Rocky Reach Fish Forum

Wednesday, 7 December 2016 1:00 – 4:00 p.m. Chelan PUD Second Floor Conference Room Wenatchee, WA



Meeting called by Steve Hemstrom Notes taken by Meaghan Connell Chairperson, Tracy Hillman

Attending Representatives:

Hemstrom, Steve	Chelan PUD	(509) 661-4281	steven.hemstrom@chelanpud.org
Padgett, Michael*	ALCOA	(412) 553-4545	michael.padgett@alcoa.com
Zimmerman, Breean*	WDOE	(509) 575-2808	Breean.zimmerman@ecy.gov

Attending Participants:

Connell, Meaghan	Chelan PUD	(509) 661-4757	meaghan.connell@chelanpud.org
Frank, Sierra*	USFWS	(509) 665-3508	sierra_frank@fws.gov
Hillman, Tracy	BioAnalysts	(208) 321-0363	tracy.hillman@bioanalysts.net
Jackson, Chad*	WDFW	(509) 754-4624 x250	chad.jackson@dfw.wa.gov
Keller, Lance	Chelan PUD	(509) 661-4181	lance.keller@chelanpud.org
Nelle, RD	USFWS	(509) 548-7573	RD_Nelle@fws.gov
Rainey, Steve*	USFWS	(503) 260-6990	wsteverainey@aol.com

^{*} Joined via phone.

Meeting Minutes

I. Welcome and Introductions

Tracy Hillman welcomed everyone to the Rocky Reach Fish Forum (RRFF or Forum) meeting. Participants introduced themselves.

II. Agenda Review

The agenda was reviewed and approved.

III. Approval of Meeting Minutes

The November meeting minutes were approved.

IV. Review Action Items

- RD will send out an updated version of the report, Final Draft Rapid Assessment of Adult Pacific Lamprey Passage at Tumwater Dam. Ongoing
- Alene Underwood will provide the RRFF with a revised copy of the Tumwater Dam Lamprey Passage Feasibility Study. Ongoing
- Steve Hemstrom will provide to the RRFF the travel time data for Pacific lamprey at Rocky Reach Dam. Ongoing
- Steve Hemstrom will send out tag detections for the 170 lamprey released in August and September downstream from Tumwater Dam. Ongoing
- Steve Hemstrom will talk to Marcie Clement about adding shoreline surveys to their Aquatic Invasive Species Prevention work. Completed
- Lance Keller will provide an update on the total number of juvenile sturgeon on station at Chelan Hatchery. Ongoing
- Steve Hemstrom will contact Joy Wade and Dr. Dick Beamish to see if there are natural mortality rates for adult lamprey migrating through undammed rivers. Ongoing
- Steve Hemstrom will email the data summary for the adult lamprey tagging, dam passage, and tributary escapement to Meaghan Connell. Completed
- Steve Hemstrom will provide the dates when technical reports are due to the PUD.
 Completed
- Steve Hemstrom will correspond with Steve Lewis for assistance regarding the contract with the USFWS. Completed

V. White Sturgeon

Juvenile Rearing

Lance Keller reported that there is no update on the number of juvenile sturgeon rearing at the Chelan Fish Hatchery. However, Lance indicated that the number rearing in the hatchery is below the goal of 2,250 juveniles to be released into Rocky Reach Reservoir in 2017. Therefore, excess sturgeon at Wells Fish Hatchery will be transferred to Chelan Fish Hatchery to make up the difference. The transfer has not occurred yet. Lance will update the Forum when he knows more about the transfer.

Tracy Hillman asked if there was an urgency in the transfer of juvenile sturgeon from Wells Fish Hatchery to Chelan Fish Hatchery. Lance Keller responded that there is no urgency unless Wells needs to transfer the fish to free up space for Douglas PUD programs. Lance reported that the sturgeon at Chelan Fish Hatchery are still doing well and while there is variation in fish size there is hope that this will narrow because of low rearing density.

Action Item:

• Lance Keller will provide an update on the transfer of juvenile sturgeon from Wells Fish Hatchery to Chelan Fish Hatchery.

Update on Success of Sturgeon Fishery in the Priest Rapids Project Area

Chad Jackson reported on the sturgeon fishery in the Priest Rapids Project Area, which includes Priest Rapids and Wanapum reservoirs. The sturgeon fishery was open from 1 July 2016 through the end of November 2016. The fishery generated 27,449 angler hours, and caught a total of 997 fish. A total of 383 sturgeon were harvested; 481 were captured and released because they were too small and 133 were captured and released because they were too large. The average catch per unit effort was 0.0363 sturgeon/hour. Chad indicated that WDFW will evaluate the fishery and determine when the fishery will open in 2017.

VI. PACIFIC LAMPREY

Pacific Lamprey NNI Criteria

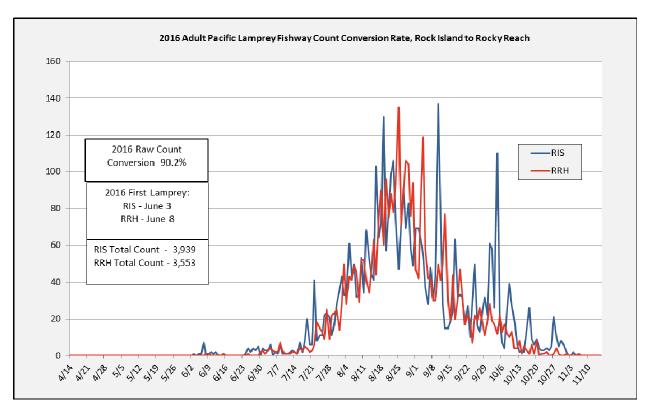
Tracy Hillman reported that the Priest Rapids Fish Forum (PRFF) asked if their Pacific Lamprey Subgroup could meet jointly with the RRFF Pacific Lamprey Subgroup to evaluate methods for calculating adult NNI. During the last RRFF meeting, the Forum agreed to meet jointly because both Forums have similar requirements regarding adult NNI. Tracy said he will send out a Doodle Poll to identify a date for the Subgroup meeting in January or February. Tracy stated that the PRFF asked him to put together an agenda to guide the discussion, which will focus on how to calculate NNI for adult lamprey. The agenda will be sent out to the groups for their review.

Action Item:

 Tracy Hillman will send a Doodle Poll to the Forums to identify a date for the joint RRFF and PRFF Pacific Lamprey Subgroup Meeting and will provide a draft agenda for review.

Adult Lamprey Counts at Rocky Island and Rocky Reach Dams

Steve Hemstrom reported on the full-season lamprey fishway counts for 2016. He discussed results contained in the following figure.



Adult lamprey counts in the fishways began on 14 April at Rock Island Dam and 15 April at Rocky Reach Dam. Counts ended at both dams on 30 November. Steve Hemstrom reported that the "raw" count conversion was 90.2%. Steve stated that the "raw" count conversion measures the proportion of adult lamprey that passed Rock Island Dam and also passed Rocky Reach Dam (i.e., number counted at Rocky Reach Dam divided by the number counted at Rock Island Dam). These counts are "raw" because they are not adjusted for tributary escapement or reservoir over-wintering of last year's fish passing this year. Steve noted that the total fishway count at Rock Island Dam was 3,939 adult lamprey and the total fishway count at Rocky Reach Dam was 3,553 adults.

Steve Hemstrom said the first adult lamprey counted at the top of the Rock Island fishway in 2016 was on 3 June. The first adult detected at Rocky Reach in 2016 was on 8 June. Steve reported that this timing appears somewhat consistent among years; however, first arrival has been noted as late as July. Steve noted that water temperatures in 2016 were warm enough in April and May for adult lamprey to migrate past the projects. It is unclear why they waited until June to begin migrating past Rock Island

and Rocky Reach dams.

Tracy Hillman asked if adult lamprey first arrive at other mid-Columbia dams in June. Steve Hemstrom said he has not graphed those data, but perhaps data from McNary, Priest Rapids, and Wanapum dams could be used as a comparison. Steve also thought it would be interesting to know the number of adult lamprey that overwinter in different project areas.

Steve Hemstrom asked if there was any information on why adult lamprey counts at McNary Dam are so low. The group did not have any information on why counts at McNary Dam are low.

Action Item:

• Steve Hemstrom will send the figure showing 2016 adult Pacific lamprey passage timing and raw conversion rates for Rock Island and Rocky Reach dams to the RRFF.

Update on Adult Lamprey Tagging Study

Steve Hemstrom reported that there was little additional information since last month. The most recent information indicates that 163 adult lamprey were detected Rocky Reach Dam. Of these, 162 successfully passed the dam. Steve indicated that there will be little movement until next year when water temperatures increase. Lance Keller stated that the Rocky Reach fish ladders will come down beginning on Monday, 12 December and any PIT-tagged lamprey will be recorded and released upstream from Rocky Reach Dam.

Tracy Hillman asked what percentage of the PIT-tagged fish have been detected in the Wenatchee River. Steve Hemstrom said out of the 211 tagged lamprey released, 2%-3% have been detected in the Wenatchee River. RD Nelle asked if there was information on detection efficiencies in the lower Wenatchee River. Steve Hemstrom said there was no additional information at this time.

Steve Hemstrom stated that if a lamprey is motivated move, it can do so very rapidly. Some lamprey, on the other hand, move very slowly. Because of this, Steve said it is best to look at the median travel time instead of average travel time.

The Forum discussed touring the fishways at Rocky Reach Dam while they are dewatered. Representatives from Chelan PUD will organize this if the group decides that this is something they would like to do.

Update on Pacific Lamprey Artificial Propagation

Steve Hemstrom gave an update on the Pacific lamprey artificial propagation work. Currently, Chelan PUD has three contracts: USFWS, NOAA Fisheries, and the Yakama Nation. The money being used was budgeted during relicensing and the settlement agreement to work on methods for raising juvenile Pacific lamprey. At the November meeting, it was reported that there had been some contracting issues with USFWS. Since that meeting, it was decided to amend the USFWS contract. The modifications include the tasks for the second year in the contract along with the start date of the third year. The modifications resulted because of an over expenditure into the second year when funding was not yet

available. Steve said they are working on this and he will report back to the RRFF when it is finalized.

Steve Hemstrom noted that per the contract, there is a requirement of a quarterly invoice variance form, which is a summary of the work that has been completed during that timeframe. The contract requires that this form is sent along with a standard invoice. Without the quarterly invoice variance form, an invoice cannot be paid. There are currently two outstanding variance invoice forms needed from USFWS.

Lamprey Passage System Presentation

RD Nelle gave a brief presentation on an experimental adult lamprey passage system recently installed at two locations at Prosser Dam (see Attachment 1). The project is in collaboration with the Bureau of Reclamation and the Yakama Nation. The Bureau owns and manages Prosser Dam.

RD Nelle reported that a telemetry study was conducted in the Yakima River to look at adult lamprey passage rates at the dams. Through a decision-making process, it was decided to test a vertical wet wall lamprey passage system. The vertical wet wall is mostly untested but has worked in a lab environment. RD reported that this experimental system is currently being used at Winchester Dam in Oregon. Something unique about the vertical wet wall system is that it is mobile and can be attached almost anywhere on a dam. RD Nelle reported that a pump is used to water the system.

Steve Hemstrom asked if this system would be used to count lamprey. RD said that this system is currently used to collect lamprey and noted that this was not the only lamprey passage system they would be using. Designs have been completed that include a more traditional lamprey passage system. RD noted that the vertical wet wall system will need to be tested with translocated fish in the future but for now the priority was getting the system installed, seasoned, and tested.

Steve Rainey reported that there have been reports of lower lamprey returns in some areas. RD noted that at some dams it was not lower returns but the lack of lamprey passing at all. Steve Rainey asked if there had been any signs of lamprey using the device. RD said there were no signs at this time. Steve Rainey noted that there are several variables including too much flow that may preclude lamprey movement in the device. RD noted that the intent was simply to get the lamprey passage system installed and running.

Update on Tumwater Feasibility Study

Steve Hemstrom reported that there is no new information to report on the Tumwater Feasibility Study. Steve stated that CH2M Hill is still working on parts of the feasibility study. In addition to the feasibility study, Steve Hemstrom reported that he has been asked to provide an analysis of when lamprey may be present at Tumwater Dam. Knowing when lamprey are present will help determine what flows may be occurring during that time of year. This will be useful for evaluating alternatives. Steve said an internal draft report has been completed, but PUD staff have not had an opportunity to review it.

RD Nelle stated that he could provide telemetry information on the behavior of tagged adult lamprey in the Entiat and Methow rivers to Steve Hemstrom. These data may be useful in completing the biological analysis.

Steve Rainey asked when the draft Feasibility Study report would be available. Steve Hemstrom stated that they are hoping the draft report will be available in January.

RD Nelle asked if modifications were strictly going to be on the fishway or if there is potential for modifications to be done at other locations on the dam. Steve Hemstrom said that some of the alternatives being evaluated are larger in scope than just the fishway. All alternatives will be prioritized based on specific criteria.

Steve Rainey noted that previously it was decided that the RRFF would not be the venue in which to discuss alternatives identified in the Feasibility Study. Steve Hemstrom reported that at this time none of the alternative options have been prioritized. Once that is done, there will be an opportunity to have a discussion about them. Steve Rainey suggested having an ad hoc group discuss the alternatives. Steve Hemstrom stated that it would be good to have a small group review the alternatives and provide feedback to the RRFF so the best product is built.

Action Item:

 RD Nelle will provide Steve Hemstrom with adult lamprey telemetry information from the Methow and Entiat rivers.

VII. Meeting

The next regular meeting of the RRFF is scheduled for Wednesday, 4 January 2017 from 1:00 to 4:00 p.m. in the Chelan PUD First Floor Conference Room.

Attachment 1

Presentation by RD Nelle on Vertical Wet Wall Lamprey Passage System

