

**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 40<sup>th</sup> wedding anniversary is September 17. Congratulations!

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**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.
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**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?

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**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).

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**Agenda Item: Construction / Operations Update**

**Presenter: Mark LaRiviere**

**Action Items:**

- Mark will report on this at the next meeting.

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**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).
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**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.
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**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.
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**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.
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**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.

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**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
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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
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**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