

MEMORANDUM FOR THE RECORD

Subject: DRAFT minutes for the 14 October 2021 FPOM meeting. The meeting was held via WebEx. In attendance:

Last	First	Agency	Email
Baus	Doug	NWD RCC	Douglas.m.Baus@usace.army.mil
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*Called in for the Avian Updates only.

1. Final decision or recommendations made at this meeting.

- 1.1. Approve August Meeting Minutes – Morrill had edits to the minutes. McClain will send out for approval after the edits are made.
- 1.2. FPP Change Forms Approved
 - 1.2.1. 21IHR006, 21LMN006, 21LGS006 – SW spill rates vs forebay (requested at Sep FPOM).
 - 1.2.2. 21MCN006 – Unit 5 Range w/ Locked Blades
 - 1.2.3. 21IHR007 – Unit 2 Final Operating Range.
- 1.3. **Coordination/Notification forms (need concurrence/discussion)**
 - 1.3.1. 21 TDA 09 MOC Fish Unit Brush Repair – concurrence.
 - 1.3.2. 21 TDA 10 MOC Unit 8 outage –Randall will coordinate operation of Unit 9 with the project. Concurrence.

2. Action Items

2.1. NWW

- 2.1.1. **[October 21] JFF Early Starts.** FPOM requested Peery put together a list of locations and dates for early start so they can make recommendations. Peery will also add a table of previous early starts.
- 2.1.2. **[October 21] 21 LGS 13 MOC Guidewall Anchor Cables Replacement.** ACTION ITEM: Peery will check with project to determine how many units will be out and report back to Bettin.

2.2. NWP

- 2.2.1. **[July 21] Ringold avian counts.** ACTION: Morrill will report back on the progress of the status review. Waiting to get comments back and present to the WA commission.
- 2.2.2. **[October 21] ACTION:** Fielding will check about training locally for elevator maintenance.
- 2.2.3. **[October 21] Columbia Basin Avian ACTION:** Trachtenbarg will provide an Inland Avian Management Plan update.
- 2.2.4. **[October 21] Avian Lethal Removal ACTION:** McClain will request Schmidt provide and update of NEPA progress. *McClain emailed Schmidt on 10/20/21 to alert him of the update request. It has been added to the agenda.*

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

- 2.3.1. **[August 21] John Day north elevator OOS.** ACTION: Fielding will push again internally to get an elevator repair bid.
- 2.3.2. **[July 21] LGS trash shear boom.** ACTION: St. John will send the different concepts to FPOM when he gets them. However remaining coordination will take place in NWW FFDRWG. (LGS working a plan for temporary debris relief, hopefully before winter maintenance).

3. Updates

3.1. NWW Updates

- 3.2. Ice Harbor VFD noise interfering with PIT antennas. Morrill asked about PIT antenna interference. The project thinks it might be the nav lock motors and are investigating.
- 3.3. JFF Early Start

- 3.3.1.** NWW – Peery asked FPOM where they would like to see JFF early start. He suggest McNary as one location. ICE and LGR have too much maintenance to start 1 March. Thompson (NOAA) asked if we have cycled through the Snake River projects yet. St. John responded most projects have already gone through early start, some locations twice. Washington suggested Little Goose. Bettin asked what we are trying to learn and when then end point is. We are trying to determine is fish are starting to migrate earlier due to changing temperatures and river conditions. It may be possible to start one week early at all projects, however in previous FPOM discussions folks wanted more data. There are about three things to watch for: USFWS is interested in Bull Trout, tribes are interested in lamprey out migrations and passing kelts or collecting them for reconditioning to help with steelhead returns. Peery emphasized the purpose of the JFF's are to pass listed species, we'll have to see if it is justified for other species. McNary and Little Goose are two potential locations, don't need to make a decision today. Swank asked what the deadline is? Next month, but the sooner the better. **ACTION ITEM:** FPOM requested Peery put together a list of locations and dates for early start. Peery will also add a list of previous early starts.
- 3.3.2.** Lower Granite spillway PIT service barge contract – Last update the Corps was going to purchase the barge and assemble or hire a contractor to do the work. PSMFC was hoping to have it available this winter to service the barge. **ACTION ITEM:** Peery and St. John will check with the project for an update.
- UPDATE via email to Morrill et al from St. John during the meeting: USACE purchased materials that NOAA Pasco shop would assemble for a boat mounted access platform to service the RSW PIT. This would be mounted to a NOAA research boat. Unfortunately, work has not been completed as NOAA is still operating with Covid restrictions. As of last week, Gordy Axle said NOAA couldn't return to work yet unless mission critical.*
- 3.3.3.** Upcoming maintenance/construction/research activities (previously coordinated MOC/MFRs).
- 3.3.3.1.** 21 IHR 05 MFR Unit trash rake problems (October 2021)
 - 3.3.3.2.** 21 IHR 12 MOC Unit Pulldown Testing (October 25TH)
 - 3.3.3.3.** 21 LGS 13 MOC Guidewall Anchor Cables Replacement
 - 3.3.3.4.** 21 LGS 14 MOC Commissioning of T2-C Transformer LH. Complications arose after about three days of work. Hoping to re-start in November. If that is the case an updated MOC will be sent out.
 - 3.3.3.5.** 21 LWG 08 MOC Trash Rake Crane Replacement (May 2022) – Updated last month work occurring in May.
- 3.3.4.** LWG Adult Trap Water Supply – No update. Lorz asked for more details. Specifically, we are looking into getting water from the JFF, it is about 1 or 2°F cooler so it may be able to keep trap cooler when getting near warm water shutdown. However, it would create a differential between the trap and the ladder diffuser water. Conder was not ready to make a recommendation after learning about the ladder/trap temp difference. Lorz asked about progress on the re-design, has it gone to FFDRWG? A project manager has been assigned. Looking to go from a swing gate to a lift gate design. Also looking at a modification for some type of shad deterrent. However, shad deterrent lacks funding.
- 3.3.5.** MCN spillway crane repairs. Spill patterns for underrated cranes and TSW removal (21 MCN06 Modified spill pattern for TSW removal). Crane 6 is in service but needs some repairs. Crane 7 is OOS as they replace the gearbox. Then the actuators need to be repaired.
- 3.3.6.** Invasive species discussion. – A Task Group has been put together. We will wait for their update later in the agenda.

3.3.7. Little Goose Roof Repair – Betting asked for update and timeline for the decision process. Updated MOC was updated in January 2021. MOC will be added to FPOM agenda under: Upcoming maintenance/construction/research activities.

3.4. NWP Updates

3.4.1. Upcoming maintenance/construction/research activities (previously coordinated MOC/MFRs).

3.4.1.1. 21BON001 MOC Navigation Lock 1 (old navlock) Bridge Replacement scheduled for CY 2023.

3.4.1.2. 21BON010 MOC ITS Closure for Gate Inspection (11 OCT 2021) – Work has started, bulkheads are in, it is dewatered, hoping to get engineers in next week. Still have a small dam to build to divert water.

3.4.1.3. 19TDA04 MOC Crane rail Replacement winter (on going work). Lorz asked about the estimated completion date. East end 19, 20, 21, 22 has been complete. Now working west end Units 1 to 4. About 70% complete.

3.4.1.4. 20TDA10 MOC PUD Smolt Bypass Extended Outage. Work is on going. Cleared the site, screen has been built, switch gate is next.

3.4.1.5. 18JDA02 MOC Trash rack replacement. Scheduled for April 2022.

3.4.1.6. 20JDA04 MOC STS crane replacement. Contractor is creating drawings. When a schedule is available Fielding will share with FPOM.

3.4.2. BON Cascade Island PIT tag antenna completion. Corps portion of the work is done PSMFC expects to have antenna on-line by mid-February of 2022. This agenda item can be removed.

3.4.3. BON Aqui-S long term solution. Recently talked with EPA, not much had moved forward. Despite request for guidance two years ago. Another meeting is set in a few weeks. Lorz offered sup

3.4.4. TDA AWS debris management. (Rerecich FC, Medhi Rashani TL, Kovalchuck temp PM). Lorz asked about the Fish Unit rehab has also been delayed. Fish Unit rehab has been delayed at least a couple years.

3.4.5. TDA trunnion pin. Via email from Michael S Colesar, on 1/28/2021 “Gate 9 trunnion would be part of a larger project to completely rehab Gates 1-9. SAP shows Start in 2031, Construction 2034”

3.4.6. JDA north pump #4.

3.4.7. JDA spill bay 10. In manual operation, have not figured out remote operations from the control room, likely manual most of spill season. The entire gate system needs to be rebuilt for remote operation. Not currently in the budget.

3.4.8. JDA N elevator #4 – Remains out, there is a contract in place for elevator maintenance. Hoping to have contractor investigate problems. Morrill asked about his previous request to reach out Corps wide to see if there is some expertise in another Corps District. Fielding did reach out to NWD but did not find more expertise. Van Dyke asked if it might be possible to train up someone locally inside the Corps to perform elevator maintenance?

ACTION ITEM: Fielding will check about training locally for elevator maintenance.

3.5. NWS (Seattle) –

3.5.1. Upcoming maintenance/construction/research activities (previously coordinated MOC/MFRs).

3.5.2. Albeni Falls Dam

3.5.3. Chief Joseph Dam

3.5.4. Libby Dam

3.6. Research/FFDRWG updates.

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

3.6.1.NWP FFDRWG. Met October 2nd.

3.6.2.NWW FFDRWG. Next meeting is October 20th

3.7. RCC update

Project	Previous Day (10/13) Average Outflow (kcfs)	5 Day (10/18) Forecasted Inflow (kcfs)	10 Day (10/23) Forecasted Inflow (kcfs)	Forecasted Inflow Low/High (kcfs)
LWG	15	15	15	15 (10/23) / 15 (10/14)
MCN	89	80	81	79 (10/21) / 96 (10/14)
BON	97	87	87	86 (10/21) / 106 (10/14)

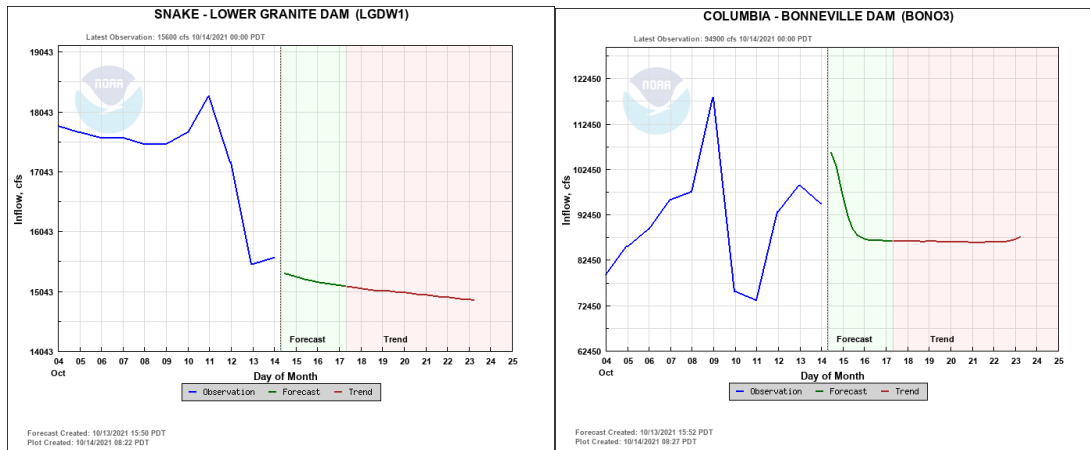


Table 1. NOAA Northwest River Forecast Center inflow forecast.

Bettin asked about Snake River flows and what % of typical we are at. He’s concerned about maintaining Chum spawning flows below Bonneville. Outflows from the Willamette are also low. Peery – 2nd year of La Nina going into the winter. Typically means a wetter winter, the second year is usually stronger than the first.

3.8. BPA update. John Day has been active. Wrapping up line 4 replacement, unfortunately when re-stringing line 4 sagged a bit and took out some hand rails and about six avian lines. Line 4 done by the 17th and Line 1 going out on the 19th. Van Dyke asked if there is insurance to cover these type of damages? Bettin was uncertain, but the repairs will be going forward. A contractor has been hired to complete repairs to the roof and replace avian lines. Helicopter is on site and working today. Line replacement is still on schedule. There is no need to change Unit Priority list

3.9. Fish Count Program update (Peery, Wertheimer). October, still doing live daytime counts. Night counts on-going at Bonneville. Morrill asked about corrections to Coho counts, video review is on-going, updates will be made at the end of each month.

3.10. Pinniped update

3.10.1. Bonneville Dam – Still above 20 animals so predation monitoring is on-going. 2021 data is being processed. Animal removals are on-going, however they are becoming more difficult to capture for removal. October 4-7th removed 3 SSLs, about 15 animals this season. Work will end November 19th.

- 3.10.2.** Willamette Falls – Van Dyke will reach out and share the update via email 10/14/21:
No pinnipeds have been sighted by ODFW staff in the Willamette River this fall.
Fall Steller sea lion management up at Bonneville has permanently removed 13 Steller sea lions. Removals are scheduled to continue at Bonneville through November 18th.
At last count 23 Steller sea lions were observed in the area of Bonneville Dam.

3.11. Lamprey update

- 3.11.1.** BON – LPSs are still in operation. Only five fish have passed the LPSs this month. FFU will have passage estimate out by mid-January.
3.11.2. TDA – No updated
3.11.3. JDA – PDTs are on-going. Will have updates in the next couple of months.
3.11.4. NWW – MCN 1,368 (95% of 10 year). A couple of lamprey passage improvement projects working through FFDRWG.
3.11.5. Lamprey Accords Work Group

3.12. Avian updates (10:30)

- 3.12.1.** NWW
3.12.2. JDA – Upwards of 800 gull resting in the forebay. A few more DCCO on the powerhouse towers and a few DCCO resting on the island below the dam.
3.12.3. TDA – Gulls loafing on rocks in the tailrace. A few Great Blue Herron and DCCO foraging.
3.12.4. BON
3.12.5. Estuary– FFU is demobilizing. Pulling laser off of Rice Island, it was effective and plan to install earlier next year. ESI – Tern and DCCO monitoring is done for the season. No chicks of either species were fledged from ESI. PIT tag recovery is complete and data processing is on-going and will be uploaded into PITAGIS. Krasnow (NOAA) – should be thinking about expanding gull take to ESI so we can be sure we have the appropriately sized Caspian Tern colony. Results of OSU population modeling suggest the western CATE population will be ok as long as the ESI colony persists. Starting the conversation about reducing the number of gulls to protect Terns. McDowell (USFWS) shared that gull management was focused on individual gulls feeding on Tern chicks and eggs. Lorz felt the two permits should be kept separate – two different management objectives: protecting salmon at the dams and protecting terns in the estuary. Lorz asked about who would be working up PIT tag data? Wertheimer did not know about a project to estimate tern predation at ESI. McDowell shared James Lawon (ODFW) is going to process Civil Air Patrol photos for population estimates, but not for ESI. The Corps FFU will be providing population estimates for ESI.
3.12.6. Columbia Basin Avian – Lorz asked for an update of the Inland Avian Management Plan. Maybe from Trachtenberg? **ACTION ITEM:** Trachtenberg will provide an Inland Avian Management Plan update
3.12.7. Avian Lethal Removal - Lorz requested update on the effort the acquire lethal removal as a tool to protect juvenile salmon at the dams. Fielding asked that Schmidt provide update next FPOM. **ACTION ITEM:** McClain will request Schmidt provide an update of NEPA progress.

4. NWP/NWW Critical Fish Passage O&M needs.

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

- 5.1. 21 MCN 09 MFR Main Unit 5 Derated with Fixed Blade Angle. Morrill asked if this will reduce output and generations? It should still be able to run within 1% range, but with a much narrower band. When they are fixed they tend to drift slightly outside the 1% range, thus they are exempt from the 1% range. They can only control is using the wicket gates open/closed. Van Dyke if they lock the blades at the lower of the 1% range is it still a 5 mega watt unit? Every unit has a 1% curve, when the blades are fixed the range is reduced.
- 5.2. 21 IHR 14 MFR Jack Chinook mortality found near juvenile fish channel
- 5.3. 21 LGS 13 MOC Guidewall Anchor Cables Replacement – Bettin asked how many units will need to be locked out. **ACTION ITEM:** Peery will check with project and report back to Bettin.
- 5.4. 21 LGS 14 MOC Commissioning of T2-C Transformer LH. Work was cut short
- 5.5. 21 BON 087 to 094 AFF Fish mortalities
- 5.6. 21 BON 089 MFR Failure to Open Attraction Flow Gates in Spillway – During a coordinated outage, the Operator failed to open attraction flow for the first two hours of the day.
- 5.7. 21 TDA 09 MOC Fish Unit Brush Repair
- 5.8. 21 TDA 10 MOC Unit 8 outage – Van Dyke asked if there would be the same problem with other units. Lorz suggest unit priority of 1, 18, and 7 or 9 so there is at least one unit next to the open sluiceway gate. Randall will coordinate operation of Unit 9 with the project.

6. **Fish Passage Plan:** The 2021 FPP went into effect March 1 and is available online at:

<http://pweb.crohms.org/tmt/documents/fpp/2021/>

6.1. **Pending Change Forms:**

- 6.1.1. 21IHR006, 21LMN006, 21LGS006 – SW spill rates vs forebay (requested at Sep FPOM). Van Dyke asked for similar updates for all Corps surface passage routes on the Columbia River like the BON Corner Collector. Wright check to see if those curves for Columbia River are available. Van Dyke asked how GDACS uses this information? Not certain if it is a curve or set intervals. GDACS time increment is about 5 minutes and the hourly reported is an average. Van Dyke was thankful for the work that Wright has been done. Bettin suggested we change on thinking on high crest vs. low crest to elevation (MSL). Peery suggested we think about the way forward. The conversation continued about the use of high crest terminology vs elevation and how to describe adjustable spillway weirs. Change forms were approved.

6.2. **New Change Forms:**

- 6.2.1. 21MCN006 – Unit 5 Range w/ Locked Blades. Full range 8-15 kcfs locked to 10.7 – 11.8 kcfs. Change form approved
- 6.2.2. 21IHR007 – Unit 2 Final Operating Range. Test results are back for new designed runner blades. That table has been updated in the FPP. Change form approved.

7. **Task Group Updates.**

- 7.1. Task Group Avian meeting (Cordie) – Will meet after FPOM on 9 September.
 - 7.1.1. <http://pweb.crohms.org/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20Avian%20Hazing/>
- 7.2. Task Group Condition Monitoring (Lorz & Sullivan)
 - 7.2.1. <http://pweb.crohms.org/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20Condition%20Monitoring/>
- 7.3. Task Group 15 Mile Steelhead Overshoots, TDA ITS operation dates. (Bellerud)
 - 7.3.1. <http://pweb.crohms.org/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20TDA%20ITS%20operations/> No updated, stay tuned.
- 7.4. Task Group Invasive piscivorous fish control opportunities (Thompson).
 - 7.4.1. Will meet following FPOM at 1300 hours for ODFW presentation to describe their stance on removing invasive fish.

Meeting ended at 11:28.