

**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.

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)?