



**Cowlitz Hydroelectric Project  
FERC No. 2016  
Cowlitz Fisheries Technical Committee  
Final FHMP Meeting Summary**

JANUARY MEETING CANCELED

**Cowlitz Hydroelectric Project  
FERC No. 2016  
Cowlitz Fisheries Technical Committee  
Final Meeting Summary  
February 2, 2016, 9:00 AM – 2:15 PM  
Mayfield Office**

**FTC Members**

Mark Celedonia (absent)	USFWS
Michelle Day	NMFS
Mark LaRiviere	Tacoma Power
Cindy Le Fleur	WDFW
Jim Pacheco	WA Dept. of Ecology
Bob Rose (absent)	Yakama Nation Fisheries
Paul Sparks	WA Chapter Trout Unlimited

**Other Participants**

Peggy Miller	WDFW
John Serl	WDFW
Sam Gibbons	WDFW
Carol Serdar	WA Dept. of Ecology
Mike Kohn	Lewis County PUD
Debbie Carlson	BPA
Keith Underwood	Tacoma Power
Kirk Kessler (by phone)	Tacoma Power
Eric Shoblom	Tacoma Power
Joan Nichol	Meridian Environmental
Shannon Wills (by phone)	Technical Advisor to the Yakama Nation
Ann Weckback	Technical Advisor to Tacoma Power
Lyn Wiltse	PDSA Consulting

**2016 FTC Meeting Dates: 9-3 at Mayfield**

Mar. 1, Apr. 5, May 3, June 7, July 5, Aug. 2, Sept. 6, Oct. 4, Nov. 1, Dec. 6

**Next ISIT Model Workshop**

Feb. 29 at the Cowlitz Salmon Hatchery from 9-3PM.

**Proposed APR Public Meeting Dates**

March 24 and April 21 at Centralia College from 6-8PM

**Announcements**

- Update on Cowlitz Operations: Keith reported that we are officially out of the drought. There was great rejoicing! There is sufficient water (slightly above-average snow pack) in the mountains now to refill the reservoir. Tacoma doesn't see any risk in doing so. The system will reset to even if we enter another drought, we will be starting from a position of a "full belly" so to speak. They are operating within the flood control rule curve. They will likely start the refill process in February.

- FTC Communications: Keith reported that he has learned that the new TPU website is on hold so it is business as usual for now. He will keep us posted. In the meantime, he is working internally to ensure that we have sufficient document sharing capabilities. Tom Santee, who set up the CowlitzFish.net website, has retired and we will figure out how this site will function in the future.
- Barrier Dam Erosion Issue: A full inspection of the barrier dam a couple of years ago showed indications of erosion that should be addressed. Mark L and Kirk K met with Ed Meyer on this last week. They are considering various methods to deal with this, within NMFS criteria. The design criteria should be set by the end of this year. The work schedule and construction portion of these needs to be consistent with the 401 water quality certification and amendments. This applies to all construction, especially in or near water. We will discuss this further at our March meeting, especially as it relates to associated fish passage issues.
  - **Action Item:**
    - Mark L: Send out background document, “Anadromous Fish Passage Plan” for all to review.
    - Mark L: Send out work plan detailing the required criteria (biological / structural) before the next meeting.
- 2016 FTC Work Plan: Mark announced this is out for review. It needs to be edited and expanded. We need to do a better job of distributing M&E information out to FTC members in a timely fashion. We will also include the Barrier Dam.
  - **Action Item:**
    - Mark: Send out a revised plan in advance of our next meeting.
- 2016 Trout Planting Schedule: This schedule has been released. This is the last year of TP’s contract with the Nisqually Tribe. They will release trout in March and April into the Swofford Pond. Fish are released into SLCPP for a popular trout derby each year. Beginning in June, they begin stocking fish into Mayfield from three different release points, concluding by the end of August. Disease protocols are in place that ensures fish transferred between basins are virus free.
- Cowlitz Rotary Screw Trap Operations: John explained at the start of the 2016 year flows at the trap were 17K cfs and dropped down to 12K. Early on, they caught just under 2,800 fry (almost all Chinook). On January 10<sup>th</sup>, they caught a log and killed about 350 fry. Two weeks later they caught a beaver that ate part of the equipment. They then caught another log (because they were good at it). As of last night, the trap is again operational and they caught 350 Chinook fry. They are working toward getting genetic mark/recapture data for the Chinook fry.
  - **Action Item:**
    - John: Let Mark know the minimum size of tissue required for genetic material.
- CRR Fund: Pat Frazier will be coordinating two additional meeting of this teamlet. The next meeting will be in March so we will likely see this topic on the FTC agenda again in April. 2016-1 and 2016-2 Draft Decision Documents are still in draft form.
- Cowlitz Falls Dam – 2016 Downstream Fish Collection Efforts: Matt reported that they are coordinating with LCPUD about their study needs. They met yesterday with LCPUD, USGS, and BPA. They will likely proceed similarly to last year,

hoping for a more-normal water year. They will be studying the same species under a variety of environmental and operational conditions. The CF tailrace collector was not able to be installed last year due to low flow conditions. They hope to be able to do so this year, and are aiming for the week of July 12 (approximately one week later than originally planned). They will be sure not to deploy prior to the tags expiring.

- **Action Item:**

- Matt: Send out a draft decision document on this prior to our next meeting.
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### **Cowlitz Turbidity Study**

**Presenters: Mark LaRiviere**

Mark explained that this study on the nearshore area at various lake levels in Riffe Lake was part of license implementation and 401 Water Quality Certification requirements. After FTC review, the study will go to Ecology for review and then it will go to FERC. Carol noted Table C-1 (2008 report) has 16 different sample points taken Jan-May. She is concerned that a 6-month study period is insufficient in order to make a generalizing statement about turbidity in Riffe Lake, regardless of a nexus to Tacoma operations. She suggests this be viewed in a broader context, including TDG. All claims should be supported well with data. In this case, she is concerned about the limited data set. There are also opportunities to make the report more readable in general. Tacoma looks forward to collaborating with Ecology to figure out the best path forward despite vague requirements called out over a decade ago.

**Action Items:**

- Carol: Complete comments on the report and send them to Tacoma.
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### **CFD Northshore Collector Update**

**Presenter: Kirk Kessler**

Kirk walked us through some recent photos that illustrated the progress being made on the Northshore Collector. Construction is proceeding on time and on budget. Mark pointed out that the acres of LWD that have been collected from winter storms will be used by various groups for habitat restoration projects in the Cowlitz River basin.

**Action Item:**

- Kirk: Send Carol information about testing for turbidity and pH and how pH-laden stormwater is being routed. *(Done)*
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**2016 FHMP Update Process**  
**Presenter: Cindy, Keith, All**

Keith explained that since our last meetings the subcommittees have met with Joan and have agreed on the scope for each of their sections. The overall goal of the issue papers is to provide the foundation to allow us to update the FHMP and get it ready to submit to FERC. We need to understand all of the requirements, how we as the FTC interpret those requirements, and what recommendations we are making. Ideally this will become something we can use to share with other stakeholders in the basin about how we see things and hear their feedback. We discussed the purpose of each of the issue papers and what we hope to achieve for each.

We reviewed the (in bold font below) Issue papers produced by subgroups for the following topics:

- **Satellite Rearing:** Mark L (coordinator), Peggy, Michelle, Rich, Paul
- **Hatchery Programs:** Mark L (coordinator), Peggy, Michelle, Rich, John, Paul
- **Mayfield Net Pens:** Mark L (coordinator), Peggy, Michelle, Rich, Paul
- **Hatchery Production Cap:** Mark L (coordinator), Peggy, Michelle, Rich, Paul
- **Harvest Management:** Keith (coordinator), Cindy, Pat
  - Distribute for review at March Meeting
- **FHMP Goals and Objectives:** Keith (coordinator), Cindy, Pat
  - Distribute for review at March Meeting
- **Increasing Hatchery Production?:** Keith (coordinator), Cindy, Pat
  
- **Population Designations:** Matt (coordinator), Cindy, John
  - **Issue Paper No. 10:** Page 3 shows FTC interpretation of what FERC said about marking and tagging fish. On p. 4 the recommendations indicate developing timelines and subgroups to develop strategies about putting fish in the Lower Cowlitz and Tilton, with a focus on fall Chinook. These are areas where the subgroup thinks we need to go next.
  - Some felt that the paper didn't take things far enough. It needs to identify risks and benefit of various actions and also the issues of the various camps that are struggling to solve this problem.
  - There was a suggestion to add to the problem statement specific questions such as:
    - Should fall Chinook be released into the upper Cowlitz?
    - Should the Tilton and lower Cowlitz fall Chinook be combined into a single population?
    - Can management decisions be made without changing population designations?
    - Are winter steelhead being lumped or split appropriately across the Cispus and the Upper Cowlitz?
  - **Action Items:**
    - Cindy: Coordinate WDFW providing a schedule about population designations.

- Matt: Present a more holistic viewpoint explaining how we are trying to recover fish. In addition to FERC requirements, define Bi-Op conditions and recovery planning as part of the ESA.
  - Cindy and Matt: Take steps to form a subgroup as described in this paper.
- **Research Needs:** Matt (coordinator), Cindy, John
    - Issue Paper No. 11: Cindy walked us through the document outlining basic M&E information and recommends forming a research team or M&E group to take this further, ensuring the research is vital to implementing the FHMP. Matt explained that there are some basic activities that are currently ongoing. The M&E Group would meet annually to review all FHMP-related current activities and perform a data gaps analysis and make recommendations to the FTC on how best to close those gaps, including proposed study design, etc. (This would go into TP's 3-year funding cycle.)
    - **Action Items:**
      - Matt: Include concept of adaptive management
      - Cindy and Matt: Present a more holistic viewpoint explaining how we are trying to recover fish. In addition to FERC requirements, define Bi-Op conditions and recovery planning as part of the ESA.
      - Cindy and Matt: Take steps to form a subgroup as described in this paper.
- **Juvenile Marking:** Matt (coordinator), Cindy, John
    - Issue Paper No. 12: The intent was to say that the goal is to differentially mark fish as HOR / NOR from the upper/lower basins. We are currently marking coho, steelhead, and cutthroat coming out from above CF Dam (with CWT). Matt cautioned that our assumptions that the fish passing into Riffe Lake are being lost to the anadromous population may not be accurate. Note: We have yet to measure winter migration behaviors. All current marking strategies are described, along with associated opportunities for error. This is a "hot" issue with the new collectors coming online. We certainly need an interim plan in place that includes infrastructure / staffing strategy. The group to address this should be a subgroup of the M&E Group.
    - **Action Items:**
      - Matt: Modify the language in the problem statement to say "without structural changes" ...
      - Matt: Note that the subgroup mentioned is a subgroup of the M&E Group.
      - Present a more holistic viewpoint explaining how we are trying to recover fish. In addition to FERC requirements, define Bi-Op conditions and recovery planning as part of the ESA.
- Nutrient Enhancement: John (coordinator), Cindy, and Sam

- **Action Item:**
  - John: Coordinate preparation of issue paper prior to our next meeting.
- Resident Fish: Mark (coordinator) and Mike Kohn
  - **Action Item:**
    - Mark: Add recommendations to this paper and distribute to the group.

We reviewed the proposed schedule to compete the FHMP issue papers. Keith announced that he has notified FERC that we would be asking for an extension of the April 16, 2016 FERC deadline perhaps to the end of this year. We will discuss this at our next meeting.

**Action Items:**

- Keith: Send out new schedule for the FHMP Update process to all.
- Subgroup Coordinators:
  - Meet with Joan to work on issue papers.
- Shannon: Send Cindy documentation relative to nutrient enhancement.
- All: If come across FERC License references to water quality requirements, let Carol know ASAP (e.g., within Nutrient Enhancement or Resident Fish).

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**Plan for Next Joint FTC / WDFW Ad Hoc Group Meeting**

**Presenters: Cindy, Keith**

Cindy announced that, while the meeting at the Cowlitz Salmon Hatchery is an Ad Hoc Group Meeting, with a shortened agenda (starting at 10AM). FTC members are invited to attend. Nutrient enhancement is likely to be among the topics discussed.

The next joint FTC / Ad Hoc Group meeting will occur when our issue papers for the 2016 FHMP are complete so we can provide the Ad Hoc Group an opportunity to gain feedback on the draft white papers that will become part of the 2016 FHMP.

**Action Item:**

- Shannon: Send out an electronic version of the State of WA's requirements relative to nutrient enhancement (~2009).

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**2015 Downstream Fish Passage Study - Mayfield**

**Presenter: Scott Gibson**

Scott walked us through a PowerPoint presentation describing the block design study that was performed this year under a variety of conditions. The intent of the study was to increase FPS through the secondary separator. The following conditions were tested:

- Baseline (2 pumps all season long)
- Drawdown is the baseline condition with the self-regulating weir dropped all the way to the floor (flushing all water and fish out of the secondary separator) once in a 7-day period

- 4 (actually 3 because one pump broke) pumps on

He explained the fish recapture percentages for each test condition. In the secondary separator, the drawdown condition was favored. There appears to be a problem from the transport tank to the tailrace. His presentation will be sent out to all along with this meeting summary. There will be a draft report out for review this spring and a three-year wrap-up document out this summer.

Matt explained that they propose the following for 2016:

- Operate 4 (actually 4 fully functioning) pumps
- Use a phased sequencing design
  - Baseline
  - 4-pump operation preceding the drawdown each time (to see if there is benefit around stacking those operations).

**Action Items:**

- Matt: Prepare decision document for 2016 study to discuss at March 1 meeting.
  - Michelle: Schedule conference call with Matt and Ed Meyer regarding the results of the 2015 study.
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**2016 APR Process**

**Presenter: Mark LaRiviere**

Mark proposed the following dates for the APR process. The meetings will be evening meetings, from 6-8 at Centralia College.

- March 24 Note: this date might slide to May depending on how things go with the ISIT Model.
- April 21

Note: The next ISIT model workshop is February 29 at the Salmon Hatchery beginning at 9AM. We will get an update on this at our next meeting.

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**Work Groups**

**Presenter: Keith Underwood**

Keith discussed the coordination between the Cowlitz M&E work group and the Cowlitz Complex work group. Mark is working on a charter for the M&E workgroup. Eric is working on a charter for the workgroup that will be working on Hatchery Operations. Keith wants to make sure the right people “on the ground” get to participate in and weigh in on work group decisions. It is important to do this as soon as possible.

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**Review / Approval of December 1, 2015 Meeting Summary and Action Items**

The December meeting summary was approved with minor edits and will be posted for public review.



## Meeting Evaluation

- Good discussions.
- Ran late
- Handouts were difficult to read due to extremely small font (copy certain slides as a whole page)
- Chocolates came too late
- Not everyone had been able to read through the issues papers before we began our discussion.

## Handouts

- Draft December 1, 2015 FTC meeting summary
- December 1, 2016 FTC Meeting Agenda
- February 1, 2016 PowerPoint: Results from the 2015 Mayfield Dam Juvenile Bypass Smolt Survival Study
- Cowlitz River Project Issue Papers:
  - No. 10 – Population Designations
  - No. 11 – Research Needs
  - No. 12 – Juvenile Marking

## Potential March 1, 2016 Meeting Agenda Items

- Welcome / Announcements (20 min.)
- Organization of FTC Meetings (20 min.)
- CFD Northshore Collector Update (20 min.)
- Barrier Dam Fish Passage Discussion (20 min.)
- 2016 APR Process (20 min.)
  - Preliminary ISIT Results
- FHMP 2016 Update Process (3 hours)
  - Review Draft White Papers:
    - Harvest Management
    - FHMP Goals / Objectives
    - Increase Hatchery Production?
    - FHMP: Prescriptive or Process?
    - Nutrient Enhancement
    - Resident Fish
- ISIT Model Overview / Table
- Decision Document: Tacoma 2016 Recommendations based on 2015 Downstream Fish Passage Study – Mayfield (30 min.)
- Review Action Items / Finalize February 2 meeting summary (10 min.)
- Set Agenda topics for April 5, 2016 Meeting (10 min.)
  - DAMW Update
  - FHMP 2016 Update Process
  - APR 2016 Process
  - CRR Fund
  - CF Northshore Collection Facility Update
- Evaluate the Meeting

**Parking Lot / Potential Future Agenda Topics**

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River
- Climate Change
- Cowlitz smelt presentation (by WDFW and Cowlitz Tribe)

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

March 1, 2016, 9:00 AM – 3:00 PM  
Mayfield Office

**FTC Members**

Mark Celedonia (absent)	USFWS
Michelle Day	NMFS
Mark LaRiviere	Tacoma Power
Cindy Le Fleur	WDFW
Jim Pacheco	WA Dept. of Ecology
Bob Rose (absent)	Yakama Nation Fisheries
Paul Sparks (absent)	WA Chapter Trout Unlimited

**Other Participants**

Peggy Miller	WDFW
John Serl	WDFW
Mike Kohn	Lewis County PUD
Debbie Carlson	BPA
Keith Underwood	Tacoma Power
Matt Bleich	Tacoma Power
Kirk Kessler (by phone)	Tacoma Power
Scott Gibson	Tacoma Power
Joan Nichol	Meridian Environmental
Lyn Wiltse	PDSA Consulting

**2016 FTC Meeting Dates: 9-3 at Mayfield**

Apr. 5, May 3, June 7, July 5, Aug. 2, Sept. 6, Oct. 4, Nov. 1, Dec. 6

**Proposed APR Public Meeting Dates**

May 19 (*new date*) and June 30 at Centralia College from 6-8PM

**Joint Ad Hoc / FTC Meeting and also M&E Work Group**

March 24 at the Cowlitz Salmon Hatchery

- 9-noon: M&E Work Group
- 1-4:00: Joint Ad Hoc / FTC Meeting

**Decisions Made at this Meeting:**

- Approval of Decision Document 2016-4: 2016 CFD Downstream Fish Collection Efforts
- Tentative agreement to use at least the same summer steelhead recycling rate in 2016 as used last year (pending additional data review)
- Approval of Feb. 2 FTC Meeting Summary

**Announcements**

- CFD Northshore Collector Update: Kirk walked us through some recent photos that illustrated the progress being made on the Northshore Collector. Construction is proceeding on time and on budget. Water quality issues have been resolved to the Washington Department of Ecology's satisfaction. They are on track to be finished with construction in January, 2017.
  - 2016 CFD Downstream Fish Collection Efforts: Matt walked everyone through the draft decision document, 2016-4. They will likely proceed similarly to last year, hoping for a more-normal water year. They will be studying the same species under a variety of environmental and operational conditions. **Decision Made: Members present agreed to approve Decision Document 2016-4.**
    - Action Item:
      - Mark to post updated version of Decision Document 2016-4 and contact absent FTC members about the decision.
  - 2016 Downstream Fish Passage Study - Mayfield: Matt briefly explained the draft decision document 2016-3 that he sent out last week with the idea that we would approve it at our next meeting. Matt explained that they propose the following for 2016:
    - Operate 4 (actually 4 fully functioning vs. 3 as was the case in 2015) pumps
    - Use a phased sequencing design (instead of repeating a random block design)
      - Baseline
      - 4-pump operation preceding the drawdown each time (to see if there is benefit around stacking those operations).They hope to have design solutions that they can apply in 2017 after doing the PIT tag study this year.
    - Action Item:
      - All: Review Decision Document 2016-3 in preparation for making a decision on it at our April meeting.
  - 2016 FTC Work Plan: Mark reminded all that he sent the updated version of the plan out last week and it is posted on the FTC website. It now includes a review of the Cowlitz M&E information.
    - Action Item: John to work on fleshing out when the various M&E presentations to the FTC would occur.
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## **Organization of FTC Meetings**

### **Presenters: Cindy Le Fleur**

Cindy explained her request to spend a few minutes considering the structure and organization of these meetings. She would like to explore different options to get to more results-oriented meetings. This may include doing updates through the website instead of a meeting. She feels like we too often get into the weeds (e.g., the appropriate number of PIT tags to deploy).

She asked the purpose of the meetings and what we hope to accomplish. She questioned the need to all travel to a central location and meet together in person. She

acknowledged that the subgroup process we have initiated has been very successful, such as the DAMW group. It may be time to turn it into a technical working group. The subgroups are focused, meet a few times and then their work is concluded. She doesn't get the same feeling at the end of these meetings. Might we divide topics into morning and afternoon sessions so folks could attend whichever session matched their interests? She would like to see the agenda better define the goal or focus of each item.

Keith observed that there may be opportunities to deploy other groups to make technical recommendations (e.g., an M&E subgroup and a hatchery operations group) to the FTC to discuss. This way the FTC could be focused on the desired end state and be less tempted to get into the weeds. He offered to work on additional scheduling tools and a structure with better-defined finite questions for the FTC to discuss.

Michelle shared that she agreed with much of what was said and that also she felt there were times when it was important for everyone to get together and be part of a discussion. The subgroup process can leave some people feeling left out. She has also seen in other processes that if meetings are suspended, then items can slip by. NMFS has been using the FTC to deal with all of their requirements. She is happy to see that water quality issues are discussed at these meetings as they directly impact aquatic habitat. In some cases, the Bi-Op and 401 Water Quality Certification issues are so complex that Matt thinks it is appropriate for Tacoma to engage with Ecology and NMFS separately and then bring suggested solutions to this group. This has been happening currently to some extent. Perhaps this could be expanded. We could build a work plan; have a subgroup figure out how to deal with it and then report to the FTC. Keith acknowledged that this would mean Tacoma taking on a larger planning role so the right people weigh in at the right level at the right time.

Mark explained that the FTC is called out in the Settlement Agreement. It is allowed to set / amend its protocols. Currently the protocols call for monthly meetings.

Next steps: Come up with a better tracking mechanism for subgroup work and scheduling. The FTC would express clear expectations and goals to the technical working groups (subgroups).

#### **Action Item**

- Lyn: Suggest how best to incorporate these ideas...
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#### **Barrier Dam Fish Passage Discussion**

**Presenters: Mark LaRiviere**

Mark explained this issue was a great example of the above discussion. He distributed a memo detailing the findings from the site visit and lists specific questions. Tacoma would like to discuss whether the barrier dam needs two separate entrances. As per the discussion at the start of the meeting, this appears to be an excellent opportunity to create a subcommittee to consider how best to address the question listed in the memo and also:

- Describe potential ramifications of not putting in a second ladder. How would it impact functionality? Would it impact passage? Are fish delaying? Is it related to the number of entrances?
- What would be the purpose of the velocity barrier? Is the velocity barrier better than the current electrical barrier?
- Are we having problems with broodstock collection, meeting our goals for numbers of fish? Do we anticipate future challenges with this?
- Define a contingency plan (for the unlikely event of dam failure) prior to actual construction.

Timing: TP needs feedback for a design basis memorandum due by the end of the year. Construction could occur in 2017-2018.

Subcommittee Members:

- Mark LaRiviere (coordinator)
- Mike Kohn
- John Serl
- Michelle Day and Ed Meyer
- Kirk Kessler
- Scott Gibson

**Action Item:**

- Mark L: Set up subcommittee meeting schedule (what they will cover, by when).
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**2016 FHMP Update Process**

**Presenters: Mark, Joan, All**

Keith intends ultimately to present these documents to the public as evidence of how the FTC stands united on specific topics. This is critical to have in place prior to the 2016 APR meetings so that we can all speak with the same voice. FTC members agreed they would work to ensure others at their agencies are at least informed and at best supporting of the recommendations.

He suggested that we first do a gut check and then start working on specific recommendations that all can support. After an initial vetting with the FTC, the subgroup will go back and integrate feedback. Once we are in agreement we will discuss these with the Ad Hoc Group, integrate their feedback, and then do the initial APR public meeting.

Issues 1-3: Due to scheduling conflicts, this subcommittee is not able to meet until March 22. They are invited to send Joan track change edits and comments between now and their meeting. She will ensure the most recent version of the documents are sent to Mark L to post in the FTC website for “one-stop shopping.”

We agreed to review the issue papers 5-14 at our April meeting. All are encouraged to add edits / comments in track changes to the documents by March 21 and send them to Joan to collate. We will discuss the most recent version at our April meeting with the aim of resolving any outstanding issues. This process will result in finalization of these papers at the May FTC meeting.

Notes from discussion at this meeting:

- Issue 13: Nutrient Enhancement
  - Do we need a water quality component?
- Issue 14: Resident Fish
  - Need to be clear on scope.

General FHMP Subcommittee:

We set up a new subcommittee to work on the schedule and how the issue papers would be integrated into the FHMP. This group will also recommend how to include topics that should be included in the FHMP that are not already represented by the issue papers. Members that will coordinate with Joan on this are:

- Mark LaRiviere (coordinator)
- Keith Underwood
- Cindy Le Fleur

**Action Items:**

- Joan: Keep track of comments on the various issue papers using track changes and send updates to Mark L who will continually post the most current version on the FTC website.
  - All: Send comments and edits (in track changes) on each of the issue papers to Joan by March 21.
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**2016 FHMP Extension Request**

**Presenter: Keith**

The current deadline is April 16, 2016. Keith needs to have a letter requesting that FERC extend the deadline until February 1, 2017. This would allow for the holiday season and we can do a hard push in January. There was consensus agreement to support this request.

**Action Item:**

- Keith: By March 11, send request to FERC for deadline extension.
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**2016 APR Process**

**Presenter: Mark LaRiviere**

Mark proposed May 19 for the initial meeting and sometime in June in support of the APR process. The meetings will be in the evening, from 6-8 at Centralia College.

- April 20 Annual Cowlitz River Fisheries and Watershed Science Conference
  - Have a moderator introduce the topic for each speaker.
  - Consider having Keith and Cindy discuss management implications at the end of each topic.
  - Discuss the 2015 tag recycling results.
  - Discuss Juvenile and then adult data and invite all to attend the APR meeting the next day to learn how these data drive management decisions.
- May 19

- Review ISIT Model results and ask for feedback
- Announce where we are with the 2016 FHMP Plan and when it will be out for public review, etc.
- June / July Timeframe: Have a “clean-up” meeting with the public. Include a salmon BBQ?

**After considerable discussion, we came to tentative consensus agreement that we would use at least the same recycling rate this year as we used last year. This agreement is contingent on the data that Cindy provides to all in an effort to get a consensus decision on what can be discussed with the Ad Hoc Group on March 24.**

**Action Items:**

- Cindy: ASAP get updated stray rate data to all FTC members including Michelle to discuss with Rich (relative to supporting the above tentative consensus agreement to use at least the same recycling rate this year as last year). Attempt to get consensus through email in time to announce at the March 24 joint meeting with the Ad Hoc Group.
- Mark L: Send out draft agenda for May 19 meeting.
- Mark L: Set up meeting with DJ Warren and Associates re: functionally defining terms in the ISIT model and how they plug into the equations.

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**Review / Approval of February 2, 2015 Meeting Summary and Action Items**

The February meeting summary was approved with a minor edit and will be posted for public review.

**Meeting Evaluation**

- Good discussions.
- Highly productive
- Look forward to continuing new organization
- Stayed on point
- Good enchiladas!

**Handouts**

- Draft February 1, 2016 FTC meeting summary
- March 1, 2016 FTC Meeting Agenda
- Barrier Dam Adult Fish Passage memo
- Cowlitz River Project Issue Papers:
  - No. 5 – Harvest Management
  - No. 6 – FHMP Goals and Objectives
  - No. 7 – Hatchery Production Cap (combined with Issue 4)
  - No. 9 – FHMP: Prescriptive or Process?
  - No. 10 – Population Designations
  - No. 11 – Research Needs
  - No. 12 – Juvenile Marking
- Table 2 from 2016 Draft Cowlitz FTC Work Plan



### **Potential April 5, 2016 Meeting Agenda Items**

- Welcome / Announcements (15 min.)
  - CFD Northshore Collector Update (10 min.)
  - 2016 Work Plan
    - M&E Deliverables Subcommittee (15 min)
  - 2016 Mayfield Downstream Fish Passage Study Decision Document 2016-3 (PM)
  - CRR Fund (20 min.)
  - 2016 APR Process (30 min.)
    - Preliminary ISIT Results
  - FHMP 2016 Update Process (3 hours)
    - Review Draft White Papers: 5-14
      - 5: Harvest Management
      - 6: FHMP Goals / Objectives
      - 7: Increase Hatchery Production?
      - 9: FHMP: Prescriptive or Process?
      - 10: Population Designations
      - 11: Research Needs
      - 12: Juvenile Marking
      - 13: Nutrient Enhancement
      - 14: Resident Fish
  - DAMW Subcommittee Report (PM)
    - Update on Schedule
  - Review Action Items / Finalize March 1 Meeting Summary (10 min.)
  - Set Agenda topics for May 3, 2016 Meeting (10 min.)
    - CF Northshore Collection Facility Update
    - FHMP 2016 Update Process
      - Finalize Issue Papers 5-14
      - Preview Issue Papers 1-3
    - APR 2016 Process
      - Review Agenda
    - CRR Fund
    - DAMW Update
    - M&E Subcommittee Report
    - Barrier Dam Fish Passage Subcommittee Report
  - Evaluate the Meeting
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### **Parking Lot / Potential Future Agenda Topics**

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River
- Climate Change
- Cowlitz smelt presentation (by WDFW and Cowlitz Tribe)

**Cowlitz Hydroelectric Project**  
**FERC No. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Meeting Summary**  
April 5, 2016, 9:00 AM – 2:30 PM  
Mayfield Office

**FTC Members**

Mark Celedonia (absent)	USFWS
Michelle Day	NMFS
Mark LaRiviere	Tacoma Power
Cindy Le Fleur	WDFW
Jim Pacheco (by phone)	WA Dept. of Ecology
Bob Rose (absent)	Yakama Nation Fisheries
Paul Sparks	WA Chapter Trout Unlimited

**Other Participants**

Peggy Miller	WDFW
John Serl	WDFW
Mike Kohn	Lewis County PUD
Keith Underwood	Tacoma Power
Matt Bleich (by phone)	Tacoma Power
Eric Shoblom	Tacoma Power
Ann Weckback	Technical Representative for Tacoma Power
Shannon Wills (by phone)	Technical Representative for the Yakama Nation
Joan Nichol	Meridian Environmental
Lyn Wiltse	PDSA Consulting

**2016 FTC Meeting Dates: 9-3 at Mayfield**

May 3, June 7, July 5, Aug. 2, Sept. 6, Oct. 4, Nov. 1, Dec. 6

**April 20: Annual Cowlitz River Fisheries and Watershed Science Conference**

**Proposed APR Public Meeting Dates**

May 19 and June 30 at Centralia College, Walton Science Center, Room 121 from 6-8PM

**Decisions Made at this Meeting:**

- Approval of Decision Document 2016-3: Mayfield downstream Fish Passage Study
- Approval of Mar. 1 FTC Meeting Summary

**Announcements**

- Mark LaRiviere announced that he plans to retire at the end of June. His career in NW fisheries has lasted over 40 years and he probably won't be a stranger. We appreciate his leadership, hard work, and intimate knowledge of the

Settlement Agreement. We wish him the best! His last FTC meeting will be in May. He plans to attend both of the scheduled APR public meetings.

- Keith announced that Tacoma Power (TP) is currently advertising for several job vacancies, including a Sr. Fisheries Biologist and a License Coordinator. Both positions close April 15. Keith asked for understanding of all with regard to his trying to handle a large workload with insufficient staff.
  - CFD Northshore Collector Update: Mark explained that construction is proceeding as planned with completion expected in January, 2017. We will get a more detailed update from Kirk complete with photos at our next meeting.
  - The CFFF will be watering up today to do their first test run. They will be evaluating the flume and checking for structural issues, etc.
  - Keith announced TP has completed removal of LWD from Lake Scanewa over the last couple of weeks. The last deliveries have been made. Carol was concerned about the decking process for the logs (near storm water conveyance). All of her suggestions were implemented. It is debatable whether this will be a temporary or permanent site for debris management - TP is in discussions with Lewis County PUD on this.
- 

## **2016 FTC Work Plan**

**Presenters: Mark L**

This plan has been out for FTC review since the end of February. Mark incorporated all the comments he received on the plan to date. The plan is posted to the FTC website. It includes topics coming up at future meetings, protocols, contacts and reports and when they are due. It also includes when various M&E leads will make presentations to the FTC. We recognize that this is a living document and a coordination resource for FTC members.

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## **CRR Fund**

**Presenters: Mark LaRiviere**

Mark explained that the subcommittee met the second week of March. Pat Frazier continues to lead this group (thank you Cindy) and he believes they can wrap up their work in two more meetings. They completed their review of the list of potential implementation questions. Pat is writing these up. He is also preparing to bring the Hatchery-Associated Production section and the Scope of Projects Considered section to the FTC for consideration at the June meeting. There is now broad agreement on what is meant by administrative costs. They will be sent out ahead of time so the FTC is able to review prior to the meeting. Tacoma is also talking with Jeff Breckel of the LCFRB about this. Stay tuned.

### **Action Item:**

- Peggy: Coordinate with Pat to set up two more meetings to finish the work of the subcommittee and discuss at June FTC meeting. Ensure draft documents are sent out to the FTC with sufficient time for review.
-

## 2016 FHMP Update Process

**Presenters: Cindy, All**

We reviewed the issue papers produced by subgroups for the following topics. The idea is that the FHMP is a base, foundational document that would remain pretty much the same with each iteration. The FHMP would be more of a guidance document for the Action Plans that are updated on an annual basis. Various appendices would be changed more specifically with each version (e.g., working toward a particular harvest rate, etc.). Paul cautioned the need to remind ourselves and the public about the primary goal of recovery. Include a plain-talk piece (perhaps on the TP website?) that explains the goals of balancing recovery with harvest. This could be an element of the Communication Plan and could be reiterated at public meetings. Put a table together for each species, stating goals for reintroduction, goals for harvest, where and when, etc. This would be revised on an annual basis.

- 5: Harvest Management: Keith (coordinator), Cindy
  - Includes an adaptive component to periodically reevaluate goals (from WDFW).
  - Include priority species with ranges of potential harvest (min / max).
  - Section 5 and 6: Who owns the “should” (e.g., “This strategy should define achievable goals.”)? The FTC?
- 6: FHMP Goals and Objectives: Keith (coordinator), Cindy
  - Lays out guidelines for the FHMP.
  - Focuses on numbers and size of release strategies, hatchery plans, etc., how to best use tools (Is the ISIT model the best tool to use?), communication plan
  - Include HSRG targets / guidelines, and then show through ISIT how these are being tracked.
  - Ensure hatchery and M&E programs are collecting appropriate data (ties to research needs).
  - Add the ranges we are working within and also describe how this fits into the goals and objectives, with specific details being updated each year.
- 7: Increasing Hatchery Production: Mark (coordinator), Cindy
  - Combined with Issue #4 (Hatchery Programs)
  - P. 1, Article 5 interpretation around pre-smolts reared in the upper hatchery to avoid conflict with listed stocks. Does this make sense from a biological perspective? Maybe explain how this was about collecting juveniles in the upper basin and how given current science, this doesn’t make sense.
  - Explains 650K lb. cap (tied to TP’s requirement / responsibility to produce).
  - Add to interpretation: The remodeled hatchery complex will be able to accommodate a range of production levels of up to 800K lb. This is based on steelhead production (to the exclusion of spring Chinook) with higher densities at lower flows. This is outlined in the table with the species and the goals, showing that spring Chinook is our highest priority. This would be great to put on TP’s website, in plain language.

- The production level within the hatchery complex will not exceed 650K lb./year for all stocks unless additional production from the escrow account is used for protecting and promoting the recovery of Cowlitz River listed stocks. The decision to abandon volitional release has been made but not submitted to FERC. Additional production above the 650K cap may be allowed with use of the escrow account but only for protecting and promoting the recovery of Cowlitz River listed stocks. Based on ESA listings at the time, the 771K number was seen as the total number of fish that would be produced in the basin based on the size of NOR populations. That number may now be 841K. If we want to use the escrow funds, then that increase in hatchery production has to be for listed fish.
- Article 5: If you use the escrow funds, you can go over the 650K cap for purposes of recovery.
- It is important to clearly state our goal to recover fish and provide harvest opportunity. Explain also that certain things need to occur in the hatchery before we can increase harvest opportunity.
- To recommendation: Describe the FTC interpretation clearly.
- 771K lb. could be the max production in terms of ESA.
- Difference could be made up if someone raised fish elsewhere (not in the hatchery).
- Ladders are not gone until FERC says they are gone.
- We can decide if we want to renegotiate the 650K cap – associated with the Cowlitz facility and three satellite facilities (within the Cowlitz complex).
- 9: FHMP: Prescriptive or Process?
  - Factor goals and objectives into modifications.
  - Prepare plain-language summary of key points.
  - Don't re-write the plan each time. Update the appendices with details (reviewed annually or as needed).
  - FHMP provides sideboards and guidance in the body of the document. This would also be reviewed at least every six years.
  - Include concept of adaptive management.
  - It would all be combined into a single document at the end.
- 10: Population Designations: Matt (coordinator), Cindy, John
  - Recommendations: M&E subgroup to review developed protocols for marking and tagging strategies. Do we need to tag each population separately? We agreed to remove the first recommendation.
  - Interpretation: Include that we are questioning whether there is a better way to have these populations designated.
  - We need to provide a schedule.
  - FHMP to ID current population structure and discussion on how we would deal with it if we did change the structure.
- 11: M&E and Research: Matt (coordinator), Cindy, John
  - Good example of how to rewrite the FHMP
  - Shows strong language around the need for research, evaluation, and monitoring

- Appendix shows priorities and basic set of needs which will morph over time and especially when we get to the upper basin.
- Under recommendations: add language about including adaptive management in the new FHMP (Note: this is outlined in Chapter 2. 2.1 and shows the decision making process that supports an adaptive management approach.)
- Last line: change “on the research proposal” to plural.
- 12: Juvenile Marking: Matt (coordinator), Cindy, John
  - Recommendations: TP is responsible to reporting the annual fish marking program to FERC. The M&E subgroup will review and develop protocols (not marking and tagging subgroup). Review these protocols annually or as needed.
- 13: Nutrient Enhancement: John (coordinator), Cindy, and Sam
  - Recommendations: M&E Working Group to determine whether a study of reservoir nutrient levels might be warranted.
  - Update table in FHMP or re-describe what we can actually do. Otherwise, it looks like we are way short of what is required.
  - Insert applicable state requirements. Include definition of “food grade.”
  - Reference report that Cindy sent out on nutrient enhancement. This may challenge our adult release strategy. How does ISIT model help us to decide this?
  - We need to keep in mind the public reaction to smelly fish carcasses.
- 14: Resident Fish: Mark L (coordinator), Mike, and John
  - Recommendations: Stock the fish outside the Cowlitz River basin and if they must be in the basin, then stock them in Riffe Lake. Background: This was a negotiated issue (the original 50K) in 1988 and the program is to be continued, based on FTC recommendations.
  - Recommend releasing coho into Riffe Lake.
  - Recommend to continue stocking in Swofford and SLCPP ponds.
  - Issue Problem Statement: Change “low Fish Passage Survival” to “low Collection Efficiency.”
  - Replace Jack Tipping reference with “it is unclear if that was successful.”

#### 2016 FHMP Schedule:

Cindy and Mark met as part of the General FHMP Subcommittee and put together a proposal / straw man on the other parts of the document. Keith is the third member of the subcommittee and is currently reviewing this.

Mark proposed a schedule based on what was done with the prior FTC update. We are required to have a public and an FTC review and comment period. Last time we provided two reviews each. Keith proposed changing it to build in a contingency margin. This would mean doing one 30-day public review and making sure the public gets to begin the conversation now. We will also do special outreach to the environmental community. They have been invited, but have remained largely uninvolved up to this point.

Potential 2016 FHMP Update Schedule:

- Finish issue papers at June FTC meeting
- Review with Ad Hoc Group in June, 2016
- Discuss at June 30, 2016 APR public meeting
- Discuss at July FTC meeting
- Release draft plan July
- Start with initial public comment meeting in August, 2016
- Public comments due September, 2016
- TP responds to all comments received by October, 2016
- FTC then discusses further at November 1, 2016 FTC meeting
- Second public meeting in Nov. 9, 2016 (in Morton?)
- Public Comments due Dec. 9, 2016
- Final comments due Jan. 1, 2017
- FERC submittal on Feb. 1, 2017

**Action Items:**

- All: Send comments and edits (in track changes) on each of the issue papers to Joan by April 26.
- Joan: Incorporate all comments on issue papers and send out one week prior to our May meeting. Keep track of comments on the various issue papers using track changes and send updates to Mark L who will continually post the most current version on the FTC website.
- All: Be prepared to finalize issue papers 5-14 at the May meeting and to review the draft issue papers 1-3 so they can be finalized at our June meeting.
- Keith: Work with Shannon to create an easy to understand explanation of the trade-offs with various species and balancing recovery (higher priority) with harvest.
- Eric: Bring copy of the SCL plan to next meeting.
- Shannon: Forward Lewis annual plan to Mark.
- Shannon: Get nutrient enhancement research (Tony M) to Cindy.
- John: Ensure what we include in nutrient enhancement is consistent with WDFW policies in Region 5 for numbers of nutrients to distribute.
- Cindy: Use ISIT model to describe how we got the 841 lb. number.
- Mark: Send out article to all: A single generation of documentation heritable alters the expression of hundreds of genes.
- Mark: Send nutrient enhancement paper to Joan.

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**Decision Document 2016-3: Mayfield Downstream Fish Passage Study**  
**Presenter: Matt Bleich**

Matt went over the highlights of the draft decision document, explaining that they propose the following for 2016: Using PIT tags to focus on Chinook juveniles, with evaluation of the secondary separator.

- Operate 4 (actually 4 fully functioning vs. 3 as was the case in 2015) pumps

- Use a phased sequencing design (instead of repeating a random block design)
  - Baseline
  - 4-pump operation preceding the drawdown each time (to see if there is benefit around stacking those operations).

They will be using adaptive management strategies to come up with the design solution, based on the 2013-2016 study results. 2014 was a high-pathology year and 2015 was an extreme drought year. Ed (NMFS) expressed concern through Michelle that this year's study won't give us very much information. Long term, the focus will be on the whole juvenile bypass system.

**Decision Made: Members present agreed to approve Decision Document 2016-3 with the addition of the below action item for Matt.**

**Action Items:**

- Mark: Post updated version of Decision Document 2016-3 and contact absent FTC members about the decision.
- Matt: Write up an approach document about how TP is thinking about various system components and how that impacts the design for this year. Do this within the context of the whole system (fish passage improvement at the Mayfield Project). Discuss with NMFS.

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**2016 APR Process**

**Presenter: Mark LaRiviere**

Mark discussed the agenda topics for the May 19 meeting:

- Workshop format to explain the reason for the APR meetings
- Current fisheries issues including:
  - Mayfield net pens
  - SRSR recycling
    - Stray rates
  - Hatchery Production
  - NOR fall Chinook Fishery
  - Adult release sites
- Do ISIT Model Demo / distribute tables for each of the populations and basis and assumptions of FTC decisions:
  - Steelhead scenarios?
- Announce where we are with the 2016 FHMP Plan and when it will be out for public review, etc.
- Use polling tool again if available.

The second meeting will be June 30. Both meetings will be from 6-8 PM at Centralia College.

We discussed possibly having an additional public meeting that may include a salmon BBQ?



At our March meeting, after considerable discussion, we came to tentative consensus to use at least the same recycling rate this year as we used last year. This agreement is contingent on the ISIT data and was shared with the Ad Hoc Group on March 24. We will finalize this at our May meeting.

#### Steelhead Stray Rate Memo

Cindy proposed, based on the table in the memo, to use a 1% stray rate for maiden fish. This would allow for us to recycle 100% of the summer run steelhead. Michelle expressed concern that there are many fish that are unaccounted for. Cindy explained only mainstem Cowlitz spawners are missing from the data. There is uncertainty. We don't have weirs on all the rivers. We don't know what is happening in the mainstem. NMFS is concerned with out-of-basin stray rates. Also, the summers are recycled and they are segregated. The winters are integrated. Given these factors, including the unknown fate of the recycled fish all give NMFS concern about going with a 1% stray rate. Michelle reminded all that we started with a 10% stray rate and then we reduced it to 2%. Paul and Shannon also agreed that we don't have enough data and that staying more conservative at this time is important. This is also something that the Ad Hoc Group understands.

In the radio tag studies, 30% were unaccounted for. In Floy tag studies we only have a return number – not a return rate. 30% return to the hatchery and around 30% were harvested.

If we amplify the number of Floy tags this year, do a creel, and work with CCA to do a derby to emphasize the importance of getting tags returned.

#### Action Items:

- Mark L: Send out draft agenda for May 19 meeting.
- Mark L: Set up meeting with DJ Warren and Associates re: functionally defining terms in the ISIT model and how they plug into the equations. Get insight on where the initial 10% stray rate came from. Is this an out-of-basin stray rate?
- Michelle: Meet with Cindy and Mara about the data.

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#### Packwood Release Site

**Presenter: Cindy**

Cindy proposed releasing the spring Chinook adults; 30% in the Upper Cowlitz, 30% in the Upper Basin, and 30% in Lake Scanewa. Ultimately, we will have a release site above Packwood. Poaching is a concern.

There is a possible site at Jodie's bridge (maybe when the water is cold, late in the season). The Coal Creek site may also be of use if we develop a slide. The Cora Bridge may also be a possible site.

WDFW plans to start putting spring Chinook up there as early as next week. They would put in the regulation to close the section where these fish are being released. We need to develop a strategy for how best to start integrating these fish. Do we wait until we reach 60% fish passage survival (FPS)?

Next steps: We will discuss this during the APR process this year.

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## **Review / Approval of March 1, 2016 Meeting Summary and Action Items**

The March meeting summary was approved with minor edits and will be posted for public review.

### **Meeting Evaluation**

- Good discussions.
- Very collaborative – listened well to each other and beginning to creatively problem solve
- Highly productive

### **Handouts**

- Draft March 1, 2016 FTC meeting summary
- April 5, 2016 FTC Meeting Agenda
- Cowlitz River Project Issue Papers:
  - No. 5 – Harvest Management
  - No. 6 – FHMP Goals and Objectives
  - No. 7 – Hatchery Production Cap (combined with Issue 4)
  - No. 9 – FHMP: Prescriptive or Process?
  - No. 10 – Population Designations
  - No. 11 – Research Needs
  - No. 12 – Juvenile Marking
- Nature Communications Article: A single generation of documentation heritable alters the expression of hundreds of genes by Christie, Marine, Fox, French, and Blouin, published Feb. 17, 2016
- March 22, 2016 WDFW letter from Mara Zimmerman on Hatchery Steelhead Stray Rate in the Cowlitz River
- Decision Document 2016-3: Mayfield Downstream Fish Passage Study

### **Potential May 3, 2016 Meeting Agenda Items**

- Welcome / Announcements (15 min.)
- CFD Northshore Collector Update (10 min.)
- 2016 APR Process (30 min.)
  - Finalize May 19 agenda
  - Recycling Rate?
  - Preliminary ISIT Results
- FHMP 2016 Update Process (2.5 hours)
  - Preview draft Issue Papers 1-3
  - Finalize Issue Papers 5-14

- 5: Harvest Management
  - 6: FHMP Goals / Objectives
  - 7: Increase Hatchery Production?
  - 9: FHMP: Prescriptive or Process?
  - 10: Population Designations
  - 11: Research Needs
  - 12: Juvenile Marking
  - 13: Nutrient Enhancement
  - 14: Resident Fish
  - Mara PPT: Lower Cowlitz River Coho Populations (60 min.)
  - Barrier Dam Fish Passage Subcommittee Report
  - DAMW / TWG Update
    - Update on Schedule
  - Review Action Items / Finalize March 1 Meeting Summary (10 min.)
  - Set Agenda topics for June 7, 2016 Meeting (10 min.)
    - CF Northshore Collection Facility Update
    - FHMP 2016 Update Process
      - Finalize Issue Papers 1-3
      - Finalize Update Schedule
    - APR 2016 Process
      - Debrief May meeting
    - CRR Fund Update (60 min.)
    - DAMW/TWG Update
    - Reintroduction Strategy Subgroup
    - Barrier Dam Fish Passage Subcommittee Report
  - Evaluate the Meeting
- 

#### **Parking Lot / Potential Future Agenda Topics**

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River
- Climate Change
- Cowlitz smelt presentation (by WDFW and Cowlitz Tribe)

**Cowlitz Hydroelectric Project**  
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**FTC Members**

Mark Celedonia (by phone)	USFWS
Michelle Day	NMFS
Mark LaRiviere	Tacoma Power
Cindy Le Fleur	WDFW
Jim Pacheco	WA Dept. of Ecology
Bob Rose (absent)	Yakama Nation Fisheries
Paul Sparks	WA Chapter Trout Unlimited

**Other Participants**

Peggy Miller	WDFW
John Serl	WDFW
Mara Zimmerman	WDFW
Carol Serdar	WA Dept. of Ecology
Keith Underwood	Tacoma Power
Matt Bleich	Tacoma Power
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Ann Weckback	Technical Representative for Tacoma Power
Shannon Wills Nation	Technical Representative for the Yakama Nation
Joan Nichol	Meridian Environmental
Lyn Wiltse	PDSA Consulting

**2016 FTC Meeting Dates: 9-3 at Mayfield**

June 7, July 5, Aug. 2, Sept. 6, Oct. 4, Nov. 1, Dec. 6

**APR Public Meeting Dates**

May 19 and June 30 at Centralia College, Walton Science Center, Room 121 from 6-8PM

**FTC Meeting – APR Process & ISIT Model**

May 6 at the Cowlitz Salmon Hatchery from 10-3.

**Barrier Dam Subgroup (Mark, Matt, John, Michelle, Ed, Mike, Kirk)**

May 20 at NMFS Office in Portland - 11<sup>th</sup> floor from 10-1.

**Fall Chinook Subgroup (Cindy, Michelle, Rich, Rich, John, Matt, Keith)**

June 2. Details TBA (Cindy is coordinating)

### **Decisions Made at this Meeting:**

- Approval of Decision Document 2016-5: FHMP Issue Papers 5-14
- Approval of April 5 FTC Meeting Summary

### **Announcements**

- This was Mark LaRiviere's last meeting with the FTC as he is retiring. We celebrated with cake and thanked him for his many years of service, his dedication to the collaborative process, and his attention to detail in guiding the FTC to fulfill the terms of the Settlement Agreement. He will be going to work part-time for DJ Warren and Associates.
- Keith reminded all that the open positions of Sr. Fisheries Biologist and License Coordinator closed on April 15. They have a good pool of candidates and will be conducting interviews over the next few weeks. There will be an update at our next meeting.
- Matt reminded all that the following reports are out for review:
  - Final Draft 2015 Mayfield Fish Passage Survival Study (out for 30-day review)
  - 3-Year Wrap-Up Report for Mayfield (under final review at TP and will be out for review shortly thereafter).
- John reported the CFFF is now operational. They are catching normal numbers of fish (primarily coho). There are some problems with the CSH stress relief ponds discharge pipe so the juveniles from the upper basin are being released directly into the river at the Barrier Dam boat launch. There was discussion about how to improve communications around such decisions so all stakeholders are informed in a timely manner. John reported there are also issues with the sorting bars (flat bars were installed over round bars) at the CFFF. This is being evaluated as it is not effectively separating fry from the smolts. If anyone wants to be on the list for the CFFF reports, let John Serl know. It will be another year before the CFNSC facility is up and running.
- Hydro Operations Update: Riffe is fuller than typical bringing a slight increase spill probability at Mayfield (still under 20%). As occurred last year, TP is being proactive by trying to keep the lake as full as possible with another warm summer anticipated. We are currently at 100% snowpack at Paradise, but it is disappearing rapidly.

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### **2016 FHMP Update Process**

**Presenters: Cindy, All**

#### Issue Papers 5-14

We began by reviewing the "final version" of issue papers.

- 5: Harvest Management (aka Allocation Recovery): Keith (coordinator), Cindy
  - Approved
- 6: FHMP Goals and Objectives: Keith (coordinator), Cindy
  - Approved
- 4 & 7: Hatchery Production Cap: Mark (coordinator), Cindy

- Discussion: The strategy remains to use adults for recovery of the population in the upper watershed. In the 2011 FHMP the focus on using adults is noted in Issue Paper 1, Section 2.3
- Deleted crediting mechanism language.
- Agreed to add “Currently” to qualify the 5-year rolling average
- 9: FHMP: Prescriptive or Process? Keith, Pat, Cindy
  - Approved
- 10: Population Designations: Matt (coordinator), Cindy, John
  - Joan announced that the completed recommendations section was inadvertently not sent out to all in advance.
  - Combined Questions 1 and 2 with “or” and added “e.g., steelhead” to Question 4.
  - Suggested new language for Question 1 and 6.1.1. Joan will incorporate into new draft and send out to all to review.
- 11: M&E and Research: Matt (coordinator), Cindy, John
  - Approved
- 12: Juvenile Marking: Matt (coordinator), Cindy, John
  - Approved
- 13: Nutrient Enhancement: John (coordinator), Cindy, and Sam
  - Approved
- 14: Resident Fish: Mark L (coordinator), Mike, and John
  - Approved

#### Issue Papers 1-3, 10

We agreed to review the “final draft version” of the following issue papers before our next meeting in hopes that we can finalize them then:

- 1: Satellite Rearing
- 2: Hatchery Programs
- 3: Mayfield New Pens
- 10: Population Designation

**Decision Made: Members present agreed to approve Decision Document 2016-5 with the addition of the below action item for Mark.**

#### **Action Items:**

- Mark: Revise Decision Document 2016-5, removing the reference to Issue Paper #10.
- Mark: Post updated version of Decision Document 2016-5 and contact absent FTC members about the decision.
- Joan: Send out Final Issue Papers for 4-9, 11-14.
- Mark: Post same to FTC website.
- Joan: Send out revised draft of Issue Paper 10.
- All: Send comments and edits (in track changes) on issue papers 1-3 and 10 to Joan by May 13.

- Joan: Incorporate all comments on Issue Paper 10 (also in track changes) and send out by May 18. Keep track of comments on the various issue papers using track changes and send updates to Mark L who send out to all and also ensure the most current version is posted on the FTC website.
  - All: Be prepared to finalize Issue Papers 1-3 and 10 at our June meeting.
  - Joan: Incorporate all comments on outstanding issue papers and send out one week prior to our June meeting.
  - Joan and Lyn: Prompt FTC members about staying on top of the reviews of the remaining issue papers between now and the June meeting.
- 

## **2016 APR Process**

### **Presenter: Mark LaRiviere**

Mark walked us through the draft agenda he sent out and discussed the plan for the May 19 public meeting at Centralia Community College from 6-8PM. The Ad Hoc Group will meet at the Salmon Hatchery earlier that day.

Mark set up a meeting for FTC members on May 6 at the Cowlitz Salmon Hatchery with DJ Warren and Associates about the APR Process and the ISIT calculator model.

The second APR public meeting will be June 30, also from 6-8PM at Centralia College.

### **Action Items:**

- Mark / Monika: Let Cindy know if and WDFW can help present.
    - Graphs of returns / sport harvest over time
    - Steelhead numbers to the separator summer and winter for last year.
  - Mark: Send ISIT Model out to all by May 4.
  - Cindy: Send out invite to Michelle, Rich, Rich, John, Matt, and Keith for Fall Chinook Subgroup meeting on June 2.
-

## Estimates of Coho Spawners in the Lower Cowlitz River Tributaries

**Presenter: Mara Zimmerman**

Mara walked us through a PowerPoint responding to the FHMP goal (Appendix J) to estimate the numbers of natural- vs. hatchery-origin spawners in the lower Cowlitz River. She explained that it was difficult to get an accurate estimate of coho spawners within the 421 miles of tributary habitat. She described the methodologies she used for data collection:

- 4 resistance board weirs on tributary streams.
- Walking surveys are done of continuous spatial index reaches and also randomly-selected reaches.

2014 Coho Spawner Estimate:

<b>Tributary</b>	<b># NOR Spawners</b>	<b>#HOR Spawners</b>
Delameter	690	18
Olequa	4,801	151
Lacamas	5307	127
Outside weirs*	5,157	109
<b>Totals</b>	<b>15,955</b>	<b>405</b>

\*Due to the insufficient sample size from the Ostrander

### Action Item:

- Mark: Send out Mara's PPT to all and post to the FTC website.

## Review / Approval of April 5, 2016 Meeting Summary and Action Items

The April meeting summary was approved with minor edits and will be posted for public review.

### Meeting Evaluation

- Good discussions
- Excellent focus on issue papers
- Highly productive
- Once again, our eyes were bigger than our stomachs in terms of how much we were able to accomplish.

### Handouts

- Draft April 5, 2016 FTC meeting summary
- May 3, 2016 FTC Meeting Agenda
- Cowlitz River Project Issue Papers 1-14
- Decision Documents 2016-5 and 2016-6

## Potential June 3, 2016 Meeting Agenda Items



- Welcome / Announcements (15 min.)
  - CFD Northshore Collector Update (10 min.)
  - FHMP 2016 Update Process (2 hours) *Do this first thing and do final review at 1:00*
    - Review draft Issue Papers 1-3 and 10
    - Finalize Issue Papers 1-3 and 10
  - 2016 APR Process (90min.)
    - Debrief May 19 meeting / Next Steps
    - Finalize June 30 agenda
    - ISIT Model Data
  - CRR Fund (60 min.)
  - Barrier Dam Fish Passage Subcommittee Report
  - Fall Chinook Subgroup Report
  - SCL Strategic Planning Process by Eric (20 min.)
  - DAMW / TWG Update
    - Update on Schedule
  - Review Action Items / Finalize May 3 Meeting Summary (10 min.)
  - Set Agenda topics for July 5, 2016 Meeting (10 min.)
    - CF Northshore Collection Facility Update
    - FHMP 2016 Update Process
      - Finalize Issue Papers 1-3
      - Finalize Update Schedule
    - APR 2016 Process
      - Debrief June 30 meeting
      - Plan for third meeting?
    - CRR Fund Update (60 min.)
    - DAMW/TWG Update
    - Reintroduction Strategy Subgroup
  - Evaluate the Meeting
- 

#### **Parking Lot / Potential Future Agenda Topics**

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River
- Climate Change
- Cowlitz smelt presentation (by WDFW and Cowlitz Tribe)

**Cowlitz Hydroelectric Project**  
**FERC No. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Meeting Summary**  
June 7, 2016, 9:30 AM – 3:00 PM  
Mayfield Office

**FTC Members**

Mark Celedonia (absent)	USFWS
Michelle Day (absent)	NMFS
Mark LaRiviere (absent)	Tacoma Power
Cindy Le Fleur	WDFW
Jim Pacheco (absent)	WA Dept. of Ecology
Bob Rose (absent)	Yakama Nation Fisheries
Paul Sparks	WA Chapter Trout Unlimited

**Other Participants**

Peggy Miller	WDFW
John Serl	WDFW
Carol Serdar (by phone)	WA Dept. of Ecology
Keith Underwood	Tacoma Power
Matt Bleich	Tacoma Power
Eric Shoblom	Tacoma Power
Ann Weckback	Technical Representative for Tacoma Power
Jeff Breckel	Lower Columbia River Fish Recovery Board
Brett Raunig	Lower Columbia River Fish Recovery Board
Joan Nichol	Meridian Environmental
Lyn Wiltse	PDSA Consulting

**2016 FTC Meeting Dates: 9:30-3:00 at Mayfield**

July 12 (NEW DATE!), Aug. 2, Sept. 6 (FIELD TRIP?), Oct. 4, Nov. 1, Dec. 6

**Remaining APR Public Meeting Date**

TBD

**Decisions Made at this Meeting:**

- Approval of Decision Document 2016-6: FHMP Issue Papers 1-3
- Approval of May 3 FTC Meeting Summary

**Announcements**

- Keith announced that they have filled the positions of Sr. Fisheries Biologist (is expected to be onboard by July 11) and License Coordinator. The License Coordinator will be Travis Nelson and will be onboard June 20. He is working on his MBA and will be working on strategies to increase the effectiveness of processes in support of license activities.

- Keith was notified by Taylor Aalvik that Shannon Wills has resigned and is no longer associated with the Cowlitz Indian Tribe. Taylor will be getting back to Keith about who they will be assign as the Yakama Technical representative.
  - Hydro Operations Update: Riffe Lake is ~757'. It will remain at this level or slightly increase, depending on inflows. As usual, Tacoma will provide pulse flows for fish transport and fully anticipate being able to meet MIFs. Carol reminded Tacoma that if they anticipate going below their true minimum flows as stated in the license, they would need to show impact on fish (dewatering, etc.). Keith explained they may start exercising their 4' operational range in Mayfield Lake to a greater extent in the future. They are trying to manage debris in a way that meets other license implementation-related interests such as recreation and cultural resources. TP continues to be proactive in keeping Riffe Lake as full as possible with another warm summer anticipated. La Niña appears to be forming which would mean a slight probability of a wetter-than-normal winter.
  - Update of CF Tailrace Collector Deployment: Matt explained that the reservoir is not projected to reach elevations that will allow for installation of the collector this season. This will represent a deviation from the plan as described in Decision Document 2016-1. We will reevaluate how to proceed next year, and the CFD Northshore Collector will be up and running then so it may make sense to re-deploy the tailrace collector elsewhere.
  - Update on CFD Northshore Collector: Keith explained construction of the new collector remains on schedule. The box for the mechanical devices has been constructed and they are starting to place these components in the vault. They will begin installing the head gates in late August and complete the process in early September. All agreed that it made sense to do a field trip to see the progress on the collector before the removal of the coffer dam and the facility is watered up (August / September timeframe). The drawdown is planned for September 12. There was discussion around holding the FTC meeting at the LCPUD meeting in Morton and then doing the field trip from there.
    - Action Item: Keith to investigate setting up a meeting possibly in Morton combined with a field trip.
  - Update from Barrier Dam Fish Passage Subcommittee: Matt explained that TP needs time to define its historic criteria for the dam, along with recommendations for what future criteria should entail. There will be a report from this subcommittee at our August meeting, as the subcommittee will not meet until TP has completed the evaluation on the effectiveness of the barrier dam and what improvements might be made. TP currently has a hydraulic modeler evaluating associated flow issues.
  - Matt explained that the Annual Upstream Fish Passage report (30-day review) and the Mayfield 3-year Study are out for FTC review.
    - Action item: Matt to send out due date for Annual Upstream Fish Passage Report to all.
-

## 2016 FHMP Update Process

Presenters: Joan, All

### Issue Papers 10, 1-3

Prior to this meeting, everyone reviewed the “final draft version” of the following issue papers in hopes that we can finalize them by approving Decision Document 2016-6.

- 10: Population Designation
  - There were edits to the initial section and also to section 6.
  - Comments were also received from Jeff Breckel. LCRFRB sees populations as synonymous with fish IDs. Population identification was done by NOAA. Recovery goals are set by the LCRFRB. Is it possible to separate individual populations from the meta-population data? E.g., the hatchery spring Chinook being placed upstream will spawn with fall Chinook. How can we determine what we can effectively manage? We need to make sure the designations make sense from practical and biological perspectives. We want to be able to track the impacts of management decisions and associated actions. We need to clearly outline in the paper which problems we are trying to address and what questions are associated with solving the problem. Note: It is much easier to change a recovery priority than it is to change an actual population designation.
  - It may be helpful to say that there are issues to be addressed that may result in a reevaluation of population designations – on an ESA-wide basis. Maybe the paper should mention the recovery plan and then state that, for our purposes in the Cowlitz, we have distinct issues and goals. Keith suggested that we, as the FTC are saying in this paper, that the population designations should be revisited. Otherwise, it seems doubtful that TP could achieve goals in the SA along with what is described in the recovery plan.
  - Matt explained the intent of the subgroup was to identify issues they see that need to be addressed by a larger external group.
  - How best can we manage (short- and long-term) under the current population designations? Of course, adaptive management will be a key component.
- 1: Satellite Rearing
  - We reviewed WDFW comments in Section 3 and 6. Those edits were accepted.
  - Paul asked that recovery be listed as the primary focus in Section 6. We agreed on the following language (bolded) for Section 6, replacing paragraphs 2-4:
    - **Satellite rearing facilities should not be implemented until the purpose or goal of the facilities is agreed upon. This purpose/goal could state: **Satellite facilities can target recovery and/or harvest. Harvest goals must be compatible with recovery objectives. Operations for recovery objectives should address factors that limit VSP parameters (abundance, life history, spatial distribution, and productivity) for listed populations.****

- We also discussed possibly setting some interim recovery goals so harvest interests don't take over.
- 2: Hatchery Programs
  - We agreed to include the WDFW recommendation to Section 6.
- 3: Mayfield New Pens
  - We reviewed clarifying comment in section 4, adding that another benefit of net pens is to improve imprinting.

**Decision Made: Members present agreed to approve Decision Document 2016-6 with the removal of references to Issues Paper 10.**

**Action Items:**

- Keith and Matt: Take the lead in redrafting Issue Paper 10 and corresponding decision document. Include options, e.g., releasing steelhead in only one of the areas – not all three. We need to be able to measure the results of our actions to the extent possible.
  - All: Be prepared to finalize Issue Paper 10 between now and our July 12 meeting.
- 

**2016 FHMP Process / Schedule**

**Presenter: Joan Nichol**

Joan distributed copies of the FHMP timeline and corresponding outline for completing the FHMP including three opportunities for public input with a target submittal to FERC in 2017. Cindy declared herself a staunch supporter of this ambitious document, which has us finishing up all the issue papers this month and getting the draft FHMP out to the FTC for review in July. The first FTC review period would be the first half of July. It would be available for the Ad Hoc Group to provide input in the third week of July. It would then be revised and put out for the public in late August. It would then be revised again and sent out to FTC in late October. There would be a final public review in mid-December and go back out for FTC review in mid-January and be sent to FERC in February, 2017.

The new Appendix A (data including ISIT Tables that comes out of the APR) would be out later this month with the new M&E Action Plan (A-17). This will include primary priorities, etc. Maybe call this Management Structure

WDFW has been working on the M&E section of the document. (What needs to be updated in Appendix F). They have not addressed whether there should be a change in the framework.

**FHMP Outline:**

- 1: Introduction / Background: Should include some substantive language from the original language. Refer to the recovery plan, guiding principles and FERC requirements.

- 2: Include description of basin, project facilities and life cycle. Refer to issue papers and how they are incorporated. Include Satellite facilities.
- 3: Adaptive Management / Science Framework: A bit more generic than current document.
  - HSRG Decision Rules have not been changed.
- 4: Management Structure (reviews each population)
  - Resident fish
- 5: Monitoring, Evaluation and Research
  - Actual plan will be Appendix E and F
- 6: Other Related Issues (includes placeholders)
  - Include Issue statement, approach to resolve, recommendation for each
  - Pull out Population Designations and include reference to “Related Activities” including CRR Fund, Fish Passage, Recovery, and other plans along with a brief description so this can be a standalone document to the extent possible.

**Action Items:**

- Cindy: Review her notes on Section 2 from discussions with Mark L.
  - Keith: By June 28, distribute draft FHMP to FTC for review.
- 

**Fall Chinook Subgroup Update**

**Presenter: Cindy LeFleur**

Cindy announced that the meeting intended for June 2 did not occur. She will send out an invitation to Michelle, Rich, John, Matt, and Keith for a Fall Chinook Subgroup meeting.

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**2016 APR Process**

**Presenter: Keith Underwood**

Report on May 19 APR Meeting: Only two members of the public attended outside Ad Hoc Group, Tacoma, FTC, and the press. We discussed how to make the meeting more enticing / newsworthy. Some felt that having a meeting without substantive changes to discuss would serve to only further frustrate an already frustrated public. There was discussion around possibly having a meeting in late summer / early fall under a tent at Blue Creek? This would provide an opportunity for more of a dialogue than what occurs in a classroom setting. A better setting for conversation might be accompanied by a barbeque open to the fishing public.

As we are no longer facing large disgruntled crowds at these meetings, we agreed that we would respond formally to questions raised at public meetings on an as-needed basis and that the 2009 protocol was no longer relevant.

We agreed to cancel the APR meeting that had been scheduled for June 30 at the Centralia Veteran’s Memorial Museum from 6-8PM. Cindy announced that the next Ad Hoc Meeting will be on July 19.

**Action Items:**

- Keith / Monika: Work on setting up (with CCA?) a meeting at Blue Creek in the August / September timeframe.
  - Eric: Work with Sam to finalize APR numbers and present in decision document for approval at July 12 FTC Meeting.
- 

## **Seattle City Light Strategic Planning Process**

### **Presenter: Eric Shoblom**

Eric briefly described SCL's strategic planning process including the governance structure for the Adaptive Management Plan (AMP) process. The structure of their Strategic Plan includes identifying key outcomes and then working backwards to identify 2025 goals, milestones, and then actions. He showed us an example from the Cedar River Strategic Plan. He also compared and contrasted how they distinguish an AMP from a Strategic Plan:

#### Adaptive Management Plan

- Ask Questions
- Hypothesizes possible answers
- Describes monitoring requirements to identify current status of unknowns
- Identifies Thresholds requiring action
- Suggests contributing factors and methods of correction
- Proposes Actions based on thresholds

#### Strategic Plan

- Collaborative process targeted at attaining agreement on the following:
  - Identify key outcomes
  - Establish key milestones
  - Review frequency
  - Actions to be taken

## **Review / Approval of April May 3, 2016 Meeting Summary and Action Items**

The May meeting summary was approved without edits and will be posted for public review.

### **Meeting Evaluation**

- Good, frank discussions
- Excellent demonstration of collaboration as we listened deeply to each other's interests

### **Handouts**

- Draft May 3, 2016 FTC meeting summary
- June 7, 2016 FTC Meeting Agenda
- Cowlitz River Project Issue Papers 10, 1-3
- Draft Agenda for June 30 APR Meeting
- Protocol for responding to questions raised at public meetings, 2009
- Decision Document 2016-6

### **Potential July 12, 2016 Meeting Agenda Items**

- Welcome / Announcements (15 min.)
- CFD Northshore Collector Update (10 min.)

- FHMP 2016 Update Process / Next Steps
    - Review / Approve Issue Paper 10 (Decision Document 2016-7)
  - 2016 APR Process
    - Plan informal third meeting?
    - Finalize APR numbers (Decision Document 2016-8)
  - CRR Fund (60 min.)
  - Barrier Dam Fish Passage Subcommittee Report
  - Fall Chinook Subgroup Report
  - DAMW / TWG Update
    - Update on Schedule
  - Review Action Items / Finalize June 7 Meeting Summary (10 min.)
  - Set Agenda topics for August 2, 2016 Meeting (10 min.)
    - CF Northshore Collection Facility Update
    - APR 2016 Process
      - Plan for third meeting?
    - CRR Fund Update (60 min.)
    - D/S Adaptive Mgt TWG Update
    - Reintroduction Strategy Subgroup
  - Evaluate the Meeting
- 

#### **Parking Lot / Potential Future Agenda Topics**

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River
- Climate Change
- Cowlitz smelt presentation (by WDFW and Cowlitz Tribe)



**Cowlitz Hydroelectric Project**  
**FERC No. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Meeting Summary**  
July 12, 2016, 9:30 AM – 2:30 PM  
Cowlitz Salmon Hatchery

**Attendees**

Michelle Day	NMFS
Cindy Le Fleur	WDFW
Sam Gibbons	WDFW
John Serl	WDFW
Peggy Miller	WDFW
Jim Pacheco	WA Dept. of Ecology
Carol Serdar	WA Dept. of Ecology
Paul Sparks	WA Chapter Trout Unlimited
Keith Underwood	Tacoma Power
Travis Nelson	Tacoma Power
Eric Shoblom	Tacoma Power
Florian Leischner	Tacoma Power
Debbie Carlson	BPA
Mike Kohn	LCPUD
Steve Manlow	LCRFRB
Brett Raunig	LCRFRB
Ann Weckback	Technical Representative for Tacoma
Joan Nichol	Meridian Environmental
Lyn Wiltse	PDSA Consulting

**Invited / Absent**

Mark Celedonia	USFWS
Bob Rose	Yakama Nation Fisheries
Matt Bleich	Tacoma Power

**2016 FTC Meeting Dates: 9:30-3:00 at Cowlitz Salmon Hatchery**

Aug. 2 (conference call from 9:30-11), NEW DATES: Sept. 12 (Monday) and Sept. 13 (Tuesday, combined with field trip to see the Northshore Collector during the drawdown), Oct. 4, Nov. 1, Dec. 6

- Action Items:
  - Travis: Set up conference call line and WebEx login for August 2 call.
  - Travis: Suggest overnight accommodations in Morton (reserve a block of rooms?) and arrange field trip on afternoon of September 13.

**Ad Hoc Meeting (Not an official joint FTC / Ad Hoc meeting; all are invited to attend)**

July 19 at the Cowlitz Salmon Hatchery starting at 9am

### Decisions for this Meeting:

- Finalize June 7, 2016 meeting summary
- Review and Approve FHMP Issue Paper 10
- Get agreement on APR numbers

### Announcements

- **Tacoma Power new hires and reorganizations:**
  - **Keith introduced Travis Nelson as Licensing Coordinator for Tacoma Power. Travis was previously with WDFW and brings a lot of experience to the team. He will be attending these meetings on a regular basis. Welcome Travis!**
  - **He also introduced Florian Leischner, who is Tacoma's Lead Habitat Biologist. He will be attending these meetings on an ongoing basis. Welcome Florian!**
  - **Hans Berge will be coming aboard in the next few weeks. He has an extensive background in habitat and research. Matt Bleich will be focusing on fish passage.**
  - **Since Mark's retirement, Keith is looking at how to implement an approach that deploys resources in more of a functional basis rather than by location.**
- **We were happy to have Steve Manlow join us for the first time, as the new Director of the LCRFRB. Welcome Steve!**
- **Hydro Operations Update: Keith announced Tacoma is keeping Riffe Lake as full as possible. There was a wet winter and an early warm spring. July looks like an average month. Though there is no drought, reservoirs are lower than they should be so they are managing flows as conservatively as possible. On July 1, the license allows them to drop flows down to 2K cfs. They have not had to go this low in the past. They usually stay at 2,500 cfs. The elevation is currently at 750'. They are still generating and may go higher than MIFs when they need more power. There is a planned drawdown for September 12 – October 7 for maintenance activities, including cutting down a portion of the coffer dam so fish can use the entrance. Note: As of October 1, the MIF goes up to 3,500 cfs.**
  - **Action Items:**
    - **Kirk: Discuss BMPs with Carol relative to the drawdown.**
    - **All: Let Steve Fischer know if you are interested in attending a tour of the construction site the first Wednesday of each month, starting in August.**
- **Update on CFD Northshore Collector: Kirk walked us through some recent construction photos. He estimates construction to be about 65% complete. He further explained that they granted the contractor about 48 more days which will delay operation until the end of February, 2017 (still in advance of the fish collection season) due to change orders to deal with foundation issues and extension of the soldier pile wall. The civil and mechanical work should all be complete before Thanksgiving of this year. Commissioning should occur in the November / December timeframe (complete series of system checks to ensure**

everything is operational). Tacoma will define the operating procedures during the commissioning as it is possible for a few fish to enter the facility during that time.

- **Update from Barrier Dam Fish Passage Subcommittee:** Keith reported this committee has yet to meet. He will keep us posted.
- **CRR Fund Update:** This committee has not met since Pat returned to WDFW. Keith offered Florian's services in taking the lead on this so we don't lose any more momentum and continuity of thought from the subcommittee when it was meeting on a regular basis. There is a need to ensure NMFS is comfortable with all of this.
  - **Action Item:**
    - **Cindy:** Check with Pat to see if he wants to meet with Florian and/or the subcommittee to discuss the handoff.
- **Fall Chinook Subcommittee Update:** Cindy reported this committee has yet to meet. She will keep us posted.
- **Downstream Adaptive Management TWG Update:** Keith explained they are working on getting contractors pre-approved and in place to help with a variety of needs across Tacoma Power. The skill sets are around fish passage, hatcheries, on-call labor staff, M&E capabilities, etc. He ensured they will ask for FTC input on which consultants are the best fit for specific work tasks over time. Keith explained that this will allow us to capitalize on the good work that has already been done by the DAMW. Concern was expressed that FTC members did not have an opportunity to weigh in on the selection of consultants. Keith explained that TP is following the process used by the USACE. He assured everyone that the FTC will be involved in writing specific project requirements and also selecting qualified contractors. It would be possible to hire someone from outside of the pre-approved pool. Keith explained that this should help to address TP's slow and cumbersome procurement process.
- **Gravel Augmentation Plan:** Ann asked if it would be possible to revise the Gravel Augmentation Plan to allow the County to use some of the streambed material near the Barrier Dam for upcoming culvert replacements and stream simulations in an active channel of a tributary of the lower Mainstem. She offered that this might be a way to help with the goals of the gravel augmentation plan as the gravel would be available to move downstream. There was concern about removing one mitigation and giving it to another – thereby losing one set of mitigation. The aim of the gravel plan is to augment sediment in the upper section of the river. If the USCACE agrees, it would be possible to use a bulldozer during low flows to push the gravel into the middle of the river. We agreed not to take action on this request at this time as it is not time sensitive or a high priority. We will take this topic up in March, 2017.
- **Adult Release Site (Tom Music Bridge):** Mike explained things are pretty much on track. Materials are being ordered for this site that is .8 mile downstream of the existing site. They have selected a contractor, Jim Ash. The USFS has reviewed everything and is very happy with the contractor selection. Ed Meyer of MNFS has also reviewed the plans. They will be able to build everything from the elevation of the bridge down to the water this August. Sometime after that they

will complete the structure for the truck to offload the fish. How will we know if the new system is working? What tests would be informative? Could we put some tags in these fish? Mike explained they would be putting some net pens down below to check on the condition of the fish. Michelle suggested we want to look at injury rates, and check for numbers of fallbacks and how changing the location of the release of fish impacts the fallbacks. Mike will keep us posted.

- Action Item:
    - Mike: Send this study to Michelle, John, and Eric for review.
- 

## **2016 FHMP Update Process**

**Presenters: Joan / Keith**

### **Issue Paper 10: Upper Basin Management Strategies (previously known as Population Designations)**

We agreed to change the title of this paper to “Upper Basin Management Strategies.” Joan walked us through the revised draft of Issue Paper 10, explaining the changes since our last meeting, many of which are in Section 4. The FTC will work with the LCRFRB to redefine the management challenges. A population designation subgroup would be formed to make marking and tagging recommendations.

Discussion:

4.1: How are we placing fall Chinook in the Tilton and Spring Chinook in the Upper Basin if we can't tell them apart? We use run timing to make morphometric decisions, but mistakes are made as we can't tell them apart. There are other ways to figure our integration rates and to estimate pHOS. We agreed on the following:

- Change wording to say it is *difficult / more work* – not that it is *impossible*.
- Say more plainly that we need to put more focus on placing spring Chinook in the Upper Basin. Say that we may want to put fall Chinook up there in the future.
- Add background around life histories on the upper basin. Include that there is huge uncertainty around the juveniles. This will be discussed by the subgroup and include the TRT analysis of how the runs are scheduled. After second sentence in 41: State that population changes will require a review and approval of the TRT analysis. Ultimately, NMFS would be the decision maker on this.

4.2: Any historic differentiation has been lost. Fall Chinook are also superimposing their redds where the Spring Chinook have spawned. Soften language to say *may* result in competition...

### **Draft FHMP and Roadmap to FHMP Revisions**

On July 7, Keith emailed out the preliminary draft of the 2016 FHMP along with a draft road map describing how the 2011 FHMP Update was altered to reflect this current 2016 preliminary draft. Joan walked us through the changes as outlined in the Roadmap.

Discussion:

Section 2: Project area: Add some maps.

Section 3: Includes new ISIT Tables. Some tables still need some data from WDFW. Currently these data are organized geographically.

Section 4: Action Plan (the old Section 3). Tentative Titled: Foundation for Population Management. Make clear this is our starting point in 2016.

How are SARs calculated (Table 3-6 on p. 26)? How does juvenile passage figure in?

We discussed the structure and goals of the document, along with guiding principles to create a refined FHMP that better suits our needs. It may be helpful to say where we are today. Our interim goal, and our long-term goal. The Issue Papers will feed back into the FHMP. The Issue papers don't change over time. How we discuss them in the FHMP will change. We see the FHMP as a backbone document with the things that will change listed in the Appendix.

Keith suggested we make this document less insular and include what we are trying to do in the basin. We need to refocus the document from a production plan into a vision that links all of our programs together, including the LCRFRB, DAMW, etc. We need a vision that has an implementation strategy built around it. We need to set the context – to explain why we are doing what we are doing in a way that unifies the basin.

- The document should describe the current situation and program such as map of basin, assets available and a description of their uses including all up and down passage facilities.
- Clear goals need to be set for each species which include a description of current, interim (next 6 years) and ultimate end state.
- The adaptive management approach needs clear ties to the monitoring and evaluation program such as how program decisions are made and identifies information needed to make decisions.
- Reorganize the tables to show current situation, what we think we can do in 6 years, and then ultimate (Recovery Plan goals). Maybe not all of the tables need to be kept.
- Focus on putting things in the Appendix that are doable in the next 6 years
- Maybe pare the FHMP down to ~25 pages and put the rest in the appendix?

#### **Action Items**

- Travis: Draft Decision Document 2016-7 (Issue Paper 10: Upper Basin Management Strategies) and send out and post for all to review. Seek approval through email.
- Joan: Send edited version of Issue Paper 10 to Travis to distribute to all along with the Decision Document.
- Eric: Oversee the recalculation of SARs on Table 3-6. Are these estimates from other basins? Are they hatchery or NORs? 5-year average?
- Keith: Pull together TP team and get with Joan to create a new framework for the FHMP and identify who should be pulled in to help with which sections.

## **Finalize APR Numbers**

**Presenters: Eric**

We reviewed the draft Decision Document 2016-8 put together by Eric and Sam. The table on the third page compares last year's program with this year. We are pushing the limits in terms of hatchery space with the current mix of fish. There may be an opportunity to use more water – up to 270cfs (TP's water right).

Suggestions:

- Scrap the table and list 2015 and 2016 numbers in the body of the document.
- Label numbers vs. lbs.
- Complete Decision and Justification box at the top of the first page. State that the programs sizes and limits are basically the same as those in 2015. This is consistent with the Settlement Agreement and HSRG guidelines based on current NOR population estimates (pHOS and abundance).
- Include an explanation of the steelhead recycling rate.

**Decision: There was consensus on approving the 8,875,500 total fish as listed on the initial page of the decision document.**

### **Action Items**

- Eric: Update the document and send out to all by the end of the week.
  - Eric: Update and simplify the ISIT table for our future use. Be sure to use the original target numbers from 2001. Include WDFW Target Production, ESA numbers, etc.
- 

## **June 7 Meeting Summary**

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

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## **Define Topics for August 2 Meeting**

In addition to listing the topics for the August meeting, we prioritized the following FTC topics:

1. FHMP
2. Downstream fish passage
3. CRR Fund

### **Action Items**

- Cindy: Send Barbless Hook study proposal to Keith to distribute as an FYI to the FTC.
- Cindy: Send out draft notes from July 19 Ad Hoc Meeting.

## **August 2 Conference Call Topics**

- Welcome / Introductions
- Announcements
  - Hydro Operations
- CFD Northshore Collector Update
- FHMP 2016 Process:
  - Approve Issue Paper 10 (if not already done through email)
  - Approve Issue Paper 10 Decision Document
  - Review revised draft / work plan
- Debrief of July 19 Ad Hoc Meeting
- APR Numbers Decision Document
- Next Public Meeting (Morton area)
- D/S Adaptive Management TWG Update
- Set Agenda for Sept. 13 FTC Meeting
  - Plan to meet in Morton with field trip to see CFD Northshore Collector
- Water Quality Monitoring Summary (?)
- Meeting Evaluation

## **Meeting Evaluation**

- Great turnout!
- Frank discussions
- Welcome to Travis, Steve, and Florian
- Got out early

## **Handouts**

- Draft June 7, 2016 FTC meeting summary
- July 12, 2016 FTC Meeting Agenda
- Cowlitz River Project Issue Paper 10
- Draft FHMP
- Draft FHMP Appendix A: 2016 Action Plan
- Draft Roadmap to FHMP Revisions 2012-2016
- Draft Decision Document 2016-7 (APR Numbers)

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## **Parking Lot / Potential Future Agenda Topics**

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River
- Climate Change
- Cowlitz smelt presentation (by WDFW and Cowlitz Tribe)
- Gravel Augmentation Plan

**Cowlitz Hydroelectric Project**  
**FERC No. 2016**  
**Cowlitz Fisheries Technical Committee**  
**Final Conference Call Summary**  
August 2, 2016, 9:30 AM – 10:45 AM

**Attendees**

Michelle Day	NMFS
Cindy Le Fleur	WDFW
John Serl	WDFW
Peggy Miller	WDFW
Carol Serdar	WA Dept. of Ecology
Paul Sparks	WA Chapter Trout Unlimited
Keith Underwood	Tacoma Power
Travis Nelson	Tacoma Power
Eric Shoblom	Tacoma Power
Florian Leischner	Tacoma Power
Steve Manlow	LCRFRB
Brett Raunig	LCRFRB
Lyn Wiltse	PDSA Consulting

**Invited / Absent**

Mark Celedonia	USFWS
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Jim Pacheco	WA Dept. of Ecology
Matt Bleich	Tacoma Power
Sam Gibbons	WDFW
Debbie Carlson	BPA
Mike Kohn	LCPUD
Ann Weckback	Technical Representative for Tacoma

**Remaining 2016 FTC Meeting Dates (Unless otherwise specified, these meetings will take place from 9:30-3:00 at Cowlitz Salmon Hatchery)**

NEW DATES: Sept. 12 (Monday starting at 9:30) and Sept. 13 (Tuesday, combined with field trip to see the Northshore Collector during the drawdown), Oct. 4, Nov. 1, Dec. 6

- Action Items:
  - If you are planning on spending the night after the FTC meeting on Sept. 12 to participate in the Northshore Collector field trip on the 13<sup>th</sup>, please reply: <http://doodle.com>
  - When you call the Seasons Motel to make your reservation, be sure to mention that you are part of the Chinook Group. 200 Westlake Ave, Morton, Washington 98356 | **Reservation Line:** 1-877-496-6835

**Decisions for this Meeting:**

- Finalize July 12, 2016 meeting summary



- Review and Approve FHMP Issue Paper 10 and corresponding Decision Document 2016-7
- Approve Decision Document 2016-8 on APR Hatchery Production Numbers

### **Announcements**

- Hydro Operations Update: Keith announced that outflows are exceeding inflows and the elevation at Riffe Lake is currently just below 750'. It is dropping up to 6"/day. He further explained that Cowlitz Falls is in spill operation to maintain 1,000 cfs in the river (required by WDFW when the lake is below 750'). TP is following load and opportunities at times going up to 2,300 cfs. Most of the ramping is being done in the evening out of courtesy to fishermen. The Cowlitz Tribe is working on a habitat project at Otter Creek. TP is coordinating with them to maintain sufficient flows for that project. TP is operating Rife to ensure refill. There was a recent email exchange, initiated by Steve Fisher, regarding the impact of the spill at Cowlitz Falls on migrating Chinook. It is important to discuss the best way to operate when elevation is less than 750'. Perhaps the agreement with WDFW can be changed to allow them to drop below 1,000 cfs requirement. Keith reminded everyone that this is LCPUD's license and TP only operates at their dam based on an easement that says they cannot operate in a way that disadvantages the PUD's operations. Peggy coordinates with LCPUD on the agreement and offered to do some research and discuss with Mike possibly changing the agreement to allow for reduced flows when the elevation is less than 750'.
  - Action Item:
    - Michelle: Forward emails to Peggy and Carol. Discuss how best to move forward.
- Debrief of July 19 Ad Hoc Meeting: Cindy reported they reviewed several of the issue papers and the barbless hook study. They also reviewed the hatchery production tables.
- Confirm approval of Decision Document 2016-8: There was a consensus decision to approve this document as amended by Eric and posted to the FTC website.
- Adult Release Site (Tom Music Bridge): John emailed the plan to all. Anyone is welcome to send comments (sooner is better) directly to Mike Kohn (mike@lcpud.org).

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### **2016 FHMP Process**

**Presenter: Keith**

Issue Paper 10: Upper Basin Management Strategies (previously known as Population Designations)

We approved Issue Paper 10 with the following edits (indicated in italics and strikethrough):

## 5 Approach to Resolve Issue

WDFW is currently reviewing population designations *and/or recovery priorities* and intends to engage the LCFRB, NMFS as well as Tacoma Power in this discussion. One approach may be to reprioritize the designated recovery priorities of certain Cowlitz populations within the context of the Cascade strata *and ESU*. The FTC agrees that population designation decisions *and/or recovery priorities* need to have a biological basis and in the Cowlitz basin, this is inextricably tied to how these populations are subsequently managed.

## 6 FTC Recommendations

The FTC understands that WDFW is reviewing the biological basis of population designations *and/or recovery priorities* and proposed changes must then be accepted by the *LCFRB and approved by NMFS*. A schedule and timeline for any proposed population changes should be developed by WDFW. Until this direction is available, the FTC must guide hatchery operators in making management decisions that lead toward achieving biological goals. A subgroup should develop recommendations so that research and tagging strategies are linked to these goals (see Issues 11 and 12). The FTC's recommendations to this subgroup on the three questions identified in Section 1 are as follows:

Decision Document 2016-7: Upper Basin Management Strategies (previously known as management strategies for the Upper Basin)

By consensus, we agreed to approve Decision Document 2016-7 with the following edits:

- Change the new title to “Upper Basin Management Strategies” to match the Issue Paper
- Include the following changes (in italics and strikethrough) to the Background Section:

<b>Background</b>
<p>The Lower Columbia River Fish Recovery Board (LCFRB) and the NMFS <del>Technical Review Team (TRT)</del> have adopted population designations that assign recovery objectives to 13 separate Cowlitz River Basin populations. These designations identify upper and lower river components as biologically distinct fish populations. This creates significant challenges to managers trying to meet recovery objectives.</p> <p>Information collected since populations were originally designated may lead us to consider other management alternatives. Some of the challenges include marking juvenile fish when the runs can't be distinguished, collecting wild broodstock for fall Chinook and winter steelhead; and how or where fish are reintroduced to the upper basin.</p> <p>The articles from the Settlement Agreement are not prescriptive about how populations are to be managed.</p>

FERC does not have requirements for Tacoma regarding fish population designation, but does require Tacoma to work toward recovering ESA species.

~~WDFW is currently reviewing population designations and/or recovery priorities and intends to engage the LCFRB and NMFS as well as Tacoma Power in this discussion.~~

~~The FTC agrees population designation these decisions must have a biological basis and understands that WDFW is reviewing the biological basis of population designations and/or recovery priorities. Ultimately, proposed changes to population designations must then be accepted by the NMFS.~~

*The FTC understands that WDFW is reviewing the biological basis of population designations and/or recovery priorities and proposed changes must then be accepted by the LCFRB and approved by NMFS.*

### Draft FHMP Work Plan

Keith referred to the email he sent out prior to this conference call. He reviewed the revised draft schedule of FHMP-related activities to prepare us for the September 12 and 13 FTC meeting. Joan is working on the initial two chapters of the Plan (Introduction and Project Setting). This is all background information that is non-controversial and should be approved fairly easily.

With that out of the way, we can turn our focus on the rest of the document. Chapters 3-5 cover Species Status, Goals, and Adaptive Management (including Monitoring & Evaluation). Keith explained the approach and organization TP would like to take with regard to these more substantive topics, where he expects some negotiations will be required in order to achieve consensus. The outline he proposed in order to organize things more effectively is:

- Species Descriptions
- Species Goals (production, harvest, conservation, performance)
- Strategy to Achieve Goals

All agreed to give this approach a try and weigh in as we go as to whether it is acceptable.

#### FTC Review Schedule for 2016 FHMP:

- August 11: Receive Chapters 1 and 2
  - August 24: Get comments to TP to incorporate by August 31
  - September 5: Receive from TP revised version of Chapters 1 and 2
  - September 12 FTC Meeting: Adopt or further revise these chapters
- September 5: Receive Chapters 3-5 for “sufficiency review”
  - September 11: Get comments to TP
  - September 12 FTC Meeting: Discuss progress and issues for Chapters 3-5

### **Action Item**

- Travis – Update Issue Paper 10 and Decision Document 2016-7 and post as final.
- 

### **July 7 Meeting Summary**

We approved the July meeting summary with minor edits. It will be posted for public review.

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### **Define Topics for September Meeting**

In consideration of topics for the September meeting, we prioritized the following:

4. FHMP
5. Downstream fish passage
6. CRR Fund

### **Action Item**

- Keith – Work with Lyn to send out draft agenda for September 12 and 13 FTC meeting in Morton.
- 

### **Parking Lot / Potential Future Agenda Topics**

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River
- Climate Change
- Cowlitz smelt presentation (by WDFW and Cowlitz Tribe)
- Gravel Augmentation Plan

**Cowlitz Hydroelectric Project  
FERC No. 2016  
Cowlitz Fisheries Technical Committee  
FHMP Workshop Notes**

September 12, 2016 from 9:30 AM – 4:15 PM at Cowlitz Salmon Hatchery  
September 13, 2016 from 8:30 AM – Noon at LCPUD Office, Morton

**Attendees**

Michelle Day	NMFS
Carol Serdar	WA Dept. of Ecology
John Serl	WDFW
Sam Gibbons	WDFW
Peggy Miller	WDFW
Debbie Carlson	BPA
Steve Manlow (by phone)	LCFRB
Amelia Johnson (by phone)	LCFRB
Paul Sparks	WA Chapter Trout Unlimited
Keith Underwood	Tacoma Power
Matt Bleich	Tacoma Power
Travis Nelson	Tacoma Power
Eric Shoblom	Tacoma Power
Florian Leischner	Tacoma Power
Lyn Wiltse	PDSA Consulting

**Invited / Absent**

Mark Celedonia	USFWS
Bob Rose	Yakama Nation Fisheries
Jim Pacheco	WA Dept. of Ecology
Mike Kohn	LCPUD
Ann Weckback	Technical Representative for Tacoma

**Remaining 2016 FTC Meeting Dates (Unless otherwise specified, these meetings will take place from 9:30-3:00 at Cowlitz Salmon Hatchery)**

October 4, November 1, December 6

**Decision for this Workshop:**

- Finalize August 2, 2016 conference call summary

**Action Item:** All to get any feedback (in track changes) on the draft FHMP and the Habitat Document to Travis by September 23.

**Announcements**

- **The Cispus River Release Site (Tom Music Bridge):** John reported the construction of this site is said to be complete. (He later showed us photos.) Mike is working with USGS to get some tests done with coho and steelhead, using radio tags.

- **Hydro Operations Update:** Keith announced that outflows are exceeding inflows and the elevation at Riffe Lake is currently just below 735'. Inflows are slightly above average now (1,700 cfs). River flows are at 3,500 cfs. On October 1 they go to 5,000 cfs.
- **Cowlitz Falls Drawdown:** Keith announced that the drawdown, originally scheduled for this week, has been postponed until next week. Carol explained Ecology is encouraging the PUD to complete a Sediment Management Plan for the project as soon as possible. If they do any drawdown they need to monitor resulting sediment movement and turbidity. Their 401 water Quality Certification doesn't cover this action because currently there is no Sediment Management Plan.
- **Peggy reported that WDFW and LC PUD can come to agreement about reducing minimum flows of 1,000 cfs when the lake is below 750' (when they pool and generate). This will result in less spill.**
- **CRR Fund:** Florian reported there has been no action on this since the last meeting. He is in the process of connecting with Cindy on this. Keith reminded all that he talked with Cindy in mid-July about how best to facilitate the handoff of the leadership of the CRR Fund subcommittee from Pat to Florian. Pat has suggested doing one more meeting with Florian in attendance to make for a smooth transition. Steve suggested that the LCFRB can help with discussion of the process and the schedule.
  - Action Items:
    - Florian to touch base with Steve about his schedule.
    - Peggy to talk with Pat, Michelle, Paul, and Florian about getting the next meeting scheduled.
- **CFD Northshore Collector Field Trip Plans:** We all agreed to leave the PUD in Morton at noon to head up to the project. The field trip will last until approximately 2:30.

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## **2016 FHMP Process**

### **Presenter: Keith**

At our last meeting the FTC agreed to give this approach a try and weigh in as we go as to whether it is acceptable. Keith explained that this first round of discussion should be focused on the framework, what elements need to be in the plan, and what elements should be in a separate document that will be updated annually.

The prior version of the FHMP was highly prescriptive and discussed the long-term goal, but did not include intermediate goals (e.g., ever six years, and also putting some of the prescriptive part of the plan into annual plan about how to do the actions in order to achieve goals). These annual plans would be adaptively managed, freeing us of having to go back to FERC with great frequency for approval of modifications over time. The FHMP would serve as a reference and provide guidance to these standing documents that would be updated continually. This way there would be accountability and flexibility with the annual plan and reports.

We will take care to ensure the standing committees are answerable to the 6-year goal that has been agreed to by the FTC. If the people in the standing committee do a lot of work and come up with a conclusion that is out of sorts with the FTC, this disconnect could create a real issue. We agreed that our aim is for the standing committees to be deeply intertwined with the FTC to ensure such a disconnect does not occur.

Keith explained that, for the current version of the FHMP, they tried structuring the document like a typical watershed management document.

The following is a list of the various sections of the FHMP draft that we reviewed and discussed. Tacoma will take input from FTC members into consideration as they create the next version for review at the October 4 FTC meeting.

### **CH 1 and 2: Introductions and Project Setting**

They integrated pieces of the FHMP and other existing documents to create a structure.

### **Ch. 3: Chinook Salmon**

#### **3.1.2 Upper Cowlitz Fall Chinook**

### **Ch. 4: Goals**

Goals:

- Non-numeric, lofty ambition
- Something slightly out of reach
- E.g., a harvest opportunity
- Reach VSP parameter

Objectives:

- Always measurable
- Dated
- Hold ourselves accountable
- 6-year objectives necessary measurable
- E.g., Recover the population and provide...

Vision: Healthy and Harvestable

### **Ch. 5: Strategy to Achieve...** (title to be defined)

### **Cowlitz Habitat Management** (likely to be Ch. 6)

### **Next Steps:**

We need to figure out how to integrate the Issue Papers into this document. There was a suggestion to incorporate some of the ideas into the FHMP vs. use them as appendices.

### **Action Items**

- Keith – Update the FHMP Update Schedule and send out for all to review by September 16.
- All – Review FHMP documents and send Travis any comments, edits, questions (in track changes) by Friday, September 23.

- Travis – Send FTC feedback to the appropriate authors and send out and post updated drafts to all prior to the October 4 meeting (by September 30 if possible).
- 

### **August 2 Conference Call Summary**

We approved the August call summary with minor edits. It will be posted for public review.

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### **Topics for October Meeting**

7. FHMP
    - a. Revised drafts
    - b. Schedule
  8. Downstream fish passage
  9. CRR Fund
- 

### **Parking Lot / Potential Future Agenda Topics**

- TP's historical operations of the facility artificially moved the spring Chinook to an artificial life history pattern
- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River
- Climate Change
- Cowlitz smelt presentation (by WDFW and Cowlitz Tribe)
- Gravel Augmentation Plan



**Cowlitz Hydroelectric Project  
FERC No. 2016  
Cowlitz Fisheries Technical Committee  
Final FTC Conference Call  
October 4, 2016 from 9:30 AM – 11:15 AM**

**Attendees**

Michelle Day	NMFS
Cindy Le Fleur	WDFW
John Serl	Tech Rep for WDFW
Sam Gibbons	Tech Rep for WDFW
Peggy Miller	FERC License Implementation Lead for
WDFW	
Debbie Carlson	BPA
Steve Manlow	LCFRB / Tech Rep for Tacoma Power
Paul Sparks	WA Chapter Trout Unlimited
Mark LaRiviere	Tech Rep for WA Chapter Trout Unlimited
Keith Underwood	Tacoma Power
Matt Bleich	Tech Rep for Tacoma Power
Travis Nelson	Tech Rep for Tacoma Power
Eric Shoblom	Tech Rep for Tacoma Power
Florian Leischner	Tech Rep for Tacoma Power
Lyn Wiltse	PDSA Consulting / Facilitator

**Invited / Absent**

Mark Celedonia	USFWS
Bob Rose	Yakama Nation Fisheries
Jim Pacheco	Tech Rep for WA Dept. of Ecology
Carol Serdar	WA Dept. of Ecology
Mike Kohn	LCPUD / Tech Rep for Tacoma Power
Ann Weckback	LC / Tech Rep for Tacoma Power

**Remaining 2016 FTC Meeting Dates (Unless otherwise specified, these meetings will take place from 9:30-3:00 at Cowlitz Salmon Hatchery)**

November 1, December 6

**Decision for this Conference Call:**

- Finalize Sept. 12 and 13 FTC workshop notes

**Announcements**

- **Hydro Operations Update: Cowlitz Falls is still drawn down. They may start to refill this week. Inflows of 1,286 cfs are currently coming out of the upper basin so refill may be slow, though rain this week will help. The elevation at Riffe is at 729'. The FTC supports WDFW's suggestion to reduce the MIF below 1,000 cfs so Lake Scanewa refills faster resulting in a higher elevation to support coho releases. Michelle stated there is a long term need to reduce minimum flows and avoid spill during the spring Chinook**

out migration. This will require a license amendment because the license only allows for short term modification of minimum flows by WDFW and LCPUD.

The minimum flows will be passed through the collector when LCPUD cannot generate. The screens were not designed to handle 1,000 cfs and still meet NMFS criteria. Spring Chinook are more vulnerable than the other species and would likely be injured when screen criteria is exceeded. In addition, water temperatures in spring and summer tend to be in the high range of thermal tolerance for salmonids and 1,000 cfs may cause additional thermal stress. This will require a permanent or long term minimum flow modification. We are hoping to capture up to 1,000 cfs of the leading edge of freshet events, when flow exceeds generation capacity, to avoid spill and collect steelhead and coho. The 1,000 cfs flow would violate NMFS screen criteria but steelhead and coho are less vulnerable than spring Chinook.

- Action Item: Peggy: Talk with Carol and LCPUD and WDFW re MIFs and report back to the FTC.
  - Northshore Collector Update: Matt explained the pumps have all been installed and conduit is being put in place. They cut out the coffer dam and have hung diffusers and diffuser panels. They also sealed up the hole around the pipes and connected the pipes and completed the pump discharge structure. The trash rack is nearly in place and ready to be tested. The hoist should be in place in the next week or so. All appreciated the field trip to see the construction on the collector on the heels of the second day of the workshop last month. It was exciting to see the progress real time!
  - Paul announced Mark LaRiviere is the new technical rep for TU. He is pleased to invite Mark with such a rich institutional memory back into the group. Welcome back Mark!
  - Keith was asked by Tony Crocco to become a tech rep to TP on the FTC. Keith said he would bring this up with our group and get back to him. This is an important issue and we want to determine the best way to get face time with special interest groups. We will review our protocols and discuss how to address in a fair and consistent manner at our Nov. 1 FTC meeting.
    - Action Item: By Oct. 15, Lyn will send out some possible paths forward regarding tech reps, taking into account their technical background and institutional knowledge from their organization. We will discuss this at our Nov. 1 meeting.
  - Keith announced they experienced a greater than usual fish fatality at the Cowlitz Trout Hatchery and that TP would be working closely with WDFW on a root cause analysis to lessen the chance that this occurs again in the future.
    - Action Item: Eric: Set up meeting for TP to work with WDFW on root cause analysis.
-

## **CRR Fund**

**Presenter: Florian**

Florian reported the CRR Fund Subcommittee met on September 30. Pat Frazier was in attendance and the meeting marked the leadership transition from Pat to Florian. At the meeting they reviewed where they left off seven months ago. The LCFRF gave a presentation on the Recovery plan, the funding cycle, and how it might mesh with a CRR funding cycle where our projects would be reviewed through their technical committee. The subcommittee worked on the following two aspects of the implementation strategy:

1. Official plan to abandon volitional release, establish CRR pot of money – not yet completely approved by the Services
2. Strategy around what these funds should fund and what not. Some chapters remain to be completed – e.g., how hatchery projects would/ wouldn't be funded and also an overview chapter.

Any action taken should benefit recovery in the Upper Cowlitz operation. Folks were pleased with how much they had accomplished. There is a need for further discussions on the funding of administrative costs. If LCFRB costs exceed our expectations, we may want to go in another direction. Steve will provide more information on what it would take in terms of costs (a per-project estimate). They plan to meet again in the next month. At that meeting, the LCFRB will do a presentation on how they have supported similar efforts in other basins (a typical assessment, stakeholder-based process). Can HAG money be used for the assessment?

### **Action Items:**

- Florian to send updated chapters out to the subcommittee to review, with an eye toward presenting decision documents to the FTC at the December meeting.
- Matt: Provide FTC members with a quick look of letter to FERC about CRR and NMFS acceptance of Plan to Abandon Volitional Fish Passage.

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## **2016 FHMP Process**

**Presenter: Keith**

### Monitoring and Evaluation Plan

Matt reported the M&E Subcommittee met on Sept. 28. John Serl was in attendance. They focused on getting M&E activities on track from calendar year to calendar year and started the update rolling for this upcoming FHMP process. In the last FHMP, the philosophy was captured in Appendix H and J. These activities were specific and prescriptive. At the last meeting they discussed different perspectives about how to move forward with a basin-wide focus (thanks to the CF Northshore collector). They also started to think about how the Adaptive Management Technical Working Group can gather baseline and directive information. This would allow us to get to a similar baseline in the upper and lower basin. We would also have a continuous but not necessarily consistent level of effort in diagnosing and solving specific issues. By Oct. 12, subcommittee members will submit suggestions for which baseline metrics would be

appropriate to measure and also which directed studies should go forward. They will discuss these on Oct. 25 and come to consensus on how to proceed. They should have something to present at the Dec.6 FTC meeting. Matt has developed a draft schedule that allows organizations internal review time. He anticipates completing the final schedule by mid-January. We need to make sure it is clear that the M&E Plan is independent from and interdependent with the FHMP. Matt will follow up on this.

### FHMP Schedule

Keith reported that he has come to the realization that it will be necessary to ask for an extension on the timeline for submitting the FHMP to FERC. He would like to request a 6-month extension from Feb 1, 2017 to end of July, 2017 so there is certainty around how all of this will come together, including the M&E and adaptive management piece. Even though these are separate license articles, they are interdependent with the FHMP and TP wants to ensure they are appropriately captured, with all of the linkages. Travis reported TP appreciates the comments received from FTC members on the various FHMP chapters and that they are currently focusing on revising the Goals chapter. They will demonstrate the new framework with three populations for FTC feedback at the Nov. 1 meeting. They are also working on how best to integrate the Issue Papers we approved, including a solution for each issue. The aim is to get FTC agreement on the approach and then will set assignments to write up various pieces.

### **Action Items:**

- Keith: Put together a refined schedule as a decision document for our Nov. 1 meeting.
- Keith: Draft letter to FERC requesting a six-month EOT (Extension of Time) by Oct. 14.
- Travis: By Oct. 25, send out draft goals example using three populations; also proposal to integrate our approved White Papers.

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### **September 12 and 13 Workshop Notes**

We approved these notes with minor edits. It will be posted for public review.

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### **Topics for November 1 FTC Meeting**

10. Announcements (including M&E Plan and CRR Fund)
11. FHMP
  - a. Schedule
  - b. Review of goals section using 3 populations as an example.
  - c. Discussion of proposed plan to integrate the approved White Papers.
12. Technical Representative Protocol
13. Set agenda for Dec. 6 meeting along with 2017 FTC meeting schedule

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### **Parking Lot / Potential Future Agenda Topics**

- TP's historical operations of the facility artificially moved the spring Chinook to an artificial life history pattern

- Create an FTC mission statement
- Tagging fall Chinook juveniles from the upper Cowlitz River basin
- Standards and conditions for outside parties to join the FTC
- Lamprey presence in the Cowlitz River
- Climate Change
- Cowlitz smelt presentation (by WDFW and Cowlitz Tribe)
- Gravel Augmentation Plan

**Cowlitz Hydroelectric Project  
FERC No. 2016  
Cowlitz Fisheries Technical Committee  
Final FHMP Meeting Summary  
November 1, 2016 from 9:30 AM – 3PM**

**Attendees**

Michelle Day	NMFS
Cindy Le Fleur	WDFW
John Serl	Tech Rep for WDFW
Sam Gibbons	Tech Rep for WDFW
Peggy Miller	FERC License Implementation Lead for
WDFW	
Carol Serdar	WA Dept. of Ecology
Paul Sparks	WA Chapter Trout Unlimited
Mark LaRiviere	Tech Rep for WA Chapter Trout Unlimited
Keith Underwood	Tacoma Power
Matt Bleich	Tech Rep for Tacoma Power
Travis Nelson	Tech Rep for Tacoma Power
Eric Shoblom	Tech Rep for Tacoma Power
Kirk Kessler (by phone)	Tech Rep for Tacoma Power
Florian Leischner	Tech Rep for Tacoma Power
Kristin Williamson	Tech Rep for Tacoma Power
Ann Weckback	LC / Tech Rep for Tacoma Power
Lyn Wiltse	PDSA Consulting / Facilitator

**Invited / Absent**

Mark Celedonia	USFWS
Bob Rose	Yakama Nation Fisheries
Debbie Carlson	BPA
Steve Manlow	LCFRB / Tech Rep for Tacoma Power
Jim Pacheco	Tech Rep for WA Dept. of Ecology
Mike Kohn	LCPUD

**Future FTC Meetings-9:30-3:00 at Cowlitz Salmon Hatchery (unless otherwise specified)**

FTC/Ad Hoc Joint Meeting: Nov. 4 from 10-3

FHMP Workshop: Nov. 29 from 9:30-3

December 6, *Jan. 5*, Feb. 7, Mar. 7, Apr. 4, May 2, June 6, *July 6*, Aug. 1, *Sept. 7*, Oct. 3, Nov. 7, Dec. 5

**Action Item:**

- All: Note the above meeting dates in *red italicized font* as they have been rescheduled from the usual first Tuesday of the month.

**Decisions for this Meeting:**

- Finalize Oct. 4 conference call notes
- Approve Decision Document 2016-9 to request 6-month extension on the FHMP

## Announcements

- **Hydro Operations Update:** Record rainfall resulted in over 13" by end of October. TP is close to exceeding their flood control rule curve. They are at 750.6' currently and need to get below 750'. A planned turbine outage was just completed. Keith doesn't anticipate a need to spill. New alarms are being installed in the hatchery to alert folks in the event of spill. TP will be at full generation for the next 3 weeks.  
As per her assigned Action Item, Peggy clarified that MIFs are in the license – not in the agreement between WDFW and Lewis County. Dropping below 1,000cfs would require a license amendment. Short-term changes can be accommodated by going through WFDW.
- **CRR Fund Update:** Florian reported the CRR Fund Subcommittee met again on September 30. There should be something for the FTC to approve at the January meeting. It no longer appears that we will be able to apply for projects through the LCFRB in February of 2017 as members of this subcommittee want to evaluate which areas have sufficient habitat data to proceed. Some estimate it will take about 1.5 years to complete the habitat assessment. There was a question as to whether the EDT runs that have been done provide sufficient data to that additional study would not be required. Technically, the CRR Fund Plan must be approved by FERC before funds can be released. Next steps include reviewing the EDT data and seeing how much of it is based on other basins. There is a common desire to "get the most bang for the buck" by concentrating habitat restoration actions rather than spreading it around in a piecemeal fashion. As per his Action Item, Matt provided FTC members with a review of the letter to FERC about CRR and NMFS' acceptance of Plan to Abandon Volitional Fish Passage. It is currently undergoing internal review at Tacoma.
  - Action Item: Florian: Send updated chapters out to the subcommittee to review, with an eye toward presenting decision documents at the December FTC meeting.
- **M&E Plan Update:** Matt reported the M&E Subcommittee met in early October and reviewed how they would use baseline evaluations and directed study evaluations to guide the M&E process. They met on Oct. 25 to discuss the GMR (genetic-mark recapture) process. They will reconvene on Nov. 18 to compare lists and determine how best to move forward. They are also working on the text for the FHMP to describe this strategy. They should be in good shape to deliver this for FTC consideration on the first quarter of 2017. They anticipate having something to share on this at our December meeting. The FHMP will identify priorities that can inform the M&E process.
- **Trout Hatchery:** Eric announced they experienced recent loss of steelhead and cutthroat. The counters indicate that the losses may be considerable. TP and WDFW performed a root cause analysis and found that there were many possible contributing factors. They are now considering changing hazing efforts

and installing a bird exclusion fence, etc. Sam explained they are also considering using PIT tags to help ground-truth the counters. It is currently challenging to determine how best to communicate this loss to the public as there is a lack of exact numbers and do not yet have a handle on the root cause. There is a desire to share the most accurate information possible with the Ad Hoc Group that meets this Friday.

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## **Northshore Collector Update / Challenges**

**Presenters: Matt Bleich / Eric Shoblom / Kirk Kessler**

**While the Northshore Collector facility looks to be complete, there is still much to be done. The schedule shows them completing construction by the end of the year. Commissioning of the trash rack system is currently underway. The 7-day endurance test and commissioning should be complete the first week of February (at the earliest). After that they would begin the hydraulic balancing which should take a couple of months. In summary, they are barely still on schedule.**

**The Upper Cowlitz Fish Collector did not prove to be very effective in its initial year of operations. There was a suggestion to install guide wings on the collector for 2015 and 2016 but this was not done as the minimum reservoir elevations necessary to complete the work were not achieved. Matt is working with Lewis County PUD on a Decision Document. The current thinking is not to install the guide wings until the end of 2017 and determine if it is a prudent decision at that time.**

### **Action Items:**

- Kirk: By Nov. 2 draft a description of the circumstances (talking points) likely leading to a delay in the commissioning of the collector and send out to all.
  - Matt: Bring a Decision Document to our December meeting suggesting that we defer enhancements of the tailrace collector until the end of 2017, as by that time we will have an idea of the effectiveness of the new Northshore Collector.
- 

## **2016 FHMP Process**

**Presenter: Keith**

### FHMP Schedule

Keith asked if anyone was opposed to the 6-month extension request of FERC. All were in favor. Keith believes TP can have all the chapters written including a strong vetting by the end of May. That would allow plenty of time to meet the new deadline of the beginning of August.

Keith sketched out a possible schedule for completing the FHMP Update, including time for public comment. He will work on document a more formal version that takes into account today's discussions and send it out in advance of the next meeting.

### FERC Extension Request Decision Document 2016-9

We added the following to the Decision Document under "Proposed Decision or



Consideration.” The FTC met on November 1, 2016 and made a consensus decision to request of FERC a 6-month extension to complete the 2016 FHMP Update.

**Decision: FTC members agreed by consensus to approve Decision Document 2016-9 with the above addition.**

Note: The Annual M&E Report is due Oct. 31. Knowing that there were additional discussions about the initial draft from WDFW that needed to occur between TP and WDFW, Travis sent a letter to FERC requesting a 3-month extension.

**Action Item:**

- John: Work with the necessary parties to get “final” edits to TP for their final review before it goes to the FTC at the December 1 meeting.

Review of Chapter 4: Goals / Fall Chinook

Keith walked us through an example using fall Chinook. Current fall Chinook program is: 3.5M Hatchery production = 2M net pen + .4M Hatchery segregated + 1.1 Hatchery integrated

There is a 20% integration rate. They get these fish through angling in the lower river.

After considerable discussion about whether / how it makes sense to manage these two populations, Keith agreed to draft a proposal for all to consider.

**Action Items:**

- Keith: ASAP write up his proposal and send out to all.
- Paul: Send list of questions to gather data from a broad audience to Lyn to pass on to Monika Sundbaum.

Integrating Issue Papers into the 2016 FHMP

Keith walked us through a table outlining how we might integrate the 12 issue papers into the 2016 FHMP.

#1: intent was for FTC to come up with a purpose and a goal before this gets integrated into the FHMP. This is a strategy so we would outline it as such in Chapter 5. The purpose and goal will be drafted by Eric. This will be addressed in the Nov. 29 FHMP workshop.

**Action Item:**

- All: Send comments on table to integrate Issue Papers to Keith by Nov. 14.

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**Joint Ad Hoc / FTC Meeting on November 4**

**Presenter: Cindy**

This meeting will be at the Cowlitz Salmon Hatchery from 10-3 this Friday, November 4. Cindy invited all to attend and previewed the meeting agenda topics which include:

- Steelhead (hatchery update)
  - FHMP Update
  - Harvest Goals (from existing FHMP)
  - Production Goals (650 lb. cap, etc.)
  - Attending FTC Meetings
-

## **Technical Rep Discussion**

**Presenter: Lyn / All**

Lyn distributed the draft protocol she put together as her action item. She also distributed the protocol as suggested by Paul. We reviewed the drafts and discussed integrating the protocol for adding technical reps to the overall FTC protocols that are now included in the Work Plan.

- Focus on implementing the SA
- We want to build trust
- Open meeting every 6 months?
- How to bring other voices in?
- Tech rep qualifications?
- Members simply designate tech reps?
- How do they participate?
- How do we address if they are disruptive?
- Change our current protocols?
- Different tier of attendees? Observer?
- Concern about setting a precedent

Next steps: This will be discussed at the Ad Hoc/FTC joint meeting this Friday. All agreed it was important to get feedback and suggestions on this from Ad Hoc members.

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## **October 4 Conference Call Notes**

We approved these notes with minor edits. They will be posted for public review.

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## **Prep for November 29 Workshop**

Prepare to present a draft plan for goals, objectives, and strategies for each species:

- WDFW: Cutthroat, winter steelhead, spring Chinook, summer steelhead
  - Tacoma Power: Coho, fall Chinook
- 

## **Topics for December 6 FTC Meeting**

14. Announcements (including M&E Plan, CRR Fund, Northshore Collector Schedule, D/S Adaptive Management TWG)
  15. FHMP
    - a. Schedule
    - b. Continue work from Nov. 29 FHMP workshop
  16. Set agenda for Jan. 5 meeting along with 2017 FTC meeting schedule
    - a. Continue work on 2016 FHMP Update
    - b. Update to FTC Protocols (?)
- 

## **Meeting Evaluation**

- Got off topic at times
- Strayed from timeline outlined in the agenda

- Had good, frank discussions
- Next time plan for fewer topics and more time
- Having material ahead of time is really helpful in preparing for these meetings



**Cowlitz Hydroelectric Project  
FERC No. 2016  
Cowlitz Fisheries Technical Committee  
Final FHMP Meeting Summary**

**DECEMBER MEETING CANCELED**