



## Meeting Minutes

### Priest Rapids Fish Forum

Wednesday, April 07, 2010

9:00 – 3:00 p.m.

Yakama Nation Fisheries Building  
Toppenish, WA

#### Technical Members

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Stephen Lewis, USFWS  
Bob Rose, YN  
Bob Heinith, CRITFC  
Tom Dresser, GCPUD  
Ben Lenz, GCPUD

Patrick Verhey, WDFW  
Keith Hatch, BIA  
Marcie Mangold, WDOE  
Mike Clement, GCPUD

#### ATTENDEES:

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Bob Rose, Yakama Nation  
Molly Hallock, WDFW (by Phone)  
Chad Jackson, WDFW (by Phone)  
Bob Heinith, CRITFC (by Phone until 10:00)  
Mike Clement, GCPUD  
Mike Nicholls, GCPUD  
Alyssa Buck, Wanapum  
Donnella Miller, Yakama Nation  
Kevin Malone, Facilitator

Stephen Lewis, USFWS (by phone)  
Marcie Mangold, WDOE (by Phone)  
Jeff Korth, WDFW  
Ty Ehrman, GCPUD  
Ben Lenz, GCPUD  
Keith Garner, GCPUD  
Ross Hendrick, GCPUD (by Phone)  
Debbie Williams (by Phone)

#### Action Items:

1. Hendrick will look at the SWMP to find out what the drop dead date is for starting shallow water data collection.
2. Clement/Bryan Nass will show examples of day and night video taken underwater near the count stations at the next PRFF meeting via web-ex.
3. Williams will set up a WebEx conference for the May meeting.
4. Heinith will provide velocity data for McNary and Bonneville fishways.
5. Clement will provide the vertical distribution of velocities at Priest Rapids ladder entrances to members.
6. Mark Timko will talk to members regarding limitations of acoustic tags at the next PRFF meeting.

7. Clement will talk to Mark Timko, Blue Leaf Environmental, to see if data can be expedited after the first 50 acoustic tagged lamprey have passed the detection areas and present preliminary results for PRFF review to evaluate if the passage evaluation is not having adverse effects to passage.
8. Lenz and Mangold will draft a proposal for changing the reporting date of the White Surgeon Comprehensive Annual Report and distribute it to PRFF members two weeks prior to the next meeting.
9. Mangold will talk to WDOE attorneys to determine if changing several reporting deadlines in the 401 Certificate would have to be done by amending the license.

## Final Meeting Minutes

- I. **Welcome and Introductions** – Attendees introduced themselves around the table and on the conference line.
- II. **Agenda Review** – Heinith asked for an update on the Shallow Water Monitoring and Fish Ladder Temperature Plans.
- III. **Fish Ladder Temperature Plan Updates** - This plan has been approved by WDOE, but not by the Federal Energy Regulatory Commission (FERC). Grant PUD had planned on installing stand pipes in the locations where monitoring will occur in order to keep monitors secure. Because the ladders have been watered up, they won't be able to install them until the ladder is dewatered in the fall. Sensors could be hung from the side of the ladder, but the potential for damage would be great.
- IV. **Shallow Water Monitoring Plan (SWMP)** - This plan has also been approved by WDOE, but not by FERC. Ross Hendrick explained that if FERC approves it fairly soon Grant PUD would probably start collecting data this year. The original plan was to gather data for one full season from May to September. Hendrick said that if we don't start collecting data in April, it will be next year before we start. Grant PUD intends to have a contractor do the work, and that contract has not been set up yet. **Hendrick will look at the SWMP to find out what the drop dead date is for starting shallow water data collection.** Because this will be a low flow, high temperature year, Heinith thought it would be a good year to collect data. Hendrick reminded members that Grant PUD also has fixed site monitors that collect data year round.
- V. **Pacific Lamprey Fish Ladder Modifications & PRFF Tour Update** - On March 26, 2010 Mike Clement and Mike Nicholls from Grand PUD escorted staff from the Yakama Nation (YN) and Washington Department of Fish and Wildlife (WDFW) on an inspection tour of fishway facility upgrades made to the right and left bank fishways at Priest Rapids Dam. All fishways are within criteria right now, and all

count stations will be fully operable for counting prior to April 15, 2010. Counts will be posted to the Grant PUD website within 24 hrs.

The Pacific Lamprey Passage Evaluation Study Plan included locations for camera placement at each count station. LGL has positioned underwater cameras at the Priest Rapids right-bank count station in order to conduct behavioral tests for adult lamprey approaching the count station. Cameras will be able to record lamprey behavior as they approach and use the ramp which approaches the count stations.

Clement reported that velocities and turbulence was better than anticipated in the pools and immediate areas around the count stations. Observations by Grant PUD staff and PRFF members touring the ladder(s) after they were re-watered saw very few bubbles or turbulence, except near the surface. Early video shows clear visibility at count stations. **Clement and Bryan Nass will show examples of day and night video taken underwater near the count stations at the next PRFF meeting. Williams will set up a WebEx conference for the May meeting.**

Heinith explained that due to the possibility of changing count stations at US Corp. dams, modifications to count stations in the Priest Rapid Project are generating a lot of interest regionally. If it can be shown that lamprey passage is improved by modifications being made by Grant PUD, Heinith thinks it's possible the US Corp. may also make modifications to their dams. Clement explained that he's had conversations with Shawn Tackey and Dave Clungston from the US Corp, and that they are tracking the project closely. At the last Lamprey Technical Workgroup (LTWG), Clement provided a short discussion that summarized modifications that have been made at Priest Rapids, and how those modifications will be evaluated. The Corps of Engineers is present and a member of the LTWG.

Rose told members that on May 12<sup>th</sup> the System Configuration Team and the Facilities Passage Operation & Maintenance Team will be touring McNary and John Day Dams. On May 13<sup>th</sup> they will be touring the Priest Rapids Project. Lamprey modifications will also be discussed at that time. This will be another opportunity for PRFF members to see the watered up count stations.

- VI. **Discussion related to Grant PUD's requirement to "Evaluate Reducing Night-time Flows in the Fish Ladders at Priest Rapids" related to the 2010 Pacific Lamprey Passage Evaluation** - Clement explained that when Grant PUD was researching alternatives to try to improve lamprey passage during relicensing, one of the things that could potentially be done was to lessen velocities in the lower fishways at Priest Rapids. The recommendation was approved by Ecology, FERC, and included in the PLMP.

After reviewing the plan, Grant PUD staff believes there would be a negative outcome to study results and have recommended that it not be done. The concern is that if velocities are lessened substantially lamprey might not be able to find the entrance to the fishway especially during a low water year. Clement stated, "If PRFF/PRCC members want to lower the velocity, Grant PUD could do it, but it could have a negative effect to passage efficiency and to overall passage. Because there is a zero velocity near the ladder flooring, Grant PUD doesn't see the point in doing it. After study results from 2010 are reviewed, if there's still a problem, Grant PUD would propose doing another study one or two years later."

Mike Nicholls distributed aerial drawings of the left and right bank fish ladders and explained that if the auxiliary water supply (AWS) is turned off at night to the lower ladder it could affect overall fish passage because attraction flows would be lessened at both Wanapum and PR entrances, prohibiting fish from finding the entrance. Nicholls believes we would be trading one known issue (reduction of attraction flow) for what hasn't been determined to be an issue (velocity). Nicholls reminded members that each project has about 80' of head, and that the AWS affects the last six feet of the fish ladder, so flows (or velocity) would only be changed in less than 10%. AWS doesn't affect the rest of the ladder. Nicholls explained that Grant PUD tries to maintain 1.5 foot criteria of differential across the entrances. The group discussed the difference between fishway entrance gates in the Priest Rapids Project and Wells Dam.

Clement explained that Grant PUD doesn't want to make modifications in order to test different scenarios only to have a negative outcome related to overall passage. Heinith asked if a block test could be conducted (turn velocities on/off, on/off) to test for both conditions. Heinith reported that new data was just received regarding night time ladder flow reduction testing conducted at McNary Dam. The data showed huge differences in the overall entrance efficiency for lamprey when flows were dropped at night in the ladder. Because of this, Heinith said there may not have to be any future structural modifications. Bonneville has had mixed results with tests. McNary velocities are in the four to six feet per second range, but less than that at the bottom. **Heinith will gather velocity data for McNary and Bonneville fishways.** Clement noted that while operating ladders under normal conditions, study results from 2001 and 2002 showed there wasn't a problem with entrance efficiencies. **Clement will send the vertical distribution of velocities at Priest Rapids ladder entrances to members.**

Half duplex (HD) Pit-tag arrays are being used above and below each count station. Fifty acoustic tags were purchased from HTI, and 300 HD Pit-tags. Radio tags (RT) will not be used for the study. Clement hopes to start placing tagged lamprey approximately 1000 ft below the

Project by mid July and be finished by early September. Heinith expressed a little concern over not using RT tags because he said acoustic tags don't work very well around powerhouses. Clement explained that preliminary testing has already taken place and Grant PUD staff feel confident that acoustic tags will give the behavioral information were seeking. **Mark Timko will talk to members regarding limitations of acoustic tags at the next PRFF meeting.** Clement said he is hesitant to put RT tags with external antennas in lamprey because they don't perform well in high velocity ladders to begin with. Clement referenced previous studies conducted at Ice Harbor where the study results were significantly less for fish tagged with RT tags compared to those with HD-PIT. Clement strongly believes that tags with external antennas create a significant tag effect.

Rose suggests that during the first half of the study (after the first 150 lamprey have entered the ladder) if there is reason to believe lamprey aren't entering the ladder, the PRFF could reconvene to discuss lowering the velocities. **Clement will check with Grant PUD engineers and the research team to determine if and how soon changes could be made to the ladders based on early lamprey study results.** Nicholls has been in contact with Bryan Nordlund, NMFS, and reported that he is concerned over the loss of attraction flows. Nicholls suggests evaluating the major modifications that were recently made to the ladders before deciding that further studies are necessary. **Clement will talk to Mark Timko, Blue Leaf Environmental, to see if data can be expedited after the first 50 acoustic tagged lamprey have passed the arrays.** Jeff Korth, WDFW, was concerned with waiting halfway through the study is that as the season progresses, there is a distinct pressure differential in fish condition and he's not sure how that would affect study results. Steve Lewis, USFWS, stated his general agreement, and suggests that if a randomized block study is done, differentials be looked at closely before starting. Molly Hallock, WDFW, thought it made sense to remove the variable for now and address it in the future if need be. If anyone has any questions regarding this topic, contact Mike Clement. PRFF members agreed to discuss this topic during the May PRFF meeting. The group agreed that a vote of the PRFF was not needed to alter the study design.

- VII. **Update on White Sturgeon Comprehensive Annual Report (WSCAR)** - Ben Lenz reported that comments to the 2009 WSCAR were received from WDFW and incorporated in the report prior to submittal to FERC and WDOE on March 31, 2010. Lenz explained that the timing to submit the report by March 31<sup>st</sup> doesn't allow for one complete year of operations to be included in the plan.

Members discussed changing the FERC submittal date of the annual report in order to include all of the current year's activities. Marcie Mangold, WDOE, thinks that because WDOE set the reporting due

dates in the 401 Certificate (401), she can write a letter documenting PRFF support to have it changed. She noted that WDOE can change dates in the 401 without it being an amendment to the license, but because the requirement is in the FERC license, they would have to make that change. Mangold agreed to draft a letter to have the date of the WSCAR changed after Lenz determines what it should be changed to. She will include PRFF meeting minutes showing the formal vote to do so with her letter. **Lenz and Mangold will draft a proposal for changing the reporting date of the White Surgeon Comprehensive Annual Report and distribute it to PRFF members two weeks prior to the next meeting.** Due dates of other reports were also discussed. **Mangold will talk to WDOE attorneys to determine if changing several reporting deadlines in the 401 Certificate would have to be done by amending the license.**

- VIII. **Establish Next Meeting Location for May PRFF meeting** - May 05, 2010 @ 10:00 a.m. in Grant PUD's Natural Resources Office. A call in number and Web-Ex will be provided.
- IX. **Yakama Nation Marian Drain White Sturgeon Facility Tour** - PRFF members toured the Yakama Nation Marian Drain White Sturgeon facility during today's meeting.
- X. **2010 Sturgeon Activities Coordination Discussion** - Members discussed how fish will be transported from the Priest Rapids (PR) Reservoir to the Yakama Nation Marian Drain (MD) facility. Lenz recommends using a juvenile white sturgeon to conduct a practice run to assure everything runs smoothly prior to broodstock collection because Golder hasn't experienced taking a fish to shore and transferring it on a trailer in the area. Clement suggests that Golder staff establish how much time it will take to transport a fish from PR via the fastest route to the Marian Drain facility, and make sure Donella Miller, YN, is comfortable with the schedule. Grant PUD will be renting a transport trailer from Fresh Water Fisheries Society of BC for broodstock collection. YN also has a transport trailer that can haul two fish at a time.

Detection arrays for the sonic tags could potentially be installed next month by Golder. Broodstock collection could start the last week of May if fish are ripe. Fish will be evaluated in the field and tethered off. YN will be fishing downstream of the Project (Hanford Reach White Bluffs area) simultaneously when Golder staff is fishing in the Priest Rapids Project area. Lenz stated that fishing will start on May 28<sup>th</sup>. The objective would be to get fish pre-spawn the last week of May, or the first week of June. Late June is the typical spawning period. Fishing will take place for one month. Currently, the YN is contracted for two weeks. Miller noted that a YN staffer will be on station from 7:30 to 4:30 each day, while everyone else will be fishing, but that Grant PUD and Golder staff will always have access.

YN has two jet boats that would be suitable for fishing in the White Bluffs area, and two prop boats that are suitable for the reservoir that Grant PUD can use. Korth offered a boat and help from WDFW as well.

Golder will only be transporting fish; they will not be involved in spawning fish. Miller explained that the YN will have the man power to conduct all spawning. Fish will stay at MD until they are spawned. After spawning, fish will be transported back to the river by YN staff unless a request is made to have Golder haul them back. A sonic tag will be installed post surgery in all adults.

Miller explained that the MD facility has enough room to put one female per 10' tank, and that two 16' pools that currently have Pelfrey's origin commercial broodstock in them can be moved out and made available for males.

Korth questioned if Wanapum and McNary fish be kept separate during spawning. Lenz explained that the White Sturgeon Management Plan wants 6 matriarchal families. Whether they are from a mixture of PR or McNary, Lenz doesn't have a preference; it will most likely depend on how many individuals can be collected from either area. . Donella explained that during spawning season some fish will go up to spawn in the tailrace of Ice Harbor dam. If there is enough broodstock from McNary and Wanapum, they will spawned as, Wanapum with Wanapum and McNary with McNary for a total of 8 families. They would then be split. Clement doesn't think the likelihood of getting 16 adults from Wanapum is likely. Rose stated that mid-season, we may want to abandon Wanapum, and go to Hanford Reach. Lenz reminded PRFF members that use of a systematic approach is best.

WDFW brought up the possibility of having a back-up satellite facility available to rear the sturgeon. The idea being that if a major culture disaster occurred at MD, only 50% of the fish would be lost. Grant noted that the Yakamas have a contract to supply 6,500 fish this year and that if they feel they need to have a back-up facility they could do so on their own. It was pointed out that the MD facility has multiple protections to avert a catastrophic loss of fish. Bob Rose agreed, but thought that the topic needed to be discussed at a future date. The co-managers agreed to discuss the need for a satellite rearing facility amongst themselves and then come back to the PRFF with their conclusions.