



Meeting Minutes

Fall Chinook Work Group

Friday, November 13, 2009

1:30 – 4:15

Grant PUD Hydro Engineering Department
Beverly, WA

Technical Members

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:

John Clark, ADFG (on phone)
Tim Hanrahan, Battelle
Paul Wagner, NMFS (on phone)
Geoff McMichael, Battelle
Eric Lauver, GCPUD
Tracy Hillman, Facilitator

Paul Hoffarth, WDFW
Marcie Mangold, WDOE (on phone)
Joe Skalicky, USFWS (on phone)
Eric Oldenburg, Battelle
Russell Langshaw, GCPUD

Action Items:

- 1. FCWG members need to send their opinions to WDOE regarding their desire to approve and move forward with Phase 1 of the Study Plan.**
- 2. After internal Washington Department of Ecology (WDOE) discussions, Marcie Mangold will notify FCWG members about WDOE's decision to approve and move forward with implementation of Phase 1 of the Study Plan.**
- 3. Marcie Mangold will meet with WDOE policy folks about Study Plan funding issues.**
- 4. Russell Langshaw will distribute Grant PUD's smolt-to-adult draft document to FCWG members.**

5. **Russell Langshaw will coordinate a Mid-Columbia Hourly Coordination workshop with Joe Taylor in January or February.**
6. **Debbie 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 January or February.**
7. **Russell Langshaw will send the Hanford Reach website link to FCWG members as soon as it is available.**

During the morning (9:00-12:00), before the meeting, members of the FCWG were invited to attend a field trip to visit fall Chinook spawning near Vernita Bar (Paul Hoffarth and Russell Langshaw attended). Scientists from Battelle and Grant PUD described studies that are currently or will be occurring on the Bar. Those included egg-to-fry survival studies, spawning ground surveys, within-redd water quality studies, and redd excavation work. In addition, members visited the Priest Rapids Hatchery Outflow Channel in which Eric Lauver, Grant PUD biologist, will conduct his studies to compare different methods for estimating egg-to-fry survival.

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**
 - October 16, 2009 – **Approved with minor edits**
- IV. **Review of Action Items** - Action items identified during the October meeting were reviewed and discussed.
 - #1 – Holly Harwood sent Bonneville Power Administration's (BPA) Study Plan comments to Russell Langshaw and Debbie Williams.
 - #2 – Holly Harwood sent 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 – Workgroup members still need to send their opinions to WDOE regarding their desire to approve and move forward with Phase 1 of the Study Plan.
 - #4 – Washington Department of Ecology (WDOE) is continuing internal discussions about approving the Study Plan and moving forward with implementation of Phase 1.

- #5 – Marcie Mangold will meet with WDOE policy folks to discuss Study Plan funding issues.
- #6 – Grant PUD will distribute the smolt-to-adult draft document to FCWG members.
- #7 – Grant PUD distributed the egg-to-fry survival proposal and egg tube information to members.
- #8 – The Egg Quantification Feasibility Study Final Report was posted to the website.
- #9 – Members provided a list of experts to sit on the productivity panel.
- #10 – Members identified locations in the Hanford Reach that can be used to examine egg-incubation habitat conditions.
- #11 – Russell Langshaw is still trying to coordinate a Mid-Columbia Hourly Coordination workshop with Joe Taylor.
- #12 – After Russell Langshaw talks with Joe Taylor, Debbie Williams will send a doodle requesting dates for the two-day FCWG meeting (one day for hourly coordination, training, and model development and another for the regular meeting) to be held in Portland.
- #13 – Comments on the 2009 Hanford Reach Fall Chinook Protection Plan Report were received. WDFW intend to provide their comments as soon as possible.
- #14 – Russell Langshaw spoke with Joe Taylor, Mid-Columbia Coordinator, about flows falling below daily minimums. Russell reported that flows increased so dropping below the minimums does not need to be considered.
- #15 – 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** – WDOE, WDFW, and Grant PUD policy-level staff met to discuss the Flow Fluctuation Report (FFR). Russell Langshaw reported that Grant PUD and Battelle are addressing most of the requests and recommendations from the FCWG. Battelle is working on additional modeling, which includes additional years (2007 and 2008). Russell reported that the revised modeling efforts will not include modified flows out of Rock Island Dam. That is, analyses will be conducted with flows out of Rock Island as they are. He indicated that the current methods are what are described in the 401, hypothetical constraints on Rock Island are beyond the purview of the 401,

and the hypothetical constraints are not a more realistic “unimpounded” scenario. Joe Skalicky stated that he was not comfortable with this, but noted that it is important to move forward with editing/updating the flow fluctuation report.

VI. Study Plan

- A Use of NNI Funds** – With regard to using No Net Impact (NNI) Funds to support Hanford Reach studies, Russell Langshaw reported that it was his understanding that the Priest Rapids Coordinating Committee (PRCC) was not in favor of using those funds to support research in the Hanford Reach. However, they did not give a firm “no” to the use of NNI funds to support research in the Hanford Reach. Bob Rose, a PRCC representative, was present for the discussion with the PRCC. Bob was not present for the FCWG meeting, but may be able to provide more information on this issue at the next meeting.
- B Productivity Estimation (CWTs)** – Russell Langshaw reported that Grant PUD has been compiling Coded Wire Tag (CWT) information for the productivity study. A draft document with the CWT analysis is being prepared. After the document is reviewed by Todd Pearsons and comments are addressed, it can be distributed to the FCWG. The draft document will be distributed for FCWG review in mid-December. A proposal using the same methods for an adult-to-adult and adult-to-juvenile study was initiated during early 2009 and is about 80% complete. It was noted that the study plan could be reviewed by the experts on the Productivity Panel.
- C Productivity Study** – Joe Skalicky noted that the productivity work (Phase 1) is a long-term project, and as such, waiting for results from that work should not hold up the implementation of other important studies. Joe indicated that to improve the level of certainty associated with fall Chinook productivity estimates, a long-term data series will be needed. Therefore, he identified several studies (i.e., 5.2, 5.3, 5.4 and 7.4) that should be implemented or scoped before the results of the Phase 1 analyses are complete.

Russell Langshaw indicated that Grant PUD was open to discuss implementing some of these studies in Phase 2, but stressed that the results from the productivity analysis (Phase 1) would be used to determine which studies would be implemented in Phase 2. If the results of the productivity assessment are ambiguous, some of the studies under discussion could be considered. In addition, Russell noted that Grant PUD has demonstrated its commitment to conducting studies to evaluate impacts. As an example, they have or are conducting pilot studies to identify methods for

enumerating eggs per redd and testing different sampling designs for assessing egg-to-fry survival.

Joe Skalicky indicated that the USFWS believes that we should move forward with the productivity analysis (Phase 1), but that “controlled flow “ studies need to be done, not just considered. Joe noted that the controlled flow studies are a condition under which study objectives can be addressed. Langshaw stated that “controlled flow” studies are simply a method to decrease uncertainty and can be used for any number of studies. When it is determined which studies will be conducted, they will be evaluated to identify which objectives will be most appropriate to address with a controlled flow study. The USFWS believes that additional studies need to be prioritized and implemented. The productivity analysis should move forward, but with the understanding that it is a long-term approach.

John Clark gently reminded the group that there is plenty of information available on survival and productivity of fall Chinook in the Hanford Reach. He noted that there is information available on egg deposition, hatching success, juveniles, smolts, and adults. Analysis of this information should point to life-stages in which there may be potential bottlenecks. This places a higher priority on CWT methods.

Russell Langshaw reiterated that the current proposal is for a parallel process. In Phase 1, productivity/survival analyses are conducted and at the same time there is preparation for implementation of Phase 2 studies. The latter would include clearly defining objectives and study locations, and conducting feasibility studies.

- D Egg-to-Fry Studies** – Eric Lauver, Grant PUD Biologist, described his proposed egg-to-fry survival study, which will serve as his thesis at Central Washington University. He will compare egg-to-fry survival among different habitats using two different methods. 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. He will also conduct survival studies on Vernita Bar. The hatchery outfall channel is being used because flows will remain stable and is a more hospitable study environment. The results of this study should help refine methods that will be used in a broader study in the Hanford Reach.

When asked by Joe Skalicky about the possibility of conducting egg-to-fry survival studies in deep water, Tim Hanrahan and Geoff McMichael indicated that it can be done, but it is dangerous, requires SCUBA, and is much more costly than sampling in shallower areas. Joe also asked if there was any way to compare survival estimates from egg tubes to those in natural redds. Geoff

indicated that that is very difficult because one does not know the number of eggs deposited within natural redds. Although there are methods for estimating the number of fry produced from a given redd, there is large uncertainty associated with the number of eggs deposited within the redd. Joe suggested that the workgroup do some brainstorming to see if there are methods or techniques that could be used to test the difference.

Given the concerns about the relative reproductive success of hatchery fish, Tracy Hillman questioned if the use of hatchery gametes versus wild gametes would affect survival results. Russell Langshaw indicated that the current study is a relative comparison of methods and that those types of questions could be addressed in future studies.

E 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 be the preferred Chair for the Panel. Russell Langshaw will check to see if Grant PUD can provide a stipend and/or travel funds.

Joe Skalicky asked what will be the specific role of the panel. Russell Langshaw suggested that they (1) review a draft assessment approach and advise the workgroup on best method(s) for estimating productivity, (2) use a Delphi 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. More specifics will be discussed during the next workgroup meeting.

Mid-Columbia Hourly Coordination and Model Development – As discussed during the last meeting, a model is being developed under Phase 1 of the Study Plan that could ultimately be used to look at alternative flow scenarios. Russell Langshaw indicated that the Hourly Coordination software cannot be used to model alternative constraints and that new software would need to be developed. Russell suggested that this should occur during Phase 3 in the Study Plan. Russell will coordinate a Mid-Columbia Hourly Coordination workshop with Joe Taylor for January or February. **Debbie Williams will send a doodle requesting dates for a two-day FCWG meeting to be held in Portland in January or February.**

VII. 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 were received from NOAA Fisheries. WDFW intends to submit their comments as soon as possible.

Russell Langshaw reported that flows are up and that meeting or exceeding minimums is no-longer a concern. Recall that under the HRF CPPA, Grant PUD must maintain daytime minimum flows of 55 kcfs. Grant PUD anticipates having enough water to maintain flows under the HRF CPPA constraints.

Russell Langshaw noted that Grant PUD will be updating the USGS flow (stage) and temperature equipment.

Weather permitting, the final aerial redd survey will be conducted on Sunday, November 22. During the most recent survey (November 12), a total of 4,726 redds were counted. This count appears less than counts made at about the same time in previous years; however, as Paul Hoffarth stated, spawning in 2009 appears to be a little later than in previous years.

- B Website Development** – Grant PUD continues to development 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 mid-December. **Russell Langshaw will send the Hanford Reach website link to FCWG members.** 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.

- VIII. Next Meeting:** Thursday, December 10, 2009, 9:00 a.m. to 3:00 p.m.
Meet at the Grant PUD Natural Resources Office in Ephrata, WA.