### Columbia River Regional Forum SYSTEM CONFIGURATION TEAM February 27, 2014 Final Minutes

#### 1. Introduction and Review of Meeting Minutes

Today's SCT meeting was chaired by Bill Hevlin, NOAA Fisheries. Representatives of the COE, NOAA, Oregon, BPA, CRITFC, Idaho and others participated. Copies of previous minutes, documents mentioned in the minutes, and the meeting sign-up sheet are available from Kathy Ceballos at 503-230-5420 or Bill Hevlin at 503-230-5415.

SCT minutes are archived at NOAA, Hevlin reported. Gary Fredricks, NOAA, asked if the notes could be posted at an accessible location such as the FPOM website. Hevlin said he would inquire whether the minutes could be stored at the FPOM site. Comments on the January 16 draft SCT notes are due by the next SCT meeting on March 20.

## 2. John Day Dam Avian Wire Replacements

SCT discussed the replacement of avian wires that collapsed recently at John Day Dam. The design team is considering whether to use a different material so the same problem doesn't happen again. The wires must cross an unusually long span, which makes them difficult to support and replace. Information on the design alternatives will be included in the O&M manual, which is almost finished, Mike Langeslay, COE, reported. The material being considered for replacement is fabric because metal is too heavy. The O&M manual will specify when to replace avain lines that are down. FPOM is coordinating the design and will manage restoration of the avian wires so the project will not be placed on the CRFM speadsheet. The main goal now is to finish the O&M manual.

SCT will revisit John Day issues at its next meeting March 20, including the adult PIT tag detection installation.

## 3. Review of Updated FY14 CRFM Spreadsheet (Cost/Schedule Changes)

Randy Chong, COE, distributed copies of the FY14 CRFM spreadsheet, which has not changed since the last SCT meeting. In early March, COE project managers will establish schedules for their projects, which will result in updated cost estimates for the spreadsheet.

SCT's attention today turned to projects that are not on the spreadsheet – development of a JSATS database and repair of the Bonneville adult fish facility. The <u>JSATS database</u> is being tested and will be ready to go public soon,

Langeslay reported. A meeting participant questioned whether that money really needs to be spent and said more information on Little Goose studies is needed.

As for the <u>Bonneville adult fish facility</u>, the pipes that deliver fish to the ladder are most likely the source of the problem, Fredricks said. It appears that fish are being injured or stunned as they pass through the pipes into the water. Rebuilding the pipes could cost several thousand dollars, Langeslay said, and no fix for this is budgeted on the FY14 spreadsheet. Further discussion indicated that a few thousand dollars might be found to address this problem.

The conversation moved to items #15 and #17 on the FY14 spreadsheet.

#### 4. Update on Lower Granite Forebay Pumps (item # 15, \$100,000)

Chong led a discussion of what's being done to upgrade the pumps that provide cooler water to the Lower Granite adult ladder and trap. SCT focused on the plan for 2014, ensuring that the adult ladder can be cooled while improving tailrace conditions for adult passage in the summertime. The goal is to avoid repeating what happened in the summer of 2013.

As long as there is leeway at the end of the in-water work period, the COE should be able to install the new pumps and extend the intakes into the forebay, Chong said. The work should be completed by June 15, 2015, including any modifications related to the new pumps.

Christine Petersen, BPA, said a large number of fall chinook are expected to return this spring. Would having the trap back in service by then help sockeye? Fredricks emphasized the importance of getting fish into the trap so they can be transported.

Russ Kiefer, Idaho, advocated a morning operation using primarily unit one at Lower Granite if it appears that adults are delaying or blocked in the tailrace. Morning is when adults are most likely to pass upstream. Lost spill volumes in the morning could be made up later in the day to meet required spill levels.

Hevlin suggested developing a change form that specifies the operational changes to be taken in the event of adult delay at Lower Granite and Kiefer supported that approach. There was discussion of whether ERDC modeling will be needed to develop spill pattern changes at Lower Granite. There may be enough information available from tailrace velocity data and video to develop a spill pattern that reduce or eliminates the powerhouse eddy, Hevlin said. Hevlin will start developing the change form. Further discussion of this issue will happen at FFDRWG.

# 5. Update on Spillway PIT Detection Installation at Lower Granite (item #17 on FY14 spreadsheet, \$4 million)

Jack Sands, COE, reported that the test evaluation of the PIT tag installation at Bonneville corner collector didn't go well but provided some important insights. The main lesson learned was that deploying the hydrofoil antennas into an RSW flow will be challenging. This will require further scrutiny if there's a decision to move forward with the hydrofoil approach. Furthermore, it will be difficult to deploy anything while the gate is open. The hydrofoil approach needs further testing, and the main question now is whether to proceed with that process or focus only on testing the ogee installation at Lower Granite.

Obviously, more information will be needed on juvenile passage at Granite to fully develop the spillway design, Sands said. The other thing that will be needed is a cost estimate for further testing of the hydrofoil approach so it can be compared with the ogee approach. More information on the ogee approach will be available in June. Ideas for possible alternative locations to test the hydrofoil approach are needed. It's possible that after further investigation the COE will decide not to proceed with the hydrofoil approach.

Developing a good communication link between the antennas and transceivers in the gallery will be key to the success of a PIT tag detection system installation at Lower Granite. To date, \$1.5 million has been spent on this endeavor, which includes all ERDC modeling to develop the hydrofoil approach and \$475,000 for biological monitoring.

There was discussion of how well the hydrofoil approach would capture passage throughout the depth of the water column. Hevlin asked if a flat plate detector might work near the crest in the TSW that will be moved from Little Goose to Lower Granite. As of July 2014, possible alternatives to consider for installing PIT detection at Lower Granite will include the ogee alternative, the hydrofoil alternative, and the TSW alternative.

# 6. Schedule of Upcoming Meetings

- March 20 Next SCT meeting and will be followed by a special Walla Walla FFDRWG meeting.
- May 28 29 Tentative date for the next Walla Walla FFDRWG meeting.

# 5. Next SCT Meeting

The next SCT meeting will be the morning of March 20 in Portland, followed by a special FFDRWG meeting to discuss Lower Granite adult passage issues, including managing temperatures in the adult ladder, and the design of the renovated juvenile bypass system, including the bio evaluation of the gatewell passage routes and choosing a new outfall location. These notes prepared by technical writer Pat Vivian.

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