

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

Special Issue Resolution Meeting - Call

October 4, 2017

http://www.nwdwc.usace.army.mil/tmt/documents/FPOM/2010/Willamette_Coordination/Willamette%20RME/RME.html

FINAL Facilitator's Summary

Participants on the call: Stephanie Burchfield (NMFS), Diana Dishman (NMFS), Brad Eppard (USACE), Tom Friesen (ODFW), Mike Hudson (USFWS), James Hughes (PNNL), Melissa Jundt (NMFS), Fenton Kahn (USACE), Chrissy Murphy (OSU), Rich Piaskowski (USACE), Dan Spear (BPA), Greg Taylor (USACE), and Jeff Ziller (ODFW)

Facilitation Team: Emily Stranz and Donna Silverberg (DS Consulting).

Review of Corps' LOP Baseline Study Proposal (from PNNL)

Facilitator Emily Stranz welcomed the group and explained that the purpose of the special issue resolution meeting was to provide an opportunity for the RM&E Team to review the most current LOP baseline study and provide ideas for how to improve it. She noted that the conversation was no longer about whether the study should move forward as that decision has been made at a policy level. Instead, the focus of this meeting was to understand more about the proposal and add any suggestions on how to improve the study design.

Emily clarified the process for meeting: a brief presentation on the proposal, followed by regional input and then a polling based on the technical merit and using the 1-5 Fingers of Consensus process.

The Corps inquired as to why a re-ranking of the proposal was required, as it was previously prioritized by the region. Emily noted that NMFS is interested in an updated ranking, as the previous ranking considered the concept with a deep draw down study, which is no longer part of the proposal for FY18. Additionally, because this is the RM&E Team, rankings should be technically based. In order to move the proposal through their permitting process, NMFS requires an updated ranking to document RM&E review of the study as currently proposed (i.e., in the absence of special operations). Rich explained the deep draw down (DDD) was considered but the Corps is currently reviewing the feasibility of this operation, and will not be able to complete this operation in 2017. He noted, however, that it is the same proposal/methodology, which will be implemented with different operational conditions, and that the Corps believes it is important to evaluate fish passage under normal operations so results can be compared to alternative operations in the future to help determine if fish passage conditions have changed. He also noted that the region has shifted process and moved the ranking from the RM&E Team to the Steering Team. For this reason, the Corps deferred on the updated ranking at the meeting.

Fenton walked the group through the draft proposal, dated 10/21/2016. A two-page description was provided as a response to some of the region's questions. He explained that the study will happen in two phases and will estimate survival while drafting and during normal winter operations. Fenton also noted that the proposal/objectives had not changed from the version that had already been reviewed and

submitted by the RM&E team. The sample sizes are the same as written in the proposal, however, there will be two releases instead of four (two at the start are combined into one release between Oct 15-20th; the second release will be between November 3rd-5th). This change was made because they want to use a larger sample size for increased precision. The dam will be operated using normal operations (conservation pool), which depend on power and flood control needs, allowing fish passage to be evaluated under these conditions.

NMFS noted that the current pool elevation is 850 feet and questioned whether it is possible to hold the pool at or near this elevation until the initiation of the study. Higher rates of passage would be expected with a faster rate of drawdown that would create a stronger outflow signal for fish. Therefore, while still within the rule curve limitations drawing down from a starting elevation of 850 ft may encourage higher rates of passage under normal operations than using a starting elevation of 835-840 ft. The Corps noted that they are planning to continue to draft water slowly toward the minimum conservation pool (825 ft) by Dec 1. They are not trying to change the planned drawdown because the point of the study is to have a normal operation. Inflow is 1000 kcfs now, so not much water is available to hold, unless the flows from Hills Creek were increased while also dropping flow out of LOP. It was noted that the project is below rule curve now. Brad inquired whether the fish managers would expect such an operation to change the timing of fish leaving? Stephanie noted that they would not expect a dramatic change; however, most movement at other dams happens when the project hits the lowest elevation and highest flow rates. There could be value in holding at 850ft elevation and then intentionally pushing higher outflows out. The on-site operators/managers prediction is that it would be an aggressive release without much impact. In addition, it is a power peaking project and that will have its own impacts. The Corps noted that their biggest concern is that doing this hold would be a deviation from 'normal operations' and the intent of the study is to evaluate fish passage under the normal operations.

NMFS noted that the project is currently 50 feet below the rule curve, so this may not really be the baseline. Stephanie reiterated NMFS' suggestion to have the baseline look 'more normal' by at least holding reservoir elevation as high as possible to be more similar to the 'baseline' of the rule curve at the time the study starts. The Corps noted that every year is different. Currently the project is below normal, but fluctuations happen, and so this would be baseline-normal for a year like this. Also, time and elevation are both key factors in fish movement. The Corps thought the study, as planned, will capture the time and elevation when fish are leaving. The goal of the study is focusing on when most will be passing, not just at the start of passage.

Mike noted that USFWS was curious about the fall and spring 2018 work that has been anticipated and whether the spring spill is still part of the study (the Corps affirmed that the spring spill was included). Dan explained that BPA will likely support the spring spill; however, he wanted the group to know that a Special Operating Request (SOR) has not yet been submitted. The SOR should be submitted as soon as possible if the region thinks spring spill will be needed for the study.

NMFS noted that one objective of the study is to get survival rates through different routes: turbines, ROs, etc. However, the project does not usually open the RO under 'normal' operations. NMFS sought clarification on how the impacts of the different routes can be studied if not all routes are used. The Corps noted that if weather leads the project to open those other routes, the data will be provided. The plan is to follow the normal operation for the year so it can be compared to future years. Stephanie

noted that they are hoping to use this study to get as much information as possible. She suggested that if fish go through turbines and there is sufficient data on that route, the Corps might want to consider opening the RO (whether it is needed for weather conditions or not) to test the survival through those routes. If passage can be improved through other existing routes, one finding may be that a deep draw down is not necessary. The Corps noted that the most important metric will be project survival past LOP as a whole, not route-specific survival. The Corps clarified that all routes will be monitored. If fish pass the route, that data will be captured and analyzed.

Stephanie asked whether the study will be operating at night and day or just daytime hours. Fenton responded that it will depend on downstream flow, BPA's generation needs and when BPA wants generation. They will run the test with normal scheduling. If outflow is high, then they expect to get a day and night block.

Poll for additional suggestions and ranking: Emily polled the group members for their technical perspectives on the study proposal:

- USFWS gave it a 2 and suggested not losing sight of spring spill operations. If there is a need to get information through Dan, USFWS recommends doing so sooner than later. They would like to see the plans for spring.
- ODFW gave it a 2 with no additional suggestions for fall; Tom noted that the change in ranking was not a technical decision but a policy level decision mainly due to other priorities for studies. Tom noted that he liked the idea of getting ahead for fish production.
- BPA gave it a 5 with no additional comments.
- NMFS gave it a 1 because they believe that enough baseline data were collected last year and NMFS does not believe this study is needed. They would like more clarification from the Corps and PNNL about the precision of the study that will come with changes in sample size. This clarification is not needed for this current study; however, NMFS would like this before the next study is completed. While information on precision is provided in the proposal, NMFS would like more clarification on how the PNNL derived their numbers regarding precision.
- The Corps deferred from ranking since RM&E already ranked the study and the Steering Team is now ranking. Rich noted that the study is important to provide comparison data between baseline and the future DDD study.

Diana noted that NMFS has coordinated with ODFW to process the permits needed to conduct this study. At this point, NMFS does not see any roadblocks for getting the permit issued to the Corps by the end of next week to begin this study.

Emily thanked the group for their efforts in discussing this study from a technical perspective and the meeting was adjourned.

This summary is respectfully submitted by DS Consulting. Suggested edits are welcome and can be sent to Emily Stranz at emily@dsconsult.co.