



MEETING

Priest Rapids Coordinating Committee

Wednesday, August 26, 2009

9:00 a.m. – 3:00 p.m.

Grant PUD SeaTac Office

PRCC Members

Scott Carlon/Bryan Nordlund, NMFS
Jerry Marco, CCT
Bob Rose, YN
Bill Tweit, WDFW

Jim Craig, USFWS
Tom Dresser/Curt Dotson, GCPUD
Carl Merkle, CTUIR
Denny Rohr, Facilitator

Attendees: (*Denotes PRCC member)

Bryan Nordlund, NMFS*
Bill Tweit, WDFW*
Duncan Hay, Oakwood Consulting
Tim Counihan, USGS
Jill Hardiman, USGS
George Thompson, GCPUD
Ross Hendrick, GCPUD
Denny Rohr, Facilitator

Jim Craig, USFWS*
Charity Davidson, WDFW
Joe Carroll, Joe Carroll Consulting
Dave Burgess, WDFW
Curt Dotson, GCPUD
Skyler Street, GCPUD
Debbie Williams, GCPUD

Action Items:

1. Dotson will run acoustic tag time stamps to determine peak salmonid migration through the Project.
2. Dotson will verify if the Predator Study Team can launch their boats from the Wanapum Indian Village in order to access the Priest Rapids tailrace easier.
3. Dotson will look into turbine configuration that would allow predation data to be collected in the Powerhouse Zone.
4. Rohr will distribute the Studies and Report tracking spreadsheet for member review prior to the next meeting.
5. Nordlund will send a copy of his Priest Rapids Tailrace Pumping Plan LA-403 comment letter to Rohr and Williams.
6. Grant PUD will rewrite and redistribute the Priest Rapids Tailrace Pumping Plan LA-403 report within two weeks.
7. Smolt to Adult Returns (SARs) and confidence wasn't discussed but will be added to the report by Dotson.
8. Tweit will send Williams the memo that was sent to the US v. Oregon Advisory Committee for distribution to the PRCC.

9. Rohr will email approved PRCC Hatchery Subcommittee meeting protocols to PRCC members.

Meeting Minutes

- I. **Welcome and Introductions** – Rohr welcomed the Priest Rapids Coordinating Committee (PRCC) and asked members and attendees to provide self introductions. Charity Davidson, Washington Department of Fish and Wildlife (WDFW) was introduced by Bill Tweit. She is working on Crab Creek and Columbia River Water Capacity issues.
- II. **Agenda Review** – Joe Carroll will give a presentation on Total Dissolved Gas at the Wanapum Unit Future Fish Bypass (WFUFB).
- III. **Action Items Review** – All action items were discussed and reviewed. Russell Langshaw is working with Grant PUD IT staff to develop an external website to house Hanford Reach data.
- IV. **10:30 am – Attendance by Tim Counihan to Update and Discuss the Ongoing Predator Study** – Tim Counihan, U. S. Geological Survey (USGS) and Dave Burgess, WDFW are executing the Predator Study funded by the PRCC. They attended today’s meeting to answer questions posed by members of the PRCC. Counihan explained that data collection has been ongoing, but analysis’ of all the data hasn’t been completed. He did do a quick data analysis of predation in the Boat Restriction Zone (BRZ) to quantify the need of the Study Team’s request that additional spill closures (It takes approximately three hours to restart spill each time it is shut down) be authorized during night time hours to allow data collection in the BRZ at the Priest Rapids Project (Project) during times of peak migration. Studies completed by Burley and Poe show that predation is greater during nighttime hours and quits when the sun comes up. Starting times would be randomized in order to capture a variety of predation conditions. Acoustic tag time stamps used for survival studies can provide data as to when the majority of salmonids are migrating through the Project. **Dotson will run acoustic tag time stamps to determine peak salmonid migration through the Project.**

Seven main sites identified in the Burley and Poe Study and one site in the BRZ have been selected as sampling locations. These sites will provide a good characterization of predation in the Project. Each section is approximately 6 kilometers, with the BRZ section being 1 kilometer. The Geographic Information System (GIS) and bathymetry data were used to categorize the depth of each site. A grid was then made of the sample area and five collection points were randomly selected. The data collected will provide relative predation and

comparative information to help determine a more efficient manner to study and manage predation in the future.

Counihan explained that predation distribution doesn't appear to change when spill is shut off because small mouth bass continue to have a propensity to be found near the structure. By catch of electro fishing (low power and low amperage) and tangle nets used during the study has been: sand rollers, bull trout, sturgeon, sculpin, red side shiners, channel cat, and large scale suckers. No snake heads have been seen. Other things noted during the study have been the abundance of fish in some areas, which has been a surprise, and that the average size of northern pikeminnow has decreased tremendously.

Preliminary results of the total percentage of predators, relative to the total of all fish (10232) sampled is: Predators - 2189 (21.4%), Other fish - 8043 (78.6%).

Prior to the start of the 2010 data collection season, Dotson will arrange for coordination between dam operators, power management, and USGS/WDFW staff to ensure ease of access to the Project. Contractor identification badges will be provided for all USGS/WDFW staff participating in the study. **Dotson will verify if the Predator Study Team can launch their boats from the Wanapum Indian Village in order to access the Priest Rapids tailrace easier.**

After discussion, PRCC members agreed that data collection in the BRZ may outweigh the need for top spill because of the large number of predators caught in that location. Sampling frequency of the BRZ (with spill shut down) would be twice a month for each dam. That equates to approximately 20 hours of spill closure during a 4 month spill season. Nordlund questioned if the same predation data can be collected for the Powerhouse Zone. Members discussed possible turbine configuration that would allow predation data to be collected. **Dotson will look into turbine configuration that would allow predation data to be collected in the Powerhouse Zone.**

- V. **Total Dissolved Gas (TDG) at the Wanapum Unit Future Fish Bypass (WFUFB) Study** - Joe Carroll and Ross Hendrick presented results of the study conducted from July 26 to August 24, 2008. The study is a requirement of the 401 Certification and will be distributed to the PRCC and the Washington Department of Ecology (WDOE) on September 30th as a draft, and on December 31st as final.

The primary objective of the study was to quantify the TDG associated with the WFUFB operation under varying flow and tailwater conditions, and secondarily to compare resulting TDG pressures at the tailwater transect (2000 ft) downstream to those measured at the tailwater fixed monitor location at Beverly Bridge (17000 ft) downstream.

Based on the summer Field Study coupled with the Retrospective analysis of 2008 operations of the WFUFB between 15 and 21 kcfs, it

was concluded that peak downstream TDG will remain below 118% saturation. This applies to the full range of project turbine operations as well as a full range of forebay TDG levels.

The existing tailwater TDG monitor at Beverly Bridge 3.2 miles below Wanapum Dam is minimally different, 0.2%, from the average TDG measures taken at 2000 ft below the dam during the WFUFB operation.

VI. Discussion of Studies and Reports Tracking Documentation – Rohr explained that the Draft Report of Survival of Acoustic-Tagged Steelhead Smolts Through the Priest Rapids Projects in 2008 will be the first report tracked using a spreadsheet created by Nordlund. **Rohr will distribute the Studies and Report tracking spreadsheet for member review prior to the next meeting.**

VII. Discussion: Draft Report of Survival of Acoustic-Tagged Steelhead Smolts through the Priest Rapids Projects in 2008 - Dotson explained that per the PRCC's request during the comment review period, a bar graph presented by Blue Leaf Environmental showing where tag lots were released during the study will be added to the report. A summary of the Effects of Avian Predation on Survival Estimates will be added as an appendix. 2009 tag data was collected from 251 acoustic tags gathered from the Caspian tern colonies on the Potholes Reservoir. Based on acoustic time stamps of the tags, predation appears to have happened in the Hanford Reach and McNary forebay region. Birds were not a predation issue at the Priest Rapids Project in 2009. Tern colony nesting pairs have almost doubled in size from 2008 to 2009. Dotson distributed the final report electronically on August 26, 2009. Approval will be asked for at the September 23, 2009 PRCC meeting.

VIII. Action Item: Priest Rapids Tailrace Pumping Plan LA-403 – All PRCC members agreed with the comments submitted by Nordlund, National Marine Fisheries Service (NMFS). **Nordlund will send a copy of his Priest Rapids Tailrace Pumping Plan LA-403 comment letter to Rohr and Williams.**

Nordlund does not agree with Grant PUD's recommendation to close the Collection Channel (CC) in order to conduct a lamprey passage study because he believes it would jeopardize salmon and steelhead passage. Nordlund doesn't believe improvements to the attraction water supply and lamprey issues should be lumped together, or that they should be driving pump station issues. He explained that salmon and steelhead passage issues were resolved by conducting tag studies and he would like to see the same studies conducted with lamprey.

Grant PUD staff argued that from a design and fiscal standpoint, additional flow data is needed before the final design of the pumping station can be completed, and knowing if the CC can be closed

sometime, or if it needs to stay open all the time will ultimately drive the final design.

Nordlund explained that Grant PUD is the only dam on the Columbia River that doesn't have a separate and independent auxiliary water supply on each bank, and that this is the opportunity to build redundancy in the system and get away from relying on gravity intake. An independent system would prevent all passage having to be shut down in an emergency situation. He noted that Grant PUD consistently meets ladder criteria.

PRCC members recommended that a Radio Telemetry Study be conducted to determine how lamprey move through the ladder, and that they would be reluctant to approve any design that offers reduced pumping capacity until they know the CC is creating a problem for salmonid and lamprey passage. They recommend the plan include a pumping design that supports two fishways and the collection channel. They would ultimately like the ability to support all three entrances, and to provide redundancy for at least one side.

Grant PUD will rewrite and redistribute the Priest Rapids Tailrace Pumping Plan LA-403 report within two weeks.

IX. Updates:

A. Steelhead and Sockeye Acoustic Tag Studies –

Data from the 2009 study has been turned in to Skalski for analysis. Rich Townsend expects to have a draft ready for review by the middle of September. Dotson hopes to have a draft Behavior and Survival Estimate Study for review at the November PRCC meeting.

B. 2009 Sub-Yearling Pilot Study – Data was sent to Skalski on August 25, 2009. Dotson hopes to have draft report ready for review at the November PRCC meeting.

Douglas, Chelan, and Grant PUD have met for the last year to compare methodologies, successes and failures of sub-yearling study efforts in the region. Tweit noted that requirements of the HCP are being changed so that sub-yearling studies will also be required of them.

Josh Moraskis, Douglas PUD, Joe Miller, Chelan PUD, and Curt Dotson, Grant PUD are writing a white paper outlining regional information gathered over the last ten years. The intent of the report isn't clearly defined at this time, but Dotson believes that it could lead to a full blown study from reservoir to concrete, a reservoir study, or show that a sub-yearling study can't be accomplished at all. The white paper will discuss HTI, JSAT and pit-tags. The draft should be ready for review by the first of October.

After the white paper has been distributed, and ample review time provided, the Joint Fisheries Party (JFP) would like the PUD's to hold a workshop to review sub-yearling issues, tagging methods, local and federal cooperation. Tweit emphasized that the JFP wants to have some form of federal interest in sub-yearling studies. Mike Schiewe, HCP Facilitator was tasked with contacting Science Center staff regarding this topic.

- C. PIT-tag Sample Size Review** – 147,000 pit-tags are needed to do a sub-yearling study. Rich Townsend was asked to estimate the precision of the 49% of fish lost between Wanapum and Priest Rapids, and what that does to the sample size? 224,000 are needed to do a pit-tag study for the Project. This information will be in the white paper. HTI, JSAT and pit-tag pluses and minus will be determined. **Smolt to Adult Returns (SARs) and confidence wasn't discussed but will be added to the report by Dotson.**
- D. Summer Spill** – Summer spill was completed on August 20, 2009. 95% of the run passed Rock Island Dam on August 8th, plus or minus 2 days.
- E. PRCC Policy Committee – Review of PR Fish Marking Dispute** – Rohr updated the committee that WDFW still wants to take this dispute to the US v. Oregon forum in September. The extension date has been extended from August 25, 2009 to November 18, 2009. Tweit will report back to the committee after the November meeting. **Tweit will send Williams the memo that was sent to the US v. Oregon Advisory Committee for distribution to the PRCC.** US v. Oregon Policy Committee meeting is on September 29-30, 2009.
- F. Explanation of Long Term Pumping Costs Regarding Habitat Projects** – Rohr explained that the PRCC Habitat Subcommittee (HSC) considers long term pumping cost a cost of business for the person proposing the project. The HSC will not take on long term cost associated with such a project, but would consider adding the present day value of pumping to the initial cost proposal.
- G. PRCC Hatchery Subcommittee** – Rohr explained that the PRCC Hatchery Subcommittee approved meeting protocols and questioned if PRCC members would like to approve them. **Rohr will email approved PRCC Hatchery Subcommittee meeting protocols to PRCC members.** Members will review the document with discussion at the next meeting. Rohr questioned if Hatchery Subcommittee Statements of Agreement (SOAs) require PRCC approval. PRCC members didn't think so.

- H. **PRCC Habitat Subcommittee** - See discussion regarding Long Term Pumping above.
- X. **Approval of Meeting Minutes**
 - **July 22, 2009** - Approved
- XI. **Next Meeting:** Wednesday, September 23, 2009, 9:00 – 3:00, Grant PUD SeaTac Office.