



## Priest Rapids Fish Forum

### Conference Call

Wednesday, 7 June 2023

9:00 a.m. – 10:30 a.m.

### FINAL MINUTES

#### PRFF Members

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

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

#### Meeting Attendees

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Ralph Lampman, YN  
Mike Clement, Grant PUD  
Patrick Verhey, WDFW  
Breean Zimmerman, WDOE  
Tracy Hillman, Facilitator

Laura Heironimus, WDFW  
RD Nelle, USFWS  
Chris Mott, Grant PUD  
Jason McLellan, CTCR

#### Action Items:

- Ralph Lampman will coordinate with the Detroit River Fish Laboratory on a time to present their Lake Sturgeon modeling and reef building work to the PRFF.
- Jason McLellan will share the Hatten et al. (2018) paper that describes substrate and flow characteristics associated with White Sturgeon recruitment in the Columbia River Basin.
- Tracy Hillman will identify a date later this summer for the joint PRFF/RRFF Pacific Lamprey Working Group meeting.

- Tracy Hillman will coordinate with John Ferguson, Chair of the ASWG, to see whether members of the ASWG are willing to participate in the joint PRFF/RRFF Pacific Lamprey Working Group meeting.

## 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 June agenda.

### III. Approve May Meeting Notes

The PRFF reviewed and approved the 3 May 2023 meeting minutes.

### IV. Review Action Items

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

- PRFF will review the presentation prepared by Grant PUD for the PRCC Policy Committee and provide comments to Mike Clement by 2 June 2023. **Complete.**
- Ralph Lampman will coordinate with the Detroit River Fish Laboratory on a time to present their Lake Sturgeon modeling and reef building work to the PRFF. **Ongoing.**
- Ralph Lampman will share papers describing construction of spawning reefs for Lake Sturgeon in the St. Clair and Detroit rivers. **Complete.**
- Laura Heironimus will share papers describing the spawning habitat requirements of White Sturgeon. **Complete.**

Ralph Lampman will provide the name and contact information for the new Pacific Lamprey Conservation Initiative coordinator. **Complete. Ralph provided the name and contact information following the meeting. Max Calloway is the new PLCI Coordinator. His email address is: [MCalloway@pacificlamprey.org](mailto:MCalloway@pacificlamprey.org).**

### V. White Sturgeon

**White Sturgeon Broodstock Collection and Spawning** – Mike Clement reported that with the help of two fishing guides, they collected enough adult sturgeon for a 6x6 spawning matrix. Fishing began on 15 May and lasted for two weeks. Mike said the fishing started slowly but picked up over time. He added that some of the fish sent to the hatchery early on were replaced with more mature fish captured later during the fishing period.

Mike said hatchery staff injected the females on 5 June and spawned the fish on 6 June. They had to wait for one female to drop her eggs and then successfully spawned a 6x6 matrix. Nate Patterson (YN) shared the following information on each fish spawned.

BY2023 Female Brood:

#	location	PIT tag	Date Captured	weight (lb)	kg	LHRHa (ug)	LHRHa (mg)	w/ purity	Initial	Resolving
1	10-1	3D9.1C2DC6BB1E	5/17/23	149	67.73	1,354.55	1.355	1.382	0.276	1.106
2	10-2	3D9.1BF2646DE2	5/19/23	210	95.45	1,909.09	1.909	1.948	0.390	1.558
3	10-3	3D9.1C2DC94B7A	5/22/23	305	138.64	2,772.73	2.773	2.829	0.566	2.263
4	10-4	3D9.1C2D2F5D10	5/23/2023	403	183.18	3,663.64	3.664	3.738	0.748	2.991
5	10-5	3D9.1C2DC69E59	5/25/2023	267	121.36	2,427.27	2.427	2.477	0.495	1.981
6	10-6	3D9.1C2D66772	5/25/2023	264	120.00	2,400.00	2.400	2.449	0.490	1.959
<b>Total</b>				<b>1598</b>	<b>726.36</b>	<b>14,527.27</b>	<b>14.53</b>	<b>14.82</b>	<b>2.965</b>	<b>11.859</b>

BY2023 Male Brood:

#	Date Captured	Location	PIT tag	lb	kg	LHRHa (ug)	LHRHa (mg)	w/ purity
1	5.16.23	20-3	3D9.1BF26401DA	140	63.64	636.36	0.636	0.649
2	5.17.23	20-3	3DD.007790FCA7	211	95.91	959.09	0.959	0.979
3	5.17.23	20-3	3D9.1BF233BF1B	144	65.45	654.55	0.655	0.668
4	5.18.23	20-3	3D9.1C2DC69384	228	103.64	1,036.36	1.036	1.058
5	5.19.23	20-3	3D9.1BF1D0C51D	87	39.55	395.45	0.395	0.404
6	5.19.23	20-3	3D91C2DC6CE5B	109	49.55	495.45	0.495	0.506
<b>Total</b>				<b>919</b>	<b>417.73</b>	<b>4177.27</b>	<b>4.177</b>	<b>4.263</b>

Mike noted that males will be returned to the river tomorrow and females will be returned next week. Mike added that they recaptured one fish that ODFW had previously tagged with an acoustic tag.

**ODFW Thiamine Study** – Laura Heironimus reported that Dr. Aimee Reed, a veterinarian with ODFW, was at the hatchery and collected a subsample of unfertilized eggs that will be examined for thiamine (Vitamin B<sub>1</sub>). Laura indicated that thiamine deficiency is a problem within Coho Salmon and Chinook Salmon in certain watersheds and aquaculture systems on the west coast, especially in Oregon and California. Thiamine deficiency is thought to be related to eating prey that are naturally rich in thiaminase, an enzyme that breaks down thiamine. Salmonids have been examined for thiamine levels and appropriate levels have been established for them. Little thiamine research has occurred on White Sturgeon. Because White Sturgeon prey on Shad, a species rich in thiaminase, it is likely White Sturgeon have low levels of thiamine. The lack of thiamine can lead to high post-hatch mortality. Because Shad do not migrate past Wanapum Dam, there may be an opportunity to evaluate White Sturgeon eggs collected upstream from Wanapum Dam and compare their thiamine levels to eggs collected downstream from Wanapum Dam. Jason McLellan indicated that eggs are collected from White Sturgeon in the Nechako and Kootenay rivers. Acquiring the necessary permits for these eggs may be difficult. Laura said she will contact folks working with White Sturgeon on the Nechako and Kootenay rivers.

**Habitat Suitability Models and Artificial Spawning Reefs** – Based on discussions during the last PRFF meeting, Ralph Lampman said he recently reached out to the researchers working on artificial spawning reefs for Lake Sturgeon in the St. Clair and Detroit rivers. He asked them whether they would be available on the first Wednesday of July or August to present their work to the PRFF and Rocky Reach Fish Forum (RRFF). He has not yet received a response. Regarding White Sturgeon spawning habitat requirements, Jason McLellan indicated that Hatten and others published a paper on substrate and flow

characteristics associated with White Sturgeon recruitment in the Columbia River Basin. Jason said the researchers identified habitat characteristics associated with age-0+ White Sturgeon in the Skamania reach (area with consistent recruitment), John Day reach (area with intermittent/inconsistent recruitment), and Kootenai reach (area with no recruitment). In short, Hatten et al. found increased recruitment when spring flow increased, gravel/cobble composition increased, and embeddedness decreased. Jason said he will share the paper with the group.

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

## **VI. Pacific Lamprey**

**Pacific Lamprey Subgroup Meeting with RRF Subgroup** – Tracy Hillman indicated that the RRF has been evaluating different models that can be used to estimate juvenile survival rates and behavior through the hydro-system. All the models being evaluated have important assumptions that need to be addressed before a valid survival study can be implemented within the project areas. To that end, the RRF recommended that the RRF and PRFF Pacific Lamprey Working Groups convene jointly to discuss the models and their assumptions. This would be similar to the joint working group meetings conducted in 2016 that were convened to discuss juvenile lamprey studies in the project areas. The goal of the joint working group meeting is to identify the appropriate model to use, evaluate the model assumptions, and determine whether the assumptions can be met. Tracy asked the PRFF whether they would like to participate in joint RRF/PRFF working group meetings. Members indicated they would like to participate in the joint meetings. Tracy will try to find a meeting date for the working groups. He will also reach out to John Ferguson, Chair of the Aquatic Settlement Work Group (ASWG) and see whether members of the ASWG would like to participate in the joint working group meetings.

**Grant PUD Trapping Efforts in 2023** – Mike Clement reported that he has been coordinating with Douglas PUD, who will continue fish passage studies in 2023. Thus, trapping at Priest Rapids Dam will be similar to last year. All fish captured during the first four weeks will be provided to Douglas PUD for their fish passage study. Fish captured during the second four-week period will be either provided to Douglas PUD (depending on whether they received enough fish for their study during the first four-week collection period) or will be released at Kirby-Billingsley Hydro Park upstream from Rock Island Dam. Based on adult lamprey counts at Bonneville Dam, Mike indicated that trapping at Priest Rapids Dam could start as early as 17 July. Mike asked the PRFF for their thoughts. Members indicated that 17 July may be a good time to initiate trapping; however, they would like to revisit this topic during the 5 July 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 10:30 am.

## **VIII. Next Meeting**

The next meeting of the PRFF will be on 5 July 2023.