

**North Umpqua Hydroelectric Project
(FERC No. P-1927)****Resource Coordination Committee (RCC)
May 15, 2019 Meeting Summary****FINAL (7/8/19)**RCC Members or Alternates Present

Steve Albertelli (PacifiCorp)
Rich Grost (PacifiCorp)
Pam Sighting (USDA-FS)
Amy Golladay (USDI-BLM)*
Paul Bridges (USFWS)*
Jim B. Muck (NOAA Fisheries)*
Ed Meyer (NOAA Fisheries)
Sam Moyers (ODFW)
Chris Stine (ODEQ)

*Attendance via conference call

Other Attendees

Ken Witcher (PacifiCorp)
Scott Schevenius (PacifiCorp)
Travis Mackie (Cow Creek)*

RCC Members Absent

Craig Kohanek (OWRD)
Mike Korn (USDI-BLM)

INTRODUCTIONS, AGENDA, OLD BUSINESSMember Updates/Organization News

USDA-FS: They have experienced a lot of retirements, including Jane Blue, NEPA coordinator. Jessica Brewen, special use permit coordinator, and Ben Habig, transportation planner, have taken other jobs outside of the Forest; their positions remain open at this point.

ODFW: Interviews for the SW Region Hydropower Coordinator position, formerly held by Dave Harris, were conducted last week. The hiring decision should be announced in approximately three weeks.

USDI-BLM: Holly Orr is the new Assistant District Manager for Support Services.

PUBLIC OUTREACH

Rich staffed a Pacific Power booth at a hydrology conference at OSU. The booth featured the NUHP display panels. Approximately 50 people, mostly students, attended the conference.

Source One Serenity will be conducting another retreat in June at Lemolo Resort. Sam will take the veterans out on Lemolo Lake for electrofishing, targeting tui chub, brown trout, and/or tiger trout,

which were recently discovered in Lemolo Reservoir. Rich will provide a tour of NUHP fish passage facilities to the veterans.

Pacific Power will be participating in the Southern Oregon Trade and Careers Expo at Seven Feathers Resort in Canyonville, OR on September 26, 2019.

FACILITY AND PROJECT UPDATES

Fish Protection and Passage Facilities

Rich reported that there has been significant action at the facilities due to the recent high flow and debris events. During the early April 2019 high flow events, the pressure relief panels opened on both tailrace barriers and were damaged by passing debris in the river channel. Damaged panels were replaced quickly with panels in inventory, but one panel at Soda Springs still has a plywood board that needs to be replaced with a finished panel. Parts have been ordered to replace the remaining panel and restock emergency inventory.

The Slide Creek tailrace barrier continues to be challenged by debris loading. Crews have been cleaning the barrier panels for the last two weeks. Underwater video cameras were used to ensure no fish were harmed during the cleaning and resetting of the panels. One steelhead mortality was observed within the tailrace following the high-flow opening of the pressure relief panels. Pam asked whether PacifiCorp had spare panels in inventory, and Rich replied that there were two replacement panels for each barrier, and that they were being replaced as part of the emergency repair contract.

The Soda Springs fish ladder was taken out of service during the peak of the high flow event to avoid damage, but was returned to service within a day. The Lemolo 2 fish ladder had some debris in the exit which was removed. The Fish Creek fish ladder was also cleared of most debris, but still has some minor debris that is not blocking passage but that must be removed during lower flows.

The Soda Springs fish screen panels were overtopped due to extremely high reservoir elevation, and the pressure relief panels opened as designed due to a debris influx during the event. There was no structural damage to the screens. When flows receded adequately, the screen area was dewatered for cleaning, inspection, and maintenance. It was out of service for approximately three weeks.

All gates, including the sluice gate, on the dam were opened during the high flow event. Organics and sediments from the reservoir bottom were sluiced during the event. The fish screen was operated during the event right up until the pressure relief panels opened to help manage reservoir inflows, debris, and prevent overtopping of the dam.

Projects Requiring NTPs or Other Coordination

Project	Status
<i>Slide Creek Quarry Development Plan</i>	Awaiting USDA-FS NTP
<i>TL 55-1 2/1 Structure Replacement</i>	Awaiting USDA-FS NTP
<i>Happy Creek Landslide Remediation</i>	Awaiting USDA-FS NTP

<i>BLM Programmatic ROW Management</i>	Awaiting USDI-BLM NTP
<i>FY 2019 1st Quarterly report</i>	Pam is working on the Q1 report.

Pam noted that FS staff are going to review the Happy Creek project in the field on May 17, 2019 and invited PacifiCorp staff to attend. Pam relayed a request from staff to have GIS.shp files submitted with NTP requests. Steve confirmed that was possible.

Ken reported that the repair of the Mowich Gate, damaged during winter access, was in progress. Crews had to weld a new section of the post and reinforce the post with concrete up to the lock box.

Other/Upcoming Projects

Toketee Dam Rehabilitation: There have been some additional discussions between FERC and PacifiCorp regarding seismic loading and acceleration calculations, but there has not been any resolution to move the project to the final design phase. The project is scheduled to be implemented in 2022/2023.

Clearwater 2 Forebay Intake Structure and Dredging: To be completed concurrent with year one of the Toketee rehab project. Steve explained that FS staff had used part of the FERC-designated dredge disposal area for establishment of a wildlife habitat enhancement project. The area used was scrub-shrub without trees and the obvious choice for spoils disposal. PacifiCorp would like to still use this area for disposal and re-plant following disposal. The disposal area is in northern spotted owl critical habitat, and therefore, PacifiCorp would like to avoid cutting additional trees, which would require ESA consultation. PacifiCorp is awaiting concurrence from FS on this issue. Scott described the concrete damage and exposed rebar at the intake structure necessitating repair of that facility.

TECHNICAL WORKING GROUP (TWG) UPDATES AND ISSUES

Fish Habitat Studies (FHS): Monitoring and Maintenance Schedules

There have been two TWG meetings since the last RCC meeting, and the next TWG meeting is tentatively planned for August to review monitoring progress, draft revisions of the SA 19.2 Study Plan, and related staffing and budget expectations for 2020 and beyond.

SA 6.2 Slide Creek Full-Flow Reach: *nothing new to report.*

SA 7.2 Gravel Augmentation: The RCC previously approved spending to deliver gravel, currently staged below the Fish Evaluation Building (FEB), to the Soda Springs bypassed reach. Most of the gravel will be placed downstream of the screens through the pipe. The remainder of the gravel will be placed directly onto the spawning tailouts and off of Schoolhouse Bridge in the Slide Creek bypassed reach.

The gravel augmentation work is still planned for August. Rich is working on obtaining in-water work permits for the project. The US ACoE has suggested applying for a permit valid for a 5-year

period, which, coupled with the newly identified need for boulder additions, will take longer than anticipated.

SA 8.2 Habitat Monitoring: *nothing new to report.*

SA 8.3 Soda Springs Habitat Modification: The Soda Springs bypassed reach habitat structures need reinforcement with boulders following high flow scouring. Annual monitoring will inform a conceptual plan for reinforcing the log weirs. Spawning gravels were scoured away by high flows. Flows were high enough to go over the fish return structure, which created a waterfall, instead of the usual eddy, thereby washing out the gravel downstream from it. Sam noted that the boulder barbs held up well during and after the storm. The TWG will need to rapidly plan and permit the boulder maintenance work, possibly to occur this August.

SA 19.2 Long-term Monitoring/Predator Control Study: The LTM plan report is pending. The TWG defined a prioritized scope of work (SOW) for ODFW staff to complete under the 19.2 program. Since it was emailed out April 9, 2019, Rich was the only TWG member to supply comments. Jim ratified the SOW via email.

The draft predator control study report from Stillwater Sciences was received and distributed for TWG review on May 14, 2019. Stillwater's initial conclusions indicate substantial predation on salmonids and recommend some level of predator control. Sam and Rich will take a critical review of the methods and analysis and encourage other TWG members to do the same via review comments to be provided to the TWG and then Stillwater.

Observations of upstream migration reveal fewer steelhead at this point, and the first Chinook migrant of the year was observed two days ago. The otter was seen in the ladder preying on steelhead and trout almost daily earlier this year. Up to three otters have been observed in the ladder at the same time. Following the storm event, the otter was observed only once, after which PacifiCorp consulted with ODFW and decided to experimentally close the juvenile fish entrance to the ladder to dissuade entry by the otter. Otters have not been observed in the ladder since that time. With the juvenile gate closed, the otter must navigate the higher velocities of the main fish entrances to access the ladder. Ed questioned whether smaller fish use the ladder, and Sam replied that fish under six inches have not been observed going upstream, though they have seen some going downstream. Ed noted that although the juvenile entrance was not a NOAA Fisheries requirement, it was intended for smaller salmon to find refuge, so we should be cautious with the decision to close the gate on a regular and/or long-term basis. Sam suggested opening the gate once (for a week) to see if doing so results in the otter in the ladder again, thereby confirming the hypothesis that the juvenile gate affects otter use of the ladder.

The group discussed the destruction of the smolt trap from high flows and logs. Trap debris was mobilized throughout the river downstream. One of the pontoons is hung up in the river about a mile upstream from Dry Creek. Some of the skin on the cone was chained up and removed from the river around Boulder Flat. A come-a-long was used to pull the skin pieces out of the sand. Sam noted that lessons learned for survival of the trap in the river include an upper limit of 2,000 cfs if left on the penstock side and an upper limit of 4,000 cfs if pulled to the ladder side, assuming that no logs hit it. Sam along with Chris Sheely have floated the river to remove debris where possible. Some debris will have to be removed following reduction of flows in the summer. Bill Blodgett, local rafting

guide, contacted USFS, PacifiCorp and ODFW about removing this debris in the river, but most of the spots Bill identified have since been removed by ODFW. Sam advised Bill to take GPS points for the remaining debris that he finds, so that ODFW can address it at a later date if feasible. Because some of the debris is deep, pinned to rocks, in rapids, and otherwise technically challenging to remove, Rich has asked Weekly Bros., Inc. for a cost estimate for removing it. The estimate will be forwarded to the RCC for approval of spending from the 19.2 account to remove as much of the remaining debris as safely possible. Sam estimates that ODFW has recovered approximately 30% to 40% of the total trap, including most of the cone skin and the cone shaft. ODFW has filed an insurance claim for the \$57K replacement cost of the trap.

Flows & Ramping (F&R): Flows, Ramping, Gaging, Monitoring, Plan & Reports

Rich reported that there was damage to several gages from high flows. USGS has been on-site performing repairs, maintaining gages, measuring flows, and revising rating tables. WY2017 data is being analyzed for reporting by Roger Reynolds, PacifiCorp hydrologist. USGS is still working on QA/QC of WY2018 data. Water quality data from the station below Soda Springs for WY2018 is expected for delivery by USGS in May 2019.

OPERATIONAL UPDATES

Slide Creek Canal Erosion Event

Ken reported on a precipitation event on April 7, 2019 that resulted in a chain of events leading to erosion of the hillside between Slide Creek Canal and the North Umpqua River. Flows increased over 5,000 cfs within 12 hours during the event. Debris loading on the tailrace barrier panels resulted in a reduction of generation at the plant pursuant to the standard operating procedures. Additional debris loading above and below the plant eventually resulted in a plant trip, which leads to canal forebay sidespill at the overflow channel immediately upstream of the penstock. A concurrent landslide on the hillside above the canal resulted in sediment loading and woody debris within the canal. The debris plugged up the trash rack and side-channel spillway and backed up water in the canal, which in turn resulted in additional debris getting hung up on the old, metal walkway supports on the downhill side of the canal. The uniform and flat canal experienced overflow on the downhill side from the forebay for approximately 2,000 feet upstream. The overflow mobilized sidecast material on the hillside from the original construction of the road and canal to the river below. Underlying bedrock was exposed from below the sidecast material. Scott estimates 4,000 cubic yards over 2,000 feet of discontinuous hillside were mobilized, some of which went to the river.

Upon discovery the canal was dewatered and taken out of service. PacifiCorp removed the old steel support structures from the canal wall and performed emergency concrete repairs to fill voids under the canal. Additional level indications will assist operators in identifying whether side spill extends upstream of the side-channel spillway in the future. Initial conclusions are that the environmental impacts of the event are limited in scope and intensity. Scott flew a drone over the impact area and it does not look like there are significant inputs of angular rock to the reach. Most of the sediment was mobilized during the storm. Rich and Scott will review potential impacts when flows recede. The group will visit the site following the meeting.

Powerhouse/Canal Outages

Clearwater 1 was recently brought back online from a scheduled maintenance outage. Lemolo 1 scheduled maintenance outage begins Monday, May 20, 2019 and will last three to four weeks. No other outages are planned until the fall.

Reservoir Management

Lemolo Reservoir: The Lemolo Reservoir refill is proceeding as planned. Rich reports that we are now within summer operating range. Steve noted that PacifiCorp had received requests from the Lemolo Resort owners to hold the water surface below maximum pool to increase beach area, and he requested that USDA-FS remind the lease holder of the operating requirements of the reservoir.

Toketee Reservoir: The Toketee Reservoir will operate within the minimum water level range for the foreseeable future, as has been the case in recent years due to conditions necessitating the Toketee Rehab project. Pam reminded the group that USDA-FS is concerned about the Toketee boat ramp and encouraged PacifiCorp to consider the boat ramp channel in project plans. Scott confirmed it is under consideration.

SA 19.1 TRIBUTARY ENHANCEMENT PROGRAM UPDATE

Kirk has permit applications in for work on mainstem Rock Creek on private lands. He is working on approximately three miles worth of sites and has secured access agreements with private landowners. There are a number of habitat enhancement sites utilizing logs, root wads, and boulders. Source sites have been identified for these resources, including a Forest Investments Alliance (FIA) boulder field and 160 full trees with root wads from the Strader property.

Rich asked how the enhancement sites held up following high flows, and Sam replied that things looked great, including the mainstem Rock Creek, East Fork Rock Creek, and Harrington Creek sites that they have reviewed thus far following the storms.

SA 19.3 FEDERAL MITIGATION FUND PROGRAM UPDATE

Pam distributed the final FY2020 project approval list. No comments were received during the review period with the exception of the RCC's letter in support of ODFW's funding proposal. ODFW's proposal was not funded. Pam reviewed the approval process with the group. The review board recommends the projects and funding amounts to Alice Carlton, Forest Supervisor, who ultimately makes the decision. The FS is resuming strategic plan development. This time the FS will prepare a plan and ask the public for input on the document instead of asking the public for input on how to prepare the plan. The next peer group meeting to produce a list of potential projects for the strategic plan will be in the fall. The group may identify project types, categories, or specific projects for recommendation in the strategic plan.

Pam noted that the cooperative agreement process has been resolved. For a time, all money going out from the FS had to be sent to Washington, D.C. for approval. There were 1,000 projects, including 300 from the Pacific Northwest, in the queue. D.C. has returned the projects, noting that

no further review is required. Agreements with Cow Creek, UC Davis Fish Genetics Department, Pacific Rivers, and other future cooperators should be more streamlined in the future.

ADDITIONAL COMMENTS

Pam reported that another death occurred at Toketee Falls trail. That makes three declared deaths, one undeclared/undiscovered body, and one injury in six months. Ranger Tyree is reviewing the trail overflow parking project, which must be cleared for the aquatic conservation strategy due to its position adjacent to the river corridor.

Pam invited RCC members to RSVP to attend Pacific Rivers' upcoming event on May 28, 2019 at the UCC Southern Oregon Wine Institute celebrating the recent designation of the Frank and Jeanne Moore Wild Steelhead Management Area, which includes most of the Steamboat Creek watershed.

PUBLIC COMMENTS: None at this time.

NEXT RCC Meeting: August 21, 2019 (Conference call).

The meeting adjourned at approximately 12:45 PM. The 2019 Rolling Action Plans were signed after the meeting.