MEMORANDUM FOR THE RECORD

Subject: DRAFT minutes for the 9 September 2021 FPOM meeting. The meeting was held via WebEx. In attendance:

Last	First	Agency	Email	
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Wright	Lisa	NWD-RCC	Lisa.S.Wright@usace.army.mil	

^{*}Called in for the Avian Updates only.

1. Final decisions or recommendations made at this meeting.

- **1.1.** Approve August Meeting Minutes
 - **1.1.1.**Morrill asked about the JD SMF condition monitoring MOC it is being withdrawn.

2. Action Items

2.1. NWW

2.2. NWP

- **2.2.1.** [July 21] Ringold avian counts. ACTION: Morrill will report back on the progress of the status review. No Update
- 2.2.2.[July 21] O&M critical needs spreadsheet. ACTION: FPOM will send ranks to Mackey, who will compile for discussion at the September FPOM meeting. Received 2.2.3.
- **2.2.4.** [August 21] John Day north elevator OOS. ACTION: Fielding will push again internally to get an elevator repair bid.

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

2.3.1.[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.

3. Updates

3.1. NWW Updates

- **3.1.1.** Upcoming maintenance/construction/research activities (previously coordinated MOC/MFRs).
 - **3.1.1.1.** 21 MCN06 Modified spill pattern for TSW removal
 - **3.1.1.2.** 21 IHR05 MFR Unit trash rake problems To be repaired this winter (October 2021)
 - **3.1.1.3.** 21 IHR07 MOC Floating Guide Wall Maintenance Due September 6-17th changed to 13-17th. Josie asked for more detail. Requires dive work to replace anchor cables and must shut down AWS diffuser flows to protect divers. Ladder would go down to orifice flow for 3 or 4 days.
 - **3.1.1.4.** 21 IHR11 MOC LBS Early Shutdown for Maintenance Includes trash rake repair.
 - **3.1.1.5.** 21 IHR12 MOC Unit Pulldown Testing No change starting 25th October
 - **3.1.1.6.** 21 LWG 08 Trash Rake Crane Re-scheduled from 4 April to 4 May 2022. Updated MOC sent out last week.
- **3.1.2.** LWG Adult Trap Water Supply No change. Get clarification add information on temperature effects of using different water supplies. Something to consider for the future.
- **3.1.3.** MCN spillway crane repairs Crane 6 is operational, starter motor need some repair. Crane 7 is operational but still needs a gear box repair in the future..
- **3.1.4.** Invasive species discussion. No updates

3.2. NWP Updates

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

- **3.2.1.1.** 21BON001 MOC Navigation Lock 1 (old navlock) Bridge Replacement scheduled for CY2023.
- **3.2.1.2.** 21BON010 MOC ITS Closure for Gate Inspection On schedule.
- 3.2.1.3. 21BON075 MOC Spillway Hydro Survey Pre-Rock Removal After Action Review: Work complete, had to remove several of the corner collector avian lines, touching water's surface (~10' MSL) had to be removed. The work actually started 30 minutes prior to the 0900. Data turn around make take longer due to Moorings fire Hydro Survey group's office burned down.
- **3.2.1.4.** 19TDA04 MOC Crane rail Replacement winter (20/21). Work ongoing per MOC. Old rail removed, installing new rail. Soon stating on Units 1-3, will adjust ITS gates as needed for surface passage.
- **3.2.1.5.** 20TDA10 MOC PUD Smolt Bypass Extended Outage. Work is progressing, ordering switch gate and screen. On schedule for early October outage.
- **3.2.1.6.** 18JDA02 MOC Trash rack replacement. Still scheduled for next April
- **3.2.1.7.** 20JDA04 MOC STS crane replacement. No updated schedule or anticipated work dates. Keep on agenda.
- **3.2.1.8.** 21JDA10 MOC Spillway Gate Climbing Inspection Work was completed in the three days coordinated. Due to low flows no need for spilling from the inspected gates.
- 3.2.1.9.
- **3.2.2.** BON Cascade Island PIT tag antenna completion. Work has begun and is expected to be completed by the end of the month.
- **3.2.3.** BON Aqui-S long term solution. No update.
- **3.2.4.** TDA AWS debris management. (Rerecich FC, Medhi Rashani TL, Kovalchuck temp PM) PDT is funded until the end of the FY, no funding at this point for next FY.
- **3.2.5.** 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". Trunnion pin is sitting in crate waiting install.
- **3.2.6.** JDA north pump #4. Waiting on plan & schedule to get pump up and running.
- **3.2.7.** JDA spill bay 10. In manual operation, have not figured out remote operations from the control room, likely manual most of spill season. No update.
- **3.2.8.** JDA N elevator #4 remains OOS. Morrill asked if a contractor has been found. Fielding responded there are very few contractors that can work on a 50 year old elevator. Van Dyke asked if work could be performed in house by training some up? Feilding check internally. Morrill asked if there might be other in the Corps that could work on the elevator or maybe from the Colorado river system.

3.3. NWS (Seattle)

- **3.3.1.**Upcoming maintenance/construction/research activities (previously coordinated MOC/MFRs).
- **3.3.2.** Albeni Falls Dam Develop fish sorting passage plan, protocols for pathogen monitoring, working with Avista Corp which are working on a similar system at Cabinet Gorge Dam. Morrill suggested that working with the Fish Passage Center to take advantage of previously developed touch screen technology used to monitor smolt health. They will touch base off line.
- **3.3.3.** Chief Joseph Dam No update
- **3.3.4.** Libby Dam No update

3.4. Research/FFDRWG updates.

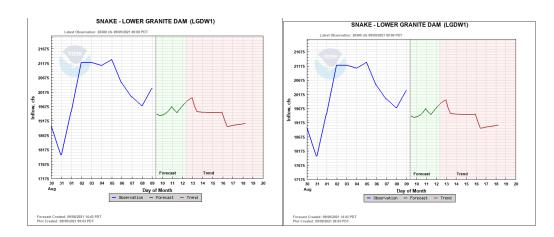
http://pweb.crohms.org/tmt/documents/FPOM/2010/FFDRWG/FFDRWG.html

- **3.4.1.NWP FFDRWG.** Met September 2nd, draft notes have been emailed, no comments received. Next FFDRWG October 2nd.
- **3.4.2.NWW FFDRWG.** Next meeting is October 20th. Mostly focused on lamprey projects that are part of the Fish Accords.

3.5. RCC update

Table 1. NOAA Northwest River Forecast Center inflow forecast.

Project	Previous Day Average Outflow (kcfs)	5 Day (9/13) Forecasted Inflow (kcfs)	10 Day (9/18) Forecasted Inflow (kcfs)	Forecasted Inflow Low/High (kcfs)
LWG	21	20	19	19 (9/18) / 20 (9/12)
MCN	95	64	69	63 (9/13) / 84 (9/9)
BON	90	71	75	68 (9/13) / 92 (9/9)



- **3.6. BPA update.** Betting will update next week.
- **3.7. Fish Count Program update (Peery, Wertheimer).** Multiple species passing making counting complicated. Eble (IDFG) noticed a difference between IHR and LMO in Fall Chinook and Coho. Two counters have been miss-identifying Fall Chinook as Coho. Counts will be re-done by video, change will be about an 80% swing. Ice Harbor forebay 70F, tailwater 69F may be causing delays. Van Dyke asked if QA checks were being performed? Peery responded, yes they are. Some checks are automatically flagged such as a pink salmon at Granite. Large differentials between the dams is done by Peery. There is a time lag in the QA / QC checks as they depend on collecting video. This check was performed earlier when Eble noticed the problem. Van Dyke asked if this QA / QC was also done in the lower Columbia? Peery is COR for all 8 dams, Wertheimer is co-COR for the Lower Columbia Dams.

3.8. Pinniped update

- **3.8.1.**Bonneville Dam. Point count this morning was 30 Steller Sea Lions, predation monitoring began when above 20 animals. SSL number generally increasing. Removals are scheduled to begin in the next couple of weeks. Van Dyke ODFW plans to start next week.
- **3.8.2.** Willamette Falls Van Dyke, nothing out of the ordinary to report.

3.9. Lamprey update

3.9.1. BON – CRITFC complete trapping, the LFS, CI ramp trap, and AFF ramp trap taken OSS this morning 9/9/21.

- **3.9.2.** TDA Trapping winding down this week. Participating in the LPS design PDT (east ladder).
- **3.9.3.** JDA Today is CRITFC's last trapping day. Working with NWP PDT on improvements.
- **3.9.4.** NWW No trapping. Fish counts as of 9/8/21 MCN daytime 1,283 (10 year 1,284 for 9/8). Counts at Lower Granite are only 32% of the 10 year average. Several Lamprey Accords projects are in the works including rounded weir crest at McNary dam.
- **3.9.5.** Lamprey Accords Work Group Next meeting September 22nd. Morrill asked about Lampman's email suggesting warm water handling of lamprey. Should we discuss it here or in the Lamprey Accords work group? Macdonald would like to get a recommendation from the Lamprey Accords WG first, and then bring a recommendation back to FPOM.

3.10. Avian updates (10:30)

- **3.10.1.** NWW Gulls mostly roosting, fewer double crested cormorants (DCCO) and American White Pelicans (AWEP). Morrill asked about feeding near the outfall pipe? Mostly just roosting on the pipe, very few sub yearling Chinook seen in the sample the last couple of weeks.
- **3.10.2.** JDA Increase of gulls but non-foraging in the forebay. AWEPS dropped to 25 in the tailrace. DCCO dropped and mostly roosting in the towers up on the dam.
- **3.10.3.** TDA Gulls from 25 to 250 majority non-foraging, no spill, just hanging out on the rocks. DCCO's about 50 on project, up to six hitting the east exit pretty hard. Pictures of them inside the fishway feeding on good size salmonids (jack sized). Will address during TG Avian to follow.
- **3.10.4.** BON Bird number peak at the same time as the juvenile shad outmigration. A mix of gulls and DCCOs.
- 3.10.5. Estuary Fish Field Unit is demobilizing passive dissuasion arrays and PIT recovery on the 1 acre tern colony on ESI. Nesting has been done for a while. Lawon reports (ODFW) looked at DCCO impacts 2003-14 nesting on ESI at the hatchery level. Predation from Big Creek hatchery's Tule Chinook around 30% and a maximum of 60%. Buoy 10 fishing was shut down do to impacts to Tule Chinook. Krasnow added that Tule stock are also important for Summer Resident killer whales. Now DCCO are nesting under the Astoria Megler bridge and could be having multiple clutches of young, further up the river, could have greater impact on salmonids. Lawonn Caspian terns are a species of concern in Oregon, only three colonies successfully breeding. Eastern Oregon is in a draught that might impact that colony. East Sand Island is an important colony to help terns persist, while protecting fish. Morrill said WDFW is in a similar situation (drought in eastern WA). McDowell reports that the flyway population estimate is that tern numbers are down. Wertheimer the Corps is closely following the Avian Predator Management Plan and also concerned about terns.
- 3.10.6. Columbia Basin Avian No one from this group was on the call. McDowell mentioned Tom Lorz is getting together a group to look at this system wide. Lawonn (ODFW) commented when both the DCCO and tern AMT's disbanded last year he thought it was going to move to FPOM. Do we need to set up a new task force? The FPOM Task Group is focused on where the Corps has authority, in this case The Dalles and John Day Dam. Van Dyke asked about how the dredging component integrated in? Krasnow responded there is a separate BiOp with NOAA and USFWS. Terns like to nest on new placement of dredge material and the Corps dissuades them from that. Conversation continued about the need for a basin wide group to track avian predators. Lorz has volunteered to lead the group but it hasn't started yet. Wertheimer clarified that the NWP's Fish Field Unit is meeting Corps requirements in the estuary. Swank asked if there will be a summary of the Blalock Island operations (holding JD pool higher to prevent nesting). Peery said Trachtenbarg will be reporting.

3.10.7. American White Pelican Status Review (Morrill) – Wertheimer asked about the WA status review. Report is still on Derrick's supervisor's desk. He will check on progress.

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

Condor is not yet in the meeting, tabling this for now.

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

- **5.1.** 21BON076 MFR Downstream Migrant Channel ERG Trip
- **5.2.** 21BON077 MFR PH2 PLC Failure and Entrance Gate Closure
- **5.3.** 21BON078 MFR Pacific Lamprey AFF Holding Tank Mortality
- **5.4.** 21BON079 MOC Spillway Gate Inspection Still going forward as coordinated. No FPOM comments.
- **5.5.** 21BON080-084 Fish mortality MFRs Please provide questions or comments to McClain.
- **5.6.** 21TDA09 MOC Fish Unit Brush Repair Cordie walked through this new MOC, brushes are wearing much faster than expected. Will not last until the end of fish passage season. Comments due 23 September. Bellerud asked if they are taking extended measures to complete work as soon as possible like overtime or working weekends. Cordie responded that it shouldn't be necessary, only 5 hours for each brush replacement. Van Dyke asked if they can't complete the work will they quit for the day or continue working? They will continue working. Total flow reduction time will be about 30 minutes each day as they switch to the AWS and back (15 min + 15 min). WDFW support delaying start time until 0900 to allow fish holding overnight below the dam to enter the ladder and move up. Swank asked what is causing the excessive wear? Engineers have been chasing it for a couple of years but have not yet figured it out. Is the repair just replacing parts? Do they have spare parts on hand? Yes, spare brushes on hand for replacement. Bellerud recommends 0800 start time, seconded by Morrill (WDFW). FPOM recommends planning for a 0800 start time.
- **5.7.** 21JDA08 MOC SMF Condition Monitoring withdrawn will re-write and re-send.
- **5.8.** 21IHR13 MOC Installation of swallow nesting deterrent at south fish ladder Request for later start (time or date) to minimize impacts to adult migrating fish. Peery will look into October start date to avoid September fish passage season. *UPDATE*: 9/15/21 Project will push start date back to October. Updated MOC emailed by Peery.
- **5.9.** 21LMN04 MOC Unit 2 Digital Governor Installation and Testing No comments received yet. Thompson (NOAA) based on past data where units were running out of priority at this time of year, there was no fish delay, NOAA concurs with the MOC.
- **5.10.** 21LGS11 MFR Unknown Opening of ASW Due to Equipment Malfunction
- **5.11.** 21LGS12 MOC Reconnection of Bus for T2 Work is occurring now. Moved from 0530, NOAA asked for 1000 hours, settled for 0900 start. There was a drop in Chinook counts from 1200 to 800. Hourly data showed that drop happened after the 0900 start time. Counts increased latter in the day. Work will take 3 or 4 days due to latter start and should finish Friday or Saturday.
- **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:**
 - **6.2.** New Change Forms:
 - **6.2.1.** 21LWG006 RSW Criteria and Spill Rate (Wright) WDFW supports, Van Dyke asked about flow table and shape of RSW at MOP elevation. Shape does not change, just more water spills over as forebay increases. Not a linear relationship. Jay requested the addition of ½ foot intervals to the table as pool is not typically at the even one foot elevation. Van

- Dyke asked for similar update for other projects, Wright will add those. Morrill was also interested in the impact of forebay elevation and surface passage flows. Change form Approved with added information.
- **6.2.2.** 21AppA002 Add DWR Doble Schedule (Peery) Added DWR to Doble Testing schedule. Change form approved by FPOM.
- **6.2.3.** 21AppI001 DWR Maintenance (Peery, Hesse) Clarify how maintenance at DWR could impact flows for fish benefits. Operational plan is decided on by the DWR Board. Added links to the DWR Board. Added info about Doble testing's impact to fish flows. Specifies if other testing is needed it will be coordinated through FPOM. Change form approved by FPOM.
- **6.2.4.** 21AppL003 Add Fall Pinniped Hazing Dates (McClain) The change from California sea lions in the spring, to a mix of CSL's and Steller sea, to only SSLs has resulted in a change in behavior. SSLs are present in the spring and fall. Fall hazing has not been codified in the fish passage plan. Change form approved by FPOM.

7. Task Group Updates.

- **7.1.** Task Group Avian meeting (Cordie) Will meet after this FPOM (9 September) 1300 hours. After action review of how the season went at The Dalles Dam and John Day Dam.
 - **7.1.1.** http://pweb.crohms.org/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20 Avian%20Hazing/
- **7.2.** Task Group Condition Monitoring (Lorz & Sullivan) The group has not meet since last month. Sullivan will connect with Lorz when he returns. BPA's contracting group is continuing to work the issue. Conversations are continuing.
 - **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) Bellerud is no longer on the call.
 - **7.3.1.** http://pweb.crohms.org/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20T DA%20ITS%20operations/
- **7.4.** Task Group Invasive piscivorous fish control opportunities (Thompson).
 - **7.4.1.** First meeting attempted on 12 August.
 - **7.4.2.** Planning to meet after the October FPOM when Lorz and Van Dyke can be present.