

MEMORANDUM FOR THE RECORD

Subject: DRAFT minutes for the 10 June 2010 FFDRWG meeting.

The meeting was held in the St. Helens Room at NOAA Fisheries, Portland OR. In attendance:

Last	First	Agency	Office/Mobile	Email
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1. Finalized results from this meeting.

- 1.1. March FFDRWG minutes approved.
- 1.2. The Region is ok with the BON spillway gate repair pit work, as coordinated through FPOM.
- 1.3. The Region is ok with the change in BON PH1 unit priority to allow U7 to move to third in the priority list. Chain gate 7A will need to be opened and chain gate 6C will need to be closed.
- 1.4. Look at the schedule, talk with USGS to see when the data analysis will be done and when Skalski can look at it.

2. The following documents were provided or discussed.

- 2.1. *Agenda.*
- 2.2. *Natalie Richards handout- Lamprey program, Adult Salmon and Steelhead Studies, JDA-N.*
- 2.3. *Fenton Khan TDA sluiceway presentation.*
- 2.4. *George Medina handout- B2 FGE, B2 BGS, B2CC, TSP, JDA COP, TDA north and east ladder study.*

3. Action Items

- 3.1. [Jan 10] MCN lamprey mods. **ACTION:** Richards will notify Derek Fryer about the desire of the Region to see the lamprey mods at MCN. **STATUS:** *completed.*
 - 3.2. [Jan 10] Spillway PIT detectors. **ACTION:** NWP will discuss funding needs for a policy decision, McCune and Downing will discuss scope of feasibility study.
 - 3.3. [Jan 10] Cascades Island TDG. **ACTION:** Langeslay will talk to Schlenker about what might need to be looked at.
 - 3.4. [Jan 10] B2 FGE gatewell hydraulic conditions. **ACTION:** Schwartz will schedule a special FFDRWG to further discuss this issue, in early April. **STATUS:** *scheduled for 17 June, after SCT.*
 - 3.5. [Mar 10] BON trash rake. **ACTION:** Schwartz will work with Erickson to get a recommendation back to FFDRWG. Need to either fix the rake or start over. **STATUS:** *to be discussed later in the agenda.*
 - 3.6. [Mar 10] Turbine Survival Program. **ACTION:** Langeslay will send out an agenda and the new one-pagers before the meeting. **STATUS:** *met in April.*
 - 3.7. [Mar 10] What happens when flows cannot support 75k spill? **ACTION:** Langeslay and Mackey will schedule a special FPOM/FFDRWG meeting prior to 10 April. **STATUS:** *two meetings in June, one on 7 June and one on 24 June.*
 - 3.8. [Mar 10] CFD model runs for PH2 + B2CC + training spill. **ACTION:** McCune will develop a matrix on what runs (for determining training spill) would be recommended. **STATUS:** *more CFD runs to be discussed at 24 June meeting.*
 - 3.9. [Mar 10] John Day North Ladder Improvements. Need more time to make modifications to the weirs so everything sits flush. **ACTION:** Tackley will draft the Coordination memo and send to Mackey on 25 March. **STATUS:** *completed.*
 - 3.10. [Jun 10] TDA avian array. **ACTION:** Langeslay and Cordie will coordinate with Pat Duyck to make sure the new avian array is included in CRFM in FY11.
 - 3.11. [Jun 10] BON trash rake. **ACTION:** Schwartz and Tackley will work with the PM to get a recommendation back to FFDRWG. Need to either fix the rake or start over.
 - 3.12. [Jun 10] TSP. **ACTION:** Langeslay will delegate someone to look at the schedule, talk with USGS to see when the data analysis will be done and when Skalski can look at it.
4. **Lamprey Program.** Richards explained that the BON NDE lamprey mods were value engineered.
- 4.1. **Washington Shore Ladder Improvements**
 - 4.1.1. The VE study results suggested the schedule wouldn't allow for enough time to complete the entire structure, just one entrance. Richards talked with Mary Moser who felt the upper entrance was more important, if only one could be done. Kruger asked why not just plan on making this a two year installation. Richards said they are trying to make sure the contract allows for installation of the second entrance, if the contractor believes they can get both installed in one season. Langeslay said he would like to see some data that suggests one entrance is better than the other.
 - 4.1.2. Fredricks still objects to the pump location. The isometric drawing shows the pump at the end of a ladder looking thing. Richards explained that the ladder like thing is a rail to raise and lower the pump more easily. Lorz asked if the pump location, as shown, precludes the option of moving the pump at a later date. Fredricks expressed concern about the noise from the pump causing additional delay of migrating salmon during sea lion season. He believes the pump will cause vibration in the fishway, as the lamprey passage structure is right against the fishway wall. He doesn't want to see salmon passage traded for lamprey passage. He stated it is a risk and if it were only operated during the summer, after the sea lion season, he would be less concerned. Langeslay said the testing of the

prototype would probably be in July, however, if it works, USACE would want to operate the system longer to provide passage for lamprey.

- 4.1.3. The VE study also suggested the pumps need to be off the shelf and the contractor should be brought in earlier.
- 4.1.4. Richards explained the need for an extension to the WS ladder outage. Fredricks said he isn't agreeing to anything until the pump location is dealt with.
- 4.1.5. Langeslay said the system could be tested to see if there is a problem. Fredricks said he is concerned about trying to test for salmon impacts. He would rather avoid the potential impacts from the start. Cordie asked about running it only at night until sea lions are gone.

5. Adult Salmon and Steelhead Studies. Fenton Khan provided copies of his presentation. He made note of the late start due to the oil spill on the tailrace deck at TDA. There were only four sluice gates open; gates at U5 were not used this year. The final draft report is due at the end of July. Khan will run last the data from last year through the 2009-2010 filter. He will explain the purpose of the filter and explain the results in the July report.

- 5.1. Sluice passage in November. Passage was highest at sluice gate 1-3. No diel pattern.
- 5.2. Dec- Mar turbine study. No fish passed the turbines in December. No fish passed through U8, which was out of service for the winter. Fish passed during the morning, none during the afternoon or night.
- 5.3. Sluice and turbine passage. All fish passing through the turbines passed through U8. Sluice gate 1-3 passed the most fish. No diel pattern.

Summary

- ▶ To summarize, 2,926 adult steelhead targets passed the dam during all three study periods combined (Nov 1, 2009 – April 10, 2010).

	Sluiceway	Turbine Units	Total
Period 1	804	75	879
Period 2 (Sluiceway closed)	0	62	62
Period 3	1958	27	1985
Total	2762	164	2926

- ▶ For the 2008-2009 study, 3,556 adult steelhead targets passed the dam during the two study periods combined (Nov 1 – Dec 15 2008 and March 1 – April 10, 2009).

	Sluiceway	Turbine Units	Total
Period 1	1704	86	1790
Period 2	1673	93	1766
Total	3377	179	3556

6. John Day North Ladder Improvements. New parts should be in by late June. A coordination form was sent on 26 May.

- 6.1. The entrance pumps are still be worked on. There is a potential to use ARRA funds, which will offset the CRFM FY11 needs.

7. **The Dalles Spillwall Extension.** Langeslay said the new array should be part of the spillwall follow-on. There had been previous discussions about re-designing the array after the wall was completed. It would allow the Region to see where deficiencies in the array are located and a new design to address problem areas.
 - 7.1. Cordie reported that there are changes proposed through FPOM and FPOM agreed to an alternative. **ACTION: Langeslay and Cordie will coordinate with Pat Duyck to make sure the new avian array is included in CRFM in FY11.**
 - 7.2. Khan reported that the birds are feeding further up in the spillway than in previous years. The gulls are feeding in the boil. FFU is observing at TDA as well.
 - 7.3. Cordie reported that Fisheries has seen an occasional fish stranded on top of the wall. He said he doesn't have a lot of data, he has watched the spill twice and saw only two fish on the wall. Project Fisheries will make more observations. It may be a follow-on issue.

8. **Survival Study Methods.** No update

9. **B1 Sluiceway Mods.** All construction is complete. Currently tweaking automated gate programming to keep the channel flowing but no flooded. Schwartz reported no debris plugs, even with the high flows and debris. The channel is maintaining flow. The mods appear to be very positive.

10. **Bonneville Spillway Repairs.** Coordinated through FPOM.
 - 10.1. At FPOM Erickson reported that the spillway has moved downstream a few inches. There have been limitations on the spillway cranes due to the instability of the spillway. This means there has been no maintenance/ inspection of the BON spill gates. Using ARRA funds, there is a contractor on board, ready to clean up the repair pit and do some shoring work. Fredricks asked what the fish issue is. Erickson and North said there would be some jackhammer work, installation of ½ inch bolts from 2200 until 0400. This work would occur during the summer 21 June through 16 August. **FPOM is ok with the plan and would be fine with starting as early as 2000. If there are issues with completing the work, they recommend bringing it back to FPOM.** Bettin asked if there was quiet work that would be going on as well. Erickson said there would be some steel erection.

11. **Bonneville Powerhouse 1 Major Rehab.** Unit 7 72 hour heat run completed.
 - 11.1. An additional issue is moving U7 to third in priority at PH1. **FPOM says ok as long as 7A is open and 6C is closed.**

12. **Bonneville Fish Unit Trash Rake.** **ACTION: Schwartz and Tackley will work with the PM to either scrap the rake or move forward.**

13. **B2 FGE.** There will be a meeting on 17 June to further discuss the data and arrive some conclusions.
 - 13.1. Gordy reported on the gatewell lighting study currently underway at MCN. Having trouble getting STHD due to their passage over the TSW. Finding reduced egress in the gatewell in the day when lights are off. No turbidity until this week. Water was so clear, researchers could identify individual LEDs. Now starting sub-yearlings. Medina commented that maybe it is premature, but the data appears to indicate there is a benefit to lights in the orifices.

- 13.2. Gordy commented that if light rings are to be used, it would be good to find something that is maintenance free and less bulky. Schwartz said we would look at something imbedded into the wall.
- 13.3. Gordy said it may be good to look at a higher intensity light. Fredricks said that would be good and he would like to see if there is a turbidity issue. Gordy said they should be able to test turbidity this week, with the high flows and increased turbidity in the river.
- 13.4. Fredricks said he would like to see another year of testing. Schwartz asked if it would be at MCN again or if the test should be at BON. Fredricks said to repeat it at MCN so there isn't an additional variable.
- 13.5. Langeslay said there is not another year of testing in the AFEP program, but this is pretty straight-forward if the Region wants to include it. Fredricks said to wait until there can be a thorough discuss on the 17th. He expressed concern about the sockeye descaling issue. He believes there may still be a gatwell issue. Gordy reported seeing the descaling and injury issue at MCN.

14. **B2 BGS.** Medina reported that there is still an O&M issue. The Project has expressed concerns about the amount of maintenance required. This will be a topic on the 17th.

15. **B2 Corner Collector Gate Hoist.** Funding was made available for Plans and Specs. Installation is dependent on funding through SCT. It is a high priority for the Region.

16. Turbine Survival Program.

- 16.1. The tagged versus untagged final report will be available in September 2010. The draft should be out in July 2010. It should be a summary of all data.
- 16.2. There are some concerns with the direct capture. Still moving forward with plans and specs though.
- 16.3. Langeslay explained that the survival estimates are biased low. There are effects from even PIT tags. Medina was informed that the TSP studies were ranked fairly low at the SRWG 1-pager meeting on 8 June. Medina asked what that means for the contracts that are in place for the studies. Langeslay said the pre-spill condition is not representative of the true predation condition and the external tag creates a predator bias.
- 16.4. Need a focused discussion on how to do field tests to determine improvements to turbines. Langeslay suggests getting some field study experts together to see what they propose. Fredricks said he struggles with doing tests in season and kill fish or doing them off season and get data that may not be representative.
- 16.5. Medina suggested revisiting studies at JDA since the avian array may have mitigated the predation issue seen in previous years.
- 16.6. FFDRWG would like to have a meeting, maybe at the end of the month. Langeslay said he would like to have the final report in hand, with all the data. Waiting for the report may be too late to solicit a proposal for next year though.
Look at the schedule, talk with USGS to see when the data analysis will be done and when Skalski can look at it.

17. **JDA Configuration and Operation Plan.** The current improvements appear to be working. COP is being revised and should be available by mid-September. Fredricks was asked to provide the COPs for the AMIP. Medina said they are available on the web but the current JDA COP doesn't talk about actions for the future.

17.1. Surface Flow Bypass and Tailrace Improvement Feasibility Study. Flow deflector optimization study beginning this summer.

17.2. Avian Wires. Currently being evaluated and mitigated.

18. The Dalles North and East Adult Fish Ladder Study. A decision should be made in the near future. Leaning towards recommendation to rehab units and have spare parts in place.

18.1. Fredricks reported that the passage at the north ladder appears to have been improved with the new spill wall. The current 100K spill has about 20 – 40 % passage for 2010. In past years, 100K spill would have resulted in about 10% passage. Fredricks qualified that he only looked at adult chinook.

19. JDA south fish turbines. Unit 3 rehab is funded. All three will be rehabbed in the next five years. Funding for units 1 and 2 have been submitted in the FY12 budget.

20. Next FFDRWG Meeting. 5 August 2010 0900 at RDP.