



Priest Rapids Fish Forum

Conference Call

Wednesday, 1 October 2025

9:00 a.m. – 11:00 a.m.

FINAL MINUTES

PRFF Members

Michael Lucid, Emily Orling, USFWS
Ralph Lampman, Keely Murdoch, 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
Melissa Peterson, Chad Brown, Ecology
Aaron Jackson, Carl Merkle, CTUIR
Steve Lewis, BIA
Pete McHugh, CRITFC

Meeting Attendees

Mike Clement, Grant PUD
Melissa Peterson, Ecology
Amber Jackson, Ecology
Chris Mott, Grant PUD
Tygh Schuster, YN
Joseph LeMoine, Grant PUD
Erin Harris, GPUD

Ralph Lampman, YN
Tim Taylor, Grant PUD
Laura Heironimus, WDFW
Shannon Adams, YN
Pete McHugh, CRITFC
Todd Miller, WDFW
Tracy Hillman, Chair

Action Items:

- Laura Heironimus will update the White Sturgeon Spontaneous Autopolyploidy Guidance document based on recently published literature.
- Laura Heironimus will share with the PRFF the White Sturgeon reports that document passage of sturgeon through dams.
- PRFF Members will evaluate the advantages and disadvantages of conducting a juvenile Pacific Lamprey survival study at the project scale versus the dam passage scale. Members will also assess whether the assumptions of the Virtual/Paired Release (ViPRE) Model and Virtual

Release/Dead-Fish Correction (ViRDcT) Model can be met. Members will send their evaluations to Tracy Hillman by 26 November 2025, in preparation for the 3 December 2025, PRFF meeting.

- Tracy Hillman will compile the model evaluation responses from members and distribute them to the PRFF prior to the December meeting.
- Tracy Hillman will seek approval of the 6 August Pacific Lamprey Subgroup draft meeting notes from the Rocky Reach Fish Forum and the Aquatic Settlement Work Group.
- Ralph Lampman will share a link to the video recordings of the Pacific Lamprey Subgroup meeting.
- Grant PUD will consider the request to collect genetic samples (e.g., fin clips) from a subsample of adult lamprey collected at Priest Rapids Dam for analysis by CRITFC.

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 no additions.

III. Approve September Meeting Notes

The PRFF reviewed and approved the 3 September 2025 meeting minutes. In addition, the PRFF approved the 6 August Pacific Lamprey Subgroup meeting notes.

IV. Review Action Items

The PRFF reviewed the following action items from the July meeting:

- Laura Heironimus will update the White Sturgeon Spontaneous Autopolyploidy Guidance document based on recently published literature. **Ongoing.**
- Members will read EPA's Columbia-Snake River Temperature TMDL report. **Complete.**
- Members will review the draft Pacific Lamprey Subgroup meeting notes and send edits to Tracy Hillman by Friday, 12 September. **Complete.**
- Ralph Lampman will provide a summary of responses to the questions submitted to PNNL. The summary will be attached to the Pacific Lamprey Subgroup meeting notes. **Complete.**

V. Water Quality

Columbia River Water Temperature TMDL – Melissa Peterson reported that she and Tim Tayler have been meeting regularly to develop the compliance schedule for the Columbia River Temperature TMDL. A comprehensive update is expected to be shared at the November meeting, with the final compliance schedule anticipated next month. Tim Taylor noted that EPA had previously presented on the TMDL and asked whether the group had any follow-up questions or interest in additional presentations. Specifically, EPA offered to provide a presentation on the River Basin Model-10 (RBM10) water quality model, which underpins the TMDL analysis. Ben Cope from EPA is available to present on the model's structure, data inputs, and assumptions if needed. At this time, members did not have any follow-up questions and did not see a need for a presentation on the model. However, the group agreed to keep

the option open for future meetings if further clarification is needed. Melissa added that there are additional water quality topics to address beyond the model discussion.

Ralph Lampman asked about Douglas PUD's water quality attainment planning process. Melissa explained that Douglas PUD is currently at a different stage in the compliance process compared to Grant PUD. Once Douglas submits their compliance project list to Ecology, similar discussions will occur within the Aquatic Settlement Work Group (ASWG). Melissa also noted that Chelan PUD is operating on a separate compliance schedule. Each PUD's timeline and documentation will vary depending on staffing capacity and relicensing status.

Other Water Quality Items – No additional items were discussed.

VI. White Sturgeon

White Sturgeon Hatching and Rearing – Tygh Schuster provided an update on the status of juvenile White Sturgeon at the Yakama Nation Sturgeon Facility (YNSF). He reminded members that feeding issues were identified and samples of feed were sent to the Abernathy Fish Technology Center for evaluation. The evaluation found nothing out of the ordinary (see Attachment 1). Nevertheless, because the Salish-Kootenai Sturgeon Facility (SKSF) also experienced high mortality rates using the same feed (Bio-Oregon's starter feed), Tygh said they will use an alternative feed (Otohime) beginning next year. Based on a question from Mike Clement, Tygh said they will continue to supplement feeding with natural items such as brine shrimp, copepods, and bloodworms.

Tygh said the current tank counts and average fish weights are as follows:

- Tank 1: 454 fish at 4.25 grams/fish
- Tank 2: 551 fish at 4.72 grams/fish
- Tank 3: 36 fish at 6.31 grams/fish
- Tank 4: 1,067 fish at 3.54 grams/fish
- Tank 5: 255 fish at 3.47 grams/fish
- Tank 6: 303 fish at 3.36 grams/fish

Laura Heironimus inquired about similar issues at other hatcheries. Tygh confirmed that SKSF experienced similar problems, and testing of their feed yielded comparable results. However, testing is limited in scope and cannot detect all potential issues, as noted by Dr. Ann Gannam. Despite the feed concerns, the fish are currently doing well, likely due to supplemental feeding with natural items such as brine shrimp, copepods, and bloodworms, which helped maintain fish health during the transition.

White Sturgeon Subgroup Meeting – Tracy Hillman reminded the PRFF that they recently agreed to extend the 2016 White Sturgeon Stocking Program Statement of Agreement (SOA) another year. During the review of the SOA, Laura Heironimus suggested that the PRFF convene the White Sturgeon Subgroup to consider developing a new SOA—potentially with a multi-year duration—to avoid the need for annual re-approval. The Subgroup meeting will be held on 5 November 2025. Tracy shared the draft agenda for the Subgroup meeting that he and Laura prepared (see Attachment 2). Members reviewed the draft agenda and had no suggested changes. Laura added that it is unlikely the subgroup will be able to address all the agenda items, so the PRFF should expect more than one subgroup meeting.

Other White Sturgeon Items – Laura Heironimus reported on the recent sturgeon mortalities in the Columbia River, including 11 dead sturgeon observed in the Rocky Reach Reservoir, potentially linked to elevated water temperatures. Mike Clement noted that a dead 5.5-foot-long hatchery sturgeon (based

on the presence of a PIT tag) was found in the Priest Rapids Reservoir. Laura said that several of the sturgeon found in the Rocky Reach Project area were hatchery-origin fish (from the 2011-2014 releases). She noted that some of the sturgeon found in the lower river were larger females with black eggs. Thus, they died before spawning. Laura encouraged members to share any additional observations and noted that she has received inquiries from the public. Ecology confirmed that no environmental events were recorded in the area, leaving the cause of the die-offs undetermined. A particularly unusual event involved many (~77) small (<130 cm) sturgeon found dead near cold-water refugia at the mouth of the Wind River.

Laura announced that WDFW has released a public survey on sturgeon harvest strategies, which will remain open through 25 October. She will share the link with forum members to help disseminate the survey. In response to Mike Clement's question about harvest in the Priest Rapids Project area, Laura explained that due to time constraints, emergency rules are being considered for winter 2025 and spring 2026. Long-term planning is underway to establish recreational harvest regulations, while tribal harvest will be determined by the Yakama Nation.

Mike Clement shared that nine sturgeon successfully passed upstream through Priest Rapids Dam this year, a notable increase from previous years. He suggested the fish may have followed shad into the ladder, congregated near the OLAFT fish trap, and then passed through the dam. Laura offered to share a report from LGL Environmental documenting upstream sturgeon passage at various dams, and Ben Cox has also analyzed passage at Bonneville Dam.

Melissa Peterson asked about water sources used at sturgeon rearing facilities. Tygh Schuster explained that their hatchery uses groundwater, which remains consistently between 56–57°F year-round.

VII. Pacific Lamprey

Grant PUD Adult Trapping Efforts in 2025 – Mike Clement reported that Grant PUD began collecting adult Pacific Lamprey at Priest Rapids Dam on 23 June and concluded on 24 September. Mike indicated that they captured a total of 875 adult lamprey. Of these, 505 were provided to Douglas PUD for translocation upstream of Wells Dam, including releases in the mainstem at Star Boat Launch, as well as releases in the Methow and Okanagan systems. An additional 275 fish were transferred to Chelan PUD for use in telemetry studies at Rock Island Dam. The remaining fish were released by Grant PUD at Kirby Billingsley Hydro Park.

Ralph Lampman commented on the success of the translocation efforts and suggested that collecting genetic (tissue) samples from a subsample of 30–40 adult lamprey captured at Priest Rapids Dam could help demonstrate the broader benefits of Grant PUD's trapping program. He emphasized the value of understanding fish behavior and survival outcomes through such samplings. He added that CRITFC has funding to conduct genetic analysis. Mike Clement indicated that Grant PUD will consider the collection of genetic samples during sampling next year.

Given the translocation efforts, Tracy Hillman asked whether more adult lamprey are now migrating past Wells Dam. Ralph confirmed a noticeable increase in migration rates, particularly into the Okanagan and Methow systems. He noted that the fish are exploring upstream habitats. Tracy remarked that these results merit publication.

Juvenile Pacific Lamprey Survival Studies – Tracy Hillman initiated a discussion on planning a juvenile Pacific Lamprey survival study in the project area. Drawing from the subgroup meeting and the PRFF meeting in September, he emphasized the need to first determine the appropriate scale of the study—whether it should focus solely on dam passage or encompass the entire project area (reservoir and dam). This decision will guide the selection of the most appropriate survival model.

To support this process, Tracy referenced Sections 4.31 and 4.32 of the Pacific Lamprey Management Plan, which outline requirements for identifying and mitigating project effects and developing juvenile passage criteria. He proposed an action item for members to evaluate the advantages and disadvantages of both study scales and assess whether the assumptions of the Virtual/Paired Release (ViPre) Model and Virtual Release/Dead-Fish Correction (ViRDct) Model can be met.

Ralph Lampman supported the approach and noted that similar discussions are occurring in the ASWG. He suggested that 2026 may be too early to initiate the study, but 2027 could be a feasible target. Ralph also recommended synchronizing studies across projects to allow for broader insights, including reservoir passage evaluations, while maintaining dam passage as the primary focus.

Mike Clement shared Grant PUD's position, which prioritizes dam passage over project-scale analysis. He agreed that conducting studies at both Wanapum and Priest Rapids in the same year would be efficient and could also provide data on predation and tag failure. Grant PUD is willing to participate in the planning and execution of the study.

Members agreed to identify the advantages and disadvantages of the different spatial scales of analysis and to identify whether the assumptions of the two models can be met. They will provide their responses to Tracy Hillman by 26 November 2025. Tracy will compile the information, share it with the PRFF, and the group will discuss it during the 3 December meeting.

Other Pacific Lamprey Items – Ralph Lampman reported that the Pacific Lamprey Conservation Initiative (PLCI) and Bonneville Power Administration FY26 proposals are due on 6 October 2025. He also noted that the 2025 Lamprey Information Exchange will be held on 9-11 December in Portland, OR. He said there will be a virtual option for those who cannot attend in person.

Mike Clement reported that Grant PUD activated their HDX PIT-tag interrogation systems in the adult ladders' entrances and exits. The interrogation system was designed to evaluate adult Pacific Lamprey passage performance. Of the 700 fish PIT tagged at Bonneville Dam, about 12 were detected moving through Grant PUD's monitoring systems. Ralph Lampman asked about the detection efficiency of the interrogation system. Mike noted that detection efficiencies vary depending on the location of the array. Detections are near 100% at the exits but are lower at the entrances.

VIII. Adjourn

With no additional business to discuss, Tracy Hillman adjourned the meeting at 11:00 am.

IX. Next Meeting

The next meeting of the PRFF will be on Wednesday, 3 December 2025. The White Sturgeon Subgroup will meet on Wednesday, 5 November 2025.

Attachment 1

Results of the Abernathy Fish Technology Center Evaluation of Bio-Oregon's Starter Feed



United States Department of the Interior



FISH AND WILDLIFE SERVICE
 ABERNATHY FISH TECHNOLOGY CENTER
 1440 Abernathy Creek Road
 Longview, WA 98632
 September 12, 2025

If this box is checked, the feed doesn't meet specifications

Memorandum

To: Sturgeon Biologist
 Attn Tygh Schuster

From: Fish Nutritionist, Abernathy FTC, #FWS220

Subject: Feed samples from Marion Drain Tribal Hatchery

We analyzed the feed samples BioVita Starter #0 and #1 crum, #0 for proximate analysis and rancidity, #1 for moisture, ash and rancidity. Specifications on the bag tag state, the protein and lipid will not be less than the given level and the moisture and ash will not be more than the given level. I have also included the results for the rancidity tests in Table 1. I've informed Ron Malnor with BioOregon about the higher than normal mortalities observed when switching to the dry feed. If you have any questions, please contact me.

	Protein%*	Lipid%	Ash%	Moisture%
BioVita Starter #0 crum Made 12/10/24, lot 0023364923	53.6	18.9	7.6	6.6
Specifications	53.0	18.0	12.0	8.5
BioVita Starter #1 crum Made 2/13/25, lot 0023759523			7.7	5.9
Specifications	52.0	20.0	12.0	8.5

*Protein, lipid and rancidity indicators analyzed by Eurofins.

Table 1. Rancidity results*.

Feed	Peroxides (meq/kg oil)	Free fatty acids (%)	TBA rancidity
BioVita Starter #0	3.5	3.22	3.5
BioVita Starter #1	4.5	3.07	4.3
	3-10 meq/kg oil (fresh)	~3%	<10 mg MA/kg

cc: Justin Rose, BioOregon/Skretting

Attachment 2

Draft Agenda for the PRFF White Sturgeon Subgroup Meeting



Priest Rapids Fish Forum White Sturgeon Subgroup Meeting

Tuesday, 5 November 2025
9:00 am – 12:00 p.m.

Microsoft Teams Meeting

[Click here to join the meeting](#)

Meeting ID: 226 612 658 552

Passcode: ~~icr08tE~~

Or call in (audio only)

[+1 323-813-7062, 272917790#](#) United States, Los Angeles

Phone Conference ID: 272 917 790#

Objective: Evaluate stocking levels in the project area based on M&E data and life-cycle modeling.

AGENDA

- I. Welcome and Introductions (9:00-9:05)
- II. Agenda Review (9:05-9:10)
- III. Review 2016 White Sturgeon SOA (Hillman) (9:10-9:30)
 - A. Adult Abundance Goals
 - B. Harvest Goals
 - C. Stocking Rate Targets
- IV. Review White Sturgeon Monitoring and Modeling Results (WSP/LGL/Blue Leaf) (9:30-11:00)
 - A. Actual Stocking Rates – 2016-2025
 - B. Population Size Structure, Survival, Growth Rates – Evidence of Density Dependence?
 - C. Population Genetic Structure/Diversity – What is Known?
 - D. Modeling Exercise – Trending Towards Achieving Adult Abundance Goals?
- V. Recommendations to PRFF (All) (11:00-12:00)
 - A. Updated Stocking Targets – What Happens if the Target is not Met?
 - B. Fish Source – Broodstock or Larvae: Where to Collect Them?
 - C. Harvest – Available Harvestable Fish for Co-Manager Discussion?
- VI. Adjourn (12:00)