



## Meeting Minutes

### Hanford Reach Working Group

Monday, April 05, 2010

Battelle EMSL, Room 1075  
Richland, WA

#### **Technical Members**

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Paul Wagner, NMFS  
Jerry Marco/Joe Peone, CCT  
Holly Harwood, BPA  
Steve Hemstrom/Shawn Seaman, CPUD  
Paul Hoffarth/Bill Tweit, WDFW  
Russell Langshaw, GCPUD  
Tracy Hillman, Facilitator

Don Anglin/Steve Lewis, USFWS  
Mark Miller/Howard Schaller, USFWS  
Bob Rose/Steve Parker, YN  
Tom Kahler, DPUD  
Marcie Mangold, WDOE  
Debbie Williams, GCPUD

#### **ATTENDEES:**

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Paul Wagner, NMFS (on phone)  
Steve Hemstrom, CPUD (on phone)  
Paul Hoffarth, WDFW  
Russell Langshaw, GCPUD  
Debbie Williams, GCPUD

Joe Skalicky, USFWS (on phone)  
Tom Kahler, DPUD (on phone)  
Marcie Mangold, WDOE (on phone)  
Steve Hays, CPUD (on phone)  
Tracy Hillman, Facilitator

#### **Action Items:**

- 1. Williams will upload Langshaw's PowerPoint to the HRWG website.**
- 2. Hoffarth and Langshaw will generate the annual Hanford Reach report by September 01, 2010.**
- 3. Hoffarth has historical redd count data in addition to ground survey data that he will send to members.**
- 4. Every week Langshaw will distribute Hanford Reach operational and temperature data reports to members.**
- 5. Hoffarth will send fry emergence data to members.**
- 6. Langshaw will discuss flow restrictions with the Bonneville Power Administration and Joe Taylor, Mid-Columbia Hourly Coordinator, regarding flow fluctuations outlined in the HRFPPA.**

7. Langshaw will draft a memo on Grant PUD's intent for the HRF CPPA 2014 re-opener.
8. Skalicky will distribute the 2007 Entrapment Study Plan and check to see when that might be completed.
9. Hoffarth will provide Hillman with contact information for Ken Tiffen.
10. Hoffarth will find out the cost of the 2007 entrapment and stranding study and share that with the HRWG.
11. Hoffarth will draft an initiation of spawning Statement of Agreement (SOA) showing current and amended language to Hillman and Williams for distribution to the HRWG and FCWG. Temperature unit collection at the WDOE site will also be added as an amendment by Langshaw. Members will have a 30-day review period.
12. Williams will upload all SOAs written for the Hanford Reach to the PRCC Supporting Documentation section under SOAs.
13. Hoffarth will email Vernita Bar spawning ground surveys.
14. Langshaw will talk to Grant PUD maintenance crews about methods to mark permanent elevations in Area C Transects at Vernita Bar.

## Final Meeting Minutes

- I. **Welcome and Introductions** – Hillman welcomed everyone to the Hanford Reach Work Group (HRWG) and asked members to introduce themselves.
- II. **Agenda Review** – The proposed agenda was adopted.
- III. **Review 2009 Hanford Reach Fall Chinook Protection Program Agreement (HRF CPPA) Implementation and Operations**
  - A **Spring operations for emergent and rearing fry** - Langshaw gave a PowerPoint presentation to members showing data from 2008 - 2009 on spawning periods, daily delta constraint compliance, and emergence and rearing periods. **Williams will upload Langshaw's PowerPoint to the HRWG website.** All data in the table are based on index counts taken from a subsection of Vernita Bar. This index area sets critical elevation and when program protections begin and end. Critical elevation is dictated by redd distribution.

Hoffarth explained that Washington Department of Fish and Wildlife (WDFW) will be conducting an adult fallback study in the future. Langshaw explained that a fallback assessment will be completed during phase one of the Hanford Reach Study Plan. The intent is to review all fallback data in order to determine if more intense fallback studies are needed. All fish that return to the hatchery are scanned for CWTs, but not PIT-tags, noted Hoffarth. PIT-tag data are only available for 2008. Priest Rapids Hatchery upgrades will include the ability to read PIT and acoustic

tags. **Hoffarth and Langshaw will generate the annual Hanford Reach report by September 01, 2010.**

Flow protections were supposed to start on March 3, 2010. Grant PUD was in violation the first two days of flow protections because Priest Rapids Dam operations were not notified to start protections until March 5<sup>th</sup>. Emergence started on March 2<sup>nd</sup> and is currently one third of the way through the emergence period. March 3<sup>rd</sup> is the annual start date for daily delta (aka flow band) flow protections; determined by average water temperatures at Vernita Bar. It is normal to observe less than 5% of fry prior to the start of protections.

Langshaw noted that typically there are 20-100 redds throughout the reach when the criteria for the initiation of spawning are met on Vernita Bar. **Hoffarth has historical redd count data in addition to ground survey data that he will send to members.** Hoffarth explained that aerial counts correlate to ground counts pretty well and he does not think any redds are being missed during ground counts. Hoffarth stated he is more comfortable with the updated criteria that can use aerial counts in the vicinity of Vernita Bar to determine initiation of spawning.

Langshaw explained that since Kevin Nordt started working for Grant PUD in 2007, daily delta constraint compliance has improved significantly. The length of the emergence period is variable because of water temperatures.

- IV. 2010 HRFPPA Implementation and Operations** - A website being developed to automatically send Hanford Reach temperature data to members has temporarily been put on hold by Grant PUD IT staff. Langshaw expects it to be May before they start working on it again. **Langshaw will distribute weekly Hanford Reach operational and temperature data reports to members.**

Skalicky asked that a pre-operational meeting be held a couple of weeks before emergence, or that a status report be distributed prior to the start of flow fluctuation constraints.

Langshaw explained that Grant PUD is using temperature data from the water quality monitoring station at Vernita Bridge. Because the two monitors at the USGS gauge have been reporting discharge variances of 3 to 4 degrees kcfs, the accuracy of their equipment came into question. USGS equipment has since been replaced, but Langshaw and Ross Hendrick, Grant PUD Limnologist, would feel more comfortable using Grant PUD's official water quality site because of its consistent maintenance program. Hoffarth noted that temperature data collected 20 miles downstream of the Vernita Bridge site is usually comparable to temperatures gathered by Grant PUD, leading him to believe that temperatures stay fairly consistent. Temperature data

collected by Grant PUD can be found on their website. No concern with Grant PUD using their gauging site at Vernita Bridge was voiced by members.

Members discussed whether Vernita Bridge is an accurate index site to gauge constraint criteria. Skalicky stated that he would like better assurance that fry that emerge early are being protected. Hoffarth said data show that 1-5% of fry will emerge before protection flows start.

**Hoffarth will send emergence data to members.**

Aerial counts at Vernita Bar are now used to set initiation of spawning, so there is no lag time from when they start to spawn in deep water vs. higher up the bank in the ground survey index area. It has been effective using aerial vs. ground counts in the past three years. If there are fewer redds at Vernita Bar, but a lot in other locations, protocols could be adjusted by the HRWG.

Skalicky noted a concern that if there was an 80 kcfs fluctuation, a large stranding could take place like that that happened in 2001. Low elevation flow years are a big concern, because any change could result in stranding and entrapment, but staying within the agreement is not going to change the chance of losses, Hoffarth said, adding that when flows are this low, it's scary times. Skalicky said the only solution is for Grant PUD to voluntarily agree to hold flows at 40 kcfs instead of 80 kcfs. Langshaw explained that constraints vary depending on discharge and that he could not commit to tighter constraints than what the HRF CPPA requires because when power purchasers purchase power, it's based on constraints outlined in the HRF CPPA. When flows within the Columbia are lower the constraints are tighter. **Langshaw will discuss flow restrictions with the Bonneville Power Administration and Joe Taylor, Mid-Columbia Hourly Coordinator, regarding flow fluctuations outlined in the HRF CPPA.** Langshaw reminded members that additional weekend protections have been voluntarily added in the past, showing the commitment of Grant PUD to do what they can where they can to try to make a difference.

- V. 2011, 2012, and 2013 Monitoring and Evaluation (objectives and funding)** - There have been ongoing discussions in the Fall Chinook Work Group (FCWG) regarding how the Hanford Reach Study Plan can be coordinated with the HRWG. Grant PUD agrees that stranding and entrapment monitoring will be conducted in 2011, 2012, and 2013, and is committed to conducting monitoring and evaluation as described in the HRF CPPA (Section 6, pg. 10).

Long- and near-term objectives need to be defined. The direction taken by the Monitoring Team will be dictated by the decision to either conduct a check in, or a long-term monitoring plan. Langshaw said that if it's a check in and the plan is changed significantly in 2014, another check in would likely be required in 10 years. Skalicky said that at a minimum a check in will be conducted because having a robust

estimate for the entire reach is important. He went on to say that if the productivity assessment shows significant losses, then the HRWG might want to think about an annual monitoring plan. Skalicky believes that three years of data should be enough to have a robust monitoring program. Langshaw thought the adaptive component of the HRSP would be to have data available to develop an index plan. If the desire is to have long-term monitoring, data could be used to develop an index area. Langshaw was comfortable using data collected to develop an index area if it is determined that long-term monitoring will occur. Wagner sees 2011, 2012, and 2013 as a check in and would like to see index monitoring.

Langshaw explained that Grant PUD does not intend to fully fund all of the effort, but will do their share and maybe more. Other signatories will also be part of that check in. Langshaw wants to finalize the objectives of the study before discussing funding issues.

Discussion then focused on what the language of the HRFPPA says and means. The license is based on adaptive management and Grant PUD reiterated their commitment to adaptive management. In order to provide some comfort to members regarding Grant PUD's vision of the 2014 reopener, **Langshaw will draft a memo on Grant PUD's intent for the HRFPPA 2014 re-opener.**

It was also noted that data collection for 2011-2013 should include: methods to assess mortalities of operations, estimates that represent the entire reach, true stranding and entrapment assessments, how to come up with robust estimates of true stranding, how to determine the fate of entrapped fish, and estimates of the number of entrapment events.

It was noted that previous studies demonstrate that there is considerable variability in the stranding and entrapment estimates. A reduction in variability was attempted by developing a stratified study design. However, there remains considerable variability in the estimates. It may be necessary to further refine the strata to reduce variability. Variability can also be reduced by developing more sensitive sampling methods, improving the sampling design, and identifying reasonable decision rules. **Skalicky will distribute the 2007 Entrapment Study Plan (ESP) and check to see when the final report might be completed.**

In a previous FCWG meeting, it was decided that a small working group would review and improve the 2007 ESP. The small work group will consist of Joe Skalicky, Paul Hoffarth, Russell Langshaw, Steve Haeseker, Ken Tiffen, Geoff McMichael, Chris Murray, and Tracy Hillman. The small work group will bring a draft study plan to the HRWG in June. **Hoffarth will provide Hillman with contact information for Ken Tiffen.**

**Funding** - Langshaw explained Grant PUD believes the cost of all studies should be shared; although he wasn't sure what the portion should be. Langshaw asked members to consider how their agencies might contribute (e.g., in kind, modeling, boat and crews, statistical work, or monetary funding). Langshaw reiterated the importance of having funding discussions among operators. Hillman suggested that the small work group should estimate the yearly cost and relay those costs to the FCWG for review. As a comparison, Langshaw noted that egg studies cost about \$200,000. **Hoffarth will find out the cost of the 2007 entrapment and stranding study and share that with the HRWG.**

Langshaw explained that the monitoring team (small work group) will develop proposed studies for 2011, 2012, and 2013. The small work group will then share their study plan recommendations with the HRWG and FCWG. After agreement is reached as to what studies will be conducted, policy makers from each signatory will then make funding commitments.

## **VI. Coordination of HRWG and FCWG**

**A Flow Fluctuation Studies (juveniles and adults)** - The deadline to submit the final Hanford Reach Study Plan to FERC is July 30, 2010.

Langshaw believes some studies proposed in the HRSP could be funded with minimal additional funding if data are gathered while the 2011, 2012, and 2013 studies are being conducted. Both temporal and spatial replicates need to be determined by the FCWG. The following studies will be looked at by the small work group to determine if they will complement FCWG stranding and entrapment studies:

- 5.4 - Conduct control flows
- 5.3 - Evaluation of stranding
- 4.1 & 4.2 – Egg-to-fry studies
- 5.1 - House model on a website
- 5.2 - Evaluate trapping sampling efficiency

**VII. Amendment: Modification of Start Date for Vernita Bar Surveys** - Vernita Bar spawning ground surveys start the Sunday before October 15<sup>th</sup>, but for the last three years have been delayed. After reviewing Vernita Bar aerial redd counts from 1989-2009, Hoffarth requested that redd counts go back to starting the Sunday closest to October 15<sup>th</sup>. Only one redd has ever been counted the Sunday prior to October 15<sup>th</sup>, but during the third week of October, five redds are routinely counted. Aerial redd count data confirm that an increase in redds is observed around October 21<sup>st</sup>. Hoffarth recommends that both aerial

and ground counts should continue. Initiation of spawning occurs when five or more redds are counted in a certain zone.

Because this would be an actual amendment to the HRF CPPA, a Statement of Agreement (SOA) will need to be written. **Hoffarth will draft an initiation of spawning SOA showing current and amended language to Hillman and Williams for distribution to the HRWG and FCWG. Temperature unit collection at the water quality monitoring site will also be added as an amendment by Langshaw. Members will have a 30-day review period. Williams will upload all SOAs written for the Hanford Reach to the PRCC Supporting Documentation section under SOAs.**

**VIII. Coordination and Dissemination of Information and Operations**

**A HRWG website** - See Item IV, 2010 HRF CPPA Implementation and Operations above.

**IX. Vernita Bar Surveys (Area C Transects)** - In an effort to tell what elevation you are at when counting redds at Area C transect, Hoffarth asked that elevations be marked. **Langshaw will talk to Grant PUD maintenance crews about methods to mark elevations permanently at the Area C Transect at Vernita Bar.**

**X. 2014 Re-Opener Expectations** - Members discussed logistics of how the 2014 re-opener would work, who and how submittals to FERC should be handled, and what happens if everyone comes to agreement. **Grant PUD's interpretation of the HRF CPPA will be drafted by Langshaw.**

**XI. Next Meeting:** The next meeting of the HRWG will be in June.