CENWW-OD-M December 22, 2004

MEMORANDUM FOR THE RECORD

SUBJECT: Minutes for December 16, 2004 FPOM Meeting.

1. The meeting was held at the Portland District Office. In attendance were:

Rex Baxter	USACE	509.527.7124
Cal Sprague	USACE	503.808.4305
Larry Beck	USACE	503.808.3943
Tammy Mackey	USACE	541.374.4552
Scott Bettin	BPA	503.230.4573
Larry Basham	FPC	503.230.4287
Robert Stansell	USACE	541.374.8801
Rudd Turner	USACE	503.808.3935
Randy Lee	USACE	503.808.4876
Tim Darland	USACE	541.374.4551
Steve Richards	WDFW	509.545.2050
Bob Cordie	USACE	541.298.7406
Jon Rerecich	USACE	541.374.7984
Corey Lewellen	USACE	541.937.2131
Ed Meyer	NOAA	503.230.5411
Tom Lorz	CRITFC	503.238.3574
Bill Hevlin	NOAA	503.230.5415
Rick Martinson	PSMFC	541.296.8989

2. The following handouts were distributed:

- AGENDA, FISH PASSAGE O&M COORDINATION TEAM, ROBERT DUNCAN PLAZA, ROOM 3C, DECEMBER 16, 2004.
- CENWP-OP-B, 15 December 2004, MEMORANDUM FOR: FPOM MEMBERS, SUBJECT: Bonneville Lock and Dam Fishway and Construction Activities Report for December 2004 FPOM meeting.
- Date: December 16, 2004, Fish Passage Operation and Maintenance Meeting, The Dalles/John Day Status.
- 12/16/2004, Lamprey Salvage Procedures During Ladder Dewatering, by David Clugston.
- FISH PASSAGE O&M COORDINATION TEAM, Adult and Juvenile Fish Facilities Status Report, U.S. Army Corps of Engineers, Walla Walla District, December 16, 2004.
- Request for Consideration, To: FPOM, Subject: Modification of Lower Monumental Dam adult fish jump barriers, by Bill Spurgeon.
- Fishway exit trashrack diagram (not included with the minutes).
- 3. Action Status Updates (meeting dates are in parentheses):
 - (November 2004) Fish Passage Plan Revision Process: ...Scott Bettin said some project personnel [Lower Granite] want to reduce the frequency of [ESBS] inspections because they have found nothing significant in recent years...we are spending a lot of money for no good reason. Rex Baxter said ESBS video inspections at the Walla Walla projects allow for very limited viewing...can only see the cleaning brush and upper few feet of the bar screen ...inspections of STSs are more complete because the mesh rotates into view...ACTION: Rex will look into changing the inspection frequencies as part of the FPP revision process.

(December 2004) – Rex said he had revised the relevant sections of the draft FPP for LWG and LGS...monthly video inspections would no longer be done every month...ESBSs are deployed in March...video inspections would take place in April, May, June, August, and October...ESBSs are pulled in December...no changes for the other projects. Steve R. asked if problems had been detected by video in the past. Rex said there had been nothing significant seen by video...there are other means to detect problems. Tom L. asked what is the rationale for cutting

back on video inspections...man-hours and money? Rex said, yes, those were part of the rationale but also they just haven't seen problems...they can't see much more than the cleaning brush and upper few feet of the ESBS. **STATUS**: Completed, but pending approval for the final FPP.

• (November 2004) – John Day Floating Orifice Gates – Closure Proposal: Miro said the University of Idaho has concluded that the FOGs provide no significant benefit to fish passage, based on an analysis of 2003 data...he is seeking approval from FPOM to close them off...they could be kept on project for awhile in case new information comes in indicating they should be put back in place...Miro has the U of I report and can provide it if requested...the U of I said keeping the northernmost and southernmost FOGs operating, adjacent to the main entrances, may benefit fish passage...there are currently 13 open FOGs...closing some would benefit the project by being able to operate only 2 of 3 fish turbines rather than all 3...this would increase system reliability due to the backup capability...the project would like to get approval soon, in advance of the winter maintenance period...they want to close at least 10 of the 13. Robert S. said that at BON PH2 there was also no net benefit but the FOGs were left open because the fish agencies wanted it that way. Randy L. said a hydraulic analysis at JDA should be done to determine overall hydraulic effects. ACTION: It was agreed to follow up on this matter at the next meeting.

(December 2004) - Bob C. said the U of I has looked at data from 2003 and now 2004...they concluded that closing the orifices is okay...they said maybe the southernmost orifice should be kept open. Ed M. said NOAA still had some concerns based on their evaluation of the data. Bill H. suggested keeping two orifices open on either end, close to the entrances. Larry Basham pointed out that most of the orifices had net entries...several orifices were real positive...one was better than a main entrance...he agreed that closing some of the middle orifices would probably be okay. Bob mentioned that fallout was a problem in a place or two...the U of I has recommended installing a fallout fence similar to the ones at LWG and LGS. Ed said he wanted to have Gary Fredricks weigh in on this orifice closure matter...he will arrange for a conference call within the next few days. Randy L. said once a decision is made by FPOM he felt a HELCRABS analysis should be done prior to any orifice closures...this would help determine the overall hydraulics of the fishway and how to adjust the fishway settings...his crew needs funding to do the analysis and he will follow up on this...it would take a week or two of work to run the model. Bob added that the project has wanted to rehab the south fish turbine for three years...they have not been able to because the funding and narrow work window have not matched up...an advantage of closing some orifices is that if just two fish turbines can be used to meet fishway criteria then the third fish turbine could be used as a backup. Ed reiterated Bill's idea of closing the middle six orifices and leaving two open on either side. Cal S. suggested temporary closures (e.g. welding plates over the orifices) so things could be undone if necessary. It was agreed that closing six middle orifices was okay. STATUS: Cal said he would contact Gary Fredricks about closing six middle orifices. Randy will follow up with the HELCRABS analysis, if funding permits, prior to making changes at the project. Discussion will continue at the next meeting.

4. Construction Updates:

Portland District – See handouts. At BON...Tammy M. said the <u>B2 follow on contract</u> would be completed in February...they are removing perforated plate in the bypass flume and installing a swinging gate to reduce fish holding in the bypass flume...<u>PH1 gantry crane demolition</u>...the time frame is somewhat flexible depending on when FPOM wants unit 1 OOS for about one month...something to think about...<u>PH2 exciter replacement</u>...all exciters need replacement...would have one unit OOS per month in 2007 and 2008, through the winter...do you have a preference for the order in which the units are done? [No definite answer...more on this later, I presume.] Ed M. asked if the gantry crane demolition could be done during a low flow period. Tom L. agreed. Robert S. suggested mid-July to mid-August. Cal S. said it should be done after the sockeye run. **ACTION**: Tammy was agreeable to this...she will look into providing more specific dates.

At TDA/JDA...Bob C. said main unit 1 at TDA is undergoing a rewind [not mentioned in handout]...supposed to be completed by April...this unit is needed for ice/trash sluiceway attraction...completion date is now mid-May but this may continue to slip even more...unit 2 is available but 3 and 4 are OOS until next fall...flow from west side of powerhouse is slow...not sure what the effect on research will be, or the effect of research on powerhouse operations.

<u>Walla Walla District</u> – See handout. Rex B. discussed each item on the handout. Bill H. asked about the 2006 return to service date for <u>pump 3 at MCN</u>...who can he contact to get details? Rex said to contact Cary Rahn in

Walla Walla. Rex discussed the <u>proposed fish ladder jump barriers at LMN</u>...a handout was provided giving the reasoning, and two photos [also provided to all FPOM members via email on December 10] ...existing barriers (netting) would be replaced with expanded aluminum...this is what the project wants to do. Somebody asked if the new barriers would be padded. Rex said no...Russ Kiefer of IDFG does not like the idea and recommends rubber sheeting. Larry Basham asked how much jumping actually occurs? Rex wasn't sure, but apparently enough to warrant jump barriers...about 8 adults have been lost in the past 12 years. Cal S. suggested the project contact the Bonneville Hatchery for advice on what kind of netting to use. Ed M. suggested Kevlar...he is not supportive of using expanded metal. Tammy M. suggested contacting Seattle Ship Supply. Bob C. said he may have some extra netting that could be used...it seems to last quite awhile...they use hog rings to attach netting. Rex will advise the project.

5. Fishway Status Updates:

<u>Portland District</u> – See handouts. At BON...Tammy M. briefly discussed the handout...DSM2 and the two mile pipe will be dewatered next Monday and Tuesday...will need 4 people to crawl through the pipe...they are going all the way to the outfall...others can join in if they want...the hydro cannon has been winterized. Rudd T. asked about the meaning of "lamprey mode active" on the handout (item 2.2.1.2). Tammy said the tailwater sensors were bouncing all over at low tailwater and opened all diffusers at one point...also when the computer was rebooted the wrong program was used to reboot...the electricians experienced with the programming had either retired or were in Iraq...[I could not follow her full explanation].

At TDA/JDA...Bob C. said TDA east fishway had been dewatered...a 9-foot sturgeon was found in the upper end and it was released to the forebay...it could not exit the ladder on its own...the exit trashrack has 1-foot spacing between the vanes...Bob wants to remove the middle vane (both ladders) to provide a 2-foot gap for the "big boys" to pass through and he handed out a trashrack diagram. Ed M. recommended that two vanes be removed, one on either side of the trashrack near the ladder walls. Bob agreed to do so. He continued...south entrance rock channel was dewatered...the diffusers looked good...juvenile bypass orifices...should they be closed this winter?...one-third were closed last winter and this ensured the tainter gate would be open about 14 inches to allow for safe fish passage. It was agreed to do the same this coming winter, although there is still some concern about the need to have any open at all because the other dams have their bypasses completely shut down. Bob said the STS crane continues to have major electrical problems...need about \$100,000 to fix...if the crane fails and turbine units cannot be run next spring because STSs cannot be deployed, "that will get somebody's attention." Scott B. said he would check on possible BPA funding. Randy L. asked about JDA VBSs...have you guys looked at them? Bob said they have not gotten to it yet...will take funding...he will follow up. Randy also said PNNL has provided the final report on instrumentation of the beefed-up VBS...copies are available.

<u>Walla Walla District</u> – See handout. Rex B. discussed the handout without elaboration. Bill H. asked for further explanation of the recent orifice lights on/off situation. Rex said as a result of studies at BON, it has been shown that fish will exit the collection channel more readily with the orifice lights off...he wanted Walla Walla projects to turn the lights off the night before dewatering this month to minimize the number of fish being salvaged [or being run through emergency bypass pipes] during dewatering...he has included new wording in the draft FPP for all five projects...it may not be appropriate for all projects, such as LWG, but he will discuss this further with the project biologists.

6. Research Updates:

<u>Portland District</u> – See handouts. At BON...Tammy M. said the Warm Springs Tribe collected 80 lamprey during the Washington shore dewatering for ceremonial purposes...the Umatillas did not have a permit so they did not collect lamprey...16-hour video counts continue at CI and BI...the Corps is partnering with Trout Unlimited to do restoration work at Bass Lake.

At TDA/JDA...Bob C. said a contractor visited TDA last week to scope out core drilling for the behavioral guidance structure...USGS is still trying to catch sturgeon for tagging in TDA forebay.

<u>Walla Walla District</u> – See handout. Rex B. said the adult fish trap at LWG would be considerably expanded...a larger work area, another anesthetic tank, more holding tanks...this is part of the Updated Proposed Action/BiOp

process to accommodate fall Chinook...design would start this January if the money is available...construction will probably be done by March 2006.

- 7. Task Group Updates: Avian Task Group/Avian EA Review Tim D. said the task group was dealing with several issues...a team is working on a wire grid at the BON outfalls...it will take more money than anticipated...\$650,000...the idea is tabled for now...the FFU will be doing a study of predation and deterrent effectiveness at the outfalls in 2005...will wait for the study results before pursuing a wire grid. Steve R. asked about using water cannons instead. Tim said this would be tricky because of winds. Scott B. asked if a letter had yet been sent to the USFWS regarding the recommended period of lethal take. Not yet. ACTION: The Corps needs to send the letter. [The EA process may cover this, however.] Tim continued...western grebes in MCN juvenile collection channel...he talked with Dave Hurson who said we now have a method of removing grebes from the MCN channel [capture in dip nets, bag them, release below the dam]. Rex B. described the grebe roundup done last summer...the birds were not banded to see if they return...he has also revised the draft FPP to make this a regular effort. Tim continued...lots of grebes are being seen in the JDA forebay...some people want us to keep an eye on these birds to determine if there are any trends. Robert S. said that researchers are studying more than just gulls and terns...other species throughout the system are included...lethal take on anything more than gulls would be a problem. Tim continued...the Corps' division office and Portland and Walla Walla districts are having monthly conference calls to discuss integrating bird studies and control efforts, from the estuary upstream...a FONSI for the avian predation EA is expected to be signed within the next month or so...the implementation plan for Caspian terns and EIS for the estuary should be finished by January 15...there will be a mid-Columbia River avian predation workshop on February 7 in the Tri-Cities or Walla Walla (POC is Scott Dunmire, USACE, Walla Walla)...a wildlife workshop will be held in Eugene at Fern Ridge from January 25-27...topics include terns, cormorants, GIS, and wetlands issues...contact Tim for details. Brainstorm Low-cost Ideas for P2 Outfall Coverage (e.g. steam jets, smoke screens) - Cal S. mentioned the high cost of installing a wire grid at the outfalls...is there a cheaper way to solve the problem?...perhaps steam jets or smoke screens...any other brainstorming ideas? Ed M. suggested mooring a small barge at the outfalls, possibly with a water cannon. Tammy M. said currents and predators hanging out under a barge could be a problem. Ed also suggested using a beefed-up, more confined jet from the downstream water cannon...or add a water line for another water cannon with a "fire hose" nozzle...we need a tighter water jet than what is there now. Steve R. asked why is there foil ribbon on existing bird wires? Robert S. said it makes the wires more visible to birds (e.g. gulls and falcons). Steve suggested putting flashing material near the outfalls. Cal suggested bird distress calls. Tammy suggested constructing an osprey platform. [How about using falconers, as in the mid-Columbia area? – Rex B.]
- 8. Fish Passage Plan Revision: <u>FPP DRAFT 2005 Revisions</u>, <u>Distribution of document</u> Larry Beck distributed the draft FPP on CD...the BON chapter has two versions, one in the old format and one in a new format...the new format is intended to be easier to use...perhaps the new format will be incorporated throughout the 2006 FPP. Rudd T. said the Corps was asking for comments on the draft FPP by January 14. <u>Discussion of Lamprey Dewatering Guidance</u> Larry provided a handout initiated by David Clugston regarding suggested lamprey salvage procedures...Larry recommended incorporating the guidelines into the dewatering plans for each project.
- 9. JDA Floating Orifice Gate Closure: See Item 3 above, Action Status Updates.
- 10. RCC Reports on River Flows/Weather: Rudd T. said the December precipitation forecast for Libby was 97% of average...Dworshak 90%...these forecasts are based on oceanographic indicators...the first water supply forecast will come out within the next few weeks...Dworshak is at 1541 feet and filling about 1 foot/day...Lower Snake is running about 30 kcfs and Lower Columbia is in the 130s...TMT had a conference call yesterday and agreed to raise the chum elevation, the target now being 12.1 feet (11.9 to 12.3)...no chum redds have been seen above 11.5 feet so far. Various people discussed flows, redd counts, and possible destruction of redds by vehicles at Vernita Bar.
- 11. Transport Operations: Larry Basham said he had been in touch with Dave Hurson regarding transport operations on the Snake next April...the new BiOp guidelines for transport and spill are based on spring flows (<70 kcfs versus 70-85 kcfs versus >85kcfs)...none of the transport projects have PIT tag detectors on their primary bypass systems...so should we run fish through the primary or secondary bypass systems?...only the latter have PIT tag detectors...he has prepared a draft letter outlining what should be done...GBT sampling would be done one day per week...[long discussion of options by various people]...Larry said he would provide the letter so its recommendations could be included in the draft FPP.

12. Hydraulic Evaluation of Bonneville Ladders: Tim D. said a request had been received to look at the hydraulic situation in the Cascade Island and B Branch ladders...a HELCRABS report has been done and it includes recommendations...they want to do fishway adjustments and testing the last week of December. Randy L. said they want to verify the model output. There were no objections to doing this work...would be done over an 8-hour day. Tom L. recommended doing it late in the day.

NEXT REGULAR MEETING: January 19, 0900 hours, Room 10 North, Portland District Office, USACE.

Minutes prepared by Rex Baxter