

# Rocky Reach Fish Forum

Wednesday, 2 October 2013

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 Suzanne Hodgson

## ***Attending Representatives:***

Hemstrom, Steve	Chelan PUD	(509) 661-4281	steven.hemstrom@chelanpud.org
Huber, Bob	Alcoa	(509) 421-5159	Bob.huber@alcoa.com
Irle, Pat (phone)	Ecology	(509) 454-7864p	pir1461@ecy.wa.gov
Rose, Bob (phone)	YN	(509) 865-5121	rosb@yakamafish-nsn.gov
Verhey, Patrick	WDFW	(509) 754-4624	patrick.verhey@dfw.wa.gov

## ***Attending Participants:***

Hillman, Tracy	BioAnalysts	(208) 321-0363	tracy.hillman@bioanalysts.net
Hodgson, Suzanne	Chelan PUD	(509) 661-4758	suzanne.hodgson@chelanpud.org
Jackson, Chad (phone)	WDFW	(509) 754-4624 x250	Chad.jackson@dfw.wa.gov
Keller, Lance	Chelan PUD	(509) 661-4299	lance.keller@chelanpud.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 an additional item from Steve Hemstrom regarding the temporary shutdown of several generating units at Rocky Reach Dam.

### III. Review and Approval of Meeting Minutes

Minutes from the 4 September 2013 meeting were approved. Tracy pointed out that Attachment 1 on page 8 was provided after the meeting and may not be accurate. Tracy added that it is a list of Rocky Reach Policy Group members and alternates, and that a number of the alternates are not eligible to serve in that capacity because they serve on the RRF.

### IV. Water Quality

#### Update on Water Quality in Macrophyte Beds Report

Tracy Hillman stated that the water quality in macrophyte beds report was provided to the RRF on 30 September 2013 for their review and that comments are due back to Steve Hays by 1 November 2013. Steve Hays asked members to please notify him if they see anything missing from the report. He added that he will be working with the appropriate staff to develop a GIS layer that links the macrophyte beds with water quality data. Steve provided some details about the report, noting that overall the data conformed to quality assessment requirements. He stated that he was surprised that levels of dissolved oxygen at the river bed in dense macrophyte beds was not lower than measured, especially near Turtle Rock where the measurements were in a bay with little flow. Tracy Hillman asked if the report included the percentage of measurements for each metric that exceeded criteria. Steve stated that those numbers are in the report and that the percentages were low. Steve added that the Rocky Reach reservoir is slightly alkaline, as are many bodies of water, and that there was a shift in plant species over time. Tracy asked if the results from the WDFW Resident Fish Report were incorporated into the water quality in macrophyte beds report. Steve Hays replied that he had used data from the WDFW report provided by Dave Burgess. Pat asked about the status of the Resident Fish Report. Steve Hemstrom replied that as soon as the report is finalized, he will send it out to the RRF.

Discussion took place around what steps might be taken in the case of any significant non-compliance found in the water quality report. Steve Hays stated that if Ecology or WDFW thought that the macrophyte beds were causing problems for aquatic life, they could bring those issues to the RRF. Steve added that some larval freshwater mussels were found during the study, and that this species was not previously known locally.<sup>1</sup>

#### Action Item:

- **RRF representatives and participants will review the draft water quality in macrophyte beds report and send their comments to Steve Hays by 1 November 2013.**

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<sup>1</sup> Tracy Hillman was asked to get additional information on the species of larval mussels identified during water quality sampling in macrophyte beds. Waikele Frantz provided the following additional information. "Neither zebra nor quagga mussel larvae, veligers, were detected in the samples. Bivalve larvae were detected for one introduced species, *Corbicula fluminea* (Asian clam), as well as two native mussels, *Anodonta* spp. (floater mussel) and *Gonidea* spp. (western ridged mussel)." These species were present at most of the sampling sites.

## V. Pacific Lamprey

### Rocky Reach Project Effects (No Net Impact)

Patrick Verhey stated that he has not talked recently with Bob Rose about No Net Impact (NNI). Tracy Hillman said that Bob has not finished the proposal, but that during the Priest Rapids Fish Forum (PRFF) meeting, Bob mentioned the possibility of elevating the NNI discussion to the policy group for clarification. Tracy added that Grant County PUD wants to work it out at the technical group level. Steve Hemstrom suggested that he would like to meet with Bob in November to discuss the roadblocks that might require elevation to the policy group. Pat Irle stated that Bob was going to connect appropriate NNI objectives to the PUD's Settlement Agreement, but since that work hasn't been completed yet, it may be too early to discuss elevating the issues to the policy group. Tracy stated that Bob had discussed the NNI objectives with the RRFF and PRFF during previous meetings and sensed some resistance to the proposed objectives. Steve Hemstrom stated that he had hoped to have more details from Bob on the objectives in order to move forward, adding that if it's a matter of time, we can provide more time.

Steve Hemstrom stated that he participated on a conference call that Bob Rose set up on 19 September regarding lamprey and radio-telemetry. The call was not linked to the RRFF or the PRFF. Steve added that Bob did not seem happy with the outcome of that call. Steve noted that it was not Chelan PUD's intent to conduct another telemetry study at Rocky Reach Dam for lamprey, as that was already done to determine what fishway improvements were needed. However, the PUD does plan to wire Rocky Reach with telemetry receivers for monitoring bull trout for one year in 2018. This system can be used to detect radio-tagged lamprey during that year. Steve further noted that Chris Peery had questioned the value of telemetry in measuring ladder passage efficiency because of the effects of radio tags on lamprey swimming ability.<sup>2</sup> With regard to another study with radio-telemetry, Steve stated that he would like to know if the RRFF shares Bob Rose's concerns.

Bob Rose joined the meeting at the end of the NNI discussion and stated that he would like to complete the draft NNI paper and discuss it with the RRFF in the future.

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<sup>2</sup> Tracy Hillman was asked to get clarification from Chris Peery on the values of telemetry in measuring passage efficiency. Chris provided the following information. "The issue with using telemetry is to know how best to interpret the results. What we see is there is a measurable handling effects associated with using radio telemetry. Fewer radio tagged fish will pass a dam than fish that receive just a PIT tag when both groups were released at the same location just downstream of the dam. We interpret this to indicate that the extra handling associated with radio tagging a fish affects the incentive for fish to continue migrating upstream. But, once the fish decide to migrate, their behavior appears to be similar for the radio-tagged and PIT tagged fish. So information associated with fish in and near the fishways is reliable in terms of characterizing passage conditions and the RT data can provide more detailed information than PIT data."

"We do need to be mindful of using fish from downstream locations to assess passage at upstream projects. These fish will likely have more energy reserves available than fish that would have migrated the distance in river. Considering the amount of time these fish spend in freshwater prior to spawning, this manipulation may not have as much of an effect to matter as long as you are not modifying the timing drastically. That is, the tagged fish should be at the dams at the time the run would normally be passing the dams to make sure conditions are as "normal" as possible."

**Action Item:**

- **Bob Rose will complete the next draft of the NNI document and provide it to the RRF for discussion at the November meeting.**

### **Adult HD PIT Monitoring**

Steve Hemstrom stated that a question came up recently about the RRF agreement to use half-duplex (HD) PIT tags to monitor the Rocky Reach fishway improvements that were completed. Tracy Hillman stated that the RRF had officially approved the use of HD PIT tags in 2011 to monitor lamprey passage through the Rocky Reach fishway (see March and April 2011 meeting notes). Patrick agreed that this had been decided. Bob Rose agreed, but added that he thinks that there is also a role for radio tags. Bob added that he would appreciate having Steve Hemstrom review past documentation on the decision. Steve agreed to do so.

Steve Hemstrom reported that Grant PUD is sending tag detection information to him. He stated that 32 tagged lamprey have passed Wanapum Dam. Of those, 27 have been detected at Rock Island Dam. He added that nine of the 27 have been detected at Rocky Reach Dam, and that six of the nine have passed the Project. He noted that these data are about two weeks old. Steve indicated that travel times for the fish are fast. Steve said it will take a bit of time to further evaluate travel times. There are seven detection sites that must be downloaded and reviewed, and that it takes time to evaluate all the data. Steve Hays asked if we know how effective our detection methods are. He added that if we detected a fish entering but not exiting the fishway, that doesn't mean that it didn't exit, because fish are known to be able to evade detection. Additional detection upstream from the dam would be helpful. Tracy Hillman stated that currently the only detections upstream from Rocky Reach are at Wells Dam. Steve Hemstrom added that he is in the process of summarizing the lamprey passage data for Rocky Reach and he plans to send the summary to the RRF when completed.

**Action Item:**

- **Steve Hemstrom will summarize past notes and provide information to the RRF regarding the Forum's decision on use of HD PIT tags.**

## **VI. Resident Fish**

### **Resident Fish Report – WDFW Revision**

Chad Jackson stated that the resident fish report will be delivered soon. After Steve Hemstrom has a chance to review it, the report will be finalized. Chad asked that this issue be kept on future agendas. He also stated that there will not be any major changes from the earlier report. There will be some changes in the discussion and conclusion section, along with some formatting changes. Chad added that the report concludes that Rocky Reach pool is dominated by native species and there does not appear to be

an abundance of fish predators in the Rocky Reach pool, as is seen in other Columbia River reservoirs.

**Action Item:**

- **Chad Jackson will send the finalized Resident Fish Report to Steve Hemstrom for review and then distribution to the RRF.**

**Bull Trout and Tumwater Dam**

No updates.

**Twenty-five Mile Creek Update**

Tracy Hillman reported that he received responses from the Cascade Columbia Fisheries Enhancement Group (project sponsor) on the issues raised by the RRF on the Twenty-Five Mile Creek fish passage design. Tracy sent the responses to the RRF on 24 September and asked for their review. He added that Bryan Nordlund did not reply before the government furlough. Tracy stated that the responses seemed reasonable to him. Discussion took place regarding changes that campers often make to rock and log weirs in the stream. Tracy asked if the RRF was satisfied with the project sponsor's responses. Patrick Verhey voiced his approval. Pat Irle stated that she was uncomfortable approving the design before getting feedback from Bryan Nordlund. Steve Hemstrom indicated that he would try to contact Bryan to get his feedback. Tracy stated that the sponsor needs to have design approval soon in order to meet their contract deadline with Chelan PUD.

**Action Item:**

- **Steve Hemstrom will attempt to get feedback from Bryan Nordlund regarding the sponsor's responses to the RRF's concerns. This feedback will be shared with the RRF so that a decision can be made on giving final approval for the design.**

**Milfoil Treatment Proposal**

Steve Hemstrom reported that during a conference call between Chelan PUD staff and Ecology, the PUD had concerns with a lack of response from Chelan County on the PUD's earlier letter. He stated that Ecology acknowledged that there are questions that need to be answered, but that the current grant is to study the feasibility of such a project. The study is not for implementation and the application of chemicals. He stated that Ecology indicated that the PUD's questions could be further explored after the feasibility study. He added that a NOAA fish toxicologist, Scott Hecht, was also on the call.

## **VII. White Sturgeon**

### **Juvenile Rearing**

Lance Keller reported that juvenile sturgeon rearing is going well at Chelan and Columbia Basin hatcheries. He stated that sturgeon are at about 63-65 fish per pound at Chelan hatchery, and that there should be more than 6,500 fish for release between the two facilities. He noted that the size of the feed may be too small and hatchery managers are looking into increasing the size of the feed. He also indicated that Chelan Falls is at maximum capacity. Tracy Hillman asked if it was necessary to release all 6,500 fish due to their origin from a 3 x 3 cross. Lance stated that this should be discussed by the RRF. He added that this is the most diverse matrix the PUD has had. Tracy stated that it may take a long time to receive acoustic tags and therefore the Forum should make a decision soon on how many fish to release in 2014. Discussion took place around how many fish might need to be released, and it was agreed that WDFW will need to know ahead of time if fewer fish than planned will be released. The Forum agreed to discuss this during the next meeting.

#### **Action Items:**

- **Lance Keller will find out how long it will take to receive acoustic tags after an order is placed.**
- **Lance Keller will work with Blue Leaf to determine the most effective number of sturgeon to release in 2014.**

#### **Juvenile Monitoring**

Lance Keller reported that three of the five monitoring and indexing events have been completed. Each monitoring event consists of crews sampling for ten days with four days of rest between events. So far, 200 juvenile sturgeon have been recaptured. Lance stated that among the recaptures, 177 fish were from 2013, three fish were from 2012, and ten fish were from 2011. He said that Columbia Research is using larger hooks and different baits than are used in the pikeminnow set-line program. He added that more fish were recaptured in the upper reservoir than the lower reservoir. He noted that Blue Leaf is downloading data from receivers that detect fish released this year and last. Discussion took place regarding stocking levels in the future.

#### **White Sturgeon Workshop Recap**

Tracy Hillman reported that there were good discussions about the use of wild larvae in the hatchery programs. He added that some broodstock collection is required by the PUD agreements, but that there is a willingness to look at D-ring sampling to collect larvae. He stated that Bob Rose had said that the Yakama Nation would like to continue collecting broodstock for at least the next few years. Lance Keller stated that D-ring efforts will take some time to perfect, but that the benefits would be useful. Tracy stated that the notes from the workshop will be sent out as soon as he receives them from the Aquatic Settlement Work Group. Bob Huber asked what happens after three years of stocking sturgeon. Lance replied that a decision will have to be made by the RRF as to how to continue. The purpose of the current monitoring efforts is to provide information that will be used by the RRF to determine how to proceed with the sturgeon program in the future.

## **VIII. Rocky Reach Dam Turbine Unit Outage Update**

Lance Keller reported that Unit C-10 at Rocky Reach Dam has been down for months and that a crack was discovered in a rod that delivers oil to the servo motor that controls the pitch of the turbine blades. He added that it looks like a design flaw and that the same flaw may also be present in C-8, C-9, and C-11. He said that because of this potential risk, all of the affected units have been taken offline. Steve Hemstrom added that there have been no fish or environmental effects associated with this issue. Lance noted that the plan is to get a temporary fix in place before the spring season, and then take units out individually for permanent repairs.

## **IX. Chelan PUD Fisheries Department Staffing**

Steve Hemstrom reported that Catherine Willard has been hired as a Senior Fisheries Biologist for Chelan PUD. She was formerly with the USDA Forest Service, Entiat.

## **X. Next Steps**

The next regular meeting of the RRFF will be Wednesday, 6 November 2013 from 1:00 to 4:00 p.m. in the Chelan PUD Second Floor Conference Room.