

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 11 August 2016 FPOM meeting.

The meeting was held at the CRITFC Office in Portland, OR. In attendance:

Last	First	Agency	Email
Bailey	John	NWW	John.C.Bailey@usace.army.mil
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Zyndol	Miro	NWP	Miro.A.Zyndol@usace.army.mil

On the phone: Chamberlain, Bailey, Doumbia, Hausmann, Hutson, Johnson, Juhnke, Kiefer, Kloewer, Peterson, Meyer, Pinney, Sears, Scott, Tiffan, Trachtenberg and Wright

Documents may be found at: <http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/>

1. Decisions made at this meeting

1.1. July meeting minutes approved

1.2. September FPOM meeting will be held at the Westrick Conference room at The Dalles Dam including a Potluck lunch

1.3. Coordination Requests

1.3.1. 16BON78 MOC spill change – **Approved**

1.3.2. 16BON92 MOC EAL testing – **Pending, two week comment period is open**

1.3.3. 16TDA08 MOC EAL testing – **Pending, two week comment period is open**

1.3.4. 16TDA09 MOC powerhouse outage- **Pending, two week comment period is open**

1.3.5. 16 MCN 14 WA shore extended ladder outages- **Approved**

1.3.6. LGS 14 Fish count window cleaning brush rehab- **Denied**. The risk of working over the fish ladder is too great if it is not an emergency.

1.3.7. 16 LWG10 MOC – **Pending, comment period is now open**.

1.4. FPP Change Forms

1.4.1. 17BON003- Nighttime lamprey operations. **Pending – Review and send comments to Lisa Wright.**

2. The following documents were provided or discussed. Documents may be found at:

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

2.1. *Agenda, Fish Passage O&M Coordination Team*

2.2. *Coordination/Notification forms (NWW/NWP)*

2.3. *FPP change forms (NWW/NWP)*

2.4. *FPOM outages 2016 NWW*

2.5. *LWG JFF work windows and outages*

2.6. *Summary of lamprey mortalities at Bonneville Dam (2015-2016) provided by McIlraith*

2.7. *Lamprey mortalities collected at Bonneville Dam provided by Zorich*

2.8. *BPA outages*

2.9. *PowerPoint presentation of Fish Loss at Unit 1 MCN*

2.10. *Documents for Hazmat Response Task Group*

3. Action Items

3.1. NWW Action Items

3.1.1. [June 16] LWG JBS Primary Outfall Construction - **ACTION:** Trachtenberg will follow up with the chief of ops regarding information on lock-out tag-out (LOTO) procedures. **STATUS:** The Corps is intending to follow what was outlined in the MOC. **STATUS UPADTE:** LOTO questions have been answered and this action item can now be removed. Trachtenberg reported that the JBS construction completion has been delayed for one year to March 2018 as discussed at the special NWW FFDRWG 19 July 2017 and that the Phase 1B contract is out for solicitation.

3.1.2. [Aug 16] PUD recommissioning plan for McNary turbine. **ACTION:** Martinson will update the MOC with dates and times.

3.2. NWP Action Items

3.2.1. [May 16] TDA AWS back-up. **ACTION:** Rerecich to provide an updated MOC in August. **Status:** Rerecich did provide 16TDA10 MOC at the August FPOM. There is a two week comment period.

3.2.2. [Jul 16] Fishway temperatures from NWP. **ACTION:** FPC and Greg Moody will send out guidelines to Portland District on the format for sending data. **Status:** Documents were

provided. On the last Division Fish call, it was stressed that all projects need to send in their data. TDA takes ladder temperatures at the count station but Conder would like to see exit and entrance pools added in order to see any differentials in the ladder. **ACTION: Lorz will create a list of the desired locations for the hobo probes for the temperature program to be implemented this winter.**

- 3.2.3. [Aug 16] BON lamprey mortalities. **ACTION:** Lamprey Task Group needs to meet and make a recommendation to BON since the IWW period is coming up quickly.
 - 3.2.4. [Aug 16] BON Sediment Deposition Monitoring. **ACTION:** Hausmann will write an MOC with more detailed information.
 - 3.2.5. [Aug 16] JDA avian array. **ACTION:** The PDT needs to write an MOC in order for the region to review the plan.
 - 3.2.6. [AUG 16] 16TDA09 **ACTION:** Bettin and Cordie will update the MOC with benefits to fish.
- 3.3. Completed Action Items or to be discussed later in the agenda.
- 3.3.1. [June 16] MCN Avian Abatement. **ACTION:** The FPOM Avian Task Group met after the July FPOM meeting. **Status:** Meeting minutes and corresponding documents have been posted.
 - 3.3.2. [June 16] BON CI Subsidence. **ACTION:** Royer to draft a MOC and include the survey markers picture. **Status: completed. 16BON31 CI Survey markers.**
 - 3.3.3. [Jul 16] BON B-Branch erosion. **ACTION:** A separate MOC for the August and September surveys is required. **Status:** BON decided not to do an August survey but is still planning on September after spill.
 - 3.3.4. [August 16] Hazmat Response. **ACTION:** Hazmat Response Task Group will meet after the August FPOM. **Status:** Hazmat Response TG did meet after the August FPOM. Notes will be posted on the website.

4. Updates

4.1. NWW Updates.

4.1.1. Upcoming maintenance/construction/research activities.

4.1.1.1. BPA MCN outage.

4.1.1.2. LGS Roof repair – Schedule has changed from starting in August 2017 to 2018. The FPOM outages have not been updated yet. The problem is that unit 5 can't run until an overhaul is done so it pushed out the project by one year. The project is hoping to have a permanent cooling system in place and are currently looking at alternatives based on LWG. Setter said that they did not purchase pumps will need to rent for next year.

4.1.1.3. LWG Revised construction schedule for JBS Phase 1 upgrades – Trachtenbarg reported that the completion date of the JBS upgrade project has been delayed by one year to March 2018 as discussed at the 19 July 2018 NWW FFDRWG meeting. Phase 1B construction of the new outfall will take place over two winters. The contract for 1A is being modified to change the extended JBS outage from 2016/2017 to 2017/18. The coordinated MOCs for 1A and 1B will be pushed out for next winter instead as described in MOC 16 LWG10. The JBS will be shut down on 15 Nov 2016 for this winter maintenance period as described in 16 LWG10.

4.1.1.4. LWG revised end date for Unit 1 return to Kaplan – April 1 [FPOM outage handout] Setter said that it is scheduled to return to service April 1 but asked if there were any issues if it was delayed to June 1. Lorz said that if there are big flows next year then the project would be forced to spill more and create more gas in the river. Spill for the rest of the river would have to decrease to prevent potential GBT issues. Bettin said that he would like to see MU1 return in April due to the potential loss of revenue.

4.1.2. LMN revised spill pattern- Spill Bay 2 is back in operation.

- 4.1.3.** LGS cooling pump emergency operation. The bascule bridge over the Nav Lock has been out of service for three weeks. The contractor refueling the diesel generator had to drive an extra 1 ½ hours each way when they were bringing fuel on site. To fill up the generator was less of an issue because there are other access routes. The contractor that was supposed to fine tune release site has not been able to return with the crane because of the bridge outage. The project will continue 24 hour operations. However, due to the cooler temperatures at night, the project may not need to continue throughout September.
- 4.1.4.** LWG cooling pump operation (Pinney). A 12 kHz signal is interfering with the PIT antennas especially the exit ones. The problems started around July 28. There is a wide variety of construction activities occurring around the area but Pinney is unsure what the source of the signal is. A 480 volt line is helping to distribute the signal but currently doesn't appear to be the cause. In order to investigate, they will need to shut off the power to south end of the powerhouse for 10-30mins around noon on Monday, August 15 and potentially few limited duration periods after this as part of investigation efforts. The temporary power shutdown will turn off all monitoring equipment and the adult ladder cooling pumps. There should not be any impact to the dam or fish passage, just to the monitoring equipment. Pinney reported that they are currently at the end of the Sockeye season with 0-2 sockeye per day. There has been some overnighting for fish that enter the ladder in the late afternoon and leave in the morning. Starting August 18, the ladder will end 5 day per week trapping operations and go to the typical 7 day per week trapping efforts.
- 4.1.5.** MCN spill pattern change ERDC modelling trip is scheduled for week of October 3- Setter wants anyone to forward info on split gate spill. Bettin mentioned that it passed fish well but the pressure on the guides was too high.

4.2. NWP Updates:

- 4.2.1.** Upcoming maintenance/construction/research activities. Includes already coordinated MOCs.
- 4.2.1.1.** FGE Mods. Continuing
 - 4.2.1.2.** BON T11 / T12 (coordinated most recently in 16BON14) continue
 - 4.2.1.3.** BON LFS repairs. (coordinated in 16BON11) Continuing
 - 4.2.1.4.** BON CI Subsidence (coordinated in 16BON31) Hausman updated that the survey markers are installed and a survey is currently taking place. The PIT TAG room will be moved to the north tower but needs some funding. Morrill would to see this issue under the Update section.
 - 4.2.1.5.** TDA Back up AWS. Continuing
 - 4.2.1.6.** BON JMF high temperature threshold- currently at modified sampling
- 4.2.2.** BON B-branch survey. No survey in August. The next survey will be the first week in September. No new erosion has been observed and Fredricks is continuing to take pictures.
- 4.2.3.** BON lamprey mortalities. Hausmann explained that BON has been sending in a lot of MFRs about lamprey morts mostly from two locations - valve 15 trash rack and behind the crowder at Bradford Island. BON Fisheries started noticing morts in this location last year and made modifications during the winter. Despite the changes, lamprey are still getting behind the crowder and perhaps now can't get back out. A report from the fish health center noted that the lamprey died from furunculosis bacteria infection. BON Fisheries have never sent in lamprey morts from this area in the past and it was noted that the fish health center doesn't have background information on how many live fish carry this bacteria. VanDyke and Conder cautioned about reading too much into this data. The report is posted on the FPOM website. Zorich handed out a MOR on lamprey mortalities including a mort index comparing the last few of years. Cordie mentioned similar crowder issues at TDA. The issue has been passed on to the Lamprey Minor Mods project and TDA will install a bristle brush on bottom of the crowder this winter. McIlraith handed out a summary of lamprey mortalities

based on the MFRs by location and wants to make sure that people are thinking about this issue. Hausmann reiterated that the project is trying to make modifications but are not sure if their efforts are working or creating more problems. Fredricks pointed out that there are two issues sockeye and lamprey with two separate solutions. Mackey asked if the discussion about LPS system on Cascade Island AWS should be reopened. Hausmann said maybe but the numbers of lamprey in that location are much less than before. The project has a manual trap there but has only captured two lamprey this year and suggest they may have entered via the tainer gate that feeds the CI AWS. BON Fisheries will continue to monitor and report lamprey mortalities including valve 15 trash rack at the AFF. Lorz pointed out that the valve 15 trash rack is a mortality index site. **ACTION: Lamprey Task Group needs to meet and make a recommendation to BON since the IWW period is coming up quickly.**

4.2.4. BON Sediment Deposition Monitoring – Hausmann reported that small sediment monitoring is being planned for Bradford Island on both powerhouse 1 and spillway side. In order to place the sample jars with the ROV on the powerhouse side, the sluiceway must be shut off. **ACTION: Hausmann will write an MOC with more detailed information.** Lorz asked if the project has done a dredge survey near fish units and B2 trash rack. Hausman reported that the surveys are conducted every year and they will be dredging this year.

4.2.5. JDA-S AWS turbine update: Zyndol suggested renaming the update to JDA-S AWS turbine 1 rehab. The project is waiting for funding and contract support. Mackey said that the project is allocating some seed money to start a PDT this year and the district would provide greater support for the next fiscal year. Pump 3 was out of service due to a lubrication problem. It will be returned to service on Aug 11. The major components of pump 3 were replaced but not minor like the lubrication system. The next contract needs to address the minor components as well. Mackey will follow up on this with the district. Zyndol will update on the crane situation.

4.3. Research/FFDRWG updates. www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/NWP%20Research/Research.html : cancelled last week not sure when it will be rescheduled.

4.4. RCC update.

Project	Previous day (8/10) average (kcfs)	5 day forecast (8/15) average (kcfs)	10 day (8/20) forecast average (kcfs)	Projected Low/Peak (kcfs) and date.
LWG	25	25	26	No peak. Stable inflows of 24-26 kcfs
MCN	142	130	131	No peak. Stable inflows of 130-131 kcfs
BON	131	135	136	No peak. Stable inflows of 135-136 kcfs

Table 1. RCC flow forecast

4.5. Pinniped updates. (Zorich) No updates

4.6. Lamprey updates. (Zorich) Discussed during the BON lamprey mortality conversation

4.7. Avian.

4.7.1. TDA avian (Cordie) Cordie reported two lines down over the spillway. The project is purchasing line and will have the structural crew install. Pelicans vanished after the smolts passed but now are back. Morrill will have information about the status of pelicans and possibility of hazing next month. Griffith is still working on the lethal take idea.

4.7.2. JDA avian array (Zyndol) Zyndol reported that this season the project could not reinstall lines and that incidental observations show that gulls are not looking for holes. Fredricks questioned this data. This year, pelicans have been a major problem and pelicans are protected and can't be hazed. The island downstream is a resting area for them. No PITTAG search has been conducted on this island. Zyndol reported that there is an active PDT for the lines this year and they are planning on replacing the Nav Lock section by May. Mackey stressed March. No boat work is involved so they can work during spill. The PDT had planned on presenting at FFDRWG until it was cancelled. Their plan was to ask regional managers if they can install every other line this year, making sure not to leave any large gaps. Next year, those lines will be reinstalled with new materials. **ACTION: The PDT needs to write an MOC in order for the region to review the plan.** Zyndol said that 21 lines are down, three more lines broke recently.

4.7.3. MCN Avian (Setter) The task group talked about MCN avian situation after the July FPOM. The PowerPoint presentation has been updated on the website. MCN and LGS are changing their effort for 2017 and are expected to be in compliance next year. Johnson reported the numbers of gulls dropped off but are now returning for juvenile shad.

4.8. BPA updates. Bettin handed out the outage schedule but will send a condensed version. The TDA complete powerhouse outage for up to nine hours will be on October 13. The previous December date will not work. The PUD turbine will still be running for north ladder attraction water. Spill will be below 100K. Bettin explained that currently there is one IMAX electronic control that all lines from the powerhouse go through. BPA feels that this is too much risk on one piece of equipment so this outage will add several IMAX controllers. **ACTION: Fredricks wants BPA and Cordie to add the benefits for fish to the MOC.** Fredricks asked if they can start earlier at 0500 instead 0700 so that fish won't be attracted to the fish ladder or start after noon. Bettin said that he will make sure that both start times are acceptable but that night work is not. Lorz wanted to look at diel patterns and make recommendation by Friday. At the end of the meeting, Fredricks added that he preferred the option that was later in the day to morning.

5. Siberian Prawns. (Tiffan) Morrill introduced Tiffan and mentioned several accompanying documents that are posted on FPOM website. Tiffan gave a summary of the presentation he gave to FPAC. The research started by looking at the food resources for Snake River fall chinook over a two year period. Prawns are native to Asian countries, predominantly fresh water and the habitat near LWG and LGS is similar to their native range. They are found in deep water and somewhat restricted by water velocities. They are omnivorous and reproduce in summer. Based on dam passage numbers, the prawns have been following a logistic growth model which means they are expanding exponentially. The concern is that as the population grows, prawns might move from deep water to shallow water habitat where smolts inhabit. Most prawns live for about one year but some survive to two years. Tiffan recommended removing the prawns at the fish monitoring sites but isn't sure what kind of impact this would make on the population of prawns. Setter said in the last week, biological services personnel at MCN and the lower Snake River dams received an amendment to their permit and a request to euthanize the Siberian Prawns. Even though the issue has not been fully resolved at FPOM, NWW will not hinder the permit decision. Morrill said that FPAC supports this decision to euthanize Siberian Prawns even though there was not full agreement by all agencies. Fredricks inquired about COE policy involving a contractor killing a certain species on their premises. Setter said that NWW policy is to follow the scientific collection permit. Fredricks said that he is not okay with picking one species of all the invasive species and having the Smolt Monitoring Program kill them instead of an eradication program or other means. Lower river sites were told to start euthanizing on August 12. The protocol will be to handle all other species first and the prawns last. NWP has different approach than Walla Walla. Mackey requested that the Smolt Monitoring Sites in Portland District not euthanize prawns until WDFW has made a formal request through the COE. NWP wants to be aware of what exactly contractors are doing on the project and this needs to be

written on the access letter. Morrill will discuss with his agency more specific language for the permit next year.

6. **EAL testing-forms – discussed under MOCs**
7. **PUD recommissioning plan for McNary turbine-** Martinson handed out copies of the MOC which is posted on the website. The outage affects just the entrance attraction flow not the ladder flow. Martinson noted that the date may get pushed back. Fredricks said that the chinook numbers drop fast as the weeks go by and would rather see the date pushed back. The MOC needs to include the time of day. Lorz asked about the possibility of starting at noon or at night. Fredricks suggested either the first week at 4pm or second week at noon. **ACTION: Martinson will update the MOC with dates and times.**
8. **Coordination/Notification forms (need concurrence/discussion)**
 - 8.1. **16BON69-77, 79-92 MFRs**
 - 8.2. **16BON78 MOC spill change**
 - 8.3. **16TDA06-7 MFR**
 - 8.4. **16TDA08 MOC EAL testing – two week comment period is open**
 - 8.5. **16TDA09 MOC powerhouse outage – two week comment period is open**
 - 8.6. **16JDA03 MFR**
 - 8.7. **16 MCN 13 Adult fish loss-tailwater log slots –** PowerPoint presented and posted to the website. MU 1 was taken out of service for a nine year overhaul and correct procedures were followed. No salmonids were found in the draft tube or scroll case but later 48 chinook mortis were found in the tail log slot. Several sturgeon are still alive and air stones have been provided for them. The unit will be out till September 23. Johnson suggested that the boil from Unit 1 which is located right near the ladder entrance may act as a false attraction to Unit 1. Fish can make their way up to a recess area in the tail log slot. Although they can normally get out, once the tail logs went in, the fish were trapped. The project will change protocol for any Main Unit 1 outage to put tail logs in when adult passage is at a minimum.
 - 8.8. **16 MCN 14 WA shore extended ladder outages- Approved**
 - 8.9. **16 LGS 14 Fish count window cleaning brush rehab- Denied because it is too great of a risk to work over the fish ladder if it is not an emergency.**
 - 8.10. **16 LWG10 MOC – This new MOC contains construction and work window dates from several earlier MOCs combined in to this new one as a result of extending the completion of LGR JBS upgrade to March 2018. Comment period is open**
9. **Fish Passage Plan:** The Current 2016 FPP and Change Forms are online at: <http://www.nwd-wc.usace.army.mil/tmt/documents/fpp/>.
 - 9.1. Pending FPP Change Forms.
 - 9.1.1. **17LWG001 –** Forebay Exit Cooling Pumps (Setter). Revised and emailed May 16. Will finalize at the beginning of 2017. **Move to section 9.3**
 - 9.1.2. **17AppB002 –** Transition to Primary Bypass (Conder). Approved for LMN only; LGS pending coordination with project for discussion at Oct FPOM. **Move section to 9.3**
 - 9.2. New FPP Change Forms.
 - 9.2.1. **17BON003-** Nighttime lamprey operations- BON would like to lower entrance velocities for lamprey at night at the remaining entrances. BON already does this for the Powerhouse 2 entrances. Mechanics have reported that the additional wear on the valves is not a concern. The time frame is June – August, May has been removed from the previous change form.
Pending – Review and send comments to Lisa Wright.
 - 9.3. Forthcoming FPP change forms.
 - 9.3.1. **17LGS002 –** New SW Close Criteria (Kiefer). Pending further FPAC discussion.

10. Task Group Updates.

- 10.1.** BON minimum spill to maintain good B2CC egress. (Fredricks and Lorz). Team: Bettin, Ebner, Hausmann, Mackey, Rerecich, Wright.
- 10.2.** Hazmat response. (Cordie). Team: Baus, Bettin, Conder, Fredricks, Hausmann, Lorz, Mackey, Wright, Zyndol. **TG will meet after the August FPOM meeting.**
- 10.3.** Avian Hazing. (Setter). The TG met after the July FPOM meeting to discuss MCN hazing. Meeting minutes and corresponding documents have been posted. Move to Inactive Task Group for now. There will be an end of season TG review meeting after November or December.

The next meeting will be at the Westrick Conference Room, The Dalles Dam on September 8, 2016 at 9:00am.