Grant County
PUBLIC UTILITY DISTRICT
Excellence in Service and Leadership

Meeting Minutes

Fall Chinook Work Group

Friday, November 21, 2008
10:00 – 3:00
Environmental Molecular Science Lab

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, ADFW
Todd Pearsons, GCPUD

ATTENDEES:

Bill Perkins, PNNL
Steve Hemstrom, CPUD
John Clark, ADFW (on phone)
Robert Heinith, CRITFC
Paul Hoffarth, WDFW
Russell Langshaw, GCPUD
David Duvall, GCPUD
Debbie Williams, GCPUD
Marshall Richmond, PNNL
Mike Bradshaw/ Steve Hays, CPUD
Marci Mangold, WDOE
Geoff McMichael, Battelle
Joe Skalicky, USFWS
Todd Pearsons, GCPUD
Alyssa Buck, GCPUD
Tracy Hillman, Facilitator

Action Items:

1. **Grant PUD will provide the FCWG with a study plan implementation timeline.**
2. **Langshaw will distribute raw input/output data, cross-sectional information (e.g., location, depth, and width) and boundary conditions of the model.**
3. **Langshaw will redistribute the PNNL MASS1 model report (Waichler et al. 2007) and the Flow Fluctuation Report (Duvall 2008).**
4. **Langshaw will distribute the Chapman documents, and the eggs per redd study plan for review to the FCWG.**
5. **WDOE will provide Tony Wiley's MASS1 review to the committee.**

6. **Battelle will provide Grant PUD with their review of all aspects of the MASS1 model, the bases of the flow fluctuation model and past reports. Langshaw will distribute Battelle's report to the committee.**
7. **An electronic copy of Perkins PowerPoint will be distributed to the committee.**
8. **Hillman will schedule a meeting with WDOE, Battelle, and members to discuss modeling questions.**
9. **Skalicky will determine the cost of using the USFWS entrapment model.**
10. **WDOE will clearly define Grant PUD's contribution to flow fluctuations in the Hanford Reach for purposes of adaptive management, either positively or negatively in order for FCWG members to prioritize studies. WDOE will email their definition of Grant PUD's contribution to FCWG members.**

Decisions:

- **The Flow Fluctuation comment period was extended to December 31, 2008.**
- **The prioritization ranking comment period was extended to December 31, 2008.**
- **FCWG members agreed that 100 points will be used for criteria weighting, and that multiple life stages and a controlled flow study will also be included.**

Final 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. Hillman explained that his goals and objectives are to help the committee achieve study plan timelines. Members agreed that future meetings will be longer than previous meetings have been. **Grant PUD will provide the FCWG with a study plan implementation timeline.**

III. **Approval of Meeting Minutes**

- August 28, 2008 – Approved
- October 23, 2008 - Approved

IV. **Action Items Review** – Action items were reviewed. Actions 2, 3 and 4 will remain from the last meeting.

V. **FERC Order – 401 Certification Requirements**

A **Flow Fluctuation Study –** Richmond and Perkins explained how the MASS1 model uses a specific instance to validate input data. Tony Wiley, WDOE reached similar conclusions as Grant PUD while conducting a peer review of the MASS1 model.

WDOE will provide Tony Wiley's MASS1 review to the committee. MASS1 has appeared in published literature regarding egg to fry survival, and is used by Chelan PUD at Rocky Reach. All members that reviewed the MASS1 model developed by Battelle were comfortable with it except CRITFC and WDOE. CRITFC and WDOE requested more time to review the model. **Battelle will provide Grant PUD with their review of all aspects of the MASS1 model, the bases of the flow fluctuation model and past reports.** L**angshaw will distribute Battelle's report to the committee. An** e**lectronic copy of Perkins PowerPoint will be distributed to the committee. Hillman will schedule a meeting with WDOE, Battelle, and members to discuss modeling questions.** Members will review data provided by Grant PUD and continue with the discussion at the next meeting.

Langshaw explained that the Flow Fluctuation Report that was distributed to members on November 20, 2008 included a finer scale analysis of flow fluctuation data. If members want additional analysis done to the flow fluctuation report, Grant PUD would like to receive comments soon so modeling can be completed. **The Flow Fluctuation comment period was extended to December 31, 2008.** WDOE hasn't completed review of the draft flow fluctuation study. It was suggested that MASS1 output be put into the entrapment model used by USFWS. **Skalicky will determine the cost of using the USFWS entrapment model.**

B **Language Clarification –** At the FCWG meeting on October 23, 2008 Grant PUD asked WDOE to present their clarified definition of the objective of the Hanford Reach Study Plan. There was disagreement relative to whether the plan should focus on flow fluctuation in the Hanford Reach or Grant PUD's negative contribution to flow fluctuation impacts to fall Chinook.

WDOE provided their clarification to Section 6.3.6a of the 401 Certification (401) in a letter to Grant PUD, dated November 20, 2008. It stated, "The studies will be identified of significant importance in regard to flow fluctuations under current operations. The purpose was not to evaluate flow fluctuations of an impounded or unimpounded scenario".

Grant PUD stated the objective of the 401 is to ensure Grant PUD is mitigating and adaptively managing for its contribution to impacts to fall Chinook in the Hanford Reach. It is for Grant PUD's impact, not the whole hydro impact. Grant PUD argued that the overall objective of the 401 should be considered during the prioritization process. Studies that focus on significant impacts, that can clearly identify Grant PUD's negative

contribution, and that can be used for future adaptive management should receive the highest priority. Grant PUD does not want to spend time and money on studies that will not lead to adaptive management for negative impacts. There was extended debate about whether Grant PUD's negative contribution should be considered during the prioritization process. WDOE explained that developing studies that evaluate the impact to fall Chinook and how the dams are operated is the important issue.

WDOE will clearly define Grant PUD's contribution to flow fluctuations in the Hanford Reach for purposes of adaptive management, either positively or negatively in order for FCWG members to prioritize studies. WDOE will email their definition of Grant PUD's contribution to FCWG members. The prioritization ranking comment period was extended to December 31, 2008.

VI. Study Plan

A **Draft Comments –** No discussion took place.

B **Prioritization –** Members disagreed on how the studies should be prioritized. USFWS explained that they ranked the studies as to the effect of flow fluctuations in the Hanford Reach, not Grant PUD's contribution to them. USFWS suggested that the studies be designed so that they can evaluate both impacted and un-impacted areas. For example, using modeled ramping rates from Rock Island versus the current ramping rates. Each member must have the same interpretation of the guidelines in order to prioritize the studies.

C CRITERIA RANKINGS - **FCWG members agreed that 100 points will be used for criteria weighting and that multiple life stages and a controlled flow study will also be included.**

The following criteria were agreed upon by FCWG members:

#1 FINAL - Magnitude of flow fluctuation impacts to fall Chinook in the Hanford Reach. The range of scores in this category is 0-20 with 20 being the greatest impact. A substantial impact could be considered mortalities of 15% or greater as a result of flow fluctuations.

#2 FINAL - Identifies the Priest Rapids Project's (PRP) contribution to flow fluctuations in the Hanford Reach. The range of scores in this category is 0-30 with 30 being given to proposals that have a high probability of being able to

accurately and precisely identify the PRP's contribution to flow fluctuations in the Hanford Reach.

#3 FINAL - Contributes to future adaptive management of the HRFCPPA to address the flow fluctuation impact. The range of scores in this category is 0-30 with 30 being given to proposals that have a high probability of providing guidance for future adaptive management.

#4 FINAL - Contributes to increasing overall knowledge of fall Chinook in the Hanford Reach. The range of scores in this category is 0-15 with 15 being given to proposals that will fill data gaps or contribute to increasing knowledge about fall Chinook in the Hanford Reach.

#5 FINAL - Can be completed prior to 2014. The range of scores in this category is 0-5 with 5 being given to proposals that can be completed prior to 2014.

VII. Fall 2008 Studies –

A Eggs per Redd – Hand excavation and hydraulic pumping were utilized to determine the amount of eggs a redd holds. 892 eggs were found in one egg pocket below the 65 kcfs band that was excavated by hand. The size was typical for redds found at this elevation. It took approximately 30 minutes to excavate the dry redd. The majority of eggs collected from the dry redd were reburied. 692 eggs were collected from a single egg pocket at the 45 kcfs band utilizing a hydraulic pump. Hydraulic pressure killed the majority of the eggs.

Ten redds containing approximately 800 eggs per pocket will be built on December 4th and 5th. The permit allows for 20 redds to be disturbed.

B Aerial Photos – Aerial photos on were taken on Saturday, November 15, 2008 with constant flows at 50 kcfs. Clear, calm conditions provided for good print imagery. If conditions and flows permit, there is a possibility of one more flight over Wanapum, Vernita Bar and White Bluffs next weekend. The digital imagery should be available within one month. An increase of 2000 redds were counted since last year. Aerial observations are covered under a Department of Energy (DOE) contract that will be expiring soon. DOE is in the process of deciding if they will continue with the aerial flights. If they do, the contract will go out for competitive bid soon.

VIII. Operations Update – Reverse Load Factoring – Final redd counts will be conducted on Sunday, November 23, 2008. Reverse Load Factoring will be discontinued when spawning activity is complete.

IX. Next Meeting: January 06, 2008. Location to be determined.