

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 14 May 2020 FPOM meeting.

The meeting was held via teleconference. In attendance:

Last	First	Agency	Email
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1. Final decisions or recommendations made at this meeting.

1.1. April meeting minutes were approved.

1.2. BON serpentine screen removal. FPOM had no initial concerns but wanted a little bit of time to consider it.

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. WDFW Alligator Gar Caught in the Columbia River near Richland, WA (NWW)
- 2.5. Caspian Tern Update (NWP)
- 2.6. TDA Diffuser Valve Locations and Numbering (NWP)
- 2.7. FPOM transmission outages (BPA)
- 2.8. Coordination Forms (MOC/MFR)(NWW/NWP)
- 2.9. FPP Change Forms (NWW/NWP)

3. **Action Items**

3.1. **NWW**

- 3.1.1. **[May 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.
- 3.1.2. **[May 20] IHR04 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.

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: They are still investigating but no answers yet.*
- 3.2.2. **[May 20] BON PH1 ITS endgate** - ACTION: Derugin will get back to FPOM with more cost details.
- 3.2.3. **[May 20] BON serpentine screens** - ACTION: Derugin will provide a MOC as soon as possible.
- 3.2.4. **[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.
- 3.2.5. **[May 20] JDA05 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.

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

- 3.3.1. **[March 20] 20BON05 MOC BI Relocate Lamprey Refuge Boxes** - ACTION: Hausmann will add the lamprey refuge box locations to the after action of the MOC if different than the proposed. *Status: The boxes are in the location that was planned. The after action section has been added.*

4. **Updates**

4.1. **NWW**

- 4.1.1. Upcoming maintenance/construction/research activities.
 - 4.1.1.1. FPOM outages schedule (Setter) No updated this month. The TSWs will be removed on June 8 at MCN. Double testing starts in July.
- 4.1.2. LWG Unit 2 - Operations is trying to build a justification to acquire funding to restore U2 to a Kaplan Unit and they want to know if this is a high priority for FPOM. Fixed blade units have been problematic in the past when trying to coordinate other work, such as roof repair. Conder believes it is a high priority because if U1 goes OOS, then there is flexibility to operate U2 within a larger range. Returning U1 to Kaplan would be a benefit to fish but it

isn't a huge priority. Lorz agrees that U2 is a priority for project flexibility but wants to know what gets dropped off the maintenance list if the U2 work moves forward. Setter explained that NWW has been discussing the priorities. The overall consensus was that it is important but there could be higher priorities in the region. Morrill agrees with NOAA and CRITFC. Cordie would appreciate Lorz leaving the trunnion pin out of the conversation.

4.2. NWP

4.2.1. Upcoming maintenance/construction/research activities.

4.2.1.1. 20BON11 MOC F1 Outage – Completed. Everything is back in service.

4.2.1.2. 15TDA08 MOC Transformer Installation - Cordie reported that the work is beginning to start again and expect to have the full crew on-site in mid-June. They are currently working on T7, followed by T1 in late fall. Lorz asked if the fish units could still be operated with T1 OOS. Cordie said the fish units will switch to run on T3 but there won't be redundancy. The work is scheduled to start on 26 October which means no redundancy after that. NO FPOM DISAGREEMENT.

4.2.1.3. 19TDA04 MOC Crane rail Replacement - Still moving forward.

4.2.1.4. 18JDA02 MOC Trash rack replacement - No update.

4.2.2. BON ITS endgate. Derugin reported that the top and bottom will be replaced. This topic is going to the Capital work group meeting in June. Lorz asked if that means it will be funded or it is being discussed for funding. Derugin said the request will be for funding. Morrill asked about cost estimates. **ACTION: Derugin will get back to FPOM with more cost details.**

4.2.3. BON JMF fallbacks. Derugin reported that the fallbacks are reported in the FPC reports but didn't see mortalities. These are reported in the annual reports and need to double check on reports in the weekly reports.

4.2.4. BON PH2 55+ deck gantry crane. Derugin explained the plan to assemble a new crane and disassemble the old one. No initial FPOM concerns were stated.

4.2.5. BON AFF anesthetic water disposal. Derugin explained that due to the pending NPDES permit at BON, there needs to be changes to the discharge of anesthetic water. A plan for 2020 has been developed to allow for ground disposal on project. An anesthetic water disposal plan will be a **new** requirement for researchers working in the AFF. Conder asked how soon a water tank will be available. Derugin explained that BON Fisheries doesn't have a need for the tank but suggested CRITFC contact Brad Eppard to inquire about borrowing the trailers UI had used in the past. They are testing a pump to move water out of the AFF. CRITFC believes they can be back to work on Monday. Conder asked what LWG is doing. CRITFC said LWG has already been discharging to ground. Petersen said she was going to ask about timing as well. Jeff Fryer was asking about using BPA sub-station grounds but it would take about a month to work out. Whiteaker requested advanced notice for next season so they know if/how to address this in 2021. Derugin said the BON ECC is working on guidance documents. He will share those when he gets them. WDFW would like to keep this as an agenda item.

4.2.6. BON serpentine screens. Derugin explained that about a year ago BON Fisheries added screens to keep lamprey in the fishway and out of the AWS. Unfortunately, those screens are clogging more than anticipated and are difficult to keep clear of debris. BON wants to piggyback on the next FV3-9 cleaning closure and get someone into the ladder, via man basket, to remove the screens. There may be some water velocity impacts related to the screens. The exit may need to be throttled a little to allow for screen access. **ACTION: Derugin will provide a MOC as soon as possible. FPOM had no initial concerns but wanted a little bit of time to consider it.** Derugin added that this work would be completed later in the afternoon.

4.2.7. TDA AWS. Cordie reported that the AWS is functional and usable, if needed. TDA has the alarm on their maintenance list and will get to it as soon as they can. The other issue is

that when operating the AWS, debris builds up on the intake. Differential has gotten as high as 3' during a low debris time of year. The issue has been elevated to NWP and a plan to deal with debris is being discussed. TDA is going to confirm the debris is an issue that needs to be resolved before relying on it during the fish unit rehab work.

4.2.8. TDA trunnion pin. Nothing new, the pin is still in its box.

4.2.9. TDA diffuser removal plan. Cordie reminded FPOM of the desire to remove unused diffusers from the collection channel. He wants to permanently open the diffusers along the lower ladder and East junction pool, close the ones in the collection channel, and keep the west entrance diffusers operable since those would be used most frequently. Schlenker approves of the plan. Cordie didn't think it would happen quickly but it will need to happen. Lorz had no objections.

4.2.10. JDA north pumps. Pump #4 is OOS, though the bearing is on-site. Once a crew is available, it will be installed and the pump reassembled. Lorz asked how many pumps are down. Fielding said five pumps are running and only one is down.

4.2.11. JDA SCADA. SCADA has been commissioned and electricians are working on interfaces as COVID-19 restrictions allow.

4.2.12. JDA spill gate 10. The gate is being operated manually.

4.2.13. JDA South Turbine Pumps. Two of the three pumps are being used. These two are limping along. Fielding reported being in criteria.

4.2.14. JDA T1C Bushing replacement. Grosvenor explained that this relates to the Line 1 outage from last year. This work is to complete the repairs that couldn't be completed last year. **ACTION:** A MOC will be coming. BPA may want to piggyback on that work. Bettin will talk to JDA Fisheries to coordinate.

4.3. Research/FFDRWG updates.

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

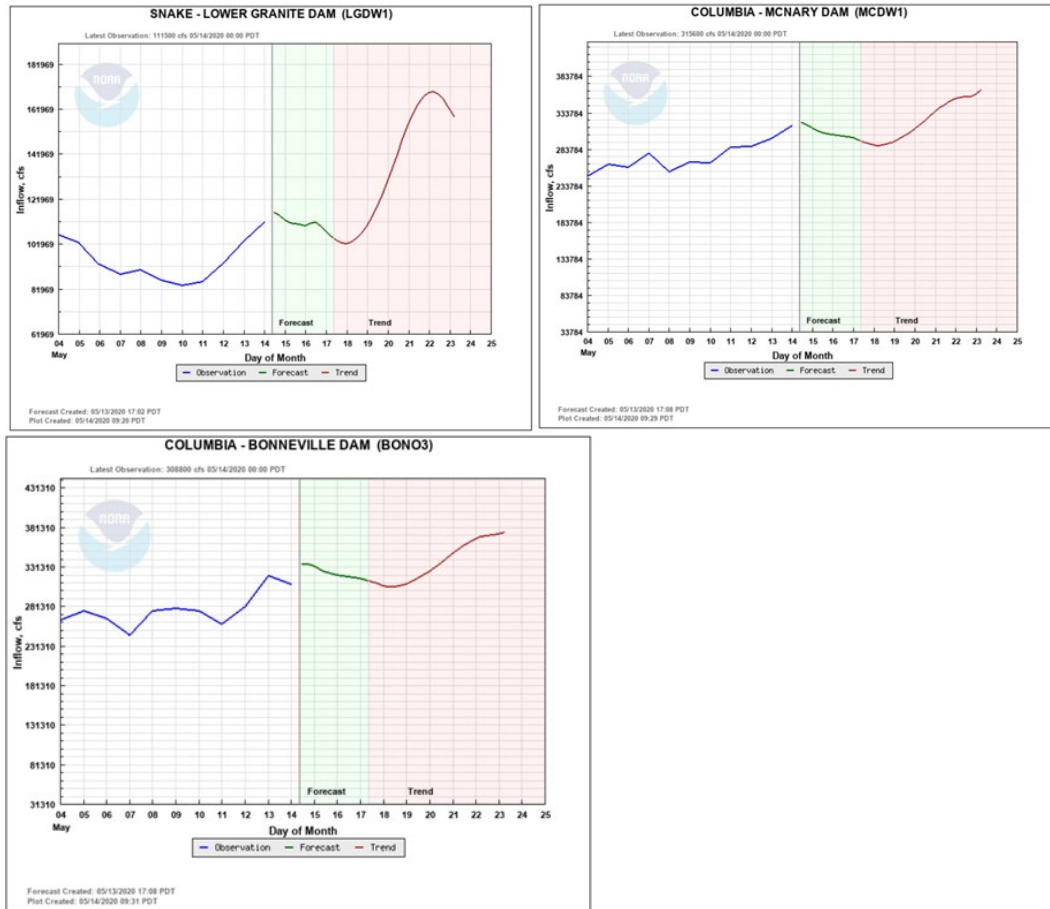
4.3.1.NWP FFDRWG – June 4. Agenda to be sent by J. MacDonald.

4.3.2.NWW FFDRWG – July 23

4.4. RCC update – the blob is reforming. Blob #20 is the official name and started on 14 March.

Project	Previous day average (kcfs)	5 day forecast average (kcfs)	10 day forecast average (kcfs)	Projected Low/Peak (kcfs) and date.
LWG	103	106	158	102 on 5/17 169 on 5/22
MCN	299	293	365	288 on 5/18 365 on 5/23
BON	319	306	375	305 on 5/18 375 on 5/23

Table 1. RCC flow forecast



4.5. BPA update. No critical updates.

4.6. Fish Count Program update (Peery, Wertheimer). Nothing new to report. Night counts at BON start on 15 May. Morrill asked about the QA procedures of selecting high passage hours rather than low passage hours. Peery said that is in the queue of things to do but it requires a contract modification. Tidwell noted that fishing is open because fish counts are flowing.

4.7. Pinniped update

4.7.1. BON – Average counts for this week are: 5 CSL and 42 SSL. Tidwell is participating in the Task Force Group. Recommendations from the Task Force on removal permits are expected in August. The FPOM Pinniped Task Group may need to reconvene to ensure limited conflict with BiOp requirements. FFU is continuing to monitor for abundance. Morrill asked if there has been any efforts to develop new SSL traps. Tidwell said that trapping efforts has been on hold. However, a funding request went to the NPCC and was approved to build SSL traps. Once COVID-19 restrictions have been lifted, the trapping efforts are likely to move forward.

4.7.2. Willamette Falls – ODFW is not trapping currently. Van Dyke clarified that ODFW is using video to monitor the area. Trapping efforts are on hold and in person monitoring is not occurring. There has been less activity noted this year compared to past years.

4.8. Lamprey update. Tidwell reported all three LPSs at BON are online. FFU is looking at optic counting systems and how to get them installed this season. The first lamprey passed last week.

4.9. Avian updates

4.9.1. NWP

4.9.1.1. BON – nothing special to report. Large number of cormorants are on the island upstream of BON but they do not appear to feed below.

4.9.1.2. TDA – seeing expected numbers with an uptick in cormorants.

- 4.9.1.3. JDA – Seeing uptick in gull activity and 50 pelicans on the island.
- 4.9.1.4. FFU – Tidwell reported there is a three day/week sampling protocol which covers Tue/Thu/Sat.

- 4.9.1.4.1. Rice Island had new dredge material, which attracted terns. Hazing efforts have been effective at keeping the birds where they belong.

- 4.9.1.4.2. ESI terns have colonized with about 1,000 individual birds in the one acre colony. There is gull and bald eagle harassment occurring, resulting in egg depredation. Including outside the colony, there are ~1800-2400 terns total on ESI. The counts are boat based and on the ground (in blinds). Counts are bounded by large confidence intervals. Civil Air Patrol flights will occur but Tidwell needs to explore how those results can be used for counts since glaucous winged gulls and terns are difficult to differentiate.

4.9.2.NWW

- 4.9.2.1. MCN - cormorant numbers are down. Gull numbers are normal and 15-20 roosting pelicans. The second laser to haze the outfall pipe has been programmed so they are both ready to go. Morrill asked about the use of drones/noise to haze. Johnson reported there hasn't been much advancement on that front. An LRAD system may be tested in July. Conder asked if a similar evaluation with the lasers will be done in 2020 as what was completed in 2019. Johnson said they can get four days of data, the days when USDA isn't out hazing the pipe. The laser is on for a full week and off for a full week. Conder was concerned about the timing of the testing. He wants to know if a sprinkler system should be added to the outfall. MCN is still limited in staff presence so the best they could do is the lasers on for a week and then off for the next. Peery added that different block designs were discussed but logistics make it difficult. Hopefully the data will indicate trends.

- 4.9.2.2. Snake River has seen a dozen or so birds at the projects. The high spill has impacted the bird numbers.

5. Invasive species.

- 5.1. Peery mentioned the continued investigation into how to remove shad. WHOOSHH has been talking with NOAA about ideas for how they could assist. Conder said NOAA is interested in reducing take of non-targeted sampled fish and how to reduce shad in the trap. Ryan Laughery contacted WHOOSHH and suggested their camera system may be beneficial in identifying and sorting out the non-target fish. The first year would be a system similar to what was installed at the BON AFF. After the software is fine-tuned, then potentially the non-target fish would be separated from the target fish. NOAA didn't see harm in continuing this line of investigation but didn't commit to anything. Van Dyke asked if the LWG trap folks have been involved in this conversation. Conder said it is more of a BiOp conversation so it's been kept between NOAA, WHOOSHH, and NWW. If the need for this system develops further, then others will be brought into the conversation. Morrill asked about any further thoughts about including a system in the BON AFF. Conder said NOAA didn't see a need for that system, in terms of BiOp requirements. NOAA sees more useful application at LWG.

- 5.1.1. Shad would not be considered a prohibited species and would not be managed in the same way. Setter said she thought ODFW was still looking into the guidance for shad. Setter said she can have the NWW invasive species coordinator come to FPOM to explain how NWW handles invasive species. Van Dyke does not have anything new as far as invasive species management. Morrill noted that WDFW wants to make sure both states are in agreement. Morrill said shad is not considered an invasive species and is considered a food fish. Morrill expressed that NWW has explained the issues very well but want to make sure the co-managers are in agreement before recommending shad should be removed from the system. Setter explained the many reasons why this issue does need to continue to be

discussed. Morrill talked about developing opportunities for improved harvest opportunity for fishermen.

5.2. Gar sighting (Hockersmith). On 13 April, commercial fishermen were harvesting carp in the Yakima River. They caught two alligator gar. Their permit did not allow them to euthanize the gar, nor did they have a collection permit so they released them back to the river. WDFW has now changed the permits to allow for euthanization of alligator gar if caught. USGS electroshocked for two days but didn't find the gar and no gar were found when the carp fishermen went fishing on another day. Setter said ODFW was alerted and asked about ODFW response if gar were encountered. Van Dyke provided comments via email to Kovalchuk. The guidance for northern pike should work similar for gar. Here is the link Van Dyke provided specific to allowing lethal removal if gar are found at a fish passage facility in OR: https://www.dfw.state.or.us/fish/CRP/prohibited_controlled.asp.

5.3. Cordie asked about bass and walleye release by dam anglers. Morrill said yes, bass and walleye have to be released but he is working on a path forward. WDFW will collaborate with ODFW.

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

6.1. 20 LWG 03 MFR Adult Fish Trap Mortalities. No additional comments.

6.2. 20 LGS 04 MFR Unit 6 Operational Testing. No additional comments.

6.3. 20 LGS 05 MFR Unit Priority. No additional comments.

6.4. 20 LMN 02 MOC Unit Priority Change. Conder asked if this will be a FPP change form. Perry said that they would submit a form if it is going to extend till next year. Conder wants to know the impact on tailrace conditions. Thompson said she asked Barnes if tailrace conditions would be changed by the unit priority. The response was that conditions shouldn't change that much. 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.

6.5. 20IHR04 MOC JBS Early Shut down for Maintenance. Hockersmith explained the need to shutdown in November to accommodate a large number of maintenance items. Swank didn't object to the work but commented that the analysis for Bull Trout was lacking and needs to be improved. Hockersmith said he only had PIT tag related information to use. Morrill concurred with the discussion. **ACTION:** Hockersmith will compile bull trout data and send out. He will also include steelhead data.

6.6. 20JDA04 MOC STS crane replacement. Fielding said this is a preview since the work won't be done until August 2021. Screens will not be able to be removed during August. No comments were received.

6.7. 20JDA05 MOC Spill bay 10 repair. JDA will remove a gear box off bay 1 and move to bay 10. The bay needs to be OOS for a week to accommodate this work. JDA estimated the best time would be between spring and summer spill. One change would be to move the date to Monday the 15th so maintenance has the entire week. Van Dyke asked which pattern would be used during that week. Swank thinks returning the spill gate to full functionality is more important than the spill pattern for a week. Morrill concurs. Bettin asked if the gate will be dogged open while the work is going on. The gate will be closed. **ACTION:** Fielding will send more information about the proposed spill pattern during the outage.

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/>

7.1. Pending Change Forms: NONE

7.2. New Change Forms: NONE

8. Task Group Updates.

9. Other items.

- 9.1.** Swank asked about higher than normal descaling rates at MCN on a couple of days. Setter said NWW had a discussion with MCN and descaling had been low this year, however, when sample sizes are low it may appear there is higher descaling. Hockersmith said he wasn't aware of anything. Debris has been minimal at all projects. Swank provided the following info on steelhead - 9 May 37.5% of 8 sampled and 11 May 45.9% of 37 sampled. Setter noted that the weekly report hasn't gone out yet so the info wouldn't have reached NWW yet. As of now, NWW doesn't know of any unusual events or issues.
- 9.2.** Bettin asked when we will have a FPOM potluck. Sometime after COVID-19 restrictions are lifted and before Bettin and Cordie retire.