Priest Rapids Fish Forum
Meeting

Wednesday, 1 August 2018
9:00 a.m. – 12:00 p.m.
Douglas PUD Conference Room, 1151 Valley Mall Pkwy, East Wenatchee, WA
Call-In Number: 1-800-977-8002, Bridge: 7422882

MEETING MINUTES

PRFF REPRESENTATIVES

Steve Lewis, USFWS	Patrick Verhey, Chad Jackson, WDFW
Bob Rose, YN	Breean Zimmerman, WDOE
Pat Wyena, Wanapum	Aaron Jackson, Carl Merkle, CTUIR
Jason McLellan, CCT	Keith Hatch, BIA
Mike Clement, Grant PUD	Chris Mott, Grant PUD
Tracy Hillman, Facilitator	Erin McIntyre, Grant PUD

ATTENDEES

Mike Clement, Grant PUD	Chad Jackson, WDFW (via phone)
Tom Skiles, CTUIR (via Phone)	Erin McIntyre, Grant PUD
RD Nelle, USFWS	Ralph Lampman, YN (via phone)
Patrick Verhey, WDFW	Pat Wyena, Wanapum
Breean Zimmerman, WDOE (via phone)	Rod O'Connor, Grant PUD (via phone)
Nathan Buck, Wanapum	Doris Squeochs, Wanapum
Damon Goodman, USFWS	Steve Lewis, USFWS
Steve Hemstrom, Chelan PUD	Aimee Wilson, USFWS
Marcie Clement, Chelan PUD	Jason Lundgren, CCFEG
Chas Kyger, Douglas PUD	Eric Anderson, WDFW
Tracy Hillman, Chair	

Action Items:

- Steve Lewis will add Wanapum to the invasive species action plan's participation list. He will also provide updates to the PRFF on the status of the draft action plan.
- Tom Skiles will check with Blaine Parker on numbers of tagged sturgeon captured in the winter tribal fishery.

I. Welcome and Introductions – Tracy Hillman welcomed everyone to the joint Priest Rapids Fish Forum (PRFF or Forum), Rocky Reach Fish Forum, and Aquatic Settlement Work Group meeting. Participants introduced themselves.

II. Agenda Review - Members reviewed and approved the draft agenda with one addition: update on Northern Pike Meeting in Spokane.

III. Approve June Meeting Notes – The June 2018 Meeting Minutes were reviewed and approved during the meeting.

A. Action Items from the June Meeting:

1. Steve Lewis will add Wanapum to the invasive species action plan's participation list. He will also provide updates to the PRFF on the status of the draft action plan. Ongoing.
2. Tom Skiles will check with Blaine Parker on numbers of tagged sturgeon captured in the winter tribal fishery. Ongoing.

IV. Presentations

A. Decontamination Stations for Aquatic Invasive Species

Captain Eric Anderson with WDFW gave a presentation on aquatic invasive species (AIS) prevention and enforcement (see Attachment 1). He began the presentation by describing the history of the enforcement program and WDFW's success in AIS prevention and enforcement. However, between 2010 and 2015, prevention and enforcement waned because the program was decentralized. A paradigm shift in 2016 resulted in centralized scheduling, dedicated AIS techs, and a focus on interstate traffic. Because of this shift, boat inspections increased from 933 in 2015 to 9,054 in 2017. In addition, there were 686 traffic stops conducted on boats that failed to pull into mandatory check stations. Captain Anderson stated that 2018 is off to a good start with 14,567 boats inspected so far this year. He noted they have detected invasive mussels on two boats this year.

Captain Anderson then described the establishment of an AIS inspection and decontamination station on the Washington/Idaho border. He talked about the arduous process of establishing the inspection and decontamination site, which opened on 28 April 2018. He also described the permanent decontamination stations, including their design, staffing, permitting, and operations. These stations are enclosed systems, meaning water is filtered and reused (no waste). He said these stations are easy to use and heat water up to 140 degrees.

B. Lamprey Passage Alternatives

Damon Goodman, USFWS, gave a presentation on Lamprey Passage Alternatives (Damon did not provide the presentation for public distribution). He began by showing a video of adult lamprey passing through small tubes, which are used to successfully pass adult lamprey over a 50-foot dam in Northern California. Damon then described the ability of adult lamprey to traverse natural obstacles including cascades and natural waterfalls. This

indicates that lamprey were likely distributed upstream of some natural barriers. Even though lamprey can pass some natural barriers, they struggle to pass anthropogenic barriers.

Damon described monitoring results in San Luis Obispo Creek in southern California. This stream represents the southern extent of Pacific lamprey in California. They found that improving passage for steelhead at a tide gate created a passage barrier for lamprey, resulting in the extirpation of Pacific lamprey in San Luis Obispo Creek. They installed lamprey ramps at the tide gate and in 2017 they found adult lamprey spawning in the stream.

Damon described the effects of removing San Clemente Dam on lamprey distribution in the Carmel River in California. The removal of the dam opened 25 miles of habitat, which was quickly recolonized by lamprey. Their monitoring work is finding various size classes of ammocoetes upstream from the previous dam site. Damon then described efforts to provide adult lamprey passage as part of the steelhead HCP at Freeman Dam. He also reported on downstream migration of juvenile lamprey in the Sacramento River. He said about 80% of macrophthalmia migrate downstream within a two-day period.

Damon discussed their work at Cape Horn Dam at Van Arsdale Reservoir on the Eel River in northern California. The dam is 15-m high with fishways designed for salmonids. Although adult lamprey attempt to migrate through the fishway, most succumb to predation resulting in a 5-6% passage success. As a result, USFWS developed a study to evaluate different lamprey passage structures including tubes, ramps, culvert pipes, and rounded bulkheads. As part of the study, they evaluated lamprey behavior, passage success, and passage timing. They found that rounded bulkheads worked but affected water velocities for salmonid passage. Smooth, four-inch tubes with 13 L/min of flow worked best. These tubes passed 99-100% of the fish in the shortest time (three hours). Culverts also passed high percentages of the fish. Passage success through the salmonid fishways was 6% and took 14 days. Damon noted that the cost of materials for tubes was about $3,000. He also said that entry and flow rates were critical to successful adult lamprey passage. Damon concluded that the tubes passed about 12,000 adult lamprey in 2017.

V. White Sturgeon Management Plan

A. Update on Juvenile Rearing – Mike Clement reported that juvenile sturgeon at Marion Drain are doing well. He said one female had relatively high levels of fungus and another had eggs with a relatively high mortality rate. Nevertheless, there are plenty of fertilized eggs to meet production goals. He added that juveniles will be ponded soon.

B. Update on Sturgeon Fishery in the Priest Rapids Project Area – Chad Jackson stated that harvest on CRITFC sturgeon in the project area has been spotty and low. Chad provided the following table of information on harvest. He said the fishery will remain open until September.

Estimated total fishing effort and catch for the Upper Columbia Sturgeon Fishery April 29 - September 1, 2018.												
Section[1]	Anglers	Angler Hours	Total Sturgeon	Sturgeon			Chinook Caught	Sockeye Caught	Steelhead Released	Other Caught	% Harvest of Total Catch	Sturgeon CPUE
				Harvested	Undersized Released	Oversized Released						
537	411	1,409	76	0	76	0	0	0	0	0	0.00%	0.0539
539 (1)	372	2,080	83	3	41	39	0	0	0	0	3.61%	0.0399
539 (2)	120	591	0	0	0	0	0	0	0	0	--	0.0000
Total	903	4,080	159	3	117	39	0	0	0	0	1.89%	0.0390

[1] 737 = Priest Rapids Dam to Wanapum Dam; 539(1) = Sunland Cover to Rock Island Dam; and 539(2) = Wanapum Dam to Sunland Cove.

C. Juvenile Index Monitoring and Population Assessments – Mike Clement said next week Grant PUD, Blue Leaf, and Golder will start the third year of the three-year juvenile index monitoring study. They will use two boats per reservoir and sample five days per week. The indexing work will take three weeks to complete. They will fish eight set-lines, each with 40 hooks.

Mike indicated that they will conduct their mark-recapture study in October. They will use three boats, one in Priest Rapids Reservoir and two in Wanapum Reservoir. They will fish set lines to capture sturgeon.

D. Other White Sturgeon Items – None.

VI. Pacific Lamprey Management Plan

A. Adult Lamprey Collection, Transport, and Coordination – Mike Clement reported that they started trapping for adult lamprey at Priest Rapids Dam on 30 July. Over the last two nights of trapping, they collected 41 lamprey. Mike reminded the group that they will trap for three weeks to fulfill the Grant PUD obligation. They will then trap for an additional three weeks for the Douglas PUD program. Grant PUD will transport the adult lamprey to Kirby Billingsley Park (upstream from Rock Island Dam), where they will either release the adult lamprey into the river or hand them off to Douglas PUD. Grant PUD will not tag adult lamprey this year; however, Douglas PUD will tag all the fish they use in their studies/program. Mike said they will meet with Douglas PUD next week to discuss release points and PIT tags. Ralph Lampman sent the following table to the group identifying different scenarios for lamprey tagging and releases. Ralph indicated that tagging and releasing 300-400 adult lamprey is highly likely this year.

Scenario	Number of adults	Number to Columbia upstream from Rock Island Dam	Number to Columbia upstream from Rock Island Dam (PIT tagged by YN)	Number to Columbia River upstream from Rocky Reach Dam (PIT tagged by YN)	Percent upstream from the Wenatchee confluence
1	750	350	200	200	27%
2	1000	600	200	200	20%
3	1500	1100	200	200	13%

Mike indicated that Grant PUD turned on their HDX PIT readers in June. They are detecting several fish that were PIT tagged in the lower Columbia River.

B. Other Pacific Lamprey Items – None.

VII. Priest Rapids Dam

A. Update on Priest Rapids Dam Operations – Mike Clement indicated that drilling for drainage and inspection in the spillway monoliths at Priest Rapids Dam is complete. About 230 core samples have been extracted from the dam's grout gallery. The discovery of excess leakage due to a disbonded lift joint earlier this year resulted in the need for the drilling.

Crews are now installing additional instrumentation that will help detect monolith movements within the spillway. Thirty-seven new instruments are scheduled to be installed. The devices are intended to measure vertical movements of the monoliths as well as any displacements across the disbonded joint or at the foundation of the structure.

Installation of these devices is anticipated to last until early September. The placement of the new equipment, coupled with the existing surveillance and monitoring instruments and activities, will allow for additional data collection across the spillway.

Following the installation of the monitoring equipment, Grant PUD will seek Federal Energy Regulatory Commission (FERC) approval to remove the lower operating-level restriction that is currently in place for the Priest Rapids reservoir. The elevation of the reservoir was lowered by about three feet, which is still within the normal operating range, while inspection work took place. Priest Rapids Reservoir continues to be held at operating elevations between 484.5 to 481.5 feet above sea level. The maximum normal reservoir elevation is 488.0 feet.

Once FERC makes its decision, Grant PUD officials will determine what, if any, other remedies are needed beyond the drilling. Engineering staff will also examine factors that caused and led to the disbonded lift joint.

The drainage drilling reduced the pressure from the water inflow at the disbonded lift joint, while also allowing crews to determine the extent of leakage throughout the spillway monoliths.

VIII. Resident Fish

A. Update on Northern Pike Meeting in Spokane – Mike Clement stated that he and Tom Dresser attended the northern pike meetings held in Spokane, WA. He said the tribes are putting a lot of effort into controlling and eradicating northern pike. He added that eDNA work has possibly detected the presence of northern pike at Boat Basin in Banks Lake, but noted the positive detection may have been a result of a boat that had previously been in Lake Roosevelt. Parties are looking for funding to help control and eradicate pike. Mike indicated that both Grant and Chelan PUDs are providing some funding to the Colville Tribes for removal of pike in Lake Roosevelt. Mike said he also described the existing control programs in the mid-Columbia. He said gill netting is an effective method for collecting pike.

IX. Next Meeting: 5 September 2018 at the Grant PUD Natural Resources Wenatchee Office.