

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 11 June 2020 FPOM meeting.

The meeting was held via teleconference. In attendance:

Last	First	Agency	Email
Baus	Doug	NWD-RCC	Douglas.m.Baus@usace.army.mil
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Wright	Lisa	NWD-RCC	Lisa.S.Wright@usace.army.mil

1. Final decisions or recommendations made at this meeting.

- 1.1. May meeting minutes were approved.
- 1.2. 20JDA04 MOC STS crane replacement – **FPOM concurred.**
- 1.3. 20JDA06 MOC Line 1 outage – Bushing replacement – **Pending.** The BPA outage coordination and the spill operation still need to be completed.
- 1.4. 20LMN006 – Units, 2, 4, 5 Priority Order Unit priority change – **Approved.**
- 1.5. 20LWG004 – Add Higher Spill Patterns - **Approved.**
- 1.6. 20AppB002 – Additional Transport Truck transport truck – **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 outages schedule (NWW)
- 2.3. Composite Cooling Water Strainers Lamprey Counts (NWW)
- 2.4. FPOM transmission outages (BPA)
- 2.5. Coordination Forms (MOC/MFR)(NWW/NWP)
- 2.6. FPP Change Forms (NWW/NWP)

3. **Action Items**

3.1. **NWW**

- 3.1.1. **[June 20]MCN TSW removal** - ACTION: NWW will come up with a proposal based on sub yearling data and project capability for FPOM to review.

3.2. **NWP**

- 3.2.1. **[March 20] BON AFF** - ACTION: Hausmann will look into a fix for fish holding in the non-sample exit pipe. *Status: No update. They are still pursuing the idea but there aren't enough people at work to do something about it. Conder thinks that the Whooshh tube material would work great. Hausmann asked what the material is but it is not known. Conder will ask for a sample. Hausmann asked for clarification if NOAA wants the main pipe or just the exit pipe coated with a slick material. The exit pipe is the main concern.*
- 3.2.2. **[May 20] BON PH1 ITS endgate** - ACTION: Derugin will get back to FPOM with more cost details. *Status: Discussed under 4.2.2.*
- 3.2.3. **[May 20] 20JDA05 MOC Spill bay 10 repair** - Van Dyke asked which pattern would be used during that week. ACTION: Fielding will send more information about the proposed spill pattern during the outage. *Status: No information was sent out but the spill was spread out over the other gates. The gate should be fixed by 18 June.*
- 3.2.4. **[June 20] BON ROV Survey** – ACTION: Hausmann will write an MOC for FPOM review.
- 3.2.5. **[June 20] BON Hydro Survey** - ACTION: Kovalchuk will consult with Ebner about potential spill bay modifications.
- 3.2.6. **[June 20] 20JDA06 MOC Line 1 Outage Bushing replacement** - ACTION: Fielding will track down data when units 1-4 were off and there was no additional attraction on the north and update the MOC.

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

- 3.3.1. **[May 20]20 LMN 02 MOC Unit Priority Change** - Van Dyke noted that there was modeling that indicated some difference would occur but he didn't remember which order would be best. ACTION: Peery will look into the modeling results. *STATUS: Response from Ryan Laughery provided in May 15 email.*
- 3.3.2. **[May 20]20IHR04 MOC JBS Early Shut down for Maintenance** - Swank didn't object to the work but commented that the analysis for Bull Trout was lacking and needs to be improved. ACTION: Hockersmith will compile bull trout data and send out. He will also include steelhead data. *STATUS: Hockersmith added analysis of impacts to Bull Trout and adult steelhead fallbacks to the MOC and redistributed to FPOM May 15, 2020. No comments objecting to the MOC were received during the 14 day review period, thus, the MOC was approved COB May 22, 2020.*
- 3.3.3. **[May20] BON serpentine screens** - ACTION: Derugin will provide a MOC as soon as possible. *Status: Completed.*
- 3.3.4. **[May 20] JDA T1C bushing replacement** - ACTION: A MOC will be coming. BPA may want to piggyback on that work. Bettin will talk to JDA Fisheries to coordinate.

4. Updates

4.1. NWW

4.1.1. Upcoming maintenance/construction/research activities.

- 4.1.1.1. FPOM outages schedule (Setter) – MCN has found funds to restart the work on fish pump 1. The work will start right after 04 July and should be completed by the end of the FY. MCN leaf gates are delayed. The wheel assembly has fallen behind due to the pandemic. The first gate will be delivered in NOV and the second in DEC. Bellerud said that those gates are necessary for the overshoot study this fall. This topic will be discussed at the next FFDRWG. The contractor has a secondary supplier and the delivery of the wheel assembly is delayed causing a delay to the overall project. Tim Wick is the Project Manager. Setter said that since it is not the contractor but a secondary contractor, they can't try to rush the work. Bellerud said that the construction schedule needs to be reviewed because they will need to spill. Setter said that they will use the TSW like last year. The problem is that the TSW can't be turned on and off easily. The gates were meant to replace using the cranes. The same protocol can be used as last year. Bellerud wants to convey that this is a high priority. October and March are the core months for the study. Setter will check on communication between the project and planning. Conder said that the TSW is needed by 15 September. Setter will continue to give updates on the MCN gates.

Although LMN Unit 2 cavitation hasn't been delayed, Setter believes it is likely to slip. The contractor is not on site; same for IHR unit 3 runner replacement. LGS powerhouse roof repair for summer 2021 is still scheduled.

- 4.1.1.2. Doble Testing July 20-26 IHR – Setter added these topics to the agenda for awareness. The work will be done in July and August.
- 4.1.1.3. Turbine oil replacement U4-6 IHR July 20-Aug 15
- 4.1.1.4. Doble testing at LGS July 27-Aug 6
- 4.1.1.5. MCN TSW removal (Lorz) – The FPP has the removal date on 8 June. After reviewing the flow and the new spill operation, Lorz thinks there could be other factors like TDG, debris and flow that should be used instead of a date. Lorz and Conder might write an FPP change form. This year, it would have been very challenging to change the date due to limited staff. Setter reminded everyone that there were MOCs to shift dates in 2018 and 2019 but no FPP change form. If the language is vague, it might be difficult to plan the crews appropriately. Setter will talk to maintenance to see if there are any problems with switching from a date. Conder suggested having Peery or Hockersmith look at the data for the sub yearlings and review the variables that could work with the project. **ACTION: NWW will come up with a proposal based on sub yearling data and project capability for FPOM to review.** Lorz said that the TSW used to represent a much bigger percentage of the flow but under high flow conditions, it doesn't. The impacts to sub yearlings are less with the flex spill agreement in place. Wright said that the TSW was closed on 8 June but the bays were not open. Johnson said that the TSWs were removed but there were problems with the limits on the hoist. Johnson thought that the work should be complete and the bays returned to service by the end of the day.

4.2. NWP

4.2.1. Upcoming maintenance/construction/research activities.

- 4.2.1.1. 20BON15 MOC BI Serpentine Overflow Slot Screen Removal – All but two were removed. The project is still contemplating doing something similar but they aren't sure if they should try to keep lamprey out or let them go in and out.

- 4.2.1.2. 15TDA08 MOC Transformer Installation – no update. Contractors are starting to come back on site. The T1 outage is still scheduled for October 26.
- 4.2.1.3. 19TDA04 MOC Crane Rail Replacement – no update
- 4.2.1.4. 18JDA02 MOC Trash rack replacement –Royer explained that originally the plan was to replace all the trash racks. The scope has changed due to expense. They will inspect all the trash racks and only replace the ones that really need it. The contract should be awarded this winter and the work will start next winter. The other trash racks will be rehabbed. Lorz asked if they are going to modify the trash racks to make them more hydraulically efficient. All the trash racks will have shaved corners not just the new ones. Bettin asked for a schedule as soon as possible to coordinate with their upcoming BPA outages.
- 4.2.1.5. 20JDA05 MOC Spill bay 10 repair – The work is scheduled for Monday through Thursday. Maintenance is going to take the gear box from spill bay 1 and move it to 10. If it doesn't work then they will continue to adjust the gate manually.
- 4.2.2.BON ITS gate – The gate was presented at the Capital Work Group and received funding. The contract should be awarded by December and then the gate on site by March. Conder verified that if the gate won't be on site until March then it would be another year before the ITS gate is in operation. Hausmann explained that the installation process will be challenging. The ITS has to be dried up because they need to work on the floor. Conder would prefer the installation in January/February. The biggest delay was the Capital Work Group funding. Conder has been working with NWD to see if they can get this a high priority.
- 4.2.3.BON ROV survey – The mid-season ROV is typically in the beginning of August but maintenance is asking if they can do the ROV in July on the WA SH ladder in order to quantify the silt/sand material for a contract. It is a half a day. Lorz asked if it could start late morning and Hausmann thought it was possible. Lorz isn't happy about this request but isn't completely against it either. He wants to review the MOC. The Bradford Island ladder would still be done in August. **ACTION: Hausmann will write an MOC for review.**
- 4.2.4.BON hydro survey – Ebner gave an update via email. “The plan is to do a hydro-survey the first week in September. But we will be going to the Corp Board in July to get permission to start working on a contract to remove rocks. The plan would be to have the contract ready to go and only need the actual rock volumes after the September survey. Hopefully able to award soon after that.” Since there wasn't a FFDRWG meeting, Lorz asked if Ebner was still planning on modifications of the spill gates. **ACTION: Kovalchuk will consult with Ebner about potential spill bay modifications.**
- 4.2.5.BON alternative energy structure – A group is looking to install and test an alternative energy structure in the river over by Hamilton Island. The project has cleared several hurdles and has other installations in other parts of the country. This project is still in the preliminary phase. Once Hausmann has clearance to send out the project package, he will send to Kovalchuk for group distribution. All parties in the FPOM group want to review the plan. Bellerud was surprised that an in-river turbine would get any consideration. Bettin said that the turbine moves very slowly. This proposed project has had FERC approval for other installations but not necessarily this project. The project is just starting to be routed. Cordie said that TDA had a similar proposal about 10 years ago that did not move forward.
- 4.2.6.TDA AWS – The AWS is operable. There are still two issues- the rake and finishing up the alarm system. The project was going to pay for the alarm system but they don't have the money. Bettin asked about the ability to turn the AWS on and off at the control room. Cordie said no, they are trying to get alarm indication in the CR not operability. The actual operation would occur out at the valve. Bellerud asked if the valve room is leaking would

someone have to enter the valve room to turn the AWS off. Cordie said no, the operation of the valve is at the parking lot level.

4.2.7.TDA trunnion pin – no update

4.2.8.JDA north pumps – 5 out of the 6 pumps are operational.

4.2.9.JDA SCADA – The new SCADA system is 90% complete but due to COVID it is delayed.

The new system is being used but some alarms are not hooked up yet. SCADA stands for Supervisory Control And Data Acquisition.

4.3. Research/FFDRWG updates.

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

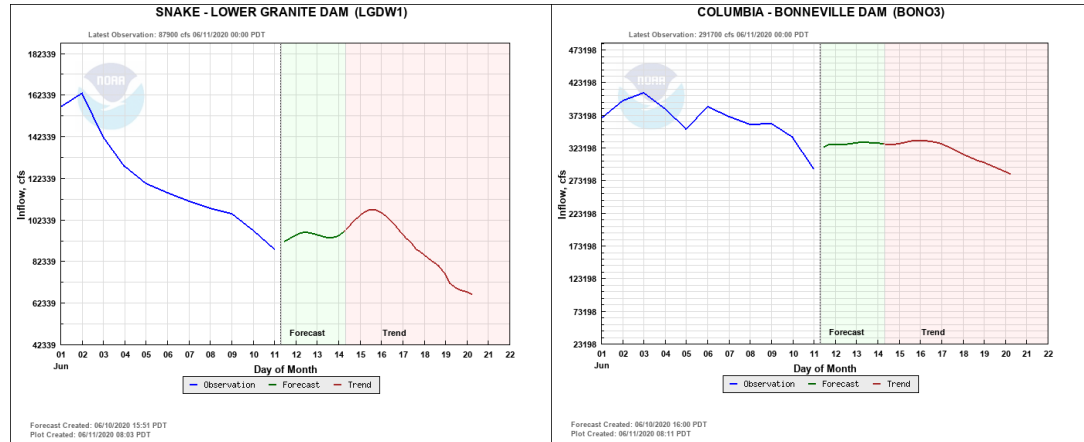
4.3.1.NWP FFDRWG – The B2 FGE update was emailed out. The next meeting is 06 August.

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

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	85	106	67	67 (6/20) / 107 (6/15)
MCN	297	321	271	322 (6/15) / 271 (6/20)
BON	299	334	283	283 (6/20) / 334 (6/15)

Table 1. RCC flow forecast



4.5. BPA update – the update was posted to the website.

4.6. Fish Count Program update (Peery, Wertheimer) – Counts are on-going. The summer run seems to be slightly better than the spring. Shad counts at BON are not as high as last year, about the ten year average. Sockeye are a little better than the ten year average but lamprey counts are very low. Passage in the Snake River has been a topic in TMT but it appears to be ironed out now. Morrill asked for an update on the QA/QC program. The contractor sends a weekly report with the results of the QC tests. The same video is sent to Peery and Wertheimer. No significant disparity between QA and QC has been found. A couple of counters had lower QC scores but the contractor has caught it. There will be additional training on the identification of sockeye. The contract modification is moving through the process. Van Dyke asked if the shad counts are high at every site. Peery pointed out that shad is not counted at every site. BON is a counting site and the numbers are 1.1 million. MCN had 41,000 shad.

4.7. Pinniped update

4.7.1.BON – The last animal left on 25 May. No sea lions are present in the tailrace at all. Tidwell is providing data to NOAA for the section 120 permit review that will allow the states to lethally remove SSL. Conder asked if the states will be making traps for SSL in anticipation of the permit or will they wait until the permit is in hand. The intent is to have a trap ready if they get authority but it is hard to say with COVID limitations. The CSL trap is in place currently.

4.7.2. Willamette Falls – no update

4.8. Lamprey update – The run is very slow this year. Historically, 10% run has passed by 10 June. All three LPS are operable and being checked regularly. Counting is in place. Optic counters are being tested on the WA SH LPS exit. Tribes have started translocation. The new CI ramp trap collected the first lamprey on the second day it was operated.

4.9. Avian updates

4.9.1.NWP

4.9.1. Estuary: With the COVID restrictions, crews were not allowed to stay down at the estuary. Instead, they are driving down to monitor and dissuade 3 days a week. At East Sand Island, there has been less than 700 Caspian terns off the colony with 208 scrapes. On colony, they haven't had a complete survey but noted less than 3000 birds which is fewer birds than seen previously. Incubation has not started yet. There is a significant presence of bald eagles. On Rice Island, there are less than 30 Caspian terns with six confirmed scrapes. They are meeting the goals for this site. Last month, they were not meeting goals and worked very hard to correct it.

4.9.2. **BON** - typical bird numbers for this time of year.

4.9.3. **TDA**- Gulls are feeding heavily at TDA. USDA is hazing but the gulls are persistent. The gulls are hitting the powerhouse as well. Cormorants on the towers have made about 40 nests on the walkways for maintenance. Cordie asked Bettin for the contact to address the walk ways. Bettin said to send an email with pictures to forward but warned that with everything going on, he doesn't think it will be a priority.

4.9.4. **JDA**- The hazers are doing the best they can but with the high spill, it is very difficult. Pelicans are feeding all along the spill line. Fielding reported that they will start counting pelicans morning and afternoon to compare. There are about 200 currently. Fielding noted that Miller Rocks is covered in gulls every morning. The forebay has mostly grebes. Morrill asked for the counting data so that he can share with the WDFW folks doing the pelican review. The data will be in the weekly reports. Van Dyke asked if they are looking for nest sites. Morrill said that no, there are several recognized colony sites. JDA is counting presence in the tailrace only.

4.9.2.NWW – **MCN** – There are ~20-30 pelicans, a few other birds but mostly gulls. Johnson said that he had an incident three weeks ago, where they counted over 300 gulls and hazing was not effective. The gulls have since left and could be following the juvenile lamprey. One laser is having problems and may be faulty. The project is considering putting one a small laser on the outfall. Morrill asked if there is an interest in looking at stomach contents if there was another gull situation. There was not time during that incident to get the necessary permits. Setter suggested letting everyone think about it for a month. MCN has lethal take already so it would just be looking at the stomach contents. Swank said that the permit could be modified if the study is based on the original premise of the permit. If the study is looking at a new question, then a lengthy permit process would be required. Peery said that the birds are usually taken from the boat. The trigger for lethal take was only hit during that one incident. Johnson corrected that USDA retrieves the carcass and puts them in the freezer before disposal so they would have easy to access. MCN has several volunteers to look at the stomach contents. Swank said that the permit modification would require who specifically is doing the analysis. Peery will look into the permit. With the

exception of IHR which has cormorants, there are very few birds at the Snake River projects due to the high spill. The highest counts are pelicans (17-124) overall.

4.9.5. Crescent Island (Peery) – This is an annual update provided to FPOM. Email from David McDermott on the 27 May site visit counts: 150 gulls and another 50 flying; 106 gull nests with 2 eggs per nest; 1 mallard nest and several dead birds. An alder tree was cut down by a beaver and the willows were recovering. No Caspian terns and goose nest. Van Dyke asked who the observers were. Setter said that they are Natural Resource staff from MCN and IHR. Tidwell said that the estuary sites had much lower Caspian tern numbers this year.

- 5. Invasive species discussion (Setter) awaiting response on shad disposal during sampling activity (Morrill, Van Dyke)** – no update. Van Dyke has passed the topic on the policy group but has not heard back yet. Cordie said that the electro fishing report had 5,700 game fish that were returned to the river. Van Dyke said that the counts are made from the deck not by bringing the fish into the boat. Any removal of a game fish would be a policy decision. Cordie asked if this topic has been discussed. Van Dyke said it has been elevated to the policy level but doesn't know if this has been discussed or not.

- 6. Coordination/Notification forms (need concurrence/discussion)**
 - 6.9. 20LWG04 MFR Juvenile lamprey mortality on direct load line dewatering screen
 - 6.10. 20LGS06 MFR Direct Load Mortality
 - 6.11. 20 LGS 07 Unit priority to remove debris
 - 6.12. 20 LMN 02 Unit priority change – approved and developed an FPP change form
 - 6.13. 20LMN03 MFR Mechanical Brush Failure in Primary Dewatering Structure
 - 6.14. 20 IHR 04 JBS Early shutdown for maintenance
 - 6.15. 20 MCN 02 LMI testing of spillway gates - approved
 - 6.16. 20 MCN 03 Unit priority during line outage
 - 6.17. 20JDA04 MOC STS crane replacement** – David Shielee is the Project Manager. The STS Crane has to be replaced. The old crane will be active while building the new crane. There will be one month without a crane; August was deemed the best time. The work will happen next year. Van Dyke asked if the month could be September instead. Shielee said that they are not locked into a month from the construction side yet but the contract will be awarded this year. Bettin said that August would have the fewest units running. **FPOM concurred.**
 - 6.18. 20JDA06 MOC Line 1 Outage** – Bushing replacement – BPA has an outage for line 1 that has a similar timeframe going through January 15. The length of this outage for the bushing replacement is about 3 weeks. Lorz said that this is the same plan as last year and wants spill during the three weeks. Unit 5 was out of service last year and this year it is not. Lorz doesn't think the outflow from unit 5 is enough to provide attraction flow. If the line is out of service, no units (1-4) can run. Lorz wants the spill in October but wouldn't request November and December. Spill will just be during the day. Lorz would like data from when 1-4 were off and there was no additional attraction on the north side. **ACTION: Fielding will track down data when units 1-4 were off and there was no additional attraction on the north.** The MOC has the passage from last year during the time frame. The MOC needs to be updated.
Pending.
 - 6.19. 20JDA07 MFR Chinook Mort Spill bay 20**
 - 6.20. 20JDA08 MFR Storm damage near south fish ladder** – The other tree has not been removed. An arborist will assess the situation.
 - 6.21. 20TDA03 MOC gatewell 18.1** – The sluice gate over 18-2 was open and fish were observed in 18-1 so they changed the sluicagate. They are trying to monitor. Fish are still milling about.

6.22. 20TDA04 MFR Juvenile Salmonid Mortality

7. **Fish Passage Plan:** The final 2020 FPP went into effect March 1 and is available online at: <http://pweb.crohms.org/tmt/documents/fpp/2020/>

7.9. **Pending Change Forms:**

7.10. **New Change Forms:**

- 7.10.1. 20LMN006 – Units, 2, 4, 5 Priority Order Unit priority change – Several units are locked so the unit priority changed. **Approved.**
- 7.10.2. 20LWG004 – Add Higher Spill Patterns **Approved.**
- 7.10.3. 20AppB002 – Additional Transport Truck transport truck – LWG added another truck with 500 fish capacity. **Approved.**

8. **Task Group Updates.**