

**Columbia River Regional Forum
SYSTEM CONFIGURATION TEAM
September 4, 2014
Final Minutes**

1. Introduction and Review of Meeting Minutes

Today's SCT meeting was chaired by Bill Hevlin, NOAA Fisheries. Representatives of NOAA, NPCC, the COE, Oregon, BPA, Umatilla Tribe, Idaho and others participated. Copies of previous minutes, documents mentioned, and meeting sign-up sheets are available from Kathy Ceballos at 503-230-5420 or Bill Hevlin at 503-230-5415. Draft and final SCT notes are available on the COE's TMT website under the FPOM link.

The July 17 draft SCT minutes were approved today as final. Hevlin said that SCT is meeting today, September 4, to accommodate the Derek's request to hold FFDRWG on August 21 to expedite the review of designs for facility improvements at Lower Granite to cool the ladder and trap.

2. Lower Granite Ladder and Trap Cooling Improvements

2a. Updated work and ladder outage schedule

Randy Chong distributed handouts outlining the COE's plans for a chimney to provide cool water to diffuser 14 and the depth extension of the forebay auxiliary pump intakes, as well as a new COE study proposal for evaluating temperature control and adult passage in the LGR adult ladder (see agenda item 2b below). Chris Pinney and Ryan Lowery of the COE Walla Walla office reported via phone. Yesterday was the 60% project design review. Pinney noted crucial dates in the work schedule:

- On September 19, 2014, the COE will provide a revised 3-D model showing how flows will be discharged into the Granite forebay from pumps #1 and #2. The design will include a new trash rack.
- The dive approach and ladder outage needs to be structured by September 15, 2014, so it can be incorporated into the contract specifications by September 29. Review of the project will be completed by November 15, with a contract award date of January 27, 2015.
- Onsite construction was initially scheduled for April 24-May 29, 2015. The ladder has to be out of service when divers are in the water. Approximately 30 hours of dive time will be needed to extend the pump intakes, with an additional 35 hours to install a chimney over diffuser #14. That means 65 hours of diving, which is typically done in 10-hour shifts.

SCT discussed at length how to schedule the ladder outage within the work window, considering the diving requirements. Installation of both pump intake extensions and the diffuser #14 chimney will require a 6-day outage, but the COE would prefer to complete the work in 3 days in double shifts, with crews working on both structures simultaneously. With a 6-day outage, the COE could probably do the pipe work and bring the ladder back on line for 2-3 days to pass fish that have accumulated, and then take the ladder out of service again for the chimney work.

Scott Bettin, BPA, asked whether any of the units at Lower Granite will need to be out of service for diving. Lowery said unit 1 could be shut off with unit 2 functioning as the priority unit. Diffuser #14 will probably also be closed for diving. There was discussion of whether unit 1 really needs to be shut off, given that divers will be more than 100' from the powerhouse.

Russ Kiefer said a ladder outage in May would be problematic for Idaho and recommended an April outage instead. Gary Fredricks, NOAA, said an April outage could interfere with adults that have relatively little time to get to a spawning location. Given these constraints, Pinney said it would be better for the COE to consider timing the ladder outage during the first half of June when chinook passage drops. There's a risk that Granite will be swamped with fish in April if 2015 turns out to be a similar water year to 2001. It may take until the second week of June to complete the work. If a 6-day outage is needed, the COE will probably split that in half so fish are not held back for more than 3 days at a time. This option appears to have the least impact.

Tom Lorz, Umatilla, proposed installing the auxiliary pump extensions only and using rental pumps again in 2015. With this schedule we at least get some improvement over what was available in 2014 and we reduce the outage to 3 days. Schedule the diffuser 14 chimney installation for 2016. Others thought the opposite schedule may be best, install the chimney in 2015 and follow with pump extensions in 2016. There did not appear to be any support for a 6-day outage, while a 3 day outage in June seemed acceptable.

Lowery said the COE will pursue its preferred option of scheduling a double-dive crew within a 3-day work window in order to complete all the work in 2015. For the COE, Lowery said, the chimney work may be a higher priority than the pump extensions if the work has to be split into two years. If unit 1 needs to be shut down for the dive project, total dissolved gas from high spill could be a problem, and Lowery will check with staff what river flow to expect at that time. Lorz suggested building flexibility into the contract so the outage can be delayed a week or two if flows are high.

SCT supported a 3-day ladder outage during the first two weeks of June 2015, with flexibility for delay if flows are too high. The COE will specify in the contract that the ladder outage will be for 3 days during the first to the third week of June. Kiefer will consult with IDFG harvest experts regarding PIT tag data that could help assess impacts of a ladder outage on chinook passage in June.

There was discussion of a recent comment at TMT that the current plan for extending the intakes at Lower Granite might not make them long enough. The COE doesn't think going deeper will provide sufficiently cooler water to be worth the increased cost and project delay, Pinney replied. The design should allow the intakes to be extended easily in future if temperatures rise, Lorz and Pinney agreed.

2b. Lower Granite PIT tag study proposal

Next year the COE plans to verify exit success at the Lower Granite ladder with PIT tag detection equipment in the bulkhead structure and also at the entrance to the tunnel, Pinney reported. The equipment can be easily removed and replaced as needed. Conder suggested installing antennas on the trash rack, and Fredricks said 3-D information would be useful. There was general SCT agreement that PIT tag antennas on the trash rack would provide valuable information. However, the presence of fins in the ladder could confound the results, Lorz pointed out.

It appears that SCT generally supports PIT tag detection at the LGR ladder exit, but the method and cost need further discussion, Hevlin noted. Bettin asked about funding for the electronics, as BPA currently has no budget for this. In response to funding concerns, Chong added a line item to the FY15 spreadsheet with an estimate of \$150,000 in CRFM funds to install two PIT tag antennas at the Lower Granite ladder exit. FPOM will discuss this further at its September 11 meeting, acknowledging that the COE needs this information by September 15 to write contract specifications.

3. Budget Update and Continued Scoring of FY15 CRFM Line Items

Per recent guidance from COE legal staff, Chong said he was asked to remove NPCC as a voting entity from the SCT spreadsheet because voting is limited to sovereigns. For example, CRITFC doesn't vote at SCT but has been designated to vote on behalf of the Umatilla Tribe, a sovereign entity. Ruff expressed surprise at this development and pointed out the Council, as an interstate compact agency, has been providing its rankings for SCT projects, along with everyone else, for about 20 years. What has changed this year to cause the Corps to take this new position, Ruff asked? Ruff also indicated, if the Corps' policy now is that only "sovereign parties" can rank projects, then the Federal government should get only one rank. Thus, each of the columns for NOAA, FWS, BPA and the Corps should also be removed from the spreadsheet and combined into a single column called the "Federal government," as these agencies are not sovereign entities. Each of the Northwest states and each of the tribes would also have a column on the spreadsheet as they are all sovereign entities.

The Senate report allocated the same amount for the CRFM project as the House report: \$69 million for the Willamette River and FCRPS combined, plus \$2 million for lamprey, a total of \$71 million. Probably the COE will operate on a work plan process in FY15 pending Congressional approval of the federal budget. There could be a year-long continuing resolution, which would probably produce the \$71 million in CRFM funding currently budgeted.

Chong highlighted changes to the FY15 spreadsheet since SCT last met:

- #10. Little Goose adjustable spillway weir re-solicitation, \$7 million – This estimate was considered mandatory because it covered actions required to complete the contract. However, that is no longer true since the contract was terminated. Hevlin reiterated the value in completing this contract successfully: dam operators will be able to shift the ASW from the low-crest to the high-crest position and open or close it in 15 minutes. Because this item is no longer considered mandatory, SCT scored it: NOAA – 5, Umatilla – 3, COE – 4, BPA – 4, Oregon – defer (believes spill is the most effective remedy), Idaho – 2.
- #18A. Post-construction evaluation, Lower Granite adult ladder temperature measures, \$150,000 – This estimate could go up or down depending on SCT and FPOM recommendations. There was general agreement to keep the current design and alter it later if it doesn't resolve adult fallback issues. Scores were: Umatilla – 3, NOAA – 4, Oregon – defer, BPA – 2, COE – 3, Idaho – 5.
- #20. Lower Monumental performance standards evaluation – follow up on near miss, \$40,000 – Scores were: NOAA – 2, Umatilla – 3, Oregon – 1, COE – 5, Idaho – 1, BPA – 4, COE – 5.
- #21. McNary TSW closure leaf seal, hoist stilts and deck modifications, \$1.5 million – The purpose of this item is to make the project whole after loaning its equipment, Chong said. Another frame is needed for the hoist on the TSW. Scores were: COE – 5 (with the caveat that this will be postponed if FY15 funds run short), Umatilla – 2 (due to concerns about funding availability; might increase score with more information), NOAA – 3, BPA – 5, Oregon – defer, Idaho – 3 (due to funding concerns).
- #22. McNary performance verification monitoring, \$100,000 – Chong said a third year of monitoring might be needed, but a lot will be happening during FY15 in terms of unit availability at McNary, which is affected by monitoring. The estimate covers preparations to re-test the dam in FY16. Scores were: BPA – defer, NOAA – 2, Oregon – 1 (doesn't support performance standards testing), Idaho – 2, Umatilla – 2, COE – defer (needs more discussion).
- #24. McNary spillway weir boat barrier, \$150,000 – This line item is mandatory, but it doesn't necessarily have to be done in FY15. Scores were: NOAA – 3, Umatilla – 3, BPA – 4, COE – 4, Oregon – defer, Idaho – 2.
- #25. Lower river BiOp performance standards testing, \$1.6 million – The estimate covers the COE's share of PIT trawl costs, as well as planning for FY16 performance standards testing at BON. It includes the contract for tags but not tag cost. Scores were: NOAA – 5, BPA – 5, COE – 5, Oregon – 1 (doesn't

support performance standards testing), Umatilla – 2 (paying for monitoring with CRFM funds is questionable), Idaho – 3.

- #26. Adult salmon migration studies, Lower River, \$160,000 – This line item is probably mandatory; Chong will verify. Scores were: Umatilla – 2 (reporting costs should be part of the project budget, not a separate line item), NOAA – 4, BPA – 5, COE – defers, Oregon – defer, Idaho – defer. The COE, Oregon, and Idaho need more information before scoring this item.
- #27. Avian island pit detection, \$425,000 – This line item will support estuary work; it's considered almost mandatory, Fredricks said. Scores were: NOAA – 5, Umatilla – 5, Idaho – 5, COE – 5, BPA – 5, Oregon – defer (supports monitoring in general, but wants a clearer path forward on this project).
- #28. Turbine survival program, \$430,000 – This is primarily for completion of the BON runner evaluation, a subject of last week's ERDC trip. Scores were: Umatilla – defer, Idaho – defer, Oregon – defer, COE – 4 (strongly supports keeping the TSP going), BPA – 5, NOAA – 3.
- #29. Snake River intake gate closure, \$150,000 – This project involves modifying the intake head gates so they can meet dam safety criteria of being able to be closed in 10 minutes. This feature was disabled at Lower Monumental, Little Goose and Lower Granite dams during installation of fish screens. Currently it takes about an hour to close the gates, which could result in damage to the powerhouse. The CRFM funds will pay for design work to look at alternatives. Scores were: NOAA – 3, BPA – 5, Umatilla – 3, Oregon – defer, Idaho – 3, COE – 5.
- #30. Transportation & project COP updates, \$85,000 – This item covers completion of the Lower Granite COP and readdressing the Little Goose COP. Scores were: Umatilla – 2, Oregon – 1, COE – 5, BPA – 4, NOAA – 3, Idaho – a split score (1 for the project COP updates and 4 for the transport COP).
- #32. Snake River fall chinook system survival study, \$50,000 – The purpose of this item is to collect adult survival data from the fall chinook study. Scores were: NOAA – 5, Idaho – 5, Umatilla – 5 (would score this lower if it's for report writing only), BPA – 4, COE – 5 (a lot has been invested), Oregon – defer.
- #33. Inland avian predation management plan, \$750,000 – This line item covers monitoring of avian predators in the San Francisco Bay area and inland. Scores were: Umatilla – 5, NOAA – 5, COE – 5, BPA – 5, Idaho – 4, OR – 5 (strongly supports monitoring outside the Columbia River and its inland areas).
- #34. Kelt management plan support, \$50,000 – This estimate might be high. Scoring was deferred until Chong confirms the amount.

- #35. Direct injury to adults over TSWs and through turbines, \$100,000 – Scoring of this line item was deferred until more information is available.
- #36. McNary and Snake River adult migration studies, \$50,000 – Scores were: NOAA – 5, Umatilla – 4, BPA – 5, COE – 5, Idaho – 5, Oregon – 5.
- #37. The Dalles/John Day adult PIT AMIP, \$20,000 – Scoring of this line item was deferred.
- #38. The Dalles adult fishways and AWS study, \$16 million – Scores were: Umatilla – 5 (was 4 until the loss of both fish units at TDA recently), NOAA – 5, COE – 5, BPA – 3 (concerned about spending \$16 million when an unofficial test recently found that 2500 cfs flows didn't move fish into the ladder), Oregon – defer, Idaho – 3 (it's 22% of the budget in a tight year), COE – 5.

4. Next SCT Meeting

The regular SCT meeting on September 18 conflicts with an ERDC trip September 15-19, so SCT agreed to cancel it and meet next on October 16.

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