

**Willamette Action Team for Ecosystem Restoration (WATER)
Research, Monitoring and Evaluation (RM&E)
February 27, 2020 Meeting**

http://pweb.crohms.org/tmt/documents/FPOM/2010/Willamette_Coordination/Willamette_RME/RME.html

FINAL Facilitator’s Summary

[Edits provided by Corps, ODFW]

ACTION	BY WHOM?	BY WHEN?
Send team proposal for year two of JPL-18-03-HHB	Fenton	When available
Report back to FPOM on RM&E conversation regarding the ODFW McKenzie River study	Fenton	ASAP
Send Rachel sampling data from Jeremy Romer regarding parasites	Jeff	ASAP
Send any additional workshop data suggestions to Rachel	RM&E Team	ASAP (no later than 4/2/2020)
Confirm April 7 Joint RM&E/Steering Team meeting date with Steering Team	Emily	3/3/2020

Present for all of part of the meeting: Leslie Bach (NPCC), Mike Hudson (USFWS), Dave Jepsen (ODFW), Fenton Kahn (Corps), Jim Meyers (NMFS), Rachel Neuenhoff (Corps), Christine Peterson (BPA), Kelly Reis (ODFW), Ida Royer (Corps), Lawrence Schwabe (CTGR), Luke Whitman (ODFW), Jeff Ziller (ODFW);

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

Welcome and Housekeeping

Emily welcomed the group and conducted a round of introductions. The group approved January 23, 2020 RM&E Team meeting summary.

Corps Update on FY20 Studies

Fenton noted that the Corps will continue to fund the OSU wild fish surrogate program and is moving forward with the four studies discussed at the January 23, 2020 RM&E Team meeting:

1. **JPL-20-01 SYS** (*Copepod gill damage in wild juvenile Chinook*);
2. **JPL 19-03-SYS** (*Copepods in UWR Chinook program*);
3. **JPL-20-01 LOP** (*Sources of reservoir mortality in juvenile Chinook rearing in Lookout Point dam*); and
4. **APH-19-02 FC** (*Post-effectiveness evaluation of Fall Creek Adult Collection Facility and PSM*).

Fenton will also be circulating a proposal to RM&E team members for year two of a PDT study regarding High Head Bypass (JPL-18-03-HHB *High Head Bypass Fish Passage Investigations*). Fenton noted that this study, investigating fish health, stress, and survival during passage via truck transport compared to bypass, was previously vetted by the RM&E and Steering Teams in 2019. The initial study (year 1 feasibility study), conducted last year, confirmed the feasibility of study (comparing truck transport to bypass conveyance) and provided information about the sample sizes needed for a full study; the full year study is planned for 2020.

→ **Action:** Fenton will email the proposal for year two of JPL-18-03-HHB when it is available.

Review of ODFW Proposed Little Fall Creek Ladder Evaluation Study

Jeff Ziller, ODFW, provided an overview of a planned ODFW study to evaluate adult spring Chinook passage in the Little Fall Creek (LFC) fish ladder. Fenton noted that the overview is for information purposes only and RME

input on the study design itself, as the study is not related to a BiOp requirement. Following ODFW's request for Corps-funded hatchery fish for this evaluation, the Willamette Fish Passage Operations and Maintenance Team (WFPOM) requested that the study be vetted for awareness with the RM&E Team. *[Facilitator's Note: Following the 2/27/28 meeting, ODFW provided additional clarification regarding the study via meeting summary edits, including the following: "Corps-funded hatchery fish were not approved in time for this request, so Leaburg Hatchery ChS from the McKenzie were used this year."]*

Jeff provided background information regarding the study. In 1986, BPA, USFS, ODFW and Weyerhaeuser cooperated to have a fish ladder built on LFC, with the idea of providing additional rearing habitat for spring Chinook, and winter and summer steelhead. The ladder was later rebuilt in 1998 after the 1996 flood. The intention of this study is to assess the functionality of the fish ladder by releasing 45,000 juvenile hatchery spring Chinook from Willamette Hatchery above the LFC ladder and seeing if returning adults successfully ascend the ladder. Jeff noted that the plan is to use hatchery spring Chinook salmon from Willamette Hatchery rather than fish from the Leaburg Hatchery due to concerns about these releases affecting pHOS in the McKenzie River. He expects the study to continue for at least three years, beginning in 2020. ODFW data indicates that water temperatures are satisfactory for Chinook spawning and rearing in LFC. RM&E Team members did not indicate any concerns regarding the study.

→ **Action:** Fenton will inform the WFPOM Team that the RM&E Team did not raise any concerns regarding the study.

Discussion Regarding Use of Surplus Surrogate Fish for Studies

Fenton noted that at the January meeting, Anne Mullan (NMFS) wanted to discuss the possibility of using surplus surrogate fish for additional studies or evaluations. He noted that the Corps funds OSU to develop surrogate fish for research. If a study doesn't go forward, the first priority is to try to use the fish for another study. Alternatively, OSU uses the fish to continue to develop the surrogate program. If another use is not found, the fish are released to the basin where they originated, in coordination with ODFW. The RM&E Team sought to develop a formal plan for potential use of any extra fish, should there be a surplus and opportunities to learn. Fenton noted that if the surrogate fish are not used for a Corps study, the funding for the study would need to be provided by others who want to use the fish. As Anne was not able to attend the February meeting, the team agreed to defer discussion of this topic to the March meeting.

Learnings from 2020 Willamette Science Review

Fenton provided a PowerPoint presentation on highlights from 2020 Willamette Fisheries Science Review (WFSR) (a separate document). The Corps is seeking permission from the researchers to share their presentations from the review with the RM&E Team. Fenton will send out those presentations once permission is obtained.

RM&E Team members shared their feedback concerning this year's WFSR. It was noted that not all presentations included results and that there may be opportunities to shorten the review in the future. Fenton explained that researchers are required, as part of their contract to provide a presentation, even if it is just an update. He noted that the intention is to allow time for attendees to absorb information being presented, as well as network.

Team members noted that additional presentations such as Laurie Weitkamp's presentation on ocean conditions, were appreciated as providing context for the team's work in the Willamette Basin. There was disappointment that the review was not available by Webex. Fenton noted a Webex option had been intended; however, was not available due to technical difficulties.

Group Discussion on Middle Fork Research Findings

To set the stage for the group discussion on Middle Fork Research findings, Rachel provided an update on the

Middle Fork SDM Workshops. She noted that at Workshop #1, the group identified long-term and interim objectives. At Workshop #2, the group refined objectives, where appropriate, and enumerated uncertainties regarding different passage approaches. She reviewed with the RM&E Team, a presentation by Dr. McAllister that summarized categories of uncertainty identified at Workshop #1 (Rachel previously provided this presentation as part of the Workshop materials).

The RM&E Team identified data gaps and suggestions:

- Add “uncertainty of operations” as a category of uncertainty in the summary slide deck, as to not lose sight of the operational passage options and unknowns. Rachel noted that operational uncertainties are noted in other workshop materials (Passage Feasibility, Slide 36); however, she will let the researchers know that it would be helpful to include in the summary of uncertainties.
- With regard to pre-spawn mortality and juvenile survival, there is no mention of parasites (e.g. nematodes in Chinook), bacterial and fungal diseases in Lookout Point and Dexter reservoirs . ODFW has conducted sampling in past years and can provide that information to Rachel. ***Facilitator’s Note: Following the 2/27/20 meeting, ODFW provided additional clarification and noted that: “These diseases could have a large effect on survival.”***
- Crosswalk the sub-basin planning tables and the October 2019 presentation to the Managers to ensure a comprehensive list of data gaps and critical questions is captured in the workshop materials.

Rachel noted that for purposes of the workshops, a deep drawdown at LOP will be simulated as part of the modeling efforts. The goal is to look at tradeoffs and provide decision options to managers. The next workshop is currently scheduled for April with a placeholder date of 4/13-14, however this date could change. Leslie noted that the proposed workshop schedule conflicts with NPCC meetings that are held on Monday through Wednesday on the second week of the month. Rachel will take this into consideration when scheduling workshop dates.

Any additional refinements or data gaps can be sent to Rachel as soon as possible, and no later than April 2, in preparation for the next workshop.

→ **Action:** Jeff will send Rachel parasite sampling data.

→ **Action:** RM&E Team members will send additional refinements and data gaps to Rachel no later than April 2.

Next Steps and Closing

RM&E Team members confirmed their availability to meet with the Steering Team for a Joint ST/RM&E meeting on April 7. Emily will confirm that April 7 will work for the Steering Team at their meeting next week and provide a meeting invite to the group.

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

The next meeting of the WATER RM&E Team will be on March 26, 2020 from 9 AM – 1 PM

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

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

Document Name	Document Type	Comments Due By	Comments received / forthcoming from
Sources of reservoir mortality in juvenile Chinook rearing in Lookout Point dam (JPL-20-01 LOP)	FY 20 Concept Paper	2/7/20 2/17/20(NMFS)	
	Status: Proposal reviewed at 1-23-20 RM&E Team meeting		
Post-effectiveness evaluation of Fall Creek Adult Collection Facility and PSM (APH-19-02 FC)	FY 20 Concept Paper	1/31/20	
	Status: : Updated Proposal reviewed at 1-23-20 RM&E Team meeting		
Extreme thermal dependence in hatching and survival of the parasitic copepod <i>Salmincola californiensis</i> (Lernaeopodidae) and evidence of naupliar stage	Draft Report	2/4/2020	ODFW: No Comments
Temperature and water-quality diversity and the effects of surface-water connection in off-channel features of the Willamette River, Oregon, 2015-16	Draft Report	2/20/20	
Effects of acute and chronic stressors on survival and dam passage of juvenile Chinook salmon infected with a parasitic copepod, <i>Salmincola californiensis</i> : implications for fish collection facilities	Draft Report	3/10/2020	
Evaluation of Foster Dam Juvenile Fish Passage, 2018. (PNNL) (telemetry report)	Final Report provided 2/7/2020	N/A	N/A