

**FTC Cowlitz Hydroelectric Project**  
**FERC NO. 2016**  
**Fisheries Technical Committee**  
**Final Conference Call Summary**  
January 4, 2011 from 9:00 AM – 11:00 AM

**Participating Members**

Michelle Day	NMFS
Mark LaRiviere	Tacoma Power
Brad Caldwell	Washington Dept of Ecology
Bob Rose	Yakama Nation

**Other Participants**

Ed Meyer	NMFS
John Serl	WDFW
Tom Martin	Tacoma Power
Debbie Young	Tacoma Power
Chris Sergeant	Tacoma Power
Tom Santee	Insight Northwest
Mike Kohn	LCPUD

**Future FTC Meeting Dates (first Tuesday of each month)**

Jan. 14, Feb. 1.

Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

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**Agenda Item: Update Downstream Progress**

**Presenter: Tom Martin**

Since the November meeting the DFPT has been finalizing the 60% Conceptual Design Report which will incorporate the decision document distributed at the November 2, 2010 meeting. They are also working on 90% Conceptual Design Report due out in March 2011. Tacoma has purchased bathymetric data from Natural Solutions for Lake Scanewa – a little dated, however. Next DFPT meeting is scheduled for January 26<sup>th</sup>. Work to date on the 90% report will be presented to make sure the design team is on the right track. March FTC meeting will have a presentation from the DFPT on the draft 90% conceptual design report. The project is on schedule so far.

There have been a series of internal meetings with the design team to make sure the 2011 evaluations get all the data needed for moving ahead with the design work.

Another DFPT meeting is scheduled for February 25th. Meetings out past early March have not been scheduled yet. Michelle suggests go ahead and schedule the out meetings ASAP.

2011 plans – same BGS and floating weir plan as in 2010. Reconfigured the BGS to take advantage of where the fish were found to hang out in 2010. Plan to put the Bonneville BGS into Lake Scanewa in 2011 – has 10' deep solid plates below the floats. There will be no weir box prototype installed on Cowlitz Falls Dam in 2011 due to monitoring being conducted by LCPUD.

Mark is working on 2011 biological evaluations. Planning to start on April 15<sup>th</sup>, possibly in conjunction with USGS evaluations work with LCPUD. Michelle noted the need to make the decision of a contractor ASAP. Michelle says efficiencies of combining the studies make sense for getting a bigger picture – important at this time. The draft 2011 biological evaluations plan will be available with two weeks for FTC review.

Michelle asked about collecting juveniles in the emergency spillway. She inquired if something could be designed and put in place to capture the initial part of the increasing hydrograph to collect the juveniles at Cowlitz Falls Dam?

There is an opportunity for changing the LCPUD BiOp monitoring schedule to accommodate Tacoma installing the weir box in 2012. Mike acknowledged that the access agreement being developed will accommodate the 2012 plan. Michelle proposed a meeting with Tacoma and LCPUD to discuss the BiOp RPM schedule changes.

John asked if anyone had thought about adding predator abeyance to the BGS.

**Action Items:**

- Michelle to send out a proposal and/or more information on the spillway collection proposal and non-smolting juveniles' fate.
- Tom and Michelle will look at setting up a meeting and/or a conference call regarding the BiOp monitoring schedule changes.

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**Agenda Item: Report on Supplemental 2010 Collection Efforts**  
**Presenter: Chris Sergeant**

The year end report has been posted on FTC document review web page. Chris summarized the report. Most of the catch came from beach seining. The Riffe Lake Merwin trap was not successful in 2010. We were unable to deploy Merwin traps in Lake Scanewa in 2010 due to LCPUD monitoring. Beach seining results are improving due to learning, skills and efficiency.

2011 recommendations:

- April 1<sup>st</sup> to July 15<sup>th</sup> – Riffe Lake beach seining.
- >July 1<sup>st</sup> fish two Merwin traps in Lake Scanewa.
- Continue to beach seine in Riffe Lake through end of September

Mike pointed out the possibility of a Lake Scanewa drawdown in September for debris deflector maintenance. Mark and Joe First, LCPUD are in communication about the schedule and Lake Scanewa Merwin trapping may need to be terminated as early as September 7<sup>th</sup>. LCPUD will make the decision regarding the schedule soon.

John and Michelle brought up the issue of non-smolting juveniles' fate once they are captured in Riffe Lake. Should the fish be hauled back upstream above Cowlitz Falls Dam? Mark pointed out the number of fish in this category totaled about 19,000 juveniles in 2010.

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**Agenda Item: Plans for Next Public Meetings/Briefings**  
**Presenter: Tom Santee**

The schedule of the draft FHMP update was reviewed. It is unknown right now if a public review draft of the FHMP update will be available on February 1<sup>st</sup>. The draft document must be distributed before the public meetings. The first meeting would be an overview of the draft document. The second meeting would be a more technical meeting explaining the process used.

Tom suggests a public review meeting around February 10<sup>th</sup>. It is likely there will be only a short notice for the meeting. An early afternoon session at the Centralia College meeting room was suggested. Mark proposed reserving some meeting rooms ahead of time.

The FTC members generally agreed we do not want to release public review draft document with unresolved issues.

The general plan is an overview meeting, probably a weekday afternoon meeting. The second technical meeting should follow within a week.

A discussion was held on the best way for the public to provide comments. It was generally agreed that written comments would be the best format.

**Action Items:**

- Tom Santee will investigate scheduling rooms at either Centralia College or Toledo High School in February.

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**Agenda Item: FHMP Schedule Update**  
**Presenter: Mark LaRiviere**

The next FTC FHMP update workshop is scheduled for Friday, January 14<sup>th</sup>. Time and location TBA – possibly in Ridgefield again. Mark's understanding is that Lars and Andy

intend to resolve all outstanding issues and produce a public review draft FHMP update document for the FTC to approve shortly after the meeting.

Assignments from the December workshop were reviewed and discussed about how to get the information to Lars and Andy. FTC members should review the summary document and any of their assignments.

**Action Items:**

- Mark will check with Andy regarding the status of the M&E plan.
- Mark will check with Lars about the status of the draft update document prior to the January 14<sup>th</sup> meeting and notify the FTC members.

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**Agenda Item: Update Status of December 7, 2010 Meeting Action Items**  
**Presenter: Mark**

**Action Items:**

DFPT:

- Chick and AI to provide some examples to Michelle of schedules of implementation ASAP.
- Chick and AI to provide explanation of additional data collection re changing the location of the Riffe Lake Collector based on the 2010 USGS fish tracking data.

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**Agenda Item: Approval of December 7, 2010 Meeting Summary**

We approved the Dec 7 meeting summary without edits.

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**Draft Agenda for Feb. 1, 2011 FTC Meeting at Mayfield**

9:00 – 9:30      Welcome / Review Agenda / Check-In  
                         Discussion – draft FHMP Update document  
                         Supplemental collection non-smolt juvenile collection fate  
                         Update on Cowlitz River Ad Hoc Group  
                         Update status of January 4 Meeting Action Items  
                         Approval of January 4 Meeting Summary

**FTC Cowlitz Hydroelectric Project**  
**FERC NO. 2016**  
**Fisheries Technical Committee**  
**Final Meeting Summary**  
March 1, 2011 from 9:00 AM – 3:00 PM

**Participating Members**

Michelle Day	NMFS
Brett Swift	American Rivers (by phone)
Mark LaRiviere	Tacoma Power
Brad Caldwell	Washington Dept of Ecology
Tim Romanski	USFWS
Bob Rose	Yakama Nation (by phone)
Pat Frazier	WDFW

**Other Participants**

John Serl	WDFW
Tom Martin	Tacoma Power
Keith Underwood	Tacoma Power
Kirk Kessler	Tacoma Power
Steve Fischer	Tacoma Power
Dennis Dorratcague	MWH
Chick Sweeney	AECOM
Dana Postlewait	R2 Resource Consultants
Tom Santee	Insight Northwest
Mike Kohn	LCPUD
Debbie Carlson	BPA
Lyn Wiltse	PDSA Consulting

**Future FHMP Update Workshop Dates**

March 4 and 11 with focus on FHMP Update: Monitoring and Evaluation and Productivity Testing, respectively. Meet at Mayfield office from 9:00 – 4:00 each day.

**Remaining 2011 FTC Meeting Dates**

Apr. 5, May 3, June 7, July 6 (Wednesday), Aug. 2, Sept. 7 (Wednesday), Oct. 4, Nov. 1, Dec. 6

Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

**Quotable Quote**

*“The whole purpose of using a Computational Fluid Dynamics Model is to allow us to take voyages of discovery using electrons instead of steel...”* - Chick Sweeney

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**Agenda Item: Update on Cowlitz River Ad Hoc Advisory Group**

**Presenter: Pat Frazier**

Pat reported that things were going well with this group. They are now meeting on a monthly basis and will continue to do so for the next several months (until they see a draft FHMP update). Their issues are being vetted through the FHMP update process. Pat will continue to keep us posted.

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**Agenda Item: Report from Downstream Fish Passage Team**

**Presenters: Tom Martin, Chick Sweeney, Dana Postlewait, Dennis Dorratcague**

Tom reported that the Downstream Team met most recently on February 25. A draft 90% conceptual design report was sent out electronically (via links) for review on February 18. This report addresses the two collection alternatives being considered on Lake Scanewa. These are partial flow and full flow facilities. The new BGS (from BPA) is larger and more robust than the prior one. Tacoma is working with USGS for monitoring in 2011. They will be using radio tags this year as acoustic tags used last year did not show us fish within 10 ft of the dam. We will install the collection facility where the fish are.

Chick, Dana and Dennis walked us through the two different alternatives (partial and full capture flow) as well as supplementary collection.

- Partial flow capture facility – single walled screen, will bleed off some of the attraction water before we capture fish. Pipe designed for capture at 250 cfs at 0.2 ft. per second per foot.
- Full flow capture facility – v-screen, we will use the whole attraction water to accelerate to the flow for fish capture. Pipe designed for capture at 500 cfs at a faster acceleration (similar to RSWs on the Snake River). For this facility we will be able to use the existing bypass pipe, flume, and associated existing structures on the dam.

Both alternatives share many of the same components and constraints. Only the partial flow option contains a pump wall. There are different means of achieving capture in both alternatives. For each module we have the BGS and the net. There can be a variety of different configurations.

Dennis explained a third option: a slower acceleration to capture that is designed to meet NMFS guidelines for acceleration and deceleration. It extends out much further into the reservoir than the other two options. It starts at 1.3 fps at the entrance (maybe this should be a little higher to differentiate between the ambient velocities in the reservoir) and ramps up to 8 fps at EL 862' and about 10.5 fps at EL 860'. This would be a fixed structure.

He also reviewed a drawing illustrating what the facility might look like if we keep the screens the same and add 750 cfs pumping velocity. Approach velocity might be 0.6 fps. The 500 cfs V screen structure would have to be expanded to accommodate the 750 cfs capacity. We would also have to do some kind of modification upstream in the

approach channel. The ability to turn on more pumps would likely translate into an adjustable capture section.

He also reviewed with us a final alternative that would address the issue of fish going under the BGS and hanging out by the dam. This would require a new bypass pipe running through the dam. There would be a 50 cfs v-screen dam face collection as supplementary collection.

The weir box is something that could be deployed later. Tom explained they could do a prototype of this in 2012.

Chick discussed the DFPT qualified recommendation and the supporting logic. They will be presenting a preliminary consensus recommendation and next steps required to go to the 100% design report.

Chick explained that at the meeting on Friday they reviewed a straw man evaluation matrix and decided the alternatives were not really amenable to this kind of evaluation. Alternatives were assembled to demonstrate different approaches to different system components and can still be mixed and matched. At the meeting they reviewed the pros and cons by component, considering potential for fish collection success and adaptive management. They also noted debris handling issues and design details needing adjustment and optimum components / compatibility of components where possible. They settled on the best combination of compatible components working downstream to upstream.

#### Preliminary Downstream Fish Passage Team Recommendations:

- 250 cfs capacity pumped V-screen
  - o V-screen layout more space efficient than wall screen
  - o Not expandable so capture section does not require as much adjustment
  - o Pump discharges pipe toward turbine intakes to not affect forebay flow patterns
- Gradual acceleration capture module upstream from V-screen
  - o Capture with full 250 cfs at 8 fps in ~4.4 ft deep x 7 ft wide cross section
  - o Capture section length determined by integration of smolt swimming capability over time.
  - o Adjustable floor elevation to follow forebay level variation
- Pump wall collector entrance from capture module
  - o Allows variable entrance flow rate and velocity to follow (exceed) variable reservoir (river) ambient flow velocities
  - o Allows easy expansion by adding pumps without affecting downstream, components
  - o Flow requirements (250 cfs expandable to 500 cfs)

The team still needs to agree on pump wall flow:

- WDFW would like to see capacity to reach 1,000 cfs collection flow.

- Tacoma is advocating for 750 cfs primary collector flow and options for supplemental collection downstream from the primary collector if fish tracking and collection results indicate such a need.
- NMFS desires considering options including flow rate and alternate entrances (e.g., corner entrance).

Recommendation contingent on good BGS performance under a range of flows (up to 15,000 cfs) needed to collect fish:

- If fish are concentrated at the collector entrance, it will likely be successful.
- If not, other collector entrance locations nearer the dam may need to be considered.

Next Steps:

- Revise Section 5 of 90% report to include evaluation and recommendations, plus a new drawing that illustrates the Preliminary Consensus Idea.
- DFPT conference call (ideally by March 10, 2011) to get confirmation that the new Section 5 reflects the team's thoughts.
- The 90% CDR will be issued to the FTC for review. Only Section 5 and the Executive Summary will change.

Depending on how well the BGS looks we might look at spreading the risk by creating multiple entrances. We might also look at turning the facility around.

Tom explained that after the design for the Scanewa facility is complete then the design for the Riffe facility will commence. Pat suggested if the exclusionary net is not effective at guiding Chinook, then we should consider the riverine area above Riffe Lake. If fish are getting around the BGS, then we should look at multiple entrances.

Note: The schedule is tight as we need to submit the 100% report to FERC by August 31, 2011.

#### **Action Items:**

- Chick – By March 11, coordinate rewrite of Chapter 5 to capture DFPT discussions from the Feb. 25 meeting. Address questions of contingency plans if:
  - Chinook don't guide on the BGS and if the net is not feasible for seasonal collection of Chinook, then per recommendation in the decision document appended to the 90% report, the alternative study for some kind of collection needs to move ahead at a different location (e.g., below CF).
- Tom – Reconvene DFPT to review revised Chapter 5 to ensure it encompasses consensus from that team. The hope is that parties involved will have had pre-discussions on the flow issue so we can move forward with the 100% design.
- Chick – Work with AI to put together table to show logic of selecting particular components.
- Tom – Post Downstream Team Fish Passage PowerPoint presentation to FTC website.



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**Agenda Item: Plans for Next FHMP Update Meetings****Presenter: Mark LaRiviere**

The next scheduled meetings for the FHMP Update are March 4 and March 11. They will be held at the Mayfield Office from 9:00 – 4:00. These meetings will be using the same format as was used in Richfield. The major remaining topics to be addressed are:

1. Monitoring and Evaluation
2. Productivity Testing

At the end of the FHMP Update Workshop on March 4 FTC members will determine if it is necessary to set an additional date in order to complete the FHMP Update.

At the end of the FHMP Update Workshop on March 11 FTC members will determine when it makes sense to schedule the next public meeting. Tom Santee reported to Mark that Toledo High School is a possible venue for the next meeting. This is in keeping with the desire to rotate meeting locations to accommodate broad public interest.

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**Agenda Item: Update Status of January 4, 2011 Meeting Action Items****Presenter: Lyn****Action Items:**

- Tom S will investigate scheduling rooms at either Centralia College or Toledo High School for next public meeting (done).
- Mark will check with Andy regarding the status of the M&E plan (done).
- Mark will check with Lars about the status of the draft update document prior to the January 14<sup>th</sup> meeting and notify the FTC members (done).
- Tom M and Michelle will look at setting up a meeting and/or a conference call regarding the BiOp monitoring schedule changes. (resolved)

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**Agenda Item: Approval of January 4, 2011 Conference Call Summary**

We approved the January 4 conference call summary with minor edits. It will be posted on the website for public review.

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**Draft Agenda for next Cowlitz FTC Meeting**

9:00 – 9:30 Welcome / Review Agenda / Check-In  
Celebration: Completion of draft FHMP Update document  
Supplemental collection  
Update on Cowlitz River Ad Hoc Group  
Update status of March 1 Meeting Action Items  
Approval of March 1 Meeting Summary

## **Meeting Evaluation**

### Well Done:

- Downstream Fish Passage Report and Presentation
- Happy Brett and Bob were able to participate by phone – conference call worked well
- Good information sharing and listening

### Do Differently:

- Plan to avoid technical difficulties
- Ensure phone participants have access presentation reference materials during the meeting

## **Handouts**

- Draft January 4, 2011 Conference Call Meeting Summary
- Draft March 1, 2011 FTC Meeting Agenda
- 90% Conceptual Design Drawings:
  - 4.1-1: Cowlitz Downstream Fish Passage 500 CFS V-Screen General Plan
  - 4.1-2: Cowlitz Downstream Fish Passage Partial Flow Capture Facility General Plan
  - 4.1-3: Cowlitz Downstream Fish Passage Partial Flow Capture Facility – 500 CFS Plan, Profile & Velocities
  - 4.2-2: Cowlitz Downstream Fish Passage 500 CFS V-Screen Plan & Profile
- Downstream Fish Passage Team Schedule

**FTC Cowlitz Hydroelectric Project**  
**FERC NO. 2016**  
**Fisheries Technical Committee**  
**Final Meeting Summary**  
April 20, 2011 from 9:00 AM – 2:30 PM

**Participating Members**

Brad Caldwell	Washington Dept of Ecology
Michelle Day	NMFS
Pat Frazier	WDFW
Mark LaRiviere	Tacoma Power

**Other Participants**

Chris Maynard	Washington Dept of Ecology
Lars Mobrand	DJ Warren & Associates
Robyn Redekopp	Meridian Environmental, Inc
Dan Rawding	WDFW
Paul Sparks	Trout Unlimited
Debbie Young	Tacoma Power

**Remaining 2011 FTC Meeting Dates**

May 3, June 7, July 6 (Wednesday), Aug. 2, Sept. 7 (Wednesday), Oct. 4, Nov. 1, Dec. 6  
Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

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**Agenda Item: Review Appendix J, M&E Plan**

**Presenter: Lars Mobrand**

Lars presented a history of the M&E appendix and how the current draft came about. A new flow chart has been added to Appendix J to describe the Monitoring Activities (MAs) that produce the data needed for the Analytical Methods (AMs) that will be used to estimate the variables that support decision making.

Lars suggested starting with AMs to make sure that the information collected during MAs can actually be used. A power analysis can determine sample size and how much data needs to be collected, and that may guide which MAs can feasibly be done. Some AMs/MAs are standard, such as many of the upper river basin activities. Escapement and composition in the lower river are the most difficult to estimate.

Lars proposed that a subgroup composed of Lars, Dan, and a group of outside experts (Scott Blankenship, WDFW?) could meet to discuss the remaining M&E options for Chinook, coho and steelhead. Some AM/MAs still need a write-up, and a power analysis should be done for all activities. This could be worked out in the subgroup.

The FTC discussed why we are estimating juvenile abundance for fall Chinook in the lower Cowlitz River. Lars noted that while the MA is included in Appendix H, they are not a priority to monitor. Meeting standards for juvenile abundance estimates for fall Chinook is difficult and may take a lot of time, money, and effort. If it doesn't impact the decision rules, we don't need to do it.

Debbie noted that she would like the M&E subgroup to present the FTC with options, not decide what will be done. If the pros and cons are equal for multiple options, then they both need to get equal weight in power analysis and consideration.

Pat noted that Brett may not agree on hatchery program changes until the M&E plan is completed. He suggested that red flags for Brett may be; 1.) Using NOR broodstock fish for the fall Chinook program, 2.) Whether or not enough NOR broodstock can be collected to run an integrated steelhead program in the Lower Cowlitz River, and 3.) If the M&E plan is specific enough to meet her needs. The final M&E plan will not be done for several months, the other issues can be addressed in the mean time.

*Action Items:*

- **Lars** – set up M&E meetings to develop plan and consult with other geneticists.
- M&E plan for Chinook will be delivered at June 7<sup>th</sup> meeting, and there will be a progress report on coho and steelhead.

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**Agenda Item: Outstanding draft FHMP update issues**

**Presenter: Lars Mobrand**

A summary table of the remaining FHMP issues awaiting FTC resolution was handed out and issues were worked through in order:

*Section 2.5.3. History of Crediting*

Pat stated that this section is covered in the last FHMP document and covers why some of the decisions in that document were made. This history does not necessarily apply now due to new discussions in the FHMP update.

*Action Item:*

- Remove History of Crediting section, but leave in Table 2-14.

*Section 3.6.2. Upper Cowlitz Spring Chinook*

The number of HORs transported to the upper Cowlitz River basin is limited by the effective pHOS (<30%). The draft FHMP update shows a 29% pHOS at 400 adults transported, with a very low harvest (3%) at the trigger point from the colonization phase to the local adaptation phase. Pat suggests increasing the trigger point from

colonization to local adaptation from 40% FPS to 60% FPS and increasing the number of HORs transported from 400 to 1200.

Michelle believes this is a policy call. The AHA analysis indicates that the lowest FPS to start local adaptation is 40%, but this is the edge and an aggressive approach. Pat suggests we need to be more conservative with a 60% FPS. Brad stated that the risk in this situation is a population collapse if you move to local adaptation too quickly.

Lars mentioned that there is an article in the April 2011 issue of Science that covers Fraiser River local adaptation and may be a good reference to review for this discussion.

Currently, the upper Cowlitz River spring Chinook program is in the colonization phase due to an FPS <40%. The FHMP update allows that at least 8,000 adults can be transferred.

*Action Item:*

- Change trigger from 40% FPS to 60% FPS and adults transported from 400 to 1,200.

*Section 3.7. Upper Cowlitz Coho*

Pat thinks that any adult return from the integrated HOR program should go upstream, and that only fish from the integrated HOR program go upstream. He thinks that 25,000 is probably the largest return we will get, but if conditions were right the maximum might be 50,000. The cap in these years would be 25,000. Lars brought up that 60% FPS is the trigger for local adaptation for coho in the draft FHMP update. That means there will be a large drop in fish transported at that time. Coho FPS may be up to 60% before 2016 at the Cowlitz Falls Fish Facility.

Michelle offered that Brett was worried about reaching carrying capacity and flooding the system. Michelle is not worried about carrying capacity and would like to increase marine derived nutrients and speed of colonization. Pat stated that the program was set to the right size for carrying capacity, so there should be no issue with moving up all returns. The only change from increasing adults transferred is to PNI.

*Action Item:*

- **Pat** will discuss the topic with Brett.
- A tentative draft solution was okayed by FTC members present and will be adapted after approval by Brett.

*Section 3.13. Resident Fish*

It was suggested and agreed upon that this section should be moved to section 5.6.

*Action Item*

- Move Resident Fish from Section 3.13 to 5.6.

*Section 5.4 and all steelhead sections Productivity Testing*

This section was skipped during the meeting. It will be discussed at the May 3<sup>rd</sup> FTC meeting. Debbie said the plan to use the Cowlitz Restoration and Recovery Fund (CRR) was created based on an example provided by Brett. The draft, with input from Sara and the HAG group, has been posted to the FTC website for review.

*Section 3.8.4. Kelt reconditioning - upper Cowlitz River Steelhead*

Pat provided a WDFW handout from Mark Johnson, Cowlitz Complex manager, that provides a draft plan for kelt reconditioning of steelhead from the Cowlitz Falls Fish Facility.

Paul questioned if there was a genetic impact of releasing reconditioned fish. Lars said that if there is a demographic problem with the population, reconditioning kelts might be a viable option for population recovery in the upper Cowlitz River. Debbie brought up that the ISRP does not support this kind of program and wonders why. It should be something we look into before beginning a program. Michelle said that we are handling fish a lot and having a great impact on survival. We should look at what others are doing to see if we can reverse those impacts. Mark mentioned that we would add risk to the program by bringing kelts into a facility that has disease issues.

Paul and Michelle both brought up the Yakama Tribe reconditioning program at Prosser, and that the fish look like they are in excellent condition.

*Action Item:*

- **Mark** circulate for review the ISAB/ISRP document that details why a kelt reconditioning program was not supported.
- FTC members to think about this proposal for later discussion.

*Section 5.3. Net Pens and off station programs*

Pat said that there should be a discussion in the draft FHMP update about the biological concerns with off-station releases. Lars provided a handout from the HSRG ("Outplanting and Net Pen Release of Hatchery Origin Fish"). Mark suggested we could just add a paragraph about the concerns and leave it at that.

*Action Item:*

- **Lars** to write up paragraph on concerns with off station releases to be circulated to Pat, then the FTC.

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**Agenda Item: Schedule**  
**Presenter: Mark LaRiviere**

Tacoma Power is applying for a six month extension for the draft FHMP until November 2011. Pat raised concerns that by November the hatchery will have already taken eggs and the proposed hatchery program in the draft FHMP update will not be followed. Two different approaches were presented:

1. Maintain current brood numbers and follow last year's future brood document;
2. Maximize egg take for all programs under an (assumed) completed and approved FHMP Update, culling extra eggs if the document is not done by then.

Michelle suggested a conference call with the FTC to approve which option to select for the Future Brood Document. Pat said we can try to get public input and review prior to egg take in September and continue with the proposed program. He would like to see if we can use the FHMP update program for BY 2011, and if in July we decide we can't, we don't use the FHMP update.

There was concern expressed about production numbers from Table 3-14f and a question raised if enough space and/or water was available to raise that number of fish.

The FTC agreed there needs to be a plan to let the public know what was done with their comments on the draft FHMP update. It was suggested that each comment be addressed and the response either be mailed/emailed to the commenter, and posted online for the public.

*Action Items:*

- **Pat** to talk to BPA about using stress relief ponds for rearing.

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**Agenda Item: Update on Cowlitz River Ad Hoc Advisory Group**  
**Presenter: Pat Frazier**

Pat reported that the group took a field trip to the hatchery at their last meeting to assess the effluent/attraction water issue. The group reviewed the hatchery as-built plans and the hatchery facility. Currently the attraction water has been turned off.

This group has discussed the option of recycling steelhead and spring Chinook to the Lower Cowlitz River. Discussions on this topic are ongoing.

## **Agenda Item: Update status of March Meeting Action Items**

**Presenter: Mark LaRiviere**

- **Mark** will post the presentation from the Downstream Team to the FTC website.
  - After further review, Michelle's spillway collection proposal and non-smolting juveniles' fate proposals are no longer valid action items.
  - The minutes from the March 1 meeting have been posted, and will be considered approved if no comments are received by Friday, April 22.
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## **Agenda Item: Announcements**

**Presenter: Mark LaRiviere**

The Mayfield office is not available for the May 3<sup>rd</sup> FTC meeting due to the Mossyrock Open House. Tim Romanski has provided an alternate location at the USFWS office, room 223 in Lacey. All FTC members are invited to attend the Mossyrock Open House on May 7 in the town of Mossyrock.

The draft Annual FHMP Report has been posted for review. The most recent draft on the website has Brett's comments in track changes.

During relicensing, Tacoma Power funded *Ceratomyxa shasta* research with Jerri Bartholomew, Oregon State University. Jerri has conducted studies in the Klamath Basin and has new findings. She has offered to host a webinar for the FTC to present these new findings. This webinar could occur at an FTC meeting or during the week not at a meeting.

*Action Item:*

- **Mark** will schedule a non-meeting time in the next few months for this webinar.

## **Handouts**

- Remaining FHMP Update Issues Awaiting FTC Resolution
- Outplanting and Net Pen Release of Hatchery Origin Fish
- References for Net Pen Concerns
- Kelt Reconditioning Outline – Cowlitz Complex February 2011



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May 3, 2011 from 9:00 AM – 2:30 PM

**Participating Members**

Brad Caldwell	Washington Dept of Ecology
Michelle Day	NMFS
Pat Frazier	WDFW
Brett Swift	American Rivers
Mark LaRiviere	Tacoma Power
Bob Rose	Yakama Nation
Tim Romanski	USFWS

**Other Participants**

Sara LaBorde	WDFW
John Serl	WDFW
Paul Sparks	Trout Unlimited
Debbie Young	Tacoma Power
Tom Martin	Tacoma Power
Lyn Wiltse	PDSA Consulting, Inc.

**Remaining 2011 FTC Meeting Dates**

June 3 (FRIDAY - NEW DATE), July 5, Aug. 2, Sept. ??, Oct. 4, Nov. 1, Dec. 6  
Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

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**Agenda Item: Productivity Testing**

**Presenter: Mark LaRiviere**

We discussed productivity testing. If we continue it we need to be sure we are doing it right. A lack of marking is compromising the testing. Marking steelhead smolts only at the Mayfield counting house only may result in a biased estimate of the number and genetic composition of adult returns to the upper Cowlitz Due to juvenile collection rates at Mayfield Dam and escapees from a Tilton River fish farm, unmarked hatchery adults return to the Cowlitz Salmon Hatchery separator.

A number of factors including recovery priorities for the Cowlitz, the M&E program, and the CRR fund will inform our decision on the need for productivity testing. There is currently a sub-committee working on the M&E draft. They plan to bring us information on this at our June and July meetings. It is important to recognize that if we decide to end the testing and implement the fund, then we would defer, consistent with the license for this license period, adult volitional passage.

We agreed to continue the testing over the next few months until these issues are resolved.

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**Agenda Item: Marking of Juveniles****Presenter: Pat Frazier**

The marking of steelhead is a conservation issue. Any unmarked steelhead adults that return to the Cowlitz Salmon Hatchery will be transported to the Tilton – not the upper Cowlitz. Michelle believes BPA would do the marking (CWT) in 2011 if Tacoma would pay for it. Debbie Carlson is currently out of town and unavailable. The only outstanding issue is the funding. Last year Tacoma provided the equipment and BPA provided the labor. For 2011, BPA offered, via email, to have CFFF staff perform steelhead CWT marking activities if Tacoma would provide funding for these marking activities. Tacoma did not respond to BPA, however, they forward the information to WDFW. Therefore BPA was unwilling to allow CFFF to conduct steelhead CWT marking activities in 2011. Debbie Young reported that Tacoma is willing to provide the equipment to share that responsibility again. They are looking for BPA to help with some of the associated costs.

We agreed to continue with negotiations on marking for 2011 with WDFW attempting to make contact with BPA, via Debbie Carlson, to discuss CFFF staff conducting CWT marking activities for steelhead and how would these activities be funded. In the meantime WDFW agreed to provide funding for steelhead CWT marking activities in the short term to provide time for BPA and Tacoma to reach agreement on how to implement and fund these activities. BPA funded CFFF staff cannot, according to their contract, mark the fish unless an agreement is reached between BPA and Tacoma Power. Tacoma is meeting with Lewis County and BPA regularly on their long-term access agreement to the Cowlitz Falls Dam and the Cowlitz Falls Fish Facility.

For the FHMP update we have identified the upper Cowlitz populations as the preferred populations to mark, a change from marking the Tilton populations as currently occurs. This marking could be done in the future at the stress relief ponds. We brainstormed how to resolve this issue in the short term. We need an agreed-to implementation plan for marking as part of the FHMP Update. For the next couple of weeks, to address this conservation issue, WDFW will provide funds for CFFF staff to perform the CWT marking of steelhead.

**Action Items:**

- Pat will contact Debbie Carlson regarding this issue.
- Debbie will add marking to the list of issues being negotiated between Tacoma and BPA.
- Pat and John will draft a marking protocol for the FTC to review at the June 3 meeting (meet with BPA and address NMFS concerns about fish handling).

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

We all agreed on the goal as specified in the license (achieve natural stock restoration).

We could use the EDT work here – a hierarchical way of looking at the habitat by reach segment in the upper basin. We might look at ownership, zoning, adjacent habitats, present and past logging, etc.

We might have three different strategies for the three different basins (Tilton, Cispus, and upper Cowlitz). We might target different populations in the different basins – based on the limiters in each basin. Tilton has contributing populations only (not primary). We could create a matrix of what to do where.

Bob will share a rapid assessment document for all to review and consider for this process. This could help us identify projects within a larger strategy. We could focus on the most important regions and the most important projects within each.

The “group” referred to in the draft CRR Fund Implementation Plan document might be a subcommittee that would bring forward proposals for approval by the FTC. The group would need to be allowed to be “fleet of foot”. We need to address what would happen to the funds if they were not spent by the end of the license period.

**Action Items:**

- All to provide comments on the draft to Mark and be prepared to discuss this further at the next meeting.
- Mark to post everyone’s comments on FTC website.
- Bob to send rapid assessment recovery plan to Lyn to distribute with these notes for all to review. (Restoration Potential and Strategy Report for the Upper Wenatchee River).

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**Agenda Item: Programs**

**Presenter:** Pat Frazier

We reviewed where we are with respect to the following Programs:

Lower Cowlitz-Fall Chinook: The issues are implementing some way to collect natural broodstock (for an integrated program), 4(d) issue (NOAA’s regulations) regarding using the natural broodstock, and the percentage of natural origin broodstock we are taking off the spawning grounds. The FHMP update will explain how this program is consistent with the 4(d) rule.

**Action Item**

- Lars to write up rationale consistent with 4(d).

Lower Cowlitz-Spring Chinook: We have been planning to release the fish at three different sizes. From a hatchery programming standpoint the release of the 16-fish-to-the-pound fish needs to occur in the fall.

Another issue raised by WDFW is recycling of spring Chinook adults in the lower Cowlitz River. WDFW wants to maximize the harvest opportunity here without impeding

or jeopardizing recovery. They propose setting a goal for hatchery spring Chinook to the upper basin and start recycling only after having reached that goal. This would account for fall-back fish, pre-spawning mortality, and harvest. There would be a cumulative curve. If above the curve, the fish could be recycled. Significant concerns were voiced by the FTC members. We don't know the conservation value of transporting a set number of fish to the upper basin. There were questions as to what is the appropriate number to transport upstream and why was there any limit how many spring Chinook adults go upstream. All naturally produced (with adipose fin present) spring Chinook that return to the separator will be transported upstream and not available for recycling.

**Action Item**

- WDFW will bring back a detailed recycling plan for FTC consideration.

Lower Cowlitz-Summer Steelhead: WDFW will be proposing a recycling study to address holes in the previous recycling studies. The study would fall inside a conservation limit of 400 – 500 fish.

Kelt Reconditioning: Several FTC members expressed concern that this proposal was removed from most recent version of the FHMP

**Action Item:**

- Mark to check with Lars about this and also the need to use tracking to indicate revisions.

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**Agenda Item: Update Status of April Meeting Action Items**

**Presenter: Mark LaRiviere**

- Lars to set up M&E meetings to develop plan and consult with other geneticists. Plan to present at June 3 FTC meeting and give progress report on coho and steelhead.
- Pat F to discuss Upper Cowlitz coho with Brett before June FTC meeting.
- All to consider proposal for kelt reconditioning of steelhead from the Cowlitz Falls Fish Facility for later discussion.
- Lars to write up paragraph on concerns with off-station releases to be circulated to Pat, then the FTC.
- Pat to talk to BPA about using stress relief ponds for rearing.
- Mark to send out potential dates to all for *Ceratomyx shastsa* webinar with Jerri Bartholomew. All to respond (if interested in attending) by end of day May 5.

**Topics for June 3 Meeting at Mayfield**

- Programs
  - Net pens / Off-station programs
  - Kelt reconditioning
  - Recycling
- M&E for Chinook

- CRR Fund
- Productivity Testing (?)
- Approve April 22 and May 3 meeting summaries

**Action Item**

- All to be prepared to edit / approve meeting summaries from the April 20 and May 3 FTC meetings at the June 3 FTC meeting.

**Meeting Evaluation**

- Good attendance
- Balanced participation
- Great discussions
- Making good progress!

**Handouts**

- Agenda for May 3, 2011 Cowlitz FTC Agenda
- Draft April 2, 2011 FTC Meeting Summary

**FTC Cowlitz Hydroelectric Project**  
**FERC NO. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Meeting Summary**  
June 3, 2011 from 9:00 AM – 2:30 PM

**Participating Members**

Brad Caldwell	Washington Dept of Ecology
Michelle Day	NMFS
Pat Frazier	WDFW
Brett Swift	American Rivers
Mark LaRiviere	Tacoma Power
Tim Romanski	USFWS

**Other Participants**

Sara LaBorde	WDFW
John Serl	WDFW
Dan Rawding	WDFW
Shannon Wills	Yakama Nation (by phone)
Paul Sparks	Trout Unlimited
Pat McCarty	Tacoma Power
Lars Mobernd	DJ Warren
Andy Appleby	DJ Warren
Lyn Wiltse	PDSA Consulting, Inc.

**Remaining 2011 FTC Meeting Dates**

June 27 (PLEASE NOTE THIS IS A NEW DATE), July 5, Aug. 2, Sept. ??, Oct. 4, Nov. 1, Dec. 6

Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

**Announcements**

- Bob Rose has a conflict and is unable to attend the meeting today. He did review Brett's edits on the CRR Fund document and told Lyn he is fine with them.
- Mark will scan and post the Upper Wenatchee River Restoration Report from Bob Rose for all to review.
- The PDF of the slides of the recent *Ceratomyxa shasta* seminar are posted. The whole presentation is available to view and hear on the Cowlitzfish.net website (less than 2 hours).
  - **Action Item:** All are encouraged to review this presentation as it has fisheries management implications for the Cowlitz River.
- Tom Martin will be retiring the end of July and will be moving to Texas. We hope to see him at our meeting next month. Gary Gilhuly is also retiring (after 43 years!).

- There is no word yet from FERC on our request for extending the FHMP Update deadline to November 2011.
  - Riffe Lake is at a low elevation in anticipation of the large run-off to come.
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**Agenda Item: Update on Cowlitz River Ad Hoc Advisory Group**  
**Presenter: Pat Frazier**

Pat F. reported that this group has not met since the last FTC meeting.

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**Agenda Item: Monitoring and Evaluation Program for Fall Chinook**  
**Presenter: Pat Frazier and Lars Mobernd**

Lars and Dan walked us through the LC fall Chinook portion of Appendix J; Monitoring and Evaluation Plan: Analytical Methods and Monitoring Activities.

The methodology called for involves using genetic mark recapture to get an estimate of the spawner abundance. Dan has proposed methods for capturing, and processing of the fish and analyzing the results. This is a new method for estimating spawner abundance that holds promise for the future. It has been used with success for Coweeman fall Chinook. Spawner abundance estimates for the Coweeman met the NOAA guidelines for accuracy and precision. The method has not yet been used for Lower Cowlitz fall Chinook. This methodology is proposed also for steelhead and coho in the Lower Cowlitz.

In his paper, Dan discusses sample size to meet the NOAA precision guidance. He presents the pros and cons of using different juvenile sampling methods. He proposes a contingency plan for abundance estimation based on conventional survey methods. If something fails there is a back-up plan to obtain spawner estimates.

He is working on fleshing out the method for coho and steelhead as well. The analytical description and sample size discussion are the same as for fall Chinook. The main difference is a) in how adults and juvenile samples are collected, and b) in the distribution of the spawning populations relative to the genetic-mark recapture study area.

Mark noted that location and effectiveness of smolt trapping has not been tested in the lower Cowlitz mainstem. The only comparable situation in the state is in the Skagit River.

Dan explained that in order to meet NOAA standards we would probably only need to genotype 1,000 juveniles so even if trap efficiency is really poor, Dan feels there would be a high likelihood that we would capture the number of fish we need. (This is based

on average of 4,000 adults over the last 10 years, and sampling 1,600 carcasses.) This estimate is only for the spawner abundance above the trap site.

There would be a start-up process the initial year or two. Depending on how many fish you sample or analyze, there is a large cost to doing the genetic analysis. Lars suggested we may want to do the sampling, proceed with the methodology and wait to commit to the genetic analysis until we have determined an appropriate sub-sample. We can shape our juvenile sampling numbers based on the number of adults we get in the fall.

If a representative sample of juveniles is not feasible, the samples that we collect from the adults need to be representative. The current program has been mostly focused on recovering CWTs in the area from I-5 up to the Barrier Dam. There are other areas fish spawn in that don't normally get surveyed. The idea would be to representatively sample the carcasses in the area above and below the smolt trap. The sampling structure Dan suggests lets us learn if the pHOS is different.

The FTC recognizes there will be a bit of a delay (1 year initially) between the adult samples and the analysis of the juveniles. One idea discussed would be to monitor only the actual surviving adults when they return. With age 6 adults returning, we would have a 6-year lag to get the estimates.

The genetic mark methodology Dan is suggesting allows for the following:

- Traditional spawner estimate (i.e. census abundance of natural spawners)
- Reproductive success to the juvenile stage
- Effective breeding size (i.e. the number of adults that produce offspring), and
- Effective population size

FTC members agreed to proceed in a systematic way to make sure we get unbiased representative samples of juveniles. We may collect more juveniles than we really need – giving us the opportunity to sub-sample to meet NOAA accuracy and precision standards.

Mark asked about collecting juveniles through other means (beach seining, electro-fishing, etc.)? Dan explained that with the screw trap there are daily or weekly efficiency trials. With seining, there are issues with high flow periods when we are not able to collect the juveniles. Also, after the hatchery release, there are lots of hatchery fish in the areas they have seined. This makes it more difficult to obtain a representative sample of the natural outmigration. Also you have some that are out-migrating at 40 mm while others leave at 60-70 mm. This makes it hard for us to know if we are collecting proportional to the run.

We need to collect juveniles in proportion to their abundance and outmigration to meet the equal catch-ability assumption of the mark-recovery method. This is easier to do at a screw trap vs. other smolt collection methods. The other complication is that there will be different survival rates if collected at different locations.



Dan explained there are three ways to meet the equal catch-ability issue. He recommends focusing on the one he knows will work. The other two ways are less certain. They are:

- Collecting adults in proportion to their abundance (hard to prove this statistically) with other study designs;
- If juveniles going past smolt trap represented a total random mix of fish that spawned above the screw trap.

We agreed that the spawner abundance estimate must meet NOAA precision standards. We don't want to put off a decision about what data to collect and miss another season. We agreed to use the genetic mark recapture methodology outlined in Dan's paper. We also agreed to collect the data in the initial phase by testing both the smolt trap and beach seining methods to see which is most effective at meeting the goals.

We need to be sure we get the best data possible and turn it into information to guide decision making. Tacoma will contract with whoever is doing the genetic sampling to ensure the fastest turnover possible.

Dan explained that 80% of fall Chinook spawn above the mouth of Olequa Creek. Most spawn in the main stem. For coho and steelhead this fraction will be much smaller. This means more reliance on getting observer efficiency, residence time, females per redd, etc. This makes us more dependent on getting a good sampling program for larger spatial coverage. We would take advantage of some WDFW weir operations. This is a little more complicated than for Chinook. Genetic mark recapture is one option. We might also be able to do some standard mark recapture. We would have a single smolt trap location for all species. If we did genetic mark recapture for the other species, we would have to figure out (on a yearly basis) what percentage coho and steelhead spawn below the trap. We discussed using outcome based language in the next draft FHMP and then provide more specifics in the final document.

**Next Steps:** For fall Chinook we will define the process to determine the location and specific gear and data analysis to use to properly evaluate the two methodologies for genetic mark recapture. There will be experts available to guide these decisions going forward.

We agreed that with little or no additional cost we could collect some juvenile coho and steelhead tissue when sampling for fall Chinook in the main stem. We could prescribe surveys based on calibrated information from observer efficiency, residence time and females per redd and apply to the residence below the study area. This would be useful whether we use genetic or physical mark recapture.

**Action Items:**

- Dan's fall Chinook plan will be incorporated into the Appendix J document. Write-ups from Pat addressing some additional outstanding M&E items will also be included in Appendix J.
  - Lars will work with Pat to draft the M&E program for coho and steelhead by June 20.
  - Pat will work on language for smolt migration speed and timing and submit to Lars by June 20.
  - Lars will incorporate text for missing spawner distribution from Dan's report by June 20.
  - Lars will send Mark an updated version of Appendix J, with track changes, for posting by June 20.
  - WDFW will take the lead in drafting the detailed plan for implementing the spawner abundance estimating program in 2012 by the end of 2011.
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**Agenda Item: Cowlitz Restoration and Recovery (CRR) Fund**

**Presenter:** Mark LaRiviere

Brett and Michelle sent in written edits on the Draft CRR Implementation Plan. Our goal is to get consensus on what the fund will look like and draft a document to send to FERC outlining the substantive rationale that supports the decision of ending the productivity test.

We reviewed the version of the document with Michelle and Brett's edits. An updated document is being developed and will be distributed for FTC review prior to June 28.

**Action Items:**

- Mark will, by June 20, send out a draft strategy, including justification, (consulting with Debbie, Brett, Michelle) to forgo volitional adult passage and establish a process to spend the fund.
  - Mark will, by June 20, post the updated draft of the plan and notify all.
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**Agenda Item: Update Status of April Meeting Action Items**

**Presenter:** Mark LaRiviere

- All are to review the proposal for kelt reconditioning of steelhead from the Cowlitz Falls Fish Facility for later discussion. (Pat sent Lars language on this and recycling for all to consider, it was then incorporated in the Draft FHMP – Mark posted this, in track changes, June 2 as “FTC Working Draft” dated April 25).
- Lars to write up paragraph on concerns with off-station releases to be circulated to Pat, then the FTC. (Andy drafted the section and Mark posted it, in track changes, on June 2 into the “FTC Working Draft” dated April 25)
- Pat F. to talk to BPA about using stress relief ponds for rearing. (Pat reported he discussed with BPA the marking of fish from the Upper Cowlitz. Stress relief

ponds were part of the discussion. There is no resolution yet on how the marking will be funded.)

## **Update Status of May 3 Action Items**

### Marking of Juveniles

- Pat F. will contact Debbie Carlson regarding this issue.
- Debbie will add marking to the list of issues being negotiated between Tacoma and BPA. (Pat M reported Tacoma is continuing to meet with LCPUD and BPA to discuss these issues. WDFW is tagging steelhead due to conservation concerns. The long-term FHMP envisions all fish coming out of the upper Cowlitz River will be marked.)
- Pat F. and John will draft a marking protocol for the FTC to review at the June 7 meeting (meet with BPA and address NMFS concerns about fish handling).

### LC Fall Chinook

Michelle will work with Lars to write up rationale consistent with 4(d) regarding "broodstock mining".

## **Approval of Meeting Summaries**

- We approved the April 20 FTC meeting summary without edits.
- Pat F will send Lyn suggested edits to the May 3 meeting summary to distribute to FTC members to approval with the goal of posting them for public review as soon as possible.

## **Topics for June 27 Meeting at Mayfield**

- Programs
  - Net pens / Off-station programs
  - Kelt reconditioning
  - Recycling
- Entire M&E program
- CRR Fund
- Productivity Testing (make decision)

Approve June 3 meeting summary

Action Item: Lars to incorporate revisions and send out prior to July 5 meeting (or bring to the meeting)

## **Topic for July 5: Walk-through of FHMP Update**

### **Meeting Evaluation**

- Good participation
- Nice to have Dan here
- Made great progress
- Nice having Zoe!

### **Handouts**

- Agenda for June 3, 2011 Cowlitz FTC Agenda
- Draft May 3, 2011 FTC Meeting Summary
- Combined edits (Michelle and Brett) on CRR Fund

**FTC Cowlitz Hydroelectric Project**  
**FERC No. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Meeting Summary**  
June 27, 2011 from 9:00 AM – 2:30 PM

**Participating Members**

Brad Caldwell	Washington Dept of Ecology
Michelle Day	NMFS
Pat Frazier	WDFW
Brett Swift	American Rivers
Mark LaRiviere	Tacoma Power

**Other Participants**

Sara LaBorde	WDFW
John Serl	WDFW
Mark Johnson	WDFW
Shannon Wills	Technical Rep for the Yakama Nation
Paul Sparks	Trout Unlimited
Lars Moberand	DJ Warren
Andy Appleby	DJ Warren
Lyn Wiltse	PDSA Consulting, Inc.

**Remaining 2011 FTC Meeting Dates**

July 5 (**noon-6pm**), Aug. 2, Sept. ??, Oct. 4, Nov. 1, Dec. 6  
Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

**Announcements**

- Tacoma's request to FERC for extending the FHMP Update deadline to November 2, 2011 has been approved.
- The annual upstream fish passage report is posted and available for review. Comments are due by July 8, 2011.
- We were sorry to hear that Bart Madison (TU) was passed away. He believed that ordinary people can accomplish extraordinary things. He was a member of the Habitat Advisory Group, a passionate conservationist and he had a special place in his heart for rainbow trout.

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**Agenda Item: Update on Cowlitz River Ad Hoc Group**

**Presenter: Pat Frazier**

Pat F. reported that this group last met on June 23. They discussed a variety of issues including productivity testing and the FHMP schedule. There was good input from the participants. Recycling was also discussed. They will meet again a couple of weeks after the FHMP is out for public review. He will continue to keep us posted.

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**Agenda Item: Program Review: Off-Station Programs****Presenter: Andy Appleby**

This is a proposed new section (expansion of Section 5.3) written by Andy. He was asked to draft rationale for why off-station programs put fish at risk. His primary focus was the smolt programs. He suggested we cannot ignore the issues of higher number of hatchery fish on the spawning ground and a production cap, (based on lbs.).

With coho fry plant programs, fish stray more and hatchery production must be lower to meet conservation limits. With steelhead smolt releases, there is a tendency to stop the fish in the lower river and make them susceptible to harvest.

Pat F. would like to see the following issues discussed separately:

1. Smolt acclimation sites
  2. In-basin remote site incubators (RSIs)
  3. Eggs going out-of-basin
1. Smolt acclimation sites are not in the proposed future hatchery program (table 3-13g in draft FHMP update). If smolt acclimation programs are implemented in the future then on-station programs would need to be reduced to account for increased stray rate. While there was not full FTC support for these programs, if WDFW implements them they will manage them to meet HSRG standards.
  2. The FTC agreed to add the following language: "RSIs would be phased out or transitioned to programs that have conservation benefit by release year 2014." There will also be an explanation of the time period and development of a transition plan that will be completed by WDFW.
  3. WDFW does not want the option of spring Chinook eggs going out-of-basin taken off the table. The only issue is how to properly compensate Tacoma for whatever additional work is required to take the eggs and move them out of basin. There is no conservation issue here. From now on the eggs would leave green. The program requires 70 pairs of adults from the Lewis and 70 pairs from the Cowlitz. Mark cautioned that this might push the limits of the Cowlitz Salmon Hatchery for water and adult holding space (factoring in pre-spawn mortality).

**Action Items**

- Mark will send out most current text on this for all to review by end of the day Thursday.

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**Agenda Item: Program Review: Kelt Reconditioning****Presenter: Pat Frazier**

The draft language offered by WDFW here focuses on the *how*. It was suggested they also include the *why*.

WDFW suggested that if trying to rebuild a run, these natural origin fish that have already spawned once are valuable. The goal would be increasing the numbers of NORs. This effort may make up for the fact that we are only collecting some of them at CFFF and the effects of trap and haul. We don't know the rate of return of kelts to the upper Cowlitz River.

We are trying to increase the iteroparity of the upper Cowlitz late winter steelhead population to something greater closer to a natural rate. After productivity testing, we could recondition a smaller number of kelts as broodstock for an integrated program rather than use first return adults. To do the reconditioning we would take them into the Cowlitz Trout Hatchery and hold them for 3-5 weeks. The total program would be 16 weeks.

Michelle thinks this program would be good for the basin. Shannon noted that the Yakamas are doing kelt reconditioning on a summer stock and they recognize that winters are somewhat different from the summers but we can learn from the Yakamas how to best handle the kelts. Mark suggested there has been a question of the value of kelt reconditioning from a genetic standpoint. Shannon disagreed and stated that kelts are part of the steelhead life history and should not be ignored. Pat feels this should be assessed on a case-by-case basis. Those that do show up get rides around all the dams. Tacoma believes this should be a BPA-funded program.

Paul shared that this issue was long debated in the conservation community and they were not able to come to agreement. A risk with this program would be possibly contaminating fish with IHN and then reintroducing them into the wild.

Mark J. reported that with respect to adult holding at the Cowlitz Trout Hatchery, they have a really good track record. Mark L. pointed out that the fish are held on re-use water and heavy chemical treatments are applied.

Andy said it is common in the literature to see rate of returns for kelts to be similar to smolt-to-adult survivals. When you apply this to the number of fish, it gives you a better sense of the small size of the program and small potential benefit.

Shannon observed that we are artificially truncating a natural process with this. This will affect PHOS somewhat. Could this compensate for the downstream passage? We don't know what returning kelts contribute to the system in terms of survivability or flexibility.

#### **Action Items**

- Debbie and Pat will discuss this offline.
- Andy will send updated draft of the proposal to Pat ASAP so Pat can update it.

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**Agenda Item: Program Review: Recycling**  
**Presenter: Pat Frazier**

### Spring Chinook

WDFW presented the case for spring Chinook recycling. Fish appear to be moving through the system faster than they have in the past. There was some desire by the Ad Hoc Group to do some recycling of spring Chinook. Issues discussed by the FTC included:

- How could we do this w/o compromising conservation intentions? What are the brood stock needs to run the program?
- We need to account for fall-back pre-spawning accounting rates (assumed a 10% re-harvest rate).

WDFW proposed that recycling would occur only after other priorities are achieved: as follows:

1. Broodstock needs (1,700 adults)
2. Reintroduction needs (2,500 adults)
  - a. Sport harvest, fallback and prespawning mortality (assumed to be 10%, could increase to 15-20% if want to be more conservative)

We would do this on weekly basis. If you are below the run timing curve you wouldn't do any recycling. If you are at or above your cumulative number of fish for run timing curve, you would do recycling. Note: The fish that come back from recycling would be held for brood. In 2013 WDFW would do a radio tag study. The goal is at least 8,000 fish would be put upstream for colonization. For reintroduction purposes we would probably shift out of the colonization phase and into the implementation phase as a naturally produced population begins to establish itself.

Concerns: We would be handling spring Chinook 2-3 more times. This might contribute to their mortality rate. We can't make a conservation argument for this. The Yakama Nation does not support recycling. They find no support for it in the literature. Nor does Tacoma.

An interest was expressed in finding money to support (ground-truth) EDT inputs.

Outcome: This proposal was not supported by the FTC.

### Summer Steelhead

WDFW presented the case for recycling summer steelhead. The purpose of the study would be to evaluate the harvest benefit and the stray rate associated with recycled summer steelhead. Pat reported the only real conservation issue is in their straying and how many show up on spawning grounds. Summer steelhead are not native to the basin – not a listed stock. They are in the basin to be caught. WDFW thinks the straying rates are such that they preclude a full recycling program of this population at this time.

WDFW proposed to do a limited study (500 fish – this number was inside the conservation goal) to get valuable info to tell us what happens to summer steelhead once they are recycled. They would work with USGS to do the radio tagging and floy tagging. The goal of the study would be to understand the fate of the recycled fish.



WDFW would seek to fund this study. Michelle noted that NMFS allows recycling in other basins and they would support doing the study.

Brett cautioned that if we have an additional 500 adults we would need to reduce the hatchery program accordingly to meet conservation objectives. There is so much riding on the weirs and the ability to separate and we don't know how effective that would be. It will be important also to understand any additional impacts that might occur. There is risk of recycling the fish if they go into streams that do not contain weirs. There is also risk around the weirs not proving effective.

Pat shared that among some fishermen, there is a sense that the catch rate on the recycled fish would be high enough it would make up for the lower production.

Andy cautioned that we wouldn't know what the 500 fish would do to the pHOS. It will likely depress the 650K summer run steelhead production number.

Outcome: FTC members agreed that the FTC will continue to adhere to the HSRG standards now and then re-evaluate after they have the data from the study WDFW is proposing. Note: WDFW would have preferred to defer until we have the data from the study.

#### **Action Items**

- Pat to follow up with the Cowlitz River Ad Hoc Advisory Group on the revised analysis and projected impact this study and reduced hatchery program would have on the fishery.

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#### **Agenda Item: Entire M&E Program**

**Presenter: Lars Mobrand**

Lars explained that Appendix J identifies the monitoring methods that we will use to collect the data and the analytical methods we are proposing to use. Some of the methods are new and some of the detailed methods have not been accounted for yet.

Objectives includes meeting NMFS's precision standards and defining the decisions we need to make. At the last meeting we agreed to go forward in principle, and WDFW agreeing to provide the detail of what is involved in implementing the methodology. They will provide a similar level of detail for coho and steelhead as is contained in the fall Chinook plan.

We walked through the document and noted opportunities to provide additional detail.

#### **Action Items**

- Pat to talk with Dan about getting write-up for smolt migration and travel time ASAP.
- Lars to move weir FHMP language to single location. Also be sure to call out "Deliverables" (work products) for all sections. Also, whether an alternative was

considered, etc. Cross reference species and make sure all sections are complete for Appendix J. Include also who performs what actions and who provides the funding.

- Mark to email edits (e.g., funding sources)
  - All to send any editorial edits to Lars to incorporate into the FHMP update FHMP.
- 

### **Agenda Item: Updated Production Table for Cowlitz Programs**

**Presenter:** Mark LaRiviere

We walked through the updated table that replaces existing Table 3-13g. We will keep the 650K production number for summer steelhead and add an asterisk that notes that this will be reconsidered if WDFW gets funding for the recycling study.

#### **Action Item:**

- Lars will insert this into the FHMP Update document that we will review at the next meeting.
- 

### **Agenda Item: Cowlitz Restoration and Recovery (CRR) Fund**

**Presenter:** Mark LaRiviere

Our goal is to get consensus on what the fund will look like and draft a document to send to FERC outlining the substantive rationale that supports the decision of ending the productivity test. An updated document was distributed for FTC review prior to June 28. Unfortunately, it was still labeled as April 8, so all FTC members did not recognize this as a revised document.

Paul noted that it will be important to build in assessment and accountability (some sort of independent audit) into this process. FTC members believe they have accounted for this in the plan.

We walked through the edits made at our last meeting and noted areas for future consideration with italics.

#### **Action Items:**

- Mark will post this revised version to the FTC website.
  - Shannon will email out draft criteria by the end of July for consideration by all.
- 

### **Agenda Item: Productivity Testing**

**Presenter:** Mark LaRiviere

Mark distributed a draft proposal of the rationale for ending the productivity test and the determination of the volitional fish passage into the upper Cowlitz River basins for this license period.

While there was no clear consensus among FTC members on whether to stop productivity testing or the details of the supporting rationale, most FTC members are pessimistic about testing being effective due to the low juvenile collection efficiency. Another reason not to do this from Tacoma's perspective is that it doesn't advance recovery. For NMFS and American Rivers the M&E plan is critical to defending any decision we make to stop productivity testing.

Note: Whatever action we take will be good through the duration of this license.

**Action Items:**

- Michelle to review and bring the NMFS Biological Opinion to the next meeting.
  - All prepare to discuss the version of the FHMP Update without productivity testing at the next meeting.
- 

**Agenda Item: Marking of Juveniles**

There is still no update on this as BPA has told Tacoma they are too busy to meet with them to discuss this issue.

**Action Items:**

- Debbie to send out an email update on this to FTC members prior to our next meeting.
- 

**Update Status of May 3 Action Items**

Marking of Juveniles

- Debbie will add marking to the list of issues being negotiated between Tacoma and BPA. (Pat M reported Tacoma is continuing to meet with LCPUD and BPA to discuss these issues. WDFW is tagging steelhead due to conservation concerns. The long-term FHMP envisions all fish coming out of the upper Cowlitz River will be marked.)
- Pat F. and John will draft a marking protocol for the FTC to review at the June 7 meeting (meet with BPA and address NMFS concerns about fish handling).

LC Fall Chinook

- Michelle will work with Lars to write up rationale consistent with 4(d) regarding "broodstock mining".

**Fall Chinook M&E Action Items:**

- Pat will work on language for smolt migration speed and timing and submit to Lars ASAP. (still waiting for this)
- WDFW will take the lead in drafting the detailed plan for implementing the spawner abundance estimating program in 2012 by the end of 2011.
- Andy will send updated draft document to Debbie and Mark by end of day. By June 28 Debbie and Mark will get draft language on this to Lars and Pat for review prior to our July 5 FTC meeting.

- Costs and specifics around who performs what actions will be worked out by agreement between Tacoma Power and WDFW and reflected in the FHMP Update.

**FHMP Update Action Item:**

- Lars to incorporate revisions and send out prior to July 5 meeting.

**Approval of Meeting Summaries**

- Pat F. sent Lyn his suggested edits to the May 3 meeting summary. She emailed them to FTC members to approve with the goal of posting them for public review as soon as possible.

**Topic for July 5 Meeting at Mayfield (NOTE TIME CHANGE: NOON - 6PM)**

- Walk through entire FHMP Update

**Handouts**

- Agenda for June 27, 2011 Cowlitz FTC Agenda
- Draft May 3, 2011 FTC Meeting Summary (with edits)
- Draft June 3, 2011 FTC Meeting Summary
- Pat's Marking Summary
- CRR Document
- End Productivity Test Rationale

**FTC Cowlitz Hydroelectric Project**  
**FERC NO. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Meeting Summary**  
August 2, 2011 from 9:00 AM – 4:00 PM

**Participating Members**

Brad Caldwell	Washington Dept of Ecology
Michelle Day	NMFS
Pat Frazier	WDFW
Brett Swift	American Rivers
Mark LaRiviere	Tacoma Power

**Other Participants**

Debbie Young	Tacoma Power
Sara LaBorde	WDFW
John Serl	WDFW
Lars Mobrand	DJ Warren
Andy Appleby	DJ Warren
Lyn Wiltse	PDSA Consulting, Inc.

**Remaining 2011 FTC Meeting Dates**

August 31 (tentative), Oct. 4, Nov. 1, Dec. 6  
Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

**Announcements**

- Tom Martin will be retiring from Tacoma Power the end of this month. He and his wife will be moving to Texas. We thank him for his many years of support of this group and wish him well.
- Mark reported the Merwin trap has been installed at Lake Scanewa. One side is up and fishing.
- All were reminded to check the FTC password-protected website regularly.

**Agenda Item: Update on Cowlitz River Ad Hoc Advisory Group**

**Presenter: Pat Frazier**

Pat F. reported that this group has not met since the last FTC meeting. They are waiting for the FHMP update to be released before meeting again. He will continue to keep us posted.

---

**Agenda Item: FHMP Update**

**Presenter: Andy Appleby and Lars Mobrand**

We reviewed and made some clarifying edits to the Monitoring and Evaluation Plan plus Appendix J. We then reviewed final issues called out for discussion before the draft FHMP update is released for public review.

Pat reported that in autumn of 2011 we may test several different adult fall Chinook capture techniques. Between now and then he and Michelle will work together to see how to best do this. This will be included in the April Work Plan. American Rivers expressed concerns with some of the content of the FHMP Update, but agreed not to oppose the submittal of the Plan.

### **Action Items**

- Pat will get a rough estimate of costs for Tacoma's share of the weir funding by the end of August.
  - Lars and Andy will incorporate revisions from this meeting and do final pagination, etc. so document can be released for public review no later than August 12, 2011.
- 

### **Agenda Item: Revised Draft FHMP Update Schedule**

**Presenter:** Mark LaRiviere

- Aug 5: Final official edits by editorial staff
- Aug 10/12: Send Draft FHMP Update to the public
- Aug 15: Public Overview Meeting #1 at Chehalis from 5:00-7:30 – Mark and Pat present
- Aug 16: Public Overview Meeting #2 (Same content as #1) at Mossyrock from 5:00-7:30 – Mark and Pat present
- Aug 22: Public Technical Meeting at St. Mary's from 1:00- 4:00 – Lars and Andy present. 4:30 – 6:30 Public comment period: Invite and record questions/comments.
- Sept 12: End of 30 Day Public Comment Period – All comments / questions go to Lars and Andy for initial review, and coordination of technical response.
- Sept 20: Send Draft FHMP Update document with Public Comments and draft responses to technical questions to FTC to review. Flag policy questions for FTC discussion.
- Oct 4: FTC Single-Topic Meeting at St. Mary's (??) to Agree on Response to Public Comments.
- Oct 11: Send Draft Final FHMP Update document to FTC for Final Review / Comments / Edits
- Oct 19: Incorporate all FTC Edits /Comments and Send out for Final Review
- Nov 2: Send Final FHMP Update to FERC

### **Action Items**

- Tom S: reserve meeting venues for all 3 public meetings and send out Draft Public Overview meeting agenda ASAP and notify public.
- Shannon: Confirm St. Mary's venue for August 22 Public Technical Meeting (1-7pm) and FTC meeting on September 15 from 9:00- 3:30.

- Lyn: Email FTC members asking if they think it makes sense to meet at Mayfield on August 31 (instead of Sept 6). Send out revised draft protocols. Suggest also how to get caught up with FTC Meeting Summary approvals.
- Mark: Work with Lars to make spreadsheets available to the public so they can manipulate the numbers.
- Pat and Mark: Put together pictures and explanation of weirs for public meeting.
- Pat: Edit the Adult Handling Protocol for fall Chinook to the Upper Cowlitz.

## **Prior Action Items**

### CRR Fund

- Shannon: Email out draft criteria by the end of July for consideration by all.

### Discussion with LCPUD

- Debbie: Add marking to the list of issues being negotiated between Tacoma and BPA.

### LC Fall Chinook

- Michelle: Work with Lars to write up rationale consistent with 4(d) regarding “broodstock mining”.

### Fall Chinook M&E

WDFW: Take the lead in drafting the detailed plan for implementing the spawner abundance estimating program in 2012 by the end of 2011.

## **Approval of Meeting Summaries**

Due to the sole focus of FTC members on the FHMP update the May and June meeting summaries have yet to be reviewed, edited, approved, and posted to the website for public review. Pat F. sent Lyn his suggested edits to the May 3 meeting summary. She emailed them to FTC members to approve with the goal of posting them for public review as soon as possible. The June 3 meeting summary has been neither reviewed nor approved.

- **Potential Topics for (tentative) August 31 Meeting at Mayfield**
  - Review status of FHMP Update and Schedule
  - Review draft updated FTC meeting Protocols
  - Debrief Public Workshops
  - Update from Downstream Fish Passage Team
  - Approve May, June, and August meeting summaries
  - Plan for October 4 or Nov. 1 FTC Meeting Agenda
  - Evaluate the Meeting

## **Handouts**

- Agenda for August 2, 2011 Cowlitz FTC Agenda
- Letters:
  - July 22, 2011 Tacoma letter to FERC re: Progress of Downstream Fish Collection Facility at the Cowlitz River Hydroelectric Project
  - July 20, 2011 Tacoma letter to NMFS re: downstream Fish Collection Obligations

- June 28, 2011 WDFW letter to Tacoma Power re: schedule for implementing fish passage improvements



**FTC Cowlitz Hydroelectric Project**  
**FERC NO. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Conference Call Meeting Summary**  
August 31, 2011 from 9:00 AM – 11:00 PM

**Participating Members**

Michelle Day	NMFS
Pat Frazier	WDFW
Brett Swift	American Rivers
Mark LaRiviere	Tacoma Power

**Other Participants**

John Serl	WDFW
Shannon Wills	Technical Rep for the Yakama Nation
Keith Underwood	Tacoma Power

**Remaining 2011 FTC Meeting Dates**

Tentative (Oct. 4), Nov. 1, Dec. 6  
Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

**Agenda Item: CRR Fund Update document**

**Presenter: Mark LaRiviere**

NMFS and American Rivers favor a license amendment for the FERC process to end productivity testing. Tacoma believes there is adequate language in the license article to use another method that would cause less delay.

The draft CRR fund document needs further review and comment by the FTC members.

**Action Item:**

- FTC members submit comments on the draft CRR Fund document by September 22, 2011. Tacoma will post on Cowlitz FTC website.

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**Agenda Item: Formal End to Productivity Testing**

**Presenter: Pat Frazier**

Pat asked the FTC members what needs to be done to move forward and submit an FHMP update document by November 2, 2011 that includes ending productivity testing. Mark believes that, as a body, the FTC needs to make the recommendation to end productivity testing. Pat wants to see this issue settled prior to the submittal of the FHMP update.

Brett believes there needs to be another meeting with the lawyers ASAP on this issue. WDFW, NMFS, Tacoma Power & American Rivers are the organizations that, at a minimum, need their attorney to meet and discuss.

#### **Action Items**

- Pat will take the lead to set up a call or meeting among the lawyers to discuss this issue.
- 

#### **Agenda Item: Cowlitz Complex future brood document**

**Presenter: Pat Frazier**

Pat reported that the fall Chinook, spring Chinook and coho programs will remain the same for this year. Programs that could be modified based on the draft FHMP submittal are the early winter-run early steelhead, late winter-run steelhead, summer-run steelhead and cutthroat trout programs. Ultimately all programs will total an annual release of less than 650,000 pounds of total production from the Cowlitz Complex.

Mark asked, and Pat agreed, to explore the possibility of some testing of NOR fall Chinook broodstock capture this fall on the Cowlitz River. WDFW and Tacoma will work together.

#### **Action Items**

- Pat will send out a brief proposal to Tacoma and NMFS for a fall 2011 testing
- 

#### **Action Item: Draft FHMP Update public meetings**

**Presenter: Mark LaRiviere and Shannon Wills**

Mark reported on the public meetings in Centralia and Mossyrock. Two people showed up late in Centralia due to a newspaper error. Eight people showed up at Mossyrock and Pat and Mark were able to give their complete presentation. Shannon reported on August 22nd meeting. The only issue raised was that by reducing the lower river fall Chinook program guides worried it would put them out of business. Pat agreed that was the main issue and all FTC members acknowledged the Ad Hoc Group's assistance in making this a smooth public review and comment period.

#### **Action Items**

- Mark - post public meeting comments on Cowlitz FTC website.
  - Mark - Post all public comments received by Tacoma on Cowlitz FTC website.
- 

#### **Agenda Item: Supplemental Collection Update**

**Presenter: Mark LaRiviere**

Mark reported on the supplemental collection efforts. Fishing efforts shifted from beach seining to Merwin traps in Lake Scanewa during August. Chinook smolt numbers are picking up the last 10 days. Tacoma has secured permission from LCPUD to extend Merwin trap operations to September 30, 2011. The current plan is to keep fishing until then and remove trap afterwards.

NMFS is working with BPA to keep the CFFF open longer this year. John reported on collection through August 30<sup>th</sup>. The FTC discussed extending the operation of CFFF and was supportive of doing so.

**Action Item:**

- Mark will post the monthly supplement collection report on the Cowlitz FTC website.
- 

**Agenda Item: Downstream Team Update**

**Presenter: Keith Underwood**

In April 2011, the Downstream Fish Passage Team (DST) was provided a 90% Conceptual Design Report for their review and comment. WDFW and NMFS provided extensive comments on Chapter 5 of the report (preferred alternative and adaptive management). Chapter 5 was revised to address the comments and submitted to WDFW and NMFS for concurrence. WDFW and NMFS did not concur. A meeting was held with WDFW, NMFS and Tacoma Power on July 15<sup>th</sup> to resolve conflicting comments. Chapter 5 was revised based on that meeting and now being reviewed by WDFW and NMFS. A Downstream Fish Passage Team meeting is set for September 27<sup>th</sup> to preview USGS tagged fish study and barrier net performance.

Brett asked about the plan for the 500 – 750 – 1000 cfs attraction flow rationale. Will there be a discussion of why starting at the low end? What happened to the floating Riffe Lake collector idea – was it brought to the FTC? Keith said the DST considered it, but did not focus on downstream collector and put the energy into the options above Cowlitz Falls Dam. There is higher potential for collection efforts to be successful above Riffe Lake. A Riffe Lake collector conceptual design has been deferred.

DST results will be brought to the FTC for a separate meeting. Michelle asked about distributing draft DST reports electronically for the review by the Yakama Nation and other FTC members.

Pat wants to see that the FTC has a meaningful roll in the review and comment on the DST recommendations. He wants the FTC members to have informed discussion.

Keith reported that the test barrier piece was deployed on August 30<sup>th</sup>. Wind has an impact and may cause some conflicts with the BGS. ADCP measurements will be taken this fall and the USGS will continue to track fish in the reservoir through September and into October,

**Action Item:**

- Keith will get the DST report information to the FTC members.
- 

**Agenda Item: Approve past meeting summaries**

**Presenter: Mark LaRiviere**

The FTC discussed how to move ahead with approving the last several draft meeting summaries. The members agreed to ask Lyn to send out most recent version of all draft meeting summaries with a two week timeline for approval or comment by the FTC members.

**Action Item:**

- Mark copy Shannon on Lyn's email.
  - Lyn to send out the most recent versions of the draft meeting summaries.
  - Bob Rose to send a notice to FTC members approving adding Shannon Wills to the FTC distribution list.
- 

**Action Item: Next FTC meeting**

**Presenter: All FTC members**

There are two topics that will require separate meetings; 1.) FTC responses to public comments on draft FHMP update and any potential changes, and 2.) a report from the Downstream Team.

The next FTC meeting was set for September 29<sup>th</sup> at Mayfield. Lars Moberand will be present to run alternative scenarios if necessary.

–The Downstream Team presentation to the FTC was set for October 11<sup>th</sup> at St. Mary's, near Toledo. The Mayfield office is available as a back-up venue for that meeting.

**Potential Topics for September 29th Meeting at Mayfield**

- Review public comments FHMP Update
- Run alternative scenarios

**Potential Topics for October 11th Meeting at Mayfield**

- Update from Downstream Fish Passage Team
  - Plan for Nov. 1 FTC Meeting Agenda
-

**Handouts**  
None

**FTC Cowlitz Hydroelectric Project**  
**FERC NO. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Meeting Summary**  
September 29, 2011 from 9:00 AM – 3:00 PM

**Participating Members**

Pat Frazier	WDFW
Mark LaRiviere	Tacoma Power

**Other Participants**

Andy Appleby	D.J. Warren & Assoc
Lars Mobernd	D.J. Warren & Assoc
John Serl	WDFW
Sara LaBorde	WDFW
Mark Johnson	WDFW

**Remaining 2011 FTC Meeting Dates**

Oct. 11, Nov. 1, Dec. 6

Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

**Agenda Item: Review responses to public comments on the draft FHMP Update**

**Presenter: Mark LaRiviere**

The members present conducted a line-by-line review of the draft responses to the public and agency comments received. There were verbal comments (recorded at the two public meetings held in August), and written comments received and responded to.

**Action Items:**

- FTC members to review the final draft FHMP Update document.
- Robyn Redekopp, Meridian Environmental will distribute the final document to FTC members via email.

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**Agenda Item: Review schedule for FHMP Update submittal to FERC**

**Presenter: Mark LaRiviere**

The members present confirmed the schedule to submitting the final FHMP Update to FERC. It is due November 2, 2011.

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**Action Item: Next FTC meeting**

**Presenter: All FTC members**

## **Topics for October 4th Meeting at Mayfield**

- Update from Downstream Fish Passage Team
  - Plan for Nov. 1 FTC Meeting Agenda
- 

## **Handouts**

None

**FTC Cowlitz Hydroelectric Project**  
**FERC NO. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Meeting Summary**  
October 11, 2011 from 9:00 AM – 2:00 PM

**Participating Members**

Tim Romanski	USFWS
Michelle Day	NMFS
Pat Frazier	WDFW
Brad Caldwell	WDOE
Brett Swift	American Rivers

**Other Participants**

Debbie Young	Tacoma Power
Joe First	LCPUD
Mike Kohn	LCPUD
Debbie Carlson	BPA
John Serl	WDFW
Peggy Miller	WDFW
Keith Underwood	Tacoma Power
Matt Bleich	Tacoma Power

**Remaining 2011 FTC Meeting Dates**

Nov. 1, Dec. 6

Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

**Agenda Item:**

**Review of Past Cowlitz Falls Activities**

**Presenter: Debbie Young**

Presentation chronicled Tacoma Power's activities at Cowlitz Falls / Upper Riffe Lake and described outcomes of collection efforts.

**Action Items:**

- No action items identified.

---

**2011 Fish Collection at Cowlitz Falls Fish Facility**

**Presenter: John Serl**



Presented 2011 Fish collection data. Collection efficiency estimates were lower than typical. This was hypothesized to be related to the high river flow season. Two of the four flume entrances were operated this year in the same configuration as last year.

**Action Items:**

- No action items identified.
- 

**2011 Supplemental Collection**

**Presenter: Matt Bleich**

This year's catch was slightly higher than last years, but overall similar to last several years. Identified the highest catches in Riffe Lake by seine occurred after high flow events and a corresponding decreased catch occurred at the Cowlitz Falls Fish Facility. Merwin traps were operated until the end of September which yielded continuing catches beyond the shutdown of the CFFF.

**Action Items:**

- Tacoma will prepare a retrospective analysis of all fish collected by this program and report smolts separate from fry and present to FTC in January 2012.
- 

**Initial 2011 BGS Fish Behavior Study Findings**

**Presenter: Keith Underwood on behalf of Toby Kock, USGS**

The data is draft and continues to be refined. Data still being collected for Chinook. Coho, steelhead and Chinook were guided by the BGS, in all, roughly 50% of the fish moved towards the North shore in the vicinity of the fish trap. Many fish migrated past the BGS to the Dam and then returned to the BGS which provides additional opportunities to collect fish at a trap. This was an above average water year and so fish behavior detected this year may not be representative of average years.

Downstream Team requested a number of questions be addressed and those question where provided to USGS on October 7<sup>th</sup>. The questions will be answered in the draft report expected in mid- November.

**Action Items:**

- Tacoma will provide FTC members the draft USGS report for review and comment in November.
- 

**Barrier Net Test Results**

**Presenter: Kirk Kessler**

Barrier net was constructed and deployed the first week of September and soaked the entire month. The net withstood the elements and did not collect much debris. The net was connected to BGS. It was determined that the BGS moves up and downstream with

changing operations creating poor conditions for the barrier net dragging the net up and downstream. Next year the barrier net will be anchored independent of the BGS to avoid possible tangling and will be tested over a longer duration.

**Action Items:**

- No action items identified.
- 

**Biological Uncertainties**

**Presenter: Keith Underwood**

A percentage of fish pass Cowlitz Falls Dam either by spill or turbine passage. FTC identified a desire to examine a method to collect fish downstream of the dam in the free flowing reach.

**Action Item:**

- John Serl (WDFW) will provide a proposed capture method below the dam for Tacoma, NMFS and WDFW to review and comment on the efficacy of the method. Results of those discussions will be provided to the FTC at by the January meeting.
- 

**2012 Anticipated Activities**

**Presenter: Kirk Kessler, Keith Underwood, John Serl and Mike Kohn**

A revised weir box is anticipated for 2012 testing. Kirk described the weir box concept and how it differs from previous study. Also, a revised BGS and revised barrier net will be deployed next year for testing. The timing of the deployment will depend, in part, on LCPUD BiOp driven study requirements. LCPUD is meeting with NMFS in the next few weeks to determine next year's strategy.

**Action Items:**

- LCPUD and Tacoma's studies will be refined and presented at the January FTC meeting.
- 

**Cowlitz Falls Fish Collector Conceptual Design Report**

**Presenter: Keith Underwood**

A Downstream Team meeting was held on September 27<sup>th</sup>. The team would like to review the final report before providing it to FTC for review. Tacoma was granted an extension until February 15<sup>th</sup> to submit the conceptual design report. The FTC can anticipate reviewing the report in early January. The report will detail three alternatives and describe the studies needed to select the preferred alternative. All alternatives are variations on a collector on the North shore upstream and adjacent to the dam.

**Action Item:**

- Provide Draft Conceptual Design Report to FTC at the beginning of January for review and comment.
- 

### **Handouts**

Review of Past Cowlitz Falls Activities Presentation  
2011 Fish Collection at Cowlitz Falls Fish Facility Presentation  
2011 Supplemental Crew Collection Presentation  
Initial 2011 BGS Fish Behavior Study Findings Presentation  
Barrier Net Test Presentations  
Weir Box Presentation

**FTC Cowlitz Hydroelectric Project**  
**FERC NO. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Conference Call Summary**  
November 03, 2011 from 9:00 AM – 11:00 AM

**Participating Members**

Pat Frazier	WDFW
Mark LaRiviere	Tacoma Power
Brett Swift	American Rivers
Michelle Day	NMFS
Brad Caldwell	Washington Dept. of Ecology

**Other Participants**

John Serl	WDFW
Shannon Wills	Technical Rep for the Yakama Nation
Lyn Wiltse	PDSA Consulting, Inc.

**Future FTC Meeting Dates**

Dec. 6, Jan. 3, Feb 7, Mar. 6, Apr. 3, May 1, June 5, July 10 (Note: This is the 2<sup>nd</sup> Tuesday of the month to avoid interference with the Fourth of July weekend.)  
Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

**Announcements**

Mark notified all that some routine FERC reports due the end of the year will be out shortly for review.

**Agenda Item: Meeting Protocols**

**Presenter: Lyn**

Lyn walked us through a review and edited further the draft FTC protocols that she and Mark edited.

**Action Items**

- Lyn to send out edited version from this meeting in track changes for all to review and approve at the next FTC meeting. Ensure it contains protocols from the most current version.
- Lyn to send out Sussman Consensus Model.
- Mark to post Sussman Consensus Model.

**Action Item:** Lyn to send out next draft in track changes by end of day Nov. 3.

---

**Agenda Item: Approval of Outstanding Meeting Summaries**

**Presenter: Lyn**

All affirmed their desire to post these meeting summaries in a timely manner for public review. Unfortunately, attempts to get outstanding summaries approved through email were not successful as dialogue among FTC members was needed.

We walked through each of the outstanding meeting summaries (June 27, August 2, August 31, and September 29, 2011). After thorough discussion we came to consensus on how they should be edited.

#### **Action Items:**

- Lyn to send out approved meeting summaries marked as final in track changes by end of day November 3.
- All to review and provide immediate feedback by noon November 4.
- Mark to accept all changes and post shortly after noon (assuming no additional comments are received) and notify FTC members when these are posted.
- Keith to post October 11 meeting summary by end of day today.
- Mark to ask Keith to let all know when to expect the DST documents (one week prior to Jan. 3 FTC meeting lands in the middle of holidays). Can he distribute these earlier?

#### **Report on Lawyer Discussion about License Amendment**

There was a conference call on October 25 to discuss the best mechanism by which to abandon volitional upstream passage, end productivity testing, and implement the CRR Fund. The next conference call on this topic will occur on November 8, 2011. We will get an update on this at our next meeting.

#### **Potential December 6 Agenda Items**

- Approve Oct. 11 and November 3 meeting summaries
- Status of CRR Fund document – posted and available for comments by members
- Protocols
- Lawyer discussions on ending Productivity Testing
- Annual Review Meetings: March and April
  - Combine with FTC meetings?
- Confirm Agenda for January 3 meeting
- Evaluate the meeting

#### **Action Item**

- Mark to post Brett's edits to CRRF for all to review

---

#### **January 3, 2012 Agenda Item**

The plan is for this to be a single-topic meeting:

- DST presentation by Keith Underwood

## **Agenda Topic: Meeting Evaluation**

### **Well Done**

- Conference call format and technology worked well.

### **Do Differently**

- It was sometimes hard to get points across with multiple people attempting to speak all at once.
  - Cuts down on amount of speaking – we don't get full engagement compared to in-person meetings.
-