

**Willamette Action Team for Ecosystem Restoration (WATER)  
Research, Monitoring and Evaluation (RM&E)  
January 19, 2016**

[http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Willamette\\_Coordination/Willamette%20RME/RME.html](http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Willamette_Coordination/Willamette%20RME/RME.html)

**Facilitator's Summary**

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<b>ACTION</b>	<b>BY WHOM?</b>	<b>BY WHEN?</b>
Draft a concept paper on the short-term objectives of operating the PFFC during the spring and winter seasons; provide to the RM&E team.	Rich	1/26

**Participants on the Phone:** Leslie Bach (NPCC); Stephanie Burchfield (NMFS); Diana Dishman (NMFS); Tom Friesen (ODFW); Bernadette Graham-Hudson (ODFW); Mike Hudson (USFWS); Melissa Jundt (NMFS); Christine Petersen (BPA); Rich Piaskowski (USACE); Todd Pierce (USACE); Dan Spear (BPA) and Greg Taylor (USACE); Elizabeth Hall (USACE), Jane Dagliesh (USACE)

**Facilitation & Notes:** Emily Stranz and Tory Hines, DS Consulting

**Welcome and Background**

Emily Stranz, DS Consulting, welcomed the group to the RM&E call to discuss the PFFC at Cougar Dam. Rich Piaskowski, USACE, noted that the purpose of the call is to clarify objectives of operating the PFFC in both the short and longer-term. The Corps had drafted an initial concept paper that they shared with the group, however, are working to further develop some aspects of their proposal. The concept paper identifies the longer-term management purpose as evaluating the potential for floating nets to improve guidance and collection of juvenile Chinook from the Cougar forebay cul-de-sac, and reduce false attraction and congregation of juvenile Chinook in front of the existing temperature control tower.

The Corps did not present a concept paper for the shorter-term management purposes, however, began discussing the objectives with the group on the call (see below). These objectives were also previously discussed at the last RM&E meeting, January 5<sup>th</sup>.

Stephanie Burchfield, NMFS, added that operation of the PFFC requires that NMFS authorize that “take” associated with this research is consistent with that presumed in NMFS Reasonable and Prudent Alternative (RPA) to the 2008 Willamette BiOp. She shared that NMFS would like the RM&E Team’s input as to if the operation fulfills a research need, as “take” needs to be research related. She also noted that the team should discuss options to utilize the PFFC at other locations in the future.

**PFFC Discussion**

Greg Taylor, USACE, presented the Corps short-term plans to operate the PFFC in the spring and winter months. He noted that there is a seasonal component to mortality at Cougar. In the past, the PFFC has not operated during the winter and spring months, thus there is an information gap to fill that would provide insight to the seasonality of mortality, as well as timing of use, copepods, species compositions, and size of fish. The group deliberated on the purpose of the short-term operation of the PFFC, including the interest in monitoring variability in PFFC collection between years. Stephanie pointed out that the proposed operation is more of a monitoring effort, rather than research. She noted that in the past the Corps has stressed the need for research to directly inform fish passage design, however, those decisions on passage have already been made for Cougar. In regards to the short-term proposal, many of the RM&E team members felt that the effort would provide more valuable information if there were

screwtraps in place to provide additional context of the fish in the area that are not captured in the PFFC. Emily asked RM&E members to provide their input, they shared the following:

- Bernadette Graham-Hudson, ODFW, inquired about efforts to reduce mortality rates at the Cougar PFFC. She also noted that any data collected with the PFFC is more meaningful when there is a sense of what and how many fish are entering and exiting the reservoir, which is where screwtrap data can help. Greg responded that the mortalities are not specific to the PFFC and similar rates are seen in the ODFW operated traps. He noted that data indicates a seasonal nature to mortality, mainly due to water temperature and copepods. He did not think that there is reason to believe that high levels of mortality of fish collected in the PFFC will occur in winter and spring.
- Stephanie asked if the Corps would consider doing a long term holding study of effects of copepods on juvenile Chinook. The PFFC could be operated to collect the fish for this study. This idea had some traction with the group.
- Diana Dishman, NMFS, noted a lot of mortality causes in the PFFC were related to the hopper and debris impingement. She asked if the Corps could provide more explanation as to how and when these issues have been addressed. Greg noted that improvements to the hopper and the facility have been made, however, was unsure of the specific dates.
- Mike Hudson, USFWS, asked that more detail be added to the concept paper to include the short-term objectives under discussion, e.g. seasonality, copepods, movement, timing. He also encouraged the Corps to consider operating the screwtraps at the head of reservoir and in the tailrace to compare to fish collections in the PFFC. He noted that the longer-term study testing guidance nets and different depths of flow intake at the tower may also benefit from information provided from screwtraps.
- Dan Spear, BPA, noted that the original purpose of the PFFC was to lower uncertainty around the full-scale collector. It was intended to act as a research vessel and it was never intended to operate as a full-time solution in Cougar.
- Tom Friesen, ODFW, asked how representative the Corps feels that the data is based on the number of fish they've collected, specifically in regards to timing, size, species composition, etc. Adding that the above-dam screwtrap provides good estimates of number of fish entering the reservoir, and these estimates can be used with PFFC counts to estimate the proportion of fish caught in the PFFC of those that entered the reservoir. Greg noted that the low collection numbers with the PFFC needs to be taken into consideration, as the data is limited. He added that valuable information could be learned from an operational perspective with the continued use of the PFFC.
- Rich noted that the RM&E team has not fully vetted or developed a proposal for the role of the PFFC at Cougar. In the short term, the PFFC may provide insight on questions around seasonality.

Emily asked what additional information or discussion would be helpful for NMFS in their decision making regarding take authorization for this RME study. Stephanie stated that it would be helpful to hear specifically whether RM&E members supported the PFFC operation as is, and/or with the addition of screwtraps. RM&E members were not comfortable weighing in on the proposal without more specifics on the Corps' short-term proposal.

### **Next Steps**

Rich agreed that he would draft a concept paper on the short-term objectives, addressing the specific research needs. He will provide this to the RM&E team for review. The RM&E Team will continue conversations on the short and long term operation of the PFFC at their January 26<sup>th</sup> meeting.

*This summary is respectfully submitted by DS Consulting. Suggested edits are welcome and can be sent to Emily at [emily@dsconsult.co](mailto:emily@dsconsult.co).*