

Columbia River Regional Forum
System Configuration Team Meeting
February 17, 2022
Final Official Notes

Representatives of Corps, OR, WA, BPA, NOAA, and others participated in today's SCT meeting facilitated by Blane Bellerud, NOAA. Draft and final SCT notes are available on the COE's TMT website under the FPOM link. For copies of documents discussed in the meeting, contact kathy.ceballos@noaa.gov. See the last page of these minutes for a list of attendees at today's meeting. Today's meeting covered 1) PIT tag technology update-Gabriel Brooks 2) Budget Updates and 3) Continuing objectives.

1. PIT Tag Technology Update-Gabriel Brooks

Gabriel Brooks, NOAA NMFS, gave a presentation on PIT R&D. In 2022, BPA has agreed to fund Biomark IS1001-MUX, Live fish release (3-16-22) (ACOE funded), FACA testing, GRS power supply upgrade, and FS3001 and power supply for prototype development. He provided additional details on each of these projects. The full presentation is available on the SCT website. He also reported on McNary R&D noting that current R&D efforts are targeting future improvements to MCN spillway detection through a stepwise approach. NOAA is working with the ACOE, PSMFC and BPA to establish an informal working group to assess and vet these ideas before moving forward with prototype design and development. NOAA will be working closely, as always, with PSMFC to design, construct and test prototypes to push these ideas further. Pending funding, these projects may be complete in FY24-25.

Gabriel reported that as a whole, COVID did not slow project progress this year since NOAA used contractors.

Questions and Comments:

Blane brought up detection below Bonneville. Historically, this group has asked how to increase detection levels. The after was that more crews would be needed to do more tows. Blane is wondering with the new TWX, if that is still the case, or if detection could be increased by bringing in more personnel. Gabriel noted that in the past, teams have been out sampling 24 hours a day with only brief stoppages in detection during shift changes. Mean detection has been 12,000 with the trawl. In 2020, there were no detections due to COVID constraints. Last year, COVID restrictions meant only one team could sample and no contractors could be hired. This year, sampling should be back to normal. NOAA has been given the green light to hire contractors.

A big expense if the group wanted to add a second trawl would be the addition for two 41' vessels. There are currently three. The trawl requires two. There is a spare one. Overall, two more would be needed because there needs to be a backup one at all times. Moving forward, developing a system to deploy and retrieve the flexible array would reduce the need to one 41' per flexible array, plus a spare. The other side could be picked up by a smaller boat and towed.

Trevor Conder, NOAA, asked three questions:

1. First, Trevor wondered how the current project is different from the proposed Bonneville project a few years ago. The Corps would not agree to mount antennas to the JBF at Bonneville. Gabriel agreed that this did happen. There was an EDR that discounted putting an antenna on the JBF at Bonneville. However, McNary is a newer project and the technology has advanced (not as many antennas would be needed). Gabriel thinks that NOAA could work with the Corps to solve this issue at McNary, especially if the antenna has a feature where it automatically breaks off at a certain pressure point so that it does not damage the piling. He thinks the dam structure is slightly different as well as the technology. That could work in NOAA's favor.
2. Changing detection would possibly mean that new data would cause data inconsistencies and issues, if it were not collected at the same place as it has been historically. Gabriel sees this as both a challenge and an advantage. If a system could be developed so as not to require divers, the equipment could be moved each season so one year it could detect fish that pass through the spill gates and the next it could detect fish that pass through the turbine.
3. Trevor missed the presentation and asked if NOAA was looking into using ogee style antennas, such as those at Lower Granite. Gabriel noted that it was looked at in the EDR for Bonneville and is working well at Lower Granite. It could be used at any top spill gate with the appropriate water conditions. The antennas detect 44 inches above the concrete. Trevor noted that a top of the weir style antenna similar to the ogee style could be mounted outside of the spill window and not require any outages.

Tom Lorz asked:

1. *With so few fish passing the powerhouse, is there even a point to putting the device near the powerhouse for detection?*
2. *Was the issue with the anchor fixed?* Gabriel noted that last year there was an issue, where the 1,000 lb. anchor dragged during high flows. It was replaced with a 6,000 lb. anchor and no further issues occurred.

There was talk about if it would make sense to use the boats to detect upstream near the bridge. The technology has been fully developed but NOAA cannot fund this since it is not R&D. However, the barge is sitting in the shipyard waiting to be leased. It could be loaded and moved upstream to McNary for \$150k. If an agency can pull together the funding and permits, it could be used this year.

The group had some additional technical questions about the fins for Gabriel. He took note of them and said he would ask West Fork.

Blane can set up any contact between the NOAA engineers and Gabriel and SCT.

2. Project Updates

Ian reported that there has been little change since the last meeting. This year, the PBUD is \$3.575M with some carry-in. There is some stimulus money but it has not been made available yet. It is earmarked for litigation requirements on the Willamette. The Corps is still waiting for

the final CRFM budget for FY22. The CR has been extended to March 11. It is time to defend the FY23 budget. That has been submitted. The FY24 budget is still being worked on and Ian is not allowed to talk about it at this time.

3. Continuing Objectives

- Cooling structures – this is a Corps priority for next year.
- Avian wires at McNary – No update. They are effective, noted Tom and Charles Morrill, WA. Tom wants to know if this is in future budgets. Ian says the Corps has more questions about McNary, particularly what the objectives, measures, and benefits are. Details need to be refined, said Ian. Tom would be dissatisfied if this were to be pushed out to FY25. Tom mentioned there is data. The Corps is planning for something in FY24 but is not sure what it will be.
- Improved pit tag detection (especially below BON, BON and MCN) – No further information. Charles would like a report from Trevor at the next meeting. Charles also voiced his opinion that there needs to be pit tagging on the north shore, so fish managers can see what going on.
- Flex Spill Evaluation (no funding has been identified) – Trevor noted that Granite Pearson will be doing a hydro-acoustic lamprey evaluation. Charles would like to talk to Trevor offline about this.

4. Other

Trevor noted that the Action Agencies proposed installing the jetty at Little Goose. He is wondering what the plan is for funding that. Ian will get back to the group next month.

Ian presented some photos on the JBF. Doug Newton said the photos were from a site visit. He showed the new emergency gate bypass hoist at the top of the primary dewatering structure. Newton said funding is still needed to complete the maintenance bench and create access to the bottom of the primary dewatering structure.

Today's Attendees:

Blane Bellerud, NOAA
Charles Morrill, WA
Gabriel Brooks, NOAA
Doug Newton, XXX
Erick Van Dyke, OR
Leah Sullivan, BPA
Melissa Haskin, BPA (CONTR)
Scott Bettin, BPA
Scott St. John, Corps
Tom Lorz, Umatilla/CRITFC
Trevor Conder, NOAA

Ian Chane, Corps
Jacob Macdonald, Corps
Yakama Nation Fisheries – Tom Iverson
Leslie Bach, NPCC

Minutes by Melissa Haskin, Flux Resources LLC, Contractor for Bonneville, mahaskin@bpa.gov (971-373-1288). Please send any requested edits to Kathy Ceballos, NOAA, kathy.ceballos@noaa.gov.