

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 08 October 2020 FPOM meeting.

The meeting was held via teleconference. In attendance:

Last	First	Agency	Email
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1. **Final decisions or recommendations made at this meeting.**
 - 1.1. September meeting minutes were approved.
 - 1.2. SMP at BON may go into by-pass during the PH2 outage.
 - 1.3. TDA will do an ROV inspection of the transportation and collection channels rather than dewater this year.
 - 1.4. 20AppG003 – LWG Dewatering- approved.

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. Avian Predator Lethal Removal NWW Projects 2020 (NWW)
 - 2.4. Insulation Power Factor Testing Presentation (NWP)
 - 2.5. Doble Testing Presentation (NWW)
 - 2.6. TDA count station light picture (NWP)
 - 2.7. TDA dewatering schedule (NWP)
 - 2.8. Coordination Forms (MOC/MFR) (NWW/NWP)
 - 2.9. FPP Change Forms (NWW/NWP)

3. **Action Items**
 - 3.1. **NWW**
 - 3.1.1. **[September]20AppG003 – LWG Dewatering - ACTION:** Peery will make the changes “no later than 72hrs” and resend. *Status: Completed. No Comments were received.*

 - 3.2. **NWP**
 - 3.2.1. **[September 20] BON Nav Lock debris bubbler - ACTION:** Wertheimer will follow up with the hatchery on release times and locations. *Status: Completed. Hausmann asked for the locations and would like to be in communication with Traylor about the language.*
 - 3.2.2. **[September 20] 20BON92 MFR AFF Chinook Morts- ACTION:** Lorz will find out how many fish were tagged on the day that three fish died. *Status: Completed. Kovalchuk sent the information to Van Dyke. He confirmed that he received the information.*
 - 3.2.3. **[August 20] TDA Turbine Dewater Sturgeon SOP - ACTION:** Van Dyke and Morrill will discuss the proposed protocol with their respective sturgeon experts. *Status: Morrill has reached out to his coworkers but hasn't heard back. WDFW is currently short staffed. Van Dyke has reached out but there is a change in staffing in the sturgeon section. Pending.*

 - 3.3. **Completed Action Items or to be discussed later in the agenda**
 - 3.3.1. **[September 20] 20JDA003 – TSW Install Date - ACTION:** Fielding will investigate the possibility of installing the TSW on a weekday and then closing it until the correct date. *See 7.1.3.*
 - 3.3.2. **[August] 20LMN08 MOC Floating Guide Wall Repair- ACTION:** Barnes will double check that no forebay restrictions are required for this work. *Status: Project staff are coordinating forebay restrictions if needed with RCC and BPA. Work is progressing on schedule. They are dredging to remove the debris around the anchor block. The work is expected to be complete by 16 September.*

3.3.3.[August 20] BON ROV - ACTION: Hausmann will write an MOC on the ROV inspection options. *Status: Due to leave, BON did not have the staff to support an ROV. BON is looking into purchasing an ROV. Hausmann asked for feedback on conducting an inspection. Lorz suggested continuing without doing an ROV inspection.*

4. Updates

4.1. NWW

4.1.1. Upcoming maintenance/construction/research activities.

4.1.1.1. FPOM outages schedule (Setter) – The only change for this month is MCN spill bay 15 has returned to service and has been removed. Crane 6 remains out of service. Fish pump 1 should return to service by the end of November. The project is expecting to receive the leaf gate in November. LMN unit 2 cavitation repair has been pushed out to next spring.

4.1.1.2. LWG PIT spill bay – The electrical subcontractor addressed the grounding issue on 17 August. The leaking conduit for antenna 5 was determined not to be a warranty repair. The project is looking add drains to the conduit to drain the water so there won't be a freezing issue this winter. The rattling conduits was also not a warranty repair. The project does have several options to prevent the rattling. The off-season spill has started. Between 01-07 October, there has been three days of spill. The adult PIT detections through the RSW over those three days has been 25 adult Chinook (1 tagged at the AFF and the other 24 were tagged as juveniles from Lyons Ferry-overshoots) and 5 Steelhead (2 tagged as juveniles for the transport in river evaluation study and 3 were tagged at the LWG adult trap). During the same time period, the adult passage through the bypass was 2 adult CH (from Lyons Ferry) and 3 Steelhead (1 from Sawtooth hatchery and 2 from LWG trap). For juvenile passage, there were 8 juvenile fall Chinook detected over the RSW and 29 juvenile fall chinook and 1 sturgeon detected through the bypass. Morrill asked about the origin of the juvenile fall Chinook. The juvenile fall Chinook all originated from various places out of the Clearwater basin.

4.1.1.3. Doble testing presentation (Bouwman and Brooks) – Bouwman explained the definition of parts and overview of the testing. Van Dyke asked if the testing technology has evolved over the years. Bouwman said that the newer Doble test boxes allows multiple tests to take place without changing the leads. Using Doble has said time. The latest box came out in the last couple of years and Bouwman noted that Doble is always updating their equipment. Brooks gave a presentation on what happens during an outage for Doble testing. Van Dyke asked why redundancy isn't added to the system to get the testing done more efficiently. Brooks said that redundancy would require another transformer. The decisions would be driven by cost and real estate. The current transformer set up already takes up most of the powerhouse. Another transformer line would be very costly for something that is more of a convenience rather than a necessity. Brooks isn't sure how much redundancy would save on outages. Just changing out bus lines would be a three-month outage. The disruption would be epic. Van Dyke asked what year the Doble box was introduced. The M7100 Doble testing box was received 2-3years ago. The engineers had been using the M4100 previously. The M7100 had a defect and has now been returned for repairs. The M7100 has been used on and off for the last three years. Doble testing has been going on since the plant was built. The testing has now improved. There are only a couple of companies that make this type of equipment but Doble is the most respected company. About every five years, Doble makes an update to the testing box. The test sets are leased. Bettin asked if the work can be done at night. Brooks said that it would be challenging for safety reasons while working 25-30

feet up in the air. The work could be done at night, but it would be more challenging and it would take longer to make sure all the leads are placed correctly. Costs would increase for lights and increased labor. Humidity and condensation are major issues. Running the manlift is a complicated operation and the tester has to come within inches of the ceramic bushing. Bumping the ceramic bushing can be cataphoric. Van Dyke asked if the doghouses must be at the top of the transformer. Brooks said that the bushing housing is filled with oil. Preventing any penetrations that would cause an oil leak is a high priority. Keeping the equipment above the oil also prevents the need to drain the oil every time something needs to be replaced. Conder said the outage timeline seems justified based on the work. July/August timeframe chosen for weather. Conder wanted to know if the work could be postponed to November. Brooks said that it is possible to get good weather, but it is also possible to get bad weather causing them to have to redo the test. They did try to do the tests in a less desirable times but the results were all over the map and it wasted a lot of time. The end of the time would be September which doesn't work well for fish either. Brooks said that they understand the challenge of competing interests and are willing to work with the regional fish managers as much as they can.

4.2. NWP

4.2.1. Upcoming maintenance/construction/research activities.

- 4.2.1.1.** 20BON69 MOC PH2 outage for electrical work – The work is on schedule for the 19-29 October. The lamprey hatch will be fixed. Van Dyke reiterated that he doesn't believe that October is a better time than the original December date for this outage. Note from Van Dyke “what I have been stressing here is that the October date was not a better time than the original December date for this outage because it focused on power benefits more than fish benefits. Too many operational decisions recently have been increasing power benefits at the expense of fish protections.” Hausmann confirmed the end date is 29 October. Conder asked about hazing. The USDA contract goes through the end of the month. USDA had been hazing around the removal effort. Conder asked that we confirm that USDA knows of the PH2 outage. Trapping occurs at PH1 in the morning and then the hazing can occur later. Martinson asked if they could remain in by-pass during the outage. They do not anticipate collecting many fish while PH2 is out of service. Martinson has some staffing shortages. Conder was fine with the request.
 - 4.2.1.2.** 20BON81 MOC Hydro-survey for Rock Removal – The construction will likely be in February. This MOC was for the hydro survey. The results were discussed at FFDRWG last week. Rocks were confirmed and the contract will go forward.
 - 4.2.1.3.** 15TDA08 MOC Transformer Installation – schedule is staying the same. Workers had to stop during the smoke, but they were able to make up the time and are now back on schedule.
 - 4.2.1.4.** 19TDA04 MOC Crane rail Replacement – on schedule. The night work starts in November.
 - 4.2.1.5.** 20TDA10 MOC PUD Smolt Bypass Extended Outage – No update. The outage starts in October 2021 until the following passage season in 2022.
 - 4.2.1.6.** 18JDA02 MOC Trash rack replacement – on schedule. The PDT is awaiting funding. Fielding has requested to be on the PDT.
 - 4.2.1.7.** 20JDA04 MOC STS crane replacement – on schedule. Fielding has requested to be on the PDT.
 - 4.2.1.8.** 20JDA14 MOC Line 1 outage – BPA transmission work – currently ongoing. The outage started 05 October.
- 4.2.2. BON ITS gate – no update. The last timeline was drastically different than before.**
Hausmann has not heard from the small cap group. He will elevate the issue with Adams if

he doesn't hear soon. Conder said this the third year without operations. Conder would like to elevate the issue on his side. If the work is delayed, he wants the work done when less juveniles are present.

4.2.3.BON JMF wetland sinkholes and proposed repair – the water has been shut off. There was a mystery source of water that was finally found. The plan is to permanently block the drain by the end of the month.

4.2.4.BON Cascade Island PIT –The project has been submitted for funding to the small cap work group. The antennas will be replaced this winter and stored in place when for when funding is provided for the infrastructure. Morrill asked how he could influence the funding decision. Hausmann and Mackey were not sure how it could be influenced. Hausmann wrote the justification and the funding is not delayed, just moving through the system. Morrill asked Conder to add this to his list of trying to influence. Conder said he is less concerned with this because there are currently detections, and this work is an upgrade. Hausmann did have help with the justification to use specific language. One of the problems is that the projects are ranked and this is degrading not in failure mode.

4.2.5.BON WA SH serpentine PIT antennas – Hausmann heard from Warf that all four antennas will need to be replaced. BON will support with cranes. Warf estimates a day or two of support. Delivery of the antennas is in second week of December. The first two weeks of December is busy with the dewatering of the ladder. Hausmann will coordinate with maintenance for support.

4.2.6.BON AFF Aqui-S disposal – There was a meeting about the disposal last week. There are two simultaneous paths to address this issue - short-term and long-term. A PDT will most likely be formed to address the long-term solution either repair the drain or create a bio-swale. Lorz asked for the plan for next year. Hausmann recommended the researchers investigate permits. There are options for disposal at landfills which might be cost prohibitive. The NPDS permits have taken the Corps a long time but there could be a faster process for other permits. Hausmann doesn't know what CRITFC should do. Lorz appreciates the PDT but they are in a bind for next year. He wants to know if they can continue using the three sites identified last year to dispose of the waste. Lorz asked about the situation at LWG and if they have to get their own permit. Hausmann said the sprinkler system is a potential but the issue is location at BON. The project has involved the environmental folks at the project and downtown. The volume is too high to just let it go to ground. Hausmann thinks the best would be to go to the wastewater treatment plant. However, it is a challenge to get it there and the volume is a struggle. This year, the Office of Counsel said it was a one-time permission. Office of Counsel and the Real Estate office will have to give their opinions. Hausmann doesn't have a definitive answer. Lorz said that he doesn't want an 11th hour crazy type deal. Lorz wants to work this out because it affects the fishery management. Hausmann agrees and has a couple of recommendations. Lorz needs to know now for planning for next year. Setter said she believes the sprinkler is an interim measure while NOAA gets a permit. The NPDS permit is different than the Aqui-S disposal permit. Hausmann will reach out to LWG. VanDyke commented that the work in the AFF is significant for management and doesn't want any hiccups. Mackey understands and mentioned that CRFM funded studies will use the AFF in the future. Morrill chimed in with support for the significance of the AFF work. Hausmann commented that the disposal according to the manufacturer is different than the environmental side. Lorz asked for streamlining work plan for the PDT.

4.2.7.TDA AWS trash rack – No update. Lorz asked what the plan is if the AWS has to be used. Cordie said the back-up AWS system can be used with periodic shutdowns, if there is debris but there is no plan B. Bellerud wants the system to be totally reliable before undertaking the fish unit rehab project. Cordie said he agrees and that is why this PDT process started.

- 4.2.8.** TDA CS lighting – Four Peaks installed a light tube at the bottom of the count station window where there is a dark spot. They are a new contractor but didn't know that these things go through FPOM. Fish staff monitored the window and salmonids don't seem to notice. Lorz asked if the light is on at night since lamprey pass at night and at the bottom of the window. Lorz stresses that the contractors need to discuss with the group before making changes. Wertheimer said that they were trying get accurate steelhead counts and will follow up with the contractor. Peery said that the contractor also added lights at IHR on the sides; the lights are on timers. Cordie will instruct them to turn off the lights at the end of the shift. Van Dyke asked about the rationale. Peery said there is a dark spot because it is going through a shadow. VanDyke asked if the lighting has been like this the whole time, what steps are being taken to ensure continuity of the counts. Peery said that nothing is being done for continuity. Cordie asked if they need it for night video. Wertheimer will ask he was on leave when it happened. **ACTION: Wertheimer will talk with Four Peaks about the lighting and if the light is used at night.** Follow up later in the meeting: Wertheimer did send an email to confirm no light at night.
- 4.2.9.** TDA Sluiceway cover – the project will install the cover this winter. It is a concrete cover. Lorz questions that there is money for a sluice cover but not the trunnion pin. Cordie said it is power money not joint.
- 4.2.10.** TDA East Exit boundary – the project is struggling to keep fisherman away from the east fish ladder exit. The project would like to move the boundary, but it must go through congress. The Washington fishing regulations do not have a boundary limit near fish ladders. The exit is in Washington not Oregon. Morrill asked if Cordie reached out to the WA enforcement. Cordie did and asked if they could add a limit to the regulations. The bottom line is that they did not add any limits. Thompson said that she has seen people fish right outside the adult ladder exit at IHR. Morrill thought the limit for angler access was 400' above and below the project. At TDA, the AWS intake causes a safety issue. Thompson and Morrill will work together after the meeting on the IHR exit. Van Dyke asked if lasers are used on anglers when they are near the exit. TDA doesn't use lasers on people.
- 4.2.11.** TDA trunnion pin – no update
- 4.2.12.** JDA north pumps – pump 4 is out of service and expected to RTS this winter.
- 4.2.13.** JDA spill bay 10 – the project is still investigating why it has to be operated manually.
- 4.2.14.** JDA SCADA – almost complete. This topic can be removed.
- 4.2.15.** Winter Dewatering Schedules
- 4.2.15.1.** BON – the schedule has not been set yet.
- 4.2.15.2.** TDA – For the last 20 years, TDA has dewatered the collection channel every year. They would like to do an ROV inspection instead. There is evasive language in the FPP that allows the ROV. There is no planned maintenance just inspecting the grating. Bettin asked if Cordie will clean up the language in the FPP for the future. Morrill asked what they normally see in the ladder. They usually find large sturgeon. The best inspection is dewatering and physically seeing each grating. They have not had any issues with the gratings, just minor issues that would have been caught with an ROV. Lorz would be fine with skipping one year but at least every other year. Bellerud thinks it is good to minimize sturgeon interaction and is fine with skipping a year. The grating at the entrances were replaced ~10 years ago. A couple of gratings in the transportation channel are original but the diffuser valve is closed. Lorz asked if the gratings are lamprey spaced. The grating are all 1" (not lamprey spaced) , but they don't typically get many fish even in the collection channel pools. Van Dyke and Morrill had no objections to this work.
- 4.2.15.3.** JDA – the schedule has not been set yet.

4.3. NWS (Seattle) – no update

4.4. Research/FFDRWG updates.

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

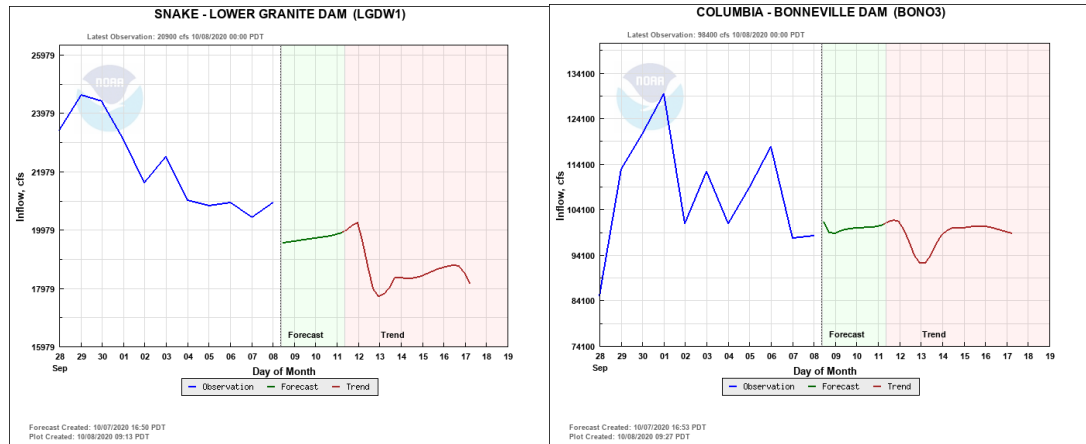
4.4.1.NWP FFDRWG – the next meeting is 03 December. The last meeting was 01 October. The Corps did not receive any comments on the turbine upgrade report. For B2FGE, the PDT was supposed to resolicit this week for the construction contract. Rerecich was not sure if it happened but doesn't think it will impact the spring schedule. Lorz might still send comments.

4.4.2.NWW FFDRWG – the next meeting is October 22, 2020. Setter had informed Shuttlers that Morrill had sent comments for FPP Change form 20IHR003.

4.5. RCC update

Project	Previous day average (kcfs)	5 day forecast average (kcfs)	10 day forecast average (kcfs)	Projected Low/Peak (kcfs) and date.
LWG	21	20	18	18 (10/12) / 20 (10/11)
MCN	100	90	92	85 (10/12) / 95 (10/11)
BON	97	100	99	92 (10/12) / 100 (10/10)

Table 1. RCC flow forecast



4.6. BPA update – Bettin asked if the fish units will be moved to line 3 during the transformer replacement. On the BPA schedule, it shows the FUs out of service starting 26 October. Cordie confirmed the plan is to run the FUs on line 3.

4.7. Fish Count Program update (Peery, Wertheimer) – no update. Night counts end at the end of September; daytime counts run through October. Winter counts will occur at BON and LWG. This is the second year of a five-year contract for fish counting. Wertheimer sent an email to the contractor about the light.

4.8. Pinniped update

4.8.1.BON –Monitoring is ongoing, and they have observed between 33-68 SSL in the last two weeks. Observers noted many sturgeon kills. The removals have not started. The pilot study to remove smaller SSL is still being worked out. Conder asked about the hazing. The Bi Op has language that the hazing study design would be NOAA approved but it has not. Conder is fine with a pilot program but the data cannot be used to address hazing in the future. Conder wants daily hazing especially during the outage period and not blocks of no hazing for this pilot study. Wertheimer said that only regular hazing is going on. There had been a

small-scale study developed by Tidwell. Hausmann said that hazers are very receptive to directions. The removals are predawn and would not be present at the same time as the hazers. Morrill said that WA has a new biologist and will relay the name to Hausmann.

4.8.2. Willamette Falls – Van Dyke reported no pinniped activity has been observed lately and ODFW is not expecting activity until December.

4.9. Lamprey update -the lamprey passage season is over. The LPS systems go down on 02 November. Through August, the LPS plus the window counts combined are ~44,000 lamprey at BON. FFU is correcting the counts and final numbers will be out in December/January. CRITFC said that there is a discussion about SMP changes for next year, CRITFC has concerns since they get a lot of lamprey samples at JDA.

5. Avian updates (10:30)

5.1.1. NWW – Peery sent out the lethal take numbers for this past year. California gulls were higher than previous years, driven by the number at LGS and IHR. Otherwise, the numbers were consistent with previous years. Morrill asked about the gut analysis. USDA can provide the carcasses for an analysis or the contract could be amended for them to do it. No pelicans would be taken under lethal take. Cordie asked how close to the quota are these lethal take numbers. Peery wasn't sure. Setter doesn't think that the contract has specific quotas per project. Cordie has concerns that if the NWP does get lethal take, the number of birds could be limited by the quota. Setter said that Cordie will need to talk to USDA about quotas. Johnson said that the new laser hasn't come. He is trying to get everything in place for the lasers for the next year.

5.1.2. JDA – There has been a recent increase in gulls and cormorants but a decrease in pelicans. JDA did a PIT tag scan of the pelican islands. Lorz recommended talking to RTR who have some tag efficiency and deposition rates for pelicans. Fielding said the plan was just to see if they could detect tags. The project plans on doing this in the future.

5.1.3. TDA – They also tried to scan the islands downstream of TDA with magnets and will ask JDA for sampling advice. Hundreds of gulls are sitting on the rocks next to without any juveniles pass by. TDA fisheries was watching the gulls and noticed that McDonalds patrons throw away food around lunch time and the gulls are waiting for it. Lorz suggested sending an email to Hevlin. Cordie said that they tried the French fry feeding at JDA but it was not successful. There are lots of cormorants as well. Lorz asked if the cormorants were juvenile or adults. Cordie doesn't know. Lorz asked if BPA has concerns about the cormorants on the towers. Bettin said it is not ideal. He is trying to modify the towers, but it is not happening quickly. It is still moving just slow.

5.1.4. BON – There are typical bird numbers for this time of year. Cormorants are usually roosting and not feeding.

5.1.5. Estuary – The season is over. FFU has removed all the passive avian dissuasion. They are working on the colony counts for ESI and they should be tabulated by end of month. This week, FFU is doing PIT recovery for survival estimates. The MOC submitted from Lorz will be supported by PME and FFU. Werthiemer very pleased with the work his staff was able to produce considering COVID and travel restrictions. Lorz asked if the analysis will be done in house or contracted. PME asked for support on the collection of the PIT tags only. PME would oversee analysis or the contract of.

6. Invasive species discussion (Setter) awaiting response on shad disposal during sampling activity (Morrill, Van Dyke) – no update

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

- 7.1. 20DWR02 MOC Exciter Testing – there is nothing new since the last version. All comments have been incorporated.
- 7.2. 20LGS16 MOC Powerhouse Roof Repair – Peery said that several agencies are waiting on the water year estimate before giving comments. The NOAA website predicts average to below average for temperatures and average to above average precipitation. The project and BPA are anxious to plan their work and market production. Conder asked the difference between four units or five operating in early spring. Peery said it significantly affected when they could do the performance spill in the spring for April and May. Conder would like the time shortened in June and asked if the crews could be increased or add a night shift. Peery hasn't heard back from the PDT. Bettin said that he thought the outage was as short as possible. Even with more money, the time couldn't be shortened due to the nature of the work. Conder is thinking more of the April time. There are some tools like going above 1%. Bettin asked when the Doble testing on line 1 is next year. Peery is looking into the schedule, but it is usually in August. They may not be able to overlap the work, but it may be a consideration on when to schedule the outages.
- 7.3. 20MCN13 MFR Missed Sampling
- 7.4. 20MCN14 MOC Early Emergency By-pass – Bellerud doesn't see any problems with the overshoot study but still needs to review the MOC. Morrill asked what year the fall Chinook were; Hockersmith didn't know but thought they were sub-yearling age. Comments are open until 20 October. MCN has been affected by COVID and has separate indoor and outdoor crews. These repairs are very important.
- 7.5. 20BON94-97 MFRs

8. **Fish Passage Plan:** The final 2020 FPP went into effect March 1 and is available online at:

<https://pweb.crohms.org/tmt/documents/fpp/2020/>

8.1. **Pending Change Forms:**

- 8.1.1. 20IHR003 – Operating Gates Position (Anderson, Hockersmith), August and September 10/22 Discussed at several previous FPOM and FFDRWG meetings. The PDT would like a response by October. Hockersmith said that Anderson is on paternity leave and Shuttles will be the point of contact. He received comments from Thompson and has reached out to PNNL for a sensitivity analysis. There will be follow up at FFDRWG meeting later this month. The single stage cylinders can be designed to raise the gate an additional 5 feet which would increase flow up the gatewell. It would be in between the high and low positions. Morrill said it is a substantial increase in height. Hockersmith said that he will make sure they have elevation drawings. Morrill sent in proposed language that WDFW would be more comfortable with for consideration.
- 8.1.2. 20AppG003 – LWG Dewatering (Peery, Holdren). Revised to “no later than 72 hours”. – the language was sent out via email. **Approved.**
- 8.1.3. 20JDA003 – TSW Install Date (Kovalchuk). Fielding to look into whether TSWs can be installed on a workday then closed with the tainter gate until spill starts Sat, 10-Apr-2021. Fielding investigated and it can't be done. Fielding will send out a detailed SOP on TSW installation. VanDyke would like to see more information before approving. Wright said that the additional information is the SOP on how the TSW is installed and wouldn't affect the change form. VanDyke has concerns because the spill starts on the Columbia a day after the Snake. Mackey said that the cost is not a savings but a shift in funds from other maintenance work. Wright said that the spill opens at midnight and the non-TSW pattern is used until the crew can get there in the morning. MCN can open the spill gates from the control room. JDA requires a crew. Setter pointed out the circumstance at MCN might change because of the broken spillway crane and they are short 2 gates. She is hopeful to have an automated system with the new gates coming in November/December. Swank isn't crazy about losing surface spill but understands the desire to use the funds on maintenance. To close the TSW, the TSW is removed on the last workday and the spill continues with the

non-TSW spill pattern. Bellerud thinks the TSW should go in early. Bettin said it is a non-starter with the additional spill. Bettin has no ability to go outside of the spill agreement. VanDyke doesn't think it is outside the agreement to start early. Conder wants to see the passage numbers. The question is whether surface spill is worth the overtime money. ACTION: Kovalchuk will look at the passage numbers and send them out. Pending. UPDATE: Kovalchuk has retracted this change form.

8.2. New Change Forms: NONE.

8.3. 2021 FPP Production Schedule and Deadlines.

- By no later than Friday, Dec 18, 2020 – submit draft FPP Change Forms and submissions for Appendix A (Special Ops & Studies) to Lisa Wright and relevant District POC – Erin Kovalchuk or Ann Setter.
- By no later than Thursday, Dec 31, 2020 – all draft project chapters, appendices, and change forms will be posted on the FPP website to allow at least four weeks for review.
- Thursday, Jan 28, 2020 – annual FPOM meeting to finalize FPP Change Forms.
- Friday, Feb 12, 2021 – FINAL DROP DEAD DUE DATE for all approved FPP Change Forms and final Appendix A submissions in order to be included in print copies.
- Monday, March 1, 2021 – start date of 2021 FPP.

9. Task Group Updates.

9.1. Avian Task Group meeting – Cordie said that the old task group did not accomplish any tasks. He wants to revive the task group to resolve a few issues. He asked who wants to be on the task group. Peery would like to be in the group and suggests looking at methods to evaluate the deterrents. Someone from CRITFC will attend. Morrill will join. Fielding will join. VanDyke would like someone from ODFW in the group. Someone from BPA will join but it hasn't been determined. Thompson will discuss to see who from NOAA will join. Conder recommended adding Lynn Krasnow. Inland/dams will be the primary concern. McDowell would like to be included. McClain was nominated from Wertheimer to attend. Cordie asked people to review Appendix L.