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

May 9, 2017 Conference Call

http://www.nwdwc.usace.army.mil/tmt/documents/FPOM/2010/Willamette_Coordination/Willamette%2 0RME/RME.html

Facilitator's Summary		
ACTION	BY WHOM?	BY WHEN?
Prepare concept papers for RM&E Team review	Corps, NMFS, ODFW	5/18
Discuss Hatchery M&E issue with Steering Team representatives for possible elevation at Steering Team meeting	All	ASAP

Participants present for all or part of call: Leslie Bach (NPCC), Stephanie Burchfield (NMFS), Ian Chane (USACE), Diana Dishman (NMFS), Scott Fielding (USGS), Tom Friesen (ODFW), Mike Hudson (USFWS), Fenton Khan (USACE), Lance Kruzic (NMFS), Jim Myers (NMFS), Christine Peterson (BPA) Rich Piaskowski (USACE), Daniel Spear (BPA), Andy Traylor (USACE), Jeff Ziller (ODFW);

Facilitation & Notes: Emily Stranz and Nancy Pionk, DS Consulting

Welcome and Introductions

Emily welcomed the group and noted that the purpose of the conference call was to identify FY 18 concept papers for the South Fork McKenzie sub-basin and Willamette Basin RM&E plans.

Emily reviewed the process that the RM&E Team developed for identifying the concepts efficiently: the team reviewed the RPA chart in preparation for this meeting and to identify pertinent questions for FY18 concepts. During the session, the team clarified the concept papers to develop, as well as the responsible party. All concept papers should be drafted by May 25^{th} for discussion at the RM&E Team meeting.

Emily reminded the group of the criteria that they developed to signal if they are getting too deep into the weeds:

- 1. If the group starts talking methodology.
- 2. If the group is trying to settle details of the science.
- 3. If the group repeating comments.

South Fork McKenzie FY18 RM&E

The group discussed the list of questions identified as concepts to draft for FY18.

Adult Passage

What proportion of adult Chinook returning to Cougar trap originated above the dam versus below? What is the timing of when above-dam Chinook return versus below-dam fish?

• Concept for FY 18: How to manage adults when they get to the trap?

Stephanie noted that these concept papers pertain to questions relating to adult passage and helps inform management of fish returning to the trap to balance minimization of "mining" downstream population and promoting genetic diversity of adults released above the dam.

 \rightarrow Action: Stephanie will update this concept paper.

What are the PSM and PHOS rates of adult Chinook released above Cougar? What outplanting practices are most effective at increasing distribution of spawners/red?

• Concept for FY 18: Assess the PSM and pHOS rates of adult Chinook released above Cougar and evaluate outplanting practices to determine the impact on distribution of spawners/redds.

This concept paper was previously drafted to be treated as a system-wide question, however, will be rewritten to be project specific. Additionally, some felt that both the above and below dam impacts should be evaluated separately, as the effects on fish that go through the dam is different. Furthermore, each project can be evaluated separately, as the impact of volitional versus controlled passage is different.

 \rightarrow Action: Stephanie will update this concept paper.

What are the PSM and PHOS rates of adult Chinook in reaches below Cougar in the SF McKenzie and mainstem McKenzie? What is the abundance of spawners?

- Concept for FY 18: Assess the PSM and PHOS rates of adult Chinook in reaches below Cougar in the SF McKenzie and mainstem McKenzie and evaluate the abundance of spawners.
- \rightarrow Action: Stephanie will update this concept paper.

Juvenile Passage

What is the effectiveness of nets and structures to improve collection of juvenile spring Chinook? How effective are guide nets at attracting juvenile fry/parr to a collector?

• Concept for FY 18: Evaluate guidance and collection efficiency of juveniles.

This has come up before with Cougar and Detroit. The team is interested in understanding: how effective the surface collectors are, as well as to evaluate the guidance efficiency. It was suggested that the concept paper consider what would be the best approach for this research: analyzing locally with a prototype, an existing offsite facility or through literature review. Stephanie suggested distinguishing between offsite or onsite studies in the concept paper. The group noted that there are nets at Clackamas and on Lewis at the Swift Reservoir, and partial nets at Baker. It might be helpful to see if there are lessons learned from those systems.

 \rightarrow Action: Scott will develop this concept paper.

What is survival and injury rate of juvenile fish through a high head bypass using the RO at Cougar Dam?

• Concept for FY 18: Evaluate the survival and injury rate of juvenile fish through a high head bypass using the RO.

This concept will be developed as a placeholder in case the Corps needs more data after the initial test in 2017. It was noted that tailrace tracking capability might be needed. And that it may be helpful to break out Green Peter and Cougar as the RO monitoring needs may be different for the two projects. It was suggested that the Corps develop two different concepts.

 \rightarrow Action: Fenton will develop this concept paper.

What is the abundance and migration timing of juvenile Chinook entering Cougar reservoir? Can reliable estimates be make of juvenile outmigration based on previous year's adult outplant numbers (and/or spawner estimates)?

• Concept for FY 18: Evaluate the abundance and migration timing of juvenile Chinook entering Cougar reservoir to see if there is correlation between juvenile outmigration and adult outplanting and/or spawning.

Stephanie noted that the question of abundance and timing was not on the sub-basin planning chart, however, this long-term information is needed to inform Cougar passage of juvenile Chinook. There was inquiry as to if this concept can be expanded to include overall habitat capacity above the dam; however, Stephanie noted that this is separate from habitat capacity and the NMFS Science Center is evaluating habitat capacity in FY17..

 \rightarrow Action: Stephanie will develop this concept paper.

What is the size and migration timing of juvenile Chinook leaving Cougar reservoir?

- Concept for FY 18: Evaluate the size and migration timing of juvenile Chinook leaving Cougar reservoir.
- \rightarrow Action: Stephanie will update this concept paper.

Downstream Flow

Are current BiOp ramping rates downstream of projects stranding juvenile spring Chinook?

• Concept for FY 18: How effective are the ramp rates that are being provided from the BiOP?

Rich is talking with Mary Karen Scullion about the ability of existing equipment to implement different ramp rates. There was inquiry as to if this question would be answered in the field or though analysis. After the concept is developed, the region needs to further clarify what is already known, what are the concerns from fish agencies and what are operational constraints? There was a request to include lamprey in the concept as well and Rich agreed to check on funding and ability to consider potential impacts to lamprey.

 \rightarrow Action: Rich will develop this concept paper.

Willamette Basin FY18 RM&E

Emily reviewed the concept papers that had already been identified as potential system-wide concepts by the RM&E team, including:

- Investigate factors that contribute to the decline in winter steelhead in the Willamette system. (Rich)
- Test HOR as an interim juvenile passage measure. (Stephanie & Mike)
- Evaluate habitat use and migration patterns by juvenile Chinook and steelhead relative to flow and temperature. (Rich)
- Evaluating the process and priority for revetment modifications. (Bernadette)

The team also identified additional concept papers. It was noted that there is not currently a need to develop a concept paper on temperature issues for FY18, as the issues are being addressed currently. However, once the latest USGS work is complete the group should revisit temperature data to see if more is needed.

Juvenile Fish Passage

How are juvenile fish passing the projects and what does reach survival look like?

- Concept for FY18: Evaluate passage and survival for juveniles.
 - The group noted that there is not a very good way to study juvenile passage at the projects, however, this concept would be good in concert with downstream flow studies and determining what is happening to fish as they leave the project. Jeff noted that there is a study going on to examine similar concepts at Leaburg that could help inform this concept.
 - \rightarrow Action: Jeff and Stephanie will develop this concept paper.

<u>Habitat</u>

Where and when Chinook rearing is occurring? What habitat is being used?

- Concept for FY18: Evaluate Chinook rearing location and timing?
 - \rightarrow Action: Diana will develop this concept paper.

Hatchery M&E

The RM&E discussed team member concerns that the Hatchery M&E would not be funded in FY17, however the RM&E Team was still asked to prioritize M&E. Andy Traylor explained that the purpose of requesting the RM&E team to review the M&E priorities and objectives was to get the region's perspective on the highest priorities and most important metrics for the sub-basin. This perspective is helpful during years when there is not enough funding, to determine whether there are objectives that can be partially funded. He continued that the Corps did not know that funds were not going to be available in FY17 when they requested input, however, feel that the input is still valuable. Andy noted that this

work is funding through O&M and has not been prioritized by the RM&E Team in the past. RM&E members noted that the data that the hatcheries provide is vital to the baseline data that is needed to manage the fisheries. It was noted that it is important to get a long-term data set, especially with a low run of chinook.

Multiple group members expressed frustration, noting that there is still a lack of clarity regarding why funding is available for some projects but not for others, despite a high priority ranking by many RM&E members. Members are feeling that their input is not valued and shared that they work hard to provide input on priorities, however, the Corps seems to have an internal criteria they use that is apart from the RM&E prioritization.

The RM&E Team acknowledged that it is difficult to have discussions on technical issues, when policy issues relating to funding are unresolved. At the technical level, team members want clear direction on what they are being asked to do and confidence that their input will be considered. Ian Chane underscored the value and need for RM&E members' input, specifically on research methods. He acknowledged that is important to be clear on what the purpose of RM&E input is, and if the Corps makes a different decision than the team recommends, the Corps needs to explain the reasoning behind the decision.

Ian explained that the Corps encounters federal contracting issues that are not always apparent when input is being sought. The contracting rules are continually changing and different projects may have different funding requirements. Additionally, the Corps was audited a few years ago, so is being very strict about contracting rules. Stephanie noted that it is important to have the same researchers performing multi-year studies for consistency; the RM&E team needs to know if they cannot count on this. Ian said that they cannot.

Dan Spear suggested that ODFW representatives talk to their BPA Fish and Wildlife colleagues to see if there is a way to reconfigure existing program funds to fund aspects of this work that are not currently funded. He noted that there may be monies that can be transferred from one project to another and offered to connect team members to the appropriate BPA representatives if there is interest.

 \rightarrow Action: Team members will relay their concerns to their Steering Team representative so that these ongoing policy issues are brought forth as an agenda issue for the upcoming Steering Team meeting on May 25th.

Next Steps:

- → Rich asked that team members submit concept papers by May 18, 2017 so that they can be discussed at the May 25th RM&E meeting.
- \rightarrow Emily will pursue possibility of scheduling next meeting at the NPCC conference room.

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