

## MEMORANDUM FOR THE RECORD

Subject: Draft minutes for the 13 February 2020 FPOM meeting.

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

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On the phone: Ebel, Fielding, Holdren, Lampman, Norton, Peery, Peterson, Swank, and VanDyke.

## 1. Final decisions or recommendations made at this meeting.

1.1. January meeting minutes were approved.

- 1.2. LWG – FPOM concurred with adding hobo probes to the primary dewatering system and the head box. Peery will confirm these locations with Laughery.
- 1.3. MOC forms
  - 1.31.20BON04 MOC Cascade Island Lamprey Trap Location – FPOM concurred.
  - 1.32.20BON05 MOC BI Relocate Lamprey Refuge Boxes – FPOM concurred.
  - 1.33.20BON06 MOC BI Installation of Pucks for Lamprey – FPOM concurred.
- 1.4. FPP Change forms
  - 1.4.1.20BON001 – Ladder Temperature Monitoring (Kovalchuk) – the June through September timeframe stands.
  - 1.4.2.20BON002 – PH2 Mid-Range – Approved with the new wording. The notification will be as follows: BON Fisheries will email Kovalchuk whenever this operation is in place for FPOM distribution.
  - 1.4.3.20LGS003 – Surface Velocity (St. John, Setter) – approved.
  - 1.4.4.20AppG001 – Adult Trap Water Supply (Peery) – approved.
  - 1.4.5.20AppG001 – Adult Trap Water Supply (Peery) – approved.
  - 1.4.6.20AppG002 – Adult Trap Water Temperature (Peery) – The word “ever” will be removed and approved.
  - 1.4.7.20JDA002 – Turbine Range Table for Locked-Blade Units
  - 1.4.8.20MCN003 – Turbine Range Table for Locked-Blade Units
  - 1.4.9.20LMN005 – Turbine Range Table for Locked-Blade Units
  - 1.4.10. 20LWG003 – Turbine Range Table for Locked-Blade Units

**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. FPOM outages schedule (NWW)
- 2.3. Lower Granite Dam adult fish trap water temperatures
- 2.4. Willamette Falls 2019 LOA Management Report (ODFW)
- 2.5. Willamette Falls 2019 Monitoring Report (ODFW)
- 2.6. FPOM transmission outages (BPA)
- 2.7. Composite Cooling Water Strainers lamprey Counts (NWW)
- 2.8. Lower Granite RSW Spillbay PIT update (NWW)
- 2.9. Northern Pike in Oregon FPOM November 2019 inquiry (ODFW)
- 2.10. USGS Nonindigenous Aquatic Species List (ODFW)
- 2.11. Coordination Forms (MOC/MFR)(NWW/NWP)
- 2.12. FPP Change Forms (NWW/NWP)

**3. Action Items**

**3.1. NWW**

- 3.1.1.[February 20] **FPOM outages** - Action: Hockersmith will forward pictures of the LMN bypass pipe repair to Kovalchuk.
- 3.1.2.[February 20] **Invasive Species** - ACTION: Setter will try to identify the invasive species coordinators for the states.
- 3.1.3.[February 20] **LGS** - ACTION: Peery will look into the telemetry data for the fall out fence at the north powerhouse entrance.
- 3.1.4.[January 20] **Staff Gauges** - ACTION: Setter will follow up with Hausmann after the meeting. Status: Setter did speak to Ken Fone and he said that he had updated one staff gauge already. IHR has additional sheet metal to make another. BON no longer has the capability to make the staff gauges until they replace the person who runs the plasma cutting machine. IHR has really limited funds and staff gauges are a low priority.

Thompson's other concern about the weirs in the juvenile channel is being addressed this winter.

**3.1.5.[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. *Status: See 5.0.*

### **3.2. NWP**

**3.2.1.[February 20] BON Rock Removal- ACTION:** Ebner will forward the tailwater/spill table to Kovalchuk for distribution.

**3.2.2.[February 20] BON Rock Removal - ACTION:** Kovalchuk will ask MacDonald to add high spill shaping patterns to the next FFDRWG agenda.

**3.2.3.[January 20] BON B-branch weirs - ACTION:** Kovalchuk will email McDonald to get B-branch weirs on the FFDRWG agenda. *Status: completed.*

**3.2.4.[January 20] Pinniped update - ACTION:** VanDyke will forward the 2019 final pinniped observation report to Kovalchuk. *Status: Completed.*

**3.2.5.[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 submitted a change form and thinks that it is approved. Kovalchuk disagrees because Conder has not had a chance to comment on this. Cordie did provide the data. TDA will not have the automation set up and may not be able to implement this operation. At BON, the operation is not automated. Derugin thinks that operators will follow the SOP and does not expect problems this year. Neither dam had concerns about wear and tear. Conder still needs to weigh in on this change form.*

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

**3.3.1.[January 20] LWG PIT detections spillway project - ACTION:** Hockersmith will send pictures of the capacitor lid surface. *Covered during January 30, 2020 NWW FFDRWG meeting.*

**3.3.2.[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.*

**3.3.3. [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.*

- 3.3.4. [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.*
- 3.3.5. [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. **STATUS: The flushing spill was completed on 4 February. The funding for a follow-up survey has been identified.**
- 3.3.6. [January 20] 20BON02 MFR** - ACTION: Lorz will send the Corps a list of impacts that not being able to use the AFF would cause. **STATUS: completed.**
- 3.3.7. [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.*
- 3.3.8. [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.*
- 3.3.9. [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.*
- 3.3.10. [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.*
- 3.3.11. [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.*

## 4. Updates

### 4.1. NWW

#### 4.1.1. Upcoming maintenance/construction/research activities.

4.1.1.1. FPOM outages schedule (Setter) – [handout] The outage schedule has been updated.

4.1.1.1.1. LGS MU5 repair is pushed out another year. LGS permanent power for the cooling pump system is on schedule. The back-up pump has been returned. Roof repair has not been addressed.

4.1.1.1.2. LMN MU2 is still out of service but it should return by the end of the month. The barge dock coffer cell repair is on schedule and should not affect transport this year. Bypass pipe repair is completed. **Action: Hockersmith will forward pictures of the bypass pipe repair to Kovalchuk.**

4.1.1.1.3. IHR - MU3 runner installation will take longer than originally thought. Setter thought the repair would take one year but it is closer to two years.

4.1.1.1.4. MCN- the leaf gates are still on schedule. Fish pump 1 schedule has not changed.

4.1.1.2. 2015 MCN TSW ops? (requested by Bettin) – Bettin asked if the MCN TSW operations should have been different back in 2015 to help alleviate temperature concerns. Wright looked at the forebay string for 20m before, during and after the TSW was opened. She did not see any changes in the temperatures. Anderson is looking into this question further with the .5m increments. The timeframe being looked at is the spring. Conder thinks they need to continue to look at this issue because the 2015 temperature issue started happening in June. Leaving the TSW open longer could help to pass the warm surface water. Lorz says there is a detriment to sub-yearling fall chinook which is why they decided to close the TSW. FPOM members need to review the temperature string data from Anderson. **This topic will stay on the agenda.** The TSW closure is based on a date of sub-yearling passage for survival. The project might want to keep the TSW open for debris issues.

4.1.1.3. LGS backup cooling pump (Setter) – discussed under 4.1.1.1.1.

4.1.1.4. LWG SW PIT testing detections (Hockersmith) – [Handout of pictures] The construction is complete except the bird wires. The handout had pictures of the epoxied bolts, construction and the antenna layout. The two spill tests were completed. Seven steelhead were detected. The first spill test was on January 26, from 9am – 5pm and the second test was January 28, from 10-4pm. The bird wires will go in at the end of the month. Bettin would like to use the spill way for involuntary spill. Hockersmith said the clearance has been lifted and the spillway can be used currently. Bettin asked if the broken cable was replaced. Hockersmith explained that one antenna had an elevated noise level and testing showed it might be the cable but the noise went away on its own. A similar situation happened in Pasco. Once the concrete was saturated with water, the noise went away. The noise came back as the concrete was drying. In between the wet and dry scenario, the noise goes away. Conder noted that seven fish passed in a relatively short time frame, indicating short periods of spill can work to pass overshoot steelhead. Morrill added that the system was

designed so that they can access the capacitor box and cable. Repair work will take a day rather than a week.

**4.1.1.5.** RSW operation at MCN – Norton reported that not a lot of fish were detected. There was little difference between 4 and 8 hour duration tests. Norton will be sending out details on the operation soon.

**4.1.1.6.** LWG adult trap temp- w & w/out cooling upgrade vs PDS (Peery) – This topic is related to the FPP change form, 20AppG001. If the fish ladder cooling pump and the shower was shut down, Peery looked at how the water temperature would be affected. The shower mixes the surface water with deeper water, so temperatures would rise. Using the strings from September, the water in the trap would produce one degree cooler in the trap without the shower running. Lorz said that this operation increases the differentials. The trap would then be a couple of degrees cooler than what the fish experiences in the fish ladder. Conder doesn't support turning the shower off. He wanted to see JMF water temperatures in comparison. Peery used tailwater temperatures because he didn't have good source of water supply temperatures at the JMF. This suggests trap water temperatures could be 1 to 3 degrees F using JMF supply, but this would also increase the temperature differential between trap and fishway by that amount. Trough temperatures are available but they are once a day spot checks. Morrill said there is a probe on the outside of the head tank. Peery said that is a one point in the day which is not helpful. The project will eventually add probes in the primary dewatering system and the head tank. Peery will discuss the probe locations with FPOM. Holdren said the facility would be watered up next week so any probe needs to go in now. Holdren suggested the probes be installed in the PDS and the head box, otherwise known as the upwell. FPOM concurred with the locations. Lorz suggested asking Ryan Laughery about the locations. Conder said that those water sources aren't possible to use for the shower. The cooler water would cause temperature differential issues. Lorz said that this cooler water is for an emergency situation. Lorz would like the temperature data posted to the website. Peery will come up with a report not posting real time temp data to the website. Morrill suggested the biological services contractor add this temperature data to the weekly report. Hockersmith said to let him know if you are not on the email distribution list.

## **4.2. NWP**

### **4.2.1. Upcoming maintenance/construction/research activities.**

**4.2.1.1.** 19BON18 MOC CI Subsidence Project – The contractor is done working on surface supports. The bridge is installed.

**4.2.1.2.** 19BON56 MOC PH2 OWS installation – ongoing. Dive work is completed.

**4.2.1.3.** 20BON03 MOC Spill for Rock Removal – The flushing spill operation occurred on 4 February but the gates did not work properly. To flush rocks, the gates need to be open to 12'. The rocks are below bay 11. The plan was to start at bay 10 then 11 and 12. Gate 10 went to 9' and eventually the project got it open to 11'. Gate 11 only opened to a max of 9.8'. Gate 12 opened fully to 12'. Funding has been secured for the survey. The project is working on the gates. It appears that there is enough water to redo the spill test. Ebner is concerned with the operation of the gates and the spillway. Securing the amount of money to fix the entire spillway is realistically not going to happen. The amount of money to fix any parts of the spillway is huge. If the spillway is breached at BON, then TDA cannot pass adult fish or make power. Lorz is frustrated at the matrix for major rehab that ranks the spillway below 1. Conder said the best NOAA can do is list this as a conservation measure. Setter asked if it needs to fail before it is fixed. Mackey said the problem is that the Corps would have to come up with hundreds of millions of dollars and the time it would take to restore operations

is very long. The lack of gate capacity impacts the flood control. Lorz asked if impacting flood control, a Congressional authorized purpose, could get attention. The problem is that funding is limited. Money is prioritized where there is the potential for loss of life over BON. Ebner thinks that BON spillway should not go above 150kcfs. Mechanically removing rocks from the spill basin is \$1million. The \$14k for the survey was hard to find. If rocks are on the apron, the rocks can be flushed off. If the rocks are in the stilling basin, the rocks have to be removed mechanically. The survey will take place after the second flushing operation. The gate opening issue doesn't impact juvenile fish spill because 4-5' is the high end of gate openings for juvenile spill. No spill bays are out of service. The pattern requires all 18 bays. Morrill asked about the condition of other dams in the nation. Ebner said that BON is very old but isn't sure about the condition of other facilities. The money is being spent in good places; there is just not enough money. Morrill said WDFW is willing to write letters or whatever is necessary to support funding for the repairs. Currently, the spillway repairs are under OM. It is hard to figure out how to fit the repair funding into budget process. Conder asked what the gate opening problem is. Ebner said there are power problems and gantry crane issues. The repairs are always in the budget to be fixed but it is usually not funded due to the high amount. Finding the right avenue for the funding is difficult. Bettin said that he is proposing a change form to go above the 1% at PH2 once the spill would go above 150kcfs but he wants to know at what point should the project go back down to mid-range. Above 150kcfs, rocks start moving. At 200kcfs, other issues will start to pop up. Lorz asked once the spill has gone over 150, is there any change from 170 to 195. Ebner said no rocks don't move faster. Conder asked if there is a chance that rocks are moving below 150 since that threshold was developed from the modeling. Ebner said it is possible, she is now looking at 125. One year, the 150 spill was exceeded for four days but with a lower tailwater and rocks were in the apron but not in the stilling basin. Ebner has a table that shows the tailwater level and spill amount. **ACTION: Ebner will forward the tailwater/spill table to Kovalchuk for distribution.** Lorz is requesting a view of the stilling basin after rock removal to make sure the rocks are cleared out. There is an ROV of the stilling basin. Ebner will have to think about a good ROV inspection. Ebner has a comparison from 2013. Lorz wants to make sure rocks are not being moved around. The rocks can't be removed from the apron of bay 17 because of the bathymetry. Rocks can be removed from the stilling basin of bay 17. Ebner is hoping to get funding for hydraulic solution -designing a road block on the apron. Morrill asked if extreme flood events becoming more frequent is something they are looking at. Ebner said yes and that is why a road block is a good idea. Even if rocks are cleaned out every year, the rocks are causing damage to the stilling basin. The project would prefer not to have rocks in the basin. The spill gates have been calibrated and the project has hard concrete measurements to confirm. Ebner suggested shaping flows in higher spill levels if spill above 200kcfs becomes more routine. **ACTION: Kovalchuk will ask MacDonald to add high spill shaping patterns to the next FFDRWG agenda.**

- 4.2.1.4. 15TDA08 MOC Transformer Installation – on schedule. The fish units are running on line 1 but can also run on line 3. Line 3 was tested on 12 February and started smoking. Line 1 is scheduled to out from February 22 through June 9. The fish units are supposed to move to line 3 during that time period. Cordie will keep FPOM updated on the repairs of line 3.
- 4.2.1.5. 19TDA04 MOC Crane rail Replacement – no update
- 4.2.1.6. 19TDA19 MOC East/North Ladder dewater overlap – The plan was to take the north ladder down February 4. The dewatering was delayed one day because the AWS had an alignment problem. The AWS was operated from February 5-9. The AWS was

supposed to run to the 10<sup>th</sup> but the intake had a 3' differential due to debris. The AWS was shut with the 10' valve to shut it down quickly. The AWS cannot be reopened with the 10' valve until the 7' valves have been equalized. The 7' valves take 4 hours to open and close. Debris is not visible but did float off when the AWS went off. The intake has a trash rack. Cordie said there needs to be a contingency plan in case shutting down the AWS doesn't float the debris off. The ladder would stay watered up when the AWS is off just the entrances loose the differential. With a fish unit and the AWS, all the entrances can stay in criteria. If there is just a fish unit, the south has to be closed. The transportation channel cannot be bulk headed off. Conder asked if we need to rely on this system during the fish unit upgrade which is the current. Cordie said that the actuators will be replaced by the end of the month so the valves can open and close with a button. The flooding alarm is installed but wasn't hooked up. The flooding threat has gone down. The vent is now closed off.

- 4.2.2. BON BI exit dredging – The contract is out for bid. The work has to be scheduled around the nav lock outage. Only one bid has come in so far. Lorz is strongly suggesting scheduling the work before the nav lock outage.
- 4.2.3. BON Whoosh scanner – the scanner has been removed.
- 4.2.4. BON ITS gate – no update
- 4.2.5. BON AFF – The project ordered metal from California but it is 5-6 weeks before delivery. The project has been stealing metal from all over the place to reinforce the structural support. The braille pool is operational. Once the metal comes in, the rest of the work will be completed. Conder has concerns about the by-pass return pipe, fish are hanging up on the spongy black material. He would like something slick or smooth so fish can't hang up. The pipe is angled not round. The padding helps control leakage and at the time, helped to slow the fish down instead of hitting the wall. A flap has been installed now instead of the wall. Mackey reminded Conder that any AFF repair is OM funded which means something else might not be repaired. Conder doesn't think this is an expensive repair. He thinks that some fish could be using all their energy fighting to hold up in that spot. Lorz will look into studying the holding issue.
- 4.2.6. BON LFS – The hatch doesn't look like it will be funded this year. Derugin suggests waiting until the tailwater is low enough and use a boat rather than divers to save money next year. BPA could potentially hold the tailwater down. Lorz suggested talking with the lamprey task group about not running the LFS this year. The catch rates were very low. BON would rather not run the LFS this year due to maintenance costs. Porter is still discussing not operating the LFS with the other tribes. The Lamprey Task Force meeting can discuss this issue. The LFS will be fixed next winter.
- 4.2.7. TDA AWS – discussed under 4.2.1.6.
- 4.2.8. TDA trunnion pin – no update. Cordie will take a picture of it. In the feasibility report, the major rehab report group is looking at spill bays 1-9 or just 9. The PDT knows it is a high priority issue.
- 4.2.9. JDA south turbine pump #3 – The turbine pump bearing is fixed with a spare in stock.
- 4.2.10. JDA north pumps – Pump 3 is repaired. Pump 4 will be next. Pump 1 is also down. The electricians are busy but will get to it.
- 4.2.11. Dewatering activities
  - 4.2.11.1. BON – CI was dewatered on Monday just to orifice flow to install the lamprey trap. There was no fish salvage. BI will be watered up on 24 February. During the BI dewatering, 144 sturgeon were salvaged. ODFW and WDFW were not a site to tag sturgeon because they did not have their training complete. Derugin found 13 tags which he passed on to the States. Morrill suggested borrowing some PIT readers from PSMFC. Mackey said that the staff's priority is fish safety not scanning for PIT tags.



VanDyke asked how many trucks of sturgeon went to the forebay. Derugin said one truck went to the forebay which was about 5 fish.

- 4.2.11.2. TDA – The east fishway is in service. The north ladder was dewatered on 04 February. A few lamprey (~5) and steelhead were salvaged. Maintenance is working on a diffuser at the count station that is critical for ladder flow. The diffuser is being repaired but the project might need to purchase a new one. The goats did not do a good enough job getting all the vegetation. The crews are trying to remove the vegetation now. Maintenance inspected the entrance weir guide because the weir wheels are wearing faster than normal. The wear could be from moving around in the guide due to spill. Gratings looks good. The AWS conduits inspection will happen this year. The exit debris barrier broke free in an east wind. It is salvageable but the attachment needs to be redone. The oil boom will be installed in the meantime.
- 4.2.11.3. JDA – South ladder on 27 January. Very few fish were salvaged. The collection channel wasn't dewatered. The erosion on the wall will be addressed this winter. The new SCADA system is on schedule. The new grating was installed at JDA-N.

**4.3. Research/FFDRWG updates.**

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

4.3.1.NWP FFDRWG – the meeting was last week. FGE improvements was delayed a year.

4.3.2.NWW FFDRWG – the next meeting is April 23

**4.4. RCC update -**

Project	Previous day average (kcfs)	5 day forecast average (kcfs)	10 day forecast average (kcfs)	Projected Low/Peak (kcfs) and date.
LWG	38	40	31	31(2/15)/40(2/17)
MCN	179	172	170	162(2/20)/185(2/18)
BON	205	190	181	178(2/21)/208(2/18)

**Table 1. RCC flow forecast**

4.5. BPA update – [Handout] The transmission outages are posted. The only issue is TDA line 1 outage that coincides with the line 3 delayed return to service.

4.6. Fish Count Program- QC update (Peery, Wertheimer) Peery met with the contractor regarding the QA/QC plan. Peery wants better video quality and improve the QC program. The QC hour selection is totally random which means sometimes you end up with empty hours. The QC hours will weighted to the hours when fish are present. Lorz asked about the corrections. Peery said the corrections will be done every two weeks. FPC will change their upload method so small changes can be made instantly instead of the once a month reload of data. The changes were small; any significant changes would have been brought to FPOM's attention. Lorz recommends increasing the quality at BON to look at B-run steelhead for monitoring. Peery said that the video from BON is good; the problem is the smaller count station.

**4.7. Pinniped update**

4.7.1.BON – For the last couple of week, there have been very low sea lion numbers, averaging 2 SSL per day and 0 CSL. Draft report will go out next week to the region. Conder was surprised that 2019 had the second lowest spring pinnipeds counts since 2002. The winter counts have increased. The SSL trap situation is unknown; VanDyke will follow up. States and Tribes have submitted the permit applications to remove SSL. It will take NOAA months to review and approve the applications.

4.7.2. Willamette Falls – no update

**4.8. Lamprey update** – the LPS are dewatered. Passage estimate for last year was sent out in January. The report is in draft form. Lampman asked about a lamprey holding facility going in at TDA. Cordie said it is not funded. CRITFC will have to write an MOC for this action. The MOC will have to be reviewed by the Real Estate section and Office of Counsel before going out to FPOM. Lampman would like the wetted wall operation converted into a trap. Once the ladder is watered up, it would not be possible to get the wetted wall out for two years. Derugin said the wetted wall could be worked on this year if they pull it out. Lampman would prefer to keep the wetted wall in place and work on something that could attach to it.

**5. Invasive species discussion (Setter)** – Morrill said that the region needs to come up with guidance at FPOM that he brings back to his agency. Setter said that there is an invasive species coordinator (ISC) that handles issues at a national level. Setter wanted to bring the discussion to FPOM since the prawn discussion was just dumped on FPOM after it was made. Morrill said the Siberian Prawns removal was a Washington proposal and this is a USACE proposal. Morrill said he is the contact for the discussion on shad at WDFW. Ebel said that FPOM needs to look at the costs and expected procedures to the SMP. IDFG wants the USACE to send this proposal but Setter said that USACE is not ready to send this proposal. When Setter discussed the topic with the ISC, the coordinator is looking to do more managing than waiting. Hockersmith had talked to the Biological Services who said they could support a euthanizing operation. The email from FPC says that they do not have available resources. The process is to start the ISC letter to Morrill and he will work through his agency and FPAC. This discussion will close for now and the process will continue. **ACTION: Setter will try to identify the invasive species coordinators for the states.** Lorz asked about the plan for the non-native fish caught by dam anglers. Morrill thinks that they have a path forward. Northern pikeminnow go to a rendering plant facility. Morrill is looking at the potential of bringing the walleye and bass to the same facility. WDFW has liberalized the rules of harvesting bass and walleye. Changing the rules takes a commission action.

**5.1. Lake Roosevelt mgmt update – northern pike (Colville tribe)** – Setter talked to Colville and next month they will give a presentation.

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

**6.1. 20 DWR 01 Unit 1 Exciter** – The action went well. No fish kills were observed.

**6.2. 20 IHR 01 MFR-Fish mortality during dewatering of upper south fish ladder**

**6.3. 20 IHR 02 MFR-South shore AWS pumps repairs**

**6.4. 20 LGS 01 MFR-Adult steelhead mortality**

**6.5. 20BON04 MOC Cascade Island Lamprey Trap Location** – no comments were received.

FPOM concurred. The trap was installed as it was drawn up. The floor bows a bit. The space between the end of the picketed leads and the floor is between the 1-1.25’.

**6.6. 20BON05 MOC BI Relocate Lamprey Refuge Boxes** – Installation Tuesday and Wednesday. FPOM concurred.

**6.7. 20BON06 MOC BI Installation of Pucks for Lamprey-** The pucks have been used on the wetted wall for flow disruption. The plan is to put them in a viewable location. FPOM concurred.

**7. Fish Passage Plan:** All 2020 FPP change forms and draft chapters/appendices are posted at: <http://pweb.crohms.org/tmt/documents/fpp/2019/changes/http://pweb.crohms.org/tmt/documents/fpp/2020/changes/>

**7.1. Pending Change Forms:**

**7.1.1. 20BON001** – Ladder Temperature Monitoring (Kovalchuk) – the June through September timeframe stands.

7.1.2. 20BON002 – PH2 Mid-Range (Bettin) – Conder thinks that not going back to the mid-range until 180kcfs is arbitrary but is willing to go along with it for one year. He also wants the phrase to be “FPOM should be notified as soon as possible”. Lorz doesn’t want it to be a change form and wants it tentative. The Spring Creek release schedule needs to be available and can’t do this action within two days of the release. Mackey thinks that Spring Creek schedule should be flexible. Releasing fish requires a lot of staff so it may be difficult for their schedule to be adjusted. Conder is wants to see what happens at the 150kcfs spill so he is willing to try this operation. Erosion at the shoreline is a concern. After 180kcfs when the units return to the mid-range, the spill would go up over 200kcfs. The operation is only at 150kcfs not during a flex spill at 100kcfs. Wright thinks the direction is clear for the operators. This operation is only for involuntary spill. Ebel thinks that the phrase “prior to” should be “once reached” for 150 spill. The region is concerned that wording is confusing. Wright said that operators have been doing this operation so she doesn’t think it is confusing. Lorz and Conder think that operators could use this operation if the project is in flex spill at 100kcfs. They only want this operation used if they absolutely have to. Conder wants the project not to return to the flex spill for 24hrs. Baus explained that the hydrograph doesn’t have that level of precision. Wright changed the wording to “greater than or equal to 150kcfs and less than 180kcfs”. Wright and Bettin will decide who is tracking and reporting. Fisheries will report this operation in the weekly reports but that is not as soon as possible. **The notification will be BON fisheries will send Kovalchuk a notice immediately when this happens.** Approved with the edited language.

7.1.3. 20LGS003 – Surface Velocity (St. John, Setter) – approved. Morrill asked Peery about the LGS fall out fence at the north powerhouse entrance. **ACTION: Peery will look into the telemetry data for the fall out fence at the north powerhouse entrance.** Morrill wants to know about the fate of the fish that fall out. Peery will put together a summary of his early data. VanDyke said that he wants information on both north entrances. The initial question was about removing the fall out fence structure.

7.1.4. 20AppG001 – Adult Trap Water Supply (Peery) – approved.

7.1.5. 20AppG002 – Adult Trap Water Temperature (Peery) – Morrill suggested removing “ever”. Thompson was fine with that. The trap is operated by an experienced person but there needs to be an SOP for decision making. Thompson said that the trap operator gets pressure to operate the trap in higher temperatures. Ebel didn’t think that IDFG pressures trap operations. Writing down the protocol and the decision making tree helps everyone. Ebel has concerns about who to call and if that person is on vacation. Setter said that if you are violating the permit, then NOAA permission is required. This change form is to help the regular coordination. The discussion can happen before 70°. Setter said that the communication for all the parties needs to improve. Lorz would like everyone to be able to see the temperatures that the trap operator is using, like the one that USACE installed. The trap operator is calibrating a handheld thermometer to the real time USACE installed probe. Lorz suggests identifying the location of the USACE probe and the location of the handheld thermometer used by the trap operator in the change form. Ebel asked for a regression table of the two thermometers. Thompson will provide the locations. The trap operator will provide the temperature information. Approved.

7.2. **New Change Forms:** approved.

7.2.1. 20JDA002 – Turbine Range Table for Locked-Blade Units

7.2.2. 20MCN003 – Turbine Range Table for Locked-Blade Units

7.2.3. 20LMN005 – Turbine Range Table for Locked-Blade Units

7.2.4. 20LWG003 – Turbine Range Table for Locked-Blade Units

7.3. **2020 FPP Production Schedule:**

7.3.1. 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;

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

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

## **8. Task Group Updates.**