



Meeting Minutes

Fall Chinook Work Group

Tuesday, April 07, 2009
10:00 – 3:00

Grant PUD Natural Resources Division
Conference Room - A

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
Bob Clubb/Tom Kahler, DPUD
Paul Hoffarth, WDFW
John Clark, ADFG
Todd Pearsons, GCPUD

ATTENDEES:

John Clark, ADFG (on phone)
Paul Hoffarth, WDFW
Steve Hays, CPUD (on phone)
Paul Wagner, NMFS (on phone)
Russell Langshaw, GCPUD
Debbie Williams, GCPUD

Bob Rose, YN (on phone)
Tom Kahler, DPUD
Joe Skalicky, USFWS (on phone)
Alyssa Buck, Wanapum
Todd Pearsons, GCPUD
Tracy Hillman, Facilitator

Action Items:

- 1. FCWG roles and participants need to be defined by Washington Department of Ecology (WDOE).**
- 2. Williams will upload edited protocols to the FCWG website.**
- 3. Rose and Langshaw will define the responsibilities of the FCWG for the meeting protocols.**
- 4. Langshaw will distribute additional study plan objective information gathered 10 days prior to the next meeting.**

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. **Action Items Review** – Action items were reviewed and discussed.
- IV. **Approval of Meeting Minutes**
 - March 03, 2009 – Approved with edits.
- V. **Meeting protocols, draft for discussion** – Langshaw drafted and distributed Fall Chinook Work Group (FCWG) meeting protocols to members. **FCWG roles and participants need to be defined by Washington Department of Ecology (WDOE).** Members agreed this is a living document. The protocols are consistent with other Grant PUD forums, with some modifications specific to this group. Langshaw will update the document with WDOE input, and send the document out for another review period. At the next meeting, the document will be reviewed by the committee, and approval will be asked for. **Williams will upload edited protocols to the FCWG website.**

Rose stated the Yakama Nation (YN) foresees having problems with entities allowed to be FCWG members as defined in the protocols. He suggested that other PUD's be represented by Grant PUD. Langshaw reminded participants that the 401 Certificate (401) (page 29) states "The FCWG shall consist of all members of the PRCC, parties to the Hanford Reach Agreement, and other interested stakeholders." Langshaw explained that WDOE opened this forum so any interested party could have their voice heard.

The FCWG was formed to make technical recommendations on studies, not management decisions. Langshaw explained that the primary function of this group is to consult on the study plan mandated by WDOE. It has no fish management authority. **Rose and Langshaw will provide recommendations of the FCWG for the meeting protocols.**
- VI. **Flow Fluctuation Report**
 - A **Draft Update** – Battelle is starting to work on revisions requested by WDOE. Battelle should complete the draft within one month. The FCWG will be given a 14 day review period prior to the report being sent to WDOE.
 - B **Finalization timeframe** – The final plan will be sent to WDOE by June 2009.
- VII. **Study Plan**
 - A **Study ranking** – Langshaw told members that study plan objectives need to be further defined for each of the studies

proposed. Members identified proposals that require additional information. Langshaw will work with individuals to get more specific details before studies are initiated. Study methodologies will be developed by the entity requesting the Request for Proposal (RFP). **Langshaw will distribute additional study plan objective information gathered 10 days prior to the next meeting.**

3.1 – Spawning Period operational effects on abundance and distribution of fall Chinook redds on Vernita Bar. Action: Clarify Priest Rapids operations; current, alternative, or how operations vary by escapement.

3.2 – The effects of fall Chinook redd abundance and distribution of productivity of individual redds. Action: Expand on what productivity is, and include redd characteristics. This may be limited to Vernita Bar only.

3.3 - Determine the behavioral components of the spawning process for fall Chinook, and the physical conditions selected by spawners under “normative” (relatively stable) streamflow conditions to derive “true baseline” habitat requirements. Action: A better description of what normative, relatively stable is. Further clarify what the bounds are, taking into account what downstream constraints are for chum. Skalicky and Langshaw will work on this plan.

3.4 - Conduct a case-control spawning study under alternate or agreement flow scenarios for comparison to the results from the “baseline” spawning study to describe the relative effects of these scenarios. Action: See 3.3 above.

3.5 - Evaluate the energetic costs of fluctuating flows and the impact of those costs on completion of successful spawning. Action: More description on rate of lost productivity, and what is meant by energetic cost. Skalicky, Wagoner, Clark and Langshaw will work on this plan.

3.6 - Evaluate and quantify the effect of redd superimposition on spawning fall Chinook in the Hanford Reach. Action: Give results of spawning conditions, and lost productivity, egg to fry survival, number of eggs and fry, egg lost, number of pockets. How many eggs were removed from a previous redd.

3.7 - Investigate, identify, and quantify the extent of deep-water spawning by fall Chinook throughout the Hanford Reach. Action: None

3.8 - Evaluate fall back of adult fall Chinook at Priest Rapids Dam. Action: Define fate.

3.9 - Hanford Reach Adult Spawning Surveys. Action: None

4.1 - Empirically determine egg to emergent fry survival rates for each of the major spawning sites in the Hanford Reach. Action: **Include egg to emergent fry survival.**

4.2 – Effects of Flow Variation on Chinook Salmon Egg Hatching Success. Action: **See 4.1 above. Define flow variation, and flow fluctuations during incubation.**

5.1 – Perform hydrodynamic model synthesis, evaluation and integration into a geographic database for the specific purpose of Hanford Reach habitat and hydrologic evaluations. Action: **The title of the study becomes the objective; and the original sub objectives 1-5 becomes the tasks.**

5.2 - Evaluate the entrapment sampling efficiency and accuracy for juvenile fall Chinook. Action: **Define entrapment.**

5.3 - Quantify the effect of flow fluctuations on *stranding* of juvenile fall Chinook. Action: **Clarify what is meant by quantification of stranding impacts.**

5.4 - Conduct controlled flow fluctuation experiments to identify specific flow bands and fluctuation magnitudes that entrap disproportionately large numbers of juvenile. (Note: This would be an example of a “Controlled Flow Study” within the agreement flows). Action: **Add definition of entrapment, strike stranding. Make sure that when the study is conducted enough data is collected to determine diel effects. Remove “Conduct controlled flow fluctuation experiments is to” from the title.**

5.5 - Develop an index sampling program including index sampling tools and methodologies that are statistically rigorous for estimating entrapment fates, the total number of entrapped fall Chinook, and juvenile Chinook mortality throughout the Reach and with adequate temporal resolution. Action: **Remove one season of studies, insert studies. Relate index to loss.**

6.1 - Effect of Priest Rapids Flows on Productivity of Upriver Bright Chinook. Action: **Define productivity (recruits per spawners). Recruit is defined as recruitment to maturity.**

6.2 - Evaluate Hanford Reach fall Chinook life cycle productivity and population dynamics using a production simulation model. Action: **Expansion of current program under Columbia River Inter-Tribal Fish Commission (CRITFC). Skalicky will talk to Steve Haeseker, USFWS statistician. Combine 7.6 with 6.2.**

7.1 - Determine the optimum or maximum sustainable yield of natural spawned fall Chinook from the Hanford Reach and the required escapement of spawning adults. Action: **Delete**

Objective #1. Post to website – Model with alpha and beta in it. Skalicky will talk to USFWS statistician.

7.2 - Evaluate the feasibility and benefit of re-regulation of streamflows coming into the Priest Rapids Project to change the flow pattern downstream into the Hanford Reach for the benefit of both juvenile and adult fall Chinook. Action: **Remove software sentence.**

7.3 - Relate spawning habitat availability (i.e. carrying capacity) resulting from an array of operational scenarios to the number of fall Chinook spawners (i.e. redds) that could be accommodated. Action: **None**

7.4 - Evaluate the effect of various ramping rates as they relate to the entrapment and stranding of juvenile fall Chinook. (Note: This would be an example of a “Controlled Flow Study” within the agreement flows). Action: **Define entrapment and stranding.**

7.5 - Conduct annual orthophotography for each of the main Hanford Reach fall Chinook spawning sites. Action: **None**

7.6 - Hanford Juvenile PIT-Tag Studies. Action: **Combine with 6.2.**

7.7 - Hanford Adult Fall Chinook PIT-Tag Studies. Action: **Combine with 3.8.**

VIII. Next Meeting: May 12, 2009 at the Grant PUD Natural Resources Office, Ephrata, WA.