

Rocky Reach Fish Forum

Wednesday, 1 February 2017

1:00 – 4:00 p.m.

Chelan PUD First Floor Conference Room

Wenatchee, WA



CHELAN COUNTY

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
Rose, Bob*	YN	(509) 865-5121	rosb@yakamafish-nsn.gov
Verhey, Patrick	WDFW	(509) 754-4324	patrick.verhey@dfw.wa.gov
Zimmerman, Breean*	WDOE	(509) 575-2808	Breean.zimmerman@ecy.gov

Attending Participants:

Connell, Meaghan	Chelan PUD	(509) 661-4757	meaghan.connell@chelanpud.org
Gottbrecht, Katja	Chelan PUD	(509) 661-4757	katja.gottbrecht@chelanpud.org
Hillman, Tracy	BioAnalysts	(208) 321-0363	tracy.hillman@bioanalysts.net

* 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 with the addition of a discussion on bull trout.

III. Approval of Meeting Minutes

The January meeting minutes were reviewed and approved with one edit.

IV. Review Action Items

- 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. **Completed**
- Steve Hemstrom will follow up with Ralph Lampman about the tag detections for the 170 lamprey released in August and September downstream from Tumwater Dam. **Ongoing**
- RD Nelle will provide Steve Hemstrom with adult lamprey telemetry information from the Methow and Entiat rivers. **Ongoing**
- Lance Keller will update the Forum via email on the total number of juveniles transferred from Wells Hatchery to Chelan Hatchery. **Completed**
- Steve Hemstrom will contact the Army Corps of Engineers to see if they have examples of loss in distribution vs loss from mortality for adult lamprey or a similar fish. **Ongoing**
- Steve Lewis will talk to RD Nelle about available data on natural mortality rates for adult lamprey. **Ongoing**
- Steve Hemstrom will find out the number of adult lamprey recovered during fishway dewaterings in previous years. **Ongoing**
- Steve Hemstrom will check with Alene Underwood on the timeline for the Tumwater Dam feasibility analysis and reporting. Report delayed due to contractor. **Ongoing**
- Tracy Hillman will talk to John Ferguson (Chair of the ASWG) about the possibility of holding a Lamprey Workshop in 2017. **Completed**
- Steve Lewis will send an email to Steve Hemstrom requesting a meeting to discuss additional items regarding bull trout passage at Rocky Reach Dam. **Completed**

V. White Sturgeon

Juvenile Rearing

On behalf of Lance Keller, Tracy Hillman reported that the transfer of juvenile sturgeon from Wells Hatchery to Chelan Hatchery took place on Tuesday, 10 January 2017. In total, Chelan Hatchery now has 2,361 juvenile sturgeon on station (see table below). This is more than enough to meet the stocking goal of 2,250 juveniles into the Rocky Reach Reservoir in 2017. The release is scheduled for April 2017.

Size Information for Juvenile Sturgeon at Chelan Hatchery (01/26/17)		
Tank Number	Number of Juvenile Sturgeon	Fish per Pound (FPP)
1	251	5.65
2	657	14.00
3	576	22.90
4	577	22.90
B1	150	41.20
B2	150	35.50
Total:	2,361	--

Workshop for Policy

Tracy Hillman reported that Lance Keller suggested having a half-day workshop with the Policy Committee to discuss results from sturgeon monitoring efforts since the implementation of the sturgeon SOA last year. The SOA stipulates the release number and monitoring efforts over a five-year period. Tracy said that Lance would like to provide this information to the Policy Committee annually.

Steve Lewis suggested updating the Policy Committee on sturgeon monitoring efforts during the annual Licensing Policy Committee Meeting rather than scheduling a separate Policy Committee meeting for sturgeon only. Steve Hemstrom was not sure if this level of information was discussed during the Licensing Policy Committee Meeting, but will check to see if this would be appropriate.

Action Item:

- **Steve Hemstrom will talk to Alene Underwood and Michelle Smith about the annual policy meeting and if an update on sturgeon monitoring could be presented at that meeting.**

VI. PACIFIC LAMPREY

Pacific Lamprey NNI Estimation

Tracy Hillman reported that the RRFF and Priest Rapids Fish Forum (PRFF) joint Pacific Lamprey Subgroup Meeting will be held on Thursday, 23 February from 9:00 am to 4:00 pm. The meeting will be held in the Grant PUD Conference Room in Wenatchee. Tracy will send out the agenda for the Pacific Lamprey Subgroup Meeting.

Natural Mortality Rates

Steve Lewis reported that he has been unable to reach RD Nelle about available data on natural mortality rates for adult lamprey.

Rocky Reach Fishway Dewatering

Steve Hemstrom reported that the dewatering of the Rocky Reach fishway is complete. During the dewatering process, 20 adult lamprey were recovered in the lower fishway and 154 adult lamprey were recovered in the upper fishway. Fishway attendants reported that when the fishway began to dewater, they observed fish dropping back down through the fishway and ultimately ending up in the lower fishway. The fish that were recovered during Rocky Reach dewatering were not included in the total count this year because they did not pass the fish window. All fish recovered were released into the Rocky Reach forebay.

It was reported during the January meeting that the lower fishway section where the fish were collected contained 1-inch grating. Steve Hemstrom indicated that the three areas within the fishway containing 1-inch grating have now been replaced with $\frac{3}{4}$ -inch grating. Steve Hemstrom noted that there is one additional area with 1-inch grating that is being reviewed for replacement with $\frac{3}{4}$ inch grating, but no fish were recovered there.

Steve Hemstrom reported that one of the 174 lamprey recovered in the fishway had an acoustic and PIT tag. This fish was tagged by Grant PUD and was last detected in August 2017 at Priest Rapids Dam.

Patrick Verhey asked about the possibility of PIT-tagging lamprey recovered in the fishway during dewatering. Steve Hemstrom stated that PIT-tagging of adult lamprey recovered in the fishway is not done because the goal is to quickly recover and relocate the fish. In addition, there would need to be a clear study plan associated with the tagging effort. Patrick agreed and said that the benefit would have to be clear and a study would need to be put together. Steve Hemstrom said that this could be discussed in the future. Steve Hemstrom noted that it is his opinion that the lamprey that enter the fishway later in the year may be choosing to overwinter there.

Steve Lewis asked if the 174 fish recovered this year represented a typical recovery number. Steve Hemstrom suggested looking at the recovery efforts pre- and post-2011 fishway improvements. Patrick noted that the fishway improvements could be a useful metric for evaluating passage success.

Patrick asked if there are predators such as sturgeon in the Rocky Reach fishway that may affect lamprey passage success and survival. Steve Hemstrom stated that this a known problem in fishways at other Projects, but will follow up with Thad Mosey about the possible presence of sturgeon in the Rocky Reach fishway.

Action Items:

- **Steve Hemstrom will talk to Thad Mosey to see if sturgeon have been observed in the fishway at Rock Island and Rocky Reach dams.**
- **Steve Hemstrom will check about the possibility of a RRF tour of the Rocky Reach fishway.**
- **Steve Hemstrom will provide pictures (if available) to Steve Lewis of the new, ¾-inch grating recently placed in the Rocky Reach fishway.**

Adult Lamprey Travel Times

Steve Hemstrom gave an update on Chelan PUD's 2016 Rocky Reach Pacific Lamprey PIT-Tag Passage and Escapement Study. This includes detections and migration rates for all adult lamprey released at Kirby Billingsley Hydro Park in August 2016. Steve shared the following items, which were provided in a memo to the Forum.

Detection and Migration Rate Stats for PIT Tagged Lamprey as of December 31, 2016

1. 211 PIT-tagged lamprey were released at Kirby Billingsley Hydro Park (KBHP), 2 August to 17 August,
2. KBHP is at RM 461.8, 11.9 miles below Rocky Reach Dam; Wenatchee confluence is at RM 468.5, 6.7 miles above KBHP.
3. 169 of the 211 tagged lampreys have been detected; 42 remain undetected.
4. 78.9% (150/190) right-bank released fish detected, 90.5% (19/21) left-bank fish have been detected.
5. 77.7% (164/211) of all PIT-tagged lampreys have been detected at Rocky Reach.
6. 99.4% (163/164) of all PIT-tagged lampreys detected at Rocky Reach Dam have successfully passed Rocky Reach.
7. For 144 right-bank detected fish at Rocky Reach, median/mean travel times to fishway exit were 5.7 and 8.0 days, respectively.
8. For 19 left bank-fish detected fish at Rocky Reach, median/mean travel times to fishway exit were 3.3 and 5.1 days, respectively.
9. A total of 5 tagged lampreys were first and last detected within the Wenatchee River in 2016.
10. No lampreys were first detected at Rocky Reach Dam, but later in the Wenatchee River.
11. No lampreys have been detected in the Entiat River thus far.
12. For Wenatchee detected lamprey, travel times from release to detection ranged from 0.5 to 13.5 days, median 0.6 days.
13. One lamprey was detected in the Chewuch River in the Methow Basin.

14. For the Chewuch lamprey, its travel time from release to first detect in Wells Dam fishway was 18.5 days.
15. For the Chewuch lamprey, travel time from release to first detect in the Chewuch River (113.5 miles) was 32.6 days.
16. As of December 31, 2016, 97.2% of tagged lampreys may be overwintering in mainstem or tributaries below antennas.

Steve Hemstrom reported that of the 211 adult lamprey that were tagged, five are in the Wenatchee and one is in the Methow; however, their current whereabouts in those systems is unknown at this time.

Steve Lewis asked if there was a way to assess “drop back” within certain sections of the fishway. Steve Hemstrom reported that this is difficult to do, but very short travel times would indicate that this is not an issue at this time. Steve Lewis noted that this was brought up before to find problem areas within the fishway, e.g., issues with grating. Steve Lewis noted that even though a fish passes successfully, it would be good to know if there are any obstacles within the fishway that could be eliminated or minimized. Steve Hemstrom noted that of the fish recovered in the gratings, most were observed by fishway attendants to be dropping back down the fishway because of the dewatering effect, not because of “fall back” or “drop back.” Steve Lewis agreed but noted that there is always room for improvement. Steve Hemstrom will talk to Blue Leaf on the accessibility of data for sequential upstream then downstream PIT-tag detections.

Steve Hemstrom asked Bob Rose and Steve Lewis if they are aware of any other dams on the Columbia River that have a passage success equal to or better than Rocky Reach Dam, where 163 of 164 tagged fish passed successfully. Bob Rose noted that this is the highest he is aware of and it would be interesting to see if this rate is consistent at Rocky Reach Dam over the next few years.

Action Item

- **Steve Hemstrom will talk to Blue Leaf on sequential in-fishway PIT-tag detections at Rocky Reach to see if drop-back is occurring within the fishway.**

Update on Adult Lamprey PIT-Tagging Study Report

Steve Hemstrom reported that he should have the Draft 2016 PIT-tag Study Report from Blue Leaf by late February 2017.

Regional Lamprey Workshop

Tracy Hillman reported that he spoke with John Ferguson, chair of the Aquatic Settlement Work Group, about the suggestion to convene a Lamprey Workshop to discuss the results from all the lamprey tagging within the upper Columbia. The purpose would be to examine the behavior, movement, and distribution of all the lamprey tagged in the Upper Columbia. This would be conducted at a large spatial scale, not just at the project scale. Tracy said that John Ferguson agreed that a workshop would not be fruitful if the analysis and discussion is restricted to the project scale. Tracy noted that members of the

Forums and ASWG have indicated that unless an analysis is conducted at a larger spatial scale, there is no need to convene a workshop at this time.

Because Mike Clement, Grant PUD, initiated the idea of a lamprey workshop, Tracy Hillman will follow up with Mike about his thoughts on moving the workshop forward. Bob Rose noted that this recommendation is larger than just a workshop to discuss lamprey tagging results. He said there are additional conversations to be had regarding coordination and how coordination will occur. Tracy Hillman noted that last year the ASWG put on a lamprey workshop to coordinate activities among the groups. Another similar workshop may be needed. Tracy agreed to discuss this with John Ferguson and the PRFF.

Action Item

- **Tracy Hillman will discuss with John Ferguson and Mike Clement the possibility of a joint RRFF, PRFF, and ASWG Pacific lamprey coordination meeting.**

VII. Bull Trout Passage Rocky Reach Dam

Steve Hemstrom reported that a 10-year bull trout radio-telemetry check-in study will begin in 2018. Steve Lewis stated that the USFWS would like to meet with Chelan PUD to discuss additional objectives and options for the 2018 bull trout study plan. Steve Hemstrom asked Steve Lewis what objectives in the 2008 study plan he would like to modify. Steve Lewis stated that he would like to minimize the number of fish that may suffer tagging and study effects, with the understanding that there are requirements within the Rocky Reach FERC license to satisfy. Steve Hemstrom noted that he is open to small changes that lessen the effect on fish and fish passage, but he does not want to change the study so significantly that the results cannot be reliably and consistently compared with results from the 2008 study. Steve Lewis agreed but noted that he would like to have a discussion on ways to be creative with the study plan. Steve Lewis and Steve Hemstrom will coordinate a meeting to discuss the upcoming 2018 bull trout passage study at Rocky Reach Dam.

VIII. Meeting

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