CENWP-ODT-F 12 August 2021

MEMORANDUM FOR THE RECORD

Subject: DRAFT minutes for the 12 August 2021 FPOM meeting. The meeting was held via WebEx. In attendance:

Last	First	Agency	Email	
Baus	Doug	NWD RCC	Douglas.m.Baus@usace.army.mil	
Bettin	Scott	BPA	swbettin@bpa.gov	
Conder	Trevor	NOAA	Trevor.Conder@noaa.gov	
Cooper	Erin	Fish Passage Center	ecooper@fpc.org	
Cousins	Katherine	NWS	Katherine.L.Cousins@usace.army.mil	
Derugin	Andrew	NWP-BON	Andrew.G.Derugin@usace.army.mil	
Ebel	Jonathan	IDFG	Jonathan.Ebel@idfg.idaho.gov	
Edwards	John	WDFW – Sea lions	john.edwards@dfw.wa.gov	
Fielding	Scott	NWP JDA	Scott.D.Fielding@usace.army.mil	
Gallion	Darren	NWP	Darren.g.gallion@usace.army.mil	
Gibbons	Karrie	NWP FFU	Karrie.M.Gibbons@usace.army.mil	
Graham	Jen	Warm Springs Tribes	Jennifer.Graham@ctwsbnr.org	
Hausmann	Ben	BPA Predation	bjhausmann@bpa.gov	
Holdren	Elizabeth	NWW LWG	Elizabeth.A.Holdren@usace.army.mil	
Iverson	Tom	YN Fisheries	t.k.iverson@comcast.net	
Johnson	Bobby	NWW-MCN	Bobby.Johnson@usace.army.mil	
Krasnow*	Lynne	NOAA	lynne.krasnow@noaa.gov	
Lorz	Tom	CRITFC	lort@critfc.org	
Macdonald	Jacob	NWP	Jacob.Macdonald@usace.army.mil	
Mackey	Tammy	NWP	Tammy.m.mackey@usace.army.mil	
Madson	Patricia	NWP-FFU	Patricia.L.Madson@usace.army.mil	
Martinson	Rick	PSMFC	rickdm@gorge.net	
McClain	Nathan	NWP	Nathan.A.McClain@usace.army.mil	
McDowell*	Michelle	USFWS	Michelle_McDowell@fws.gov	
Miller	David	NWW	david.l.miller@usace.army.mil	
Morrill	Charlie	WDFW	Charles.Morrill@dfw.wa.gov	
Peery	Chris	NWW	Christopher.A.Peery@usace.army.mil	
Peterson	Christine	BPA	chpetersen@bpa.gov	
Porter	Laurie	CRITFC	porl@critfc.org	
Shane	Scott	Public Power Council	shane@sscottandassociates.com	
St. John	Scott	NWW	Scott.j.st.john@usace.army.mil	
Studebaker	Cindy	NWD	Cynthia.A.studebaker@usace.army.mil	
Sullivan	Leah	BPA	lssullivan@bpa.gov	
Swank	David	USFWS	David_Swank@fws.gov	
Tidwell	Kyle	NWP FFU	Kyle.S.Tidwell@usace.army.mil	
Thompson	Josie	NOAA	Josie.Thompson@noaa.gov	
van Dyke	Eric	ODFW	erick.s.vandyke@state.or.us	

Warf	Don	PSMFC	dwarf@psmfc.org	
Webster-	Stooy	BPA		
Wharton	Stacy	DrA	stwebsterwharton@bpa.gov	
Wendler	Jeanette	NWP BON	Jeanette.C.Wendler@usace.army.mil	
Wertheimer	Bob	NWP-FFU	Robert.h.wertheimer@usace.army.mil	
Wright	Lisa	NWD-RCC	Lisa.S.Wright@usace.army.mil	

^{*}Called in for the Avian Updates only.

1. Final decisions or recommendations made at this meeting.

- **1.1.** Approve July Meeting Minutes
- **1.2.** 21 IHR 11 MOC JB Early shutdown for maintenance No comments, FPOM concurs.
- **1.3.** 21 IHR 12 MOC Unit 1 intake gate pulldown test No comments, FPOM concurs.
- **1.4.** 21 LWG 10 MOC Spill Pattern Adjustment for Low Flow Withdrawn after conversations with Morrill post FPAC meeting.
- **1.5.** 21AppJ001 Snake River High Temperature Protocols (Morrill). FPOM Concurred.

2. Action Items

2.1. NWW

2.1.1. [July 21] LGS trash shear boom. ACTION: St. John will send the different concepts to FPOM when he gets them. Project will deploy boat buoys in front of current gap in the trash shear boom. Lorz asked what venue the coordination would take place. Peery responded, when a design, when available, coordination would move to FFDRWG. Lorz would like region to have input when alternatives have been developed, Peery will accommodate.

2.2. NWP

- **2.2.1.** [July 21] Ringold avian counts. ACTION: Morrill will report back on the progress of the status review in August. Report is in draft form and sitting on a supervisor's desk.
- 2.2.2. [July 21] O&M critical needs spreadsheet. Section starts 10 minute 30 seconds into WebEx recording. ACTION: FPOM will send ranks to Mackey, who will compile for discussion at the August FPOM meeting. Currently on Swank has submitted rankings. Lorz, Conder, and Van Dyke had some questions about ranking process. Mackey suggested ranking by project, as budgets are submitted by project. Projects may use end of year funds to complete local projects prior to returning them to the UFR pool. After that, District ranking's are important for UFR funding, then Division level (just NWW, NWP, and NWS). Conder suggested folks might need another month. Morrill offered to schedule this as an agenda item for FPAC in two weeks. Van Dyke asked if this funding has already been requested or not. Peery some projects are funded and others are not, this ranking could help move up unfunded projects. Van Dyke would be good to know what is funded to help us with our ranking. Conder suggested this is an initial stab at this ranking and it is a work in progress. It is a BiOp process to allow NOAA to have input on ranking fish priority funding. NOAA is looking for regional input as well. Studebaker this is an end of month deadline for USACE to return to NOAA.
- **2.2.3.** [August 21] John Day north elevator OOS. **ACTION**: Fielding will push again internally to get an elevator repair bid.

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

2.3.1.[July 21] JDA trashracks. ACTION: Fielding will share the schedule when he gets it. *STATUS: Contract was awarded on 29 June with site work anticipated to occur from 19 – 25 April 2022. Regular updates will occur as information becomes available.*

- **2.3.2.[July 21] LWG Doble testing. ACTION:** Holdren will clarify the FPP language in Appendix A 9.1.4. *UPDATE: Information was provided on 8 July, after FPOM. An email was sent on 5 August to all of FPOM.*
- **2.3.3.** [July 21] Warm water sampling protocols. ACTION: Morrill will schedule a special meeting to discuss the change form. He is looking at scheduling for the week of 18 July. *UPDATE: Meeting was held.*

3. Updates

3.1. NWW Updates

- **3.1.1.** Upcoming maintenance/construction/research activities.
 - **3.1.1.1.** 21MCN06 Modified spill pattern for TSW removal Working on FPP change form for to modify spill for TSW removal given status of cranes.
 - **3.1.1.2.** 21IHR05 MFR Unit trash rake problems On list for earlier start of maintenance at Ice Harbor.
 - **3.1.1.3.** 21IHR07 MOC Floating Guide Wall Maintenance Planned for September
 - **3.1.1.4.** LWG Adult Trap Water Supply Information provided on temperature from the two different water sources and how they would effect temperature differentials in the trap and ladder. Do we need more discussion on how and when to use which water supply. Conder – Information provided was useful and help show how complicated this problem is. For the trapped fish you are transporting, and moving out of the system, it could be beneficial. However, for fish being released back into the warm ladder (72 F or higher), it could be detrimental. Cooling of the trap water should be used with caution. Van Dyke asked for more detail. If we wanted to use the 2nd water supply from the JFF (1 to 2 degrees F cooler) in the trap, it would create a higher differential between the trap and the ladder. Another consideration, if JFF had to go to emergency by-pass, that would shut off cool water to the trap. They would have to quickly change to the diffuser supply. Emergency by-pass is rarely needed at LWG. There is no single option that is the best one. Lorz would like to keep options to use cooler water as a tool in the toolbox, it seems like folks are apprehensive to use it. Peery – the project folks are getting more familiar with this operation and getting better at synchronized switching of the water supply. We can have more conversation, a separate technical meeting if needed.
- **3.1.2.** MCN spillway crane repairs. Repairs to crane 6 and 7 are in progress as parts arrive with one crane remaining in service, the other out of service.
- **3.1.3.** Invasive species discussion. -No update

3.2. NWP Updates

- **3.2.1.** Upcoming maintenance/construction/research activities.
 - **3.2.1.1.** 21BON001 MOC Navigation Lock 1 (old navlock) Bridge Replacement scheduled for CY2023. No Update
 - **3.2.1.2.** 21BON010 MOC ITS Closure for Gate Inspection On schedule per MOC.
 - **3.2.1.3.** 19TDA04 MOC Crane rail Replacement winter (20/21) Ongoing work, moving down powerhouse. Still need to remove some rail over the east exit, as coordinated waiting for in-water work period.
 - **3.2.1.4.** 20TDA10 MOC PUD Smolt Bypass Extended Outage Soliciting bids for different components, selected fabricators to build switch gate, screen will come from Farmers Irrigation District. Moving forward with early extended outage.
 - **3.2.1.5.** 18JDA02 MOC Trash rack replacement. Nothing new
 - **3.2.1.6.** 20JDA04 MOC STS crane replacement. When Fielding gets schedule, he will report to FPOM.

- **3.2.2.** BON Cascade Island PIT tag antenna completion. Planners would like to complete work prior to end of they FY, Derugin is uncertain work will be complete by then.
- **3.2.3.** BON Aqui-S long term solution. EPA is aware of timeline and are working it internally. Lorz was thankful that the Bonneville Project is still working on a permanent solution and that a plan is in place for 2022. Studebaker (NWD) was also supportive of the Projects work on this.
- **3.2.4.** TDA AWS debris management. (Rerecich FC, Medhi Rashani TL, Kovalchuck temp PM) This week begins the Value Engineering study, hope to see the alternatives soon. Lorz asked about timeline to see alternatives and if Fish Unit rehabs could wait until the AWS debris management solution has been found. Cordie replied the Fish Units rehab is on schedule to begin regardless of AWS debris solution. Lorz stressed the AWS debris solution needs to be deployed before the Fish Units rehab – not going to be able to run for an entire season without debris clogging the AWS. Conder asked about how flow changed when AWS is closed to allow debris to clear? When differential is close to 2' the AWS is closed for about 20 to 60 minutes, milfoil floats away, then the AWS is opened. When rack is clean there is almost no differential. During the spring were able to run for weeks prior to debris build up. Conder asked if TDA is reducing night time flows for Pacific Lamprey to enter fishways? No, the automation is currently ½ complete, so would need to be done manually as was done during testing of reduced night time flows for lamprey. Conder suggested an operation that could result in less debris build up, for example Fish Units on and off as well as AWS off at night. Betting suggested turning AWS off and night is preferred, FU's could be reduced rather than ON/OFF cycling which would reduce wear. Lorz asked if there are changes in velocity as well as flows – what operation would be best to prevent lamprey from falling out of the ladder? Velocities in the channel have not been measured, when you drop the entrance weirs the entrances look better for lamprey. Morrill asked when milfoil becomes a problem? Mid-summer into the fall.
- **3.2.5.** TDA trunnion pin. Via email from Michael S Colesar, on 1/28/2021 "Gate 9 trunnion would be part of a larger project to completely rehab Gates 1-9. SAP shows Start in 2031, Construction 2034" Lorz asked about cost? Cordie remembers maybe 1M\$ but doesn't think anyone has produced a cost estimate. Betting suggested they did produce an estimate several years ago, depended heavily on the need for renting a mobile crane, or waiting for on site crane to be fixed.
- 3.2.6. JDA north pump #4. No update.
- **3.2.7.** JDA spill bay 10. In manual operation, have not figured out remote operations from the control room, likely manual most of spill season. No other update. Bettin asked if they will close it manually my mid-night when spill ends. Fielding yes. Will be working this winter to get spill bay 10 back to remote operation.
- **3.2.8.** JDA elevator #4 Struggling to get a contractor out to investigate problem. Porter asked about cost for CRITFC planning. Hard to find an elevator company that works on these old elevators to provide an estimate. ACTION ITEM: Fielding will push again internally to get a elevator repair bid.
- **3.3.** NWS (Seattle) Upcoming maintenance/construction/research activities.
 - **3.3.1.** Albeni Falls Dam Albeni Falls Dam Scheduled fish passage facility sorting discussion with partners for August 27th. Swank asked if this meeting was to review a draft proposal. No draft proposal prepared as of yet; wanted to have conversations with project partners prior to any draft proposals. Discussion will be how fish will be sorted when they swim out of the ladder. USFWS wants USACE to retain and dispose of pike, brook trout, walleye, goldfish. Propose to discuss if alligator gar will be added to this list (lake trout might be another species that may be considered for removal). Would like to retain bull trout and westslope cutthroat trout there may be hybrids and only want to outplant non-hybrid fish.

- Morrill (WDFW) asked about background and the level of concern regarding bull trout hybrids? IDFG is aggressively searching for and removing brook trout as is WDFW, but they cannot get them all, and so these fish will be removed if they swim up the ladder.
- 3.3.2. Chief Joseph Dam Quite a few large capital BPA projects to occur over the next several years. Seven likely in the next few years, 480V systems, exciter systems, station service units, generator rewinds, replacing the sump pump systems spillway sump pump system first, and later the powerhouse sump pump system. Proposal to replace the debris boom as well. At present the Upper Columbia United Tribes (UCUT) smolt migration study plans to mount equipment on the current debris boom and so some coordination is need. The debris boom will be replaced during the UCUT five year study.
- **3.3.3.** Libby Dam No updates

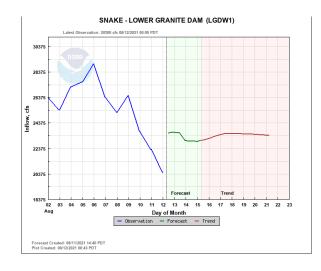
3.4. Research/FFDRWG updates.

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

- 3.4.1.NWP FFDRWG. Last meeting was August 5th. MacDonald will send out minutes soon.
 3.4.2.NWW FFDRWG. Last meeting was two weeks ago. Most topics were dealing with Fish Accords Lamprey projects. Next meeting is October 20th.
- 3.5. RCC update

Project	Previous Day (8/11) Average Outflow (kcfs)	5 Day (8/16) Forecasted Inflow (kcfs)	10 Day (8/21) Forecasted Inflow (kcfs)	Forecasted Inflow Low/High (kcfs)
LWG	20	23	23	23 (8/14) / 24 (8/12)
MCN	155	138	140	132 (8/12) / 140 (8/21)
BON	149	143	144	125 (8/12) / 144 (8/21)

Table 1. NOAA Northwest River Forecast Center inflow forecast.





- **3.6. BPA update. John Day -** Stringing new lines from the Powerhouse to the 1st tower. Fielding thought line 3 might be complete this weekend. Pulling line from barge in the forebay. Putting bushing on line 3 soon. Working Tuesday to Sunday. Morrill asked about fire near Dworshak lines, Bettin did not have a fire update. Crew was able to get line back up yesterday.
- **3.7. Fish Count Program update (Peery, Wertheimer).** Into Fall Chinook at BON, counts are low and Steelhead numbers are very low. Fish counting continues at all sites.

3.8. Pinniped update

- **3.8.1.Bonneville Dam** Continue to monitor daily for abundance, less than 10 Steller Sea Lions right now but increasing over the last week. When above 20 animals, predation monitoring will start. The 2021 report should be out prior to the 1 JAN. John Edwards (WDFW) removals will start the week after Labor Day, 13 SEP, and continue to the first part of November. They have larger barge to deal with larger Stellar Sea Lions.
- **3.8.2.** Willamette Falls No update.

3.9. Lamprey update

- **3.9.1.**BON CI trap was down to one pump for a day or two, back up now.
- **3.9.2.**TDA Porter confirmed CRITFC still trapping, likely until the 1st week in September.
- **3.9.3.**JDA South fish ladder trap in operation. North ladder ramp trap has been shut off due to low collection numbers. Due to elevator outage technician have to walk 9+ flights of stairs, with heat wave in forecast CRITFC asked for north ladder trap to be taken OOS.
- 3.9.4.NWW LWG count yesterday was 16 at day, 166 at night.
- 3.9.5.Lamprey Accords Work Group MacDonald asked if trapping will stop when BON hits 74 F. Derugin has been in communication with Porter, looks likely to hit 74 F in the next day or two. Porter techs will check BON temp when at John Day Dam today and may pull tube traps at the end of the day today. Morrill asked where temperatures where taken, Derugin responded posted to Corps website from monitored in the Cascade Island spillway forebay. MacDonald asked if lamprey could be removed from the hot river to cooler holding area? Porter responded they do not yet have access to BON Hatchery brood stock building with cooler water. MacDonald asked if trapping criteria might change when CRITFC had access to colder water. Derugin it's not so much the water they are held in, but the handling stress of trapping them, moving them to a truck, then moving them to holding tanks. CRITFC is developing tables to temper lamprey into cooler water for holding or transport.

3.10. Avian updates (10:30) – Lynne Krasnow, not McDowell,

- **3.10.1.** NWW Starting to see birds that show up this time of year, likely for the juvenile shad outmigration. AWEPS and Grebes at McNary, no counting at IHR right now, LMN few birds, LGS 30 to 40 gulls daily, LWG reports 15 DCCO.
- **3.10.2.** JDA Hazing ended on July 31st, AWEPs have dropped to less than 100 in tailrace.
- **3.10.3.** TDA Hazing has ended for the season. Gull number 50 100, lower than previous month. Falconer hazing tested last few weeks, there was some reaction. DCCO numbers still up, diving at east fishway exit, five swam up and out of the trash rack today. If lethal removal was available, we could remove them. Lorz asked for update on NWP's request for lethal removal. Fielding asked Schmidt (PME) for update. He was working on other projects and would get back to the lethal removal latter. Lorz offered to send letter of support, Studebaker suggested contacting Jon Rerecich (NWD Avian Predation) prior to sending letter.
- **3.10.4.** BON –DCCO's and gulls increasing. 100-300 gulls per day, many loafing on the corner collector. They may be attracted to out migrating juvenile shad. Bird numbers tend to go down after juvenile shad leave. 61k juvenile shad collected at BON SMF this week.

3.10.5. Estuary

- **3.10.5.1.** ESI Birds largely dissipated. DCCO counted 300 nests build this year but very few no eggs seen. Terns have dissipated, Monday this week 750 on colony 150 outside colony, few scrapes or nesting attempts. Starting to leave. Next steps remove dissuasion material and scan for PIT tags.
- **3.10.5.2.** Rice, Miller, and Pillar Islands, Successfully kept Terns from nesting here. Only about 20 terns loafing near the rack lines. Next steps, remove dissuasion material from R,M,P and PIT scanning on ESI.

- 4. NWP/NWW Critical Fish Passage O&M needs. Moved to September.
- **5.** Temperature Compliance Points (measuring location) Condor questioned why do we use the AFF brail pool for salmonid handling vs. the Cascades Island forebay for lamprey compliance point? Derugin AFF has been shut down, brail pool has dedicated thermometer, CRITFC can measure that in real time. The on-line site allows lamprey techs, who are not on-site, to check temperature remotely. The lamprey are not released into the brail pool which tends to be warmer then the area lamprey are collected and held. The CI forebay temperature at 5 meters is similar to ladder temperatures. Conder asked about other locations temp is measured. BON Project has monitoring station about 2' away from brail pool. When the brail pool gets warm, it is emptied, then refills with river water so difference between brail pool and ladder is minimized.

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

- **6.1.** 21 MCN 07 MFR Late Closure of Spill Bay 2
- **6.2.** 21 MCN 08 MFR Reduction in sampling due to staffing
- **6.3.** 21 IHR 10 MFR Adult Chinook salmon mortality found near south fish count station
- **6.4.** 21 IHR 11 MOC JB Early shutdown for maintenance No comments, FPOM concurs.
- **6.5.** 21 IHR 12 MOC Unit 1 intake gate pulldown test Questions address previously, FPOM concurs.
- **6.6.** 21 LGS 09 MFR Unit Priority 2
- **6.7.** 21 LWG 10 MOC Spill Pattern Adjustment for Low Flow Withdrawn after conversations with Morrill post FPAC meeting.
- **6.8.** 21 LWG 11 MFR Lower Granite Line Outage
- **6.9.** 21 LGS 10 MFR Line Outage for Transformer 2C Removal/Installation
- **6.10.** 21 BON 043 to 074 MFRs for fish mortalities. Majority were Pacific Lamprey. Also found were adult sockeye, Chinook smolts and adults, and a Steelhead adult.
- **6.11.** 21 BON 075 MOC Spillway Gate Inspection & Pre-rock Removal Hydro Survey Annual inspection, 5 gates on the north side, two day project. Outage matched with hydro survey, to take place Friday morning. Clearance process has become time consuming and would increase time from one day to two days. Alternating flow between bay 18, and then Bay 1 would require to walk first clearance, perform work, hang and walk 2nd clearance, then perform work. Lorz will read MOC and provide comments later. Mackey cautioned that a large fall runs could trigger the need to split flows in the fall. No other comments.
- 6.12. 21 JDA 08 MOC SMF Condition Monitoring Mon Fri, condition of fish only, targeting 100 of the predominant species any time of year. Allows collection and holding of less fish vs. current operation. Conder are you proposing 100 fish of the predominant spp. as the standard operation and then increase to 300 if you see an issue? Fielding responded it may take 300 fish to get 100 of the predominant spp. it is something we'll have to learn. Conder would like them to stick with the 100 fish target, realizing they may need to collect more fish in total depending on the season. Martinson asked who would be doing the work. Fielding is proposing Pacific Sates would do the work if funded by BPA. Porter asked about collecting juvenile lamprey for passage studies. Fielding suggested there will be some flexibility to adjust sampling times. Thompson (NOAA) cautioned that any additional sampling would need to be kept under the current take permit and collecting specifically for lamprey may require it's own permit. Brandon Chockley (FPC) has managed these take permits for years and should be part of the conversation. In 2021 Chockley adjusted collection numbers at FPC operated facilities to keep

take under permitted levels. Thompson wants to set up a meeting of several sampling groups to be sure take levels are not exceeded Martinson mentioned in the past additional fish collected for researcher would be on the researcher's take permit. Porter asked about the sampling hours each month? Planning to start at 6 or 7 AM ending when goal of 100 predominant species collected. Martinson asked if regional fish managers had an issue with Corps personnel performing the work? Conder commented it would be similar to how USACE operates Ice Harbor operates. The conversation continued about who could perform the work. Bettin asked what we need to get from the conversation today? Mackey responded, we need to get FPOM comments on this MOC, and prepare folks for possible changes in the future. Understand that we are on a holding pattern depending on BPA funding. Ebel (IDFG) we will be submitting comments, there are also conversations about this operation in other venues. Conversation continued about if BPA will continue funding FPC into 2022. Sullivan (BPA) – it is with BPA's contacting group now and they are coordinating both internally and externally, so it is in the work. Mackey asked FPOM reps to submit any comments to McClain and Fielding.

- **7. Fish Passage Plan:** The 2021 FPP went into effect March 1 and is available online at: http://pweb.crohms.org/tmt/documents/fpp/2021/
 - 7.1. Pending Change Forms:
 - **7.1.1.** 21AppJ001 Snake River High Temperature Protocols (Morrill). Discussed and revised at the special FPOM meeting on July 12th. No comments FPOM Concurred.
 - 7.2. New Change Forms:
- 8. Task Group Updates.
 - **8.1.** Avian Task Group meeting (Cordie) Next meeting TBD
 - **8.1.1.**http://pweb.crohms.org/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20Avian%20Hazing/
 - **8.2.** Task Group Condition Monitoring (Lorz & Sullivan) Lorz this resulted in the John Day MOC. Mackey suggested Task Group could be moved to inactive status. Lorz agreed.
 - **8.2.1.** http://pweb.crohms.org/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20Condition%20Monitoring/
 - **8.3.** Task Group 15 Mile Steelhead Overshoots, TDA ITS operation dates. (Bellerud) No update, Bellerud is out on a ship.
 - **8.3.1.** http://pweb.crohms.org/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20TDA%20ITS%20operations/
 - **8.4.** Task Group Invasive piscivorous fish control opportunities (Thompson).
 - **8.4.1.** First meeting will be after the August FPOM meeting.
 - **8.4.1.1.** Van Dyke (ODFW) is no longer in the WebEx meeting. Since ODFW is the descending voice, it is important to have them represented in the meeting. Charlie tried to contact Van Dyke via text and voice call to see if he can join us at 1145 hours.

FPOM Ended at 1135 hours.

1145 hours – Task Group Piscivorous Fish Control Opportunities convened without Van Dyke. Folks will gather previous science on non-native predator impacts on salmonids and send to Thompson. Thompson will reach out to Van Dyke to try to get ODFW representation at the next meeting.