

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 09 May 2019 FPOM meeting.

The meeting was held in the Conference Room at the Juvenile Monitoring Facility, McNary Dam, Umatilla, OR. In attendance:

Last	First	Agency	Email
Baus	Doug	NWD-RCC	Douglas.m.Baus@usace.army.mil
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On the phone: Baus, Bellerud, Blubaugh, Brower, Hausmann, Juhnke, Kiefer, Scott, Swank, Thompson, Warf and Wright.

1. Final decisions or recommendations made at this meeting.

1.1. April meeting minutes were approved.

1.2. 19TDA07 MOC Lamprey hoist EFL installation – FPOM recommended doing the work later in the day and concurred with this action.

- 1.3. 19TDA08 MOC Lamprey Reduced Nighttime Flows- FPOM concurred.
- 1.4. 19BON04 MOC Adult Lamprey Study RT antenna installation – FPOM concurred.

2. **The following documents are provided or discussed at this meeting. All documents can be found at: <http://pweb.crohms.org/tmt/documents/FPOM/2010/>**

- 2.1. Agenda, Fish Passage O&M coordination team
- 2.2. FPOM outages (NWW)
- 2.3. BPA outages (BPA)
- 2.4. Coordination Forms (MOC/MFR)(NWW/NWP)
- 2.5. FPP Change Forms (NWW/NWP)

3. **Action Items**

3.1. **NWW**

3.1.1. **[April 19] LGS debris spill** - ACTION: Setter will ask about the debris strategies at each dam and provide a list to FPOM. *Status: Setter discussed the removable boat barrier with LMN and at this time, they are not interested. LMN has developed a lengthy protocol that they feel is adequate to handle debris issues. She has detailed debris plans from all projects except IHR. Setter will send out the final documents to the group for discussion next month.*

3.2. **NWP**

3.2.1. **[May 19] 19JDA09 MFR Spill gate 20 OOS** - ACTION: Grosvenor will look into why the spill gate closed.

3.2.2. **[April 19] BON PIT room relocation** – Hausmann will get a cost estimate. *Status: Hausmann said the project is now looking at the using the count station at the UMT to hold the PIT equipment with the new antenna system. Using the count station is much cheaper than a new building. The count station is only used when CI exit is open and it is video counting. The next time it will be dewatered is winter 20/21.*

3.2.3. **[December 18] TDA dam angling Catch Results** - ACTION: Morrill will ask Winther for data to be broken down by month. Status: Morrill has the draft 2018 report and will send to Kovalchuk for FPOM distribution. *Status: The file is too big to send and Morrill is still figuring out how to send the file. Setter said that she heard that permits were given out to mid-Columbia PUDs for non-native species lethal take permits while dam angling. Morrill said that he has just heard of it and will need to discuss internally first. VanDyke said that some of these policies have evolved. Lorz mentioned that targeted removable programs were suggested by the Power Council at the latest presentation.*

3.2.4. **[July 18] SLEDS Extensions** - ACTION: Hausmann will look into the feasibility of modifying the SLEDs. Status: Hausmann had hoped to get a ball park estimate from the FOG bulkheads but the method of cost per pound of steel doesn't work in this case. Engineering will need to make a cost estimate. *Status: The cost is ~\$3K per foot of height of the SLED. PH2 would cost ~ \$120K. Hausmann thought 10' would be necessary to add to the current SLED. Conder wants to wait until it is a problem. Lorz suggests talking to Chane about CRFM funding. VanDyke asked if one entrance is a higher priority than another but Conder didn't think there was any evidence to indicate sea lions prefer a certain entrance. Conder asked if it was possible to lift the SLED up and dog it with middle section open. Hausmann said it might be possible but there is only one dog location and it may not be helpful. Mackey thought leaving an open section would be easier for sea lions than increasing the height. Mackey said that the SLED extension could be submitted for the next budget cycle.*

3.3. **Completed Action Items or to be discussed later in the agenda**

3.3.1. **[April 19] TDA ROV Report** - ACTION: Add the TDA spillway rocks to the next FFDRWG agenda and ask Ebner to give her perspective. Status: Completed

- 3.3.2. [April 19] **Whooshh** - ACTION: Kovalchuk will add the pictures of the second modification to the MFR then resend to the group. Status: Completed.
- 3.3.3. [April 19] **19TDA04 MOC Crane Rail Replacement**: ACTION: The June FPOM will be scheduled at TDA for a site visit. Status: Completed.
- 3.3.4. [February 19] **MCN** – ACTION: After the avian deterrent laser is mounted, Johnson will provide pictures. Status: Completed.
- 3.3.5. [March 19] **Rock Removal**- ACTION: Kovalchuk will create a new page for the spillway rock removal reports on the FPOM webpage. Status: Completed.
- 3.3.6. [July 18] **SLEDS timeframe**- ACTION: Hausmann will write a change form and an MFR on the SLEDs. Status: Still pending. See FPP change forms below.

4. Updates

4.1. NWW

4.1.1. Upcoming maintenance/construction/research activities.

- 4.1.1.1. FPOM outages schedule (Setter) – The key update was that IHR Unit 2 returned to service allowing the project to start working on MU3. Conder asked if the testing on unit 2 lined up with the expectations. Peery said that the index testing was not done yet. After the 72 hour run was complete, the unit was returned to service for making power. VanDyke asked what it actually means to run the unit without the testing and if it would cause problems. The unit is run where the project thinks the upper end of 1% is but it still needs to be verified and this should not be problematic. Setter pointed out that this is a fixed blade unit and that the 72 hour run is a test. The index testing will be this summer. Setter said that the project completed the index testing on MU6 and it matches MU5. Both units are hydraulically locked at 24°. The Spill PIT work is still going well.
- 4.1.1.2. Early Start Up 2020- Lorz wants to know what the early start up plan is for next year. The MCN overshoot research depends on MCN starting early. Setter said that the projects have not secured funding for more staffing but they are expecting to start early. FPAC would like MCN and LWG and Setter said that is the preliminary plan. Bettin wants to know how many units/screens are required for MCN. Setter thinks three or four units/screens might be possible. MCN could install that first week depending on the work days. Lorz suggested looking at research funding to help cover the costs for MCN. Conder asked what the priority is at MCN. Johnson said that 1, 13 and 14 are the first three priority units. Setter asked who would give the okay for having screens in early for lamprey survival purposes at MCN. CRITFC and Nez Perce will be discussing this issue. **This topic will remain on the agenda.** For LWG, the project still needs to report if they can screen half or all of the units.

4.2. NWP

4.2.1. Upcoming maintenance/construction/research activities.

- 4.2.1.1. BON CI subsidence – The plan is to install a military style bridge in late November/December and improve three locations for the cranes. A site visit is scheduled for next week.
- 4.2.1.2. TDA – VanDyke said more flexibility is needed on spill operations at TDA. He would like an update on the status of each bay and the repairs needed. Mackey said that Cordie had created a similar Memo a few years ago. A comprehensive spill way assessment is ongoing currently but no repairs are scheduled yet. Cordie will update the memo and send out as soon as possible. The crane for the spillway is a higher priority over the trunion pin. Conder would like to elevate this issue. Conder brought up that Ebner suggested that bay 1 might need a limitation for erosion issues in the future but this is not an active constraint.

4.2.1.3. TDA- A log barge broke loose and was pinned against spill bay 1. The barge was removed without interrupting spill.

4.3. Research/FFDRWG updates.

<http://pweb.crohms.org/tmt/documents/FPOM/2010/FFDRWG/FFDRWG.html>

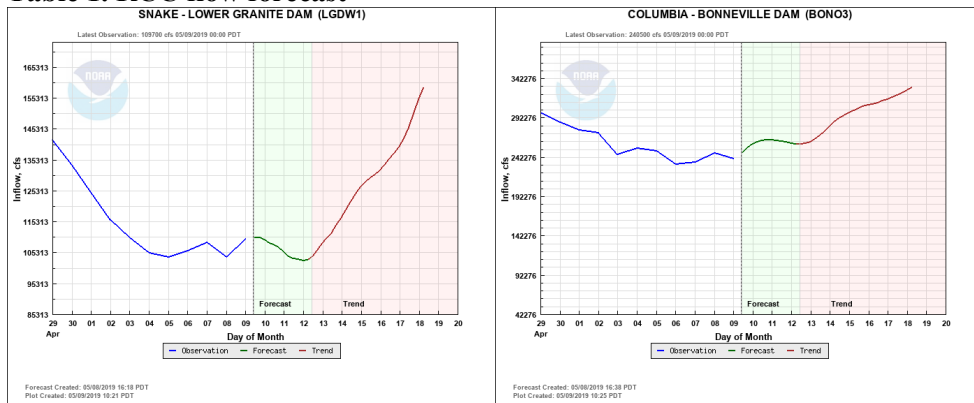
4.3.1.NWP FFDRWG- The last meeting was on 30 April.

4.3.2.NWW FFDRWG – The next meeting is 23 May.

4.4. RCC update

Project	Previous day average (kcfs)	5 day forecast average (kcfs)	10 day forecast average (kcfs)	Projected Low/Peak (kcfs) and date.
LWG	110	110	159	103 (5/11) / 159 (5/18)
MCN	232	247	310	236 (5/9) / 310 (5/18)
BON	238	265	331	248 (5/9) / 331 (5/18)

Table 1. RCC flow forecast



4.5. BPA update – A new schedule was posted in the meeting folder.

4.5.1.NWW Stilling Basin Condition Update (Laughery) – After the gas cap spill of 2018, NWW wanted ROV surveys of all the spill basins to look for possible problems. LWG survey found a 5k cubic yards of debris piles including trees, cobble and boulders. Most of the stilling basin is at design elevation but there was some erosion closer to the base of stilling basin with some pockets of 12” deep erosion. The data was from a multi-beam survey. LGS had no noticeable erosion issues with concrete but there was about 8K cubic yards of debris piles. LMN had historical erosion problems that have been repaired and small debris piles. IHR was found to be stable. MCN had some small erosion pockets but mostly stable. Lorz asked about removing debris from LWG. Laughery said it was on their radar but there is no plan. It is not considered a dam safety issue. After the deflectors were added, debris piles started forming because the debris was no longer blown out. The debris would have to be physically removed; the debris could not be blown out and there is more debris for recruitment. Fish at depth could be impacted by the debris. The debris piles are moving around the basin. The rock movement can cause erosion problems. They need to document if there is increased erosion but funding for surveys is every five years. Lorz suggests doing a survey in between spring and summer spill to see what is under the rock piles.

4.6. Fish Count Program – The Four Peaks contractor is counting fish at all dams and testing their software at BON. When the bugs are out then the software will be used at all the dams. The counts are faxed to their office and manually entered. The manual counting has added a couple of hours to the post time. The plan is to be completely up and running by June. Most of the counters are trained counters. QA/QC is ongoing.

4.7. Pinniped update

4.7.1. BON – Observations have averaged 27-30 SSL and 2 CSL. The states have removed 12 CSL. Due to the new criteria, the states can remove animals in about a week. Idaho has been supporting the effort as well. Lorz asked what the status of a stellar trap is. Wertheimer said that is a question for the States and VanDyke didn't have any update. Conder asked if the SSL numbers are lower than average. Hazing starts at 5am which makes the point count harder. The peak numbers are similar but the tail ends are different.

4.7.2. TDA- A sea lion has been observed at the TDA marina and potentially near the south entrance. The COE is working through the NEPA coverage issues to be able to haze the sea lion. PME has funding and is working on getting TDA in NEPA compliance. FPOM members expressed frustration at the process. Conder asked if this animal had been to TDA before and although the CSL is branded, it is unknown if he has been at TDA before. The navigation lock gates are closed to deter pinnipeds from getting on a barge.

4.7.3. Willamette Falls – 31 CSL have been removed at Willamette Falls.

4.8. Chum update – **This operation is completed for the year; it will be removed from the agenda.**

4.9. Lamprey update – The LPS are running at BON. The LFS and traps will start soon. U of I will be working the LFS trap and coordinating with the tribes for allocation.

4.9.1. JDA elevator and LPS pumps – The project had to retract their sole source contract on the elevator due to time constraints. The contract was to be sent out for bid which will take a while but the work itself shouldn't take more than a week. The LPS is operable.

4.10. Avian Update

4.10.1. BON- Small number of birds are present. All the avian lines are installed.

4.10.2. TDA – Gull numbers are low to moderate. Project staff is using a laser to deter gulls on a rock island. USDA hazing continues.

4.10.2.1. DCC towers –DCC have always been observed on the towers but the nesting has increased. Project staff is looking to see if this is increasing predation. Laser is being used to harass the cormorants.

4.10.3. JDA – The project has observed average grebes in the forebay, low gull numbers and ~30 pelicans in the rocks below the dam. All lines are intact.

4.10.4. MCN- All species are present but more roosting than feeding. USDA hazing is ongoing. The laser is being used on the outfall. Johnson thinks that the laser is working better than the sprinkler.

4.10.5. FFU – East Sand Island has ~400-600 terns in the colony and there are more terns beyond the habitat. Mackey will start posting the avian update to the FPOM website once the page is finished. Rice Island has no nesting yet but many scrapes at night. Staff has been actively working Rice Island seven days a week.

5. Coordination/Notification forms (need concurrence/discussion)

5.1. 19LWG03 MFR Emergency Debris Spill

5.2. 19LWG04 MOC AWS Pump1 RTS – No additional comments.

5.3. 19LWG05 MFR Partial fishway dewater

5.4. 19LGS03 MFR Debris Spill

5.5. 19LGS04 MFR Primary and Secondary Bypass due to Raceway Capacity –Due to the sudden increase in migration numbers, the raceways hit capacity sooner than expected and fish

were put back in the river rather than transported. No mortalities were reported. Transport will change to every other day sooner than normal due to the early migration. Some of the fish that were coded as barged were actually returned to the river fish. A note was made in PITAGIS but it couldn't be changed.

- 5.6. 19LGS05 MFR A-side Direct Load Pipe Plug
 - 5.7. 19LMN04 MFR Raceway 3 mortality
 - 5.8. 19LMN05MFR Bypass of Fish
 - 5.9. 19IHR06 MFR South fish ladder upper diffuser valve repair
 - 5.10. 19MCN04 MFR Sample Delay
 - 5.11. 19MCN05 MOC Oregon Ladder exit power outage – The work went well and the exit was back in automatic by 5:15.
 - 5.12. 19JDA07 MFR MU2B 28 Juvenile CH ST Morts – JDA does do visual inspections of the gatewell once a day but the actual orifice is not visible. The unit was raked and the screen was pulled and inspected. The camera system had to be modified to see the orifice. The open/closed sensor is on the shaft and not on the knife gate. The attachment point to the knife gate is inspected when the unit is down for a 5year overhaul. Any additional attachments for a sensor could catch debris. **Conder would like to see the knife gate indicator added to the FFDRWG agenda.** Mackey suggested taking pictures when the JBS is dewatered so everyone can see the orifices from the other side.
 - 5.13. 19JDA08 MFR SFL Turbine Pump 1 OOS
 - 5.14. 19JDA09 MFR Spill bay 20 OOS – Lorz wants a follow up next month on why the spill gate closed. **ACTION: Grosvenor will look into why the spill gate closed.**
 - 5.15. 19TDA07 MOC Lamprey hoist EFL installation – Lorz suggested doing the work later in the day. There are about 10 bolts to drill into the wall which will take about 30 mins. **FPOM recommended doing the work later in the day and concurred with this action.**
 - 5.16. 19TDA08 MOC Lamprey Reduced Nighttime Flows – The flow will be the same but the differential will be lower. The differential will be 0.5' for nineteen randomized days. **FPOM concurred.**
 - 5.17. 19TDA09 MFR PUD turbine outage
 - 5.18. 19BON04 MOC Adult Lamprey Study RT antenna installation – BON project preferred the floating antenna. Conder and Lorz preferred the floating antenna as well. PSMFC ran a test to make sure there would be not be any interference between the RT and PIT antennas and the test was successful. **FPOM concurred with the floating antenna.**
 - 5.19. 19BON05 MFR ERG Trip –Hausmann explained the fish in the DSM were sent to the tailrace instead of going to the JBS.
 - 5.20. 19BON06 MFR Spill bay 18 Temporary Closure – Swank asked if the spillway inspections will increase due to the flex spill. Hausmann said that the PMs are not being increased yet and the frequency of each PM is based on reliability of the particular part. Hausmann said that this was kind of a fluke.
6. The final 2019 FPP is available online at: <http://pweb.crohms.org/tmt/documents/fpp/2019/> All 2019 FPP change forms and draft chapters/appendices are posted at: <http://pweb.crohms.org/tmt/documents/fpp/2019/changes/>
 - 6.1. Pending Change Forms:
 - 6.1.1.19LGS004 – Channel Velocity (Peery/ St. John). Pending more information on rationale for changing the location.
 - 6.2. New Change Forms:
 - 6.2.1. 19BON003_SLEDS
 - 6.2.2.19IHR005_Units_5_6_Range
 7. Task Group Updates.