



Grant County **PUBLIC UTILITY DISTRICT**

FINAL

Priest Rapids Coordinating Committee Meeting

Wednesday, May 28, 2014

9:00 am

SeaTac Radisson Hotel

PRCC Members

Scott Carlon, B. Nordlund, J. Yeager, NMFS	Jim Craig, USFWS
Bob Rose, YN	Kirk Truscott, CCT
Jeff Korth, C. Andonaegui, P. Verhey, WDFW	Tom Skiles, CTUIR
Tom Dresser, Curt Dotson, GCPUD	Denny Rohr, Facilitator

Attendees:

Scott Carlon, Justin Yeager, NMFS	Jim Craig, USFWS
Carmen Andonaegui WDFW	Tom Skiles, CTUIR
Tom Dresser, Curt Dotson, GCPUD	Kirk Truscott, CCT (by conference phone)
Chris Fisher, CCT (by conference phone)	Allen Evans, Real Time Research
Melissa Rohr, D.Rohr & Associates	Denny Rohr, D. Rohr & Associates

Decision Summary

1. PRCC approved, pending approval by Bob Rose, of NNI funding request of "Comprehensive Assessment of Total Smolt Mortality in Relation to Avian Predation on the Mid- and Lower Columbia River: Spatial and Temporal Analysis of Reservoir-Specific Smolt Losses" for \$153,512 from the NNI Fund.
2. PRCC approved, pending approval by Bob Rose and C. Andonaegui and/or Jeff Korth, of NNI funding request from the PRCC Habitat Subcommittee of "Methow Valley Irrigation District Instream Flow Improvement Project" for \$1.4 million from the NNI Fund.

Distributed Items

1. Proposal by Allen Evans, Real Time Research, Inc/OSU, "Comprehensive Assessment of Total Smolt Mortality in Relation to Avian Predation on the Mid- and Lower Columbia River: Spatial and Temporal Analysis of Reservoir-Specific Smolt Losses".
2. Fish injury images
3. PRCC Habitat Funds Project Specification Sheet for the "Methow Valley Irrigation District Instream Flow Improvement Project".

Action Items

1. D. Rohr to contact Bob Rose and Jeff Korth for approval of April 4, April 11, April 14 and April 22 meeting minutes.

2. D. Rohr to work with Mike Schiewe, HCP Chair, on the June 24-25 meeting possibilities.
3. D. Rohr to contact Bob Rose regarding decision on Allen Evans proposal.
4. Allen Evans will send PPT presentation to D.Rohr and he will distribute to committee members.
5. D. Rohr to follow up with upper management of NOAA and Grant to discuss spiral chute installation.
6. C. Andonaegui will contact WDFW personnel within her office regarding Lisa Pelly, Trout Unlimited, and questions regarding the MVID water diversion study.
7. C. Andonaegui to contact WDFW personnel within her office regarding fish screen on the Twisp and Methow Rivers.

Meeting Minutes

- I. **Welcome and Introductions:** Rohr welcomed members to the meeting and introduced participants. Rohr outlined the agenda and the subjects to be addressed.
- II. **Meeting Minutes Approval** – Present PRCC members approved April 4, April 11, April 14, and April 22, 2014 meeting minutes subject to approvals by Bob Rose and Jeff Korth of April 22nd, and Jeff Korth of April 4, 11, and 14. Kirk Truscott is reviewing the April 14th minutes, and D.Rohr is to check back with him in a few days for a final approval. D.Rohr to contact Bob Rose and Jeff Korth regarding meeting minutes needing their approval.
- III. **Agenda Review:** There were no additional agenda items added.
- IV. **Action Items Review – April 22, 2014 Meeting:** These Action Items had all been completed or received additional discussion during today's meeting.
- V. **Update of Wanapum Dam Activities and Review of Injured Fish (T. Dresser)**

PRCC members referred to images provided of injured fish being discussed. The committee discussed that the injuries are too large to be epoxy cuts from the flume vanes and discussion centered around the possibility of pinniped bites from downstream. T. Dresser spoke directly with the Priest Rapids fish counter who distinctly remembers 6 injured fish at the Priest Rapids Dam over a span of time and will continue to document any more injuries. All counting facilities will continue to watch for injured fish. There was concern that injuries were from a damaged flume vane, but this does not appear to be the case. Hatchery managers have not said anything about fish injuries appearing. The comment of 25% more injuries than generally normal does not have context since there is no reference to 25% of what number.

Some injuries indicate possible net wounds. Two of the injured fish have tags. It was suggested that it may be possible to look back at the fish counter video for the fish that passed through with tags to see if they can see if the fish was injured at the point of reaching Wanapum Dam. T. Dresser will keep the committee members advised of the results.

T. Dresser updated the committee regarding Wanapum Dam activities. The grout gallery needs 1 ft. drain joints drilled. 50 of the 84 required were drilled as of May 23, 2014. All three 4 inch pilot holes for the tendons have been drilled in monolith #4. Pilot holes are drilled at 4 inches, then 10 inches and finally at 16 inch diameters. A pilot hole is also being drilled in monolith #3 and is 75% complete. 195 ft. of stranded cable tendons, including 61 strands and 10 inches in diameter, will be installed in each hole and extend 90-100 feet into bedrock.

The BOC (Board of Consultants) has not officially approved, but Grant anticipates the BOC will want one tendon at least in each monolith. The Ogee "pinning" plan for monolith #4 requires eight holes be drilled in the front, but for now they are only putting in four.

When questioned regarding the structural integrity of Priest Rapids Dam, T. Dresser stated that engineering has looked at Priest Rapids Dam and said it is alright, but they will evaluate it more thoroughly after Wanapum work is completed.

VI. NNI Funding Proposal – *"Comprehensive Assessment of Total Smolt Mortality in Relation to Avian Predation on the Mid- and Lower Columbia River : Spatial and Temporal Analysis of Reservoir-Specific Smolt Losses"* (C. Dotson)

Allen Evans presented on behalf of Real Time Research, Inc., Oregon State University, and USGS. Evans showed a power point slide starting with an update of the current Goose Island project. The project started in February and active hazing began in late March. As of May 23 there were no Caspian terns nesting on Goose Island. However, terns have found a small rock island nearby, named NW Rocks, to nest on that appears to be physically connected to Goose Island. Currently there are 105 nests and over 300 birds on NW Rocks. Due to gulls inhabiting NW Rocks and laying eggs, hazing of the terns is not permitted at this time, due to possible disturbance of gull nests and for which permits have not been received to do so . There are questions whether this smaller Island is part of Goose Island and if it can be incorporated into the already existing management plan to deter terns from the Potholes area. In the past there have been no birds on this smaller island. The nesting density cannot yet be determined; however it is apparent the terns are packed closer on this island than they were on the main part of Goose Island. Key questions raised are: Is NW Rocks part of the current management plan? Is NW Rocks part of Goose Island? Does the management plan need to specifically include NW Rocks? The smaller island is only 60 yards away from Goose Island. During later summer months there is no water between them.

28 Caspian Terns in the area have been outfitted with battery powered satellite tags . These satellite tags transmit for 6 hours at a time, over a 28 hour cycle. The 22 hours they are not transmitting is for battery recharging as they contain tiny solar panels on the transmitters. These satellite tags will transmit for a little over one year. Evans is checking whether that 6 hours can be specifically identified as to which hours to transmit or if they are random transmission times.

Currently of the 28 terns, 21 of the 28 are still in the Potholes area. One is nesting on Crescent Island, one on Blalock Island and recently one has been found in the Puget Sound area.

The main goals of the proposal are to determine the high predation areas within the Wanapum, Priest Rapids, McNary and John Day reservoirs by recovering fish tags, determining the spatial and temporal components of mortality in juveniles and conducting a retrospective analysis of smolt loss.

This will be determined by using existing arrays along the river to detect fish as they move down river. This will allow multiple detection points. These detection points will help to determine where the smolts are last seen in the river and identify the area of predation. Near Wanapum Dam the detection arrays are not close enough together to determine if mortality took place during the day or nighttime. Further down river there are enough arrays to indicate day vs. night mortality. This in turn will help determine what type of predator(s) are impacting smolts, such as night time mortality is most likely fish predation as opposed to avian predation. On page 5 of the proposal document is information regarding the survival study.

C. Dotson informed PRCC that there would be additional fish in this study through another project PRCC recently funded. This will add an additional 400 acoustic/PIT tagged fish to the study. They will be released from the Priest Rapids hatchery in the Priest Rapids tailrace.

Evans also discussed an earlier deposition study where they intentionally fed PIT tagged fish to the terns to determine the probability of consumed fish with tags ending up on the island. This probability determined the variance to be applied for the study.

Certain areas in the study have been identified from other studies as the main predation colonies to be concerned with.

This study will only go through 2014. The tags are to provide the spatial and temporal data.

PRCC members asked if perhaps the data would be skewed due to draw down of Wanapum Dam. Evans pointed out that Goose Island is already being managed, but the other islands have no tern management. Using the data from Goose Island and this study will help determine how the management of Goose Island impacts the terns and how that management impacts the rest of the area and fish throughout the system. The Goose Island terns are still a very large predation problem this year even though they were hazed.

PRCC members discussed the possibility of the removal of terns allowing other predators to move into that niche. Would more water birds move into the area? Are they as good at hunting smolt? Would the gull population increase? There was discussion of gulls diet being higher in cherries and human trash, rather than fish.

Studies have shown that more hatchery fish are eaten than wild fish. PRCC members raised the question if terns are picking off the weaker fish. Former studies have shown middle of the road. Some are weaker, but not all.

PRCC members moved to a decision. All present members voted yes to approve the requested funding from the NNI Fund of \$153,512, subject to concurrence by Bob Rose. Kirk believes it will provide PRCC with a look at the entire breadth of predation over the Columbia River. It will be a good analysis of the upper Columbia River. D. Rohr will contact Bob Rose to seek his concurrence.

VII. NNI Funding Proposal (from Habitat Subcommittee) – “Methow Valley Irrigation District Instream Flow Improvement Project” – (D. Rohr, C. Fisher).

Chris Fisher, CCT representative on the PRCC Habitat Subcommittee, called into the meeting by conference phone to present this proposal. The Habitat Subcommittee is requesting \$1.4 million from the NNI Fund for this proposal. Fisher presented two components, a East and West canal. The Bureau of Reclamation is working to get out of surface withdrawals and currently the MVID (Methow Valley Irrigation District) creates a push up dam on the Twisp River to provide irrigation. The plan is to move to a pressurized ground water system and get out of the Twisp River. On the east side they would like to move a large portion to a pipe system, which would allow more water into the Methow. MVID users at this time do not always get the allocation of water they have paid for. This would move to a more efficient system and users would get their allocations. They have tried to utilize funds for the big-ticket price. The Department of Ecology has \$6 million that needs to be used by the end of 2015. They would like to accomplish some aspects of the project before the requested \$2 million from NNI. They asked the HCP Tributary Committee to increase their contribution from \$400,000 to \$1 million, which they did. This allows for the originally planned NNI request of \$2 million to be reduced to the presented request of \$1.4 million.

One concern of the committee was that they just paid to upgrade some of the screens on the Twisp River, and they asked if these were the same screens that this proposal was planning on taking out. The Fulton and Power fish screen is on the Chiwawa River. C. Andonaegui didn't know if there is one on the Twisp River, and she will contact personnel within her office to ask. Trout Unlimited raised the same question and members are discussing if it can be removed and used somewhere else. The screen would become obsolete and the committee does not want it to slip through the cracks. Members felt they had confidence in the group doing the project and it would be taken care of.

There were questions regarding swapping the 11cfs from one part of the river to another. The low base flows of 11cfs can be drawn from the main stem instead of the Twisp. There are wells not utilized from the aquifer and most wells would be drilled at this level. There is a greater capacity to not affect the lower Methow and there would be less impact on the Twisp.

C Andonaegui is concerned about the diversion change and the impact on fish. PRCC members would like to know if the study has been done. Fisher said that Lisa Pelly, Trout Unlimited, would have all of this information. This project is ready to go for this August and Fisher believed that this would in fact have been done. There is information on page 4 of the proposal regarding the diversion affects of trading water that shows that the trade of 11cfs is a wash but the impacts to the Twisp River itself are less.

Members were curious about the court order, which is referenced in the proposal, to reduce the flow by 11cfs and what would happen if the funding for the project did not come through. There was a question of compliance. Members would like to see the push up dam go away so that adult fish are not isolated in pools and the possibility of drying up the Twisp's lower portion during dry years does not happen.

Present members like the project. Many members were happy to see the efforts of cost sharing with Ecology. PRCC members commended the Habitat Committee for seeking funds from several sources. Many members felt that the project was a bit of a stretch for funding from PRCC's NNI Fund, as opposed to the Habitat Subcommittee's Habitat Fund, but are supportive. Members would like to see any left over dollars returned to the NNI Fund.

Present committee members approved the requested funding amount of \$1.4 million from the NNI Fund subject to approval by Rose, and Andonaegui and/or Korth. T. Skiles abstained. Bob Rose will be contacted by D. Rohr.

C. Andonaegui needs to talk to Korth and people internal to WDFW before she can give her approval.

D. Rohr will check back with Andonaegui and Korth and also Rose regarding their votes.

VIII. Discussion of Wanapum Fish Ladder Spiral Chute, Including LB Ladder Approach Same as RB Ladder Approach (T. Dresser)

Grant is still not convinced on installing the spiral chute. There are differences of opinion among the committee members regarding the need to install it. Grant is concerned with adding an additional structure to the flume, causing a ladder outage for installation and increasing the chances of failure. It would take a 4-5 day shut down to install the chute. Due to the other issues with Wanapum this would require a full shut down of each respective ladder during the installation. In addition, Grant is concerned with having to shut down again in order to remove it in time for the Fall Chinook run, if an interim pool raise to 565' took place in October.

All committee members want fish to have the best passage possible and agree that Grant is doing a very good job of handling the current passage activities. Some members are in favor

of a more conservative approach and feel the spiral chute should be installed, while others believe that because the current system is working now, there is no need to change it.

The question was raised about the impact of having the ladder be completely shut down while it is being installed.

T. Skiles is in support of Grant not installing the spiral chute due to the delay and additional risk. He believes that the false weir and flume have been tested while the spiral chute is untested. The current operation is working.

Andonaegui discussed the spiral chute having already being completed and asked why not install it since it has been built. Supports two entities (Grant and NMFS) sitting down to discuss the best outcome.

WDFW questioned the situation for the lamprey and how monitoring will continue. They are worried about getting into an emergency situation.

T. Dresser brought up that the high numbers for sockeye is from July 12-18.

K. Truscott is in favor of the installation as the time frame for the installation is prior to the peak passage. The river conditions will become less hospitable as the season goes on. More fish will move during the high run and the impact should be minimized for fish. However, understands that there is a question of the structural risk and possible risk to the existing structural flume.

J. Craig favored installation of the spiral chute. He basically agreed that it is best to take a conservative approach and provide the best possible passage conditions for salmon and steelhead.

Members all recognized the problems that could arise if the existing flume were to be damaged by the spiral chute during peak run season.

The conclusion is that the spiral chute will be installed at both the left and right bank ladders, and that NMFS and Grant will continue to have offline discussion about the issue. T. Dresser indicated that installation of the spiral chute would start with the left bank ladder first (June 6-11), and be followed by installation on the right bank ladder (June 12-17).

IX. Spill Report for 2014 (C. Dotson).

Currently spilling in the area of 170-180 KCFS plus an additional 20 KCFS side flow for a total of approximately 190 KCFS. Still running at 5 KCFS at the Wanapum bypass. Inadvertent spill is at 40 KCFS out of the tainter gate. There is currently more water than can be handled. Smolts are being evaluated for any signs of Gas Bubble Trauma and they are alright.

X. Updates

- A. Inland Avian Predation Work Group (IAPWG) Activities (C. Dotson) (See VI above).
- B. Priest Rapids Bypass Operation (C. Dotson, T. Dresser) – C. Dotson commented that there has been a lot of spilling, including tainter gate and fish spill.
- C. Hatchery Construction Activities (T. Dresser) – T. Dresser noted that the Penticton Sockeye fry facility will be done soon and ribbon cutting ceremony is tentatively scheduled for September 20, 2014.

- a. Carlton Acclimation Facility – no new information.
 - b. Nason Creek Acclimation Facility will be done in June. Moving residents into housing and doing hands on training at the facility.
 - c. PR Hatchery Modifications – Grant is working closely with WDFW and moving forward on the identified modifications.
- D. Hatchery Permits (Section 10 for Summer Chinook and Section 7 Consultation for Bull Trout. (T. Dresser) – no new information.
- E. NNI Funded Projects
- a. Upper Columbia Fish Screen Monitoring Program Phase I Contract Extension (C. Andonaegui)
 - Peshastin fish screen bypass is completed and juvenile fish are no longer becoming trapped.
 - Goat Creek fish screen (upper Methow) – existing 6 foot drum screen will be replaced with an 8 foot drumscreen in fall 2014.
 - b. Upper Columbia Fish Screen Monitoring Program Phase II – (C. Andonaegui) – No Update
 - c. Lower Wenatchee Instream Flow Enhancement Project Phase II – (C. Andonaegui) – No Update
 - d. “Mid-Columbia River Intake Screen and Diversion Assessment” (B. Nordlund, T. Dresser)
 - The inventory of existing irrigation diversions for compliant fish screens was jump started with the Wanapum drawdown. Danny Didricksen, WDFW, and T. Dresser are reviewing the scope of work and budget.
- F. Committee Reports (D. Rohr)
- D. Rohr sent out to committee members for review.
- G. NNI and Habitat Funds Report (D. Rohr)
- D. Rohr has sent out the first quarter report to committee members for review.
- XI. Review of Next Month’s Agenda Topics (D. Rohr)**
- D. Rohr commented that next month’s meeting will be at Wanapum Dam and include a tour of the fish facilities. Additional agenda items will be determined. . It was announced that Aaron Beavers, NMFS, would attend the June 25, 2014 meeting.
- XII. Next Meeting – June 25, 2014 at Wanapum Dam.** D. Rohr will distribute meeting details.