



Priest Rapids Fish Forum

Conference Call

Wednesday, 4 October 2023

10:00 a.m. – 12:00 p.m.

FINAL MINUTES

PRFF Members

RD Nelle, USFWS
Ralph Lampman, YN
Nathan and Clayton Buck, Wanapum
Jason McLellan, Bret Nine, CTCR
Mike Clement, Chris Mott, Grant PUD
Tracy Hillman, Chair

Patrick Verhey, Laura Heironimus, WDFW
Breean Zimmerman, WDOE
Aaron Jackson, Carl Merkle, CTUIR
Marchelle Foster, BIA
N/A, CRITFC

Meeting Attendees

Mike Clement, Grant PUD
Patrick Verhey, WDFW
Ralph Lampman, YN
Bao Le, Consultant
Tracy Hillman, Chair

RD Nelle, USFWS
Chris Mott, Grant PUD
Breean Zimmerman, WDOE
Erin Harris, Grant PUD

Action Items:

- Tracy Hillman will share the PRFF responses to comments in the Draft Pacific Lamprey Subgroup Meeting Notes with the RFFF.
- Tracy Hillman will share the PRFF responses to comments in the Attachment to the Draft Pacific Lamprey Subgroup Meeting Notes with the RFFF.
- PRFF will review the Updated Framework for Upper Columbia Juvenile Lamprey Acoustic Telemetry Study and the Updated Upper Columbia Juvenile Source Lamprey Datasheet prepared by the Yakama Nation.
- Grant PUD will populate cells in Tab 1 in the Updated Upper Columbia Juvenile Source Lamprey Datasheet.

Decision Items:

- None.

I. Welcome and Introductions

Tracy Hillman welcomed everyone to the meeting and identified all attendees.

II. Agenda Review

The PRFF reviewed and approved the October agenda with the following addition:

- White Sturgeon Index Monitoring.

III. Approve September Meeting Notes

The PRFF reviewed and approved the 6 September 2023 meeting minutes.

IV. Review Action Items

The PRFF reviewed the following action item from the August meeting:

- Ralph Lampman will work with other members to develop a study plan to evaluate juvenile lamprey passage behavior and survival through hydro-projects in the Upper Columbia.
Complete.

V. White Sturgeon

White Sturgeon Hatching and Rearing – Mike Clement reported that the juvenile sturgeon on station at the Yakama Nation Sturgeon Hatchery are doing well. He added that the fish are healthy and unlike in previous years the fish have limited fin deformities.

Mike noted that the Yakama Nation provided juvenile sturgeon for the Annual Archaeology Days at the Wanapum Heritage Center. Mike thanked the Yakama Nation for providing the fish. Mike commented that it appeared that fewer school kids attended the festival this year than in the past.

White Sturgeon Index Monitoring – Mike Clement reported that WSP and Blue Leaf completed the three-week-long White Sturgeon Index monitoring work within the project area yesterday. Mike reminded the group that sampling was consistent with previous years with the exception of the gear changes that were approved by the PRFF in July. Recall, in July, the PRFF approved the following methodology for conducting index monitoring:

- Deploy equal numbers of 4/0 and 12/0 hooks.
- Use 30 gangions per setline (reduced from 40/setline).
- Deploy gangions on 122-m-long, ¼-inch-diameter setlines.
- Maintain the same level of sampling effort of overnight sets (but reduce effort based on hook-hours).
- Sample within the 360 GRTS-selected sites (90 sites in Priest Rapids reservoir and 270 in Wanapum reservoir).

Mike noted that the addition of the larger hooks resulted in the capture of larger sturgeon. He said the consultants should have preliminary results to share with the group during the November meeting.

Other White Sturgeon Items – No other White Sturgeon items were discussed.

VI. Pacific Lamprey

Review of Pacific Lamprey Subgroup Meeting Draft Notes – Tracy Hillman indicated that he received edits and comments on the Draft Pacific Lamprey Subgroup meeting notes. The meeting was held on 21 August and was attended by the PRFF, RRF, ASWG, and others. Tracy reminded the group that the purpose of the Subgroup meeting was to evaluate the juvenile Pacific Lamprey survival models and their assumptions. Tracy displayed the draft notes and walked through the edits and comments and pointed out that the comments in the attachment to the draft notes should be handled as a separate document (the attachment reflected thoughts and comments by the RRF regarding each of the assumptions associated with the survival models). The RRF provided responses to comments in the draft notes. The RRF directed Tracy to share their responses with the RRF, which will meet this afternoon to review the edits and comments.

Following review of the draft Subgroup meeting notes, the RRF reviewed the comments in the attachment to the draft notes, which is now a separate document (see Attachment 1). Tracy captured RRF responses to the comments in Attachment 1, titled: “Dam Passage Survival Models and their Assumptions.” The RRF directed Tracy to share their responses with the RRF.

Juvenile Lamprey Survival Discussion – Before the meeting, Ralph Lampman provided the RRF with the Updated Framework for Upper Columbia Juvenile Lamprey Acoustic Telemetry Study (see Attachment 2). Ralph walked through the document and highlighted various components of the survival study. Ralph described how survival studies in the Upper Columbia will link with survival studies in the Snake River and Lower Columbia River. He said there is evidence that juvenile lamprey survival studies are possible and that juvenile survival studies are a requirement in the Pacific Lamprey Management Plan. He noted that the addition of 150-350 tagged juveniles in each of the three project areas in the Upper Columbia will contribute to a 1,000-1,500 juvenile study throughout the Columbia River. He said collaboration is essential. Ralph reminded the PUD that it is their responsibility to secure fish for the study. Ralph showed a map that identifies possible sources of juvenile lamprey. He reiterated that by working collaboratively, we can offset the risks and disadvantages to each PUD.

Ralph identified some of the results from the survival studies conducted in the Snake River and discussed how those results can be used to guide a survival study in the Upper Columbia. In addition to showing a map that identifies locations for the collection of juvenile lamprey, he described the PNNL/Tribal Juvenile Trap that is under development. The trap may be used at the dams to collect fish for the survival study.

Ralph then described some of the “key” questions associated with a valid survival study. These were questions identified during the Pacific Lamprey Subgroup Meeting in August and discussed during the September RRF meeting.

- Scope of the Survival Study (Reservoir and Dam, or just the Dam)

Ralph said the Yakama Nation believes the study should be at the dam, not the entire project areas (reservoir and dam) at this time. However, a system-wide survival study will provide some useful information regarding survival through reservoirs.

- Selection of Survival Model (ViRDcT or ViPre)

The Yakama Nation supports the ViRDcT (dead fish model) because of its many advantages including smaller sample sizes. Ralph described those advantages, which are listed in Attachment 2).

- Acceptable Level of Precision

Ralph provided examples of the range in 95% confidence intervals associated with different levels of precision on a survival estimate (e.g., 50% and 90%). Using data from the Snake River survival study, he showed the relationship between standard error and survival and standard error and sample size. Ralph said he supports a standard error of 5%, which is consistent with the Snake River survival studies.

- Source of Juvenile Lamprey

Ralph believes the source of juvenile lamprey should come from the dam as well as screw traps and hatchery. The priority would be to use fish closest to the dam; however, if sources are not available upstream from the dam, use sources downstream from the dam. Ralph reminded the group that lamprey do not have the same population structure found in salmon and steelhead. Therefore, it is okay to use lamprey from various sources in a survival study.

Ralph concluded by stating that studies in the upper Columbia should coincide with studies in the Snake and Lower Columbia rivers. This will provide a better understanding of juvenile lamprey survival through the system. The work will help identify bottlenecks, passage routes, and survival rates through the dams. This will help the region determine where to focus efforts.

Tracy thanked Ralph for the overview of Attachment 1. Tracy commented that it is unlikely the PUDs can implement a juvenile lamprey survival study in 2024 because it is too late to set up budgets for next year, prepare requests for proposals, and identify adequate source(s) of juvenile lamprey for the studies. In addition, the Forums have not identified the spatial scale of the study, nor have they identified the precision of estimates.

Tracy said the necessary level of precision of survival estimates will depend on how the results from the survival study will be used. For example, from the table in the Framework document, using a SE of 0.05, a survival estimate of 90% will have a confidence interval of 80.2 to 99.8%. Given the wide confidence interval, how would the PRFF use these results? Would they use these results to identify mitigation measures, and, if so, what level of mitigation would be needed? Alternatively, would the PRFF conclude that additional studies are needed?

Ralph explained that one difference between salmon and lamprey studies is salmon studies have a clear threshold for survival and precision. Lamprey studies do not have a specific precision target yet, but it is something that needs to be discussed within the forums. He added that results from a lamprey study would help guide additional studies that try to pinpoint survival bottlenecks. In addition, the results could be used to identify potential mitigation measures. Tracy asked what types of mitigation measures would be considered (e.g., trapping juveniles and hauling them below dams). Ralph indicated that he does not know at this time.

Ralph then walked through the Updated Upper Columbia Juvenile Source Lamprey Datasheet (see Attachment 3), which he shared with the PRFF before the meeting. He noted the following regarding the Datasheet:

- Tab 1: Outlines the responsibility of each of the PUDs (as well as YN) to supply past data for screw traps and juvenile lamprey monitoring facilities.
- Tab 2: Summary of key questions, YN position, and a date for the discussion and decision making.
- Tab 3: Standard error and confidence interval table (shows calculations).

- Tab 4: Tables 1-4 that went into the document (as well as the calculations).

Ralph asked that Grant PUD complete the requested information in Tab 1. That is, Grant PUD would fill in cells in rows 17-21. The information requested includes timing of trap operations; ratios of juvenile vs larvae; mean, min, and max numbers of juveniles; and average juvenile size for various years. Mike Clement indicated that Grant PUD should be able to provide these data for the spreadsheet.

As identified in Tab 2, Ralph would like the PRFF to address each “key” question by November or December this year. Ralph noted the position of the Yakama Nation on each question and asked all members to review the Framework document and be prepared to discuss the “key” questions during the November meeting.

Tracy thanked Ralph for completing his actions items and for walking the PRFF through the Framework document and Datasheet. Tracy asked the PRFF members to review the materials carefully and be prepared to discuss them during the November PRFF meeting.

Other Pacific Lamprey Items – No other Pacific Lamprey items were discussed.

VII. Adjourn

With no additional business to discuss, Tracy Hillman adjourned the meeting at 12:00 pm.

VIII. Next Meeting

The next meeting of the PRFF will be on 1 November 2023.