

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 10 October 2019 FPOM meeting.

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

Last	First	Agency	Email
Bellerud	Blane	NOAA	Blane.Bellerud@noaa.gov
Benner	Dave	FPC	Dbenner@fpc.org
Bettin	Scott	BPA	swbettin@bpa.gov
Brower	Alan	PSMFC	abrower@psmfc.org
Bryan	Janine	Whooshh	janine.bryan@whooshh.com
Bryan	Vince	Whooshh	v3@whooshh.com
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Geist	Evan	CRITFC	-
Hausmann	Ben	NWP-BON	Ben.J.Hausmann@usace.army.mil
Hockersmith	Eric	NWW	Eric.E.Hockersmith@usace.army.mil
Kovalchuk	Erin	NWP	Erin.H.Kovalchuk@usace.army.mil
Lampman	Ralph	Yakama	lamr@yakamafish-nsn.gov
Lorz	Tom	CRITFC	lorz@critfc.org
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Morrill	Charlie	WDFW	Charles.Morrill@dfw.wa.gov
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Porter	Laurie	CRITFC	porl@critfc.org
Rerecich	Jon	NWP-PM-E	Jonathon.G.Rerecich@usace.army.mil
Schmidt	Paul	NWP-PM-E	Paul.A.Schmidt@usace.army.mil
Sears	Sheri	Colville	Sheri.Sears@colvilletribe.com
Setter	Ann	NWW	Ann.L.Setter@usace.army.mil
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Swank	David	USFWS	David_Swank@fws.gov
Thompson	Josie	NOAA	Josie.Thompson@noaa.gov
VanDyke	Erick	ODFW	erick.s.vandyke@state.or.us
Wright	Lisa	NWD-RCC	Lisa.S.Wright@usace.army.mil
Zyndol	Miro	NWP-JDA	Miroslaw.A.Zyndol@usace.army.mil

On the phone: Brower, Ellenwood, Hockersmith, Lampman, Sears, Sullivan, Swank, Wright and Zyndol.

1. Final decisions or recommendations made at this meeting.

- 1.1. September meeting minutes were approved.
- 1.2. 16LGS16 Discharge Pipe Plug & Unit 1 Valve Rotation – FPOM concurred with one day of diving.

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. Outage Schedule (NWW)
- 2.3. BPA Transmission outages (BPA)
- 2.4. Whooshh Presentation (Whooshh)
- 2.5. Dewatering Schedules (NWP)
- 2.6. TDA Ice and Trash Sluiceway design plans (NWP)
- 2.7. WDFW Public Release Document on Reducing bag limits of game fish (WDFW)
- 2.8. Coordination Forms (MOC/MFR)(NWW/NWP)
- 2.9. FPP Change Forms (NWW/NWP)

3. **Action Items**

3.1. **NWW**

- 3.1.1. **[October 19] Fish Count Program** – ACTION: Peery/Kovalchuk will send out the QAQC plan to the group.

3.2. **NWP**

- 3.2.1. **[October 19] BON LFS** - ACTION: Hausmann will follow up with Schlenker on the hydrologic conditions of welding the hatch shut.
- 3.2.2. **[October 19] TDA Spillway MRER** - ACTION: Rerecich will follow up with Trachtenbarg about the status of the MRER and the cost benefit ratio.
- 3.2.3. **[September 19] TDA AWS**- ACTION: Cordie will find out about the details associated with the follow-on contract commissioning testing. *Status: Commissioning testing will be in the last two weeks of January and require only one day. Cordie will confirm one day or 24 hrs. Lorz asked about running the AWS for additional time beyond the one day test. The PDT is getting together to discuss this issue this month. The AWS is currently out of service.*
- 3.2.4. **[September 19] COE Temperature Profile Strings** - ACTION: Kovalchuk will find out when the report is expected. *Status: The report is scheduled to be out in December.*

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

- 3.3.1. **[August 19] Shad dissuasion** - ACTION: BPA will look into the shad research supported by BPA. *Status: See 4.0. Status: Peterson forwarded a report that will be posted.*
- 3.3.2. **[August 19] Shad dissuasion** - ACTION: The States will discuss removing juvenile shad at the JBS facilities internally. *Status: See 4.0.*

4. **Updates**

4.1. **NWW**

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

- 4.1.1.1. **FPOM outages schedule (Setter)** – The coffer cell repair is planned for this winter in the IWWP. The project is challenged to find funding but there is support. Until the coffer cell is fixed, there won't be any barge transport from LMN. Setter said the collection numbers have been higher with the different spill patterns over the last couple of years.
- 4.1.1.2. **16LGS16 Discharge Pipe Plug & Unit 1 Valve Rotation** – Diving is scheduled from 28-31 October. They would prefer one day instead of two afternoons on 28 October. The diving requires an outage of units 1 and 2. BPA concurred and comments were received by CRITFC and NOAA. **FPOM concurred with a one day dive.**

- 4.1.1.3. LWG Spillway PIT Construction Schedule update – Excavation on the ogee should be complete by the end of the week. The construction is on schedule for completion by 15 March. The antennas will be set in late October – November. Lorz asked about a test pour on the concrete. Hockersmith said it was completed and successful. PSMFC had a successful test of the antennas on the ground and hooked up to the transceivers in the conex.
- 4.1.1.4. 2019 Barge and Raceway TDG during spring spill – Hockersmith is setting up a site visit looking at the differences in head box configuration for raceway loading between LGS and LMN. Funding is now available but it still needs to be scheduled. Morrill asked if USACE is being funded month by month right now. Setter said yes, USACE is under continuing resolution authority (CRA) and we need to request our expenditures a month or two in advance. Morrill asked if the O&M funding took as a big a hit as CRFM. Setter can't speak to details but routine work is moving forward but non-routine is more difficult to fund.

4.2. NWP

4.2.1. Upcoming maintenance/construction/research activities.

- 4.2.1.1. 19BON18 MOC CI Subsidence Project – The new temporary bridge comes in next week and the project is on track to install the crane pads this winter.
 - 4.2.1.2. 19BON31 MOC CRITFC LPS collection – The MOC is being withdrawn as long as the CI trap is installed before the next passage season. Porter said that they reserve the right to resubmit an MOC if the trap isn't efficient or if the trap is not funded. Hausmann said the supplies have been ordered and the UFR has been submitted. All responses to the MOC have been provided. CRITFC has a site visit scheduled for October 15 to see the trap location.
 - 4.2.1.3. 19BON52 MOC Spillway hydro survey – Completed. Rocks were found. The follow on ROV inspection has been delayed to December 02. Mackey talked to Ebner about the reason behind the ROV inspection and she said that it is to get an idea of how big and how many rocks the contractor will be removing. VanDyke asked the difference between the hydro survey and the ROV. The hydro survey is more of sonar survey and the ROV is camera.
 - 4.2.1.4. 19TDA04 MOC Crane Rail Replacement – Scheduled for 2021.
 - 4.2.1.5. 19JDA08 MOC Line 1 outage – Bushing replacement – The work started on 01 October. MU5 returned to service and the ladder split for the counts is good. The work should be finished on schedule.
- 4.2.2. BON CI PIT room – The dewatering to take measurements is scheduled for December 11. Hausmann will provide an MOC.
- 4.2.3. BON Nav Lock – The Nav Lock returned on 27 September. Lorz asked if the Nav Lock would be taken out of service again to check on the sill. Hausmann said they will most likely ROV the sill but not dewater.
- 4.2.4. BON Tug Diane – The Tug was removed on 15 September.
- 4.2.5. BON wetted wall – Lorz wants to know what the operation plan is for next year. The wetted wall is still in planning and the decision to continue will be after a review of the video.
- 4.2.6. BON LFS – no update. Bettin said the flows are low enough right now to switch to PH1 to take a look. Lorz suggests waiting till 1100 to start the ROV inspection. Hausmann will try to schedule an ROV inspection. Divers are needed to repair the hatch. Lorz asked if engineers have been asked about welding the hatches shut. ACTION: Hausmann will follow up with Schlenker on the hydrologic conditions of welding the hatch.
- 4.2.7. TDA spillway MRER – The PDT is waiting on funding. Rerecich thought that the spillway may not have scored high on the cost benefit ratio. ACTION: Rerecich will follow up with Trachtenbarg about the status of the MRER and the cost benefit ratio.

- 4.2.8.** TDA Spillway Inspection – This inspection was to see if there was damage below the water line after the log barge lost control last spring and hit the spill way. No problems were found with the ROV.
- 4.2.9.** TDA Ice and Trash Sluiceway – TDA is putting a cover over the sluiceway. The plans are on the website. The total cost is about \$500K. Bettin suggested looking at the metal exclusion plates. Hausmann will look at the measurements for the exclusion plates.
- 4.2.10.** TDA PUD sampling facility – Schmidt did the environmental section of the real estate action. The PUD wants to build the facility even though they haven't been able to meet all of the criteria but they think they can meet the biological testing. The USACE will issue the real estate permit on the condition that they pass the Biological Testing. VanDyke asked why they can't meet the criteria. Bellerud is advising on this project and said it is due to space and slope constraints.
- 4.2.11.** TDA weir 157 – A part was ordered to repair weir 157. However, the weir needs to be set on the bottom so they need to wait until this winter and keep the forebay constraint in place.
- 4.2.12.** JDA south turbine pump #3 – A contract has been awarded to fabricate a new bearing and it should be back in service by next year.
- 4.2.13.** JDA elevator and LPS – The elevator has been fixed. The follow on work for the LPS is scheduled for this winter. Porter asked what was changing. Zyndol said it is going back to the old water source. The design is still pending.
- 4.2.14.** JDA north pumps – Pump 3 is repaired and improvements to the lubrication system are being made. Pump #4 is still OOS but will be repaired next. Four pumps are available.
- 4.2.15.** JDA STS cords – Line 3 was out for maintenance. The maintenance crew didn't know to attend to the tension to the cables and the cables got sucked into the orifices. They will be repaired this winter. This only effects units 9-12.
- 4.2.16.** JDA JBS start date – There is a new conflict with the E-crane dismantling that blocks the STS Crane resulting in a shorter maintenance period. The project is requesting the JBS start date of April 01. Mackey will discuss this with the project before next month's FPOM meeting. If the start date is March 01 then the first four units would be screened and the JBS would be in primary bypass.
- 4.2.17.** Dewatering schedules – posted to the website
- 4.2.17.1.** BON
 - 4.2.17.2.** TDA
 - 4.2.17.3.** JDA

4.3. Research/FFDRWG updates.

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

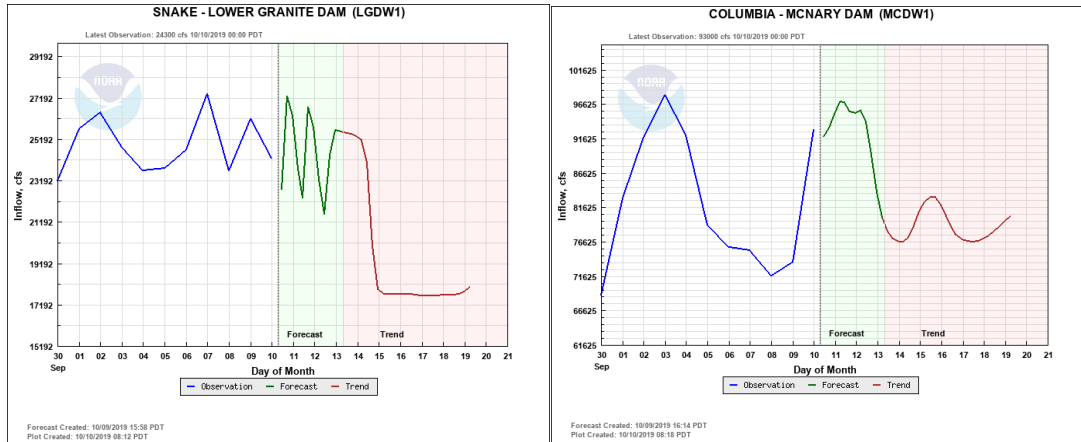
4.3.1.NWP FFDRWG – Next meeting is December 5. The B2 FGE program has been funded and the testing of MU15 will be this spring. JDA turbine rehab PDT started Phase 1 and will start the modeling down at ERDC. CFD suggested fixed blade units in the middle of the powerhouse could present a problem for adults. Bettin asked if the fixed blade units currently at JDA will be fixed or is the project waiting for the turbine rehab project. Rerecich is not sure. Bettin said that the fixed blade units are struggling to stay in the 1% band. The next meeting may need to be rescheduled.

4.3.2.NWW FFDRWG – Next meeting is 22 November. AFEP is 3-4 December.

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	23.3	24.0	18.1	17.6 (17-OCT) / 27.3 (10-OCT)
MCN	92.0	77.3	80.3	76.6 (14-OCT) / 97.0 (10-OCT)
BON	113.2	84.4	87.5	83.8 (17-OCT) / 103.5 (11-OCT)

Table 1. RCC flow forecast



4.5. BPA update – The update was posted but no outages affecting fish passage.

4.6. Fish Count Program – Peery talked with FPC this morning about how to post the 24 hr counts for lamprey and sockeye. No decisions were made.

4.6.1. Lamprey Counts – Lampman noticed that the 16hr count did not match the daily count. He asked FPC about the discrepancy and they noticed a further problem with more species. Peery discussed this with FPC and tried to find a common source for the error. Sometimes, corrections are made after the fact from issues from the counters or a quality control issue and then corrections are added to the final tally and not to the individual hours. Lampman asked if the correction factor is done hourly or to the daily total. Peery said that has changed over the years. Now the correction factor is done hourly. With this is a new contract, all corrections are made by the contractor. Quality control is more rigorous now. FPC would like all the raw counts, break times and correction factors as well. This will help with more documentation. The accuracy criteria applies to salmon not to lamprey counts. The night lamprey counts are more consistent now and has been part of the program for 8 years. Peery said that there will not be an attempt to correct the old data. Moving forward, the counts will add up like they are supposed to but it would be impossible to figure out what caused an error in past data. Lorz asked for the quality control/correction factor plan and Peery will provide it. **ACTION: Peery/Kovalchuk will send out the QAQC plan to the group.** Lorz asked about allowing TAC to review video for B-run steelhead numbers. TAC and NOAA have received some video for review. Peery said that they will split the video feed for TAC to have their own video copy. Lampman asked if the day/night counts would stay separate and the only way to get 24hr counts would be to add them together. Peery said because the counts are taken two different ways, the day and night lamprey counts will stay separate. The day count is a corrected factor and night counts are straight video counts. Setter would like to see the counts together because people see the day counts and considered that the final number. Peery said it was discussed to put the lamprey counts on a separate page or do all counts on video. Lorz thinks that they need both counts for historical reference. Setter

would like a separate lamprey page for their counts. The night counts are lagged due to the video review. Setter asked about sockeye counts. Lorz suggested asking FPAC but Setter would like to see the counts the most accurate as it could be. The tribal collections ended in September. McClain said the uncorrected count is over 70K lamprey passed Bonneville which doesn't include the research related fish. The LPS are still operating. Porter had a handout on the tribal collection numbers. The report with the corrected data is due in December.

4.7. Pinniped update

4.7.1. BON – Presently, there are 32- 45 SSL and no CSL in BON's tailrace. The FFU is monitoring for abundance and take. The numbers tend to increase this time of year due to chum spawning. No sea lions have been reported above BON.

4.7.2. Willamette Falls – No update. Bettin asked when trapping restarts. VanDyke did not know.

4.8. Lamprey update – CRITFC commissioners request a tour of MCN during the IWWP to see lamprey passage improvements there. The juvenile mortalities from cooling water strainer inspections will be collected by CRITFC from the lower Snake River next week. Parental based genetic analysis will be performed to determine proportion of juveniles parented by translocated adults.

4.9. Avian Update

4.9.1. BON – There are typical cormorant numbers for this time of year but the truck transport staff has informed Hausmann that cormorants move in when they release their fish. The NWW truck employees would like to haze them themselves since there is no USDA hazing and they are trained. Hausmann is looking at permission. Mackey said that arming USACE employees with pyrotechnics has been a problem in the past. The project had tried a propane cannon in the past. It is a focused release site and Lorz thinks that USACE needs to provide safe passage. Mackey will look at keeping USDA hazing staff through truck season or make sure that the NWW employees have permission to haze in NWP. Setter suggested asking the truck staff to provide the appropriate bird data to Hausmann to help with permission.

4.9.2. TDA – Bird numbers are typical for this time of year.

4.9.3. JDA – Still some pelicans hanging around but otherwise typical bird numbers are present.

4.9.4. MCN – Typical cormorants and gulls are present.

4.9.5. FFU – No successful nesting outside of the one acre tern colony on ESI and no successful nesting on Rice Island. PIT recovery is the week of 21st of October. Lorz wants to know who is reading the data analysis. FFU is collecting the tags on the CATE colony..

4.9.6. Future avian control measures – Portland District is moving in a similar path as NWW but we are waiting on a NWD decision. Office of Counsel will be invited to the next meeting. Morrill suggests using drones. McClain said that previous FFU studies did not find the drones successful. Drone permission is difficult. Peery said that as technology improves, drones might be reconsidered.

5. Whooshh presentation [Presentation] – Janine Bryan gave an overview of the data collected during the AFF season. If Whooshh has additional funding secured by 24 November, they will request to keep their scanner in the AFF for another year; otherwise, the scanner will be removed. Vince Bryan said that they need 1K images per species for a 99% accuracy reading. Setter asked about having multiple species in one frame. Bryan said they can still identify the species but the fork length might not be accurate. Bellerud asked about the precision and accuracy of measuring the fish since they are not laid out. Bryan said the analysis takes into account the curling of the fish and has accuracy rate of up to 2cm. It was not possible to compare the CRITFC measurements with theirs because they didn't measure the same fish. Setter said it is unclear how much human interaction is needed for counting fish. Bryan explained that 18 images are taken but the computer chooses the best three images. They take those three images and run through the AI. The purpose of this year was to get the images for

species identification. They don't have the species algorithm yet. The machine learning needs to see all images of life cycle to identify a species at any point in its life. There are limitations to the data but Whooshh thinks that this will be very accurate to identify and separate fish. The cost of running the scanner is mostly the software and analysis - \$5k per month to support the project which does not include the install and demob costs.

6. Shad discussion (Setter) -

6.1. Lethal Removal of juveniles from sampling activities? – Setter has concerns that the sockeye counts are less accurate due to shad numbers at IHR and the LWG trap has shad mortalities that fall back causing clogging and even closing the facility. The juvenile numbers are so high that they clog the screens in the sample tanks. Bellerud doesn't think removing juveniles would make any impact at all. Setter brought up the Siberian prawns removal program and wondered if the same should be done for the shad. Thompson thought the larger ecology needs to be looked at. Removing a large biomass in a system would cause a change which could be good or bad. Setter has no money for any formal research or monitoring. The report Peterson forwarded will be posted. Bellerud suggests making sure that all procedures and regulations are being followed. There is no current proposal for shad removal.

7. WDFW Seeks Public Comment on Liberalizing Limits for bass, walleye and channel catfish –

This is an opportunity for other agencies and individuals to send in comments on their concerns of game fish populations. The comment period is currently open. This did not come as a management decision but as policy to help orcas. Bettin asked if Morrill can bring up the FPOM interest in removing dam angling by-catch at the internal meetings and he said he would.

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

8.1. 19LMN11 MFR - Temporary Primary Bypass due to Shad – Due to low smolt passage, the sample rate was set at 100% but the drains in the sample tanks clogged from high shad numbers. Morrill brought up the situation at MCN about 10 years ago where the SMP sampling was stopped in September due to shad numbers. WDFW has been approached to expand the commercial shad fishery below BON.

8.2. 19BON57-61 MFS – no comments.

9. 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/>

9.1. Pending Change Forms: None

9.2. New Change Forms: None

10. Task Group Updates.