

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 11 May 2017 FPOM meeting.

The meeting was held at the Lewis and Clark conference room at USACE Northwestern Division Building, Portland, OR. In attendance:

Last	First	Agency	Email
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Wright	Lisa	NWD-RCC	Lisa.S.Wright@usace.army.mil
Zyndol	Miro	NWP	Miro.A.Zyndol@usace.army.mil

On the phone: Bettin, Hart, Juhnke, Johnson, Swank, and Wharf

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

1. Decision made at this meeting.

1.1. April meeting minutes were approved with one change.

- 1.2. WDFW's Science Division Proposal for Seine Mortality Study Aug. - Sept. below Bonneville – FPOM had no issues with using fish from the AFF as long as they have the necessary permits and follow the permit requirements. All comments about the study can be emailed to Wadsworth and Cox.
- 1.3. Temporary LMN and LGS PIT Detectors – The picketed leads will remain in place for November for PIT detections.
- 1.4. MCN TSW removal – Instead of removing the TSW on Thursday, June 8, the project will run the TSW throughout the weekend and remove it on Monday, June 12.
- 1.5. Next 5-year Adult Count Contract Schedule – All comments need to be sent to Peery by next month.
- 1.6. Carrying reserves at MCN and TDA to control TDG - The FPOM group discussed operating MCN above the 1 percent but not to exceed up to 14.4 kcfs based on recent modeling observations but there was lack of FPOM consensus on how this type of operation would be implemented in real-time.
- 1.7. 17IHR02 Powerhouse flooding at high tailwater - FPOM suggests shutting the north powerhouse main entrance plus one floating orifice before turning off the AWS pumps.
- 1.8. **MOC/MFR**
 - 1.8.1. 17LWG06 MOC JFF Phase 1B Outfall Installation – NOAA concurred but CRITFC and ODFW still need to respond.
 - 1.8.2. 17LWG03 MFR Unit 2 RTS – FPOM concurred with the index testing and suggested late morning to afternoon.
 - 1.8.3. 17JDA06 MOC JDA-Spill bay 20_Restriction – Denied
 - 1.8.4. 17BON09 MFR CI Subsidence Interim Repairs – FPOM concurred
- 1.9. **FPP Change Forms**
 - 1.9.1. 17LWG007 – Count Station Pickets - Approved
 - 1.9.2. 17LGS006 – Count Station Pickets - Denied
 - 1.9.3. 17LMN006 – Count Station Pickets - Denied
 - 1.9.4. 17IHR006 – Count Station Pickets - Approved
 - 1.9.5. 17MCN006 – Count Station Pickets - Approved
 - 1.9.6. 17IHR007 - Unit 5 Fixed-Blade Range – Approved
 - 1.9.7. 17MCN007 - Table MCN-7 High Flow Spill Patterns – Approved
 - 1.9.8. 17TDA006 – Single Fish Unit Operation - Approved

2. The following documents are provided or discussed at this meeting. All documents can be found at: <http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/>

- 2.1. *Agenda, Fish Passage O&M coordination team*
- 2.2. *Cooling water strainer lamprey counts, NWW*
- 2.3. *Juvenile Lamprey Strainer Inspections 2010-16 (NWW)*
- 2.4. *FPOM Count Periods (NWW)*
- 2.5. *May-July 2017 Transmission Outages (BPA)*
- 2.6. *WDFW Seine Mortality Proposal 04172017*
- 2.7. *FPOM Charter (NWW/NWP)*
- 2.8. *Lower Columbia River Forebay Templines SOW Study April 2017 (NWP Water Quality)*
- 2.9. *BON-TDA-JDA Forebay Temp Monitoring Charter (NWP Water Quality)*
- 2.10. *FFU BON WA SH Orifice Monitoring Schedule (NWP FFU)*
- 2.11. *Coordination Forms (MOC/MFR)(NWW/NWP)*
- 2.12. *FPP Change Forms (NWW/NWP)*

3. Action Items

3.1. NWW

- 3.1.1. [May 17] **MCN TSW removal** - ACTION: RCC will send a revised teletype.

3.1.2. [May 17] 17IHR02 Powerhouse flooding at high tailwater - ACTION: Peery will talk to Ken Fone to see if some of the AWS pumps can be turned off instead of all of them.

3.1.3. [May 17] 17LWG008 - U1, U2 Priority - ACTION: Setter will follow up on the status of unit 2 returning to Kaplan for the next FPOM.

3.2. NWP

3.2.1. [May 17] Avian Update – BON - ACTION: Hausmann will talk to USDA about hazing protocols.

3.2.2. [May 17] 17BON10 MFR MU3 Juvenile salmonid morts - ACTION: Hausmann will add the preventative measure to the unit dewatering plans.

3.2.3. [May 17] TDA picketed leads - ACTION: Cordie will review the language in the FPP and decide if a change form is needed.

3.2.4. [May 17] 17JDA06 MOC JDA-Spill bay 20_Restriction - ACTION: Cordie will check on the pendants used at TDA to see if they could be used at JDA.

3.2.5. [May 17] 17JDA07 MFR MU12 Juvenile salmonid morts - ACTION: Zyndol will update the MFR with more details and timeline.

3.2.6. [May 17] 17JDA07 MFR MU12 Juvenile salmonid morts - ACTION: Zyndol will make changes to the dewatering procedure based on the discussion.

3.2.7. [Apr 17] TDA BRZ - ACTION: TDA will send out a Memo for the Public and post a copy of the map at the boat ramp. *Status: The change to the BRZ has not occurred so no memo was sent. The project tried to install a buoy but it floated away. They will pursue help from the Coast Guard.*

3.2.8. [Mar 17] BON B2 Orifices ACTION: Hausmann will write up what work will get done and which funding sources will be tapped in an MFR. *Status: Not completed.*

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

3.3.1. [Feb 17] Forebay Temperature Profiles ACTION: Lundell will revise the proposal based on the discussion. *Status: Pending till April. See 4.2.1.1*

- 4. WDFW's Science Division Proposal for Seine Mortality Study Aug. - Sept. below Bonneville –** WDFW representatives Wadsworth and Cox gave a presentation on a Seine Mortality Study that they are proposing. This is to build on seine mortality studies done previously. There was discussion of the control group and the handling effect. Wadsworth and Cox have come to FPOM to gain support for using fish from the AFF. The study would take place in late August through October this year and ideally more than 1 year. **There are no issues about using fish from the AFF from FPOM as long as they get the necessary permits and follow the requirements.** TAC has already sent comments that were incorporated into the study design. Any comments from FPOM members on the methods and study design are welcome and should be sent Wadsworth and Cox.

5. Updates

5.1. NWW

5.1.1. Upcoming maintenance/construction/research activities.

5.1.1.1. FPOM outages schedule – LWG Unit 1 return to service has been extended to 15 August. LMN Unit 1 has been extended to December.

5.1.2. Temporary LMN and LGS PIT Detectors – [Handout] WDFW provided a handout on the PIT data they use from these sources and stated that they would still like to opportunity to collect this data. Changing the protocol of the picketed leads would result in about 10% loss of detections. In the second handout, Wharf gave a cost estimate for permanent detections. In order for the permanent detectors to go in, the COE would need a strong justification for this cost. Detectors could be placed in the tributaries. WDFW recognizes that permanent PIT detectors would not be a high priority and is requesting that the picketed leads stay in through November. NOAA recommends removing the leads but will not

object to leaving the picketed leads in. The change forms will be denied/dissolved for LMN and LGS but the other forms will be approved.

- 5.1.3.** Court Ordered early start-up of by-pass facilities – Setter wanted clarification if the early start up is required for just LWG or all by-pass facilities. VanDyke said that any facility with PIT detection capability needs to start early. LWG and BON are the most critical sites and BON already starts early. The idea is for the projects to run in by-pass with flow detections not with sampling. At MCN, screens do not go in early because of lamprey passage. There could be conflicts for maintenance with Nav Lock outages. In 2011, PIT detections were made without screens at BON but it is unknown if this could be viable at other projects. Flexibility on some project or some units needs to be looked at but ODFW recalled the request was inclusive of all instrumented facilities so suggested all be considered. The projects haven't considered or budgeted for any additional costs. This topic will stay on the agenda for next month and then the group will decide if a Task Group is necessary.
- 5.1.4.** Option to pull screens and run units to reduce TDG at LGS – In the last couple of weeks, there have been numerous mortalities at LGS. Unit 1 should return to service 12 May. The project has been working 24 hours a day to get the unit back to service. The mooring point for the debris boom that will go in this winter is catching debris. The COE is compiling a scope of work for emergency debris removal since the high flows will be continuing. The COE will provide a better mortality estimates after all the gate well and panels have been inspected. There is only one emergency bulkhead for the project and it required an HSS inspection. There are issues with corrosion around the bolts and each one has to be drilled out. Plastic bolts are now being used to minimize the corrosion. There is lots of debris and no effective cleaning method for the VBS. Most units except unit 5 should be back in service next week and this should help with adult passage concerns and TDG issues. The screens were inspected before the season started. The mesh is easily torn and bars might be a better option. Right now, only units 4 and 6 are operating. Three more units will be back by next week. The peak is this Saturday. Fish are having symptoms of gas bubble trauma but flows are predicated to go back down next week. Conder asked about running units at the upper end of 1% but Lorz suggested removing the screens at unit 2 and run the unit. After Setter explained the process that would be required to run unit 2 without screens and the schedule of returning units to service, it was agreed that the COE should stay on the current path of returning unit 2 to service rather than stopping work to remove the screens. Conder suggested looking at pattern of generation to look at reducing TDG.
- 5.1.5.** LWG NPE cable break (Peery) – When moving a bulkhead, a weir cable snapped. The entrance weir is now fixed on sill and can't be moved. In order to fix the cable, the project could send down an ROV but it would require shutting off spill and generation of units 5 & 6. This is not possible with the current flows. The fix will wait until September when spill is off. The project will write an MOC.
- 5.1.6.** MCN TSW removal – MCN plans to close the TSW on June 8 (Thursday) and when the crews return on Monday, remove it. Wind could extend the timeline. FPOM suggests running the TSW throughout the weekend and remove it on Monday rather than Thursday. The project can run the TSW up until the crews are ready in the morning instead of turning it off at midnight. **ACTION: RCC will send a revised teletype.** Wright will work with Johnson on specific language.
- 5.1.7.** Dworshak Unit 3 – Unit 3 return to service will not be on July 15th as planned due to quality control of the bars. The new date is unknown but more information will be available before the next TMT meeting. DWR is not accepting the bars from the contractor. A waiver for TDG may be necessary but water management is the primary place for discussing this issue.

5.2. NWP

5.2.1. Upcoming maintenance/construction/research activities.

- 5.2.1.1.** Forebay Temperature Profiles – Questions from Lundell went out via email to the FPOM group.
- 5.2.1.2.** BON Powerhouse 2 roof repair – An MOC will be sent out.
- 5.2.1.3.** TDA picketed leads – TDA leaves the picketed leads in through November and sometimes December and January. **ACTION: Cordie will review the language in the FPP and decide if a change form is needed.**
- 5.2.1.4.** TDA AWS – Season 1 construction has finally finished. There will most likely be request for early start on season 2. Kiewitt poured concrete in the forebay at the end of March. They will be requesting a dive to inspect the pour. Another issue is the core drill on the tailrace side that may have gone crooked and will need to be inspected. MOCs will be coming.
- 5.2.1.5.** TDA rail removal – The project is removing forebay deck derelict rail now. They are about ¾ way down the deck and completed the changing of sluiceways. On the tailrace deck, there are several places that have asphalt that need to be poured in the summer for curing. An MOC will be forth coming. FPOM would like night time work.
- 5.2.1.6.** JDA Trash rack crane – The crane returned to service 11 May. With units 1 & 2 coming out of de-rated, the TDG will hopefully be reduced. BON had 5% gas bubble trauma symptoms. Lorz suggested renting crane if the crane doesn't return to service but finding an appropriate crane would be difficult. Wright asked if closing the TSW would help but the amount of spill through the TSW bays are similar to the other bays.

5.3. Research/FFDRWG updates. www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/NWP%20Research/Research.html

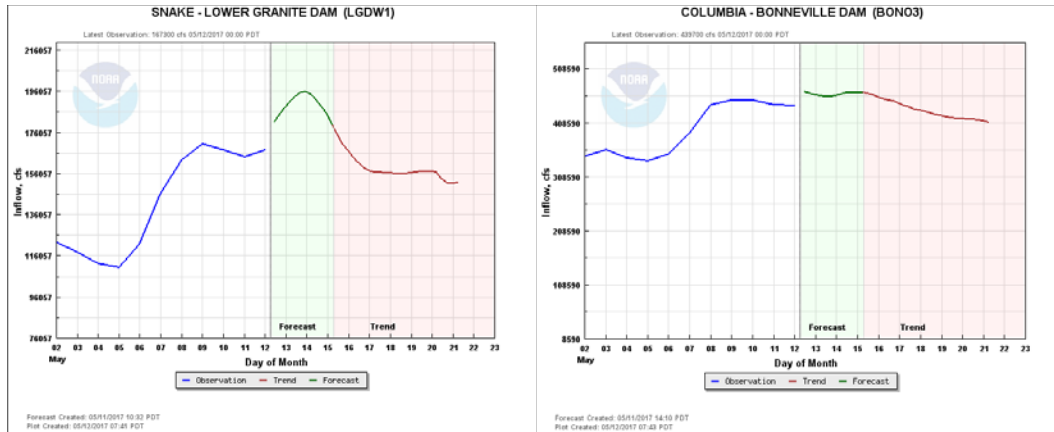
5.3.1. NWP FFDRWG – The next meeting will be June 1st at Block 300 Fireside room. Rerecich said that the FGE study is going well with the exception of an issue with the mobile blue view. The units are being run at mid-range not at upper 1%. Wright thought the units were being run at mid-range due to debris but Hausmann thought the limitations might be due to head levels.

5.3.2. NWW FFDRWG – The next meeting is 25 May.

5.4. RCC update

Project	Previous day average (kcfs)	5 day forecast average (kcfs)	10 day forecast average (kcfs)	Projected Low/Peak (kcfs) and date.
LWG	165	198	174	159 5/20 198 5/13
MCN	431	450	434	394 5/20 450 5/13
BON	443	475	464	420 5/20 475 5/13

Table 1. RCC flow forecast



- 5.5. BPA update** – The COE will be conducting an efficiency test on June 15/16 for DWR Unit 2. Conder suggested putting in the MOC that if the testing is completed during times of no fish then no further coordination is necessary. The date range March – July would be a good time to do the testing after the steelhead have left and prior to spring Chinook coming back. There is another time period in September as well before the steelhead come back. Conder wants to stress the timeframe so that the project can schedule all testing during those periods. Bettin provided a handout on the website for transmission outages through July.
- 5.6. Fish Count Program** – Last week, counts from the weekend were not posted to the FPC website until Monday afternoon. The server that the database is on got locked up and the contractor (ACE-IT) took a long time to reboot the server. FFU is trying to get the system automated but there are still several obstacles. The system currently blocks the email file because it is too large and FFU staff is investigating a waiver. Wertheimer has elevated the issue to upper management because of all the dead ends that they have come up against. Monday is always critical for meetings especially TAC meetings. All CAC cards are completed.
- 5.7. Next 5-year Adult Count Contract Schedule (Peery)** – The current contract is for three years and this is the second year. The next five year contract is being developed. Peery sent out a draft schedule of counts to be incorporated in the next contract. **All comments should be sent to Peery by next month.** The new contract may have the contractor supply equipment and be responsible for sending the data directly to FPC. Fredricks said that the frequency of the winter counts/off season counts should be looked at.
- 5.8. Pinniped update (Tidwell)** – Currently, Stellar sea lions make up 2/3rd of the sea lions population in the BON tailrace. CRITFC has resumed boat based hazing. The States have removed 20 California sea lions. The number of sea lions is similar to the ten year average. The number of Stellars is the second highest based on individual day counts. Usually California sea lions start to return down river but with this year being so different, it is unknown if they will. If the weather gets rough, then CRITFC hazers will help with additional dam based hazing and observations. USDA doing dam based hazing. Three sea lions have been observed above BON and they have been hazed at the TDA powerhouse entrances. Observers are monitoring the SLEDs at BON because there is only have about 12 inches of freeboard. Pinniped hazing is done with rubber bullets, rubber shots and banger firecrackers; CRITC uses seal bombs. As of 20 April, a little over 800 salmon have been consumed. Relative to last year, pinniped numbers are the same but fish numbers are way down.
- 5.9. Lamprey update** – The draft of “Use of Lamprey Passage Structures at Bonneville and John Day Dams 2016 Annual Report” will go out at the end of the month. The orifice monitoring RM&E study is on-going. The schedule has been posted to the website. There has been one Jack approach the orifice and no interactions. At night, the staff monitors with infrared and a sucker got into the orifice. It is not known if he came in dead or alive but was dead in the morning. The knife gates are only open when monitoring is underway. A lamprey has been observed

going up and downstream through an orifices. Wertheimer asked for feedback on extending the staff through the weekend but it did not seem necessary. May 11 was the last date for Spring Chinook but because of the low numbers, it will be extended.

5.10. Turbine cooling water strainer inspection schedule (Peery) – Peery explained the current inspection schedule and questioned if the inspections should continue in the summer. There is no language in the FPP currently. Peery's recommendation is to conduct monthly inspections in the spring. Nez Perce uses the lamprey caught in the strainers for genetic analysis. IHR conducts weekly sampling but would like to go to monthly sampling. USFWS would be okay with not sampling in the summer but wanted to point out that they use this information from these inspections. A lamprey strainer shield has been designed but no funding for construction. If the shield is built, then inspecting will switch to weekly. Peery will draft a FPP change form for the next meeting.

5.11. Avian update

5.11.1. BON (Hausmann) – The avian lines are still down. Gulls have been observed going after sea lion scraps. Fredricks asked the pinniped hazer to harass gulls but the hazer said that he hazes pinniped not gulls. Gulls were feeding at the B2CC. **ACTION: Hausmann will talk to USDA about hazing protocols.**

5.11.2. TDA (Cordie) – USDA is actively hazing by boat downstream of the bridge but with all the spill, it is difficult to reach the gulls. The missing lines will be installed in September.

5.11.3. JDA (Zyndol) – The numbers of gulls and pelicans have been increasing lately. Hazing is supposed to start next week (late).

5.11.4. MCN

5.11.4.1. Pelican Hazing (Peery) – The pelican hazing plan is being developed with USDA. Gull hazing is on-going with no direct hazing of pelicans and avoiding breeding pairs, identified by the bump on their bills. The hazers are being conservative with the pelicans. Gull numbers are low and not many pelicans. Morrill was unaware of the upper level meetings and will follow up with WDFW. Peery will follow up with USDA. Morrill and Peery will update FPOM next month.

6. FPOM Charter Review – FPOM members should review the charter and revisit next month.

7. Carrying reserves at MCN and TDA to control TDG (Norris) – BPA is proposing carrying excess reserves at MCN and TDA. This would be a reduction in spill and increase in generation which would help lower TDG. After deploying the reserves, the project would return to the 1% criteria. Fish managers felt that TDA does not contribute heavily to BON's TDG level noting that the forebay TDG levels of TDA and BON are very similar. GBT symptoms at BON are at 5%. Down at ERDC, the model showed that the lower 1% turbine hydraulic environment doesn't look good; upper 1% looked better. At MCN, gate wells have always been an issue but with the current lowered operating gate configuration the hydraulics look better. MCN is the most limited for generation but two units are scheduled to come back to service. Fredricks would prefer a change like this to have an engineering analysis and an MOC. Norris said that this method is a tool in the toolbox for lowering TDG not to be used all the time. Current conditions at MCN are spilling in the range 285-300 with TDG levels of 130. When the gas is between 125-130, Fredricks wants to bring the gas level down. Conder said that the spillway has a much higher survival than the turbine survival and until the GBT at BON is higher, it is not worth bringing down the gas levels. Fish managers decided against this idea with two units returning to service. If the flows have another peak, this issue can be reconsidered via an MOC with an analysis. At the end of the meeting, Setter said that the two units would not return to service for two more weeks. The issue was reopened. The FPOM group discussed operating MCN above the 1 percent but not to exceed up to 14.4 kcfs based on recent modeling observations but there was lack of FPOM consensus on how this type of operation would be implemented in real-time.

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

- 8.1. 17LWG03 MFR Unit 2 RTS** – This MOC is for scheduling the index testing. Hevlin did not like May. The new tentative date is 20 June. The testing will take place in the afternoon; FPOM said late morning to afternoon is fine. It will take a couple of hours. The unit is running now. It is the fixed blade unit.
- 8.2. 16LWG10 MOC JFF Phase 1B Outfall Installation Update Revised Schedule** – The contractor has asked for an earlier construction window. Most of the work is above the water except moving the crane barge between piers and anchoring it at each new location. NOAA is okay with this. CRITFC is okay but will double check with Nez Perce. Hockersmith still needs to address the concerns of BPA. ODFW needs to review the MOC and will respond.
- 8.3. 17LGS05 MFR Separator Smolt Mortality**
- 8.4. 17LGS06 MFR Secondary by-pass mortality**
- 8.5. 17LGS07 MFR Orifice Blockage Mortality**
- 8.6. 17LGS08 MFR Vertical Barrier Screen Mortalities** – The debris situation is changing every day. As the project brings on more units, another debris raft may form in front of the powerhouse which is why the project is working towards an emergency debris removal contract. All mortality issues have been due to debris not negligence. The project has increased monitoring and identified places where previous debris clogs took place.
- 8.7. 17IHR02 Powerhouse flooding at high tailwater (Peery)** – When the tail water is higher than 353, the powerhouse warehouse floods. The AWS pumps were shut down to prevent flooding as described in the FPP. With high flows, the same situation will happen again this weekend. In the winter work period, the project is adding grout to the floor boards to help seal the cracks. If the project abandons this section of the powerhouse then they would need another facility. The project can't close all the floating orifices because they don't have enough bulkheads. **FPOM suggests shutting the north powerhouse main entrance plus one floating orifice before turning off the AWS pumps. ACTION: Peery will talk to Ken Fone to see if some pumps can be turned off.**
- 8.8. 17IHR05 Powerhouse ventilator (Peery)** – The MOC was sent out; no comments came in. At the last meeting, it was suggested that the vibration be measured but the project does not have the proper equipment and would need to hire a contractor. Swank suggested observing with and without the ventilator to see what is causing the vibration. The ventilator provides oxygen to the workers. FPOM suggested turning the ventilator off on a day that no one is working and observe if the vibration goes away.
- 8.9. 17JDA05 MFR CH mortality switchgate** – Replacing the gasket can wait until winter maintenance.
- 8.10. 17JDA06 MOC JDA-Spill bay 20_Restriction-** This MOC is to restrict Spill bay 20 to 3 stops to control the spray/turbulence. In 2011, a similar restriction was used to protect equipment but now it is to eliminate turbulence. Bay 20 has the extended flow deflector. Wertheimer mentioned that a spill curtain was looked at during the PDT. Modeling might be necessary since the number of stops may change depending on tail water. The three stops was based on Operator's observations. Currently, the spillway has three bays out of service for bad brakes. Bay 17 will be fixed first since it is a high priority. The failure of the brake assembly is a newer problem and three have failed this year. JDA needs funding for the spill way issues. The gates cannot be dogged off. **ACTION: Cordie will check on the pendants used at TDA to see if they could be used at JDA.** Zyndol explained the computer control of the spill bays and how the redistribution works. Due to three bays out of service, FPOM wants to use spill bay 20. This MOC is denied.
- 8.11. 17JDA07 MFR MU12 Juvenile salmonid morts** – The fish mortalities occurred during the dewatering of MU12 which was out for oil change. The project is looking into using two roller gates and one bulkhead as a preventative measure plus gate well dipping. The roller gates go into the VBS slot and the STS slot would stay open to the forebay. One bulkhead is necessary to

lower equipment into the scroll case. **ACTION: Zyndol will update the MFR with more details and timeline.** Steelhead smolts have been delaying in the gate wells. The timing of the outage could have been better since it was a high passage time. This unit outage was delayed from March. More communication about timing of unit outages. **FPOM suggests better communication on the timing of outages, leaving the unit off for one day, dipping the gate well and opening the orifice throughout the process.** **ACTION: Zyndol will make changes to the dewatering procedure.**

- 8.12. 17TDA16 MFR F2 Forced out of service** – F2 tripped off line. Electricians were trouble shooting for over a week and found a loose wire. F1 was turned up as high as it could go. The counts were low but fish were passing. The project had time to play with the system to distribute the water to find the best situation. FPP change forms were made for junction pool.
- 8.13. 17BON09 MFR CI Subsidence Interim Repairs** – No outage is required but construction will occur within 50ft of the fish way. The dates changed from two weeks to a one month window starting in February 15th – March 15th. **FPOM concurred with this action and suggested trying to do it as early as possible.**
- 8.14. 17BON10 MFR MU3 Juvenile salmonid morts** – Usually, there are no fish in the scroll case because the fish are drained into the draft tube. In this case, the drain clogged and caused the mortalities. For the preventative measure, the project will now put someone into the scroll case every time instead of doing a visual check during juvenile passage period. The crew would salvage from the scroll case and unplug the drain. **ACTION: Hausmann will add the preventative measure to the unit dewatering plans.**

- 9. Fish Passage Plan:** The Current 2017 FPP and Draft 2017 FPP Change Forms are online at: <http://www.nwd-wc.usace.army.mil/tmt/documents/fpp/2017/>

8.1 Pending FPP Change Forms.

- 9.1.1.** 17LWG007 – Count Station Pickets - Approved
- 9.1.2.** 17LGS006 – Count Station Pickets - Denied
- 9.1.3.** 17LMN006 – Count Station Pickets - Denied
- 9.1.4.** 17IHR006 – Count Station Pickets - Approved
- 9.1.5.** 17MCN006 – Count Station Pickets - Approved

9.2. New FPP Change Forms

- 9.2.1.** 17DWR01 – Testing and Project Section – Pending until the next FPOM.
- 9.2.2.** 17LWG008 - U1, U2 Priority. Ann Setter, NWW **Pending to July after the index testing.** ODFW did not agree on the angle and does not agree on the unit priority. Unit 2 is the priority unit with Unit 1 being out of service. With the fixed blade, Unit 2 is the first on but cannot be the last off. Wright suggested the changing the Unit Priority Table to say if unit 1 is in service, unit 2 is at the end of the list. Lorz suggested running Unit 1 & 2 from June through August for adult attraction. When the index testing in June is completed, things might change and this change form will stay pending to the July FPOM. NWW wants unit 2 to return to Kaplan but there are funding issues and it could take two years. **ACTION: Setter will follow up on the status of unit 2 returning to Kaplan for the next FPOM.**
- 9.2.3.** 17IHR007 - Unit 5 Fixed-Blade Range. Ann Setter, NWW – This change form restricts unit 5 to a smaller band within the 1%. Approved.
- 9.2.4.** 17MCN007 - Table MCN-7 High Flow Spill Patterns. Ann Setter, NWW – Approved.
- 9.2.5.** 17JDA005 - Turbine Dewatering Gatewell Dipping. Miro Zyndol, JDA – Pending; Zyndol will add other preventive measures as discussed, then resubmit for June FPOM.
- 9.2.6.** 17TDA006 – Single Fish Unit Operation. Bob Cordie, TDA – Approved.

10. Task Group Updates.

10.1. BON minimum spill to maintain good B2CC egress. (Fredricks and Lorz). Team: Bettin, Ebner, Hausmann, Mackey, Rerecich, Wright. Date for test selected?