

Columbia River Regional Forum
SYSTEM CONFIGURATION TEAM
***Draft MEETING NOTES**
January 18, 2018
Comments are due March 15, 2018

1. Introduction

Representatives of NOAA, the COE, PPC, BPA, NPCC, Oregon, Washington, Idaho, CRITFC/Umatilla and others participated in today's SCT meeting. Blaine Bellerud, NOAA, served as chair and facilitator, following Bill Hevlin's retirement in December. The final notes for the November 16 meeting have been finalized via email.

2. Updates on FY18 CRFM Project List and Cost Estimates

Ian Chane, COE, passed out copies of the updated CRFM budget spreadsheet for FY2018 and gave updates on individual line items, using the vertical version of the spreadsheet. He explained modifications the COE has made to the spreadsheet format:

1. A new column was added showing the cost estimate as of the last SCT meeting. Comparing this with the column to the right shows any changes in project budget.
2. The Remarks section has been removed from both the horizontal and vertical versions of the spreadsheet.
3. Project descriptions have been updated.
4. COE project numbers were added for internal tracking purposes.
5. The two versions of the spreadsheet are linked electronically so that changes to one will automatically be made to the other.

Several of the FY18 project budgets have changed dramatically, due to a big cost increase in #23. Lower Granite Juvenile Bypass Facility Phase 1a from \$4.5 million to \$9.3 million. It's critical to get this project up and running (see discussion below).

The conversation moved to individual line items:

- #3. Estuary Habitat Studies – Completion of the report analyzing 3 years' worth of data has been deferred to FY 2019 to help cover the cost increase for Lower Granite juvenile bypass work in FY18. If funding becomes available it will continue this year, but FY19 funding is more likely.

- #4. Avian Predation Cormorant Monitoring, \$3.5 million – Work will move forward on terrain modifications at East Sand Island.
- #5. John Day Avian Wires, \$1.411 million – The estimate went up from \$1.3 million to \$1.411 million.
- #6. John Day Adult PIT Detection, \$80,000 – The estimate of \$80,000 hasn't changed. It covers SAEDC and closeout costs. However, the line item is new and didn't transfer onto the vertical version of the spreadsheet, so the COE will make that change and send the revised spreadsheet to SCT.
- #7. The Dalles AWS, \$4.9 million – The estimate dropped by \$100,000. Work is on track and there are no scheduling issues.
- #8. Lower Columbia River Juvenile Survival Studies, \$1.5 million – The budget was reduced by \$100,000. SCT should discuss whether this will need more funding
- #9. Avian Island PIT Detection, \$300,000 – The cost of tag recovery has gone up from \$200,000 to \$300,000, along with a cost reduction in predation monitoring. So the overall avian budget hasn't changed.
- #10. Turbine Survival Program, \$250,000 – Closeout is on track to occur in 2018.
- #11. John Day Mitigation, \$10,000– The funding is needed to continue analysis of mitigation at JDA. The COE is working with the TAC to analyze adult production for *U.S. v Oregon*.
- #12. Reservoir Temperature Monitoring at BON, JDA and TDA, \$85,000 – The current monitoring period is July-August, but there have been discussions of starting earlier. \$85,000 covers only equipment deployment and is considered a placeholder.
- #13. FCRPS CRFM Program Management, \$400,000 – The budget was reduced to help pay for Lower Granite juvenile bypass work. It covers in-house labor only.
- #14. McNary Avian Water Cannon Deficiency, \$750,000 – The estimate hasn't changed.
- #16. Ice Harbor Turbine Passage Survival Program: Test Turbine, \$350,000 – The estimate for oversight and closeout hasn't changed. There was agreement to revise the project description to clarify that balloon tags are being used (acoustic tagging is not CRFM-funded). Installation of trolley and fish pipes in the tailrace is problematic, and the COE is working hard to finish this year. Scott Bettin, BPA, noted that the work has been taking a lot of units out of service at ICR.
- #17. Lower Monumental Outfall Bypass Pipe Expansion Deficiency Correction, \$0 – This estimate was initially \$500,000 but has been zeroed out for FY18 and deferred to FY19 depending on available funding.

- #18. Little Goose Spillway Weir Boat Barrier, \$182,000 – The estimate is up from \$77,000 because the project was under-budgeted. Contract modification added \$50,000 to the cost.
- #19. Little Goose Adult Ladder Temperature Mitigation, \$900,000 – The estimate for SAEDC hasn't changed and the project is on schedule. Russ Kiefer, Idaho, asked when the cooling system would be operational; Derek Fryer, COE, will get back to him on that.
- #21. Lower Granite Spillway PIT Detection, \$0 – Work appears to be on schedule. There will be an update at the next FFDRWG meeting.
- #22. Lower Granite Spillway PIT Tag Detection Post Construction Monitoring, \$0 – This is one of the line items deferred for FY19 funding. A contract will be issued this year, and the project should be on line by spring 2019. The schedule for post-construction monitoring shifted when installation of the antenna was delayed.
- #23. Lower Granite Juvenile Bypass Facility Construction, Phase 1a, \$9.3 million – The budget increase from \$4.5 million is driving most of the recent changes in the FY18 budget. The JBS is on schedule for completion by April 15.
- #24. Lower Granite Surface Passage Modifications, \$200,000 – This covers the cost of moving forward with 30% design specifications. The contract is on track to be awarded in 2018, but the COE has not yet decided to move forward with modifications, given that the spillway weir would cost \$3-5 million to repair if it ever had to be sunk in a flood. This warrants more SCT discussion.
- #27. Lower Granite Spillway Weir Boat Barrier, \$30,000 – This covers the cost of posting warning signs for the public.
- #28. Lower Granite Juvenile Passage Performance Verification Monitoring, \$790,000 – The estimate for repairing the trolley system, which was damaged by debris, increased by \$290,000. The contract will be awarded this week, if it hasn't been already. The work will incorporate a new design to resolve issues with the spillway deflectors.
- #28b. Lower Granite Juvenile Passage Performance Verification Monitoring, \$1.5 million – The estimate was previously zero because SCT didn't want to rank this item. \$1.5 million will purchase equipment to support spill studies evaluation in FY18 (which is related to system survival studies) specifically 1600 tags plus project oversight and labor. The COE will add a note to the comments identifying this as a passage and survival study, rather than changing the project title which makes the project difficult to track. The description needs to specify that funds will be used to purchase tags for the Lower Granite passage and survival study (the same fish are also being used for reach survival estimates), and that data from the transmitters will be used to support spill studies.

- #32. Inland Avian Predation, \$200,000 – These funds cover oversight and closeout work for avian predation mitigation inland and on the lower Columbia. The project will conclude in FY18, with a few closeout costs in FY19. Tern mitigation ends this year, but cormorant mitigation will continue.
- #33. CRSO, 8.601 million – CRSO is funded differently than other CRFM line items, using dollars from different sources through a “revolving account” that doesn’t obligate funds until they’re expensed. That means funding might not be obligated until the year after the work is completed. While CRFM project funds are typically not carried over into the following year, Chane has been working with the COE Division office re: anticipated carryover for this line item. More to come on this – it’ll probably be a source of restoring funding in FY18 for items that had to be deferred.
- #35. FCRPS CRFM Program Management and COP Updates, \$240,000 – This funding supports work in the COE Walla Walla and Portland offices. The budget has been reduced from previous FY18 estimates.
- #36. FCRPS Spill to Gas Cap Pattern Development, \$2 million – Previously, biological studies and modeling were combined in one line item with total costs of \$4-5 million. Now the two have been split into separate line items, with #36 covering physical modeling only (the COE will remove biological studies from the Remarks column). Chane will follow up with SCT re: the updated modeling ERDC schedule. Trevor Conder said NOAA will reduce its score of 5 if the work won’t be done in time for spill season.
- #37. Smolt Susceptibility to Avian Predation Post BON, \$0 – This line item is not moving forward but will remain on the spreadsheet, depending on what happens with consultation.
- #38. Evaluate Feasibility of Alternatives to Turbine Blade Blocking, \$0 – The work is being transferred from CRFM to BPA’s 2406 large cap program for turbine repair and replacement. There was agreement that coordination with the Regional Forum needs to be addressed at FPOM, and to put this line item on the February 15 SCT meeting agenda.

#39. The Dalles Sluiceway PIT Detection Feasibility Evaluation (placeholder), \$0 – This has been changed to a placeholder since the last SCT meeting. SCT had a lengthy discussion about this line item today, and Russ Kiefer questioned his involvement n SCT if the Action Agencies assign low scores to a project and cut funding when the rest of the region gives it a high priority. PIT detection at The Dalles would provide much-needed information on whether bypassing turbines is a good way to increase survival for relatively low cost. Erick Van Dyke, Oregon, agreed this line item is important.

Kiefer asked whether the region is entitled to a written explanation of the COE’s decision not to fund. Eppard said the COE needs written justification for this project from its supporters, preferably a white paper. There was agreement this is essentially a process question. The final funding decision is at a higher level than SCT; the COE’s Division office has determined the current BiOp has no requirement to install PIT tag detection in

The Dalles sluiceway. While project rankings provide a valuable assessment, the COE needs more details on the benefits of this project because there's a lot of Congressional scrutiny of funding requests. The next step is for supporters of PIT detection at TDA to supply a written justification.

Chane said a Division representative could visit SCT and explain the COE's perspective. Kiefer said he also wants the COE to address funding of the Lower Granite adult trap, which is in question. The process for dealing with this debate needs to define how it will be referred to RIOG. Chane pointed out the region is in transition from one BiOp to another, which can lead to dissent. For the record, Bill Hevlin provided photocopies of language from the 1994 BiOp that authorizes SCT to perform a regional advisory role to the Action Agencies. There was general agreement that documentation of how SCT dealt with controversial issues is in the meeting notes.

- #40. Sheepy Lake Caspian Tern Island, \$580,000 – The budget was reduced by \$100,000 based on updated estimates for construction and oversight.
- #42. FCRPS Spill to Gas Cap Studies, \$4.148 million – As noted for line 36, the funding was split into two line items, \$4.148 million for biological studies and \$2 million for modeling, with an overall cost of \$6.148 million.
- #43. BON Powerhouse 2 Fish Guidance Efficiency, \$180,000 – The FY18 estimate hasn't changed for concluding work on the connector bolt.
- #44. BON Powerhouse 2 Floating Orifice Gates, \$50,000 – This has been deferred to FY19, and the estimate reduced from \$950,000 for fabrication and delivery of bulkheads to \$50,000 just to keep the process intact.
- #45. Caspian Tern Management Plan, Avian Predation Monitoring, \$300,000 – The estimate is down from \$630,000 due to reduced effort for some of the monitoring. It will meet the same intent at less cost.
- #46. Little Goose Adult Ladder Temperature Mitigation, \$0 – This was zeroed out from \$800,000 because it might not be needed from a biological perspective. The COE plans to work with the region on a hydraulic evaluation to confirm that operation of the pumps will not affect fish passage. The possibility of obtaining funding from another source needs to be discussed. There is currently no active fish or video monitoring at LGS but this spring, the ladder will be monitored for 400-500 tagged spring chinook.
- #47. Lower Granite Adult Ladder Post Construction Monitoring, \$20,000 – This covers contract oversight.
- #48. AMIP Spill Test, \$70,000 – This estimate was reduced from \$100,000.
- #49. Bonneville PIT Tag Detection, \$0 – There will be a presentation later today on the possibility of installing a prototype at the piers below BON. This is considered high

priority but funding has been shifted to FY19. The technology has become more difficult and complicated. Scott Bettin, BPA, agreed that PIT detection should be installed in both the sluiceway and the outfall. Chane will revise the project description to include feasibility of both sluiceway and outfall PIT detection.

- #50. Lower Granite Juvenile Bypass Facility Upgrade Post Construction, \$350,000 – Scott Bettin asked about the total cost of this; Chane will report at the next SCT meeting.

3. Presentation: New Sampling Methods to Supplement PIT Detection of Juvenile Salmonids at BON Dam

Trevor Conder, NOAA, gave a presentation on improving detection efficiency for reach survival estimates, using a method developed by the NOAA Science Center. The goal is to increase PIT detection at BON to improve hydro system survival estimates and precision.

Current confidence intervals are too broad to answer questions regarding reach survival and variations in reach survival rates. These issues can't be addressed until confidence intervals are smaller, which will require improved PIT detection capability at Bonneville or in the estuary.

Since 2007, only 16% of migrating fish on average have been detected at BON, with a range of 7% to 26% in 2011 and 2010 respectively. To improve these rates, NOAA is working on developing new PIT detection methods in the estuary.

Two new detectors have been installed at BON in the past five years, a pile dike detector and a flexible array that is towed behind a boat.

The towed receiver carries 12 antennas and has more than 2000 square ft of detection. The equipment is easily replaced, sheds debris well, and has 100% detection efficiency. The biggest risk of damage is a large log passing through an antenna, which would then need to be reattached. The pile dike detector collects data on fish passing through the corner collector and powerhouse 2 fish, even some powerhouse 1 fish. The challenge is getting fish to go through it. To improve pile dike detection, antennas will be mounted on both the upper and lower piers.

4. #37. Smolt Susceptibility to Avian Predation Post-Bonneville, \$0

Chane has conferred with COE Division staff regarding this line item. Previous discussion is captured in the SCT meeting notes. Like #39. TDA Sluiceway PIT Detection Feasibility, line #37 is not supported for funding at this time. Lorz said he will raise this topic at SRWG for further discussion.

5. Review Updated Work Plans

These should be available by the next SCT meeting, Chane said.

6. FFDWRG/SRWG Future Meeting Dates

- **February 22** – Walla Walla FFDRWG [location TBD]
- **March 1** – Portland FFDRWG

7. Next SCT Meeting

SCT will meet on February 15. These notes prepared by technical writer Pat Vivian.

<i>Name</i>	<i>Affiliation</i>
Blaine Bellerud	NOAA
Ian Chane	COE
Scott Bettin	BPA
Trevor Conder	NOAA
Derek Fryer	COE
Erick Van Dyke	Oregon
Leslie Bach	NPCC
Brad Eppard	COE
Sean Tackley	COE
Charles Morrill	Washington
Tom Lorz	CRITFC/Umatilla

Phone:

Margie McGill	COE Walla Walla
Shane Scott	PPC
Leah Sullivan	BPA
Christine Peterson	BPA
Russ Kiefer	Idaho