

## MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 04 October 2018 FFDRWG meeting.

The meeting was held at the Columbia Room, CRITFC office in Portland, OR.

In attendance:

Last	First	Agency	Email
Bach	Leslie	NW Power and Conservation council	<a href="mailto:Lbach@nw council.org">Lbach@nw council.org</a>
Bellerud	Blane	NOAA	<a href="mailto:Blane.Bellerud@noaa.gov">Blane.Bellerud@noaa.gov</a>
Bettin	Scott	BPA	<a href="mailto:swbettin@bpa.gov">swbettin@bpa.gov</a>
Bissell	Brian	NWP -BON	<a href="mailto:Brian.M.Bissell@usace.army.mil">Brian.M.Bissell@usace.army.mil</a>
Conder	Trevor	NOAA	<a href="mailto:trevor.conder@noaa.gov">trevor.conder@noaa.gov</a>
Eppard	Brad	NWP-PME	<a href="mailto:Mathew.B.Eppard@usace.army.mil">Mathew.B.Eppard@usace.army.mil</a>
Kiefer	Russ	IDFG	<a href="mailto:Russ.kiefer@idfg.idaho.gov">Russ.kiefer@idfg.idaho.gov</a>
Kovalchuk	Erin	NWP	<a href="mailto:Erin.H.Kovalchuk@usace.army.mil">Erin.H.Kovalchuk@usace.army.mil</a>
Lorz	Tom	CRITFC	<a href="mailto:lort@critfc.org">lort@critfc.org</a>
Macdonald	Jacob	NWP	<a href="mailto:Jacob.Macdonald@usace.army.mil">Jacob.Macdonald@usace.army.mil</a>
Morrill	Charlie	WDFW	<a href="mailto:Charles.Morrill@dfw.wa.gov">Charles.Morrill@dfw.wa.gov</a>
Peterson	Christine	BPA	<a href="mailto:chpetersen@bpa.gov">chpetersen@bpa.gov</a>
Rerecich	Jon	NWP-PME	<a href="mailto:Jonathan.G.Rerecich@usace.army.mil">Jonathan.G.Rerecich@usace.army.mil</a>
Studebaker	Cindy	NWP-PME	<a href="mailto:Cynthia.A.Studebaker@usace.army.mil">Cynthia.A.Studebaker@usace.army.mil</a>
Sullivan	Leah	BPA	<a href="mailto:lsullivan@bpa.gov">lsullivan@bpa.gov</a>
Swank	David	USFWS	<a href="mailto:David_Swank@fws.gov">David_Swank@fws.gov</a>
Tackley	Sean	NWP-PM-E	<a href="mailto:Sean.C.Tackley@usace.army.mil">Sean.C.Tackley@usace.army.mil</a>
Thompson	Josie	NOAA	<a href="mailto:Josie.Thompson@noaa.gov">Josie.Thompson@noaa.gov</a>
Walker	Ricardo	NWP-PME	<a href="mailto:Ricardo.Walker@usace.army.mil">Ricardo.Walker@usace.army.mil</a>

On the phone: Bach, Bettin, Eppard, Kiefer, Morrill and Swank.

1. Final decisions or recommendations made at this meeting.
  - 1.1. July meeting minutes approved.
  - 1.2. Studebaker sent out a meeting invitation with the agenda and updates. This method will continue in the future as long as no one has any issues with it.
2. Action Items
  - 2.1. Lamprey Passage Minor Fishway Modifications - ACTION: Walker will follow up with FFU and the project and then communicate the status of the redistribution of the rest boxes to FFDRWG.
  - 2.2. The Dalles Back-Up AWS - ACTION: Rerecich will identify the testing dates.
  - 2.3. The Dalles Back-Up AWS - ACTION: Rerecich make sure the risks of running the AWS unscreened compared to running one fish unit with minimal criteria is evaluated in the alternatives report.
  - 2.4. Turbine Survival Program - ACTION: Rerecich will post the TSP report when available.
  - 2.5. Avian Wires Manual - ACTION: The responsible party for the maintenance of the avian lines will be confirmed at FPOM.
  - 2.6. B2 orifices - ACTION: Eppard and Rerecich will have another conversation with Medina on the status of the B2 orifice project and report back to the group.
3. Lamprey Passage Minor Fishway Modifications (Turaski/Schroeder/Walker) At WA SH, the contract for cutting the orifices was awarded. Redistributing the rest boxes is still up in the air. FFU can commit to a

couple of days of monitoring during the peak of the sockeye run and a few days to review the videos but Wertheimer needs to confirm the resources are available. Conder finds a couple of days too minimal and would prefer two weeks. Lorz would rather have more monitoring than a quick turnaround in the results. The monitoring is of one refuge box only; no monitoring of the orifices. The contract has an option to include the redistribution of the boxes or the project could do the work. Bissell said that the project has concerns about running seines, scaring fish and lifting boxes to salvage lamprey. Conder suggests saving the lamprey for translocation. Typically BON doesn't have many lamprey in a dewatering but there may be some in rest boxes. Bissell said that day is intense and would like the tribes to be there to help. Walker still needs confirmation from FFU and the project and will send out an email when the okay has been given.

**ACTION: Walker will follow up with FFU and the project and then communicate the status of the redistribution of the rest boxes to FFDRWG.**

4. Bonneville B2 FGE (Medina/Roshani/Rerecich) – All the plates have been removed. The MOC was updated through the FPOM process. The updated DDR is scheduled for review in late October with all the calculations for the concrete alternative. CFD modeling will be used to make sure that this alternative will work. The goal is to achieve the same hydraulics in the gatewell as with the metal plates. The current schedule is to get a contract out in May 2019 and construct a prototype unit in June/July. This is an optimistic schedule and will be adjusted as they go. Units 11 and 18 will be completed during the IWWP.
5. John Day Turbine Rehab (Medina/Lipski/Rerecich) – The PDT is working on the alternatives evaluation of 60% Phase 1 A. Schedule – the in-section review of the draft final report will be in Oct-Nov followed by a district quality review from mid-November – mid-December. The ATR draft final and the FFDWRG review comes out in late November – mid-December. The final report will be out by March 2019. Alternatives include do nothing, a full powerhouse replacement with Kaplan or a fixed blade turbine or a partial with only the most critical units being replaced. Lorz asked if the condensing units would be a problem but there shouldn't be any problem with that. The turbines will be designed with fish screens out for optimization but will run with the fish screens in. Conder asked if this design approach would make the turbine environment run worse with screens in if it wasn't designed that way. Rerecich didn't know the answer but it is usually an efficiency change not an environment change. STS are in bad shape but they are not replacing them right now. Conder asked if the Ice Harbor data will be in before decisions are made on what turbine design. Rerecich said they are moving forward with implementing the collaborative design process regardless of when the data comes in. The balloon tag data will be in but this only shows major problems. The three units study with JSATS fish is long term and the data won't be in for three years. The first year of construction is 2022.
6. The Dalles Backup AWS (Wright/Rerecich) – Engineers are satisfied that the trouble shooting hydraulic testing that occurred on 26 August can be considered commissioning for that portion. Additional commission testing that will not impact ladder operations and will occur in late October. The one fish unit in conjunction with the AWS test will be the last week of November. It needs to be during the day for visual confirmation and anyone is welcome to view the testing. This action will be coordinated through FPOM and they may need two days of testing. NOAA is supportive of two days because this is important. ERDC personnel may need to be present during the testing. **ACTION: Rerecich will identify the testing dates.** Lorz wants to look at the lamprey impact because the AWS intake is unscreened. Conder wants to know how close the entrance criteria is with one unit compared to running the back-up AWS without a screen. **ACTION: Rerecich make sure the risks of running the AWS unscreened compared to running one fish unit with minimal criteria is evaluated in the alternatives report if the outcomes from testing changes the PDT's path forward.** Operating the back-up AWS may allow the PDT to reevaluate the alternative they chose. The second alternative is cheaper, reliable, and have less oil risk. Conder feels that Fredricks did not envision running the back-up AWS unscreened as a supplement to the fish units. Lorz prefers the Kaplan because the project can run as 1 unit even if the other unit goes down.
7. Turbine Survival Program (Medina/Ahmann/Rerecich) – Rerecich had a completed B2 report with hard copies for the project and BPA. The PDT has been updating the phase 2 report which should be going to print soon and will be posted when available. Funding for the TSP program has concluded. **ACTION: Rerecich will post the TSP report when available.**
8. Avian Wires Manual (Macdonald) – The O&M manual has been posted to the FPOM website. Additional pictures are coming. The manual gives project instructions on how to maintain the wires. The design deficiencies have been fixed. The wires are being transferred to the project to maintain. **ACTION: The responsible party for the maintenance of the avian lines will be confirmed at FPOM.**

9. BON Spillway Stilling Basin Hydro-survey (Bissel) – Survey will be on November 5. One spill bay will be open at a time. Due to the HECP clearance procedures, this will take an additional time. The survey will be much faster if both spill bays are open. The rock removal will most likely be in January. The surveys will be done at TDA and JDA as well. FPOM will discuss leaving both spill bays open due to the clearance procedure. All regional partners are annoyed at the late date for the survey.
10. B2 orifices – At the last meeting, Conder had requested additional air bursts. Rerecich recapped that the project was expected to upgrade their PLC system before any modifications to the systems could be made and Bissell confirmed that the PLC was upgraded. More bursts and additional time for the bursts can be added. Conder feels that the jet is starved for air and said it was stated in the alternatives report as well. The airlines would need to be larger or additional compressor to add more air is necessary. The two fish issues are impingement and debris. Conder feels that the selected alternative was not acceptable to the region and wants to revisit the issue. Rerecich says that they are not seeing survival problems showing up at the SMF. Although there is nothing egregious in terms of direct survival problems, Conder thinks that there is scaling and impingement concerns. The COE doesn't want to spend money on an issue that doesn't have a measurable benefit. Lorz suggests starting with lower cost items like airlines. Conder wants data on how long the jets stay solid. Bissell said the additional air bursts are already being added but increased duration is not known. Lorz says that since this is not operating as intended and it should be CRFM. Eppard said you have to identify the problem first and decide if this is causing harm to fish. Conder said it was already identified as a problem and that is why the PDT was formed. Eppard said that originally, it was not known whether the problem was the gatewell or orifice and then the two issues split. In order for upper management to fund this project, a specific problem has to be identified and it also has to be in the new Bi Op. Rerecich said that in the alternatives report the more expensive fixes were CRFM and the other smaller items were O&M responsibility. **ACTION: Eppard and Rerecich will have another conversation with Medina on the status of the B2 orifice project and report back to the group.**
11. Question of the day – Would it be safe to assume that “30% of the juvenile salmonids currently passing through powerhouse routes would pass through powerhouse surface passage (PHSP) routes if they were available at the projects? This question came up during CRSO modeling and Studebaker wanted to hear the responses from this group as well. The group suggested looking at project specific data / studies, including the construction of the B2CC, the surface passage study done in the early 2000s, The Dalles ITS, IHR before getting rid of the sluiceway, Lake Billy Chinook and Baker Lake. Swank said that table 1 from 2015 BON TSS report using the current system has all the passage route information but the question is about if it is possible to move 30% of the fish from the powerhouse to a surface passage route by improving a current surface passage system / route or by adding one if there isn't one yet. The answer depends on the project and the amount of money involved; JDA and TDA would be difficult to increase very much. Eppard said that most fish that can be guided are surface oriented which is the theory behind the B2CC, TSW and RSW. Surface flow may not achieve the same conditions as a guided screen. Bellerud suggested, if you could move 30% of the water, then you can probably move 30% of the fish. The problem is building something that limits the amount of water which could be very expensive. Conder feels that the 30% estimate is too low if it can guide fish and Eppard agreed that 30% is conservative. Bellerud suggested that 30% is minimum to make it worthwhile to build. Sullivan mentioned Wampum was designed for 30% and with the amount of water (20cfs), they ended up with 50-70% guidance efficiency. The COE authored a surface passage compendium but it needs to be updated. This historical document would be a good place to start.
12. Next meeting Thursday, December 6, 2018.