

**Willamette Action Team for Ecosystem Restoration (WATER)
Research, Monitoring and Evaluation (RM&E)
January 5, 2017**

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

Facilitator's Summary

ACTION	BY WHOM?	BY WHEN?
Check in on Managers Forum summary distribution process.	Emily	ASAP
E-mail ST & RM&E re: internal meeting to discuss WATER Guidelines, purpose/role grid. Compile edits for February ST meeting.	Emily	ASAP
Connect with Marc and Joyce re: clarifying NMFS' position on passage at Green Peter.	Stephanie	ASAP
E-mail the revised RM&E FY 17 status summary to RM&E team.	Rich	1/5
Draft PFFC work plan and send to RM&E team	Rich & Todd	1/12
Rank FY 17 projects high, medium, low or do not fund and provide comments explaining ranking, send list to Emily once complete.	RM&E team	1/13
Follow up with Dan Spear re: technical input for "critical path" flow chart	Emily	1/13
Follow up with Ian re: scheduling operational passage workshop before the MF RM&E Plan is complete.	Emily	1/13
Schedule call to discuss PFFC work plan	Emily	1/16
Compile, average RM&E FY 17 rankings and agency comments.	DSC	1/26
Review 11/17 facilitator summary for approval at Jan meeting.	RM&E Team	1/26

Participants in the Room: Leslie Bach (NPCC); Stephanie Burchfield (NMFS); Diana Dishman (NMFS); Mike Hudson (USFWS); Rich Piaskowski (USACE); and Ricardo Walker (USACE); Christine Peterson (BPA)

Participants on the Phones: Scott Fielding (USACE); Tom Friesen (ODFW); Melissa Jundt (NMFS); Todd Pierce (USACE); Lawrence Schwabe (CTGR); Tom Skiles (CRITFC); and Travis Williams (Willamette Riverkeeper);

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

Review of Meeting Summaries

RM&E members present approved the 10/27 and 11/3 meeting summaries. The group requested more time to review the 11/17 summary. Emily Stranz, DSC, requested the group come to the January 26th meeting prepared to approve the 11/17 summary.

WATER Updates

Emily noted that there has been a lot going on in the WATER process since the RM&E team met last in November. To help communicate discussions and decisions, she provided the RM&E team a brief summary of take-aways from the December Managers' Forum, Steering Team and G4 meetings. Emily suggested that the summary is to supplement conversations between WATER representatives and recommended that RM&E members follow up with their Steering Team representative in addition to reviewing the provided summary.

Managers' Forum - Emily noted that at their December meeting, the Managers discussed characteristics of successful collaboration. The Managers agreed to carry out their brainstormed collaboration principles and they also agreed to meet internally within their respective WATER representatives to discuss how to

work collaboratively within the WATER process. Additionally, the Managers will hold internal discussions to gather input on the 2008 WATER Guidelines, as well as each team's purpose and role.

→ **ACTION:** Emily will send out an e-mail asking Steering Team representatives to help schedule internal meetings to discuss the 2008 WATER Guidelines and complete the purpose and role grid. DSC will compile tracked changes to the WATER Guidelines and the grid for the February Steering Team meeting and distribution at the March 17th Managers' Forum meeting.

Rich Piaskowski, USACE, asked if Managers' Forum summaries will be provided to the Steering Team and RM&E Team. Emily noted that the summaries were briefly discussed at the Managers' Forum, however, she was not sure what was decided and so will follow up with Donna.

Steering Team - At the December Steering Team meeting, the group discussed the roles of various WATER teams and the potential restructuring of those teams to help clarify the decision space and the conflict resolution process. During conversation, the question was posed as to if the RM&E team can focus only on technical conversations, and policy conversation and decisions could occur at the Steering Team and Managers Forum level. This concept was flagged as needing more discussion. Concern was expressed by the RM&E Team that it would be difficult to separate out the policy and technical aspects of decisions because they are not black and white. Because the RM&E Team members are so immersed in the Willamette, they have a finger on the pulse of both technical and policy issues, and understand the "grey area". Emily explained that part of what the facilitation team is working on is separating out the issues into distinct, defined and manageable problems that the WATER teams can effectively problem solve. She observed that many of the issues at hand are so intertwined amongst the various teams, which makes it more difficult to define and address. She encouraged the RM&E Team to trust the process and support other WATER teams to do their part in addressing the issues. The RM&E Team has reached impasse in the past on projects/concepts due to policy implications and decisions that they are not responsible for making; thus, the attempt to separate out policy and technical decisions is intended to prevent these impasses. This separation does not mean that the teams would operate in a vacuum, there would need to be a clear understanding of the grey areas between policy and technical issues and decisions.

Getting back to the Steering Team updates, Emily shared that the Steering Team also agreed that the Middle Fork RM&E Plan should include study paths for HOR, at dam and operational passage. The Steering Team is working on developing a "critical path" flow chart to clarify the necessary information and timeline for each approach. The Steering Team suggested that Rich and Stephanie continue to work on incorporating critical path and study plans for all three options. The RM&E team felt that it is necessary to have RM&E input on the critical path and asked that Emily follow up with Dan Spear (lead on developing the critical path) to ensure he connects with Rich and Stephanie and include technical input to the "critical path" template.

→ **ACTION:** Emily will contact Dan and share the RM&E team's request to involve Rich and Stephanie in the development of the critical path.

Ian Chane, USACE, also agreed during the Steering Team meeting to coordinate an operational passage workshop. When last discussed, the Steering Team felt that the workshop could occur after the RM&E sub-group drafts the RM&E plan. The RM&E Team felt that the workshop was needed to inform the plan and asked that Ian coordinate the workshop before the Middle Fork RM&E Plan is finalized.

→ **ACTION:** Emily will follow up with Ian to share the RM&E Team's request to schedule the operational passage workshop as soon as possible.

Finally, the Steering Team looked at the following elevated issues: (1) paired release study, (2) annual parentage analysis, spawning surveys and screwtrapping and (3) Green Peter outplanting, parentage,

spawning surveys and screwtrapping. They concluded that the Corps will provide a written response to elevated issue one and two to the Steering Team at or before the January meeting. For issue three, the Steering Team felt they could not respond to the priority and need for the study without seeing how it compares to other studies in the region. The Steering Team will provide an assessment once the RM&E Team generates a regionally ranked project list (see discussion below).

Stephanie noted that regarding issue three, passage at Green Peter was always intended as an RPA requirement, however, it was viewed as a lower priority compared to some other RPAs, thus NMFS required that the Corps study passage as a first step. Rich explained that the Corps and NMFS read the RPA language differently; the Corps does not believe passage is stated as a requirement. Emily noted that during the Steering Team meeting, Joyce requested that NMFS provide in writing, clarification on the RPA requirement for passage at Green Peter. Emily suggested that Stephanie connect with Marc and then Joyce to clarify.

→ **ACTION:** Stephanie will connect with Marc and Joyce regarding the NMFS RPA requirement for passage at Green Peter.

G4 - Emily provided an update on the G4 December meetings. She noted that the G4 has been working to clarify the authority of various guiding documents used in managing the Willamette system. While a fully vetted response is not yet available, the G4 indicated that the BiOp/RPAs are the primary guiding documents and the subsequent COP and HGMPs are intended to support implementation of the BiOp/RPA. The G4 is aware that different agencies interpret these documents differently, specifically in regards to what constitutes a completed BiOp action, what BiOp actions can be funded using CRFM funds, and such. The G4 is working to clarify interpretations. They agreed to develop a map of project based funding and authorization, as well as to coordinate a policy discussion regarding funding RPA measures not covered by CRFM funds. The G4 also revised the Middle Fork RM&E summary, those edits were reviewed and approved by the Steering Team at the 12/17 meeting. Emily provided a copy of the revised summary to RM&E members.

FY 17 Finalized Projects & Regional Prioritization Process

Next, RM&E members discussed FY 17 projects. Rich noted that the Corps is still waiting for final proposals to come in and will provide those to the RM&E Team as soon as possible. The team revisited the projects the Corps plans to fund in FY 17:

- APH-09-01 FOS (Chin Objective 1-4)
- APH-09-01 FOS (Chinook Objective 5)
- APH-09-01 FOS (Steelhead/pedigree)
- APH-15-05 FOS (Ladder evaluation)
- APH-17-01 MF (PSM study)
- JPL-15-04 LOP (Parr/smolt behavior)
- JPL-17-06 DET (Rearing/migration)

Stephanie noted that while the Corps views these projects as high priority, other RM&E members ranked some of these projects medium to low priority. The group discussed the nuances and challenges of a regionally ranked list of projects. Rich shared that from his perspective a regional ranking is not possible because each agency is ranking the concepts using different criteria, based off of different policy interests. Emily suggested that a range of policy perspectives is inevitable when working with multiple agencies and that if desired, the RM&E Team can add clarifying language to highlight the differences for the Steering Team. She continued that the Steering Team members are looking for the big picture in terms of where projects fall in relation to one another, so that they have a more comprehensive understanding of the priority of a project.

The team discussed whether or not it is too late to regionally prioritize the FY17 projects, noting that the funding is already moving forward for those projects listed above. Mike Hudson, USFWS, suggested that developing a FY17 regionally prioritized list would create a process that could be recreated for FY 18. Leslie Bach, NPCC, suggested that part of the RM&E prioritization process should be to include a list of

projects and the questions that need to be addressed. After much discussion, the team decided to review the FY 17 project list and rank those projects using a scale of high, medium, low, or do not fund. If desired, they will provide a comment explaining their agency ranking rationale.

→ **ACTION:** Rich will e-mail an updated RM&E FY 17 status summary (including the pre-spawn mortality concept). RM&E members will go through the project list and rank using high, medium, low or do not fund (H, M, L, DNF) for each concept. Rankings will be sent to Emily who will compile and average them. Individual agency rankings, the regional average and agency comments will be provided to the Steering Team at their January 26th meeting.

PFFC Permitting Request

Rich provided an overview and update on the portable floating fish collector (PFFC) at Cougar Dam. He explained that the Corps installed the PFFC in the forebay at Cougar reservoir to collect juvenile Chinook salmon and evaluate the surface collection device. For over three years the device has operated to collect fish with two purposes: (1) to provide safe collection and transport of juveniles downstream (157 in 2014, 2,661 in 2015, and 1,883 in 2016) and (2) to inform research questions regarding the size and timing variation of fish collected. The Corps would like to continue to use the PFFC in 2017 to inform design of a new fish collection facility. Rich explained that there was a noticeable difference in the size and timing of Chinook last year, as more Chinook were collected when the reservoir was low. Additionally, researchers are learning about fish behavior at the collection trap. Typically, sampling has not occurred between January and March, when researchers would expect to see additional fry in the reservoir, however, they hope to sample earlier this year to inform that data gap. Todd Pierce, USACE, explained that the PFFC is not in operation now, as the Corps does not yet have their take permit. He continued that over the last three years the reservoir regime has changed every year and as a result reservoir conditions could not be replicated. At this point, there is no definitive answer as to why the PFFC is collecting more fish, however replicative years will aid in answering this question. In 2017, ODFW will no longer be monitoring the South Fork for juveniles and the PFFC will be the only monitoring tool available.

Stephanie noted that the RM&E Team has discussed moving the PFFC to a different location to gather information to inform collection at other projects; however, due to the cost of moving the collector, the Corps has kept the collector at Cougar. She pointed out that the Corps has stressed that they can only fund projects that are gathering data to inform passage decisions, yet, passage decisions have already been made at Cougar and the PFFC is no longer providing necessary information. Stephanie continued that if the RM&E Team agrees that the PFFC is important to continue in FY17, NMFS will authorize the additional take, however, they need to see rationale. Mike echoed Stephanie's concerns and suggested that the RM&E Team consider how to best utilize the PFFC next year and get the ball rolling so that they are not faced with funding and timing limitations. Rich and Todd agreed to provide the RM&E team with a write-up on the FY17 PFFC study to inform their assessment of whether it is important or not. Christine Peterson, BPA, asked that the work plan include any new developments and what has been learned from the small changes.

→ **ACTION:** Rich will work with Todd to write a statement and/or work plan for the PFFC study that will include the purpose and objective of the operation by Thursday, January 12th. DS Consulting will schedule a call for the RM&E Team to discuss the study the week of January 16th.

Middle Fork Sub-Basin RM&E Plan

Rich and Stephanie provided an update on the Middle Fork Sub-Basin RM&E Plan. Stephanie noted they received comments from ODFW and they are still waiting on comments from the other agencies. Mike noted that the comments he provided during the November RM&E meeting should constitute for USFWS' input.

The group initiated discussion around an operational passage approach, noting that this approach could be either a standalone or hybrid approach with other passage options. It was noted that there may be

several permutations of the three main ways to pass fish: at-dam, structural and operational (e.g. spill, HOR, above dam/in-stream) and that more data needs to be collected to inform the range of options. Mike added that in discussing operations at Lookout Point, the group should also examine Dexter, which could explore similar operations. Rich noted that an important management decision is whether the operation should stand-alone or be associated with a structural operation. Stephanie noted that considering both routes allows for adaptive management.

Rich asked the group to discuss the biological hypotheses as they relate to an operation’s measurable objectives, noting that the goal is to frame the research so it addresses a decision/measurable objective. Rich also asked for the group to consider whether or not the operational objectives are long or short term objectives, as this will help inform when studies should be conducted, and thus inform the critical path.

The group started by brainstorming biological objectives for a fall drawdown operation and the correlating hypothesis.

Late Fall Draw Down Objectives	Hypothesis	Alternate Hypothesis
Dam Passage Efficiency	Passage efficiency will increase with late fall draw down as the reservoir elevation draws closer to the RO.	
Reservoir survival/migration timing; effects of predator population	Lower reservoir elevation will increase survival through the RO; there will be a net increase in survival as fish (including predatory fish) are passed downstream.	A lower reservoir elevation will decrease survival because there will be higher densities of predators as a result of reduced pool volume.
Below dam reach survival & SAR – (this objective may be more pertinent to other operational objectives)	Passing larger fish will result in higher reach survival & SARs.	

The group agreed that they will revisit the Environmental Assessment for descriptions of operations and the biological assumptions in preparation for continued discussion at the next RM&E meeting. Rich will send out a diagram showing reservoir length at various elevations, as well as a cross section of the dam. Mike encouraged the team to consider the limiting factors at LOP.

→ **ACTION:** RM&E members will review the EA descriptions and reservoir diagram in preparation for more discussion at the January 26th RM&E meeting.

Next Steps

Moving forward, Emily will connect with the Steering Team regarding scheduling internal conversations on the WATER Guidelines; she will also follow up with Dan and Ian to provide the RM&E Team’s input of the critical path and operational passage workshop process. Stephanie will connect with Marc and Joyce regarding passage at Green Peter. Rich will send the group the updated FY17 status spreadsheet and team members will provide rankings to Emily to be provided to the Steering Team. The group will review the LOP EA to prepare for continued conversation on the biological objectives of operational passage. With that, Emily thanked the group for their work and the meeting was adjourned.

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