

**Willamette Action Team for Ecosystem Restoration (WATER)  
Research, Monitoring and Evaluation (RM&E)  
May 13, 2021**

[http://pweb.crohms.org/tmt/documents/FPOM/2010/Willamette\\_Coordination/Willamette\\_RME/RME.html](http://pweb.crohms.org/tmt/documents/FPOM/2010/Willamette_Coordination/Willamette_RME/RME.html)

**FINAL Facilitator's Summary  
[Edits received from: Corps]**

<b>ACTION</b>	<b>BY WHOM?</b>	<b>BY WHEN?</b>
Provide comments on draft concept papers to Fenton.	RM&E Team	6/8/2021
Provide revised concepts to DSC for inclusion in Joint meeting materials.	Corps	6/28/21
Review concepts with Steering Team representatives in preparation for the Joint Team ranking meeting.	RM&E Team	Before 7/6/21 Joint Meeting
Review basin-wide monitoring spreadsheet and provide any additional input.	RM&E Team	5/27/21
Review basin-wide monitoring spreadsheet and input with Steering Team representatives to prepare for the June Steering Team meeting.	RM&E Team	Before 6/1/21 Steering Team meeting
Update the sub-basin planning spreadsheets to include the list of Interim Measures.	DS Consulting	6/24/21 RM&E Team meeting
Coordinate with UBC PI for presentation on Middle Fork uncertainties.	Rachel	6/24/21 RME Team meeting
Invite RM&E Team members to 6/1/21 Steering Team meeting and 7/6/21 Joint Team meeting.	DS Consulting	<b>[Completed]</b>
Send RM&E Team the UBC Presentation on Middle Fork Uncertainties.	Brad	<b>[Completed]</b>

**Present for all or part of the meeting:** Leslie Bach (NPCC), Brad Eppard (COE), Fenton Kahn (COE), Michael Hudson (USFWS), Dave Jepsen (ODFW), Rachel Laird (COE), Anne Mullan (NMFS), Christine Petersen (BPA), Kelly Reis (ODFW); Lawrence Schwabe (CTGR);

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

**Welcome and Housekeeping**

Emily welcomed the group and conducted a round of introductions. Team members agreed to review the meeting summaries for the 3/16 and 3/25 RM&E meetings and the 4/6/21 Joint meeting by COB 5/14/21. These summaries will be considered approved after that date if no concerns are raised.

**FY21 and FY22 Study Updates**

Fenton reported that the contract for the pedigree analysis was accepted by USGS and OSU will begin work on pedigree analysis soon.

The Corps is currently planning FY22 studies. Two concepts for FOS and DET were previously ranked at the 4/6/21 Joint meeting and the Corps is planning for those studies. The next step will be to request proposals from researchers. The Corps has also prepared 6 new draft concept papers that were emailed to the RM&E team on May 11, 2021 (see last page of this summary for the list of concepts).

**ACTION: The RM&E Team agreed on the following next steps and timing for draft concept paper review:**

1. **RM&E Team members will provide comments on the draft concepts to the Corps by 6/8/21.**
2. **The Corps will review and address comments and send final drafts to DS Consulting by 6/28/21.**
3. **DS Consulting will email the revised concept papers to the Joint RM&E and Steering Team by 6/29/21 in preparation for the 7/6/21 Joint meeting.**
4. **RM&E Team members will review concepts with their Steering Team members ahead of the 7/6/2021 Joint meeting.**
5. **The RM&E and Steering Teams will meet for a Joint meeting on 7/6/21 to review and rank the concepts.**

### **Wild Fish Surrogate Program**

Fenton reported that ODFW and OSU placed PIT tags in 1,990 surrogate steelhead and released the fish below Minto. Another 1,146 surrogate steelhead were also released below Minto without PIT tags (this may be because of lack of PIT tags). In total, 3,136 fish were released; these surrogate fish were scheduled for a study at Foster in spring 2021, but the study was not implemented (previously discussed by the RM&E Team).

Fenton is coordinating with the OSU Surrogate Program to rear fish for the screw trap efficiency tests during FY22. Anne noted that, due to low numbers of steelhead, the permitted “take” for fish that can be used for spawning for the surrogate program has been reduced to 3 females and 3 males. OSU and ODFW are planning to conduct a “partial squeeze” of these fish for eggs and milt. This is something that ODFW (at Minto) do each year for the surrogate program.

### **Interim Measures Implementation**

The Corps continues to implement night-time spill at Foster for downstream fish passage, which will end on June 15, 2021. On June 16th the Corps will begin a surface spill operation with the Foster weir to warm up the river temperature downstream of the dam to aid in getting returning adult Chinook salmon back to the fish facility. Given current drought concerns, there is uncertainty how long the weir can be operated. The Corps is working on several SORs, including the FOS fish weir spill operation, for spill at DET and one for spill at LOP.

### **Basin-wide Monitoring**

The RM&E Team responded to questions posed by the Steering Team regarding basin-wide monitoring. Emily reminded the group of the Steering Team’s 5/4/21 discussion concerning the need for basin-wide monitoring and the desire to have a broader conversation with WATER Managers. She noted that the Steering Team partners recognize the value of basin-wide monitoring to support adaptive management and the need to work together to explore and problem-solve questions relating to possible implementation, including funding. The Steering Team posed several questions around basin-wide monitoring for the RM&E Team to consider and discuss:

- 1) What is the purpose?
- 2) What does a basin-wide monitoring program look like to you?
- 3) What are the advantages?
- 4) What are the disadvantages?
- 5) What are the barriers?
- 6) What are the opportunities and capabilities, and where is there overlap?

The RM&E Team worked together to identify ideas and responses to the Steering Team’s questions on a Google Sheets document. See spreadsheet link:

[https://docs.google.com/spreadsheets/d/1T4\\_VfSDOhpZblker07OvfT83zk3CVF2IS5GdQDzzLL4/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1T4_VfSDOhpZblker07OvfT83zk3CVF2IS5GdQDzzLL4/edit?usp=sharing))

Team members noted that additional basin-wide monitoring tends to be related to biological monitoring as many opportunities for environmental monitoring already exist (e.g. SWIFT studies). It was suggested that additional environmental monitoring could be added to biological monitoring where appropriate (for example, water quality monitoring such as flow and TDG impacts could be included with PIT Tag monitoring). It was also noted some issues, such as pre-spawn mortality are a problem for the whole basin, while other issues are unique to a specific tributary or sub-basin. Anne suggested that as this conversation evolves, it could be helpful to have Jim Meyers and Jeff Jorgenson of NOAA present to the Steering Team regarding life-cycle models/new technology in the Columbia Basin.

Team members agreed that the ideas identified on the document accurately represented technical information needs from a biological perspective. Rachel suggested that identifying the hypotheses associated with the desired monitoring would be helpful for further clarifying the need for monitoring, as well as to determine responsibility for instituting a program. The group acknowledged that basin-wide monitoring is a regional need and working together, and with other regional partners, could expand the resources and options that would be available to establish the program.

**ACTION: As next steps, the Team will discuss these ideas with the Steering Team at a Joint meeting on June 1, 2021. RM&E members will review the spreadsheet and provide any additional ideas ahead of the meeting by May 27, 2021. It was noted that the intent of these discussions is to attempt to arrive at a shared vision regarding the development of basin-wide monitoring. If a shared vision cannot be reached at the Steering Team level, then the question would be elevated to the Managers to consider at the next Managers Forum (currently being proposed for late July 2021).**

#### **FY21 Middle Fork Check-In Planning**

RM&E Team members discussed the request from the Steering Team to summarize information regarding information learned and data gaps related to the Middle Fork. A presentation by the University of British Columbia researchers on the SDM outcomes is scheduled for the 6/24/2021 RM&E Team meeting. Brad noted that the researchers have reviewed uncertainties and identified key data gaps. He will send out a presentation prepared by the researchers that reviews the uncertainties of passage efficiency. Team members agreed to defer further discussion on this topic and resume discussion at the 6/24/21 meeting after the researchers' presentation. The intent is to bring the RM&E Team's conclusions to the Steering Team at the 7/6/21 Joint Meeting.

#### **Sub-Basin Planning Spreadsheets**

Team members reviewed the sub-basin spreadsheets and updated them to include information on monitoring efforts related to interim measures. As a next step, DS Consulting will update the spreadsheets to include the list of Interim Measures in the "Planning or Ongoing Actions" column.

→ **Actions: DS Consulting will update the spreadsheets to include the list of Interim Measures.**

And with that, Emily thanked the group and adjourned the meeting.

**The next meeting is a Joint Meeting between the RM&E and Steering Team on June 1, 2021; following that the next regular meeting of the RM&E Team is June 24, 2021.**

This summary is provided by DS Consulting. Suggested edits are welcome and can be provided to Nancy at [nancy@dsconsult.co](mailto:nancy@dsconsult.co).

**Document Review Tracking** (Click here for [Master “tracking” Spreadsheet](#))

<b>Document Name</b>	<b>Document Type</b>	<b>Comments Due By</b>	<b>Comments Provided By</b>
<b>WQFM – 22 -XX-SYS</b> ( <i>Analyses and Interpretation of Willamette River Basin Water-Temperature Simulations</i> )	FY22	6/8/2021	
	5/11/21: Sent to RM&E Team		
<b>JPL-18-01</b> ( <i>Winter Steelhead Residualism Rate in Detroit Reservoir</i> )	FY22	6/8/2021	
	5/11/21: Sent to RM&E Team		
<b>APH-21-01-SYS</b> ( <i>Rapid Genetic Sorting at Willamette Project (WP) Adult Fish Facilities</i> )	FY22	6/8/2021	
	5/11/21: Sent to RM&E Team		
<b>APH-16-03-SYS</b> ( <i>Evaluation of the Trap and Transport of Adult Steelhead Above USACE Project Dams in the Upper Willamette Basin</i> )	FY22	6/8/2021	
	5/11/21: Sent to RM&E Team		
<b>WQFM-22-XX-SYS</b> ( <i>Evaluation of discharge effects on UWR Chinook and steelhead habitat availability in primary tributaries affected by Willamette Project (WP) dams</i> )	FY22	6/8/2021	
	5/11/21: Sent to RM&E Team		
<b>WQFM – 22-XX-SYS</b> ( <i>Assessment of dam discharge on off-channel hydraulic and temperature conditions below Willamette Project (WP) dams</i> )	FY22	6/8/2021	
	5/11/21: Sent to RM&E Team		
<b>FY21 JPL-XX-21</b> ( <i>Detroit Dam Juvenile Fish Passage Interim Operations</i> )	FY22 Concept	3/22/21	
	5/6/21-Ranked at Joint Steering/RM&E Team meeting		
<b>FY21 JPL-XX-XX-FOS</b> ( <i>Foster Dam Juvenile Passage Spill Operations</i> )	FY22 Concept	3/22/21	
	5/6/21-Ranked at Joint Steering/RM&E Team meeting		
<b>FY20-xx</b> ( <i>Evaluation of Interim Measure Evaluation for 2022 Operational Passage in South Fork McKenzie</i> )	FY22 Concept	3/22/21	Corps
	2/25/21 – Reviewed at RM&E Team meeting		