

Cowlitz Hydroelectric Project
FERC NO. 2016
Fisheries Technical Committee
Final 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.

Agenda item: Hatchery Schedule Letter

Presenter: Tom Martin

Discussion:

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.

Conclusions: N/A

Action items	Person responsible	Deadline
✓ Letter to FERC	Tom M	
✓ Send out bid package for hatchery re-model	Tom M	Q1

Agenda item: Nov. 20 Public Meeting In Morton

Presenter: All

Discussion:

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.

Conclusions: We presented a united front as we explained the HSRG recommendations and next steps

Agenda item: Quarterly Public Meetings

Presenter: Tom Santee

Discussion:

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.

Conclusions: 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.

Action items

Person responsible

Deadline

✓ Send out proposed schedule for public meetings (dates and locations).

Tom Santee

2/2/08

Agenda item: 2008 Downstream Migrant Collection Plan

Presenter: Marc Wicke

Discussion:

Marc Wicke distributed an updated plan at the meeting 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 temporary 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 a 15' deep tarp wall (depth reduced from 25' in the prior iteration of the plan because Tacoma felt that a 25' deep structure could not be held in place). There were no proposed changes to the baffle panel structure. Considerable discussion followed regarding these structures and which arrangement would likely result in the most effective attraction of fish. Concern was expressed that the current plan will continue to yield the poor results we have seen for collection efficiency the past few years. Suggestions from FTC members included:

- Considering locating the temp boom further up the north side – one piece in front of fish gate 1 (with the idea that smolts migrate along structures but some distance away from them).
- Opening the baffle panels on Turbine #1
- Considering Ed's idea about creating head/differential at the screen
- Operating two screens instead of one

The facilitator pointed out that some of the diverse views about what is included versus what should be included in the 2008 Downstream Migrant Collection Plan arose from the fact that no formal meeting notes were captured from the December 17, 2007 meeting. A commitment was made to provide such notes for all meetings and field trips going forward.

As we increase the number of variables in this plan, we make it increasingly difficult for us to understand the impact of each independent variable as it operates within the whole. Tacoma committed to their best effort with the existing screen, working to address fish rejection issues, and depending on results will consider other plans such as an additional screen for the 2009 season. Marc reported that Tacoma is working with USGS to integrate feedback from

FTC members into the plan to evaluate the effectiveness of the 2008 Cowlitz Falls Improvements. Before the next meeting Marc will provide this plan for all to review. We will be repeating the ratio telemetry study again this year. In addition to providing the funding for the evaluations, Tacoma may also evaluate the Natural Solutions piece of the investigations. They are looking at a directed flow above CF and doing some supplemental collections below CF.

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. February 15 is a solid deadline for the final engineering plans to be delivered to LCPUD. LCPUD extended the long standing December 15th. LCPUD 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 as suggested by WDFW. 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. They will investigate concerns about the effects on Kelts and whether it would impact the rate of return to spawning grounds or success at the spawning grounds. Marc will investigate this.

Conclusions: There is major concern about the low collection efficiency over the past couple of years. We are all looking for major improvements this year.

Action items	Person responsible	Deadline
✓ Look at baffle panels and debris during recon	Marc	Q1
✓ Keep notes about agreements and next steps at all meetings	All	Ongoing
✓ Check with Chick re: Ed's suggestion about creating a differential into the screen	Marc	Q1
✓ Update plan and post on FTC website	Marc	Jan 30
✓ Perform block studies with radio tagged fish to see what actions are effective. (Marc by Fish Expert Workshop)		
✓ Get answers from Smith Root re: effect on kelts and spawning (Marc)		

Agenda item: Supplemental Collection Plan for 2008 **Presenter:** Marc

Discussion:

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.

There was discussion around additional activities to optimize fish collection, including at additional locations and at different times. John reported that we can't operate with baffle panels after October 15 so even if we run we don't collect at the dam (this is a dam safety issue). Brian recommended continuing collection into the winter, possible using seine and/or minnow traps in the upper end of Riffe Lake.

Conclusions:

Action items	Person responsible	Deadline
✓ Update the plan taking into consideration FTC input	Marc	
✓		

Agenda item: Alternate Release Sites **Presenter:** Mark L

Discussion:

FTC members expressed their views that the current Cispus River site is not optimal as it does not have resting pools, etc. for fish. It may need modifications

Mike K. explained that LCPUD has funds available to spend on release site development / improvement. After considerable discussion Mike said he would file for an extension to use these funds to support construction / maintenance of a new release site – most likely at the Tom Musak Bridge. Mark stated that for the current days of the year when it is too warm (as outlined in the NMFS Bi-Op) Tacoma would find a release location other than at Tom Musak Bridge. The location and method of release would be approved by the FTC. It was observed that the Packwood release site may also need modifications in order to be a suitable site to release fish into.

Conclusions: We will work together to find suitable release site(s) that meet the NMFS temp requirement.

Action items	Person responsible	Deadline
✓ Tacoma will meet with WDFW, USFWS, and LCPUD and come back with suggested next steps for discussion at our February meeting.	Mark L	

Agenda item: Downstream Migrant Transport Study Report **Presenter:** Mark L

Discussion:

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 out-migrants from those 2 years. The fish were released while pulse flows were ongoing.

It takes 1-3 days for natural-origin out-migrants 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 out-migrants 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 out-migration of these fish. All are asked to review the study and give their feedback to Mark.

Conclusions: N/A

Action items	Person responsible	Deadline
✓ Review the study and give feedback to Mark	All	Feb 6

Agenda item: Draft Disease Management Plan **Presenter:** Mark L

Discussion:

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 Barrier 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.

Conclusions: The primary goal of this plan is protection of the hatchery. It will also help us identify disease issues with wild fish.

Action items	Person responsible	Deadline
✓ Consider how to define success and failure in this report	All	5/7/08
✓		

Agenda item: Mayfield Downstream Collection Operation Protocols **Presenter:** Mark L

Discussion:

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.

Conclusions: N/A

Action items	Person responsible	Deadline
✓ Meet with Julie to review historical data to gain a clearer understanding of the effect of the pumps	Mark	

Agenda item: Fish Passage Collection at Mayfield **Presenter:** Mark L

Discussion:

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.

Conclusions: N/A

Action items	Person responsible	Deadline
✓ N/A		

Agenda item: Plan for FTC Team Building Session **Presenter:**

Discussion:

We discussed how having Lyn take us through a session where we could learn to understand – and also appreciate – each other's communication styles which 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.

Conclusions: This would be helpful. It will be a challenge to find time for it without setting up a separate meeting.

Action items	Person responsible	Deadline
✓ Consider how to integrate some team training into future agendas	All	Ongoing
Agenda item: Upper Cowlitz River Basin Nutrition Enhancement Efforts	Presenter: Steve V	

Discussion:

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.

Conclusions: Excellent publicity!

Action items	Person responsible	Deadline
✓ N/A		

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

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Other Attendees

Mike Kohn	LCPUD/BPA
Joe First	LCPUD, Cowlitz Falls
Ed Meyer	NMFS
Steve Vigg (by phone)	WDFW
John Serl	WDFW
Julie Henning	WDFW
Charles Morrill	WDFW
Toby Kock	USGS
Tom Santee	Insight Northwest
Marc Wicke	Tacoma Power
Bill Iyall	Tacoma Power
Steve Fairchild	Tacoma Power
Debbie Young	Tacoma Power
Tom Martin	Tacoma Power
Lyn Wiltse	PDSA Consulting, Facilitator

Future FTC Meeting Dates

Mar 5 (from 10:00 – 2:00),
Apr 2, May 7, Jun 4, Jul 2, Aug 6, Sept.3, Oct 1, Nov 5, Dec 3.
Default time: 9:00 AM to 3:00 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 – Note compressed schedule of March 5 meeting.
- Tom M: Send out link to Fish Passage Expert Workshop info to all.
- All: Send John your feedback on paper by noon Feb. 8.
- Marc – Share Smith Root voltage/pulsing data with FTC members.
- Pat: Send out spring Chinook run site forecast prior to next FTC meeting.
- All: Verify agenda for Public Briefings prior to each meeting.
- Julie: Summarize and send out Mayfield pump on/off data.
- All: Send Marc input on 2008 plans by COB on 2/15.
- Debbie: Invite Todd to explain Mayfield outflow projections at our March meeting.
- Mark: Send Gantt Chart with suggested FHMP update schedule to all prior to next FTC meeting.
- Lyn – Send out draft meeting summary of February meeting including suggested edits. Coordinate sharing of proposed edits to January meeting summary among FTC members.

Previous Action Items

- 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.
- Steve V – Look at getting Greg Volkhardt to do a site visit to check purse seining feasibility for us.

Approval of Meeting Summary

The approval of the January meeting summary was deferred until after all members have a chance to review the proposed edits. The summary will be discussed at a conference call of FTC members on Feb 25 from 1:00 – 2:00.

Announcements

- Special Assignment: Congratulations to Michelle who will be leaving us to work on a special assignment related to a leadership program she is participating in. She will be away for the next 60 days with the exception of the Fish Passage Expert Workshop which she will be attending. Otherwise, Ed will assume her FTC duties in her absence.
- Meeting: Debbie reported on a recent meeting with staffers from the congressional offices of Cantwell and Dicks. The meeting occurred as a result of public concern about fish recovery actions in the Cowlitz Basin and FHMP implementation.

Agenda item: PR Plan

Presenter: Tom S

Discussion:

Tom S distributed the proposed schedule for FTC Public Briefings. We agreed (tentatively) on the following dates: March 20 (focus would be solely on Fish Passage Expert Workshop proceedings), April 10, August 14, and November 13. There was a question about the scope of these discussions. The FTC would determine the agenda for each of these meetings. The aim would be to keep the discussions fisheries focused. FTC members would be encouraged to attend these meetings. A news release about these briefings is in the works. One of the aims of these meetings is transparency. Some expressed discomfort with the idea of being recorded (audio and video). We will revisit this issue.

Conclusions: We are united in our desire to inform the public of our actions and supporting rationale.

Action items

Person responsible

Deadline

✓ Finalize dates and locations of public meetings

Tom S

ASAP

Agenda item: Annual FHMP Report

Presenter: Mark L

Discussion:

Mark reported that this report will be posted on the FTC website shortly for the (at least) 30 day FTC member review. He will send an email notification of the posting. This report is due to FERC April 1, 2008, and will include the draft 2008 Cowlitz Evaluations report.

Conclusions: N/A

Action items

Person responsible

Deadline

✓ Send email re: notification of posting of Annual FHMP Report

Mark L

ASAP

Agenda item: Lower Cowlitz River Steelhead Genetics Study

Presenter: Mark L

Discussion:

Mark and Debbie met with Pat, Wolf, Julie, and Steve to discuss this study. Tacoma has verbally committed to fund Phase I of the study as it substantially follows the study methodology recommended by the FTC genetics subcommittee, and endorsed by the entire FTC. The final study plan will be posted to the FTC website shortly. Mark will send an email notification of the posting. Pat met with Cleve about FOC involvement and reported there will be a follow-up meeting with FOC later this month.

Conclusions: N/A

Action items

Person responsible

Deadline

✓ Send email notification when Final study plan is posted to FTC website

Mark L

ASAP

Agenda item: Instream Flow Variances

Presenter: Debbie Y

Discussion:

Brian explained that for 2 out of the last 3 years the FTC has been asked to give a variance from the 5K cfs that is to be provided at Mayfield Dam from March 1 through June 30. The March 1 Riffe Lake expected refill forecast is used as the basis for the refill forecast.

Debbie announced that the Mossyrock Dam unit rebuild will further impact Tacoma's generational flexibility at Mossyrock. With the healthy snow pack, we hope not to have to request relief from the 5K in 2008. Brian hopes than any such requests would be made with sufficient lead time to allow for adequate discussions and recommendations by the FTC. The weekly projections provide data on refill, operations, inflow, outflow, etc.

Conclusions: We will get periodic updates.

Action items

Person responsible

Deadline

✓ Debbie will invite Todd to explain these forecasts and get FTC member input at our March meeting.

Debbie

Feb 18

Agenda item: FHMP Renewal Schedule

Presenter: Mark L

Discussion:

Mark explained that the renewal date for this is March 1, 2010. Tacoma will take the first cut at creating a schedule (such as a Gantt chart) to allow the FTC and the public adequate review time prior to meeting the filing date. We will discuss the schedule at our next meeting. Where possible we will plan to exceed the 30 day minimum approval timeframe.

Conclusions: We will review this at our March meeting with an eye toward maximizing review time.

Action items

Person responsible

Deadline

✓ Send schedule out for FTC review

Mark L

Feb 18

Agenda item: Mayfield Downstream Collection Facility Improvements

Presenter: Steve F and Bill I

Discussion:

Mark introduced Steve Fairchild and Bill Iyall who presented the plans for this. Ed had expressed concern about the screw pump. Steve explained that the intent with the screw would be to run 24/7 and provide additional water to the transport pipeline. There would not be clearance issues in the screw pump as the screw forms its own seal. It would move 2cfs up to the flume – 30 feet elevation. The advantages of this are that the fish aren't handled until they are anesthetized, tagged and put in the recovery tank. The "slide for life" is designed for more water than we would be running through it. This technique is in operation in several instances in Washington for moving hatchery adults. It is also used for shrimp farms. Our application of this for moving juveniles is new to the Pacific Northwest.

Ed explained that NMFS criteria say not to pump fish in a by-pass system, which is what we would be doing with the screw pump. To further explore this option, we need to test this in an environment that excludes listed fish (as per the NMFS experimental technologies protocol). Ed prefers that we go back to the existing batch system (hopper system).

Ed further explained the need for the inside of joints and pipes to be smooth. He thinks the secondary separator screens look good - no gaps should be larger than 1.75 mm. He is concerned about brush action causing debris to collect at the bottom of the screen. He is concerned about the monitoring facilities (counting house) design. He would like WDFW to review the plans and process flow for the counting house changes. He also requested the inclusion of more safety margin/features as we update this facility even if it means up to a year delay. He prefers the delay for the counting house, but thinks the screens, by-pass pipe and louvers all look pretty good and the work can proceed on those components. Julie expressed a desire to be included in the review of the collection facility. Tacoma will keep in mind that it's best to have as much water in the pipe system as possible.

Conclusions: Further consultation with NMFS is necessary.

Action items

- ✓ Bill will provide Ed with a comment sheet to capture –additional comments. They will meet to discuss this further the morning of February 22.

Person responsible

Bill I

Deadline

Feb 22

Agenda item: Fish Passage Expert Workshop

Presenter: Tom M

Discussion:

Tom M explained the list of experts being invited totals about 12. He distributed the tentative list of attendees.

The teamlet has prepared a draft of some background information. They distributed this and asked FTC members to provide feedback by Friday. We'll make sure all references are posted to the new website. Suggestions: Add debris barrier to cross-section drawing and add more detail on the forebay (show shoreline, etc.), as well as detail on Tacoma fish screen.

Workshop Dates: March 3 & 4 – Facilitated by Lyn with experts Al Giorgi and Chick Sweeney creating a summary document to be shared with the public (after review/approval by workshop participants). We want to provide the public with accurate information without overwhelming them with technical details. After some discussion we agreed to create a more technical document and a more user-friendly version for public consumption. We would release the higher level summary first and invite interested parties to sign up to receive the technical information at a later date.

We also want to share with the public information on how and why we make decisions. We agreed that the most productive and respectful way to do this would be to hold a public meeting a few weeks after the fish passage expert workshop to share the content and processes coming out of that workshop.

We discussed proceeding as follows:

1. Expert Workshop (2 days of intense work by fish passage experts)
2. One-two weeks later share a "Reader's Digest" version with interested members of the public and ask if any of them are interested in "going deeper" (Chick/AI) – Timeline/Next Steps. This meeting to run 2-3 hours with Chick and AI present to provide public with access to experts
3. Hold half-day review (as necessary) for members of the public who want to dive into the technical details of the discussions from the workshop. Timeframe: May-ish – 4+ hours to facilitate this review.

The location of the workshop is still undetermined.

Conclusions: There is still much to be done.

Action items	Person responsible	Deadline
✓ Determine the location of the workshop	Tom M	ASAP

Agenda item: LWSH **Presenter:** Mark L

Discussion:

Mark distributed a sheet describing the triggers. He will realign the issue of "objectives" in FHMP with management actions and the Productivity testing. He will consider whether the two triggers are necessary to conduct productivity testing. We will discuss this at our March meeting.

Conclusions:

Action items	Person responsible	Deadline
✓ N/A		

Agenda item: 2008 Downstream Migrant Collection Plans **Presenter:** Marc W

Discussion:

Marc explained that the debris barrier relocation at Cowlitz Falls Dam will be done in early April. A sheer boom will provide active debris removal above the dam (30" draft at most) as flows allow.

Bill walked us through diagrams showing the new location of the debris barrier and the potential area for low energy electrodes deployed for fish guidance. Jeff Smith of Smith Root provided Tacoma with laboratory data that show this voltage combined with the pulsing methodology doesn't harm larger fish. Marc will share these data with FTC members. There were questions around how we might evaluate the short and long term effects of this low voltage pulse on juveniles and adults. Might there be hot spots or other unintended consequences?

We also reviewed the plan/design for a penstock diversion screen.

Marc explained that we will be working with USGS to evaluate the impacts of the actions we will be taking. USGS proposes using RT and the DIDSON camera to monitor these impacts. Details are described in the Research Proposal distributed and posted on the FTC website.

Toby walked us through the study objectives and critical uncertainties. USGS expressed concern that there are so many different variables in the study that it will be difficult to get robust/meaningful data from which we will be

able to draw cause and effect conclusions. For this reason we will be doing a block study of the guidance tarp during the Chinook run. Mike Kohn shared that we might be seeing a later Chinook run this year due to a large snow pack.

Conclusions N/A

Action items	Person responsible	Deadline
✓ Review this with LCPUD and work with them to address some operations issues.	Marc L	ASAP

Agenda item: Draft Plan for Supplemental Collection Presenter Marc

Discussion:

Marc distributed an updated version of this plan (which incorporated input from FTC members). The new plan calls many diverse actions to be taken. A Merwin trap will be located near Mossyrock Dam from April through June 21. It would then be moved to Lake Scanewa where it will remain through September 26.

A 100' seine net with 9'3" depth and additional section to lengthen the net that can be added will also be used to fish in Riffe Lake.

Marc distributed pictures of an incline plane trap that is much larger than what had been previously discussed. The floats are 36' long at 3,000 lbs each. It will sit 6' deep and 6' wide. Marc also reported that they found a really good location for the trap. They will be able to move it up and downstream to find the optimal velocity. The plan is to deploy this in April. We will deploy minnow traps in Riffe Lake this spring. Natural Solutions will be deploying a special trap net in May (elevation needs to be above 750' to do this).

Fish handling was also described. They will be doing 48 hour delayed mortality testing.

Input on the Revised Plan:

- Could we deploy Merwin Trap at upper end of Riffe Lake?
- What frequency of seine netting will occur each day?
- Winter fish collection – desire to see a firm commitment of testing seine netting / minnow traps throughout the winter
- In-season monitoring and reporting would be appreciated
- Add species and stage for all salmonids

Conclusions: There is more work to be done on the plan.

Action items	Person responsible
✓ Marc will continue to provide updates at FTC meetings (at least monthly) and integrate feedback as possible	Marc
✓ Discuss CF fam post drawdown fish collection with LCPUD	

Meeting Evaluation

Well Done:

- Great focus
- Moved toward conclusions

Do Differently Next Time:

- Ran over
- Meet here next time from 10-2
- Focus on Expert Workshop and public meeting, instream flows and LWSH and Spring Chinook

Meeting Handouts

- February 6, 2008 draft meeting agenda
- January 30, 2008 Draft FTC Public Briefings Proposal
- February 5, 2008 Draft Background Information for Workshop to Investigate Solutions for Smolt Collection at or Near Cowlitz Falls Dam
- February 5, 2008 List of Attendees for above workshop
- Mayfield Dam Cowlitz River Downstream Migrant Facilities schematics:
 - Counting and Holding Facility Site Plan (1/15/08)
 - Screw Pump Plan (1/15/08)
 - Screw Pump Elevation (1/15/08)
- Cowlitz Falls Dam 2008 improvements schematic drawings
- January 30, 2008 USGS Research Proposal: Behavior and passage of juvenile salmonids during evaluation fish collection efforts at Cowlitz Falls Dam, 2008
- Draft 2008 Supplemental Collection Plan
- Late winter-run steelhead productivity issues

Parking Lot

Adaptive Management

Draft Agenda for March 5 Meeting from 10:00 – 2:00

10:00 – 10:30	Welcome / Check-In / Review Agenda, Action Items, etc. Update on Alternate Release Locations FHMP Renewal Schedule Todd to explain projections?
10:30 – 11:45	Report from Fish Passage Expert Workshop
11:45 – 12:05	Working Lunch
10:05 – 1:00	Report from Fish Passage Expert Workshop (continued) Plans to Inform the Public
1:00 – 1:20	Productivity Issues for: Late Winter Steelhead and Spring Chinook
1:20 – 1:50	Review 2008 Downstream Migrant Collection Plans at Cowlitz Falls
1:50 – 2:00	Set Agenda for April 2 Meeting and Evaluate the Meeting

FTC Cowlitz Hydroelectric Project
FERC NO. 2016
Fisheries Technical Committee
Final Meeting Summary
March 5, 2008 from 8:00 AM – 2:30 PM
Tacoma Power Conference Room
Tacoma, Washington

Participating Members

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

Other Attendees

Joe First	LCPUD, Cowlitz Falls
Ed Meyer	NMFS
Steve Vigg (by phone)	WDFW
Wolf Dammers (by phone)	WDFW
John Serl	WDFW
Charles Morrill	WDFW
Tom Santee	Insight Northwest
Marc Wicke	Tacoma Power
Bill Iyall	Tacoma Power
Steve Fischer	Tacoma Power
Debbie Young	Tacoma Power
Tom Martin	Tacoma Power
Todd Lloyd	Tacoma Power
Lyn Wiltse	PDSA Consulting, Facilitator

Future FTC Meeting Dates

Apr 2, May 7, Jun 4, Jul 2, **Aug 13**, Sept.3, Oct 1, Nov 5, Dec 3.
Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

New Action Items

- All: Note: August meeting date is the 2nd Wednesday: August 13.
- All: Send Marc input on 2008 collection plans by COB on 3/15.
- Todd: Post forecast info by 3/10 on website.
- Mark: Send out notification when updated 2008 inflow forecast is posted.
- Michelle: By COB on 3/10 get clearance for electro anesthesia from NMFS.
- Lyn: Send out revised Draft Protocols and Sussman Consensus Model along with meeting summary in new format.
- All: Review Protocols – adequate? Note # 13, 15 re consensus process.
- Mark: Meet with Brian, Steve V., and Wolf re: Draft Goals of Fish Release Program and which sites qualify.
- Mark: Check on number of chum at Mayfield 1961-1968.
- John: Talk with Mike K. re. partnering with Tacoma to fulfill request for winter collection.
- Mark: Revise FHMP schedule
- All: Review draft FHMP schedule.
- Pat: Get detail of HSRG recommendation on chum.
- Lyn: Send out Workshop notes to all (FTC). Include Steve V's opening workshop remarks as emailed to her by COB.
- All: Let Tom M. know if you want a copy of FHMP and Public comments.
- Tom M: Send Workshop notes to Experts.
- All: Reserve August 13th (not 6th) for FTC Meeting at Mayfield.
- All: By March 17 get comments on Annual Report to Mark.

Previous Action Items (note reviewed at March 5 meeting)

- All: Verify agenda for Public Briefings prior to each meeting.
- Julie: Summarize and send out Mayfield pump on/off data.
- 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.
- Steve V – Look at getting Greg Volkhardt to do a site visit to check purse seining feasibility.

Approval of Meeting Summary

The approval of the February meeting summary was deferred until the April 2 meeting.

Agenda item: Instream Flow Projections

Presenter: Todd Lloyd

Discussion:

Todd Lloyd explained the current forecast methodology. Todd aims for 75% confidence of Riffe Lake refill at 5000 cfs discharge from Mayfield. Tacoma uses forecasts from two organizations: 3 Tier Environmental and The River Forecast Center, with preference on 3 Tier Environmental.

Last year was driest May-July on record. However, there were about two weeks where Riffe Lake inflows dropped below average, while discharge remained at a high level. This year they will be taking one of the units out of Mossyrock, leaving unit capacity of 6200 cfs. His aim is to refill Riffe without spilling – lots of variables to balance. They are expecting a well-above average runoff this season.

He walked us through several charts and explained exceedence probabilities. He is targeting Riffe Lake EL of 700' at the start of the outage period, and feels there is a very high likelihood of being able to maintain 5000 cfs at Mayfield through June and dropping to 2500 cfs in July (778.5 is full pool). They like to raise the reservoir before the recreation season so they can clean up the LWD.

TPU is operating a flow regime very similar to the agreement they signed with WA Dept. of Fish & Game in 1977. About half the time we fall below 5000 cfs in the spring.

Action items	Person responsible	Deadline
✓ Todd will put information on the website for all to review. Information will include: Riffe Lake elevation; Inflow; Outflow; Refill probability curve; Snow pack.	Todd Lloyd	April 2 and monthly thereafter through June.
✓ Mark will let FTC members know when it has been posted – March-June	Mark LaRiviere	

Agenda item: FTC meeting Summaries

Presenter: Lyn Wiltse

Discussion: The aim of the meeting summary for FTC meetings

The aim of the meeting summary: "The Record" – Snapshot of what occurred and where we left off.

Remember accurately

"Decisions" recommendations made / rationale

Action items / Next steps (Who/What/By When)

List what is unresolved, differing views, Discussion, Status, Next Steps.

Conclusions: ✓ Adopted a new format to try. Will get feedback at April meeting.

Action items and next steps: (Who/What/By When)	Person responsible	Deadline
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✓ Determine if new format fulfills aims as listed above.

All

4/2/08

Agenda item: Format of the meeting summary for FTC meetings. **Presenter:** Lyn Wiltse

Discussion: How to record meeting summary and supporting process

We agreed the FTC meeting summaries should include the following elements:

- Attendees
- Action Items
- Response to Questions Raised (NEW!)
- Issues
- Discussion (issues of differing opinions – list issues without attribution)
- Next Steps
- Next Agenda
- Evaluation

Process: All “own” notes as Lyn writes them

- Review Next Steps / Action Items at end of each agenda item.
- Lyn to send documents with Agenda one week prior to meeting.

Action items	Person responsible	Deadline
✓ Try new format and discuss effectiveness at next meeting	Lyn Wiltse	3/7/08

Agenda item: Mayfield Downstream Migrant Improvement Schedule **Presenter:** Steve Fischer

Discussion:

Steve explained that this project has been broken into 3 parts, each with a different schedule:

1. Secondary Separator Improvements: Redesign so the brush will move upward only. Fabrication will last two months. Installation will require another 2 months in 2008. NMFS is comfortable with the design.
2. Counting House: Working with ESC Engineering to simplify this design. Hope to be out to bid late summer. Goal: To be operational by the start of out-migration season 2009.
3. Outfall Improvements: Tacoma asked NMFS if the current design is sufficient. Steve F will give NMFS more information on the depth of the flow – maybe reduce the pipeline diameter to try to get more depth? Maybe add water? Anticipated to construct in 2008.

Action items (our Next Steps)	Person responsible	Deadline
Send the revised secondary separator design to Ed when available.	Steve F	ASAP
Send the revised counting house design to Ed when available.	Steve F	ASAP
Steve will Convene an early design meeting and include NMFS and WDFW as Ed would like to see this early in the process. Ed needs more detail on flow and fish path.	Steve F	ASAP
Reconfigure the bid package for outfall improvements. Tacoma will go through one more iteration of this with Ed - phone call will be sufficient.	Steve F	

Agenda item: Alternate Release Locations **Presenter:** Mark LaRiviere

Discussion: What will happen this season and going forward?

Mark reported that he has tentative approval from the Ranger to go ahead with our erosion control plan at the current Cispus River site. TP is committed to continue looking at additional sites for this year. Mike K requested a time extension (September 30, 2009) to use the funding for this. TP is in the early stages of developing a design for a fish release device towed behind the fish truck, probably on a trailer with an arch. The design is very rough at this time. TP agreed to consider application of this for the Tom Music site, while, together with other FTC members, they also consider other sites that allow us to address these issues to determine site locations:

- Permitting issues with Tom Music site
- Temperature (rivers/lake systems) for determining site locations
- Fall back
- High velocities

Members discussed the need to set goals for the adult release locations. These goals, in addition to a list of potential sites in the Cispus and Upper Cowlitz, should be used to guide the selection of the most suitable sites.

Action items (our Next Steps)	Person responsible	Deadline
✓ Mark will talk with Ranger re. permitting issues at Tom Music; FTC members consider goals for fish release program – consider using the fish contraption in a variety of locations including the upper Cowlitz and Tilton rivers. List design requirements around functionality (e.g., how far to extend from the truck, angle, etc.)	Mark, Wolf, Steve V., Brian	
✓ Review draft design memorandum. #1 Clarify the goals of this program. #2 Clarify the list of sites.	Mark, Wolf, Steve V., Brian	

Agenda item: Schedule for Updating FHMP **Presenter:** Mark LaRiviere

Discussion:

Mark distributed a draft schedule for all to review. It shows that the FTC will have two opportunities for review changes to the FHMP (double what is called for). The public will also have an opportunity for review. Tacoma suggested having an FHMP meeting with Lars Mobrand to review the plan. We don't expect the update to be as complex as the new plan.

Conclusions: We will also discuss the process for agreeing on changes

Action items (our Next Steps)	Person responsible	Deadline
✓ Mark will revise the schedule to include another issues resolution point.	Mark LaRiviere	
✓ All will review the revised schedule which revolves around FTC meetings. We will review the goals. Approve this at our April 2 meeting.	FTC members	

Agenda item: FERC Reporting Schedule - FHMP **Presenter:** Mark LaRiviere

Discussion:

The FHMP Annual Project Status Report is due to FERC April 1, 2008. The draft annual report was posted to the FTC web site on 2/7 for review. This final report includes the draft 2007 Cowlitz evaluation report. Mark just received this from WDFW and has appended it to the Annual Report.

TP expects to file this report electronically as they did last year.

Action items	Person responsible	Deadline
✓ All get comments to Mark by March 17.	All	3/17/08

Agenda item: Public Outreach

Presenter: Lyn Wiltse

Discussion:

We reviewed the press release announcing the Cowlitzfish.net website that Tacoma sent out on 2/27/08. So far it doesn't look like any of the papers have picked it up. We will for other ways to promote public awareness of the web site.

Conclusions: We need to find additional ways to update the public.

Action items

Person responsible

Deadline

- ✓ Tom S will report on number of hits on website.

Tom Santee

4/2/08

Agenda item: 2008 Cowlitz Falls Dam Downstream Migrant Collection Plans

Presenter: Bill Iyall

Discussion: Debris barrier

Bill updated us on the proposed designs for the 2008 Downstream Migrant Collection Plans. TP is talking with LCPUD about how to accomplish repairs to support structure without a drawdown.

Conclusions: We need advice from fish passage experts to inform our next steps.

Action items

Person responsible

Deadline

- ✓ Set up site visit with project people to determine feasibility. Bill - let Marc Wicke know if not feasible.

Bill Iyall

Agenda item: 2008 Cowlitz Falls Dam Downstream Migrant Collection Plans

Presenter: Bill Iyall

Discussion: Intake Screen

TP is still working through some design review comments they received from LCPUD. When asked about frequency of cleaning Steve explained this process will be defined over time. They will start out daily and adjust as appropriate.

Issues:

- Effect on fish impinged on screen or going through the turbine is unknown.
- How to evaluate the head loss / generation?
 - Fish survival issue
- Turbulence in gate well?
- Have someone watch tail-race when doing cleaning?
 - De-scaling?
 - Injury rates?
 - Record observations
- NMFS is okay for TP to move ahead once TP gets approval from LCPUD.
- Smith Root contract in place to investigate electro-anesthesia in the forebay (won't work in the confines of rejection area). NMFS concerns – effect on smolts / kelts / larger resident fish.
- Electrified field with radio tags? This is experimental technology (requires NMFS review).

Action items	Person responsible	Deadline
✓ Need approval of design – looking to deploy April 15.	Steve Fischer	
✓ Michelle to get go-ahead on electro-anesthesia.	Michelle Day	3/10/08

Agenda item: Fish Passage Expert Workshop **Presenter:** Lyn Wiltse

Discussion: Next Steps after Workshop

Lyn distributed the 29 pages of draft workshop notes that she compiled from the last two days' activities. Discussion included the following:

State specific goals and by when we should complete them. WDFW wants to see a plan by August as it will impact their fish management decisions and may re-shape the FHMP

TP wants to be able to model and test hypotheses. We want to implement what will give us the most "bang for the buck."

Have AI and Chick summarize the workshop notes for alternatives teams recommended be carried forward for FTC to review. Share this summary with workshop participants.

Get expert consultant input from workshop participants and additional NMFS participants identified by Michelle.

Potential phrasing: *How would you improve FPS to reach 95%? What is your supporting rationale?*

(Use Settlement Agreement definition of FPS)

Need a short term and long term balance as well as a research and action balance.

Pat stated that the plan must show the 95% fish passage survival goal must be achieved, including benchmarks and timelines, including actions that will be implemented in the near term that will be implemented in the near term that will result in substantial progress towards achieving the 95% goal.

Conclusions: We will reassess where we are and the appropriate next steps at our April meeting.

Action items	Person responsible	Deadline
✓ Send workshop summary to NMFS fish passage experts who did not attend the workshop along with background information ask them also to answer the King question.	Michelle Day	ASAP
✓ Send Workshop notes out to all FTC participants to review before they are sent out to experts.	Lyn Wiltse	ASAP
✓ Ask AI and Chick to help phrase expert consultant question ASAP.	Lyn Wiltse	3/5/008
✓ Send workshop notes out to fish passage experts along with question."	Tom Martin	ASAP

Agenda item: March 20 Public Technical Briefing **Presenter:** Tom Santee

Discussion: Preparation for the meeting

Tom S will see if a school facility is available for this informational briefing. Mark and Pat agreed to attend and help explain the workshop activities and outcomes. We want to allow ample time for Q and A.

Suggested Agenda for the meeting:

6:00 Welcome and introductions

6:30 – 6:50 Set the context (Distribute and review John's background document)

6:50 – 8:00 Review proceedings of the workshop (distribute and review Workshop Notes)

(incl. break) Hand flip charts from the workshop so public gets the flavor of the creativity and process.

8:00 – 8:45 Discuss next steps

8:45 – 9:00 Q&A
 9:00 – 9:15 Open time
 9:15 Adjourn

Conclusions: We want to inform the public of where we are in this process in a way that allows them to understand next steps with regard to fish passage and the supporting rationale.

Action items	Person responsible	Deadline
✓ Tom to meet with Mark L and Pat Frazier to coordinate the details of the meeting	Tom Santee	ASAP

Agenda item: Supplemental Collection **Presenter:** Debbie and Marc

Discussion: What will be done this season?

Debbie reported that Tacoma is pretty much in agreement about proceeding with the suggested forms of supplemental collection with the exception of winter collections. Brian restated the USFWS request of 2 days a month of beach seining and minnow trapping (overnight) October through March.

He also expressed a need for a firm commitment to beach seining at the head of Riffe Lake. Tacoma committed to seining at least weekly and possibly daily depending on the number of fish in the traps. Morning seining is considered important. TP will make every attempt to do morning seining. Consider going to 10 hour work days. Marc explained that the safety of the fish in the traps has to come first.

Conclusions: We will explore opportunities to partner with LCPUD on this.

Action items	Person responsible	Deadline
✓ John will talk with Mike Kohn re. partnering with Tacoma to fulfill winter collection	John Serl	a firm date would be better ...

Agenda item: Chum **Presenter:** Mark LaRiviere

Discussion: HSRG Recommendation

Mark explained that the HSRG has just released recommendations for chum salmon.

Conclusions: We will discuss this at our April meeting.

Action items	Person responsible	Deadline
✓ Get description of HSRG findings and send out to all	Pat Frazier	3/26

Meeting Evaluation

Well Done:

- Meeting summary discussion and focus on moving forward
- Plan for public technical debrief on March 20
- Frank discussions
- Attention to notes on flip charts
- FHMP review schedule and discussion
- Wolf and Steve joining us by phone (instead of missing the meeting)

Do Differently:

- Ran late
- Noise level of facility

- Missed the teamwork discussion (once again)
- Missed Brett and George

Meeting Handouts

- Snow pack and refill forecast graphs
- 2/25 draft conference call summary
- 2/6 draft meeting summary
- FTC operating protocols – 10/4/2006
- Proposed FTC meeting summary format
- 2007 FHMP annual project evaluation and status report
- Tacoma Power – Cowlitzfish.net press release
- FTC Fish Passage Expert Workshop meeting notes

Topics for April 2 FTC Meeting

- Welcome / Check-In / Review Agenda, Action Items, etc.
- FHMP Renewal Schedule
- Report from Fish Passage Expert Workshop
- FTC operating protocol discussion
- Working Lunch
- Report on public meeting – March 20
- Productivity Issues for: Late Winter Steelhead and Spring Chinook
- Review 2008 Downstream Migrant Collection Plans and Supplemental plans
- Set Agenda for April 2 Meeting and Evaluate the Meeting

FTC Cowlitz Hydroelectric Project
FERC NO. 2016
Fisheries Technical Committee
Final Meeting Summary
April 3, 2008 from 9:00 AM – 3:45 PM
Mayfield, Silver Creek, Washington

Participating Members

Michelle Day	NMFS
Mark LaRiviere	Tacoma Power
Brian Peck	USFWS
Brett Swift	American Rivers

Other Attendees

Rich Turner (by phone)	NMFS
Joe First	LCPUD, Cowlitz Falls
Mike Kohn	LCPUD
Debbie Carlson	BPA
Steve Vigg	WDFW
Wolf Dammers	WDFW
John Serl	WDFW
Charles Morrill	WDFW
Julie Henning	WDFW
Tom Santee	Insight Northwest
Bill Iyall	Tacoma Power
Steve Fischer	Tacoma Power
Tom Martin	Tacoma Power
Lyn Wiltse	PDSA Consulting, Facilitator

Future FTC Meeting Dates

May 7, Jun 4, Jul 2, Aug 6, Sept.3, Oct 1, Nov 5, Dec 3.
Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

New Action Items

- Joe: Set up meeting to address status of debris barrier removal and send out update to all ASAP. *(done)*
- Charles: Send Mike email confirming extension of contract ASAP.
- John: Send Lyn presentation made at March 20 public meeting to attach to notes. *(done)*
- Lyn: Attach PowerPoint presentation made by John *and Pat* at March 20 public meeting to draft notes *(done)*
- Lyn: Cut and paste into May FTC agenda all relevant FTC protocol items. *(done)*
- All: Review Protocols – adequate? Note # 13, #16 re consensus process.
- All: When receive draft agenda for next meeting from Lyn notify her of any supporting documents that FTC members should read to prepare for next meeting ASAP.
- All: Send suggested edits to Lyn on Jan, Feb, and April meeting summaries by April 23.
- Mark: Meet with Brian, Steve V., and Wolf re: Draft Goals of Fish Release Program and which sites qualify.
- Mark: Provide Cowlitz Project Operations chart in color for May meeting.
- Mark: Revise FHMP schedule (Include summary of all input and how each suggestion was treated) and send out notification of posting to all by April 15.
- All: Review draft FHMP schedule/protocols and send comments to Mark before May 7.
- Mark: Draft sample FHMP update process norms and post by April 30.
- Mark: Convene teamlet of Brian, Wolf, Steve V, Ed ?, Bill I to make recommendations re: adult fish release locations by May 1.
- Tom M: Ask for answers to “King question” by April 11 if possible or ASAP and that workshop experts send their ideas directly to Lyn. Include an explanation that Chick and Al’s draft summary was just that and it has been neither reviewed nor approved by the FTC. *(done)*

- All: Send comments on Chick and Al's summary to Tom M by April 30.
- Tom M: Post FTC-approved version of Chick and Al's summary as soon as approved by the FTC.
- Tom M: Send follow-up email to Experts re: timing of response to "king question."
- Bill: Send Tom M drawings and documents relevant to electro guidance / electro anesthesia studies so he can post them for FTC review ASAP.
- Mark: Talk with USGS about acoustic tagging at Cowlitz Falls this year (to better understand fish movement in the forebay).
- Marc: Update this plan and post it for all to review. Include contingency plan if debris barrier cannot be removed. Consider also changing baffle panel arrangement on Unit 1 to allow for surface collection on Unit 1.
- Marc: If not fishing by April 15, re-do the plan and post by April 16.
- Mark: Revise plan to include the following: Parr in Lake Scanewa stay, and parr in Riffe Lake go downstream.

Previous Action Items

- Pat: Get detail of HSRG recommendation on chum.
- Julie: Send out Mayfield pump on/off data for Lyn to send out along with this draft meeting summary.
- All – Consider ideas for chum enhancement – we will continue to discuss this at future meetings. (*Is this still relevant?*)
- 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.
- Steve V – Look at getting WDFW experts to do a site visit to check purse seining feasibility.

Approval of Meeting Summary

The approval of the March meeting summary was approved with minor edits.

Agenda item: Riffe Lake Refill / Instream Flow Update **Presenter:** Mark

Discussion:

Mark walked us through the most recent forecast. He will update it in the next day or so. Snow pack is 134% of normal at Paradise. We are holding steady at 5K cfs for Mayfield discharge except for the weekly pulse flow.

Conclusions: N/A

Action items	Person responsible	Deadline
✓ Provide Cowlitz Project Operations chart in color for May meeting.	Mark	May 7

Agenda item: NMFS Position on Electro Shocking at Cowlitz Falls Dam **Presenter:** Michelle

Discussion:

Michelle explained that NMFS supported our going forward with this on a trial basis. If we see injury to fish we'll shut it off. If it looks like a long-term option, Tacoma will do long-term study on survival rates.

Conclusions: Okay to start (a conditional start)

Action items	Person responsible	Deadline
✓ Review data from this year to analyze effects	FTC	

Agenda item: Adult Fish Release Location **Presenter:** Mark

Discussion:

Mark explained that Tacoma is looking to develop a release methodology that would work at a variety of release sites using a smooth-walled conduit pipe. Tacoma feels the portable option doesn't look feasible from a technical standpoint. This would mean developing a "Packwood-like" flume at the Tom Music Bridge site and possibly other sites. There would be security issues at each site to protect the flume from vandalism or destruction by high water. The proposal is to develop the flume on an as-needed basis and remove it when not in use. There has not been a discussion with the FTC on this yet. There was skepticism about this approach, as it is not water to water transfer. Mike K explained that he is awaiting State approval of his request for extension to use the 7K – request is through the end of September 2009. Frustration was expressed about the lack of progress made on this topic. FTC members want to take a detailed tech look at this before our May FTC meeting.

Conclusions: It makes no sense to proceed without the teamlet meeting and coming up with recommendations and supporting rationale.

Action items	Person responsible	Deadline
✓ Convene teamlet of Brian, Wolf, Steve V, Ed ?, Bill I Deliverables: Notes, Recommendations, Alternatives Considered and Supporting Rationale.	Mark	April 15
✓ Send Mike email confirming extension of contract.	Charles	ASAP

Agenda item: FHMP Renewal Schedule **Presenter:** Mark

Discussion:

Mark explained that the revised schedule includes the suggestion for a second FTC resolution process. The length of review time for FTC has been doubled as requested. It also includes public review. Tacoma proposes Lars Moberand as contractor to help with this. This idea was supported by FTC members.

The FERC order reminded the FTC to go through the settlement agreement dispute resolution process (approved by FERC) to resolve any disagreements. We will provide two opportunities to dispute resolution within the FTC before invoking the formal settlement agreement dispute resolution process.

Constituent issues shall be vetted during the entire FHMP update process. There were many questions about how the review would happen and what each of the tasks in the proposed schedule actually means. Steve V requested that FTC members be able to participate in the review process beginning in Step 1. There was not consensus among FTC members on this. We agreed we want to establish norms to support the review process. For example, how best to capture and communicate proposed changes to the plan? This will include addressing Steve's request (see above).

Conclusions: We need a revised schedule. If, at our May meeting, it is determined we need a teamlet to work on this we'll set one up at that time.

Action items	Person responsible	Deadline
✓ Post revised schedule and send out notification to all.	Mark	ASAP
✓ Draft sample FHMP update process norms and post.	Mark	April 30
✓ Send comments to Mark regarding schedules and protocols.	All	ASAP
✓ Include summary of all input and how each suggestion was treated.	Mark	ASAP

Agenda item: Hatchery Update **Presenter:** Tom M

Discussion:

Tacoma posted the bid for the hatchery remodel, not including the crowders. Tacoma is still working on the best model for the water treatments and well design. They expect to award the bid in mid-May. This will be an approximately \$18M project.

Conclusions: N/A

Action items	Person responsible	Deadline
✓ Keep FTC informed.	Tom M	Ongoing

Agenda item: Status of Debris Barrier **Presenter:** Joe

Discussion:

Joe reported that LCPUD does not want to remove the debris barrier until July 1 due to the possibility of high-flow events which may occur through the end of June. A further complication is the restaging of two support blocks which have been overturned due to a high-water event. Joe further explained that the moorage site was originally intended for maintenance rather than long-term usage. There was discussion about frustration about the delay with this process and what we will actually be doing to improve this fish passage this year. There was consensus that we need to have a face-to-face meeting to try to work this out quickly. This is complicated as there are permitting and liability issues, mitigation costs for lost generation and lost fish, and fear of being blamed for misalignment of the screen.

All agreed that this process was plagued by missed deadlines and inadequate information. There was a question about the shared responsibility and associated costs for fish passage among LCPUD, BPA, and Tacoma.

There is hope. Joe explained that Steve Bell can expedite the HPA.

Conclusions: We need LCPUD, BPA, and Tacoma to take whatever steps are necessary to facilitate moving the debris barrier as soon as possible for the purpose of testing and improving fish passage.

Action items	Person responsible	Deadline
✓ Set up a meeting to address this.	Joe	April 3

Agenda item: Request for Shared Funding of Supplemental Collection **Presenter:** Mike

Discussion:

In response to an Action Item from our March meeting, John talked with Mike about Tacoma and LCPUD possibly sharing costs for operation of wintertime seining and minnow traps. It was suggested that this wasn't the forum to request funding as we are a technical advisory committee.

Mike explained that LCPUD will be investing in areas at or above Cowlitz Falls. Activities include: radio telemetry, juvenile winter behavior, when sub-yearling Chinook actually migrate, performing a literature search regarding turbine and spillway survival evaluations (by Normandeau). They are also looking at treating the milfoil problem.

Conclusions: The cost-share funding is doubtful for FY 2008.

Action items	Person responsible	Deadline
✓ Continue to explore options for this in FY 2009 through budget request to BPA.	Debbie Y	September

Agenda item: Fish Passage Expert Workshop **Presenter:** Tom M

Discussion:

Tom reported that Chick and Al's technical summary of the workshop was sent out to FTC and experts who attended the workshop on March 28. They also, at that time, sent out "the King question" to all the experts. Tacoma acknowledged the need to take a more scientific approach this year compared to last year. They proposed forming a technical committee to fast-track (by August) recommendations to address fish passage survival for 2009. This committee would begin meeting this month and report regularly to the FTC. It might make sense to try to delay

the report until September so we could take advantage of fish passage results that come in mid-August after we shut the facility down.

It was suggested that the 95% fish passage survival goal be added to the outline of the plan. *WDFW wants to see the final plan completed by August 1 – a review draft one month prior.*

Concern was expressed that Chick and Al's workshop summary was sent out to the experts without review/approval by the FTC (according to the agreed-upon protocol called out in the FTC March meeting summary). FTC members were also frustrated that there was a delay in sending out "the King question". The unfiltered answers to this question (*What plan of action would you propose to achieve the juvenile fish passage survival goal of 95 percent?*) should be shared with all FTC members.

WDFW has said it would provide its perspective on how implementation should proceed in the near future, *after discussing these recommendations with WDFW Director Koenings.*

Conclusions: We have some trust to regain among FTC members as we develop a process for moving forward.

Action items	Person responsible	Deadline
✓ Ask for answers to "King question" by April 11 if possible or ASAP and that workshop experts send their ideas directly to Lyn. Include an explanation that Chick and Al's draft summary was just that and it has been neither reviewed nor approved by the FTC.	Tom M	April 3
✓ Send comments on Chick and Al's summary to Tom M.	All	April 30
✓ At next FTC meeting, review Tacoma's proposed approach, "King question" responses, WDFW approach, that of other FTC members, and determine next steps.	All	May 7

Agenda item: Protocol Discussion

Presenter: All

Discussion:

There is an accountability issue. This shows up in lack of follow-through on commitments as recorded in meeting notes. We are all responsible for this, as we are all responsible for the content of the meeting notes.

Concern was expressed that the FTC meeting summaries failed to capture important statements (for example, policy statements) of FTC members. We discussed the proper level of detail the notes should reflect. This was the subject of a conference call in February among FTC members. We are still struggling with this issue. At our March meeting, we adopted a new format for the meeting summaries. Lyn did her best to put the meeting draft summaries from January and February into this new format. In many cases, she neglected to provide the appropriate level of detail. She pleaded with members to edit the notes as she reviews them on the flipcharts. That way there should be no surprises when FTC members review the draft notes she sends out afterward.

After some discussion we agreed to generally (no names) capture what was said with the exception of disagreements, in which case parties would be identified along with next steps. Note: There will be times when members ask to be identified when they call out specific policy statements.

We need to get the meeting summaries posted on the website and available to the public in a timely manner. We have not posted any summaries this year as we have not been able to approve them.

Conclusions: We need to continue to review/change protocols to meet FTC and public needs.

Action items	Person responsible	Deadline
✓ Send comments to Lyn on revised versions of January and February meeting notes and today's meeting notes.	All	April 23
✓ Check with presenters for agenda items of future meetings, about what documents should be reviewed in preparation for the meeting.	Lyn	Ongoing
✓ Cut and paste into May FTC agenda all relevant FTC protocol items.	Lyn	April 30

Agenda item: Public Meeting

Presenter: Tom S

Discussion:

WDFW, Tacoma, and seven members of the public, along with some consultants, attended the public meeting on March 20. There was poor weather. This may have been a factor. Consensus was we were well prepared and gave out good information. Several members of the public commented on how they appreciated the update without having to wait for a formal plan. John's PowerPoint was well received. Lyn's workshop notes were distributed. The flipcharts from which she typed these notes were displayed on the walls of the meeting room to give the public a flavor of the expert workshop.

Some members of the public expressed concern about the FTC being able to work together to resolve the important issue of fish passage.

Conclusions: Job well done! The meeting was appreciated. We plan to hold at least two more meetings this year.

Action items	Person responsible	Deadline
✓ Send Lyn the PowerPoint presentation that John made to all.	John	April 30
✓ Post FTC-approved version of Chick and Al's summary as soon as approved by the FTC.	Tom S	ASAP

Agenda item: 2008 Downstream Migrant Collection Plan **Presenter:** Bill

Discussion:

Bill explained the basic components of the 2008 plan. They include:

- Electro guidance plan is moving forward. We need to ensure we are monitoring the fish condition carefully while we execute this plan.
- Electro anesthesia is a further study component of this plan which we will try based on the results of the initial study (see above).
- Turbine intake screen. Steve F explained that Tacoma is still in the process of approval, review, and evaluation of the intake screen. There are safety questions that need to be answered before proceeding. There is concern that it might set up harmonics with the turbine. They are hoping to get these issues resolved in time for the spring Chinook season which begins July 1. Note: Unit 1 may not be available after July 1.
- Marc is working on getting more antennae to use upstream to see if fish do trend along the left bank.
- USGS is going forward with the original plan for evaluations.
- Removal of the debris barrier is in question. Guidance tarps are attached to this (pun intended).
- Tacoma is also considering looking at different boom gate settings. They will also consider beefing up the evaluation plan.

Conclusions: We need the final plan and it needs to include contingencies if we can't move the debris barrier.

Action items	Person responsible	Deadline
✓ Send Tom M drawings and documents relevant to electro guidance / electro anesthesia studies so he can post them for FTC review.	Bill	ASAP
✓ Talk with USGS about acoustic tagging at Cowlitz Falls this year (to better understand fish movement in the forebay).	Mark	ASAP
✓ Update this plan and post it for all to review. Include contingency plan if debris barrier cannot be removed. Consider also changing baffle panel arrangement on Unit 1 to allow for surface collection on Unit 1.	Marc	ASAP

Agenda item: 2008 Supplemental Collection Plan **Presenter:** Mark

Discussion:

The Merwin traps are being lifted into Riffe Lake tomorrow. Tacoma is currently doing a dry run for the incline trap below Cowlitz Falls. Both traps are set to be fishing by April 15.

Appreciation was expressed to Tacoma for incorporating FTC comments. Outstanding requests include: winter seining and transport of parr.

Conclusions: We need the final plan.

Action items	Person responsible	Deadline
✓ Send out meeting update / next steps to all.	Joe	ASAP
✓ If not fishing by April 15, re-do the plan and post.	Marc	April 16
✓ Revise plan to include the following: Parr in Lake Scanewa stay, and parr in Riffe Lake go downstream.	Mark	ASAP

Meeting Evaluation

Well Done:

- Facilitation
- Participant focus and endurance
- We need the 9:00-3:00 timeframe.
- Team-building.

Do Differently:

- We need more team/trust building.
- Discuss goals (95% and document) and methods of how to make recommendations and detailed schedule for fish workshop follow-up discussion.
- Try doing notes real-time, projecting on the screen.
- Be more serious about action items.
- End at 3:00.
- If you have a question or an issue with someone, check it out with them versus assuming the worst.

Meeting Handouts

- Revised draft agenda for April 2 FTC meeting
- Draft March 5, 2008 FTC meeting summary
- Snow pack and refill forecast graphs
- Draft FHMP update development plan and consultation schedule
- Tacoma Power proposal – Improvements for fish passage survival/fish passage experts
- Draft January 9, 2008 FTC meeting summary
- Draft February 6, 2008 FTC meeting summary
- Cowlitz Falls Workshop, Follow-up Thoughts from Lynn Reese, USACOE
- Tacoma Power plan for Supplemental Cowlitz River juvenile collection, March 26, 2008

Topics for May 7 FTC Meeting

- Welcome / Check-In / Review Agenda, Action Items, etc.
- Approval of January, February, April meeting notes
- FHMP Renewal Schedule – Teamlet required?
- Next Steps from Fish Passage Expert Workshop
- FTC operating protocol discussion; recommendation process
 13. The Sussman Consensus Model, DECISION MAKING BY CONSENSUS, A STRATEGY (adapted from Steve Sussman, Organization Training and Consulting) will be the Cowlitz Fisheries Technical Committee decision making process. In the event of an even split, the motion will be deferred to the following meeting.
 16. The FTC agreed they want their recommendations subject to public review opportunity. The FTC will develop a public review process. Formal recommendations

will be developed by appointed FTC members, distributed to the FTC with enough time for additional consideration, and distributed after final FTC consideration.

- Working Lunch
- Productivity Issues for: Late Winter Steelhead and Spring Chinook
- Review 2008 Cowlitz Falls Dam Collection Plans
- Review 2008 Downstream Migrant Supplemental Collection plans
- Update on Riffe Lake refill schedule and operations
- Set Agenda for June 4 Meeting and Evaluate the Meeting

FTC Cowlitz Hydroelectric Project
FERC NO. 2016
Fisheries Technical Committee
Final Meeting Summary
May 7, 2008 from 9:00 AM – 3:45 PM
Mayfield, Silver Creek, Washington

Participating Members

Michelle Day	NMFS
Mark LaRiviere	Tacoma Power
Brad Caldwell	WA DOE
Brett Swift	American Rivers
Pat Frasier	WDFW

Other Attendees

Ed Meyer	NMFS
Joe First	LCPUD, Cowlitz Falls
Mike Kohn	LCPUD
Lolanda Thomas	LCPUD, Cowlitz Falls
Debbie Carlson	BPA
Steve Vigg	WDFW
Wolf Dammers	WDFW
John Serl	WDFW
Mark Johnson	WDFW
Tom Scribner	Yakima Nation
Tom Santee	Insight Northwest
Bill Iyall	Tacoma Power
Steve Fischer	Tacoma Power
Marc Wicke	Tacoma Power
Debbie Young	Tacoma Power
Tom Martin	Tacoma Power
Lyn Wiltse	PDSA Consulting, Facilitator

Future FTC Meeting Dates

May 7, Jun 4, Jul 2, Aug 6, Sept 3, Oct 1, Nov 5, Dec 3.
Default time: 9:00 AM to 3:00 PM; Default location: Mayfield

New Action Items

- All – Check Settlement Agreement for reference to “mitigation” as it relates to flow reduction.
- Mark - Check re: monitoring being done in spring – what results and how they can inform the future. Also set up conference call as needed to request relief from MIF.
- Mark – Post alternate release site design criteria to website by May 11.
- Pat – Track broodstock collection and report at June FTC meeting.
- Pat – Complete review of Draft Fish Disease Management Plan and send to Tacoma by May 19.
- Mark – Notify FTC members when the revised Draft Fish Disease Management Plan is posted.
- All – Send suggested scope and sequence for FHMP update by June 4.
- Mark – Set up “Next FTC Meeting Materials” section on FTC Website.
- Marc – Break out data by day fish were collected and post reports to FTC website.
- Marc – Get revised study info from USGS and send out plan.
- All: Review revised plan and provide Marc with your input.
- Marc – By June 9 Talk with USGS about how changing baffle panel in Unit 1 might affect the evaluation.
- Tom M – Set up contracts with fish passage experts and set up meetings prior to June FTC meeting. Also inform FERC of our plans.
- Lyn – By May 11 revise protocol to reflect our discussions and send out for all to consider along with these notes. (done)
- All – By June 4 send list of suggested scope and sequence to Mark.
- Mark – By June 4 attach descriptions to each of the Tasks in FHMP Update schedule.

Previous Action Items

- Pat – Get detail of HSRG recommendation on chum.
- Mark – Send out Mayfield pump on/off data to Brett.
- Wolf – Report on the definition of low run sizes for summer-run and early winter-run steelhead.
- Steve V – Email creel data to Mark to post to FTC website.
- Steve V – Look at getting WDFW experts to do a site visit to check purse seining feasibility.

Approval of Meeting Summaries

We approved the January, February, and April meeting summaries with minor edits.

Agenda item: Riffe Lake Refill / Instream Flow **Presenter:** Mark

Discussion:

Mark walked us through the most recent forecasts. For the Cowlitz Project Operations, Riffe is flat-lined currently. We are continuing to hold steady at 5K cfs for Mayfield discharge except for the weekly pulse flow. This year represents an all-time high record for low-elevation snow pack. The high elevation snow pack is in the top three of the past 30-year record. Depending on how the snow pack melts and releases and precipitation levels, we may be short of inflow to the reservoir. We should barely get above 730 ft at 90% exceedence. Even at 50% we should get to 750 ft. in July. This is less than ideal in terms of reservoir refill. Dropping below 750 ft. in the fall impacts our ability to collect spring Chinook. Two weeks ago Tacoma posted a revised forecast curve. Since then there hasn't been much run-off so Todd re-ran the forecast with a reduction to 3,000 cfs the first of June. We would expand monitoring to look at any impact to fish and adjust operations to reduce stranding impacts to the extent possible. Tacoma may be requesting relief from the minimum flow for the month of June (reduce from 5,000 to 3,000 cfs). They would do this by conference call the last week of May. No rain will translate into a greater probability of making this request. The benefit would be 10-12 ft. of reservoir elevation. Fishery concerns – when start reducing flows, fish move quicker through the system and are not available for harvest. This results in calls from the public to WDFW asking what they are doing to flows.

Todd believes in a couple of weeks we should have a better idea of how the snow pack run-off will impact refill. Most recent weather update calls for cooler and drier than normal. Tacoma can, with approval of the FTC, go as low as 2,000 cfs. They want to try to keep it at 2,500 cfs after July to support fishing. They also want to make boat ramps accessible. Would like to get the reservoir above 760 ft to preserve recreation interests. There is a real chance that even with this reduction in flows in June we will probably not get above 740-750 ft.

Conclusions: We may have to manage low flows in a way that reduced negative impact to the resource and recreational interests.

Action items	Person responsible	Deadline
✓ Continue to provide updates on flows/reservoir refill	Todd	Ongoing
✓ Convene FTC conference call if necessary to request relief from MIF	Mark	May 27-30, 2008
✓ Check re: monitoring being done in spring – what results and how they can inform the future, Discuss at June FTC Meeting,	Mark	Late May

Agenda item: Collection of Adult Spring Chinook **Presenter:** Mark Johnson

Discussion:

So far we have collected about 30 fish. This is the lowest return in about 10 years. Normally we would have collected about 500 by now. We hope they are late. We hope the same for LWRSH. WDFW is considering how to deal to this (e.g., reduction in harvest, actively collecting the broodstock, etc.) Joe Hymer (WDFW) has announced that sport harvest is lower than usual for spring Chinook. Low run size is also being observed in other lower Columbia tributaries. Cold water temperature may be delaying

migration.

Conclusions: Wait and see.

Action items	Person responsible	Deadline
✓ Track brook stock collection; report at June FTC meeting.	Pat	June 4, 2008

Agenda item: Cowlitz Salmon Hatchery Rebuild Schedule
Presenter: Steve Fischer

Discussion:

Steve reported that the salmon Hatchery bids are in and Tacoma is moving forward.

Conclusions: Construction is set to begin in late May.

Agenda item: Downstream Migrant Supplemental Collection Activities	Presenter: Steve Fischer
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Discussion

Merwin traps: Marc explained we began fishing April 16. Wind storm in April 22 pushed everything out of position. Was back in operation on April 24 and has been so since. So far 76 smolts have been caught in the Merwin trap. Can't launch a boat in upper end of Riffe lake yet since have no access to boat ramps. Hope to be able to gain access to the boat ramp in the next couple of weeks. In the meantime, will also talk with LCPUD about doing some seining in Lake Scanewa. New low-level boat launch is complete (720 ft). This is an improvement from years past where it required elevation of 745 ft. Access issues for minnow traps. Tried to use roe as bait. Caught no fish. Now trying different types of bait. Merwin trap will be 100 yards upstream of Mossy Rock Dam.

Incline Plane Trap: Had to be repaired and re-fitted (replaced flotation), new winches, etc. This has been fishing since May 5. Guide nets have been purchased and are on site. The location is at cross section of the river channel 200 yards below CF dam. Velocity is at 7 ft/sec in the trap. Still working on access plank. Marc reported that 250 fish (95% Chinook) were caught in the first night of operation.

Tacoma is talking with USGS about modifying the evaluation to include a study before the debris barrier is moved and then after it is moved on July 1. The USGS has put extra antennae on the dam to get a better idea of fish activity in the forebay.

Natural Solutions wants to wait to see elevation of 750 before the site they have identified will be capable of operating.

Conclusions: We will continue to get updates as we go.

Action items	Person responsible	Deadline
✓ Break out data by day fish were collected – post reports to FTC website	Marc	ASAP
✓ Get revised study info from USGS and send out plan	Marc	ASAP
✓ Review revised plan and provide Marc your comments	All	ASAP

Agenda item: Fish Passage Expert Workshop **Presenter** Tom Martin

Discussion:

Tom distributed an email from Jeff Boltz including observations on the workshop and response to the King for a Day question. He also distributed a recommendation for a surface flow outlet approach from Dennis Dorratacague and Dave Thompson.

Steve walked us through the executive summary of the WDFW recommendations calling for a variety of actions over several seasons in order to accomplish the 95% fish passage survival goal. These recommendations were what WDFW determined were highest in terms of biological performance and technical feasibility.

Tacoma's plan as discussed at our last FTC meeting is to convene a team of experts to look at what plan to put in place to make substantial progress toward the goal. They are working on getting contracts in place to support this work. WDFW would like to see the plan fleshed out by August 1. We'll aim to have the plans for next year outlined by then. If possible, we will include what can be prototyped/ (done feasibly by next year), and/or tested in the meantime. Core team members were suggested to include: Ed Meyer, Mike Kohn, Ken Bates, Dennis Rondorf, Chick Sweeney, Al Giorgi, Rod Woodin, Chuck Peven (LCPUD has offered to fund), John Serl, Dana Postelwaite, and Tacoma staff. FTC members may attend all meetings. The process should be about the science and feasibility of downstream passage. Facilitation might be helpful. Caution was expressed that it is difficult for a facilitator to also be a full participant.

Conclusions: We will convene technical team ASAP and get regular reports at these monthly meetings.

Action items	Person responsible	Deadline
✓ Talk with USGS about how changing baffle panel in Unit 1 might affect the evaluation.	Marc	By May 9, 2008
✓ Set contracts up and set up meetings (The FTC would like to see at least 2 meetings take place before our June 4 meeting.)	Tom M	ASAP
✓ Talk to FERC about our intentions here	Tom M	By May 2008

Agenda item: Alternate Release Sites **Presenter:** Mark

Discussion:

This teamlet met April 16 and discussed a release method at Tom Music Bridge and also to improve the existing release site up at Packwood. Notes from this meeting have been posted on the FTC website. NMFS has impact criteria for outfalls (not to exceed 25 ft/sec.). For adult flumes bigger is better. Maybe include lay-flat inside of 18 inch culvert. We want to get this installed this fall prior to the coho return.

Mark has also been looking at alternate release sites on the Tilton system. He wants WDFW to consider releasing some fall Chinook destined for the Tilton into Mayfield Lake.

Conclusions: Tacoma will send Mike Kohn an invoice for this before Sept. 20 or let him know so he can put a line item in the budget.

Action items ✓ Mark will post the design criteria including all the ideas expressed by the team by May 11.

Agenda item: FHMP Update

Discussion:

Schedule with proposed changes is now posted to the website. It includes the possibility of invoking dispute resolution. Kick off will include getting Lars Mobernd's schedule. We reviewed the draft operating norms that Mark drafted for the team.

Conclusions: We're off and running!

Action items	Person responsible	Deadline
✓ Send list of suggested scope and sequence to Mark	All	June 4, 2008
✓ Attach descriptions to each of the Tasks in FHMP Update schedule	Mark	June 4, 2008

Agenda item: FTC Protocol **Presenter:** Lyn

Discussion:

We discussed revisions to the protocol to set ourselves up for successfully working together.

Action item:

✓ Revise protocol to reflect our discussions and send out for all to consider along with these notes. Lyn By 5/11/08

Meeting Evaluation

Well Done:

- Good discussions
- Yakima presence
- Energy and Direction for improving fish passage

Do Differently:

- Ran late
- Too many side bars
- Tough to balance facilitation with note taking – consider how we can resolve this
- Missed Brian!
- Need to improve display of Meeting Summary notes projected on screen.

Meeting Handouts

- Revised draft agenda for May 7 FTC meeting
- Draft April 2, 2008 FTC meeting summary
- 2 Mossy Rock Refill Probability Curves
- 2008 Cowlitz Project Operations graphic
- Update of 2008 CFD Smolt Collection Activities
- Summary Report of 2008 Supplemental Cowlitz River Juvenile Collection Activities
- CFD Fish Passage/Collection Ideas
 - MWH
 - EA
 - WDFW
- Draft FHMP update development plan and consultation schedule
- Draft FHMP Update Team Norms
- April 4, 2008 FTC Operating Protocols

Topics for June 4 FTC Meeting

- Welcome / Check-In / Review Agenda, Action Items, etc.
- Approval of May 7 Meeting Summary
- Update of 2008 Cowlitz Falls Dam Collection Activities
- Update of 2008 Downstream Migrant Supplemental Collection Activities
- Update from Downstream Team
- FHMP Update Scoping Discussion
- Public Outreach Update
- Productivity Issues for: Late Winter Steelhead and Spring Chinook
- Update on Riffe Lake Refill and Operations
 - Past Springtime Monitoring Results and Lessons Learned

- Set Agenda for July 6 Meeting and Evaluate the Meeting

Parking Lot

- Ideas for chum enhancement

FTC Cowlitz Hydroelectric Project
FERC NO. 2016
Fisheries Technical Committee
Final Meeting Summary
June 4, 2008 from 9:00 AM – 2:00 PM
Mayfield office, Silver Creek, Washington

Participating Members

Michelle Day	NMFS
Mark LaRiviere	Tacoma Power
Brian Peck	USFWS
Brett Swift (by phone)	American Rivers

Other Attendees

Steve Vigg	WDFW
Ed Meyer	NMFS
Mike Kohn	LCPUD
Debbie Carlson	BPA
John Serl	WDFW
Julie Henning	WDFW
Tom Santee	Insight Northwest
Bill Iyall	Tacoma Power
Steve Fischer	Tacoma Power
Tom Martin	Tacoma Power
Lyn Wiltse	PDSA Consulting, Facilitator

Future FTC Meeting Dates

Jul 2 (10:00 Start!), (Aug 5 (Tom S facilitates), Sept 2, Oct 7, Nov 4, Dec 2. – tentative dates)

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

Announcements

This is the last meeting that FTC member Brian Peck will be attending as he will be leaving the area for American Samoa as Resource Conservation and Development Coordinator. We appreciate his many contributions to this team and will miss him. We wish him well!

On July 9 Debbie C will be doing a tour of the Bonneville Dam Corner Collector starting at 1:00. Let her know if you are interested in attending!

Michelle finished her leadership program – congrats!

New Action Items

- Mark and Steve – Work with Greg V. to explore seining opportunities in Riffe and Scanewa and report at our next meeting.
- Brian – Send Mark Tim Romanski's contact information.
- All – Let Debbie C know if you are interested in attending the July 9 tour.
- All – Check Settlement Agreement for reference to "mitigation" as it relates to flow reduction. This pertains to flow reduction below the barrier dam. (Mark wasn't able to find a reference to mitigation.)

- Mark – Post alternate release site design criteria to website by June 30.
- Mark – Check with Tacoma webmaster about format of how Fish Disease Management Plan prints out.
- Pat – Track Cowlitz broodstock collection and report at next FTC meeting.
- Pat – Complete review of Draft Fish Disease Management Plan and send to Tacoma by May 19.
- All – Send bulleted list of items / issues you would like to see addressed in the FHMP update to Mark by July 2.
- Mark – By June 30 attach descriptions to each of the Tasks in FHMP Update schedule.
- Lyn – Send Tom S copy of new meeting summary template.

Previous Action Items

- Pat – Get detail of HSRG recommendation on chum.
- Wolf – Report on the definition of low run sizes for summer-run and early winter-run steelhead.

Approval of Meeting Summaries

We approved the May 7 meeting summary with minor edits. They will be posted for public review.

Agenda Item: Update of 2008 CF Dam Collection Activities **Presenters:** Bill Iyall and Steve Fischer

Discussion:

Electric Fish Guidance System

Bill reported we had the first recorded drawdown during fish collection season, so as we expected the numbers and activity were low as the fish were hiding.

He distributed the study plan for the electroshocking. Members were frustrated at seeing the plan for the first time. He reported that we are moving forward with modification of the fish screen with Smith-Root. The aim is to do flume sampling with one hour on and one hour off starting 8am through 3pm during the weekdays where we have sufficient Tacoma and WDFW staff on site. We'll observe the data. We anticipate we will need to step up either the pulse rate or the voltage. We will do that on a weekly basis. We reduced the pulse rate to 1/10 of what it was set at originally. The idea is to work our way up slowly. If we observe any increases in mortality above "background" (e.g., 2%) we will stop. If we notice decreased collection efficiency we will stop. We will know which fish went through the system and will be able to look for burns, etc.

We are prepared to begin the week of June 9 so Smith-Root can be present for the initial test. If we step up the voltage, they would return for that each time.

We reviewed the aim of this study. This is a guidance system. The fish is oriented in a manner where he doesn't receive the voltage unless he turns the wrong direction. There was some skepticism about whether this would work and that it might actually reduce or stop collection when the pulse is on. There was also frustration expressed that the study is being planned to be carried out in a way that is different than our initial understanding. Bill offered that the actual installation is the same as the original conceptual drawings from Smith-Root. We acknowledged that this was experimental originally. Steve V observed that Smith-Root has competent engineers and biologists that are specialized in electro-fishing and that the plan is reasonable. Smith-Root reviewed the Didson videos that show the fish backing up behavior and took this into consideration in designing this study. If we

decide not to test the system we will pull the plates out. We might just go ahead with the electro-anesthesia component of the study. We will set up a conference call to discuss this.

Turbine Intake Screen

There was no action on the turbine intake screen this month. The hold-up is a dam safety issue because it is behind the trash rack and LCPUD has major concerns about this. It appears unlikely that this will happen this year. The issue has to do with hydraulic loading on the screen and risk to CF facilities. The idea was to collect fish in a low velocity zone and create a larger area for doing so. Both Ed and Steve F expressed reservations about how successful this would be if we decided to go forward this year or even next year.

What we are doing: This year we will be removing the debris barrier. Mike reported that there should be no problem in doing this. He is thinking there will be a later run for spring Chinook sub-yearlings and we might be able to remove the debris barrier in time for that run. We are aiming for July 1, with 5K cfs flows. The guidance system is all ready to go as soon as we remove the debris barrier. We will do a radio-tag study just before and just after removal of the debris barrier.

Baffle panels were removed on Unit 1 and a steelhead study was just completed.

Conclusions:

We will talk with Smith-Root about why this study is now being proposed in a way that differs from what we asked for. We want to be more proactive about this sort of thing with contractors in the future.

It looks like we won't be installing the turbine intake screen this year due to dam safety reasons. Steve F and Ed recommend we pull the plug on this as it appears we are moving in a different direction.

Action Items	Person Responsible	Deadline
Set up conference call with Smith-Root to discuss their suggested approach to the study and the supporting data as to why they think it will work.	Bill	ASAP
Let Bill know if you want to participate in conference call	All	ASAP
Ask USGS to try to analyze data from Didson video during the time the pulse was on the first time.	Bill	ASAP
Consider pulling the plug on the turbine intake screen idea for this year	All	July 2, 2008

Agenda Item: Supplemental Collection

Presenters: Mark and Bill

Discussion:

Mark distributed a May 17-30 summary of the collection activities. The last 2 weeks have been especially challenging given the extremely high run off. They had to suspend operation of the minnow trap in mid-May. They were deployed at the upper end of the lake. They also had to stop inclined plane operations and move it to the side of the river so it didn't get washed downstream.

Something that has been fairly successful is the beach seining operation. Hatchery origin juvenile Chinook are the bulk of the fish that have been caught by this method. This shows some habitat partitioning. Tacoma crews are still improving their seining techniques.

Catches at the Merwin trap have been minimal – they are getting a few coho and steelhead smolts. We will continue to operate this trap until the end of the month.

Refill rate at Riffe Lake was around 2 ft/day. It has since slacked off to about 1 ft/day. Inflows have dropped off to the extent that we should be able to put the inclined plane trap back in (6 ft.). They will also be installing BPA's 4 ft. inclined plane trap they are borrowing from LCPUD directly beside the other. The pontoons on this trap are in really good shape. We will fish them when we are at or below 10k cfs at CF. We will install an anchorage system to enable us to get them in and out more quickly.

Mike cautioned that we might not want to move the Merwin traps to Lake Scanewa until the flows are lower – safety issue and fishability issue.

Conclusions:

These activities will be ongoing. We are pleased with the inclined plane trap catches and the beach seining catches.

Action Items	Person Responsible	Deadline
Post fish collection numbers on the website and continue to do so every two weeks	Marc	Ongoing
GPS locations for all mobile gear to increase efficiency. Include the dates so can correlate the dates with the catch and place.	Marc	Ongoing

Agenda Item: Update of Cowlitz Downstream Collection Team **Presenter:** Tom M

Discussion:

Tom announced that this team has now met twice in Tacoma: May 20 and June 3 (all day). July 11 and July 30 are additional potential dates. Chick Sweeney is facilitating. Ed Meyer, Marc Wicke, Mark LaRiviere, Steve Fischer, Wolf Dammers, Tom Martin, John Serl and Bill Iyall were all in attendance. Also Dana Postelwaite, Al Giorgi, Dennis Rondorf and Tim Romanski of USFWS attended on June 3. He will take Brian's place on the FTC and the HAG. Tom M reiterated that all FTC members are welcome to attend and participate in these meetings.

They have gone through all the ideas that came out of the workshop and spent these two meetings analyzing and prioritizing them using a numerical scoring system based on fish passage performance, O&M costs, cap costs, dam safety, can it be phased or prototyped. They combined some of the supplemental collection efforts and left research on its own – not to be ranked as it is a necessity. These discussions were very productive.

The next meeting will be July 1, as members did not have June dates available. June will be spent doing homework – ranking by species. This is due to Chick by June 17. They are going to be working on getting some designs down on paper so we can better understand how the various ideas would flesh out. In addition, in the process of discussing things combined with the results of the new inclined

plane trap below CF dam, some new ideas are taking shape beyond what was discussed at the workshop. At the July 1 meeting they will focus on the rankings and start identifying specific actions to take for next year including prototypes.

Report

There is a final report scheduled for submittal to FERC on August 1. This could be delayed depending on the progress on the fish passage survival plan and subsequent review by the FTC. We will not have a final plan at that time. Working with the FTC, we will be talking with FERC about changing the content of the report on the plan. Our target is to have an initial draft plan for 2009 to make progress toward the 95% FPS by August 1.

Conclusions:

The process is underway, Chick is working on summarizing the output from the meetings. The May 20 meeting summary has been posted to their website as has some additional related materials. We will be mindful about ensuring transparency and traceability of all items raised at the workshop.

Action Items	Person Responsible	Deadline
Continue analyzing alternatives	Team	Ongoing
Continue to send out update notices for meetings.	Tom	Ongoing
Let Tom or Bill know which meetings you plan to attend so he can ensure a large enough meeting space.	All	Ongoing
Continue to post relevant documents to the new website.	Tom or Bill	Ongoing
Let Tom know if you have trouble accessing the new website.	All	ASAP

Agenda Item: Public Outreach

Presenter: Tom S

Discussion:

Public Meetings

Tom reported that we are currently scheduled to have the next public meeting August 14 (Thursday) with the focus of the meeting being an update of the hatchery remodel. He has furnished Tom M a brief outline for a Cowlitz Fish Newsletter with the idea that it would be out by the end of July to help advertise the meeting. Stan Bartall called Tom S and expressed a desire that the next public meeting be held in June instead of waiting until August, even if there are no new updates. (Our last meeting was March 20.) He liked the Centralia location, but thought a Friday night might have worked better since people wouldn't have to get up and go to work the next day.

We discussed changing the schedule and shifting the August meeting to July and then scheduling another for September. At that time we would discuss the fish passage plan for 2009 and results of supplemental collection for this year.

After some discussion, we decided to move up the hatchery meeting discussion to June 26. There would also be a conversation around current matters.

We also agreed to keep the August 14 meeting with the public and at that meeting give an update on where we are with the plan for improving fish passage survival toward the 95% goal. This would be a progress report.

Website

Added a lot of meta tags to the site so it can be searched and found easily. We are only getting 6-10 hits to site each day. We hope the newsletter will help increase people's awareness of it.

Conclusions:

Next Public Meetings will be:

June 26: Hatchery update is main topic; also a conversation about status of current activities.

Aug 19: Fish passage plans is main topic; also a conversation about status of current activities.

Action Items	Person Responsible	Deadline
Reserve same room in Centralia for June 26 meeting and start advertising the meeting.	Tom S	ASAP
Contact attendees of initial meeting and invite them to the meeting	Tom	ASAP

Agenda Item: FHMP Update

Presenter: Mark L

Discussion:

Mark explained that the FTC has now agreed upon a schedule that extends through the next 2 years. All were in agreement that Lars Mobrand should support the effort. Lars has asked John Barr (Vice Chair of the HSRG) to step in and take his place for the next three months, as Lars is undergoing some medical treatments. The plan is for Lars to step back in after those three months. In the meantime we are proceeding according to schedule.

Between now and the next meeting FTC members were asked to make a list of issues they want to be sure are addressed in this process.

Conclusions:

FTC members agreed with the selection of John Barr.

Action Items	Person Responsible	Deadline
Put contract in place for John Barr and set up initial meeting	Mark L	July 2
Write out a bulleted list of issues with FHMP that they want to be sure are addressed in the update	FTC members	July 2
Update draft norms for this process to add John Barr	Mark	July 2

Agenda Item: Productivity Issues for LWSH and Spring Chinook **Presenter:** Mark L

Discussion:

Mark feels that discussion of this is premature given the poor returns of the natural origin fish. We are following the FHMP laid out for moving adults upstream. Productivity testing criteria are also linked to the low collection efficiencies at CF.

Brett brought to our attention the number of triggers that are to occur prior to productivity testing taking place. The results of the productivity testing will inform our plan for upstream passage. The way the plan is currently written, we are to have already begun the productivity testing. Essentially there would be no change from what we are currently doing: passing all LWSH NOR to the upper basin; also LWSH HOR excess broodstock are being passed to the upper basin. We need to reach a minimum escapement goal for NOR of 500. It looks like we won't quite make that number. The way the trigger is written, it includes fish passage efficiency at CF dam. Because we are constrained by low numbers / low collection efficiency, there is nothing to conclude at this time. Spring Chinook returns are also very low this year. WDFW recently closed the spring Chinook fishery in the Cowlitz because of lower than expected escapement and uncertainty in attaining hatchery broodstock needs and upper river passage needs.

Conclusions:

We agreed to continue to follow the plan for moving adults upstream, as we work on improving collection efficiency at CF dam.

Action Items	Person Responsible	Deadline
Work to consolidate FHMP pieces regarding productivity testing and write up a summary for FTC review.	Mark, Brett, and Steve V	Aug 6, 2008

Agenda Item:

Presenters: Mark L and Todd Lloyd

Discussion:

Todd will take the request for the possibility of dropping below minimum flow in June off the table. Riffe Lake levels rose by 63 feet last month. Levels are continuing to rise at about a foot each day. The river is expected to stay consistently high over the next week and likely all through June. Todd may have to look at increasing flows going downstream in order to manage all the water coming in.

Conclusions:

We have a lot of water and snow pack. Tacoma will continue to manage the run-off and meet all instream flow requirements. If over 8K cfs, the weekly transport flow would be suspended.

Agenda Item: Past Springtime Monitoring Results and Lessons Learned **Presenter:** Mark L

Discussion:

Mark reported that there are no evaluation reports on past spring flow reduction events. Some data were available in his field notes – cross sectional measurements of side channels. No impact was inferred from what was written in those notes. It would be helpful to be prepared to institute some surveys if we find ourselves in a similar situation like this again. Mark will draft a study plan for this.

Action Items	Person Responsible	Deadline
Give report on 2008 fry stranding monitoring at next meeting.	Mark	July 2, 2008
Put together a draft study plan for springtime flow reduction scenario	Mark	July 2, 2008

Agenda Item: FTC Meeting Schedule

Presenter: Lyn

Discussion:

Members discussed the meeting schedule for the rest of the year. The new USFWS representative has a standing meeting on the first Wednesday of each month.

Action Items	Person Responsible	Deadline
Work on schedule with Tim	Mark	ASAP
Work with Mark on schedule	Lyn	ASAP

Agenda Item: Fish Disease Management Plan

Presenter: Mark L

Discussion:

The final draft is out for review. Mark explained that this is the last new plan that was anticipated as a formal plan to be filed with FERC. WDFW's Larry Durham has been the primary author of this plan. The plan describes what we are doing currently. It anticipates volitional passage of adults into the Tilton at some point in the future and takes into consideration what that might involve. It does not allow for using steelhead for nutrient enhancement (high IHN risk). There is a lot of detail on results from monitoring. It is due to FERC on July 18.

Conclusions:

Input is due by next FTC Meeting.

Action Items	Person Responsible	Deadline
Review and send comments to Mark L by COB July 2, 2008	FTC Members	July 2, 2008

Agenda Item: Annual Upstream Fish Passage Report

Presenter: Mark L

Discussion:

The Tacoma Power fish truck worksheet data will be available on the website and will be appended to this report. All the hauling was done in compliance with the criteria. This report is out for FTC member review. It is due to FERC by July 18. Mark has posted this to the website and notified FTC members.

Mark also posted the latest calculation of credits. WDFW will incorporate it into the revised broodstock document that will be out the first of August.

Conclusions:

Input is due by next FTC Meeting.

Action Items	Person Responsible	Deadline
Review and send comments to Mark L by COB July 2, 2008	FTC Members	July 2, 2008

Meeting Evaluation

Well Done:

- Got out early
- Was helpful to have some notes written up ahead of time
- Happy to have Brian here for one last time
- Great progress on the notes

Do Differently:

- Make sure phone people have handouts
- Smith-Root study plan should have been out earlier than 5 days before they were set to start

Meeting Handouts

- Draft Agenda June 4 FTC meeting
- Draft May 7 Meeting Summary
- Smith-Root CF Dam Fish Guidance System Concept Paper
- 2008 Cowlitz River Project Supplemental Juvenile Salmon Collection Report, May 17-30, 2008

Topics for July 2, 2008 FTC Meeting

- Welcome / Check-In / Review Agenda, Action Items, etc.
- Approval of June 7 Meeting Summary
- FHMP Update Topics List
- HAG Property Purchases Update
- August (or sooner) Public Meeting / PR Plan
- Fish Disease Management Plan
- Update from Downstream Team
- Update on Riffe Lake Refill and Operations
- Set Agenda for Aug 6 Meeting and Evaluate the Meeting

Parking Lot

- Ideas for chum enhancement

FTC Cowlitz Hydroelectric Project
FERC NO. 2016
Fisheries Technical Committee
Final Meeting Summary
July 2, 2008 from 10:00 AM – 2:00 PM
Mayfield, Silver Creek, Washington

Participating Members

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

Other Attendees

Ed Meyer	NMFS
Mike Kohn	LCPUD
Joe First	LCPUD
Lolanda Thomas	LCPUD
Debbie Carlson	BPA
Steve Vigg	WDFW
Wolf Dammers	WDFW
John Serl	WDFW
Julie Henning	WDFW
Charles Morrill	WDFW
Tom Santee	Insight Northwest
Debbie Young	Tacoma Power
Bill Iyall	Tacoma Power
Marc Wicke	Tacoma Power
Tom Martin	Tacoma Power
Lyn Wiltse	PDSA Consulting, Facilitator

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

Aug 5 (Tom S facilitates), Sept 2, Oct 7, Nov 4, Dec 2.

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

Announcements

Reminder that plans with all comments received to date will be filled with FERC the middle of July 2008. These plans include: Disease Management Plan, Annual Side Channel Monitoring Report, and the Annual Upstream Fish Passage Report.

There is a meeting next Tuesday at Tacoma (possibly Mayfield?) at 10:00 to review the plans for Mayfield Downstream Passage improvements.

New Action Items

- All – Send comments to Bill and copy Wolf on plan for Tom Music Bridge alternate release site by end of July.
- Lyn – Add Mike Kohn to distribution list for these meetings.
- Mike – Keep Debbie C informed about these meetings.
- Tom M – Invite Chick and Al to August 5 meeting.

- Steve V – Book Centralia College for Aug. 19 Public Meeting (6:30 – 8:30). Let Steve know ASAP if it's a go.
- Tom S – Announce Aug. 19 Public Meeting at Centralia College ASAP.

Previous Action Items

- Mark and Steve – Work with Greg V. to explore seining opportunities in Riffe and Scanewa and report at our next meeting.
- All – Check Settlement Agreement for reference to “mitigation” as it relates to flow reduction. This pertains to flow reduction below the barrier dam. (Mark wasn't able to find a reference to mitigation.)
- Pat – Track Cowlitz broodstock collection and report at next FTC meeting.
- Pat – Complete review of Draft Fish Disease Management Plan and send to Tacoma by May 19.
- All – Send bulleted list of items / issues you would like to see addressed in the FHMP update to Mark by end of July.
- Mark – By end of July attach descriptions to each of the Tasks in FHMP Update schedule.
- Pat – Get detail of HSRG recommendation on chum.
- Wolf – Report on the definition of low run sizes for summer-run and early winter-run steelhead.

Approval of Meeting Summary

We approved the June 4 meeting summary with minor edits. They will be posted for public review.

Agenda Item: FHMP Update Topics List Presenter: Mark L

Discussion:

Tacoma will compile the lists they received from FTC members and will post them to the FTC website. Tacoma is working on the first deliverable for end of September. October and November are identified for FTC review.

WDFW has invited their staff to comment on this and will be soliciting feedback from constituents as well. They are also looking at the organization of the FHMP and management goals.

Action Items	Person Responsible	Deadline
Post lists to the FTC website.	Mark L	ASAP
Set up meeting with Mark and John Barr to discuss FHMP list.	Pat	By July 31

Agenda Item: Aug. 1, 2008 FERC Filing Presenter: Tom M

Discussion:

We agreed that it made sense to send FERC a request for an extension. The plan would be to file a status report including framework for 2009 plan by Sept. 15. Include details and schedule for final plan that will be informed by July 11 and Aug. 5 meetings. Include the options that are rising to the top. Ideally a draft 2009 plan should be provided to FTC before Aug. 5 so members could be ready to discuss. Note: Need to check with Bill Iyall and Steve Fischer on this.

Action Items	Person Responsible	Deadline
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Talk with Chick and Al about when they expect the work from the Downstream Team to be complete.	Tom M	ASAP
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Agenda Item: Debrief of June 26 Meeting

Presenter: Tom S

Discussion:

The meeting was held at Centralia College. There were 10 members of the public and 12 agency reps. Mark and Chad of Tacoma presented an update on the progress on the salmon hatchery construction project. There was a lot of discussion. This resulted in an article on the hatchery project published in the Chronicle. Interruptions to presentation translated the 20 minute presentation into over an hour. Tom S will work on handling interruptions in a more effective manner at the next meeting which we re-scheduled to occur on August 19 instead of the 14th.

There was also concern about ensuring adequate public input into the revision of the FHMP. There was also concern about fish collection and the 1:1 ratio. "Rock snot" was also a hot topic – a water quality issue.

Friends of the Cowlitz were encouraged to call meetings to facilitate additional discussions.

Action Items	Person Responsible	Deadline
Reschedule August 14 Meeting to the 19 th .	FTC	July 2, 2008
Reserve Centralia College for Aug 19 from 6:30 – 8:30.	Steve V	ASAP

Agenda Item: HAG Property Purchases Update

Presenter: Mark

Discussion:

To date we have purchased 113 acres within the targeted areas. We have identified another 500 acres of properties and are investigating the purchase of these as well.

Conclusions:

Nice to see positive action here!

Agenda Item: August Public Meeting / PR Plan

Presenter: Tom S

Discussion:

We agreed to change the date of the August meeting from the 14th to the 19th. The topic for this meeting will be Downstream passage. The meeting will be at Centralia College from 6:30 to 8:30.

Action Items	Person Responsible	Deadline
Inform the public about the Aug 19 next public meeting.	Tom S	ASAP

Agenda Item: Downstream Team Update

Presenter: Tom M

Discussion:

This team of experts met on May 20, June 1, July 1. FTC-ers have been attending these meetings regularly and are copied on notes from these meetings. Tacoma convened this team based on the

list provided by the FTC. The members have set up as aggressive a schedule as possible for meetings, with homework in between.

We discussed the need to increase the quality of communication with FTC members about possible recommendations coming from this team. Between the June and July meeting all members completed their ratings of the various options. At the July 1 meeting the team reviewed the collective ratings. As a result of this, two options that scored low on biological performance were dropped. There were good discussions at the meetings and everyone has a better understanding of the pros and cons of all the options.

One idea is about how to draw more flow into the collection area. Ed feels like it might be possible for 2009 to modify the existing system by putting a weir in front of the screen, cracking the Tainter gate a few inches to boost the flow, and then create a sort of a trap box. Bill disclosed that he is working on a design/build schedule to investigate trying this out next year.

Another alternative being considered would mean increasing flow into the bypass through the Tainter gate and enlarging the flume entrance (would require more time and effort).

NMFS recommends that Tacoma seriously consider both of these options and implement one of them for 2009. If the Downstream Team comes up with a recommendation to do something else for 2009, NMFS would certainly look at this.

We discussed what kind of deliverable we might see from this team by August 1. We would like to see some prototypes by 2009. Where possible we would work on prototypes while executing various studies (e.g., CFD study, predation study, etc.) and evaluations. Some of these things will be time sensitive and would need to be put in the timeline immediately. We may have a rough idea by August 1, but it is highly unlikely that we will have a complete plan in place by then. We will ideally have the 2009 design complete by mid September in order to deploy it in 2009.

The next meeting will be July 11. The FTC is carefully monitoring the progress of this team and will utilize their findings in determining how to proceed. We want to focus on what we can do in 2009 to improve fish passage survival.

Agenda Item: Productivity Issues for LWSH and Spring Chinook **Presenter:** Mark
Discussion:

The teamlet still needs to meet.

Action Items	Person Responsible	Deadline
Mark will follow up with Steve V to set the meeting.	Mark L	July 2

Agenda Item: Update on Riffe Lake Refill and Ops Presenter: Mark L

Discussion:

The reservoir is within 5 feet of full and we are at maximum generation at Mayfield. Inflows are still really high at Cowlitz Falls.

Conclusions:

Still trying to make more room for the melting snow pack. Inflows will remain high. It will be a while before the flows are reduced in the Lower Cowlitz River.

Agenda Item: Supplemental Collection

Presenter: Marc W

Discussion:

Marc distributed the latest report that summarizes supplemental activities. They have been able to get the included plane trap back in place. They had to pull it again last week due to more high flows. It is still out now. They will re-deploy it as flows drop back down. We now have two inclined plane traps we can operate 24 /7 in tandem as soon as flows drop down below 10 kcfs. Beach seining activities continue. Sometimes they are successful. Other times they are not. We will experiment with different times - and locations. We are currently looking at Swofford Pond in the Mossy Rock Park area.

Marc also reported that the Merwin Trap catches have improved markedly. The plan calls for moving this trap to Lake Scanewa. Marc sent out an email earlier this week explaining that due to the high catch rate, they will leave the trap in place until lower flows in Lake Scanewa. As the water temperature rises there should be less success and that might also signal time to move the trap.

We agreed that it made sense to pull out the minnow traps as they haven't been successful.

We discussed problems with transport protocols which have been updated to incorporate lessons learned to prevent such problems in the future.

We will be looking also at removing the debris barrier as soon as flows come down. Looks like Chinook run will be significantly delayed this year with all the high flows.

Electro-shocking: Bill reported that Smith-Root has come up with an alternative study plan. Bill will set up another conference call with the teamlet to discuss what they are now proposing after studying the Didson camera footage. They have also reviewed John's collection reports.

Action Items	Person Responsible	Deadline
See if success in seining varies based on various times of the day.	Marc	ASAP
Include delayed mortality data in the bi-weekly report.	Marc	Aug 4
Work with John S. about configuration and possibly longer leads when moving the Merwin Traps.	Marc	
Set up another Smith-Root teamlet conference call.	Bill I	ASAP

Agenda Item: Alternate Release Site

Presenter: Bill I

Discussion:

Bill reported we hope to have the Tom Music site operational by Sept. 1. All are encouraged to offer feedback. The plan is posted in the FTC website.

Meeting Evaluation

Well Done:

- New format for minutes
- Wireless projection
- 10:00 start was appreciated

Do Differently:

- Lots of time spent on re-working the agenda
- Missed George, Brad, and Tim
- Miscommunication between meetings
- Tom S will facilitate
- Chick and/or AI to attend?

Meeting Handouts

- Draft June 4 FTC Meeting Summary
- Updated FTC Member Contact Sheet
- Summary of Downstream Team Initial Biological Ranking Results
- Summary of Supplemental Collection Data: June 14 – June 27, 2008

Topics for August 5, 2008 FTC Meeting (Tom S facilitates)

- | | |
|---------------|---|
| 9:00 – 9:20 | Welcome / Check-In / Review Agenda, Action Items, etc. |
| 9:20 – 9:30 | Approval of July 2 Meeting Summary |
| 9:20 – 11:00 | Review Downstream Team Work-to-Date
Q&A with Team Members |
| 11:00 – 11:30 | Poll of FTC Members:
What is your reaction?
What do you want to see more of? Less of? |
| 11:30 – 11:50 | Our Usual Working Lunch |
| 11:50 – 1:45 | Plans for 2009 – What is Time Sensitive? |
| 1:45 – 2:30 | Plan for August 19 Public Meeting |
| 2:30 – 2:45 | Evaluate Meeting and Set Agenda for Sept. 2 Meeting |

Parking Lot

- Ideas for chum enhancement

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

**Fisheries Technical Committee
Final Meeting Summary**

August 5, 2008 from 9:00 AM – 3:00 PM
Mayfield, Silver Creek, Washington

Participating Members

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

Other Attendees

Ed Meyer	NMFS
Mike Kohn	LCPUD
Joe First	LCPUD
Steve Vigg	WDFW
Wolf Dammers	WDFW
John Serl	WDFW
Charles Morrill	WDFW
Tom Santee	Insight Northwest – Substitute Facilitator
Steve Fischer	Tacoma Power
Bill Iyall	Tacoma Power
Marc Wicke	Tacoma Power
Al Giorgi	BioAnalysts
Chick Sweeny	ENSR

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

Sept 2, Oct 7, Nov 4, Dec 2.

(The Sept 2 meeting may be rescheduled to Sept. 9 to enable attendance by NMFS representative)

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

Announcements

Tom Santee is today's facilitator because Lyn Wiltse is vacationing.

Tim Romanski is welcomed to his first FTC meeting.

Tom Martin is unable to attend because he is with his wife who is recovering from major surgery.

Ed said he wants to discuss with Steve Fairchild of Tacoma Power about the planned modifications to the Mayfield Counting House to explore some alternatives.

Neither Michelle nor Ed are available to attend the Sept. 2 FTC meeting. Michelle said Ed can attend if the meeting is rescheduled for Sept. 9. Mark L is to check with Lyn as to whether she is available if the FTC meeting is rescheduled. If not, the meeting date will remain as Sept. 2.

Approval of Meeting Summary

We approved the July 2 meeting summary with no edits. Mark L will post for public review.

Agenda Item: Report from the Downstream Fish Passage Team Presenters: Al Giorgi and Chick Sweeny

Chick and Al summarized the work to date by the Downstream Fish Passage Team and presented a list of recommendations for consideration by the FTC.

Chick said the 35 alternatives resulting from the fish passage workshop were first narrowed to 16 and then to nine. The team rated those nine which resulted in five options that are the most promising for further development. Those five are:

- Collector in Lake Scanewa
- Collector in Riffe Lake
- Riverine collector upstream from Riffe Lake
- Surface flow outlet at Cowlitz Falls
- Existing system enhancements

They explained the process used by the team for rating the options for biological and technical criteria. Cost was not an explicit criterion.

An example development timeline was presented to estimate the steps and timeframes needed to complete one of the floating surface collector alternatives. Chick said he believed the timeline was ambitious especially at the front end. Estimated project completion was shown as June 2013.

Considerable discussion followed about what might expedite or delay an actual project compared with the example timeline. Of particular concern were possible delays during early stages possibly due to awaiting study results or taking on multiple concurrent projects. However, concern also was expressed about being hasty in making conclusions about locating and designing facilities only to learn later that some assumptions were proven inaccurate by study results.

The team also prepared a list of proposed 2009 studies in four categories as follows:

- Prototype Studies and Interim Measures (focused on existing facility improvements)
 - Move debris barriers/BGS (behavioral guidance system)
 - Induction slot collection flow augmentation up to 2x existing flow
 - Weir box on non-screened bay tainter gate with screen and siphon
 - Weir at fish screen entrance (with flow augmentation using tainter gate)
 - Flap gate test of SFO concept (with entrance weir box and screen)
 - Re-engineer sluice gate to allow more low level flow release (low probability for implementation – investigation only)
- Prototype Studies and Interim Measures (focused elsewhere)
 - Merwin trap/guide net test to prototype FSC exclusion net debris and other issues in Lake Scanewa or Riffe Lake
 - Exclusionary nets upstream from CF with floating HDPE pipe siphon to flume system (2010)
- Biological Studies

- Acoustic tag study of travel time/survival, spatial/temporal distribution and movement in Lake Scanewa and Riffe Lake
- Predator/prey interaction – phased abundance/distribution/consumption rate studies
- Disease/parasites – Necropsies of fish collected at CF versus Merwin trap at Mossyrock Dam.
- Physical Characterization Studies
 - Fixed temperature profile array at deep point in reservoir with mobile casts at several locations in Riffe Lake

Chick explained that the team needs to do more refinement of the proposed studies list. Brett asked that previously planned supplemental collection measures for 2009 be noted along with an evaluation component.

Pat encouraged the team to consider how the studies can be conducted in a way that also helps improve fish collection in the interim.

Actions

FTC members present concurred to endorse for recommendation to Tacoma Power the team's recommendations for 2009 prototypes and studies subject to further refinement by the team and for initiating conceptual design report for the five highest-ranked options described above.

Pat will set up a conference call with Michelle, Ed, Brett and Mark L to discuss the upper basin 1:1 NOR:HOR adult coho ratio for this fall. Brett asked for advance written information regarding any recommendation WDFW may be suggesting that is different from the current prior to the conference call. The result of this discussion will be reported at the September FTC meeting.

Tacoma Power (Steve F) is asked to provide at the September FTC meeting a draft of the downstream fish management plan scheduled to be submitted to FERC September 15.

Steve F will initiate preparation of RFPs to retain contractors where needed to for recommended studies and conceptual design.

Agenda Item: Aug. 19 Public Meeting

Presenter: Tom S

Discussion:

Tom said a public meeting to report the progress on the downstream fish passage plans is set for 6:30-8:30 p.m. Tuesday, Aug. 19 in Washington Hall at Centralia College. The meeting is announced on the cowlitzfish.net Web site. Tom also will place advertising in The Chronicle announcing the meeting.

Bill Iyall volunteered to give the presentation at the public meeting. Tom said he will assist by making introductions, writing questions on flip charts and facilitating the question and answer period following Bill's presentation. Mark will also be available to speak and to answer questions. All FTC members are encouraged to attend.

Meeting Handouts

- Agenda, August 5, 2008 FTC meeting
- Draft July 2, 2008 FTC meeting summary
- Downstream Team presentation to Cowlitz FTC, 8/5/08

Cowlitz Fish Passage Alternatives Evaluation/Biological Performance
Riffe Lake floating surface collector development timeline

Topics for September 2008 FTC Meeting

Welcome / Check-In / Review Agenda, Action Items, etc.

Approval of Aug 5 Meeting Summary

Downstream Fish Passage update

 Follow-up on proposed 2009 studies

 Draft Tacoma Power plan for submission to FERC

 Recap from Aug. 19 public meeting

 Next steps

Report on WDF&W conference call regarding 1:1 NOR:HOR coho transport

Supplemental Collection update

Evaluate Meeting and Set Agenda for Oct. 7 Meeting

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

**Fisheries Technical Committee
Final Meeting Summary**

September 9, 2008 from 10:15 AM – 2:30 PM
Mayfield Office, Silver Creek, Washington

Members Present

Mark LaRiviere	Tacoma Power
Brett Swift	American Rivers
Pat Frazier	WDFW
Tim Romanksi	USFWS
Brad Caldwell	WDOE

Other Attendees

Ed Meyer	NMFS
Mike Kohn	LCPUD/BPA
Steve Vigg	WDFW
Wolf Dammers	WDFW
John Serl	WDFW
Charles Morrill	WDFW
Tom Santee	Insight Northwest – Substitute Facilitator
Steve Fischer	Tacoma Power
Bill Iyall	Tacoma Power
Tom Martin	Tacoma Power
Debbie Carlson	BPA
Julie Henning	WDFW
Sean Murphy	Congressman Baird's Staff

Remaining 2008 FTC Meeting Dates (first TUESDAY of each month!)

Oct 7, Nov 4, Dec 2.

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

Announcements

Tom Santee is today's facilitator because Lyn Wiltse is not available for the rescheduled meeting date.

Sean Murphy from Congressman Baird's staff is attending as an observer.

Pat asked to re-title the last agenda item as "WDFW Coho Reintroduction Strategy."

The October 7 meeting will return to its regular 9 a.m. start time.

Approval of Meeting Summary

We approved the August 5 meeting summary with no edits. Mark will post for public review.

Agenda Item: Downstream Fish Passage Review and Discussion

Presenters: Bill, Steve F, Tom M, Mark

Bill handed out a draft of the downstream fish passage plan to be submitted to FERC on September 15, 2008; a timeline for executing the plan that is updated from the one distributed at the August 5 FTC meeting; a technical memorandum from MWH describing 2009 interim fish passage measures; and a copy of the FERC August 17 order granting extension of time to March 1, 2009 for submitting Tacoma Power's downstream fish passage/collection facilities effectiveness report.

Bill recapped the progress made since the previous FTC meeting on the Downstream Team (DST) and FTC's recommended options. He said consulting contracts are being updated so there will be no delay in carrying out pre-design work. Steve F said there will be a competitive bid process for final design work but shouldn't cause any schedule delay.

The revised timeline focuses on pre-design tasks. It anticipates FTC review of 10% project tasks on Oct. 7, 2008, 30% tasks on Nov. 25, 2008, 60% tasks on Feb. 3, 2009, alternatives rating meeting on July 7, 2009, 90% tasks on Sept. 8, 2009 and preliminary design project completion on Nov. 19, 2009. In response to questions Bill said there will be conceptual designs – not construction designs – until after a final option is selected.

Bill said the plan described in the draft report to FERC includes all the FTC recommendations except that only one of the three weir options proposed by the downstream fish passage team. The three weir options are overlapping so only one is needed. Bill and Steve discussed the Sept. 8 memorandum from the consulting firm MWH which describes a gate slot diverter and a weir box at Cowlitz Falls Dam. Steve F said that Tacoma Power is not satisfied with some of the MWH suggested criteria for the weir box and this will be reviewed by the downstream fish passage team. Ed also wants more discussion of the gate-slot diverter and weir box at the next team meeting. Ed said the 200 cfs at the weir box seems too high velocity.

Mike said this is a good time for Tacoma Power to meet with Lewis PUD engineers to review items that relate to Cowlitz Falls Dam. Steve F agreed.

Brett asked that the plan submitted to FERC be expanded to include all the recommended 2009 measures and an explanation of why the specific weir option was chosen over the others. There also was discussion about need for a predator prey study. Mark L said this was not needed until a final option was chosen because the results depend on the location. It was agreed that a literature review relating to predator prey will be useful prior to selection of a final option.

Tom M asked FTC members to inform him of any questions they have or issues of concern with the plan being submitted to FERC. He said he will send out a revision by

Thursday. If there are unresolved matters he said Tacoma Power prefers that people contact him so additional submissions to FERC on the issue can be jointly signed.

It was decided that progress reports on the downstream passage plan shall be a standing FTC agenda item at monthly meetings.

Actions

- Tom Martin sends a revised draft plan to FTC by Thursday, Sept. 11.
- FTC members contact Tom M as soon as possible about any concerns or additions.
- Steve F and Mike make arrangements for meeting with LCPUD engineers
- Downstream fish passage team reviews MWH recommendations

Agenda Item: Report on Aug. 19 Public Meeting Presenters: Tom S, Mark, Pat

Discussion:

Tom S said the public meeting had essentially the same attendees as the previous meeting even though the meeting was promoted through display ads in four editions of *The Chronicle* newspaper. Buddy Rose who reports for the *East County Journal* attended and wrote an informative article for that newspaper.

Mark and Pat were the FTC members present. Bill Iyall made the presentation. There was some difficulty accessing the projection equipment so the meeting start time was delayed.

Bob Reid and Tom S asked most of the questions at the meeting. Bob expressed disbelief that a surface collector will work due to debris problems.

Because of the small turnout Pat asked if it may be best to return to the idea of a roundtable discussion rather than a presentation-style meeting. Other locations or times may be appropriate as well. Tom S said he could call some of the public who regularly attends and ask what they would prefer. The next public meeting will be discussed at the Oct. 7 FTC meeting

Actions

- Tom S calls some of those attending the public meetings and prepares a recommendation for the next public meeting for discussion at the Oct. 7 FTC meeting.

Agenda Item: Supplemental Collection Update

Presenter: Mark

Discussion:

Mark handed out the supplemental juvenile salmon collection summary report for Aug. 23- Sept. 6, 2008. The report states that the Merwin traps, inclined plane trap and the Natural Solutions trap were fishing during the period. The minnow traps were

discontinued for the remainder of the season due to low catches and to allow for more beach seining effort.

Marc said the inclined plane traps need to be removed soon and the Merwin traps will continue fishing until Sept. 24.

Through August the supplemental collection smolt totals are; Merwin traps 6,618 fish, the incline plane trap 6,087, beach seining 711, and none collected using the minnow traps.

Agenda Item: WDFW Coho Reintroduction Strategy
Discussion:

Presenter: Pat

Pat handed out "WDFW's Generalize Approach for Reintroduction of Target Anadromous Salmonid Species into the Upper Cowlitz River Basin." Pat said the existing strategy for rebuilding wild coho stocks in the upper Cowlitz is inadequate due to the low-percentage downstream fish collection. He said WDFW believes the numbers of adult spawners needs to be greater than is possible under the current method. His agency also is very concerned about the economic hardship to local communities due to the greatly lessened sport fishing opportunity resulting from the current method.

Pat focused most of his discussion on the new WDFW approach on its potential biological performance. He said his agency believes that more hatchery stock is needed upriver than under the current management method until such time as downstream fish collection is achieving high performance. Offsetting a lessened genetic quality from hatchery stock is greatly increasing intergrated hatchery stock production.

Pat said implementing this new approach is within WDFW's authority but that he wants the FTC to concur with the approach.

Initial response by some FTC members focused on not being provided this information in advance so there is no opportunity for review and analysis. Pat said the approach was finalized the previous week and he was working this morning getting the information together for the FTC. Brett said American Rivers cannot provide feedback today on something they had no opportunity to review.

Several questions were asked about how it technically changes current hatchery operations including tagging, how it is consistent with the ESA recovery plan, how it melds with what the HSRG summarized a year ago and how WDFW arrived at its calculations. Pat encouraged FTC members to email him with their questions so he can respond with more details.

It was agreed to continue the discussion of this at the next FTC meeting after WDFW provides more detail.

Actions

- FTC members email Pat with specific questions
 - Pat provides details and responses well in advance of the next meeting
-

Meeting Handouts

Agenda, September 9, 2008 FTC meeting

Draft August 5, 2008 FTC meeting summary

Signed attendance list, 9/9/08 Cowlitz FTC meeting

Downstream Team – draft timelines

MWH Technical Memo, 9/8/2008

Draft SA License Article 1 plan for 2009 Fish Collection Improvements

Supplemental Collection Report – August 23 to September 6, 2008

WDFW's Re-evaluation of upper Cowlitz River basin coho management

Draft WDFW paper – NOR:HOR releases ratios, Fall 2007 - Vigg, 9/4/2008

WDFW's generalized approach for re-introduction of salmonids into upper Cowlitz River

Topics for Oct. 7 2008 FTC Meeting

Welcome / Check-In / Review Agenda, Action Items, etc.

Approval of Sept. 9 Meeting Summary

Downstream Fish Passage update (This is to be a monthly agenda item)

Plan for next public meeting (Tom S)

Report on satellite rearing facilities

Supplemental collection update

Report on FHMP update process

Discussion of details regarding WDFW Coho Reintroduction Plan

Update on Cispus adult release chute

Evaluate Meeting and Set Agenda for Nov 4 Meeting

Meeting Evaluation

Documents weren't provided ahead of meeting

Facilitator cut off discussion too early at times; meeting felt rushed

We keep returning to issues without resolution; lack of collaboration

Subgroups are where collaboration is succeeding; maybe need more

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

**Fisheries Technical Committee
Final Meeting Summary**

October 7, 2008 from 9:15 AM – 2:00 PM
Mayfield office, Silver Creek, Washington

Members Present

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

Other Attendees

Ed Meyer	NMFS
Mike Kohn	LCPUD/BPA
Joe First	LCPUD
Steve Vigg	WDFW
John Serl	WDFW
Julie Henning	WDFW
Tom Santee	Insight Northwest
Steve Fischer	Tacoma Power
Bill Iyall	Tacoma Power
Tom Martin	Tacoma Power
Al Giorgi	BioAnalysts
Chick Sweeney	ENSR
Dennis Dorratcague	MWH Global
Lyn Wiltse	PDSA Consulting

Future FTC Meeting Dates (first Tuesday of each month)

2008: Nov 4; Dec 2;

2009: Jan 6; Feb 3; Mar 3; Apr 7, May 5, Jun 2, Jul 7, Aug 4, Sep 1, Oct 6, Nov 3; Dec 1

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

Announcements

Brett and Mark announced that the Cispus River has been nominated and determined to be eligible for designation as a Wild and Scenic River. The qualifying reach is from the source to the backwater of CF Dam. The initial adult release site development proposal for the Tom Music Bridge may not fit with the Outstanding Remarkable Values (ORVs).

Action: Mark will present latest design ideas to the USFS to see if it is compatible with the ORVs for the Cispus.

Approval of Meeting Summary

We approved the September 9 meeting summary with no edits (nice job Tom S!). Mark will post for public review.

Agenda Item: Downstream Fish Passage Update Presenters: Chick Sweeney, Al Giorgi, Dennis Dorratcague

Discussion

Chick Sweeney walked us through the recommendations that the FTC agreed to since the workshop. The top 5 options were evaluated from a conceptual design standpoint.

1. Collector in Lake Scanewa
2. Collector in Riffe Lake
3. Riverine Collector Upstream from Riffe Lake
4. Enhancement of existing system at CFD
5. Surface Flow Outlet at CFD

Prototype studies recommended:

- Move debris barrier (this is happening)
- Induction slot collection flow augmentation up to 2 X existing flow (is being implemented)
- Weir box on non-screened bay tainter gate with screen and siphon
- Weir at fish screen entrance (with flow augmentation using tainter gate) – could not be implemented in 2009
- Flap gate test of SFO Concept (at odds with weir box – thus not moving forward with this)
- Re-engineer sluice gate to allow more low level flow release (not moving forward due to low probability for implementation – investigation only)

Merwin Traps will go in as part of the supplemental collection. We might be able to configure them to help us predict how we might use a FSC in the future.

Exclusionary nets are slated for study in 2010.

Biological studies

- Acoustic tags study
- Predator/prey study
- Disease/ parasites study in Riffe Lake

Physical characterization study

- Fixed temp profile array at deep point in reservoir with mobile casts at several locations on Riffe Lake

Chick reminded us that two files have been sent out for FTC review: Schedule and 10% Concept Report.

The concept report development has been broken down in terms of percents of completion. This will facilitate getting FTC comments in a timely manner. Al Giorgi is looking at biological input. Dennis D is doing the design work at the CF project. Dana Postelwaite from R2 Resource Consultants is putting together design concepts for those alternatives not at CF Dam. Chick is acting as overall coordinator of these activities, and editor in chief of the report.

Chick explained that they prepared a detailed Table of Contents for the Report. They also developed design criteria to be used across all alternatives being evaluated. They also drafted an outline of the appendices for the report. This is all undergoing FTC review (10% submittal).

Next step will be the 30% submittal. This will include writing up the intro to the report and preparing a method for comparing and ranking the various alternatives. A couple of viable alternatives will be carried forward for further development. Design site and location maps will be developed for each. There will be another review meeting.

Next: 60% design. Costs estimates will be prepared along with draft construction schedules resulting in a submittal for the 5 alternatives so they can be reviewed and a decision can be made on a technical and biological basis as to which should be carried forward. This will be reviewed from a technical standpoint with the FTC. There will also be a review meeting with the FTC to perform a biological review of the alternatives.

2009 Prototype studies: Study plans are under development as is design of the prototypes. LCPUD needs to review and approve these. This needs to happen before we move to 60%. The 60% submittal will provide the basis for the report that Tacoma submits to FERC in March of 2009. It won't be final yet at that point. We will have done the technical evaluation already when the submittal is made to FERC.

In early October of 2009 we hope to have results of biological and physical studies available.

Chosen designs will be advanced to a 90% review. They will be reviewed with the FTC and then taken to 100%.

Each review period is 15 working days in length. There was concern that this might not be sufficient time. We are working under the deadline of needing to make the submittal to FERC by early March.

There was also a question about whether there was a limit of two alternatives that would be carried forward. If the analysis criteria call for three alternatives to be carried forward, then we would do that.

To get to 100% completion, we are end of 2009 / beginning of 2010. Then there has to be a decision on implementing something and contracts put in place for a detailed design (design, permitting, easements, etc.). We are aiming to have this project

operational in 2013. This is comparable to design and development work done on similar projects.

Chick walked us through an outline of the contents of the Conceptual Design Report. There will be a functional description for each of the alternatives. It will describe the physical features and a cost estimate and implementation schedule for each.

Dennis walked through the plans for the testing of enhancement of existing system to see if additional flow (double the existing) will attract more fish to the screen entrance. We would be exceeding current criteria at the screen of 0.4 fps during the test. By the end of 2009 we should know if this is effective based on biological criteria. Marc Wicke is working on these plans which should be out by next week.

The structure to be tested would be a frame that runs down in the gate slot with an air foil on it. The flow would come in and go around this structure. It can be raised and lowered to a certain extent. We can also make porosity adjustments. There are no working parts on this structure. If it proves successful, it would become a permanent structure.

He also reviewed with us the plan for testing the weir box to test the surface flow outlet. Here flow would go over the weir, downward and they be siphoned through a bypass. The aim is to get to 200 cfs over the weir and 140 cfs through the screen. The approach velocity would be 0.6fps. We want to make this flexible to accommodate a variety of weir shapes. We will install this with a barge and get it into position. From there it would be suspended and held into position from a beam.

What would the reference condition for this be? We may want a water level sensor under the screens along with a brake valve so we can shut it off fairly quickly. If the screen plugs we need to make sure it won't collapse. Alternatively, we could put a vacuum breaking valve on there. In our schedule we will be starting the structural design on this later this week. It would be good to install a manual crowder in the box. Access would be a consideration.

The plan is to have both of these structures installed and operational April 15 of 2009 so the biological plan can be implemented. Final designs will be in December.

Actions

- All – Submit comments to Tom Martin and Chick Sweeney (and copy Lisa at Ldill@cityoftacoma.org) by October 20.

Agenda Item: FTC Response to WDFW 9-9-08 Re-Evaluation of Coho Management in Upper Cowlitz River Basis Presenters: Pat Discussion

Pat reported that WDFW plans to get a formal response back this week to the letter submitted to them from Tacoma and American Rivers. It will be mailed to all FTC

members. Pat explained that the WDFW plan presented at the last FTC meeting still stands. WDFW conducted evaluations for 20%, 30% and 40% FCE rates. They have already begun to implement the plan presented at the September FTC meeting. The letter from Tacoma and American Rivers asked WDFW to continue upholding the 1:1 ratio as the new plan was not consistent with the FHMP and what was recommended by the HSRG and agreed to by the FTC for last season.

There are strong HOR coho returns this year. Mark said Tacoma has taken a couple of thousand HORs upstream, but very few NORs (the NOR run is later in the season. We are expecting 3,000-5,000 NORs). Until we get the returns from the integrated program, the WDFW plan calls for 16,000 HOR being taken upstream.

WDFW sees this WDFW plan as a form of adaptive management. They looked at the goal of getting more NORs into the upper basin when they formulated this plan. The WDFW plan would more than double the number of NOR fish in the upper basin. They believe the evaluation should go forward to test the success of this plan.

WDFW's 3 year plan is 16,000 HORs upstream. WDFW plans to stick with this new plan for the next 3 years. At that point only NORs or adult returns from the new integrated program will be taken upstream.

What if an interim measure dramatically increases the FCE? The plan would be modified only when those outmigrants return as adults. Pat sees this fish management plan as consistent with plans to dramatically improve FPS rates in 2013.

Impact on FHMP? All agree there is value and coming to consensus as a team on the content of the FHMP. FERC says that if we can't reach consensus we invoke the Dispute Resolution Process. Pat would like to see the FHMP update be less prescriptive in how we get there but more prescriptive on what we get. Mark believes that the FHMP is very clear about goals. There was consensus that the current FHMP is a large and complex document. We hope to simplify it through the update process. How does the WDFW plan fit with the draft FHMP updates and what is the role of FTC? Pat will address this in the document he is preparing along with supporting data and rationale.

Actions

- Julie will summarize creel data and bring it with her to our November meeting.
 - Pat will address the question of how this fits with the FHMP and also the role of the FTC in the letter he is drafting – to be sent to all FTC members by Oct. 17.
 - Pat will ensure that attachments to the letter include supporting data (including sources of the data) and rationale for the models. He will clearly define all the rationale that support the new WDFW Plan.
-

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

In the last two years we have hosted public meetings in November (Morton and Packwood) re the fish transportation issue. Other meetings have been in the Centralia area and have been sparsely attended. Tom will be following up with these people to learn how useful they are finding the information shared at these meetings.

Tom recommends having the next meeting December 2nd following the FTC meeting (and after the 30% fish passage alternatives design meeting). We could have this in Morton, Mossyrock or Centralia. The downstream fish passage plans, hatchery construction update, FHMP process update (draft of the document will be out for public review March 6), and what should be done about future public meetings could be on the agenda items.

By holding this the same day at the FTC meeting, it would ensure we had broader participation by FTC members. This has been requested by members of the public. The next public meeting could include discussion of the FHMP schedule. We might consider Timberland library meeting room or a smaller meeting room at the same facility where we met with them in Morton. NMFS currently has a travel restriction that makes it difficult for them to travel for more than 12 hours in a single day. We will look at holding an abbreviated FTC meeting that morning to help fit within this schedule.

We want to do everything possible to ensure that we are presenting information that matters to the public and that time is well spent. Maybe we could use an open house format that would allow for break out session according to interest in specific topic areas. Maybe we could order pizza?

Actions

Tom will check with public about Dec. 2 afternoon meeting and review these potential topics and locations with them and share their input with us at our November meeting.

Agenda Item: Report on Satellite Rearing Facilities and Mayfield downstream passage construction

Presenter: Steve F

Discussion

At Hall Creek satellite rearing facility (Packwood), Steve reported they cleaned out the intake structure, pulled the screen off and are in the midst of building a new intake structure that will draw in water from beneath. They have also ordered new submersible pumps. The electrician is working on developing new breakers for the pumps. There are some mountain beaver complications. This will be used like an acclimation site. Stay tuned.

Mayfield contractor is installing stainless steel pipe today. Ed warned them to ensure internal joints are smooth. Next week (or the week after) they will be doing a water shut down to pull in the new liner pipe (HDPE liner). Secondary separator screens are being fabricated by Tacoma in their shop. Contracting for the counting house will be bid in December or January. After the contracts are awarded, construction should begin within a couple of weeks. A six month construction period is anticipated.

Agenda Item: FHMP Draft Update Presenter: Mark

Discussion

Mark reviewed the process for the FHMP update. We are following the agreed-upon timeline and norms. The public has asked for a chance to perform a second review before the plan is submitted to FERC. We will see if we can do this without adversely affecting the schedule.

We reviewed the process norms (we agreed to these earlier this year) for this update.

- Schedule all meetings, times and locations around Lars' (John Barr) schedule.
- FTC members and Tacoma follow the approved FHMP update schedule.
- All submittals should be addressed to Tacoma.
- All written comments to be submitted on time (per the update schedule).
- Email, letter or fax submissions acceptable.
- Tacoma (or Lars/John Barr) will respond to all comments in writing following the update schedule. Comment noted will not be used as a response.
- Tacoma (or a contractor) will implement a tracking system available to all FTC members for tracking and recording all comments and responses to the plan, and to changes to the plan.
- Lars (John Barr) will sequence the sections of the plans to be updated after reviewing Tacoma and FTC scoping comments/issues.

The draft of the FHMP update was posted on the FTC website last week. John Barr will walk us through the draft and explain the format and thinking behind this draft at the November 4th FTC meeting. They will also review with us their recommendations. Many of the recommendations are consistent with the current FHMP. Some are new proposals (e.g., innovative rearing on p. 38). Note: there may not be sufficient detail provided to new recommendations to allow FTC members to follow the rationale.

Questions: Will this be a stand-alone document? An addendum to the existing plan?

Actions

- Mark – Send FTC members John and Kevin's vision for this document (see questions in paragraph immediately above) by October 15.
- All FTC members will review the schedule to see if we can accommodate the public's request for a second review of the FHMP before it is sent to FERC.
- All FTC members will review the draft FHMP, paying careful attending to proposed recommendations and be ready to discuss at our November FTC Meeting.

Agenda Item: Next Agenda

Presenter: Mark

Discussion

We brainstormed topics for our next meeting

Actions

- Marc Wicke will see if USGS can participate by phone if they won't be present for discussion of biological evaluation.
 - Mark will check with Mike Kohn to see if he can give a presentation on LCPUD projects.
-

Meeting Handouts

- Agenda, October 7, 2008 FTC meeting
- Draft September 9, 2008 FTC meeting summary
- Letter from LCPUD to FERC dated September 29, 2008

Topics for Nov. 4, 2008 FTC Meeting

Welcome / Check-In / Review Agenda, Action Items, etc. (9:00 – 9:20)

Approval of Oct. 8 Meeting Summary including 2009 Dates (9:20 – 9:30)

Report on FHMP update process (9:30 – noon)

- Discussion of details regarding WDFW Coho Reintroduction Plan

Working Lunch (12:00 – 12:30)

Supplemental Collection Update (12:30 – 12:50)

Downstream Fish Passage Update (12:50 – 1:25)

- Include review of Biological Study Plans

Plan for next public meeting (Tom S) (1:25 - 1:40)

Update on Cispus adult release chute (1:40 – 1:50)

Evaluate Meeting and Set Agenda for Dec 2 Meeting (1:50 – 2:00)

Meeting Evaluation

- Lost FTC member to “tour” right after lunch
- Got started 15 minutes late
- Got out by 2:00
- Good presentation on fish passage
- Lunch break was late
- Laughter was good
- Missed Brad and George

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

**Fisheries Technical Committee
Final Meeting Summary**

November 4, 2008 from 9:00 AM – 3:00 PM
Mayfield office, Silver Creek, Washington

Members Present

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

Other Attendees

Ed Meyer	NMFS
Rich Turner	NMFS
Mike Kohn	LCPUD/BPA
Joe First	LCPUD
Debbie Carlson	BPA
Wolf Dammers	WDFW
John Serl	WDFW
Julie Henning	WDFW
Andy Appleby	WDFW, HSRG
John Barr	John Barr Consulting, HSRG
Tom Santee	Insight Northwest
Steve Fischer	Tacoma Power
Bill Iyall	Tacoma Power
Tom Martin	Tacoma Power
Marc Wicke	Tacoma Power
Debbie Young	Tacoma Power
Chris Sergeant	Tacoma Power
Shawn DeCew	Tacoma Power
Lyn Wiltse	PDSA Consulting

Future FTC Meeting Dates (first Tuesday of each month)

2008: Dec 2 **starting at 9:30 AM** (Tom S facilitating);

2009: Jan 6; Feb 3; Mar 3; Apr 7, May 5, Jun 2, Jul 7, Aug 4, Sep 1, Oct 6, Nov 3; Dec 1

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

Approval of Meeting Summary

We approved the October 8 meeting summary with edits as suggested by Brett, John, Mark, and Michelle. Mark will post for public review.

Creel Data Summary

Julie walked us through a summary table, using a similar format as last year to capture the creel data from the upper Cowlitz River coho fishery. The surveys were stratified according to transport and non-transport days. Surveys are more extensive this year than last, collecting data from morning until dark, Wednesday through Sunday. At Packwood, they saw harvest rates for the last few weeks of 20% – 36%. On the Cispus River they saw harvest rates between 5% and 10%. Lake Scanewa survey data is not included in this report.

Action

- Julie will update the table to include the latest data from Lake Scanewa for the December meeting. We also want to look at how these data square with punch card data.
- Mark will talk with Pat about continuing funding these creel surveys.

Agenda Item: WDFW Coho Reintroduction Plan Discussion

Presenters: Andy Appleby and John Barr

Andy and John (both members of the HSRG) reviewed the AHA Analyzer model and some of the assumptions in that model. The goal of proposing a 500,000 integrated smolt program was to generate the appropriate number of integrated hatchery fish for the upper watershed and move the spawning population towards becoming more adapted to the natural environment.

Andy reviewed the AHA Analyzer calculations over an 80 generation period using the data set and assumptions in the model. An 80% spawning effectiveness (HOR vs. NOR) was used as the HSRG believes the longer a fish remains in a hatchery the less able it is to function in the wild.

The model runs showed that a collection efficiency of 20% would not support a sustainable natural population in upper Cowlitz River over an 80 generation period. The HSRG agrees that harvest concerns need to be subordinate to conservation. Subsequently they crafted the 1,000,000 integrated smolt program, and modeled both the 30% and 40% FCE levels.

One approach is for a specific program tailored to the FCE and evaluating the productivity of the population. WDFW recommends that we be prepared to adjust the program as the input parameters change (i.e., adaptive management). Andy and John suggest using a 3 or 5 year rolling average of FCE. If we do work that is anticipated to have a significant effect, then we would look at the new FCE number right away.

It was acknowledged that the approach WDFW put together low-balls the FCE. WDFW's approach has a clear goal to put more fish in the upper basin for harvest, however, the Settlement Agreement prioritizes the recovery of the populations above harvest. According to some, a PNI of .67 should improve both fitness and productivity. The WDFW program, according to the model, would also result (though not quite as

effectively) in a rebound with a PNI .58. There is very little difference in what happens to the population in the short term. Getting to a PNI of .5 is a critical factor.

Andy suggested we state what we are trying to accomplish. Specifically what number of NORs is our objective? The escapement goal? The language in the FHMP is vague (“achieve recovery”). A de-listing goal for both the Cispus and upper Cowlitz River (together) might be suffice.

Actions

- Pat will address the question of how the September 9, 2008 coho plan fits with the FHMP, and also the WDFW view of the role of the FTC in the letter he is drafting. He reported the delay has been due to his waiting on habitat data.
- Pat will ensure that attachments to the letter include any additional pieces of supporting data (and sources of the data) and rationale for the models. He will clearly define all the rationale that supports the new WDFW plan.
- Andy will follow up with Brett to set up a meeting to discuss the model

Agenda Item: Report on Proposed FHMP Updates Discussion

Presenters: John Barr

In response to the Action Item he received at the last meeting, Mark reviewed the schedule and found that it allowed insufficient time for the public to have a formal second review of the FHMP before it is sent to FERC. Since this request came from WDFW, Mark suggested that they might want to use some of their review time in September through December of 2009 to hold their own public hearings and get additional public input.

John B walked us through an outline of the Update of the FHMP.

The proposed reviewing and updating:

- Re-introduction programs
- Lower river programs
- Credit mechanisms
- Productivity testing

Update programs using existing policy guidance:

- Settlement Agreement
- Recovery Plan

Technical Guidance:

- HSRG Scientific framework and HSRG criteria and recommendations
- EDT
- AHA – All H-Context

Recovery Plan

- What does this mean for Cowlitz vs. what does it mean for the ESU (Evolutionarily Significant Unit)?

John B explained that there are three levels of population designations: Primary (core, genetic legacy populations), Contributing (important for recovery – not as large

historically – provide diversity), and Stabilizing (probably never were big contributors to the meta population.

All-H Approach (Habitat, Hatchery, Harvest, and Hydro)

- This is built into the AHA Analyzer that could be for the updates to the FHMP.
- Different H's take effect at different rates.
- Actions would be phased to compensate for differential implementation rates.
- Hatchery/harvest actions take effect first and habitat actions require the most time.
- Necessary actions vary depending on expected contribution of population recovery.
- We can't be successful if we have harvest rates that are not consistent with recovery.
- While developing strategies for any one H we take into account the context of its value to all the Hs. This will give us a better opportunity for a successful outcome.

Example: WDFW's All H Approach to Lower Columbia River Conservation and Sustainable Fisheries Plan

- A plan for implementation of hatchery actions necessary to achieve recovery and support robust sustainable fisheries.
- Key actions were to restrict the number of HORs in natural spawning areas, reprogram hatchery production and manage broodstocks to minimize risks to fish.

The FTC reviewed a proposal to update Cowlitz programs and the Fisheries and Hatchery Management Plan by:

- Using All-H Strategy
- It is consistent with :
 - SA
 - Recovery Plan
- Using:
 - HSRG principles and criteria
 - WDFW Conservation and Sustainable Fisheries Plan as a guide.

The HSRG approach on the Lower Columbia was to contribute to recovery while maximizing harvest, subject to:

Primary populations:

-PNI > 0.67 OR pHOS < 0.05

Contributing populations:

- PNI > 0.5 OR pHOS < 0.1 (threshold condition)

Stabilizing populations:

- Current PNI and pHOS or better

At the end of the discussion FTC Members agreed on the following to guide the FHMP update:

- Result in a single updated document
- Include an All-H Approach
- Use Conservation and Sustainable Fishery Plan as a guide
- Use HSRG standards (PNIs and pHOS) and recommendations
- Get policy guidance from the Settlement Agreement
- Get policy guidance from the Lower Columbia Salmon Recovery Plan
 - Bring in ESU to find out what contribution these populations will make

Actions

- John – Continue work on the revised FHMP according to feedback received from FTC members and the criteria listed above.
- All – Be prepared to discuss their comments on the proposed FHMP updates at the December meeting.

Agenda Item: FHMP Adaptive Management Discussion

Presenter: John Barr

The FHMP calls for the creation of a structured Adaptive Management plan with technical and policy level input. Thinking about some of the past problems with developing the FHMP and looking to where we want to go in the future, John recommends breaking things down into technical and policy decisions. The FHMP calls for the development of a Technical team. The FTC functions as the Policy team.

We will use the December FTC meeting to walk through the suggested updates.

Actions

- All – Review section 6.0, FHMP.
- All – Review section 1.1, FHMP

Announcement

The FTC was informed about an incident two weeks ago related to the construction of the Mayfield by-pass facility. . All the flow was going into the raceways. The planned 2-3 day outage to replace the bypass pipe line was expanded to 7 days. The screens were overwhelmed with flow and some fish died in the process. The bypass pipe line is now completed and we want to ensure this incident doesn't happen again. There were lessons learned about reducing flow to the raceways while clearing the fish out of the bypass pipeline. Ed doesn't envision the same situation occurring again and we now know how to prevent this from happening again.

Action:

- Tacoma will post the monthly Cowlitz Evaluations on the website (due the 10th of each following month)

- Steve F will work with Julie to create a section in the operations manual that includes lessons learned here.
-

**Agenda Item: Supplemental Collection Update Presenters: Chris Sergeant
Discussion**

Chris reviewed the fishing effort and catch of the 2008 supplemental collection program. They used for minnow traps, beach seining, inclined plane trams, and Merwin traps at Mossyrock and Scanewa.

The following recommendations were proposed for 2009:

- Discontinue Minnow trapping
- 2009 Sampling Schedule

Apr. 15 – June 1 do inclined plane traps in 2008 location and intensive beach seining.

June 1 to July 1: Continue inclined plane traps and intensive beach seining.

Adaptively decide whether a Merwin trap at Mossyrock Dam is warranted during the month of June.

From July 10 to Sept 15 continue incline plane traps and install two Merwin traps in Lake Scanewa in 2008 location. Conduct beach seining as schedules allow.

Actions

- Chris will split out Mossyrock Merwin trap data from Scanewa data and incorporate other changes as suggested by FTC members into the report.
 - Mark and Steve V will talk with Greg V and Dennis R about the effectiveness of pursuing purse seining.
-

**Agenda Item: Downstream Fish Passage Update Presenter: Marc Wicke
Discussion**

Tom M reported that the status report is due November 15 to FERC. He noted that the main issue is the schedule that is due with the report. With the additional design review time that NMFS requested, it is no longer possible to meet the March 1 plan filing date. That plan would contain the concept feasibility designs at the 60% level and the proposal to use the 2009 prototype study results to arrive at a final collection plan. Tom will consult with FERC about the March report delayed by at least one month or if they would prefer we wait until the end of next year so we can include 2009 data and a final plan in one report. These proposed reporting delays will not impact our overall implementation schedule.

Marc reported that following the last Downstream Meeting there have been a series of discussions with USGS about biological evaluation studies for 2009 and the need to develop conclusive results from those studies. At this point USGS is recommending the

block-study approach for the two different apparatuses we will be testing at CF dam (the weir box attached to the spill gates, and the Tacoma fish screen combined with increased flow).

USGS wants us to expand on lessons learned from the past. They are proposing we use the weir box only early in the season. Later in the season they suggest evaluating Chinook passage by the screen and flow deflector. USGS is also working on the time-travel study for a floating surface collector on Riffe Lake and they plan to deliver this plan by Nov. 10. It will be discussed at the next Downstream Team meeting on Nov. 19 and we will get an update at our Dec. 2 FTC meeting.

Actions

- Tom M will follow up with Eric G (FERC) re: the plan and the schedule for filing it. Can we submit it as a draft? Let FTC members know what he says by Nov. 15.
- Bill will ensure we add FTC review of prototypes to the schedule
- Marc will send out the Smith-Root electro-guidance draft report to FTC members in week of Nov. 10.

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

Discussion:

Tom recommended having the next public meeting December 2nd immediately following the FTC meeting (and after the 30% fish passage alternatives design meeting). He suggested we hold the meeting from 4:00 – 6:00 in Morton at the facility where we held the last meeting in a conference room that provides a more intimate venue for discussing fish issues.

Possible future locations could include Packwood and Toledo, and Spiffy's at Hwy 12 and I-5?

Tom S has heard that the public is interested in fish transportation. He proposed the subject matter for the December meeting be along the lines of "Looking Ahead to 2009".

Actions

- Tom will advertise the December 2 afternoon meeting ASAP.
- Tom and Mark L will develop the agenda and send out to the FTC for review.

Meeting Handouts

- Agenda, November 4, 2008 FTC meeting
- Draft October 7, 2008 FTC meeting summary
- Draft Creel Data Summary Table (will be updated For Dec. FTC meeting)
- Upper Cowlitz Coho Table 2-1 (from proposed FHMP Updates)
- Conceptual Model graph
- LCSR B Cowlitz Population Designations, December 2004
- FHMP Section 6.0: AMP Management Structure
- FHMP Section 1.1 Policy Formation

- 2008 Supplemental Collection Report slides
- Draft Progress Report, November 15, 2008, License Article 1: Downstream Fish Passage: Riffe Lake and Cowlitz Falls Collection and Passage.
- Timeline for Downstream Team activities

Topics for Dec. 2, 2008 FTC Meeting

Welcome / Check-In / Review Agenda, Action Items, etc. (9:30 – 9:40)

Approval of Nov. 4 Meeting Summary (9:40 – 9:50)

FHMP Update (9:50 – Noon)

Working Lunch (12:00 – 12:15)

Conclude FHMP Update (12:15 – 1:15)

Downstream Team Report - 30% Design (1:15 – 2:45)

Meeting Evaluation and Set Jan. 6 Agenda (2:45 – 3:00)

Meeting Evaluation

- Need chocolate sooner
- Conference calls and other distractions
- Morning speakers outstanding
- Good feedback on FHMP Update Process
- Great participation!

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

**Fisheries Technical Committee
Final Meeting Summary**

December 2, 2008 from 9:30 AM – 3:00 PM
Mayfield office, Silver Creek, Washington

Members Present

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

Other Attendees

Ed Meyer	NMFS
Wolf Dammers	WDFW
John Serl	WDFW
Andy Appleby	WDFW
Debbie Young	Tacoma Power
Tom Martin	Tacoma Power
Tom Santee	Insight Northwest – facilitator
*Steve Fischer	Tacoma Power
*Bill Iyall	Tacoma Power
*Marc Wicke	Tacoma Power
*Chick Sweeney	AECOM
*Debbie Carlson	BPA
*Mike Kohn	LCPUD/BPA

* Attended afternoon portion of meeting

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

January 6, February 3, March 3, April 7, May 5, June 2, July 7, August 4, September 1,
October 6, November 3, December 1, 2009

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

Announcements

Tom Santee is today's facilitator
The FTC is hosting a public meeting in Morton at 4 - 6 PM today.

Approval of Meeting Summary

The November 4 meeting summary was not approved. Brett will send FTC members written comments with her suggested changes.

Review Action Items from November 4 FTC meeting

Creel Data Actions

- Julie will update the table to include the latest data from Lake Scanewa for the December meeting. We also want to look at how these data square with punch card data.
 - Wolf will send out the data via email.
- Mark will talk with Pat about continuing funding these creel surveys.
 - Remains to do.

WDFW Coho Reintroduction Plan Actions

- Pat will address the question of how the September 9, 2008 coho plan fits with the FHMP, and also the WDFW view of the role of the FTC in the letter he is drafting. He reported the delay has been due to his waiting on habitat data.
 - Letter no longer needed. Brett asked that this plan be addressed and discussed in the FHMP update process.

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.

Supplemental Collection Update Actions

- Chris will split out Mossyrock Merwin trap data from Scanewa data and incorporate other changes as suggested by FTC members into the report.
 - Done.
- Mark and Steve V will talk with Greg V and Dennis R about the effectiveness of pursuing purse seining.
 - Mark reported that Greg Volkhardt (formerly WDFW) believes a test of the WDFW purse seining equipment used in the Seattle locks would be possible in Riffe Lake under the right conditions (calm water, light winds). Steve Vigg is checking on the availability of the equipment for a test. Mark talked with Chris Sergeant about fishing on a chartered limit seiner (58') used for research in Lake Washington targeting smolts and cutthroat trout. The catches were small, but adequate for their sampling needs. Ken Tiffen of the Columbia River Research Lab, USGS shared with Mark the findings on the use of a lampara net in the lower Snake River. Their target species is juvenile Chinook, and they are fishing the gear from July through the next April. Wind and current make it difficult to haul, and it does fish effectively down to 40' depth.

Downstream Fish Passage Update Actions

- Tom M will follow up with Eric G (FERC) re: the plan and the schedule for filing it. Can we submit it as a draft? Let FTC members know what he says by Nov. 15.
 - Done. Subject of November 19 Downstream Team meeting for review at today's FTC meeting.
- Bill will ensure we add FTC review of prototypes to the schedule
 - Done.
- Marc will send out the Smith-Root electro-guidance draft report to FTC members in week of Nov. 10.

- To be sent out upon completion of Tacoma Power internal review.

Morton Public Meeting Actions

- Tom will advertise the December 2 afternoon meeting ASAP.
 - Done.
- Tom and Mark L will develop the agenda and send out to the FTC for review.
 - Tom, Mark and Pat discussed meeting agenda via phone conversations.

Mayfield by-pass facility Action

- Tacoma will post the monthly Cowlitz Evaluations Report on the website (due the 10th of each following month)
 - Done.
- Steve F will work with Julie to create a section in the operations manual that includes lessons learned here.
 - Neither Steve F nor Julie are present to discuss this item.

Agenda Item: FHMP Update Schedule

Presenters: Mark, Pat, Andy

Mark presented a brief summary of the recent action by WDFW to use the HSRG's AHA modeling process to calculate the number of hatchery-origin coho transported to the upper basin this fall. He said the AHA model was not available at the time the FHMP was drafted, but that it can be a very important tool in the FHMP update. Mark says he is embracing this tool because it helps achieve the FHMP's goals using a new approach that promises to be more effective than the current plan.

Pat added that he sees it as a useful tool because it shows what happens when changing different things. He said it is possible to set a desired end point and see what program modifications are needed to get there.

Brett asked for more information about external technical reviews of the AHA model and said a comprehensive monitoring and evaluation plan is needed because it is just a model. Andy pointed out there are reviews of the AHA model by the Columbia River basin Independent Scientific Review Board and by the Willamette/Lower Columbia River Technical Recovery Team.

Andy presented an extensive background regarding the development and use of the AHA model and how it is useful in determining strategies for integrated hatchery programs. He described the AHA model as a gene-flow calculator aimed at determining how to best utilize the natural environment to drive genetic fitness when there is an integrated (natural and hatchery) fishery.

Following Andy's presentation Mark and Pat recommended the creation of a technical team of people knowledgeable about the AHA model parameters to help guide the FHMP update with this new approach.

There was considerable discussion regarding the proposal to create the technical team. Much of the discussion centered on concern that the technical team would face policy

issues that are the province of the FTC, and uncertainty that the team would recognize those situations. On the other hand, it was pointed out the FTC won't have all the information it needs for policy decisions until it has the technical information to be developed by the work of the team. The discussion was tabled for later in the meeting to allow the next agenda item to be presented. When the discussion re-opened FTC members agreed to the following action:

Action Item:

- A technical team will be formed to assist incorporating AHA modeling into the FHMP update. FTC members can designate their technical representative. The team's first meeting will be held this month (December).

Agenda Item: Downstream Team Report – 30% Design

Presenter: Chick Sweeney

Chick gave a detailed report on the completion of the 30% tasks for the downstream fish passage plan and discussed progress on each of the five smolt collection alternatives. He also handed out a new draft project timeline pointing out that the design and construction phase is a generic schedule and will be expanded at the 60% tasks submittal. He noted that agency review periods are increased from 10 to 30 days. Chick said the 60% schedule is tight and may need a few additional weeks to complete. He said this would not delay the schedule for design and construction.

Marc reported on 2009 study plans. He said tests to improve smolt collection include a weir box and a gate well flow converter at Cowlitz Falls Dam. There also will be studies of fish transit through Riffe Lake to evaluate travel time and survival, and fish pathology examinations of downstream migrant fish mortalities.

Action Item:

Marc will provide a study plan to FTC for comment when available in about a week, including deadline for submitting comment.

FTC comments on 30% submittal due December 19.

Downstream team to re-evaluate completion schedule for 60% tasks at its January meeting. Tom M to email FTC with report on an adjusted schedule following that meeting.

Agenda Item: Morton Public Meeting

Presenter: Tom S

Tom said the 4 - 6 PM public meeting was advertised in Morton's East County Journal and promoted on the cowlitzfish.net Web site. The announced agenda is for Mark to give an update on plans for 2009 actions and studies. Stan Bartel called Tom to ask that someone be prepared to talk about plans for the Tilton River fisheries and Tom talked with Pat regarding Stan's request. Tom said the meeting is scheduled for this afternoon

to make it easier for more FTC members to attend because the public requested this at previous meetings.

There was discussion about how worthwhile these meetings are because of the low attendance. Tom said holding the meetings in communities along the river may get more attendance than holding meetings in Centralia. He said Bob Reid suggested holding meetings in Packwood and Toledo.

Pat and Mark suggested changing the planned agenda for the Morton meeting to get right to the questions and issues of those in attendance. Instead of starting with a prepared summary of 2009 plans the attendees will be asked for their questions which will be written on flip charts for response by Mark and Pat.

Meeting adjourned at 3 p.m.

Meeting Handouts

- Draft November 4, 2008 FTC meeting summary
- List of Cowlitz populations and recovery designations
- All H Analyzer (AHA) results - screen shots
- Timeline for Cowlitz Downstream Team activities

Topics for January 6 FTC Meeting

Welcome / Check-In / Review Agenda, Action Items, etc. (9:00 – 9:40)

Approval of November 4th & December 2^{cd} meeting summaries (9:40 – 9:50)

Lower Columbia River Fish Recovery Plan

- Population designations, Ray Beamsderfer

Report on December 2^{cd} Morton public meeting

Working Lunch (12:00 – 12:15)

Use of the All H Analyzer model (AHA) for the Cowlitz “ladder tests”

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

Use of All H Analyzer model (AHA) for Fisheries & Hatchery Management Plan (FHMP) solutions

- Upper Cowlitz River: coho

Downstream Team update (2:35 – 2:45)

Meeting Evaluation and set February 3 meeting agenda (2:45 – 3:00)

Topic for February 3 FTC Meeting

Discuss purse seining to decide whether or not to continue and/or conduct testing.