

MEMORANDUM FOR THE RECORD

Subject: FINAL minutes for the 10 June 2021 FPOM meeting starting at 0900 hours and ended at 1207 hours.

The meeting was held via WebEx. In attendance:

Last	First	Agency	Email
Baus	Doug	NWD RCC	Douglas.m.Baus@usace.army.mil
Bellerud	Blane	NOAA	Blane.Bellerud@noaa.gov
Bettin	Scott	BPA	swbettin@bpa.gov
Conder	Trevor	NOAA	Trevor.Conder@noaa.gov
Cooper	Erin	Fish Passage Center	ecooper@fpc.org
Cordie	Robert	NWP TDA	Robert.P.Cordie@usace.army.mil
Cousins	Katherine	NWS	Katherine.L.Cousins@usace.army.mil
Derugin	Andrew	NWP-BON	Andrew.G.Derugin@usace.army.mil
Ebel	Jonathan	IDFG	Jonathan.Ebel@idfg.idaho.gov
Edwards	John	WDFW – Sea Lions	John.Edwards@dfw.wa.gov
Fielding	Scott	NWP JDA	Scott.D.Fielding@usace.army.mil
Karrie	Gibbons	NWP FFU	Karrie.M.Gibbons@usace.army.mil
Goetz	Fred	NWS	Frederick.A.Goetz@usace.army.mil
Graham	Jen	Warm Springs Tribes	Jennifer.Graham@ctwsbnr.org
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Laughery	Ryan	NWW-ECH	Ryan.O.Laughery@usace.army.mil
Lorz	Tom	CRITFC	lort@critfc.org
Macdonald	Jacob	NWP	Jacob.Macdonald@usace.army.mil
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McDowell	Michelle	USFWS	Michelle_McDowell@fws.gov
Morrill	Charlie	WDFW	Charles.Morrill@dfw.wa.gov
Peery	Chris	NWW	Christopher.A.Peery@usace.army.mil
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Shane	Scott	Public Power Council (PPC)	shane@sscottandassociates.com
Skiles	Tom	CRITFC	skit@critfc.org
St. John	Scott	NWW – LGS	Scott.j.st.john@usace.army.mil
Swank	David	USFWS	David_Swank@fws.gov
Tidwell	Kyle	NWP FFU	Kyle.S.Tidwell@usace.army.mil
Thompson	Josie	NOAA	Josie.Thompson@noaa.gov

Van Dyke*	Eric	ODFW	erick.s.vandyke@state.or.us
Wendler	Jeanette	NWP BON	Jeanette.C.Wendler@usace.army.mil
Wright	Lisa	NWD-RCC	Lisa.S.Wright@usace.army.mil

*Van Dyke had to drop off call just before 1000 hours.

1. Final decisions or recommendations made at this meeting.

1.1. May meeting minutes were approved.

2. Action Items

2.1. NWW

2.1.1. [June 21] Ice Harbor south ladder temps were odd, for example (-1768 F). ACTION: Peery will check into odd values reported by Ice harbor south ladder thermometer. *Emailed update 6/14/2021: The Little Goose fishway exit temperature probe was repaired Friday, June 11. Corps personnel are working to repair the Ice Harbor fishway exit probe.*

2.1.2.[March 21] 21 LGS 01 MOC Unit Priority Change to Facilitate Debris Removal. ACTION: Peery or St. John will report back to FPOM next month about path to re-design of debris boom. Design work continues to close gap allowing debris in from the spillway during the winter. As debris handling is a BiOp requirement NOAA want to be involved early in the design process. Peery plans to work with FFDRWG for regional design input.

2.1.3.[May 21] Ice Harbor trash rake repair. ACTION: Peery will report back on time-line for fixing rake. Raked three units and found significant debris build up on two of them NOAA asked if another ROV inspection could be done. Issue is the unit has to be taken OOS during ROV inspections but it is doable if there is a need. NOAA asked if rake will be fixed this winter, it is on the schedule to be repaired. Lorz asked if there was any other passage condition they noticed with slight increase of descaling? Draw down issues of others. They inspected the VBSs at that time, back flushing orifices 3x a day, and watching gatewells closely.

2.1.4.[June 21] Peery will check into odd values reported by Ice harbor south ladder thermometer. *The Little Goose fishway exit temperature probe was repaired Friday, June 11. Corps personnel are working to repair the Ice Harbor fishway exit probe*

2.1.5. [June 21] 21 LGS 06 MOC Closure of Spillbay 8. ACTION: Peery will check back with project about specific dates and get back to FPOM.

2.1.6. [June 21] 21 MCN 05 MFR OR AWS Fish Pumps OOS ACTION: Peery will ask for more detail and develop a contingency plan.

2.2. NWP

2.2.1. [February 21] CI PIT tag antennae electrical work. ACTION: Project Fisheries will let Warf know when that work will be completed so PITAGIS can be on-site to assist as needed. Waiting on funding to finish this job. *Update: Derugin it is moving up the UFR list. He will report back next month. Moving its way up the UFR list.*

2.2.2. [August 20] TDA Turbine Dewater Sturgeon SOP (6' and greater) - ACTION: We will have a more detailed discussion once SOPs from the Project Bios for removal and/or leave fish in place are developed. *Update: Cordie provided PowerPoint showing cross section of turbine relative to tailwater levels and posted it to the FPOM website. Van Dyke will check in with new sturgeon lead for ODFW.*

2.2.3. [2019] TDA East Exit boundary. This area is in Washington's waters and out of OSP's authority. New boundary has been put in place and fishermen are respecting it. Morrill reports it will be part of the permanent regulation next year.

2.2.4. [June 21] Invasive piscivorous fish control opportunities. ACTION: McClain will help Thompson set up task group. *Update 6/24 via e-mail from Thompson: Can you let everyone*

at the July FPOM meeting know that I'd be interested in having a task group meeting after the August FPOM meeting and/or prior to that (though it'd have to be after I return to regular work on July 20th).

2.2.5. [June 21] Columbia Basin Avian group - McDowell asked about next avian meeting.

ACTION: McClain will add agenda item under Avian Updates to discuss new group with wider scope. Update BOR contact from McDowell email: Mitch Mumma, mmumma@usbr.gov, Scott Hoefer, shoefer@usbr.gov, Sarah Fesenmyer, current email: sarah.fesenmyer@noaa.gov moving to BOR 6 July.

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

2.3.1. [March 21] McNary steelhead overshoot study – waiting on results. **ACTION:** Peery will share. Update: Will release to SRWG group.

3. Updates

3.1. NWW - Upcoming maintenance/construction/research activities.

3.1.1. McNary modified the spillway operation during TSW change procedure. Cranes are under rated for lifting gates out of flow. Normal close 18, 19, 20, and 21 but had to close 14 through 21 to recover stored gates focusing spill in fewer bays. However due to lower flow TDG did not exceed gas cap. Project will change where they store gates so fewer bay will be effected. An FPP change form is forthcoming. Cooper asked about how change will impact TDG/spill. Little impact, about 10 hours and spill was not reduced. Van Dyke asked about how TDG changed with operation, did not exceed 125. Van Dyke wants to have a broader conversation about TDG and how operations decisions are being made. Lorz also check and TDG did not exceed 125. Van Dyke is concerned about maximizing fish benefits. Eble noted we were just under 125 on the 2 hour interval, would also like to have a broader conversation in the fall. Could be a separate call or add it to the FPOM agenda.

3.1.2. McNary spillway crane repairs. Both cranes #6 and #7 are back in operation. Morrill asked about plans going forward. They are the top of the McNary critical infrastructure list.

3.1.3. Little Goose transformer replacement. Plan is to perform replacement 26 July to late 2 September for installation. Testing would follow, hoping to complete by end of FY.

3.1.4. LGS temperatures – Forebay string was not transmitting, fixing problem now. Getting close to 64F trigger for cooling pump is operating. Forebay temp strings are funded, fishway temp monitoring might be O&M funded. Looking at funding to maintain fishway thermometers. Conder stressed this is an important place to monitor water temperatures here. It is a BiOp requirement in the FPP and needs to be fully funded. It is important, sockeye are arriving and temp string was out for two weeks when we were watching temps to see if trigger was reached. Eble commented Ice Harbor south ladder temps were odd, for example (-1768 F). Asked about why temp intervals were not all recorded at the same time (i.e. top of the hour). Griffith said timing of sample is determined by when the logger was started. Van Dyke asked why LGS forebay string was not yet reporting on the web. Have to scroll down to get to current data. **ACTION:** Peery will check into odd values reported by Ice harbor south ladder thermometer. The Little Goose fishway exit temperature probe was repaired Friday, June 11. Corps personnel are working to repair the Ice Harbor fishway exit probe.

3.1.5. Ice Harbor trash rake replacement/repair (see above)

3.1.6. Invasive species discussion.

3.1.6.1. Juvenile shad removal from samples (Peery) – No update.

3.2. NWP - Upcoming maintenance/construction/research activities.

- 3.2.1.** Invasive piscivorous fish control opportunities (Cordie) – ODFW boat electrofishers were stunning large number of bass during Northern Pike Minnow indexing/tagging. Currently do not collect them. Van Dyke mentioned this is part of a long discussion and efforts remove as many species as possible during any action. Oregon has not supported this in the past. Lorz asked if Oregon would not support removing bycatch elsewhere? Van Dyke responded there is not update. Mackey asked if a Task Group is needed to form an FPOM recommendation on disposition of invasive species caught at the dams. Van Dyke stated there are several regional conversations on-going outside of FPOM. Josie Thompson Chair (permits pikeminnow program) and Morrill would like to participate. States and tribes will be invited as well. **ACTION: McClain will help Thompson set up task group.** *Update 6/24 via e-mail from Thompson: Can you let everyone at the July FPOM meeting know that I'd be interested in having a task group meeting after the August FPOM meeting and/or prior to that (though it'd have to be after I return to regular work on July 20th).*
- 3.2.2.** 21 BON 001 MOC Navigation Lock 1 (old navlock) Bridge Replacement (Trachtenbarg) scheduled for CY2023.
- 3.2.3.** 19TDA04 MOC Crane rail Replacement winter (20/21) – Potential for conflicting schedules. More to come.
- 3.2.4.** 20TDA10 MOC PUD Smolt Bypass Extended Outage – Looking for a fabricator, looking into PUD buying components and have contractor install. Some concerns within PUD which might delay until next year.
- 3.2.5.** 18JDA02 MOC Trash rack replacement. Waiting for construction schedule.
- 3.2.6.** 20JDA04 MOC STS crane replacement. Waiting for construction schedule.
- 3.2.7.** BON Cascade Island PIT tag antenna completion. Moving up UFR list.
- 3.2.8.** BON Aquia-S update. *Update: Letter sent from BON Project to researchers detailing ground disposal for 2021. New environment officer inspected release locations this week and everything looked good. Plant life looked fine, some dirt move by force of water.*
- 3.2.9.** BON ITS Gate – MOC to coordinate pre-construction visit and outage is forthcoming.
- 3.2.10.** BON PH2 gantry crane replacement. No update, can be removed until there is a change in status.
- 3.2.11.** TDA AWS debris management. (Rerecich FC, Medhi Rashani TL, Kovalchuck temp PM) . PDT continues to work toward a possible solution for AWS debris - current rack was not designed to be raked, expected infrequent use would not require it. Cannot operate both fish units on the same line, they will overheat. Could lead to fish unit outage which would require use of AWS and may become clogged with milfoil.
- 3.2.12.** 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” – No update.
- 3.2.13.** JDA north pumps. Meeting criteria, #4 is out, and may need to be rebuilt.
- 3.2.14.** 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.
- 3.2.15.** JDA elevator #4 (north ladder) – Out of service. Removed some conduit that was tripping limit switch.
- 3.2.16.** JDA tailrace egress conditions. When spilling over 50% condition were deteriorating fast. Video played showing a huge recirculation at 70%. The physical model had a similar result, when over 50% the re-circulation sets up. Bellerud commented that recirculation is capturing the output of the juvenile outfall. Lorz suggested we already know these conditions will set up. Surface flow is one thing, how is it effecting survival? Corps should elevate and get money to fund a survival study. Bellerud asked, if most juveniles are passing via spill, are they getting capture by the recirculation? This could have implication

for other dams as well. Condor commented, the spill is keeping juveniles away from the turbines which have poor survival, spillway survival is much higher.

3.3. NWS (Seattle) - Upcoming maintenance/construction/research activities.

3.3.1. Albeni Falls Dam – Working with federal and tribal partners on designing fish facility.

3.3.2. Chief Joseph Dam – Several large cap. Project are proposed such as, 480 Volt exciter and generator re-wind projects, replacing sump pumps, not expected to have any impact to spillway. However, spill from Coulee and Canadian Dams can result in high forebay TDG. There are spillway deflectors, however there is a limit to deflectors ability to keep TDG low. Working to determine how to accomplish maintenance projects and keeping TDG down.

3.4. Fishways Critical Operations and Maintenance List (new item). Posted to the FPOM website.

3.5. Research/FFDRWG updates.

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

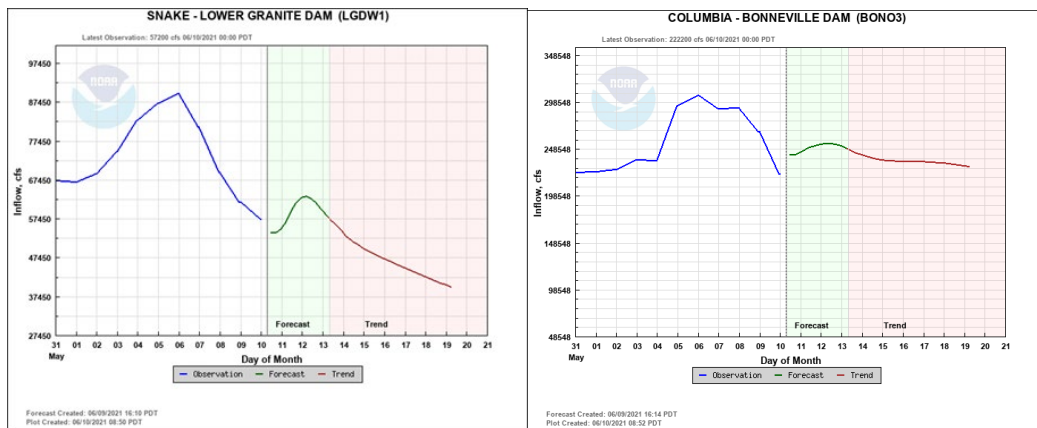
3.5.1.NWP FFDRWG. Last meeting was June 3rd. Draft notes sent out by Macdonald, comment received from Trevor. If there are more please send to Macdonald. Next FFDRWG will be at Bonneville Dam so they can visit the spillway.

3.5.2.NWW FFDRWG. Next meeting 31 July.

3.6. RCC update

Project	Previous Day Average Outflow (kafs)	5 Day Forecasted Inflow (kafs)	10 Day Forecasted Inflow (kafs)	Forecasted Inflow Low/High (kafs)
LWG	58	53	40	40 (6/19) / 63 (6/12)
MCN	237	228	219	219 (6/19) / 248 (6/11)
BON	225	241	230	230 (6/19) / 255 (6/12)

Table 1. NOAA Northwest River Forecast Center inflow forecast.



3.7. BPA update. Bettin sent out spreadsheet.

3.8. Fish Count Program update (Peery, Wertheimer). Night counting starting 15 June at The Dalles, JD, MCN and Granite. Night counting started 15 May at Bonneville Dam. Peery is dealing with differential between LoMo and LGS. The angle of view makes it difficult to determine adults from jacks so each individual makes a different call impacting the adult count totals. This is a long standing issue. Ebel asked about how different the counts are, Peery is waiting to get another data point the end of this season and will reach out.

3.9. Pinniped update

3.9.1. Bonneville Dam – No sealions as of the last week of May. Expect them to return in about three weeks. Predation report is forthcoming. Lethal removal program is done for the season as well. John Edwards (WDFW) reports 21 California and 13 Steller sea lions removed this spring. Will resume trapping at the end of August until September or November.

3.9.2. BON FOG refurbishing. Removal of bulkheads would cause a 10 minute opening between tailwater and the collection channel, about one hour total. Project would like to perform work while sea lions are gone and cannot enter. Would like to perform the work next week. Lorz asked about impacts to the facility or fishway – fish could fall out of fishway. Lorz then asked about the amount of noise produced, causing possible fish delay. Derugin responded the crane used to pull them is about 50' up in the air and moving bulkheads does not cause excessive noise. Conder asked for time to read the MOC and will comment later.

3.9.3. Willamette Falls – not covered, skipped to Avian

3.10. Lamprey update - not covered skipped to Avian

3.11. Avian updates (10:30 or 1:35:23 into audio)

3.11.1. NWW – Number reported last week are relatively low. MCN highest count was 42 gulls, a large number grebes mostly loafing on booms in the forebay not feeding and a few AWEPS in the tailrace. Ice Harbor counted up to 21 gulls, several DCCOs and 9 to 25 AWEPS over the week. LoMo high count of 14 gulls, a few grebes, a few AWEPS. Goose – very few birds. Lower Granite – mostly AWEPS 5 to 13 over the week. Cordie asked if they were using lethal removal of gulls? Peery responded they had a high number initially and then they went down. Was not certain the lethal removal trigger (number) was reached. He will report back those numbers. Morrill asked if lethally removed birds were collected. Peery will check to see if they removed any and if carcasses were collected.

3.11.2. JDA – Decrease in gull, but an increase in Am. White Pelicans and decent number of Grebes in the forebay.

3.11.3. TDA – Over 200 gulls last night about 7pm, 120 feeding in SW3 and 4. USDA is hazing, chasing them in circles. Around 15 AWEPS in the tailrace, spill wall eddy line. High count of 15 Great Blue Herron in the fishways feeding mostly on dead shad. DCCO's in BPA transmission towers. Lorz asked about the number of DCCO's. Under 100 total when including loafing in BPA transmission towers. Did you use green lasers? Yes, and had some success early on but then they made nests and ignored it. Lorz asked for update on lethal take EA process and if a letter of support from CRITFC is needed. Funding is in place and process is moving forward. McDowell said that no one from USACE has reached out to her about a lethal take permit. NWP Colonel is aware and will be on site next week.

3.11.4. BON – Low number of gulls and DCCO.

3.11.5. Estuary – FFU at Rice, Miller, and Pillar on a daily basis.

3.11.5.1. Rice - Green laser is in operation and keeping birds out of the bowl. However they are trying to move to the center of Rice – which overlaps with SHLA habitat. Three eggs found on Rice. Sixty scraps and last week's count was 160 terns.

3.11.5.2. Miller & Pillar – terns loafing below the rack line.

3.11.5.3. ESI – Caspian terns ~3k on colony. Nesting and incubation is delayed this year. About 910 Cormorants nesting on ESI, most likely DCCO, will used CAP flight

images to help resolve species. Krasnow asked if Cormorants are nesting on the east side of the fence. Kyle responded, no, but we are not hazing them since numbers have been low the last couple of years.

3.11.5.4. ESI – off colony, several scraps filled and 13 eggs deposited off colony but depredated by gulls. The south beach continues to grow due to successful pile dyke placement.

3.11.5.5. Astoria-Megler Bridge – less than 1,500 DCCO as of last month.

3.11.5.6. Columbia Basin Avian group? - McDowell asked about next Task Group Avian meeting. Cordie suggested an end of season review in August. McDowell is concerned that a project by project approach will not be sufficient to manage the basin. Would like to bring in BOR (Mitch Mumma) and Yakama Nation (Bill Sharp). Cordie wants to keep Task Group focused on initial missions – The Dalles & John Day gull issues as well as Miller Island Rocks gull colony. McClain suggested the FPOM Task Group Avian might not be the best forum for that meeting. Morrill said WDFW has reviewed and wants to supply comments to the Army Corps' 10 year Synthesis Report, there is some concern but limited funding to track. WDFW POC is Nathan Gambil. Krasnow suggest WDFW read the multiple comments provided by RTR comments to the 10 year Synthesis Report. Conversation continued about how WDFW can provide comments on the recent Avian report. **ACTION: McClain will add agenda item under Avian Updates to discuss new group with wider scope.** Update BOR contact from McDowell email: Mitch Mumma, mmumma@usbr.gov, Scott Hoefler, shoefler@usbr.gov, Sarah Fesenmyer, current email: sarah.fesenmyer@noaa.gov moving to BOR 6 July.

- 4. Fishways Critical Operations and Maintenance List** – Conder clarified the intent of his request, which was different than what the Corps' (NWW & NWP) response. Conder is concerned that maintenance on items that effect meeting Fish Passage Plan criteria or ESA listed fish passage are not being given enough weight and want to know how and who ranks items. Morrill also wanted to learn more about how things are ranked. Ranging discussion of funding and how fish passage items rank against non-passage items. Peery suggested this conversation can be continued.
- 5. Early start-up of juvenile bypass systems.** – NWW has evidence that starting juvenile systems a week or two early would capture more fish. Lorz asked about NWP starting earlier as well. Bonneville already starts 1 March so it would be adjusting John Days start time. This topic will stay on the agenda for more conversation next month.
- 6. Coordination/Notification forms (need concurrence/discussion)**
 - 6.1.** 21 LWG 08 MOC Trach Rake Crane Replacement (2023) – (Holdren) Large foot print of intake deck near adult fish ladder. Building new crane, testing, then disassemble old crane. Do not expect any ladder impacts, just wanted to make sure FPOM was aware of this large project. Lorz is fine with timing of work. No other agency comments.
 - 6.2.** 21 LGS 06 MOC Closure of Spillbay 8 – To prevent spraying water while electrical box is open. Lorz suggested waiting until summer spill starts, would be ok if they can complete work in 8 hour time frame. **ACTION: Peer will check back with project about specific dates and get back to FPOM.**
 - 6.3.** 21 IHR 06 MOC North fish ladder exit trash rack – Work compete 6/9
 - 6.4.** 21 MCN 05 MFR OR AWS Fish Pumps OOS –Down to one pump. Remaining increased blade angle and closed orifice gates to maintain entrance criteria. Return of pump #1 estimated one month, fish pump #3 estimated return the end of September. Bellerud asked why it will take so

long for pumps to return to service and if there is a contingency plan if the final pump fails.

ACTION: Peery will ask for more detail and develop a contingency plan.

- 6.5. 21 JDA 06 MFR Spill Bay 3 Out of Service (Update 6/10/21) – Return to service is unknown, short if they have a spare motor, longer if they have to order one.
- 6.6. 21 JDA 07 MFR South Fish Turbine #2 out of service
- 6.7. 21 BON 003 MFR U18 Delayed In-Service date
- 6.8. 21 BON 008 MFR AFF adult Chinook Mortality
- 6.9. 21 BON 009 MFR U14 and U15 Outages and STS Failure
- 6.10. 21 BON 010 MOC ITS Closure for Gate Inspection – No comments.

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

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

7.1. **Pending Change Forms:**

7.1.1. 21TDA002 – Unit 8-2 Sluicagate (Cordie) – Lorz asked if this is a temporary change until repair or permanent. Cordie said it will be a permanent operation. Lorz would like more information, Cordie dug for more but couldn't find that level of resolution from earlier reports. Lorz concurred with the operations. Wright asked for comments from NOAA or USFWS. Conder – no comment, Eble – no comment, Swank – not enough information but trust Corps Biologist.

7.1.2. 21AppB001 – LMN Condition Monitoring (Conder) – 0955 (55:00 minutes into recording) prior to Van Dyke leaving the call: NOAA asked for clarification from Oregon about condition sampling change form. Oregon supplied comments and don't agree with the way change form was written. NOAA asked for more clarification so change could be finished. Van Dyke had to drop off for another call. Eble sees need to get change form resolved soon. Lorz has brought up the topic in FPAC and thinks we should have a task group meeting to move this forward. More discussion at FPAC and with BPA (please include Sullivan). Oregon may want to make some changes. (Pending)

7.2. **New Change Forms:**

7.2.1. 21IHR005 – Unit 4 Operating Range – Preliminary pending index testing of hydraulically locked blades, not complete with new operating range table specific to Unit 4.

7.2.2. 21AppB002 – Correct Barge End Date to 20 June.

8. **Task Group Updates.**

8.1. The Dalles & John Day Avian Task Group meeting (Cordie)

8.1.1. <http://pweb.crohms.org/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20Avian%20Hazing/>

Next meeting in August focused on The Dalles & John Day.

8.2. Task Group Condition Monitoring (Lorz & Sullivan)

8.2.1. <http://pweb.crohms.org/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20Condition%20Monitoring/> Waiting for decision on FPC's proposal to BPA. However, that is moving slowly. Corps will need time to plan and get contracts in place to cover and condition monitoring that would end if there is no SMP at John Day or elsewhere. Eble – the proposal is out there, everyone has seen it, fish managers have agreed to it, it would be with BPA. Sullivan – there has been dialog at BPA but will ask for an update. Lorz asked about Corps drop dead date to hire people to perform the work? The timeline is already very tight, would require approval of additional FTE's and budget adjustment to fund.

8.3. Task Group 15 Mile Steelhead Overshoots, TDA ITS operation dates. (Bellerud)

8.3.1.<http://pweb.crohms.org/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20TDA%20ITS%20operations/>

Meeting ended at 1207 hours.