Willamette Action Team for Ecosystem Restoration (WATER) Research, Monitoring and Evaluation (RM&E) June 28, 2018 Meeting

DS Consulting Conference Room

Facilitator's Summary

ACTION	BY WHOM?	BY WHEN?
Carry-Forward of Action Items from 5-24-18 Meeting		
Provide the proposals regarding SWIFT to the RM&E Team and provide updates to FY19 Planning Tables on work being done by SWIFT.	Rich	Joint RM&E/Steering Team meeting
Follow-up with Jeff Ziller regarding existing data on the habitat downstream at Dexter.	Kelly	Joint RM&E/Steering Team meeting
Action Items from 6-28-18 Meeting		
Send most recent version of the 5/24 meeting summary to team for review.	Nancy	ASAP
Provide clarifying footnote regarding "sustainable population" for FY19 Planning Tables to DS Consulting.	Rich	Before Joint RM&E/Steering Team meeting
Update FY19 Planning Tables per RM&E Team 6/28 conversations	DS Consulting	Before Joint RM&E/Steering Team meeting
Provide updated drafts of the sub-basin planning tables to the team for further review and discussion.	Rich	August 23, 2018 RM&E Team Meeting
Hold a mini-workshop on the Res/Sim and HydSim model runs when completed.	RM&E team members	Before Joint RM&E/Steering Team meeting
Follow-up with Dan regarding how best to share the information from BPA on HydSim modeling.	Christine	Before Joint RM&E/Steering Team meeting
Provide suggestions for working with risk when making LOP operation decisions.	Rachel	Before Joint RM&E/Steering Team meeting
Provide written comments to Fenton on concept papers relating to Foster, High Head Bypass and Lookout Point.	RM&E team members	July 3, 2018
Provide written comments for all other concept papers (to Rich and Diana).	RM&E team members	July 6, 2018
Provide the next version of the concept papers to the RM&E team and DSC with tracked changes.	Rich, Fenton and Diana	July 16, 2018
Accept edits and provide final versions of FY19 concept papers to the RM&E and Steering Teams.	DS Consulting	COB, July 16, 2018
Prepare Steering Team representatives for FY19 Concept Prioritization.	RM&E team members	Before Joint RM&E/Steering Team meeting
Schedule next Joint RM&E/Steering Team meeting.	DS Consulting	Late July/Early August

Participants in the Room: Leslie Bach (NPCC), Diana Dishman (NMFS), Mike Hudson (USFW), Dave Jepsen (ODFW), Fenton Kahn (USACE), Rachel Neuenhoff (USACE), Christine Peterson (BPA), Rich Piaskowski (USACE), Ida Royer (USACE);

Participants on the Phone: Jim Meyers (NMFS), Lawrence Schwabe (CTGR);

Facilitation Team: Emily Stranz and Nancy Pionk (DS Consulting)

Welcome, Housekeeping and Updates

Emily welcomed the group and conducted a round of introductions. The group approved the April 26, 2018 meeting summary. The group deferred approval of the May 24, 2018 meeting summary to allow time for team members to review the latest edited version.

→ **ACTION:** Nancy will send out the most recent version of the May 24th meeting summary to the group for review and approval at the next meeting.

Steering Team Review of FY19 RM&E Planning Tables

RM&E Members reviewed the comments provided by the Steering Team at their 6-5-18 Steering Team meeting. Steering Team members commented that the tables were extremely well done, captured the appropriate information for Columns 1 and 2, flowed logically and were an excellent tool for determining the research needed for FY19.

- Under the Middle Fork table, Steering team members suggested that the term "sustainable population" in Column 2 be clarified. Rich explained this term is referenced in the BiOp in several places. He will provide a clarifying footnote regarding this term.
- It was also suggested that *Habitat Improvement above Foster Dam* be added to Column 1 of the South Santiam table.
- It was suggested that the columns relating to Lookout Point Deep Draw Down contain the same placeholder language as the columns relating to Green Peter.
- → **ACTION:** Rich will provide a footnote clarifying the term "sustainable population" in the FY19 RM&E Planning tables. DS Consulting will update the tables and provide an updated version to the team.

Sub-basin Planning Tables

Rich reported that the Corps is working to incorporate information from the FY19 planning tables into the sub-basin plans as they are developed. He expects to have drafts out to the group within the next couple of weeks, in time for the August RM&E Team meeting.

It was noted that the FY19 planning tables were developed with the short-term information needs and that the team will need to have additional discussions to further flesh out the timing of longer-term actions, and or additional needs. The group agreed that the sub-basin plans should address the study needs for the current (2008) BiOp RPAs.

→ **ACTION:** Rich will provide drafts of the sub-basin plans to the team for further review and discussion.

<u>ResSim for JPL -18-xx-LOP (</u>*Hydrologic Evaluation of Operations for Improving Downstream Fish Passage at Lookout Point Dam*)

Fenton updated the team regarding the ResSim modeling of potential downstream passage operations at Lookout Point. While the modeling is not yet complete, preliminary modeling done by Cindy Bowline

and Mary Karen Scullion suggests that delayed refill, and regular refill with spring and summer spill look promising. However, there would be a need to manage the operation to balance project needs, in particular, the operations could impact power generation. One possibility may be to spill for several hours at night and generate power during the day.

Fenton noted that Lookout Point reservoir refill is dependent on spring rainfall as opposed to runoff from snowpack. In the event that Lookout Point cannot capitalize on rain, a delayed refill operation would draw heavily from Hills Creek. This and other impacts, such as increased flows, water temperature changes, flow targets, migration and spawning downstream, agency missions and costs, will need to be explored by the region once the modelling is complete. Rachel noted that that there are several competing risks to consider and she can provide some suggestions on how to approach these risks when making decisions about these potential operations.

Fenton and Rich indicated that the model runs will consider operations without power generation and with power generation. Team members provided additional suggestions for the Corps to consider as they run the models:

- Do not preemptively limit the biological or operational bounds of the model runs do the full sweep of model runs to see the varying degrees of impacts.
- Could delayed refill separate from spill be considered (in case delayed refill with spill is too risky)?
- Consider incorporating thermal data (Norm Buccola's data) into the ResSim runs.
- Review the ResSim runs done during NPCC's Sustainable Rivers project. In particular, the environmental flow targets for downstream of Dexter and how often the targets were met under various regimes. Fenton stated that Mary Karen is considering the overall picture of how the operations will affect flow and he will remind her about these earlier ResSim runs.
- Approach the operation from an opportunistic perspective, with flexibility and opportunities to spill throughout the system when flows allow do not determine the operation is not feasible too early in the season, instead, consider these operations as in season management options.

Team members discussed their desire to have the discussion, process, and decisions regarding these potential operations be as transparent as possible in order to avoid any surprises and keep the region informed along the way. They were interested in hearing more about power generation needs and in particular, the thresholds and limitations that drive decisions regarding power generation. The RM&E team agreed on the following next steps, once the ResSim modeling is complete:

- 1. Conduct a mini-workshop once the ResSim runs are completed, with Mary Karen present to answer questions. Rachel will also provide suggestions at the next meeting on how to weigh potential risks moving forward to assist with decision making.
- 2. The ResSim modeling will be provided to BPA so that a HydSim analysis can be completed.
 - BPA (Dan Spear or an analyst) will share back with the RM&E team any thresholds/limitations that may be identified for the operations. Christine will follow-up with Dan regarding how best to share the information from BPA.
- 3. If there is a conflict concerning the proposed operations and any thresholds/limitations identified by BPA, the issue will be elevated to the Steering Team to discuss as a policy matter.
- 4. If there is no conflict, the RM&E team will continue to discuss and make technical recommendations.

→ **ACTION:** The RM&E Team will conduct a mini-workshop on the Res/Sim and HydSim model runs when completed. Christine will follow-up with Dan regarding how best to share the information from BPA. Rachel will provide suggestions on how to work with risk in making a decision.

Updated Middle Fork RM&E Schedule

Rich provided the team with an updated Middle Fork RM&E Schedule. The updates include the Corps' determination that Deep Drawdown at Lookout Point is not feasible and consequently is not being pursued. It also indicates that further Head of Reservoir studies are on hold pending the fry survival study results. Rich noted that this update does not yet include the spring spill studies and delayed refill without spill.

→ **ACTION:** Rich will update the Middle Fork RM&E Plan and send the plan and updated schedule to the RM&E team for review and comments by July 12. RM&E Team members will review plan and schedule and provide comments to Rich.

FY19 Concept Paper Review

The group reviewed the concept papers listed below and identified red flags, suggestions and questions. Note: Comments on individual concepts were provided from RM&E Team members directly to the concept authors.

- 1. APH-15-05-FOS Evaluation of Foster Adult Fish Trap Performance
- 2. APH-17-01-MF Evaluate the performance of the trap and haul program of adult Chinook salmon at Dexter Trap
- 3. APH-19-01-MF Investigation of fish passage alternatives for the Middle Fork Willamette River
- 4. APH-19-02-FC Fall Creek adult trap post-construction evaluation
- 5. JPL-11-05-FOS Evaluation of Foster Dam Juvenile Fish Passage
- 6. JPL-18-03-HHB High Head Bypass Fish Passage Investigations
- 7. JPL-19-01-LOP Evaluation of a spring and summer spill operation at Lookout Point Dam for improving juvenile spring Chinook Salmon dam passage
- 8. JPL-19-02-LOP Evaluation of delaying refill and spring surface spill operation at Lookout Point Dam for improving juvenile spring Chinook Salmon dam passage
- 9. XXX-18-XX Evaluate interim outplanting strategies for adult UWR Chinook Salmon prior to completion of downstream fish passage at Big Cliff and Detroit dams.
- 10. APH-18-03 Evaluation of effects of changes to temperature targets in the North Santiam on fish condition and emergence timing
- 11. FMWQ-18-01 Evaluation of habitat benefits associated with USACE revetment modification, including potential cold water refuge enhancement
- 12. FMWQ-18-02 Determination of habitat use patterns for rearing and emigrating juvenile spring Chinook salmon and winter steelhead below Willamette Project dams
- 13. FMQW-18-03 Willamette River Instream Flow Science Review and Analysis
- 14. JPL-19-03-SYS Effects of acute and chronic stressors on survival and dam passage of juvenile Chinook salmon infected with a parasitic copepod, Salmincola californiensis: implications for fish collection facilities
- 15. JPL-18-02-SYS Latent Mortality

RM&E Team members agreed to provide comments directly to the concept paper authors by COB, Friday, July 6th. Edits will be considered, incorporated via tracked changes, and a red-lined version will be provided back to the group to allow everyone to see changes made. The DS Consulting Team will provide clean versions of the final concepts to the Steering and RM&E Teams by COB, July 16th in preparation for the joint ST/RM&E prioritization meeting.

- → **ACTION:** Team members will provide written comments to Fenton by July 3rd for concept papers relating to Foster, High Head Bypass and Lookout Point (if they cannot get comments in by the 3rd, comments will be sent to Rich); written comments for all other concept papers will be provided to the concept paper authors (Diana and Rich) by July 6, 2018.
- → **ACTION:** The authors will provide the next version of the concept papers <u>with tracked changes</u> by July 16, 2018 to the RM&E Team and DS Consulting.
- → **ACTION:** DS Consulting will provide final versions to the region by COB July 16^{th.}

FY19 RM&E Prioritization

The group discussed next steps for prioritization of the concepts. The concept papers will be ranked at the next joint RM&E/Steering Team meeting using the FY19 RM&E Planning Tables and an updated ranking table. It was suggested that concepts previously identified by the Steering Team as non-CRFM fundable (i.e. FY18 concepts carried forward as a place holder, however, identified as not fitting within the CRFM funding parameters) will be placed on the bottom of the list, in hopes of not derailing the prioritization of the studies that do qualify for CRFM funding (i.e., for which a funding mechanism is immediately available) to avoid delays in requesting study proposals. The RM&E Team stressed their desire to have all concepts ranked according to the biological information needs. RM&E Team members will talk with their Steering Team representative regarding this desired focus. DS Consulting will work with the RM&E and Steering Teams to schedule the next Joint RM&E/Steering Team meeting, either for July 26th or August 7th.

→ **ACTION:** RM&E team members will brief their Steering Team members on the FY19 concepts and RM&E Team's desire to provide an initial biological-based ranking on the concepts (followed later by a Steering Team conversation regarding funding – as needed).

With that, Emily thanked the group and adjourned the meeting.

The next RM&E Team meeting is scheduled for July 26th from 9:00-1:00. The joint RM&E/Steering Team meeting may be scheduled for the same day, potentially impacting the RM&E Team meeting time. Please stay tuned for scheduling announcements!

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