



Meeting Minutes

Fall Chinook Work Group

Friday, October 16, 2009

10:00 – 3:00

Grant PUD Natural Resources Office
Ephrata, WA

Technical Members

Paul Wagner, NMFS
Robert Heinith, CRITFC
Roger Schiewe, 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:

John Clark, ADFG
Tom Kahler, DPUD
Paul Wagner, NMFS (on phone)
Geoff McMichael, Battelle
Mike Bradshaw, CPUD (on phone)
Debbie Williams, GCPUD

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

Action Items:

1. Harwood will re-send the Bonneville Power Administration's (BPA) Study Plan comments to Langshaw and Williams.
2. Harwood will send a letter to the Fall Chinook Work Group (FCWG) notifying them that she will be replacing Roger Schiewe, who has retired, as the Bonneville Power Administration's representative.
3. If they have not already done so, FCWG members will send opinions to WDOE regarding their desire to move forward with Phase 1 of the Study Plan.
4. After internal Washington Department of Ecology (WDOE) discussions, Mangold will notify FCWG members about WDOE's

- decision to approve the Study Plan and move forward with implementation of Phase 1.
5. Mangold will meet with WDOE policy folks about Study Plan funding issues.
 6. Pearsons will distribute Grant PUD's smolt-to-adult data spreadsheet to FCWG members.
 7. Langshaw will distribute the egg-to-fry survival proposal and egg tube information to members.
 8. The Egg Quantification Feasibility Study Final Report will be posted to the website, and sent to FCWG members by Williams.
 9. FCWG members will provide a list of experts to sit on the productivity panel to Williams by November 6th. They will also provide contact information for each expert.
 10. Members will identify a range of locations in the Hanford Reach that would be representative of typical egg-incubation habitat conditions to Williams by November 6, 2009. Locations should include sites that have both shallow-water areas (50-60 kcfs) and deeper areas.
 11. Langshaw will coordinate a Mid-Columbia Hourly Coordination workshop with Joe Taylor in December.
 12. Williams will send a doodle requesting dates for a two-day FCWG meeting (one day for hourly coordination, training, and model development and another for the regular meeting) to be held in Portland in December.
 13. Comments to the 2009 Hanford Reach Fall Chinook Protection Plan Report are due to Langshaw by November 01, 2009.
 14. Langshaw will speak to Joe Taylor, Mid Columbia Coordinator, about the probability of falling below daily minimums and plans to meet constraints. Langshaw will provide an update to the FCWG.
 15. Langshaw will send the Hanford Reach website link to FCWG members next week.

Meeting Minutes

- I. **Welcome and Introductions** – Attendees introduced themselves around the table and on the conference line.
- II. **Agenda Review** – No additions were made to the agenda.
- III. **Approval of Meeting Minutes**
 - September 01, 2009 – **Approved**
- IV. **Review of Action Items** - Action items were reviewed and discussed.
 - #1 - Harwood will re-send the Bonneville Power Administration's (BPA) Study Plan comments to Langshaw and Williams.

- #2 - After internal discussions, Grant PUD confirmed that any party can request to reopen the Hanford Reach Fall Chinook Protection Program Agreement (HRFCPPA) at anytime after April 05, 2014 (ten years following the effective date).
- #3 - **Harwood will send a letter to the Fall Chinook Work Group (FCWG) notifying them that she will be replacing Roger Schiewe, who has retired, as the Bonneville Power Administration's representative.**
- #5 - **After internal Washington Department of Ecology (WDOE) discussion, Mangold will notify FCWG members of WDOE's decision to approve the Study Plan and implement Phase 1.**
- #7 - WDOE received no comments from FCWG members regarding their comfort, or non-comfort of moving forward with Phase 1 of the Study Plan. Grant PUD's intent is to partially implement Phase 1 of the Study Plan during 2009. To address comments by FCWG members, implementation of studies that will be conducted during Phase 2 were addressed in a paragraph that will be added to Section 3.1, Preparation for Phase 2.
- #9 - **Pearsons will distribute Grant PUD's smolt-to-adult data spreadsheet to FCWG members.**

V. Flow Fluctuation Report

- A Discussion** – WDOE, Washington Department of Fish and Wildlife (WDFW) and Grant PUD policy level staff will be meeting to discuss the Flow Fluctuation Report (FFR) at future meetings. Updates will be provided. Battelle continues to work on comments to the FFR; specifically the error and modeling work that was completed.

VI. Study Plan

- A Discussion** – Langshaw distributed Section 3.1, Preparation for Phase 2 of the Study Plan, explaining parallel paths of studies in Phase 1 and Phase 2.

The 20% to 25% funding level of Phase 2 studies by Grant PUD was determined because upper constraints and long-term discharges occur 20% to 25% of the time. Funding issues will also be discussed during aforementioned policy level discussions. Use of No Net Impact Funds (NNI) to fund studies will be discussed at the Priest Rapids Coordinating Committee (PRCC) meeting on October 28, 2009.

Grant PUD has been compiling Coded Wire Tag (CWT) information for the productivity study. CWT analysis will be

completed by Grant PUD within the next 4-6 weeks. The proposal for an adult to adult and adult to juvenile study is 80% complete and will be distributed for FCWG review soon. Participants for this study have not been selected yet.

Eric Lauver, Grant PUD Biologist, will be conducting an egg-to-fry survival study for his thesis project at Central Washington University. The focus of 2009 efforts is to develop and confirm methods that can be reliably used to estimate egg-to-fry survival in the Hanford Reach. He will compare egg-to-fry survival among different habitats using two different devices. Eric will construct artificial redds in the outflow channel at Priest Rapids Hatchery and compare survival in egg tubes to Vibert or Whitlock-Vibert boxes (WVBs). He will also be working with Battelle to conduct feasibility survival studies in the Hanford Reach. Flows will remain stable in the spawning channel, which is a more controlled environment for comparative evaluations. His proposal will be sent to FCWG members for review.

Grant PUD would like their studies to be part of a broader study of egg-to-fry survival in the Wenatchee and Yakima basins. A comparative study of survival with naturally constructed redds and WVBs in the spring Chinook spawning channels is being conducted at the Cle Elum Hatchery. These studies are funded by the National Oceanic Atmospheric Administration (NOAA) Science Center and conducted by WDFW. Battelle and Grant PUD staff are working in parallel on proposals to compare egg-to-fry survival methods and results at Vernita Bar to methods and results used by WDFW. The Battelle proposal isn't complete at this time. Langshaw will try to distribute both proposals in the next week or two.

Egg to fry survival work will be conducted on Vernita Bar this year by Battelle and Grant PUD. The purpose of the study is to determine if egg tubes are a suitable tool to evaluate egg-to-fry survival. About 40 to 60 egg tubes will be filled with 100 fertilized eggs from the Priest Rapids Hatchery (a date hasn't been determined yet). They will be buried 30 cm below the surface of the substrate on two different dates. Flow fluctuations could be a concern this year. Egg tubes will be pulled when they have reached 975 - 1000 thermal units (TUs). McMichael explained that WVBs are smaller and more delicate than egg tubes and he believes they may not hold up to retrieval in the Hanford Reach.

Grant PUD will monitor intra-gravel water quality in redds with dissolved oxygen (DO) sensors and thermistors. To ensure these methods are comparable to WDFW methods, they will conduct slug tests (conductivity tests that measure the rate of movement

of an injected salt solution) that will measure permeability (intra-gravel flows) in the redds.

Skalicky questioned the representativeness of survival results from egg tubes to natural redds. He noted that the reason to monitor natural redds vs. manmade redds is to make sure constructed redds are representative of natural redds. Langshaw confirmed that is one of the major objectives of this effort.

Langshaw will distribute the egg-to-fry survival proposals and egg tube information to members.

The Egg Quantification Feasibility Study Final Report will be posted to the website, and sent to FCWG members by Williams.

Wagner requested that a presentation be given in January or February on the models that will be used to assess Fall Chinook productivity.

Members discussed who should participate as an expert on the productivity modeling panel. **FCWG members will provide a list of experts to sit on the productivity panel to Williams by November 6th. They will also provide contact information for each expert.** The following are suggested participants: Howard Schaller, United States Fish and Wildlife Service (USFWS); Steve Haesecker, USFWS; Jim Scott, WDFW; Tom Cooney, NOAA; Robert Kope, NOAA; Ray Hilborn, University of Washington; Richard Hinrichsen, Hinrichsen Environmental; David Hankin, Humboldt State University; and Pete Hahn, WDFW. Grant PUD may be able to provide travel funds to implement this meeting.

For permitting and cultural resource purposes, Grant PUD asked **members to identify locations in the Hanford Reach that would be representative of typical habitat conditions throughout the reach. Members are to send their suggestions to Williams by November 6, 2009. Locations should include sites that have both shallow-water areas (50-60 kcfs) and deeper water areas.** Proposed sites suggested during the meeting included: 100F, White Bluffs, Locke Island, and Coyote Rapids. It was suggested that evaluations be conducted in deep water, in the 50-60 kcfs band, and above 70 kcfs. The focus, however, will be the 50-60 kcfs band. Because the feasibility of deploying deeper water tubes hasn't been determined, Langshaw expressed concern with sampling these deep water areas.

- B Request for Proposal (RFP) Discussion** - Members discussed the need to develop clear study objectives before sending out requests for proposals. When asked if the Workgroup could simply identify which entity should conduct a given study, Langshaw explained that each study would be handled on a case-

by-case basis. Some studies could be completed internally, others will go out for RFP, which can take several months to complete the bidding and contracting process, and still others could be conducted by Battelle, USFWS, United States Geological Survey (USGS), Universities, or the Columbia River Inter-Tribal Fish Commission (CRITFC).

Langshaw anticipates that Battelle will be the primary contractor, with other agencies or entities as sub-contractors on the Productivity Project in Phase 1. USFWS noted their discomfort with one entity doing all of the work, and suggested that a neutral third party also be considered, or that the FCWG sign-off on each entity selected to carry out a study. Langshaw said that Grant PUD wants to build support and buy-in from the FCWG. However, using the Flow Fluctuation Report as an example, he believes that all members of the FCWG will not completely agree on who should conduct a given study, so, in order to get work completed in a timely manner, he believes that agreement by all FCWG members is not necessary; although it is important to address all members concerns and comments and to coordinate with the FCWG. Grant PUD's objective is to have peer-reviewed publications at the end of each study.

- VII. Mid Columbia Hourly Coordination and Model Development** – In order to develop a flow model during Phase 1 of the Study Plan, a better understanding of how the Mid-Columbia (Mid C) works is needed by FCWG members. Bob Rose suggested that FCWG members participate in a two-day Hourly Coordination workshop given by Joe Taylor, the Mid C Coordinator.

The USFWS is looking for tools to explore adaptive management. The USFWS would like to use the current version of Hourly Coordination software that is presently used for offline modeling. Langshaw explained that the software would need to be modified before it could be used, and suggested that that should occur during Phase 3 in the Study Plan. **Langshaw will coordinate a Mid-Columbia Hourly Coordination workshop with Joe Taylor in December. Williams will send a doodle requesting dates for a two-day FCWG meeting to be held in Portland in December.**

VIII. Hanford Reach Work Group Meeting

- A 2009 Operations** – The 2009 Hanford Reach Fall Chinook Protection Program Report was sent to signatories on September 01, 2009. **Comments are due November 01, 2009.**

Last week Grant PUD was concerned when Chief Joseph Dam flows were forecast at 40-45 kcfs because the resulting outflows at Priest Rapids Dam would be in the 50-55 kcfs range during the day and 36-37 kcfs at night. Under the HRF CPPA, Grant PUD

must maintain daytime minimum flows of 55-70 kcfs. Members discussed maintaining average daily and nightly flows at 50 kcfs, which would require signatory permission. Langshaw noted that the October 12th revised forecast for Chief Joseph Dam was 60 kcfs. If flows remain at this level, Grant PUD anticipates having enough water to maintain flows under the HRFCPA constraints.

There are currently no nighttime constraints. Flows were down to 40 kcfs before mid-night last night (October 15, 2009). As noted above, daytime constraints are between 50-70 kcfs. **Langshaw will speak to Joe Taylor, Mid-Columbia Coordinator about falling below daily minimums and plans to meet constraints.** Langshaw will keep FCWG members updated.

Weather permitting, aerial redd surveys will be conducted by Bob Mueller on Vernita Bar and the Wanapum tailrace this Sunday. Bob will also conduct a few aerial surveys on the lower Yakima River this year.

The first redd count will be Sunday, October 18th and will continue weekly until the initiation of spawning is set. The final redd count will be the first Sunday before Thanksgiving (November 22, 2009).

- B Website Development** – Internal Grant PUD discussions continue on development of a website to house Hanford Reach data. A mock site is up and running. It's anticipated that FCWG members will have access to the site by October 23, 2009. **Langshaw will send the Hanford Reach website link to FCWG members next week.** The intent is to manually update the site once a week until daily updates can be performed automatically. It's estimated that full automation will be complete by February 28, 2010.

- IX. Next Meeting:** November 13, 2009, 9:00 a.m. to 3:00 p.m. Meet at the Grant PUD Hydro Engineering Department (HED) in Beverly, WA. Car pool to Vernita Bar in the Hanford Reach. A business meeting at HED will follow the site visit.