

Rocky Reach Fish Forum

Wednesday, 1 June 2016

1:00 – 4:00 p.m.

Chelan PUD Second Floor Conference Room

Wenatchee, WA



Meeting called by Steve Hemstrom

Chairperson, Tracy Hillman

Notes taken by Heidi Kunz

Attending Representatives:

Hemstrom, Steve	Chelan PUD	(509) 661-4281	steven.hemstrom@chelanpud.org
Lewis, Steve	USFWS	(509) 665-3508 x14	stephen_lewis@fws.gov
Padgett, Michael*	ALCOA	(412) 553-4545	michael.padgett@alcoa.com
Verhey, Patrick	WDFW	(509) 754-4324	patrick.verhey@dfw.wa.gov

Attending Participants:

Hillman, Tracy	BioAnalysts	(208) 321-0363	tracy.hillman@bioanalysts.net
Jackson, Chad*	WDFW	(509) 754-4324 X250	chad.jackson@dfw.wa.gov
Keller, Lance	Chelan PUD	(509) 661-4299	lance.keller@chelanpud.org
Kunz, Heidi	Chelan PUD	(509) 661-4757	heidi.kunz@chelanpud.org
Nelle, RD	USFWS	(509) 548-7573	rd_nelle@fws.gov
Rainey, Steve*	Consultant	(503) 260-6990	wsteverainey@aol.com
Truscott, Kirk	CCT	(509) 978-8031	kirk.truscott@colvilletribes.com
Underwood, Alene	Chelan PUD	(509) 661-4364	alene.underwood@chelanpud.org

* Joined via phone.

Meeting Minutes

I. Welcome and Introductions

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

II. Agenda Review

There were no changes or additions to the agenda.

III. Approval of Meeting Minutes

The May meeting minutes were approved with no edits.

IV. Review of 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**
- Steve Hemstrom will write plans for the 2016 Pacific Lamprey PIT tag study. **Ongoing**
- Lance Keller will send out Jamie Crossman's research paper on sturgeon stomach analysis techniques when he receives it. **Complete**
- Steve Hemstrom will complete the lamprey conversion rate analysis. **Ongoing**
- Bob Rose will share their ISRP proposal with the RRFF. **Ongoing**
- Bob Rose will communicate with ISRP regarding using the Entiat watershed as a control. **Ongoing. This will happen when the YN submit their proposal to the ISRP.**
- Steve Hemstrom will submit for review Chelan PUD's proposed tagging study plan to assess dam passage, overwintering, and escapement of adult lamprey into tributaries. **Ongoing**
- Tracy Hillman will provide the RRFF with an agenda for the ASWG Pacific Lamprey Workshop as soon as it is available. **Complete**
- RRFF members will communicate with their HCP Coordinating Committee members if there are problems or concerns with the proposed orifice gate closures at Rocky Reach Dam during August. **Complete**
- Steve Hemstrom will provide the USFWS draft 2015 artificial propagation report to the RRFF. **Complete**

V. White Sturgeon

Juvenile Sturgeon Release

Lance Keller reported on the juvenile sturgeon release for the 2015 brood year from Columbia Basin and Chelan Hatcheries. He stated QA/QC was completed on tag retention and also length and weight measurements were taken before the fish were released. A total of 1,125 fish from Chelan Hatchery were released on 10 May. One third of these fish were released at Gallagher Flats, one third at Daroga, and one third at the Entiat boat launch. A total of 1,125 fish were released from Columbia Basin Hatchery. On 11 May, one third of these fish were released at Gallagher Flats and one third at Daroga. The remaining third was released on 12 May at the Entiat boat launch. Lance reported that the fish from Columbia Basin Hatchery averaged 200 grams per fish, and the fish from Chelan Hatchery were under that mark. The entire 2016 program will be located at Chelan Hatchery.

Larvae and Broodstock Collection

Lance Keller reported that broodstock collection efforts took place downstream from McNary Dam from 16 May through 25 May. This was a joint effort between Chelan and Grant PUDs. The effort resulted in nine females and ten males, which were transported to Marion Drain. One female was returned because of her PI value. Because of adverse conditions at John Day, the fishing guide for the Yakama Nation fished with Chelan PUD downstream from McNary Dam for a few days and was able to add one male and two females to the total number of fish collected. Thus, in total, there were 11 females and 11 males transported to Marion Drain.

Lance stated that Donella Miller, Yakama Nation, successfully completed a 6x6 spawning matrix on 27 May. The eggs from that spawning event are incubating at Marion Drain. The fry will be transported to Chelan Hatchery on 8 June for rearing. Lance reported that because the sturgeon program is smaller than in the past, all rearing can take place at Chelan Hatchery. Lance also said the risks for the spread of white sturgeon iridovirus have been minimized.

Tracy Hillman shared an email message from Bob Rose on behalf of the Yakama Nation, thanking everybody who helped with the spawning effort at Marion Drain on 27 May.

Lance reported that the fish at Marion Drain will be shared with Grant and Douglas PUDs.

Chad Jackson reported on larval collection. He said that contracts have been signed, the gear is ready to go, and evaluation of collection sites has begun. He stated that temperatures this year are similar to 2015; however, stream flows are higher than last year. Collection efforts will begin on 2 or 3 June.

Monitoring Updates

Lance had no updates on white sturgeon monitoring. He hopes to have the three-year monitoring report available to the RRFF for review next week.

Action Item:

- Lance Keller will provide the RRFF with a copy of the three-year White Sturgeon Monitoring Report.

VI. PACIFIC LAMPREY

Rocky Reach Tagging Plan and Contract

Steve Hemstrom reported that the contract between Chelan PUD and Blue Leaf Environmental is complete and has been signed. The contract is for \$68,000 and includes a year of monitoring and reporting. He reported that the study plan is still being prepared. Blue Leaf will help prepare the technical portion of the study plan.

Steve Hemstrom reported that a conference call took place on 31 May among Grant, Chelan, and Douglas PUDs to discuss the coordination of studies in the Mid-Columbia. Douglas PUD would like to obtain adult lamprey for an in-reservoir study. The previous study demonstrated that adult lamprey are not approaching Wells Dam. Steve Hemstrom said there are several requests for adult lamprey this year. Chelan PUD has asked for 225-250 to be collected at Priest Rapids Dam. This is in addition to Grant PUD's need for about 250 adult lamprey and Douglas PUD's request for 50 adults. Mike Clement, Grant PUD, could not confirm that he would be able to capture enough lamprey to satisfy Douglas PUD's request. As a result, Steve Hemstrom proposed that if Chelan can acquire 225 or more lamprey for its study, then Douglas PUD can double tag 50 of Chelan PUD's fish with a VEMCO acoustic transmitter and a FDX PIT tag. These fish would be released upstream from Rocky Reach Dam for Douglas PUD. This release group could provide information that would be useful to both Douglas and Chelan PUDs. That is, these fish can be used to assess reservoir passage as well as approach to Wells Dam. The remaining 175-200 FDX PIT-tagged fish would be released downstream from Rocky Reach Dam. It has not been decided if the 50 fish released upstream from Rocky Reach would be released above or below the Entiat River. Steve reported that the acoustic tags could last for about a year. Patrick Verhey said that the Yakama Nation may have 1,000 adult lamprey available. Steve Hemstrom stated that Chelan PUD prefers to use fish from Priest Rapids, because they minimize introduction of confounding variables in the study.

Artificial Propagation Contracts and Work

Steve Hemstrom reported that Chelan PUD has begun to receive invoices for artificial propagation work. He said he received a report from Abernathy and expects one from the Yakama Nation, but does not have anything exceptional to report to the RRFF as the entire process of getting fish to a size for survival studies will be a long one. Tracy Hillman, referring to a previous presentation on artificial propagation, asked if the artificial propagation work is addressing the feeding bottleneck that has been identified in the early developmental of lamprey. Steve Hemstrom responded that they are working on it, but have not resolved the issue yet. He suggested that this issue could be part of the natural developmental process. Steve Hemstrom indicated that the issue of how many facilities may be required to produce

macrophtalmia for survival studies has not been addressed.

Steve Hemstrom reported that the Conservation Agreement Pacific Lamprey Technical Subgroup recently had a conference call. The group looks at critical uncertainties and threats for Pacific lamprey. The group was unaware of the large number of sturgeon that are being put into the system in this area. The group has identified predation as a critical uncertainty for lamprey, but white sturgeon are not currently listed as a predation threat. Steve Hemstrom stated that there was a natural balance between lamprey and sturgeon at one time, but it is no longer balanced. Steve Hemstrom reported that the group is in the process of developing passage standards.

Action Item:

- The RRFF will send comments on the draft Artificial Propagation report to Steve Hemstrom by 30 June. Tracy Hillman will resend the report to the RRFF.

ASWG Pacific Lamprey Workshop

Tracy Hillman reported that Douglas PUD will host a Pacific lamprey workshop on 8 June in their auditorium. Last week, Tracy sent the workshop agenda to the RRFF.

Tumwater Dam Lamprey Passage Feasibility Analysis

Alene Underwood reviewed the draft memo, *Tumwater Fishway Lamprey Passage Feasibility*. She stated that the memo is a draft and is not a copy of the scope of work with the consultant.

Alene stated that at this time, the right bank (opposite the fish ladder) is not being looked at as a possible location for lamprey passage. Steve Hemstrom explained that working on that side is extremely difficult. Steve Hemstrom commented that during September and October, the left side of the river is a small stream and lamprey will easily be able to find the fishway. Patrick Verhey asked if a telemetry study would be necessary. Steve Hemstrom responded not at this time and stated that as the lamprey approach the project, the left bank has the majority of flow and the other side (right bank) has very little flow. He believes that lamprey will be moving up along the left bank during lower flows. If they do not approach along the left bank, the project is small enough that they can easily make their way towards the fishway within a few days.

Steve Rainey stated that in the Rapid Assessment Report there is some speculation that river hydraulics are prohibitive to lamprey passage in the spring. He stated that the fish would be more likely to approach the right bank in the spring and then be unable to reach the left bank due to turbulence. He doesn't think this would be a problem in the fall. He suggested that a telemetry study would be helpful to evaluate this issue.

Patrick suggested that a telemetry study would be helpful in looking at problems that occur as fish approach the dam and could help provide ideas for other solutions rather than building a lamprey passage structure. Steve Rainey stated that it is not known when or how many adult lamprey are trying

to move upriver into the gorge (Tumwater Canyon). Alene stated that there is turbulence throughout the entire length of the canyon, not just at Tumwater Dam.

Alene confirmed that lamprey passage at Tumwater Dam is not a Rocky Reach issue. Funding for this issue was not addressed in the Rocky Reach Settlement Agreement. Alene stated that Chelan PUD is not necessarily looking for the most cost-effective solution to improve passage. Effective passage is the ultimate goal of the feasibility study.

Alene reviewed the spreadsheet of the project schedule that was provided. Alene explained that the schedule will depend on permitting and the small work window that is available. Typically, the fishway is shut down in December and maintenance is performed in February. Steelhead begin to appear in February, with the numbers increasing in March and April. If needed, issues with the small work window will be addressed in the final stage of the design phase. Alene confirmed that the bid package is just for construction and not for monitoring. She stated that Chelan PUD is committed to an evaluation, but it has not been scoped at this time.

Steve Rainey suggested that if an evaluation was done first, the engineering could cater more towards specific behavior. Patrick stated that at this time there is an assumption of no passage because there is no evidence of passage. He stated that the PIT-tagged fish that will be released in 2016 will provide some level of baseline information on lamprey passage.

Alene commented that the timing of the monitoring is flexible and will depend on the results of the feasibility study, but that Chelan PUD is committed to doing monitoring. Alene stated that there is a possibility that more arrays will be installed including one near the entrance to the fishway. Chelan PUD will consider PIT tagging as well as other monitoring options.

Tracy Hillman asked if there were any updates on lamprey that the Yakama Nation released into the fishway. Alene replied that they have not been detected upstream and all have moved downstream. The fish that were released upstream from the dam have not been detected upstream.

Steve Rainey suggested that the fish should have been acclimated before they were released. Steve Hemstrom commented that there will be about 500 PIT-tagged lamprey close to the Wenatchee River. Those fish will be acclimated. The intent of the study is to get an estimate of how many fish want to go into the Wenatchee River. Chelan PUD's 2016 lamprey passage study has nothing to do with Tumwater Dam specifically. Steve Hemstrom commented that the PIT-tag study could be done for three years and will give good information on escapements into the Wenatchee River. The number could affect decisions on how to move forward with fishway modifications at Tumwater Dam. Steve Rainey commented that it would be helpful to study the movement of fish that are released in the lower Wenatchee River.

Alene stated that the feasibility study will simply look at the best way to get fish over Tumwater Dam. Information on escapement rates into the Wenatchee River will be considered as they become available.

Alene stated that the concrete on the right bank has been assessed annually through Chelan PUD's Dam

Safety Program.

Steve Hemstrom commented that he would like to see more fish translocated upstream of Tumwater Dam for the purpose of spawning and establishing a pheromone signal.

Action Item:

- Alene Underwood will send electronic copies of the memo, *Tumwater Fishway Lamprey Passage Feasibility* and the project schedule to Tracy Hillman for distribution to the RRFF.
- Steve Hemstrom will provide stream width data for the Wenatchee River near Tumwater Dam.
- Chelan PUD welcomes comments on the *Tumwater Fishway Lamprey Passage Feasibility* schedule.

VII. General Notification – Notification to FERC: Permanent Suspension of Reserved Plan to Install Small Turbine Units in Rocky Reach Fishway Attraction Water System

Lance Keller explained that in March 2001, FERC issued an order to its licensees to find opportunities to increase generation at licensed hydropower projects to address the western US power crisis occurring at the time. The idea was to boost generation through the use of micro-turbines. Instead of installing micro-turbines, Chelan PUD boosted generation through rehabbing the turbines at Rocky Reach and Rock Island dams. Therefore, Chelan PUD has no plans to install micro-turbines. Chelan PUD is filing a letter with FERC to cancel the installation of micro-turbines. This will be a permanent suspension.

VIII. Next Meeting

The next regular meeting of the RRFF is scheduled for Wednesday, 6 July 2016 from 1:00 to 4:00 p.m. in the Chelan PUD Second Floor Conference Room.