WATER Steering Team Meeting

December 5, 2017 Office of DS Consulting

FINAL Facilitator's Summary

ACTION	By Whom	By When
Provide a bulleted list of CRFM funding parameters to the Steering Team.	Ian/Joyce	ASAP
Connect with Steve Gannon regarding development of the sub-basin plans.	Corps Sub-basin Team	ASAP
Re-schedule the 2018 Managers and Steering Team meetings.	DS Consulting	ASAP
Request a response on the LOP deep draw down authority question so that the RM&E Team can discuss any needed changes to the NEPA document at their January 4 th meeting.	Joyce	12/19
Send the 11/7 summary edits to DSC; review and approve.	NMFS/Steering Team	12/31
Draft a change form for the WFOP to submit to WFPOM requesting fin clips collection when fish are handled; discuss with the RM&E team.	Diana	1/4/18 RM&E Team meeting
Discuss FMWQ-18-02 internally and bring back to the Steering Team.	Corps/Ian	January 2018
Meet to discuss BiOp RPA requirements and next steps for funding; as well as FMWQ-18-01 (Revetments); JPL-18-01 (Detroit winter steelhead residualism); JPL-18-02-SYS (latent mortality); and JPL-14-01-SYS (Predator population in DEX).	BPA, Corps, NMFS,USFWS	January 2018
Provide an updated budget spreadsheet with additional detail on the CRFM funding rationale before the February meeting.	Corps (Ian)	January ST meeting

Participants in the room: Leslie Bach (NPCC), Stephanie Burchfield (NMFS), Joyce Casey (Corps), Ian Chane (Corps), Diana Dishman (NMFS), Tom Friesen (ODFW), Mike Hudson (USFWS), Fenton Kahn (Corps), Tammy Mackey (Corps), Rich Piaskowski (Corps), Kelly Reis (ODFW), Dan Spear (BPA); Karl Weist (NPCC); *Participants on the phone:* Nancy Gramlich (ODEQ), Jim Peterson (OSU), Lawrence Schwabe (Grand Ronde);

Facilitator: Donna Silverberg; Summary: Emily Stranz, DS Consulting.

Welcome, introductions, & housekeeping

Donna welcomed the group to the WATER Steering Team meeting, extending a special welcome to Kelly Reis, ODFW, who is joining the team as ODFW's new Steering Team representative. The group reviewed and approved the October 3rd meeting summary. NMFS said they have additional edits for the November 7th summary, which they will send to DSC to provide to the group. The goal will be to get the edits in and summary approved before the end of the year.

→ **ACTION:** NMFS will send their 11/7 meeting summary edits to DSC ASAP for distribution to the Steering Team; the Steering Team will strive to approve the summary before the end of the year.

Updates & Process Check-in

The team reviewed the action items from the November meeting, noting that all were accomplished (some will be discussed during the day's session), with the exception of the Corps providing a list of CRFM funding parameters and the Habitat Technical Team connecting with the team developing the RM&E Sub-basin plans.

- → **ACTION**: The Corps will provide a bulleted list of CRFM funding parameters to the Steering Team ASAP.
- → **ACTION**: The RM&E Sub-basin Team will connect with Steve Gagnon regarding development of the sub-basin plans.

Concept Paper Presentations & Funding Rationale

The intended result of the Steering Team's conversation about the 2018 concepts papers was to gain a more nuanced understanding of how CRFM funds can or cannot be used to fund specific work in the basin.

The Corps clarified that CRFM can be used for:

- 1. Planning
- 2. Construction, and
- 3. Post effectiveness evaluation of CRFM actions.

This includes fish passage actions, of which flow management for fish passage purpose is eligible.

Rich noted that Willamette RM&E is entering in to a new era – in the past they focused on fish passage, which is fundable with CRFM. However, they now are shifting focus to downstream actions, many of which are not fundable with CRFM. He noted that the region needs an organized way to discuss how to move forward with this next phase, and suggested that sub-basin plans would play a key role in gaining a regional perspective on what the ask should be. As the program matures, it is vital to solve these problems. Mike added that resolving these issues will likely take a lot of time and effort and so needs to be addressed now to allow the process to continue forward.

The group discussed that there are RPA measures that call for work for which there is not a clear funding source, because either a) there is not a funding mechanism (authority), or b) there are not actual funds (availability). This was pointed out as a fundamental issue with the BiOp that needs to be resolved by the Action Agencies. One thought was to go back to those who authored the BiOp to see what they expected to happen with these RPA measures. It was noted that, according to the BiOps, the Corps should have the authority to implement the RPA (and if not, they should have sought that authority). In addition, if there is a need for funding that is not authorized or allocated, the Corps (with support from the region) could take a budget request to Congress to seek the needed funding.

The group requested the Action Agencies meet with the Services to discuss the RPA measures that are not currently funded, clarify what was intended, and determine how they are going to be funded moving forward. They will report back to the Steering Team when they have a path forward. They also will discuss specific concepts identified as needing federal discussion (noted below).

- → **ACTION:** The Corps, USFWS, NMFS, and BPA will meet in January 2018 to discuss BiOp RPA requirements and next steps for funding. During this conversation(s) they also will discuss:
 - o Revetment work required by the BiOp (FMWQ-18-01; Budget Line 32).
 - The need for more information on potential steelhead residualism/behavior in Detroit reservoir to inform passage design (JPL-18-01; Budget Line 12).
 - Latent mortality as it pertains to Cougar passage objectives and performance criteria (JPL-18-02-SYS; Budget Line 31).
 - The need for baseline information on predation in Dexter in order to inform the 2019 Middle Fork check-in (JPL-14-01-SYS; Budget Line 25).

RM&E Team members presented details on a number of concepts in response to Steering Team inquiry on the purpose of and funding rationale for the various concepts. In response to the Steering Team's questions, Ian provided more detail about the Corps' thoughts on each study and the ability to use of CRFM funds to fund the research. It was noted that the purpose of the presentations and conversation is to further clarify the nuances of the funding sources for future years and studies, not to push to get these studies funded in FY18.

FMWQ-18-02 SYS (Budget Line 30) "SWIFT" and "Mainstem fish habitat" concepts

Rich P. presented the SWIFT concept with additional input from Jim Peterson, OSU. Diana presented the mainstem fish habitat monitoring concept. This study is a component of the SWIFT work and relates to mainstem and tributary flow targets. As noted in the BiOp, the RPA requires that the Corps evaluate the flow targets and, if appropriate, update them based on the best available science. The SWIFT concept explores temperature, flow, and associated habitat in tributaries and the mainstem Willamette in order to see if and when juvenile salmonids are utilizing the habitat from a flow and water temperature perspective. The mainstem fish habitat concept study will provide information to managers around the timing and use of tributary and mainstem habitat by juvenile Chinook and steelhead, assesses and defines habitat preferences, how flow impacts habitat, and whether flow target changes are needed. Based on the PHABSIM studies done to date, these questions have not yet been answered for juvenile Chinook and steelhead. However, information gathered up to this point is showing that temperatures and habitat are directly impacted by flows. This study would, in a sense, validate and update the modelling and would help improve management decisions, actions, and adaptive management.

Corps Response: Ian would like to think about this concept a bit more and discuss it internally, as the purpose is now clearer and meets a different purpose than previously understood.

→ **ACTION**: Ian will discuss this concept internally to determine whether it is eligible for CRFM funding and will circle back to the Steering Team with a response at their next meeting.

FMWQ-18-01 (Budget Line 32) "Revetment" concept

Mike presented this concept. This concept is tied directly to RPA measures 7.4 and 9.1 and indirectly to RPA 2.3; it looks at how changes in flow affect habitat availability and water temperature, specifically in areas with Corps revetments. This work informs fish passage, since appropriate flow management is integral in helping salmon upstream and downstream migration. It was noted that this work is directly tied to the SWIFT studies currently being funded by CRFM. The Habitat Tech Team originally identified this study need years ago after the initial revetment assessment; however, it has not yet been implemented. This study is focused on filling data gaps, and is not focused on restoration or removal of revetments. It was thought that some of this work could be tied to the 2018 SWIFT study.

Corps Response: Ian provided an update on the Corps revetment work, noting that it was originally funded with O&M funds. Moving forward, the Corps is planning on implementing a revetment survey this year, and results will go to the Habitat Tech Team to see if there are opportunities for habitat restoration. CRFM does not fund habitat restoration or revetment removal, as these are not CRFM actions. Division determined that revetment work should be conducted using O&M funds. CRFM funds can be used to inform flow management decisions, as they are tied directly to a project and inform CRFM actions.

→ **ACTION**: The Corps, USFWS, NMFS, and BPA will discuss the need for this information at their January BiOp RPA conversation.

JPL-18-01 (Budget Line 12) "Detroit winter steelhead residualism"

Tom presented this concept. The purpose of this study is to gather information for the Detroit downstream passage structure for winter steelhead and would provide species specific information to inform passage design and relates to RPA 4.2 and passage RPAs. There is currently information on how Chinook behave in the Detroit reservoir and as they migrate downstream; however, there is little information on steelhead. A Chinook is 5-times more likely than steelhead to survive migration to Willamette Falls dam; however, it is unclear why that is. Residualism of steelhead in the reservoir is one theory that some are interested in testing. As part of the paired

release study, 80,000 steelhead smolts were released in the reservoir in the last few years, presenting an opportunity to study the residualism and active migrant rates. This year would be the last chance to catch the cohorts of steelhead released upstream of Detroit.

It was noted that Chinook and steelhead migrate differently and may use different depths and routes for passage. This information could help inform design of the Detroit passage structure, as well as how the agencies are implementing trout stocking, and the reintroduction plans. Ian asked if there was a need to refine steelhead passage rates since he didn't think it would be part of the performance criteria that NMFS and the Corps will rely on to evaluate the success of the new Detroit structure. Stephanie replied that although the Cougar criteria were based on Chinook salmon only, there was no need to include criteria for winter steelhead there because we don't have winter steelhead at Cougar. NMFS expects that winter steelhead performance criteria will be necessary for Detroit. The Corps and NMFS agreed that they need to discuss the criteria in more depth.

Corps Response: Ian noted that this concept seems like it could qualify for CRFM in regards to informing potential design or evaluation of actions. However, the Corps is not sure they need this information at this time. The Corps, NMFS, and USFWS agreed to discuss this information need more when they meet to discuss evaluation.

→ **ACTION**: The Corps, USFWS, NMFS, and BPA will discuss the need for this information at their January BiOp RPA conversation.

APH-18-02-SYS (Budget Line 16.1)

Fenton and Rich presented this concept. This study would consider the effects of actions to reduce pHOS after the Foster adult fish facility is improved. The Corps agreed that this study could be funded with CRFM as it is an after action performance evaluation; however, they would plan for it after changes are made to the facility. If this study were focused more on the hatchery effects, then it would not qualify for CRFM funds. The group will revisit this study once the changes are made to the Foster Adult Fish Facility.

Corps Response: If focused on the adult fish facility performance, this study qualifies for CRFM funding; however, the right time to implement this study is after the facility changes are complete.

JPL-18-02-SYS (*Budget Line 31*)

Stephanie had planned to present on this item but the group pretty much ran out of time. The group briefly discussed this concept which focuses on latent mortality of fish that pass Cougar. Rich P. noted that latent mortality estimates weren't necessary to inform whether the passage facility (once constructed) meets the performance criteria that NMFS and the Corps had agreed to a few years ago. NMFS noted that they view the Cougar performance criteria as being used to inform what additional measures the Corps would need to take to improve passage rates and survival at Cougar, but that additional post-construction evaluations will be needed to assess the full benefit of the new facility.

Corps Response: The Corps noted that this is CRFM fundable, however, is not being pursued at this point because the Corps does not see that the information is needed for post-construction evaluation.

→ **ACTION**: The Corps, USFWS, NMFS, and BPA will discuss latent mortality as it pertains to Cougar passage objectives and performance criteria at their January BiOp RPA conversation.

JPL-14-01-SYS (Budget Line 25)

Stephanie presented this concept. This concept assesses predator populations in the Dexter reservoir and estimates likely effects on juvenile salmonids. NMFS noted that they would like to front-load data gathering in preparation for the 2019 Middle Fork RM&E check-in. Additionally, it would be good to have this data to look back on if they implement the deep draw down, as the draw down would likely change prey species composition and density in the reservoir. The Corps pointed to literature that could help further the conversation on predation and noted that, at this point, they are most concerned with Chinook survival in Lookout Point Reservoir and whether or not

it is sufficient. This study is not in the current iteration of the Middle Fork RM&E Plan, but NMFS has always felt it should be included.

→ **ACTION:** The Corps, USFWS, NMFS, and BPA will discuss the need for a predation study before the 2019 Middle Fork check-in at their January BiOp RPA conversation.

Corps Response: The Corps agreed that this study is fundable using CRFM, however, they noted that efforts now are focused on other aspects of life stage survival and, once they've looked at fry and parr survival in the reservoir, then they would know whether there is a need to explore predation impacts.

Moving forward, the Corps will provide the Steering Team with an updated budget spreadsheet that includes more detailed rationale for the decisions noted above. They also will provide a list of CRFM criteria to the group (see action item above).

→ **ACTION:** The Corps will provide an updated budget spreadsheet with additional detail on the CRFM funding rationale before the January Steering Team meeting.

The group agreed that the presentations from RM&E members and joint conversation on the concepts was helpful and allowed them to hear and learn from each other.

SWIFT Presentation

Rich presented the ongoing Science of Willamette Instream Flow Team (SWIFT) work (see the attached PowerPoint for more details). He noted that the 2008 BiOp RPA identified flow targets and called for an evaluation of those targets. As a result, from 2009-2011 the SWIFT group focused on tributary flow and has since moved on to evaluate mainstem flows in 2016-2017, with the intent of determining how ESA listed fish/wildlife species and habitat is affected by flows. Rich noted that the Corps plans to continue with this work in FY18 with studies focused on hydraulics, temperatures, decision analysis and adaptive management. This work is funded using CRFM funds.

In response to questions from the Steering Team, Rich noted that the flow impacts on the mainstem temperature are variable and largely depend on the temperature of the tributary inputs. He pointed to an earlier study that looked at temperatures during a Lookout Point reservoir draft, which resulted in a noticeable change in mainstem temperatures. Diana added that tributary flows also impact side channel connectivity, which in turn impacts temperatures, flows and habitat.

Rich noted that implementability is an important consideration when looking at the approach to adaptively manage the flows, specifically due to uncertainties in flow each spring. He stressed the need for clear priorities, as it will be a balancing act amongst potentially competing needs. He noted that, in order to help with this balance, the modelling incorporated both adequate and deficit year targets. The group appreciated Rich's presentation and the overall SWIFT efforts.

Budget

Ian provided the team with an updated FY18 budget, which included the 'current capability' for expected efforts. He noted that the Corps is operating under a Continuing Resolution and thus only have funds allocated through December 8th, 2017. Once the Continuing Resolution is resolved, additional funds likely will be secured. Fortunately, Ian noted, there was an increase in the budget, from \$15 million to \$17.15 million during the budget lock. He pointed the group to the budget spreadsheet, noting that the line items highlighted in yellow are those that will be funded within this CR; the yellow and orange highlighted line items denote all the Corps plans to fund in FY18. Together, these projects are expected to account for the entire FY18 budget.

Lookout Point Deep Draw Down

Joyce provided an update on the Corps' internal conversations regarding their authority for a deep draw down study at Lookout Point. She noted that the District and Division attorneys have been in conversation about this

and have not yet reached a conclusion. The Corps plans to move forward with the spill study in spring 2018 and is completing the fall 2017 baseline study. Joyce is getting the NEPA documents as ready as possible in case there is desire to move forward with any other NEPA alternatives. Joyce agreed to request a response from the attorneys within the next two weeks in order to allow the RM&E to continue discussions about any needed changes to the NEPA document. She will ask the attorneys to take into consideration the revised operation developed by the RM&E Team that achieves deep drawdown but for a shorter period than what the Corps initially evaluated in the draft NEPA document.

→ ACTION: Joyce will request legal response on the authority question within the next two weeks so that the RM&E Team can discuss any needed changes to the NEPA document at their January 4th meeting. She will also ask them to consider the revised deep drawdown operation identified by the RM&E Team last summer.

Screw Trapping Information Needs

Tom and Diana reported that, as requested at the November Steering Team meeting, they reviewed information and study needs and added screwtrapping needs into the RM&E study proposals via agency comments. There were a handful of concepts to which they added these surveys, and while it might be too late to add to the FY18 studies, they are hopeful it could be incorporated into the FY19 studies.

It was noted that in order to secure the opportunity to gather genetic data on fish returning in 2019, they would need to gather fin clips for fish returning in the fall of 2018. The fish will already be in hand, and collecting the fin clips should not require much, if any, additional funding. The group concurred that it would be best to collect this data now and store the clips so they maintain the option for future analysis. Tammy suggested that the best path would be for NMFS make a 'change form request' to the WFOP stating that: if fish are handled, protocol is to collect the fin clip. She suggested that any details as to how the clips should be managed should be included on the form. The request then would be worked through the WFPOM process. Tammy also noted that the feasibility of making this change at non-Corps facilities (Dexter and Minto) may be subject to limitations of applicable subcontracts.

→ **ACTION**: Diana will draft a change form for the WFOP to submit to WFPOM; she will also discuss the need for this data collection with the RM&E Team at their January meeting.

Regional Updates from WATER Members

- NMFS: Stephanie announced that she is retiring at the end of the year. It is expected that Diana will take her position as the RM&E Team representative. The group thanked Stephanie for her years of hard work and dedication to the Willamette River Basin and WATER process.
- Corps: Joyce noted that they received the Advocates of the West's Notice of Intent (NOI), however, have not yet received a complaint. The Advocates of the West have sixty days to file a complaint, which is over January 4th. Additionally, Tammy noted that, if there is not a Government shutdown, it is likely she will have an O&M budget update for the next Steering Team meeting. The Corps is also working on setting up a conversation with leaders from Grand Ronde tribe to discuss concerns shared in Michael Karnosh's letter to the WATER Managers Forum.
- ODFW: Kelly reported on ODFW staffing assignments for the WATER forum (and their alternates). Managers Forum: Bruce McIntosh (Bernadette Graham-Hudson as alternate); Steering Team: Kelly Reis (Brian Wolfer); RM&E Team: Dave Jepson (Kelly Reis); WFFDWG: Kelly Reis; Habitat Tech Team: Dave Jepson (Kelly Reis); Flow Team: Elise Kelly; Hatchery Management Team: Ryan Couture; WFPOM: Ryan Couture (Kelly Reis).
- Grand Ronde: Lawrence shared that for the last 4-5 years the tribe has been transporting lamprey upstream of Fall Creek Dam and they are now catching macrophyllia in the screw trap! He did not have a count, however, noted that he will keep the region updated.

Next Steps

Donna reported that, after trying, DS Consulting did not get any traction on setting up a Managers Forum meeting in December. Instead, she and her team will aim to schedule a meeting for February. She inquired as to whether it made sense to tie the Managers Forum to the Willamette Basin Science Review, to which the team noted that since the Review is a very packed agenda, it would be better to find another time. Additionally, the January and February Steering Team meetings need to be rescheduled, as they fall within the holidays and the WRBSR. The group suggested combining the January and February meetings into one meet towards the end of January. It was also suggested that the group consider combining meetings with the RM&E Team when appropriate.

→ **ACTION**: DS Consulting will work to schedule the January/February Managers Forum and Steering Team meetings.

The next Steering Team meeting date is TBD.

This summary is respectfully provided by the DS Consulting Facilitation Team. Suggested edits are welcome and can be emailed to Emily Stranz at emily@dsconsult.co.