

Priest Rapids Coordinating Committee Meeting

In person at Wanapum Dam, HOB Room 107 and Webex
Tuesday, August 28, 2023
1:00 p.m. to 2:30 p.m.

Meeting Minutes

PRCC Representatives and Alternatives

Curt Dotson, Tom Dresser (Alt), GPUD	Bill Gale, USFWS
Kirk Truscott, Casey Baldwin (Alt), CTCR	Chad Jackson, Andrew Murdoch (Alt) WDFW
Tom Lorz, CTUIR	Keely Murdoch, Brandon Rogers (Alt), YN
Scott Carlon, Justin Yeager (Alt), NMFS	

Meeting Attendees

Larissa Rohrbach, Anchor QEA	Tim Taylor, GPUD
Bryan Nordlund, Facilitator	Bill Gale, USFWS
Kirk Truscott, CTCR (Online)	Nathan Buck, Wanapum (Online)
Curt Dotson, GPUD	Chad Jackson, WDFW
Tom Dresser, GPUD	Andrew Murdoch, WDFW
Rod O'Connor GPUD	Keely Murdoch, YN

Action Items

- B. Nordlund will determine whether WDFW's presentation of a memorandum on wild smolt survival should be presented as a joint topic for the next HCP-CC and PRCC meetings.
- Grant PUD will report the number of fish mode starts and stops prior to December 31.

Review Items

- Grant PUD's *Draft Study Plan for the Estimation of Juvenile Yearling Chinook, Sockeye, and Steelhead Survival through the Priest Rapids Project in 2025–2027* (Survival Study Plan) was sent on August 22 for discussion in the September 26 meeting.

Decisions and Approvals

- None.

I. Welcome, Announcements and Agenda Review

- No changes to the agenda were requested, and the PRCC approved the agenda.

II. Meeting Minutes Status

The July 25 PRCC meeting minutes were distributed by Larissa Rohrbach by email on August 15, with revisions due by the August 22 meeting. All present in the meeting approved the minutes. K. Truscott did not attend the July 25 meeting and abstained from approval. S. Carlon approved via email following the meeting.

III. Action Items Review

- *B. Nordlund will contact J. Ferguson (HCP-CC chair) to propose that steelhead overshoot and fallbacks at the Upper Columbia River projects be presented as a joint topic in the next HCP-CC and PRCC meeting.*

B. Nordlund did confer with J. Ferguson, and it was determined that the topic of overshoots and fallbacks should not be a joint discussion, and this topic can be withheld from the PRCC agenda until progress toward resolution is made in the HCP-CC. An additional topic brought forth by WDFW that could be presented jointly, wild spring Chinook smolt survival, was raised over email last week, but major discussion will be deferred to next month (a brief discussion occurred later in today's meeting). B. Nordlund will discuss with J. Ferguson the value of preparing a joint presentation to support future discussions in both groups.

B. Gale suggesting holding a joint presentation when it can save the committee members time and effort. T. Dresser said that when meeting topics are presented jointly, representatives tend to make the same assumptions for all three PUDs or for all hydro projects, which is not a correct approach. B. Nordlund suggested that one approach could be for representatives to report key talking points from one Coordinating Committee to the other where it is relevant.

- *B. Nordlund will discuss with J. Ferguson a proposal to convene an annual HCP and PRCC Policy overview meeting on the same day each year.*

B. Nordlund said that due to differences in programs and hydro projects, it would not be desirable to convene joint HCP and PRCC Policy annual meetings; however, depending on next year's agenda, arranging meetings consecutively and potentially within the same day will be considered to make attendance and travel easier.

IV. Steelhead Fallback – Ongoing Coordination and Discussion

The topic of overshoots and fallbacks is still under consideration in the HCP-CC related to project-specific elements. T. Dresser said that he still would prefer to hold separate

discussions on this topic because each hydro project is unique, and data collected to evaluate overshoots and fallbacks at each hydro project are unique.

- A. Murdoch will distribute his most recent presentation to keep the PRCC informed of key discussion points; PRCC representatives can review the information and inform B. Nordlund if they would like a discussion in next month's meeting.

V. Survival Study Plan – Brief Update

C. Dotson provided a brief update on the status of Grant PUD's Survival Study Plan.

C. Dotson said that statistical methods have been added in an appendix. It was requested that an appendix showing comments and responses be included; this is still in progress. He has been including both the written comments and comments made in meetings in a spreadsheet associated with the commenter's name and affiliation, and K. Truscott agreed with that approach. C. Dotson said that other than these additions, minor tweaks have been made to the document, which is still draft form, and no additional comments were received.

The draft Survival Study Plan was sent to the PRCC following the meeting for comment and discussion in the next meeting.

C. Dotson shared information to answer a question raised last month by K. Murdoch, to estimate what proportion of the smallest fish (95 millimeter [mm]) could be rejected for tagging based on the tag burden cutoff of 3%. He reviewed data from yearling Chinook Salmon and steelhead tagged at Rock Island Dam (RIS) for the avian predation study by Real Time Research (RTR). Fish were tagged from 2013 through 2016, starting in mid-April. In total 22,301 yearling Chinook Salmon were tagged; of those, only 200 (0.9% of yearling smolts) were less than 95 mm in length, and the smallest fish tagged were 66 mm. The acoustic tags (AT) planned for use in the 2025 to 2027 studies are about half of the weight that were available at the time of previous (2014 to 2017) study; the combined passive integrated transponder (PIT) and AT weight for dual-tagged fish in this study will be 0.316 gram (g), so the smallest tagged smolts could be 10.5 g in size. Of those 200 smolts, only 15 of the smolts in the RTR study were less than 10.5 g. This amounts to 7.5% of the fish that were less than 95 mm. Many more steelhead were tagged by RTR from 2008 through 2016, and in 2018, and they are typically larger in size. In total, 78,410 steelhead smolts were tagged, and only 49 were less than 95 mm in length.

K. Murdoch said that if a large proportion of the smallest fish would be rejected from the study due to tag burden limits, she would suggest that some of the smallest fish only receive one tag.

C. Dotson said that the reduction in AT size (SS 400 model) will make a big difference. The PIT tag to be used is the 12 mm tag. There are a few fish that will not be tagged due to tag burden and also the cavity size of those smallest fish.

VI. Wild Smolt Survival

A memorandum prepared by A. Murdoch was shared via email by C. Jackson on August 10.

A. Murdoch said that the theme of the memorandum is what WDFW sees as a discrepancy in wild versus hatchery smolt survival and what can be done to sort those differences out. He said that the paper is intended to be a discussion starter on how WDFW is viewing the issue; there are many challenges with trying to estimate wild smolt survival.

T. Dresser said that he is hopeful that the discussion is not all about hydro; there are probably a lot of other factors that can also account for differences, and he would appreciate a broader discussion.

K. Truscott asked whether it makes sense to go forward with presenting that information today to kick off the topic and provide some preliminary feedback for A. Murdoch to consider for next month's discussion. T. Dresser said that Grant PUD would prefer to table the topic until next month. WDFW will lead the PRCC through their analysis in next month's meeting.

VII. 2023 Fish Passage Operations Report

Fish passage operations have started the 2023 season, summarized in the following subsections.

Fish Ladder Inspections

K. Murdoch said that she met with Mike Clement for the August inspection, and there were no concerns. She anticipates the inspection will be done virtually in September.

Fish Spill Updates

C. Dotson said juvenile spill at both Priest Rapids Dam (PRD) and Wanapum Dam (WAN) ended on August 14. Both projects have transitioned to adult fallback spill now until November 15. The end of the juvenile spill period is also when turbines operations move out of "fish mode" into "normal" turbine operations. For this season at PRD, there were no deviances from fish mode. There was one instance at WAN on June 19 when two turbines were taken out of fish mode for less than 30 seconds. This past year, the PRCC approved a change for operating fish mode at WAN from 11.8 to 15.7 thousand cubic feet per second (kcfs) to a new range of 10.0 to 15.7 kcfs (PRCC Statement of Agreement [SOA] 2022-03) One of the provisions within that SOA is that the number of starts and stops that take place for WAN turbine operations during "fish mode season" be reported to the PRCC prior to December 31.

Fish Counts for 2023

C. Dotson reminded the group that Grant PUD is contracting out their fish counting to a third party. There has been a few day's lag in reporting online due to volume over the season; one discrepancy that stands out through August 6 (shown on the agenda) is the Sockeye Salmon counts at RIS dam, which are higher than at the other adjacent projects. For instance, the McNary Dam Sockeye Salmon count shown today is 228,781, whereas the count at RIS is 247,384. A question that has been raised to Grant PUD regarding whether RIS counts may be more skewed than they were thought to be.

The following are fish counts as of August 31, 2023:

Project	Spring Chinook Salmon (Adult and Jack)	Summer Chinook Salmon (Adult and Jack)	Fall Chinook Salmon	Sockeye Salmon	Coho Salmon	Steelhead
Priest Rapids	18,696	49,547	2,299	231,078	270	2,868
Wanapum	18,792	57,251	1,582	227,835	107	2,939
Rock Island	17,619	51,574	997	247,588	6	2,611

T. Dresser reminded the group about the opening and closing of picket gates in the ladders as a potential source of count errors last year because it may have allowed fish to pass without being counted. The picket gates collect debris, and at times they are opened and closed to flush it through. C. Dotson shared the number of times picket gates have been opened to date (April 15 through August 22) and the amount of time open in each fishway at PRD and WAN. There was one fish observed passing on the right bank at PRD.

Table 1. Fish Crowder Cleaning Metric for the Priest Rapids Project Fishway (April 15-August 22, 2023).

Metrics	Fishway			
	PR – Right Bank	PR – Left Bank	Wan - Left	Wan - Right
Total Time Open (min)	38	0	187	57
Percent Time Open (%)	0.02	0	0.11	0.03
Ave. Time Open (min)	12.7	0	6.0	5.7
Total Times Opened	3	0	31	9
Fish Observed Passing	1	0	0	0

B. Gale asked about details of the adult spill. C. Dotson said that at PRD and WAN, spill is 24 hours a day, 7 days a week, at a rate of 2 kcfs, which varies slightly due to the variation in forebay elevations. When juvenile spill is closed down, adult spill is initiated. These criteria are aligned with the agreements in place. A. Murdoch asked whether ending the juvenile spill on August 14 in 2023 correlates with passage of 95% of the juvenile run; the only index available to use is 95% of the juvenile run past RIS.

C. Dotson said that he spoke with the spill representatives, and on August 14, it was estimated that 99.2% ± 4% of the run had passed based on the Data Access in Real Time (DART) site. Grant PUD’s criteria for shutting down juvenile spill is 95%. Many years ago, there used to be a break between spring and summer spill, and spill for the remaining 5% of the run was spilt between beginning and end. Criteria for the other projects are more complicated, but Grant PUD has just the one number; it is difficult to know accurately when 95% of the juvenile run has passed, and it is not until a couple of months later that it can be confirmed. Grant PUD tries to make a conservative decision. Sometimes juvenile spill ends around August 20 or 22; fish started showing up earlier this year—there was a lot of water moving through.

C. Jackson thanked C. Dotson for tracking passage metrics and asked whether there have been any lessons learned for next year with the use of a new contractor.

T. Dresser said that Grant PUD is planning to use the same contractor next year;

Grant PUD was more concerned about accuracy, but another concern has been a longer lag-time until counts are available online—it is about 5 days right now, and more like 3 days at the other projects. Some of the Coho Salmon numbers seemed a little off early in the year, and this may be related to staff training and changeover. All quality assurance/quality control checks have run over 95% accuracy. C. Dotson said that logging the picket gate openings has helped to increase the awareness among the operators of the importance for keeping it open for as little time as possible and how to better respond to alarms going off for debris management.

B. Nordlund asked whether there are differences between how the PUDs count their fish. T. Dresser said that there are no differences compared to past years; counts are done 24 hours a day, 7 days a week, so there is no subsampling and expansion. Chelan PUD counts minijacks separately, whereas Grant PUD counts those as jacks. A. Murdoch said that sometimes jacks are used as a response variable; if minijacks are included with jacks, that may influence the usefulness of the metric. T. Dresser said that he would confirm how Grant PUD is handling minijacks.

Updates

VIII. Review of Outstanding No Net Impact-Funded Projects

- **Lower Wenatchee Instream Flow Enhancement Project Phase II**
No update.
- **Northern Pike Removal (2022 to 2024).**
No update.

Washington State Department of Fish and Wildlife PIT-Tag Detection Barge.

A. Murdoch updated the group on barge operations. He said that the barge will stay in the river in the fall to detect any fall outmigrants. A presentation can be given next summer with more complete survival estimates. A. Murdoch said that the question of whether or not it can provide the data to do the analysis that was hoped for will be answered next summer.

B. Nordlund asked how the infrastructure has been operating. A. Murdoch said that the barge has been anchored farther downstream than last year, and it may be moved to the right bank to avoid it becoming landlocked again. It will be removed before it becomes iced or landlocked due to low flows. WDFW can now do everything themselves except moving the anchor, which requires the contractor. Minor damage to the fins has been repaired; surplus fins have been acquired.

It had been deployed in what was thought to be the best location for detection efficiency, which appeared to work well during a fall freshet; however, the lesson learned was to look downstream and anticipate what might happen during low flows.

B. Nordlund asked whether the PRCC would like more regular updates on implementation of projects in general that use No Net Impact Funds. A. Murdoch said that he does not anticipate making any other funding requests for this

project. K. Murdoch and C. Dotson agreed that this update on deployment is sufficient at this time.

C. Dotson asked whether a similar barge is being pursued through a joint program with the Bureau of Reclamation in the Methow River. A. Murdoch said that this is being pursued, and it will be the same type of barge array but totally different deployment location based on lessons learned in the Wenatchee River. It will be deployed in the inundation area, with a much different configuration.

R. O'Connor asked whether a detection efficiency trial is conducted in the same way as a smolt trap is tested. A. Murdoch said that the detection efficiency will be assessed in the same way as is done for other PIT-tag arrays, with the second detection point at McNary Dam. The data collected will also support hatchery evaluation, for instance, to compare the number of outmigrants to the number released from hatcheries to estimate residualization rates. For habitat restoration, the mainstem Wenatchee River is very important; survival estimates of 50 to 60% have previously been based on the ratio of PIT tagged juveniles from fall to spring.

A. Murdoch said that a bigger question for the whole region is whether barge arrays can be used to estimate juvenile tributary survival. The Umatilla Tribe is operating two barge arrays in the Walla Walla River with a different suite of problems. One was operated on the Green River for a short time to answer some specific questions. A very large one was operated in the Lower Columbia River below Bonneville Dam with very few detections. Throughout testing in the Wenatchee River, the array had good performance, with few vibrations or interference with detections; it is hoped that the data show 15 to 25% detection rates.

- **Quincy Northern Pikeminnow Derby (planned for May 12 to 14).**
No update.
- **2023 Real Time Research, Inc., Avian Predation Study.**
No update.

IX. Subcommittee Updates

Subcommittees that report up to the PRCC are the hatchery and habitat subcommittees convened under the Priest Rapids Salmon and Steelhead Settlement Agreement. The Fall Chinook Work Group and Priest Rapids Fish Forum have policy representatives convened under the Clean Water Act Section 401 Certification. All are signatories to the Fall Chinook Protection Act.

B. Nordlund has forwarded the subcommittee distributions received to date via email to PRCC members and alternates.

- Priest Rapids Fish Forum—met September 6, next meeting October 4.
- Habitat Subcommittee—met August 10, next meeting September 14.

- Fall Chinook Work Group—next meeting October 3.
- Hatchery Subcommittee—next meeting September 20.

X. SOAs Discussed in 2023

SOA number	Key Words	Last Discussed	Status
2022-03	Fish Mode revision	January 24, 2023	Approved
2023-01	Sockeye Salmon Program	January 24, 2023	Approved
2022-02	Hatchery Production Objectives, 2024–2033	February 28, 2023	Approved

XI. Next Meetings

The next PRCC meeting is scheduled for September 26 at 1:00 p.m. at the Wanapum HOB-107 Executive Conference Room. Virtual attendance will be provided on Teams.