

Cowlitz Hydroelectric Project
FERC NO. 2016
Fisheries Technical Committee
Draft Meeting Summary
January 9, 2008
9:00 AM – 3:00 PM
Mayfield office
Silver Creek, Washington

Participating Members

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

Other Attendees

Larry Durham	WDFW
Mike Kohn	LCPUD/BPA
Joe First	LCPUD, Cowlitz Falls
Jennifer Wolff	American Rivers
Steve Vigg	WDFW
Wolf Dammers	WDFW
John Serl	WDFW
Julie Henning	WDFW
Charles Morrill	WDFW
Tom Santee	Insight Northwest
Marc Wicke	Tacoma Power
Bill Iyall	Tacoma Power
Debbie Young	Tacoma Power
Tom Martin	Tacoma Power
Lyn Wiltse	PDSA Consulting, Facilitator

Future 2008 Dates

Feb 6, Mar 5, Apr 2, May 7, Jun 4, Jul 2, Aug 6, Sept.3, Oct 1, Nov 5, Dec 3.
Default time: 10:00 AM to 2:00 PM; Default location: Mayfield

Note: If you are running late, or if you need to participate by phone call Lyn at 425-890-3613 the morning of the meeting.

New Action Items

- All – Continue to provide feedback to Tom Santee on new website. (tsantee@insightnw.com).
- All – Come prepared to provide feedback on the revised 2008 Cowlitz Falls Dam Collection plan that you receive prior to next meeting.

- Mark – Send thank you to Lars from FTC for his participation at Morton meeting.
- Tom S – Send out proposed schedule for public meetings (dates and locations).
- Marc – Send out 2008 Collection plan by January 30 for all to review and be ready to provide input at our February meeting.
- Marc – Share Smith Root plan with FTC as it becomes available.
- Steve V – Reconvene Expert Workshop to develop agenda and send out to all to review prior to next meeting.
- Mark – Send out invites to proposed fish passage experts for March workshop.
- Mark – Copy Expert Workshop summary to Michelle and share with Workshop teamlet.
- Mark – Meet with Julie regarding Mayfield collection pumps on vs. off historical data and send out summary.
- Lyn – Send out draft meeting summary of December meeting including suggested edits.
- Lyn – Send out draft meeting summary of January meeting and attach description of communication style assessment (I-Speak).

Previous Action Items

- Tom M – Post the following to the FTC website when available:
 - PDF of initial newsletter
 - Drawings showing the design of separator and ladder
- Tom M – Include date on postings to the FTC website so it is easier for members to note recent additions.
- All – Consider ideas for chum enhancement – we will continue to discuss this at future meetings.
- Wolf – Report on the definition of low run sizes for summer-run and early winter-run steelhead.
- Steve – Send out creel data electronically to FTC members.
- Marc – Provide written rationale for “rejections” from teamlet brainstormed list. Include more definition of timing, intended frequency, etc. for options they are going forward with.
- Steve V – Look at getting Greg Volkhardt do a site visit to check purse seining feasibility for us.

Approval of Meeting

The November meeting summary was approved with a few minor edits.

Announcement

Mark announced that the Oregon Steelhead Summit will be in Portland at the Eco Trust Building this coming Saturday. Mark brought a schedule of the presentations. He has attended and has presented the Cowlitz River natural-

origin steelhead situation in the past two years. He recommends attending. Brett will attend.

Hatchery Schedule Letter

Tom M explained that Tacoma Power engineers are proceeding with putting together a bid package for the hatchery re-model project. This will be completed in first quarter, 2008. He is writing a letter to FERC explaining the schedule change and why.

Nov. 20 Public Meeting in Morton

All reported there was a great showing at the meeting in Morton (65 public and 15 reps from FTC). The event was covered by only the Yakima paper. Folks seemed to appreciate the opportunity to be heard. Tom S. distributed the follow-up article which was fairly positive. Tom did a great job facilitating. Kudos to Pat Frazier for the foresight that this meeting needed to occur, to Tom S. for facilitating, and to Michelle for calling folks on side bar conversations. The emphasis on collection efficiency improvement was loud and clear. The challenge will be to keep this momentum moving forward. The newsletter can help with this.

Pat reported that the HSRG is really pleased about the messages that were delivered. The FTC appreciated Lars' participation in the meeting. It was also nice to see a representative from TU at the meeting.

Lessons learned: Be more methodical about answering each question and minimize some of the coalition building during the meeting among the public. We would want to minimize the discussion that was a re-hashing of the same issue over and over again. The grouping of the questions seemed to work well. We answered the downstream juvenile passage a question first as we felt that was more important to most people.

Quarterly Public Meetings

Tom S. suggests alternating between Centralia/Chehalis area and the Morton area for these meetings. Tom suggests meeting in April (workshop focus), July (hatchery focus), and early November (fall activities) this year. He will send out a proposed schedule for review.

For these meetings we will use a structured approach – combination of presentation and Q&A. We would look for settings where we could bring pizza in.

2008 Downstream Migrant Collection Plan

Marc Wicke distributed an updated plan and he and Bill Iyall described it. The plan is to remove the debris barrier (drafts 9 feet) to facilitate access to fish collection area, to install a guidance system and to install penstock diversion

screens. Tacoma is working with LCPUD to review the logistics involved in all these projects, especially removing the debris barrier. They will put a temp steel boom (two or more 45-foot sticks) fixed in front of the intake. The component we don't have a drawing for yet is a sheer boom to collect the debris above the dam. So far they have located about half of the pieces for that. They are working to make it satisfactory to LCPUD.

LCPUD is preparing a contract to repair docking areas damaged in the flood. LC is the lead on this. Tacoma will work with them to provide the manpower and equipment to support.

The guidance system is the 15 foot deep tarp wall. This functions as a behavior guidance device to guide fish toward out screen entrance as opposed to Bay #1. There is a float line on top that is a cable and it is weighted to keep it down in position.

Feedback/suggestions on the Plan: Consider locating the temp boom further up on the north side – one piece in front of fish gate 1. Marc explained that they will look at the baffle panels and the debris when they do recon over the next few months

The Plan does not propose to change the baffle panel arrangements from the last couple of years. Marc stated he feels it is a little late to start modifying baffle panel configurations. The changes we will be making are already complex and interdependent, making it difficult to determine which changes contribute positively to fish collection.

Everyone agreed that some of the confusion expressed at this meeting could have been alleviated had we had summary notes from the December 17 meeting. A commitment was made to provide meeting notes for all meetings and field trips going forward.

For the third year in a row we are getting a high rejection rate. The USGS report said improvement to fish collection efficiency was due largely to low flows. There is concern that until we solve the fish rejection issues with the screen we won't get a marked improvement. Suggestions: Open up turbine #1 during the steelhead season? Work on rejection rate before work on improving collection efficiency? Open the flume as well as the fish screen? John suggested running 2 screens.

Debbie explained that it is a complicated system and it depends on what you define as your primary goal. We tried to get a screen that worked before putting in another screen or throwing the first one out and trying a new approach. It's not too late to make decisions about this plan. It is too late to decide on an entirely new plan. We are taking a scientific method approach and being intentional

about not making too many changes so we can understand the effects of the changes we make.

Michelle wants to be sure that Tacoma gets to implement their plan and get meaningful results so we can “move on” as appropriate.

More information about different ideas will be coming from the workshop. Pat is concerned that we are evaluating something that doesn't show much progress for the sake of doing a thorough evaluation.

Marc explained that they will be doing some block studies with radio tagged fish and looking to see what specific actions are effective. This will be helpful to discuss at the expert workshop.

The rejection rate for coho now is at 40%-50%. It was pointed out that we have an opportunity to do different things for Chinook and steelhead. Bill sees the Chinook as the greatest opportunity to benefit from removal of the debris barrier.

Tacoma will provide information about the plan to LCPUD so they can conduct an independent review. They are hoping to have plans ready by February 15. They will have an independent consultant review the plans.

Marc also reported they are working on a proposal with Smith Root to do electro anesthesia within the screen (an idea suggested by Steve V). They are on track to initiate some of the engineering aspects and this idea looks promising if deployed in the fish screen around mid-April. There would be a series of electrodes at the entrance of the screen. Using USGS Didson camera, we will track the movement of schools of fish. They will be hit with a pulse current and would be stunned for 20-30 seconds and move into the screen. They have had similar systems in the past be very successful. Marc is cautiously optimistic about this since 85% of the fish currently hang around in front of the screen. Of course we will watch for mortality issues (not likely to occur). Smith Root understands we have listed fish.

Steve V explained that there have been studies on electroshocking on juvenile salmonid populations. The level of current would be much less than a backpack electro shock method. He commended Tacoma for following up on this. Pat raised a question about how we evaluate this. How will we know what happens to the fish as they move through the system (impingement, etc.)?

Marc explained the flume is a relatively smooth system. Any injuries should be obvious as the fish move through the system. The recovery rate is 30 seconds. Michelle expressed concern about the long term impacts of the shocking. Would it impact the rate of return to spawning grounds? Will the Didson camera be able to look both upstream and downstream to be able to evaluate complete avoidance to the area?

Marc provided an update on the Evaluations plan which they modified based on feedback from FTC members at the December 17 meeting. They have broadened the approach to the plan based on feedback from FTC members and are working with USGS to come up with a comprehensive plan using a sample size robust enough to provide the statistics we are seeking. Marc will distribute this at least a week before our next meeting for further review by FTC members. There is a desire to repeat the ratio telemetry study again this year. Tacoma is working on how best to do this. They are also planning to do some block studies with the guidance tarp in place and also with penstock diversion screens and the electro shocking. This plan needs to be finalized by early April. Joe F. will check with their consultants to see how long it would take to review the plan – possibly in a week. Tacoma will do the fabrication in-house. They have already all the materials they need.

Tag orders need to be put in the next few weeks. He will be ordering a similar number of radio tags as last year as recommended by USGS to be able to evaluate the individual components of the study. Tacoma has committed to provide the funding for the evaluations. They may also evaluate the Natural Solutions Inc. piece of the investigations. They are looking at directed flow above CF and doing some supplemental collections below CF. Natural Solutions Inc. can use BPA funding only below CF.

Pat asked what the collection efficiency would be with 2 turbines running (surface collection on both turbines) – changing baffle panel configurations on baffle panel #1. Is it possible to test this in this year's study and evaluation plan without jeopardizing the other questions that need to be answered? (He sees this as a lower priority than the questions the study is being designed to ask.) We would need to get USGS to evaluate this. Marc expressed concern that this would likely adversely affect the collection. If these screens prove effective we could have two diversion screens and two surface screens, creating a closed system that we can divert water into.

Supplemental Collection Plan for 2008

Marc explained that the Supplemental Collections plan is a similar version to what team members received at the December 17 meeting: Installing a Merwin trap at Mossyrock Dam until mid June and screw trap in the tailrace at CF at Lake Scanewa. The plan also calls for doing beach seining. Tacoma has committed to hiring two full-time positions to accommodate this. Another copy of this plan is posted on the FTC website. Marc reported having received comments from Brian Peck and John Serl.

Brian observed that in the downstream article (Article #1), there is discussion of higher standard – meeting 75%-95% collection efficiency – and we are not currently in compliance with this. Maybe we want to look at doing year-round

collection? John reported that we can't operate with baffle panels after October 15. This is a dam safety issue. So even if we run we don't collect.

Michelle feels there should be supplemental collection at other times because we need to do everything possible to get the numbers up.

Alternate Release Sites

After two site visits, Mark's impression was that members decided to stay with existing site. Tacoma has committed to making the repairs necessary at the existing Cispus River release site.

Members expressed a desire to develop an alternate release site as they see addressing the erosion at the existing site as a stop-gap measure. FTC members felt the Tom Musak site was the best candidate. There is not complete consensus that improving the existing site would be ultimately sufficient.

Mike K. explained that LCPUD has fund available to spend on release site development / improvement and they should spend that money by this spring unless they file for an extension. Mike needs to send out a progress report the end of this month on what their plans are. Tacoma's obligations from the NMFS Bi-Op are to release the adult fish at a site with cool water (less than 16 degrees Celsius when fish are released).

After much discussion, Mike announced he will file for an extension to use the money. For the current days of the year when it is too warm, Tacoma would find another release spot. The location and method of release would be approved by the FTC.

Note: If we modify how we release fish at Packwood, it may be a reasonable site to release fish into.

Tacoma said they will meet the temperature requirement and when possible would like to release all of the fish in Lake Scanewa. Tacoma will meet with WDFW and LCPUD and come back with suggested next steps for discussion at our February meeting.

Downstream Migrant Transport Study Report

During the summer of 2006 Tacoma conducted study of radio tagged fish in the Lower Cowlitz River per the requirements of license article 15 – Instream Flow evaluations. The draft study is dated September 2006. Tacoma received only one comment from WDFW, acknowledging they had received the report.

In 2007 they saw an opportunity to repeat some of this work. Radio tagged fish that were no longer needed were set in fixed tracking stations operated by USGS. Mark sent out email last week to FTC saying the 2007 study basically supported the 2006 study as they got comparable data for natural-origin

outmigrants from those 2 years. The fish were released while pulse flows were ongoing.

It takes 1-3 days for natural-origin outmigrants to move down to the Columbia River. There is another opportunity to repeat this study in 2008. Since we've taken advantage of these other radio tagged fish, we will have more data available to include in the overall report due to FERC in 2009.

In 2006 the hatchery-origin outmigrants spent a lot of time (2 weeks for some of the coho) getting out of the river. We need to see what we can do to increase more direct and faster outmigration of these fish. All are asked to review the study and give their feedback to Mark.

Draft Disease Management Plan

The first draft of this plan was completed the end of 2007. This plan will be filed with FERC by July 18 of 2008 (5 years after license issuance). The draft report is posted on the FTC website. There is some input needed from the hatchery side. The reporting process is outlined – the current salmonid disease policy provides the template for this report. They are working on defining success and failure. Mark encouraged all to consider how to address this issue. This is tied to whether we put fish above the Mayfield dam, etc. It calls for monitoring of any dead or dying fish at the facilities. There is a lot of value for us to do that. The primary goal is protection of the hatchery. We also want to know about disease issues with wild fish.

Mayfield Downstream Collection Operation Protocols

Mark announced that to align the license article 2 Mayfield Downstream Collection plan with what we currently do, he and Julie H. changed these protocols – they are posted on the website.

Julie wants to re-visit the issue about running the trap year around. In the plan it says the trap is shut down January 1 through the end of March with the pumps will be turned back on April 1 and the trap re-opened. This was implemented starting in mid-February of 2007. When they compared fish capture numbers when pumps are on and then off, capture rate goes down to zero (actually between 1 and 10 fish). Pumps are providing the attraction flow. This time of year catch about 200 fish a week (includes Chinook and coho). She believes these fish are staying in Mayfield and can be preyed upon or get a disease. Highest capture rates are January and then trail off for February and March. Michelle asked about how difficult it would be for Tacoma to run the pumps continuously. Mark explained that they used to have the pumps off for 6 months of the year instead of the current 3 months.

Next Steps: Mark and Julie will meet and review historical data to gain a clearer understanding of the effect of the pumps.

Fish Passage Collection at Mayfield

Mark reported that passage survival (including spilling) was between 94% and 96% for 2007. Will be going into construction on improvements to downstream collection facilities at Mayfield and will re-evaluate following construction. Another piece is the obligation to verify on an annual basis that we are at the 95% level.

Plan for FTC Team Building Session

We discussed how having Lyn take us through a session where we could learn to understand – and also appreciate – each other’s communication styles could be very helpful toward accomplishing the work of the FTC in an effective and efficient manner. We will try to do this sooner rather than later.

Upper Cowlitz River Basin Nutrition Enhancement Efforts

We watched a video of a KOMO-TV news program reporting on Tacoma Power and WDFW’s nutrition enhancement activities in the upper Cowlitz River basin. Excellent publicity!

Meeting Evaluation

Well Done:

- Reprioritization of agenda items.
- Room for all at the table.
- Got out on time.

Do Differently Next Time:

- Start on time
- Minimize sidebars
- Realistic agenda
- Document outside meetings

Meeting Handouts

- January 9, 2008 draft meeting agenda
- Draft November 7, 2007 meeting summary
- Yakima Herald-Republic newspaper articles
- Cowlitz Falls improvements plan for 2008
- Drawing TS-1, Cowlitz Falls Dam
- Drawing, proposed penstock screens, Cowlitz Falls Dam

Parking Lot

Adaptive Management

Draft Agenda for February Meeting

9:00 – 9:20	Welcome / Check-In / Review Agenda, Action Items, etc. Downstream Migrant Transport Plan
9:20 – 11:15	Teambuilding / Communications Style Workshop
11:15 – 11:30	Report from Fish Expert Workshop Teamlet
11:30 – 11:45	Working Lunch
11:45 – 12:45	Productivity Issues for Late Winter Steelhead

12:45 – 2:30	Review 2008 Downstream Migrant Collection Plans at Cowlitz Falls
2:30 – 2:40	Instream Flow Variances – spring flows (March – June) Mark to report on meeting with Power Management
2:40 – 2:50	FHMP renewal schedule
2:50 – 3:00	Set Agenda for March 5 Meeting and Evaluate the Meeting