CENWP-OD 20 October 2016

MEMORANDUM FOR THE RECORD

Subject: DRAFT minutes for the 20 October 2016 Fish Facility Design Review Work Group

The meeting was held at Mt. St. Helens Room at the NOAA Fisheries offices, Portland, OR. In attendance:

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| --- | --- | --- | --- |
| **Last** | **First** | **Agency** | **Email** |
| Bissell | Brian | NWP | [Brian.M.Bissell@usace.army.mil](mailto:Brian.M.Bissell@usace.army.mil) |
| Doumbia | Julie | BPA | [jadoumbia@bpa.gov](mailto:jadoumbia@bpa.gov) |
| Fredricks | Gary | NOAA | [Gary.Fredricks@noaa.gov](mailto:Gary.Fredricks@noaa.gov) |
| Hevlin | Bill | NOAA | Bill.Hevlin@noaa.gov |
| Kiefer | Russ | IDFG | [Russ.kiefer@idfg.idaho.gov](mailto:Russ.kiefer@idfg.idaho.gov) |
| Kovalchuk | Erin | NWP | Erin.H.Kovalchuk@usace.army.mil |
| Kuhn | Karen | NWP | [Karen.A.Kuhn@usace.army.mil](mailto:Karen.A.Kuhn@usace.army.mil) |
| Lorz | Tom | CRITFC | [lort@critfc.org](mailto:lort@critfc.org) |
| Peterson | Christine | BPA | [chpetersen@bpa.gov](mailto:chpetersen@bpa.gov) |
| Rerecich | Jon | NWP | [Jonathan.G.Rerecich@usace.army.mil](mailto:Jonathan.G.Rerecich@usace.army.mil) |
| Swank | David | USFWS | [david\_swank@fws.gov](mailto:david_swank@fws.gov) |
| Tackley | Sean | NWP | [Sean.C.Tackley@usace.army.mil](mailto:Sean.C.Tackley@usace.army.mil) |
| Walker | Ricardo | NWP | [Ricardo.Walker@usace.army.mil](mailto:Ricardo.Walker@usace.army.mil) |
| Zorich | Nathan | NWP | [Nathan.a.zorich@usace.army.mil](mailto:Nathan.a.zorich@usace.army.mil) |
| Zyndol | Miro | NWP | [Miro.A.Zyndol@usace.army.mil](mailto:Miro.A.Zyndol@usace.army.mil) |

On the phone: Doumbia, Kiefer, Swank and Zorich.

**All documents may be found at:**

<http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/FFDRWG/FFDRWG.html>

1. Final actions or recommendations:
   1. June meeting minutes were not approved. Tackley will check to see if there were any amendments to the minutes and resend.
   2. John Day North Ladder PIT detection: NOAA and CRITFC concurred with the action to move the conduit but said it was not ideal.
   3. B2 Orifices: The O&M issues will be moved to the FPOM forum.
   4. Lamprey Passage Structure (LPS) and Minor Mods: No weir caps will be installed on Bradford Island A-branch or John Day south entrance weirs. The caps add an extra four inches and will impact ladder entrance criteria during low flows.
2. Brief Progress Updates (5 min or less per project)
   1. John Day North Ladder AWS pumps (Richards) - All pumps are up and running. There is an outstanding issue to be worked out with the contractor but otherwise closing out the project.
   2. Turbine Survival Program (Medina/Rerecich) - A B2 turbine model meeting will take place in mid-November in Portland. Data from the bead analysis from BON second powerhouse should be available soon. A model for TDA units 1-16 is being built down at ERDC. Due to the way the dam is built, the approach flow is very different from any other turbine models. The bead analysis for TDA will start next year. ACTION: Rerecich will send out the final report on the B2 bead analysis and track down the report on B1. Hevlin asked if the leak issue at IHR unit 5 should be talked about under TSP. TSP has a regularly scheduled meeting once a month and it should be brought up as an issue for Walla Walla.
   3. B2 FGE (Medina/Knowles/Rerecich) - Construction is underway and on schedule. MU 18 is completed and MU 17 is being worked on presently. PNNL will be doing the post construction evaluation.
   4. John Day North Ladder PIT detection (Kuhn/Walker) – The Phase 1 contract is out for bid. The conduit that comes from the antennas in the south ladder had to be moved when they relocated from weirs 184/183 to weirs 181/180. The conduit is now about a foot away from the weir; originally it was about three feet but still on the upstream side. Wharf had to move conduit closer to the weir because of the concrete support interfered with the PIT antenna. The conduit is round PVC pipe with no sharp objects or corners. Fredricks asked if there was any other configuration that they could use but any changes would delay the project. If fish scales are found on the pipe, then a shroud could be installed around it. **NOAA and CRITFC said the current configuration is okay but not ideal.** Phase 2 will be completed by May. Peterson will check to make sure that they are invoicing before the deadlines.
   5. John Day Avian Line Improvements – Phases I and II (Medina/Zyndol) – This issue was covered at FPOM. The major change is that the deadline has been pushed back to May 1. This contract has reached the cost threshold that triggers a higher level of review and therefore takes more time to process. **Fredricks agreed to the May deadline and will send an email to Kovalchuk.**  Hevlin asked about how the pelicans push out the gulls. Zyndol explained that due their numbers and size, pelicans can push the gulls and take their food. Eric Grosvenor is working with Trachtenbarg to scan the rocks for PIT tags. Zyndol will check on the status of this. Zorich mentioned that those rocks have historical use so there will be PIT tags from other years when gulls used those same rocks to rest. In order for the study to give any relevant data, you could only use PIT tags from the last two years only.
   6. The Dalles East Adult Fish Ladder AWS Backup System – On schedule. (Turaski/Roshani/Rerecich)
   7. BON Major Rehab (Cutts/Lynn/Rerecich) – The PDT is scoping the FY17 effort. The goal is to be at 90% by the end of FY17. After the December PDT meeting, Matt Cutts will attend the January FPOM and explain all the facets of the major rehab and the maintenance alternatives.
3. B2 Orifices (Medina/Kuhn/Rerecich/Royer) – The EDR recommendations address the improved jet quality, inspection capability of the orifice and uses the FFDRWG and NOAA comments received through the review process. The chosen alternative leaves the orifice at 12 5/8 because the 13” orifice had hydraulic limitations and the 12” had an adult fish impact component. To save money, the orifice light ring has been eliminated but the project will upgrade the existing light system. BON has made improvements to the system by replacing airlines, fittings and canisters for the actuators. BON maintenance crews will start rehabbing orifices this in-water work period. Two operational changes are suggested - adding a burst of air at the end of the cycle to forces a non-cohesive jet into a straight jet and adding an additional cycle so that every orifice is cycled every two hours. The PLC running the orifices is outdated and doesn’t meet the current security requirements. The cost to add the operational changes would be about $4K but this system will be upgraded in the next few years. The project feels that the money could be better spent on other things. District funds may be an option and the FGE improvements may change the dynamics of the system. Fredricks noted that the power of the burst is different at the south and north end and wondered if the airlines are in need of repair. Rerecich said that redoing the airlines lines is part of the first recommendations (rehabbing the orifices) for O&M. **Rerecich suggested moving this issue to FPOM.** Kuhn needs to update the cost estimate for this alternative. This alternative with the two main components – O&M improvements and CRFM re-core component - is the recommendation to finish the EDR however there is no funding source lined up. BON project will need to push the O&M recommendations. To help keep the lenses clean, light tube extension were installed but did not help. New shrouds were installed. Lenses are changed out mid-season. The LED light was cooler and easier to clean but did not stop algae from growing.
4. Lamprey Passage Structure (LPS) and Minor Mods (Turaski/Schroeder/Walker) – As planned, work on the LPSs will start this winter maintenance period and LFS work on Nov 14th. On Bradford Island LPS, no new entrance ramps will be installed. The only modification will be to extend the exit chute as far as possible past the fish ladder exit. Walker will send out the 90% DDR in next two weeks for review. Cascade Island LPS will be upgraded to a permanent fixture so that the project can take it over. The upgrades include upgrading the transceiver panels for the duplex PIT antenna and wiring. For Washington Shore Minor Mods, they would like to add rest boxes, monitoring equipment and entrance ramps. For Bradford Island Minor Mods, the list includes doing similar work in the serpentine section, three lamprey orifices, rest boxes, and ramps on the weirs between the junction pool and the count station slot. The entrance ramps for Washington Shore will be extended. Weir caps will be installed on Washington Shore weirs during this in-water work period. For the A-branch Bradford Island entrance weirs, the weir caps would add four inches and could impact entrance criteria during low flows. John Day south entrance weirs will have the same issue. Tail water is lowest during the highest adult passage months and losing an additional four inches is unacceptable to NOAA and CRITFC. **No weir caps will be installed at Bradford Island A-branch or John Day South entrance weirs.** Walker will go back to the PDT to see what can be done. The caps have not been fabricated yet. At JDA north fish ladder, the LPS be extended to the second 180 bend for 2018/19 in-water work period. The funding is planned for all phases but is never guaranteed.
5. JDA – SQ boards replacement. There are four SQ boards. In order to replace a board, four units need to be out. Each replacement will take three months. There is a tentatively schedule for the work based on unit priority. Most of the work will take place during the winter maintenance period except SQ3. Unit priority will need to be adjust during this time. An MOC will be sent out shortly.

**Next NWP FFDRWG Meeting:** 1 December 2016 (Block 300 – 1st Floor Conf. Rm)