

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 14 May 2015 FPOM meeting.

The meeting was held at McNary Lock and Dam. 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
Burgess	Townes	NWW-LGS	Oliver.t.burgess@usace.army.mil
Clinton	Patti	NWP	Patricia.L.Clinton@usace.army.mil
Conder	Trevor	NOAA	Trevor.conder@noaa.gov
Cordie	Bob	NWP-TDA	Robert.p.cordie@usace.army.mil
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
Hockersmith	Eric	NWW	Eric.e.hockersmith@usace.army.mil
Holdren	Elizabeth	NWW-LWG	Elizabeth.a.holdren@usace.army.mil
Jacobs	Lieutenant	NWW	John.s.jacobs@usace.army.mil
Johnson	Bobby	NWW-MCN	Bobby.johnson@usace.army.mil
Mackey	Tammy	NWP	Tammy.m.mackey@usace.army.mil
Mensik	Rosanna	Blueleaf	rmensik@blueleafenviro.com
Moody	Greg	NWW	Gregory.p.moody@usace.army.mil
Morrill	Charles	WDFW	Charles.morrill@dfw.wa
Petersen	Christine	BPA	chpetersen@bpa.gov
Pinney	Chris	NWW	Chris.a.pinney@usace.army.mil
Scott	Shane	PPC	shane@sscottandassociates.com
Setter	Ann	NWW	Ann.L.Setter@usace.army.mil
Trachtenbarg	David	NWW	David.a.trachtenbarg@usace.army.mil
van Dyke	Erick	ODFW	Erick.s.vandyke@state.or.us
Van Nice	Thomas	PSMFC	tvannice@psmfc.org
Wertheimer	Bob	NWP	Robert.h.wertheimer@usace.army.mil
Wright	Lisa	NWD-RCC	Lisa.s.wright@usace.army.mil
Zyndol	Miro	NWP – JDA	Miroslaw.a.zyndol@usace.army.mil

Baus, Burgess, Clinton, Conder, Fielding, Fredricks, Hausmann, Hockersmith, Petersen, Pinney, Scott, van Dyke, Wright called in.

May birthdays include: Wertheimer.

HAPPY BIRTHDAY!

Documents may be found at <http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/>

1. Decisions made at this meeting.

- 1.1. April meeting minutes approved with edits
- 1.2. MOCs and MFRs

- 1.2.1. Special TDA FPOM meeting to be in Portland in the morning on 2 June.
 - 1.2.2. **15MCN 04.** Debris Spill. *Completed.*
 - 1.2.3. **15MCN 05** North Powerhouse Entrance Weir Malfunctions. Fredricks expressed concern that this issue could have gone for so long without any alarms. Johnson reported that the alarms had gotten turned off during the winter. Johnson said he will check to make sure checking that the alarms are on during operator inspections.
 - 1.2.4. **15LGS 06** Adult Fishway Controls Modifications Update. *Approved.*
 - 1.2.5. **15LWG 04** LWG JFF construction and **15 LWG 010** Lower Granite JFF Update - Transport Channel Mining. *Approved.*
 - 1.2.6. **15LWG 09** Auxiliary Water Supply pump #2 – return to service test. *Approved.*
 - 1.2.7. **15LWG011** MFR North shore entrance gate operation. Hevlin had questions about the MFR. He said if it's possible to better meet criteria on the one gate, then that is presumed to be better for fish passage. Setter said this is in the FY17 budget request.
 - 1.2.8. **15BON03** MFR BON CI FV5-4. No comments.
 - 1.2.9. **15BON04** MFR AFF CHK MORT. Only comment was “don't let it happen again”.
- 1.3. FPP change forms:
- 1.3.1. 15IHR006 - Unit 3 Efficiency Range (Moody). *Approved.*
 - 1.3.2. 15IHR007 – Spill Pattern Correction (Wright). *Approved.*
 - 1.3.3. 15LWG003 – Spill Pattern Correction (Wright). *Approved.*
 - 1.3.4. 15TDA006 – Sluice Outage Time (Cordie). *Pending. Fredricks does not give concurrence. This work can only occur during the day. Fredricks would like to have further discussion. TDA is getting more aggressive about completing the plating of the orifices. This will be carried over for further discussion once Fredricks gets back in the office. Cordie will take a closer look at the schedule to see how many might be completed outside the winter work window.*

2. Action Items

2.1. NWW Action Items

- 2.1.1. [May 15] **15MCN 05** North Powerhouse Entrance Weir Malfunctions. Johnson said he will check to make sure checking that the alarms are on during operator inspections. Fredricks said if necessary, we can add language in the FPP. **ACTION:** Johnson will talk with the operators about checking the alarms and report back to FPOM.
- 2.1.2. [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:** *SRWG has set up objectives for FY16. Hevlin said FY15 funding will be used for this study. Van Dyke said he had submitted comments. Wertheimer will follow up with Van Dyke through SRWG.*

2.2. NWP Action Items.

- 2.2.1. [May 15] BPA updates. Operating one unit on the 115KV line. **ACTION:** Bettin will draft a MOC and bring it back to FPOM.
- 2.2.2. [May 15] 14BON84 ITS end gate and WG1. **ACTION:** Hausmann will provide an updated MOC.
- 2.2.3. [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. **STATUS:** *Hausmann said nothing has been written yet but explained that moving fish is difficult using the guidance in the FPP. Fredricks said we may just need to get something on paper for FPOM to review. Fredricks requested Hausmann get something on paper and he will review it when he gets back in town.*

2.2.4. [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.*

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

2.3.1. [Apr 15] MCN log Bronc. **ACTION:** Klatte and Setter will talk later this afternoon to try to find a path forward. **STATUS:** *Discussed later under Debris Plan*

2.3.2. [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. Discussed later in the agenda.*

2.3.3. [Apr 15] LWG JFF. **ACTION:** Trachtenbarg will get an updated MOC 15LWG004 to FPOM soon. **STATUS:** *discussed under MOCs.*

3. Updates

3.1. NWW Updates.

3.1.1. Upcoming maintenance/construction/research activities. NWW provided a calendar of outages.

3.1.1.1. LWG Unit 1 timeline. Bridge crane work to be completed in September.

3.1.1.2. LMN Unit 1 timeline. Setter talked through the proposed schedule. LMN won't start until January 2016.

3.1.1.3. Hevlin asked about the July/August start for U3 at DWR. Setter said that is the preferred start time. She hasn't provided any updates on that item. Setter said we are still waiting on parts. Bettin said there will be a site visit in a couple of weeks and then once contractors can evaluate and bid, we will have a better idea on schedule.

3.1.2. MCN debris plan revised draft. Navy boat available and should be on-site by the end of May. This was a much quicker acquisition than purchasing a log bronc. FPOM was very happy about this bit of good news.

3.1.3. LWG Rental pump update. Should be on-site by 1 July. All prep work is scheduled to be completed by mid-June. If the prep work is completed early, a switch for the existing pumps will be added. On-site meeting was earlier this week. Two vendors attended, one of which provided pumps last year. There is speculation that the pumps may be needed early this year and the Project will be ready. FPOM discussed the importance of needing cool water from DWR. The first summer 2015 coordination call, checking in on adult passage and trapping conditions at LWG, will be held either 22 or 29 June.

3.1.4. Fish Transport Initiation. Bailey reported that collection started on 1 May at the Snake River projects. Daily barging has continued since the start. Setter said there is an issue at LGS; there is a lot of banging of the barge against the dock. Once the run has passed, the 4000 series barge will be changed to an 8000 series barge so there will be less damage to the barge loading dock. The lip of the 4000 series barge is catching under the barge dock and doing quite a bit of damage. There may be less

direct loading at LGS due to the barge switch from 4000 series to 8000 series. The 4000 series barge is the only one having an issue at the dock.

3.1.4.1. Bailey reported that fish transport numbers are lower this year than in previous years. Fish condition looks good at MCN. Setter said it may be that spill is extremely effective during this low water year. Bettin agreed that this water year, up to now, resembles 2010 so it is likely the fish numbers will track the numbers from 2010. Bailey said there has been no sign of fish holding in the LGS pool. Hevlin asked where the fish would be stalled. Setter said maybe in the confluence area but that doesn't make much sense. Baus chimed in and inquired why Salmon Manager's at the last several TMT meetings expressed significant concern associated with perceived delay in the LWG forebay associated with differential in the Lewiston Trap and the LWG index describing it as a dire situation yet the same level of concern is not being shared at today's FPOM meeting. Hevlin noted that we do not know if fish are not passing the project since we are still spilling almost 50% of the river, with a surface route. Morrill suggested it is important to be cautious when interpreting that trap data. Baus said that was not the attitude during TMT in previous weeks. Setter said that at FPOM bios are suggesting spill may be more effective and with the forecasted rain, it is expected to result in an increase in fish collection numbers. She said we rely heavily on PIT tag and index numbers but if fish are not using the bypass, then that information is not available. In any event, LGS will start using a different barge and will no longer do direct loading. This will reduce damage to the dock. Van Dyke said he will share a website that explains what is going on in different forums with Baus. He noted that neither forum has resulted in a very confident position.

Update: [van Dyke] "included another source of information that characterizes juvenile migration for this spring (see links below for three species). Seems well supported that low flow conditions are our biggest challenge for in-season management, and acting to supplement spring flows while balancing for things to come have been deeply seeded in the discussions to date. All discussions have been quick to include that no decision we face moving forward will be void of risk and that balancing these risk is the overarching intent of in-season recommendations aimed at implementing adaptive management actions this year."

Yearling Chinook <http://www.fpc.org/smolt/passgraphs/passgraph.asp>
<<http://www.fpc.org/smolt/passgraphs/passgraph.asp>>

Juvenile steelhead <http://www.fpc.org/smolt/passgraphs/passgraph.asp>
<<http://www.fpc.org/smolt/passgraphs/passgraph.asp>>

Juvenile sockeye <http://www.fpc.org/smolt/passgraphs/passgraph.asp>
<<http://www.fpc.org/smolt/passgraphs/passgraph.asp>>

3.2. NWP Updates

3.2.1. Upcoming maintenance/construction/research activities. Includes already coordinated MOCs.

3.2.1.1. 15BON02 T11 and T12 outages (updates 14BON82).

3.2.1.2. 14BON83 WS Fish View Building roof.

3.2.1.3. 14BON84 ITS end gate and WG1. Hausmann said the work is still scheduled for 3 – 14 August. One issue that was not raised is that the south entrances will need to be closed to allow divers into the area. A transverse bulkhead will be installed so the north entrances will remain open. Fredricks didn't see it as a problem, but he would like to see an updated MOC. **ACTION: Hausmann will provide an updated MOC.**

3.2.2. TDA spill bay 9 trunnion pin. Cordie reported that the goal is to look at gates 1-8 to make sure they are in top condition. Mackey clarified that bays 1-9 will be assessed. There are concerns about drums, trunnion pins, wire ropes, and general condition. Fredricks said he agrees with the proposed plan forward. Fredricks said that if we need to dismantle a gate to look at what is going wrong, he would like that to happen in bay 9.

3.3. Research/FFDRWG updates. [www.nwd-](http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/NWP%20Research/Research.html)

[wc.usace.army.mil/tmt/documents/FPOM/2010/NWP%20Research/Research.html](http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/NWP%20Research/Research.html)

3.3.1. NWP FFDRWG met on 23 April. Next meeting will be 18 June.

3.3.2. NWW FFDRWG will meet on 28 May.

3.4. RCC update. Baus provided his update close to lunch and had some good peanut butter references.

Table 1. RCC flow forecast. These numbers may not include the DWR pick up.

Project	Previous day average (kcfs)	5 day forecast average (kcfs)	10 day forecast average (kcfs)	Projected Peak
LWG	51	80	63	81 on 17 May
MCN	188	192	177	192 on 18 May
BON	184	201	188	201 on 18 May

3.5. Lamprey updates. Wertheimer provided an update. 1st lamprey has passed through BON and JDA. FFU will be operating the lamprey facilities seven days a week. They will be transporting from BON WS to Stevenson and from JDA-N to upstream on the WA side.

3.5.1. Moody reported that lamprey night counts will begin on 16 May at the fish count stations. Wertheimer noted that prior to this year, lamprey night counts started in June and we missed the start of the run.

3.6. Pinnipeds. Wertheimer reported the highest number of stellars seen. Numbers are starting to drop off and we should be wrapped up by the end of the May. Bettin asked how many have been euthanized. Wertheimer said the official count is 14 to date. There may be more this week but those numbers haven't been reported yet. We had a mortality resulting from an accidental drowning. The traps have been modified to exclude sea lions from accessing areas between the traps where ropes & rigging present a hazard area to sea lions.

3.7. Avian.

3.7.1. NWW program underway since April. Johnson reported that MCN had their first lethal take on 11 May. NWW still has a green light to utilize lethal take as needed. Moody explained that there are steps that must be completed before going to lethal take. The permit allows up to 1000 birds. There has been no change in the protocols and there is no anticipated change to those protocols for future years.

3.7.2. NWP Avian hazing began in mid-April. Cordie asked about lethal take at NWP projects. At this time, this is not an action NWP is willing to pursue, however, with the data from NWW, there may be enough evidence of benefit to pursue the issue again.

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

3.9. BPA updates. Bettin suggested that the FPP may have overlooked the 115KV and 130KV requirements. He said it looks like the FPP may need to be modified to keep a unit on the

115KV line. This summer BPA will be replacing original and damaged lines. Bettin would like to know which unit we would want running. This is an issue this year due to low water flow. Fredricks is concerned running only one unit will kill fish. There is an option of running more than one unit. The preference may be Unit 1 until the ITS work starts, then switch to Unit 10. **ACTION:** Bettin will draft a MOC and bring it back to FPOM.

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

4.1. 15MCN 04. Debris Spill. *Completed.*

4.2. 15MCN 05 North Powerhouse Entrance Weir Malfunctions. Fredricks expressed concern that this issue could have gone for so long without any alarms. Johnson reported that the alarms had gotten turned off during the winter. Johnson said he will check to make sure checking that the alarms are on during operator inspections. Fredricks said if necessary, we can add language in the FPP. The Washington shore weirs have been checked so there will not be a similar issue over there. **ACTION:** Johnson will talk with the operators about checking the alarms and report back to FPOM.

4.3. 15LGS 06 Adult Fishway Controls Modifications Update. Burgess reported that this is something that was scheduled for the winter maintenance period but there were a couple of items that were not completed prior to fish passage season. The contractor did not show up on the day coordinated to complete the work on the north shore weirs and complete the hardware update. There is a bit of mist coming from the spill bays and that may affect the electronics being worked on. The target date is 20 May and should take less than an hour. Hevlin suggested moving the flow from bay 8 to bays 3 and 4. If moving only one stop, move it to Bay 3, if moving two stops, move one to Bay 3 and one to Bay 4. *Approved.*

4.4. 15LWG 04 LWG JFF construction and **15 LWG 010** Lower Granite JFF Update - Transport Channel Mining. Part 2 of the audio starts here. Trachtenberg reported on the current status. Core drilling and debris removal will occur at night. This work should be less noisy than a standard jack-hammer. Hevlin asked about the rebar. Trachtenberg said it will all come out together. Nighttime work hours will be 1800 – 0600. Noise monitoring will occur, more for human health and safety. More on that will be available at NWW FFDRWG. Cordie asked what the noise data will be used for. Trachtenberg said it will be applied to establishing thresholds for fish impacts. Trachtenberg noted that it is surprising how loud background Project noise really is; 80-85 decibels was detected with no work going on. *Approved.*

4.5. 15LWG 09 Auxiliary Water Supply pump #2 – return to service test. Holdren presented the MOC to FPOM. Moody said each pump is bulk headed separately so there is some configuration of bulk heads. Two pumps will be OOS during two hours (1400 – 1600) on 27 May. This will target the lowest passage time. *Approved.*

4.6. 15LWG011 MFR North shore entrance gate operation. Hevlin had questions about the MFR. He said if it's possible to better meet criteria on the one gate, then that is presumed to be better for fish passage. Setter said this is in the FY17 budget request.

4.6.1. Hevlin asked about juvenile fish numbers. Holdren said the counts are just low. She hasn't seen any holding at the dam.

4.7. 15BON03 MFR BON CI FV5-4. No comments.

4.8. 15BON04 MFR AFF CHK MORT. No comments, other than “don't let it happen again”.

4.9. 15TDAXX. Crane rail removal 2016-2017. **Meeting on 2 June to discuss further.**

4.10. 15TDAXX. Back up AWS construction. **Meeting on 2 June to discuss further.**

5. Fish Count Improvements (FFU)

5.1. TDA count station. Wertheimer explained what has happened to date. He is very excited about the video feed potential. There are concerns about the bandwidth use but he will show FPOM some video at the June FPOM meeting. Capture, archive, compress, send is the mantra. Fredricks would like to see the video count set up at TDA-N on 4 June. Fredricks

said he is unhappy with the winter counts. He would like to see more frequent winter counts if this technology works. Moody said that is the direction we would all like to head. We need to see how this works at one count station first. Setter asked about having a camera available instead of funding a body to sit at the count station during the winter months when the ladder is out for maintenance. The video could be fed to any location that has access to the web and counts could be completed for several projects by one person. FPOM commented that this is a great breakthrough for fish counts. They are eagerly awaiting the presentation in June.

5.2. Adult Fish Counting new contract. Moody reported that the new five year contract is in development. He provided a schedule for FPOM review. Moody will develop the contract scope based on any comments received from FPOM. Eventually FPOM would like to see more frequent winter counts at all of the dams so that fish impacts could be more accurately estimated when coordinating work in November and March. This discussion will be continued at the June FPOM meeting.

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

6.1.1. 15IHR006 - Unit 3 Efficiency Range (Moody). *Approved.*

6.1.2. 15IHR007 – Spill Pattern Correction (Wright). *Approved.*

6.1.3. 15LWG003 – Spill Pattern Correction (Wright). *Approved.*

6.1.4. 15TDA006 – Sluice Outage Time (Cordie). *Pending. Fredricks does not give concurrence. This work can only occur during the day. Fredricks would like to have further discussion. TDA is getting more aggressive about completing the plating of the orifices. This will be carried over for further discussion once Fredricks gets back in the office. Cordie will take a closer look at the schedule to see how many might be completed outside the winter work window.*

6.2. Pending FPP Change Forms.

6.2.1. 15BON006 – PH2 Mid-Range Dates. Pending finalization of Task Group revisions. Wright sent an updated form to Lorz and Fredricks. Fredricks will review and provide comments once he is back in the office. He stressed the need to get the agreement from the last task group meeting in writing in the form.

6.3. Potential FPP change forms.

6.3.1. BON split flows. Additional trigger to operate more units at PH1.

6.3.2. 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.

7. Task Group Updates.

7.1. New Task Groups.

7.1.1. Load Shaping Guidelines (Bettin). Team members include: Fredricks, Mackey, Wright. Bettin is still figuring out if he is allowed to edit Appendix C.

7.2. Active Task Groups.

7.2.1. TDA split flows. (Cordie) <http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20TDA%20split%20flows/>

7.2.1.1. Team members include: Bettin, Cordie, Fredricks, Lorz, Lut, Mackey, Rerecich, Skalicky, Wertheimer. *Tentatively scheduled to meet after the June 2015 FPOM.*

7.2.2. Condition monitoring. (Lorz, Conder). <http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20Condition%20Monitoring/>

7.2.2.1. 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.**

7.2.2.2. Mensik provided an update on how the new contractor is working with FPC/PSMFC. She said it is all going well. No major problems.

7.2.3. Adult counting. (Wertheimer and Moody)

7.3. Task Groups that really want to be inactive but still has an Action Item.

7.3.1. AFF mods (BON Fisheries). <http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20BON%20AFF/>

7.3.1.1. Team members include: Benner, Fredricks, Lorz, Mackey, Meyer, Rerecich, Royer, and Whiteaker. **This task group may go to inactive status AFTER an after action report is provided to FPOM.**
ACTION: Rerecich and Hausmann will collaborate.

7.3.2. BON Ops. (Lorz) <http://www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/Task%20Groups/Task%20Group%20BON%20unit%20operating%20range/>

7.3.2.1. Team members include: Benner, Bettin, Fredricks, Hausmann, Lut, Mackey, Meyer, Rerecich, Skalicky, Wertheimer. 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.

FPOM is serious business...

