

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 09 January 2020 FPOM meeting.

The meeting was held in the Columbia Conference Room of the CRITFC Office in Portland, OR. In attendance:

Last	First	Agency	Email
Benner	Dave	FPC	Dbenner@fpc.org
Bettin	Scott	BPA	swbettin@bpa.gov
Conder	Trevor	NOAA	trevor.conder@noaa.gov
Cordie	Robert	NWP-TDA	Robert.P.Cordie@usace.army.mil
Ebel	Jonathan	IDFG	Jonathan.Ebel@idfg.idaho.gov
Hausmann	Ben	NWP-BON	Ben.J.Hausmann@usace.army.mil
Hockersmith	Eric	NWW	Eric.E.Hockersmith@usace.army.mil
Johnson	Bobby	NWW-MCN	bobby.johnson@usace.army.mil
Kovalchuk	Erin	NWP	Erin.H.Kovalchuk@usace.army.mil
Lorz	Tom	CRITFC	lorz@critfc.org
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Morrill	Charlie	WDFW	Charles.Morrill@dfw.wa.gov
Norton	Joe	NWW	Joseph.A.Norton@usace.army.mil
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Rerecich	Jon	NWP-PM-E	Jonathon.G.Rerecich@usace.army.mil
Sears	Sheri	Colville	Sheri.Sears@colvilletribe.com
Setter	Ann	NWW	Ann.L.Setter@usace.army.mil
Silver	Greg	CRITFC	gsilver@critfc.org
Swank	David	USFWS	David Swank@fws.gov
Thompson	Josie	NOAA	Josie.Thompson@noaa.gov
Tidwell	Kyle	NWP-FFU	Kyle.S.Tidwell@usace.army.mil
Van Dyke	Erick	ODFW	erick.s.vandyke@state.or.us
Whiteaker	John	CRITFC	whij@critfc.org
Zyndol	Miro	NWP-JDA	Miroslaw.A.Zyndol@usace.army.mil

On the phone: Ebel, Hausmann, Hockersmith, Johnson, Norton, Sears, Swank, Thompson, and Tidwell.

1. Final decisions or recommendations made at this meeting.

- 1.1. December meeting minutes were approved.
- 1.2. 20BON02 MOC PH2 entrance closure for OWS project – FPOM would like the work to occur after noon.

2. The following documents are provided or discussed at this meeting. All documents can be found at: <http://pweb.crohms.org/tmt/documents/FPOM/2010/>.

- 2.1. Agenda, Fish Passage O&M coordination team

- 2.2. BON Oil and Water Separator Project drawing
- 2.3. Coordination Forms (MOC/MFR)(NWW/NWP)
- 2.4. FPP Change Forms (NWW/NWP)

3. Action Items

3.1. NWW

- 3.1.1.[January 20] **LWG PIT detections spillway project** - ACTION: Hockersmith will send pictures of the capacitor lid surface.
- 3.1.2.[January 20] **Staff Gauges** - ACTION: Setter will follow up with Hausmann after the meeting.
- 3.1.3.[January 20] **Invasive species** - ACTION: Setter will have the invasive species coordinator write a letter to WDFW specifying the Corps position on lethal removal from sampling facilities for shad .
- 3.1.4.[December 19] **LWG Spillway PIT Construction** - ACTION: Hockersmith will keep Bettin updated on the schedule for the spill test. *Status: Completed. Setter sent email with spill tests.*
- 3.1.5.[December 19] **Per Bettin's question about screens** - ACTION: Setter will follow up with Richard Turner about the investigation into screen replacement. *Status: At this point, even though the white paper was completed, no funding was secured. Setter noted that after the FPOM minutes were sent out, there has been internal discussions taking place. Setter clarified that this topic has to do with maintenance of the ESBS screens. Some people are questioning if all units will be maintained and therefore, do they need all the screens maintained. The LWG screens also fit LGS. LWG has updated 12 of 18 screens. Bettin suggests the COE look at the maintenance and if it is worthwhile to keep the screens. Setter stated that LGS has been updating the repair pit to work on the screens and are almost finished. Conder has concerns that if the screens are replaced that they need to be as long as the previous screens so the FGE doesn't change and that they need to be lamprey friendly. JDA has no plan for screen replacement. One screen was damaged this year so there is no longer a spare but several units are out of service. The sand blasting facility had been a plan but it was not followed through on. Zyndol clarified that the overhaul is the framework only. The moving parts and screens are maintained every year.*
- 3.1.6.[December 19] **Invasive species discussion** - ACTION: Van Dyke will check to see if the laws are same as WDFW on northern pike. *Status: Van Dyke said that there is no law about killing northern pike because the species has not been found in state of Oregon waterways. There are administrative rules on managing species identified as "new introductions" that encourage they not be released back into Oregon waterways. Setter wants to be clear on what to do if a northern pike is found at one of the SMP facilities in the Walla Walla district. Van Dyke said that along with not releasing species not know to occur in Oregon waterways (new introductions), that it is very important to follow the permit language and immediately communicate any sightings of species suspected to be or that were treated as new introduction in Oregon waterways. Van Dyke indicated he would share a one pager to help convey his summary with suggested recommendations.*

Setter said that the Colville Tribe have been doing a removal program and found through genetic testing that the northern pike have apparently been reintroduced several times into Washington/Idaho waterways and are not just of Pend O'Oreille River origin as previously thought.

3.2. NWP

- 3.2.1.[January 20] BON Spillway rocks** - Action: Kovalchuk will follow up with Ebner to see when the spill to push rocks off the apron will happen and if a follow-up survey can be done.
- 3.2.2.[January 20] BON B-branch weirs** - ACTION: Kovalchuk will email McDonald to get B-branch weirs on the FFDRWG agenda.
- 3.2.3.[January 20] 20BON02 MFR** - ACTION: Lorz will send the Corps a list of impacts that not being able to use the AFF would cause.
- 3.2.4.[January 20] Pinniped update** - ACTION: Van Dyke will forward the 2019 final pinniped observation report to Kovalchuk.
- 3.2.5.[December 19] 19BON65 MOC PH2 OWS installation** - ACTION: Hausmann will follow up on making sure that the outages have been removed from the outage schedule. *Status: Completed.*
- 3.2.6.[December 19] TDA AWS** - ACTION: Randall will follow up on if there is an alarm for flooding. *Status: There will be an alarm for flooding. However, the alarm will not forward to the control room just in the parking lot. The AWS is not available right now.*
- 3.2.7.[December 19] BON BI dredging** - ACTION: Mackey will follow up with BON next week to see where they are at with the dredging contract. *Status: The UFR was approved but NWP did not have the money. The project is waiting to see if the funding comes through.*
- 3.2.8.[December 19] TDA dewatering** - ACTION: Randall will make sure the PM on the pumps are being completed. *Status: Completed. Cordie sent an MFR on the maintenance. Lorz asked about a pre-check before the dewatering. Cordie said they did test the pump but it still didn't work. The sturgeon mortality occurred because the pumps weren't adequate so they added the sump pump to pump the water faster. Cordie now added not to use the sump pump to the SOP. The timing of the dewatering is difficult because of the number of pumps that work and how large the system is.*
- 3.2.9.[November 19] Lamprey Update** - ACTION: Lorz will ask the lamprey task force about the entrance flow plan for next year. *Status: Reducing the flows at the entrances looks slightly beneficial. The Corps has concerns about staffing and extra wear and tear on the equipment. Conder had concerns about remembering to change to flow back. The lamprey task group would have to do a change form to make this permanent. Status: Lorz would like to implement this strategy permanently and needs to write an FPP change form. Conder has concerns about flows not returning to salmon criteria. He wants there to be a fail proof method like automatic settings not an additional step in an SOP. McClain said that research shows that the lamprey find the ladder at an increased rate but they do not ascend any faster. He also noted that lamprey fall out at a higher rate. Lorz said that getting the lamprey into the ladder at an increased rate is a benefit. Working on passage through the rest of the ladder can be the next step. McClain said that U of I research shows that making improvements higher up in the ladder leads to a higher success rate. Cordie wants to look at how often the turbines were backed off compared to dropping the weir to reduce the flow and compare that to the lamprey passage. Cordie will pass on the turbine data to U of I and CRITFC. TDA is putting in new SCADA system that they can program to drop and raise the weirs. The east entrance should be completed this year and the west and south will be completed next year. Neither TDA nor BON found the wear and tear to be a big issue for them. Conder wouldn't have concerns if the flows return to salmon mode. The lamprey task group has no plans for JDA entrance flow adjustments yet.*

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

- 3.3.1.[November 19] Shad discussion** - ACTION: Setter will send out an AMRIP brief of the proposed shad removal/restriction methods to FPOM. *Status: Setter sent out the AMRIP brief to FPOM. The description is about the turn pool gate improvements for the trap and doesn't mention shad. However, this is the improvement that will reduce shad numbers in*

the trap. The project doesn't have enough money to make a cost estimate. Holdren is aware that the design has to go through FPOM prior to modification.

3.3.2.[November 19] 19IHR18 MFR South fish ladder picketed lead debris problem -

ACTION: Peery will follow up with Fone on any actions for next year to reduce the chance of a reoccurrence of this debris problem. *Status: Peery completed this task.*

3.3.3.[November 19] Fish Count Program - ACTION: Peery will send an outline of the QA/QC program to Lorz to share with FPAC. *Status: Peery shared the program but it wasn't shared at FPAC. Lorz said that FPAC hasn't had a meeting since receiving the plan.*

4. Updates

4.1. NWW

4.1.1. Upcoming maintenance/construction/research activities.

4.1.1.1. FPOM outages schedule (Setter) – There were no changes to the outage schedule.

At SCT, the subject of LGS being prepared for cooling pump operation next year came up. The pump from last year works. The backup also works but there is a problem with the sensor board. The project is still having weekly meetings with the contractor. The project has installed permanent power for the pumps. Conder asked if the sensor board doesn't work, would the pump still work. Setter said yes, in manual but the pump has not returned from the manufacturer. There is Doble testing at LGS scheduled but with the permanent power there won't be the same problem as last year. Conder would like LGS Doble testing scheduled first because of the tailrace issues and then schedule the other dams around it. The LMN joint issue at the JBS and barge issue will both be addressed this winter. Lorz asked about the coffer cells at IHR. Setter said there was a problem a couple of years ago and the coffer cells were refilled with gravel.

4.1.1.2. LWG Spillway PIT Construction Schedule update – After Christmas, work restarted on installing the PIT detection system. PSMFC is continuing to map and test the antennas. Next week the coffer cell will be removed. Three spill tests are scheduled. The project should be completed by 01 February. Conder requested pictures of the capacitor lid transition area surface. ACTION: Hockersmith will send pictures of the capacitor lid surface but noted that the work is not complete yet. After the spill test, the project will sand off some of the concrete and add an epoxy resin. The project needs to access these hatches until the last step. Morrill asked if the epoxy is going over the whole concrete spill gate or just the hatches. Hockersmith said that the epoxy is going over the capacitor box area only. Currently, there is concrete over the hatches but it will be sanded down. Morrill asked why the whole surface is not epoxied. Hockersmith said the concrete will be smooth. If the capacitor box needs to be accessed in the future then the epoxy can be chipped away rather than jack hammer out the concrete. The hatches are over the capacitor box for each antenna. Hockersmith will also send pictures after it has been smoothed. The last spill test is on 31 January and the contractor is projecting a finish date of 01 February. Conder asked when the sanding and epoxy work will be done. Hockersmith said immediately after the last spill test. Conder has concerns about the work being done hastily and if the surface is dry. Hockersmith said that the contractor date and spill tests are constantly changing. The surface will be inspected. Lorz asked if the regional folks can have a site visit to view the smooth surface. Hockersmith said a site visit is possible but you can only see it with binoculars.

4.1.1.3. Staff gauges – Hausmann doesn't have a cost estimate. The plasma cutter person has left. Hausmann has talked to chief of maintenance. ACTION: Setter will follow up with Hausmann after the meeting. Setter found that the forebay staff gauge has

already been replaced by the project and Fone is checking on potential to update those in the tailrace [removal panel that slips in place and more readily cleaned].

4.2. NWP

4.2.1. Upcoming maintenance/construction/research activities.

- 4.2.1.1. 19BON18 MOC CI Subsidence Project – ongoing. The bridge has been installed and now crews are working on crane pads. A void was found but the work is moving forward.
 - 4.2.1.2. 19BON56 MOC PH2 OWS installation – ongoing.
 - 4.2.1.3. 19BON65 MOC MU18 and Fish Unit outage for OWS – completed.
 - 4.2.1.4. 15TDA08 MOC Transformer Installation - ongoing
 - 4.2.1.5. 19TDA04 MOC Crane rail Replacement - ongoing
 - 4.2.1.6. 19TDA18 MOC Fish Unit exciter work FUB – on schedule. Commissioning will be the first week of February.
 - 4.2.1.7. 19TDA19 MOC East/North Ladder dewater overlap – ongoing.
- 4.2.2. BON BI exit dredging – see 3.2.7.
- 4.2.3. BON Whooshh scanner – Whooshh turned in a research packet on 12 December. They have not secured funding for next year. BON has given them a deadline of 20 January for secured funding and if not, have the scanner removed by 30 January. Derugin said that the options are removing the scanner or leaving it in with monitoring. If they are not monitoring, then BON will not allow the scanner to remain in the AFF. The scanner has to be removed with enough time for repairs to the AFF. Conder has concerns about the drop in the scanner transition area. NOAA said that they will require Whooshh to fix the transition if the scanner remains in the AFF.
- 4.2.4. BON ITS gate – The gate is a large cap item. A meeting is scheduled for Monday to discuss how to proceed.
- 4.2.5. BON B-branch entrance weirs – The weirs are in need of significant repair that are very expensive. Hausmann would like to know if FPOM would support a variable width weir like at Cascade Island. Lorz wants to know if the lamprey improvements would go with it like at Cascade. Hausmann said he didn't know. Bollards were added at JDA and BON. This topic needs to go to FFDRWG. **ACTION: Kovalchuk will emails McDonald to get B-branch weirs on the FFDRWG agenda.** The weir won't require maintenance and the flows at the bottom are good for lamprey.
- 4.2.6. TDA AWS – The work is ongoing. The OM plan and the corrective action list can be posted to the FPOM website, if needed. The commissioning test will be one day to make sure the AWS functions properly. A separate test for running the AWS for a prolonged period in support of the fish unit rehab project will be coordinated. Bettin said that there may be an opportunity in March. Conder asked why an additional test is necessary if there are no moving parts once the AWS is turned on. Cordie and Rerecich were both in support of a test because of the previous problems. The project management has suggested a week for the test.
- 4.2.7. TDA trunnion pin – The pin has been seen lately and hopefully being maintained. Lorz had requested this topic stay on the agenda so people do not forget about it.
- 4.2.8. JDA south turbine pump #3 – The project has received the new bearing but they do not have enough maintenance staff to work on this. It may not be available by March 01. Zyndol will provide an update next week. Turbine pump #1 will be rehabbed next.
- 4.2.9. JDA north pumps – Pump #4 repairs are still ongoing. Due to the work on the north ladder, maintenance hasn't had time to work on the pumps. Pump #3 will be next. The system is redundant and there are enough pumps for next season.

- 4.2.10.** JDA Elevator – The elevator is fixed but it still needs ~\$100K worth of cabling and control panel work. A complete rehab would be \$1million. The project may be able to reprogram money for the elevator.
- 4.2.11.** Dewatering activities
- 4.2.11.1.** BON – Maintenance is working on A-branch diffusers and will do a couple on B branch as well. Normal winter maintenance is ongoing.
- 4.2.11.2.** TDA – The east is still dewatered. Maintenance is replacing a lamprey weir cap on E2, repairing the removable weirs and the exit weir will have the guides redone. The forebay restriction has been removed.
- 4.2.11.3.** JDA – The north is dewatered. The return to service has been delayed to repair a dewatering pump. JDA-S dewatering is delayed until 22 January. There is not much work on the south ladder beside the wall erosion inspection. The JBS was supposed to be dewatered on 11 January but there was too much leakage from the orifices. The project has been cycling the orifices and will try again on Monday to dewater. The SMF will have an updated SCADA system installed this winter. The project was able to line up the funding and manpower.

4.3. Research/FFDRWG updates.

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

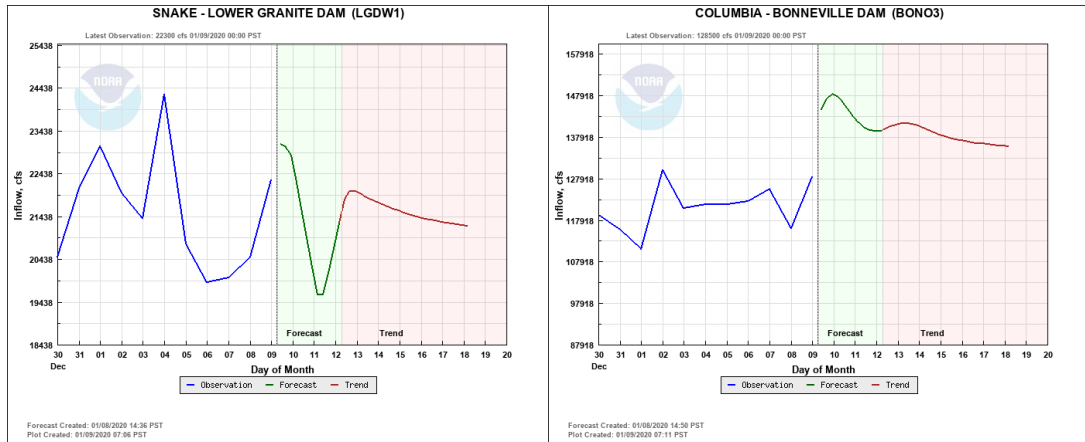
4.3.1.NWP FFDRWG – The next meeting is 06 February. There is a revised schedule for B2FGE. The request for proposals is 17 January and award by 19 February. The schedule is aggressive. Pressure testing will be in one unit at the end of March for one day. Bettin would like to know which unit but it hasn't been determined yet. Construction starts in 01 April through mid-May. Hydraulic testing is late May – June. Although the ten year average looks promising, it is hard to predict if this year will have adequate flows. The PDT is moving forward with construction even if the model doesn't predict a high enough flow for testing. The required flow is 225Kcfs in river with 57' head in order to get 18Kcfs through the unit. The hydraulic testing is a different contract than the construction.

4.3.2.NWW FFDRWG – Chamberlain sent out a revised agenda. It will be web meeting.

4.4. RCC update – no update ask Doug for email

Project	Previous day average (kcfs)	5 day forecast average (kcfs)	10 day forecast average (kcfs)	Projected Low/Peak (kcfs) and date.
LWG	23	22	21	20 (1/11) / 23 (1/9)
MCN	121	128	125	125 (1/18) / 138 (1/9)
BON	115	141	136	136 (1/18) / 148 (1/9)

Table 1. RCC flow forecast - <https://www.nwrfc.noaa.gov/rfc/>



4.5. BPA update –TDA has a fish unit outage for a couple of months that is not correct. Cordie is working to correct it. Fish units can run on either line 1 or 3. There is a possibility of line 3 and line 4 going out at the same time which would open up a time to run the AWS. When Bettin has a finalized outage schedule, he will pass it on to Kovalchuk.

4.6. Fish Count Program – Counts continue at BON and LMN. LWG counts will restart when the ladder returns. Peery is meeting with the contractor at the end of the month to address quality control program and software updates. Lorz would like corrections more than once a month. Peery will discuss the correction frequency with the contractor. Morrill asked about an update to the biological assistance contract. Hockersmith said the selected individual should be contacted this week. The contractor process has been changing but Hockersmith is confident it will work out.

4.7. Pinniped update

4.7.1. BON – Over the past month, there has been an average of 15.5 SSL. Abundance counts continue every day but no predation monitoring since they haven't reached the trigger. Dam based hazing starts on 15 March. The FFU is currently working on an evaluation of hazing and will provide the study plan to NOAA. An older study done by FFU was found and will be posted on the FPOM website under Pinniped Task Group. The 2019 draft report is being compiled and should be distributed for regional review by the end of the month. The data was presented at AFEP. Morrill observed a SSL between the Ives and Pierce playing with a chum while out doing spawning surveys. Tidwell expects the draft proposal for behavior monitoring be sent to NOAA at the end of February.

4.7.2. Willamette Falls –Between St John's Bridge and W Falls, ODFW observed 8 SSL and no CSL on 03 January. If there were CSL present, ODFW would start trapping. They do not have a trap for SSL yet. ODFW sent a report to NOAA on observations from last year.

ACTION: Van Dyke will forward the 2019 final pinniped observation report to Kovalchuk.

4.8. Lamprey update

4.8.1. Wetted wall operation (Hausmann) – BON wants to know the future of the wetted wall operation. Lorz said that there is a benefit and would like it to stay where it is. Conder suggests modifying the wetted wall into a trap. The lamprey task group is discussing this. BI is dry right now so if a trap could be added now is a good time. Swank was surprised by the success of the wetted wall and would like to see the wall in operation next year.

4.8.2. BON rest box maintenance (Hausmann) – The current placement of the rest boxes make dewatering difficult. The project was also concerned about so many lamprey remaining in the boxes rather than moving up the ladder. Lorz suggests asking the lamprey task group. McClain said that the rest boxes were placed in front of the window to view any interactions with salmonids. The original plan was to move them upstream in the higher flows if there were no impacts to salmonids. Hausmann reiterated that the location one issue but the boxes actually stuck to the concrete which made them extremely difficult to remove.

Lorz suggests moving the location and adding a better release mechanism. The current release system was good but it was filled with debris. During the salvage, crews had to pry the metal boxes off the concrete with a pry bar. Bettin asked about a gasket. Derugin said that there was a gasket but most of them still stuck to the concrete. Conder thinks the flows are more chaotic further up and salmonids could side swipe the box. Hausmann would like to remove the boxes from the current location even if they are not replaced upstream. Conder said that CRSO has considered removing the serpentine section. Lorz doesn't think that the lamprey task group would prioritize removing the serpentine section. Conder would prefer a dome or rounded edges rather than squared. Derugin thought the refuge boxes are keeping the lamprey in the ladder since there were so many in the dewatering. Bettin pointed out that it may be an indicator that there are more lamprey since there used to be many in a dewatering.

4.8.3.LFS repair – The project is not planning on fixing the LFS unless it is a priority to the region. Lorz and Conder think that with all the engineering and money put into this structure, it should be repaired to see if it can work properly. The repairs are under OM but if it is a design flaw it should be CRFM. The repair should be one day of diving to reattach the hatch. It will cost about \$20-30K. PH2 needs to be shut off completely for diver safety with all flow going to PH1. Bettin thinks it is possible for this winter.

5. Invasive species discussion (Setter) – WDFW is open to euthanize shad at all JMFs in Washington. Setter will bring this topic back to the Biologists to see how much a burden this is on them. Cordie asked what the objective is. Setter said that the euthanizing Siberian Prawn came years after the problem occurred. For the shad, it is making an effort to do something about the invasive population problem and in support of ESA listed salmon. Van Dyke doesn't believe that ODFW is adding similar language in their permits. Setter recognizes that this is not a silver bullet but thinks it is making a step in the right direction. Van Dyke wants to clarify that there is a difference between invasive and non-native fish. ODFW has a written list that distinguishes which species is an invasive or a non-native game fish. These lists differ by state. **ACTION: Setter will have the invasive species coordinator write a letter on Corps preference for lethal take of shad in juvenile sampling facilities and send to WDFW.** WDFW can bring the topic to FPAC. IDFG would need to understand the procedure for euthanizing before giving an opinion.

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

6.1. 20DWR01 MOC Unit 1 Exciter – Setter has received comments. Lorz would like an updated MOC to have in writing the actual operation. Setter had received a question from Hesse on the spill operation. There will be a similar operation as done in December which means using unit 2 to reduce TDG impacts and spill for two [Setter misspoke at the meeting and said three] hours prior to speed no load. There were no observations to support the notion that the spill pulled fish to the other side. Fish were seen swimming in the tailrace with no observations of injuries. Van Dyke said that just because you didn't observe any injuries that doesn't mean no fish were injured. Conder was wondering why the original MOC didn't have the similar operations as unit 2. NWW wasn't sure if the region was going to be supportive of the operation. In December, some people thought spill was important and others didn't. In this case, FPOM wanted spill and it will go into the operation but they may want a different operation next time. Conder appreciates the ability to change methods but wants something in the MOCs to avoid the problems that have happened in the past. Conder would like an exclusion gate. Lorz was wondering if the spill prohibited people from making observations but it didn't appear so. Lorz was wondering why this operation is outside of the normal work window. Unit 2 and 3 were necessary in case a unit went OOS but now unit 1 couldn't have that same justification. Setter said it was most efficient to do all units the same year and the project had not known the contractor would require a speed no load > 5 min. operation for commissioning. IDFG asked

when the MOC will be updated and redistributed. Setter will send one out at the beginning of next week. Nez Perce is planning on sending staff to monitor and the COE will also send staff.

- 6.2. **19IHR20 MOC Unit 4 Blade Locking** – No comments were received. Conder would like the terms to be hydraulic locking not blocking. Thompson asked when the flows are higher than what the blade lock allows, would the project go above 1% or spill. Setter said the project will have reduced flexibility in water management and it could involve spill. Bettin said that there could be a larger operating forebay range. Funding is not lined up to repair this unit.
- 6.3. **19MCN19 MOC Steelhead Overshoot Evaluation** – Conder asked why unit priority is 1, 14, 13 and 10 instead of 1, 14, 10 and 13, in case there isn't enough flow. Johnson said they were trying to incorporate the priority for early start up (four units) and the study in the same MOC.
- 6.4. **20LWG01 MFR** -
- 6.5. **20LWG02 MFR** -
- 6.6. **20LMN01 MFR** – Conder has concerns that the units will be going on and off with the flex spill which is not good for the turbines. Van Dyke asked how this outage affects unit priority. Peery said that unit 2 was repaired and will return to Kaplan. The project thinks it will be back before spill.
- 6.7. **19TDA20-22 MFRs** -
- 6.8. **19BON66 and 67 MFRs** -
- 6.9. **20BON01 MOC PH2 entrances closure for OWS project** – The date has changed to 31 January for the work. The work was delayed because the outages were not scheduled. There is a lot of flow in the work area. The entrances will have to be closed and units will be shifted to PH1. Divers will install four bolts below water level. Lorz and Bettin asked if they can do this later in the day like noon or one. Hausmann will ask. Bettin said the afternoon usually has less units on rather than push units to the side without a fish ladder running.
- 6.10. **20BON02 MFR AFF Damaged Metal Works** – The pictures showed the deteriorated support system to the braille pool. The AFF cannot be used until it is repaired. The cost is ~\$35K which they didn't anticipate so it is not in the budget. Lorz commented that the AFF is necessary for fish management. Lorz asked about PMs. Hausmann said that it is not easy to access but engineers had checked it a few years ago. Derugin said when it was previously inspected, the caked on dirt hid the extent of the rust. Mackey needs a list of impacts that the AFF not running would cause as a justification for additional OM dollars. **ACTION: Lorz will send the Corps a list of impacts that not being able to use the AFF would cause.** Hausmann thinks the project could get the work completed this year, if they had the money.

7. **Fish Passage Plan:** [Change Forms and draft sections of the 2020 FPP are posted online for review at: http://pweb.crohms.org/tmt/documents/fpp/2020/changes/](http://pweb.crohms.org/tmt/documents/fpp/2020/changes/)

7.1. **Pending Change Forms: None**

7.2. **New Change Forms:** See Draft 2020 FPP website.

7.3. **2020 FPP Production Schedule:**

7.3.1. Thursday, 1/23/20: annual FPOM meeting to finalize FPP change forms.

7.3.2. Friday, 2/14/20: drop dead due date for approved change forms and Appendix A submissions in order to be included in the print copy;

7.3.3. Sunday, 3/1/20: start date of 2020 FPP. Print copies will be shipped to Corps project and district staff by this date;

7.3.4. Thursday, 3/12/20: print copies for FPOM reps distributed at the meeting (unless otherwise arranged).

8. **Task Group Updates.**