

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

May 23, 2019

<http://www.nwd->

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

[\[Edits provided by the Corps\]](#)

**FINAL Facilitator's Summary**

| <b>ACTION</b>   | <b>BY WHOM?</b>        | <b>BY WHEN?</b> |
|---|------------------------|-----------------|
| Send Lawrence (and others) the summary of outputs from the Copepod workshop.  | Rachel                 | ASAP            |
| Provide a list of additional FY19 objectives that the Corps proposes be funded for ongoing studies, along with the original concept and most recent study proposal. | Fenton                 | 6/20/2019       |
| Provide draft concept papers to RM&E Team.  | Specified RM&E members | 6/20/2019       |
| Review draft concepts   | RM&E members           | ongoing         |
| Provide revised APH -19-XX-FOS concept paper to team members  | Fenton                 | 5/24/19         |
| Review concepts and brief Steering Team representatives for concept ranking at the 6/4/19 Steering Team meeting   | RM&E Team              | ASAP            |
| Re-schedule Joint RM&E/Steering Team meeting  | DS Consulting          | ASAP            |

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

| <b>Document Name</b>   | <b>Document Type</b>   | <b>Comments Due By</b> | <b>Comments received / forthcoming from</b> |
|--|--|------------------------|---|
| Investigation of spring Chinook salmon passage alternatives for the Middle Fork (APH 19-01 MF) | <b>Status:</b> Request for proposal has been sent out.   |                        |   |
| Evaluation of Foster Adult Fish Trap Performance, 2019 (APH-15-05-FOS)                         | Pre-Proposal   | November 2             | CTGR, ODFW and NMFS provided comments       |
|  | <b>Status:</b> On hold; PDT presented on design fixes at 3/5/19 WFFDWG meeting.  |                        |   |
| Evaluation of Foster Adult Holding and Transport (APH -19-04-FOS)                              | Concept  | November 30            | NMFS provided comments                      |
|  | <b>Status:</b> Fenton will provide concept by 5/24; Steering Team will discuss and rank concept for funding at 6/4/19 Meeting.                           |                        |   |
| Evaluation of a spring and summer spill at LOP (JPL-19-01-LOP)                                 | Concept  | TBD                    | COE provided comments                       |
|  | <b>Status:</b> RM&E and Steering Team will discuss management purpose and information needs during concept prioritization meeting – 6/4/19.              |                        |   |
| High Head Bypass Fish Passage Investigations (JPL-18-03-HHB)                                   | Concept  | 5/6/19                 |   |
|  | <b>Status:</b> RM&E discussed concept on 5/6; Corps requested draft proposal; Steering Team will discuss and rank concept for funding at 6/4/19 Meeting. |                        |   |
| Willamette Project Dam Passage Delayed Mortality (18-02-SYS)                                   | Concept Paper  | June 27                |   |

|  |                                       |         |  |
|--|---------------------------------------|---------|--|
| Evaluation of Foster Dam Juvenile Fish Passage (JPL – 11-05-FOS)   | Concept Paper                         | June 27 |  |
| Spring Chinook Salmon Spawning Surveys in the Upper Willamette River Basin in 2018   | Final Report Provided on May 17, 2019 |         |  |
| Development and application of an integrated population model for Chinook salmon in the Willamette River basin             | Draft Report                          | May 1   |  |
| Biological Fish Injury and Survival Evaluation of the New Fish Weir at Foster Dam, 2018 (Normandeau)                       | Draft Report                          | 5/31/19 |  |
| Evaluation of Foster Dam Juvenile Fish Passage: Sensor Fish Evaluation of the New Spillway Weir at Foster Dam, 2018 (PNNL) | Draft Report                          | 5/31/19 |  |
| Potential Effects to Changes to Temperature Targets in the North Santiam River on Adult Chinook Salmon                     | Draft Final Report                    | June 10 |  |

**Participants in the Room:** Leslie Bach (NPCC), Diana Dishman (NMFS), Mike Hudson (USFWS), Fenton Kahn (USACE), Anne Mullan (NMFS); **Participants on the Phone:** Ida Royer (Corps), Jim Myers (ODFW), Rachel Neuenhoff (Corps), Lawrence Schwabe (CTGR), Luke Whitman (ODFW);

**Facilitation Team:** Emily Stranz, Nancy Pionk, and Liz Holley-Kline (DS Consulting).

**Welcome, Housekeeping, and Updates**

Emily welcomed the group and conducted a round of introductions. The team approved the 3/28/19 and 4/25/19 RM&E Team meeting summaries and the 4/9/19 Joint RM&E/Steering Team summary.

The group revisited best practices for editing meeting summaries. All present coalesced around the following editing protocols for meeting summaries and materials:

- Team members should provide suggested edits to their own comments only.
- If team members believe that another team member’s statement was not captured correctly, this should be noted in a comment bubble; DS Consulting will check back with the speaker to verify the statement.
- The intent of the meeting summaries is to provide a summary of what was said at that meeting. If team members wish to expand on a topic from a meeting, they should bring that information forward to the next meeting, instead of offering the expanded information as a suggested edit or comment in the meeting summary.

Fenton reminded team members that there are several reports out for comments and more reports will be coming out in the next few weeks. If team members are planning to comment and need a time extension, they can email Fenton to coordinate. Fenton noted that the Corps has some flexibility regarding the timing of the comments; however, want to make sure that they and contractors are aware of comments coming in so that they can be incorporated into proposals within the contractors contracted timeframe.

**Water Team Member Updates:** Diana has taken a new position at NMFS and will no longer be working with the WATER teams; Anne Mullan will be representing NMFS on the RM&E team in the future. Ricardo Walker, Corps, has transferred to the Walla Walla District and will no longer be working with the WATER teams. Ian Chane will be on a Washington DC detail until October 2019; Andy Traylor will be filling in for Ian at the Steering Team with support from Brad Eppard. Ian is expected to return to his Steering Team role in October.

## 2019 Studies/Projects Updates

- **Update on Middle Fork workshop series:** Rachel reported that a proposal was accepted for the workshop series. She is currently working to get the contract awarded. Rachel expects the first workshop to be scheduled towards the beginning of summer (tentative dates: June 18-20). The second workshop will likely occur at the end of summer, and additional workshops would be scheduled at different intervals up to February 2020.
- **Copepods in UWR Reservoirs (JPL-19-03-SYS):** The contract for the initial study was awarded; the Corps is working to add the “additional sampling” mini-proposal to the contract. The Corps has indicated that it will not be seeking comments on the mini-proposal, as it is an addendum to previously reviewed and funded work that does not deviate in scope from the original proposal. Lawrence inquired whether a summary of the outputs from the Copepod workshop had been sent out to the team.

→ **Action:** Rachel will follow-up to send the summary of the workshop outputs to Lawrence and others.

- **Ongoing Studies:** The Corps is reviewing FY19 projects and considering additional objectives to fund with remaining FY19 funds. They suggested that potential ongoing work could include USGS modeling and Foster flow modeling. Diana noted that the Hatchery BiOp was finalized on 5/22/19; it is expected that future genetic pedigree work will be funded with O&M funds via this BiOp. The genetic pedigree studies funded by FY19 CRFM funding could be impacted by this change; Fenton will consult internally to see if FY19 RM&E funding is impacted.

The RM&E team will have further discussions regarding additional FY19 study objectives at the June 27, 2019 RM&E Team meeting.

→ **Action:** Fenton will provide a list of additional FY19 objectives that the Corps proposes be funded for ongoing studies, along with the original concept and most recent study proposal to RM&E members in advance of the meeting.

## FY20 Sub-basin RM&E Priorities and Concept Ranking

The group reviewed and updated the North and South Santiam, McKenzie, and Basin-wide RM&E planning charts. [Note: Edits were made in real-time via Webex and provided to the group for further revision, see *FY19 Willamette RM&E Planning Draft as of 5-23-19*]. Additionally, the group identified follow-up actions, including development of concept papers for FY20. The follow-up actions are listed on the table attached to this summary (pp. 5-7), as well as on the planning charts. As next steps, Emily asked those team members who committed to drafting concept papers to provide as many as possible to the team by June 20, so that they can be reviewed by team members ahead of the June 27, 2019 RM&E Team meeting. The group agreed to defer discussion of Foster Fish Weir and Delayed Mortality concept papers until the June 27, 2019 RM&E Team meeting.

→ **Action:** RM&E Team members who are drafting concept papers will provide drafts by June 20. Team members will review the draft concepts and will be prepared to discuss them at the June 27, 2019 RM&E team meeting.

The group also discussed whether to defer the 6/4/19 Joint RM&E/Steering Team meeting and FY20 prioritization until more concept papers are drafted. The Corps noted that it would like the Steering Team to rank the High Head Bypass study on June 4, so that if needed, they can move forward with the getting the contract in place. Fenton noted that the RM&E Team discussed the concept during their May 6, 2019 conference call and all present indicated support for developing a study proposal. The Corps has spoken with the researchers regarding the study and will send out the draft proposal as soon as it is available. It was noted that Melissa Jundt, NMFS,

and ODFW were looking into the possibility of adding to the study, a comparison of a privately-owned bypass that meets NMFS passage standards.

Additionally, Ida is revising APH -19-04-FOS *Evaluation of Foster Adult Holding and Transport* (see table below). The Corps is seeking to have this study funded for FY19 and proposed that this study also be ranked by the Steering Team at the 6/4/19 Meeting.

The group agreed that the Joint RM&E/Steering Team meeting would be deferred until later in the summer; however, the High Head Bypass Concept and the revised APH-19-04-FOS concept will be ranked by the Steering Team at their June 4, 2019 meeting. Fenton will provide the revised concept to RM&E team members by 5/24; RM&E team members were asked to review the concept and brief their Steering Team representatives to be prepared to rank the two concepts at the 6/4/19 Steering Team meeting.

### **Next Steps and Closing**

DS Consulting will work to re-schedule the Joint meeting for later in July when more FY20 concepts are ready for prioritization.

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

**The next RM&E Team meeting is scheduled for June 27, 2019 from 9:00- 1:00 PM**

*This summary is provided by DS Consulting. Suggested edits are welcome and can be provided to Nancy Pionk (nancy@dsconsult.co).*

| Planned or Ongoing Action/Issues   | Data Gap/Research Need   | Actions from 5-23-19 RM&E Meeting  |
|--|--|--|
| <b>Middle Fork</b>   |  |  |
| LOP/DEX downstream passage - Head of Reservoir juvenile fish passage                                     | 1. FOR FY20 - Develop concept(s) that consider another way to evaluate collection at HOR and collection effects. Can we collect a significant proportion of the population at HOR?   | Anne/NMFS will develop concept papers.   |
|  | Additional research could be done with results of survival study related to mortality (part of fry survival study). <i>[Note: Fenton clarified after the 5-23-19 meeting, that this would be year 3 of the study.]</i>   | Fenton will include this on the list of FY19 studies that could be funded with FY19 funds.   |
| LOP/DEX At-dam structure downstream fish passage   | FOR FY20: Develop Concept paper that applies estimated survival rates to identify a sustainable population. Explore options to address predation if survival is poor (see Brant paper).  | Fenton will check with Rich regarding this comment. The Middle Fork Plan identifies this as a need. Fenton will circle back to RM&E team and let the team know if Corps is not going to prepare a concept paper. |
| LOP/DEX Downstream Passage Operations - Spring and Fall surface spill                                    | Need to evaluate an at-dam structure.<br>FOR FY20: Develop Concept paper that applies estimated survival rates to identify a sustainable population.   | Fenton will check with Rich regarding status of population modeling.   |
|  | ResSim results show that spring/fall surface spill would be feasible to implement in every year classification.<br>FOR FY20: Develop a concept that addresses what duration of spill would achieve sufficient passage of a significant proportion of fish? What duration of spill is needed to support a sustainable population? | Anne will revise FY19 concept for FY20 ranking.  |
|  | What does this operation do to fry? How many passed? How do they survive below DEX?<br>FOR FY20: Develop a concept to address the rate of fry passage and survival downstream.   | Anne, with support from ODFW, will develop a concept paper.  |
| LOP/DEX Downstream Passage Operations - Delay refill of LOP Reservoir with spring and fall surface spill | Does reservoir elevation (lower or modified) effect distribution of fish in reservoir? Could it impact collection? Does delayed refill impact distribution?<br>NMFS/USFW see there is a data need to determine if this is a useful tool during a good water year.  | Anne, with support from ODFW, will develop a concept paper.  |

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| Fall Creek Dam upstream fish passage  | FY20 CONCEPT: May need a second year of data collected in FY20  | The Corps will revise concept paper for FY20, if needed.   |
| <b>North Santiam</b>  |   |  |
| Interim operation of Detroit Dam for temperature target                           |   | RM&E Team will review Keeffer/Univ of Idaho et.al) study and double-check on any data gaps with PDT and ODFW (confirm temperature targets with Elise Kelly).   |
| Interim actions to manage TDG before fish passage improved at Detroit Dam         | How quickly TDG dissipates below Minto to inform fish management (recycling vs. holding? How to manage fish disposition (recycling v. holding)?<br><br>How do high levels of TDG directly impact incubating eggs and alevins in the reach below Big Cliff, particularly during prolonged exposures?" Rather than simply looking at TDG levels and making inferences, it was suggested that a field study directly evaluating impacts (e.g., with egg boxes at various distances and depths) would put things in a clearer perspective as to how elevated TDG is impacting productivity in this reach. | NMFS (Diana /Jim] will prepare concept paper.  |
| High Head Bypass (JPL-18-03-HHB)<br>[Concept also applies to McKenzie/Systemwide] |   | RM&E team has reviewed this concept and the Corps has requested a draft proposal. The concept is moving forward for ranking at the 6/4/19 Steering Team meeting.   |
| <b>South Santiam</b>  |   |  |
| Foster Dam Downstream fish passage - post-effectiveness performance               | On Hold until Weir design changes are made to minimize injury rates; PDT is working on draft design; contract for construction expected this fall.  | Fenton has prepared a concept paper as placeholder for FY20. RM&E Team members will review and provide comments at the June 27, 2019 RM&E Team meeting.  |
| Upstream fish passage at Foster Dam   | FY19 Concept was being revised to focus on objective 1 relating to synthesis; PDT has since indicated that more data is needed.   | Ida will prepare revised concept paper from FY19. Paper will not include synthesis concept. Corps would like to have this study funded for FY19. Fenton will provide concept by 5/24; RM&E Team will review/brief Steering Team representatives to be prepared to rank on 6/4/19 at Steering Team meeting. |
| Downstream fish passage in Green Peter Reservoir and at Green Peter Dam           | This is an unresolved policy issue. NMFS still sees a need for these information needs to be addressed. The previous concept paper will be brought forward to Steering Team for discussion as part of the FY20 Concept Ranking.   | Diana/Anne will revise concept papers for FY20.  |

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| Upstream adult fish passage at Green Peter Dam   | This is an unresolved policy issue. NMFS still sees a need for these information needs to be addressed. The previous concept paper will be brought forward to Steering Team for discussion as part of the FY20 Concept Ranking.   | Diana/Anne will revise concept papers for FY20.   |
| Reintroduce spring Chinook salmon above Green Peter Dam                                | This is an unresolved policy issue. NMFS still sees a need for these information needs to be addressed. The previous concept paper will be brought forward to Steering Team for discussion as part of the FY20 Concept Ranking.   | Diana/Anne will revise concept papers for FY20.   |
| Complete reintroduction of wild winter steelhead above Green Peter Dam                 | This is an unresolved policy issue. NMFS still sees a need for these information needs to be addressed. The previous concept paper will be brought forward to Steering Team for discussion as part of the FY20 Concept Ranking.   | Diana/Anne will revise concept papers for FY20.   |
| <b>McKenzie</b>  |   |   |
| Rearing habitat for juvenile Chinook salmon  |   | Fenton will check in with the SWIFT team for overlap with SWIFT work to see if concept needs to be re-submitted. If so, Fenton will revise FY19 concept ( <i>FMWQ-18-02</i> ) for FY20. |
|  | NMFS suggests there is a need for a field component to verify the predictions (i.e. Juvenile Habitat Use).  | Anne, with help from ODFW, will prepare concept paper.  |
| <b>Systemwide</b>  |   |   |
| Operational changes for flow and water temperature management discharged from WVP dams |   | Fenton will follow-up with Rich to determine what studies have been funded. If SWIFT identifies data needs, Fenton will draft a concept paper.  |
| Mainstem and tributary habitat for wild Chinook and steelhead (non-flow related)       |   | Fenton will follow-up with Rich to determine what studies have been funded. If SWIFT identifies data needs, Fenton will draft concept paper.  |
|  | NMFS clarified that this study is related to the same flow-induced habitat changes studied by SWIFT. USGS studies are with regards to modeling how much habitat is available under different flow regimes. This is the field component to look at whether juvenile fish are actually there using the habitat when it would be available (previously referred to as “ground-truthing” the SWIFT work). | Anne, with help from ODFW, will draft a concept paper.  |

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| Willamette Project Dam<br>Passage Delayed Mortality |  | Diana has prepared a concept paper. RM&E Team members will review and provide comments at the June 27, 2019 RM&E Team meeting. |
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