

Rocky Reach Fish Forum

Wednesday, 3 August 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
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:

Connell, Meaghan	Chelan PUD	(509) 661-4757	meaghan.connell@chelanpud.org
Hillman, Tracy	BioAnalysts	(208) 321-0363	tracy.hillman@bioanalysts.net
Keller, Lance	Chelan PUD	(509) 661-4299	lance.keller@chelanpud.org
Kunz, Heidi	Chelan PUD	(509) 661-4757	heidi.kunz@chelanpud.org
Miller, Donella*	YN	(509)945-0132	mild@yakamafish-nsn.gov
Zimmerman, Breean	ECY	(509) 575-2808	Breean.zimmerman@ecy.wa.gov

* Joined via phone.

Draft Meeting Minutes

I. Welcome and Introductions

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

II. Agenda Review

The agenda was reviewed and approved with two additions. Tracy Hillman added a group discussion on a questionnaire sent to Forum members by Paul Anders with Cramer Fish Sciences. Responses to the questionnaire will help Paul and others prepare a presentation titled, “25 Years of White Sturgeon Hatcheries in the Columbia Basin: A Retrospective.” Paul will give the presentation at the 2016 Annual Meeting of North American Sturgeon and Paddlefish Society in Hood River, Oregon. Steve Hemstrom added an update on the Tumwater Dam Lamprey Passage Feasibility Study.

III. Approval of Meeting Minutes

The July meeting minutes were approved with one edit.

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 complete the lamprey conversion rate analysis. **Ongoing**
- The RRFF will send comments on the three-year White Sturgeon Monitoring Report to Lance Keller by 29 July 2016. **Completed**
- The RRFF will send comments to Steve Hemstrom on the dam passage and tributary escapement study by 11 July 2016. **Completed**
- Steve Lewis will provide the finalized meeting minutes from the ASWG Pacific Lamprey Workshop. **Complete. Tracy Hillman sent the final notes to the RRFF.**
- Alene Underwood will provide the RRFF with a revised copy of the Tumwater Dam Lamprey Passage Feasibility Study. **Ongoing**
- Tracy Hillman will provide an agenda and meeting location for the Pacific Lamprey Subgroup, which will convene on Thursday, 4 August from 9:00 am to 4:00 pm. **Completed**
- Steve Hemstrom will provide the meeting minutes from the Pacific Lamprey Technical Work Group to Tracy Hillman for distribution to the RRFF. **Completed**

V. White Sturgeon

Juvenile Rearing

Lance Keller reported that there were no updates on juvenile rearing at the Chelan Hatchery. Lance will have an update next month.

Larvae Collection

Patrick Verhey reported that the catch per unit effort (CPUE) for larvae sampling within Bonneville and The Dalles pools was 0.100 and 0.059 larvae per hour, respectively. The total CPUE was 0.090 larvae per hour (see table below). This resulted in a total catch of 268 larvae, which is not enough to support a supplementation program.

Sampling effort				White sturgeon catch					
				Free embryos		Early larvae		Total	Catch / hour
Set type	# of days or nights	Set duration	Live	Dead	Live	Dead			
Bonneville									
53 daytime sets	10	mean	14.5 hrs						
101 overnight sets	20	range	(5.7-49.7) hrs	—	—	—	—	—	—
154 total sets		total	2,233.5 hrs	31	3	177	13	224	0.100
The Dalles									
17 daytime sets	4	mean	15.9 hrs						
30 overnight sets	10	range	(6.2-25.0) hrs	—	—	—	—	—	—
47 total sets		total	747.6 hrs	5	3	34	2	44	0.059
Combined									
70 daytime sets	10	mean	14.9 hrs						
131 overnight sets	20	range	(5.7-49.7) hrs	—	—	—	—	—	—
201 total sets		total	2,981.1 hrs	36	6	211	15	268	0.090

Patrick said that Brad James, WDFW, did not think this was a good year for sampling as river conditions were similar to last year, but Brad is optimistic for next year. Tracy Hillman noted that during the PRFF meeting in the morning, Jason McLellan indicated that an earlier start to collection would be appropriate. When asked about the fate of the 268 larvae collected, Patrick said he did not know, but indicated that WDFW is preparing a report that will have more detail.

Donella Miller reported that the Yakama Nation was able to collect about 10-40 larvae per day, but was unable to collect enough larvae to support a supplementation program. All of the fish captured by the Yakama Nation were sent to CRITFC for DNA sampling. Donella noted that the collection began earlier this year with efforts beginning 10 days after water temperatures reached 14°C. Donella stated that their ability to capture larvae was affected by boat and barge traffic, similar to past years.

Update on Monitoring

Lance Keller reported that Blue Leaf Environmental is preparing to conduct their mark-recapture monitoring work in September.

Lance reported that they conducted their second round of diet sampling during 17 July 2016 through 19 July 2016. Sampling efforts were conducted throughout the reservoir. Lance said that they experienced a higher catch rate than during the first round. In general, sturgeon appeared to eat a wide variety of prey. Stomach samples were sent to a lab for analyses.

Tracy Hillman asked if any sturgeon were sacrificed to compare actual stomach contents with gastric lavage techniques. Lance said no fish were sacrificed. In the future, lethal sampling may be considered by the RRF. Lance said the third round of diet sampling is planned for October and the fourth will be between January and February. Lance indicated they are interested in documenting seasonal diet changes.

Patrick Verhey reported that Grant PUD collected a six-foot sturgeon during daytime electrofishing (as part of their northern pikeminnow program). Because the fish died, Grant PUD sampled its stomach contents and found 125 fully intact and about 30 partially digested juvenile lamprey consisting of at least three different age classes. The sturgeon did not appear to be tagged.

Comments on the Three-Year Monitoring Report

Lance Keller reported that they received no comments on the three-year monitoring report titled, *“Rocky Reach Reservoir White Sturgeon Indexing and Monitoring Program, Initial Phase (2012-2015).”* The report will be finalized.

Questionnaire on White Sturgeon Hatchery Programs in the Columbia Basin

Lance Keller said that Chelan PUD is working with WDFW on responding to the questionnaire sent from Paul Anders. The RRF asked Tracy Hillman to respond to the last three questions and provide those responses to Lance. Chelan PUD will then distribute their responses to the RRF for review before sending it back to Paul.

Action Item:

- **Tracy Hillman will respond to the last three questions in the questionnaire and provide those responses to Lance Keller.**
- **Lance Keller will send Tracy Hillman draft responses to the questionnaire for distribution to the RRF.**

VI. PACIFIC LAMPREY

Update on Adult Lamprey Tagging at Priest Rapids Dam

Steve Hemstrom reported that Chelan PUD is transporting 41 adult lamprey from Priest Rapids Dam to Kirby Billingsley Hydro Park. The 41 adults are FDX PIT-tagged and will be released today.

Steve Hemstrom said that Grant PUD has completed their tagging of 225 adult lamprey and are currently trapping adults for the Chelan and Douglas PUDs studies. Chelan PUD's goal is to tag and release up to 250 adults and Douglas PUD's goal is tag and release 50 adults. Once 75% of Chelan's fish are captured, Grant will begin trapping adults for Douglas PUD. Steve Hemstrom stated the later capture and release of adults for the Douglas study may comport better with the run timing of adults to Wells Dam.

Final 2016 Lamprey Passage Monitoring Study Plan

Steve Hemstrom reported that he received comments on the Study Plan, *A Monitoring Study to Quantify Dam Passage and Tributary Escapement of Adult Lamprey in the Rocky Reach Project Area and the Mid-Columbia River* and has responded to those comments. The Plan was finalized and sent to the RRF.

Closure of Rocky Reach Orifice Gates

Lance Keller discussed the closure of six of the orifice gates (OGs) at Rocky Reach Dam to improve entrance differentials (water height) at the right powerhouse entrance. This was brought to the HCP Coordinating Committee as being a fish passage issue and it was recommended by Bob Rose to inform the RRF of the closure because of the ongoing lamprey efforts that are associated with Rocky Reach. The SOA to close the gates in August was approved by the HCP Coordinating Committee on 26 July 2016 and it was estimated that all six OGs will be closing by the end of the week. Fish counts will be monitored and compared to the daily fish counts over the past five years to see if there are any differences in fish counts with the gates opened or closed. Lance said that if there is an issue, or if there are comments regarding the closure, they can be brought to an HCP Coordinating Committee member.

Steve Lewis asked if the OGs would be opened if it were determined the closures caused a delay in fish migration. Lance said that if a member of the HCP Coordinating Committee believes a delay is occurring, the Committee would reconvene to discuss next steps, which could include opening the OGs.

Location of Adult Lamprey Released into the Wenatchee River

Before reporting on the lamprey released into the Wenatchee River, Steve Hemstrom noted that Ralph Lampman, Yakama Nation, had sent an email to the RRF that included similar information.

Steve Hemstrom reported that one fish released downstream from Tumwater Dam was subsequently detected at Rocky Reach Dam. Steve Hemstrom noted that the fish had not yet been detected in the Entiat. It is unknown if the fish traveled 1 km upstream to Tumwater Dam because there are no

detectors at the entrance of the fishway.

Steve Hemstrom discussed a comment Ralph made in his email regarding a fish being detected at the trap. This comment was clarified as referring to the top of the ladder. This fish was not detected again after that point. Steve Hemstrom also clarified a comment in Ralph's email regarding the Weir-15 PIT antenna blocking fish. Steve Hemstrom said the PIT antenna surrounds the orifice, but it is unknown if the antenna interferes with fish passage.

Tracy Hillman stated that an adult lamprey that remained undetected for about a year was recently detected at Rock Island Dam. Lance Keller said this fish was released at Vantage on 24 July 2015 and remained undetected until 25 July 2016, when it was detected at Rock Island Dam and then on 31 July 2016 in the Wenatchee River. Steve Hemstrom said that with over 500 PIT-tagged lamprey in the system, there should be enough detections to describe lamprey movement over the next 1 to 2 years.

Steve Hemstrom reported that most of the adult lamprey released by the Yakama Nation in the Wenatchee River have not been detected. He said this emphasizes the need for long-term monitoring.

Tracy Hillman reported that Ralph Lampman sent an email to the RRF stating that the Yakama Nation plans another release of about 210 adult lamprey into the Wenatchee River. These fish will be released at seven different locations between mid-August and mid-September.

Tumwater Passage Feasibility Analysis

Steve Hemstrom reported that the entrance to the Tumwater fishway does not have PIT-tag antennas. He said Chelan PUD will install antennas at both the Tumwater entrances used for the fishway, and at Weir 2. This will help detect fish inside the entrance.

Steve Hemstrom reported that he met with CH2M Hill and two Chelan PUD engineers, who will be assisting with the Tumwater Dam Passage Feasibility Analysis. At least four alternatives were identified. One of the alternatives includes the right bank; however, the infrastructure on the right bank does not appear to lend itself as a good alternative. In addition to infrastructure issues, the engineers also noted that an exit along the right bank will put fish in a position where they may fallback over the dam. Steve Hemstrom said that all alternatives will continue to be evaluated and he was very encouraged from the meeting.

Steve Lewis asked about the other alternatives. Steve Hemstrom said the alternatives included (1) lamprey passage structure within the fishway just under the gratings, (2) a right-bank passage structure, (3) modifications to the existing fishway, and (4) passage structure attached to the outside of the fishway. Steve Hemstrom said that there are multiple criteria that are being evaluated. Some of those include water sources, power source, ease of building, debris removal, and more. Steve Hemstrom said that they will be meeting again next week to discuss what has been evaluated.

Reminder: Pacific Lamprey Subgroup Meeting

Tracy Hillman reminded the RRF that the Pacific lamprey subgroup will meet on Thursday, 4 August from 9:00 am to 4:00 pm at Grant County PUD.

VII. Next Meeting

The next regular meeting of the RRF is scheduled for Wednesday, 7 September 2016 from 1:00 to 4:00 p.m. in the Chelan PUD Second Floor Conference Room.