

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

January 6, 2009 from 9:00 AM – 3:00 PM
Mayfield office, Silver Creek, Washington

Members Present

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

Other Attendees

Ed Meyer	NMFS
Rich Turner	NMFS
John Serl	WDFW
Andy Appleby	WDFW
Kevin Malone	Meridian Environmental
John Barr	John Barr Consulting, HSRG
Debbie Young	Tacoma Power
Tom Martin	Tacoma Power
Bill Iyall*	Tacoma Power
Tom Santee	Insight Northwest
Ray Beamsderfer	Cramer Fish Sciences, LCFRB
Lyn Wiltse	PDSA Consulting – facilitator

*Joined meeting at noon

2009 FTC Meeting Dates (first TUESDAY of each month!)

February 3, March 3, April 7, May 5, June 2, July 7, August 4, September 1, October 6, November 3, December 1

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

Announcements

Tom Santee will facilitate our next meeting on February 3, 2009.

Approval of Meeting Summary

The November 4, 2008 meeting summary was approved with clarifying edits.
The December 2, 2008 meeting summary was approved without changes.

**Review Action Items from November 4, 2008 FTC meeting
Creel Data Actions**

- Julie will update the table to include the latest data from Lake Scanewa for the December meeting.
 - Wolf will send out the data via email.

- Mark will talk with Pat about continuing funding these creel surveys.

FHMP Update Process Actions

- John – Continue work on the revised FHMP according to feedback received from FTC members and the criteria listed above.
 - In progress.

Mayfield by-pass facility Action

- Steve F will work with Julie to create a section in the operations manual that includes lessons learned here.
 - Neither Steve F nor Julie was present to discuss this item.

Review Action Items from December 2, 2008 FTC meeting

FHMP Update Schedule

- A technical team was formed to assist incorporating AHA modeling into the FHMP update. FTC members can designate a technical representative. The team's first meeting was held in (December). NMFS, WDFW, and Tacoma were in attendance. Another meeting will be set up in January.

Agenda Item: Lower Columbia River Fish Recovery Plan

Presenters: Ray Beamsderfer

Ray gave us a PowerPoint presentation that explained the background, purpose, and activities of the Lower Columbia Fish Recovery Board. There will be an opportunity to inform the revised recovery plan which is due out later this year.

The vision for the recovery plan is to provide a phased approach to achieve healthy and harvestable populations in a way that works for both fish and people.

Ray walked us through the population planning ranges and a recovery scenario for chum. He also reviewed with us a chart depicting the current status and planned objective for Cowlitz fall Chinook, spring Chinook, chum, winter steelhead, and coho.

The recovery strategy spans all the entire salmon life cycle and balances support for each of the 4 H's (Habitat, Hatcheries, Hydro, and Harvest). He explained that the plan is not prescriptive. It relies heavily on a monitoring and evaluation component and will be continually revised over time.

Agenda Item: Report on December 2, 2008 Public Meeting

Presenter: Tom Santee

Tom briefly reviewed the response to the December 2 public meeting held in Morton immediately after the FTC meeting. FTC members Michelle, Mark, and Pat were in attendance.

Tom felt that the meeting went pretty well. The facility seemed to work well. The 4:00 PM start time, though troublesome for some, yielded the best turnout so far, with about 40 in attendance. The format of this meeting was Q&A vs. a prepared presentation as done in the past. At this meeting a "Parking Lot" list was created for some suggested actions that required additional research. Tom distributed a list of the questions that were posed at the meeting along with copies of an article and an editorial about the meeting that appeared in the East Lewis County Journal to the FTC.

Tom observed that there is still room to improve the "co" part of the communication that occurs during these quarterly meetings. In the spirit of being open and transparent we will work to create more of an atmosphere of dialogue at future meetings.

Action Items:

- Tom S will post answers to key questions raised at the meeting on the Cowlitz website. He will solicit input from FTC members to do this. He will try to incorporate items listed in Parking Lot during the December 2, 2008 Public Meeting. He will specify who has what jurisdiction.
- Tom S will bring ideas for the next public meeting to our March meeting.
- Pat will answer outstanding website questions.

Agenda Item: Use of All H Analyzer Model (AHA) for Fisheries & Hatchery Management Plan (FHMP) Solutions

Presenter: Andy Appleby

Andy demonstrated a specific application of the All H Analyzer. He walked us through the input parameters and various scenarios for achieving self-sustaining populations of upper Cowlitz coho.

Action Item:

- Mark L will set up the schedule for the next technical meetings.
- The technical team will continue to meet and will recommended a model approach for all species. They will bring a comprehensive proposal to the FTC for review. The aim is to have this discussion at our June FTC meeting.
- Mark will publish the dates and agendas of these technical meetings.

Agenda Item: Testing for Self-Sustainability for Steelhead and Coho in the Tilton River and for Steelhead in the Upper Cowlitz River

Presenter: Andy Appleby

There was lively discussion around where we are with respect to triggers set out in the FHMP and whether we should begin productivity testing for steelhead and coho in the Tilton and for steelhead in the Upper Cowlitz. Andy suggested that it might make sense to do testing since we are getting hundreds of natural origin coho back in the Tilton. We will all consider this and make a decision on this at our next meeting. We will consider a plan for the productivity testing before the end of 2009.

Action Items:

- All will be prepared to discuss this at the February FTC meeting.
 - Mark will prepare a version of the schedule that works backwards from deadlines for discussion at our February FTC meeting.
-

Agenda Item: Downstream Team Update**Presenter: Tom Martin**

Tom explained that the 30% Conceptual Design Plan has been distributed to the FTC and the Downstream Team. Comments on the plan have been received and the consultants are working on addressing them.

The team has provided design information to Lewis County PUD for the weir box (29' X 9' X 12') and the flow deflector that will be tested in the upcoming collection season. Bill reported that bids will go out in the next two weeks for construction of these items. They are planning to have the equipment installed and be operational by April 15, 2009.

Marc Wicke has received the draft of the 2008 evaluation report from USGS and is awaiting their 2009 draft study plan. They will be distributed to the FTC as soon as they have finalized.

Downstream team to re-evaluate completion schedule for 60% tasks at the next downstream team meeting on February 17. Tom M to email FTC with report on an adjusted schedule following that meeting.

Action Items:

- Tom will work with Bill to post the comments on the 30% Design Plan on the FTC website.
 - Bill will distribute the plan for the weir box by January 7, 2009.
 - Tom will file an extension request with FERC for a schedule modification.
-

Meeting Evaluation**Well Done:**

- Finished early
- Good discussions

Do Differently:

- Better describe agenda items
- Send out recommendations in advance for prior review?
- Move approval of meeting summaries to end of the meeting

The meeting was adjourned at 2:40 p.m.

Meeting Handouts

- Agenda for January 6, 2009 FTC meeting
- November 4, 2008 Draft FTC meeting summary with Brett's comments
- Draft December 2, 2008 FTC meeting summary
- December 10, 2008 Lewis County Journal article and editorial about the December 2, 2008 public meeting
- List of questions generated at December 2, 2008 Public Meeting
- PowerPoint presentation: Lower Columbia Fish Recovery Board Salmon Recovery Planning: Cowlitz River examples

Topics for February 3 FTC Meeting

Welcome / Review Agenda / Check-In (9:00 – 9:10)

Review the FHMP implementation Schedule – working backward from deadlines (9:10 – 9:20)

Sustainability Testing – modify SA schedule? (9:20 – 10:20)

- Tilton River: steelhead & coho
- Upper Cowlitz River: steelhead

Break (10:20 – 10:30)

Approval of Use of the All H Analyzer model (10:30 – 10:45)

- All species

AHA Technical Team Update (10:45 – 11:30)

Working Lunch (11:30 – 12:00)

Downstream Team Update (12:00 – 12:15)

Use WDFW seining equipment to conduct a test? (12:15 – 12:30)

Update Status of Action Items (12:30 – 12:50)

Other Issues? (12:50 – 1:15)

Approval of January 6 meeting summaries (1:15 – 1:25)

Meeting Evaluation and set March 3, 2009 meeting agenda (1:25 – 1:45)

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February 3, 2009 from 9:00 AM – 2:00 PM
Mayfield office, Silver Creek, Washington

Members Present

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

Other Attendees

Ed Meyer	NMFS
Rich Turner	NMFS
John Serl	WDFW
John Barr	John Barr Consulting, HSRG
Debbie Young	Tacoma Power
Tom Martin	Tacoma Power
Wolf Dammers	WDFW
Tom Santee	Insight Northwest

2009 FTC Meeting Dates (first Tuesday of each month)

March 3, April 7, May 5, June 2, July 7, August 4, September 1, October 6, November 3, December 1

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

Announcements

Tom Santee is substituting as facilitator for today's meeting.

The agenda item for FHMP Implementation Schedule is deferred to March 3.

The agenda item about using WDFW seining equipment to conduct a test is assigned as an action item for Steve Vigg.

Agenda Item: Upper Cowlitz & Tilton River Productivity Testing

Presenter: John Barr

John presented an overview of a draft document recommending that productivity testing begin this year for upper Cowlitz steelhead and for Tilton River fall Chinook and coho.

The need for productivity testing is described in the Settlement Agreement (SA) and the FHMP. Results from the testing will guide decisions for upstream fish passage measures.

Several members of the technical work group assisting with the FHMP update noted that productivity testing needed to begin last year in order to have results in time for decisions that are called for in year 14 of the license. Therefore, several of the members recommend starting the testing immediately, even though some of the “triggers” in the FHMP needed to be reached prior to the start of testing have not all been achieved.

The recommendation is described in the draft document: Population Productivity Testing for the Cowlitz River Hydroelectric Project, January 2009, prepared by Andy Appleby, John Barr, Mark LaRiviere, Kevin Malone and Rich Turner.

A two-hour discussion followed John’s summary. Meeting participants commented on what they viewed as potentially adverse consequences and benefits of implementing productivity testing and of delaying the start of productivity testing. A significant concern is that the testing eliminates sport fishing for those species in those systems during the minimum five years needed for testing. Other concerns included the indefinite time period that productivity testing will need to go on, and the fact that some triggers are not currently met. A major concern for not implementing the testing now is that the FHMP deadline for upstream passage decision is already impossible to meet, and those decisions will be delayed years’ longer.

The participants also discussed the meaning of language article 3 of the SA: Upstream Fish Passage, Barrier, Mayfield and Mossyrock. There are different interpretations about flexibility.

There was not consensus among the FTC members present to accept the recommendation to begin productivity testing immediately. Instead the members agreed to place this item on the June 2, 2009 FTC meeting agenda for further consideration. Prior to that meeting the following action items will be done.

Action Items:

- Pat will work with Tacoma Power to develop testing and decision-making criteria to be in place when productivity testing begins. Draft criteria will be presented at the March 3 FTC meeting. (Pat F)
- Tacoma Power will prepare an analysis of the language and dates in Section 3 of the SA, and report on what dates are reasonably attainable. (Tom Martin)
- All FTC members identify any information they need to be ready for a decision in June, and to bring their information request to the March 3 meeting. (All)

Agenda Item: Approval of use of All H Analyzer Model in FHMP Update process
Presenter: Mark LaRiviere

Mark said the FTC members had not yet concurred on using the All H Analyzer Model with the FHMP update process because some members wanted to know more about assumptions built into the model. He said this information was shared and wanted to obtain an official consensus.

Brett said she supported using the AHA model with the understanding that there are a number of consequential uncertainties in model inputs and outputs, and that these uncertainties need to be kept in mind when the outputs are used to help inform decision making. As a result, Brett feels the modeling runs done by the Technical Group will need to consider those uncertainties.

The FTC members concurred to use the All H Analyzer Model.

Agenda Item: FTC/NMFS coordination when fish passage is affected
Presenter: Michelle Day

Michelle reported that NMFS representatives were upset they were not informed of the schedule to shut down the fish ladder at the Cowlitz Salmon Hatchery and not given opportunity to review plans for the temporary trap design. She said their staff may have been able to provide ideas to make the temporary trap more effective. She added that while this is a very important concern to NMFS, she believes it should be an issue for the FTC as a whole.

Mark and Debbie responded that the fish ladder closure is part of the overall hatchery remodel plan reviewed by the FTC a couple years ago. The hatchery remodel schedule was designed around the time when there are few fish returning to the ladder. They acknowledged that designs for the temporary trap were on an expedited schedule and it was an oversight not to share them with NMFS.

Michelle said she is concerned about being kept informed about anything affecting fish passage on the Cowlitz River; particularly when they are planned in advance. Debbie promised to keep NMFS better informed.

During the discussion it was suggested that an operations and construction update relating to fisheries projects be presented by Tacoma Power at each FTC meeting.

Action Item:

- Mark will ensure an operations and construction update is on the March 3 agenda. (Complete)

Agenda Item: Downstream Team Update
Presenter: Tom Martin

Tom reported that USGS proposals for evaluation of a screen and weir at CFD and for evaluating a floating collector at Riffe Lake are received and will be on the FTC site this week. Comments are invited.

Tacoma Power expanded its contract with WDFW for pathology services relating to understanding pathology of downstream migrants.

These studies are expensive. About \$750,000 will be spent on tags and labor.

Comments received on the 30% conceptual design report were sent to the downstream team.

The team's next meeting is Feb. 17 in Tacoma. The team is working on the 60% design. The request to FERC to extend the final reporting date to the end of August 2010 is nearly final.

Prototypes for this year at CFD are moving ahead. The damper screen is being built by Tacoma Power. The weir box is out for bids. However, a contract won't be awarded until the FERC Dam Safety Office gives approval. A bid package for pumps and other auxiliary items is being put together.

Approval of Meeting Summary

The January 6, 2009 meeting summary was approved with clarifying edits.

Review Action Items from January 6, 2009 FTC meeting

Public Meetings/Communications

- Tom S will post answers to key questions raised at the meeting on the Cowlitz website. He will work with Tom and Pat to do this.
 - Tom received the parking lot list from Mark today. He will draft a Q&A by Feb. 18.
- Tom S will bring ideas for the next public meeting to our March meeting.
 - Complete
- Pat will answer outstanding website questions.
 - Complete

Use of the All H Analyzer Model

- Mark L will set up the schedule for the next technical meetings.
 - Complete
- The technical team will continue to meet and will recommended a model approach for all species. They will bring a comprehensive proposal to the FTC for review. The aim is to have this discussion at our June FTC meeting.
 - Complete
- Mark will publish the dates and agendas of these technical meetings.

- Ongoing

Productivity Testing

- All will be prepared to discuss this at the February FTC meeting.
 - Complete
- Mark will prepare a version of the schedule that works backwards from deadlines for discussion at our February FTC meeting.
 - Revised for March meeting

Downstream Team

- Tom will work with Bill to post the comments on the 30% Design Plan on the FTC website.
 - Complete
- Bill will distribute send the plan for the weir box by January 7, 2009.
 - Complete this week
- Tom will file request with FERC for a schedule modification.
 - Nearly complete

Meeting Evaluation

Well Done:

- Finished early
- Good discussions

The meeting was adjourned at 1:30 p.m.

Meeting Handouts

- Agenda for February 3, 2009 FTC meeting
- Draft January 6, 2009 FTC meeting summary
- Population Productivity Testing for the Cowlitz River Hydroelectric Project: Draft January 2009
- Appendix 1: Settlement Agreement Article 3: Upstream Fish Passage: Barrier, Mayfield and Mossyrock

Topics for March 3 FTC Meeting

Welcome / Review Agenda / Check-In (9:00 – 9:10)

Review FHMP Update implementation schedule

Construction and operations update

Productivity testing

 Development of testing and decision-making criteria

 Identifying FTC member information needs

AHA Technical Team update

Public meeting and communications update

Lunch

Downstream Team update

Upper basin juvenile supplementation/Hall Creek rearing pond
Update Status of Action Items
Approval of February 3 meeting summary
Meeting Evaluation and set April 7, 2009 meeting agenda

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March 3, 2009 from 9:00 AM – 2:00 PM
Mayfield office, Silver Creek, Washington

Members Present

Pat Frazier	WDFW
Mark LaRiviere	Tacoma Power

Other Attendees

Ed Meyer	NMFS
Rich Turner	NMFS
John Serl	WDFW
Charles Morrill	WDFW
Wolf Dammers	WDFW
Julie Henning	WDFW
Debbie Young	Tacoma Power
Tom Martin	Tacoma Power
Tom Santee	Insight Northwest
Lyn Wiltse	PDSA Consulting

2009 FTC Meeting Dates (first Tuesday of each month)

April 7, May 5, June 2, July 7, August 4, September 1, October 6, November 3, December 1

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

Announcement

Tom Santee will be facilitating the May 5 FTC meeting.

Agenda Item: Review FHMP Update Implementation Schedule

Presenter: Mark LaRiviere

We are less than a year away from the filing deadline (Feb. 22, 2010). The FTC has agreed to be very intentional about providing adequate public review. We need time for their input to be considered and evaluated. Pat suggested we might be able to accomplish this through a workshop followed by a 30 day public comment period. The original schedule needs to be revised.

Action Item:

- Mark – Work with Tom Santee to revise the schedule to include public workshop(s) and send out to FTC members for comment prior to our next meeting.

Agenda Item: Construction and Operations Update

Presenter: Mark LaRiviere

Mark reported that the temporary trap has been operational at the CSH ladder since the last meeting. It was removed from service for 3 days last week to widen the opening in the trap, and is now working much better. The flow on the lower Cowlitz River is up to around 6,100 cfs today, in accordance with instream flow requirements.

Hatchery reconstruction: Mark reported that we are still on track here. An issue has developed with the adult holding capacity. The new ponds won't be completed until May so an alternative plan for holding adult broodstock for the month of April has been implemented by WDFW.

Downstream collection improvements at Mayfield: Bids for the counting house remodel are being accepted. An update will be given at our next meeting.

Agenda Item: Productivity Testing

Presenter: Pat Frazier

Development of Testing and Decision-making Criteria

This issue is not well defined in the FHMP. We want to make a decision about how to proceed in June, in order to implement in August. Kevin Malone, John Barr, Mark, Pat and Rich Turner developed a memo with some suggestions on how to proceed.

The memo suggests two methods; biologically preferred (assumed we can identify natural from hatchery production) and biologically confounded, and includes a decision tree. The decision tree addressed Pat's concerns about having a set endpoint to the testing. The memo proposed a start (depending on the species) and how long we would have to go. If we start in 2009, the end of the first 5-year period would be the following:

- Coho – 2017
- Chinook – 2018
- Steelhead - 2019

At end of these 5 years, if productivity is greater than one and if abundance is greater than or equal to 500, then we would build the ladder. There was a question about whether the 500 is carved in stone. Participants agreed that if that is the case, then it is a pretty high bar for some populations like steelhead in the Tilton River. As a contributing population, the abundance target for steelhead could be adjusted to between 200 and 500. In addition, we need to consider what levels of abundance would indicate no need for further testing.

If, after that 5-year rolling average we are under 0.5 for productivity, we wouldn't proceed with a ladder or further productivity testing because the likelihood of achieving the desired productivity of greater than one would be remote. A strong argument for 0.5

being the decision-point productivity level is to account for some good years, some flood years, and a variety of ocean conditions.

The initial decision on for constructing the ladder is needed by year 15. It appears that when we hit year 14, the upper Cowlitz River populations are not needed for productivity testing. After that, the FHMP calls for testing “any species” in the Tilton. Does this mean that all species have to be tested? We need to figure out what this means. Pat hopes to have some legal interpretation from the AG’s office on this in time for the April FTC meeting.

Action Items:

- Rich will determine what the appropriate abundance number should be for the 3 species in the Tilton (can it be a range vs. a specific target? Less than 500?).
- Mark will describe what would happen if we decided to go ahead with passage (the ladder) at Mayfield. Would we have a trap at Mayfield? At Mossyrock? What would the physical facilities be? Where would they be located? Will there be trapping / marking capabilities?
- Mark will share above description with Pat prior to our next FTC meeting.

Agenda Item: AHA Technical Team Update

Presenter: Mark LaRiviere

Mark reported that this team last met in January of this year. The AHA Model is especially helpful in determining hatchery production. American Rivers’ Chuck Huntington is attending and contributing to these meetings.

The team will meet again March 5 in the Ecology Conference Room of WDFW’s Region 5 Office. The aim of this meeting will be to propose solutions and present these at the May FTC meeting.

Agenda Item: Public Meetings and Communications Update

Presenter: Tom Santee

Tom distributed a handout describing some alternative approaches to keeping the public informed of FTC activities. In his opinion, the four public meetings we held last year were only somewhat effective.

These meetings were advertised as FTC public meetings, when they were in fact hosted by Tacoma Power and WDFW upon the recommendation of the FTC. Tom suggested we clarify who is hosting these meetings, going forward. There have also been complaints by members of the public about the time and location of the meetings. At some meetings the public seemed less than interested in the topics being presented. Many expressed appreciation that the meetings were held and the opportunity to

express themselves about their fisheries issues. We recognize that the public seems to be primarily interested in what can be done to preserve and enhance the sports fishery.

Tom proposes hosting two public meetings in 2009. Another option would be to explore the option of exchanging information with the public through the medium of Webinars. This would address the issue of convenient location and also require less time from participants. Tom asked for volunteers to test drive this option. Pat, Mark, and Lyn volunteered to participate in the trial.

Action Items:

- Tom S will contact volunteers to set up a Webinar demo, using the topic of Webinars. He will do this early in the week of March 23.

Agenda Item: Downstream Team Update

Presenter: Tom Martin

Tom M explained that the extension request was filed with FERC as discussed at the last FTC meeting.

The February 17, 2009 meeting of this team included a review of the 30% conceptual design report. The riverine collector option was deemed technically infeasible. The details of this decision will be outlined in the 60% design report, which will be presented at our June FTC meeting.

Final designs of prototypes have been sent to FERC for the weir box and flow deflector. Tacoma has responded to FERC's request for QA/QC plans for these prototypes. In the meantime, Tacoma has begun construction of the deflector. Bids for the weir box are being opened today.

Due to its extremely large size there are issues around getting the weir box in place. Discussions on how best to do this are taking place this week.

Tom reported that Tacoma has received an estimate on the evaluation studies for Cowlitz Falls and Riffe Lake from USGS. The total cost (labor and tags) exceeds \$1 million. Tacoma is re-evaluating these evaluations to see how the costs can be reduced. The plans are in place and the tags have been ordered.

Tom distributed letters on the background and anticipated due date of the NMFS Biological Opinion for the LCPUD Cowlitz Falls Dam. This is expected to be issued from NMFS on March 20, 2009.

Tom also reported that Tacoma is in the process of finalizing the access agreement with LCPUD.

Action Items:

- Marc will send out updated evaluation plans for the FTC to review.

Upper Basin Juvenile Supplementation / Hall Creek Rearing Pond

Presenter: Wolf Dammers

Wolf explained how this site might apply to the upper basin rearing requirement in the SA. The facility has not been in use the past couple of years, due to problems with the intakes and the pumps. At the request of the Cowlitz Game and Anglers (who had voluntarily operated the facility), Tacoma initiated some repairs there last summer. When they re-examined the pond recently, they discovered further damage due to the high water events this past winter.

We will look at the potential of this site through the lens of the AHA Model solutions. The future roles of acclimation ponds will be evaluated through the AHA Model.

Agenda Item: Update Status of Action Items

- Tom M will check with Bill Iyall re WDFW portable adult release chute for the Cispus River.
- Tom M will check with Marc re: 2009 Supplemental Collection Efforts
- All Cowlitz FTC members will let Mark know if they won't be attending each FTC meeting (one week in advance of the meeting if at all possible)
- Lyn will add request for RSVP to draft agenda she emails out one week prior to each meeting.

Productivity Testing

- Tacoma Power will prepare an analysis of the language and dates in Section 3 of the SA, and report on what dates are reasonably attainable. (Tom Martin)
- All FTC members identify any information they need to be ready for a decision in June, and bring their information requests to the April 3 meeting. (All)

Public Meetings/Communications

- Tom S will post answers to key questions raised at the public meetings on the Cowlitz website. He will solicit input from FTC members to do this. He will try to incorporate items listed in Parking Lot during the December 2, 2008 public meeting. He will specify who has what jurisdiction.
-

Agenda Item: Approval of February 3, 2009 Meeting Summary

We reviewed and approved the February 3 meeting summary, with Brett's suggested edits.

Agenda Item: Meeting Evaluation

Well Done:

- Summary of public meeting
- Got out early
- Moving forward
- Very productive
- Good discussions
- Appreciated Brett letting us know she had to miss the meeting

Do Differently:

- Disappointing attendance (lack thereof) by FTC members
 - Bring power cord
-

The meeting was adjourned at 1:10 p.m.

Meeting Handouts

- Agenda for March 3, 2009 FTC meeting
 - Draft February 3, 2009 FTC meeting summary
 - Productivity Testing at Cowlitz River Memo dated March 2, 2009
 - LCPUD letters dated September 29, 2008 and January 30, 2009
 - Proposed 2009 FTC Public Meetings Memo dated February 25, 2009
 - Questions/comments from December 2, 2008
-

Topics for April 7, 2009 FTC Meeting

Welcome / Review Agenda / Check-In (9:00 – 9:10)

Review FHMP Update Implementation Schedule

Construction and operations update

Productivity testing

 Development of testing and decision-making criteria

 Identifying FTC member information needs

AHA Technical Team update

Public meeting and communications update

Lunch

Downstream Team update

Supplemental Collection Efforts

Mayfield debris management review

Upper basin juvenile supplementation – steelhead upper Cowlitz fry plants

Update Status of Action Items

Approval of March 3 meeting summary

Meeting Evaluation and set May 5, 2009 meeting agenda

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Tim Romanski	USFWS
Brett Swift	American Rivers
Brad Caldwell	WA Dept of Ecology
Pat Frazier	WDFW
Mark LaRiviere	Tacoma Power

Other Attendees

Ed Meyer	NMFS
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John Serl	WDFW
Wolf Dammers	WDFW
Debbie Young	Tacoma Power
Tom Martin	Tacoma Power
Tom Santee	Insight Northwest
Lyn Wiltse	PDSA Consulting
Steve Fischer	Tacoma Power
Marc Wicke	Tacoma Power
Dean McLeod	Tacoma Power

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Announcement

Tom Santee will facilitate the May 5 FTC meeting.

Agenda Item: Review FHMP Update Implementation Schedule

Presenter: Mark LaRiviere

At our March meeting Pat requested integrating in the schedule a public workshop (or series of workshops in different areas to facilitate public attendance) followed by a 30-day public review period when the draft plan is out. These workshops would allow the FTC to walk through the plan and explain the *what* and the *why* of the plan. This would provide a common base of understanding to inform members of the public as they, subsequent to the workshop(s), formulate their comments on the plan.

Mark adjusted the schedule accordingly, keeping the same FERC filing date. He distributed a handout outlining the new schedule.

Action Item:

- Mark will update the schedule further to reflect the new process using the AHA model.

Agenda Item: Construction and Operations Update

Presenter: Mark LaRiviere

Mark reported that over the last couple of weeks Tacoma has removed the temporary trap and re-opened the ladder and has begun using the new electro-anesthesia system at the separator. The new re-built separator facility is now operational. We will tour that facility this afternoon.

Hatchery reconstruction: Mark reported that construction is proceeding on schedule. Construction is anticipated to be substantially complete by the end of 2009.

Downstream collection improvements at Mayfield: The bid for the counting house replacement has been awarded to Pease and Sons (who also built the CF fish facility). They will start mobilizing next week. This will require a lot of coordination with the operation of the downstream collection activities. A meeting to discuss this is scheduled for April 13. We will get an update on progress at the May FTC meeting.

Agenda Item: Productivity Testing

Presenter: Pat Frazier

Development of Testing and Decision-making Criteria

There was not consensus about proceeding with productivity testing for steelhead this year. There was strong interest in evaluating for salmon species later this year. The next opportunity to begin productivity testing will be this fall. Language regarding time frames and locations and how upper Cowlitz fits in with the productivity testing is undergoing legal review by WDFW. There are different perspectives on the interpretation Article 3 with respect to proper response to triggers not being met in time to meet the deadlines spelled out in the settlement. We need to “sort out” what volitional passage actually means. The settlement language says we have to either breach the barrier dam or ladder it. The objective is to keep the number of hatchery fish that make it upstream to an acceptable level.

There are concerns about negative impact to fisheries during productivity testing. There are also concerns about whether productivity testing would end with building a ladder. This would likely include a sorting facility. There is not consensus about doing this. What remains to be determined is how to do the productivity testing, over what timeline (8 -15 year timeline) and with which species. Pat believes that steelhead would be the

best candidate for achieving a sustainable population in the upper basins. There is a question around whether we can just select one of the stocks, while maintaining a harvest on the other stocks.

Rich reported that the updated abundance numbers for the Tilton population are 300 for steelhead; Chinook is 400; Coho is 1100, based on low risk range of viable population based on stock-specific information.

Action Items:

- Pat will send out a description of what WDFW is looking for regarding productivity testing by April 20.
- All FTC members are to review the Mar. 2, 2009 memo on productivity testing protocols to see if they agree with the suggested protocol. They are also to identify any information needs to inform further discussion at our May meeting and a recommendation which will be made at our June FTC meeting.
- Pat will work with Mark on what it might look like (management plan that includes sorting and hauling activities and impacts on fish) if we have a ladder in place and present this at the May FTC meeting.

Agenda Item: Supplemental Collection Efforts

Presenter: Marc Wicke

Marc reported that collection equipment is being installed. Out of 180 applicants, three experienced staff members have been hired. Collection starts April 15. The two inclined plane traps (4 x 4 and 6 x 6) are being installed side-by-side today below CF Dam. They will also be doing beach seining starting April 15 and if the catch falls off, they will consider re-installing the Merwin trap. Collection will continue until early September. The stress relief ponds will be shut down for remodel in late October, so there shouldn't be any conflict.

Action Items:

- Marc will post to the FTC website a monthly collection report one week prior to each FTC meeting.

Agenda Item: AHA Technical Team Update

Presenter: Mark LaRiviere

Mark reported that the subcommittee has met twice since our last meeting and plans to meet three more times between now and the June FTC meeting. They have created draft AHA solutions for fall Chinook, coho, and steelhead. They need to revisit coho (complicated by upper and lower basin populations) and steelhead. They are working on getting more information on the population status, and segregated or integrated status to create solutions for spring Chinook and sea-run cutthroat trout. They propose to meet one more time after the FTC reviews the final draft recommendations to finalize

them, incorporating FTC feedback. Their next scheduled meeting is April 17 in Vancouver.

Action Items:

- Mark will provide another update at the May FTC meeting.
-

Agenda Item: Public Meeting and Communications Update

Presenter: Tom Santee

Tom is working on improving the website. He hopes to upgrade it to more easily support exchange of information and ideas so it becomes a more useful tool. The website will help inform visitors about topics of public meetings in advance.

Our last public meeting was in November in Morton. We want to schedule another public meeting in the near future, possibly late June in Morton, after graduations, etc. and when there is likely information to be shared relative to productivity testing, downstream passage, and the FHMP update workshops coming in September. These meetings afford people the opportunity to interact and build relationships. We will have at least these two public meetings this year and can look at possibly setting up a third, depending on information to be shared and public interest.

Tom Santee reported on the successful practice webinar session held last week. We had four FTC members participate, along with Tom S and Lyn. Tom had a couple of his colleagues also attend as “participants” playing the role of the public. The practice session went fairly well. Benefits of this format: would create buzz and provide a supplemental avenue of input. Participants can submit questions in advance, raise their hands, participate in polls, etc. Questions can be asked and answered in a general way where all attendees can see them. They can also be asked and answered specifically where only the asker and answerer can see them. There is also the ability to create a log of all the questions, chat, and the ability to record the session. Tom found himself to be somewhat hobbled by the limits of Mac technology. Next time he will make sure he is on a PC.

We agreed to give this technology a try as a public outreach method. A possible application is an update on downstream passage. We would also use this as a way to provide background information prior to public meetings. Tom S has hired an intern to create a marketing plan for the webinar and also for the public meetings. He will also contact past attendees and invite them directly.

Tom M reported that Tacoma will be doing a Cowlitz Currents publication before Memorial Day. This 4-page newsletter will publicize the website; announce public meetings, webinars, etc.

Action Items:

- Tom S will report on improvements to the website at our May meeting.

- Tom S will research some of the technical issues that arose during the practice session.
 - Tom S will look at setting up a webinar public meeting prior to the June public meeting. He will also schedule a rehearsal for this with FTC members.
-

Agenda Item: Downstream Team Update

Presenter: Tom Martin

Tom Martin reported that work continues on the 60% conceptual design report. They had a conference call last week to review the deliverables and schedule. Draft cost estimates are due next week. The 60% design draft report will be complete for review by the next FTC meeting (distributed internally on April 23 and published on April 30). The team will incorporate comments and give a formal presentation on the 60% design at the June FTC meeting. We will assume a 6 month time approval period from FERC. May 12 is the date of the next meeting (in Tacoma).

Prototypes: Fabrication of the flow deflector is nearly complete. They plan to install in the next few days. The screen and both deflectors are to be in place on April 15. ENSR will begin the hydraulic testing at that time. The weir box contract has been let, materials have been received, and fabrication has been started and should be complete May 27. Tacoma is awaiting dam safety approval from FERC who has some issues about how quickly the weir box could be removed in the event of a Probable Maximum Flood. Bill Iyall has been meeting with LDPUC and is working with them on solutions to satisfy FERC's requirements. Installation is contingent on FERC approval.

Evaluations: Marc Wicke reported that the evaluations contract with the USGS has been finalized. They get approval from the Utility Board tomorrow. USGS is finishing the setup for the acoustic telemetry survey. These evaluations are following the January 15 study plan (for steelhead and Chinook). Marc will let us know if we need to use coho (a timing issue).

Any mortalities encountered during collection of downstream migrants, including supplemental collection and CF fish facilities will be run through Cowlitz Complex pathologist. There is a protocol in place to deliver these samples to the pathologist.

Action Items:

- Tom M will post pictures of operational prototypes to FTC website when possible.
-

Mayfield Debris Management Review

Presenter: Steve Fischer

Dean updated us on the new cleaning protocol that Tacoma has been using for the past four months.

On an annual basis they will dewater and clean each intake wing including the louvers themselves in addition to the slots in the intake wings. They have been doing this annual cleaning for the past 3 years. They do this during the summer when flows are lowest. This process usually takes 3-5 days. We want the screens to be as clean as possible before the juvenile out-migration. Tacoma plans to revise the original plan and send it to FERC.

Action Items:

- Tom M will send out a draft of the revised plan for review before it is sent to FERC.
 - Dean will take some pictures of the louvers to show the amount of debris before and immediately after the annual cleaning. We will use these as baseline photos from which to compare subsequent years and re-evaluate accordingly.
-

Upper Basin Juvenile Supplementation

Presenter: Wolf Dammers

Steelhead Upper Cowlitz Fry Plants

This is the time of the year we start collecting brood stock for the upper Cowlitz River basin fry plants. Mark pointed out that the six alternatives looked at so far by the AHA Solutions sub-committee eliminated the upper basin release program for fingerling plants. WDFW was the primary advocate for plants initially and now they advocate ending the fry plants. The smolts for this year's releases are already on station. We need to decide whether to take the broodstock this month. We need to know the right target for this. The fry plant survival has been low. Pat suggested we consider using Hall Creek as an acclimation location for smolts (next year). Mark Johnson has suggested we could possibly rear 25K smolts up there.

Action Items:

- Wolf will send out an email with the relevant information and set up a conference call with FTC members to make a recommendation on this by April 15.
-

River Forecasts and Reservoir Refill

Presenter: Mark LaRiviere

Todd Lloyd, Tacoma Power has requested that this become a standing agenda item for this time of the year He is also available to meet with us by request. Mark distributed a couple of graphs from 3TIER Environmental and also the River Forecast Center. The River Forecast Center shows a 50% probability of refill to 770 feet with 5,000 cfs minimum discharge. The 3TIER forecast calls for 89% probability of refill to 770 feet with 5,000 cfs minimum discharge. Todd's best guess at this time is to look at the historic average inflow which shows us getting to 770 the first week of June (fits within our target). Debbie reported that snow pack is currently at 107% of average.

Action Items:

- Mark will post these to the FTC website every two weeks.
-

Mayfield 2008 FHMP Annual Report Review**Presenter: Mark LaRiviere**

Mark reported that Tacoma has asked for an extension to May 15 for this report.

Action Items:

- Mark will meet with WDFW and then request FERC of adjustments to the annual report timeline.
-

Agenda Item: Update Status of Action Items

- Tom M will check with Bill Iyall re WDFW portable adult release chute for the Cispus River.
 - All Cowlitz FTC members will let Mark know if they won't be attending each FTC meeting (one week in advance of the meeting if at all possible)
 - Lyn will add request for RSVP to draft agenda she emails out one week prior to each meeting. Also ask for where item requires decision and note this on agenda. Send out reminders of action items with agenda.
-

Agenda Item: Approval of March 3, 2009 FTC Meeting Summary

We reviewed and approved the March 3 meeting summary. It will be posted to the public website.

Agenda Item: Meeting Evaluation**Well Done:**

- Good discussions and clarity around where we need to be more clear
- Michelle's desire to get into the details – WaHOOO!
- Eating outside
- Great attendance (through lunch)

Do Differently:

- When we review the agenda, make it obvious where a decision is required and indicate source of supporting information.
-

The meeting was adjourned at 1:55 p.m.

Meeting Handouts

- Agenda for April 7, 2009 FTC meeting
 - Draft March 3, 2009 FTC meeting summary
 - Updated FHMP Schedule
 - Productivity Testing at Cowlitz River Memo dated March 2, 2009
 - Mayfield Dam Upstream Passage Graphic (also posted to FTC website)
 - Mossyrock Elevation Probability charts (3TIER and River Forecast Group)
-

Topics for May 5, 2009 FTC Meeting

Welcome / Review Agenda / Check-In

Review FHMP Update Implementation Schedule

Construction and operations update

Productivity testing

Development of testing and decision-making criteria

Identifying FTC member information needs

AHA Technical Team update

Genetic Subcommittee report

Website, Webinar, and Public meeting and communications update

Lunch

Downstream Team update

Update on Supplemental Collection Efforts

Upper basin juvenile supplementation – steelhead upper Cowlitz fry plants

Update Status of Action Items

Approval of April 7 meeting summary

Meeting Evaluation and set June 2, 2009 meeting agenda

FTC Cowlitz Hydroelectric Project
FERC NO. 2016
Fisheries Technical Committee
Final Meeting Summary
May 5, 2009 from 9:00 AM – 2:15 PM
Mayfield Office, Silver Creek, Washington

Members Present

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

Other Attendees

Ed Meyer	NMFS
Rich Turner	NMFS
John Serl	WDFW
Wolf Dammers	WDFW
Debbie Young	Tacoma Power
Tom Santee	Insight Northwest
Marc Wicke	Tacoma Power

2009 FTC Meeting Dates (first Tuesday of each month)

May 5, June 2, July 7, August 4, September 1, October 6, November 3, December 1

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

Announcement

Tom Santee will facilitate the May 5 FTC meeting.

Agenda Item: Revised FHMP Update implementation schedule

Presenter: Mark LaRiviere

Mark handed out an updated timeline for the FHMP Update. He noted the time frames for several items are getting compressed although he believes the plan still can be submitted to FERC by the March 1, 2010 submittal date.

Pat asked if the public review period could be moved up from starting October 7 to early in September; possibly the same as when the first public workshop is held. This extends the time to more than the 30 days currently scheduled for public review. Everyone agreed to this change although it was noted that FTC members might not reach consensus on the plan update prior to the workshops or public review. This will be pointed out to the public during the review period.

The FTC may need to hold a second meeting in August to work through the draft update. No additional meeting is scheduled at this time.

Action Item:

- FTC members are to look into their September schedules for dates they are available for public workshops. The workshop schedule will be set at the June FTC meeting.

Agenda Item: Productivity Testing Discussion

Presenter: Pat Frazier

Pat said he was unable to complete the document describing WDF&W's recommendation for productivity testing for discussion at today's meeting. He said his agency will recommend moving forward with productivity testing but did not say in what locations and for what species although Tilton River steelhead was mentioned as one likely population. Pat said he will provide a WDFW written plan prior to the June FTC meeting for discussion at that meeting. Pat believes an FTC decision can be made at that meeting.

Brett proposed a legal team meeting be held this summer to review Article 3 of the Settlement Agreement because of differing interpretations and issues regarding triggers and target dates. Debbie and Brett will work on what legal questions should be reviewed by the legal team. FTC members agreed with holding off on setting up the legal team meeting until WDFW's plan is received at the end of May.

Action Item:

- Pat completes and distributes WDFW's productivity testing plan for discussion and possible action at the June meeting.
- Debbie and Brett work on strategy for legal team meeting this summer.

Agenda Item: Genetic Subcommittee Report

Presenter: Mark LaRiviere

Mark reported on the April 13 Genetics Subcommittee conference call and distributed a written report posted to the FTC site on April 29. Denise Hawkins of USFWS is a new subcommittee member.

The subcommittee approved a summary statement to accompany the 2009 progress report of the lower Cowlitz River steelhead genetic study conducted by WDFW. The following four paragraphs of the first page of the handout is this summary:

The March 2009 report provides an initial genetic characterization of lower Cowlitz River steelhead assumed to be natural spawners in 2008. The report is a first year

progress report and continued sampling in 2009 will result in a second year progress report. A total of 30 d steelhead adults were sampled from three lower river sub-basins in 2008. Four of these were marked, hatchery-origin fish. All three Cowlitz Hatchery steelhead stocks sampled in 2008 were included in the genetic analysis. The small sample size for natural spawners allowed only some preliminary conclusions. See the hypothesis/findings below.

In general, steelhead adults from lower Cowlitz River tributaries were distinct from the hatchery steelhead stocks; however, genetic influence from the early winter-run hatchery stock was evident. Also, the lower Cowlitz tributary steelhead adults were generally distinct from other lower Columbia River natural steelhead populations. Cowlitz River hatchery steelhead stocks were distinct from each other.

The upper Cowlitz River basin late winter-run steelhead sampled at the barrier dam/separator in 2005 did not show any significant genetic divergence from the hatchery late winter-run stock sampled in 2008. The genetic similarity suggests that the late winter hatchery stock transported to the upper watershed is producing returning adults.

The adult sampling work of this study is the first phase. Results from the adult sampling phase will determine if we conduct the second phase – sampling lower Cowlitz River juveniles.

The subcommittee also discussed sampling results to date of Mayfield Lake downstream migrant Chinook juveniles. Two of the three years resulted in 95% of the sampled juveniles are fall Chinook. Mark said sampling will continue one more year and then the recommendation is to discontinue the sampling program. Resampling may be considered again in three years. After next year's study Ann Marshall of WDFW will be asked to present a report at an FTC meeting.

Agenda Item: AHA Technical Team Update
Presenter: Mark LaRiviere

Mark reported the AHA technical team is finished with spring Chinook and will work on coho at its next meeting. They hope to have two meetings in May so they can go over all the species. John Barr will give an update at the June FTC meeting. It will be a broad brush rather than species-by-species report and will discuss different hatchery objectives such as using the hatchery for conservation only, what would it look like to manage to HSRG standards and focusing on recovery of listed species. The FTC will have flexibility to mix and match different objectives.

Agenda Item: Public Communications Update
Presenter: Tom Santee

Tom handed out a report on cowlitzfish.net site traffic during April 2009. He noted the site has the most activity on Mondays probably due to the weekly posting of the Cowlitz fish report. He said he is working with a journalism school intern and the person who designed the site to revamp its approach to make it more valuable to visitors and to the FTC. Among the possible changes is to allow visitors to post comments following the postings Tom puts on the site so there is more opportunity for dialogue. Tom does not plan to have open forums at this time, however, as that is available at other places.

FTC members discussed when to schedule the next public meeting. It was agreed that Tacoma Power and WDFW will co-host a public meeting at the community center in Morton on Tuesday, June 23 from 6-8 p.m. The topic is what's planned for productivity testing. Tom will reserve the room and publicize the meeting.

FTC members also discussed when to hold the first Webinar. It was agreed that this should take place near mid-July. The Webinar will feature a presentation by Tacoma Power on the salmon hatchery remodel.

Action Items:

- Tom S will reserve the conference room in the community center in Morton for the June 23 meeting and publicize the meeting.
-

Agenda Item: Downstream Team Update

Presenter: Marc Wicke

Marc handed out the 60% design summary for discussion at the June FTC meeting.

March reported that low, medium and high-flow calibration is complete for the screens at Cowlitz Falls Dam. The weir box will be in place by mid-May. It must be able to be removed within 24 hours of a high-flow situation in order to get FERC dam safety approval.

Action Items:

- FTC members review the 60% design report for discussion at June meeting.
-

Agenda Item: Supplemental collection update

Presenter: Marc Wicke

Marc handed out the April 13-26 supplemental collection report and said monthly reports will be posted to the FTC site a week prior to each FTC meeting during the collection period. Through April 30, 1,858 juvenile salmon were collected, ranging from 180 to 350 fish per day. Only 30 to 40 were collected via the inclined plane trap with the rest via beach seining.

Agenda Item: Upper basin juvenile supplementation; conference call report
Presenter: Pat Frazier & Wolf Dammers

There was no conference call to report. Pat handed out a document emailed to FTC members and posted to the FTC site on April 30 titled: "A Proposal to Eliminate Hatchery Late Winter Steelhead Fry Stocking in the Upper Cowlitz River Watershed."

Pat said the annual stocking of 200,000 late winter steelhead fry upstream of Cowlitz Falls Dam is returning an average of 44 adults to the hatchery. Meanwhile, the stocking of 75,000 smolts is producing an average return of 207 adults annual. As a result, WDFW proposes the stocking of 200,000 fry annually be ended starting fall 2009 and the release of smolt hatchery origin late winter steelhead be increased from 75,000 to 100,000. Pat said that most of the additional smolts could be acclimated in the Hall Creek Facility near Packwood and collected there for transport downstream thereby avoiding issues with fish-collection efficiency near Cowlitz Falls Dam.

Considerable discussion followed the proposal but no decision was made regarding WDFW's proposal. The members decided to table further discussion and possible action until the June FTC meeting.

Agenda Item: River forecasts and reservoir refill updates
Presenter: Mark LaRiviere

Mark said there is no likelihood that Tacoma Power will be asking to temporarily reduce minimum flows below the required 5,000 cfs this season as Riffe Lake's refill should be normal.

Agenda item: Construction/Operations update
Presenter: Mark LaRiviere

Mark said the salmon hatchery rebuild is on schedule. They are going to be moving fall Chinook juveniles on the north side of the hatchery to adult ponds to rebuild those raceways, and then will do the raceways on the south side. Mark said modifications are being made in both design and operations of the fish separator to reduce stress on the fish. Ed said he wants to see it in operation again before Tacoma Power concludes that the modifications are complete and adequate.

Mark said work is under way to rebuild the downstream migrant facility at Mayfield Dam. The contractor is ahead of schedule and operations are continuing during construction.

Added agenda item: FHMP Annual Report review
Presenter: Mark LaRiviere

Mark said the FHMP annual report is out for comment. It needs to be sent to FERC next week so any late comments must be submitted right away.

Added agenda item: HAG meeting update

Presenter: Mark LaRiviere

Mark said the HAG will meet next week at the WDFW office. There will be a report on the latest land acquisitions. Tacoma Power is being approached by property owners wanting to sell their land.

Added agenda item: FTC member attendance at meetings

Presenter: Mark LaRiviere

Mark noted that two FTC members weren't present: George Lee and Tim Romanski. Neither said they would not be here for the meeting. The FTC suggested that both be contacted to learn if there is a way to facilitate their participation in the meetings.

Action item: Lyn will call Tim and Mark will call George about FTC participation matters.

Agenda Item: Update Status of Action Items

- Tom M will check with Bill Iyall re WDFW portable adult release chute for the Cispus River.
 - Tom M will send out a draft of the revised Mayfield Debris Management plan for review before it is to sent to FERC
 - Dean will take some pictures of the louvers at Mayfield Dam to show the amount of debris before and immediately after the annual cleaning. We will use these as baseline photos from which to compare subsequent years and re-evaluate accordingly.
 - Lyn will add request for RSVP to draft agenda she emails out one week prior to each meeting. Also ask for where item requires decision and note this on agenda. Send out reminders of action items with agenda.
-

Agenda Item: Approval of April 7, 2009 FTC Meeting Summary

We reviewed and approved the April 7 meeting summary. It will be posted to the public website.

Agenda Item: Meeting Evaluation

Well Done:

- Good job, Tom, with facilitation

Do Differently:

- Concern about attendance
-

The meeting was adjourned at 2:15 p.m.

Meeting Handouts

- Agenda for May 5, 2009 FTC meeting
- Draft April 7, 2009 FTC meeting summary
- Updated FHMP Schedule
- Genetic subcommittee 4/13/2009 conference call summary
- April 2009 monthly report of Cowlitzfish.net activity
- April 13-26, 2009 Supplemental Collection effort report
- WDFW proposal re: upper Cowlitz River basin juvenile steelhead fry plants
- Adult steelhead hauled above Cowlitz Falls Dam, 1996-2008 graph

Topics for June 2, 2009 FTC Meeting

9:00-9:30 a.m.: Welcome / Review Agenda / Check-In

9:30-11:a.m.: AHA subcommittee report and discussion

11:00-11:15 a.m.: Break

11:15 a.m.-12:15 p.m.: Productivity testing recommendation

12:15-12:45 p.m.: Working lunch

12:45-2:45 p.m.: Downstream Team 60% Report discussion

2:45-3 p.m. May meeting summary approval / Set July 7 agenda

FTC Cowlitz Hydroelectric Project
FERC NO. 2016
Fisheries Technical Committee
Final Meeting Summary
June 2, 2009 from 9:00 AM – 3:00 PM
Mayfield Office, Silver Creek, Washington

Members Present

Michelle Day	NMFS
Brad Caldwell	WA Dept of Ecology
Pat Frazier	WDFW
Mark LaRiviere	Tacoma Power
Tim Romanski	USFWS

Other Attendees

Rich Turner	NMFS
John Serl	WDFW
Julie Henning	WDFW
Debbie Young	Tacoma Power
Tom Martin	Tacoma Power
Terry Ryan	Tacoma Power
John Barr	Consultant
Chuck Huntington	CBI (substituting for Brett Swift)
Tom Santee	Insight Northwest
(Afternoon attendees follow)	
Marc Wicke	Tacoma Power
Bill Iyall	Tacoma Power
Steve Fischer	Tacoma Power
Al Giorgi	BioAnalysts
Chick Sweeney	AECOM
Mike Kohn	LCPUD/BPA
Joe First	LCPUD

2009 FTC Meeting Dates (first Tuesday of each month)

July 7, August 4, September 1, October 6, November 3, December 1

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

Announcements

Tom Santee is the substitute facilitator. This is Terry Ryan's first FTC meeting. He is an engineer with Tacoma Power for 15 years. Brad Caldwell will miss the July 7 meeting as he will be on vacation.

Agenda Item: AHA Subcommittee report and discussion

Presenter: John Barr

John presented an update on alternatives format the AHA Subcommittee is putting together for FTC consideration. He said he needs input from the FTC about the summary. Is the information appropriate? Is it too much? Is information lacking?

John said they are using data and guidance from several sources:

- Policy guidance is from the Settlement Agreement.
- Policy and technical guidance from the Lower Columbia Salmon Recovery Plan.
- Technical framework using HSRG criteria in regards to hatchery programs, EDT for productivity of the natural populations and AHA model to look at how populations respond to different approaches.

The Settlement Agreement has an overall goal of restoring and recovering wild populations in the Cowlitz River Basin. It also says maintenance of a recreational fishery is important.

The Lower Columbia Salmon Recovery Plan gives us direction for the importance of different populations. It provides population designations. The Primary populations are most important for recovery; Contributing populations are still important but may not reach the recovery of primary populations. Stabilizing populations are important but not expected to show major improvement.

The proportion of the natural-origin fish in the hatchery brood stock is important for integrated programs. The proportion of hatchery fish spawning is important for both integrated and segregated programs. The Proportion of Natural Influence (PNI) is the relationship between the two and is important to integrated programs.

The HSRG recommends designing hatchery programs for Primary populations that have a PNI of at least 0.67. That limits the proportion of hatchery fish on the spawning grounds to less than 30% for integrated populations.

These are lowered a bit for Contributing populations. The PNI is not greater than 0.50. The percentage of hatchery fish spawning remains at 30% for integrated programs.

Programs for lower-river populations in the Cowlitz River are different than for the upper river.

The only lower-river population that is Primary is coho. The upper Cowlitz and Cispus primary populations are spring Chinook, winter steelhead and coho.

The Contributing populations are; lower river fall Chinook and winter steelhead, and Tilton River winter steelhead.

The rest of the populations are considered Stabilizing populations. There are no designations for the cutthroat trout populations.

John presented an example showing data comparing options for one of the alternatives being considered and asked if this is what the FTC needs to help make decisions. Mark suggested there be more detail explaining some of the numbers such as what 30% really means. Pat suggested adding brief notes of what kind of actions are needed to implement a specific option.

John said they would remove options that are technically unfeasible. He also said he is contemplating putting together a “recommended approach” among the options.

The next steps are for the subcommittee to meet again to finish putting the alternatives together for the FTC and make the requested adjustments.

The draft FHMP update is scheduled for FTC review at the August 4 meeting. The draft plan will have an introduction and six sections:

1. Settlement Agreement & License (unchanged from current FHMP)
2. Framework & analytical tools
3. Assessment
4. Objectives & strategies (by species)
5. Adaptive management
6. Monitoring & evaluation

Action Items:

- John is to provide FTC members a copy of his PowerPoint slides.
- AHA subcommittee to meet and finalize draft FHMP plan for FTC review in August.

Agenda Item: Productivity Testing Discussion

Presenter: Pat Frazier

Pat described the WDFW recommendation for productivity testing that was provided to FTC members on May 26. It splits the approach for the Tilton River separate from the upper Cowlitz. Testing would begin this coming year for Tilton River winter steelhead only. There are criteria for determining how long testing continues and how the results of the testing will be used to determine whether upstream fish passage needs to be provided past Mayfield Dam. WDFW expressed concern regarding the inclusion of the upper Cowlitz in the productivity test. However, if the FTC recommends to go ahead with upper Cowlitz River steelhead productivity testing WDFW proposes the same criteria to be applied as used for the Tilton River testing.

Discussion of the WDFW recommendation focused on several matters:

- Does this recommendation meet the conditions of the Settlement Agreement?
- Is it okay to test only winter steelhead in the Tilton?
- Can testing in the upper Cowlitz be deferred?
- What purpose is served by testing in the upper Cowlitz when those fish still would need to be trapped and hauled regardless of a Mayfield fish ladder?

- Are some scenarios in the WDFW decision grid superfluous?
- Is it reasonable to target completion of testing in Tilton in 2019 unless data is inconclusive?

Each of the above items remained in question at the conclusion of discussions. Debbie said Tacoma Power will write a corollary to WDFW's recommendation for continued FTC discussion at the July 7 meeting.

Pat asked how deferring action on this item affects plans for a June 23 public meeting in Morton that the FTC previously agreed was to explain the productivity testing decision. Tom S said the meeting was not yet publicly announced. The group concurred that the meeting should either be deferred or the topic changed. (Further discussion of the public meeting was held near the conclusion of today's meeting).

Action Items:

- Pat is to amend the WDFW recommendation to conform with language in the Settlement Agreement relating to 3-of-5 consecutive brood years.
- Debbie and Mark will prepare a Tacoma Power corollary to WDFW's recommendation

Agenda Item: Supplemental Collection report
Presenter: Marc Wicke

Marc said they were having difficulty operating the inclined plane traps due to high flows. The location for beach seining was changed because the higher reservoir elevation at Taidnapam caused a significant drop in collection. They have moved downstream near Mossyrock Park. To date 4,218 juvenile fish are collected of which 122 are smolts. This year's efforts are more successful.

Agenda Item: Downstream Team 60% Report discussion
Presenters: Chick Sweeney & Al Giorgi

Chick and Al provided an overview of the introductory section of the report and reviewed the alternatives that are developed to the 60% design stage. The introductory section describes history of fish collection efforts at or near Cowlitz Falls Dam since 1996 and the formation of the downstream team in early 2008.

The following approaches are continuing to be evaluated at the 60% stage. They are

- Floating surface collector in Lake Scanewa. This is similar to what is at Upper Baker reservoir and is being designed for Lake Cushman. It would be located on the right bank. It would take an estimated 5 years to design and install at an estimated cost of \$46 million. A trash boom would need to be installed. There would be a behavior guidance system to guide fish to the collector at all flows.

- Enhancing existing collection system at Cowlitz Falls Dam. There are two approaches being evaluated. One is to increase the attraction flow ahead of the existing screen to improve entrance efficiency. The other is to address rejection at the upstream end of the screen system by increasing the cross section and flow rate at that end. This project would require 3-1/2 years to complete at an estimated cost of nearly \$2.5 million.
- Surface flow outlet at CFD located at the emergency spillway. A behavioral guidance system would be installed. Investigated attraction flows at 500 and 1,000 cfs. There may not be room for a 1,000 cfs outlet. The 500 cfs project would require an estimated 4 years at a cost of nearly \$15 million. There is no cost estimate as yet for a 1,000 cfs project but it likely is double the other.
- Collector in Riffe Lake (either in upper reservoir or adjacent to Mossyrock Dam).

The collector in upper Riffe Lake would have about 6,000 feet of net, upstream and downstream trash booms, wave attenuator and an onshore trash-handling facility. A number of possible locations were evaluated but it needs to be nearer the middle of the reservoir due to the sizeable fluctuation in lake elevation and difficulties with access. Construction of an access road and power facilities to the site are included in the cost estimate. This project will take approximately 6 years and cost more than \$10 million.

The collector adjacent to Mossyrock Dam doesn't require a downstream trash collector and installation of much of the infrastructure required at the upper reservoir site. The project would require 5 years to design and install and cost an estimated \$44 million. The longer travel for juveniles and smolts to reach this location is a concern regarding its effectiveness.

A riverine collector between Cowlitz Falls Dam and Riffe Lake is no longer being considered because it is not feasible.

Facility operation is targeted for April 15 through August 31 although the device should be prepared to operate over a larger portion of the year.

Chick and AI reviewed the evaluation rating process used to compare the alternatives. There is evaluation of technical issues and of biological issues. The preliminary ratings are in the report. Recently the biological rating process is being re-evaluated. AI said it became apparent the existing matrix did not capture a lot of the risk and uncertainty of underlying biological issues such as fish mortality in Riffe Lake. AI said he is now working on a different approach he hopes will be completed soon. He is looking to methods used at other sites in the Northwest.

There are two prototype studies under way. 1) A flow-deflector prototype is testing one aspect of the improvements to the existing collector: increasing the attraction flow. The

test will go up to the 400 cfs being proposed. 2) A weir box prototype is a test of a surface-flow-outlet type flow field.

The results from the prototype studies and a study of downstream fish in Riffe Lake will be used in preparing a report to the FTC in November. At that time the alternative or alternatives to advance to 90% design are chosen. The preliminary 90% design is scheduled for February 2010 and the final report is set for July 2010 so that implementation may begin.

Agenda Item: Mayfield Collector Flow Pump Operations
Presenter: Steve Fischer

Steve Fischer gave a brief explanation of steps Tacoma Power is taking to improve the louver collection system at Mayfield Dam to meet one of the license requirements. Rather than replacing the pumps to attain desired attraction flows it is working to simply change the number of existing pumps that are on or off. There is a plan being developed to submit to FERC.

Action Items:

- Steve is going to send out information on this item along with information from reports of pertinent studies conducted in 1964-65. This will be an agenda item for the July 7 FTC meeting.

Open Agenda:

Pat suggested that the presentation on downstream collection alternatives by Chick and Al would be a good topic for the June 23 public meeting in Morton. He said this supports his goal of “transparency” between the work of the FTC and the public. Chick and Al said they are available to be at the meeting (scheduled for 6 pm to 8 pm) and are willing to give a presentation.

Tom S said Bill Iyall gave a presentation about the downstream team’s work at a public meeting in Centralia last summer.

Action Items:

- Tom S will publicize the June 23 meeting and announce the topic will be progress with downstream collection.
- Chick and Al will prepare and give a public presentation on the downstream team’s progress.

Agenda Item: Approval of May 5, 2009 FTC Meeting Summary

Brett previously submitted edits to the draft summary. The summary was approved with all but one of Brett's edits. Pat Frazier said he wanted a statement attributed to him regarding the productivity testing discussion to remain in the summary.

Agenda Item: Meeting Evaluation

Michelle said she is uncomfortable with the process that meeting summary edits submitted by an absent member can be changed at the meeting without consulting the person who suggested the edits.

It is important to complete minutes the following meeting so that they can be posted on the web site within the time constraint set forth in our adopted protocol.

The meeting was adjourned at 3:05 p.m.

Meeting Handouts

- * Agenda for June 2, 2009 FTC meeting
- * Draft May 5, 2009 FTC meeting summary
- * Updated FHMP Schedule
- * WDFW proposal re: upper Cowlitz River basin steelhead productivity testing

Topics for July 7, 2009 FTC Meeting

Welcome / Review Agenda / Check-In
Mayfield Attraction Flow Pump Operation
Productivity Testing discussion
Construction/operations update
Report on June 23 public meeting
Supplemental Collection report
AHA Subcommittee update
Update status of May & June meeting action items
June 2 meeting summary approval / Set July 7 agenda

FTC Cowlitz Hydroelectric Project
FERC NO. 2016
Fisheries Technical Committee
FINAL Meeting Summary
July 7, 2009 from 9:00 AM – 2:00 PM
Mayfield Office, Silver Creek, Washington

Members Present

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

Other Attendees

Ed Meyer	NMFS
John Serl	WDFW
Marc Wicke	Tacoma Power
Debbie Young	Tacoma Power
Tom Martin	Tacoma Power
Steve Fischer	Tacoma Power
Tom Santee	Insight Northwest
Sean Murphy	Congressman Baird's Office
Mike Kohn	LCPUD/BPA
Debbie Carlson	BPA
Lyn Wiltse	PDSA Consulting

2009 FTC Meeting Dates (first Tuesday of each month)

August 4, September 1, October 6, November 3, December 1

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

Announcements

Mark announced that the draft FHMP update will not be released as scheduled on August 1. The FERC filing deadline is March of 2010. When we get the new schedule we will discuss how best to accommodate the public's review of this. We will get an update at our next meeting.

The AHA subcommittee meets July 9 in Olympia. We will get an update at our next meeting.

Reminder to all that comments on the annual Upstream Passage Report are due July 16 and the annual Side Channel Monitoring are due July 30. All are asked to get their comments to Mark L. These reports are due to FERC July 19 and August 1, respectively.

USGS-CRRL made a request to run 8-10Kcfs flow in response to a gauging issue at Cowlitz Falls Dam. This is not spill, it is generation. It has to do with flow measurements. It has nothing to do with fisheries evaluations that the USGS is doing with Tacoma. It is to be a one-hour test. Mike will provide Debbie Young with additional information.

At our September meeting we will review the construction schedule for the Downstream Team recommendations. All comments will be addressed.

**Agenda Item: Report on June 23 Public Meeting,
Discussion of Morton City Council Letter**

Presenter: Tom Santee

25 people attended the meeting. It was a very productive meeting. The presentations were very well received. Tom Martin gave a presentation about what is happening with the Downstream Team. Mark gave an update on the hatchery construction. There were great discussions and both topics seemed to interest to the public.

We reviewed a list of specific issues/questions raised at the meeting. We want to give these issues their appropriate due. Tom S will suggest a protocol for answering questions that are not dealt with at the meetings. When discussing the Morton letter, it was asked if a member of the public could give a presentation to FTC members prior to or after one of our FTC meetings. One of the aims of the public meetings we are holding is to allow the public a chance to voice their concerns. Are these meetings not accomplishing that goal? Not all FTC members are able to attend the public meetings; however, a summary of the information from those meetings is discussed at the following FTC meeting. Our primary duty is to complete our work as a committee. Our work is implementing the Settlement Agreement. Our work is not political by nature. Members of the public wishing to make a presentation to the FTC are invited to contact Tom Santee who will work with them on a case-by-case basis to find the appropriate way to share the information. An option would be for them to write a letter that would be attached to the agenda.

Stan Bartell faxed to Mark the letter from Mayor James Gerwig and the Morton City Council and asked him to share it with the FTC. The letter expressed concerns about down-scaling of hatcheries. The sport fishery has an economic impact on the town and they are also feeling the economic impact of these difficult times. As we implement the Settlement Agreement we are trying to strike a balance between our recovery obligations and support of fisheries. Tacoma will send a response letter.

Action Items:

- Tom S will suggest a protocol for addressing issues raised at public meetings.
- Tom S will also create a protocol for members of the public wishing to make presentations to the FTC.
- Tacoma Power will send a response, on behalf of the FTC, to the Morton City Council.

Agenda Item: Construction / Operations Update**Presenter: Mark L**

Mark expressed appreciation for all the excellent help and cooperation provided by WDFW on the new hatchery. He explained that we are on track with the construction which is scheduled to be complete in early 2010. The new facility provides for a physical separation of adults and juveniles. We are maintaining full production during construction.

Mark pointed out where the new Cowlitz Salmon Hatchery Visitor Center will be located and explained how the length of the raceways will be doubled. We will have the ability to deliver pathogen-free water to the ponds and raceways.

The improvements to the Mayfield downstream facilities should be complete by this fall. We are continuing to collect downstream migrants with support of WDFW. The rebuild of the counting house will result in less handling of the fish.

Action Items:

- Mark will provide another update next month.

Agenda Item: Supplemental Collection Report**Presenter: Marc Wicke**

Marc reported that the May 23 to June 26 reports have been posted on the FTC website. The inclined plane traps have been problematic and we lost about 29 days due to debris and flow. Low velocities have been an issue. Crews have been focusing efforts on beach seining. They deployed Merwin traps in Lake Scanewa this week. The goal was to have these traps in by July 10th. They should start fishing on the 9th.

Supplemental collection fish totals for the season are about 8,600, of which 1,100 were smolts. They have caught coho fry, Chinook, and a few steelhead smolts.

This last week flows were such that LCPUD and Tacoma personnel were able to move the debris barrier at Cowlitz Falls Dam. The FCE for coho at the Cowlitz Falls fish facility has gone from 10% prior to the weir box going in to 44%. John reported that catches jumped up (caught 5,700 smolts – mostly Chinook yesterday) since the debris barrier was removed. The acoustic camera footage and radio tags should help us understand reasons for this change.

Agenda Item: Productivity Testing Discussion**Presenter: Debbie Young**

Debbie explained that Tacoma feels that they need to conduct productivity testing in both the Tilton and the upper basin and get a 5-year rolling average. They are fine with testing just steelhead, starting this coming winter, as suggested by WDFW; however, the testing should be in both basins. It is their belief that testing steelhead would have the least effect on the fishery and that steelhead has the highest likelihood of establishing a self-sustaining population.

Tacoma also needs to stick with the original 500 abundance number as a minimum for a viable population. This number was set in the FHMP by National Marine Fisheries Service, when they supplied comments that explained the reasoning behind the 500 number.

Tacoma doesn't believe the timelines of license year 12, 14, and 15 (2018) need to be altered. They believe it is possible to make a proposal, starting this winter that supports the Settlement Agreement as it is written. By year 15 Tacoma feels there would be enough information for the FTC to decide whether to continue testing or not as we would be 4 years into a 5 year average and we would know if the target is likely to be met. The check in points would remain years 14 and 15. Year 16 would be the first year that a 5-year average would be available. It is possible that productivity testing could continue beyond that point (for at least another 4 years). The WDFW proposal for continuing or not might apply here. The FTC would ultimately make that call. We need to be very clear up front about what "likely to be met" might look like so we don't do testing forever. Pat offered to work with Tacoma to flesh out likely to be met triggers. We want something that makes biological sense.

We feel that we are gaining a good understanding of each others' perspectives on this important issue. We will continue this discussion at our next meeting. We agreed to make a decision by our meeting on December 1st or sooner.

Action Items:

- Mark will post the July 6 revised WDFW proposal to the website.
- Mark and Debbie will work with Pat to revise the likely-to-be-met triggers and send out to all.
- Mark and Debbie will provide their corollary to the WDFW productivity testing matrix.
- Michelle will work with Rich to explain the rationale behind the revised abundance number for the Tilton River steelhead population.
- All will conduct legal review of Settlement Agreement language requirements (e.g., one or both basins, species, timeline, etc.).

Agenda Item: Presentation on NMFS Biological Opinion for Cowlitz Falls Dam
Presenter: Michelle Day

Michelle walked us through an overview of the NMFS Biological Opinion for Cowlitz Falls Dam that was issued on June 2, 2009. It covers Chinook, coho, and steelhead. She focused on the effects of the action which lead to the conclusion that there was no jeopardy and no adverse modification of critical habitat. She described the measures that led to the incidental take statement. A copy of the BiOp was distributed to those who requested it. It also available on the NMFS website.

BPA has a 10a (1a) permit and a BiOp for the operation of the Cowlitz Falls fish facility, issued February 27, 2009.

Agenda Item: Mayfield Attraction Flow Pump Operation
Presenter: Steve Fischer

Steve distributed an explanation of how Tacoma proposes to operate the secondary separator pumps. The original plan included a variable frequency drive on the pumps to allow a uniform apex slot velocity of 1.1 to 1.7 above background level velocity. Testing has shown that flow moves through the louvers in a uniform fashion. The intention of this design is to achieve a constant, steady slot velocity of 1.4 times the background velocity.

We discussed performing some biological evaluations to confirm we are meeting the criteria.

Action Items:

- Mark will get numbers on fry collection during winter months.
 - All members will review and supply any questions/comments through Tom M by the next FTC meeting (August 4).
-

Agenda Item: Update Status of May & June Meeting Action Items

The following Action Items were carried over from the June FTC meeting:

- Mark L will post John's PowerPoint presented at June FTC meeting to the website.
-

**Agenda Item: Approval of June 2, 2009 FTC Meeting Summary,
Set August 4 Agenda (See last item below)**

We reviewed and approved the June 2 meeting summary with minor edits. It will be posted to the public website.

Agenda Item: Meeting Evaluation

Well Done:

- Stayed on time with agenda items
- Good participation

Do Differently:

- Some technical difficulties
- Missed Brad and George

The meeting was adjourned at 2:05 pm.

Meeting Handouts

- Agenda for July 7, 2009 FTC meeting
- Draft June 2, 2009 FTC meeting summary
- Public's Issues/Questions from June 23, 2009 Public Meeting
- April 24, 2009 Letter from Morton Mayor James Gerwig and the Morton City Council
- WDFW July 6, 2009 Productivity Testing and Decision Making Protocol letter
- PowerPoint notes for NMFS Cowlitz Falls Biological Opinion
- Ration Attraction Flow vs. Generation Flow Chart
- License Article 401 and Settlement Agreement Article 2 (b): Revisions to the Downstream Fish Passage Improvement Plan: Mayfield

Topics for August 4, 2009 FTC Meeting

Welcome / Review Agenda / Check-In

Public Outreach Protocols

AHA Subcommittee Report

Construction/Operations Update

Supplemental Collection Report

Latest report on weir box

Productivity Testing Discussion

FHMP Schedule Update

Approval of July 7 meeting summary

Meeting Evaluation and set September 1, 2009 meeting agenda

FTC Cowlitz Hydroelectric Project
FERC NO. 2016
Fisheries Technical Committee
Final Meeting Summary
August 4, 2009 from 9:00 AM – 3:00 PM
Mayfield Office, Silver Creek, Washington

Members Present

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

Other Attendees

Ed Meyer	NMFS
John Serl	WDFW
Julie Henning	WDFW
Mark Johnson	WDFW
Andy Appleby	WDFW
Tom Martin	Tacoma Power
Bill Iyall	Tacoma Power
Tom Santee	Insight Northwest
Lyn Wiltse	PDSA Consulting
John Barr	John Barr Consulting

2009 FTC Meeting Dates (first Tuesday of each month)

September 1 (field trip following the meeting to Mayfield counting house and hatchery separator), October 6, November 3, December 1

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

Announcements

All are invited to attend the WDFW Commission meeting that will include a briefing on Cowlitz scheduled for September 10th or 11th in Olympia. Go to <http://wdfw.wa.gov/commission/meetings.html> for details about this event.

Tacoma has filed comments with FERC re LCPUD's Cowlitz Falls Dam Biological Opinion. They commented on the Reasonable and Prudent Measures and suggested some additional RPMs including strongly supporting the formation of a formal Fisheries Committee. LCPUD will be filing a response to these comments by September 4.

Mark announced the annual Upstream Fish Passage and Side Channel Monitoring reports have been filed with FERC. This fall two 5-year roll-up reports from annual research activities will be posted for FTC review. They are due to FERC before the end of the year and are: Article 15 - Instream Flow Monitoring Report, and Article 9 - Lower River Large Woody Debris Report.

WDFW is predicting an all-time record return of coho salmon to the separator this fall. All indications are that the forecast is accurate. We may get over 100,000 adults returning this year! We got our first coho back to the separator last week – very early!

The revision to the Mayfield Downstream Collection Plan (distributed at the July FTC meeting) has been posted on the FTC website for review and comments.

Agenda Item: Public Outreach Protocols

Presenter: Tom Santee

Tom S distributed a draft protocol for addressing issues raised at public meetings. To date follow up on such questions has been handled on a fairly casual basis. We want to formalize this process so nothing falls through the cracks. Going forward, Tom suggests the following:

- Stage 1: Tom S will chart issues and questions raised during the meeting and then circle back at the end of each meeting and verify which require follow up. He will let the requestors know that answers will be posted to the website within a month.
- Stage 2: Tom S will discuss with Mark L who is to draft answers to the questions. The goal is to have all questions answered within 3 weeks.
- Stage 3: Tom S will post the questions and answers in a special cowlitzfish.net section for public meeting follow-up and let FTC members know they have been posted. Answers will include who answered each question, and if they have answered on behalf of the organization they represent.

Tom will add to Stage 2: Notification to FTC members of what questions have been assigned to whom.

Tom S also shared a list of all the ways the public can interact with the FTC. They are:

- Phone, write, or email individual members
- Attend a public meeting
- Submit a question or comment using the feedback link at cowlitzfish.net.
- Use the Cowlitz@cityoftacoma.org email link posted at Tacoma Power's relicensing website and promoted in the *Cowlitz Currents* newsletter
- Invite a FTC member to a local meeting as a guest or presenter

Since there isn't time before or after FTC meetings to allow for public presentations, Tom suggested setting up webinars as an additional form of public outreach. We could use this technology to solicit questions or topics that the public suggests we address at the webinar. This would be a way to reach out and encourage people to communicate what things the public would like to know more about. The nice thing about the webinars is that if members of the public aren't available to attend at the time the webinar is held, they could dial in later at a convenient time to hear it.

The FTC agreed to give these protocols a try. We look forward to getting feedback from the public about the effectiveness of these in ensuring they have a voice and that their questions are answered in a timely fashion.

Action Items:

- All – Give Tom S information of interest to the public so he can post it on the cowlitzfish.net website.
-

Agenda Item: AHA Subcommittee Report

Presenter: John Barr

John Barr, Andy Appleby, Mark LaRiviere, Rich Turner, Chuck Huntington, Kevin Malone, and Pat Frazier have been active participants on this team, working to design hatchery programs using HSRG criteria for primary and contributing populations. They ended up with a set of options that are worthy of consideration. In some cases they follow the criteria closely.

John distributed a handout that included solution tables for all the populations. Mark sent the solution tables individually to each FTC member last week and they were posted on the FTC website.

Note: The Lower Columbia Salmon Recovery Plan sets forth criteria required to achieve recovery of listed species. John explained that all of the proposed alternatives (other than the current program) meet those criteria.

John explained that the purpose of the work being done by this team is to achieve the goals and objectives described in the Settlement Agreement and the Lower Columbia River Salmon Recovery Plan. We reviewed the solution tables for lower Cowlitz spring Chinook, lower Cowlitz fall Chinook, lower Cowlitz coho, lower Cowlitz winter steelhead, upper Cowlitz coho, upper Cowlitz steelhead, and Cowlitz sea-run cutthroat.

FTC members expressed appreciation for all the hard work by the subcommittee. Several of the alternatives have consensus support by subcommittee members.

Mark suggested that program size at release could change in the future and could affect total poundage. We need to keep in mind that hatchery operations in the future may not be the same as in the past. We want to shape our hatchery programs to mirror what is happening in the natural environment to the extent possible / appropriate.

Action Items:

- John will update the table and make it clear for which species the subcommittee has reach consensus. He will also update the titles.
- FTC members will get feedback from their organizations on the tables and send any questions to John and / or Andy.

- Mark L will send out a table that shows the poundage associated with each alternative.
 - The subcommittee will continue to review the two most recently added options (sea run cutthroat and upper river coho) and summarize research on size of fish at release and make recommendations accordingly.
-

Agenda Item: Construction / Operations Update

Presenter: Mark LaRiviere

Mark explained that Tacoma Power continues to be on track with the construction which is scheduled to be complete in early 2010. Production is being maintained during construction. The hatchery will re-open to visitors in June of 2010.

The improvements to the Mayfield downstream facilities continue to be on track for completion in early fall of this year.

Action Items:

- Mark will provide another update next month.
 - Mark will schedule another walk-through of the counting house and hatchery separation facilities after the September FTC meeting.
-

Agenda Item: Downstream Fish Passage Process Improvement at Mayfield

Presenter: Ed Meyer

Ed distributed draft NMFS comments on the proposed revisions to the Mayfield Downstream Fish Passage Improvement Plan. The comments were centered on debris management and hydraulic improvements.

Action Items:

- Tacoma will review NMFS comments and send out a response prior to our next meeting.
-

Agenda Item: Supplemental Collection Report

Presenter: Mark LaRiviere

Mark reported that the last month's collection reports have been posted on the FTC website. In July we were able to fish both the Merwin traps and incline plane traps. Seining in Riffe Lake continues. Collection has been primarily Chinook. Total supplemental smolt collection to date is approaching 10% of the CFFF smolt collection this year.

The weir box at Cowlitz Falls Dam seems to be working reasonable well. Some of the test group FCEs were high – up to 92%. The weir box seems to work better at lower flows.

Total fish transported from supplemental collection efforts for the season are about 15,471, 8,083 of which were smolts (immediate mortalities are subtracted out).

Fish collection efficiency for coho at the Cowlitz Falls fish facility is about 33% this year. Weighted by passage the total FCE for coho is about 21%.

FCE for steelhead this year averages 37%. Chinook averages 38%.

Action Items:

- Mark L will include information on all mortalities included in the report.
- Mark L will include seining data (not included in July report because little seining was done).
- Mark L will account for the other fish that were caught (and released) in Tables 2 and 3.
- Tacoma will provide another update at our September meeting.

Agenda Item: FHMP Schedule Update

Presenter: Mark LaRiviere

FERC requires us to update the FHMP every 7 years. We want to standardize the update process to make it more effective and efficient over time. Tacoma wants to meet the FERC schedule that calls for the update being sent to FERC by March 1, 2010.

In the meantime, the FTC and public need to review the draft and provide feedback that we would then incorporate into the FHMP. The FTC discussed the current timeline and suggested some changes working within the current FERC filing deadline to accommodate adequate public review of the draft FHMP. FERC will also be providing the public a chance to review and comment on the FHMP.

Andy suggested coming up with a set of biologically neutral hatchery program alternatives that are species centric and ask the public to provide comment. We need to be able to flag how productivity testing would affect each option. We could meet with them and give them an update on how likely we think recovery is for each of the species. We could also share some harvest data including where the fish were caught.

After we give them the opportunity to provide input on the hatchery programs, we could then provide a separate opportunity for them to comment on the other aspects of the FHMP update.

Action Items:

- Mark will come up with a revised draft schedule for FTC review and send it out prior to our next meeting.
-

Agenda Item: Productivity Testing Discussion**Presenter: Pat Frazier and Mark LaRiviere**

Mark reported that he and Debbie have been working with Pat on this to bring a starting point for discussion to the FTC. Tacoma's latest proposal is something that Pat supports, with some concerns. Mark distributed and explained a copy of the proposal that contained four scenarios based on testing with late winter-run steelhead in the Tilton River and upper Cowlitz River basin starting in winter of 2009/2010 and concluding in 2020. The scenarios use the abundance figure of 500 adults as set by NMFS. Note: July 18, 2003 is the official FERC license issuance date. June of 2019 is when we would get our first 5-year rolling average.

Concern was expressed at cutting off the testing in 2020 after only two 5-year rolling averages. Ed reminded us that we need to keep in mind the time required for design prior to construction (need at least 3 years for this). Other concerns: inclusion of upper Cowlitz River steelhead for productivity testing and proposed decision making with regard to Tilton. We want to investigate how appropriate the 500 number is for the Upper Cowlitz and Tilton.

Michelle distributed a copy of Table 4 from Appendix E, Chapter 12, page 31, of the latest draft Lower Columbia Salmon Recovery Plan. She reminded us to keep in mind that recovery goal is not the same as the abundance number. She explained that NMFS looked at the lowest number for the moderate (highest) risk range and that's where they determined the 200 (not 250 as previously stated) for steelhead. Michelle will try to track down the source of the table.

Action Items:

- Mark will update description under Action column of table of Tacoma's proposal to include settlement agreement language.
 - All will conduct legal review of License Article 3 language requirements.
 - All will come to the September FTC meeting prepared to discuss productivity capacity (e.g., EDT, one or both basins, species, timeline, etc.).
-

Agenda Item: Update Status of July Meeting Action Items

- All Action items were complete with the exception of Mark providing the numbers on fry collection during winter months. He has collected these data and will check on their status and let us know.
-

**Agenda Item: Approval of July 7, 2009 FTC Meeting Summary,
Set September 1 Agenda (See last item below)**

We reviewed and approved the July 7 meeting summary with minor edits. It will be posted to the public website.

Agenda Item: Meeting Evaluation

Well Done:

- AHA presentation
- Good focused discussions, particularly on productivity testing

Do Differently:

- Improve technical connections
 - Missed Tim and George
 - Got a little cranky during productivity testing
 - Bring chocolate
 - Try to be out by 2:00 to make time for field trip to hatchery
-

The meeting was adjourned at 2:53 pm.

Meeting Handouts

- Agenda for August 4, 2009 FTC meeting
 - Draft July 7, 2009 FTC meeting summary
 - Public Outreach Documents dated August 4, 2009
 - Protocol for questions/issues raised at public meetings requiring follow-up
 - Discussion of expanding methods in which the public can interact with the FTC
 - 2009 Cowlitz River Project Supplemental Juvenile Salmon Collection Monthly Report: June 27 – July 24, 2009
 - Draft NMFS Comments on the proposed revisions to the Downstream Fish Passage Improvement Plan: Mayfield, dated August 4, 2009
 - NOAA Fisheries comments dated July 20, 2004.
 - Appendix E, Chapter 12, latest draft Lower Columbia Salmon Recovery Plan
 - AHA Solution Tables
 - Productivity Testing – Tacoma Power Proposal dated July 22, 2009
-

Topics for September 1, 2009 FTC Meeting

Welcome / Review Agenda / Check-In
Public Outreach Protocols
Productivity Testing Discussion
 NMFS abundance figure

AHA Subcommittee Report
Construction / Operations Update
Supplemental Collection Report
Mayfield Downstream Fish Passage Improvement Plan
 Tacoma response to NMFS comments on hydraulic improvements and debris
 management
FHMP Schedule Update
Approval of August 4 Meeting Summary
Meeting Evaluation and set October 6, 2009 Meeting Agenda

Immediately following the meeting:

Potential Field Trip to Mayfield counting house and hatchery separator.

FTC Cowlitz Hydroelectric Project
FERC NO. 2016
Fisheries Technical Committee
Final Meeting Summary
September 1, 2009 from 9:00 AM – 2:00 PM
Mayfield Office, Silver Creek, Washington

Members Present

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

Other Attendees

Ed Meyer	NMFS
Rich Turner	NMFS
John Serl	WDFW
Andy Appleby	WDFW
Chris Sergeant	Tacoma Power
Tom Martin	Tacoma Power
Debbie Young	Tacoma Power
Tom Santee	Insight Northwest
Lyn Wiltse	PDSA Consulting

2009 FTC Meeting Dates (first Tuesday of each month)

September 25 (NEWLY ADDED!), October 6, November 3, December 1

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

Announcements

Pat will be giving a briefing to the Fish and Wildlife Commission on September 12 on Cowlitz fisheries management issues. The audio of the public testimony regarding the Cowlitz River from the July 10 Commission meeting is available on the Fish and Wildlife Commission website.

Tom S's 40th wedding anniversary is September 17. Congratulations!

Agenda Item: Approval of Updates to Public Outreach Protocols
Presenter: Tom Santee

Tom S walked us through an updated version of the suggested protocol for handling questions or issues raised at public meetings that require follow-up. People responding will be identified and will be answering on behalf of their organizations, not for the FTC.

Action Items:

- Tom will make the additional suggested edits and post it on the FTC website.
-

Agenda Item: Productivity Testing Discussion

Presenter: Pat Frazier and Mark LaRiviere

Mark distributed a handout on Tacoma's proposal on productivity testing that reflected the discussion at the last FTC meeting. In the Action column, Mark changed it to read that actions would be taken per the FERC license article. It includes starting testing with steelhead in the winter of 2009 / 2010, testing in both the Tilton River and upper Cowlitz River basins and using the abundance figure of 500 adults as set in 2004 by NMFS in the FHMP.

In the discussion that followed, the abundance number was called into question as was including the upper basin and timing issues.

In the Lower Columbia Fish Recovery Board Draft Plan, Appendix E, Chapter 12, there is discussion of QET (Quasi Extinction Threshold) and CRT (Critical Risk Threshold), and a reference to supporting documents. Michelle distributed links to the references. Rich reviewed these source documents from 2006 and 2007 (McElhany et al) to frame the discussion for the abundance number. Rich referred to Table 9 on pp. 12-47, the CRT column for steelhead. He suggested, for the purposes of discussion, that the upper Cowlitz might be comparable to the Sandy / Clackamas population so the number might be 300 for the upper Cowlitz (combination of 200 for the main stem and 100 for the Cispus) and the number for the Tilton might be 100. There was concern that this number might be too low. Tacoma believes that during the development of the FHMP the number was supposed to be a set number that would not change over time.

Rich explained that the 500 number was based on natural genetic drift. It was the size that would prevent an unacceptable risk of inbreeding and risk of extinction. Subsequently, other values have been developed (QET and CRT).

In the LCFRB Recovery Plan the minimum abundance for productivity purposes for the Upper Cowlitz is 400 and 200 for the Tilton River for winter steelhead.

When we start productivity testing we wouldn't take any hatchery steelhead upstream (neither adults nor juveniles). Juveniles are typically planted in the upper basin the end of September / early October. WDFW suggested that if we begin productivity testing this winter, we wouldn't plant hatchery-origin steelhead in the upper basin for the period of the testing. Tacoma maintains that they need to test both basins. There is a difference in how FTC members interpret the need to do this as stated in the Settlement

Agreement. After considerable discussion, all agreed to do the testing in both basins, pending resolution of other issues: the abundance number and the decision protocol (e.g., not building the ladder if the Tilton passes and the upper basin doesn't pass in 2019). While members agreed to go forward there was disagreement about the biological basis for testing in the upper basin. The requirement to do the testing in the upper Cowlitz River basin and the Tilton River is in the Settlement Agreement.

Action Items:

- Pat will invite Ray Beamesderfer to the October FTC meeting to explain productivity numbers. If Ray is unable attend, he will let Rich know to invite Paul McElhany.
- Rich will provide written justification for the revised winter steelhead numbers subsequent to the October meeting.
- Change October FTC meeting date and/or add an FTC meeting?

Agenda Item: AHA Subcommittee Report

Presenter: Andy Appleby

The AHA subcommittee has identified various options for each species. They indicated where they reached consensus. Their aim was to develop species-specific options to achieve two standards: Lower Columbia River Recovery Standards and HSRG Standards. The subcommittee has not met since the August FTC meeting.

Absent the monitoring and evaluation and adaptive management pieces (to be included in the FHMP) it is difficult for FTC members to endorse specific options. NMFS has come out with some draft guidance for monitoring and evaluation programs. It also includes information we need to perform status reviews for the future. This came out in 2007 as part of the basin-wide monitoring and evaluation initiative. Chuck Pevin (consultant) has been the lead on this.

Lower Cowlitz spring Chinook: The aim was to maintain genetic legacy (ability to re-introduce in the upper basin) and to maintain harvest opportunity. There is no natural population in the lower Cowlitz River. The options were to either maintain the current program or operate a larger program for harvest. We discussed the size of the fish (5 fish per lb.) and predation. Andy shared that work from the Lewis and other places on the Puget Sound; predation by hatchery juveniles on wild fish doesn't seem to be an issue for spring Chinook. He further explained that the time and size release studies on the Cowlitz indicate that 5 fish per lb. produces the best smolt-to-adult survival rate. In the increased program there is room to do smaller sizes at release. The size that a fish is released at can alter age at maturity and therefore fecundity.

We need to include spring Chinook upper basin population recovery triggers and timelines in the updated FHMP.

Lower Cowlitz fall Chinook: The HSRG solution was for a program approximately the same size as the existing program. There was concern among subcommittee members about productivity of the existing lower river habitat. The proposed 3.2 million HSRG primary program involves capturing 30% natural-origin adults for the hatchery broodstock. There was consensus among the technical group that this program has the higher likelihood of success. Andy estimates between 2,000 and 4,000 natural-origin FCH should, theoretically, be present in the lower Cowlitz River. We'll get our first data point on this next fall based on mass marking. FCH are released at around 70-80 fish per lb in the spring. Currently there is an ongoing evaluation plan – a combination of aerial surveys, carcass surveys and CWT recovery.

Currently these fish are at “low risk” in the recovery plan. We need to be consistent with NMFS 4(d) rules here. NMFS might suggest that we take no more than a certain percent of NORs.

In the new hatchery we will be expanding the use of pathogen-free water. Mark noted that Tacoma is also funding a full-time pathologist for the facility. The benefits of less exposure to disease were not taken into consideration in the subcommittee-recommended options.

Lower Cowlitz Coho: Initially, the AHA subcommittee had some concerns about a segregated program. Making some assumptions on the mismark rate (= 1%), there was consensus that the 1.1 million segregated program is as large as made sense to operate because the homing fidelity is high. This level of production represents a reduction from what we are currently doing. Mark pointed out that coho are very cyclic in nature. In a period of low ocean productivity, we could end up with some very low returns. The subcommittee had consensus on the segregated program.

Lower Cowlitz Steelhead: Currently there are three hatchery programs. Some recent natural-origin steelhead genetic study results support a choice not to continue producing early winter steelhead due to genetic introgression into the lower Cowlitz River natural population. The subcommittee set the production standards for the remaining hatchery populations at the maximize size possible and still meet the criteria. Any number less than the maximum would certainly meet the criteria. One option (3) was dependent on operational weirs to remove 90% of summer steelhead strays. Option 1 and Option 3 are the two that meet the standards. Andy explained that Option 2, while resulting in a census pHOS of 51%, technically meets HSRG standards because the effective pHOS is at 27%. One idea is to truck the steelhead below the majority of fall Chinook rearing habitat to reduce predation. Pat suggested that we might be able to use net pen sites at the Wallace ponds for this, to provide stress relief from trucking.

There was consensus by subcommittee members on the elimination of the early winter steelhead program.

Upper Cowlitz Coho: The major difference between the various options is at what speed and when transitions take place. What they have in common is: program size and the

intent to manage brood-year specific production based on FCE of that particular juvenile brood outmigration. The intent was to encourage further improvements to the FCE over time. The HSRG program would operate more on or off, while the WDFW option would operate in more of a transitional fashion.

The additional option has not yet been discussed by the subcommittee.

Upper Cowlitz Steelhead: The program is predicated on whether we do productivity testing in the upper basin. The natural brood would be collected at the hatchery. The juveniles would be reared and released at the hatchery. The returning adults would be placed in the upper watershed along with the NORs minus those that are required for brood. Pat suggested we consider kelt reconditioning at the Mossyrock Trout Hatchery (raceways). The handling protocol is very specific for these listed fish and NMFS would need to consider how we would get the adults out of the facility for reconditioning.

The AHA subcommittee consensus was that the current program was not acceptable. The decision on productivity testing will determine whether there is any program in the upper Cowlitz. If there is productivity testing, all agree there are no hatchery steelhead (all life history forms) released in the upper basin.

Cowlitz Sea-run Cutthroat: The AHA subcommittee couldn't do any gene flow analysis due to a lack of data, and they stipulated that BMPs for a segregated program would discontinue net pen releases. They suggested an option of half the current program – a fairly arbitrary number, but based upon the previous studies of sea-run cutthroat trout predation on rearing salmonids. The USFWS is considering re-evaluating the listing of these fish.

Action Items:

- All FTC members will put together a suite of hatchery program options that are preferred and acceptable for each species.
- Technical subcommittee will meet again and will clarify footnote for UC coho stating that harvest deficit can be made up by increasing lower river segregated program by 500K smolts and complete tasks assigned at August FTC meeting (sizes of release, etc.).
- All FTC members are to review the existing monitoring and evaluation language in the FHMP; also the NMFS guidelines.
- Mark will head up Monitoring and Evaluation Subcommittee (Rich, Pat, and Tim).

Agenda Item: Construction / Operations Update

Presenter: Mark LaRiviere

Action Items:

- Mark will report on this at the next meeting.

Agenda Item: Supplemental Collection Report

Presenter: Chris Sergeant

Chris explained that fish collection is winding down. They plan to disassemble the Merwin traps next week. They stopped fish collection on August 31. Delayed mortalities will be included in the year-end report. Michelle would like to see this information included on a more regular basis in next year's report.

Action Items:

- All FTC members are to let Chris know if they have any questions about the 2009 Cowlitz River Project Supplemental Juvenile Salmon Collection report.
 - Marc W. and Chris will analyze data on delayed mortality rates – supplemental collection vs. from transport to CFFF (need to get data from John).
-

Agenda Item: Mayfield Downstream Fish Passage Process Improvement Plan

Presenter: Tom Martin

Discussions with NMFS re. their comments on the change to the plan (debris management and hydraulics) are ongoing.

Action Items:

- Tom M will send out new proposal prior to next FTC meeting.
-

Agenda Item: FHMP Schedule Update

Presenter: Mark LaRiviere

We agreed that the next public briefing would be in October in Centralia from 6:00 – 8:00 pm. The main topic would be the hatchery program alternatives. The public review period would follow

Action Items:

- Debbie and Mark will discuss the FHMP draft with their contractors. We want to be proactive with our support on this. We will get an update on this at our next meeting and then discuss a process for moving forward (updating the schedule, etc.).
 - Mark will send out an email update after this meeting has occurred.
-

Agenda Item: Update Status of August Meeting Action Items

- This was deferred as we were running late and had people waiting to facilitate our field trip.
-

**Agenda Item: Approval of August 4, 2009 FTC Meeting Summary,
Set October 6 Meeting Agenda**

We deferred the approval of the August 4 meeting summary until our Aug. 25 meeting.

Agenda Item: Meeting Evaluation

Well Done:

- Enjoyed the chocolate
- Andy's presentation was very informative
- Good discussions

Do Differently:

- Scheduled too many topics to cover adequately.
 - Need to meet more often?
 - Ran late
-

The meeting was adjourned at 3:30 pm.

Meeting Handouts

- Agenda for September 1, 2009 FTC meeting
 - Draft August 4, 2009 FTC meeting summary
 - *Viability Status of Oregon Salmon and Steelhead Populations in the Willamette and Lower Columbia Basin*, September 2007 by Paul McElhany, et al
 - *Revised Viability Criteria for Salmon and Steelhead in the Willamette and Lower Columbia Basins*, April 1, 2006 by the Willamette / Lower Columbia Technical Recovery Team and the Oregon Dept. of Fish and Wildlife
 - Productivity Testing – Tacoma Power Proposal, July 22, 2009
 - Protocol for questions / issues raised at public meetings requiring follow-up, August 7, 2009
 - 2009 Cowlitz River Project Supplemental Juvenile Salmon Collection Monthly Summary Report
 - FHMP Schedule
-

Tentative Topics for September 25, 2009 FTC Meeting

Welcome / Review Agenda / Check-In

Productivity Testing Discussion

AHA Subcommittee Report

FHMP Schedule Update

Confirm Next Public Meeting Date(s)

Update Status of August 4 and September 1 Meeting Action Items

Approval of August 4 and September 1 Meeting Summary

Meeting Evaluation and Set November 3, 2009 Meeting Agenda

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

September 25, 2009 from 9:00 AM – 2:00 PM
Mayfield Office, Silver Creek, Washington

Members Present

Michelle Day	NMFS
Brett Swift	American Rivers
Pat Frazier	WDFW
Mark LaRiviere	Tacoma Power
George Lee	Yakama Nation

Other Attendees

Rich Turner	NMFS
John Serl	WDFW
Wolf Dammers	WDFW
Julie Henning	WDFW
Chris Sergeant	Tacoma Power
Tom Martin	Tacoma Power
Debbie Young	Tacoma Power
Pam Hefley	Tacoma Power
John Barr	Consultant
Lyn Wiltse	PDSA Consulting

2009 FTC Meeting Dates (first Tuesday of each month)

October 6, November 3, December 1

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

Announcements

Mark reported that the Gravel Augmentation Progress report will be out to the FTC for review at our next meeting (due to FERC by December 31, 2009). There will be a minimum of a 30 day review period for comments. The Instream Flow Monitoring report is also due to the FERC by the end of the year. The Habitat Advisory Group will be sending a report summarizing its activities also by the end of the year.

The Progress Report on Downstream Collection is due to FERC by December 15, 2009.

Tacoma filed comments with FERC re. the LCPUD Biological Opinion. Tacoma originally filed comments with FERC in July. LCPUD and BPA filed (separate) comments in September. Tacoma filed another set of comments to FERC today.

Agenda Item: Productivity Testing Discussion
Presenter: Chris Sergeant

Chris read through the McElhaney et al 2006 and McElhaney et al 2007 documents that Michelle distributed at our last meeting. He summarized the data and provided a corresponding handout. He explained viability curves (initial guidance from NMFS defined a viable population as one with an extinction risk of less than 5% in 100 years) and minimum abundance thresholds (set a floor on the viability curve). These have been defined by the population persistence thresholds.

RFTs and CRTs are set according to watershed size (based on spawnable stream kilometers) for each species as defined by Kray in 1957.

Based on the criteria described in the McElhaney documents and the watershed sizes defined by Kray, the population abundance thresholds (low risk of extinction) for steelhead are 500-750 for the Tilton (small watershed), 500-1,000 for the Upper Cowlitz (medium watershed), and 500-700 for the Cispus (small watershed).

All agreed this was a good distillation of the reports. We need to discuss an appropriate abundance number as the bar for a self sustaining population and the bar for recovery may be different.

We still have several questions to resolve including: What do we mean by sustainability? How do we fit this into our abundance number? Would we need to meet it once? More than once? Productivity is well defined. Might we do something similar for abundance as well?

Other data needs to guide this discussion:

- Abundance number
- If we test in both basins, what is the decision making? What action do we take based on results (how prescriptive should we be)? E.g., timing: base it on one 5-year rolling average?

Action Items:

- Pat will check with Mark Johnson about how long we can hold the fish (past mid-October)?
- All prepare to make a decision about the decision protocol and the official number at our October meeting.
- Pat will ask Ray B to send out info on his presentation by Sept. 29 to all to review prior to our Oct. 6 meeting.
- Rich will provide written justification for the revised winter steelhead numbers subsequent to the October meeting.

Agenda Item: AHA Subcommittee Report

Presenter: John Barr

Outstanding Issues for the subcommittee to address prior to our October 6 meeting:

- Size of fish at each release in these programs

- Clarification of the additional option (Option 3) for Upper Cowlitz Coho

The RIST report (sponsored by NMFS) reviews the HSRD guidelines and provides certain findings. We discussed the various options for the various species.

Action Item:

- The subcommittee will meet again between now and our October 6 meeting and report on these remaining items at that meeting.
-

Agenda Item: Working Lunch / Hatchery Production Scenarios
Presenter: Discussion by All

We flagged various data gaps to resolve before we can recommend adoption of any specific scenario for each species. We will follow up on these at our October meeting.

Agenda Item: Confirm Next Public Meeting Date(s) and Topics
Presenter: Lyn

We discussed Tom S's thoughts regarding the next public meeting. The current plan is to focus on the hatchery portion of the update. We want to do this in a way that is meaningful to members of the public. To that end, Tom S suggests creating a questionnaire that would include questions such as *What are your favorite sports fisheries in the middle and upper Cowlitz River basin?* and *What upsets you most about the current FHMP?* Participants agreed that such a questionnaire would be a good idea.

Action Items:

- Tom S will send out sample list of questions for the public at next public meeting and we will discuss at our October 6 meeting.
-

Agenda Item: Update Status of August 4 and September 1 Meeting Action Items
Presenter: Lyn

We reviewed the status of outstanding action items and carried forward those that were incomplete.

Agenda Item: Approval of August 4 and September 1 Meeting Summaries

We approved the August 4, 2009 and September 1, 2009 meeting summaries with minor edits. They will be posted to the public website.

Agenda Item: Meeting Evaluation

Well Done:

- Gave enough time to have good discussions on the hatchery scenarios
- Welcome back, George!

Do Differently:

- (Nothing listed)
-

The meeting was adjourned at 2:30 pm.

Meeting Handouts

- Agenda for September 25, 2009 FTC meeting
 - Draft September 1, 2009 FTC meeting summaries
 - Developing population abundance thresholds in the Tilton and Upper Cowlitz/Cispus basins (9/25/09 discussion document based on McElhaney and Kray documents summarized by Chris Sergeant)
-

Topics for October 6, 2009 FTC Meeting

9:00 – 9:20	Welcome / Review Agenda / Check-In
9:20 – 12:20	Productivity Testing Discussion (Ray B)
12:20 – 12:50	AHA Subcommittee Report - Update on Data Gaps for each species
12:50 – 1:05	Initial M&E Subcommittee Report
1:05 – 1:20	FHMP Schedule Update
1:20 – 1:50	Plan for next Public Meeting - List of questions to ask the public
1:50 – 2:00	Update Status of September 25 Meeting Action Items
2:00 – 2:15	Approval of September 25 Meeting Summary
2:15 – 2:30	Meeting Evaluation and set November 3, 2009 Meeting Agenda

**FTC Cowlitz Hydroelectric Project
FERC NO. 2016**

**Fisheries Technical Committee
Final Meeting Summary**

October 6, 2009 from 9:00 AM – 2:30 PM
Mayfield Office, Silver Creek, Washington

Members Present

Michelle Day	NMFS
Brett Swift	American Rivers
Pat Frazier	WDFW
Mark LaRiviere	Tacoma Power
George Lee	Yakama Nation
Brad Caldwell	WDOE

Other Attendees

John Serl	WDFW
John Barr	John Barr Consulting
Tom Santee	Insights Northwest
Chris Sergeant	Tacoma Power
Debbie Young	Tacoma Power
Ray Beamesderfer	Cramer Fish Sciences Consultants
Lyn Wiltse	PDSA Consulting

2009 FTC Meeting Dates (first Tuesday of each month)

November 3, December 1

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

Announcements

FTC members are encouraged to go the FTC website to review various documents that have been posted.

The Upstream Fish Passage Plan has the goal of handling 2,500 adults/day at the separator. Yesterday, they hit 2,300 working until 2 PM. It looks like we will be able to reach the 2,500 goal pretty easily – maybe even 3,500. These are mostly coho.

Agenda Item: Productivity Testing Discussion

Presenter: Ray Beamesderfer

Ray walked us through a PowerPoint presentation on salmon population sustainability based on information from the Lower Columbia Fish Recovery Plan. The draft plan will be out for public review in November 2009.

He suggested that sustainability should be considered the same as viability (ESA perspective). This, in the recovery plan, is a long-term median abundance value over

several generations. A low level of extinction risk would be 5% or less. Elements that contribute to sustainability include abundance, productivity, spatial structure and distribution, and diversity.

Winter steelhead in the Tilton are considered a low viability population due, in part, to the degraded habitat conditions. John explained that the EDT equilibrium number is around 300. This assumes 100% outmigration and no adverse hatchery impact (reduced productivity).

John explained that the NEQ would be 222. This is the number, on average, where the population would settle based on the AHA model equation. However, this population would have a high extinction risk.

300 was one of several abundance numbers suggested. We also discussed the appropriate length of time to test in order to account for wild swings in ocean conditions and after El Nino effects.

The steelhead life cycle is such that 5 years would cover approximately 85% of them.

Action Items:

- All will continue to contemplate the best course of action, with the idea of coming to agreement at our next meeting.

Agenda Item: AHA Subcommittee Report

Presenter: Mark and Pat

John reported that Chuck presented his option for upper Cowlitz River coho at the October 5 AHA subcommittee meeting.

They also discussed sizes at release. They came up with some preliminary recommendations.

Action Items:

- John will summarize the recommendations and send them out for concurrence by subcommittee members and then will share them with the FTC.
- John will send a detailed description of Alternative 3 to Mark to post on the FTC website as well as a summary of that option in the same format that has been presented previously to the FTC.
- Mark will let FTC members know when this has been posted to the website.

Agenda Item: Initial M&E Subcommittee Report

Presenter: Mark

They will meet between now and our November FTC meeting.

Action Items:

- Mark will convene this subcommittee prior to our next meeting.
-

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

Mark reported that the Settlement Agreement says only five things are required to be included in the FHMP. If we treat the existing plan as a standalone reference document, then all we have to do is only focus on the five things that are specifically required in the Order. That leaves many things (nutrient enhancement, resident fish, adaptive management, etc.) on the table for us to consider as an FTC. Michelle noted that, under the Biological Opinion, an Adaptive Management plan is required. This could be included in the FHMP update or as a separate document.

We discussed the desire to have the updated version of the FHMP serve as a standalone document. We want to improve the existing format, which many find confusing.

All are to consider what we want to include in the FHMP under “Fisheries Management”. We will discuss this at our November meeting. Pat observed that we could also ask for an extension on when the FHMP update is due to FERC.

Action Items:

- John will work with Mark and George to draft a proposed Table of Contents for the updated FHMP for all to review prior to our next meeting. He will include how to address anything removed from the current FHMP.
-

Agenda Item: Plan for Next Public Meeting**Presenter: Tom S**

Tom suggested that we set the next public meeting for the evening of Thursday, October 29. The focus of the meeting would be the hatchery program proposals and how they might affect fisheries. At the meeting we would distribute a list of questions to members of the public. They could take the list with them and get their responses back to us so we better understand their interests.

Tom distributed sample questions. We want to be careful not to unduly raise expectations by the way we frame the questions.

Action Items:

- All will review the draft questions distributed by Tom S and let him know what else they would like to know from the public.

- Tom S will meet with Mark and Pat to further plan the agenda for the public meeting.
 - Tom will send out the draft agenda to FTC members for their feedback.
 - Tom will arrange the meeting room at Centralia College on October 29 from 6:00–8:00.
 - All will put the next public meeting on their calendars and plan to attend
-

Agenda Item: Update Status of September 25 Meeting Action Items

Presenter: Lyn

We reviewed these and transferred forward those that were incomplete.

Agenda Item: Approval of September 25 Meeting Summary

Presenter:

We approved the September 25, 2009 meeting summary with minor edits. They will be posted to the public website.

Agenda Item: Meeting Evaluation

Well Done:

- Ray's presentation was very helpful
- We are listening to each other and working to find alternatives that satisfy each other's interests

Do Differently:

- Ran late
- Some had to leave early
- We missed Tim
- We need to have fewer side conversations
- We need to ensure that people finish their thoughts before talking

Set November 3, 2009 Meeting Agenda (see below)

The meeting was adjourned at 3:00 pm.

Meeting Handouts

- Agenda for October 6, 2009 FTC meeting
- Draft September 25, 2009 FTC meeting summary
- Ray Beamesderfer's PowerPoint presentation on sustainability

- Sample questions for public meeting
-

Topics for November 3, 2009 FTC Meeting

9:00 – 9:20	Welcome / Review Agenda / Check-In
9:20 – 12:20	Productivity Testing Decision
12:20 – 12:50	AHA Subcommittee Report <ul style="list-style-type: none">- Size of fish at release, updated alternatives- Data gaps
12:50 – 1:40	Yakama presentation <ul style="list-style-type: none">- Acclimation ponds
1:40 – 1:50	Initial M&E Subcommittee Report
1:50 – 2:00	FHMP Format and Schedule Update
2:00 – 2:10	Report from Oct. 29 Public Meeting
2:10 – 2:20	Update Status of October 6 Meeting Action Items
2:20 – 2:25	Approval of October 6 Meeting Summary
2:25 – 2:30	Meeting Evaluation and set December 1, 2009 Meeting Agenda

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

November 3, 2009 from 9:00 AM – 2:30 PM
Mayfield Office, Silver Creek, Washington

Members Present

Michelle Day	NMFS
Brett Swift	American Rivers
Pat Frazier	WDFW
Brad Caldwell	WDOE
Mark LaRiviere	Tacoma Power
George Lee	Yakama Nation
Tim Romanski	USFWS

Other Attendees

Rich Turner	NMFS
John Serl	WDFW
Julie Henning	WDFW
Chris Sergeant	Tacoma Power
Tom Martin	Tacoma Power
Debbie Young	Tacoma Power
Tom Santee	Insights Northwest
John Barr	John Barr Consulting
Lyn Wiltse	PDSA Consulting

Future FTC Meeting Dates (first Tuesday of each month)

2009: December 1

2010: January 5, February 2, March 2, April 6, May 4, June 1, July 6, August 3,
September 7, October 5, November 2, December 7

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

Announcements

The draft interim instream flow monitoring report is posted on the FTC website for review. Mark L hand distributed the draft interim 5-year study report on gravel augmentation to the FTC members.

Hatchery coho returns to the salmon hatchery continue to be strong – over 63K adults as of last week with no signs of slowing down. This is expected to continue into December. Fish are surplused to local Lewis County food banks and other food banks through a state-wide buyer.

The upper Cowlitz River basin nutrient enhancement activities are beginning this week. Some folks in the upper basin may help provide transportation to the upper Cowlitz River sites.

Tom M announced that the status report on downstream passage (License Article 1) is due to FERC on Dec. 15, 2009. The draft will include the latest from the Downstream Team that is meeting on November 17. Therefore some of the information (e.g., next year's program) that is in the report out for the 30 day review may change slightly between now and then. We will have detailed discussions regarding this report at our December 1 FTC meeting.

Agenda Item: Productivity Testing Discussion
Presenter: Debbie Young

Debbie suggested that at our last meeting Ray Beamesderfer confirmed the abundance value of 500 steelhead that Tacoma proposed originally. Mark distributed a handout of Tacoma's proposal in which Tacoma proposed using the 500 abundance number for the upper Cowlitz River basins and the Tilton. The late winter-run steelhead productivity test can begin this winter – as early as December 1. Tacoma's proposal is for testing in the Tilton and upper Cowlitz River basins. The parameters of the test are consistent with those in the Settlement Agreement. The FTC could make a recommendation if it doesn't look like the criteria have a chance of being met regarding this testing as early as 2018. The first 5-year rolling average would be available as early as 2019. Productivity testing would continue in 2020 in the Tilton River.

Brett distributed an NGO proposal that called for using a 250 abundance value for testing in the Tilton River and no testing in the upper Cowlitz. The FTC discussed the rationale and potential value of testing in the upper basin. After some discussion the FTC agreed to include the upper Cowlitz River basins in the testing, as that is consistent with the Settlement Agreement. All share concerns about an open-ended approach to productivity testing.

Mark acknowledged that the Actions specified on the Tacoma Proposal in Scenarios 1 and 3 should be edited to match that in the NGO proposal (consistent with the Settlement).

After lengthy and detailed discussion we agreed to use the abundance number of 300 for steelhead in the Tilton. This is a combination of the medium viability range (200-500 for a small population*) and the EDT capacity estimates, and passage mortality. It also accounts for habitat improvements.

The FTC agreed to use the year 2019 for recommendations on actions based on the annual results from both the Tilton and the upper basins. This means testing the upper basins for a minimum of one 5-year rolling average. We would not continue testing in

the upper basins unless the FTC affirms that it makes sense to do to (based on the likelihood that the criteria would be achieved).

The FTC agreed upon the year 2024 for actions based on annual results from the Tilton River. This gives the Tilton additional 5 year rolling averages.

When the FTC reviews the annual results of the productivity testing, we ask if we are achieving the criteria. The decision would be based on the most recent 5-year rolling average. When we are at the point of achieving the criteria then we would provide for fish passage per the Settlement Agreement.

For future consideration: How do we operationalize the abundance number for the upper Cowlitz River and the Cispus River steelhead populations? Do we use 500 for each population? This is a complicated issue as the Settlement Agreement contemplated only one population. The Recovery Plan (more recent than the Settlement Agreement) identifies these as two distinct populations. We will resolve this at our December 1 meeting.

*Per the 2006 and 2007 McElhany et al viability criteria documents

Action Items:

- Mark L will update the FTC proposal to reflect the agreements from today's meeting and send it out to Brett and then to the FTC. He will work with Brett to ensure a consistent approach with the years used. The FTC will approve the revised proposal at our next meeting.
- Mark will draft a statement explaining how we are in compliance with the Settlement Agreement with this proposal. We will review it at our next meeting.
- John B. will run the EDT estimates with different FCEs.

Agenda Item: AHA Subcommittee Report

Presenter: John Barr

John distributed a handout that the AHA Subcommittee drafted in response to our question to them regarding the issue of fish size at release. The table included Future Brood Document target size, subcommittee recommendations, and associated comments.

LC Spring Chinook: The Subcommittee recommendation is to keep it at 5 fish per pound and develop a trigger point to reduce the size of fish at release to produce fish that have the same size and age structure of natural spring Chinook. The new facility may allow us to do releases at a smaller fish per pound (fpp). We know that there is a positive correlation between fish size and survivability.

LC Fall Chinook: The recommendation is to increase size of release to 60-65 fpp from 80 fpp. They also recommend an earlier release time (mid-May through early July).

LC Winter Steelhead: The recommendation is to test producing 2-year old smolts. (The challenge will be keeping them off surface waters so they don't contract IHN).

Other recommendations were fairly standard. If the sea-run cutthroat program persists, the recommendation would be to go from 4 to 4-7 fpp.

Mark pointed out that we will want to evaluate the recommended ranges based on what is possible with the new hatchery. This will be incorporated into the Evaluation and Monitoring plan and will be included in the draft FHMP.

Agenda Item: Report from October 29, 2009 Public Meeting
Presenter: Tom Santee

Tom S reported that the meeting went well. Pat and Mark were presenters. Michelle and Brett also attended as did Rich, John, Julie, and others. There were excellent discussions. All agreed that the meeting was highly productive. Approximately 35 members of the public also attended. The subsequent write-up in the newspaper reflected well the content of the meeting. Pat did a great job preparing handouts and explaining various hatchery scenarios. He also facilitated much of the discussion. He also provided Tom S the bulk of the questions that were used in the questionnaire.

The questionnaire was distributed and the public was asked to fill it out and return it to Tacoma Power by November 23. These will be reviewed and summarized prior to our December meeting. The summary of the results will be posted on the Cowlitzfish.net website. Also on the website is an audio recording of the meeting along with the documents that were distributed.

The next public meeting will be in early 2010 when additional aspects of the FHMP update will be available for comment.

Action Items:

- Future questionnaires will have more extensive FTC review before release.
- FTC will review the summary of the responses to this questionnaire at our next meeting.

Agenda Item: FHMP Format and Schedule Update
Presenter: Mark LaRiviere

Outline: Mark distributed a draft outline of the FHMP update, dated November 2009. The FHMP update will look a lot like the document posted to the FTC website in September 2008. The updated FHMP will be more concise than the original FHMP.

This updated FHMP will be a standalone document. It will refer to the original FHMP in certain cases, e.g., implementation and effectiveness monitoring, the adaptive management portion of the document, etc.

It will also include some information that was not in the original FHMP, e.g., searun cutthroat predation study and HSRG guidelines, etc.

Schedule: Discussion of the hatchery program alternatives will occur at the January FTC meeting. This schedule is not compatible with the March 1, 2010 due date to FERC. The FTC wants to be sure to get good consensus on how to proceed on a number of important issues. We also want to build in more public review time.

Action Items:

- Pat will send M&E information to John Barr to include in the draft FHMP. Copy Lyn to forward to all.
- Mark will create a more detailed schedule that includes which pieces are to be discussed (initiate discussion and complete discussion) on which dates per our FTC meeting schedule. We will review this at our next meeting.
- Michelle will send Bi-Op to Lyn to distribute.
- Mark will set up new Section on the FTC website: Monitoring and Evaluation.
- All will let Mark know if they have trouble accessing information from the FTC website.

Agenda Item: Update Status of October 6 Meeting Action Items
Presenter: Lyn

All items were complete!

Agenda Item: Approval of October 6 Meeting Summary

We approved the October 6, 2009 meeting summary with a minor edit. It will be posted to the public website.

Agenda Item: Meeting Evaluation

Well Done:

- We made a consensus recommendation re productivity testing!
- Great discussions
- Full FTC attendance
- Pushed through a difficult discussion

Do Differently:

- Ran late

The meeting was adjourned at 3:10 pm.

Meeting Handouts

- Agenda for November 3, 2009 FTC meeting
 - Draft October 6, 2009 FTC meeting summary
 - FTC Data Gaps/Action Items relative to Hatchery Production Scenarios (October 6, 2009)
 - Productivity Testing – Tacoma Power Proposal, November 2009
 - Productivity Testing – NGO Proposal, November 2, 2009
 - FHMP Update – Subcommittee Recommendations for Fish Size at Release
 - Draft Outline of FHMP Table of Contents, November 2009
-

Draft Agenda for December 1, 2009 FTC Meeting

- 9:00 – 9:30 Welcome / Review Agenda / Check-In
- 9:30 – 9:50 Review / Approval of Productivity Testing Proposal
 - Upper Cowlitz Abundance Numbers
- 9:50 – 12:50 Downstream Team Report
 - Schedule
 - USGS Presentation
 - Plan for Revisions to Juvenile Marking Protocols
- 12:50 – 1:50 Supplemental Collection (Interim Measures)
- 1:50 – 2:20 M&E Update
 - Info that allows us to make hatchery program alternatives decision in January
- 2:20 – 2:35 FHMP Schedule Update
- 2:35 – 2:45 Update Status of November 2 Meeting Action Items
- 2:45 – 3:00 Approval of November 2 Meeting Summary
 Meeting Evaluation and set January 5, 2009 Meeting Agenda

Main Focus of January 5, 2010 Meeting: Hatchery Program Alternatives

Future Topics

- Fish release strategies

Action Items relative to Hatchery Production Scenarios

The FTC flagged various data gaps to resolve before recommending adoption of any specific scenario for each species. We will continue to follow up on all these at future meetings and remove items from the list once the gap has been filled.

LC Spring Chinook Action Items

- Mark will get data on number of fish we have been able to transport above Cowlitz Falls Dam, their distribution and when they were released.
- George will arrange for BPA Acclimation Pond results – report and presentation for future FTC meeting. He will arrange this for one of our meetings in the first quarter of 2009. The presentation focus will be study plan and result (return rates, etc.) for acclimation ponds for spring Chinook in the Yakama system.

LC Fall Chinook Action Items

- Rich will check for us the acceptable NOR removal rate and supporting rationale. What has been allowed up to now?
- How do we propose getting sufficient number of fish? Pat will follow up with Lou Reed, Jess Winter on (adult capture) sites. (Include in FHMP). This is a broodstock management issue (NORs).

Lower Cowlitz Coho Action Items

(No outstanding items)

LC Winter Steelhead Action Items

- Pat will provide information on weir type, placement, monitoring, etc. Where would wild broodstock be collected?
- Rich will provide information on the size of the population. How can we be confident in taking 60?

UC Coho Action Items

- Need to know the timing and whether we meet the HSRG criteria.
- We need to know how the transition will occur (broodstock and escapement management details). Note: Transition depends on FTC recommendation for UC Coho program.

UC Steelhead Action Items

(No outstanding items)

Cowlitz Cutthroat Action Items

- Tim to provide guidance from USFWS re: status
- For future consideration:
 - At certain reductions in programs, the fisheries become no longer attractive to the people – analysis on the returns?
 - What is the harvest rate of current program?
 - Continue this hatchery (only one in the Pacific Northwest)?

**FTC Cowlitz Hydroelectric Project
FERC NO. 2016**

**Fisheries Technical Committee
Final Meeting Summary**

December 1, 2009 from 9:00 AM – 3:00 PM
Mayfield Office, Silver Creek, Washington

Members Present

Michelle Day	NMFS
Brett Swift	American Rivers
Pat Frazier	WDFW
Mark LaRiviere	Tacoma Power
George Lee	Yakama Nation
Tim Romanski	USFWS

Other Attendees

John Serl	WDFW
Julie Henning	WDFW
Mike Kohn	LCPUD
Joe First	LCPUD
Tom Martin	Tacoma Power
Debbie Young	Tacoma Power
Steve Fischer	Tacoma Power
Terry Ryan	Tacoma Power
Chris Sergeant	Tacoma Power
Marc Wicke	Tacoma Power
Bill Iyall	Tacoma Power
Chick Sweeney	AECOM Environment
Lyn Wiltse	PDSA Consulting

Announcements

Tom M reported that Tacoma has received over 70 returns of the questionnaire from the last public meeting. The results will be posted on the Cowlitzfish.net website by December 15, 2009.

Best wishes to Wolf who is recovering from open heart “maintenance” surgery.

Agenda Item: Productivity Testing Proposal

Presenter: Mark LaRiviere

Mark announced that hatchery-origin steelhead adults returning to the separator are not being taken upstream on the Cowlitz. Some natural-origin early WR steelhead have already returned. Some were Tilton in origin so they were taken upstream.

Mark distributed a revised version of the proposal that he had worked with Brett to edit. He walked us through a review of those edits. We corrected several typos under scenario 2 and 4 and changed one of the footnotes from “any time after 2018” to “2019.” We also agreed that a narrative should accompany the productivity table and be included in the FHMP. It could capture details such as the default action being to stop the testing unless the FTC collectively decided that it should continue.

For the action under Scenario 2 we would add “for the Tilton Basin.” We removed “consult with” language and added a new footnote for scenario 2 saying that testing in the upper basin would continue only if the FTC finds strong or compelling evidence to approve it. This characterizes the current intent of the FTC today. This new footnote would also apply to scenario 4. Another footnote will say that Tilton Basin productivity testing would take place only with FTC approval or something to that effect.

Mark also distributed a copy of the rationale document for productivity testing that includes the abundance number. It includes how we made our decisions for productivity testing in a way that supports the Settlement Agreement. We discussed various edits to this document and its ultimate inclusion in the FHMP to memorialize our thinking on this topic.

We discussed the reason we are testing in the upper Cowlitz River is because it is written to do so in the Settlement Agreement. While we aren’t confident that we will get numbers that pass the test, we will use the testing to evaluate habitat and FCE. If we see improvement in FCE, we would also expect to see abundance numbers approaching 500 (based on 95-99% probability of being a sustainable number).

We discussed how this document might be most helpful if it addressed the following questions: Why steelhead only? What is the rationale behind abundance numbers? How is it consistent with the Settlement Agreement? Why didn’t we use the original triggers (in the Fisheries and Hatchery Management Plan)? Why did we choose different timelines for the upper Cowlitz River and the Tilton?

Action Items:

- Mark L will work with Brett update the table with the edits and post for review prior to our next meeting.
- Pat will work with John B, Andy, and Michelle re the abundance number for the upper Cowlitz River basin and get out supporting rationale prior to the next meeting.
- Mark L will work with Michelle and Brett to revise the accompanying narrative to address the five questions listed above and post for review prior to our next meeting.

Agenda Item: Downstream Team Report
Presenter: Chick Sweeney (AECOM)

Chick explained that the team found that a combined FPS model would be the most appropriate method of evaluating potential biological performance of alternatives. They adopted a modified version of the model developed by John Serl. They reviewed the results from the 2009 biological studies at CF Dam and in Riffe Lake to develop inputs to the modified model.

The problem with the prior matrix was that the parameters didn't directly translate to the metrics set in the Settlement Agreement. He explained the survival collection index formula used by the Downstream Team. Chick walked us through potential input to John's (modified) model. The consultants chose to adopt FCE numbers that were from the Bonneville Second Powerhouse corner collector at Bonneville Dam for the low end of the range. They couldn't find any other numbers to guide them in setting the ranges for FCE. They applied the B2 number in some instances and not in others. The Downstream Team members have not yet come to consensus on these numbers, but the plan is to have the members review them and make recommendations for the plan that will be reviewed by the FTC.

At the Downstream Team meeting, members asked for a range of numbers by species instead of a specific number as per the straw men that were floated at the meeting.

The Downstream Team needs discussion and more accurate numbers going forward. Chick reviewed with us a list of the 10 alternatives that are being reviewed in the current report. They are in the process of trying to complete the model evaluations.

Multi-phase Analysis:

- Collection potential model analysis in progress, need to address
 - Critical BGS enhancement of collection efficiency data gap
 - Critical impact of debris barrier on residence time in front of collector
- Revisit biological matrix for factors outside of model and conduct risk-uncertainty assessment, e.g., adult passage, drawdown, etc.
- Test technical feasibility matrix
- Conclusions from collective analyses

Tacoma's proposed plan for 2010 that was discussed at the last DST meeting:

- Conduct Behavioral Guidance System prototype test to evaluate true guidance potential
- Conduct weir location test
 - Objective to determine if weir entrance location affects collector performance
 - Compare DE and EE existing, Weir box vs. Weir emplaced at screen pier nose entrance
 - 200 cfs thru each device
 - Need flow diverters
 - Weir box same configuration as 2009
 - Debris barrier removed

- Forgo additional Riffe Lake survival studies, because 2009 data are consistent with earlier studies.

Chick explained that there are no similar prototypes of a collector with 2 miles of net in existence. The only way to test a mid-lake collector would be to build it. We know the fish migrate along shorelines. What we don't know is if they will migrate along a long distance of net and treat it like a shoreline.

All agree that time is of the essence and that all involved have been working very hard to come up with recommendations for the plan. There have been scheduling complications, a lack of available data and confusion around the recommendation process. Michelle asked for a model run to show the likelihood of success of a mid-lake collector in Riffe Lake. There are logistical problems in trying to come up with the design study that can give us data to help with our decision making. Part of this is the result of actions Chick took in presenting various options at the last meeting along with some estimates.

Twelve alternatives and combinations of alternatives were presented at the last Downstream Team Meeting. They found there were 5 systems that were indistinguishable in terms of predicted biological performance. Chick looked at all of these alternatives in terms of relative cost of implementing the systems and found that some that were much less expensive to install than others with similar biological outcomes. He and AI tried to come up with ranges of performance. They are not confident enough in the numbers to recommend a number as final collection alternatives to go ahead with. There is concern that mid-lake Collector may not be constructible and operable.

Two options were removed by the consultants from the list since the last Downstream Team meeting:

- Surface flow outlet at CF and Riffe Lake collector
- Floating surface collector at Mossyrock

All of the major alternatives will be evaluated by the model.

A meeting has been set up for December 10 with FERC, NMFS, BPA, Tacoma and LCPUD re the removal of the debris barrier. We need a contingency plan for how to proceed if the debris barrier is not moved before July. If this barrier is not removed, then Tacoma is not likely to go forward with radio tag studies.

Next Steps: Review each of the alternatives; identify where we have uncertainties and how we will address them (e.g., use best judgment, with facts and data, etc.). We also need to agree in the inputs to the model. Some additional work needs to be done on some of the cost and constructability estimates. This would be done after the modeling work.

1. Agree on the inputs and do the analysis that informs the inputs
2. Complete the model update
3. Run the model on the alternatives
4. Compare effectiveness of all from a biological perspective
5. Review the alternatives (cost, constructability, etc.)

The FTC also wants a list of what actions (studies, etc.) will be taken in 2010 and why.

Tom explained that we are looking at getting the team together again in January/February timeframe. Information on the analysis surrounding each of the alternatives would be agreed upon at that meeting and then presented in the form of a recommendation to the FTC (Feb or March meeting).

Action Items:

- Marc W will post a graph relating thermocline temperature with run timing in Riffe Lake on the FTC website.
- Joe will send out an email to all on the outcome of the Dec. 10 meeting with FERC.
- John will send Chick his updated model by December 4, 2009

Supplemental Collection (Interim Measures)

Presenter: Chris Sergeant

Chris walked us through a PowerPoint summary of the 2009 Cowlitz River Supplemental Salmon Collection Program. Based on catch summary data, recommendations for 2010 are for the following sampling schedule:

April 15-July 1: Intensive beach seining to upper and lower sections of Riffe Lake.
July 1-Sept 15: Install two Merwin traps in Lake Scanewa and continue to conduct beach seining in Riffe Lake.

Another recommendation was to discontinue the inclined plane traps. This would allow for an additional 2-3 hours/day for beach seining. Michelle suggested adding additional field crews and shaping the bottom where seining is most successful.

Action Items:

- Chris will get size data to John.
- All to get any additional ideas/suggestions to Marc / Chris.

FHMP Schedule Update

Presenter: Mark LaRiviere

Mark distributed a revised version of the FHMP schedule. He pushed out the due date for the schedule to FERC by a year. He provided for a second round of public review. Using the FTC meetings as key dates, he included subjects to discuss at each meeting (or spanning two meetings, etc.). He explained that he is open to changing the order and/or duration of each of the topics. Edit: Line 16 should be "Harvest Management" instead of "Fisheries Management." The idea here is we would address key questions/issues at FTC meetings and prior to John Barr drafting the subject into the FHMP update. We would then review the drafted FHMP language at a subsequent FTC meeting.

The FTC members agreed to ask FERC for a one year extension for the FHMP update filing requirement.

Pat suggested the following protocol:

- Tee one issue up while discussing another
- Eventually we would solve one, tee up another and discuss a third.
- There would be a need to work on these subjects ahead of time.

Action Items:

- Mark will revise the schedule based on feedback from today's discussion and post it on the FTC website.
- Tom M will send request for FERC for a year delay.

Meeting Handouts

- Agenda for December 1, 2009 FTC meeting
- Draft November 3, 2009 FTC meeting summary
- Productivity Testing – Cowlitz Fisheries Technical Team Proposal, November, 2009
- Draft Late Winter-Run Steelhead Productivity Test, Cowlitz River Hydroelectric Project, November, 2009
- Cowlitz River Project Downstream Fish Passage presentation, December 1, 2009 Fisheries Technical Committee Meeting, AECOM Environment
- Results of the 2009 Cowlitz River Supplemental Juvenile Salmon Collection Program
- FHMP Plan Update, 11/24/09

Agenda Item: Approval of November 3 Meeting Summary

We approved the November 3, 2009 meeting summary with no edits. It will be posted to the public website.

Draft Agenda for January 5, 2010 FTC Meeting

- 9:00 – 9:30 Welcome / Review Agenda / Check In
- 9:30 – 9:40 Review/Revise FTC Protocols

- 9:40 – 10:40 Productivity Testing
Tee up Satellite rearing facilities?
- 10:40 – 11:40 Yakama presentation on satellite rearing ponds
- 11:40 – Noon Our Usual Working Lunch
- Noon – 12:45 Public Involvement
Survey Results and Plan for Next Public Meeting
- 12:45 – 1:30 Downstream Team Report
- 1:30 – 2:00 Supplemental Collection
- 2:00 – 2:45 Review FHMP Schedule
- 2:45 – 3:00 Approval of December 1 Meeting Summary
Meeting Evaluation and set February 3, 2010 FTC Meeting Agenda

Action Items relative to Hatchery Production Scenarios

The FTC flagged various data gaps to resolve before recommending adoption of any specific scenario for each species. We will continue to follow up on all these at future meetings and remove items from the list once the gap has been filled.

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