



## Meeting Minutes

### Fall Chinook Work Group

Thursday, December 10, 2009

10:00 – 12:15

Grant PUD Natural Resources Office Conference Room  
Ephrata, WA

#### Technical Members

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Paul Wagner, NMFS  
Robert Heinith, CRITFC  
Holly Harwood, BPA  
Keith Truscott, CPUD  
Bill Tweit, WDFW  
Marcie Mangold, WDOE  
Russell Langshaw, GCPUD  
Steve Hemstrom, CPUD

Joe Skalicky/Dan Diggs, USFWS  
Paul Ward/Bob Rose, YN  
Brett Swift, American Rivers  
Tom Kahler, DPUD  
Paul Hoffarth, WDFW  
John Clark, ADFG  
Todd Pearsons, GCPUD

#### ATTENDEES:

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John Clark, ADFG  
Mike Bradshaw, CPUD (on phone)  
Paul Wagner, NMFS (on phone)  
Geoff McMichael, Battelle  
Todd Pearsons, GCPUD

Paul Hoffarth, WDFW (on phone)  
Marcie Mangold, WDOE (on phone)  
Joe Skalicky, USFWS (on phone)  
Russell Langshaw, GCPUD  
Tracy Hillman, Facilitator

#### Action Items:

1. **Tracy Hillman will contact Bob Rose to find out if the Priest Rapids Coordinating Committee is okay with using No Net Impact Funds to support Hanford Reach studies.**
2. **Russell Langshaw and Todd Pearsons will add draft language to the Study Plan describing a framework for crossing the gap between the inconclusive productivity assessment results and Phase II studies.**
3. **After the Workgroup decides the final framework for the study plan, WDOE will meet internally about Study Plan funding issues.**
4. **Russell Langshaw will distribute Grant PUD's smolt-to-adult draft document to FCWG members in early January 2010.**

5. In February, Geoff McMichael will provide his thoughts on ways to compare egg-fry survival in tubes to those in natural redds. Members with thoughts on this need to share those with Geoff.
6. Members need to let Tracy Hillman know about any data and/or reports they would like to share with the Expert Panel. Debbie Williams will add a folder to the FCWG website that will house the reports and data for the Expert Panel.
7. Tracy Hillman and Russell Langshaw will draft a letter inviting experts to serve on the Productivity Panel. The letter will also explain the purpose of the workshop and the role of the experts.
8. Russell Langshaw will coordinate a Mid-Columbia Hourly Coordination workshop with Joe Taylor in January.
9. Russell Langshaw will post to the website aerial photos of the Wanapum Tailrace.
10. Tracy Hillman will provide an electronic copy of the paper published in the Canadian Journal of Fisheries and Aquatic Sciences that documents the eating of salmon eggs by mature salmon.
11. Russell Langshaw will send the Hanford Reach website link to FCWG members as soon as it is available.

## Meeting Minutes

- I. **Welcome and Introductions** – Attendees introduced themselves around the table and on the conference line (see list of attendees above).
- II. **Agenda Review** – No additions were made to the agenda.
- III. **Approval of Meeting Minutes**
  - November 13, 2009 – **Approved with minor edits**
- IV. **Review of Action Items** - Action items identified during the November meeting were reviewed and discussed.
  - #1 – Marcie Mangold reported that she received comments and opinions from workgroup members regarding their desire to approve and move forward with Phase 1 of the Study Plan. She will share those comments and concerns with the Workgroup during the meeting.
  - #2 – After the Workgroup decides which studies need to be initiated in parallel with the productivity analysis and in Phase II, the Washington Department of Ecology (WDOE) will discuss how studies should be funded.
  - #3 – Russell Langshaw noted that Grant PUD will distribute the smolt-to-adult draft document to FCWG members in early January.

- #4 – Russell Langshaw is still trying to coordinate a one-day Mid-Columbia Hourly Coordination workshop with Joe Taylor.
- #5 – After Russell Langshaw talks with Joe Taylor, Debbie Williams will send a doodle requesting a day for the hourly coordination workshop and meeting to be held in Portland.
- #6 – Grant PUD is still working on the Hanford Reach website. Russell Langshaw will send the link to the FCWG members as soon as the site is available.

## V. Flow Fluctuation Report

- A Discussion** – Russell Langshaw reported that Grant PUD and Battelle are still updating the Flow Fluctuation report, which should be available in early February.

## VI. Study Plan

- A Use of NNI Funds** – Bob Rose was not present for the FCWG meeting and therefore was unable to discuss the use of No Net Impact (NNI) Funds to support Hanford Reach studies. Russell Langshaw asked if members of the FCWG have discussed this with their representatives on the Priest Rapids Coordinating Committee (PRCC). NOAA and USFWS reported that they have talked with their PRCC representatives and that they are in favor of using NNI Funds to support Hanford Reach studies. Paul Hoffarth indicated that he will discuss this with WDFW's representative. The Workgroup asked Tracy Hillman to talk with Bob Rose about getting a definitive response from the PRCC.

- B Approval of Study Plan** – Marcie Mangold shared with the Workgroup that WDOE received comments and opinions from Workgroup members on their desire to approve and move forward with Phase I of the Study Plan. Marcie noted that, overall, Workgroup members were comfortable with the approach. However, she noted that there were two primary concerns. First, there were some concerns with coordination and communication with Grant PUD. Here, the concern was with Grant PUD deciding who would be conducting the studies. The commenter's believed that the Workgroup should have input on who is selected to conduct a given study. Russell reassured the Workgroup that Grant PUD would seek the input of the Workgroup, but recognized that the Workgroup may not reach a consensus on who should do the work.

The second concern had to do with implementing productivity and feasibility studies. Specifically, there were concerns that feasibility studies would not be included during Phase I. Marcie suggested that the Workgroup discuss which feasibility studies should move forward in the near term (as part of the parallel efforts). The

Workgroup discussed the merits of moving forward with the Study Plan as currently written versus having the Expert Panel make recommendations on which feasibility studies should be implemented. The Workgroup agreed to the Study Plan framework, but recognized the importance of having the Expert Panel provide recommendations on which feasibility studies should be implemented.

Russell Langshaw stated that the Expert Panel could provide a draft report describing their recommendations based on the results of the productivity assessment, and this information will be used to help inform which studies should be implemented. Todd Pearsons suggested that the Study Plan include a “backup” plan that would identify different options based on the recommendations of the Expert Panel. However, not knowing the recommendations of the Expert Panel before the Panel meets, there would possibly need to be several different backup plans written, which would take a lot of time to develop. Therefore, it was recommended that language be added to the current Study Plan indicating that any recommendations made by the Expert Panel would be used to inform which studies will be implemented.

Russell Langshaw and Todd Pearsons agreed to add draft language to the Study Plan for review by the FCWG. Russell stated that he would try to provide the draft to the Workgroup by the January meeting, but could not promise that. Joe Skalicky recommended that language be added to the Study Plan stating the need for increasing the number of juvenile Chinook PIT tagged. Joe noted that the USFWS can bring significant resources (including cost share) to PIT tagging. Russell commented that the productivity assessment is expected to be completed during 2010. An increase in PIT tagging must be associated with a core issue for the FCWG and fit into a broader monitoring plan that will be implemented under Hanford Reach Fall Chinook Protection Program, 401 Water Quality Certification fall Chinook study plan, and the Priest Rapids Hatchery M&E plan. Additional tagging could be used to update a future productivity assessment but the assessment under this study plan will not drag on for several generations.

Geoff McMichael recommended the development of a framework for crossing the gap between inconclusive productivity assessment results and Phase II studies. Russell Langshaw noted that Behr Turner’s productivity report (based on CWTs) is but a small component of the productivity assessment. It is simply a mark-recapture effort to identify juvenile abundance at the time of tagging. Additional data and analyses will be used estimate productivity and its relationship to operational variables. Therefore, if the productivity assessment is inconclusive or there

are big gaps between the results and Phase II studies, there should be language identifying studies needed to fill the gap. Russell stated that he and Todd will draft the framework language. Russell also noted that Grant PUD will fully fund Phase I of the study plan that includes the productivity assessment, an egg-to-fry survival study, and modeling efforts.

Joe Skalicky asked that Russell and Todd reflect on the USFWS memo written by Howard Schaller as they revise the Study Plan. Russell noted that that would be difficult because the memo recommends a completely different framework from the one currently supported by the Workgroup.

John Clark reiterated the importance of using the existing data to help make decisions.

Marcie Mangold stated that after the Workgroup decides the final framework for the study plan, WDOE will discuss internally how studies should be funded.

- C Productivity Estimation (CWTs)** – Russell Langshaw reported that Behr Turner with Grant PUD has been drafting the smolt-to-adult paper. Behr needs additional information from Paul Hoffarth to complete the draft. Paul indicated that he has sent all the information requested of him to Behr. Russell indicated that the draft report should be available for review by the FCWG in early January.
- D Egg-to-Fry Studies** – Russell Langshaw stated that egg baskets (Vibert boxes and egg tubes) and instruments have been placed in the outflow channel and on Vernita Bar. The first batch is at the eyed-up stage. Geoff McMichael noted that egg mortality in the first batch was an issue. Viability averaged about 40% (range, 10-70%) and percent viability was linked to the females. That is, some females had lower egg viability than others.

Tracy Hillman asked the group if they had considered Joe Skalicky's question about comparing survival estimates from egg tubes to those in natural redds. Geoff McMichael stated that he had given it some thought, but did not have anything prepared for the meeting. Joe asked for a range of conditions in which Chinook spawn. Joe suggested the use of a matrix that shows various response variables (e.g., survival, deposition rates, viability, etc.) associated with the range of environmental conditions encountered by the salmon. Geoff said that he will continue to think about this and provide some notes to the group in February. Members who have some thoughts on this should share those with Geoff.
- E Productivity Study (Expert Panel)** – Tracy Hillman identified the names of experts to serve on the productivity panel that were

submitted by FCWG members. The list includes Howard Schaller, USFWS; Steve Haeseker, USFWS; Jim Scott, WDFW; Pete Hahn, WDFW; Tom Cooney, NOAA; Alex Wertheimer, NOAA; Ray Hilborn, University of Washington; Richard Hinrichsen, Hinrichsen Environmental; Charlie Petrosky, IDFG; Rishi Sharma, CRITFC; Scott McPherson, ADFG; David Bernard, ADFG; Brian Riddel, CDFO; Chuck Parken, CDFO; Rick McNicold, CDFO; and David Hankin, Humboldt State University, who would preferably Chair the Panel. Tracy Hillman asked if any Workgroup members had a concern with the proposed list of experts. No one had a concern.

Russell Langshaw reported that David Hankin would not be available until June 2010. That should not be a problem, however, because it will take several months to compile all the information that will be shared with the experts and to organize the workshop. To that end, members of the Workgroup need to let Tracy Hillman know what information (data and reports) they have, or know about, that should be shared with the experts. Joe Skalicky recommended that the Workgroup provide a folder on the website that will contain all the data and reports for the experts. Russell agreed and noted that the site would be password protected.

John Clark reminded the Workgroup that the Expert Panel will need information not only on Hanford Reach Chinook but also on coastal populations. The latter are needed to put the Hanford Reach fall Chinook in the proper context.

Tracy Hillman reminded the Workgroup that the specific roles of the panel, as discussed during the last meeting, were to (1) review a draft assessment approach and advise the workgroup on best method(s) for estimating productivity, (2) use a Delphi (professional judgment) approach to estimate productivity in the Hanford Reach in the absence of dams, and (3) if necessary, provide a technical review of the study results. Russell Langshaw stated that there will likely be a need for experts to continue to participate after the workshop. Russell noted that Grant PUD will provide funding for experts as part of the productivity assessment if the Workgroup agrees to move forward with Phase I of the Study Plan.

Russell Langshaw recommended that he and Tracy Hillman draft a letter that will be sent to the experts asking them to participate on the panel. Russell and Tracy will provide the draft letter to the Workgroup.

**Mid-Columbia Hourly Coordination and Model Development –**  
Russell Langshaw indicated that he will coordinate a Mid-Columbia Hourly Coordination workshop with Joe Taylor for January. Debbie

Williams will send a doodle requesting dates for the workshop and the FCWG meeting to be held in Portland in January.

## **VII. Hanford Reach Work Group Meeting**

- A Operations Update** – Russell Langshaw reported that hatching of fall Chinook will begin on December 11 (based on accumulated temperature units) within the 36,000-50,000 cfs zone. Grant PUD will be implementing protection flows, which means that flows will not drop below 50,000 cfs.

Russell Langshaw reported that in 2009 a total of 78 redds were identified in the zone above 50,000 cfs (most were in the band between 50,000 and 55,000 cfs). The last redd survey was on November 22. Six redds were found in the zone above 60,000 cfs.

The last aerial survey was conducted on November 22. The total visual count was 4,996 redds, which, when compared to previous years, falls within the lower-median range.

Russell Langshaw noted that they were able to take good aerial photos of the Wanapum Tailrace. These may be used to assess the feasibility of using photos to estimate the availability of spawning habitat. Russell indicated that he will post the photos on the website.

Paul Wagner asked if there were any issues with spill (total dissolved gas) and incubation survival below Wanapum Dam. Geoff McMichael stated that TDG is probably not an issue, based on studies below Bonneville Dam. Geoff noted that water depths in the Wanapum Tailrace are greater than those below Bonneville Dam and therefore TDG should not be an issue below Wanapum.

Paul Hoffarth stated that he will complete the calculation of fall Chinook spawning escapement by next week.

Tracy Hillman shared with the Workgroup that a recent study published in the Canadian Journal of Fisheries and Aquatic Sciences indicates that mature salmon eat salmon eggs. Tracy asked if those conducting spawning surveys are checking the stomachs in Chinook carcasses. Paul Hoffarth indicated that they do not check stomachs, but noted when they check females for egg voidance, they find that most stomachs are generally atrophied. The Workgroup asked Tracy to send them the article.

Russell Langshaw indicated that Grant PUD has been updating the USGS flow (stage) and temperature equipment. He did not know if they have completed the installations.

- B Website Development** – Russell Langshaw reported that he did not have time during the last month to further develop the website, which will be used to house Hanford Reach data. Russell

will be meeting with the website folks at Grant PUD and believes that the site will be up and running in mid-January. Russell will send the website link to the FCWG members. In the short term, the site will be manually updated once a week. The intent will be to have automatic daily updates.

- VIII. Next Meeting:** The next meeting of the FCWG will be in Portland. The meeting will occur right before the Hourly Coordination Workshop. The date and time of the meeting/workshop will be determined after Russell Langshaw talks with Joe Taylor.