

## MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 12 April 2019 FPOM meeting.

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

Last	First	Agency	Email
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On the phone: Anderson, Brower, Johnson, Morrill, Richards, Sears and Wright

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

- 1.1. March meeting minutes were approved.
- 1.2. FPOM concurred with testing the LGS cooling pump.
- 1.3. 19TDA004 – AWS Backup Operation 2 – 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 (NWW)
- 2.3. BPA outages (BPA)
- 2.4. Composite Cooling Water Strainer Lamprey Counts (NWW)
- 2.5. 2019 LMN Early Start JBS Passage (NWW)
- 2.6. MCN Laser Photos (NWW)

2.7. Coordination Forms (MOC/MFR)(NWW/NWP)

2.8. FPP Change Forms (NWW/NWP)

### 3. Action Items

#### 3.1. NWW

3.1.1.[April 19] **LGS debris spill** - ACTION: Setter will ask about the debris strategies at each dam and provide a list to FPOM.

3.1.2.[February 19] **MCN** – ACTION: After the avian deterrent laser is mounted, Johnson will provide pictures. *Status: Completed. The laser is functional as of yesterday morning.*

#### 3.2. NWP

3.2.1.[April 19] **19TDA04 MOC Crane Rail Replacement**: ACTION: The June FPOM will be scheduled at TDA for a site visit.

3.2.2.[April 19] **TDA ROV Report** - ACTION: Add the TDA spillway rocks to the next FFDRWG agenda and ask Ebner to give her perspective.

3.2.3.[April 19] **Whooshh** - ACTION: Kovalchuk will add the pictures of the second modification to the MFR then resend to the group.

3.2.4.[April 19] **BON PIT room relocation** – Hausmann will get a cost estimate.

3.2.5.[March 19] **Rock Removal**- ACTION: Kovalchuk will create a new page for the spillway rock removal reports on the FPOM webpage. *Status: Completed.*

3.2.6.[December 18] **TDA dam angling Catch Results** - ACTION: Morrill will ask Winther for data to be broken down by month. Still pending. *Status: Morrill has the draft 2018 report and will send to Kovalchuk for FPOM distribution.*

3.2.7.[July 18] **SLEDS Extensions** - ACTION: Hausmann will look into the feasibility of modifying the SLEDs. Status: Hausmann had hoped to get a ball park estimate from the FOG bulkheads but the method of cost per pound of steel doesn't work in this case. Engineering will need to make a cost estimate. *Status: Still pending. Kovalchuk asked if this was still necessary and several FPOM members would like to know the cost estimate in case it is needed in the future.*

3.2.8.[July 18] **SLEDS timeframe**- ACTION: Hausmann will write a change form and an MFR on the SLEDs. *Status: Still pending. The MFR was completed but the FPP form was not submitted yet.*

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

3.3.1.[February 19] **Whooshh** - ACTION: Conder will engage Meyer on the design. *Status: Completed.*

3.3.2.[February 19] **Rock Removal** - ACTION: Kovalchuk will find out if the ROV report is final. *Status: Completed.*

3.3.3.[February 19] **MCN** - ACTION: A laser effectiveness study plan will be sent out to FPOM for comments. *Status: Completed.*

### 4. Updates

#### 4.1. NWW

4.1.1. Upcoming maintenance/construction/research activities.

4.1.1.1. FPOM outages schedule (Setter) – Setter did not add anything new this month but the RTS date for IHR Unit 2 has been extended until April. There are minor contractor issues to be worked out before the testing can be done. Setter is optimistic that the turbine work (redoing draft tube) will be more efficient and fish friendly. All three units will eventually have the redesigned draft tube. The focus of the design was power efficiency and higher survival. The increased efficiency could spur operational changes like removing STS since they are a huge O&M cost.

4.1.1.2. LMN Early Start Summary – [Handout] Units 1-3 were screened and the project started in primary by-pass on 01 March but didn't start sampling until 08 March. The

collections numbers were heavily influenced by the Lions Ferry release. The last week of March is when fish really started to move. Bettin would like the temperature added in bold to Hockersmith's report for historic perspective. Setter stressed that the early start should be evaluated with the criteria of the weather. A total of 88 steelhead fell back over the separator bars with 10 PIT tagged.

- 4.1.1.3. Hourly Separator Count Data at LWG JFF – Morrill discussed this topic with Holdren. She will add to the counts to the weekly report for the spring spill season. Setter thought Morrill was looking for a separate report. Holdren had told Setter the plan was for the COE to provide a week of daily counts broken up by hour which will be submitted on Mondays. Morrill agreed to that plan. FPAC will decide where the file goes to.
- 4.1.1.4. Emergency spill at LGS- Flows came up quickly on 09 April and the project had to do an emergency debris spill. An MFR will come out soon. The flow peaked on 10 April. Bettin reported that the project shut off three units hoping the wind would blow the debris over to the spillway and the spill flow increased to 145kcfs. The debris boom is in place but there is an opening that a lot of debris came through near the Nav Lock. LMN has a boat barrier in place that tends to catch debris. LGS has an opening in the boat barrier that allows debris to pass over the spillway. Lorz wants to know the debris strategies at LGS and LMN in case any changes are needed for the FPP for next year. Conder wants to know what the risk is in April/May of not having the boat barrier boom out there. **ACTION: Setter will ask about the debris strategies at each dam and provide a list to FPOM.**
- 4.1.1.5. LGS cooling pump – The project needs to test the cooling pump. This work did not get done during the winter work period. Bettin suggested running it overnight to give the motor enough time to heat up. **FPOM concurred with testing the LGS cooling pump.**
- 4.1.1.6. LMN- The outfall pipe went under water but the outfall sprinkler is still working.

## 4.2. NWP

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

- 4.2.1.1. Whooshh installation (18BON67) – The scanner was installed. AFF sampling has not started yet. **ACTION: Kovalchuk will add the pictures of the second modification to the MFR then resend to the group.** Lorz and Conder requested that the lid be taken off for the first several fish to make sure the pipe doesn't cause any problems. Hausmann reported that there are some minor repairs to the AFF that need to occur before sampling can start. Whooshh doesn't have a PIT detection system but the sampling looks for PITs. Morrill confirmed that there is a bill in the WA legislature supporting the work at BON.
- 4.2.1.2. TDA Fish Unit Breakers (18TDA14) – Fish units came back on the 08 April and there is full flow at all entrances. A problem was discovered where some wires had been crossed resulting in a power outage. The project is still investigating the cause and path forward. If it needs to be repaired, FPOM would like it now before fish numbers come up. Cordie pointed out that there were lots of shortcuts taken to get the FU back to service and the east ladder may need an extended outage in the winter to finish some of the work.
- 4.2.1.3. TDA AWS system (19TDA03) – The 7' valve room flooded. The vents pushed up more water than the sump could handle. The project closed the AWS using the 10' valve. The 7' valve electronics are in manual and there is a plan to repair. The bolt issue has been taken care but they are too short. Bellerud wants to know if the AWS is reliable enough for an emergency. The follow on contract will have an alarm for the valve rooms. It took three hours to open the valves manually.

- 4.2.2. BON CI subsidence – The first step is adding a temporary bridge to allow access to the area. Hausmann will update when he knows more.
- 4.2.3. BON Spill bay 13 – The bay was open and dogged off at 2.9'. The dog position is a little low for the high spill. The bay should be repaired in about a week. Bettin is asking if PH2 can go above the midpoint to reduce spill above 150kcfs but Conder said that the Spring Creek fish were released about two days ago and gatewell conditions would deteriorate under that operation. Flows are forecasted to drop again in a few days so the operation probably won't be necessary. Bettin really wants to hold the BON spill at 150kcfs in order to keep the rocks out of the tailrace. Spill was up to 175kcfs during the high flows. Lorz said there are too many variables to just give a blanket answer to increasing the flow at PH2. Conder said that if the operation had occurred it would have greatly affected the Spring Creek fish and the duration over 150kcfs was not that long. Lorz and Conder need to check on the spring creek passage and will get back to Bettin. The weekend predication is more rain. Hausmann will check to see if the hatchery release passed and see if another release is scheduled. Lorz will follow up on Friday. Wertheimer asked if they could hold the water and trade like a commodity. Bettin said no because the water is not stored. Update during the meeting: Spring Creek has almost passed and the next release is in May.
- 4.2.4. JDA South Fish Turbine Pumps – Fish turbine pumps 1 and 2 were running and #3 was out of service with a bad clutch. On 09 April, line 2 tripped due to breaker work which stopped the turbines. The turbine pump #1 was torqued the wrong way during shutdown. Only turbine pump #2 is running. Per FPP, the FOGs and NE2 were closed and MU1 was reduced to 100. SE 1 was raised to 5' with a 1' differential. The project is thinking about changing to the shad setting to raise water level. There is a side diffuser but it hasn't been open in 30 years. FPOM does not recommend using the side diffuser. Maintenance is investigating and has not provided an update on the timeframe when #1 will return to service. NE1 has 1.5' differential. If the tailwater comes up, then the weirs will be raised again. Channel velocity is ~1fps. Conder asked for JDA to be a priority for fish counts. Lorz asked for email updates until this is fixed. An MFR will be coming.
- 4.2.5. ROV spillway TDA – The report came out from last winter and there is a large pile of rocks in front of spill bay 10 which hasn't run in years. Conder asked for an update at FFDRWG with Ebner's perspective. **ACTION: Add the TDA spillway rocks to the next FFDRWG agenda.** Lorz suggested going to the model and come up with a plan. Bettin suggested opening the gates with a crane and blow the rocks out.

#### 4.3. Research/FFDRWG updates.

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

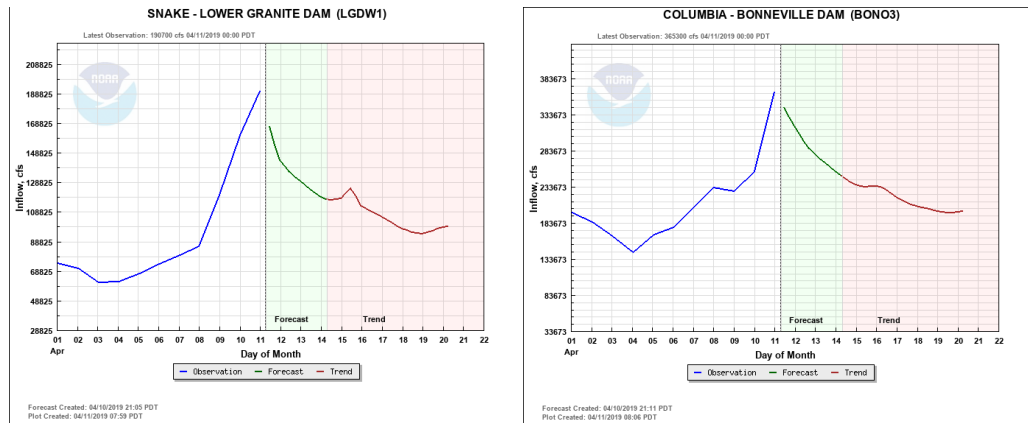
4.3.1. NWP FFDRWG – The last meeting was canceled.

4.3.2. NWW FFDRWG – May 23. Conder wants to do a site visit at LWG.

#### 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	195	122	99	95 (4/19) / 167 (4/11)
MCN	306	195	170	167 (4/19) / 272 (4/11)
BON	357	235	200	198 (4/18) / 343 (4/11)

Table 1. RCC flow forecast



- 4.5. BPA update – [Handout]** Kovalchuk will add the update to the meeting file. No new updates affecting fish this month.
- 4.6. Fish Count Program –** JDA counts are behind but the others have been within three days. FFU will prioritize JDA this week. As the fish numbers increase, the turnaround time will take longer. FFU is almost done with mobilizing for the avian program and will have more time for the counts. TDA is helping out with the fish counts. Fishway inspections are the priority but gate wells inspections, calibration and velocity will be dropped to keep up with the counts.
- 4.6.1. Next 5-year adult fish counting contract –** The COE has received the transition plan and working with the contractor to roll out the plan. FPOM was pleased with the timeliness of the fish counts.
- 4.7. Pinniped update –** The average count for BON tailrace has been roughly 10 SSL and 1 CSL. The States started trapping CSL. The trapping focus has been at the Willamette Falls, due to the low CSL numbers at BON. The State of Idaho has been supporting BON observations, and has provided a vet to support removals. The WDFW is currently supporting FFU abundance & take observations at BON in the interim. The USDA is hazing Tower Island until the CSL numbers increase.
- 4.7.1. Fall Hazing –** A Term and Condition in the new Bi Op is pinniped hazing in the fall. No hazing is required from June through August. There is a caveat that hazing could be reduced for research. Conder wants to start talking about this topic now since this is a new requirement and not in the current budget. Mackey doesn't have the funding and will need to find some. Mackey asked how many hours is expected. Conder said it could be negotiable but wants effective hazing. He is tired of seeing SSL at the entrances in the fall. Mackey will have an update at the next FPOM. The hazing hours changed this year at BON to have two hazers doing both bird and pinnipeds at the same time. TDA pinniped hazing has another hurdle to overcome – NEPA documents.
- 4.8. Chum update –** Chum operations end today. Emergence is almost complete.
- 4.9. Lamprey update –** The final lamprey report is ready to out after a final review. The LPS were watered up 11 April. Crews were working on deeper grooves for the plastic exit ramp. Setter asked for the lamprey final numbers. Wertheimer said it is in the Annual Fish Passage Report and asked if the AFPR is a requirement from NOAA. Conder didn't think so but Setter thought it was under fish counting. This year, the report is solely digital. Wertheimer would like to streamline the report because it is very long, and wants to ensure that the Fish Managers are still using these data in the document for applied management. Lorz thought that TAC uses the document. The document holds history in one place with cumulative tables. Most of the information is easier to find on the fish passage website.
- 4.10. JDA –** The old LPS pumps will be reinstalled. The elevator has been reclassified as a fish elevator. A contract will be issued to repair it again.

#### 4.11. Avian Update

- 4.11.1. **BON** – Very few birds are present. CC avian lines are underwater and most likely broken.
- 4.11.2. **TDA** – Gulls are starting to show up. Some have been observed at Miller rocks and the Klickitat. USDA starts next week.
- 4.11.3. **JDA** – The lines are in good condition. USDA hazing starts on 16 April.
- 4.11.4. **MCN** – Bird numbers are starting to increase. There was a bird wire connected to the walkway that was lost when the handrail washed out. The laser appears to be effective at discouraging feeding but most activity is roosting. A distress call is being added. The laser is supposed to have a better range during overcast days but the project hasn't verified this.
- 4.11.5. **FFU** – The East Sand Island colony was moved inland but it is still one acre. The passive dissuasion has been installed on the rest of the island. Rice Island is being completed as well. Bettin asked if the high water presents any problems. High water creates problems for getting to the island and back.

- 5. **ODFW study proposal that requires AFF coordination (ODFW)** – A study is being proposed through OWEB on tagging John Day Steelhead for migration behavior. The specifics on how to get the JDR fish has not been worked out. Conder is not willing to accept any violation of FPP criteria and Van Dyke was aware of that. Lorz strongly suggests looking to see how many JDR PIT fish come through the AFF. There is no sort by code system. Sullivan wanted to know how many fish are being targeted and would like to see the proposal. VanDyke will send the proposal to Kovalchuk for distribution. For access to the AFF, there will be a longer process since this is not CRFM funded.
- 6. **BON PIT room relocation (PSMFC)** – Brower shared a presentation on relocating the PIT room. This project has been approved by the PIT TAG steering committee and will be funded from BPA and BON project. The old antenna system just covered the orifices; this new system will cover 100% of the passage including lamprey with improved efficiency. Due to the subsidence, it is unclear how long the current building will last and there is a restriction on vehicles in the area. PSMFC would like to install the new system this winter. The thin walled antenna is similar to the TDA count station antennas. Detection efficiency is very high for this type of antenna. There will be two locations – one at the UMT and the other at the counting station for 100% detection. The building is too heavy to move and a new building will need to be purchased. Some of the existing equipment can be reused. PSMFC would like to get the work done this winter. Conder asked why they need new antennas. The location is too far to route the cables and it was cheaper to do a new system with higher detections than run a cable that far. Lorz and Conder have trouble with adding a new system when funding is at a premium this year. Hausmann pointed out that the importance of these detections was already discussed and it was decided that the region wanted them. The funding is half BPA and half BON O&M. Lorz wants to know what won't get funded to do this work. **ACTION: Hausmann will bring back a cost estimate.** Mackey said that the subsidence doesn't have a long term plan in place and it is getting pieced together. Mackey thinks it would be better to get this work done before the project restricts access to the site.
- 7. **Coordination/Notification forms (need concurrence/discussion)**
  - 7.1. **19LWG01 MOC Unit 2 Model Validation** – Discussed under 4.1.1.1.
  - 7.2. **19LWG02 MFR Fish Ladder Partial Dewater**
  - 7.3. **19LGS01 MFR AWS Pumps Intermittently Out of Service**
  - 7.4. **19LGS02 MFR Sample holding tanks**
  - 7.5. **19LMN03 MFR Spill Gate 7**
  - 7.6. **19IHR03 MFR Delay in Raising the northshore picketed leads**
  - 7.7. **19IHR04 MOC Unit 2 Commissioning** – Comment period is open until 15 April. No additional comments were received.

**7.8. 19IHR05 MFR JBS Outfall Sprinkler Out of Service**

**7.9. 19TDA04 MOC Crane Rail Replacement Tailrace Deck** – With only the in-water work period, it would take 5.8 years to complete. It is similar to the removal of derelict train rail removal completed in ‘17-18. This rail is over the collection and transportation channels. Bellerud asked if the noise was similar to AWS work but it would be too hard to compare. Lorz asked if there were any locations that are more difficult than others like the sluiceway outfall. Cordie did not think so. Bettin asked if it has to be sequential. Richards said yes and the plan is to try to impact operations the least. All of the work will be segmented doing one main unit at a time – 86’. The work starts in the winter of 2021. The section near the east entrance will be during the winter period. Lorz was okay with nights in November. Lorz wants the COE to identify any trouble spots. **ACTION: The June FPOM will be at TDA for a site visit.** The remaining rail road on the east exit will be done during in-water work period. The project will keep the debris out of the fishway. **This action is pending until the site visit.**

8. The final 2019 FPP is available online at: <http://pweb.crohms.org/tmt/documents/fpp/2019/> All 2019 FPP change forms and draft chapters/appendices are posted at:

<http://pweb.crohms.org/tmt/documents/fpp/2019/changes/>

**8.1. Pending Change Forms:**

**8.1.1.19LGS004** – Channel Velocity (Peery/ St. John). Pending more information on rationale for changing the location.

**8.2. New Change Forms:**

**8.2.1.19TDA004** – AWS Backup Operation 2 (Cordie) – Approved.

**9. Task Group Updates.**