



Grant County **PUBLIC UTILITY DISTRICT**

Priest Rapids Fish Forum

Wednesday, 6 August 2014
Grant PUD Wenatchee Office

PRFF Members

Stephen Lewis, USFWS
Bob Rose, YN
Carl Merkle, Umatilla Tribe
Tom Dresser, GCPUD
Aaron Jackson, CTUIR

Patrick Verhey, WDFW
Keith Hatch, BIA
Pat McGuire, WDOE
Mike Clement, GCPUD
Jason McLellan, CCT

Attendees:

Pat McGuire, WDOE
Patrick Verhey, WDFW
Chad Jackson, WDFW
Jason McClellan, CCT (Via phone)
Ben Truscott, WDFW
Debbie Williams, GCPUD

Donella Miller, YN (Via phone)
Bob Rose, YN (Via phone)
Tom Skiles, CRITFC (Via phone)
Jim Powell, BC Center for Aquatic Health Sciences (Via phone)
Mike Clement, GCPUD
Tracy Hillman, Facilitator

Distributed Items:

1. PRFF Agenda
2. PRFF Draft Meeting Minutes 06-04-14
3. PRFF Draft Meeting Minutes 07-02-14
4. RRFF-PRFF Workshop Notes February 2014
5. WDFW White Sturgeon Standardized Fish Health Protocol May 2014 Final
6. Adult lamprey trap n haul SOP 2014_06_03 DF Formatted
7. PRCC-HCP Briefing 6-02-14 Final
8. Lamprey run timing

Action Items:

1. Mike Clement will make sure that the SG3 Gate is opened after all WDFW OLAFT use. Patrick Verhey will send Pat Burdick's e-mail correspondence regarding the SG3 Gate to Tracy Hillman for distribution to the PRFF. Debbie Williams will look for a video showing how the OLAFT is operated.
2. Jim Powell will send necropsy protocols established for the Upper Columbia Sturgeon Program to Tracy Hillman for distribution.

Meeting Minutes

- I. Welcome and Introductions
- II. Agenda Review
 - A. Action Items from last meeting – Complete
 - B. Meeting Minute Approval – 04 June 2014 – Approved. 02 July 2014 – Approved.
 - C. Additional agenda items – An Off-Ladder Adult Fish Trap (OLAFT) presentation specific to lamprey passage was added to the agenda.
- III. **Update on Wanapum Dam and Fish Passage** – Mike Clement provided a PowerPoint presentation on updates on Wanapum Dam (see Attachment 1, which was distributed to the PRFF by Tracy Hillman). Mike described the successful passage of over 600,000 fish, intermittent problems with one of the four pumps in the left ladder, evaluation of adult Pacific lamprey passage including adult lamprey trap and haul, modifications to the flume to improve adult lamprey passage, and the status of installation of tendons in the monolith piers.
- IV. **Update on PLMP**
 - A. **NNI Update** – The PRFF and RRFF lamprey subcommittees met the last week of July to discuss what is currently known about adult lamprey entrance and passage efficiency. There were no major disagreements among members and adult lamprey tagged with HD PIT tags will help address questions about lamprey entrance and passage efficiency. Members also discussed the importance of monitoring lamprey escapement into tributaries (e.g., Entiat River).
 - B. Ben Truscott, WDFW, described the operation of the OLAFT at Priest Rapids Dam. The OLAFT is used to address many objectives including broodstock collection, stock assessment, and collecting data for run reconstructions. Ben noted that it is unlikely that human scent from processing fish in the OLAFT is causing delays in the movement of adult lamprey in the upper portion of the left-bank ladder. However, members did question the operation of some of the slide gates (especially slide gate 3), which may affect lamprey. **Mike Clement will make sure that the SG3 Gate is opened after all WDFW OLAFT use. Patrick Verhey will send Pat Burdick's e-mail correspondence regarding the SG3 Gate to Tracy Hillman for distribution to the PRFF. Debbie Williams will look for a video showing how the OLAFT is operated.**

Members discussed the probability that the presence of adult sturgeon in or just outside the OLAFT may have some effect on lamprey passage. The sturgeon appear to follow the movement of shad and sockeye into the ladder. The PRFF will visit the OLAFT and its operations on Monday, 15 September 2014 at 10:00 a.m.
 - C. **Lamprey Passage and Trap-n-Transport** – Mike Clement reported that a total of 1,634 adult lamprey have passed Priest Rapids Dam. Most of these (60%) migrated through the left-bank ladder. A total of 289 adult lamprey have been captured; 274 were tagged and transported upstream from Rock Island Dam. Adult lamprey collection will occur from 1 July to 1 September.
 - D. **HD Pit Detection** – Mike Clement indicated that to assess adult lamprey passage efficiency at Wanapum Dam, 15 adult lamprey captured at John Day Dam and 13 captured at Priest Rapids Dam (PRD) were HD PIT tagged and released into the Wanapum left-bank ladder. All but one

passed the HD PIT Tag detection system at the exit of the ladder. Not counting the aforementioned 28 fish, 36 unique tags have been detected at PRD. Of those, 34 have been detected exiting PRD, for a passage efficiency of 76.5%. Mike said that two of the tags detected at Wanapum Dam had previously overwintered in Priest Rapids reservoir.

- E. **Lamprey Regional Implementation Planning Process** – No update was provided as RD Nelle was not in attendance.
- F. **Other Lamprey Items** – Mike Clement noted that Grant PUD will provide the PRFF with a draft report later this summer on their assessment of benthic organisms stranded in Wanapum Reservoir due to water level reductions.

V. Update on WSMP

- A. **Update on Dispute Resolution and Stocking Decision for 2014** – Tracy Hillman reported that on 21 July, Ecology sent a letter to Grant PUD instructing them to release the remaining 2,168 juvenile sturgeon on station at Marion Drain. On 5 August, Chairman Boyd (Colville Tribes) submitted a letter to Director Bellon (Ecology) requesting a government-to-government consultation and asked Ecology to instruct Grant PUD to stay release of the juvenile sturgeon at Marion Drain. Patrick McGuire indicated that he will provide the PRFF updates on the dispute.
- B. **Review Draft SOA** – As directed by the PRFF Policy Committee, Grant PUD submitted a Statement of Agreement (SOA) to the PRFF describing the release of juvenile sturgeon into the Priest Rapids Project Area. As recommended by the PRFF Policy Committee, the SOA follows the approach approved by the RRFF White Sturgeon Subcommittee. All voting members present, with the exception of the Yakama Nation, approved the SOA for the release of juvenile sturgeon in 2015. The Yakama Nation indicated that they could not support the SOA at this time. Because consensus could not be reached, WDFW and Grant PUD will make minor modifications to the SOA and resubmit it to the PRFF in September.
- C. **Spawning and Rearing** – Bob Rose and Donella Miller reported that spawning at Marion Drain was successful and all fish are doing well. Chad Jackson indicated that at the WDFW hatcheries, their staff is gearing up to do the first grading and culling. The first round of disease sampling via non-lethal fin clip will occur in about one month. WDFW is in the process of finalizing the fish health contract.

Bob Rose said that the Yakama Nation completed larval fishing with 20+ larvae collected and transported to the hatchery. To assure everyone's safety, most collection occurred during daylight hours. Bob noted that larval fishing in the Columbia River was highly variable.


- D. **Sampling of Sturgeon** – Jason McLellan reported that the Colville Tribes will conduct sturgeon index surveys for two weeks in Priest Rapids Pool and another two weeks in Wanapum Pool. Mike Clement noted that in an effort to increase Grant PUD's sturgeon data set, any CRITFC-hatchery sturgeon released in 2003 that are collected as a result of juvenile indexing will be used for stomach analysis as long as previously agreed to sample size (n=20) is not exceeded. Four sturgeon were sampled during broodstock collection.
- E. **Protocol for Dealing with Dead Broodstock** – The PRFF discussed the need to examine sturgeon broodstock that die before, during, or after spawning. They will review necropsy protocols established for the Upper Columbia Sturgeon Program. **Jim Powell will send necropsy protocols used in the Upper Columbia Sturgeon Program to Tracy Hillman for distribution.**

F. Other White Sturgeon Items – None

VI. Next Meeting – 3 September 2014 at Grant PUD's Wenatchee office.


Attachment 1

Presentation by Mike Clement on Wanapum Dam Updates



**PRFF
Briefing**

August 6, 2014



Grant County
PUBLIC UTILITY DISTRICT
Excellence in Service and Leadership

Wanapum Fishway Exit Passage System

- Wanapum Fishway Exit Passage Systems continue to successfully pass adult salmonids;
- More than 600,000 Chinook salmon, sockeye and steelhead have successfully passed the modified fish ladders.



Adult Pacific Lamprey - Passage Plan

- Key Components of the Plan
 - Collection and Trap-N-Transport
 - Volitional passage via the Priest Rapids fishways and Wanapum Fishway Exit Passage Systems;
 - Pilot passage testing & video monitoring



Adult Pacific Lamprey - Passage Plan Collection and Trap-N-Transport

- Collection to occur in three sections of each of the fish ladders at Priest Rapids and Wanapum dams July 1 through September 1 (during the majority of the lamprey migration).
- The proposed locations at this time at each dam include the following:
 - Priest Rapids Dam – Left Bank Ladder
 - Above the Adult Video Fish Count Station, or
 - Turning Pool downstream of the Off-Ladder Adult Fish Count Station, or
 - Upper pools downstream of the fish exit.
 - Priest Rapids Dam – Right Bank Ladder
 - Second turning pool upstream of the fish ladder entrance, or
 - Turning Pool upstream of the Adult Fish Count Station, or
 - Upper pools downstream of the fish exit.
 - Wanapum Dam – Left Bank Ladder
 - Above the Adult Video Fish Count Station, or
 - Upper pools downstream of the fish exit, or
 - Pool immediately downstream of the false-weir.
 - Wanapum Dam – Right Bank Ladder
 - Above the Adult Video Fish Count Station, or
 - Upper pools downstream of the fish exit, or
 - Pool immediately downstream of the false-weir.



Adult Pacific Lamprey - Passage Plan Trap-N-Transport & Volitional Passage - RESULTS

- A total of 1634 adult lamprey have been documented via the video count system passing through Priest Rapids Dam (8/4/2014); 803 have been counted at McNary (day count only)
- 60% (n=972) migrated up left bank;
- Eighty-six (n=289) have been collected at Priest Rapids and Wanapum dams;
- 274 have been transported (Upstream of Rock Island and CPUD tagging/release).



Adult Pacific Lamprey - Passage Plan

Passage Evaluation - RESULTS

- A total of 28 adult lamprey have been tagged and released into the upper section of the Wanapum Fishway – Left Bank (Evening of 7/25/2014)
- All were tagged with HD PIT tags;
- Fish were collected and transported from John Dam, and Priest Rapids Dam (1 removed from study based on downstream movement, i.e., tag effect);
- Video Monitoring: Used to assess lamprey passage and behavior over the false weir and approximately the first 10 feet downstream of the slide (Daytime).
- Two infrared-equipped cameras will be used to monitor lamprey behavior at the false weir during the night, when most passage is likely to occur.
- Night time video monitoring will occur from approximately 20:00 to 8:00 hours for 4 days immediately following release of tagged lamprey.

Wanapum Spillway Repairs



Tendon Hole Drilling: 30 Required.

- ✓ Twenty-Two of 30 - 4" pilot holes completed.
- ✓ First 6 of the 30 – 16" started.
 - ❖ Monolith 4 - 16" drilled to full depth
 - ❖ Monolith 5 - 16" drilled to bedrock
 - ❖ Monolith 7 - 16" drilled to full depth
 - ❖ Monolith 8 - 10" drilled to 22'
 - ❖ Monolith 9 – 10" drilled to full depth
- ✓ Temporary Upstream Anchors.
 - ❖ Monolith 3 – 2 of 7 holes completed
 - ❖ Monolith 4 – drill templates installed waiting on FERC approval
- ✓ Downstream Anchors.
 - ❖ Monolith 4 – Construction of downstream drilling platforms in progress

Preliminary Results - Yearling Chinook & juvenile steelhead Survival Evaluation

The survival standard requirement that Grant PUD is required to achieve per the NOAA Fisheries BiOp (for ESA listed species) and the Priest Rapids Settlement Agreement (non-ESA listed species) for the Priest Rapids Project (Rock Island to Priest Rapids Tailrace) is 86.49%.

PROJECT SURVIVAL

- **Yearling Chinook:**
 - Wanapum Reservoir + Dam = 95.2%
 - Priest Rapids reservoir + Dam = 95.0%
 - Project Survival (Rock Island to Priest Rapids Tailrace) = 90.4%

- **Steelhead:**
 - Wanapum Reservoir + Dam = 92.4%
 - Priest Rapids reservoir + Dam = 95.6%
 - Project Survival (Rock Island to Priest Rapids Tailrace) = 88.3%

“CONCRETE SURVIVAL”

- **Wanapum Dam:**
 - Yearling Chinook = 96.9%
 - Juvenile Steelhead = 96.8%

- **Priest Rapids Dam:**
 - Yearling Chinook = 95.3%
 - Juvenile Steelhead = 95.2%