with the Ad Hoc Group. Eric is working Rich on trying to get the maximum number we can use for individual stocks / populations. Since everything we are doing is based on a 5-year rolling average, there likely will not be much change from year to year. This is by design of the FHMP. This brings stability vs. having booms and busts.

Note: Shannon checked with tribal leadership (Cowlitz and Yakama) about their concern about recycling. She reported that the tribes are against recycling.

Action Items:

- Mark to prepare a list of ISIT Model inputs by population for distribution at the ISIT Model Workshop. Send this spreadsheet to members of the ISIT Model teamlet to review / QC (Eric, John, and Mara). Also consider posting link to M&E data so it is available to the public.
- Eric to continue discussions with Rich.
- Eric to run the AHA model again with a 30/30 scenario for Lower Cowlitz Fall Chinook. Does 30% integration rate limit your program?
- Mark to check with Clint on how to maximize loading capacity within safe limits.

2016 FHMP Update Process

Presenter: Mark LaRiviere

Mark walked us through a draft "strawman" that he created based on our brainstormed list of "hot buttons" at our last meeting. The 2016 Update is due to FERC in April of 2016. Tacoma proposes using the work that we are in the midst of refining for the update. Not all of the issues raised at the last meeting are addressed in the FHMP Update.

Questions / discussion: Is the FHMP a decision document or is it a way to get to decisions? Is there time in the next 10 months to complete a background write-up for each of these items? Can we use the write-ups that already exist in Ch. 5 (nutrient enhancement, off-station programs, productivity testing, Cowlitz trout hatchery, resident fish). We need to keep in mind that we are also working on two collectors and also the CRR fund. Are there certain issues on the list that should be addressed in a more immediate timeframe? For example, do we have enough information to say what we will do on net pens right now? Maybe we will have a better idea in two years. Satellite rearing: 2016 timeframe for a decision. Perhaps the timeframe would be 2018 for resident fish. Other issues we could address at a slower pace. We could approach this as a Work Plan.

The FHMP shall identify the following:

- Quantity and size of fish to be produced at Cowlitz Complex
- Rearing and release strategies for each stock, including adjustments to accommodate recovery of indigenous stocks
- Credit mechanism for production of high-quality natural stocks
- Plans for licensee-funded ongoing monitoring and evaluation
- A fisheries management strategy consistent with the priority objective of maximizing the natural production of wild indigenous fish stocks in the basin

Action Items:

- Mark will update the Strawman document to include background where it is available, sub-issues / debates within each issue, and also to add nutrient enhancement and will create a draft Work Plan for us to review.
- At the July meeting we will review each of these and decide what we need to do for each, and by when. We can write the FHMP to capture those decisions.

Decision Documents

Presenters: Mark LaRiviere, Matt Bleich and John Serl

Mayfield 2015 D/S Fish Survival Study: This Decision Document was reviewed at our last meeting. A few days after that meeting the SOW was send out. The study will be very similar to what was done last year. It deals with issues around the juvenile collection system with a focus on Chinook passing at Mayfield (had the lowest survival last year).

During the 15 week study period. They will be moving away from VIE to PIT-tagged fish which they will release all fish from the apex of the louvre bays into the downwell of the louvre bays. Acoustic tagged fish: There will be a paired release through the tailrace and also virtual releases to see what survival looks like through the juvenile collection system. A second hydrophone will be added at the end of the tailrace. At the counting house they will modify the protocol to ensure accurate detection rates. This will establish a baseline on what condition these fish are when they enter the facility.

We will also be testing under three different conditions this year:

- Baseline (two pumps for this time of year)
- All four attraction pumps on (independent of project operations). These have up to 500 cfs.
- Routine secondary separator drawdowns (emptying the secondary separator where juvenile Chinook were observed holding)

2,500 total Chinook will be included in the test. Of these, 2,250 will be PIT-tagged fish and 250 will have acoustic tags.

The 2015-5 Decision Document was approved with the additions agreed to.

2015 Summer Steelhead Recycling: The new version of this Decision Document included edits from John Serl. We will recycle steelhead up to 3,300 between June 15 and August 15. They are increasing the number of fish per load. The other change this year is floy tagging – some will be double-tagged. Each tag has its own unique number. Tacoma will be putting out collection boxes at the boat launches and flyers also to that effect, including where the tags can be made. A reward might be a good incentive.

The plan will be important as data could include distribution, catch rates, stray rates, etc.

The 2015-6 Decision Document for the plan was approved.

Action Items:

- Mayfield 2015 D/S Fish Survival Study: Mark to fill out the Decision and Justification box on the 2015-5 document and include more detail on the fish health study plan.
- Mark to send out an update on the fish genetics / health component to all.

Plan to Abandon Volitional Upstream Passage / Status of Productivity Testing

Presenter: Mark LaRiviere

We agreed to defer this discussion until our July meeting as Tacoma and NMFS have yet to meet to discuss this.

Action Items:

• Mark will request a second 6-month extension from FERC for this. Initial extension expired July 17.

FTC Protocols

Presenters: Peggy Miller and Keith Underwood

Peggy walked us through the updated comparison table including the addition suggest at our last meeting about notification of the time and location of subcommittee meetings.

Role clarification:

- Facilitator is responsible for the flow of the meeting and adequate participation. This works well for consensus decision making. Most concerned with getting to consensus.
- Chair is concerned with timelines. Oversees approval of an action and make sure it is reflected correctly. Most concerned with making a decision. Should this role rotate? The licensee is the responsible person for making sure the decisions are being made in a timely manner. "Decisions are to be made in collaboration with the FTC." Rotate the Chair? If so, over several meetings.

Keith walked us through the flowchart he made to illustrate the new decision making protocol he would the FTC to try out.

- #5: Add how decisions are addressed when someone is unable to attend a meeting. Maybe include something like TP will actively pursue a response from those not in attendance immediately following the meeting. Silence is not a sign of concurrence.
- Note: Add language on Decision Documents about consequences of a delay to the decision? A well-written decision document would convey a sense of urgency.
- Proposed decision making process. In reviewing the proposed flow chart that Keith put together, Keith explained that the Chair never can state the motion. It must come from a member of the group. This process organizes the decision document and ritualizes it so everyone knows we are in a decision mode. Dissenters are invited into the center of the discussion because they are the ones that would invite an alternate path forward.
- Not all decisions require a decision document. The proposed revised version of Robert's Rules of Order is formalizing something we are already doing. It may help us to clarify decisions.

We agreed to try out this new protocol along with the Chairman role for three months, beginning in August.

Action Items:

- Peggy to send out updated version of meeting protocols to Ann and then to all.
- All to review them and be ready to discuss at the next meeting.

Review / Approval of May 5, 2015 Meeting Summary and Action Items

Presenter: Lyn

The May meeting summary was approved with minor edits and will be posted for public review.

Meeting Evaluation

• Another collaborative meeting!

Handouts

- Draft May 5, 2015 FTC meeting summary
- Draft June 2, 2015 FTC Meeting Agenda
- May 27, 2015 Mossyrock Elevation Probability graph
- Decision Document 2015-5: 2015 Mayfield Downstream Fish Survival Study
- Decision Document 2015-6: 2015 Summer Steelhead Recycling
- Updated FTC Protocols Table prepared by Peggy
- Draft Decision Protocol Flowchart prepared by Keith

Potential July 7 Meeting Agenda Items

- Welcome / Announcements (30 min.)
 - CFD 2015 Northshore Collection Facility Update
 - Update on Mayfield Operations
 - How to share / post FTC meeting summaries
- Debrief of June 3 APR Public meeting
- FHMP 2016 Update Process (2 hrs.)
- FTC Role: Technical vs. Policy (set up the discussion for August)
- ISIT Model
- CFD 2015 Fish Collection Efforts
- Responding to request for Extra-FHMP Studies
- FTC Summaries Public Access and Use
- Review Action Items / Finalize June 2 meeting summary (10 min.)
- Set Agenda topics for August 4 Meeting
 - o FHMP 2016 Update Process
 - FTC Role: Technical vs. Policy
 - Role of Chair vs. Facilitator (and beginning of 3 month trial)
 - o Update on Mayfield Operations
 - o ISIT Model
 - Plan to Abandon Volitional Upstream Passage / Status of Productivity Testing

- FHMP M&E
- o CFD 2015 Fish Collection Efforts
- Responding to request for Extra-FHMP Studies
- CF Northshore Collection Facility Update

Parking Lot / Potential Future Agenda Topics

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the Upper Cowlitz River basin
- What to do about smelt potential future FTC presentation by the Cowlitz Tribe
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River

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

July 7, 2015, 9:00 AM – 2:00 PM Mayfield Office

Participating Members

Mark LaRiviere Michelle Day Jim Pacheco

Other Participants

Peggy Miller Eric Kinne John Serl Carol Serdar Matt Bleich Debbie Carlson Mike Kohn Kirk Kessler (by phone) Monika Sundbaum (by phone) Toby Kock (by phone) Pat Frazier Ann Weckback Lyn Wiltse Tacoma Power NMFS WA Dept. of Ecology

WDFW WDFW WA Dept. of Ecology Tacoma Power BPA Lewis County PUD Tacoma Power Tacoma Power USGS Technical Advisor to Tacoma Power Technical Advisor to Tacoma Power PDSA Consulting

Remaining 2015 FTC Meeting Dates

Aug 4, Sept 1, Oct 6, Nov 3, Dec 1

Joint Meeting with FTC and WDFW's Ad Hoc Committee September timeframe (TBD)

Next Public Meeting Date

Sept. 16: Meeting in Morton will be moved to Packwood (perhaps at the Senior Center). Upper Cowlitz issues will be discussed. Details TBA.

Announcements

- Scope of NMFS 5 Year Review: WDFW sent an agency letter to Scott Rumsey (NMFS) stating that in Region 5 they will be reviewing and assessing population designations of multiple species of salmon and steelhead in the Lower Columbia. They look forward to working with NMFS on this as part of the 5-year review.
- Cowlitz HGMP Coverage: NMFS and Tacoma will meet to discuss a number of issues including future coverage for the CFFF. Eric will continue discussions with Rich (Cowlitz Spring Chinook production, on- and off-station).
- CFD 2015 Northshore Collection Facility Update: Construction is underway. Kirk walked us through some photos showing working platform that is being built and where the spoils from the construction will be stored. So far they are on

schedule. Kirk will look into an additional silt screen above the tailrace discharge chute.

- Update on Mayfield Operations: Tacoma will, beginning in August, fluctuate the elevation of the Mayfield pool by an additional 1.5'. This means utilizing a 5' band in Mayfield (possibly going as low as 420'). These actions will help to stabilize the PNW power supply and the market (meeting peak demands in the mornings and evenings). Tacoma will send a letter to residents, campers, businesses in the area to explain the anticipated impacts and ask for feedback from these groups on how they are impacted.
- Riffe Lake Refill: Tacoma Power is finished with its refill probability weekly forecast graphs. They are currently at 764' elevation. They have passed the highest point (~770') they are going to be at for the summer. There will not be substantial inflows until the fall. The good news is there is lots of very cold water at Riffe Lake.
- CF Tailrace Collector: Matt sent out an email last week on this describing how Tacoma had been working toward a July 6 installation of the Cowlitz Falls Tailrace Collector. The collector is designed to operate safely at elevations of up to 764'. As the elevation has dropped early this year, the tailrace collector won't be safe to operate so they have decided not to install it this season. This is also a matter of human safety and fish health as the warm temperatures in Riffe Lake are not conducive to handling fish. Tacoma intends to delay 2015 activities for this collector to 2016. Note: Data are still being collected at all six original transects.
- Cowlitz Fish Facility Manager: This position will soon be re-opened. If anyone knows of a good candidate, please call Mark L.
- 2015 Annual Upstream Fish Passage Report: The newest version of this report is posted to the FTC website for review.

Cispus River Adult Release Site Presenters: Toby Kock / Mike Kohn

Mike Kohn introduced the subject by reading RPM 6b from the Biological Opinion. The aim is to "Determine and develop, if applicable, the best location for adult fish release sites. The location, layout, and facilities of each site will be subject to NMFS approval after consultation with WDFW and USFS." Then Toby reviewed with us the 2015/16 draft study plan to evaluate the Cispus River Adult Fish Release Structure. The focus is on coho as they would be released first (in October). The steelhead evaluation would occur in the spring. Some confounding is expected.

The proposal assumed the structure will be constructed and operational this summer or early fall. They welcome any suggestions for changes to the plan, including staffing requirements and sample size for steelhead. Timing and condition of the fish will impact when the evaluations occur. The 4-sample approach will be treated as a baseline, and modified, as recommended by the FTC if injuries occur. Michelle pointed out that Ed is okay with the design as long as the edges are smooth.

Next steps: Lewis County and BPA will meet later in July to discuss budgets, and take FTC feedback into consideration.

Debrief of June 3 APR Public Meeting

Presenter: Monika / All

This meeting was held from 6-8pm in room 121 of the Walton Science Center of Centralia College. It appears that the additional advertising including radio was effective. In addition to the eight FTC members, the two representatives of the press, and the five members of the Ad Hoc Group, there were five interested community members.

Monika discussed the results of the voting tool again at the end of the meeting. Aims of the meeting included continued trust and relationship building and a presenting of materials that are interesting and relevant to participants. The meeting constituted a final opportunity for public input as part of this year's APR process.

We discussed whether it made sense to do three APR public meetings next year since the ones this year were so lightly attended. Tacoma Power is only required to do two public meetings for the APR process each year. There was a suggestion for next year that we host two meetings, perhaps preceded by an Ad Hoc / FTC meeting that the public would be invited to attend (bringing the total number of meetings to three). This would also give the public an opportunity to see how the FTC works cooperatively with the members of the Ad Hoc.

Action Item:

- Mark will work with Monika on an official response to all questions and bring it to the FTC for review.
- Monika will send a link to the polling results to Mark to distribute to all.

ISIT Model Workshop

Presenter: Mark LaRiviere

Bob, Paul, and Ann were the only ones who initially took Mark up on his offer to host a separate workshop for those interested in exploring various scenarios through the ISIT Model. Since then additional FTC members have also indicated interest. Bob requested that Mark put all of the inputs for all the populations on a single sheet. Mark put together a draft of this, separated by population, for whatever data we have toward the 5-year rolling average. Mark asked for WDFW review and feedback on this sheet in hopes that it can be a useful tool for our 2016 APR. Mark invited interested FTC members to attend the workshop. The date has not yet been set.

Action Item:

• Mark to check with Bob Reid on some possible dates and then send them out to FTC members to select which works best. Assume a 4-hour session.

FERC Extension Request: Productivity Testing

Presenter: Mark LaRiviere

FERC has given Tacoma until the end of July to file the plan to end the upper Cowlitz River basin productivity test. We reviewed the letter and there was a suggestion to make clear in the letter that this is not part of the FHMP. We agreed that is made sense to change the six-month extension request to 9 months to allow for the holidays.

Action Items:

• Mark to edit the letter according to FTC feedback and send to FERC.

FTC Role (Technical vs. Policy)

Presenter: Mark LaRiviere

We discussed how this group makes decisions based on science to the extent possible. Yet, there are also policy issues that come into play. For example, when we choose how many fish to produce of each species, there is both a technical and policy decision. When this occurs the FTC member gets the policy guidance from their policy folks and brings it back to the group.

Ann reminded all that this topic came up originally during discussions of technical reps being added to the FTC and Keith raised the idea of possibly creating a separate policy team consisting of signatories to the Settlement Agreement.

<u>Decision</u>: There was a motion and a second to continue as we have been operating with respect to policy vs. technical decisions with no need to set up a separate policy team. As no one disagreed, the motion carried.

Decision Document: 2015-7: 2015 APR – Hatchery Production

Presenter: Mark LaRiviere

Mark briefly reviewed the decision document that he sent out last week regarding the 2015 APR Hatchery Production Plan. The intent is to memorialize the Hatchery Production Table that we already approved to use in the FHMP. He welcomed feedback:

- Add a footnote that says includes all fish from the hatchery and those transferred off-station.
- Clarify if talking about pounds or numbers.
- Show total number of fish produced.
- Justification: Program sizes consistent with HSRG guidelines and continues to support existing fisheries.

Suggestion for next year: When the new data are plugged into the ISIT Tool, be sure to review it at an FTC meeting to ensure common understanding before sharing it with the public.

Action Item:

• Mark will update the decision document and send out to all.

CFD 2015 Fish Collection Efforts

Presenter: John Serl

John reported total smolt collection is fifth highest on record with two months to go. Last week they caught 4,500 smolts (half Chinook and half coho).

We looked at the catch vs. 2001 (highest collection season to date and also a low-water year). The table shows we started off on par with 2001 and it dropped off mid-year. The temperature inside the facility is not up to 22 degrees Celsius now – significantly above normal even for a low water year.

They have been PIT-tagging fish to assess mark-recapture efficiency. Matt's crew has been downloading the receivers and creating the reports. FCE is 81% for steelhead and 85% for coho. These are all-time highs. 2013 was also a good year. There was great rejoicing!

They collected 175K coho in total and 11K Coho. They have collected 13K total Chinook, including 1,800 yearling Chinook. Chinook seem to tolerate water temperatures up to 21 degrees, with mortalities starting at 22 degrees. The warm weather is affecting the timing of the runs. Chinook were observed in June this year vs. the usual mid-July.

All collection numbers have now dropped off. CFD will continue to operate at night as long as possible given the low flows.

Action Item:

• All to let John know if they would like a copy of John's weekly reports.

FTC Protocols

Presenter: Peggy Miller

We reviewed the near-final version of the protocols. Our protocols are a living document. We will review these again in approximately a year or sooner if the need arises.

All were reminded that we will begin the 3-month trial with Keith being the Chair of the meeting. As Chair, he will never be able to state a motion. He will oversee the approval of an action and make sure it is reflected correctly. During those months we will also try out the decision making flowchart.

Additional Edits:

• Add review is at least annual.

- Add to flowchart that after 3 rounds of disagreement without resolution, the decision stands and the dissenter is invited to document his/her disagreement (consistent with Sussman Model).
- Correct Mark's cell phone number.

Action Item:

• Lyn will make the final edits and send out the protocols to all.

2016 FHMP Update Process

Presenter: Mark LaRiviere

Mark walked us through the revised draft "strawman" listing key issues that need to be addressed in time to meet the April FERC filing deadline. He reminded everyone that for the 2011 Update process, we were left with some unresolved issues. We need to decide the best approach to minimize the likelihood that this will repeated.

Considerations:

- The best approach may be to tackle the issues one at a time.
- Do we tackle them ahead of time or fold them into the FHMP process which includes a public review?
- Do we ask FERC for a one-year extension because of our relationship with the Ad Hoc Group and the discussions with NMFS about changing some of the population designations? This would allow adequate time to drill into some of these issues that may result in significant changes to the plan. It would also allow ample time for public review.
- Are there major changes we want to make to the FHMP? If we ask for an extension we need to be clear about whether we are simply revising an existing plan or if we are creating a whole new plan.
- Should we make any changes to ISIT Model decision rules (tied to HSRG guidelines or other policy decisions)?
- Do we need a tool that is more user-friendly for us and for the public than the ISIT? If not, then it is important to find a better way to explain the ISIT tool to all.
- The existing FHMP document gives us some nice sideboards and context for discussion of key issues with interested stakeholders.

Action Items:

- Mark to review the list of agenda topics defined by members of the Ad Hoc Group and to ensure they are included in the strawman list.
- All to:
 - Review the strawman from today's meeting and let Mark know if anything is missing (Ch. 6 issues).
 - Review M&E and decision rules.
 - Provide feedback on the plan itself and whether you think it can be tweaked or if there should be a wholesale revision.

• Mark to suggest at August meeting TP's recommendation for the scope of the update and how to proceed: What needs to be addressed and by what method.

Recycling Study Design

Presenter: Mark LaRiviere

Mark reported they started collecting broodstock this week, but there will be fewer than 300. Cindy has not received any additional input from the public. We are recycling everything we get. This is what the public had requested at our meetings.

These fish are tagged with Floy tags and we have been getting a pretty good response rate of tags getting turned into the receptacles - starting with the very first release. What we don't know with this study is the non-return rate. A question was raised about how we can accomplish the study objectives without knowing the non-return rate. We won't know how many were actually caught by anglers. We will know how many of the tags were returned but not the distribution. The data we are getting are anecdotal. While we have no statistical creel on summer steelhead, we can compare the data recovered in the creel vs. tags returned and then in two years get catch records. This is an initial study. We can refine it over time, including a more thoughtful and coordinated effort about what data we can collect and what that will mean. How can we make the study a more effective tool in helping us to better manage fish? The public will want to know the results of the data they helped to collect and how it is being used.

They will continue recycling until mid-August. The total return to the hatchery this year is low relative to the last 5-year average, but not low compared to our long-term experience. We will have no problem meeting our broodstock numbers.

Action Item:

• Mark will update the "plan" (not "study plan") and make edits that account for the FTC feedback and send it out prior to our next meeting.

Review / Approval of June 2, 2015 Meeting Summary and Action Items

The June meeting summary was approved with minor edits and will be posted for public review.

Meeting Evaluation

- Best meeting yet!
- Covered a lot of ground
- Had frank discussions that were very productive

Handouts

- Draft June 2, 2015 FTC meeting summary
- Draft July 7, 2015 FTC Meeting Agenda
- Decision Document 2015-7: 2015 Annual Project Review Hatchery Production

- Updated FTC Protocols Table prepared by Peggy
- WDFW Cowlitz Fish Facility Weekly Report for June 26 July 2, 2015: Week 11
- Draft FERC Letter: Request for extension for filing the plan to discontinue the upper Cowlitz River basin productivity test

Potential August 4 Meeting Agenda Items

- Welcome / Announcements (30 min.)
 - CFD 2015 Northshore Collection Facility Update
 - How to share / post FTC meeting summaries
- FHMP 2016 Update Process
- Update on Mayfield Operations
- Start 3-monthTrial with Chair Role (Clarify role of Chair vs. Facilitator)
- ISIT Model Workshop
- FHMP M&E Annual Report
- CFD 2015 Fish Collection Efforts
- Requests for Extra-FHMP Studies
- FTC Summaries Public Access and Use
- Review Action Items / Finalize June 2 meeting summary (10 min.)
- Set Agenda topics for September 1 Meeting
 - o Plan to Abandon Volitional Upstream Passage
 - o DAMW
 - o FHMP 2016 Update Process
 - FHMP M&E Annual Report
 - o APR
 - CFD 2015 Fish Collection Efforts
 - o CF Northshore Collection Facility Update

Parking Lot / Potential Future Agenda Topics

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- What to do about smelt potential future FTC presentation by the Cowlitz Tribe
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River

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

August 4, 2015, 9:00 AM – 2:00 PM Mayfield Office

Participating Members

Mark LaRiviere Mark Celedonia Cindy Le Fleur Jim Pacheco Paul Sparks

Other Participants

Peggy Miller Eric Kinne John Serl Carol Serdar Debbie Carlson Mike Kohn Shannon Wills (by phone) Keith Underwood Kirk Kessler (by phone) Monika Sundbaum (by phone) Pat Frazier Ann Weckback Lyn Wiltse Tacoma Power USFWS WDFW WA Dept. of Ecology Trout Unlimited

WDFW WDFW WA Dept. of Ecology BPA Lewis County PUD Technical Rep for the Yakama Nation Tacoma Power Tacoma Power Tacoma Power Technical Advisor to Tacoma Power Technical Advisor to Tacoma Power PDSA Consulting

Remaining 2015 FTC Meeting Dates

Sept. 1, Oct. 6, Nov. 3, Dec. 1

Joint Meeting with FTC and WDFW's Ad Hoc Committee

Sept. 16 at Salmon Hatchery from 1-4pm.

Next Public Meeting Date

Oct. 14, at Packwood Senior Center, 6-8pm. Upper Cowlitz issues will be discussed.

Announcements

- Cowlitz HGMP Coverage: Keith met with Michelle July 17 about the best strategy to cover Tacoma's direct take in the HGMP process. He will send an email to that effect to Michelle and Rich. He is hopeful that NMFS will agree on how to do this for Tacoma's Cushman project as well.
- We all extended a hearty welcome to Mark Celedonia of USFWS. This is the first meeting he has been able to attend since replacing Lou Ellyn Jones and taking over all of her FERC projects. He is now the point person for the Cowlitz project. Originally from the east coast, he is happy to call the west coast his home and has been here for 17 years.

- CFD 2015 Northshore Collection Facility Update: Kirk shared some recent photos of the construction for this facility. He was happy to report that things are moving along on schedule. Construction is moving along nicely for upstream and downstream components. He has addressed the silt fence concerns expressed by Carol at our last meeting.
- ISIT Workshop: Mark L reported that he has met with Ian Coulter of Mt. Hood Environmental, whom the Ad Hoc Group has engaged as a consultant. Mark shared with Ian the updated ISIT model, manual, and data entry sheets that we use. Additionally, Mark has made himself and Dan Warren available to answer any questions and provide any assistance with the model. No date has yet been set for the workshop. Bob Reid is the one who originally requested this workshop. Now it should include Ian as well.
 - Next Steps: Set up a workshop for the FTC facilitated by WDFW. The timeframe would be sometime in December. Then take steps to host the workshop with the Ad Hoc group in January / February of 2016. If Bob contacts Mark in the meantime, requesting a sooner date, Mark will work to coordinate a workshop date that works for all.
- Recycling Study Design: Mark L revised the study based on comments received and posted it. He has heard no further comments since then. On average the fish seem to require 10 days to return to the hatchery. 14% of the tags have been returned so far. We don't know what this means. There are no summer-run steelhead being surplussed this year. The drought does not seem to be affecting this study on the Cowlitz. Temperatures are only slightly warmer. Flow and visibility in the mainstem is typical.
 - Next Steps: The draft study results will be out by November 15 (before the first public meeting).
 - We need a design for a recycling study plan in place by early next year.
- Annual Side Channel Monitoring Report: Tacoma requested a 2-month extension on this so it is now due October 1, 2015. This new date better aligns with the availability of the data needed for the report. Tacoma and WDFW will get together in September to discuss.
- Cowlitz Fish Facility Manager: This position has been reopened and will close August 14, 2015.
- WFDW Fish Transfer to Trout Hatchery: Cindy explained that due to the drought situation WDFW has been seeing a lot of mortality due to various warm waterrelated diseases. They recently transferred 33K coho from the North Toutle and 450K from Grays River into the trout hatchery where Tacoma has rearing space with water limitations (recycled water with steelhead and coho above them). There may be additional requests from other surface water hatcheries in the future. The impact this will have on straying is unknown.
 - Next Steps: Cindy will provide more information on the fish populations being housed in the hatchery.
- CRR Fund: Pat reported that the teamlet met since our last meeting. Mark, Pat, Paul, and Peggy were able to attend (on August 27). Pat briefed Shannon on the meeting afterward and she will continue to keep Bob Rose updated on their progress. They made good progress and will have some draft sections of the

plan ready to review by the next meeting. These will be brought forward as decision documents.

Decision Document: 2015-7: 2015 APR – Hatchery Production

Presenter: Mark LaRiviere

Mark briefly reviewed the decision document that he edited according to feedback received at our last meeting regarding the 2015 APR Hatchery Production Plan. The intent is to memorialize the Hatchery Production Table that we already approved to use in the FHMP.

We reviewed the edited Decision Document and agreed to approve the Decision Document with the addition of adding a statement to the background section of the document, noting this was discussed with the Ad Hoc Group before being presented to the general public.

Action Item:

• Mark: Make final edit to the Decision Document and post it to the website.

FHMP Annual Report / M&E Report Presenter: Mark LaRiviere

By August 21, 2015 the annual report will be sent to the FTC. Mark explained that FERC has issued new requirements:

- FERC wants to see the methods included in the M&E Report. This will be a simple cut-and-paste.
- The status of developing the three juvenile rearing facilities must be recorded.
 - Mark and Cindy will include this on the Cowlitz Complex Annual Tacoma Power / WDFW Meeting agenda this Friday. (Perhaps the CFFF raceways could be considered.)
- File plan to end Upper Cowlitz River basin productivity testing (awaiting NMFS approval).

The report is due to FERC October 31, 2015.

CFFF 2015 Fish Collection Efforts

Presenter: John Serl

John reported they are nearly complete with fish collection for the year. This is the 5th highest season overall. They collected nearly 17K steelhead. This was the best natural

production collection ever! Same with sea-run cutthroat (1,400 is more than double the average). They collected 16K sub-yearlings and 1,800 yearlings for Chinook.

River flows are at 1,000 cfs. Riffe Lake is at just over 750' elevation. It should hit 750' in a week or so and then CFD will just be passing inflow. Temperatures vary by 1-1.5 degrees/day. With warm temps and low flow, we are at the end of the season. They will continue to daily collect Chinook until the end of August. They are not seeing parasite loading on the Chinook. Nor are they seeing much mortality. There was great rejoicing.

Collection Efficiency:	81% steelhead
-	85% coho
	Very low for Chinook

Action Item:

• John to add Mark C to the distribution list for the weekly report.

Questions / Comments from June 3, 2015 Cowlitz APR Meeting Presenter: Mark

We reviewed the questions and draft responses from the last APR public meeting. Once the responses are complete and have been reviewed for accuracy, this document will be posted for public review.

Sample responses:

- "The study plan that was approved by the public was implemented as designed and answered all of the questions that were posed."
- "Studies are being done in other basins. We are currently collecting tissues so if it is determined that a study needs to be done, we will be able to do it." Or add "The Cowlitz FTC will discuss the need for a Cowlitz River steelhead genetic study."
- "...however Bright's Creek has not yet been selected in the randomized site selection."
- Mention that stray rate is just general information and not being used for management.

Action Item:

• All to review draft responses for clarity and completeness and send edits to Mark L, providing context as needed. Sttart by saying what we think the question is getting at.

2016 FHMP Update Process

Presenter: Mark LaRiviere

We reviewed the revised draft "strawman" listing key issues that need to be addressed in time to meet the April FERC filing deadline.

We agreed to do the following:

- Lay out the process determine the timelines.
 - Are we solving the problem or are we agreeing on a process to solve it?
 - Determine how much time to request in terms of an extension (6 months?).
- Tweak the plan vs. doing a wholesale rewrite (alter current document).
- Create a public-friendly document (executive summary) as a separate document.
- Add Fall Chinook Management Strategy to the list of topics.
- Create a SurveyMonkey to:
 - Prioritize the list and deal with high priority issues first:
 - High priority
 - Medium priority
 - Low priority
 - Determine which issues to reserve for large group discussions.
 - Have people sign up as subgroups to create draft options for other issues.
 - Determine whether we are seeking a final result or a path to a solution.
 - Write a problem statement for each issue (what are we trying to solve?).
- Set aggressive timeline and stick to it, scheduling review of key issues for specific FTC meetings.

The timeline will include the action items listed below and getting feedback from the Ad Hoc Group at our joint meeting with them on September 16. The FTC needs to review and provide comment in the initial draft and TP needs time to incorporate those comments into the revised draft before the initial public meeting. Between public meetings there will be a public comment period with time for the FTC and TP to review and respond to public input. At our next meeting we will address the schedule more specifically.

Action Items:

- Mark to send out SurveyMonkey by August 7 for all to complete.
- All to complete SurveyMonkey by August 14.
- Mark to send out SurveyMonkey results and draft timeline by August 24.
- All to review results and draft timeline and be ready to discuss at September 1 FTC meeting.

Mayfield Operations

Presenter: Keith Underwood

Keith explained that Tacoma's Cushman facilities are currently shut down in terms of helping to meet loads. They also have the lowest release ever (500cfs) in the Nisqually. They are running out of cold water in Alder Lake so they are operating at MIF. To further complicate matters, TP also has power balancing requirements that they are obligated

to meet. This has seriously reduced TP revenues and they must meet load requirements by purchasing from the power market or by generating themselves. This puts extra pressure on the Cowlitz. Last week they went up to 6K cfs in the Cowlitz for revenue reasons (prices briefly spiked). The Power Management folks at Tacoma are doing the best they can to balance resource needs by the company and the fish.

421.5' is the Mayfield Lake elevation that TP doesn't violate during the summer recreation season. Despite heavy fiscal constraints, they elected not to drop the lake further as it would adversely impact recreationists.

In Riffe Lake, it looks like the elevation will drop below 750' in mid-September. This puts an instream flow requirement on LCPUD. This means they will be below the drawdown needed to install the fish pilings. The inflow is at 900 cfs and will go to 500 cfs. There is concern about not having enough precipitation to refill Lake Scanewa.

Concern was expressed that the safe margins provided for fish by reducing flows early in the season were lost by recent TP generation. There was also general agreement that a decision document would have been helpful in this case. There is certainly room to improve communication around this issue and that tools be well understood up front and consistently used. Ideally, the (periodicity) chart would show which fish will be impacted in which months. It was also noted that the best time to plan to manage a drought is not during a drought.

Action Item:

• Tacoma to continue to keep everyone updated on this and to take a proactive approach for next year's planning as more of the same weather is expected.

Review / Approval of July 7, 2015 Meeting Summary and Action Items

The July meeting summary was approved with minor edits and will be posted for public review.

Meeting Evaluation

- Happy to have Mark C join us!
- Had frank discussions that were very productive
- We are on a good path to update the FHMP
- Keith and Lyn did a pretty good job with their newly-defined roles

Handouts

- Draft July 7, 2015 FTC meeting summary
- Draft August 4, 2015 FTC Meeting Agenda
- Decision Document 2015-7: 2015 Annual Project Review Hatchery Production
- Q&A (draft) from June 3, 2015 Cowlitz APR Meeting
- Mossyrock Elevation Probability Chart: July 27, 2015 RFC ESP Forecasted Inflows

Potential September 1 Meeting Agenda Items

- Welcome / Announcements (30 min.)
 - CFD 2015 Northshore Collection Facility Update
 - o Update on Mayfield Operations
 - ISIT Model Workshop Update
- FHMP 2016 Update Process (2 hours)
 - o Review:
 - Survey responses
 - Draft schedule provided by Tacoma
 - Plan for Sept. 16 Joint meeting with the Ad Hoc Group
- Update on Mayfield Operations (15 min)
- M&E Report Presentation (30 min.)
- CFD 2015 Fish Collection Efforts (10 min.)
- Packwood Public Meeting Preview (15 min.)
 - Upper Cowlitz Issues
 - o Season Update
- CRR Fund (1 hour)
 - Review Draft Decision Documents
- Requests for Extra-FHMP Studies (?)
- FTC Summaries Public Access and Use (?)
- Review Action Items / Finalize August 4 meeting summary (10 min.)
- Set Agenda topics for October 6 Meeting
 - o Plan to Abandon Volitional Upstream Passage
 - o DAMW
 - FHMP 2016 Update Process
 - o FHMP M&E Annual Report
 - o APR
 - o CRR Fund
 - o CFD 2015 Fish Collection Efforts
 - o CF Northshore Collection Facility Update

Parking Lot / Potential Future Agenda Topics

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- What to do about smelt potential future FTC presentation by the Cowlitz Tribe
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River

Cowlitz Hydroelectric Project FERC No. 2016 Cowlitz Fisheries Technical Committee Final Meeting Summary September 1, 2015, 9:00 AM - 3:00 PM

Mayfield Office

FTC Members

Mark Celedonia (absent)	USFWS
Michelle Day	NMFS
Mark LaRiviere	Tacoma Power
Cindy Le Fleur	WDFW
Jim Pacheco	WA Dept. of Ecology
Bob Rose (absent)	Yakama Nation Fisheries
Paul Sparks (absent)	WA Chapter Trout Unlim

Other Participants

Rich Turner (by phone) Peggy Miller John Serl Eric Kinne Sam Gibbons Carol Serdar Debbie Carlson Mike Kohn Steve Grega Keith Underwood Kirk Kessler Matt Bleich Monika Sundbaum (by phone) Steve Fischer Pat Frazier Ann Weckback Lyn Wiltse

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NMFS WDFW WDFW **WDFW** WDFW WA Dept. of Ecology BPA Lewis County PUD Lewis County PUD Tacoma Power Tacoma Power Tacoma Power Tacoma Power Tacoma Power Technical Advisor to Tacoma Power Technical Advisor to Tacoma Power **PDSA** Consulting

Remaining 2015 FTC Meeting Dates

Oct. 6, Nov. 3, and Dec. 1 (9-3 at Mayfield)

Joint Meeting with FTC and WDFW's Ad Hoc Group

Sept. 16 at the Cowlitz Salmon Hatchery from 1-4pm

Next Public Meeting Date

Oct. 14, (new date!) at Packwood Senior Center, 6-8pm. Upper Cowlitz issues will be discussed.

Announcements

- Cindy introduced Sam Gibbons as Mark Johnson's replacement. We welcomed him to the group. He is the operations and hatchery reform manager for WDFW. His official start date is September 8. Welcome, Sam!
- As we greeted Sam, we learned that we had to say goodbye to Eric. This is Eric's last FTC meeting. He has accepted a new hatchery program manager position in Olympia. Congratulations Eric! We will miss you.
- CFD 2015 Northshore Collection Facility Update: Kirk shared some recent photos of the construction for this facility. He was happy to report that, so far, things are moving along on schedule.
- ISIT Model Workshop: Mark L reported that as he hasn't heard anything back from anyone on this, no date has been set for the workshop.
 - Next Steps: Set up a workshop for the FTC facilitated by WDFW. The timeframe would be sometime in December or early 2016. Then take steps to host the workshop with the Ad Hoc Group after that. If Bob Reid contacts Mark requesting a sooner date, Mark will work to accommodate that request.
- The Annual Lower Cowlitz Side Channel Monitoring Report and the Annual Cowlitz Fisheries and Hatchery Management Plan Reports are out for review. The Annual FHMP Report is in a new format as requested by FERC.
 - Action Item: By September 28, all to send any comments to Mark L.
- FERC Approval of extension to file the Plan to Abandon Volitional Upstream Passage: The new deadline is now April 15, 2016.
- Cowlitz HGMP Coverage: Eric and Rich came up with a maximum number of 2.5 million hatchery spring Chinook as their "best scientific estimate" where there would be no adverse ecological impact.
- WDFW Fish Transfer: Cindy explained that they plan to move the fish (being temporarily housed at the Cowlitz Trout Hatchery) off station by the end of September.

2016 FHMP Update Process

Presenter: Mark LaRiviere

We reviewed the responses to the SurveyMonkey that was sent out after our last meeting. We agreed to set up subgroups to draft white papers to seed discussions by the entire FTC for the issues listed below:

- Fish Production Facilities: Mark L (coordinator), Rich, (Michelle), Peggy, Pat
 - Is the 650K a true cap? We need to clearly state our interpretation of this. We need the subcommittee to review the SA language and present options for interpretation with a focus toward a solution. We need a white paper proposal so we can get agreement on this as the FTC before we discuss it with the Ad Hoc Group. Ultimately, each entity needs to be sure they are represented in the discussion appropriately – and meeting with their attorneys as needed.

- Can net pens be considered a satellite facility? What satellite facilities do we need in the future? How do we define where there is production for the anglers? Fisheries vs. restoration emphasis?
- We don't want to give up volitional passage just to increase harvest opportunities.
- Program Measures and Communication: Keith (coordinator), Pat, Cindy
- Population Designations / Research and Marking: Matt (coordinator), Cindy, John
 - Fall Chinook in the upper basin?
 - Tipping study / marking strategy

Large Group (entire FTC) Discussion Topics:

- Rainbow trout
- Resident fish
- Nutrient enhancement

The FTC / Ad Hoc Group will meet together the afternoon of September 16. At that time we will review the issues from the SurveyMonkey with them and see if they have additional questions or concerns / problem statements. We will meet with them again and have a more directed discussion after the white papers have been developed by the subcommittees.

Note: The FTC needs to review and provide comment in the initial draft and TP needs time to incorporate those comments into the revised draft before the initial public meeting. Between public meetings there will be a public comment period with time for the FTC and TP to review and respond to public input.

Action Items:

- Subgroups: By September 29, send out draft white papers for review at the October FTC Meeting. These should would clarify the problem statements, develop the questions that need to be asked, consolidate feedback from the survey, and address whether there is an overall vision / purpose for each topic, etc.
- Keith: Send list of issues (by grouping) to all by September 4.
- Cindy: Send issues list to members of the Ad Hoc Group as soon as you receive it from Keith so they have time to review it prior to our meeting with them on October 14.

Mayfield Operations

Presenter: Mark LaRiviere

Mark reported there is currently 2,500 cfs discharge out of Mayfield, and the plan is to stay steady at this flow through the end of September. On October 1, Tacoma will bump flows up to 3,500 cfs, the minimum instream flow (MIF) for that date. The elevation at Riffe Lake is currently at 745'. There is not a recent refill probability curve.

Action Item:

 Mark: Bring an updated refill probability curve graph to our next meeting. Also be prepared to discuss what planning will be done for next year if we have another drought.

Implications of LC PUD Drawdown at Cowlitz Falls

Presenters: Keith Underwood, Mike Kohn, Steve Grega

We set the stage for a LC PUD meeting with TP and the agencies about LC PUD's planned drawdown at Cowlitz Falls, with the idea of giving FERC a timely response. Kirk pointed out that if the drawdown cannot be effectively accomplished, it would delay the installation of the coffer dam and therefore delay the implementation schedule of the CFD Northshore Collection Facility by a full year. Key issues to be discussed are:

- Sediment load
- Refill (not meeting MIF)
- Turbidity

Note: As this was not specifically an FTC topic, the affected parties met separately during lunch and then rejoined the meeting.

CFFF 2015 Fish Collection Efforts

Presenters: Eric Kinne and Matt Bleich (for John Serl)

Matt explained the CFFF "closed up shop" as of August 31. They got 220K fish total, 177K of which were coho and 16K were steelhead. Preliminary FCE estimates were 81% for steelhead, 85% for coho and 6% for Chinook.

Matt thinks these efficiencies are almost entirely expressed through flow this year, as the early spring flow was truncated and there were no fish lost due to spill or turbine passage. Project operations and cycling of units on and off also impacted the Chinook season. The water temperature was several degrees warmer than normal. The fish were over-summering vs. passing downstream. Despite the warmer water, parasite loading has remained very low this year.

FHMP Annual Report / Monitoring & Evaluation (M&E) Report Presenter: Mark LaRiviere

Mark explained that FERC issued new reporting requirements and that the annual report is due to FERC October 31, 2015. He sent the draft report to all to review on August 21. He walked us through the table of contents of the report and reminded us that the study plans, methodology, results, and discussion are spelled out in the M&E portion of the FHMP. He reminded all that the M&E work is currently focused in the lower river. We have been working to determine the NOR population which is a key driver in hatchery production (ISIT Model).

Action Item:

• All: Send any comments to Mark L by September 28.

Ad Hoc / Packwood Public Meetings

Presenter: Mark / Matt / Keith

We agreed that the FTC will meet with the Ad Hoc Group at the Cowlitz Salmon Hatchery from 1-4pm on September 16. Our public meeting will be October 14 from 6-8pm at the Packwood Senior Center.

CRR Fund Report

Presenter: Pat Frazier

Pat reported that the teamlet met since our last meeting. As promised, they are bringing the plan to the FTC for review bit by bit, with decision documents which serve as background for the attachments. The decision documents are written with public review in mind. We will approve the pieces of the plan, and then approve the whole plan. Any fatal flaws need to be identified up front. He walked us through the three initial decision documents and their attachments. Feedback included the following:

- 2015-8: CRR Plan Implementation Strategy Purposes & Goals: Introduction
 - Add "Introduction" to the first page of the attachment.
 - Remove reference to Appendix B in background section of Decision Document (end quote with "...")
 - Add a paragraph to Table 1 explaining where we are focusing.
- 2015-9: CRR Plan Implementation Strategy Purposes & Goals: Priorities
 - Note: The second set of priorities listed is new as recommended by the subcommittee.
- 2015-10: CRR Plan Implementation Strategy Purposes & Goals: Habitat Assessment
 - Note: This recommends that a qualified professional be engaged to perform a habitat assessment focused in the upper basin. It will include the types of activities to be included in the assessment. It will also discuss doing restoration and/or acquisition and potential changes in river flows and hydrographs (to address climate change).
 - Request that the contractor review the prior work that has been done (habitat acquisition without a focus in spring Chinook).
 - Focus on priority reaches and limiting factors associated with each. Reconnect the side channel, etc.
 - Focus more on actual projects than studies and analyses.

Pat spoke with Bob Rose recently who expressed support for the direction the subcommittee is suggesting. He also asked that we take climate change into consideration relative to habitat acquisition and restoration.

Action Items:

- All: By September 14, using track changes send Pat and Mark any edits to these three decision documents and corresponding attachments so they can compile the edits and send them out to the FTC by September 28.
- Pat: Send out link to past assessments as an example for all to review by September 4.

Review / Approval of August 4, 2015 Meeting Summary and Action Items

The August meeting summary was approved with minor edits and will be posted for public review.

Meeting Evaluation

- Happy to have Sam join us!
- So very sad to be losing Eric...
- Had frank and productive discussions
- Facilitator forgot chocolates and Larry saved the day!

Handouts

- Draft August 4, 2015 FTC meeting summary
- September 1, 2015 FTC Meeting Agenda
- Draft Decision documents 2015-8, 2015-9, 2015-10 (CRR Plan Implementation and Strategy)
- Summary of discussion between TP and WDFW regarding satellite rearing facilities

Potential October 6 Meeting Agenda Items

- Welcome / Announcements (30 min.)
 - CFD 2015 Northshore Collection Facility Update
 - ISIT Model Workshop Update
 - Set Date for WDFW-facilitated training for FTC
 - o FTC Communications: Status on SharePoint site
 - DAMW (?)
- Feedback from Ad Hoc Group from Sept. 16 Joint meeting (15 min)
- FHMP 2016 Update Process (1.5 hours)
 - Review White Papers:
 - Fish Production Facilities
 - Program Measures and Communication
 - Population Designations / Research and Marking
- Plan for Packwood Public Meeting on Oct. 14
 - Upper Cowlitz Issues
 - Season Update
- Update on Mayfield Operations (15 min)
- CRR Fund (30 min)
 - Approve Decision Documents

- Review Action Items / Finalize September 1 meeting summary (10 min.)
- Set Agenda topics for November 3 Meeting
 - Plan to Abandon Volitional Upstream Passage
 - o DAMW
 - FHMP 2016 Update Process
 - o APR 2016 Process
 - o CRR Fund
 - o CF Northshore Collection Facility Update

Parking Lot / Potential Future Agenda Topics

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- What to do about smelt potential future FTC presentation by the Cowlitz Tribe
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River

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

October 6, 2015, 9:00 AM – 1:15 PM Mayfield Office

FTC Members

Mark Celedonia (absent) Michelle Day Mark LaRiviere (absent) Cindy Le Fleur Jim Pacheco Bob Rose (absent) Paul Sparks (absent)

Other Participants

Rich Turner (by phone) Peggy Miller John Serl Sam Gibbons Mike Kohn Keith Underwood Matt Bleich Monika Sundbaum (by phone) Shannon Wills Pat Frazier Ann Weckback Lyn Wiltse USFWS NMFS Tacoma Power WDFW WA Dept. of Ecology Yakama Nation Fisheries WA Chapter Trout Unlimited

NMFS WDFW WDFW Lewis County PUD Tacoma Power Tacoma Power Tacoma Power Tacoma Power Technical Advisor to Yakama Nation Technical Advisor to Tacoma Power Technical Advisor to Tacoma Power PDSA Consulting

Remaining 2015 FTC Meeting Dates

Nov. 3 and Dec. 1 (9-3 at Mayfield)

Joint Meeting with FTC and WDFW's Ad Hoc Group

Nov. 18 at the Cowlitz Salmon Hatchery from 1-4pm

Next Public Meeting Date

Oct. 14 at Packwood Senior Center, 6-8pm to discuss upper river issues.

Announcements

- CFD 2015 Northshore Collection Facility Update: Matt reported that construction is progressing. Peggy and Carol participated in a site visit. They noticed a lot of sediment up and downstream. The pile cap (foundational structure on top of the pilings to support the pump back discharge structure) is nearly complete. They are cutting the holes through the dam. One is for the water return pipe and the other is for the intake for the fish collector. Some LWD is available by request. Kirk will do a presentation with photos at our next meeting.
- ISIT Model Workshop: This is set for Nov. 4 at the Cowlitz Salmon Hatchery, from 9-3pm. Bob Reid and his consultant will attend. It will include a brief

overview of EDT at the beginning and explain what info from EDT is used in the ISIT model (productivity and capacity). We will explain the key parameters that drive the ISIT model (SAR, etc.) WDFW will be instrumental in explaining the science behind the numbers.

- Action Item: Cindy will see if Eric Kinne is available to attend.
- Update on Mayfield Operations: On October 1, Tacoma increased flows to 3,500 cfs, the minimum instream flow (MIF) required for that date. TP is focused on meeting MIFs and load, and spiking when prices are high in an effort to recover lost revenues. Riffe is at 734.5' elevation (historic average is 749').
- FTC Communications: SharePoint Site: Keith reported that not much progress is being made on this. There was confusion about the SurveyMonkey which was sent out to determine which external programs each entity can use for document management. SharePoint is not supported by federal agencies.
 - Action Item: Keith will take this off line with each of the entities.
- DAMW Update: Keith reported Tacoma is re-invigorating their review of the DAMW document with the goal of being ready to discuss it by the end of the year. DAMW meetings will likely reconvene in January. In the meantime, Matt will continue to send out monthly updates.

Update on LC PUD Drawdown at Cowlitz Falls Presenter: Mike Kohn

Mike explained the drawdown has been extended to Oct. 19 (putting us two weeks behind on refill). There is a meeting with Dept. of Ecology in late October to review water quality data. Only 10% of the salmonids were seen compared to 2003. This is likely related to temperature. They are still doing sediment work behind the coffer dam (using a crane with buckets) and are planning to refill on October 19. They probably won't be able to start generating until December. Both sluice gates are open. One is plugged with sediment.

Debrief of Sept 16 Ad Hoc Meeting Presenter: Cindy / Keith

The FTC met again with the Ad Hoc Group at the Cowlitz Salmon Hatchery from 1-4pm on September 16. It was a good meeting with productive discussions. We reviewed the issues from the SurveyMonkey (for the FHMP Update) with them to see if Ad Hoc members had additional questions or concerns / problem statements. We will meet with them again on November 18 and have a more directed discussion after the FTC-generated white papers have been refined by the subcommittees. At that meeting Cindy will give a presentation on the North of Falcon process. Another topic is metrics for measuring VSP parameters.

Suggestion for improvement: If we meet again in the afternoon of the same day where the Ad Hoc Group meets in the morning, it would be helpful if Cindy and Keith quickly debriefed the FTC members prior to the start of the joint meeting (during lunch?).

2016 FHMP Update Process Presenter: Mark LaRiviere

We reviewed the white papers for the following topics and agreed on how to proceed.

• Fish Production Facilities: Mark L (coordinator), Rich, (Michelle), Peggy, Pat

Mark developed the initial draft of this white paper and sent it to the subcommittee to review. The team members see this initial draft as a good starting place and a work in progress. Ultimately, we need to edit the draft white paper so that it reflects agreement among FTC members before discussing it with the Ad Hoc Group. With turnover in FTC membership, the original intent behind the words may be less than clear. Yet, we must act in a way that is consistent with the language.

- Issue #1: Satellite Rearing Facilities: The primary purpose will be focused in the Upper Basin for recovery (reintroduction or supplementation). While recovery is a priority, this wouldn't preclude us from using the facilities for harvest purposes. We might end up setting up separate goals with a phased approach. Structures could be temporary / portable and could be moved around as priorities change over time. We agreed to focus on the aim and use of the satellite rearing facilities and leave the funding issue for a separate CRR fund discussion. For potential acclimation facilities, we could consider all options to be available to us, including net pens, raceways, etc. The type would be dependent on the species.
- Issue #4: Hatchery Programs: This ties to the APR process. We need to do a better job discussing the production of the Cowlitz as it compares to other basins. Include comparison of SARs, etc. Can we tie this to production for NORs? It is important to note that the historical numbers were market driven. Is there a way to normalize the data for comparison purposes? How can we improve the fish that we are currently rearing at the hatchery? Spring Chinook in the net pens and fall Chinook in the hatchery?
- Issue #5: Mayfield Net Pens: WFDW received funding specifically to increase fall Chinook production for 2014 and 2015 (to benefit in-river fisheries). If there is a shift in the use of the net pens, we need to still provide the same amount of fall Chinook. The funding is being continued. Do the "strings" that came with the original funding stay in place, precluding us from raising spring Chinook or steelhead in the new pens (staying within HSRG standards)? Is it possible to move the net pens to a location with cooler water? Is it appropriate for the FHMP to incorporate some or all of the net pen program?
- Issue #6: 650K lb. Cap: We agreed this is the highest priority issue to be addressed. We need to explain our interpretation of the connection between this and the CRR Fund and also the satellite facilities. We see that it doesn't apply except to protection and recovery of listed stocks, as specified in the SA. The 771K lb. is tied to the hatchery remodel. It is important to clearly define this in a comprehensive manner. Looking at the

HSRG standards, there is a maximum standard for each species. 897K lb. is the limit based on steelhead, coho and fall Chinook program constraints based on NORs. Spring Chinook has no ESA limit. We don't know the carrying capacity of all of these smolts in the basin.

- Action Item: Pat will send a revised draft of this document to Keith to review and then will send it to all.
- Action Item: Keith will send out FHMP sections 2.2-2.3.5 and section 5 to all (as a single document).
- Program Measures and Communication: Keith (coordinator), Pat, Cindy
 - Title: Harvest Management: One-page fact sheets would be helpful for FTC, Ad Hoc, and the public in general. E.g., Mayfield Net Pens – What is their purpose?
 - Title: FHMP Objectives and Goals: It was acknowledged that the ISIT model is highly complex and not well understood. It is difficult to communicate ISIT results to the public. If we stay with this model, we need to get it expanded so it will accept data from numerous years. Is there a better / easier model out there?
 - Title: Increase Production at the Hatchery (Pat will pull this into the above document.)
 - Title: FHMP: Prescriptive vs. Process: Subgroups would take a crack at rewriting specific sections and present it to the FTC. The technical writer would work closely with the subgroups and do the writing and ensure everything is complete according to the schedule.
 - Action Item: The subgroup will meet again to update the document and put it into the outline used for the Cowlitz Fish Production Facilities topics and also include the page numbers in the FHMP they would address.
- Population Designations / Research and Marking: Matt (coordinator), Cindy, John
 - Population Designations: WDFW is doing this research across the entire Lower Columbia River basin. They are soon to engage the Recovery Board and then will meet with Tacoma on this before the end of the year. The FHMP would say we think the basin would be better managed if we moved to a different strategy. We would outline potential strategies and what changes would occur based on that within the document. For steelhead and coho there are three populations in the upper basin. Do we have to estimate production and do M&E for each population separately? There is no logical way to split them. We need to connect with the appropriate people at NMFS on this. If we shift the populations around we still have to achieve the viability goals for the entire ESU.
 - Research Needs: This is broken into two categories. The first is Baseline Monitoring, including passage and pHOS. The second is Programmatic. Currently we are just doing research on downstream passage. A technical work group will review research proposals.
 - Juvenile Fish Marking: We have a limited time to figure this out as we will have a lot more fish to handle and tag, assuming the collector is

operational in 2017 and is effective. We will have to do this assuming the current population structure. The populations are steelhead, coho, cutthroat, fall and spring Chinook. We need to be cognizant of what needs to be done from a permitting standpoint.

 Process to make the changes: (This was a suggested addition to be fleshed out.)

Action Item:

• Subgroups: By October 27, send out updated draft white papers for review at the November FTC Meeting.

CRR Fund Report Presenter: Pat Frazier

We approved the following Decision Documents with minor edits:

- 2015-8: CRR Plan Implementation Strategy Purposes & Goals: Introduction
- 2015-9: CRR Plan Implementation Strategy Purposes & Goals: Priorities
- 2015-10: CRR Plan Implementation Strategy Purposes & Goals: Habitat Assessment

Discussion: Consider adding that we will try to improve the geomorphic processes that benefit spring Chinook and possibly other species. Aim to solve problems long term by treating root causes, recognizing there will be a need to treat some symptoms along the way. Consider adopting a "do no harm to spring Chinook" policy in reviewing prospective proposals. More details can be added at the RFP / SOW point of the process. Balance process and structure. LC has the channel migration zone data that will be useful for our assessment.

Action Item:

• Pat will add verbiage to the FTC Decision and Justification section and send out the "Final" versions of these documents to all.

Plan for October 14 Packwood Public Meeting

This meeting will focus on up-river issues. We confirmed which FTC members will be attending and reviewed a draft agenda. Monika is doing extensive advertizing for this event, using print, radio, and social media. Matt distributed a draft agenda for all to review. There will be approximately 15 minutes for each topic with Q&A immediately following each presentation:

- Welcome
- Cowlitz Falls North Shore Collector
- Cowlitz Falls North Shore Collector Goals and Strategy
- CF Fish Facility Collection History
- Adult Release Strategies
- Upper Cowlitz Fisheries Successes and Improvements
- Wrap-Up

FTC members see that it is important to attend these public meetings to hear about the concerns of community members.

Review / Approval of September 1, 2015 Meeting Summary and Action Items

The September meeting summary was approved with minor edits and will be posted for public review.

Meeting Evaluation

- Good discussions.
- Need to better estimate the time it takes to discuss each topic.

Handouts

- Draft September 1, 2015 FTC meeting summary
- October 6, 2015 FTC Meeting Agenda

Potential November 3 Meeting Agenda Items

- Welcome / Announcements (20 min)
- CF Northshore Collection Facility Update
- Update on LC Drawdown at CF Dam (10 min)
- Update on Mayfield Operations (10 min)
- Feedback from Ad Hoc Group from Oct. 14 Public Meeting in Packwood (15 min)
- FHMP 2016 Update Process (1.5 hours)
 - Review Revised White Papers:
 - Fish Production Facilities (incl. Resident Fish)
 - Program Measures and Communication
 - Population Designations / Research and Marking
- CRR Fund (30 min)
- Review Action Items / Finalize October 6 meeting summary (10 min)
- Set Agenda topics for December 1 Meeting
 - Plan to Abandon Volitional Upstream Passage
 - o DAMW
 - o FHMP 2016 Update Process
 - APR 2016 Process
 - o CRR Fund
 - o CF Northshore Collection Facility Update

Parking Lot / Potential Future Agenda Topics

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- What to do about smelt potential future FTC presentation by the Cowlitz Tribe
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River
- Climate Change

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

November 3, 2015, 9:00 AM – 1:15 PM Mayfield Office

FTC Members

Mark Celedonia (absent) Michelle Day Mark LaRiviere Cindy Le Fleur Jim Pacheco (absent) Bob Rose (absent) Paul Sparks

Other Participants

Peggy Miller John Serl Pat Frazier Carol Serdar Mike Kohn Debbie Carlson (by phone) Keith Underwood Eric Shoblom Matt Bleich Monika Sundbaum (by phone) Danielle Judd Shannon Wills Ann Weckback Lyn Wiltse USFWS NMFS Tacoma Power WDFW WA Dept. of Ecology Yakama Nation Fisheries WA Chapter Trout Unlimited

WDFW WDFW WA Dept. of Ecology Lewis County PUD BPA Tacoma Power Technical Advisor to Yakama Nation Technical Advisor to Tacoma Power PDSA Consulting

Future FTC Meeting Dates: 9-3 at Mayfield

2015: Dec. 1; 2016: Jan. 5, Feb. 2, Mar. 1, Apr. 5, May 3, June 7, July 5, Aug. 2, Sept. 6, Oct. 4, Nov. 1, Dec. 6

Meetings with FTC and WDFW's Cowlitz Ad Hoc Group

ISIT Model Workshop: Nov. 4 at the Cowlitz Salmon Hatchery from 9-3pm Joint Meeting: Nov. 18 at the Cowlitz Salmon Hatchery from 1-4pm

Announcements

- We welcomed Eric Shoblom, Tacoma Power's new Cowlitz Fish Facilities Manager. Eric has been with TP for two weeks now and is coming up to speed quickly. He is stationed at the Cowlitz Salmon Hatchery and is focusing on ways to optimize that facility. He will be attending these meetings and looks forward to working with everyone.
- WDFW Announcements:
 - Pat Frazier has been hired by WDFW as Policy Coordinator, replacing Eric Kinne. He will be overseeing policy and budgets and will also focus

on smelt and sturgeon for Region 5. Generally speaking, Pat will no longer be part of FTC, but will work to ensure a smooth transition - leaving nothing "hanging." He will become involved with pre-season planning and the ISIT Model, as he is taking over Eric's role.

- Cindy announced there is a problem with coho in the region and in the state. The adult return is down and the state is having problems meeting basic hatchery goals. Region 5 reduced the sport fisheries catch limit from 6 to 1 fish. On the Cowlitz, they are trying to retain all hatchery coho. Cindy is reviewing the numbers on a weekly basis. There will be discussions with partners on how best to prioritize these fish and associated communications of the strategy once it is set. Stay tuned...
- ISIT Model Workshop: This is set for Nov. 4 at the Cowlitz Salmon Hatchery, from 9-3pm. It will include a brief overview of EDT at the beginning and explain what info from EDT is used in the ISIT model (productivity and capacity). We will explain the key parameters that drive the ISIT model (SAR, etc.) Eric Kinne will attend and help support explanations of the science behind the numbers.
- Update on Mayfield Operations: Recently, Tacoma increased flows to 5,000 cfs. They expect these flows to remain fairly constant. Tacoma captured 7' in Riffe Lake during the recent rain event. Riffe Lake is currently at 730' elevation. They are normally at 740' this time of year.
- FTC Communications: Keith reported that all of Tacoma is migrating its file management onto SharePoint (driven by public disclosure requests). Simultaneously, they are redesigning the websites for all of Tacoma Public Facilities, with the intent of making them more outward facing. Keith will be checking individually with each FTC entity to determine which external programs are viable for FTC document management.
- Packwood survey points on the river: Keith noticed last weekend several survey points set up on the river. Ann explained this is a Lewis County action in response to a bank erosion problem and is being addressed by Lewis County. He also noticed a DOT project at milepost 118, where they were using rock in an attempt to save Highway 12. It would be nice if communications of such actions were more widely known ahead of time so there could be fish considerations along the way.
- Mark reported that a Draft Recovery Plan for threatened smelt will be issued this spring by NMFS. There was a forum last August in Portland to discuss this. There are many stakeholders, including the Cowlitz Tribe, working to help NMFS with the drafting of the plan. Cindy offered to do a presentation on smelt for the FTC, in partnership with the Cowlitz Tribe, if there is sufficient interest. Lyn added this to our Parking Lot list at the end of these notes.

Update on LC PUD Drawdown at Cowlitz Falls / Northshore Collector Presenters: Mike Kohn, Danielle Judd

Mike reported they have been taking systematic pictures of the drawdown since September 11. He distributed some of these to illustrate the depth of the cut into the sediment. They estimate there were 1-2 million cubic yards of sediment in the forebay that moved downstream after the drawdown began. There was a meeting with Dept. of Ecology in late October to review water quality data. Flows as of November 1 were estimated at 2,400-2,500 cfs.

Only 10% of the anadromous fish and non-salmonids were observed compared to the drawdown in 2003 (when 640K cubic yards were estimated to go downstream). This is likely due to temperature issues, especially in the Cowlitz arm. They will be investigating this. 30K cubic yards of sediment were removed from behind the coffer dam. They replaced the gate seals and controls. The reservoir is between 850' and 842' and will be maintained as such until November 9 when they move the deflector back into place. They were going to try to start at least one of the generators this morning.

CFD 2015 Northshore Collection Facility Update: Danielle (engineer with Tacoma Power) reported that construction is progressing on schedule. She walked us through photos chronicling recent construction activities. Major construction should be complete by October - November of 2016 and then the commissioning activities will begin.

Action Item:

• Mike and Danielle: Email their photos to Debbie Carlson as soon as possible.

Debrief of October 14 Public Meeting in Packwood Presenter: Matt / John / Monika

Members of the FTC met with the public on October 14 to discuss up-river issues. There were 33 folks in attendance. It was a good meeting with productive discussions. The publicity for the meeting, including radio, proved to be effective. Next time we will post a flyer at the post office and then we will have covered all the bases!

We reviewed the data from the electronic polling conducted at the meeting.

Action Item:

• Monika: Post the questions and comments from the session and the data from the electronic posting.

2016 FHMP Update Process

Presenter: Cindy, Keith, All

- Ad Hoc Engagement: The next joint FTC / Ad Hoc meeting is scheduled for November 18. Originally, we had intended to share the white papers we are developing to inform the next FHMP. Since the papers won't be complete until after we get input form the Ad Hoc Group, we will open the discussion by sharing some bullet points for each issue that reflect our current thinking and ask for their input. For example, under the topic of Population Designations / Research and Marking, we might share the following bullets:
 - Discussion around changing population designations
 - Research to consider biology

It is important to solicit Ad Hoc Group input early in the process so we can consider it as we craft the language for the update document. We want them to know where we are in the process and that Tacoma Power has engaged a professional technical writer from Meridian Environmental to assist the subgroups. We hope to have a schedule for the update complete in the next couple of months.

At the last meeting we reviewed the white papers produced by subgroups for the following topics:

- Fish Production Facilities: Mark L (coordinator), Rich (Michelle), Peggy, Pat, Paul
- Program Measures and Communication: Keith (coordinator), Pat, Cindy
- Population Designations / Research and Marking: Matt (coordinator), Cindy, John

We brainstormed issues around our remaining topics, which we had agreed to work through all together, rather than through subgroups.

- Resident Fish:
 - o Mike Kohn has many years of data to contribute to this.
 - We are putting resident fish in Mayfield on top of steelhead, coho, and Chinook.
 - Mayfield Lake is critical (and essential) fish habitat for listed steelhead and coho.
 - Is it okay to allow resident domesticated rainbow to be released in anadromous waters with steelhead populations while we are trying to do steelhead recovery? If not, do we augment Mayfield Lake somehow to make a fishery?
 - Any residualism in Mayfield Lake would impact other salmonids coming through.
 - Riffe Lake has effective fishery due to our failure to catch fish at Cowlitz Falls. Should we relocate the program to that location?
 - We should consider the lake and streams as contiguous. That is about genetics and not necessarily habitat.
 - We are putting twice as many fish into Mayfield Lake and have eliminated two stream fisheries.
 - Trout fishing in Mayfield Lake seems to be pretty popular (anecdotal data).
 - Should we consider using cutthroat instead of trout?
 - Domesticated rainbow and steelhead have more bifurcation than rainbow and cutthroat. Domesticated rainbow spawning with cutthroat – their offspring are more likely to spawn with steelhead.
 - Current releases are to South Lewis County Park Pond, Swofford Pond, and Mayfield Lake.
 - We need to be careful about making decisions for Mayfield that may set a precedent that might influence the LCPUD license.
 - Why is it okay to release trout in Scanewa and not in Mayfield? (Impacts to listed fish are very low. If not a problem in Scanewa and there is a Bi-Op, why would we think it would be a problem in Mayfield?)

- If we replace rainbows with steelhead for CF or Mayfield, we have monitoring requirements at both locations and alternate life histories can be expressed at both locations.
- Ask Toby Kock (USGS) to give us a presentation of known data?
- Monitoring activities: Study the interactions on spawning grounds between rainbow and steelhead i.e., do we want to maintain rainbow in the same place as other species?
- There are no studies about catching rainbow behind the dams.
- What if we didn't release trout in Mayfield Lake?
- Could we use steelhead to augment the trout fishery, and allow harvest in the interim? Can we use listed fish to create a program where we release fish for fishery?
- Nutrient Enhancement:
 - WDFW has a carcass-handling plan for nutrient enhancement. Mark Johnson has used this as a surrogate for a nutrient enhancement plan for the basin.
 - This has never been part of the Adult Handling Protocol.
 - This includes non-food-grade fish and spawned-out fish.
 - Tacoma wants to see the plan that is specific to the Cowlitz Complex.
 - Tacoma doesn't move fish for nutrient enhancement
 - Chapter 3.6 (p. 16) of the original FHMP discusses nutrient enhancement – including historic levels, models of the need in the basin, etc.
 - In the FHMP (Ch. 5.1.3) there is a commitment to nutrient enhancement for WDFW with support from others, including volunteers. The need for nutrient enhancement is to be determined by WDFW. Until their policy on distributing surplus fish is changed, perhaps there is nothing to be done unless an exception is granted. The need is identified for marine-derived nutrients. There is nothing specified on this in the license.
 - Tacoma is happy to support this, though they are not the driver.
 - WDFW's actions are based on a contract that sells surplus fish to a processor.
 - Most of the good quality fish go to the food bank, processed by Canadian Pacific.
 - Salmon hatchery has a freezer for some of the fish so they can be metered out over time for nutrient enhancement.
 - o Constituents want more nutrient enhancement and also more carcasses.
 - Where are the supporting data?
 - Is there a correlation between the amount of nutrients and smolt production?
 - We want to come up with recommendations about what to do can we change the definition of what is a food-grade fish?

Action Items:

• Pat and Cindy: Draft a couple of bullets for each of the above issues to share with the Ad Hoc Group to reflect FTC thinking for each issue. They will send these out to the FTC by November 10 for review and comment. These will be the

issues the FTC sees with respect to each particular topic. We would ask the members of the Ad Hoc Group if there are additional issues to address.

- Mark: Send Pat edits to his document by November 6.
- Keith: Send out Gaedeke memo to all.
- Keith: Coordinate summary write-up of resident fish discussion and send out to all prior to the meeting with the Ad Hoc Group. Include LCPUD's operation in the paper and how it is/isn't consistent with what we are doing.
- Cindy: Work with Shannon to write up white paper for nutrient enhancement. (Mark to edit).

CRR Fund Subgroup Report Presenter: Pat Frazier

At the last meeting we approved the following Decision Documents with minor edits:

- 2015-8: CRR Plan Implementation Strategy Purposes & Goals: Introduction
- 2015-9: CRR Plan Implementation Strategy Purposes & Goals: Priorities
- 2015-10: CRR Plan Implementation Strategy Purposes & Goals: Habitat Assessment

Since then, Pat has completed the justification for the above-listed Decision Documents and they have been sent to all and posted as final.

The CRR Subcommittee met again and completed draft documents on two additional sections of the document:

- Overview section (includes the broader vision, the current primary focus, general information, and references the project review process)
- Hatchery Associated Production Section (identifies sections of Articles 3 and 5, discusses satellite facilities and their possible role, hatchery production, etc.)
- Future questions:
 - Does the CRR Fund invest money in monitoring?
 - o Can a private land owner request monitoring on his/her land?

The purpose of the fund is to protect and promote the recovery of listed stocks. This puts the sideboards on what we will do with the funds. The subgroup also discussed a timeline for these hatchery programs, as we are new to recovery and still have low collection rates. When we get to 60% recovery rates, the goals would change and hatchery programs would be reduced.

Next Steps: These documents will come to the FTC for initial discussion at the December meeting and then as Decision Documents to be approved at the January FTC meeting. Keith will begin to work with Jeff Breckel about how LCFRB and the FTC can collaborate effectively over time. Jeff would be part of the implementation strategy. Pat will help describe how this might look, since he has the benefit of having been an insider at the LCFRB. Pat will lead two more subgroup meetings with the goal of finishing up their good work before he becomes unavailable due to his new work duties.

Action Items:

• Pat: Set up two more meetings to finish the work of the CRR Subcommittee.

• Keith: Meet with Jeff Breckel to discuss working together on the MOA.

Plan for November 4 ISIT Workshop

We discussed the aim and agenda for the workshop. People are interested in understanding the data inputs into the model and how the data is being used. Mark walked us through a PowerPoint for the ISIT workshop tomorrow. We agreed to talk about fitness, productivity, and capacity. In the ISIT model info we need to define the lowest breeding population required for breeding / genetic survival.

Action Items:

- Mark: Create a handout with acronyms and definitions.
- Mark: Update the PPT as discussed.
- John: Continue to review data tables for possible errors.

Review / Approval of October 6, 2015 Meeting Summary and Action Items

The October meeting summary was approved and will be posted for public review.

Meeting Evaluation

- Good discussions.
- Need to better estimate the time it takes to discuss each topic.
- Nice to meet Eric.
- Danielle's presentation.
- Need to ensure handouts, photos discussed in the meeting have been sent to phone participants before the start of the meeting whenever possible.

Handouts

- Draft October 6, 2015 FTC meeting summary
- November 3, 2015 FTC Meeting Agenda

Potential December 1 Meeting Agenda Items

- Welcome / Announcements (20 min.)
- Update on Mayfield Operations (10 min.)
- Debrief of ISIT Model Workshop on Nov. 4 (15 min.)
- Debrief Joint Meeting with Ad Hoc Group on Nov. 18 (20 min.)
- FHMP 2016 Update Process (1 hour)
 - Review Revised White Papers:
 - Fish Production Facilities
 - Program Measures and Communication
 - Population Designations / Research and Marking
 - Resident Fish
 - Nutrient Enhancement
- CRR Fund (1 hour)
- DAMW Update (1.5 hours)
- Downstream Fish Passage Study Mayfield (30 min.)
- CFD 2015 Downstream Fish Collection (15 min.)

- Review Action Items / Finalize November 3 meeting summary (10 min.)
- Set Agenda topics for January 5, 2016 Meeting (10 min.)
 - o DAMW
 - FHMP 2016 Update Process
 - o APR 2016 Process
 - CRR Fund Decision Documents
 - o CF Northshore Collection Facility Update

Parking Lot / Potential Future Agenda Topics

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- What to do about smelt potential future FTC presentation by the Cowlitz Tribe
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River
- Climate Change
- Cowlitz smelt presentation (by WDFW and Cowlitz Tribe)

Cowlitz Hydroelectric Project FERC No. 2016 Cowlitz Fisheries Technical Committee Final Meeting Summary December 1, 2015, 9:00 AM – 2:15 PM

Mayfield Office

FTC Members

Mark Celedonia (absent) Michelle Day (absent) Mark LaRiviere Cindy Le Fleur Jim Pacheco (by phone) Bob Rose (absent) Paul Sparks

Other Participants

Peggy Miller John Serl Carol Serdar Mike Kohn Debbie Carlson Keith Underwood Matt Bleich Kirk Kessler (by phone) Joan Nichol Ann Weckback Lyn Wiltse USFWS NMFS Tacoma Power WDFW WA Dept. of Ecology Yakama Nation Fisheries WA Chapter Trout Unlimited

WDFW WDFW WA Dept. of Ecology Lewis County PUD BPA Tacoma Power Tacoma Power Tacoma Power Meridian Environmental Technical Advisor to Tacoma Power PDSA Consulting

2016 FTC Meeting Dates: 9-3 at Mayfield

Feb. 2, Mar. 1, Apr. 5, May 3, June 7, July 5, Aug. 2, Sept. 6, Oct. 4, Nov. 1, Dec. 6

Next Joint Meeting with FTC and WDFW's Cowlitz Ad Hoc Group

February 5, 2016 from 10AM-3PM at the Cowlitz Salmon Hatchery

Announcements

- Update on Mayfield Operations: Mayfield has been at full generation lately and Tacoma Power received permission from the USACE to exceed the rule curve. They are now discharging 11K cfs out of Mayfield. Keith explained that a couple of units got tripped off over the weekend, resulting in a small spill. They are currently 5' below the rule curve at about 740'. The water being discharged in the lower river is turbid with limited visibility. This is expected for this time of year. The water side of TPU has announced we are now "out of the drought."
 - Action Items:
 - Keith: Forward memo announcing the end of the drought to Carol.
 - Mike: Forward spill-related info to Carol.
- Water Quality: One of the final pieces of the License Article 410 Water Quality Monitoring plan was completed a couple of years ago. The final Draft Riffe Lake Turbidity Study has been distributed and posted since July. Carol explained that

after the FTC has submitted comments on this study, Tacoma and Ecology will work together to finalize the document.

- Action Items:
 - Mark: Send out a separate email explaining the context for the study (why it was done, etc.).
 - All: By Jan. 15, 2016, review study and send comments to Mark.
- FTC Communications: Keith reported that he has been working with the TP web specialist to ensure she has a good understanding of our communication strategy, reinforcing the fact that the public needs to be able to easily access our documents. The focus is being able to meet ADA standards while also meeting business needs. One option might be to take over the existing Cowlitz Fish.net website. Stay tuned.
- We welcomed Joan Nichol of Meridian Environmental who has been hired by Tacoma to provide technical writing support of the subgroups for the FHMP. There was great rejoicing!

Debrief of Nov. 4 ISIT Model Workshop Presenters: Mark, Cindy

The ISIT Model workshop at the Cowlitz Salmon Hatchery was considered successful by all. 15 people attended, including Bob Reid, consultant Ian Coulter, several WDFW folks including Cindy Le Fleur attended as did Michelle Day, Ann Weckback, Jack Tipping, and a few others.

The questions and demonstrations focused on the data and assumptions used by the model, Tacoma's funding of monitoring and evaluation activities to close data gaps, and how the model output addresses the issue of hatchery – wild fish interactions in the basin. Steelhead recycling was also a discussion topic. Mark reported on our very preliminary estimates that ~50% of the 3,299 tagged fish recycled this year are still unaccounted for as of Nov. 2. WDFW clearly articulated the conservative approach that was selected for this year in setting the numbers of recycled summer steelhead.

The FTC and WDFW have accepted the criteria and rule sets from the HSRG that are built around specific genetic strategies. This is reflected in the FHMP. We want to do a better job communicating that to everyone.

Cindy explained that WDFW will be adopting this tool for use in other basins in addition to this one. WDFW will be sponsoring an in-depth training on the ISIT model in March. We will likely use the current version of the model for 2016.

Debrief of Joint FTC / WDFW Ad Hoc Group Meeting Presenters: Mark, Cindy

The joint meeting with the Ad Hoc Group took place at the Cowlitz Salmon Hatchery on November 18. It was well attended and the information we shared relative to the 2016 FHMP Update was, by in large, well received.

This meeting helped us to solicit Ad Hoc Group input early in the process so we can consider it as we craft the language for the FHMP Update document. We shared with them where we are in the process and that Tacoma Power has engaged Joan to assist the subgroups with writing the white papers in a way that is easily understood by all.

At the meeting Cindy walked everyone through a PowerPoint on the North of Falcon Process. This presentation has been distributed to all as a PDF. There was discussion about setting another meeting in early February. Topics could include steelhead recycling program (need to get broad angler participation), juvenile fish marking, sharing any white papers, objective of the FMMP, the results of what fish priorities are shared by each Ad Hoc member what we know and what we don't know, etc.

Action Items:

- Lyn: Send Cindy draft agenda for the next Joint Meeting with the Ad Hoc Group.
- Joan: Work with Tacoma to create agendas for the subgroup meetings.
- Mark: By the end of January, convene a subgroup (Keith and John) to review the draft steelhead recycling report.

2016 FHMP Update Process Presenter: Cindy, Keith, All

Keith explained he met with Joan last week to draft potential headings for each of the white papers. He distributed this list along with a tentative schedule for completion of the white papers and the path and timeframe for making a decision. All of this was done with the idea of sharing the white papers with the Ad Hoc Group. The suggested outline included the following:

- 1. Issue / Problem Statement
- 2. FERC Requirement
- 3. FTC Interpretation of FERC Requirement
- 4. Current Implementation Status / Situation
- 5. Approach to Resolve Issues
- 6. FTC Recommendations

The above outline was well received by FTC members. Each subcommittee (see below) will make decisions around lumping and splitting.

We then reviewed the proposed schedule whereby subcommittees would meet between now and Jan. 8 and get something together to submit to Joan. She will make herself available to the subgroups to the extent possible. We hope to have some working drafts of white papers to share with the Ad Hoc Group in February. This all needs to be done in a timely fashion considering the FHMP Update is due to FERC by April 16, 2016. We reviewed the white papers produced by subgroups for the following topics:

- Fish Production Facilities: Mark L (coordinator), Rich (Michelle), Peggy, Paul
- Program Measures and Communication: Keith (coordinator) and Cindy
- Population Designations / Research and Marking: Matt (coordinator), Cindy, John

- Resident Fish: Mark (coordinator) and Mike Kohn
- Nutrient Enhancement: John (coordinator), Cindy, and Sam

Action Items:

- Keith: Send out Gaedeke memo to all.
- Subgroup Coordinators:
 - Meet with Joan in December about topics to include in each area.
 - Communicate subgroup meeting dates to subgroup members ASAP.
- Shannon: Send Cindy documentation relative to nutrient enhancement.
- All: If come across FERC License references to water quality requirements, let Carol know ASAP (e.g., within Nutrient Enhancement or Resident Fish).
- Keith: Work with Joan to revise the schedule and send out to all.

CRR Fund Subgroup Report Presenter: Mark LaRiviere

Mark explained that the Cowlitz Restoration Fund was set up in lieu of providing volitional upstream passage.

We have set up a subcommittee to work on the implementation strategy for the plan. Pat Frazier has been leading this group and has, with his new WDFW role, been cleared by Cindy to lead two more meetings.

Prior to this meeting, Mark emailed out draft documents from the subcommittee for all to review. These hadn't yet been approved by the subcommittee.

- 2015-11: CRR Plan Implementation Strategy Overview
 - This was a complete rewrite and needs subcommittee review
- 2015-12: CRR Plan Implementation Strategy Hatchery Associated Production

 This likely requires only minor editing

Next Steps: These documents will come to the FTC for discussion at the February meeting with the aim of approving the associated Decision Documents (otherwise, they will be approved at the March FTC meeting. Their work will include a recommendation on funding schedules. Keith owes Jeff Breckel a phone call on how LCFRB and the FTC can collaborate effectively over time. Jeff would be part of the implementation strategy.

Action Items:

- Pat: Set up two more meetings to finish the work of the CRR Subcommittee in time to present at the February FTC meeting.
- Keith: Meet with Jeff Breckel to discuss working together on the MOA.

Downstream Fish Passage Study - Mayfield Presenter: Matt Bleich

Matt walked us through a PowerPoint presentation describing the block design study that was performed this year under a variety of conditions including:

• Baseline (2 pumps all season long)

- Drawdown is the baseline condition with the self-regulating weir dropped all the way to the floor (flushing all water and fish out of the secondary separator) once in a 7-day period
- 4 (actually 3 because one pump broke) pumps on

He explained the fish recapture percentages for each test condition. We could vary the velocity between 13 and 20 cfs. The intent of the study was to increase FPS through the secondary separator. His presentation will be sent out to all along with this meeting summary. There will be a final report out next spring. It will include a section on fish health. The parasite load this year was lower than last year.

CFD 2015 Downstream Fish Passage Presenter: John Serl

John walked us through a very informative PowerPoint presentation of the CFFF 2015 downstream fish passage collection results. The amount of water / flow this year was approximately one third of normal. This led to higher-than-normal collection efficiency for steelhead and coho. Chinook collection remains low.

Review / Approval of November 3, 2015 Meeting Summary and Action Items

The November meeting summary was approved with a minor edit and will be posted for public review.

Meeting Evaluation

- Good discussions.
- Nice to meet Joan! Glad she is aboard!

Handouts

- Draft November 3, 2015 FTC meeting summary
- December 1, 2015 FTC Meeting Agenda
- Cowlitz River Project Suggested Outline for Issue White Papers that will inform FHMP Revisions, including Proposed Schedule to Complete Issue Papers

Potential February 2 Meeting Agenda Items

- Welcome / Announcements (20 min.)
- Update on Mayfield Operations (10 min.)
- CFD Northshore Collector Update (20 min.)
- Plan for Joint Meeting with Ad Hoc Group on Feb. 5 (30 min.)
- 2016 APR Process
- FHMP 2016 Update Process (2 hours)
 - Review Draft White Papers:
 - Fish Production Facilities
 - Program Measures and Communication
 - Population Designations / Research and Marking
 - Resident Fish

- Nutrient Enhancement
- CRR Fund Discussion (1 hour)
 - \circ Overview
 - Hatchery Associated Production
- DAMW Update (1.5 hours)
- Tacoma Recommendations based on 2015 Downstream Fish Passage Study Mayfield (30 min.)
- Review Action Items / Finalize December 1 meeting summary (10 min.)
- Set Agenda topics for March 1, 2016 Meeting (10 min.)
 - o DAMW
 - FHMP 2016 Update Process
 - APR 2016 Process
 - $\circ \quad \text{CRR Fund}$
 - CF Northshore Collection Facility Update

Parking Lot / Potential Future Agenda Topics

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River
- Climate Change
- Cowlitz smelt presentation (by WDFW and Cowlitz Tribe)