CENWP-OD 08 January 2015

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 08 January 2015 FPOM meeting.

The meeting was held at the CRITFC offices, Portland OR. In attendance:

Last	First	Agency	Email	
Bailey	John	NWW		
Baus	Doug	NWD-RCC	Douglas.m.baus@usace.army.mil	
Bettin	Scott	BPA	swbettin@bpa.gov	
Conder	Trevor	NOAA	Trevor.conder@noaa.gov	
Cordie	Bob	NWP-TDA	Robert.p.cordie@usace.army.mil	
Derugin	Andrew	NWP-BON	Andrew.g.derugin@usace.army.mil	
Doumbia	Julie	BPA	jadoumbia@bpa.gov	
Dugger	Carl	NWW-MCN	Carl.r.dugger@usace.army.mil	
Fredricks	Gary	NOAA	Gary.fredricks@noaa.gov	
Hall	Steve	NWW		
Hamilton	Chauncey	NWP Small Projects	Chauncey.j.hamilton@usace.army.mil	
Hausmann	Ben	NWP-BON	Ben.j.hausmann@usace.army.mil	
Hevlin	Bill	NOAA	Bill.hevlin@noaa.gov	
Kiefer	Russ	IDFG	Russ.kiefer@idfg.idaho.gov	
Kostow	Kathryn	ODFW		
Lorz	Tom	CRITFC	lort@critfc.org	
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Mensik	Rosanna	PSMFC		
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Morrill	Charles	WDFW	Charles.morrill@dfw.wa	
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Setter	Ann	NWW	Ann.L.Setter@usace.army.mil	
Skalicky	Joe	USFWS	Joe_skalicky@fws.gov	
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Leeuw				
Van dyke	Erick	ODFW		
Wagner	Paul	NOAA Fisheries	Paul.Wagner@noaa.gov	
Wertheimer	Bob	NWP	Robert.h.wertheimer@usace.army.mil	
Worthington	Shawn	NWP- HDC	Shawn.m.worthington@usace.army.mil	
Wright	Lisa	NWD-RCC	<u>Lisa.s.wright@usace.army.mil</u>	
Zorich	Nathan	NWP-FFU	Nathan.a.zorich@usace.army.mil	
Zyndol	Miro	NWP-JDA	Miroslaw.a.zyndol@usace.army.mil	

Bailey, Dugger, Hall, Kiefer, Mensik, Moody, Morrill, Statler, called in.

January birthdays include: Conder and Wright HAPPY BIRTHDAY!

- 1. Decisions made at this meeting.
 - **1.1.** December meeting minutes approved.
 - **1.2.** Coordination Forms
 - **1.2.1. 14DWR01 Unit 3 rehab. Pending.** FPOM will need to provide concurrence by 22 January. FPOM would like to see language in the contract that allows for scheduling flexibility (15 August 15 September being the time in question) and dewatering plans for warm water conditions. **A** TDG waiver should be acquired ahead of time. In summary, there needs to be flexibility in the contract and there are many contingencies that need to be considered and set in motion.
 - 1.2.2. 14TDA13 AWS Survey. Approved.
 - 1.2.3. 14BON84 ITS end gate and WG1 repair. Pending updated MOC.
 - **1.3.** FPOM Avian Task Group will meet after the 12 February 2015 FPOM meeting.
- **2.** The following documents were provided or discussed. Documents may be found at http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/
 - **2.1.** Agenda, Fish Passage O&M Coordination Team.
 - **2.2.** Cooling Water Strainers Lamprey Counts.xls.
 - **2.3.** *Coordination/Notification Forms (NWW/NWP)*
 - **2.4.** FPP change forms. (NWW/NWP)
- 3. Coordination/Notification forms (need concurrence/discussion)
 - **3.1.14DWR01 Unit 3 Rehab** Spring operation, summer operation discussion by NWW Water Management. Steve Hall explained the proposed project. Work would begin in September 2016 and wrap up in spring/summer 2017. A normal overhaul would require a full calendar year. It was recognized that a 12 month outage would not be acceptable so the compressed schedule has been proposed. Hall went through the balancing of power generation and TDG concerns as well as flood control concerns. Lorz asked if the contract would be written to have flexibility in starting, depending on the type of water year. Lorz also suggested requesting a waiver for the TDG limits. Moody said the start date may be a hard 1 September start date due to the lead time on parts. Conder said starting later may also be needed depending on the water temperatures. Hall said there may be opportunities to start earlier. DWR will do as much as they can to compress the schedule and minimize risk of going longer. FPOM will need to provide concurrence by 22 January. FPOM would like to see language in the contract that allows for scheduling flexibility (15 August – 15 September being the time in question) and dewatering plans for warm water conditions. A TDG waiver should be acquired ahead of time. ACTION: NWW will update the MOC and re-distribute to FPOM for comments. All comments must be back to NWW by 22 January. Setter commented that NWW is putting de-gassers in place. She has asked for documentation from the hatchery to find out if there were any detrimental impacts to juveniles. The LWG temperature mods should be complete during winter 2015-16. ACTION: Lorz said FPAC will discuss the TDG issues and work on the hatchery concerns. Baus said a waiver was written last year so we can use that same template. Setter said Lower Granite Unit 1 will be back in service and will be back to Kaplan operation. In summary, there needs to be flexibility in the contract and there are many contingencies that need to be considered and set in motion.
 - **3.2.14TDA13** back up AWS survey. Lorz gave his thumbs up. After further discussion and explanation, Fredricks gave his approval. **Approved.**
 - **3.3.14BON84** PH1 ITS end gate and WG1 repair. Hausmann provided some explanation of the need. He said the bulkhead install/removal could be scheduled to prioritize the non chain gate slots. This would keep the ITS operating longer and bring it back a bit sooner. This could take 4 7 days off the schedule. Hausmann said the Project is willing to work the

necessary hours to keep the installation to a week. Fredricks and Lorz were agreeable with the schedule as long as operation of PH1 is minimized to the capacity we can. This may lead to increased spill. Fredricks stressed that the ITS is the juvenile bypass and if we do not have a bypass system we should not be operating the units. **ACTION:** Hausmann will need to update the MOC with more information – this should include a risk assessment of what flows could be, powerhouse capacity, ability to reduce the schedule. The Project is now leaning heavily on the safety issues with the ITS being open and little way to close it. Fredricks and Lorz said the three week impact is a big impact and while safety is a concern, the fish impacts need to be considered. Baus suggested looking at PH2 operation at mid-range and upper end of 1%.

4. Action Items

- 4.1. NWW Action Items.
 - **4.1.1.** [Dec 14] Fish count improvements. Bettin suggested Barrows look at the existing video to see what fish counters deal with. **ACTION:** Moody can provide video for a busy day in September. *STATUS:* DVD provided to Cordie at the January FPOM meeting.
 - **4.1.2.** [Dec 14] MCN debris. **ACTION:** Fredricks asked MCN to develop a debris management plan for 2015. *STATUS:* this will be discussed at the 12 February FPOM meeting.
 - **4.1.3.** [Jan 15] 14DWR01 Unit 3 Rehab. **ACTION:** NWW will update the MOC and redistribute to FPOM for comments. All comments must be back to NWW by 22 January.
 - **4.1.4.** [Jan 15] 14DWR01 Unit 3 rehab. **ACTION:** Lorz said FPAC will discuss the TDG issues and work on the hatchery concerns.

4.2. NWP Action Items.

4.2.1. [Nov 14]TDA avian hazing/performance standards. **ACTION:** NWP will draft up justification regarding whether or not TDA continues to haze avian predators as effectively as when they met the performance standards. Fredricks would like FFU to provide a method to gauge effectiveness and include it in the FPP. FFU and TDA will work on developing a way to measure effectiveness between years. STATUS: Zorich provided a graph, it is available on the website. He proposed looking at the mean bird abundance over several years. Fredricks and Lorz said the story from NWD is that bird predation was cut in 2011 and that 2011 level would be maintained to continue to meet compliance. Fredricks said the idea is to look at what avian level was and how it changes over the years. Conder and Zorich discussed how best to look at the data and how to interpret the information. Fredricks said he doesn't want to break the bank with hazing but if NWD is claiming performance standards were met due to increased hazing then we need to have a way to monitor avian predation and evaluate the effectiveness of the hazing. Lorz suggested NWP pursue lethal take. He also explained that NWD is drafting a memo stating that TDA has met performance standards and testing is complete there. In the memo, NWD is supposed to be stating that hazing is how the standards were met and that level will be maintained. NWP discussed the flexibility of USDA and the ability to have a boat back-up as a contingency at TDA. Right now the flexibility of USDA may be less than desired. Further discussion settled around if the same level of effort is occurring at each Project does effectiveness monitoring need to occur. Conder suggested if the level is the same, monitoring isn't needed. Fredricks wasn't quite as convinced that should be true. Fredricks said these are not Inland Avian Group issues, they are definitely FPOM. Lorz came back around to if NWW can get lethal

- take then NWP should be able to as well and he would encourage NWP to move forward on that.
- **4.2.2.** [Jan 15] 14BON84 ITS end gate and WG1 repair. **ACTION:** Hausmann will need to update the MOC with more information this should include a risk assessment of what flows could be, powerhouse capacity, ability to reduce the schedule.
- **4.2.3.** [Jan 15] Avian hazing effectiveness evaluation. **ACTION:** FFU will continue to work on developing a method to evaluate hazing effectiveness at each project.
- **4.2.4.** [Jan 15] Avian hazing effectiveness evaluation. **ACTION:** Klatte will talk to Environmental Planning about looking at lethal take again.
- **4.2.5.** [Jan 15] Pinniped meeting. **ACTION:** Hausmann will send out the information to Wertheimer and van der Leeuw.
- **4.2.6.** [Jan 15] BON Ops Task Group. **ACTION:** Bettin and Wright will work on updating the change form and getting it back to FPOM before 22 January.
- **4.3.** Completed Action Items or to be discussed later in the agenda.
 - **4.3.1.** [Oct 14] BON ITS gate installation. **ACTION:** Hausmann will write up a MOC with a proposed date during fish passage season with the back up being winter maintenance season. Wills did not agree with the one unit operation due to the April release at Spring Creek. Hausmann noted that at this time, there have been no issues with the ITS being open. The work will take about three weeks. **STATUS:** 14BON84 will be discussed later.
 - **4.3.2.** [Dec 14] BON Weir Gate 1. **ACTION:** Hausmann will pursue getting the work completed during the winter. He will double check on whether the ITS gates can be closed or if bulkheads need to be installed. Installation will take about week. **STATUS:** 14BON84 will be discussed later.
 - **4.3.3.** [Nov 14] JDA-S weirs. Fredricks asked Zyndol about the weirs. Zyndol said the three lower weirs are not needed. **ACTION:** This will be added to the next NWP FFDRWG agenda. *STATUS: next NWP FFDRWG is 5 February*.
 - **4.3.4.** [Dec 14] Noise and Vibration Task Group. **ACTION:** Conder and NWW will work on some updated language that leans more conservative while Fielding continues to pursue baseline data. Conder and Fielding will send their references to Mackey for her to include on the Task Group link. **STATUS:** References posted to http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Task%20Groups/Task%20Groups/20Noise%20and%20Vibration
 - **4.3.5.** [Dec 14] TDA ITS February operation. **ACTION:** Cordie will work with Faber and Rerecich to get the MOC and internal coordination started. The goal would be to get a test in 2015. **STATUS:** MOC and internal coordination started on 5 January.

5. Updates

- 5.1. NWW Updates.
 - **5.1.1.** Upcoming maintenance/construction/research activities. Includes already coordinated MOCs.
 - **5.1.2.** MCN descaling. NWW will develop a plan for MCN debris and bring it to the February FPOM.
 - **5.1.3.** LWG ladder is being dewatered on 7-8 January
- 5.2. NWP Updates
 - **5.2.1.** Upcoming maintenance/construction/research activities. Includes already coordinated MOCs.
 - **5.2.1.1.** 14BON82 T11 and T12 outages.
 - **5.2.1.2.** 14BON83 WS Fish View Building roof. Popescu and Hamilton provided an update on the roof repair. Contractor is selected. The

- performance dates are expected to be met. Popescu asked if pressurized air could be an option. FPOM requested the pressure washer be kept 50' away from the fishway and a long hose is used.
- **5.2.2.** BON Unit 11 update. Hausmann said the RTS date is March 2015. It is quite possible the exact date will be 21 March. The unit is now back in Project hands and should be back as expected.
- **5.2.3.** BON Fish Unit trashrake. Hausmann reported that the perf plate just needs to be installed. It will be back by 1 March. Testing will be discussed at the next NWP FFDRWG.
- **5.2.4.** TDA north fishway rock wall repairs. Nothing new to update until after PDT meeting.
- **5.2.5.** TDA Weir guides. Fredricks asked if only one is getting replaced this year, does that mean that the other guides are in good shape. Cordie said no but new wheels are going on all the gates and the guides are being replaced in one weir. That work hasn't gone as smoothly as anticipated. They are working on patching the other guides to get them through until next winter.
- **5.2.6.** TDA collection channel pumps. Of the six pumps in the collection channel, three are on the deck, one has been rehabbed and two are stuck. Cordie didn't think there would be a concern with meeting criteria even with two pumps out.
- **5.2.7.** TDA de-icing. Fredricks asked what de-icing entails. Klatte said the de-icer is acceptable for use. Cordie said TDA Fisheries is still working to educate TDA maintenance about reducing use as much as possible and to mark areas around fishways to restrict de-icing.
- **5.2.8.** TDA spill bay 9 trunnion pin. Money is available for P&S. Mackey is working on a charter to get a PM assigned. Bettin asked if the pin is properly stored.
- **5.2.9.** JDA-N AWS fish pump testing. Zyndol said there was extensive testing in December and it should address all of the deficiencies. This issue has received lots of attention and is in the hands of NWP. Five out of six pumps are available.
- **5.2.10.** BON winter maintenance work.
 - **5.2.10.1.** CI picket lead mods Hausmann said the back panels could be removed and stored elsewhere. Fredricks asked if removing and storing them would be helpful in reducing head loss on the picket lead. Hausmann said he wasn't sure but they will try.
 - **5.2.10.2.** Lack of functioning DSM2 orifice flushing. Mechanics are working on the orifice flushing now. The DSM was dewatered this week. Fredricks suggested each orifice be tested in auto and manual. Mackey said Rerecich needs the assessment of each orifice for the FGE team.
 - **5.2.10.3.** Lorz asked about LEDs. Hausmann said they have 25 and will put them and evaluate them. Halogens will be changed out as time and money allow.
- **5.2.11.** JDA winter maintenance work.
 - **5.2.11.1.** Condition of STSs and STS crane. Timeline for rehab/repair. Zyndol reported that STSs have not been rehabbed since 2000 or longer. Klatte said he started the process in 2007 and not much has been done. Zyndol said the STSs appear to be in working condition. Cordie asked if the engineers look at the screens every year. Zyndol said the Project is waiting on the rehab. Klatte gave a brief history on the effort to get the screens rehabbed. Fredricks said the CI discussion is a place to get details and provide support for getting funding and traction. He said his concern is whether or not the screens, in their current condition, are harming fish. Zyndol said he would be more worried about the STS

crane than the STSs. Klatte said the STS crane is in the hopper list for the large cap program and it is a high priority. Klatte hopes to see it funded in the next year or two through large cap. Ruckwardt is the PM for large cap. Lorz asked if the STS mesh is still NOAA criteria or if it's been changed to the lamprey criteria. Fredricks said the same mesh is used at all of the Projects.

5.3. Research/FFDRWG updates. www.nwd-

wc.usace.army.mil/tmt/documents/FPOM/2010/NWP%20Research/Research.html

5.3.1. 5 February 2015 is the next NWP FFDRWG meeting.

5.4. RCC update.

Table 1. RCC flow forecast.

Project	Previous day average (kcfs)	5 day forecast average (kcfs)	10 day forecast average (kcfs)	Projected Peak
LWG	38	31	30	1/9 34kcfs
MCN	181	171	163	1/9 188kcfs
BON	191	186	176	1/9 206kcfs

- **5.5.** Lamprey updates. No updates.
- **5.6.** Avian. Zorich asked if there will be another Avian Task Group meeting. Setter said the appendix was the last task completed. Fredricks suggested the hazing evaluation would be good to discuss in the Avian Task Group. **The next meeting will be 12 February.**
- 5.7. Critical Infrastructure. Lower Granite Dam. This is the first discussion of the Project by Project CI lists. Fredricks said having these discussions in FPOM may be a bit much. This may need to be pulled out of the main FPOM meeting and set up at each Project in a separate meeting. NOAA said travel is difficult for them but a central meeting place might work. Setter suggested coming up with a consistent format so everyone can prepare to ask/answer questions. Fredricks said he is thinking items like hoists, gates, etc. FPOM may be able to help with prioritizing the list. Klatte explained that there has been a plus up in the O&M budget for routine work as related to infrastructure built by CRFM. Setter suggested FPOM might be useful in writing the justifications for non-routine requests.
- **5.8.** BPA updates. No updates.
- **6.** Nagy and Stansell retired on 31 December. Klatte gave a recap of the retirement lunch. 20 people came to the lunch (17 of which had worked for FFU before). Wertheimer is now at the helm. van der Leeuw will now be the pinniped biologist, aka Mr. Pinniped.
- 7. FFU Pinniped presentation. (van der Leeuw) Mr. Pinniped provided a handout. It is also available on the website. van der Leeuw gave a recap of the 2014 sea lion observations. On average there were more Stellar sea lions than California sea lions. There was a day with zero sea lions observed. This is the first time van der Leeuw had witnessed that. Salmonid predation was about 2.1% of the total salmonids passing BON from 1 March to 31 May. Sturgeon predation was down. Branding occurred only on California sea lions. Lack of Stellar marking makes tracking difficult. Part of difficulty in marking Stellars is their size. They are too big to fit in the cage for branding. Stellars return to BON as early as August. Tower Island is being used as a haul out location with as many as 26 individuals on one day in November. 2015 monitoring will be much the same as 2014. 7 Bio Techs have been hired instead of SCA students. Conder expressed concern about the lack of branding Stellars. Fredricks suggested a pinniped meeting. Hausmann said there will be a meeting at the end of the month. ACTION: Hausmann will send out the information to Wertheimer and van der Leeuw. FPOM discussed the potential impediments to branding Stellars. Bettin suggested larger equipment may be needed for the larger animals. The branding and removal is the responsibility of the States.

Lorz asked about the status of the two pinnipeds above BON. Hausmann said the trap upstream may be too small so the States are moving that trap downstream.

- **8. Fish Passage Plan:** The 2015 FPP draft sections and change forms are online at: http://www.nwd-wc.usace.army.mil/tmt/documents/fpp/2015/index.html. New change forms have been added since the last FPOM meeting.
 - **8.1.** 15 January 2015 Appendix A sections are due. Include when/where each item had been coordinated. NWP has used Appendix A for research and construction. NWW uses Appendix A for maintenance. Appendix A utility was discussed. NWW will review their use of Appendix A.
 - **8.2.** 22 January 2015 proposed date for FPOM meeting to finalize FPP change forms.
 - **8.3.** Change forms 2015 (new or pending further review):
 - **8.3.1. 15BON002** Turbine Start-up Operation. *Pending*. Fredricks said this should be included in the Load Shaping Guidelines. **ACTION:** Royer will find out more about the speed no load operation and if the Load Shaping Guidelines cover the 60 minutes.
 - **8.3.2. 15BON003** DSM Orifice Control Table BON-7. *Pending*. Fredricks said the orifice openings are directly tied to the forebay.
 - **8.3.3. 15BON005** B-Branch Entrance Gates. *Pending further review*. Not approved until FPOM reviews Schlenker's email with justification.
 - **8.3.4. 15BON006** PH2 Mid-Range Operation Dates
 - **8.3.5. 15BON007** Facility Winter Inspections
 - **8.3.6. 15BON008** Facility Inspections
 - **8.3.7. 15TDA001** Table TDA-4 Unit Priority
 - **8.3.8. 15TDA002** Removable Weirs #154-157
 - **8.3.9. 15TDA003** Fish Lock
 - **8.3.10.15MCN002** Work Near Fishway. *Revised per Task Group discussion*.
 - **8.3.11.15MCN003** Spill Patterns at Higher Flows
 - 8.3.12.15MCN004 Warm Water Ops Temperature Review
 - **8.3.13.15MCN005** South Shore AWS Ops
 - **8.3.14.15IHR001** Work Near Fishway. *Revised per Task Group discussion*.
 - **8.3.15.15IHR003** Turbine Unit Operation
 - **8.3.16.15IHR004** STS Operation
 - **8.3.17.15IHR005** Backflush Orifices
 - **8.3.18.15LMN001** Work Near Fishway. *Revised per Task Group discussion*.
 - **8.3.19.15LMN003** STS Operation
 - **8.3.20.15LGS003** Work Near Fishway. *Revised per Task Group discussion*.
 - 8.3.21.15LGS004 Cold Weather Definition
 - **8.3.22.15LWG001** Work Near Fishway. *Revised per Task Group discussion*.
 - **8.3.23.15AppB001** Truck Transport Minimum #s
 - **8.3.24.15**AppB002 Columnaris Operations
 - **8.3.25.15AppG001** BON AFF picket leads
 - **8.3.26.15AppL001** Avian Monitoring & Deterrence Plans. *Pending review*.
 - **8.4.** Potential FPP change forms.
 - **8.4.1.** BON split flows. Additional trigger to operate more units at PH1.
 - **8.4.2.** Overview. Getting MFRs covered in the FPP.
 - **8.4.3.** Appendix C Load Shaping Guidelines. Needs to be updated.

9. Task Group Updates.

- 9.1. Pinniped Task Group. (van der Leeuw). Presenting at the January FPOM meeting.
- **9.2.** BON Ops. (Lorz) Team members include: Benner, Bettin, Fredricks, Hausmann, Lut, Mackey, Meyer, Rerecich, Skalicky, Wertheimer. **Meeting following January FPOM.**

Bettin explained the purpose of this meeting. He would like to see the date changed from 31 October to 1 August. With low flows, the PH2 units were getting turned on/off a lot more frequently. Fredricks said he isn't onboard with August without including an analysis of effects. The Task Group recommends including justification to the change form. Flow range when the problem is seen needs to be included as well. Flows drop in mid-August and larger sub yearlings do not have the same issues as the smaller fish. Bettin said under 200 kcfs creates a scheduling problem. With the justification and a review of the data, this change form would likely be on track for approval. **ACTION:** Bettin and Wright will work on updating the change form and getting it back to FPOM before 22 January.

- **9.3.** TDA split flows. (Cordie) Team members include: Bettin, Cordie, Fredricks, Klatte, Lorz, Mackey, Rerecich, Stansell, Wills.
- **9.4.** AFF mods (BON Fisheries). Team members include: Benner, Fredricks, Lorz, Mackey, Meyer, Rerecich, Royer, Stephenson, and Whiteaker.
- 9.5. Noise impacts task group. (Setter and Conder). Team members include: Conder, Cordie, Fredricks, Hevlin, Lorz, Mackey, Setter, and others as needed. Met after December FPOM. New FPP change forms drafted. Hevlin would like to go back and review all of the MOCs in the hopper and evaluate them in terms of the new FPP change forms. Setter said more discussion could occur at the 22 January FPP meeting but the plan is to gather data during some of the upcoming construction. She said NWW agreed with the FPP change forms but the Projects may not be as agreeable. Hevlin said he is in the Project camp when it comes to LWG. Lorz jumped in at this time and reminded everyone that the FPP change forms are applicable for non-routine activities. LWG will have extensive coordination and noise/vibration will be part of that. Setter pointed out that part of the concern is that other offices within the District do not use or do not share MOCs. Fredricks said he will suggest the FPP Overview be modified to include the MOC requirement for Planning as well as Operations.