

**PRCC Hatchery Subcommittee Meeting**  
Wednesday, November 16, 2011  
Douglas PUD Offices, East Wenatchee, Washington

**Attendees**

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**PRCC HSC Members**

Craig Busack, NOAA (via phone)  
Bill Gale, USFWS  
Todd Pearsons, GCPUD  
Keely Murdoch, YN  
Mike Tonseth, WDFW  
Kirk Truscott, Colville Confederated Tribes

**Other Participants**

Shane Bickford, (for recalculation discussion)  
Pat Burdick, GCPUD  
Dave Duvall, GCPUD (for Habitat Committee updates and recalculation discussion)  
Matt Collins, YN (for smolt trap discussion)  
Mark Hassebrock, HDR Consulting (for White River design discussion)  
Ross Hendrick, GCPUD (for Dryden issues discussion)  
Ian Hunter, GCPUD  
Tom Kahler, Douglas PUD (for recalculation discussion)  
Shannon Lowry, GCPUD  
Greg Mackey, Douglas PUD (for recalculation discussion)  
Josh Murauskas, Chelan PUD (for recalculation discussion)  
  
Elizabeth McManus, Facilitator  
Andy Chinn, Facilitator

**Decisions**

- A. Approved the October meeting summary
- B. Approved the Interlocal Agreement Letter with Douglas PUD, pending HCP-HC meeting on 11/17

**Actions**

- 1. Ross & Associates will circulate the proposed low-phosphorus feed study plan to HSC members
- 2. USFWS and WDFW will review the proposed low-phosphorus feed study plan
- 3. Mike will check with Little White Salmon National Fish Hatchery regarding any potential issues resulting from Jim Rockowski's retirement
- 4. Todd will contact Chelan PUD about availability of data on current phosphorus intake and discharge from Dryden
- 5. HSC members will contact their appropriate engineering staff about a half-day workshop in Leavenworth in early January to review the 90% Nason design work
- 6. USFWS and Grant PUD consultants will discuss armoring concerns at the Nason site
- 7. JFP will meet prior to the 11/17 HCP-HC meeting to discuss creative solutions to recalculation

8. YN and Grant PUD engineering will follow up on the proposed relocation of the YN smolt trap
9. Mike will circulate the draft fall Chinook marking document following WDFW internal review

### **Draft Meeting Summary**

#### **I. Updates**

- A. Habitat Committee Updates** – The Trinidad Creek land acquisition was recently completed. Chelan County Natural Resources just signed a contract for up to \$160,000 in design and permitting work for a component of the B+ reconnection at Nason Creek/Lower White Pine. The HC is developing alternatives to the bridge replacement fee originally proposed for Burlington Northern-Santa Fe railroad. The HC approved purchase of 108 acres as part of the Entiat Stormy Reach Phase 3 Acquisition. Several other projects are under review, including a Wenatchee nutrient enhancement proposal from USFWS, the goal of which is development of a MOA with Ecology. McIntyre Dam should be completed shortly, and Vertical Drop Structure 13 is scheduled for completion in summer 2012.
- B. Fall Chinook Working Group Updates** – Battelle provided updates during the most recent Working Group meeting on the progress of their study plan. The revised productivity report will likely be completed in May 2012.
- C. Section 10 Permit Update** – NMFS and Grant PUD are in discussions to develop a workplan for a biological evaluation, beginning with NEPA documentation.
- D. Meeting Summary** – The HSC approved the October meeting summary as amended.

#### **II. Summer Chinook Updates**

- A. Carlton Pond** – Weather has not yet impeded progress at the site. During the week of 11/7 divers investigated the existing intake screen and gathered information for Grant PUD to compare against NOAA standards. Grant PUD's consultants developed a channel stability monitoring program which includes photographs at specific locations near the proposed facility to visually monitor annual changes in river morphology. The program, which will be implemented immediately, will include cross-sections with surveyors to determine the extent of channel shift. On 11/15 a biologist identified the ordinary high water mark at the site. Grant PUD is moving forward with the proposed basis of design and will likely present it during the December HSC meeting.
- B. Dryden Pond** – Ann Gannam forwarded the proposed first phase of the low phosphorus feed study plan to HSC members to review and provide comments. Ann is planning to proceed with the study plan unless HSC members identify fatal flaws. Biologists identified the ordinary high water mark at Dryden, as well as critical areas. Grant PUD continues to move forward with its permit package for the site, and expects additional bathymetry data from the intake area. Grant

PUD is also working with Chelan PUD and its consultant on the capacity of the bridge over the irrigation canal, given the need to transport construction equipment to and from the site.

**C. Path Forward and Next Steps**

- Ross & Associates will coordinate HSC comments on the first phase of the low phosphorus study plan and send them back to Ann Gannam.

**III. White River Issues**

**A. Spawning of F1 Fish** – 2011 brood spawning is complete, with 206,000 eyed eggs on-hand (76% eye-up rate). Whether the hormone therapy had any net benefit for egg extraction is unknown given the lack of a control group. WDFW's next task is running projections for F2 production over the next two years. 2013 is the earliest year that anadromous parents would be needed. WDFW recommends continuing hormone treatments in the coming year.

**B. Precocious Maturation of White River Smolts** – Feed trials for the captive brood fish are underway. Jim Rockowski recently announced his retirement as manager of Little White Salmon National Fish Hatchery.

**C. Path Forward and Next Steps**

- HSC members will discuss possible study plans around the precocious male reduction treatment during the January or February HSC meeting.
- HSC members will discuss 2013 releases from the captive brood program, given that the program will be at full capacity.

**IV. White River Updates**

**A. Permit Status** – For the White River facility, Chelan County expects to issue a finding of non-significance during the week of 11/14, which will be followed by a fourteen day comment period. Grant PUD anticipates the Chelan County hearing examiner's meeting will occur in early January (likely January 4). For the Nason facility, Grant PUD is providing additional information to Chelan County, as requested, which will in turn trigger a thirty day review period. Representatives from WDFW, Ecology, and Army Corp of Engineers (ACOE) visited the Nason site during the week of 11/7. The tour included demonstration of where the fish release, drain, and cone screen are planned. The agencies expressed concern about potential bull trout habitat at the fish release structure, and debris strikes on the cone screen. Grant PUD is also remaining engaged with the update to the Shoreline Master Plan (SMP).

**V. Summer Chinook Updates (continued)**

**A. Dryden Pond Phosphorus Issue** – Grant PUD described the final draft of its phosphorus modeling efforts, including the basic model description, assumptions in effluent load estimation, design considerations for reducing effluent, and a summary of the effects of various phosphorus reducing

measures on fish rearing capacity. Additional considerations for phosphorus removal include:

- Use of demand feeders to reduce the percentage of unconsumed feed has been unsuccessful at the WDFW Turtle Rock hatchery and would not likely affect phosphorus levels at Dryden.
- Recirculation has little effect on phosphorus levels.
- Ecology will not discount the amount of phosphorus entering the Dryden facility; Grant PUD's model assumes that the incoming phosphorus level will meet Ecology's load requirements (i.e., upstream wastewater treatment plants and other regulated facilities will meet effluent requirements).

## **VI. White River Updates (continued)**

### **A. White River Design** – Grant PUD provided detailed responses to several issues raised during the 10/18 meeting to review the 90% design of the White River facility:

**Intake Screen:** The original design included a platform located above ordinary high water level, six feet above the highest edge of the flat plate screen. NMFS expressed concern that the designed height would make it difficult for an operator to reach the screen. The design is now modified to set the platform height three feet above the screen. Another concern that arose during the 10/18 meeting was installation of a local control switch for the air backwash system. Grant PUD consulted with the design electricians and the plans already include a control switch at the fence. The fence posts will also serve as anchor points for fall protection from the platform, which was another concern raised on 10/18. Grant PUD does not anticipate sediment accumulation in the intake screen vault to negatively impact intake screen function because water flow through the vault is sufficient to keep it relatively sediment free. However, if necessary a vacuum truck could access the vault for sediment cleaning. There were several questions about controlling ice formation at the intake screen; Grant PUD investigated several icing scenarios and determined that all necessary measures to control icing – in particular controlling frazil ice formation – have been included in the design. A final question was raised concerning backup options if the intake were to become totally obstructed; the design allows for provision of supplemental oxygen in the event of complete intake obstruction.

**Tank/Acclimation Building:** HSC members recommended full spectrum fluorescent bulbs in lieu of the proposed lighting. Full spectrum lamps are available and compatible with the metal halide system proposed for the building. The lamps cost 20 - 60% more than the standard lighting, depending on the source. Grant PUD is also incorporating motion sensors for the building's interior lighting. Staff will still be able to turn lights on and off manually. An 18 inch solar tube will be centered over each of the four tanks. The translucent

ceiling panels are rated for 63% light transmission, and the interior walls will be white, textured, and washable. Grant PUD is considering adding a hose bib in the storage room for net and wader disinfection, and providing additional storage for disinfectant. Interior ventilation should be sufficient to address condensation concerns, and variable-frequency drives will be installed on all of the pump systems for maximum control.

Volitional Release Structure: The design allows facility operators to turn off the center drain to increase the flow out of the volitional release structure on the side of the circular. This may result in a buildup of solids during release but the solids could be flushed daily.

Outdoor Ponds: The issue of controlling snow on the kidney ponds has not yet been resolved. For predation control, an anchoring system will be put in place but wires will not be added until a predation issue is observed.

Pipeline: Grant PUD will verify that the pipeline is properly vented and heat traced to prevent freezing.

## **VII. Nason Creek Updates and Status Issues**

**A. Design Status Update** – For cleaning, the cone screen includes a continuous active brush system driven by water flow through the screen. This design was preferred due to the lack of consistent sweeping flow velocity and shallow water depth during low water periods. Debris is less of a concern at this site due to the nature of the bed load material, the upstream groin, and prevailing woody debris. The fish release pipe will be angled to 45 degrees, rather than perpendicular as originally proposed. The 90% design review for Nason will be submitted by 12/13.

- USFWS reiterated concerns about bank armoring at the Nason site.

**B. Path Forward and Next Steps**

- HSC members will contact their respective engineering staff for review of the 90% Nason design.

- GeoEngineers and USFWS will discuss concerns around the proposed bank armoring at Nason.

**VIII. 2013 Grant PUD Hatchery Mitigation Recalculation** – The JFPs reported that they were not prepared to agree with Grant PUD’s proposed recalculation amendments. JFPs are concerned about loss of overwinter acclimation at Dryden, in addition to general disagreement with the ratio for a summer Chinook – spring Chinook swap. JFPs also want to separate the negotiation of the fall Chinook fry to smolt conversion. Finally, JFPs believe that supplementation of White River and Nason Creek are required under the terms of the settlement agreement unless all parties agree to make a change. During the ensuing discussion HSC members raised the following additional points:

- Grant PUD requested clarification on the JFPs use of a 1:1 ratio for a swap of summer and spring Chinook, given that it was their proposal and only Grant PUD

had given reasons why they thought that a 1:1 swap was not supported by GPUD. Grant PUD reiterated its position that if the JFPs want a species swap to result in additional spring Chinook, then the PUD should not be required to operate out of the Dryden facility. The PUD is interested in removing its operations from Dryden due to the required infrastructure changes as well as annual operating costs and the improvement in conservation of the summer Chinook in the Wenatchee River.

- Grant PUD must also consider ACOE’s policies regarding wetland impact in the White River; if the implementation number is smaller than the proposed facility design at White River, ACOE could require Grant PUD to consider alternatives to reduce wetland impact.
- USFWS noted that the agency is less concerned with the loss of summer Chinook than with the loss of overwinter acclimation at Dryden. If Dryden is not an option for overwinter acclimation, and Carlton is not feasible as an overwinter acclimation facility, then there are no other alternatives for overwinter acclimation.
- The JFPs indicated willingness to abandon the proposed species swap in order to keep Grant PUD operations at both Dryden and Carlton, recognizing that this raises the question of the appropriate size of the White River and Nason facilities.
- WDFW commented that if fish rearing density can be increased, rearing capacity at White River will increase without adding infrastructure on-site. The HSC has been fairly conservative with the design parameters at White River, basing the numbers on the biological parameters of the captive brood program.
- USFWS proposed a possible 1:1 swap of spring and summer Chinook, keeping Chelan’s 61,000 fish at the Methow Hatchery, and moving the 128,000 fish slated for Dryden to Carlton.
- In response to the proposal above, CCT expressed concern about broodstock segregation, among other issues.

**A. Path Forward and Next Steps**

- JFPs and PUDs will continue to discuss the recalculation issue during the 11/17 HCP-HC meeting.

**IX. Relocation of White River Smolt Trap** – Yakama Nation proposed to relocate its White River smolt trap to Grant PUD’s property at the White River Bridge. The current location of the trap is approximately six miles upstream of the bridge and is not conducive to trapping due to safety issues and fish trapping issues. Safety issues include lengthy time for first responders to reach the site, lack of cell phone reception, and danger from large debris strikes during night operations. Fish trapping issues are demonstrated by low abundance of Chinook yearlings in the trap over the previous five years of collection.

- HSC members noted that adjacent property owners might object to lighting at the site during night trapping operations.
- Grant PUD and WDFW commented that the property owner on the bank opposite the site has not been highly receptive to Grant PUD’s proposed fish rearing operations.

- Grant PUD expressed concern that the cables for the smolt trap would impede planned development at the site.
  - A. Path Forward and Next Steps**
    - Grant PUD engineers and Yakama Nation will continue discussion of the proposed smolt trap relocation to determine if trap emplacement will interfere with facility construction.
- X. 2012 Adult Collection**
- A. Interlocal Agreement Letter (ILA) with Douglas PUD** – HSC members approved the ILA with Douglas PUD, pending approval during the 11/17 HCP-HC meeting.
- XI. Lake Wenatchee Predation Study** – Mike Kaputa, Director of Chelan County DNR, recently requested to discuss a potential Lake Wenatchee predation study paid for through the PRCC by NNI funds.
- USFWS expressed concern about devoting HSC time to development of an RFP or study design.
  - WDFW noted that the agencies Large Lakes team previously developed a proposal to evaluate predation in Lake Wenatchee. The proposal was submitted to the Northwest Power and Conservation Council but it was declined due to lack of funds. The proposal could potentially be modified to fit within required NNI funding guidelines.
- A. Path Forward and Next Steps**
    - Grant PUD will contact Mike Kaputa to arrange discussion of the predation study during the February HSC meeting.
    - Mike will contact WDFW staff for a copy of the agencies predation study proposal.
- XII. Fall Chinook Issues**
- A. OLAFT Update** – 11/16 was the final day for OLAFT sampling; total numbers are not yet available. There were no significant issues for the OLAFT sampling operation. WDFW is planning to combine the 2011 and 2012 data in a single document; the timeline for completion will depend upon timing of otolith sampling results.
  - B. Power analysis/marketing assignment** – Mike met with WDFW Olympia staff and received further clarification on the expectations of the assignment. A draft document is under internal WDFW review and will be circulated with the HSC when available. The document describes various marking scenarios and associated costs, and whether the marks meet M&E objectives.
  - C. Path Forward and Next Steps**
    - Mike will work on the OLAFT numbers and present further information at an upcoming HSC meeting.
    - Mike will circulate the draft power analysis/marketing document prior to the

December HSC meeting.

**XIII. Wrap-Up / Next Steps**

**A. Next Meeting:** Thursday, December 15, 2011 at 9:00 A.M. – Cedars Inn

**B. Potential August Meeting Agenda Items**

- Retrospective of 2011 Grant PUD hatchery operations
- Carlton basis of design
- Low phosphorous feed at Dryden Pond
- 2013 NNI recalculation
- Release of 2011 brood White River fish in 2013 during facility construction
- Fall Chinook updates and issues
- White River facility permitting
- Power analysis/marketing assignment

**Meeting Materials**

The following documents were provided to HSC members in advance of this meeting:

- Final Agenda
- October Priest Rapids Hatchery report
- October Production Report for White River Spring Chinook Salmon at Little White Salmon/Willard National Fish Hatchery Complex
- 2012 interlocal agreement letter to Douglas PUD requesting excess hatchery space at the Methow and Wells Hatcheries
- Excerpted termination language from Grant PUD - Chelan PUD facility sharing agreement
- Priest Rapids Hatchery Monitoring and Evaluation Statement of Work
- Summary of Activities completed under the Priest Rapids Hatchery Monitoring and Evaluation Program - October 2011

In addition to the documents listed above, during the meeting HSC members were provided with copies of status reports for 11 Grant PUD programs: White River spring Chinook, Coho, Methow spring Chinook, Methow summer Chinook, Nason Creek spring Chinook, Okanogan spring Chinook, Okanogan summer Chinook, Priest Rapids Hatchery fall Chinook, Sockeye, Steelhead, and Wenatchee summer Chinook.