CENWP-OD 14 April 2016

MEMORANDUM FOR THE RECORD

Subject: DRAFT minutes for the 14 April 2016 FPOM meeting.

The meeting was held at the Auditorium Bonneville Lock and Dam OR. In attendance:

|  |  |  |  |
| --- | --- | --- | --- |
| **Last** | **First** | **Agency** | **Email** |
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On the phone: Bettin, Conder, Fone, Fredricks, Hevlin, Kiefer, Lorz, Meyer, Swank, Trachtenbarg, and Wright

**April birthdays include:**

**HAPPY BIRTHDAY!**

Documents may be found at: <http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/>

1. **Decisions made at this meeting**
   1. March meeting minutes approved by Mackey.
   2. NWP Oil spill plans. This will be moved to a regular agenda item so FPOM will be sure to look at them. These plans address both small and large scale spills. The Projects will give short presentations at the May FPOM meeting.
   3. JDA-S fish pumps. See agenda item #7 below for an update.
   4. Coordination Requests
      1. **16BON10 MOC** EAL testing U15- **Approved**
      2. **16TDA03 MOC** EAL testing in Unit 1 - **Approved**
      3. **16IHR003 MOC** Unit 2 testing without STSs – **Not Approved**
      4. **16IHR004 MOC** GDACs testing - **Approved**
      5. **16LGS04 MOC** Little Goose Debris Spill **– Never happened**
      6. **16LGS08 MOC** SW Change from High to Low Crest Configuration – **Approved**
      7. **16LGS02 MOC** TSW Removal and ASW Installation – **Approved (Bailey to provide BPA with information for awareness)**
   5. FPP Change Forms.
      1. 16AppB002 – LMN-LGS Condition Sampling. **Approved.**
      2. 16JDA001 – JDA-S fishway operations for AWS turbine outages. **Denied.** Temporary modifications may be acceptable but we need three workable pumps to meet criteria.
2. **Action Items**
   1. NWP Action Items.
      1. [MAR 16] BON PH2 FOGs. ACTION: Hausmann will write up a FPP change form recommending permanently closing the center FOGs. STATUS UPDATE Hausmann asked if we want a change form even if we can’t proceed with closing these. The FOGs that are being discussed to close are currently closed but they can’t stay closed if there is a need to dewater the channel. They are our only bulkheads and they may need to stay open. Mackey said if we had an approved change form it could provide leverage to get them done. ACTION: Hausmann will submit change form.
      2. [MAR 16] CI Subsidence. BON suggests running the conduit to the tower instead of the PIT tag building. Morrill, speaking as the PTSC chairperson, said if it’s feasible, it makes sense to keep the detection site operational. ACTION: Hausmann will get a cost estimate for moving the conduit. STATUS: 40k to move is initial estimate. 11k for materials and about 300 labor hours comes to about 40k. Hausmann said that he’s gotten some feedback that PSMFC would prefer moving the building. Mackey asked why they prefer to move the building and Hausmann wasn’t sure but it could be due to noise. He will find out. ACTION: Hausmann will find out what they prefer.
      3. [MAR 16] Cascade Islands FV5-3. ACTION: Hausmann will send FPOM the date of the inspection as soon as he knows. STATUS UPDATE: Hausmann said district people will come for an inspection on 20 April. Hausmann said it probably makes sense to address this Fall. It is in manual mode which keeps the ladder in criteria right now which makes more sense to avoid putting it in auto and have a possible failure. Fredricks agreed.
      4. [Feb 16] BON Weir 68 Bleed-off. ACTION: Hausmann will insert cautionary language in the BON dewatering plans with a note to conduct a test in the future. STATUS: Language has been inserted. Still need to include the note to conduct the test. Hausmann said it would take time away from winter maintenance and that both ladders would normally be taken OOS. Rerecich suggested adding the info into the HELCRABS report or at least contacting Schlenker. STATUS UPDATE: Hausmann reported that when the opportunity arises to dewater Cascades Island and continue running the Washington Shore ladder, coordination will be done to allow testing of the Weir 68 positioning relative to various forebay elevations. No further talk
      5. MAR 16] JDA-S lower three weirs. ACTION: Grosvenor and Cordie will figure out the lowest TDA forebay possible that still allows JDA-S to operate in criteria. STATUS: Cordie reported sill of east exit is 147', Minimum forebay to operate navlock and fishways are 155'. 20 year forebay range has been 155.5' to 159.7' and normal forebay range is 158.5-159'. Cordie said he is not sure what that translates to John Day tailwater. It will change with the amount of river flow. **STATUS UPDATE**: Cordie provided the #’s to Zyndol. Zyndol reported that permission to remove 3 weirs was given 10 years ago. He said that it hasn’t been completed due to logistics and funding. Zyndol spoke to a HELCRABS report that was conducted in 2005. He said the weir removal was listed in their recommendations as #3 in priority. Zyndol suggested checking with Portland District hydrologic engineers regarding permission given for removal. Cordie asked about getting some hard #’s for elevation variance. Mackey said that an MFR with the permission information needs to be written with most current content in it. Zyndol commented that the weir removal is the last fish passage improvement item for JDA. ACTION: Zyndol to update coordination form with current data by next FPOM.
      6. [MAR 16] JDA avian lines. 13 lines are still down. Waiting on a contract. Lines are at the navlock so re-installation may occur anytime. Cost is expected to be about $200K. ACTION: Mackey and Grosvenor will check on the UFR request. **STATUS UPDATE:** Zyndol stated that UFR is in the process. UFR will be submitted soon. Mackey said that the UFR is supported so the expectation is that the lines will get installed. Zyndol said a contract was in place from previous installments so once UFR is approved contracting should be fairly simple. Zyndol says boat hazing exists. Fredricks asked about timeline for completion. Zyndol said it could be around the end of this fiscal year but more than likely after. Morrill commented that if the lines aren’t installed then JDA isn’t’ really able to meet their performance standards. Swank asked if 13 lines are a big # to lose. Zyndol said that lines are too close together and windy conditions are causing them to interfere with each other at the attachment point and break. He said that adding 10ft steel leaders could help. There is an improvement program started to see how the lines could be improved. Zyndol said that the material seems to be aging and stretching more than originally promised and there was greater loss last year. Morrill asked if there was any warranty from the manufacturer and Zyndol said probably not because we agreed to the material however this is the 6th season for these lines and they were given a ten year life expectancy. Zyndol said that out of a total of 125 lines they are missing only 13. Setter asked if APHIS is still available to fix avian lines. The consensus is that they no longer support. Mackey said they have not been supportive in meetings to meet timeline to get lines installed which is why BON started installing their own. Hausmann said last time APHIS came to BON to install lines they didn’t come with any safety gear. ACTION: Dalgliesh will check on Avian hazing contracts status at division.
      7. [Feb 16] NWP Oil spill plans. ACTION: FPOM will review for March meeting. STATUS: this will be moved to a regular agenda item so FPOM will be sure to look at them. These plans address both small and large scale spills. The Projects will give short presentations at the May FPOM meeting.
   2. Completed Action Items or to be discussed later in the agenda.
3. **Updates** 
   1. NWW Updates.
      1. Upcoming maintenance/construction/research activities. FPOM OUTAGES schedule available on the web site. Setter said nothing substantial changed. Dworshak added 1 week steady state testing in June for unit 3 overhaul. (look at the spreadsheet posted). Primary and emergency outfall for LWG is scheduled for November 15 through the end of February. That work has already been coordinated. The bridge crane at LGR has passed an inspection so that work on unit 1 can proceed. On schedule for FPOM outages. Bettin asked what steady state testing is and Setter said she would get more details regarding that.
      2. Wasco PUD at MCN – Martinson said there is nothing new to report.
      3. MCN Log Bronc - Ready to go and drop in water next week. Waiting on small parts.
      4. MCN Fish pump 2 RTS – Scheduled for end of September.
      5. LWG Gatewell sampling data – Sent out April 4 or 5. Comported well with B&C slots. Setter asked if there were any concerns with LWG being able to utilize the JDA modified ESBSs in A slot. No concerns. Approved
      6. LWG operation of temp pumps – New equipment put in place last winter. Need to have serious discussion in May regarding guidance of operation. Big issue turning on and off of shower in the forebay. Setter asked for comments and ideas. Morrill asked about being able to get temperature information with shower on and off. Laughery commented that there is a temperature string in place upstream and just behind where water is turned on. He said that they will be able to have a good idea of what the temp and what the approach temps are. Lorz asked about monitoring before temperatures hit and see if fish react differently with the shower on or off. Laughery checked on that with Chris Pinney and said that shouldn’t be an issue. Setter asked about timeframe for developing a straw man plan and if May is too soon. Laughery said that putting a plan together with historical information for June is a good approach for now and operate and see what happens. Morrill said that preliminary testing is a good idea and then also when temperatures reach a critical range. Setter said fish passage center offered to put the adult ladder temperature data from the HOBO string information on their site.
      7. SW ops alterations – Setter said all weirs were opened on schedule.
   2. NWP Updates
      1. Upcoming maintenance/construction/research activities. Includes already coordinated MOCs. -
         1. **15TDA07** MOC 35 ton gantry crane rehab update- Cordie said delayed until mid-June for completion. Most of the crane is assembled. They are just doing finishing touches. The activity now is pretty minor.
         2. FGE Mods – Rerecich said no change to construction schedule units 18-16 during T12 outage September 7th – November 23rd, units 11-14 during in-water work period 20016/2017. Flexibility for units 14 & 13 in March 2017 if necessary.
         3. **16BON0**3MOC Blown AWS grating at PH2CC diffuser C5\_update: Hausmann said the grating was covered with steel plate successfully using the ROV. The diffuser will be kept from operating. There is no void accessible by fish.
         4. BON T11 / T12(coordinated in MOCs 14BON13, 14BON59, 14BON82 & 15BON02 – Mackey said T12 is out sept 7 until Nov 23 for additional work. Will update the MOC (ACTION: will make a new one for this year).
      2. TDA Units 15 & 16 – Cordie said they will be out for a while. Transformer issues over the last couple years. The outage affects unit priority. It will show up on the status report as being out of criteria for the fish passage plan but it’s not a top priority unit.
      3. TDA 15mile creek steelhead – report available online: Cordie said there were overshoot steelhead that overshoot The Dalles and need to find their way back to 15mile creek (15mile creek below The Dalles). ODFW came out a year ago and said they are losing half of the 15mile creek fish. 70% + fish overshoot The Dalles. Possibility of opening up the sluiceway. Their return is 48% survival of fish seen at BON make it to 15mile creek. Mackey asked about a task group and said that Cordie needs to reactivate it as the chair. Last active group was in 2009. Fredricks said it would be good to review the data since we have two year’s worth. Cordie said that the report is online. Cordie reluctantly agreed to chair the task group.
      4. JDA-S AWS turbine update
      5. JDA TSW -TSWs in bays 18 & 19 were open 10 April at 0750.
   3. Research/FFDRWG updates. [www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/NWP%20Research/Research.html](http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/NWP%20Research/Research.html) - Rerecich commented that we are expecting contract updates that speaks to language to handle protesting for The Dalles AWS project. The language in the contract will allow the Corps to take corrective action based on any new protests. Expect to be back to work in July at the latest. Updates will be provided as they come. Cordie said the last he heard they will need the full in-water work period. Rerecich said that was correct. Mackey commented that we need a current year updated MOC.
   4. RCC update.

**Table 1. RCC flow forecast**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Project** | **Previous day average (kcfs)** | **5 day forecast average (kcfs)** | **10 day forecast average (kcfs)** | **Projected Peak** |
| **LWG** | 100.4 | 111 | 133 | 133 |
| **MCN** | 265.3 | 275 | 348 | 348 |
| **BON** | 272.6 | 295 | 365 | 365 |

* 1. Pinniped updates – Mackey said 47% daylight hours are covered with monitoring and the State has removed 10 animals.
  2. Lamprey updates. Water is flowing through the LPSs. MOC coming soon for lamprey flume on WA shore for hatch repair. We will need comments back by 1 May.
  3. Avian.
     1. TDA avian lines. (Cordie) – Pole failed and the lines were secured to the new pole. Powerhouse tailrace lines – 12 lost. The gaps aren’t bad and can be lived with this year and monitor and if there is a problem they could try and install mid-season.
     2. JDA avian lines. (Zyndol) discussed in action items above
  4. BPA updates. – Bettin said nothing should interfere with operations. A document of updates can be found on the FPOM website.

1. **Coordination/Notification forms (need concurrence/discussion)**
   1. **16BON10** MOCEAL testing U15 – Comment period ended the end of March. **Approved**
   2. **16TDA03** MOC EAL testing in Unit 1: Comment period ended the end of March. **Approved** Fredricks wants more detail on Unit 2 being just as good and ok if Unit 1 is out of operation. Just wants more justification written into form regarding no impact due to unit 1 being a priority unit. Cordie said they haven’t done anything yet and could do another Unit possibly. He said that doing the test on Unit 1 would eliminate a gap if Units after 1 were used and he’s not entirely comfortable doing different units and creating a gap. Fredricks would like more information on what is exactly being tested and what was actually being done. Hausmann said they put new lubricant into wicket gate seals and come back after 30 to 45 days run time and check to see if it was successful then they put it back in for a year run time. Morrill asked what the reasoning for testing unit 1 was and Cordie said mainly the fact that it gets so much run time would allow for good testing. ACTION: Hausmann said he has that information and can put that in the MOC.
   3. **16MCN03** MFR juvenile fish kill – Bailey reported that the chiller tank that holds the anesthetizing agent had a leak. Water leaked into the sample tank. Setter said between the A & B tanks is where the leak occurred. Expect it to be repaired quickly and not interrupt sampling. Morrill said the setup is on different floors so the operators wouldn’t have readily heard the leak. Setter said it looked like it was a crack that opened over time. Fredricks said he needs to go see the facility to get a better idea of what the operation is like.
   4. **16IHR003** MOCUnit 2 testing without STSs – **Not Approved** until updated and circulated for further comments. Fone reported that Unit 2 runner will be replaced in May. Pretesting needs to be done with existing runners to take measurements including vibration. STSs need to be removed for testing for warranty. It would involve running unit 2 for 2 days without the turbines on and off to take measurements. It would occur during the week of 27 April. Morrill said he doesn’t like seeing this occur at a time when fish could be moving. Setter said contracting matters has dictated the date. Fone said there will also be a post-test without the STSs with the new runner July or August 2017. He asked if there would need to be a separate MOC for the post-test. Setter said that you could come back and re-site this MOC with an update or put a new 2017 # on the current MOC. ACTION: Fone will gather more information and update the MOC and re-circulate for further comment.
   5. **16IHR004** MOC GDACs testing – **Approved** Fone reported that latest version of the GDACs program to be installed in the control room. It controls the operations of the unit. Once installation is complete they need to test the system by starting and stopping the units and open and closing the spillway gates. Gates will be tested one at a time. The test would occur 22 April and could take up 10 hours. Morrill commented about disappointment regarding timing.
   6. **16LGS04** MOC Little Goose Debris Spill – Bailey reported the debris spill was cancelled due to weather and shifting of the debris in the forebay. **Never happened.**
   7. **16LGS06** MFR Failure of Spillbay 1 tainter gate brake – Setter reported that it happened just prior to starting spill. The tainter gate failed in the open position. Parts were cannibalized from spillbay 5 and got the TSW opened on schedule. An adjusted pattern was sent out.
   8. **16LGS07** MFR Pipe leak delayed juvenile fish collection – Setter reported that this is part of the juvenile collection system below the primary de-waterer. Corrosion holes in the pipe enlarged and could have caused a system failure during the season. The facility was de-watered and put in primary bypass until section could be repaired. Put back in service on 9 April at 7:00am. Bailey said other alternatives were attempted but it continued to back up and leak so they had to repair. Operating under normal conditions now.
   9. **16LGS08** MOCSW Change from High to Low Crest Configuration – **Approved** Bailey reported that FPP requires once STP comes out and 85k is reached it is supposed to be changed 3 days prior. The MOC was needed to coordinate that change. Put into operation on 11 April.
   10. **16LGS02** MOC TSW Removal and ASW Installation – **Approved** further information. Setter reported that this form was sent out originally on 22 February for comments and there was not any discussion on it at the time so she wanted to make sure to cover it now. It is meant to make people aware of that starting September 1, 2017 through Jan 31, 2018 is when the new ASW will be installed and the removal of the old TSW will occur. That is after the spill season starts. No comments were received when the MOC was sent out. The MOC states that Spillbay 1 will be out of operation and the use of turbines 5 & 6 may be restricted in support of dive operations. ACTION: Bailey to provide BPA with more information for awareness.
2. **Fish Passage Plan:** The Final 2016 FPP and Change Forms are online at: [http://www.nwd-wc.usace.army.mil/tmt/documents/fpp/](http://www.nwd-wc.usace.army.mil/tmt/documents/fpp/2014/changes/index.html).
   1. Pending FPP Change Forms.
   2. New FPP Change Forms.
      1. **17MCN01** Changing spillway patterns – **Pending - Step 1 to initiate further discussion and evaluation**. Laughery reported that the existing spill pattern flip flops one side of the spillway to the other side. He said he looked at priority bays based on lower and higher discharge. Setter commented that at the FPOM meeting in May at MCN it would be good to have a sub-group to have some discussion regarding this issue and be able to chart a path forward. Fredricks is concerned and wants to look more in depth at the model. Laughery said we need to answer the question if developing a new pattern is even feasible. Setter said the concern is over constant manipulation of gates during a one day time period. Fredricks asked if this would be an O&M funded project or CRFM and thought CRFM could make sense in that the patterns weren’t correct to begin with. Laughery said this speaks to making sure gates don’t get worn out for major failures. Morrill asked if it were spring or summer spill patterns and Setter said summer but would probably be early pre-season as well.
      2. **17AppD00**1\_MCN-Lamprey-Passage – **Approved** Wright asked for comments and Fredricks said he’s already provided his comments.
   3. Potential FPP change forms.
      1. BON kelt trigger clarification - Setter
      2. BON FOGs (per Gary's request)
      3. BON minimum spill
      4. LGS SW close criteria – Setter reported that they want to determine triggers to pull out the spillway weir for summer. There was a change form submitted in February and had agreement with everyone except Kiefer. Setter said that there have been some indicators that there may be some middle ground to find a path forward. Kiefer stated that after clearing up some information they would approve changing the criteria for after 1 August but not 21 June. Wright commented that there had been a date change to 21 June added in to coincide with the start of summer spill. As this stands Kiefer stated that they do not support taking out the surface weir in late June or July. Bettin asked if they factored in the effects of taking surface water and mixing it with the cooler turbine water. He asked if there could be benefit to Sockeye. Kiefer said they will be watching conditions of Sockeye and if the modeling information is available they could consider an in-season change. Kiefer said that perhaps they could discuss passage #’s and they could get behind moving forward later in July. Setter commented that they aren’t asking to change spill levels, just where they are spilling and asked Kiefer to maybe give that some thought. Kiefer to provide more information and Setter suggested that we could have a revised straw man for May.
      5. LWG criteria to trigger pump operation
      6. Appendix C load shaping guidelines
3. **Task Group Updates.**
   1. Yet-to-be active task groups.
      1. BON minimum spill to maintain good B2CC egress. (Fredricks and Lorz). Team members include: Bettin, Ebner, Hausmann, Mackey, Rerecich, Wright. Report from Laurie, waiting for ERDC information.
   2. Active Task Groups. Currently no active task groups meeting at this time.
4. **JDA-S fish pumps –** Zyndol said fish pump #2 was repaired and returned to service on 31 March. Two turbine operations since. Main entrances both north and south in optimal criteria. Pump #1 is on long term outage due to need for overhaul. Overhaul has to happen before repair could even be conducted. Mackey said a PDT is being put together this year at the district. We have a sole source justification put together for the contractor that did the rehab on pump #3. We will continue to work with them to get pump #1 rehabbed. Decker said they went from a greased bearing to a water cooled bearing. They found that the CIP (CIP is a synthetic plastic type material) wear material in pump #2 in the bearing had failed and they replaced it. Will go into fish pump #1 where the same bearing is worn out and the shaft is grooved and damaged because of it. They are going to see if there is any kind of backup but in the meantime they have quotes for replacement. (recording) Zyndol mentioned that the work conditions were very difficult on pump #2 due to confined space and location of components. The turbine is in a circular make-up that is difficult to get to. There is also a gearbox on top that contains oil and they both need attention and repairs. Fredricks said he wants to come to JDA and meet with Zyndol to take a look at the system and thinks a complete overhaul of the system might be in order and it could be looked at to potentially get funding as part of the next BiOp.
5. **Other: 12 May 2016 FPOM at MCN**
6. **Meeting adjourned at 13:00. Tour of JDA will begin.**