

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 11 July 2013 FPOM meeting.

The meeting was in the Columbia Room at the new CRITFC building. In attendance:

Last	First	Agency	Office/Mobile	Email
Bailey	John	USACE-NWW		John.c.bailey@usace.army.mil
Baus	Doug	USACE-RCC		Douglas.m.baus@usace.army.mil
Benner	Dave	FPC		dbenner@fpc.org
Conder	Trevor	NOAA	503-231-2306	Trevor.conder@noaa.gov
Cordie	Bob	NWP-TDA	541-506-7800	Robert.p.cordie@usace.army.mil
Fone	Ken	USACE-NWW		Kenneth.r.fone@usace.army.mil
Fredricks	Gary	NOAA	503-231-6855	Gary.fredricks@noaa.gov
Hausmann	Ben	NWP-BON	541-374-4598	Ben.j.hausmann@usace.army.mil
Hevlin	Bill	NOAA	503-230-5415	Bill.hevlin@noaa.gov
Kiefer	Russ	IDFG		Russ.kiefer@idfg.idaho.gov
Klatte	Bern	USACE-NWP	503-808-4318	Bernard.a.klatte@usace.army.mil
Lorz	Tom	CRITFC	503-238-3574	lorz@critfc.org
Lut	Agnes	BPA		axlut@bpa.gov
Mackey	Tammy	USACE-NWP	503-961-5733	Tammy.m.mackey@usace.army.mil
Martinson	Rick	PSMFC		rickdm@gorge.net
Mensik	Rosanna	PSMFC		rmensik@psmfc.org
Meyer	Ed	NOAA		Ed.meyer@noaa.gov
Petersen	Christine	BPA		chpetersen@bpa.gov
Rerecich	Jon	USACE-NWP		Jonathan.g.rerecich@usace.army.mil
Sears	Sheri	Colville Tribes		Sheri.Sears@Colvilletribes.com
Traylor	Andy	NWP-BON		Andrew.w.traylor@usace.army.mil
Wright	Lisa	USACE-RCC	503-808-3943	Lisa.S.Wright@usace.army.mil
Zorich	Nathan	NWP-FFU	541-374-8801	Nathan.a.zorich@usace.army.mil

Bailey, Benner, Fone, Kiefer, Martinson, R. Mensik, Meyer, Sears called in.

July birthdays include: Zyndol, Hausmann. HAPPY BIRTHDAY!!!!

1. Finalized results from this meeting.

1.1. June FPOM minutes approved.

1.2. BON F2 extended outage. Currently scheduled for 23 November. The Project is concerned about the delay in getting components back in time to allow for F1 to be taken down and serviced. Hausmann asked about leaving F2 out while the lamprey work is going on and keeping it out until the work is complete. FPOM was in agreement with that as long as F1 is kept in service and work progresses on the units in a timely manner.

1.3. AFF lamprey morts. **FPOM agreed it was worth trying raising the picket leads for lamprey.**

1.4. AFF researcher configuration. WDFW tank configuration memo. **FPOM and BON are ok with the proposal.**

1.5. Avian Task Group meeting after the September FPOM meeting.

1.6. Coordination/Notification forms (need concurrence).

1.6.1. 13BON34 LFS ROV inspection. Approved.

- 1.6.2. **13TDA06** T8 Startup. FPOM asked how much time will be spent out of 1%. Fredricks asked for the expected flow through the units. **FPOM would prefer this occur in August, but may be ok with July depending on how much of the operation will be outside 1%, and how far outside 1%.**
- 1.6.3. **13MCN012** RAS Testing (update). Fone provided an update. This was previously approved.
- 1.6.4. **13IHR011** Line 1 disconnect maintenance. Need the extra time to work on the disconnect prior to the double testing. Conder doesn't like this operation. He would like to see the work in August since steelhead could take the delay a little better than the Chinook. Conder also expressed concern about the MOC structure; it was vague, needed more in-depth analysis of the impacts by species, no reference to the previous coordination, dates were changed and there was no explanation as to why. Moody said this work cannot be delayed due to the annual maintenance scheduled after this work and if it isn't done now, the double testing won't be completed for another 3 years. FPOM asked how late the disconnect maintenance could be pushed, how soon could double testing occur. NOAA said no. This is ESA listed sockeye at risk during this operation. Moody asked if doing the disconnect after 26 July would be acceptable. NOAA said that would be better and as close to August is best. **NOAA and CRITFC does not support this MOC as written. There are concerns about impacts to sockeye. BPA will work with NWW to figure out scheduling. ACTION: Moody will go back to the PM and work with developing a new schedule.**
- 1.6.5. **13IHR012** MU3 outage. **Approved.**
- 1.6.6. **13LGS06** Turbine 1 and 2 exciter replacement and model validation testing. Units will be operated outside 1% but for no more than 30 minutes. **FPOM is ok with this.**

1.7. FPP change forms.

- 1.7.1. **14TDA002** 2.4.1.2.a ROV turbine units. Cordie explained the current operation. Lorz said he said he wants inspections of units across the powerhouse but he doesn't care if we look at unit 17 instead of 18. **FPOM approved.**
- 1.7.2. **14TDA003** Sluiceway move time limit. **Approved.**

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. [Jun 13] MCN temperature profile. **ACTION:** NWW will continue to work on this. **STATUS:** Fone reported this is a continuing agenda item. Lorz asked if there was any movement forward. Fone and Moody said the model was available for use by the Project. Fredricks asked for a written update on the status of the model, what is left to be completed, schedule, etc. Fredricks and Lorz will bring this up at the July NWW FFDRWG. Fredricks said he has hoped the Project would be utilizing the model by now but it doesn't

sound like they are. He noted this is a BiOp item and an important item for MCN. Mensik asked if this model is the summary of the temperature data she collects on a daily basis. Fredricks said the model is more than just a summary. This will be moved to Updates. Just a minor correction: NMFS had made comments to the effect that they were hoping that we would be using the McNary temperature (sawtooth) model by now, but NMFS apparently thought that we were not. We have indeed been using the model, as the sawtooth pattern is mandatory under the current FPP. We have been working the sawtooth model around the units that have been out of service for rewinds and other work. Also, when units are shut down briefly due to low power loads, the operators have been using the sawtooth pattern as determined by the model and by the current FPP. We also used the sawtooth pattern to determine the order of the units that were shut down for recent RAS and Doble testing. The use of the model is probably partly responsible for the fact that we have not had any significant fish mortalities this summer due to temperature shock. - Carl

- 3.1.2.** [Jun 13] MCN debris spill. **ACTION:** NWW will provide the protocols so this can be inserted into the FPP as a normal operation prior to the TSWs being removed. **STATUS:** *This will be captured under potential change forms.*
- 3.1.3.** [Jun 13] MCN sampling without transport. **ACTION:** NWW will put together a proposal for the Region to consider. Wills said he would take the issue to FPAC as well. **STATUS:** *Setter has started the report. This will be captured under Updates. Lorz reported this has come up at FPAC, but NWW needs to provide more information before FPAC can make a recommendation. Lorz suggested a FPP change form for further discussion this fall/winter.*

3.2. NWP Action Items

- 3.2.1.** [Feb 13] BON AFF PIT tag detector. **ACTION:** Fryer will have detailed drawings, an operating plan, and monitoring plan for FPOM review in October.
- 3.2.2.** [May 13] BON JMF Separator Bar contract and condition sub-sampling. **ACTION:** Lorz said they will take the proposal to roll the sub-sampling into the SMP contract it to FPAC and Bettin will broach the subject again with BPA contracting. **STATUS:** *BPA and FPC has not yet had the discussion about adding this to the FPC work plan.*
- 3.2.3.** [Jul 13] BON JMF Separator Bar contract and condition sub-sampling. **ACTION:** *Klatte will arrange for a meeting between FPC and BPA.*
- 3.2.4.** [May 13] BON video Kelt Monitoring. **ACTION:** NWP (FFU) will develop a proposal for kelt monitoring from 1 March through 10 April. They will bring this back to FPOM in August or September for further discussion and development.
- 3.2.5.** [Jun 13] BON PH2 tail logs. **ACTION:** Hausmann will put together a MOC with all of the details so FPOM can evaluate the risk to fish and make a recommendation. **STATUS:** *The digital governor contract was delayed so this is no longer an issue.*
- 3.2.6.** [Jun 13] NWW hydrofoil test at B2CC. **ACTION:** A detailed discussion of the new study plan needs to be added to the NWW FFDRWG or a special meeting need to be set up. **STATUS:** *This test will not occur in FY13. It may occur in FY14 at LWG or BON B2CC. This is no longer an Action Item.*

- 3.2.7. [Jun 13] Diel fish passage graphs. **ACTION:** Wright will take the lead on figuring out where to insert the information into the FPP. **STATUS:** *This will be moved to potential FPP change forms.*
- 3.2.8. [Jun 13] BON debris loading reporting. **ACTION:** Hausmann will send weekly updated on debris to Benner and Baus prior to TMT. **STATUS:** *no longer needed.*
- 3.2.9. [Jul 13] AFF modifications/mortalities. **ACTION:** NWP will look at the potential of installing cameras.
- 3.2.10. [Jul 13] AFF lamprey morts. **ACTION:** Zorich will bring recommendation to Corps-Tribal Accords Work Group next week as well as seek input from Sean Tackley (NWP Planning) and lamprey researchers trapping lamprey in the AFF.

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

- 3.3.1. [Jun 13] JDA-S lamprey trap temperature protocols. **ACTION:** A. Jackson has been asked to write up some justification and bring it back to FPOM. Zorich will continue to do a literature search for some guidance as will the rest of FPOM. **STATUS:** *to be discussed under lamprey updates.*

4. Updates

4.1. NWW Updates

- 4.1.1. LGS- TSW End of season operation. Wright explained the potential trigger date and what that means for fish impacts. If FPP criteria was followed, the TSW would be pulled on Monday 15 July. This is about two weeks early compared to previous years. Hevlin said he believes it is better for the fish runs to leave the weir in place, but he understands there are operational constraints when flows drop. Hevlin recommended 1 August. He suggested there are potential issues with the FPP trigger when it suggests the weir should be pulled as early as 1 July. Moody and Wright were in agreement with the need to be adaptable when considering the trigger. Conder suggested choosing 1 August and if the Project has a problem then coordinate through a MOC. The “problem” is turning on and off Unit 2. Wright said it appears flows would allow the weir to stay in until 1 August. A FPP change form will be written to change the weir removal date to 1 August with any earlier removal coordinated through an MOC.
- 4.1.2. LWG gatewell dipping. JDA ESBSs were tested in units 3 and 6. Results showed no statistical difference in fish descaling between JDA and LWG screens.
- 4.1.3. Snake River Chinook jack fish count. Fish Counters are the same as last year. The jack count lines haven’t changed. Counters are tested regularly.
- 4.1.4. LWG ACDP. Fone said the flow forecast indicates 30 kcfs on Sunday or Monday. The last two data points will be collected and the model can be calibrated.

4.2. NWP Updates

- 4.2.1. BON Updated Dewatering Plans. Traylor will be working on these when he is at the Project on Sundays. He is currently detailed to NWP Ops Division Fish Section.
- 4.2.2. JDA TSW end of season operation. 31 August is on Saturday. The Project will remove the TSW on 29 August (Thursday). The TSW removal requires

a crane, the tainter gate may not be used as a closure device. **This will be a change form for future FPPs.**

- 4.2.3. BON F2 extended outage. Currently scheduled for 23 November. The Project is concerned about the delay in getting components back in time to allow for F1 to be taken down and serviced. Hausmann asked about leaving F2 out while the lamprey work is going on and keeping it out until the work is complete. **FPOM was in agreement with that as long as F1 is kept in service and work progresses on the units in a timely manner.**

4.3. Research/FFDRWG updates. Approval letters, permits, etc located at www.nwd-wc.usace.army.mil/tmt/documents/FPOM/2010/NWP%20Research/Research.html

- 4.3.1. AFF modifications. Removal of the pipe sections. Fredricks presented a spreadsheet on the slew of mortalities in the last couple of months. FPOM discussed how this year compares to previous years. Zorich suggested looking at proportion of the run. Conder suggested looking at the use of the AFF. Fredricks said the operation of the AFF is the same regardless of who is in the lab. He doesn't believe there are that many dead fish floating down the ladder. Rerecich suggested the shad may have created a biological weir on the valve 15 grizzly, allowing water to raise and contribute to holding in the exit pipe. Cordie and Conder asked about putting cameras at the weir and the trashrack to see what fish are doing. Fredricks and Hausmann suggested it would be difficult to see what is going on with a camera. **ACTION: NWP will look at the potential of installing cameras.** Fredricks noted there were a couple mortalities caused by the flap in the sample flume and that should be corrected immediately. Conder suggested raising the four picket leads to lamprey criteria (1.5") to allow lamprey to avoid the AFF if they so choose. **FPOM agreed it was worth trying raising the picket leads for lamprey. ACTION: Zorich will take the recommendation to the Lamprey task group.**

- 4.3.2. AFF researcher configuration. WDFW tank configuration memo. **FPOM and BON are ok with the proposal.**

- 4.3.3. IHR adult fish trap update. Bailey reported the crane should be fixed but he is skeptical. The crane is not yet in operation.

4.4. RCC update. BON uptick is related to the BC dam Arrow operations.

Project	Previous day average (kcfs)	5 day forecast average (kcfs)	10 day forecast average (kcfs)
LWG	35.4	32	34
MCN	213.8	205	213
BON	206.9	203	217

4.5. Lamprey updates.

- 4.5.1. BON WS lamprey structure. ROV inspection occurring today at 1300. Inspection will be inside the flume this time. Zorich reported the final rest box has been reinstalled.

- 4.5.2. JDA-S Lamprey collection protocols. **ACTION: A. Jackson has been asked to write up some temperature justification and bring it back to FPOM. Zorich will continue to do a literature search for some guidance as will the rest of FPOM. STATUS: Zorich reported that A. Jackson hasn't had time to get to this yet. Lorz asked about the crane removal without the hoist. Zorich said the Project has a small crane over there to pick and deploy the trap.**

- 4.6. Avian. Zorich reported that similar to last year TDA and MCN have the most avian predation activity. Fredricks would like to see a meeting of the Avian task group. Lorz suggested looking at wire arrays at TDA. Cordie said the activity is below the bridge. The task group meeting needs to be established. Fone asked if all of the Project bios should be included.
- 4.7. BPA updates. RAS occurring at MCN today and 12-18 July. No RAS testing at TDA.
- 4.8. Critical Spare parts lists. Fone had no update for July.
5. **Coordination/Notification forms (need concurrence).**
- 5.1. **13BON34** LFS ROV inspection. **Approved.**
- 5.2. **13TDA06** T8 Startup. FPOM asked how much time will be spent out of 1%. Fredricks asked for the expected flow through the units. **FPOM would prefer this occur in August, but may be ok with July depending on how much of the operation will be outside 1%, and how far outside 1%.**
- 5.3. **13MCN012** RAS Testing (update). Fone provided an update. This was previously approved.
- 5.4. **13IHR011** Line 1 disconnect maintenance. Need the extra time to work on the disconnect prior to the double testing. Conder doesn't like this operation. He would like to see the work in August since steelhead could take the delay a little better than the Chinook. Conder also expressed concern about the MOC structure; it was vague, needed more in-depth analysis of the impacts by species, no reference to the previous coordination, dates were changed and there was no explanation as to why. Moody said this work cannot be delayed due to the annual maintenance scheduled after this work and if it isn't done now, the double testing won't be completed for another 3 years. FPOM asked how late the disconnect maintenance could be pushed, how soon could double testing occur. NOAA said no. This is ESA listed sockeye at risk during this operation. Moody asked if doing the disconnect after 26 July would be acceptable. NOAA said that would be better and as close to August is best. **NOAA and CRITFC does not support this MOC as written. There are concerns about impacts to sockeye. BPA will work with NWW to figure out scheduling. ACTION: Moody will go back to the PM and work with developing a new schedule.**
- 5.5. **13IHR012** MU3 outage. **Approved.**
- 5.6. **13LGS06** Turbine 1 and 2 exciter replacement and model validation testing. Units will be operated outside 1% but for no more than 30 minutes. **FPOM is ok with this.**
6. **Fish Passage Plan:** The Draft 2014 FPP and Change Forms website is at: <http://www.nwd-wc.usace.army.mil/tmt/documents/fpp/2014/changes/index.html>. All change forms reviewed to date have been posted. See the "*Production Schedule & Deadlines*" document for a timeline of events and due dates for change forms to be included the printed version of the 2014 FPP:
- Friday, 01 NOV 2013 – all Corps change forms due to Wright.
 - Friday, 13 DEC 2013 – all change forms due to Wright.
 - Tuesday, 31 DEC 2013 – final draft sections and change forms will be posted online for regional review.
 - Appendix A (Special Project Operations and Studies) sections will be drafted by NWW and NWP as soon as final study designs and operations are finalized (via FFDRWG and/or FPOM), and are due to Wright by mid-February for inclusion in the final print version of the 2014 FPP.
- 6.1. **14BON001** PH2 Mid-Range Operation. *Pending NWD policy/legal review.*

- 6.2. 14TDA002 2.4.1.2.a ROV turbine units.** Cordie explained the current operation. Lorz said he said he wants inspections of units across the powerhouse but he doesn't care if we look at unit 17 instead of 18. **FPOM approved.**
- 6.3. 14TDA003 Sluiceway move time limit. Approved.**
- 6.4. 14MCN001 SFE and NFE elevation at sill correction. Approved, though FPOM was amazed the as-builts could be off by 10'.** Fredricks asked if the ERDC model was built correctly. Fone will double check.
- 6.5. 12LGS002 finally changed in the FPP.** Changes in the change form were not carried over to final 2012 or 2013 FPP. **Approved.** Baus noted approved 12LGS002 change form revisions were inadvertently not included in the printed version of the FPP. Because the revision was not made to the FPP there is an inconsistency in the LGS spill operation from 30% to constant spill of 7-11kcfs operation described in the FPP and the FOP. The Corps will be making this operational change as described in the FOP (pg 6) and not as described in the FPP. The electronic version of the 2013 FPP has been revised to reflect this change and is available on the FPP website. Additionally, the Corps will be making this change (30% spill to constant spill of 7-11 kcfs) soon at LGS because the current RFC forecast suggests we are approaching the flow trigger (day average flow is less than equal to 32 kcfs) to make this change.. This allowed Lorz an opening to ask if the FOP will go away with the new BiOp and return it to the Appendix E, which is a part of the FPP and should be discussed and updated through FPOM like the rest of the FPP. Fredricks agreed it should go back to being an Appendix to the FPP.
- 6.6. 14AppG002 IHR Updated Trap Protocols.** Tentatively approved at the April FPOM, pending inclusion of edits recommended by Conder. Change form will be updated by Pinney and Fone for final FPOM concurrence.

7. Potential 2014 FPP changes.

- 7.1.** Fredricks suggested including a calendar of dates when specific actions are scheduled to occur.
- 7.2. All Projects:** Adult salmon diel passage data added to guide decision-making during scheduling of O&M activities. FPP location to be determined. Proposed at FPOM June 13.
- 7.3. JDA:** clarify TSW removal occurs on last work day of summer spill season.
- 7.4. JDA:** JDAS lamprey trap operations. How/where to include? Proposed at FPOM March 14.
- 7.5. MCN:** Debris spill protocol prior to TSW removal. Proposed at FPOM June 13.
- 7.6. MCN:** remove language regarding transportation?
- 7.7. LGS TSW:** add criteria that SW will be closed no earlier than August 1 to ensure closure doesn't occur during subyearling migration. If low-flow criteria are achieved prior to August 1, the TSW will remain in service until August 1 unless an adult passage delay is observed or if necessary due to turbine unit operational constraints at low flows. Closing the TSW prior to August 1 will be coordinated with FPOM via an MOC.
- 7.8. Appendix B:** remove language regarding MCN transport?
- 7.9. Appendix ? (new):** Guidelines for Avian & Pinniped Hazing. Proposed at FPOM April 11 and May 9.
- 7.10.** Lorz requested project stats, such as number of turbine units, MW, max/min forebay, etc.

8. Task Group Updates.

- 8.1.** Sea Lion task group. New group. Need to establish chair and team members. Chaired by Stansell. Team members include: Fredricks, Conder, J. Skidmore, Hausmann,

Mackey, Whiteaker, VanderLeeuw, Cordie. Met after June FPOM meeting. ***Pinniped Task Group – 6-13-13 meeting results.*** Primary topic discussed was hazing practices and if everyone was following the current protocols or not. Although there had been some incidents where the boats were within 100' of fishway entrances, it was not often and not a sign of become lax with the rules. John Whitaker showed that the general trend for boat based hazing in the past few years is showing less pyrotechnics being used, which is the same for USDA dam hazers. Gary Fredricks was generally OK with the current restrictive zones and distances as long as they are followed, but he was not comfortable with the practice of trying to get cracker shells exploding underwater, stating this then became an underwater explosion. This is particularly a concern closer to the dam and not as much, say, 500' downstream of the dam. The result was that CRITFC and the Corps (USDA) will reinforce the restrictions on using pyrotechnics with boat and dam based hazing crews, with a big emphasis on ensuring no boats or pyrotechnics are to be within 150' of fishway entrances. In addition, no attempt to shoot cracker shells under the water will be allowed within 500' of the face of the dam. Other than that, no changes to current protocols. The group also discussed the BiOp requirements (RPS's 49 and 69) regarding continued monitoring. Funding has become an issue, and it will likely be necessary to reduce sampling effort in future years. Gary and Trevor both saw continued need for monitoring through at least 2018, particularly in light of the changing dynamics (Steller sea lions becoming more dominant). However, a reduced effort using sub-sampling might be acceptable, if predation results could be expected to be comparable to current estimates (say 95% probability of results being within +/- 5% of actual figures). It was also mentioned that there needs to be expanded monitoring into the fall/winter period, as we have done for the past 2 years, to not only monitor Steller sea lion take of sturgeon, but of impacts to winter steelhead populations. FFU will develop some scenarios and present to FPOM for discussion/approval. We will also look into what we can do in the fall/winter with our limited funds and staff. From the Corps perspective, it would be nice to identify an end goal, whether abundance or predation, that could trigger an end to formal monitoring in favor of more anecdotal observations. We may also need to look into other funding sources, if the region considers this so important.

- 8.2.** Avian task group. Chaired by NWW. Team members include: Cordie, Dugger, Fone, Fredricks, Hausmann, Madson, Setter, Skidmore, Trachtenbarg, Zorich, Zyndol. NWW will hold a meeting after the September FPOM. Zorich asked about the objectives of this task group. He noted that there is some disproportionate allocation of lethal take in the Basin. Fredricks suggested going dam by dam and looking at the effectiveness of our avian abatement program at each project. Klatte suggested bringing in the Port of Portland avian guy as well.
- 8.3.** AFF mods (Rerecich). Modifications are not complete so task group will continue.
- 8.4.** Fish counting task group (Setter). Team members include Fredricks, Klatte, Mackey, Setter, Tackley, and Wills. Setter pulled together existing needs and gave that to Klatte. A meeting will be tentatively scheduled for after the August FPOM. Setter suggested there may be a place for video counting at some projects. The team can look at all of the options.

9. Calendar items/ next FPOM agenda items. (Check the CY13 on the website)



State of Washington
Department of Fish and Wildlife
2108 Grand Blvd. Vancouver WA 98661 (360) 696-6211

To: U.S. Army Corps of Engineers, Bonneville Dam Fisheries

From: Washington Dept. of Fish and Wildlife (WDFW), Ann Stephenson

Subject: 2013 Researchers use of the AFF

Date: June 21, 2013

Today, Gary Fredericks (NOAA Fisheries), Tom Lorz (CRITFC) and I met at the AFF with Steve Lee with the University of Idaho (U of I). We looked at the recent changes to the bypass pipes and at the layout of the main floor. After a fish fell out of the transport tank from the upper level, the U of I moved the tank back onto the floor of the AFF. With the tank at an angle, they are able to get fish from the small anesthetic tank into their workup tank and still have space to exit the area. The anesthetic tank opens on both sides, so at this point, later in the summer/fall U of I and WDFW both plan to work up fish out of the small anesthetic tank. U of I will only be radio tagging steelhead at that time of year, so there will be minimal overlap of fish species. U of I can still move steelhead from the anesthetic tank into their workup tank and back into the transport tank. WDFW can operate off of the west side of the anesthetic tank as needed. At this point, it appears that everyone should be able to fit into the space. If for some reason the transport tank needs to be moved back to the upper level, a "boot" on the lid and/or a net can be added to the tank to ensure fish cannot escape. AES.



Figure 1. Bonneville Dam Adult Fish Facility June 21, 2013

Memorandums of Coordination



COORDINATION TITLE- 13TDA06 T8 startup

COORDINATION DATE- 27 June 2013

PROJECT- The Dalles Dam

RESPONSE DATE- 11 July (FPOM)

Description of the problem- Units 15 and 16 have been out of service due to transformer T8 oil issues. Plans are to restart the units July 22 and test T8 to assure problems have been resolved. Unit 15 and 16 will need to be run outside of the 1% criteria during this testing for four 8 hour periods.

Type of outage required- Unit 15 and 16 out of 1% operation criteria July 22.

Impact on facility operation- The return of unit 15 and 16 to service.

Dates of impacts/repairs- 22 July 2013

Length of time for repairs- Four 8-hour periods.

Expected impacts on fish passage-

Downstream migrants- Unknown. Approximately 18% of sub-yearling passage occurs through powerhouse. Horizontal powerhouse distribution is uniform. Turbine survival for sub-yearlings is approximately 86% under normal 1% operation, per previous JSAT studies. Cannot find specific turbine survival information for The Dalles units running outside 1% .

Upstream migrants- impacts expected to be minimal since the ladders should not be impacted.

Comments from agencies

Final results



COORDINATION TITLE – 13 LGS 06 Turbine Unit 1& 2 Exciter replacement & Model Validation Testing

COORDINATION DATE- May, 2013

PROJECT- Little Goose Lock and Dam

RESPONSE DATE-

Description of the problem: Units 1 & 2 exciter replacement were scheduled for December 2012 and January 2013. Contractor issues with the previous installations uncovered problems with the procedures and this work was delayed. Exciter replacement requires performance testing and model validation testing of the unit. This work is described in the 2013 Fish Passage Plan, Appendix A, Little Goose sections 1.4, and 1.5.

Type of outage required: Turbine Units 1 & 2 will be removed from service at different periods between October 1 and January 6, 2014. Main Unit #2 will be completed first and tested. This will be followed by Main Unit #1 to maintain unit priority into the fall season.

Impact on facility operation: When unit one is undergoing service, unit 2 and then 3 through 6 will become the priority sequence. When unit two is undergoing service, unit 1 and then 3 through 6 will become the priority sequence.

Following exciter replacement, validation testing will consist of two short duration periods, (90 minutes or less) to test the entire unit operating range for which the unit need to be operated outside the 1% criteria for approximately 30 minutes of that time. Test durations will be minimized to the extent possible and during mid-day hours. No other impacts to facility operations are expected.

Length of time for repairs: Each Unit requires a period of 60 days or less occurring between October 1, 2013 and January 6, 2014. Main Unit #2 will be completed first and tested. This will be followed by Main Unit #1 to maintain unit priority into the fall season.

Expected impacts on fish passage: Possible delays to adult fish migration into the fishway and fish ladder when unit one is out of service.

Juvenile fish that enter a turbine unit while it is operating above the 1% criteria will be subjected to increased turbulence and increase probability of injury. However this is expected to be minimal due to the time of year and few fish migrating during this period.

Comments from agencies

Final results:

Fish Passage Plan Change Forms



Change Request Number: 14TDA002 Mid season ROV trashrack inspection

Date: 06/24/2013

Proposed by: Bob Cordie

Location of Change: The Dalles Dam

Proposed Change/Add:

2.4.1.2. a. Inspect units 3, 8 and 18 by ROV between June 1 and June 15

TO:

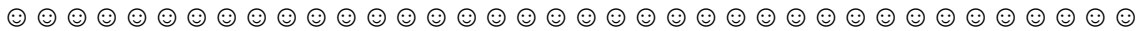
2.4.1.2.a. Inspect 3 units across the powerhouse that have the most prior operation and will not interfere with sluiceway operation.

Reason for Change: Inspecting 3 units is intended to provide an indicator of possible debris build up on turbine trashracks from spring operations. However 3, 8 and 18 require sluiceway outage to safely operate the ROV. Unit 8 requires crane operation to close its chaingate, Also, forced outages may cause these units to have considerably less operating time, thus would not provide an good indication of debris loading on other units.

We recommend the 3 units be selected by project fisheries. These units will have the most prior operation and will not affect operation of the sluiceway during the inspection.

Comments from others:

Record of Final Action:



Change Request Number: 14TDA003 Sluicgate movement timing

Date: 06/24/2013

Proposed by: Bob Cordie

Location of Change: The Dalles Dam

Proposed Change/Add:

2.4.1.2. e. If any these MUs are out of service more than 6 hours, operate the next available MU and associated gates adjacent to the unit'

Reason for Change: There presently no time limit on MU outage as to when a sluicgate should be moved. When a unit is out less than 6 hours there is no benefit to swapping gates because it takes several hours of crane time to swap gates. A reasonable time limit is needed.

Comments from others:

Record of Final Action:



Change Request Number: 14 MCN 001 SFE and NFE elevation at sill correction

Date: 18 June 2013

Proposed Change:

FROM:

P. MCN-15-16:

- “i. Lower the SFE 1 & 2 entrance weir to the lowest elevation (243 fmsl).
- ii. Lower the NFE 2 & 3 entrance weir to the lowest elevation (243 fmsl).”

TO:

- “i. Lower the SFE 1 & 2 entrance weir to the lowest elevation (244 fmsl).
- ii. Lower the NFE 2 & 3 entrance weir to the lowest elevation (253 fmsl).”

Reason for Change: Due to the configuration of the bottom sills, the SFE 1 & 2 entrance weirs can only go down to 244 feet (not 243) and the NFE 2 & 3 entrance weirs can only go down to 253 feet (not 243).

Comments from others:

Record of Final Action:

