Rocky Reach Fish Forum
Wednesday, 6 June 2018
1:00 – 4:00 p.m.
Chelan PUD Second Floor Conference Room
Wenatchee, WA



Meeting called by Steve Hemstrom Notes taken by Heidi Kunz Chairperson, Tracy Hillman

Attending Representatives:

Hemstrom, Steve	Chelan PUD	(509) 661-4281	steven.hemstrom@chelanpud.org
Lampman, Ralph*	YN	(509) 388-3871	lamr@yakamafish-nsn.gov
Lewis, Steve	USFWS	(509) 665-3508x14	stephen_lewis@fws.gov
Truscott, Kirk	CCT	(509) 978-8031	kirk.truscott@colvilletribes.com
Verhey, Patrick*	WDFW	(509) 754-4624	verhepmv@dfw.wa.gov

Attending Participants:

Hillman, Tracy	BioAnalysts	(208) 321-0363	tracy.hillman@bioanalysts.net
Jackson, Chad*	WDFW	(509) 754-4624x250	chad.jackson@dfw.wa.gov
Keller, Lance	Chelan PUD	(509) 661-4299	lance.keller@chelanpud.org
Kunz, Heidi	Chelan PUD	(509) 663-8121	heidi.kunz@chelanpud.org

^{*} 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 meeting agenda was reviewed and approved with the following additions:

- Pacific Lamprey Rapid Assessment at Dryden Dam (Steve Lewis)
- Update on the Tribes' Pacific Lamprey Master Plan (Ralph Lampman)
- July RRFF meeting (Tracy Hillman)

III. Approval of April Meeting Minutes

The April RRFF meeting minutes were reviewed and approved with one edit.

IV. Review Action Items

- USGS will send a short paper to the RRFF providing guidance on studying the effects of Triclopyr TEA on Pacific lamprey. Ongoing
- Ralph Lampman will suggest studies on the effects of Triclopyr TEA on Pacific lamprey ammocoetes. Ongoing
- Kirk Truscott will ask Jason McLellan (CCT) for feedback on the use of PIT-tags to document bull trout interactions with hydroelectric projects. Complete. Jason supports the use of PIT tags.
- Lance Keller will send the 2017 draft Annual M&E report to Tracy Hillman, who will forward it to the RRFF for review. Ongoing
- Kirk Truscott will check with Jason McClellan regarding discontinuing the winter diet survey
 and adding another diet survey later in the year. Complete. Jason supports discontinuing
 the winter diet survey and adding another survey later in the year.
- Patrick Verhey will check with Chad Jackson regarding discontinuing the winter diet survey and adding another diet survey later in the year. Complete. Chad supports discontinuing the winter diet survey and adding another survey later in the year.

- RD Nelle will check with Steve Lewis regarding discontinuing the winter diet survey and adding another diet survey later in the year. Complete. Steve supports discontinuing the winter diet survey and adding another survey later in the year.
- Alene Underwood will provide the responses to comments to Tracy Hillman by the end of the week. Tracy will then distribute the responses to the RRFF. Complete
- Tracy Hillman will send to the RRFF the Watershed Science and Engineering response memo, the 2013 Alternative Analysis report, and a compilation of Forum discussions on the Twenty-Five Mile Creek project. Complete

Steve Lewis asked about the status of Triclopyr TEA treatments in Rocky Reach Reservoir. Steve Hemstrom responded that the harvester would be used first. He stated that he has not received any notifications within Chelan PUD that Triclopyr TEA will be used in 2018.

Steve Lewis asked about the status of Rock Island Dam relicensing efforts. Steve Hemstrom responded that Chelan PUD does not yet have a timeframe for external engagement. Initial discussions on the timeframe have taken place internally. The current license expires in 2028.

Action Item:

 Steve Hemstrom will contact Marcie Clement about the use of Triclopyr TEA in the Rocky Reach Project Area.

V. White Sturgeon

Broodstock Collection

Lance Keller reported that the collaborative effort between Chelan PUD, Grant PUD, and the Oregon Department of Fish and Wildlife (ODFW) to capture adult white sturgeon downstream from McNary Dam began on 14 May and ended on 27 May. Lance Keller said that six males and six females were captured and delivered to Donella Miller at Marion Drain. A total of 15 males and 11 females were collected, tagged, and released as part of ODFW's tagging study. Lance reported that the collaborative effort was successful. Donella Miller will attempt to spawn five females and five males on 7 June. One female is not yet ripe. Progeny from this spawning (brood year 2018) for Chelan PUD will be reared at Columbia Basin Hatchery in Moses Lake.

Juvenile Rearing and Proposed Release

Lance Keller reported that there are currently 2,257 fish on station at Chelan Falls Hatchery that are PIT-tagged and ready for release next week. The fish average about 8.48 fish/pound, which is smaller than desired. Some improvements were made to the facility between brood years 2016 and 2017, but there are limitations on water temperature and infrastructure at Chelan Falls Hatchery. Production (2018)

brood) will be moved to the Columbia Basin Hatchery until those issues at Chelan Falls Hatchery can be addressed. The fish will have a higher probability of reaching 200 grams at Columbia Basin Hatchery.

Lance reported that the juvenile sturgeon will be released into Rocky Reach Reservoir next week. They tested negative for white sturgeon iridovirus. Chelan PUD also verified the fish had been PIT-tagged and they collected representative weights and lengths on the fish. The information will be uploaded to PTAGIS. Lance indicated that at about 8.48 fish/pound, the fish are below the target of 200 grams.

Lance stated that there are some fish over 200 grams, several between 100-200 grams, and some below 100 grams. Some feed switches were made between brood years 2016 and 2017. Improvements were also made to the program, but it was not enough, so the program will be moved to Columbia Basin Hatchery where 200-gram fish have been produced in previous years. A remodel of Chelan Falls Hatchery is in the planning stages. Lance has asked for a sturgeon facility with biosecurity built in as well as other improvements, which could eventually bring the sturgeon program back to Chelan Falls Hatchery.

Lance stated that no fish were tagged with acoustic tags this year.

M&E Update and Diet Surveys

Lance Keller reported that Corey Wright with Blue Leaf Environmental conducted a three-day diet collection effort on 25-27 April. Only one sturgeon was caught. Corey attributed the low catch per unit effort to high river flows during the end of April. The 2018 M&E effort will begin at the end of August. Additional diet surveys are scheduled for 25-27 June and at the end of August and October. There will be four separate surveys conducted this year.

Steve Lewis asked if there will be any larval collection in the near future. Lance responded that he does not know the status of larval collection for this year. Lance believes the combined broodstock collection effort that took place this year was a positive effort overall and could continue in 2019. Lance believes Chelan PUD will continue to use hook-and-line as opposed to set line to capture broodstock because hook-and-line minimizes stress on the fish.

Steve Hemstrom stated that Grand Coulee Dam has been spilling up to 50,000 cubic feet/second this year. Kirk Truscott expects Grand Coulee Dam to continue to spill in future years due to long-term maintenance that is taking place there. Steve Hemstrom asked if there is a source for details on the maintenance and spill schedule at Grand Coulee Dam. Kirk Truscott said he will try to find a source for that information.

Lance Keller stated that Donella Miller will attempt to do an additional 1x5 spawning effort later this month. If successful, Columbia Basin Hatchery will have capacity for that effort.

Action Item:

• Kirk Truscott will provide Lance Keller and Steve Hemstrom with a contact who can provide information on the long-term maintenance schedule at Grand Coulee Dam.

VI. Pacific Lamprey

2017 Rocky Reach Lamprey Passage Report Update

Steve Hemstrom reported that there is no new information to report. There were no additional new detections at Rocky Reach Dam and no notable detections in the tributaries in April. Steve Hemstrom would like to have a Draft Report of the 2017 Rocky Reach lamprey passage study to the RRFF by 31 July. The draft will be a combined report, which will include results from the 2016 and 2017 lamprey passage studies at Rocky Reach Dam. Comments from the RRFF will be due back to Chelan PUD by 31 August. The final report would be released on 30 September 2018.

Kirk Truscott asked how the report would include all of the movement information from the 2017 released fish if it is completed by 31 July. Steve Hemstrom responded that queries will be run at the end of June and into July, which should include most of the movement at Rocky Reach. Ralph Lampman agreed that movement in the mainstem should be done by June. Steve Hemstrom stated that if there are late detections, the report may be pushed back a few weeks and the RRFF would be notified.

Steve Hemstrom would like the combined report to provide the individual year and combined year Rocky Reach passage rates and escapement rates for the two-year study period. Three total years of detections (including 2016, 2017, and 2018 detections and fish movements) will be included in the draft report. As requested by the Yakama Nation and WDFW, the report will also include a description of the study objectives that were achieved.

Action Item:

• Steve Hemstrom will submit the Draft combined Rocky Reach Pacific Lamprey Passage Report to the RRFF on 31 July.

Yakama Nation Translocation Efforts

Ralph Lampman would like to move Pacific lamprey from Priest Rapids Dam to locations upstream from Tumwater Dam on the Wenatchee River. He will submit a draft translocation plan to the RRFF next week. He would like to have a discussion about the best location to release the fish.

Kirk Truscott said he will take a look at the plan after it has been submitted. He would like to continue to put fish in the Okanogan. He reported that heavy flows this spring damaged existing PIT-tag arrays in the mainstem, particularly the lower Okanogan River array.

Tracy Hillman suggested coordinating with Mike Clement at Grant PUD. Tracy reported that Grant PUD will be trapping for three weeks (five days per week) beginning in early August. That timeframe could shift slightly depending on the migration timing of adult lamprey. Grant PUD will collect lamprey at Priest Rapids Dam and transport them upstream from Rock Island Dam (likely to Kirby Billingsley Hydro Park). Any entity that would like to request fish for translocation will need to coordinate with Mike Clement. Ralph said he would like to translocate some of those fish into the Wenatchee River.

Steve Lewis mentioned that Douglas PUD may also conduct three weeks of trapping at Priest Rapids Dam. Tracy stated that they would need to coordinate with Grant PUD and there has been no recent communication from Douglas PUD on this matter. Chelan PUD is not asking for any adult lamprey this year.

Steve Lewis asked Kirk Truscott where the Colville Tribes would place Pacific lamprey in the Okanogan River basin. Kirk responded that they would probably release adult lamprey into the Similkameen River. He said in mid to late August, the mainstem Okanogan River is too warm for lamprey. Last year, translocated fish were released into the Columbia River at the confluence of the Okanogan River and also in the Similkameen River. No fish were put into the Okanogan River because of high water temperatures there. Steve Lewis asked if the fish were tracked upstream. Kirk responded that all the fish were PIT-tagged and there is an extensive network of PIT-tag arrays in the Okanogan River basin. He stated that most of the tributaries are wired, although there is no array in the Similkameen River. That said, there have been no PIT-tag detections so far this year. Kirk stated that there are no plans at this time to place adult lamprey upstream from Enloe Dam.

Ralph Lampman stated that the fish can be kept in a holding tank over the summer and winter, and then released in early spring. Kirk Truscott said his crews will be out in July looking for pre-spawn and spawning adults.

Action Item:

 Ralph Lampman will submit a draft adult lamprey translocation plan to the RRFF for their review.

Update on Pacific lamprey Master Plan

Ralph Lampman reported that the Tribes' Pacific Lamprey Master Plan is the supplementation plan for the Yakama Nation, the Umatilla, and the Nez Perce tribes. It includes information on existing work being done for translocation and also new plans for where to place larval lamprey. The Yakama Nation has release locations in the upper Yakima Basin and Naches. The Entiat and Klickitat rivers will serve as controls. The Umatilla Tribes also have release and control locations as described in the plan.

Ralph said the plan received positive reviews from ISRP and BPA. There were a few questions about the phases of the plan. The plan is currently in Phase I. After approval, it will move to Phase II, which is the

release of the larvae. Phase III includes gathering the results of five years of research and Phase IV includes determining the next steps.

VII. Rapid Assessment at Dryden Dam

Tracy Hillman stated that because Chelan PUD collects broodstock within the Dryden Dam fishways, and these collections are included in the Rocky Reach License, the RRFF can discuss this proposed agenda item. Steve Lewis reported that RD Nelle has fish passage funds available to evaluate Pacific lamprey improvements at facilities. This could include assessments for lamprey at fish passage facilities. RD is considering various sites where the money could be used.

Steve Lewis does not believe there is any information describing lamprey passage at Dryden Dam. The proposed process at Dryden Dam would be similar to the rapid assessment that was done at Tumwater Dam and a similar document would be produced on the status of lamprey passage at Dryden Dam. RD Nelle would like a response from the RRFF on the use of the funds. Steve Lewis will confirm when RD needs a response from the Forum and the amount of the funds available.

Steve Hemstrom asked if assessments at Dryden Dam would be the best use of USFWS funds, or if there are other locations that would benefit more from the use of these funds. Steve Hemstrom stated that Chelan PUD would be more likely to spend money at Tumwater Dam than at Dryden Dam and therefore questioned the use of these funds on assessments at Dryden Dam.

Steve Lewis asked about the possibility of doing a cost-share of funds between Tumwater Dam and Dryden Dam. Steve Hemstrom said he cannot answer that question at this time. Tumwater Dam is still being reviewed and discussed internally and Chelan PUD is waiting to see what happens this year with adult lamprey passage at Tumwater Dam given that adult and juvenile lamprey have been relocated upstream from Tumwater Dam.

Kirk Truscott asked if there was opposition to Dryden Dam being on a list of potential locations for assessments. Steve Hemstrom replied that Chelan PUD has not discussed that possibility internally. He said even if an assessment is done at Dryden Dam, there is a low probability that any improvements would be made at the facility. Steve Hemstrom stated that if the RRFF considers Dryden Dam the best location to spend the money, he will take that information to his management team for discussion.

Ralph Lampman stated that there are no PIT-tag data available on passage at Dryden Dam. He suggested using the funds to set up a pilot project using a smooth tube for lamprey passage at Tumwater Dam.

Action Items:

 RRFF needs to respond to Steve Lewis by 31 July on the use of USFWS funds for conducting a rapid assessment at Dryden Dam (this is contingent on Steve Lewis providing more information on the timing and use of the available funds). • Steve Lewis will talk to RD Nelle about the details of the available funding for Pacific lamprey passage (e.g., when the funds must be committed to a specific project, the list of possible assessment locations within the State, and the year the money must be spent).

VIII. Resident Fish

Twenty-Five Mile Creek Update

Tracy Hillman stated that during the April RRFF meeting, Mike Kaputa and Graham Simon discussed the Twenty-Five Mile Creek barrier. In April, Tracy provided the information that the RRFF requested. He asked if the Forum has any questions regarding the information provided and if the Forum is still interested in funding a fish passage improvement project on Twenty-Five Mile Creek.

Steve Hemstrom explained that there are funds available for years 1-10 and addition funds from years 11 through the life of the Rocky Reach License. The funds are CPI adjusted. Steve stated that if the Forum decides not to spend the funds on the project at Twenty-Five Mile Creek, the money could be applied to northern pike removal, which would be a direct benefit to Rocky Reach. The Resident Fish Management Plan does not specify that funds must be spent at Twenty-Five Mile Creek. Chelan PUD would prefer to use the resident fish enhancement funds provided by the Rocky Reach License on a project with more direct benefits to Rocky Reach rather than spending the funds offsite in the Lake Chelan basin on a project with unknown results (i.e., questionable benefits given the perched concrete culvert that blocks upstream fish movement). The most appropriate solution is to replace the perched culvert with a bridge or bottomless culvert, but Mike Kaputa indicated such a project would cost over \$1,000,000.

Patrick Verhey said he would like to see more information on the positive effects to fish populations by improving passage on Twenty-Five Mile Creek. He is not opposed to having funds applied to northern pike removal. He would like more information before a decision is made on Twenty-Five Mile Creek. He stated that Graham Simon was going to provide that information to the Forum. Patrick Verhey will contact Graham Simon.

Steve Hemstrom said he would like to see how much additional fish production there would be if passage is improved on Twenty-Five Mile Creek. Tracy Hillman stated that although it would be nice to have an estimate of additional production, it will be difficult to estimate. He said other funding entities (e.g., HCP Tributary Committees and Salmon Recovery Funding Board) are generally satisfied with estimates of habitat quantity and quality upstream from the fish passage impediment. Estimating production potential requires information and modeling that may not be readily available.

Steve Hemstrom stated that the success of the project at Twenty-Five Mile Creek will depend on more work being done by Chelan County Natural Resources Department. The current proposal from Chelan County includes keeping the culvert where it is and building a Newbury riffle up to it.

Steve Hemstrom stated that removing northern pike from the Rocky Reach Project Area would benefit bull trout that are moving from the Rocky Reach Project Area into tributaries to spawn in May and June and juveniles that are moving out of tributaries into the Rocky Reach Project Area. This would be another resident fish benefit from norther pike control. He added that the funds could also be used to decrease the potential that northern pike become established in Rocky Reach Reservoir.

Action Items:

- Steve Hemstrom will confirm the amount of money available in the Resident Fish fund.
- Patrick Verhey will contact Graham Simon for more information on Twenty-Five Mile Creek.

IX. July RRFF Meeting

The next meeting of the RRFF is scheduled for Wednesday, 4 July. This meeting will be canceled due to the 4th of July holiday. Tracy Hillman asked Steve Lewis to forward any time-sensitive information on Pacific lamprey passage funding to him and he will send it to the Forum. A conference call can be scheduled if needed. Steve Hemstrom will send the draft combined Rocky Reach Lamprey Passage Report to Tracy, who will forward it to the Forum on or before 31 July. Lance Keller will provide Tracy with updates on white sturgeon spawning at Marion Drain and on the release of juvenile sturgeon into the Project Area. Tracy will share this information with the Forum.

Action Item:

 Lance Keller will provide information on the white sturgeon spawning effort at Marion Drain and the release of the juvenile white sturgeon into the Project Area.

X. Public Comments

None.

XI. Next Meeting

The next meeting of the RRFF is scheduled for Wednesday, 1 August 2018 from 1:00 pm to 4:00 pm and will be held at the Chelan PUD office in Wenatchee at 327 N. Wenatchee Avenue in the First Floor Large Conference Room.