



Grant County
PUBLIC UTILITY DISTRICT
Excellence in Service and Leadership

Fall Chinook Work Group

Tuesday, 5 March 2013

Grant PUD Headquarters Building

Ephrata, WA

Technical members

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

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

Attendees: (*Denotes Technical member)

Marcie Mangold, WDOE*
Tom Kahler, DPUD* (phone)
Jeff Fryer, CRITFC* (phone)
Daniel Diedrich, NMFS (phone)
Leah Sullivan, Blue Leaf (phone)

Russell Langshaw, GCPUD*
Paul Hoffarth, WDFW* (phone)
John Clark, ADFG* (phone)
Keith Hatch, BIA (phone)
Tracy Hillman, Facilitator

Action Items:

1. Leah Sullivan will submit an outline of the predation report to the FCWG by 31 March 2013.
2. Russell Langshaw and Jeff Fryer will work with presenters to coordinate presentations for the Fall Chinook Symposium at the Western Division AFS meeting in Boise.
3. Russell Langshaw will conduct retrospective analysis on historical stranding and entrapment work and identify issues for discussion during the next FCWG meeting.
4. Russell Langshaw will develop a protocol that will be followed when the USGS flow gage fails.

Meeting Minutes

- I. **Welcome and Introductions** – Tracy Hillman welcomed attendees to the meeting. Attendees introduced themselves.
- II. **Agenda Review** – The agenda was reviewed and approved.
- III. **Approval of Meeting Minutes**
 - 5 February Meeting Minutes were reviewed and approved.
- IV. **Review of Action Items** - Action items identified during the February meeting were discussed.
 - The FCWG will review the draft Hydrodynamics Model report and provide comments to Russell Langshaw and Tracy Hillman by Monday, 5 March 2013. **Complete**
 - Russell Langshaw will work with presenters to coordinate presentations for the Fall Chinook Symposium at the Western Division AFS meeting in Boise. **Ongoing.**
 - Russell Langshaw will conduct retrospective analysis on historical stranding and entrapment work and identify issues for discussion during the next FCWG meeting. **Ongoing**
 - Russell Langshaw will develop a protocol that will be followed when the USGS flow gage fails. **Ongoing**
- V. **Phase I Study Updates**
 - A. **Productivity Assessment** – The final productivity report is complete and has been posted to Box.net.
 - B. **Egg to Fry Survival** – The final egg-to-fry study report is complete and has been posted to Box.net.
 - C. **Dam Passage Fallback** – The final dam passage fallback report is complete and has been posted to Box.net.
 - D. **Production Simulation Model** – Russell Langshaw said that a doctoral student in Canada is reviewing the Production Simulation Model and may tweak it to evaluate flow effects on fish production in Canada. His work is associated with the Columbia River Treaty.
 - E. **Hydrodynamic Model** – Debbie Williams posted the hydrodynamics model draft report (draft of methods and a catalogue of what is available) to Box.net. The FCWG had 30 days to review the draft report. Comments were due to Tracy Hillman and Russell Langshaw by Monday, 5 March 2013. Russell and Battelle will finalize the report.
- VI. **Phase II Study Plan**

Phase II Draft Study Plan – Blue Leaf Environmental is compiling available information on fish and bird predation in the Hanford Reach and Lake Wallula. Leah Sullivan reported that the literature review is

complete. She also noted that they are still waiting for data from the USGS, ODFW, WDFW, and Department of Energy. Russell Langshaw noted that there are also some funding constraints that need to be resolved. This, and the slow acquisition of data, will push the completion of the project out about three to four months. GCPUD is working on a change order for the contract, which should be completed soon.

John Clark noted that he was hoping to get the predation report soon. He would like to use the report to help secure funding for predation studies. John asked about the purpose of the bioenergetics component of the predation report. Leah said that the bioenergetics section will estimate consumption and predation rates. The FCWG asked if Leah could provide the FCWG with an outline of the predation report. Leah will submit an outline of the predation report to the FCWG by the end of March.

With the contracting issues and delays in securing data, the draft report will likely be submitted to the FCWG by 31 July 2013 and the final after a 30-day comment period.

VII. HRWG Activities

Update on Protection Flows – Russell Langshaw said that the protection program for the rearing period began on 2 March 2013. He also indicated that there will likely be minimal flow fluctuations because of the proposed BPA flow releases over the next few weeks. Russell noted that all temperature and flow data are displayed in the Fixed Site Monitoring – Monthly Summary files on the Grant PUD Water Quality Website (<http://www.gcpud.org/naturalResources/fishWaterWildlife/waterqualityMonitoring.html>). The temperature unit tracking spreadsheet is found under “Fixed Site Monitoring – Monthly Summary.”

- **Update on Stranding and Entrapment Activities** – Russell Langshaw indicated that he identified a few issues with the entrapment data. First, the counts of entrapments based on MASS2 are higher than what is actually sampled. That is, where MASS2 predicted, say, four entrapments, crews found only one on the ground. On average, the ratio of predicted versus actual entrapments was about 7:1. Thus, the timing of formation and sampling could bias the estimate of entrapped fish. The current resolution of MASS2 may be a problem. Russell will look at different resolutions.

The second issue Russell described involved the structure of the data. Because entrapments with fish are rare (i.e., most entrapments have no fish), Russell is looking into using a two-stage mixed-model to analyze the entrapment data. This is similar to the statistical approach used by researchers in Canada, who analyzed entrapment of fish in the lower portion of the Columbia River in Canada. Under the current

approach, it is difficult to correlate fish entrapment with environmental variables. Russell will continue to conduct retrospective analysis. He will provide more results during the next FCWG meeting.

WDFW will conduct its first stranding and entrapment survey this week. Paul Hoffarth will provide the first stranding and entrapment progress report on 20-22 March.

Lastly, the FCWG asked about the possibility of a site visit during the stranding and entrapment survey period. Russell Langshaw and Paul Hoffarth recommended a site visit during the afternoon following the next (2 April) FCWG meeting. The FCWG agreed. The FCWG will meet in the morning at the Hydro Engineering Department (HED) Building located at 15655 Wanapum Village Lane, Beverly, WA, and then tour some stranding and entrapment sites in the afternoon.

- **Fall Chinook Presentations at the American Fisheries Society (AFS) Meeting** – Russell Langshaw and Jeff Fryer have been organizing the presentations for the Fall Chinook Symposium at the Western Division AFS meeting in Boise. The symposium will cover both Snake River and Hanford Reach fall Chinook. Marcie Mangold will give the first presentation, which describes the 401 Certification process and places the Hanford Reach studies in context. Russell will then share results from the various studies, while Ryan Harnish will talk about the productivity study. Paul Hoffarth will discuss the stranding and entrapment studies and Jeff Fryer will describe results from his tagging studies. Given the recent federal government spending cuts, some federal employees may not be able to attend and present their Snake River work at the symposium. Therefore, there may be time for extra presentations on the Hanford Reach. Russell said he will consider additional presentations (e.g., egg-fry survival studies). Abstracts for the symposium were due on 14 February 2013, but Jeff thought this would likely be extended to fill vacant time slots. The AFS meeting is on 16-18 April 2013.

VIII. Next Meeting: Tuesday, 2 April 2013 at Grant PUD HED in Beverly, WA. After the meeting, the FCWG will visit some of the stranding and entrapment sites in the Hanford Reach.