FINAL 12 JULY FPOM MINUTES

CENWP-OD 06 August 2007

MEMORANDUM FOR THE RECORD

Subject: FINAL Minutes for the 12 July 2007 FPOM meeting.

1. The meeting was held in Room 421 at Bonneville Power Administration, Portland. In attendance:

Last	First	Agency	Office	Email
Bailey	John	USACE	(509) 527-7123	John.c.bailey@usace.army.mil
Benner	David	FPC	(503) 230-7564	dbenner@fpc.org
Bettin	Scott	BPA	(503) 230-4573	swbettin@bpa.gov
Fredricks	Gary	NOAA	(503) 231-6855	Gary.fredricks@noaa.gov
Hausmann	Ben	USACE	(541) 374-4598	Ben.j.hausmann@usace.army.mil
Hevlin	Bill	NOAA	(503) 230-5415	Bill.hevlin@noaa.gov
Klatte	Bern	USACE	(503) 808-3943	Bernard.a.klatte@usace.army.mil
Lorz	Tom	CRITFC	(503) 238-3574	lort@critfc.org
Mackey	Tammy	USACE	(503) 808-4305	Tammy.m.mackey@usace.army.mil
Martinson	Rick	PSMFC	(541) 296-8989	rickdm@gorge.net
McCann	Jerry	FPC	503-230-7564	jmccann@fpc.org
Moody	Greg	USACE	(509) 527-7124	Gregory.p.moody@usace.army.mil
Rose	Robert	USACE	(503) 808-4318	Robert.e.rose@usace.army.mil
Schwartz	Dennis	USACE	(503) 808-4779	Dennis.e.schwartz@usace.army.mil
Scott	Shane		(360) 576-4830	Sscott06@earthlink.net
Stansell	Robert	USACE	(541) 374-8801	Robert.j.stansell@usace.army.mil
Swenson	Larry	NOAA	(503) 230-5448	Larry.swenson@noaa.gov
Zyndol	Miro	USACE	(541) 506-7860	Miroslaw.a.zyndol@usace.army.mil

1.1 Greg Moody was introduced to the group. He is the new Rex.

2. The following handouts were distributed:
   2.1 Agenda, Fish Passage O&M Coordination Team, handed out by J. Bailey.
   2.2 O & M report for Walla Walla projects, handed out by J. Bailey.
   2.3 O & M report for The Dalles/John Day projects, handed out by M. Zyndol.
   2.4 O & M report for Bonneville Dam, handed out by B. Hausmann.
   2.5 Smolt Monitoring Options during High Temperature Periods, handed out by R. Martinson.
   2.6 Bonneville AFF fish mortality memos, emailed by T. Mackey.
   2.7 JDA, TDA, BON outage schedules, emailed by T. Mackey.
   2.8 070628 BI FPOM In-Water change justification, emailed by T. Mackey
   2.9 JDA Unit 1 test 1997, emailed by T. Mackey
   2.10 RCC flow report, handed out by B. Klatte.

3. Action Items.
   3.1 Bonneville DSM2 lights. **ACTION:** T. Mackey will continue to work with D. Schwartz to include a light test with the Spring Creek survival test in March 2008. **STATUS:** D. Schwartz has indicated he will work with G. Fredricks to get a better understanding of what is needed and required.
   3.2 Bradford Island PCB clean up dive and fishway outage. **ACTION:** T. Mackey will continue to work with the Region regarding coordination of the fishway and attraction flow outage issues.
   3.3 Bonneville PH2 TIES. S. Bettin said SCT is looking at new TIES. G. Fredricks said to look at permanent TIES. He suggested looking at old TIES studies and coordinate an ad-hoc meeting. **ACTION:** T. Mackey to find out TIES life expectancy. S. Bettin will get this as an SCT line item.
   3.4 Bonneville Erosion. No significant increase in erosion. Randy Lee is the technical lead for emergency repairs. Bays 9, 12, 14 will be worked on. Rebar will need to be trimmed back. **ACTION:** D. Schwartz will send out the erosion information to the FFDRWG group.

FINAL 12 JULY FPOM MINUTES

3.5 McNary Operations. **ACTION:** G. Fredricks and T. Lorz will take the various options to FPAC members the afternoon of 12 July and to the next FPAC meeting (17 July).
3.6 Lower Granite Fish Mortalities. 232 juvenile morts were reported at the truck loading pit at Lower Granite on 2 May. FPOM inquired about the use of flushing water before sending fish through the system. **ACTION:** J. Bailey will check the ops manual to ensure flushing is part of the start up procedures. He will report back at the next FPOM.
3.7 Bonneville PH1 turbine priorities. **ACTION:** Look at tailrace conditions with the models.
3.8 Switch Gate Seal at BON: **ACTION**: TDA and BON will collaborate on new seals. E. Meyer requested BON look into a PLC change to allow for continuous flushing flow.

Since several key members had to leave the meeting early, the agenda was rearranged so critical items were discussed first. The normal updates were not discussed at the meeting, though everyone did get a handout, if they wanted one.

4. Construction Updates. Please see the handouts.
5. Fishway Status. Please see the handouts.
6. Research. Please see the handouts.
7. Updates from Task Groups.
   7.1 Lamprey. The Lamprey Task Group meeting is scheduled from 1000 -1200 on 19 July. Call in number is 503-808-5190. Meeting room is the Lewis and Clark room on the 9th floor of RDP.

8. FPP Appendices G, J, and K. *Due to the extensive discussion, the notes are taken more from the recording than my written notes. This will hopefully capture everyone's specific comments and concerns.*
   8.1 Temperatures are near 70º F at Bonneville and have reached 70º F at JDA. According to Appendices J and K we do not do index sampling at 70º F, we go to full bypass.
   8.2 J. McCann: How do the fisheries managers feel about that?
   8.3 M. Zyndol: it is my understanding that index sampling at JDA isn't as critical as at Bonneville. The main purpose of smolt monitoring at JDA is PIT tag detections. The new full flow detector is being tested. Do we rely 100% on that by switching to bypass? Preliminary data shows the system is very effective.
   8.4 J. McCann: there are other options than completely stopping sampling. Last year we had the options before FPAC so they could make a decision.
   8.5 G. Fredricks: Need to consider do we need indexing and do we need condition monitoring. At the very least, need a condition sample once every couple of days. Can we live without monitoring throughout the summer?
   8.6 M. Zyndol: we have no collection issues. We are not collecting fish for research.
   8.7 J. McCann: How hard is it to switch to full flow bypass?
   8.8 M. Zyndol: it is time consuming. Wouldn't recommend more often than maybe once a week. Takes a couple of hours. Unable to switch the switchgate under full flow. Have to open the crest gate, dry the flume, move the gate, check the seals, and then close the crest gate. This won't take long, but requires personnel and some time. We do not have the bladder seal, in the past we didn't need to switch it.
   8.9 T. Lorz: will be switching more often in the future so might want to get a new seal.
   8.10 S. Bettin: What is the value of the data at JDA? Can we get it at BON?
   8.11 G. Fredricks: There's really only condition. Index isn't as important. The condition is important. Gives us an idea of any problem.
   8.12 M. Zyndol: Historically, little issues with operations and maintenance. Just a problem with the ESBS testing.
   8.13 G. Fredricks: it's an insurance policy. Twice a week is the recommendation. This is a minimum.
   8.14 M. Zyndol: above 70º F as of Tuesday.
   8.15 G. Fredricks: 100 fish of one species (sub yearlings). As far as Bonneville, cut back to minimum indexing. What was the modified sampling for 2006?
   8.16 J. McCann: we did more frequent sampling and fewer fish. The next step was to go to every other day index sampling.
   8.17 G. Fredricks: Good idea to maintain some index sampling. Do condition sampling at the same time since you are handling them. (R. Martinson showed up at this point). We are talking about cutting JDA back to twice a week. At Bonneville we are talking about cutting back but still doing some index sampling.
   8.18 R. Martinson: you are comfortable with cutting back to twice a week at JDA? (He provided a handout with fish numbers, % of run, and options which were considered last year).
   8.19 G. Fredricks: what is the next step at Bonneville?
   8.20 J. McCann: every other day index. GBT needs to be done twice a week.

8.21 R. Martinson: smaller sample size and more frequent monitoring is what we went to last year. We continued to collect a 24 hour sample; we just processed them more quickly.
8.22 G. Fredricks: down the road we will be wondering what the numbers are in the lower river. We do every year. We say we don't need them and every year we do. Less handling, less accuracy, but you don't lose much by doing this. Option 2 (on R. Martinson's handout) looks like it. For Bonneville we fall back to Option 2, every other day index sampling.
8.23 R. Martinson: so that's operating the main switch gate as opposed to turning the sample off. Diverting fish away from the separator bars.
8.24 T. Mackey: hasn't hit 70º F at Bonneville yet, but we expect it to this weekend.
8.25 R. Martinson: last year we ended up just turning the sampler on and off. The full flow PIT detector was still in test mode.
8.26 T. Mackey: Fisheries recommends switching the switchgate. It is an option and it is preferred.
8.27 R. Martinson: that will require fish salvage. It's designed to do that, but not do it every day. I don't think it was designed to be used like that.
8.28 G. Fredricks: flushing water should come on, so it shouldn't be a problem.
8.29 R. Martinson: still need to do some fish salvage of the dewatering structure, there is a drain there and water holds up in the hopper below the separator bars.
8.30 G. Fredricks: still say this is what the systems were designed to do. …was to have condition sampling at these facilities. Go to full flow bypass when not sampling.
8.31 M. Zyndol: then we could utilize Greg and Jessica to help us with the switchgate.
8.32 R. Martinson: if you guys are comfortable sampling twice a week, that's your call. I don't think it's a good decision.
8.33 G. Fredricks: not that concerned about it. Haven't had a whole lot of problems at JDA.
8.34 R. Martinson: Is FPC ok with that?
8.35 J. McCann: we work for these guys [indicated NOAA and the other fish managers]. If they have a problem we will do what they want us to.
8.36 R. Martinson: the switchgate at JDA has never worked the way it was intended to work. It has problems, pinch points, gaps on the bottom… maybe you've already touched on that.
8.37 G. Fredricks: we have.
8.38 R. Martinson: We are at or near the peak of the run right now. If we break it, we could impact a lot of fish.
8.39 G. Fredricks: If it breaks, what will happen? It will get stuck in one position or the other. The project can move the gate manually.
8.40 T. Mackey: clarification. **JDA- sampling twice a week with 100 fish of one species (sub yearlings)**. At Bonneville…
8.41 R. Martinson: Go back to John Day; let's stay on John Day for a second. Want to clarify; we will go to full flow bypass. PIT tag detection is still in testing mode; just want to make sure everyone is aware of that.
8.42 There was a question about contacting PITAGIS about the system.
8.43 T. Mackey: Dennis was planning on being here to talk about it. He is very confident in that system.
8.44 S. Bettin: it is very similar to others on the river.
8.45 T. Mackey: for Bonneville…
8.46 R. Martinson: One more question. What days do you want to collect condition sampling?
8.47 J. McCann: what days do you want?
8.48 R. Martinson: I have people working 24/7. I'm not going to lay them off because we are changing it so it doesn't matter to me.
8.49 M. Zyndol: I'm proposing to do this tomorrow.
8.50 R. Martinson: it hasn't gone to 70º F yet.
8.51 M. Zyndol: It has as of Tuesday. Sampling on weekdays are better.
8.52 More discussion. **It was decided that sampling should occur on Monday and Thursday.**
8.53 R. Martinson: will that be a 24 hour sample?
8.54 G. Fredricks: up to you.
8.55 R. Martinson: 24 hours with a low sample rate.
8.56 G. Fredricks: this is until temps drop to 70º F…
8.57 T. Mackey: 69.5º F
8.58 R. Martinson: where are you getting the temperatures from Miro? And what is the protocol for collecting and recording the temperatures? Is it a 24 hour average?
8.59 T. Lorz: we have a protocol for the adult facility; this would be covered by it.

8.60 T. Mackey: the protocols are covered in the Appendices.
8.61 R. Martinson: it's not covered very well.
8.62 T. Mackey: it's an instantaneous.
8.63 R. Martinson: is it recorded? Sent out to us?
8.64 T. Mackey: that's up to the Projects.
8.65 R. Martinson: do you guys want to see it? Do you want see the data on a daily basis? I think it should be collected, summarized and sent out to all
8.66 G. Fredricks: what data?
8.67 R. Martinson: 24 hour average.
8.68 G. Fredricks: I don't want to see it. Check it every day.
8.69 B. Klatte read the protocols from the FPP.
8.70 T. Mackey: When we take the instantaneous readings and it is 70º F, that's it.
8.71 R. Martinson: daily average represents the conditions, the prevailing conditions over the most amount of time.
8.72 M. Zyndol: we reached 70º F in the afternoon. Not reached 70º F daily average though.
8.73 R. Martinson: I just assumed we would use the average.
8.74 T. Mackey: that's fine, just not what we do. Instantaneous shuts them down. Daily average lets them back in.
8.75 B. Klatte: **morning reading will be the instantaneous reading, will determine sampling**.
8.76 R. Martinson: would be nice before 0700 so as to not bias the sample.
8.77 T. Mackey: **Bonneville will go with Rick's handout Option 2.** The Project has the ability to move the switchgate if it gets stuck.
8.78 J. Bailey: McNary isn't at 70º F. Anything else we need to cover?
8.79 G. Fredricks: what was the McNary option?
8.80 S. Bettin: McNary will use the same criteria as Bonneville?
8.81 J. Bailey: sampling every other day.
8.82 G. Fredricks: so the same as Bonneville.
8.83 **McNary protocols will be the same as Bonneville.**

9. John Day Unit 1 Operations and Adult Passage.
   9.1 S. Bettin: JDA Unit 1 is the one we've been running last on, first off at 100 MW. Proposing to remove the soft constraint because it is better to run at the upper end of 1%, 100MW is at the lower end of 1%.
   9.2 M. Zyndol: 1997 report shows no effect. Latest research is showing better survival.
   9.3 G. Fredricks: haven't seen the data or final report. We need final data before making any decisions. Significant results had low power and that is a concern. In studies that pre-date Peery's work, there was an effect on fish passage.
   9.4 S. Bettin: when will the data be available? Can we keep this on the next agenda to talk about once everyone has reviewed the data?
   9.5 G. Fredricks: it's just a soft constraint; you can still operate as you need to.
   9.6 M. Zyndol: until this year, we were assuming it was a hard constraint.
   9.7 D. Clugston was talking a bit about the study results, but the recorder didn't pick it up well. Mentioned that now some orifices are closed.
   9.8 G. Fredricks: Point is- data on both sides for adults, not enough information to determine if there is a problem for juveniles. Remember Little Goose…
   9.9 M. Zyndol: we are encouraging people to look closer.
   9.10 G. Fredricks: it's an AFEP program; we should follow the channels we normally do. If we don't have the full report, a letter report from Normandeau would work, and then we have something in our hands to look at.
   9.11 T. Lorz: will a change affect lamprey?
   9.12 **FPOM prefers keeping the soft constraint until the data indicate otherwise. This data should be presented in the form of a letter report or a final study report.**

10. Bonneville Powerhouse 1 Draft Tube Grizzly Drains. Bonneville PH1 grizzly drains trap and kill sturgeon. Project Fisheries would like to look at redesigning the grate, possibly with a cage. Need FPOM approval since a cage would put a structure in the draft tube environment. **FPOM okays modifications to protect sturgeon.**

11. Bradford Island Clean-up.
    11.1 A memo was provided from Carolyn Schneider. G. Fredricks says this will need to go through FCRPS coordination. **ACTION:** T. Mackey will work with G. Fredricks to get through the coordination process.

FINAL 12 JULY FPOM MINUTES

12. Bonneville Dam Adult Fish Facility Mortalities.
    12.1 Due to the numbers of dead sockeye at the AFF, Bonneville Project Fisheries halted sockeye sampling until FPOM would weigh in. T. Lorz suggests the shad numbers may stress sockeye. **FPOM prioritized sockeye sampling over shad sampling. As long as CRITFC is sampling sockeye, there will be no shad sampling.**
    12.2 Bonneville has removed three dead sockeye from the picket leads between the WA shore ladder and the FV6-9 AWS channel. Fisheries requests approval to drop water elevations on 31 July to investigate how they are getting in. All of the picket leads were pulled and inspected the week of 9 July. All leads look great. 31 July is the same day as the ROV inspection, so ladder passage will already be affected for the day. **FPOM approves going to orifice flow on 31 July at WA shore fishway.**

13. Bonneville Powerhouse 2 TIES. S. Bettin and D. Schwartz discussed the need for the TIE crane.
    13.1 The TIE crane is used for B2CC bulkhead and headgate, VBS cleaning, turbine Kaplan pipes, TIES. VBS/FGE mods depend on the TIE crane. Failure to clean VBSs may lead to unit shutdown, forced spill, and a TDG violation. TIES can't be installed. This is a violation of the FPP. They are good for guidance, flow manipulation and are needed for testing the BGS guidance.
    13.2 There is currently no funding in place for repair. It is not a line item in the FY09 budget. Need $450K, all of which will need to come from O&M. The researchers need the crane; it is a critical path item for FGE. There may be the possibility of looking at cost-sharing w/CRFM. **FPOM needs to continue to support TIE crane repair funding.**
    13.3 TIES- 6 of 12 TIES need replaced or repaired. Can we leave the 6 good ones in and leave them? If life expectancy is limited, what can we do for new ones? Make them lighter? Permanent? S. Bettin said SCT is looking at new TIES. G. Fredricks said to look at permanent TIES. He suggested looking at old TIES studies and coordinate an ad-hoc meeting. **ACTION:** T. Mackey to find out TIES life expectancy. S. Bettin will get this as an SCT line item.

14. NWP Turbine Outage Schedules- schedules emailed to everyone.

15. TSW Operations and Not Barging Fish from McNary.
    15.1 B. Klatte reported that barging has not occurred at McNary due to TSWs and spillbay 14 at 3 stops. A test set-up was coordinated through TMT. The barge captains typically request zero flow so they can cross the tailrace. Going to zero flow this year would require too much time. A 26K test was looked at but didn't work. No summer barge transport, but there is still truck transport scheduled to start 16 August.
    15.2 B. Klatte talked about the teletype requesting turbine loading from the north to the south during higher temps. We aren't transporting though and the FPP assumes transport. Currently in bypass. Gatewell water temps are currently 70º F.
        15.2.1 G. Fredricks indicated that the temperature criteria were developed to keep the hot OR shore water from thermally shocking fish in the bypass. Fredricks and Hevlin were not quite in agreement as to the proper course of action. Comes down to a temperature v. outfall. B. Hevlin preferred leaving the operation the way it has been for nearly 10 years. G. Fredricks suggested that conditions were bad either way. J. Bailey said he would look at the egress conditions on his way back to NWW.
        15.2.2 J. Bailey indicated there was a need for a spill pattern for the TSWs.
        15.2.3 G. Fredricks, after moments of quiet concentration, suggested that maybe the project should pull screens. Fallbacks will find the surface routes, if they are available. D. Clugston concurred that it is likely fallbacks will find surface routes. G. Fredricks said a decision couldn't be made at FPOM, so for now, keep the operation as it is but consider pulling screens. J. Bailey indicated that if screens were pulled, the units would have to be shut down because it is a hard and fast rule that you do not operate a unit without fish screens. S. Bettin recapped that if screens could be pulled, it's a week to get them out and a week to get them in, we would start from the north and prioritize unscreened units until 1 September.
        15.2.4 There was more discussion as to whether the Project could pull screens, if the Project could operate units without screens, who makes the final decisions.
        15.2.5 Several options were discussed. After the 60/40 spill- go to 40% spill, leave the TSWs. Start pulling fish screens from U14 → U1. Go to trucking 1 September. Need to know what operation

should occur at night. **ACTION:** G. Fredricks and T. Lorz will take the various options to FPAC members the afternoon of 12 July and to the next FPAC meeting (17 July). The agreement was for the Corps to look at the feasibility of removing screens, and for FPAC to consider removing screens, starting at U14 and moving towards U1. No barging or trucking in August. Reinstall screens 1 September and start up trucking. **Until a final decision is made, loading will remain north to south. A final decision will need to be made as to what to do at night.**

15.2.6 **UPDATE:** On 16 July, Dave Hurson responded via email-

We are not going to be pulling screens at McNary. Research there last year with 40% spill and 60 percent spill had turbine survivals of 82% and 83% respectively. The bypass survival rates for same spill levels were at 100%.

Presently we have units 10, 11, and 12 out of service. So on the 40% days all 11 remaining turbines are operating. For days with 60% spill we can run 7 or 8 units at mid level and make sure units 4 and 5 are operating to provide flow at the outfall. Units 1-3 can be off for temperature control. Operating more units at less load will also pull in less surface (warmer) flow. This is consistent with the 2004 BIOP which Judge Redden says we must follow.

Any questions please give me a call.

Dave Hurson

16. Little Goose Transformer Bushing Repair. Returns to service on 14 July. No adult passage issues.

17. Bonneville DSM2 update.
    17.1 Water elevations are back to normal. J. Sweet asked B. Hevlin to put new mechanical sweeps on the SCT spreadsheet. G. Fredricks said the original designers should probably be involved.
    17.2 Elevated mortality couldn't be pinpointed to any specific cause, but the Project did trip the ERG and cleaned dewatering screen #3. This screen was fully clogged due to the airburst not working properly and the mechanical screen sweep drive being out of service. The riggers also raked U11 trashracks. Significant debris was found, though drawdowns were not significant. After the trashracks were raked, mortality decreased by 1-1.5%. Due to the amount of debris accumulating on the U11 trashracks, Project Fisheries has requested the riggers rake the unit monthly. Not sure if this is too much or not enough raking, but it will be a start to see if we can keep debris levels and mortality levels low.

18. Bonneville Erosion. No significant increase in erosion. Bonneville spill drops to 75K on 16 July, at that time, bays 9 and 12 will be closed. Randy Lee is the technical lead for emergency repairs. Bays 9, 12, 14 will be worked on. Rebar will need to be trimmed back. **ACTION:** D. Schwartz will send out the erosion information to the FFDRWG group.

19. Lamprey trapping. D. Clugston would like FPOM approval for increasing the temperature threshold for lamprey trapping from 70º F to 72º F. **FPOM agrees lamprey researchers can continue to trap at night up to 72º F.**

20. McNary debris. J. Bailey reported that on 5 July, debris complete obscured the trashrack on the Oregon shore fishway. The Project allowed use of the crane to clean the trashrack. The picket leads were raised at the count station to let shad move through. There was a total of six counting hours lost due to this operation.

21. Barge loading information request. S. Bettin brought up the request from D. Ledgerwood to access barge loading information in a timelier manner and in a more technologically advanced manner. BPA would like to know if there are other ways we could streamline regional data. NWW is reluctant to update data entry methods. BPA is willing to buy equipment, but asking for FPOM input. **FPOM says do it if you can.**

22. River Flow Forecast- B. Klatte provided a handout

23. FPP comments.
    21.1 Bonneville
        21.1.1 Table BON-1 states bays 1 and 18 will be open 4". It should read 6".
        21.1.2 Move Table BON-5 from Section 2.0 to Section 5.0 Turbine Unit Operation and Maintenance. This is where the other Projects have their Unit priority tables as well.

21.1.3 Add verbiage to Appendix G specifying that when the trap is in operation, the flumes must be open and must be manned.

21.1.4 Include monthly trashrack raking of U11 and U12.

21.2 The Dalles

21.2.1 TDA Section 2.6.1.2- want to discuss the water velocity requirements.

21.2.2 TDA Section 3.3.2.4. - need to discuss diffuser grating repairs and whether those can wait until the IWW period if the valve is closed.

21.3 John Day

21.3.1 JDA Section 2.4.1.2.a- Need to discuss including a VBS drawdown measurement requirement.

21.3.2 JDA Section 2.4.1.2.m.8- need to discuss the dewatering of the PDS for adult removal during fish passage season.

21.3.3 JDA Section 3.3.2.4- need to discuss diffuser grating repairs and whether those can wait until the IWW period if the valve is closed.

24. Meeting adjourned at 1200. The next meeting is scheduled for 09 August at 0900. The August meeting will be held at Bonneville, in the Auditorium training room.