

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 14 September 2017 FPOM meeting.

The meeting was held in the Columbia Room, CRITFC office, Portland, OR. In attendance:

Last	First	Agency	Email
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On the phone: Baus, Hausmann, Holdren, Kiefer, Morrill, Scott, Sears, Swank, Van Dyke and Wharf.

1. Final decisions made at this meeting.

- 1.1. August meeting minutes were approved.
- 1.2. BON will change the gap size from 1.5" to 1.25" on the picket leads at WA SH to prevent sockeye from going behind the picket leads.
- 1.3. 17OVE003 – FPOM Coordination – Approved.
- 1.4. 17LWG008 – U1, U2 Priority – Approved.
- 1.5. 18AppD001 – Cooling Strainer Inspections – Approved.
- 1.6. 18BON001 – Table BON-5 Day Spill Hours Correction - Approved.

1.7. 18IHR001 – AWS Ops during High Tailwater – Approved.

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 Outage Schedule (NWW)*

2.3. *Lower Granite Dam JBS Upgrade and Operational Outages*

2.4. *September 2017 LWG Temperatures*

2.5. *Picture of the LWG RSW broken seals*

2.6. *Coordination Forms (MOC/MFR)(NWW/NWP)*

2.7. *FPP Change Forms (NWW/NWP)*

3. **Action Items**

3.1. **NWW**

3.1.1. **[Aug 17] LWG spill mitigation for Sept- Dec** - NWW would like to know if there is a temperature trigger for RSW versus deep spill. **ACTION:** This topic will be brought to FPAC next week. *Status: The topic did go to FPAC and TMT. [Handout Sept 2017 Lower Granite Temperature] There was a brief RSW spill followed by spill from bays 6&8. On the TMT call, a decision was made to switch to bays 2 &3. The forebay is still warm from warm water coming down from the Hells Canyon complex. The deep spill was scheduled till 15 September unless FPOM chose to extend it. Even though the air temperature is cooler, the water temperature is affected by the sources of the water. Setter suggested using 1 October as a fixed date instead of a temperature trigger to start using the RSW but due to confusion with the RSW repair topic, this topic will be moved to TMT.*

3.1.2. **[Aug 17] Next 5-year adult fish counting contract** - **ACTION:** Lorz will ask TAC about the importance of Coho unclipped/clipped counts. *Status: Pending. Lorz needs to follow up with his coworker. Email response from Lorz “As to the clipped non-clipped counting of Coho taking with Tac they are comfortable to only have counting at Bon, MCN and LWG. They are in the process of using more and more Pit data, at least in the upper reaches, specifically LWG, to evaluate the native, hatchery question. But they like the window count to aid in this as a back check and there is still some use epically at Bon for lower river estimates. They did say that in a couple more seasons they might/likely will be able to just use Bon but they need to insure the techniques they are using work.”*

3.2. **NWP**

3.2.1. **[Aug 17] 17BON53 MFR WA SHORE SOC morts** - **ACTION:** Lorz will talk to the lamprey task group about the size of the gap that would still be acceptable for the picket leads. *Status: BON will change the gap size from 1.5” to 1.25” on the picket leads at WA SH if it is still a problem move to 1”.*

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

3.3.1. **[Aug 17] 17TDA20 MOC Oct start revised** - **ACTION:** Rerecich will update the MOC to reflect the request for spill for BPA to review. *See 4.2.1.6.*

3.3.2. **[July 17] BON adult fish in PH1 tail log slots** - **ACTION:** Kovalchuk will contact Tackley about using a hydro acoustic transducer to monitor the slots. *Status: Completed.*

3.3.3. **[July 17] TDA Pendants** - **ACTION:** Cordie will check to see if the pendants are in useable condition. *Status: The pendants are very rusty and in an unusable condition. TDA will scrap the pendants.*

4. **Updates**

4.1. **NWW**

4.1.1. Upcoming maintenance/construction/research activities.

4.1.1.1. FPOM outages schedule

4.1.1.1.1. LWG – Unit 1 is delayed until 13 October due to contractor quality assurance. The contractor has to fix the thrust bearing guide shoes to 2%. Commissioning testing will start next week.

4.1.1.1.2. LGS – Unit 5 has cracked upper guide bearing the return to service date has been extended to July. This unit outage might affect the tailrace and will have to be remodeled next week at ERDC. The powerhouse drives how the project can spill. The repairs cannot be sped up and this is a minimum estimate of out of service time. Setter will check on the scheduled maintenance for next year. Pinney will relay the message to Junhke about modeling this new status.

4.1.1.1.3. LMN – There is an extensive oil leak in unit 2. The project is going to do blade packing on unit 5 so that it can return to service as a Kaplan unit and they are hoping to do the same with unit 2. Unit 5 is already un-watered and can't be switched with unit 2 for maintenance schedule.

4.1.1.2. LWG spreadsheet – Hockersmith will provide an update every month. The construction is on schedule. The contractor is on site starting work on the primary bypass and on the pilings. The contractor will do commissioning in January and the COE in February. During most of the commissioning, screens are not necessary. The screens are planned to be installed at their normal time. Unit 2 blade angle change will be in late December.

4.1.1.3. LWG Spill Operations, implication for RSW maintenance. (Hockersmith, Holdren) [Handout] Logs had been lodged in the RSW which resulted in broken seals. The project needs to conduct an inspection of gate which requires opening it 100%. The project will then have to order the appropriate materials. When conducting the repair, the project will need to install head gates and close the RSW. Since the RSW is used for mitigation spill until December, the proposal was to do the repairs in March. Hevlin would like the fix done in the fall due to delays that usually follow. Lorz suggested doing the inspection on Monday or when the forebay is 68°. The inspection should take three hours. The FPOM members in the room agreed with conducting the inspection next week. An MOC will coordinate the repairs because the mitigation spill will go from RSW to deep spill. The RSW will not be operable during the repairs. There was confusion on exactly what was being agreed to by the FPOM members. **ACTION: Holdren will write an MOC/MFR on the RSW inspection.** LWG will continue to spill through bays 2 & 3 until the forebay cools.

4.1.1.4. LMN Unit 3 Fixed Blade Angle (Hockersmith, Setter) – The project fixed the blades at 28.5° which is below the upper threshold of 1%. The unit came back to service on 12 September. Unit 4 returned to service on 13 September. Units 3, 4 and 6 are now back in service. Unit 3 commissioning testing will be the second week of October. The project will conduct index testing to verify that it is within the 1% band. The blade angle can be adjusted after the testing if necessary. Hockersmith will update FPOM with the testing results.

4.1.2. Wrap-up and discussion on Court ordered early start-up of by-pass facilities [Setter, Kovalchuk, Mackey] Setter said that NWW does not yet have assurance that funding will be in place to hire the Bio techs for March. LMN is all set and LGS has not verified that they are ready. Setter will immediately notify FPOM if there are any issues. Zyndol asked about sampling requirement in March. **ACTION: Zyndol will write an MFR detailing the increase in cost and his proposal for sampling by the end of the month.**

4.2. NWP

4.2.1. Upcoming maintenance/construction/research activities.

- 4.2.1.1. BON T11 outage (17BON20) –It is still scheduled for the last two weeks in September. **ACTION: Hausmann will update the MOC.**
- 4.2.1.2. BON MU 15 – The project will be tack welding the nuts in place. It will be more problematic to remove now. This fix may need to be done on all eight units with the flow control devices. It hasn't been welded yet so it is now last on first off.
- 4.2.1.3. BON MU17 OOS – The STS was removed by divers and is now back in service. **ACTION: Hausmann will write an MFR.**
- 4.2.1.4. BON F2 OOS – The unit was out of service from 17-31 August. It was repaired in-house.
- 4.2.1.5. Spillway Hydro-surveys (17BON49 & 17TDA21) – For BON, the fish unit survey is scheduled for 25 September and the spillway on the 26th. The TDA survey will be 27 September.
- 4.2.1.6. TDA Rail Removal (17TDA17) – All rail has been pulled up and asphalt will begin on 22 September.
- 4.2.1.7. TDA AWS (17TDA20) – At FFDRWG, the COE received support from NOAA and CRITFC for bedrock removal using the rock ripping technique. Two sites have been set up for monitoring vibration. The best location is on the inside wall of the fish ladder above the water line. The trigger will be the higher of either the 80 dB identified from the LWG work or the background vibration levels which will be monitored the week before. The spill pattern for attraction spill is in the FPP.
- 4.2.2. BON ROV inspection of BI and CI – Portland District came out to do the ROV. No issues were found except for the sand. One the B2 entrances is affected by the sand and can't open all the way.
- 4.2.3. Eagle Creek Fire impacts – Due to the closure of the project, not all inspections were completed but no other FPP violations occurred. Pieces of ash are littered over the project.
- 4.3. **Research/FFDRWG updates.** www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/NWP%20Research/Research.html
- 4.3.1. NWP FFDRWG – Next meeting is 5 October.
- 4.3.2. NWW FFDRWG – Next meeting is 29 November.

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	23	26	22	30kcfs on 9/14/17
MCN	117	103	111	125kcfs on 9/15/17
BON	109	109	117	130kcfs on 9/15/17

Table 1. RCC flow forecast

- 4.5. **BPA update** – No update.
- 4.6. **Fish Count Program** - Counters were evacuated on 4 September. No counts were taken on 5 September. A DVR was started on 6 September then back to live counts a couple of days later.
- 4.7. **Next 5-year adult fish counting contract status** – A “Sources sought” solicitation will go out soon. The contractor will have to provide their own hardware, software and have their own internet connection similar to SMP.
- 4.8. **Pinniped update** – Stellar sea lions are currently at BON, averaging 17 animals for the past three weeks. FFU started a pilot project to estimate predation in the fall.
- 4.9. **Lamprey update** – The 2017 run is the third largest since counts resumed based on the day time index counts. Once the LPS numbers are added in, the total should be similar to 2003/04. New WA LPS is getting lots of use. The counters are all new and the numbers are preliminary but the

WASH LPS have passed tens of thousands lamprey. After operating during the bulk of the lamprey run the Lamprey Flume Structure (LFS) at B2 NDE was taken OOS on 24 August. It collected 51 lamprey over 64 days of operation, less than the previous years, indicating something is hindering its collection. The entrances might be jammed with sediment. The ROV has some limitations for checking the entrance.

4.10. Avian update

4.10.1. BON (Hausmann) – There are a fair amount of gulls currently. Wires will go up by winter.

4.10.2. TDA (Cordie) – Avian lines were installed over the spill way on 14 September. The west side of the powerhouse has to be ground as well so the project will now ground the east side as well.

4.10.3. JDA (Zyndol) – A couple more avian lines went down but they will be replaced during the winter.

4.10.4. MCN – The discussion on pelican hazing is still ongoing but the COE needs a conclusion by spring.

5. **FPOM Charter Review (Setter, Mackey, Kovalchuk)** – Office of Counsel is reviewing the latest version to meet legal concerns. Fredricks has more comments to add. This topic will be pending till November. Van Dyke is not available in November. Another date for a sub group may be necessary.

6. **Coordination/Notification forms (need concurrence/discussion)**

6.1. 16LWG10 MOC JBS Phase 1 Spill Operations update 1 September 2017 – See 4.1.1.2.

6.2. 17LWG20 MOC Potable Water Supply Connect – The work was completed on 25 August. The project changed to north side of ladder so they didn't need to demo concrete and they were able to use a vacuum truck.

6.3. 17LWG21 MOC Adult Entrance Repair – The first one was repaired and the NPE-2 repair is scheduled for 28 August.

6.4. 17LWG22- This MOC has just been sent out. The project expects to get funding on 15 September. The ladder will remain in service just the north shore entrance and collection channel will be OOS. Hevlin asked if this could be done in December. The contract hasn't been awarded yet so it may be impossible to move up the start date. Closing the north shore entrance on the north side of the spillway should not have big impact. **ACTION: Setter will check to see if the work can start early.**

6.5. 17LGS 16 MOC Unit 1 Governor Oil Pump Switch – The work was completed on 15-17 August.

6.6. 17LGS 17 MOC Trash Boom and Barrier Installation – The project wants to start 1 November for the boat barrier and trash boom installation. NOAA concurred with the action and stressed caution during the demolition for debris in the forebay.

6.7. 17LMN09 MFR Unit 6 STS stationary

6.8. 17MCN16 MFR Emergency Debris Spill

6.9. 17JFT 03 MFR Upstream Release and Secondary Bypass Operation – NWW is still in bypassing due to the Eagle Creek fires closing 1-84. LMN is bypassing ~10-12 fish a day and LGS ~60 fish a day. COE would like an analysis from NOAA on the cost benefit ratio of trucking fall chinook for an FPP change form. **This topic should be discussed at FPAC.**

6.10. 17BON62-3 MFR PL morts – Swank asked about the round abrasions on the lamprey but no member of the CRITFC staff was available to answer. Swank will follow up with McIlraith.

7. **Fish Passage Plan:** Change Forms are available online at: www.nwd-wc.usace.army.mil/tmt/documents/fpp/2017/changes/ (2017) and www.nwd-wc.usace.army.mil/tmt/documents/fpp/2018/changes/ (2018).

6.1 Pending FPP Change Forms

- 7.1.1. 17OVE003 – FPOM Coordination (Mackey). *[Discussed at July FPOM. Tentatively ok with the change but requested more time to review.]* Approved.
- 7.1.2. 17LWG008 – U1, U2 Priority (Setter). *[Discussed at May FPOM and revised per comments received. Pending review of revisions and Unit 2 index test results.]* Index testing was completed but will change the blade in December but will need to redo testing. This is until unit1 returns to Kaplan. Approved.
- 7.1.3. 18AppD001 – Cooling Strainer Inspections (Peery). *[Discussed at July FPOM and revised per comments received. Pending final review of revisions.]* Approved.
- 7.1.4. 18DWR001 – New Project Section (Setter). *[Pending further coordination and development of draft.]* Still in development.

7.2. New FPP Change Forms

- 7.2.1. 18BON001 – Table BON-5 Day Spill Hours Correction (Kovalchuk). Approved.
- 7.2.2. 18IHR001 – AWS Ops during High Tailwater (Peery). Approved.
- 7.2.3. 18LMN001 – Table LMN-11 Modification (Setter). Two instances when running 1 stop on bay 5 when you could be running 2 stops on 7. Pending - need to look at this at ERDC.

8. Task Group Updates.

- 8.1. BON minimum spill to maintain good B2CC egress. (Fredricks and Lorz). Team: Bettin, Ebner, Hausmann, Kovalchuk, Rerecich, Wright. The team will look at this issue at ERDC in September. Pending until Ebner can coordinate the test.