# **Rocky Reach Fish Forum**

Wednesday, 7 August 2013 1:00 – 4:00 p.m. Chelan PUD Second Floor Conference Room Wenatchee, WA



Meeting called by Steve Hemstrom Notes taken by Suzanne Hodgson Chairperson, Tracy Hillman

# Attending Representatives:

Hemstrom, Steve	Chelan PUD	(509) 661-4281	steven.hemstrom@chelanpud.org
Huber, Bob	Alcoa	(509) 421-5159	Bob.huber@alcoa.com
Rose, Bob (phone)	YN	(509) 865-5121	rosb@yakamafish-nsn.gov
Verhey, Patrick	WDFW	(509) 754-4624	patrick.verhey@dfw.wa.gov

# **Attending Participants:**

Clement, Mike (phone)	Grant PUD	(509) 754-5088 x2633	mclemen@gcpud.org
Jessica Gonzales (phone)	USFWS	(509) 665-3508 x16	Jessica_Gonzales@fws.gov
Hillman, Tracy	BioAnalysts	(208) 321-0363	tracy.hillman@bioanalysts.net
Hodgson, Suzanne	Chelan PUD	(509) 661-4758	suzanne.hodgson@chelanpud.org
Jackson, Chad	WDFW	(509)754-4624 x250	chad.jackson@dfw.wa.gov
Keller, Lance	Chelan PUD	(509) 661-4299	lance.keller@chelanpud.org
McLellan, Jason (phone)	CCT	(509) 263-1082	Jason.McLellan@colvilletribes.com
Nelle, RD (phone)	USFWS	(509)548-7573	RD_Nelle@fws.gov
Skiles, Tom (phone)	CRITFC	(503) 238-0667	skit@critfc.org

# **Meeting Minutes**

## I. Welcome and Introductions

Tracy Hillman welcomed everyone to the Rocky Reach Fish Forum (RRFF) meeting and made known that voice recording of the meeting was initiated for note-taking purposes.

# II. Review of Agenda

The agenda was approved with the addition of an update on fish passage at Twenty-Five Mile Creek.

# III. Review and Approval of Meeting Minutes

Minutes from the 5 June 2013 meeting were approved with the following edits: on page five under Bull Trout and Operation of Tumwater Dam, "WDFW's Legal Department" should be "US Fish and Wildlife's Legal Department." On page six under White Sturgeon, the number of males taken to Marion Drain should be nine.

Tracy Hillman added that Chelan PUD has a new General Manager, Steve Wright, former administrator of BPA, who will begin in September.

## IV. Water Quality

### **Update on Water Quality Reports**

Tracy Hillman noted that the Draft Rocky Reach Macrophyte Bed Water Quality Report was due to Ecology on 17 June 2013. Comments from Ecology would be provided by 26 July 2013 and the final is due on August 2013.

#### **Action Item:**

• Steve Hemstrom will find out if the June and July deadlines were met and will notify the RRFF of the report's status.

# V. Pacific Lamprey

## **Juvenile Effects Spreadsheet**

Steve Hemstrom stated that that he could resend the spreadsheet to the group and that it could serve as part of the report to FERC that is due on 14 February 2014. He added that there is a lack of information needed to fully complete the spreadsheet. Nevertheless, the spreadsheet shows that the Forum worked on gathering information on potential threats to lamprey. Bob Rose stated that he is ambivalent about working anymore on the spreadsheet.

#### **Rocky Reach Project Effects (NNI)**

Tracy Hillman reported that there were two action items on this topic from the June meeting: (1) review and discuss the draft Pacific Lamprey Proposal and (2) convene a small group meeting to link the plan's objectives to the Settlement Agreement. It was reported that few reviewed the proposal and that the meeting did not take place. Bob Rose indicated that he made some revisions to the proposal distributed in June. The plan is being revised to identify which objectives link to which PUD license. He said that, after initial revisions, the plan now has ten objectives, as compared to the seven it previously had. Bob made it clear that there is no new content, but rather the existing objectives have been reorganized. He said that the revised plan will identify specific tasks as they relate to each objective. Bob stated that he

was not expecting decisions today, but that he hoped to further the discussion. He said that he would like to convene the technical team to focus on the science. Bob identified and described each of the ten objectives in the revised plan.

**Objective 1: Mainstem Fishway Entrance and Passage Efficiency**. This objective is made up of three parts: fishway entrance efficiency, passage efficiency, and fallback. Bob said that this objective is the responsibility of the PUDs. Bob would like to see good statistical information on this topic. Steve Hemstrom brought up telemetry and asked the forum about its decision to use HD PIT tags to assess the fishway modification completed at Rocky Reach and whether that would be sufficient. Bob replied that some technology works better in some locations, so it may be necessary to find the best average technology to get the necessary information.

Objective 2: Proportion of Adults Ascending Tributaries. Bob stated that this objective would require radio telemetry and the evaluation of tags at the mouth of major tributaries and areas upstream in the tributaries. Bob noted that 70-80% of the tagged lamprey are unaccounted for using dam counts. Did these fish go into tributaries are stay in the reservoirs? He stated that this objective is primarily the responsibility of the PUDs. Steve noted that Wells Dam is engaged in a passage efficiency study that could be helpful, and added that this issue may require a broader approach. Bob agreed that we don't know where responsibilities begin and end, so it requires a regional effort and that he is looking forward to the results of the Wells study. He added that even though this issue isn't specifically stated in the Lamprey Management Plan, he believes that it is in the spirit of the Plan.

**Objective 3: Fate of Adults in Reservoirs.** Bob thought that this objective would not be addressed until 2016 or later, because it is a difficult objective to assess. He indicated that there are likely two project effects; fish get tired passing the projects and spawn in the reservoirs, or they are eaten by sturgeon. Discussion took place regarding reproductive success of fish detected, but not passing fishways and the work done by Chris Caudill on this issue.

Objective 4: Establishment of Baseline Status and Trend Information. Bob stated that this objective is the primary responsibility of the fishery managers, but the PUDs can help. This objective will need regional coordination. Bob noted that we will need counts at dams and in tributaries. He added that there is a need to identify and survey spawning and rearing locations, identify index locations, assess the number and timing of juvenile out-migrants, and a need to estimate seeding levels. Steve noted that Lance Keller had prepared a document titled 2004 – 2012 Juvenile Lamprey Counts at Rocky Reach and had sent it to RD Nelle earlier in the year. He added that counts for 2010 and 2011 were much higher, due to the fact that a juvenile spring Chinook study took place during that time using round-the-clock sampling at the Rocky Reach Bypass. Lance said that nighttime passage increased and was affected by flow and turbidity that year.

**Objective 5: Adult Behavior and Passage in Tributary Streams**. Bob said that this objective would include telemetry work to test passage in tributaries, at irrigation structures, and at Tumwater Dam. The focus would be on the four major tributaries (i.e., Wenatchee, Entiat, Methow, and Okanogan). He

indicated that the PUDs should support this objective.

Objective 6: Adult Translocation Research. Bob noted that adult passage at dams will not be 100%. Rocky Reach is part of the cumulative effect, which affects population abundance and spatial distribution. He believes this is a fundamental part of the strategy, and that the PUDs should be obligated to support it. He stated that the Yakama Nation is currently translocating lamprey. There was discussion about population genetics and the risks and benefits of translocation. Steve asked if this work would be a research project or supplementation program. Bob replied that it would be research. Bob acknowledged that funding for this is an issue. Steve stated that he has started a paper with several others regarding the mechanisms of adult returns to long distance tributaries in the Columbia River basin. Discussion took place regarding the Umatilla's translocation work and the best methods for carrying out translocation.

**Objective 7: Propagation Research**. Bob reported that clause 4.2.3 in the Settlement Agreement states that there are funds available to produce juvenile lamprey for future evaluations. He added that he believes that Chelan PUD should release some funding for this work. He also stated that he would like to have a discussion on the interpretation of clause 4.2.3. Steve passed out a handout detailing the language in the Agreement and noted that the RRFF has the ability to decide how those funds are used as long as decisions make sense and there is a connection to the license. Bob agreed.

**Objective 8: Juvenile Predation in Tailraces.** Bob said that he appreciates the work Chelan is doing with predation control, but that more could be done and that additional work may benefit salmonids also. He noted that this objective is the responsibility of the PUDs.

**Objective 9: Juvenile Occupancy and Use of Reservoir Habitat**. Bob stated that Chelan PUD has done some work on this objective already. There may be a need for additional work, but this objective can be deferred to a later date.

**Objective 10: Juvenile Entrainment**. Bob suggested that fixing diversions and minimizing the number of lamprey entering them may be accomplished with existing funds to earn mitigation credits. He added that telemetry work would be helpful. Bob indicated that he would like to get the technical team together in the next few weeks to start thinking about this objective and also the other nine.

Bob Huber raised concerns about funding for all of the objectives. Discussion took place on whether or not the \$700,000 listed in clause 4.2.3 is the total amount committed to work on Pacific Lamprey. Steve explained that \$700,000 is to be used to measure the effects on downstream passage of juvenile lamprey and that meeting No Net Impact could potentially involve additional costs. He added that we currently cannot measure the effects because of limits in technology and methodology. Discussion took place regarding the scope of the proposal and next steps. Steve stated that financial contributions from Chelan PUD must lead to agreement that NNI has been reached. Jessica Gonzales noted that it may be helpful to identify objectives in the draft NNI proposal that can be linked to the \$700,000 identified in

the Agreement. Bob Rose said that that was doable. Tracy recapped the discussion by saying that it may be possible to mitigate for unknown NNI through some of the projects identified in the proposed objectives as long as all parties agree that the mitigation work achieves NNI.

#### **Action Items:**

- Bob Rose will submit a revised draft of the NNI proposal to the RRFF.
- RRFF members will review the draft proposal as soon as it is available.
- Bob Rose will convene a technical team workshop that will focus on describing the objectives and linking the objectives to NNI in the Settlement Agreement.
- Tracy Hillman will keep the discussions on the Settlement Agreement sections 4.2.3 and 4.4 on future agendas.
- Steve Hemstrom will send the 2004 2012 Juvenile Lamprey Counts at Rocky Reach to the RRFF.

## Future Planning: Potential Juvenile Lamprey Measures, Timeframe, and Budgeting

No new updates. This topic was covered in the section above.

## **Adult HD PIT Monitoring**

Steve Hemstrom reported that one tagged adult lamprey detected at Wanapum Dam was detected on 15 July 2013 at Rock Island Dam. This fish has not yet been detected at Rocky Reach Dam.

### VI. Resident Fish

### **Resident Fish Report - WDFW Revision**

Chad Jackson stated that the resident fish report is being reworked and a draft is due to Chad and Chelan PUD by 13 August 2013. The final will be available on 30 August 2013. Discussion took place around elements of the report and the changes that will be present in the final report. Chad noted that some reorganization of staff is taking place at WDFW. Andrew Murdoch will be the new lead for Large Lakes Research. Chad also noted that the rewrite is being funded by the State and not with Chelan PUD Resident Fish Settlement Agreement funds.

### **Bull Trout and the Operation of Tumwater Dam**

Steve Hemstrom said that there are no new updates on bull trout and operations at Tumwater Dam. Chelan PUD staff are currently working on this issue. Jessica Gonzales stated that for Tumwater Dam trapping activities, the U.S. Fish and Wildlife Service would like to sort out and make clear where the incidental take lies and how to minimize risk.

<sup>&</sup>lt;sup>1</sup> During the September meeting of the RRFF, the group noted that this statement was intended to try and link the funding identified in the Rocky Reach Settlement Agreement for Pacific Lamprey with the objectives in the NNI proposal. The co-managers are currently estimating costs associated with each objective in the NNI proposal, and where possible they will link the objectives in the proposal to the funding identified in the Agreement.

#### **Action Item:**

• Tracy Hillman will keep this issue on the agenda for future discussion.

## **Twenty-Five Mile Creek Update**

Tracy Hillman shared the following update on passage at Twenty-Five Mile Creek, which was funded by the RRFF in November 2012:

- 1. The consultant is evaluating the hydraulics of the culvert and the downstream stream reach. Velocities coming out of the culvert during a major flood would be extremely high, which is an important factor to consider in the design.
- 2. The consultant has developed three concepts that cover the range of alternatives (see Attachment 1). They are not spending too much time on these, only enough to make sure they have enough information to know whether they are actually possible.
- 3. It is likely that the concept of a roughen channel will be a core element of the project. The channel downstream from the culvert is a classic step-pool system. Knowing that the stream will be an amenity for the park, the consultants are working on a design that will take advantage of the roughen channel stability, but also incorporate as much of the natural step-pool morphology as possible so that the stream will be very pleasing to park guests.

Tracy added that the RRFF had asked to review the engineering alternatives and provide input on the appropriate design.

#### **Action Item:**

 Tracy Hillman will contact the Cascade Columbia Fisheries Enhancement Group (project sponsor) to remind them that the RRFF would like an opportunity to review the engineering alternatives for fish passage on Twenty-Five Mile Creek.

# VII. White Sturgeon

## **Juvenile Rearing**

Lance Keller reported that juvenile rearing is going well. He noted that one group of eggs at Chelan Falls did not hatch well (these eggs were from the first spawning). This group also had poor hatching success at the other hatcheries (i.e., Marion Drain and Columbia Basin hatcheries). Chad Jackson stated that pathogen screening results for broodstock indicated that the fish tested negative for disease.

### **Juvenile Monitoring**

Lance Keller reported that indexing and juvenile monitoring would take place in August. He added that juveniles were stocked in three locations; Gallagher Flats, Daroga Park, and the Entiat boat launch. Sampling will follow a randomized sampling design.

## **Adult Monitoring**

Lance Keller said that adult tagging took place on 22 June and yielded four adult fish. A second effort took place on 29 June and yielded three adults, including one flowing male. He noted that the same equipment was used to monitor both adults and juveniles.

# **VIII.** Next Steps

The next regular meeting of the RRFF will be Wednesday, 4 September 2013 from 1:00 to 4:00 p.m. in the Chelan PUD Second Floor Conference Room.

Attachment 1 – Three Concepts to Improve Fish Passage on Twenty-Five Mile Creek





