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

February 5, 2013, 9:00 AM – 11:30 PM Mayfield Office

Participating Members

LouEllyn Jones (for Tim Romanski) USFWS
Michelle Day NMFS
Eric Kinne WDFW

Mark LaRiviere Tacoma Power Bob Rose (by phone) Yakama Nation

Paul Sparks Washington Council, Trout Unlimited

Other Participants

Matt Bleich Tacoma Power
Kirk Kessler Tacoma Power
Andy Schildmeyer Tacoma Power

Joe First LCPUD
Debbie Carlson BPA

Shannon Wills (by phone) Yakama Nation technical representative

Peggy Miller WDFW John Serl WDFW

Lyn Wiltse PDSA Consulting, Inc.

Conference Call Dial-In Instructions

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

2013 Meeting Dates

March 5, April 2, May 7, June 4, July 2. Default time: 9:00 AM to noon, Default location: Mayfield

Announcements

- The FTC website has been changed such that all the meeting materials for the next meeting are at the top of the page. Tacoma Power is in the process of updating their website.
- The License Article 3 (upstream fish passage) amendment has been submitted to FERC. The FTC has already approved the Cowlitz Restoration and Recovery Plan that includes hiring a contractor to assist with identification of habitat protection and restoration of properties above Mayfield Dam. An RFP will go out Feb. 13, 2013. The pre-bid meeting will be Feb. 212013. Tacoma anticipates awarding a contract in March with work beginning this season. The RFP will be posted on the FTC website for review next week. FTC members are welcome to be on the reviewing committee. Michelle thanked Tacoma for moving forward with the contract while FERC is reviewing the amendment. Bob suggested it would be helpful to review what our goals. Should we include granting tribal and

non-tribal fishing access? Sequestering habitat makes more sense than trying to restore it after it has been degraded.

Action Items:

- All to let Mark know if they have any suggestions for the FTC website.
- All to review the RFP when it is posted.
- All to let Mark know if they would like to be part of the committee to review RFPs.

Agenda Item: Status of Cowlitz FHMP Update

Presenter: Mark LaRiviere

We have received no further word from FERC on the FHMP Update. In the meantime, Mark proposed devoting April 2 and May 7 FTC meetings to all day Annual Program Reviews. Lars Mobrand and Andy Appleby, now with DJ Warren and Associates, will lead these meetings. These would be all-day meetings from 9-3 at Mayfield.

We discussed the most appropriate way to involve the public in these proceedings. There is no requirement to do so as the order has not yet been approved. Yet, we all agreed that involving the public and getting their input is valuable. Mark suggested scheduling a public meeting later this year (August?) to inform the public about what we are doing. We hope by then FERC will have approved the order. In 2014 the APR process would be open to the public and we would have one year of practice under our belt. Eric cautioned that this would be an effective approach only if the programs don't change. First meeting would be to present results to put into the model and the second meeting would be when the FTC looks at model results and makes decisions about program changes.

Tacoma and WDFW are looking at transitioning the lower Cowlitz River late winter-run steelhead program to an integrated hatchery program. The details have not been worked out. Eric explained they are looking at collecting 1 in 10 broodstock from the weirs now operating and bringing those fish into the hatchery to evaluate the spawn time of those fish. In addition we will implement additional monitoring of the late winter-run steelhead population in the lower Cowlitz River basins

Paul expressed the following concerns:

- 1. If we take too many of these steelhead out of the population and back to the hatchery, we are mining our natural stock for hatchery stock.
- 2. We will get about a 40% drop in productivity by bringing fish into hatchery.
- 3. We don't know what genetic considerations there might be on the wild stock.

For all, this means the M&E component is very important. We need to take the new science into consideration.

Agenda Item: Upper Riffe Collector Update

Presenter: Mark LaRiviere

The DAMW met on Jan 16 for a brainstorming meeting. They narrowed the ideas into two categories: fyke netting - live box and more traditional trapping ideas. Eliminated from further consideration; active traps, purse seining, FSCs, etc. Tacoma's consultant, R2 is in the midst of doing a detailed review of these ideas. They will present their results at the March DAMW meeting. This will begin a 30-day review process after which a recommendation will be brought to the FTC for consideration of approval. The (aggressive) schedule has not changed.

Agenda Item: Cowlitz Falls North Shore Collector

Presenter: Kirk, Andy, Matt

Kirk briefly reviewed the final 4 cases that were developed by the design team. He described in detail the benefits of the Case 4^t which is being presented to the FTC for approval. Case 4 includes the feature of a tailrace discharge pipe to pass up to 1000 cfs (in case of negative market, to maintain minimum flows, and spill events). Kirk also described the geo-tech investigation and phase 1 of a hydraulic modeling study. They settled on a preferred diffusion strategy: wall or pipe diffusion as opposed to deep diffusion. The benefits of this alternative include constructability, flexibility, and capability for future expansion. Andy described the excedance flow analysis. There was consensus to move forward with Case 4.

Action Item:

Mark to provide Paul copy of CFD presentation slides in hard copy.

Agenda Item: Steelhead Kelt Reconditioning

Presenter: Eric Kinne

John explained the WDFW proposal for this year. This was included in the FHMP Update and is year 2 of the experimental study. The idea is to see if kelt reconditioning is a viable idea. They are proposing to use what they've got and see if they get better outcomes. Shannon suggested using fiber glass circulars and also salt in addition to formalin. For the evaluation John explained they will continue to mark the fish. They will increase the flow rate to get higher quality water. They will look at linking into the summer steelhead recycling program radio telemetry to see if they are leaving the Cowlitz or residualizing. There is no baseline for multiple returns. We have seen kelts that were previously tagged as kelts at CFFF but have not calculated the rate. John explained we cannot look at repeat spawners through rate of previously tagged kelts at CFFF. Because the estimate would be biased. Could we look at scales and/or extrapolate data from other rivers? We could look at scales of steelhead adults at the separator.

Agenda Item: Review / Approval of December 4, 2012 FTC Protocols

Presenter: Mark

The FTC meeting protocols were approved with minor edits to #2 showing the expanded distribution of meeting materials and meeting attendance beyond official FTC members and their technical representatives. This is a living document and will be reviewed and revised over time.

DRAFT TOPICS FOR MARCH 5, 2013 MEETING

- Announcements
- Review CRR Implementation Plan
 - o Goals
 - o Schedule
- Approve February 5 Meeting Summary

Agenda Item: Approval of December 4, 2012 Meeting Summary

Presenter: Lyn

The December 4 meeting summary was approved with minor edits and will be posted to the website for public review.

Meeting Evaluation

New process went well (Mark leading the meeting)

Handouts

- Draft meeting summary for the December 4, 2012 FTC meeting
- Draft February 5, 2013 meeting agenda
- FTC Protocols
- WDFW kelt reconditioning study

Parking Lot / Potential Future Agenda Topics

• Consider having John Skalski present with HTI (as data comes in)

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

March 5, 2013, 9:00 AM – 12:00 PM Mayfield Office

Participating Members

Lou Ellyn Jones (for Tim Romanski) USFWS

Mark LaRiviere Tacoma Power

Brad Caldwell WDOE

Bob Rose Yakama Nation

Paul Sparks Washington Council, Trout Unlimited

Other Participants

Ed Meyer NMFS

Keith Underwood Tacoma Power
Matt Bleich Tacoma Power

Peggy Miller WDFW
John Serl WDFW
Debbie Carlson BPA

Shannon Wills Yakama Nation technical rep (by phone)

Lyn Wiltse PDSA Consulting, Inc.

Conference Call Dial-In Instructions

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

2013 Meeting Dates

April 2 & May 8 – FHMP Update, Annual Program Review (note: May 8 is the first Wednesday in May); June 4, July 2. Default time: 9:00 AM to noon, Default location: Mayfield

Announcements

- Mark announced the Cowlitz Falls Dam, Case 4 downstream fish collection alternative preliminary drawings will be available to the FTC over the next 4-6 weeks. They will be distributed to members and posted as soon as they are available.
- A new Tacoma Power website is set to go live in the next couple of weeks. If anyone has issues accessing any website content, please let Mark know right away.
- For the time being, Lou Ellyn Jones will be taking Tim Romanski's place as the
 official USFWS representative to the Cowlitz FTC. Mark will update and distribute
 the FTC member contact list accordingly.

Agenda Item: 2013 Supplemental Collection

Presenter: Matt Bleich

Lewis County PUD and BPA will be conducting their dam passage survival studies for juvenile Chinook this season to meet their Bi-Op requirements. They have requested that Tacoma Power not install Lake Scanewa Merwin traps over the summer to avoid interfering with those studies. Tacoma has been asked to remove the weir box, traps, and any other devices by July 1. Supplemental collection efforts will be limited to beach seining which will continue until it proves to no longer be beneficial due to rising lake levels. FTC members present discussed this action and agreed that it made sense.

The ultimate aim is to discontinue supplemental collection when fish passage survival goals are met. Removal of the traps is happening one year earlier than originally anticipated and the FTC will discuss future trap deployment in a timely fashion. Active fishing techniques will always be available for use in the future as needed.

Lou Ellyn requested an opportunity to step back, review the Cowlitz Settlement Agreement and check our status on an article-by-article basis. An overview of each of the articles could provide common context for everyone and energize everyone to work collectively toward solutions. Mark suggested that we do this at the June FTC meeting.

Action Item:

Matt to review this item with Michelle for concurrence.

Agenda Item: FHMP Update Presenter: Mark LaRiviere

Mark reported that we have received no further word from FERC on an Order for the FHMP Update. Informally FERC has indicated it will likely be approved without changes. In the meantime, members of the FTC have agreed, in good faith, to begin implementing portions of the Update.

The first Annual Program Review (APR) meetings will be April 2 and May 8 here at Mayfield. Note the May meeting has been pushed out one day to Wednesday. DJ Warren and Associates staff will lead these meetings. These would be all-day meetings from 8:30-4:00 at Mayfield. The regular FTC agendas will be suspended.

Lars thought it would more helpful for the FTC to review the initial chapters (especially chapter 2) of the FHMP Update, and review Appendix J of the FHMP update to prepare for the APR. Mark posted a preliminary APR manual on the website, but it is intended to be more of a guide to prepare for future APRs as sort of a "technology transfer tool".

WDFW has presented Tacoma Power with the 2013 Cowlitz Evaluations budget to expand lower Cowlitz River tributary work. The budget includes the priority monitoring tasks listed in Appendices H and J of the FHMP Update. Budget approval is anticipated shortly and the work has begun.

Action Items:

- All to review the FHMP Update (11/1/2011) document. Re-read Ch. 2 and Appendices H and J in preparation for April 2 Cowlitz Annual Project Review meeting. Consider fall Chinook, lower river coho, and lower river winter steelhead in preparation for April meeting.
- Mark to invite Mara Zimmerman (WDFW Region 5) to give a presentation to the FTC on the GRTS methodology.

Agenda Item: Cowlitz Restoration and Recovery (CRR) Goals Review Presenter: Mark LaRiviere

As it is nearly a year since we worked together on the CRR plan (April 3, 2012) we reviewed the initial few paragraphs of the CRR to remind everyone of the goals. The plan is aimed at restoration and recovery of listed upper Cowlitz Basin salmonids. Once FERC issues an Order approving the license amendment they will likely request the CRR Plan. There is currently approximately \$16.5 million in this fund.

Bob noted that an ESA recovery standard for the tribes may be different that what NMFS has set. The tribes would like assurance that they have access to the upper Cowlitz River for harvest opportunities. He recommended that FTC members have their habitat restoration and enhancement folks review the CRR Plan to ensure access is being considered. He would like to see a focus on implementation monitoring vs. biological monitoring. If the funding is concentrated in a few specific areas it is more likely to produce meaningful results with multiple species benefits. This seems a wiser approach than spreading it thinly across the whole area. Bob would like to see flexibility vs. criteria that might prove to be constraints. In general Bob has no problem with the implementation plan as written.

Keith explained that on the Cushman project they are doing a habitat assessment with a series of steps that look for remedy opportunities and then write—ups of one-page descriptions to submit to the committee. The committee then decides what to act on. This may be a helpful approach to take.

Mark explained that we modeled this document on the HAG fund where the priority in the lower basin was on habitat acquisition with a focus on protection from development. He supports a similar approach in the upper basin. When Tacoma Power buys a piece of property the public has access unless it is necessary to restrict for safety or operational reasons. Property management plans are developed for all properties purchased and they typically have some restrictions including no motorized vehicles or fires.

Michelle, though unable to attend this meeting, sent an email stating she was in support of the use of the CRR Plan funds for factors limiting listed anandromous fish production. Mark explained this the CRR Plan is a living document and that it may be time to reevaluate what we have previously developed.

Action Items

- All to review the CRR Fund document, beginning with the purpose and edit as needed. Use Track Changes and send to Mark.
- Mark to compare suggested edits to earlier versions and be prepared to discuss.
- Bob to share protocols on how to go about project selection by the end of March.
- Keith to send Cushman plan he described by end of March.

Agenda Item: Review / Approval of February 5, 2013 FTC Meeting Summary Presenter: Mark

The meeting summary was approved with minor edits.

Meeting Evaluation

- Nice to have Lou Ellyn aboard!
- Ran a little late.
- Good discussions.

Handouts

- Draft meeting summary for the February 5, 2013 FTC meeting
- Draft March 5, 2013 meeting agenda
- Cowlitz Annual Project Review, draft agenda
- Cowlitz Restoration and Recovery (CRR) Fund Implementation Plan (April 3, 2012)

Parking Lot / Potential Future Agenda Topics

 Consider having John Skalski present with HTI (as data come in, likely January, 2014)

Cowlitz Hydroelectric Project FERC NO. 2016 Cowlitz Fisheries Technical Committee Meeting Summary

June 4, 2013, 9:00 AM – Noon Mayfield Office

Participating Members

Lou Ellyn Jones USFWS

Mark LaRiviere Tacoma Power

Brad Caldwell WDOE

Bob Rose (by phone) Yakama Nation

Michelle Day NMFS Cindy LaFleur WDFW

Paul Sparks Washington Council, Trout Unlimited

Other Participants

Ed Meyer NMFS
Peggy Miller WDFW
John Serl WDFW

Kirk Kessler Tacoma Power Matt Bleich Tacoma Power

Lyn Wiltse PDSA Consulting, Inc.

Conference Call Dial-In Instructions

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

2013 Meeting Dates

July 2, August 6 (full day), September 9, October 1, November 5, and December 3. Default time: 9:00 AM to noon, Default location: Mayfield

Announcements

- We welcomed Cindy LaFleur to the FTC as the official WDFW representative.
 - Action Item: Mark will update the FTC contact list.
- Report on May 29, 2013 Cowlitz public meeting: This meeting was surprisingly well attended with 100 people, especially considering there were only a few at the last public meeting. Four FTC members attended this meeting. Mark and Cindy presented a PowerPoint on the FHMP update and proposed hatchery production in the first part of the meeting. This seemed to be well received. During the second part of the meeting, Mark and Cindy took questions. Major areas of concern were around fall Chinook production, fluctuating lower river flows, and few fish to catch, particularly steelhead. A list of questions was generated for follow up. Some will be addressed by Tacoma Power, some by WDFW, some by both Tacoma and WDFW and all with FTC input. We will post the responses on websites along with a schedule for additional public meetings.

- Action Item: FTC members to suggest how to group the questions and/or how to respond to specific questions. Let Mark know by June 14.
- LCRFRB: Mark shared that the LCRFRB has expressed an interest in signing the Settlement Agreement and joining the FTC. Jeff Breckel will follow up with Tacoma. Tacoma has also talked to the Cowlitz Tribe about the same thing. Mark has offered to discuss this with the tribal council. Mark will keep us posted.
 - Action Item: All to review Settlement Agreement language around provisions for other members to join the FTC.
- Reports for FTC review: The annual Upstream Fish Passage report will be out for review in the next week or so. It is due to FERC in late July 19. Same with the Annual Side Channel Monitoring report. It will be out later this summer and is due to FERC August 1.
- There is still no word from FERC on the approval of the FHMP Update.

Agenda Item: 2013 Cowlitz FHMP Update Annual Program Review Presenter: Mark LaRiviere

The annual Program Review (APR) meetings were held April 2 and May 8, 2013 here at Mayfield. Mark thanked everyone for their participation.

Meeting summaries approval: The APR meeting summaries remain "draft" until FTC approval. DJ Warren and Associates took very detailed notes. The May 8 minutes contain a series of action items for the FTC to approve including the hatchery program for all populations. The FTC members agreed to table the approval of the draft APR meeting summaries.

Preliminary plans for 2014 APR were discussed. Mark suggested there were lessons learned from the APR process this year that can be applied to next year. At this point, we have reserved March and April of 2014 for next year's APR. It may make sense to start the process earlier. We also want to get more public involvement / engagement earlier in the process.

Discussion / Suggestions:

- At the first public meeting we could review last year's results and present the hatchery program plan along with any changes.
- This could be done in an open house format.
- The way we present the information is also critical and it might be helpful if we started every meeting with some education focused on why we have to do NOR fish recovery.
- We want there to be transparency to what we are doing and why.
- Paul suggested it might be effective for Tacoma Power to place an ad in the Salmon Trout Steelheader magazine.

 LouEllyn asked if there might there be an opportunity to blog regularly or use Facebook?

The FTC discussed the fall Chinook production plan including; the Mayfield Lake net pen proposal, increasing the production at the Cowlitz Salmon Hatchery, and ramifications of the program changes. Clarity and consensus are needed for this issue.

Next steps: Mark will demonstrate one of the ISIT tools at the July FTC meeting. The FTC will continue the discussion of the 2014 APR process and the fall Chinook production issue.

Action Items:

- Mark will demonstrate how to model population data in an ISIT spreadsheets at the July FTC meeting.
- FTC members to review the draft APR meeting summaries with an eye toward approving the hatchery program for implementation. This will be discussed at our July 2 meeting.
- Mark and Cindy will have further discussions on the fall Chinook production plan and hatchery program. The FTC wants to review the fall Chinook issue either before the July 2 meeting or at the July 2 meeting.

Agenda Item: Annual Work Plan Presenter: Mark LaRiviere

Mark walked us through the FTC work plan he put together. There are tables of meeting topics for 2013 and 2013 and 2014 tables of plans and reports that come up for FTC review. Mark welcomes feedback on the plan. Michelle expressed appreciation for him putting this together. This plan will be updated on an annual basis.

Action Items:

- Mark will confirm the date of LWD report.
- All to review and get any comments to Mark before the July 2 meeting.

Agenda Item: Cowlitz Restoration and Recovery (CRR) Plan Presenter: Mark LaRiviere

Mark thanked FTC members for input on the CRR Fund Plan. Bob's edits were distributed to all in track changes. Tacoma plans to fold the CRR implementation plan into a FERC filing and submit it to FERC later this summer. If FERC approves it quickly, we may have some money to spend later this year. *Note: There is currently approximately \$16.5 million in this fund which was established in July 2008 as an interest bearing account, consistent with Cowlitz Project License Article 3.*

Action Item

• FTC to review the CRR Plan and give Mark feedback by the July 2 meeting. FTC Meeting Summary June 4, 2013

Agenda Item: Lower Cowlitz River late winter-run steelhead conservation objective discussion

Presenter: Paul Sparks

Paul expressed concern for the lower Cowlitz River late winter-run steelhead numbers which he believes have dropped over the last few years. He explained that a consequence of a mixed stock fishery is an imbalance between the hatchery and natural origin populations. Natural origin fish always lose. He is concerned that this may be happening here.

WDFW has begun a pilot program to start the integrated steelhead program for the lower Cowlitz River Paul is concerned about any removal of the natural origin fish from the tributaries (NOR broodstock). He would like to see the population build up to around 300 before we integrate any of natural stock into the hatchery broodstock. Mark sketched out the spawn timing of the NOR and HOR steelhead runs in the lower Cowlitz River. The NOR fish are usually ripe in February to April while the HOR broodstock is not collected until May. The goal is to restore the historical timing of the run, from November through May.

Next steps: The FTC agreed to review this program in more detail, and to ensure that all the appropriate people are in attendance so we can make informed decisions about how to move forward.

Action Items:

- FTC members to consider how to address this issue going forward.
- FTC members to suggest to Mark the appropriate time and venue to continue this discussion.

Agenda Item: DAMW Updates

Presenters: Matt Bleich and Kirk Kessler

Matt gave a brief update on DAMW activities and invited all to stay into the afternoon to attend the DAMW meeting immediately following. He highlighted the following:

- The process flowchart has been cleaned up thanks to the valiant efforts of Peggy. This is one component of major DAMW deliverable for downstream fish passage at CF Dam. It identifies data required to route to each decision tree and key.
- The collector is not yet at 30% design. While still preliminary, Keith walked us through a brief update of the design and highlighted changes since the last FTC update. The FTC will have the opportunity to review the complete drawings at the end of the summer.
- The new pump configuration involves 4 larger pumps expandable to 6 instead of the original design which called for 8 smaller pumps expandable to 12.

- Instead of a fixed screen option, Tacoma is moving to a combination of fixed and
 raveling screens. The travelling screens will be utilized at the front of the collector
 where there is lower velocity. Tacoma will also use a primary fixed screen with
 backwash option.
- Construction is still scheduled to be complete in December 2016.

Action Items:

- FTC members to review the flowchart and call Matt directly or discuss any questions with their DAMW representative.
- Kirk to set up a subcommittee conference call to discuss the detailed design.

Agenda Item: Review / Approval of March 5, 2013 FTC Meeting Summary Presenter: Mark

The meeting summary was approved without edits.

Action Items:

- Mark will send out the draft meeting agenda for the July 2 meeting within the next two weeks.
- FTC members to review the draft agenda and give Mark feedback on the suggested amount of time allowed for each agenda item.
- Mark will prepare a PowerPoint to serve as a "Cowlitz 101" session to ensure
 existing and new members understand the terms of the Settlement Agreement
 and FERC license articles that relate to fish issues.

Meeting Evaluation

- Nice to have Cindy aboard!
- Glad Bob was able to attend by phone.
- Ran a little late.
- Good discussions.
- We need to go to full days again to ensure adequate time for discussion.

Handouts

- Draft meeting summary for the March 5, 2013 FTC meeting
- Draft June 4, 2013 meeting agenda
- Cowlitz FTC CY 2013 Work Plan
- Cowlitz APR Day 1 and Day 2 Draft meeting summaries
- DAMW:
 - Process Flowchart
 - o Preliminary CFNSC Site Plans and Hydraulic Analysis (30% submittal)
- Cowlitz Restoration and Recovery (CRR) Fund Implementation Plan (May 24, 2012) Draft

Parking Lot / Potential Future Agenda Topics

• Consider having John Skalski present with HTI (as data come in, likely January, 2014)

Potential July 2 Meeting Topics

- Cowlitz fish "101" presentation
- Demonstration of an ISIT tool
- DAMW Update
- Finalize June 4, 2013 meeting summary
- Confirm date and agenda for next FTC meeting: August 6
- Evaluate the meeting

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

July 2, 2013, 9:00 AM – 3:00 Mayfield Office

Participating Members

Lou Ellyn Jones USFWS

Mark LaRiviere Tacoma Power

Brad Caldwell WDOE
Michelle Day NMFS
Cindy LeFleur WDFW

Paul Sparks Washington Council, Trout Unlimited

Other Participants

Ed Meyer
Rich Turner (by phone)
NMFS
Jim Pacheco
WDOE
Mark Johnson
WDFW
Peggy Miller
WDFW
John Serl
WDFW
Debbie Carlson
NMFS
WDOE
WDOE
WDFW
WDFW
WDFW

Matt Bleich Tacoma Power

Lyn Wiltse PDSA Consulting, Inc.

Conference Call Dial-In Instructions

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

2013 Meeting Dates

August 7 (Wednesday, 10:00-2:30), September 10, October 1, November 5, and December 3. Default time: 9:00 AM to noon, Default location: Mayfield

Announcements

- The next meeting will be August 7th starting at 10am
 - All to bring calendars
- No news from FERC on the FHMP Update.
- Tacoma is preparing the Upstream Fish Passage Article (the CRR plan) for FTC review prior to FERC submittal. Michelle suggested deleting "implementation" from the monitoring requirements in the plan. Bob had added this because he was concerned that monitoring would not include implementation.
 - Action Item: Mark will check back with Bob on this and convey the intent of the edit as agreed to by the FTC.
- The Lower Columbia River Fish Recovery Board (LCFRB) has submitted a
 request to join the FTC. Tacoma supports this and will initiate a process to sign
 onto the Settlement Agreement, (SA) given concurrence by the SA parties. The
 license article in the SA would also be amended to include LCFRB as a member

of the FTC. Michelle requested that Pat Frazier begin to attend as a technical advisor for NMFS starting immediately.

- Action Item: Mark to call Bill Iyall to check on the Cowlitz Tribe's interest in also signing the Settlement Agreement.
- Action Item: FTC members to review the SA language around provisions for other parties to join the FTC.
- Reports out for FTC review: The Annual Upstream Fish Passage report due to FERC July 18. The Annual Side Channel Monitoring report - due to FERC August 1.
 - Action Item: Email any comments on reports for all to review.

Agenda Item: Cowlitz Fish Mitigation Programs

Presenter: Mark LaRiviere

Mark presented a PowerPoint on the Cowlitz Hydro Project fisheries mitigation activities.

Background of the license; The initial controversy was caused by fears that the dams would end the fish runs. The project ended up in the U.S. Supreme Court more than once. The first license period was 1950-2001. There was a multi-party Settlement Agreement signed in August of 2000. The second FERC license was issued in 2003. With the SA came a major shift in emphasis to natural-origin stock recovery efforts.

Fish transportation; Tacoma operates one of the largest fish transportation programs in the state. In some years 70-80K adult fish are hauled above the dams. The same trucks are used to haul juveniles downstream from Cowlitz Falls Dam. Detailed worksheets are filled out for each haul.

Downstream juvenile collection; Multiple collectors are currently being designed and planned for Cowlitz Falls Dam. They will be complete and operational in 2016. At Mayfield Dam Tacoma has made improvements to the louvers and guidance systems. Fish survival studies are being conducted at Mayfield from 2013 – 2015.

Lower Cowlitz River Instream Flow Agreement; The agreement calls for minimum flows at various time of the year with fish transport flows in the spring/early summer. Brad observed we are fortunate to have very good water quality in the Cowlitz.

Lower River Fish Monitoring Program; Lower Cowlitz River side channel monitoring is a combination of habitat enhancements, protections and fish monitoring.

Habitat Advisory Group; Was established with a fund of \$3 million and membership is open to any party that signed the SA. It has taken 5 years to spend the bulk of the money and most has been spent on land purchases. Some has been spent on habitat restoration. Interest has accrued and there is about \$0.5 million remaining in this fund.

Large Woody Debris; Tacoma Power clears the reservoirs for dam safety reasons. Large wood collected has been donated to the USFS and the Cowlitz Indian Tribe.

Gravel augmentation; The Cowlitz River program is to annually place 500 yards of washed gravel that meets the size criteria for spawning just below the Barrier Dam. Monitoring will determine the fate of the gravel.

Cowlitz Restoration and Recovery Plan: This is a great opportunity for protection and restoration of habitat for listed populations in the upper Cowlitz River basin. This fund is in lieu of providing volitional adult passage over the dams during the current license period.

Cowlitz Fisheries and Hatchery Management Plan; Tacoma owns and operates two large hatcheries on the Cowlitz River. They annual production is capped at 650K pounds. Future actions will be determined by an extensive monitoring and evaluation program.

Lower Cowlitz River Monitoring and Evaluation Program; Three tributary weirs have been installed and a fourth one is planned. WDFW is working to verify model assumptions (NOR abundance and HOR influence) and they are validating recovery actions while hatchery production is maintained.

Agenda Item: 2013 Annual Program Review (APR) meeting summary approval Presenter: Mark LaRiviere

The FTC agreed to leave the draft meeting summaries from the April 2 and May 8, 2013 APR meetings in draft form for reference.

Cowlitz Complex hatchery production: Mark shared a new Hatchery Production Table meeting HSRG criteria and boosting fall Chinook production up to 3.5 million (up from 1.5 million). Tacoma has agreed to fund this new program which will fit within the existing space and poundage limit. Mark reported BPA is allowing Tacoma to use their stress relief ponds to make the new program possible. By consensus FTC members agreed to the new numbers in the Production Table.

The lower Cowlitz River summer-run steelhead recycling study is underway for a second year.

Action Items:

Mark and Cindy will share Tacoma and WDFW letters on this topic with the FTC.

Agenda Item: May 29th Cowlitz Public Meeting - Questions and Answers

Presenter: Cindy LeFleur

A draft of the answers to the questions from the May 29, 2013 Cowlitz public meeting has been developed and distributed to the FTC. Tacoma and WDFW are finalizing their answers to a couple of the questions and need to discuss this further. Mark distributed copies of a letter from the Coastal Conservation Alliance (CCA) that he and Cindy received asking for the answers to these questions and also for the date of the next public meeting. The plan is to release the answers to the questions by mid July and hold the next public meeting at Centralia College in the September time frame.

Action Items:

- Michelle to send her edits to Erik Kinne and copy Mark.
- Others to send edits to Mark.
- Mark will send out the finalized version of these by the middle of July.

Agenda Item: Lower Cowlitz River Winter-Run Steelhead Integration Presenter: Paul Sparks / Mark LaRiviere

Prior to this meeting Mark distributed a white paper prepared by Paul to help seed this discussion. Paul is concerned about making the move to an integrated hatchery program for lower Cowlitz winter-run steelhead program. His paper outlined concerns and proposed several solutions. Among others, he thinks it is advisable to consider doing a 2-year integrated hatchery program (producing both one-year and two-year old smolts).

Mark explained the how the ISIT tool allows runs of hypothetical scenarios to develop a mix of hatchery programs that meet recovery criteria. The new Hatchery Production Table uses the best available data to model the programs within HSRG criteria. The data will be refined over time based on results of the monitoring and evaluation program.

Currently there are two segregated steelhead programs in the lower river - summer-run steelhead and late winter-run steelhead. The summer runs use up all the available pHOS, this it is important to be strategic about how to integrate the late winter-run steelhead program in order to ensure sufficient harvest opportunities of summer-run steelhead.

Michelle explained that NMFS shares Paul's concern about the number of NOR fish in the lower river. There are different percentages of age classes in steelhead and they reside in the river until they get big enough to smolt. Rich thinks we are not limiting the gene pool if we raise them to one age 1+ smolts in the hatchery. The goal of the recovery efforts in the lower river is to limit the number of HOR fish that spawn naturally and if they do spawn we want them to be as genetically close to NORs as possible.

Cindy explained that some WDFW staff also question the effectiveness of integrated programs. WDFW presented a draft plan for moving forward with an integrated program for 2014. The plan includes; collecting later timed NOR fish and earlier timed HOR fish for broodstock, collecting 25 NOR fish, and testing cultural techniques in the hatchery.

The weirs have collected an average of 86 NOR steelhead annually over the last few years and it is likely that only 50% are being accounted for at the weirs. If we accept that 86 is the total abundance, then collecting 25 would be within a 30% limit. In 2014 there will be four weirs operating in the lower Cowlitz River.

All agreed we need a better measure of the status of the NOR population in the lower river. In addition, a risk is that if you collect 25 fish from the tributaries how can you be sure they are all Cowlitz River origin fish?

So far there are two years of weir data. Is one more year of data collection going to be enough in terms of what we would learn so we can justify going against HSRG criteria and keep things segregated one more year? Beginning in 2014 a more intensive survey program will begin to collect population data above the weirs. Starting in 2014, it would take a minimum of 2-3 years to get these data.

Possible solutions: Doing wild-only crosses or spawning the males only at the weirs and releasing them back to the stream. Rich thinks live spawning is a good idea and Mark Johnson said they already do that with integrated programs. Could also take only males into the hatchery and not the females. Milt could be frozen in liquid nitrogen and stored at minus 80 degrees.

The FTC agreed to review this program in more detail, and to ensure that all the appropriate people are in attendance at further discussions so all can make informed decisions about not meeting the HSRG criteria for the steelhead programs in the lower Cowlitz River.

Action Items:

- Mark to send out a draft August 7th FTC meeting agenda with this topic as the sole topic for the morning.
- Cindy to let Mark know if August 7 works for WDFW participation.
- Mark to send Paul the Cowlitz Evaluation Report showing reduced number of steelhead redds in the lower Cowlitz River tributaries.

Agenda Item: 2013 Mayfield Downstream Migrant Survival Study

Presenter: Mark LaRiviere

Mark reported they have acoustically tagged and released 489 fish into the Cowlitz River. The detection hydrophones are at the Salmon Hatchery and 6 miles downstream at the Trout Hatchery. The contractor is Hydroacoustic Technology Inc. There are no data yet about the louver released fish, however, the tailrace released fish are moving very quickly downstream. The first year study results will be available to the FTC this winter along with a study plan for 2014.

Action Item:

 Mark to set up a surgery viewing at the Mayfield counting house concurrent with the October FTC meeting.

Agenda Item: DAMW Update Presenters: Matt Bleich

Matt gave a brief update on the Downstream Adaptive Management Work Group (DAMW) activities. Their main focus is to develop an adaptive management plan that includes designing and installing a primary collector and interim collectors - existing system improvements at Cowlitz Falls Dam and an upper Riffe Lake Collector.

- The Adaptive Management Plan: The group is meeting monthly and a work group is meeting weekly. They have developed a process flowchart for calculating the Fish Passage Survival (FPS). This work will be reviewed at the next DAMW meeting on July 8. These tools are being incorporated into the first four chapters of the plan.
- Cowlitz Falls Dam Fish Collection (prototype weir box) The weir box was
 removed June 27 as planned. The testing was successful from the start of
 steelhead through end of coho season. There are extensive data to be analyzed
 with roughly 2,000 tags out. Matt is also working on a study plan to better
 understand the hydraulics within the induction slots and also to characterize a
 variety of flow conditions and experimental design among many different release
 groups for 2014. The initial study results indicate poor collection at the weir box
 during spill events in 2013. During non-spill events the FCE is very strong at
 times.
- Upper Riffe Lake Collector analysis: The consultants, R2, completed an
 alternatives analysis and Tacoma will meet with the DAMW to recommend how
 to move forward. Tacoma will do the design themselves and go external for
 fabrication and installation. They selected three sites and are now going to
 initiate a data collection regime. A fabrication and installation schedule will be
 developed and construction is scheduled to be completed in July 2014.
- Supplemental Collection: They have captured ~ 2300 fish, the majority of which have been Chinook and 320 smolts have been collected. The total numbers are roughly a third of what was collected in the past, however, this makes sense as they are only out fishing 1-2 days per week. The effectiveness of the collection effort is being measured on a catch-per—unit-effort basis and daily catch rates appear to be relatively consistent to date. At the beginning of this year Tacoma proposed a refocus for the supplemental collection crew and have them collect fish only as time allows. Next year the upper Riffe Lake collector will be in place and the time of this crew may be fully consumed.

Action Items:

Matt will provide another update at the September FTC meeting.

Agenda Item: Review / Approval of June 4, 2013 FTC Meeting Summary

Presenter: Mark

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

Action Items:

- Mark will send out the draft meeting agenda for the August 7 meeting within the next two weeks.
- FTC members to review the draft agenda and give Mark feedback on the suggested amount of time allowed for each agenda item.

Meeting Evaluation

- Glad Rich was able to attend by phone.
- Ran a little late.
- Good discussions.

Handouts

- Draft meeting summary for the June 4, 2013 FTC meeting
- Draft July 2, 2013 meeting agenda
- Cowlitz River Salmonids Hydropower Operations and Mitigation PowerPoint
- Some thoughts about Lower Cowlitz Late Winter-Run Steelhead, Paul Sparks
- Cowlitz APR Day 1 and Day 2 Draft meeting summaries
- CCA Washington letter to Mark and Cindy
- Revised Hatchery Production Table
- Cowlitz Restoration and Recovery (CRR) Fund Implementation Plan (May 24, 2012) Draft

Parking Lot / Potential Future Agenda Topics

- Consider having John Skalski present with HTI (as data come in, likely January, 2014)
- What to do about eulachon?

Potential August 7 Meeting Topics

- Cowlitz late winter-run steelhead integration program (entire AM)
- Demonstration of ISIT tool
- Monitoring and Evaluation Program?
- Finalize July 2, 2013 meeting summary
- Confirm dates for remaining 2013 FTC meetings
- Set agenda for next FTC meeting: September 10
- Evaluate the meeting

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

September 10, 2013, 9:00 AM – 3:00 Mayfield Office

Participating Members

Mark LaRiviere Tacoma Power

Jim Pacheco WDOE
Michelle Day NMFS
Cindy Le Fleur WDFW

Paul Sparks Washington Council, Trout Unlimited

Other Participants

Keith Underwood Tacoma Power

Ed Meyer
Rich Turner (by phone)
Mara Zimmerman
Peggy Miller
John Serl
Bryce Glaser
Debbie Carlson

NMFS
NMFS
WDFW
WDFW
WDFW
WDFW
BPA

Jamie Murphy Tacoma Power

Mike Kohn LCPUD

Matt Bleich Tacoma Power Kirk Kessler Tacoma Power

Pat Frazier LCFRB

Conference Call Dial-In Instructions

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

2013 Meeting Dates

October 1, November 5, and December 3. Default time: 9:00 AM to noon, Default location: Mayfield

Announcements

- Welcome to a new Cowlitz FTC member Jim Pacheco, Washington Department of Ecology. Brad Caldwell retired.
- No news from FERC on the FHMP Update.
- One concurrence statement has been signed and returned supporting the Lower Columbia River Fish Recovery Board (LCFRB) to sign onto the Settlement Agreement, (SA) and include the LCFRB as a member of the Cowlitz Fisheries Technical Committee (FTC).

- Action Item: Mark to set up a conference call with the FTC members regarding the LCFRB request.
- Reports out for FTC review: The Fish Disease Status report has been posted for FTC member review - due to FERC November 1.

Agenda Item: Revised Cowlitz Fisheries Technical Team Protocols Presenter: Mark LaRiviere

The FTC members discussed and then approved the change to the Cowlitz FTC protocols to allow individual members to have a technical advisor attend the FTC meetings.

• Action Item: Mark to request email approval of the protocol change from Lou Ellyn Jones and Bob Rose.

Agenda Item: Lower Cowlitz River winter-run steelhead integration

Two concerns were expressed by FTC members regarding NOR population "mining" and the run timing/spawn timing differences between the NOR and HOR populations.

Cindy reported that the fourth lower Cowlitz River tributary weir has been installed. Weirs are now located on Olequa, Ostrander, Delameter & Lacamas creeks based upon the assumptions these are primary late winter-run steelhead spawning tributaries, and that these creeks have a presence of summer-run steelhead strays. Bryce reported that the weirs are approximately 50% effective at excluding steelhead from the creeks above the weirs.

Cindy presented the WDFW – Cowlitz Fall Chinook Production Plans. WDFW is committed to moving towards integration of the lower Cowlitz River winter-run steelhead. They planned to start the 2013 integration at a 1:10 ratio beginning on April 1, however, due to run timing and maturation differences between the NOR and HOR populations it was not possible to complete any spawning in 2013. The few NOR fish collected at the weirs were returned to the streams.

The proposal for 2014 is to integrate at a 30% rate (3:10 ratio) if possible. Broodstock collection of both populations to begin February 1. NOR x NOR crosses will be considered, but are not a first choice. Spawning of NOR x HOR fish will occur only after April 1 to avoid an early winter-run population influence.

A 2014 interim goal of 10% integration and the collection of 25 NOR broodstock would be acceptable to WDFW. The number needed for a 30% integration rate is 86 and for a 10% integration rate is 25. The triggers to change the integration rates are the NOR population estimate and matching the maturation rates of the NOR and HOR populations.

WDFW will begin the collection of the late winter-run steelhead broodstock earlier in 2014 and will work closely with Tacoma Power's separator operators to verify that the broodstock selected are from the late winter run and not early winter run steelhead. The issue of mixing the two runs will go away over the next several years as the early winter-run steelhead program has ended.

Bryce described the plan for estimating the lower river steelhead population number. The estimate will only be for the tributaries, but it will include all lower Cowlitz river tributaries (except the Toutle River). An initial estimate will be available in December 2013. WDFW wants to collect the data and evaluate the NOR population value in the lower Cowlitz river tributaries in order to conduct a harvest-driven integration program (similar to the Kalama River). WDFW doesn't want to go down the "wrong" path on this integration program.

NMFS asked if a "stepping stone" approach would work. That would include doing NOR x NOR crosses and bringing those fish into the hatchery. The adult returns of those crosses would be used to start the integration program in the next generation. It was acknowledged there are problems with this approach:

- High residualism rates
- Higher pHOS rates
- Harvest issues
- Greater variation (more diversity) in smolt age and size

The FTC members asked that the following additional topics be considered/discussed in the future:

- 1. 2-year smolts
- 2. A single HOR steelhead population for the Cowlitz River
- 3. Leaving the integrated versus segregated steelhead population issue unresolved.

Agenda Item: Mayfield Lake fall Chinook net pens. Presenter: Cindy Le Fleur

Cindy announced WDFW will be going ahead with the Mayfield Lake fall Chinook net pen releases in 2014. Funding has been made available from the Washington State legislature due to the efforts of the Coastal Conservation Alliance (CCA). The FTC members discussed several issues with the program and asked WDFW to address the issues.

Cindy said she will get back to the FTC sooner rather than later on these issues.

Action Items:

 Cindy to respond to Cowlitz FTC member concerns regarding the Mayfield Lake fall Chinook net pen project. **Agenda Item: Cowlitz DAMW Updates**

Presenter: Matt Bleich

Upper Riffe Lake collector: Transects 1 & 2 have been selected for the collector site. The schedule for implementation is in flux; however the collector will be operational July 1, 2014. An updated schedule and conceptual design will be posted and distributed following contractor selection.

Adaptive Management Plan: Chapters 1 -4 have been distributed and comments received. Thanks for the input. Chapter 5 will be written and all of the first five chapters will be re-written and available for a second round of review. Current review target for DAMW is end of the calendar year.

Cowlitz Falls Dam studies: In 2013 the PIT tag study results have shown very little FCE difference from the VIE study results. This was the case for both steelhead and coho smolts. Chinook outmigrants were not included in the FCE study this year and as a result were not PIT tagged. The study plans for 2014 include replacing VIE tags with PIT tags for steelhead and coho, and a paired marking program for PIT tag and VIE of the Chinook outmigrants.

Agenda Item: 30 % design review – Cowlitz Falls North Shore Collector facility Presenter: Kirk Kessler

Kirk led the FTC through the 30% design drawings and a corresponding Design Basis Memorandum for the proposed Cowlitz Falls North Shore Collector. Kirk asked for a member review and comments and questions prior to the October 1, 2013 FTC meeting.

Action Item:

• FTC members to review the 30% design drawings and Design Basis Memorandum for questions, comments and other input.

Agenda Item: Review / Approval of July 2, 2013 FTC Meeting Summary

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

Handouts

- Draft meeting summary for the July 2, 2013 FTC meeting
- Draft September 10, 2013 meeting agenda
- Revised Cowlitz FTC Operating Protocols
- WDFW Cowlitz Fall Chinook Production Plans

Presenter: Mark LaRiviere

Parking Lot / Potential Future Agenda Topics

- Consider having John Skalski present with HTI (as data come in, likely January, 2014)
- What to do about eulachon?

Potential October 1 Meeting Topics

- Mayfield Lake fall Chinook net pens
- CRR Plan
- DAMW updates
- 30% Design Review Cowlitz Falls Dam North Shore Collector
- Finalize September 10, 2013 meeting summary

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

December 03, 2013, 9:00 AM – 3:00 PM Mayfield Office

Participating Members

Mark LaRiviere Tacoma Power

Michelle Day NMFS
Cindy LeFleur WDFW
Jim Pacheco WDOE

Paul Sparks Washington Council, Trout Unlimited

Other Participants

Keith Underwood Tacoma Power
Ed Meyer NMFS (by phone)

Peggy Miller WDFW
John Serl WDFW
Mark Johnson WDFW

Matt Bleich Tacoma Power

Pat Frazier LCFRB

Shannon Wills Yakama Nation technical rep (by phone)

Lyn Wiltse PDSA Consulting, Inc.

Conference Call Dial-In Instructions

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

2014 FTC Meeting Dates

Jan. 7, Feb. 4, Feb. 25 (conference call with GoToMeeting at 1:00), Mar. 4, Apr.1, May 6, June 3, Jul. 1, Aug.5, Sept. 2, Oct. 7, Nov. 4, Dec. 2 Default time: 9:00 AM to 3:00 PM, Default location: Mayfield.

2014 Public Meeting Dates, Topics

March 12 (all day, 2014 Cowlitz Annual Project Review (APR), location to be determined), Apr. 24 (evening, APR location to be determined). There will also be a meeting in the fall (evening, rainbow trout stocking plan, location to be determined).

Action Items

Announcements and Planning for Next Meeting

- Mark L. to post 60% design documentation for Cowlitz Falls North Shore Collector by December 6.
- FTC members to review design documentation (see above) and return comments to Mark L. by January 3, 2014.
- All to review the CRR Fund Plan either November version (track changes or edits accepted).
- Mark L. to accept all formatting changes to the CRR document.

Organization / Management of FTC

- Mark L. to post a draft decision document to capture FTC decisions. Include supporting data used to reach the decision.
- Pat to send inconsistencies in the FTC protocols to Mark prior to next meeting.
- All to review FTC protocols in preparation for discussion at January FTC meeting.
- All to review the draft 2014 FTC Work Plan and come to January meeting ready to discuss "make it your own."

Cowlitz DAMW Updates

Matt to prepare document that "tees up" the decision on the 2014 Cowlitz Falls
Dam capture efficiency release study protocol that will be made at the January
meeting. Send this out prior to our next meeting.

Mayfield Lake Net Pens

- Mark J. to get cost estimate for 5b (hose in the pipe vs. the pump and trucking).
- Mark L. to get estimate of costs for 5a, 6 (staff, equipment associated with moving the net pens, snaking the hose through the pipe, pumping, etc. Also check with FERC on dam safety implications.
- Mark J. and Mark L. to meet to evaluate the hole in Mayfield Dam.
- Mark L. to check with Toby regarding feasibility of net pens at Mayfield Dam and let Mark J know ASAP.

Annual Process Review 2014 Public Meeting Schedule

- Mark L. to setup Feb. 25 conference call with GoToMeeting at 1:00
- Mark L. to reserve meeting location for the public meetings on March 12 (all day) and April 24 (evening).
- Mark L. to work with Cindy on presentation for initial APR public meeting.

Rainbow Trout Stocking Plan

- All to send any relevant info on this to Mark L by Dec. 13.
- Mark L to consolidate and send out to all prior to Jan. 7 meeting.

Action Items from Prior Meeting(s)

- Keith to draft letter to FERC re FHMP Update for FTC review in January.
- Cindy to discuss Blue Creek boat launch site with user groups and use APR process in 2014 for a decision.

Announcements

- The 60% set of drawings and the design basis memorandum will be posted for review by December 6. Kirk will also provide a comment matrix that Ed put together as this seems to work well to capture comments and Tacoma's responses.
- The 2013 Mayfield downstream migrant survival study report is only partially completed. The last Chinook release will occur this week. The 2013 report will be out for review in early February, 2014.
- Access agreement negotiations among Tacoma Power, BPA & LCPUD for Cowlitz Falls Dam facilities are on track. A draft agreement will be out for

signatures around the first of the year. In October of 2014 Tacoma will take over the CFFF and the Cowlitz Salmon Hatchery facilities funded by BPA.

Organization / Management of the FTC Presenter: Lyn Wiltse

Purpose: Agree on new process to try out for three months and then evaluate its effectiveness.

Lyn discussed the how changes in FTC agendas and meeting summaries can help make our process more proactive, effective, and efficient.

<u>FTC Member Roles and Responsibilities</u>: Keith reiterated that he sees the FTC as a decision making body. With that role comes full ownership by FTC members of FTC work products and public meetings. Mark will take on a more technical role and Lyn will take a stronger facilitator role.

Meeting Agendas and Summaries: We will continue to assign meeting agenda topics in a way that aligns with the Cowlitz FTC Work Plan. Lyn proposed a new agenda format that highlights the purpose of each agenda item, (discussion, decision, etc.), and action items

<u>Website</u>: We will continually work on making the FTC website and public website easy to use and relevant for all. We will post on the public website any final documents that have been used to support FTC decisions.

Memorializing Decisions:

We will call out any decisions to be made at a particular FTC meeting in advance so all can be prepared to participate in the decision making process, with the aim of coming to consensus. This will allow any members who miss a meeting to "cast their vote" ahead of time through another FTC member or the facilitator. Both the decision and the justifications for the decision should be made available to the public.

Cowlitz DAMW Updates Presenter: Matt Bleich

Purpose: Present updates and answer any questions.

<u>Upper Riffe Collector Status</u>: The contract is being sent to the contractor for signatures today. The contractor will provide a 30% design. TP will then take it to 100% fabrication.

They will have the concept in place by the end of the year (for permitting purposes) and hope to have a prototype in place by summer of 2014. They plan to use the 4th transect site (shallower with more hydraulic control) and are in discussions with LCPUD on this. The trap will be downsized for that location. They will complete the shakedown tests in

2014 and then start the performance monitoring tests with PIT tags and active tags to determine entrance, retention, and discovery efficiency.

<u>Adaptive Management Plan Update</u>: Chapters 1-4 are being processed by Meridian Environmental and are nearly complete. 5.1 lists the environmental factors that would impact our studies and is being reviewed by the DAMW. 5.2 (still being drafted by DAMW) describes how studies will be implemented over the next 3-4 years. The DAMW will review this in mid-January, 2014 and plan for the FTC to review it in March, 2014.

<u>2014 Cowlitz Falls Studies</u>: Matt added that the FCE study for 2014 will be on Chinook (they were not incorporated into last year's study). Survival studies will be conducted by LCPUD until July 7 so Tacoma will deploy the weir box by July 8. LCPUD will be doing maintenance on Unit 2 on Aug. 10. Matt suggested that for the available period of July 8 – August 9 the weir box will be "on" (not blocked) as the 5 week period of availability is too short to conduct a study that will provide accurate blocked vs. unblocked data. We will make a decision on this at our Jan. 7 FTC meeting.

Mayfield Lake net pens Presenter: Cindy LeFleur

Purpose: Review options and make consensus decision on recommendation for net pen program.

Cindy reviewed the pro / con analysis she created on the options defined at the Oct. 29 FTC meeting. The FTC dismissed the first four options due to a variety of factors, including potential cultural issues and narrowed the list to the following four options:

- 5a: Long 4" hose in 30" pipe at Mayfield Dam
- 5b: Trucking from Mayfield Dam
- 6: Hole in Mayfield Dam
- 7: Use Cowlitz Salmon Hatchery (WDFW reported they cannot consider at this time).

When we "took the temperature" of FTC members in the room on which options they currently preferred and support was split between some version of 5 or 6 and option 7. The FTC agreed that additional information and discussion was necessary to reach consensus on this topic.

Decision: The FTC agreed that if fall Chinook net pens are installed in Mayfield Lake they should be at Mayfield Dam, not at the Mossyrock Hatchery site.

Annual Project Review and 2014 Public Meeting Schedule Presenter: Mark / All

Purpose: Agree on proposal, schedule, venue, agenda items and aim of these meetings.

In the spirit of increased openness and transparency and getting good information out to the public, the FTC agreed to conduct two Cowlitz fisheries public meetings on the subject of the APR and a third in the fall on the subject of trout stocking in 2014.

Ideas for the initial presentation:

- Start by emphasizing the Settlement Agreement (SA) and recovering naturalorigin fish.
- Identify the big problems over the next 1-2 years and identify the options being considered.
- Show graphics of adult returns to the Cowlitz River. Explain the model inputs.
 Explain what additional studies are being done and what information to be gained. Do this on a population basis. Explain the ESA and HSRG criteria limits.
 Use a table or chart that shows the constraints and have it hanging and visible the whole time.

We agreed we need to manage expectations and be clear about how we are taking input and what we will do with it. This includes the need to recover listed species and also maintain viable fishing opportunities.

- At the second meeting present available data in a user-friendly graphic format.
- The M&E information would be fed into models with deadlines and would shape the information presented. TP is currently funding a limited M&E program by WDFW and it does not yield all the information needed for the models.

The FTC agreed that the dates of the APR public meetings will be: March 12 (all day) and April 24 (evening).

Rainbow Trout Stocking Plan Presenter: Mark LaRiviere

Purpose: Discussion of future stocking aiming for consensus recommendation in Jan. At the Oct. 29th meeting, Tacoma asked FTC members to review this issue and come to this meeting prepared for further discussions and a possible recommendation for future stocking. It became clear that more preparation is needed to ensure a fully informed discussion of this topic. FTC members will send information they have on this to Mark L to consolidate and send out to all prior to our next meeting.

Review / Approval of October 29, 2013 FTC Meeting Summary and Action Items Presenter: Lyn

The meeting summary was approved with minor edits and will be posted for public review. The status of the Actions Items was reviewed and updated.

December 03, 2013 Final FTC Meeting Summary

Meeting Evaluation

- Meeting was very productive
- Like the new agenda
- Good first step in the right direction
- This was a good start at being more action and decision oriented

Handouts

- Draft meeting summary for the October 29, 2013 FTC meeting
- Draft December 3, 2013 meeting agenda
- Draft 2014 APR meeting agenda for Day 1 and Day 2
- Cowlitz Fall Chinook Production Plans: Mayfield New Pen Program / Options for 2013 Brood Fall Chinook in the Cowlitz River

Parking Lot / Potential Future Agenda Topics

- Consider having John Skalski present with HTI (as data come in, early, 2014)
- What to do about smelt potential future FTC presentation by the Cowlitz Tribe
- Standards and conditions for outside parties to join the FTC
- Identification of Upper Cowlitz River Basin Habitat for Protection report
- LCFRB presentation on the Recovery Plan for the upper Cowlitz River basin

Potential January 7 Meeting Agenda Items

Decisions: - Approve 2014 CFD Study Protocol

- Resolve conflicts for 60% design documentation for CF North Shore Collector
- Finalize CRR Fund Plan

Mayfield downstream migrant survival study update

Finalize CRR Fund Plan

Discuss rainbow trout stocking plan

DAMW updates including feedback on 60% design documents

Mayfield net pens status

Review / Revise FTC Annual Work Plan

Review of FTC protocols