

Subject: Draft minutes for the 11 January 2024 FPOM meeting. The meeting was held in person at the CRITFC offices and via WebEx, from 0900 until 1300.

In Attendance:

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1. Final actions or decisions.

- 1.1. December FPOM minutes approved.
- 1.2.

2. FPOM Action Items

2.1. NWW

- 2.1.1.[Jan 24] Falconry at MCN. **ACTION:** Peery and Morrill will set up another task group meeting.
- 2.1.2.[Jan 24] MCN hoist. Conder had questions about the engineered lifts. **ACTION:** Peery will ask the engineers, but he suspects there is a resistance to having the gate hanging from the hoist.
- 2.1.3.[Jan 24] MCN hoist. Conder asked if NWW has looked into the availability of slabs for rent. **ACTION:** Peery said he would inquire if there are any that would match the lifting beams and hooking points at the project.
- 2.1.4.[Jan 24] MCN hoist. Hesse asked about which spill bays would be prioritized. He said the modeling and having a plan is important. He also noted that he would hate for the three per year be the limiting factor. If more could be done, that would be better. Peery said the solicitation doesn't restrict the number completed per year, that is just the realistic expectation based on historical knowledge. **ACTION:** Peery will check with Contracting to see if asking the bidders about how many they can do a year is acceptable.
- 2.1.5.[Dec 23] LWG transformer maintenance. **ACTION:** Peery will provide an update regarding how long the maintenance work should take.

2.2. NWP

2.2.1.[Jan 24] 24TDA01 MOC TDA spill gate movements. **ACTION:** FPOM has significant concerns and would like more discussion and information before agreeing to the MOC. Lorz would like to see more than one year in the analysis. Van Dyke would like to see the metrics that led to this MOC and a connection to the MCN plan. Hesse would like to see suggestions that balance all interests, not just Action Agency interests. This will continue to be on the agenda until resolved or sent to RIOG. **ACTION:** Cordie will send Mackey the MRR for posting to the web. **STATUS:** *Completed.* [Documents / FPOM / 2024 / January \(crohms.org\)](Documents / FPOM / 2024 / January (crohms.org))

2.2.2.[Jan 24] NWP Lethal Take Permit. FPOM has concerns about the low number of cormorants that can be taken. **ACTION:** Dorsey will engage with FPOM as we move through the avian hazing season. He will ensure concerns are heard and addressed in some manner.

2.2.3.[Jan 24] 19TDA04 MOC – East side powerhouse crane rails. Looking at resuming work this winter. May be pushed to spring but no specific update. Lorz asked for the estimated completion date. **ACTION:** Cordie will look into the completion date.

2.2.4.[Dec 23] 22JDA20 MFR JDA-S Temps. Incorporating 2023 data into the memo. Macdonald wanted to make sure Juhnke is aware of the memo. **ACTION:** Someone (not Mackey) will send the updated memo to FPOM and post to the website once Lotspeich has it completed.

2.2.5.[Dec 23] 18JDA02 MOC Trash rack replacement. Contract will be written for FY24. Another year until next FY. Will be a replacement and not a refurbishment. **ACTION:** Macdonald will add to next FFDRWG agenda.

2.2.6.[Nov 23] CRITFC Member Tribes Lamprey Trap. **ACTION:** Macdonald will draft the MOC with the design concepts so FPOM can review a thorough plan. He will have this by the December FPOM meeting. **STATUS:** still pending. Macdonald will put the design concepts and maps into a MOC. TDA has advantages over BON though BON is still targeted for some time in the future. Lotspeich asked about the JDA location. Macdonald said no issues with JDA, TDA was just an easier location for prototype testing.

2.2.7.[Nov 23] Avian end of season review. Lorz asked if there would be an end of season review. It was a good meeting to help the Region understand what was going on and what might need to be changed for the upcoming season. **ACTION:** Someone (not Mackey) will work with Bettin and Lorz to develop an agenda and schedule the meeting. AFEP Avian presentations may be included. **STATUS:** still pending.

2.3. NWS

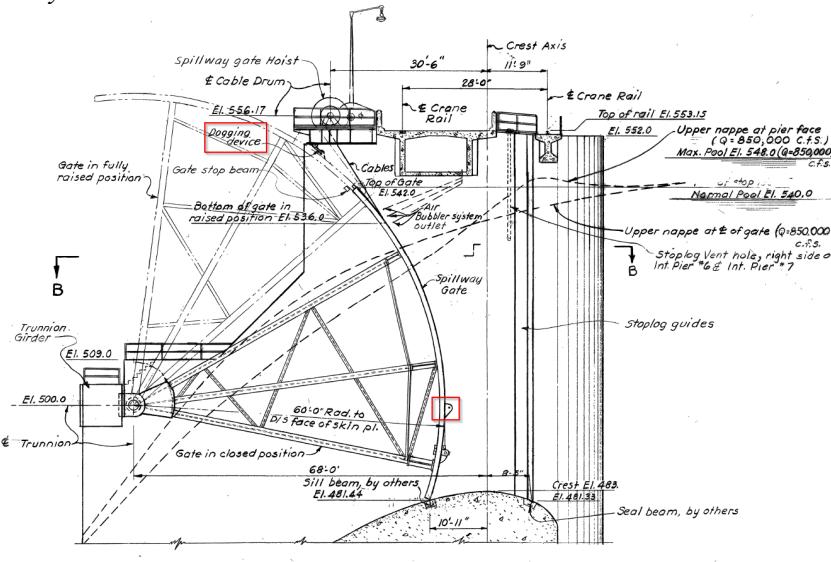
2.3.1.[Jan 24] **NWS updates.** Ebel asked where the Albeni Falls updates will be shared. Lorz asked about Chief Joseph fish passage. **ACTION:** Peery will work with NWS to make sure they provide updates on pertinent topics.

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

2.4.1.[Dec 23] LMN bays 5 and 7. **ACTION:** Peery will ask about the timelines and potential gearbox switching. **STATUS:** *Lower Monumental expects parts to repair gates 5 and 7 to arrive by mid-March. It will take one week to make repairs for each gate. They will start with bay 5.*

2.4.2.[Dec 23] LMN bays 5 and 7. **ACTION:** Peery will inquire about the dogging abilities of the tainter gates. **STATUS:** *See below marked up screenshot from a drawing of the spillway gates. As you can see, there is a dogging device that is designed to hold the weight of the gate while it is in the fully raised position. This dog is there for maintenance purposes so that wire ropes and other hoisting components can be worked on with the gate raised. There are no other dogging points available. Also, as can be seen from the below*

figure, the pick point for the gates is below roadway and so these tainter gates cannot be lifted by a crane.



2.4.3.LAWG: Porter asked Macdonald to capture all of the email strings prior to the LAWG meeting. **ACTION:** Macdonald will take care of that. **STATUS:** completed.

3. FPOM Updates

3.1. NWW Updates

3.1.1. Upcoming coordinated maintenance/construction/research activities.

3.1.1.1. 22 LWG 04 MOC T1T2 Gasket Repair. Nov 28-Jan 31. T1C first and then T1B. going forward as planning.

3.1.1.2. 23 LGS Unit 5 Commissioning. Postponed to Fall/Winter 2023. Going forward as planned. ERTS 1 February 2024

3.1.1.3. LGS Fishway Cooling Pump Repair/Replace. Trying to get a contract to repair one pump. RTS expected in July, if not delayed.

3.1.1.4. 23LMN12 MFR spillgate 5 and 7 repair. No change, repairs should be done by the end of March.

3.1.1.5. 23IHR11 MOC Navlock Tainter Gate Replacement February 2025. No update.

3.1.2. MCN crane status. Lorz asked for the Phase 1 report. Developing the solicitation for the first hoist. Once the solicitation is issued, the DDR can be shared with FPOM. Will be twice the capacity of the existing hoist. 40 hp motor maximum. Torque is 200% overload capacity. New lifting beam will be included with the hoist. EAL will be used in all components not permanently sealed. Peery shared the slides that were posted to the FPOM website under the MCN spill task group. Some NWW engineers are learning about the different regional forums and the way we interact with FFDRWG and FPOM. There may be some bumps but the information will be shared with the forums as soon as the contract solicitation goes out. Lorz noted that since this is not CRFM funded, Peery will be the primary source of information. **FPOM will be the forum for information transfer.**

3.1.2.1. Conder asked if the split leaf operation can still occur with this construction going on.

The first hoist will be on-site in September 2025. There will be 22 hoists, with the anticipation of completing three per year. van Dyke expressed some concerns about making sure this project didn't mimic the BON FGE, which had multiple restarts.

3.1.2.2. Lorz asked about slabs for next year. Peery said he put in a request to have the slabs and railing considered out of sequence. Lorz asked if slabs were used, could the restrictions be removed. Peery said yes, it would reduce the loads. Lorz doesn't want

to write more letters so he would appreciate NWW moving on procuring slabs sooner rather than later. Peery said NWW is aware and it's dependent on how fast the project can move through the large cap funding process. Conder had questions about the engineered lifts. **ACTION:** Peery will ask the engineers, but he suspects there is a resistance to having the gate hanging from the hoist. Conder asked if NWW has looked into the availability of slabs for rent. **ACTION:** Peery said he would inquire if there are any that would match the lifting beams and hooking points at the project.

3.1.2.3. Hesse asked about which spill bays would be prioritized. He said the modeling and having a plan is important. He also noted that he would hate for the three per year be the limiting factor. If more could be done, that would be better. Peery said the solicitation doesn't restrict the number completed per year, that is just the realistic expectation based on historical knowledge. **ACTION:** Peery will check with Contracting to see if asking the bidders about how many they can do a year is acceptable. Lorz asked if funding is the issue or time. Peery said funding is always an issue but there are no known concerns for requesting funding at this time. The logistics will be the hurdle.

3.1.3. MCN ERDC Model. No update today. Barnes will send Lorz study information.

3.2. NWP Updates

3.2.1. Upcoming coordinated maintenance/construction/research activities.

3.2.1.1. 19BON001 MOC Navigation Lock 1 Bridge Replacement. No FPP conflict. Work may not begin for many years.

3.2.1.2. BON PH2 Tailrace crane replacement. Work will occur during winter 25/26. No update.

3.2.1.3. 19TDA04 MOC – East side powerhouse crane rails. Looking at resuming work this winter. May be pushed to spring but no specific update. Lorz asked for the estimated completion date. **ACTION:** Cordie will look into the completion date.

3.2.1.4. 18JDA02 MOC Trash rack replacement. Contract will be written for FY24.

3.2.1.5. 20JDA04 MOC STS crane replacement. In the fabrication portion of the contract. Construction will start next June, commissioning to occur at the end of summer 2024. On track. Factory testing occurring now. New crane to start in the spring.

3.2.1.6. 22JDA20 MFR JDA-S Temps. Incorporating 2023 data into the memo.

3.2.1.7. 23JDA03-05 JDA -S fish turbine pumps 1 and 2 operating at reduced output 55 rpms, 3 OOS for gearbox repair. Anticipate having pump 3 ready for the start of fish passage season. Completing bearing work on pumps 1 and 2. They will be ready for the upcoming fish passage season. PM is working on interim fix funding. The gearbox should be back before the end of winter maintenance season. Pump 3 will return to full service but pumps 1 and 2 will only be band-aided until a complete overhaul can be done. Pump assemblies will be looked at on all three at some point in the future as a large cap program.

3.2.1.8. JDA north pump #4. Budget request has been submitted. No funding received yet. Looking at submitting an FY26 budget package.

3.2.1.9. JDA north pump #5. Offline half a day but now back in service.

3.3. NWS updates. No NWS attendees.

Ebel asked where the Albeni Falls updates will be shared. Mackey noted that NWS is still learning the regional forums and need to get comfortable with sharing information. Lorz asked about Chief Joseph fish passage. Neither Peery nor Mackey had any info, but Peery will work with NWS to make sure they provide updates on pertinent topics.

3.4. Research/FFDRWG

3.4.1.FFDRWG.

3.4.1.1.TDA-E lamprey fishway commissioned on 1/10. Everything looks great.

3.4.1.2.January meeting notes are out for review for attendees and will be sent to the broader audience soon. Macdonald thanks Conder for the memo he sent.

3.4.1.3.Porter said CRITFC may want to recommend additional lamprey studies.

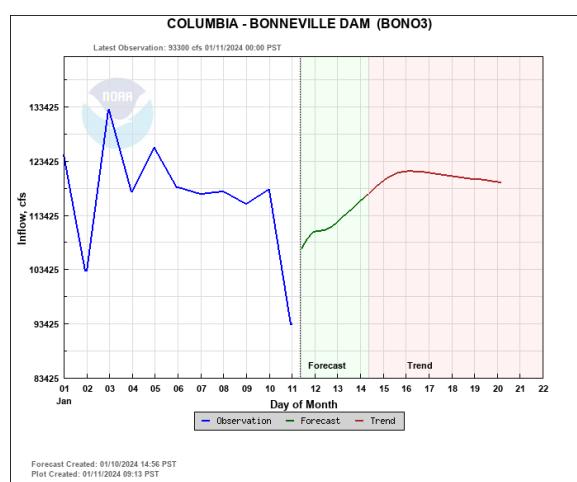
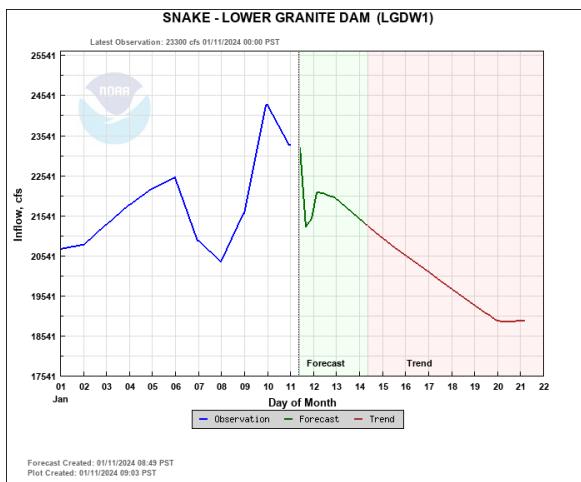
3.4.2.SRWG.

3.4.2.1.In-person AFEP Annual Review on 22-23 January 2024. Draft agenda is attached to the meeting invite. Macdonald will send an updated agenda this week.

3.5.RCC update.

Table 1. Previous Day Average Outflow and NWRFC Inflow Forecast.

Project	Previous Day (1/10) Avg. Outflow (kcfs)	5 Day (1/15) Forecasted Inflow (kcfs)	10 Day (1/20) Forecasted Inflow (kcfs)	Forecasted Inflow Low/High (kcfs)
LWG	26	21	19	19 (1/20) / 23 (1/11)
MCN	79	110	109	97 (1/11) / 111 (1/15)
BON	97	120	119	107 (1/11) / 122 (1/16)



Project Data: <https://pweb.crohms.org/report/projdata.htm> NWRFC Inflow Forecasts: <https://www.nwrfc.noaa.gov/rfc/>

3.6. Fish Count Program (Peery, Wertheimer). New contract due in 2024. Video counts at BON and LWG.

3.6.1.Waiting on NWW portion of funding to award the new contract. A common theme in the proposals was moving towards AI.

3.7. BPA Update. Schedule available on the FPOM website.

3.8. Pinniped update.

3.8.1.BON. Less than five pinnipeds in the tailrace. FFU is working on reports. Braun is the lead author this year. The draft should be available for regional review in about two weeks. Conder asked if Tidwell is no longer working pinnipeds. Wertheimer said Tidwell is still working it, but he is overseeing the project and not the lead author. Cordie said he

hasn't seen Terrible Tammy at TDA yet but Derugin said "she" has been seen in the BOON forebay.

3.8.1.1.Parker asked how the trigger is reached if monitoring isn't occurring. Wertheimer explained that there are daily point counts and the 20 animal trigger is based on historical data. Parker said he brings this up because the sturgeon task group is finding numbers are dropping in the lower river. Having the pinniped count data might help with estimating sturgeon impacts. Parker also noted that Oregon and Washington are really responsible for the monitoring and managing of sturgeon. Braun does have a section in the report for white sturgeon.

3.8.2.Willamette Falls. van Dyke doesn't have an update.

3.9. Lamprey update. FFU report will be out for review in February.

3.9.1.BON. Minor mods continuing.

3.9.2.TDA. LPS float test completed. Cordie wasn't there due to snow depth testing on Mt. Hood, but he heard everything seems to be going smoothly and on time.

3.9.3.JDA. Contractor will be on-site to make repairs to the JDA-N elevator. It may be functional for the upcoming fish passage season.

3.9.4.NWW. PNNL is working with MCN to get acoustic telemetry equipment installed.

3.9.5.LAWG: no updates.

3.10. Avian updates 10:55AM

3.10.1.NWW – Juhnke working on deterrents at MCN. USDA MIPRs are almost complete. No significant changes in the work from previous years. Parker asked if MCN is using the same wire tensile strength at JDA. Lorz said the design is different and the issues at JDA shouldn't be similar at MCN. Parker said it takes too long to fix wires. Lorz also added that JDA wires are breaking because the BPA transmission line falling on them. Parker invited others to join in the brush removal at Badger Island. LMN has five wires down.

3.10.2.NWP

3.10.2.1.JDA – 40 – 50 cormorants and 6 pelicans on Preacher's Island. 21 lines down with 17 at the powerhouse. USDA will repair the lines. The four navlock lines will not be replaced at this time due to the lines being too far for USDA to repair.

3.10.2.2.TDA – 50 gulls and 60 cormorants. 12 grebes in the forebay. Grebes are getting into the gatewells. Eagles are in Westrick Park. Eagle watch day is 20 January, the public is invited.

3.10.2.2.1.Miller Rocks – Sharp reported that in 2023 there were 16 days of falconry from mid-April to mid-June. Used pyros and people with dogs. Funding for 2024 has been secured. TDA saw a reduction in gulls and attributed that to the work YN did at Miller Rocks. Sharp asked McDowell about adjusting their take permit in-season. Sharp asked for an EA timeline. McDowell said USFWS prefers to a year to year approach to allow for adjustments based on new knowledge. She confirmed changes can be made mid-season but the timeline for an EA is dependent on the level of concern with the changes. YN has egg take and requested adult lethal take as well. YN and USFWS will have more conversations.

3.10.2.3.BON – No increase in birds. Working through the MIPR for line replacement.

There has been significant damage to some anchor posts. Tech Staff is looking at options for replacement/repair.



3.10.2.3.1. Parker asked for the 2022 and 2023 count data. The annual reports hold this information. The annual reports are posted at [Documents / FPOM / Annual Reports \(crohms.org\)](https://crohms.org/documents/fpom/annual-reports)

3.10.2.4. Lethal Take Permit. Permit has been issued. Garrett Dorsey will meet with the Projects to determine lethal take numbers for each project. Parker asked McDowell why the cormorant numbers for lethal are so low (30 birds). McDowell said that was what NWP asked for. Parker said he will work with NWP to get a higher number for next year. The permit will be held in Dorsey's name. McDowell clarified that the lethal take number is not how much can be taken but rather how many need to be taken to get the work done. If the take at the dams increases, then there will need to be a reduction in other areas. Lorz and Ebel suggested taking more, at least early on, and then reduce if appropriate. Morrill said that one thing Lawonn has talked about taking enough birds to affect behavior. Mackey strongly suggested we all be happy we have a lethal take permit this year and we can modify it in the future. She noted that it was decades in the making and it may not be perfect, but we can adjust for future years. "Just hold a moment of gratitude for the permit this year." Cordie is grateful he can retire now. **ACTION:** Dorsey will engage with FPOM as we move through the avian hazing season. He will ensure concerns are heard and addressed in some manner.

3.10.2.4.1. McDowell reminded permit holders to get their reports in by the end of the month.

3.10.2.5. Estuary. Reports are available at [Documents / FPOM Avian Hazing Task Group \(crohms.org\)](https://crohms.org/documents/fpom/avian-hazing-task-group). Getting ready for next field season. Draft reports will be available next month and final versions will be posted in February.

3.10.2.5.1. Astoria Megler Bridge. No update since Lawonn isn't on the phone.

4. FPOM Coordination/Notification forms (need concurrence/discussion)

4.1. NWW – no memos this month.

4.2. NWP

4.2.1.24 TDA01 MOC TDA spillgate movement frequency. Lorz asked for more details about timeframe, true maximum movement numbers, and consider not moving the gates unless spill drops below 40%. Cordie said TDA is likely not spilling 40% due to discrepancies in the measurements. Cordie also noted that the timeframe is a very long time out. There are many issues with TDA spillway crane, gates, etc.

4.2.1.1. Conder noted the difference in under-design and under-rated. TDA is under-designed and MCN is under-rated.

4.2.1.2. Ebel asked if there is a concrete maintenance plan for the spillway. He is concerned that reducing the movements now might push any real maintenance activities down the road. Cordie said the plans go out through 2043.

4.2.1.3. Lorz suggested renting a crane to get started earlier. Cordie noted the not-cheap aspect of renting a crane and O&M funding is always very tight. Lorz doesn't want to

see a continued practice of risking fish because O&M activities are not fully funded. Cordie said there is a potential that gates 1-8 could be tagged out between now and 2043 and that would be very bad for fish. Also, given the age and condition of the infrastructure, there are unknowns that could become rapidly known at inopportune times.

4.2.1.4.Conder asked how this operation would impact meeting BiOp spill of 40% +/- 5%. He is willing to work with Cordie, but those requirements need to be considered. Cordie said TDA is open to any reduction in gate movements.

4.2.1.5.Van Dyke is concerned with how the conversation is going at FPOM and would like to see the criteria Cordie is using to determine the need to reduce spillgate movements. Cordie suggested that failed spill gates should be indication enough for a change in operation if we want to keep gates 1-8 available for fish passage for decades to come. Derugin offered that FEM PMs and TRs might be useful as a metric. Van Dyke wanted something more tangible. Cordie asked if maybe the TDA Major Rehab Report (TDA MRR) would have the metrics FPOM desires. **ACTION:** Cordie will send Mackey the MRR for posting to the web.

4.2.1.6.Morrill asked how fish condition would be monitored. Mackey said that is would be presumed that if we are within BiOp spill then fish condition should be similar regardless of how many times the gates are moved. Lorz agreed and suggested targeting 45% to get the +/- %.

4.2.1.7.**ACTION: FPOM has significant concerns and would like more discussion and information before agreeing to the MOC. Lorz would like to see more than one year in the analysis. Van Dyke would like to see the metrics that led to this MOC and a connection to the MCN plan. Hesse would like to see suggestions that balance all interests, not just Action Agency interests. This will continue to be on the agenda until resolved or sent to RIOG.**

4.2.1.8.From the chat

4.2.1.8.1.from Trevor Conder to everyone: 11:13 AM – regarding TDA Agreement language 40% for 24 hours. Allocation of reserves may result in spill above 40% of river flows; maintain current minimum generation range of 50-60 kcfs for Transmission services. Like operations implemented in 2023. Summer TDA Agreement - 40% 30%. Reducing summer spill flows on August 1 40% to 30%. Provide a target spill of 40% (or 30% in late summer) with range of $\pm 5\%$ for reserves. 2020 BiOp TDA spring spill - 40% with caveat: Fish passage spill at The Dalles should be limited to spillbays 1 to 8 unless river flow exceeds 350 kcfs—then spill outside the spillwall is permitted. TDG levels in The Dalles tailrace may fluctuate up to 125 percent TDG prior to reducing spill at upstream projects or reducing spill below 40 percent at The Dalles.

4.2.1.8.2.from Ben Hausmann to everyone: 11:20 AM - The TDA spillgate movement reduction is strictly an infrastructure preservation proposal. A "reduction" to 4 movements per day is not implementable from BPA's perspective. The MOC proposal is to use the previous day's total discharge for identifying spillgate settings. Since this would result in more than 40% spill as often as it results in less, there is no net benefit to anyone/anything besides the TDA spillway. I'd like to request fish manager input on the anticipated fish impacts of Bob's MOC to help us reach an agreement.

4.2.1.9.Conder sees one movement a day as a non-starter. Baus asked what the bookends would be so the analysis can be more focused and useful. Conder would like to better understand the need for the one movement. Is it for marketing and fish takes the hit or how are these issues balanced?

4.2.1.10. Cordie said the goal would be to maintain an average, with some days higher and some days lower. Conder said there is likely less benefit from spilling more and more impact from going under. Fish managers and FPC said to look at the SPE because the curve isn't the same on either side of "average".

4.2.1.11. Going back into history, Cordie asked how 64% was worse, in the days we spilled that high. Lorz said survival was lower because there wasn't a spill wall. Lorz would be happy if all of the spill could be kept inside the wall. He also reminded everyone that the turbine survival is not good.

4.2.1.12. Ebel is more concerned about spring passage. He believes this would go in the FOP and maybe RIOG. Hesse would like to see more analysis. Everyone wants to avoid a MCN situation at TDA. Everyone is willing to find a balance, just not one movement.

4.2.2.23 BON100 MFR FG3-21 Lamprey Dewatering Morts. Swank asked about the corrective actions. He asked what action can be taken if lampreys are seen in the diffuser pit. Derugin said you can't see if lampreys are in the pits. Cycling the diffusers is important to flush the sediment from the diffuser valves. Derugin said opening diffusers more slowly may allow the lampreys to exit rather than be impinged. He also noted that reducing the grating opening would help prevent lampreys from getting into the pits. Swank would like to brainstorm ideas for how to prevent a kill of this magnitude in the future.

4.2.3.23 BON101 MFR PH1 unit priority. No additional comments.

4.2.4.24 BON001 MFR PH1 units 6 and 10 OOS due to oil sheen. No additional comments.

4.2.5.24 BON002 MFR Units 11 and 12 OOS. No additional comments.

5. Fish Passage Plan

5.1. The Final 2023 FPP is in effect through February 2024 and is posted at:

pweb.crohms.org/tmt/documents/fpp/2023/

5.2. Draft 2024 FPP chapters, appendices, and change forms are posted at;

<https://pweb.crohms.org/tmt/documents/fpp/2024/changes/>

5.3. Change Forms: All new change forms will be discussed at the FPP review meeting on Friday, 2-FEB. Wright will email the agenda and meeting materials packet by 15-JAN.

5.4. Invasive species removal language. No change form yet, but it will include the removal of invasive species during dewatering activities. Hesse asked about this item. Cordie had already left for the mountain, so Mackey attempted to dredge up the memory as to what this topic was originally. The Corps is not a fish management agency, so fish are salvaged and released without prejudice. Over the years, other agencies have asked for the lethal removal of non-native, invasive species and the Corps doesn't have permits for these removals. There are intricacies in getting permits and executing removal. Parker used northern pike as an example of a species that should be removed.

6. FPOM Task Group Updates.

6.1. Schedule falconry discussion (Peery/Morrill). NWW needed additional information on falconry before they could just replace hazing with falconry. NOAA was ok with both, but not just falconry. Cordie noted that the information TDA is just observational without hard metrics. If funding becomes available, NWW will seek an evaluation. Parker said boat based hazing doesn't save fish. NOAA and CRITFC are not on the same page. Parker suggested Conder listen to him and not the agency. **ACTION:** Peery and Morrill will set up another task group meeting.

6.2. MCN TSW operation in the summer (Peery). FPAC says leave them in due to the condition of the spillway.

6.3. MCN spillway (Peery). Next Update 25 January. Discussions include adding sensor fish to the balloon tag study.

6.4. Budget and Infrastructure Updates. Updated spreadsheet posted to the January FPOM website folder.

7. FPOM Annual gathering at Rogue.