



Grant County **PUBLIC UTILITY DISTRICT**

Priest Rapids Fish Forum

Wednesday, 2 December 2015
Grant PUD Wenatchee Office
9:00 a.m. – 12:00 p.m.
FINAL MEETING MINUTES

PRFF Representatives

Stephen Lewis, USFWS
Bob Rose, YN
Doris Squeochs, Wanapum
Jason McLellan, CCT
Mike Clement, Grant PUD
Orlene Hahn, Grant PUD

Patrick Verhey, Chad Jackson, WDFW
Pat McGuire, WDOE
Aaron Jackson, Carl Merkle, CTUIR
Keith Hatch, BIA
Chris Mott, Grant PUD
Tracy Hillman, Facilitator

Attendees

RD Nelle, USFWS (via phone)
Doris Squeochs, Wanapum (via phone)
Pat Wyena, Wanapum (via phone)
Jim Powell, BCAHS (via phone)
Orlene Hahn, Grant PUD (via phone)
Pat McGuire, WDOE (via phone)

Stephen Lewis, USFWS
Chris Mott, Grant PUD
Chad Jackson, WDFW
Mike Clement, Grant PUD
Matt Howell, Colville Tribe (alt) (via phone)
Tracy Hillman, Facilitator

Action Items:

1. Hillman will compile responses from the Technical Members and send them to the participating members for review.
2. Technical members will review their responses to the Policy Representatives and send their edits to Hillman.
3. Hillman will try and secure responses from YN and CRITFC, who were unable to participate in the PRFF meeting.
4. Hillman will then send responses to the Policy Representatives by Monday, 14 December.

Meeting Minutes

I. Welcome and Introductions

II. Agenda Review:

- A. Hillman added a discussion regarding the Bull Trout M&E Draft Report. Comments on the bull trout draft report are due to Joe LeMoine by 31 December 2015. Clement reported that six bull trout were counted at Priest Rapids Dam and four at Wanapum Dam.

- B. Clement added a discussion regarding lamprey stating that the PIT-tag readers will be upgraded and the annual report is in process.

III. Meeting Minute approval – 12 November 2015 Meeting Minutes were reviewed and approved.

A. Review Action Items from November Meeting.

1. Patrick Verhey will follow-up with Chad Jackson on health sampling at Marion Drain and at the WDFW facilities. **Complete – follow-up was done and YN has a copy of the official WDFW fish health protocol.**
2. Tracy Hillman will send a Doodle poll to members to setup at least two more joint PRFF and RRFF Pacific Lamprey Subgroup meetings. **Complete – the meeting dates are Tuesday, 19 January 2016 and Thursday, 4 February 2016.**
3. Steve Lewis will provide the Forum with a paper describing the position of the USFWS on adult translocation and juvenile artificial propagation. **Complete – Hillman read an email he received from Lewis on 1 December 2015 as Lewis was unable to join the meeting until 10:00 am today. The email said, “In response to my action item related to the development of a position paper for lamprey translocation, etc., the papers that RD provided serve as our response. We go where the science leads us in a carefully thought-out manner.” Once Lewis arrived at the meeting he stated that the USFWS would support translocation in an experimental situation. He also stated translocation is still a useful tool.**
4. Mike Clement will have Rod O’Connor present results in February or March on adult lamprey PIT-tag studies conducted in 2015. **Complete - results will be presented at the February 2016 meeting.**
5. Mike Clement will provide the USFWS with last known adult lamprey locations and tag numbers in the Entiat River. **Complete – Clement sent the information to Nelle last month.**

IV. Update on White Sturgeon Management Plan (WSMP)

A. Update on Juvenile Rearing – No update provided during the meeting.

B. Review and Address Policy Representative Directions and Assignments – The Policy Representatives met on 6 November 2015. Hillman reviewed what the Policy Representatives approved:

1. The Forums will develop an objective, decision-support framework that will guide the number of juvenile sturgeon released into the project areas in the future as indicated in the White Sturgeon Management Plans.
2. As described in the White Sturgeon Management Plans, the decision-support framework will include Genetics and Carrying Capacity.
3. Genetics: The Forums will make the collection of larvae a priority and rear them for release; they will use juveniles from broodstock collections to backfill any gaps needed to achieve the release goal; larvae and broodstock collection efforts will be commensurate with past collection efforts and will be limited to the window (timeframe) in which larvae and broodstock are available for collection; and the fate of surplus production (i.e., juveniles in excess of the release goal) will be decided by the fisheries co-managers. Excess production cannot be released into the project areas.

4. Carrying Capacity: Important components of carrying capacity include age- or stage-survival rates, ecological interactions, and harvest.
5. The Forums will include the following additions to the sturgeon monitoring programs: conduct annual juvenile index monitoring through 2018 and then reevaluate the monitoring program; and conduct seasonal sturgeon diet (gut) analysis through 2018 and then reevaluate the monitoring program.

Hillman then identified the assignments that the Policy Representatives gave the Technical Representatives.

1. Provide additional results from modeling population growth rates under various stocking and harvesting scenarios.
 - Grant PUD is working with Larry Hildebrand to complete this assignment.
2. Provide a summary of findings from examining literature on ecological interactions.
 - Chelan PUD is currently compiling information to help address this assignment.
 - Powell will check with British Columbia researchers to see if they have any information on interactions.
3. Identify methods to reduce juvenile and/or adult sturgeon numbers if carrying capacities are exceeded.
 - The PRFF identified and discussed methods to reduce numbers of sturgeon within the project areas if carrying capacities are exceeded. Members identified two primary methods:
 - a. Harvest: Includes sport and tribal harvest on adults and possibly juveniles.
 - b. "Mechanical" Removal: Includes targeted, non-recreational removal of certain size classes using set lines or other appropriate methods (e.g. gill nets). Sturgeon collected for targeted removal could be used for research purposes (estimate diets, growth rates, habitat use, etc.), distribution for human consumption, and/or translocation.
4. Each entity of the Fish Forums will identify their greatest concerns with releasing 6,500 juvenile sturgeon into the project areas and identify what information is available or needed to address their concerns.

Technical representatives present identified and ranked factors that they believe are important in determining juvenile sturgeon release numbers.

WDFW

Ecological Interactions: This factor was selected based on modeling results showing that releases of 6,500 juvenile sturgeon could quickly exceed densities reported for other reservoirs. Rapid population growth rates within the project areas are due to the large numbers of fish released and their high survival rates. Given that sturgeon are apex predators, they will likely have negative effects on sensitive species (e.g., lamprey, anadromous salmonids, and other resident species), the reservoir ecosystem, and food webs.

GCPUD

Genetics: This factor was selected because of concerns over future inbreeding depression due to the known relatedness of released sturgeon in the project area in recent years, and other genetic issues raised by Dr. Andrea Schreier.

Ecological Interactions: This factor was selected because of the large number of fish released and their high survival rates. There is concern that large numbers of apex predators will affect salmon recovery (listed and non-listed species), Pacific lamprey abundance and passage through the project area, community structure, food webs, and even the persistence of rare species such as pearl snails.

USFWS

Ecological Interactions: This factor was selected because of concerns that large numbers of a long-lived predator (resulting from continued releases and high survival rates) will affect fish and benthic assemblages. There is no reason to believe that large numbers of apex predators will have no effect on community structure.

Genetics: Genetics are equally important, but they were addressed by the policy representatives.

Colville Confederated Tribes

Genetics: This factor is very important and was addressed satisfactorily by the policy representatives.

Ecological Interactions: This factor is important because of the suspected high survival rates of sturgeon, large stocking rates, and the longevity of the species. The stocking of large numbers of long-lived predators will likely affect community structure and function. There is no evidence that the stocking of predators will not have an effect on community structure.

Wanapum

Genetics: This factor was selected because of concerns described by Dr. Andrea Schreier during the workshop.

Ecological Interactions: This factor and genetics are equally important. Ecological interactions were selected because of the rapid rate at which the population is growing within the project areas. The concern is that a large number of predators will have negative effects on ESA-listed species, summer and fall Chinook, and Pacific lamprey.

5. Identify and prioritize locations for collecting white sturgeon larvae.
 - The PRFF identified and prioritized larval collection sites based on genetics and feasibility.
 - a. In terms of genetics, larvae can be collected anywhere upstream from Bonneville Dam (including the Snake River downstream from Hells Canyon Dam).
 - b. Based on population productivity, the most promising locations for collection of egg and/or larvae include Bonneville and The Dalles pools, Lake Roosevelt, mid-Columbia (Wanapum Pool), and downstream from Hells Canyon Dam. Fertilized eggs are currently being collected in Wanapum Reservoir as part of a "reproduction potential" study. Eggs collected are reared *in situ* and are being

used in the Wells supplementation program. Managers need to consider that collections from Lake Roosevelt already support two supplementation programs and availability in the long-term (> five years) is dependent on upper Columbia Recovery Program goals and objectives. Collection of larvae downstream from Bonneville Dam is the least preferred collection site.

- c. Because unusual conditions in the lower Columbia River (i.e., low flows and high temperatures) likely precluded successful capture of larvae in 2015, the technical representatives believe at least another year of testing larval collection methods in Bonneville and The Dalles pools is appropriate.

Hillman said the Policy Representatives will reconvene on 17 December 2015. Hillman will compile the Forum's responses to the assignments and send them to the meeting participants for review. Hillman will then send the responses to the Policy Representatives by Monday, 14 December. Members present asked Hillman to try and secure responses from YN and CRITFC.

- C. **Monitoring Updates** – Mott indicated that data from sturgeon monitoring are still being crunched. Mott will contact Golder next week to see if there are any updates. He mentioned that Grant PUD will do a side-scan pilot study in February 2016. If side scanning is found to be a reliable monitoring method, it may replace current methods. Clement stated that side-scan monitoring may be used in the future to do adult indexing. He said that it might be a good way to measure the population without using set lines.
- D. **Other White Sturgeon Items** – None.

V. Update on Pacific Lamprey Management Plan (PLMP)

- A. **NNI Update (No Net Impact):** Hillman said based on Doodle poll results the two best meeting dates for the Pacific Lamprey Subgroup are 19 January 2016 and 4 February 2016.
- B. **Update on Adult Passage and Tagging Studies:** Clement stated that the HD PIT receivers were downloaded recently. He said there was some lamprey movement at Priest Rapids (PR) and Wanapum Dam (WAN). Based on 130 PIT tagged fish, passage efficiency at PR was 82.6%. Of the fish that passed PR, 86.5% passed WAN. This is similar to what has been seen in past years. Clement stated that 95% of the fish used the left-bank fish ladder at PR and 5% used the right-bank fish ladder. These results will be finalized after dewatering the ladders. Grant PUD has dewatered the right-bank fish ladder at PR and they are currently dewatering the left-bank fish ladder at WAN.

Clement stated he needs to schedule a fish ladder tour this year. The preference is to tour the PR left-bank fish ladder. The date for this tour will likely be after 15 February 2016. The date will be confirmed after the ladder is dewatered. The majority of the work this winter is focused on maintenance of the two fish pumps. There may be some minor modifications to the count stations, making it easier to clean.

Clement had no new information to report on adult acoustic tag results. Rod O'Connor will present information at the February 2016 meeting. Grant PUD intends to do another year of tagging, which will give the Forum two consecutive years of useful information.

- C. **Other Pacific Lamprey Items:** Clement reminded Forum members that the Anadromous Fish Evaluation Program (AFEP) Annual Review Meeting is in Walla Walla on 8-10 December 2015. He noted that almost a half day is dedicated to lamprey studies, which including: Evaluation of Adult Fish Ladder Modifications to Improve Pacific Lamprey Passage at McNary Dam, 2015; Evaluation of Upstream Migration and Dam Passage by Adult Pacific Lamprey in the Lower Snake

River, 2015; Use of Lamprey Passage Structures at Bonneville and John Day Dams, 2015; Evaluation of Larval Pacific Lamprey Rearing in Mainstem Areas of the Columbia and Snake Rivers Impacted by Dams; Vulnerability of Larval Lampreys to Columbia River Hydropower System Operations: Effects of Dewatering on Larval Lamprey Movements and Survival; and Assessment of Fluctuating Reservoir Elevations Using Hydraulic Models and Impacts on Larval Pacific Lamprey Rearing Habitat in the Bonneville Pool

VI. Next Meeting – 6 January 2016 at the Grant PUD Natural Resources Office in Wenatchee, WA.