

Subject: Final minutes for the 10 August 2023 FPOM meeting. The meeting was held at the Bonneville Lock and Dam Auditorium, and via WebEx, from 0930 until 1130.

In Attendance: Attendees in peach attended in person.

| Last | First | Agency | Phone | Email |
|-----------|-----------|--------------|---------|--|
| Ashline | Josh | BPA | | jdashline@bpa.gov |
| Bethea | Dana | NOAA | | Dana.bethea@noaa.gov |
| Bettin | Scott | BPA | | |
| Blair | Erin | NWP-FFU | | erin.k.blair@usace.army.mil |
| Borchert | Nick | USDA-WS | 5094*10 | nick.j.borchert@usda.gov |
| Braun | Mark | NWP-FFU | | mark.w.braun@usace.army.mil |
| Burnet | Sarah | NWP | | sarah.h.burnet@usace.army.mil |
| Campbell | Noah | FPC | | ncampbell@fpc.org |
| Conder | Trevor | NOAA | | trevor.conder@noaa.gov |
| Cooper | Erin | FPC | | |
| Cordie | Bob | NWP-TDA | | Robert.P.Cordie@usace.army.mil |
| Derugin | Andrew | NWP-BON | | andrew.g.derugin@usace.army.mil |
| Ebel | Jonathan | IDFG | 2088*51 | jonathan.ebel@idfg.idaho.gov |
| Edwards | John | WDFW | | john.edwards@dfw.wa.gov |
| Erickson | Michael | NWW | | michael.erickson@usace.army.mil |
| Flemmer | Jeanette | NWP-BON | | jeanette.c.flemmer@usace.army.mil |
| Gallion | Darren | NWP | | Darren.g.gallion@usace.army.mil |
| Graham | Jen | Warm Springs | | jennifer.graham@ctwsbnr.org |
| Grosvenor | Eric | NWP-JDA | | Eric.Grosvenor@usace.army.mil |
| Hesse | Jay | Nez Perce | | jayh@nezperce.org |
| Holdren | Elizabeth | NWP-LWG | | elizabeth.a.holdren@usace.army.mil |
| Juhnke | Steven | NWW | | Steven.d.juhnke@usace.army.mil |
| Krasnow | Lynne | NOAA | | lynne.krasnow@noaa.gov |
| Lorz | Tom | CRITFC | | lort@critfc.org |
| Lotspeich | Michael | NWP-JDA | | michael.d.lotspeich@usace.army.mil |
| Lynch | Samantha | NWP | | |
| Mackey | Tammy | NWP | | Tammy.m.mackey@usace.army.mil |
| Madson | Patricia | NWP-FFU | | patricia.l.madson@usace.army.mil |
| McDowell | Michelle | USFWS | | michelle_mcdowell@fws.gov |
| Morrill | Charlie | WDFW | 360*40 | Charles.Morrill@dfw.wa.gov |
| Peery | Chris | NWW | | Christopher.A.Peery@usace.army.mil |
| Petersen | Christine | BPA | | chpetersen@bpa.gov |
| Roberts | Marcus | NWP-FFU | | marcus.t.roberts@usace.army.mil |

| | | | | |
|---------------|---------|---------|---------|--|
| Sechrist | Juddson | BOR CPN | | jsechrist@usbr.gov |
| Stewart | Jeff | | | jeffrey.g.stewart@usace.army.mil |
| Strong | Noah | NWP-FFU | | Noah.e.strong@usace.army.mil |
| Swank | Dave | USFWS | | David_Swank@fws.gov |
| Swieca | Kelsey | NOAA | | Kelsey.swieca@noaa.gov |
| Urmston | Jenn | USFWS | | jennifer_urmston@fws.gov |
| van der Leeuw | Bjorn | NWP-FFU | 5038*12 | bjorn.k.vanderleeuw@usace.army.mil |
| Van Dyke | Erick | ODFW | | erick.s.vandyke@odfw.oregon.gov |
| Wells | Erica | USDA | | erica.j.wells@usda.gov |
| Wertheimer | Bob | NWP-FFU | | Robert.h.wertheimer@usace.army.mil |
| Wright | Lisa | NWD-RCC | | Lisa.S.Wright@usace.army.mil |

1. Final actions or decisions.

1.1. July meeting minutes approved.

2. Action Items

2.1. NWW

2.1.1. [Aug 23] LGS Fishway Cooling Pump Repair/Replace. **ACTION:** Peery to provide the pump specs to FPOM.

2.1.2. [July 23] FPP memo reporting. **ACTION:** Conder will talk with Peery and Mackey to discuss potential reorganization of the weekly reports. **STATUS:** Peery talked with Conder. Conder would like the FPP violations to be clearly marked and easily found. He does not want to have to hunt for them.

2.1.3. [May 23] LWG tailwater. **ACTION:** Peery will set up a meeting in a week or two so the work group team can get into the details and work towards a reasonable solution. Interested parties should email Peery to be included in this work group. **STATUS:** Peery is working on getting more information. Pump 2 is OOS. Repairs are expected during winter maintenance. There may be something faulty in the pump 1 that causes it to shutdown. The pump has to run at a high setting during low tailwater and it overheats then shuts down. Peery noted that the fish pumps at all of the projects are getting old and need to be replaced. These are on the critical infrastructure list. Each project has different pumps. Ebel noted his frustration that NWP and NWD are not aligned in messaging.

2.1.3.1. Elizabeth Holdren will be taking a 120-day detail as OPM at Lucky Peak. David Miller, Elizabeth's assistant bio, will be managing LWG Fisheries.

2.1.4. [May 23] LGS GBT. **ACTION:** Peery will work with SMP and Conder to develop the plan for spot checks. There are morts but the rate of mortality isn't alarmingly high since the collection is high. **STATUS:** Still pending. Peery hasn't had time yet. He will work with Holdren since she has prior experience at LGS.

2.2. NWP

2.2.1. [July 23] NWP/NWW Critical Fish Passage O&M needs. Spreadsheet is available on the FPOM website in the August 2023 meeting folder. Mackey said there are no changes from last month. **ACTION:** Mackey and Peery will send a formal email to NOAA with the current spreadsheet to meet BiOp requirements.

2.2.2. [June 23] TDA Fishing Boundary. The main concern is that the line is not entirely clear, and anglers are coming within 100' of the east fishway exit. **ACTION:** Morrill and Cordie will work on a memo outlining the recommendation for a line straight across. Lorz is waiting to hear back from his TAC rep. **STATUS:** Lorz said TAC understands the line is 100' from the

entrance. Cordie thought the goal was 200', to match ODFW regs. Morrill needs the information about where the line is supposed to be. WDFW agrees it should be 100' from the exit and that includes the casting distance. After further discussion, the line is a fishing line not a boat line. To provide guidance for boaters, it may be worthwhile to make it a 200' boundary. Cordie said his current understanding is that the action is now with WDFW Enforcement. Morrill said WDFW does not have a concern with the existing line, with the understanding that the boundary is for fishing and not just boating. Cordie said TDA will just continue to call enforcement when they see violators.

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

2.3.1.[June 23] TDA temperature collection. *STATUS: discussed under 3.2.5.*

2.3.2.[July 23] Invasive species removal language. Will be an FPP change form. **ACTION:** Cordie will draft initial language for the change form. *STATUS: covered under 5.3.*

2.3.3.[May 23] Pelican hazing in the estuary and at the dams. *STATUS: NWP projects are hazing pelicans.*

3. 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. New dates Nov 28-Jan 31. Will work on T1C first and then T1B. No changes.

3.1.1.2.23 LGS Unit 5 Commissioning. Having issues with the temperature sensor. Postponed to Fall/Winter 2023.

3.1.1.3. LGS Fishway Cooling Pump Repair/Replace. Contractor is waiting on the part for spare pump. The project is developing solicitation to repair the pump in hand and to purchase a new (third) pump. Hope to have pumps ready for next fish season. Morrill asked if there is a contractor available in the US. Peery said the contractor is in the US but the parts are coming from Europe. Conder asked why an irrigation pump wasn't used. Peery said the pump is a fully submersible pump as opposed to one that needs to be on a platform. Derugin noted that pumps tend to have difficulty lifting water above 20'. LGS is different from LWG, where the motors are above water and not submersed. NWW has been discussing different designs. Lorz asked if the European part can be machined locally. Peery said no because the part has very specific tolerances. Conder had less than favorable opinions about the piece of equipment. Lorz is concerned about the risk of not having the pump available next year and encourages looking at every and all options. He warned of "irritable folks" if the pump is not available for the sockeye run in 2024. Peery said the contractor who is repairing the spare pump is located in Florida and has been granted extra time, but NWW may pursue a contract termination if needed. Conder suggested a parallel track of procuring pumps similar to LWG. Van Dyke asked Peery to share the pump specs. **ACTION: Peery to provide the pump specs to FPOM.**

3.1.2.MCN crane status. Cranes 6 and 7 have performed two engineered lifts and cannot be used again this year. Peery said dog repair is still occurring. MCN was hoping for dogs from three gates to be completed in FY23. More will be completed in FY24. Memo from lead engineer allows the Project to use the cranes once more to close bays 2 and 6 after summer spill. This will occur on the morning of 15 August. NWW is going to the Large Cap group to request the funding. No update on hoist condition or procurement. Conder asked if the TSWs can still be operated. Peery said the TSWs do not overload the crane and may be operated normally.

3.1.2.1.Lorz asked about the status of new cranes. Peery said NWW is working on a timeline and will share with FPOM when there is something tangible to share. van Dyke asked for more information about the procurement process start to finish steps. Hesse asked

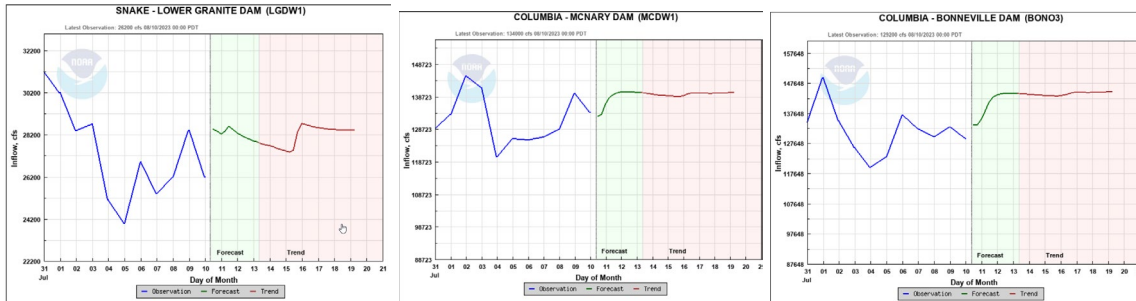
if the timeline has changed based on the current information. Peery said the timeline hasn't changed and the work going on are the first steps to upgrading hoists and getting the new cranes. Hesse echoed Lorz in requesting a written timeline when it is available. Lorz asked for a hoist timeline as well.

- 3.1.2.2. Scope of Work for Physical Modeling.** Peery talked with ERDC about the model. There is some funding in place to start work. Still need confirmation of FY24 funding. When looking at the existing model, ERDC found it not worth fixing and suggesting a whole new model, which will take about 7-9 months, starting in October. FPOM was not overly impressed with this turn of events. Peery explained that the models are concrete, sand, and plywood. Mississippi doesn't have favorable conditions for the long-term storage of wooden models. The new model will rely less on natural materials and be better designed to withstand moisture. The new model will be \$1.5M in CRFM funding. The model will be available for the fall 2024 operations, but not the spring. Lorz requested a second opinion on the condition of the model. He struggles with the concept that the model has rotted in five years. Peery noted that NWW has not been on-site to inspect the model and they are trusting the ERDC review and recommendations. Lorz did not have favorable comments on the apparent lack of ability to maintain a relatively new model.
- 3.1.2.2.1.** Hesse asked if NWW has looked at a different storage location. Peery said they are looking at that internally and whether or not CFC modeling could be used. The physical model has benefits over the CFD models.
- 3.1.2.2.2.** Peery added that ERDC took apart the LWG model and NWW was unaware prior to that occurring.
- 3.1.2.2.3.** Peery reminded FPOM that these models were not designed to last for decades, they were designed to look at specific issues. Bettin said the modular idea is a good because it allows the models to be stored easier. Peery said Laughery is looking at 1:49 because it is a nice square root, but NWW is looking at 1:45. Just need space to store these models. NWW has discussed the idea storing these models closer to home.
- 3.1.2.2.4.** Next update will be the September FPOM.
- 3.1.3.** LWG tailwater monitors/LGS pool levels.
- 3.1.4.** JFF early start. No new updates. Morrill asked when FPOM will know if NWW can accommodate an early start up. Peery said NWW does not believe they can shorten the maintenance periods at LWG and LGS any further. Van Dyke asked about the staffing at the projects. Peery said there are some compliance and safety positions that have been added but the maintenance positions haven't changed much. Some positions are open. It is more difficult to hire personnel, the hiring process takes a very long time. This has resulted in several vacant term fish positions and the remote sites are the hardest to fill. van Dyke asked if there could be a discussion about who is doing the maintenance and why maintenance activities are not occurring. He also asked about the work going to private contractors. Peery said there are multiple challenges with maintenance; flat funding, shortened maintenance window and using spillways in ways they were not originally designed for. Contractors are often used for non-routine work. Peery said there are many internal discussions looking for efficiencies. Sometimes contracting is not the best option, sometimes there are limited options for how to get the work completed. Peery clarified that non-routine does not mean non-critical, just that these items are not completed on regular basis.
- 3.1.4.1.** Morrill asked about the dates for MCN PIT tag detectors. Peery said NWW will be at the EDR level start of FY24. It may also be broader than just looking at the spillway.
- 3.1.5.** Fish Transport program. Trucking a couple thousand fish per truckload, every other day.
- 3.2. NWP Updates** Please note – spillway updates will be provided in a presentation in September.

- 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. 23BON002 ITS end gate replacement. Installation is still expected for October. Gate is expected to be delivered this month. Derugin offered to show Conder photos. The gate is located somewhere in Vancouver.
 - 3.2.1.3. 23BON003 T11 outage. Still on track.
 - 3.2.1.4. BON FGE – Units 11 and 18 Scheduled from 30 Nov – 28 March. Expected completion is December 2023. On schedule. The gatewell dipping basket has been working great.
 - 3.2.1.5. 19TDA04 MOC – East side powerhouse crane rails. Next step is to replace the crane in the spring. Work is expected to be complete in the fall. The work will occur at the east end of the powerhouse, more than 100’ from the fishway exit. No changes.
 - 3.2.1.6. 18JDA02 MOC Trash rack replacement. MU16 done. Next update – fall 2023. Still working on the contract. No changes.
 - 3.2.1.7. 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. No changes. No unit outages needed.
 - 3.2.1.8. 22JDA20 MFR JDA-S Temps. Still accepting comments. Plan is to collect data this season. Arrays are deployed in the ladders and in the forebay. Collecting data and will include in the annual report.
 - 3.2.1.9. 23JDA03-05 JDA-S fish turbine pumps 2 and 3 operating at reduced output. Parts for pump 3 should arrive soon and work will begin in mid-August. Contractor received a counterfeit bearing (made in China and won’t meet certification). JDA had a bearing on-site and will see if it can be used by the contractor. Delays are going to be between a month to nine months. Grosvenor noted that the JDA bearing may not have been stored appropriately so it may not be useable.
- 3.2.2. BON Aquia-S. Draft NPDES general permit, and the supporting fact sheet addendum, are available for review at <https://www.epa.gov/npdes-permits/npdes-general-permit-federal-aquaculture-facilities-and-aquaculture-facilities-located> Comments still accepted. New position at BON, who will be working on the Aquia-S issue as part of their duties.
- 3.2.3. Wasco PUD smolt condition monitoring. Monitoring concluded for the season.
- 3.2.4. JDA north pump #4. Budget request has been submitted. No funding received yet. No update.
- 3.3. **NWS updates.** No update
- 3.4. **Research/FFDRWG**
 - 3.4.1. SRWG. Juhnke reported that Macdonald is working on responses.
 - 3.4.2. NWP/NWW FFDRWG. Combined meeting held on 8 August and went well. If the meetings do not go too long, the combined option may continue. van Dyke said there may be concerns about not getting into all of the projects if the meetings remain combined and the agenda limited. Juhnke acknowledged ODFW’s concerns.
- 3.5. **RCC update.**

Table 1. RCC FPOM flow forecast.

| Project | Previous Day Avg. Outflow (kcfs) | 5 Day Forecasted Inflow (kcfs) | 10 Day Forecasted Inflow (kcfs) | Forecasted Inflow Low/High (kcfs) |
|------------|----------------------------------|--------------------------------|---------------------------------|-----------------------------------|
| LWG | 26.2 (Aug 9) | 27.5 (Aug 14) | 28.4 (Aug 19) | Flat between 27-28 |
| MCN | 128.3 (Aug 9) | 139 (Aug 14) | 140 (Aug 19) | 133 (8/10); 140 (8/12) |
| BON | 132.2 (Aug 9) | 143.7 (Aug 14) | 144.8 (Aug 19) | 133.8 (8/10); 144.8 (8/12) |



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).** Peery noted that most of the sockeye have moved through and coho are showing up at BON. 4 Peaks will refresh their counters’ training on coho.
- 3.7. BPA Update.** Schedule available on the FPOM website. Moving the 7/25 BON outage to 10/12.
- 3.8. Pinniped update.**

3.8.1.BON. Roberts did a point count this morning and found seven Stellers in the tailrace. Final report will be ready by 29 February. WDFW will start fall management the week of 11 September. This will continue through November. BON had a dead pinniped float into spillbay 14 (forebay). BON is looking to schedule a debris spill to move it through. ODFW asked if it could be determined what killed it. Derugin said the only way would be to shut down the spillway and we are still in summer spill. WDFW is aware that the animal may wash up downstream. WDFW does not believe the animal is worth a great deal of effort to retrieving it. Ebel asked if there would be a way to mark the animal so it could be identified when it washes through. Mackey said the Project does not have the resources to mark the animal for the agencies responsible for MMPA actions. The debris spill will not occur until early next week.

Update from Derugin - Hi all, Here’s the pic of the sea lion carcass from spillway 14. It looks too far gone and hard to see to gain any useful info from.



3.8.2. Willamette Falls. van Dyke reported not a lot going on at Willamette Falls. ODFW does acknowledge that Stellers are starting to come back.

3.9. Avian updates (10:34).

3.9.1. NWW. Bird numbers have decreased but juvenile shad numbers are increasing. Gull numbers in the 100s at MCN.

3.9.2. NWP Avian EA/NEPA (Environmental Branch). Mackey signed the permit request. USDA is getting trained for lethal take and the expectation is we will utilize that new tool in 2024.

3.9.3. JDA. Pelican numbers have dropped from about 1000 to 100. Couple dozen gulls. 19 avian lines are down and a few more are on the verge of failure. Looking at a contract to replace those.

3.9.4. TDA. Bird numbers are dropping. USDA hazing concluded on 31 July. Falconry concluded a couple of weeks ago. Tied RC boats in the falconry contract. This was utilized around the islands. The results appear promising. Looking to continue next year. The tori lines (photos in the weekly report) have proven to be very successful in front of the entrances. Grosvenor said they are successful at JDA too. van Dyke asked how these lines were paid for. Cordie said they used materials lying around the project and borrowed from SeaGrant. TDA will seek to purchase their own in FY24.

Update from Cordie - For those inquiring at FPOM, here's pic of the tori line deployed at south entrance. Very simple, cheap and effective. We have yet to see a pelican or cormorant around the lines. End of the line has small float and small funnel to keep it in the flow. Only challenge is keep it from tangling over long time periods. We're working on fine tuning and will likely just deploy when birds are present. Another example of Jim Day continuing to search for solutions to our ongoing bird issues.



3.9.5. BON. Gull numbers are high at the B2CC (about 600+). The birds are in the area of the B2CC avian array. Rangers have observed pelicans in the area. This is a new bird for BON.

3.9.6. Estuary. Reports are available at [Documents / FPOM Avian Hazing Task Group \(crohms.org\)](https://crohms.org)

3.9.6.1. ESI. FFU avian team is attending the meeting today and will be at the picnic for informal conversations. Strong reported 552 CATE, 3 DDCO, a handful of brown

pelicans, and too many American White pelicans to count. No eggs successfully produced on ESI. Gulls remain in the colony and limit hatching success.

3.9.6.2.Rice Island. 30 CATE, 1800 DCCO

3.9.6.3.Miller Sands. 10 CATE, 10 DCCO, 300 AWP

3.9.6.4.Pillar Islands. 3 DCCO

3.9.6.5.FPOM would like an update on the Astoria Megler bridge at the next FPOM meeting. No update from ODFW.

3.10.Lamprey update

3.10.1.BON. CRITFC still trapping. Numbers bumped up yesterday. No excessive mortalities in the traps. AFF valve 15 continues to collect morts. Madson provided the LPS count – 62K lamprey. Optic sensors 99% in agreement. Counts are starting to drop. No LFS operation this year.

3.10.2.TDA. CRITFC still trapping at TDA-E. 1211 lamprey collected YTD. Lamprey trap at the junction pool still on target for the IWW.

3.10.3.JDA. CRITFC still trapping at JDA-S. 1400 lamprey collected YTD. Working on south entrance weir cap.

3.10.3.1.JDA-N elevator. Contractor is building the controller and the elevator should be back in service at the start of next fish passage season.

3.10.4.NWW. Counting still occurring with counts above the 10-year average.

3.10.5.LAWG. Meeting was on 2 August at the TDA Westrick Room. Juhnke reported on the meeting. Nothing critical from the meeting.

3.10.5.1.Accords work at BON B1 LPS has been awarded.

3.10.5.2.Minor mods at BON will be completed during the IWW.

3.10.5.3.WS serpentine section at Plans and Specs.

3.11.Budget Updates.

3.11.1.NWP/NWW Critical Fish Passage O&M needs. Spreadsheet is available on the FPOM website in the August 2023 meeting folder. Mackey said there are no changes from last month. **ACTION: Mackey and Peery will send a formal email to NOAA with the current spreadsheet to meet BiOp requirements.**

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

4.1. NWW

4.1.1.23MCN09 MFR Spillbay 20 Closure

4.1.2.23MCN10 MFR Spillgate Dogging Mechanisms

4.1.3.23IHR09 MOC Unit 3 Exciter testing. There are two separate testing times to avoid interfering with each other. van Dyke asked if both tests are completed elsewhere in the system. Bettin clarified that the Project did the exciter work and the contractor did the other work. The exciter has to be tested first because the exciter has to be working to run the unit. The testing has to be done in sequence and not concurrently. Van Dyke asked if the testing could occur immediately after the other. Peery said the timing resulted in a bit of a delay for the exciter. Van Dyke said that the example is specific to this event and wants to know if the testing has occurred concurrently ever. Peery did not know.

4.1.4.23IHR08 MFR Spillbay 3 temporarily out of service.

4.1.5.23IHR07 MOC Unit 3 Biological Testing. PNNL is raising the chinook for this test. The release pipes need to be installed and fish will be released in late September/early October. Another outage will be needed to remove the release pipes. Bettin asked if the pipes will be stored for future tests. Peery said yes, these are pipes from previous testing.

4.2. NWP

4.2.1.23NWP01 MFR temp reporting

4.2.2.23BON024 MOC Old Navlock Dredge Placement.

- 4.2.3.23BON038-47 and 49-76 MFRs – mort memos
- 4.2.4.23BON048 MFR Temp Monitoring System Failure.
- 4.2.5.23BON077 MOC Spillway Rock Hydro survey
- 4.2.6.23TDA04-10 MFRs – mort memos
- 4.2.7.23TDA11 MOC TDA-E diffuser repair
- 4.2.8.23JDA26 MFR Pelican foraging at SFL entrances
- 4.2.9.23JDA27-29, 31 MFRs mort memos
- 4.2.10.23JDA30 MFR STS Crane OOS. Crane is back in service and camera crane should be back in service by the end of the month.

5. Fish Passage Plan

- 5.1. The Final 2023 FPP went into effect on March 1 and is posted at:
pweb.crohms.org/tmt/documents/fpp/2023/
- 5.2. Pending Change Forms: no new or pending change forms.
- 5.3. Invasive species removal language. No change form yet, but includes the removal of invasive species during dewatering activities.

6. Task Group Updates.

- 6.1. Schedule falconry discussion (Peery/Morrill). This group will look at what was learned through the use of falconry this year and last year and how it might be beneficial to MCN in 2024. Meeting will be scheduled after TDA provides an update on their falconry results.
- 6.2. MCN TSW operation in the summer (Peery). Look at biological and model data to determine an appropriate operation of the TSWs in the summer. Waiting on data before scheduling a meeting.