

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 09 April 2015 FPOM meeting.

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

Last	First	Agency	Email
Bailey	John	NWW	John.c.bailey@usace.army.mil
Baus	Doug	NWD-RCC	Douglas.m.baus@usace.army.mil
Bettin	Scott	BPA	swbettin@bpa.gov
Fielding	Scott	NWW	Scott.D.Fielding@usace.army.mil
Fredricks	Gary	NOAA	Gary.fredricks@noaa.gov
Hausmann	Ben	NWP-BON	Ben.j.hausmann@usace.army.mil
Hevlin	Bill	NOAA	Bill.hevlin@noaa.gov
Keller	Paul	NWP- TDA	Paul.s.keller@usace.army.mil
Kiefer	Russ	IDFG	Russ.kiefer@idfg.idaho.gov
Klatte	Bern	NWW	Bernard.a.klatte@usace.army.mil
Lorz	Tom	CRITFC	lort@critfc.org
Mackey	Tammy	NWP	Tammy.m.mackey@usace.army.mil
Moody	Greg	NWW	Gregory.p.moody@usace.army.mil
Morrill	Charles	WDFW	Charles.morrill@dfw.wa
Petersen	Christine	BPA	
Sears	Sheri	Colville Tribes	
Setter	Ann	NWW	Ann.L.Setter@usace.army.mil
Skalicky	Joe	USFWS	Joe_skalicky@fws.gov
Trachtenbarg	David	NWW	
Trumbo	Brad	NWW	
Van Dyke	Erick	ODFW	
Wright	Lisa	NWD-RCC	Lisa.s.wright@usace.army.mil
Zorich	Nathan	NWP- FFU	
Zyndol	Miro	NWP – JDA	

Bailey, Hevlin, Kiefer, Moody, Morrill, Petersen, Sears, Setter, Trachtenbarg, Trumbo called in.

**April birthdays include: Tackley, Medina, Cordie
HAPPY BIRTHDAY!**

1. Decisions made at this meeting.

- 1.1. March meeting minutes approved with the addition of Bailey's birthday.
- 1.2. MOCs and MFRs
 - 1.1.1. **15BON02** T12 outage in November. *Approved.*
 - 1.1.2. **15TDA02** BPA outages. *Approved.*
 - 1.1.3. **15JDA02** MFR MU9 draft tube dewatering delay. *No comments from FPOM.*
 - 1.1.4. **15MCN04.** *pending*
 - 1.1.5. **15IHR006.** *IHR will go to 30% spill, using the normal pattern on 10 April for four days. The spill will be made up on days after the test. These dates will be determined. If the 30% doesn't work, IHR will go directly to a modified 45K pattern.*

The 4-6 May and 8-10 will be the make-up days when spill will be 45K instead of 30%.

- 1.1.6. **LMN U1 (MOC coming).** *Pending*
- 1.1.7. **LWG** won't be started until LGS is completed. Start may be delayed until December 2015.
- 1.1.8. **LGS.** Removing debris from upstream of units 1 and 2. Divers got a 15 foot debris pile out from in front of the units.
- 1.1.9. **15LWG004.** LWG JFF construction. *Will be updated and sent to FPOM.*
- 1.2.1. **15LWG005.** *Replaced by 15LWG07, which was approved.*
- 1.3. FPP change forms:
 - 1.3.1. **15BON006 – PH2 Mid-Point Operation Dates.** *Approved but will be revisited.*
 - 1.1.10. **15LWG002 - Season Dates.** Pending review of revisions per the March FPOM discussion. **Approved.**
 - 1.3.2. **15LGS005 – Unit 1 clarification.** New Change form. **Approved.**
- 1.4. Task Groups.
 - 1.4.1. Condition monitoring. (Lorz, Conder). Team members include: Benner, Bettin, Chockley, Fredricks, Mackey, Morrill, Setter. **First meeting will be after the 11 June FPOM.**
 - 1.4.2. Load Shaping Guidelines (Bettin). Team members include: Fredricks, Mackey, Wright. Bettin is still figuring out if he is allowed to edit Appendix C.
 - 1.4.3. BON Ops. (Lorz) Team members include: Benner, Bettin, Fredricks, Hausmann, Lut, Mackey, Meyer, Rerecich, Skalicky, Wertheimer. Met after January FPOM. *The Task Group agreed to the full range of PH2 unit operation only if the upper range operation was limited to no more than what had been seen in 2006 - 2012 (based on FPC memo). The change form can be approved as written, with additional language about reviewing the FGE test results and making further discussions about the upper range.*
 - 1.4.4. TDA split flows. (Cordie) Team members include: Bettin, Cordie, Fredricks, Klatte, Lorz, Lut, Mackey, Rerecich, Skalicky, Wertheimer. **Tentatively scheduled to meet after the May 2015 FPOM.**
 - 1.4.5. AFF mods (BON Fisheries). Team members include: Benner, Fredricks, Lorz, Mackey, Meyer, Rerecich, Royer, and Whiteaker. **It has been suggested this Task Group can be removed. This task group may go to inactive status AFTER an after action report (from 2009 until 2014) is provided to FPOM. ACTION: Rerecich and Hausmann will collaborate.**

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. Action Items

- 3.1. NWW Action Items.
 - 3.1.1. [Mar 15] Snake River condition monitoring. **ACTION:** Bailey will schedule a teleconference with FPOM once the new contractor has been selected. **STATUS:** *Blueleaf has started and everything is progressing as expected.*

- 3.1.2. [Mar 15] Winter steelhead surface passage. **ACTION:** Fryer will draft a scope and the Region will help shape that scope. Wertheimer will connect with Fryer to see where their efforts over-lap. **STATUS:** *pushed to May.*
- 3.1.3. [Mar 15] Fishway dewatering SOPs. **ACTION:** Project Biologists will send their dewatering SOPs to FPOM for review. **STATUS:** *No updated SOPs for NWW. Current SOPs are posted to the website.*
- 3.1.4. [Mar 15] Benner asked if the adults removed for broodstock before the count window at LWG should be added back into the ladder counts. FPOM deferred to TAC. **ACTION:** Lorz will talk to Stuart Ellis. **STATUS:** *completed.*
- 3.1.5. [Apr 15] MCN log Bronc. **ACTION:** Klatte and Setter will talk later this afternoon to try to find a path forward.
- 3.1.6. [Apr 15] LWG rental pumps. **ACTION:** Setter will provide a schedule for the electrical work to FPOM. **STATUS:** *Per the request at FPOM meeting last week, below is an update specific to the schedule for electrical modifications to support rental pump operation this summer at Lower Granite. Lower Granite staff has completed the design for electrical work and it is under review by Electrical Design staff at the NWW District Office. The design will be finalized by April 16, and then materials will be procured and work initiated. A more detailed schedule has been requested and will be forwarded upon receipt. Ann Setter*
- 3.1.7. [Apr 15] LWG JFF. **ACTION:** Trumbo will get an updated MOC 15LWG004 to FPOM soon.
- 3.1.8. [Apr 15] NWW lethal take and Audubon newsletter. **ACTION:** Lorz will send a copy of the Audubon newsletter to Mackey. **STATUS:** *completed*

3.2. NWP Action Items.

- 3.2.1. [Mar 15] BON split flows. Additional trigger to operate more units at PH1. **ACTION:** Fredricks and Hausmann will work up a change form for FPOM to review. Lorz felt left out so he is going to be added to the team.
- 3.2.2. [Mar 15] Fishway dewatering SOPs. **ACTION:** Project Biologists will send their dewatering SOPs to FPOM for review. **STATUS:** *TDA dewatering plans are updated on the website. JDA dewatering SOPs have been sent to Mackey and will be updated on the website soon. BON sent theirs on 9 April.*
- 3.2.3. [Mar 15] AFF mods (BON Fisheries). Team members include: Benner, Fredricks, Lorz, Mackey, Meyer, Rerecich, Royer, and Whiteaker. It has been suggested this Task Group can be removed. This task group may go to inactive status AFTER an after action report (from 2009 until 2014) is provided to FPOM. **ACTION:** Rerecich and Hausmann will collaborate. **STATUS:** *Rerecich and BON Fisheries have started a draft. Lorz suggested talking with the researchers so they can get their input on paper.*

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

- 3.3.1. [Mar 15] TDA unit outages. Bettin requested to coordinate an outage for units 1-4 in May. FPOM requested a MOC. **ACTION:** Bettin will draft a MOC for this outage.

4. Updates

4.1. NWW Updates.

- 4.1.1. Upcoming maintenance/construction/research activities.
- 4.1.2. MCN debris plan. Lorz did provide written comments and Skalicky provided comments related to lamprey. There are issues with the log Bronc. The approval to purchase the log Bronc is at NWD. There are questions about the funding source for

the purchase. If NWD does not approve the purchase, the debris plan will need to be modified. Fredricks stressed that the log Bronc is a very important part of the MCN debris plan. Setter said the cost is estimated to be about \$700K. The issue is where the money is coming from. If the decision is to not purchase with the proposed funding then there is not a clear path forward. Fredricks asked if NWD understands the importance of the log Bronc. FPOM could provide recommendation and input if understanding the importance is the problem. If the issue is just the pot of money then FPOM can't do much about that. Lorz asked why this couldn't be funded through CRFM. Hevlin noted that Lorz provided TWO good suggestions in one day. The Region will discuss this at SCT next week. Klatte asked if NWW has tried a Small CAP waiver. **ACTION:** Klatte and Setter will talk later this afternoon to try to find a path forward.

- 4.1.3. LWG Rental pump update. Still on schedule. Solicitation expected to go through Contracting later in April. Lorz had questions about the electrical work being complete so diesel pumps are not needed. Setter said there was an electrical design from the Project. The work will be completed by Project Maintenance. Setter believes the work will be completed in time. Hevlin and Lorz would like to be updated before the next FPOM as to whether or not the electrical work will be completed in time so the contract will not need to be modified to allow for diesel pumps instead of electric pumps. **ACTION:** Setter will provide a schedule for the electrical work to FPOM. This will remain an update until complete.
- 4.1.4. LWG JFF. TrachtenbargTrachtenbarg reported that the construction is still in progress. Fish screen slot lower plugs are completed in Units 1-3, completion of units 4-6 will resume next July to occur with normal turbine unit maintenance. Completion of pier drilling is nearing completion for all piers except Pier 22. Pier 22 is near the adult ladder and trap and is currently the footing is being redesigned for constructability reasons. Transportation channel mining will likely start in late May. There were questions about the coordination form. **ACTION:** TrachtenbargTrachtenbarg will get an updated MOC to FPOM soon regarding pier 22 once we know final design and construction details.

4.2. NWP Updates

- 4.2.1. Upcoming maintenance/construction/research activities. Includes already coordinated MOCs.
 - 4.2.1.1. 14TDA13 Back up AWS survey. Keller reported that the survey is occurring today and tomorrow.
 - 4.2.1.2. 15BON02 T11 and T12 outages (updates 14BON82). T12 will need to be out a week after T11 returns in November 2015. **FPOM concurred.**
 - 4.2.1.3. 14BON83 WS Fish View Building roof.
 - 4.2.1.4. 14BON84 ITS end gate and WG1. Still on schedule.
- 4.2.2. BON Fish Unit trashrake. Lorz reported that a test would be good. Hausmann had sent photos to Lorz. Lorz requested that the raking be noted in the weekly report so that he may someday retire once the rake is determined fully functional.
- 4.2.3. TDA spill bay 9 trunnion pin. Klatte reported that the trunnion pin is on-site and in good shape. Small Projects is looking at doing the pin and possibly some wire ropes at other bays. The survey will be completed in April. The hope is that the pin will be relatively inexpensive to replace. **This will remain on the agenda until completed.**
- 4.2.4. JDA spill bay 15 repair. Zyndol reported that the bay is repaired and back in service.
- 4.2.5. JDA TSW opening. The TSW will be open on Friday morning.
- 4.2.6. JDA Avian lines. Zyndol reported 123 lines are installed. The contract for installing the two missing lines did not go through. In 2014 there was one line missing and

JDA Fisheries didn't notice an increase in predation. JDA Fisheries will continue to monitor in 2015. Attempts to increase hazing will be made if needed. FPOM asked about the contract and why it failed. There was concern about more lines breaking and contracts not getting through in timely manners. Zyndol said there are many issues and special funding is needed for this array. The array has a 10 year life span and is not designed for Project Maintenance to repair. Fredricks and Lorz expressed concern about funding and the Project not being able to do the work themselves. Zyndol clarified that in 2015 JDA had the money but the contract couldn't get through.

4.3. Research/FFDRWG updates. www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/NWP%20Research/Research.html

4.3.1. NWP FFDRWG is scheduled for 23 April.

4.3.2. 1 April Lamprey FFDRWG.

4.4. RCC update.

4.4.1. Zorich asked if the tailwater elevation at BON is at the peak too. Bettin said the tailwater is dropping slowly until May and then it will drop faster. Zorich said the higher tailwater seems to provide better conditions for lamprey at the NDE flume.

Table 1. RCC flow forecast.

Project	Previous day average (kcfs)	5 day forecast average (kcfs)	10 day forecast average (kcfs)	Projected Peak
LWG	48.2	53	48	4/13 53
MCN	190.9	171	166	4/8 190.9
BON	207.4	183	178	4/8 207.4

4.5. Lamprey updates. Zorich reported that no lamprey seen at the count windows or volitional LPSSs but lamprey have been seen taken by sea lions. LFS will open in May with the AWS open about 30%. FPOM was concerned about the AWS operation and how it won't be operating as designed.

4.6. Pinnipeds. Hausmann said he believes six animals have been removed this year.

4.7. Avian. Bettin asked if gun lockers have been purchased.

4.7.1. NWP Avian hazing will begin in mid-April.

4.7.2. NWW is experiencing increased concern from the local Audubon about their lethal take program. Fredricks said he has heard the rumors and would recommend NWW get facts out to the public to help address some of the misinformation. Setter said NWW will draft a response and providing accurate information. **ACTION: Lorz will send a copy of the Audubon newsletter to Mackey.** Setter said there hasn't been a threat of a lawsuit yet. The concerns voiced are related to the belief that NWW is indiscriminately shooting birds. Fredricks asked who was voicing concern. Moody said it was Mike Denny.

4.8. Critical Infrastructure. Schedule a meeting in August. NWP and NWW would be split.

4.9. BPA updates. TDA line 1 and 2 outage MOC has been drafted and submitted.

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

5.1. 15BON02 T12 outage in November. Approved.

5.2. 15TDA02 BPA outages. Approved.

5.3. 15JDA02 MFR MU9 draft tube dewatering delay. No comments from FPOM.

5.4. 15MCN04. Fredricks asked for a new MOC for the debris spill since there were many comments. He asked if one or both TSWs would be closed. He requested more detail and a better write up of the impacts of this action. He stressed that we need our MOCs to be more complete so they accurately reflect what we do. This will be helpful for the Admin Record. Kiefer recommended including a debris spill before the start of the spill season in the FPP. This was deemed a great idea.

5.5.15IHR006. Trumbo is requesting to get training spill from bays 1 and 3 due to low recovery of test fish. These fish are balloon tagged. Hevlin said he wants the normal spill pattern to be put in place once releases are completed each day. Hevlin said we normally have bay 1 closed to avoid attracting spring Chinook. Lorz agreed with Hevlin. Lorz asked if the study will still end on time. Trumbo said he believes the test will be completed by 13 April. Fredricks asked if the results of the test will meet the precision needed to have meaningful data. Trumbo said he will request permission for boat operators to enter the BRZ downstream of the outfall pipe to get fish. Van Dyke asked what is being tested. FPOM discussed whether this is a test of the RSW or the spill plan. Bettin suggested reducing spill to allow for recovery of the test fish. He suggested 30% spill. FPOM discussed this option. Fredricks said this test is to test the RSW only. Lorz asked if the lost spill would be made up later. At the reduced spill, the normal pattern could be used. Trumbo said he is interested in getting the fish caught in the eddy. Wright wanted to decide which days the 45K is made up. Bettin said he needs to go back to the office and discuss the preferred days first. **IHR will go to 30% spill, using the normal pattern on 10 April for four days. The 30% spill days to begin on 10 April will be swapped with 45K spill days that occur later in the spill schedule for 2015 once the test is completed. These dates will be determined. If the 30% doesn't work, IHR will go directly to a modified 45K pattern. The 4-6 May and 8-10 will be the make-up days when spill will be 45K instead of 30%.**

5.6. LMN U1 (MOC coming). Still developing the schedule. Meeting set for 21 April to discuss the outage needed for Unit 2. Need to have a good salvage plan.

5.7. LWG won't be started until LGS is completed. Start may be delayed until December 2015.

5.8. LGS. Removing debris from upstream of units 1 and 2. Divers got a 15 foot debris pile out from in front of the units.

5.9. 15LWG004. LWG JFF construction. **Will be updated and sent to FPOM.**

5.10. 15LWG005. Replaced by **15LWG07**, which was approved.

6. Fish Passage Plan: The Final 2015 FPP is 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.

6.1. Change forms - 2015 (pending further review):

6.1.1. 15BON006 – PH2 Mid-Point Operation Dates. *Approved but will be revisited.*

FPC provided a memo. Lorz said he believes the Task Group was comfortable with expanding the range at the lower end. There is still discussion about expanding the upper end. The upper end is dependent on the FGE test results. **See notes under BON Ops task group.**

6.2. New FPP change forms (since last FPOM meeting):

6.2.1. 15LWG002 - Season Dates. Pending review of revisions per the March FPOM discussion. **Approved.**

6.2.2. 15LGS005 – Unit 1 clarification. New Change form. **Approved.**

6.3. Potential FPP change forms.

6.3.1. BON split flows. Additional trigger to operate more units at PH1. **ACTION:** **Fredricks and Hausmann will work up a change form for FPOM to review. Lorz felt left out so he is going to be added to the team.**

6.3.2. MCN debris spill.

6.3.3. Appendix B – Transport. Revise truck transport minimums if supported by data analysis to determine likely effects, including frequency and duration. Wagner will request NOAA Montlake to look at the data.

6.3.4. Appendix C – Load Shaping Guidelines. Needs to be updated and reconciled with project-specific sections of the FPP. This is a new task group.

6.3.5. Appendix J – Smolt Monitoring Protocols. Should include protocols for smolt condition monitoring at all projects. Fredricks said he would like to see an evaluation of the condition data collected to determine if we are doing the minimum monitoring effort to satisfy the requirements of the BiOp. Lorz reported that the oversight committee met and started discussing current monitoring and needs for monitoring. Fredricks said the SMP is different than the intent of this potential change form. This change form is to address the BiOp condition monitoring required from the Action Agencies. This is a new task group.

7. Task Group Updates.

- 7.1.** Condition monitoring. (Lorz, Conder). Team members include: Benner, Bettin, Chockley, Fredricks, Mackey, Morrill, Setter. Fredricks drafted a memo detailing what he believes is the minimum condition monitoring needed. He would like the Task Group to define what is needed for monitoring and reporting, what condition means, and then draft a change form so this information is included in FPP Appendix J. **First meeting will be after the 11 June FPOM.**
- 7.2.** Load Shaping Guidelines (Bettin). Team members include: Fredricks, Mackey, Wright. Bettin is still figuring out if he is allowed to edit Appendix C.
- 7.3.** Avian Hazing (Zorich). Team members include: Conder, Fredricks, Lorz, Mackey, Setter, Wertheimer. **Met on 12 February to discuss hazing effectiveness evaluation.**
- 7.4.** BON Ops. (Lorz) Team members include: Benner, Bettin, Fredricks, Hausmann, Lut, Mackey, Meyer, Rerecich, Skalicky, Wertheimer. Met after January FPOM. Change form still pending review and approval. **Meeting right after the April FPOM.** Attendees included Baus, Bettin, Doumbia, Fredricks, Klatte, Lorz, Mackey, Van Dyke, Wright. Lorz reiterated that the data appears to show little risk with expanding the lower end, however, there needs to be more discussion about the upper end. Bettin explained that BPA would like the ability to use the range but likely would not use it. FPOM will revisit the upper end after the FGE test results are in and analyzed. The change form needs an end date included. **The Task Group agreed to the full range of PH2 unit operation only if the upper range operation was limited to no more than what had been seen in 2006 - 2012 (based on FPC memo). The change form can be approved as written, with additional language about reviewing the FGE test results and making further discussions about the upper range.**
- 7.5.** TDA split flows. (Cordie) Team members include: Bettin, Cordie, Fredricks, Klatte, Lorz, Lut, Mackey, Rerecich, Skalicky, Wertheimer. **Tentatively scheduled to meet after the May 2015 FPOM.**
- 7.6.** AFF mods (BON Fisheries). Team members include: Benner, Fredricks, Lorz, Mackey, Meyer, Rerecich, Royer, and Whiteaker. **It has been suggested this Task Group can be removed. This task group may go to inactive status AFTER an after action report is provided to FPOM.** ACTION: **Rerecich and Hausmann will collaborate.**

8. Other.

- 8.1.** MOCs to come.
- 8.1.1. TDA powerhouse train tracks removal. The three month window starts in January. It may have to go beyond the three month window.
- 8.1.2. TDA 35 ton gantry crane rehab.
- 8.1.3. TDA AWS backup.
- 8.2.** This was Bern's last FPOM before he takes over as the NWP Deputy Chief of Operations. Let it be noted that it was one of the shortest, if not the shortest, FPOM meetings held in the eight years he has chaired FPOM.