CENWP-OD 08 May 2014

MEMORANDUM FOR THE RECORD

Subject: Final minutes for the 10 April 2014 FPOM meeting.

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

Last	First	Agency	Office/Mobile	Email
Bailey	John	NWW		
Baus	Doug	USACE-RCC	503-808-3995	Douglas.m.baus@usace.army.mil
Benner	Dave	FPC		dbenner@fpc.org
Chamberlain	Charles	NWW		Charles.B.Chamberlain@usace.army.
				<u>mil</u>
Chockley	Brandon	FPC		
Conder	Trevor	NOAA		Trevor.conder@noaa.gov
Cordie	Bob	NWP-TDA		Robert.p.cordie@usace.army.mil
Dugger	Carl	NWW-MCN		Carl.r.dugger@usace.army.mil
Fredricks	Gary	NOAA	503-231-6855	Gary.fredricks@noaa.gov
Fone	Ken	NWW		Kenneth.r.fone@usace.army.mil
Hausmann	Ben	NWP-BON	541-374-4598	Ben.j.hausmann@usace.army.mil
Hevlin	Bill	NOAA	503-230-5415	Bill.hevlin@noaa.gov
Iverson	Tom	Yakama Nation		t.k.Iverson@comcast.net
Kiefer	Russ	IDFG	208-334-3791	Russ.kiefer@idfg.idaho.gov
Klatte	Bern	USACE-NWP	503-808-4318	Bernard.a.klatte@usace.army.mil
Kostow	Kathryn	ODFW		Kathryn.E.Kostow@state.or.us
Lorz	Tom	CRITFC		lort@critfc.org
Lut	Agnes	BPA		axlut@bpa.gov
Mackey	Tammy	NWP	503-961-5733	Tammy.m.mackey@usace.army.mil
Martinson	Rick	PSMFC		rickdm@gorge.net
Mensik	Rosanna	PSMFC-MCN		rmensik@psmfc.org
Meyer	Ed	NOAA		Ed.meyer@noaa.gov
Moody	Greg	NWW		Gregory.p.moody@usace.army.mil
Petersen	Christine	BPA		chpetersen@bpa.gov
Pinney	Chris	NWW		
Rerecich	Jon	NWP	503-808-4779	Jonathan.g.rerecich@usace.army.mil
Sands	Jack	NWW		
Sears	Sheri	Colville Tribes		sheri.sears@colvilletribes.org
Setter	Ann	USACE-NWW	509-527-7125	Ann.L.Setter@usace.army.mil
Stansell	Robert	NWP-FFU		
VanDyke	Erick	ODFW		erick.s.vandyke@state.or.us
Wills	David	USFWS		David_wills@fws.gov
Wright	Lisa	NWD-RCC		<u>Lisa.s.wright@usace.army.mil</u>
Zorich	Nathan	NWP- PM-E		
Zyndol	Miro	NWP-JDA		Miroslaw.a.zyndol@usace.army.mil

Bailey, Chamberlain, Chockley, Dugger, Fone, Kiefer, Martinson, R. Mensik, Pinney, Sands, Sears, Zorich called in.

April birthdays include: Medina, Tackley, and Cordie

HAPPY BIRTHDAY!

1. Decisions made at this meeting.

- **1.1.** March meeting minutes were approved.
- **1.2.** Fish counting no nighttime shad counting. **FPOM agrees to end nighttime shad counting.**
- 1.3. BON B2CC avian lines. Cork line has been re-installed. USDA could not re-install avian lines prior to spill season. FPOM said to focus hazing in the area and keep an eye on the avian activity.
- 1.4. BON ITS repair schedule. All of the parts should be on hand by the end of May. Repairs will take about two weeks. FPOM previously suggested July/August for taking the ITS out of service for repairs. They held with that suggestion.
- **1.5.** BON FVB roof repair. Hausmann reported BON will trowel on a seal. The deck will need to be pressure washed prior to the troweling. **FPOM said do not let the pressure washing waste wash into the fishway.**
- 1.6. BON sewer line repair under tanner creek. Hausmann said the pipe is currently not leaking. Excavation and repairs are expected to occur in July. He asked if FPOM cares about this issue. FPOM requested a map of the area. Fredricks asked if this work has been coordinated through NOAA Habitat folks. This goes to PM-E for coordination with Regional folks.
- 1.7. BON navlock mooring dolphin installation. Hausmann asked if this needed to be done during the IWW period. The work could occur in the fall and should only take one day. FPOM recommended doing this work at the same time the ITS work is being completed. This would be a time when PH1 won't be running as much, if at all.
- **1.8.** TDA fish unit digital governor. Need to update tables. Cordie explained they need the fish units off for a couple of hours. He recommended one at a time, after 2100. They plan to do the work during the first week of May. **FPOM concurred.**
- 1.9. 14IHR03 Ogee and Deflector Modification. Wills stressed that USFWS doesn't do informal consultation in FPOM meetings in regards to Bull Trout. Chamberlain said NWW wrote a memo stating there will be no effect. Wills asked if the memo was sent to the USFWS. Chamberlain said NWW didn't have to send a memo since they went with no effect. Discussion moved on to the informal consultation covered by FPOM. FPOM asked NWW what impacts moving the start time two hours later (start at 1800 instead of 1600) and prioritizing the south units would have on the project. Hevlin added another option of spilling and setting up the attraction flow. Lut stressed that the restrictions would be for September. Sands said the mod will cost NWW more money since this wasn't included in the original contract. Lorz suggested FPOM review should occur earlier for these projects.
- **1.10. 14LWG03** fish pump 3 test. **FPOM attendees reluctantly agreed with the testing.**
- 1.11. MCN Lamprey entrance vibration issues. FPOM said no monitoring for the test to see if opening reduces the vibration but if this becomes the operation, then monitoring would be needed. Lorz noted there is a window to try to get a diver in to do repairs but once fish numbers pick up, that window closes. ACTION: Dugger will provide a MFR after testing different methods to reduce vibration.
- 1.12. MCN separator morts. NOAA felt that these fish do not belong on anyone's permit. MCN can keep track of the numbers but they do not get reported against a permit.

- 1.13. TDA Weir 159 modifications (see attachments and video). Weir 159 is a critical weir and hasn't been replaced since the 1980's. Changes between the old weir and new weir include: two leafs rather than three leafs; skin plate on the downstream side to help lamprey; guides were replaced last year and the wheels will be made of heavy duty plastic. Fredricks said he had some concern about going from three to two. He doesn't want to see the leaves stick out further or encroach upon the orifice. Cordie said there will be less impact since they are getting rid of one leaf. FPOM is onboard with the proposed changes. Lorz did request that Cordie check with RCC just to be sure there is no reason for the third leaf. RCC had nothing. The new weir will be installed during the next winter maintenance period. The old 159 weir will go into 158 weir and the 158 weir will be a spare.
- **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)
 - **2.5.** BPA outages.
 - **2.6.** Avian Task Group meeting documents

3. Action Items

- **3.1.** NWW Action Items.
 - 3.1.1. [Apr 14] LMN ladder repair schedule/out of criteria. Conder had requested this agenda item. He had talked with Spurgeon about the PLC outage and operating within criteria. When the weekly report came out, the ladder was out of criteria because the PLC is out of service.

 ACTION: Moody will report back to Conder about the PLC schedule and the ability to maintain criteria.
 - **3.1.2.** [Apr 14] MCN Lamprey entrance vibration issues. **ACTION:** Dugger will provide a MFR after testing different methods to reduce vibration.
 - **3.1.3.** [Apr 14] **LWG** Thermal spill operations. Hevlin would like to see the alternatives left in because if we get to the third alternative then we are in a pretty dire situation. **ACTION:** NWW will resend the FPP change form.

3.2. NWP Action Items.

- **3.2.1.** [Jan 14] BON Forebay elevation and FPP compliance. **ACTION:** Klatte will find the report and figure out the appropriate elevation from those reports. *STATUS:* this is no longer an action item. This issue will be dealt with in a general manner in the FPP (i.e. remember to coordinate a minimum forebay when PHI will be the only downstream route of passage during fish passage season) and more specifically when coordinating special operations. Fredricks wanted to make sure something was included in the FPP so the next time this issue arises, the ITS and a minimum forebay won't be forgotten.
- **3.2.2.** [Apr 14] BON BI bridge repair schedule heads up. Hausmann reported BON received money to do the work but it needs to be obligated in FY14. The work may be conducted in FY15. Would FPOM prefer November or Winter Maintenance, or a combination of the two? FY15

- will be the year for Washington Shore to go out of service for maintenance. **ACTION:** Hausmann will draft a MOC for this item.
- **3.2.3.** [Apr 14] JDA ArcFlash requirements and what it means for JDA-N AWS pumps. Fredricks said if this is a new SOP, then the FPP will need to be updated to reflect the new criteria. **ACTION:** Zyndol will draft a FPP change form reflecting the new requirements.
- **3.2.4.** [Apr 14] 14JDA04. Lorz asked how the juvenile lamprey kill could be avoided in the future. FPOM discussed the option of trying to coordinate maintenance with peak lamprey passage times. **ACTION:** NWP will work with the lamprey group (Zorich) representative to try to develop some criteria to help protect the out-migration of juvenile lamprey when dewatering units.
- **3.2.5.** [Apr 14] BON Ops task group. **ACTION:** NWP will find out the due date for the PNNL report. Fredricks said he was comfortable using Weiland's presentation instead of wait for the final report. Wright pointed out the gas cap waiver now uses a different site and that could change the operation. Fredricks stressed he does NOT want to piecemeal the operation. **ACTION:** Mackey will send a doodle poll to find a good meeting date.
- **3.2.6.** [Apr 14] **Spring FOP Min Gen Table 1 changes and coordination. ACTION:** Klatte will discuss this with NWD and report back to FPOM in May.
- **3.2.7.** [Apr 14] NWP weekly reports. **ACTION:** Project Fisheries will include differential readings in the weekly reports.

4. Updates

- 4.1. NWW Updates
 - **4.1.1.** Fish counting no nighttime shad counting. **FPOM agrees to end nighttime shad counting.**
 - **4.1.2.** Fish transportation early season research barge runs. Setter reported that there are weekly updates on the navlock and a decision on the early season runs. LGS navlock is projected to reopen by 1 May. VanDyke said ODFW is still not supporting the 50% idea. There are eight barges ranging from 2000 8000 fish barges. Early releases may not occur if the navlock doesn't open prior to 1 May.
 - **4.1.3.** 14MCN05 cancelled. Moody reported the debris spill was cancelled. Fredricks had asked about the coordination. Dugger reported the method coordinated worked really well in 2013 but in 2014 there were too many units out of service. Until Unit 11 is returned to service, the only way to move that debris is to use a tug. MCN will continue to clean trashracks and check differentials daily. If the debris becomes a bigger problem, they can bring in a tug. Setter said MCN is trying to get a little tug that would stay at MCN. They are looking at options and just waiting for a funding opportunity (\$600 \$700K). Dugger reported there is about an acre of debris.
 - **4.1.4.** 14MCN06. Moody reported Unit 3 has returned to service. Fredricks clarified that the FPP does not provide coverage for going above the 1% range for return to service testing however the load shaping guidelines do provide coverage. Fredricks noted that the load shaping guidelines need to be updated so references to the FPP are accurate. The FPP should be updated to reference the load shaping guidelines as well. Bottom line- reference the

- correct section of the FPP and the MOC would have been fine, or not even needed.
- **4.1.5.** MCN hydro-cannon. The hydro-cannon returned to service on 9 April. Sands reported the pump repair should be good. The pump is located on the shore and that should reduce some issues as well.
- 4.1.6. MCN mechanical screen cleaner. Setter said the brushes have been unreliable. The Engineers are looking at whether a rehab or rebuild would be more appropriate. Dugger reported on the latest failure. He said the transition brush has been causing problems. It covers about 10% of the floor screen area and has a series of rails. This brush is usually out of service and when it is in service it is not set to auto mode, it is always run in manual. The big problem is that if the transition brush fails in the upstream position it creates a hazard for the other brushes. Fredricks said he would like to see diagrams of the sweep and airburst system. The airburst works well except when there are grasses. Mechanical brushes are needed for grass removal. Ideas include making the airburst system more robust, removal of the floor screen. Fredricks said he would be out there on 1 May. Dugger said he can run the system when Fredricks is out there.
- **4.1.7.** LMN ladder repair schedule/out of criteria. Conder had requested this agenda item. He had talked with Spurgeon about the PLC outage and operating within criteria. When the weekly report came out, the ladder was out of criteria because the PLC is out of service. Conder would like an update on this. Spurgeon wasn't on the phone so Moody will get back to Conder. **ACTION:** Moody will report back to Conder about the PLC schedule and the ability to maintain criteria.
- **4.1.8.** LGS ladder repair schedule/out of criteria. Everything is back in service and in criteria at this time.
- **4.1.9.** 14LGS03 forebay trash shear boom. Removed from the forebay and will be stored on shore. A repair plan, funding and completed repairs are about two years out. Hevlin asked about the debris plan at LGS. Setter said it is expected that the TSWs and new spill patterns will help move debris. If there are problems with debris, they will rake units more frequently. Lut asked why the two year delay. Setter said they looked at emergency repairs but NWW decided on the long term fix of redesigning and replacing the boom. Fredricks said if the debris moves, then from a predator standpoint, it may be better to not have the trash boom out there. Setter added that Melanson ensures more frequent inspections that historically took place so debris issues should be found sooner. Lut asked if this issue is on the SCT spreadsheet. Setter said not at this time, it has stayed in O&M.
- **4.1.10.** 14LGS04 navlock. Expected to return to service by 1 May.
- **4.1.11.**LWG fish pump 1 and 3 testing. Fish pump 1 and 2 are operable. Fish pump 3 is out of service. MOC 14LWG03 requests concurrence to test the fish pump. Testing requires all three pumps to be out of service. *See 8.3.*
- **4.1.12.** 14LWG02 debris spill. Moody coordinated a debris spill for 2 April however involuntary spill occurred on 1 April so the debris spill was no longer needed.
- **4.1.13.** Fish facilities update. All facilities are operating as they should.

4.2. NWP Updates

4.2.1. BON Unit 11 update. No new update. Still anticipating return to service in December 2014.

- **4.2.2.** BON B2CC avian lines. Cork line has been re-installed. USDA could not re-install avian lines prior to spill season. **FPOM said to focus hazing in the area and keep an eye on the avian activity.**
- **4.2.3.** BON Kelt Counts. FPOM can find the number at the FPC website.
- **4.2.4.** BON ITS repair schedule. All of the parts should be on hand by the end of May. Repairs will take about two weeks. **FPOM previously suggested July/August for taking the ITS out of service for repairs. They held with that suggestion.**
- **4.2.5.** BON FVB roof repair. Hausmann reported BON will trowel on a seal. The deck will need to be pressure washed prior to the troweling. **FPOM said do not let the pressure washing waste wash into the fishway.**
- **4.2.6.** BON BI bridge repair schedule heads up. Hausmann reported BON received money to do the work but it needs to be obligated in FY14. The work may be conducted in FY15. Would FPOM prefer November or Winter Maintenance? FY15 will be the year for Washington Shore to go out of service for maintenance. **ACTION:** Hausmann will draft a MOC for this item.
- 4.2.7. BON Fish Unit trashrake schedule. Mods should be complete by August. Lorz is able to retire if the trashrake works. Rerecich noted that the current rake works. Lorz asked by we are still floating debris. Rerecich said that is a good question. FPOM said the point it to get away from floating debris every night. Rerecich asked if there would be increased raking effort this spring. Hausmann said BON would have to if they can't float debris. Hausmann asked what happens if the new rake doesn't work as expected once all the mods are completed. Lorz and Fredricks said it would get thrown back to the PDT. FPOM expressed skepticism and was not wholly optimistic that the rake would work as claimed. Hausmann said he can't confirm there won't be debris accumulation overnight that would result in floating debris. At that point it was noted that an automatic rake was suggested.
- **4.2.8.** BON sewer line repair under tanner creek. Hausmann said the pipe is currently not leaking. Excavation and repairs are expected to occur in July. He asked if FPOM cares about this issue. FPOM requested a map of the area. Fredricks asked if this work has been coordinated through NOAA Habitat folks. This goes to PM-E for coordination with Regional folks.
- **4.2.9.** BON navlock mooring dolphin installation. Hausmann asked if this needed to be done during the IWW period. The work could occur in the fall and should only take one day. **FPOM recommended doing this work at the same time the ITS work is being completed. This would be a time when PH1 won't be running as much, if at all.**
- **4.2.10.** BON pinniped update. Wills asked about the latest pinniped reports. Wright said she just posted some to the TMT website yesterday. Klatte reported there are a couple dozen new/naive animals at BON. Cordie asked if the sea lion at TDA will be trapped. Klatte said it appears the States are not pursuing trapping him at this time. Cordie said the sea lion hangs out at the west entrance and has been seen for a number of years.
- **4.2.11.** TDA fish unit digital governor. Need to update tables. Cordie explained they need the fish units off for a couple of hours. He recommended one at a time, after 2100. They plan to do the work during the first week of May. **FPOM concurred.**

- 4.2.12. JDA ArcFlash requirements and what it means for JDA-N AWS pumps. Zyndol explained the issue. The distance required for the workers to safely conduct work on the breakers results in the operators not able to reach the individual unit breakers. This means the main breaker for the line had to be tripped and this takes the fish units offline. Fredricks said if this is a new SOP, then the FPP will need to be updated to reflect the new criteria. ACTION: Zyndol will draft a FPP change form reflecting the new requirements.
- **4.2.13.** JDA debris. Zyndol reported lots of tumbleweeds. JDA raked non-stop Monday Thursday last week. Zyndol said the amount was huge. The weight was so great, it overloaded the semi-truck capacity. Smolt Monitoring reported two morts in each sample which would equate to about 10 morts per day. Cordie asked about descaling. As of this week, the debris has lessened.
- **4.2.14.** JDA avian line repair. Zyndol reported great success. Two out of three lines have been replaced. The line not replaced is the furthest downstream. Zyndol did not see an issue with this line remaining out. The bird numbers are still light.
- **4.2.15.** 14JDA04. Lorz asked how the juvenile lamprey kill could be avoided in the future. Zyndol stressed he hadn't seen this issue before. FPOM discussed the option of trying to coordinate maintenance with peak lamprey passage times. **ACTION:** NWP will work with the lamprey group (Zorich) representative to try to develop some criteria to help protect the outmigration of juvenile lamprey when dewatering units.
- **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.** FGE mods. Unit 15 should return to service on 10 April. The spring and summer test plans are moving forward.
 - **4.3.2.** AFF testing. BON completed the items. Have a 10" baffle, rounded corners, plated at the top of the baffle. With the baffle all the way up, criteria was maintained though water elevation was very close to the high water alarm. Water was added to the north flume. Rerecich provided the photos below.





4.3.3. CRITFC AFF PIT tag detector. (J. Fryer) Postponed until June. Fredricks asked J. Fryer questions about his memo and the detector

location. The hoop antenna is a non-starter as far as Fredricks is concerned.

4.4. RCC update.

Project	Previous day average (kcfs)		10 day forecast average (kcfs)
LWG	71	94	75
MCN	206	246	231
BON	223	262	246

- **4.5.** Lamprey updates.
 - 4.5.1. MCN Lamprey entrance vibration issues. The rod attached to the gate is vibrating. The problems appear to be focused on the eastern side. FPOM would like to see the vibration dampened. Dugger said the entrance is schedule to open on 1 June, but if the vibration is a problem, MCN will open it early so there is tension instead of pressure. Fone asked that if the entrance is opened early, monitoring would need to occur at the same time. FPOM said no monitoring for the test to see if opening reduces the vibration but if this becomes the operation, then monitoring would be needed. Lorz noted there is a window to try to get a diver in to do repairs but once fish numbers pick up, that window closes. ACTION: Dugger will provide a MFR after testing different methods to reduce vibration.
 - **4.5.2.** BI & CI LPS exit sections installed (NOAA) count logger & telecom work still needed.
 - **4.5.3.** BON LFS/LPS waiting for pump install. Trolley system designed for flat I-beam but sloped I-beams were installed. U of I is tapering trolley wheels and testing to see if this is a viable work around.
 - **4.5.4.** Zorich is organizing a pre-adult lamprey collection call in for the week of 21 April, currently Monday the 21st has the most votes. Facilitates communication between USACE researchers (U of I & NOAA) and four Treaty Tribes. Agenda:
 - 1) Collection targets (by group) and contingencies for low run size
 - 2) Coordination with tribal collection including prioritization and tracking of fish.
 - 3) Protocols for reporting collections, tagging and disposition (i.e., NOAA weekly report)
 - 4) Update point of contact list from last year
 - 5) Half duplex scanning of all captured lamprey, tagged fish should stay in river.
- **4.6.** Avian. Projects are still filling in the spreadsheets. A meeting date will be scheduled soon.
 - **4.6.1.** Lethal take. NWW got approval for lethal take. NWP still isn't talking about it. Klatte suggested FPOM talk to PM-E if they want to see NWP pursue lethal take.
- **4.7.** Critical Infrastructure. Setter said in NWW there is a major maintenance infrastructure plan being implemented so the fish list will focus specifically on fish related structures. Cordie asked by NWW isn't using FEM. He said TDA wasn't using it either but FEM has greatly improved. Fredricks would like to find a path forward so we can get these lists compiled and used to support requests for funds. Klatte said a presentation could be made this summer. Lorz requested it occur during the summer BBO.

- **4.8.** BPA updates. No updates.
- 5. Spring FOP Min Gen Table 1 changes and coordination. Conder said NOAA had concern about the min gen table. The table from 2013 didn't represent what was seen at the Projects. It was also noted that the table in the draft FOP was different with what showed up in the final FOP. Wright and Baus tried to explain how the table came about and why the changes were needed. The old table created a situation where the table didn't reflect the actual operation and resulted in excessive court reporting for deviation from what is on paper. FPOM expressed their frustration with the messy way this particular issue was handled. VanDyke said ODFW provided a change form on the FOP but apparently FPOM hasn't seen it. He asked if the FOP is part of the FPP. Wright clarified that the FOP has been under court order for several years so it was taken out of the FPP and coordinated through NWD and RIOG and then re-inserted into the FPP without FPOM discussion. It was explained that the FOP had been known as *Appendix E: Spill Operations* prior to RIOG taking it over and making it the FOP for court reporting. FPOM will need to figure out whether this is a permanent condition or if *Appendix E* will return to FPOM for inclusion in the FPP discussions. **ACTION:** Klatte will discuss this with NWD and report back to FPOM in May.
- 6. MCN Smolt Sampling procedure. Setter said there was opposition from FPAC for reducing sampling. Sampling would be reduced since transport no longer occurs at MCN. During FPP discussions, FPOM recommended following similar protocols as JDA and BON. The opposition seems to be focused on the use of MCN as a historical index site and that the index sampling needs to continue. NWW needs more information about why MCN should pay for index sampling at a frequency that may exceed the needs of the Project. Since transport has stopped at MCN, there has been a push to look for ways to improve efficiency and reduce costs. Setter asked for the minimum sampling needed to meet the index goal of FPAC so NWW can look at how best to meet those needs. Fredricks noted that we could look at the impacts of sampling fewer hours a day or fewer days a week but we need to see how that affects the data integrity and needs. Setter said that is the goal but she hasn't received detailed information from FPAC regarding the needs.
 - **6.1.** Separator morts. Bailey had a question about how separator morts would be reported back to NOAA. He said the guidance he got from Fredricks was that separator morts would be part of the facility morts and not the sampling morts. Fredricks explained that at BON and JDA, dead fish go back to the river without being counted. At MCN, since all fish are collected, they are not sent right back to the river. **NOAA felt that these fish do not belong on anyone's permit. MCN can keep track of the numbers but they do not get reported against a permit.**
 - **6.2.** MCN Separator. Fredricks doesn't like the separator and would like to see it replaced.
- 7. TDA Weir 159 modifications (see attachments and video). Cordie explained the proposed mods. The weir will basically follow forebay. Weir 159 is a critical weir and hasn't been replaced since the 1980's. Changes between the old weir and new weir include: two leafs rather than three leafs; skin plate on the downstream side to help lamprey; guides were replaced last year and the wheels will be made of heavy duty plastic. Fredricks said he had some concern about going from three to two. He doesn't want to see the leaves stick out further or encroach upon the orifice. Cordie said there will be less impact since they are getting rid of one leaf. Further discussion resolved Fredricks' concerns. FPOM is onboard with the proposed changes. Lorz did request that Cordie check with RCC just to be sure there is no reason for the third leaf. RCC had nothing. The new weir will be

installed during the next winter maintenance period. The old 159 weir will go into 158 weir and the 158 weir will be a spare.

8. Coordination/Notification forms (need concurrence).

- **8.1.14IHR03** Ogee and Deflector Modification. Wills stressed that USFWS doesn't do informal consultation in FPOM meetings in regards to Bull Trout. Chamberlain said NWW wrote a memo stating there will be no effect. Wills asked if the memo was sent to the USFWS. Chamberlain said NWW didn't have to send a memo since they went with no effect.
 - **8.1.1.** Discussion moved on to the informal consultation covered by FPOM. Conder had concerns about mitigation of impacts occurring in September and October, when there are still high passage numbers. Suggestions for mitigation included changing unit priority to move fish to the other fishway. Conder said he would like to see NWW justify the start time of 1600, or start around 1800 to help avoid fish passing in the late afternoon. Sands said he looked at some previous work at LGS. He said the IHR project will have significantly more concrete, demolition, and rebar placement. He said at LGS work was started on 1 November and the work was completed barely in time on 1 April. He would like to start earlier to make sure the work gets completed in a timely manner. Starting when the weather is more favorable will likely allow for delays due to inclement weather later in the winter. Sands said they are trying to compromise between the impacts to fish and construction window. Setter asked about monitoring the noise and having a plan in place to alter the work if a problem was seen. Sands said there isn't currently a plan to monitor noise but it could be added. He said it is hard to tell the threshold. Fredricks said there will be some noise that will vibrate through the concrete to the fishway entrance. The work is two bays from the north powerhouse fishway entrance and that should help dampen the impact. FPOM asked NWW what impacts moving the start time two hours later (start at 1800 instead of 1600) and prioritizing the south units would have on the project. Hevlin added another option of spilling and setting up the attraction flow. Lut stressed that the restrictions would be for September. Sands said the mod will cost NWW more money since this wasn't included in the original contract. Lorz suggested FPOM review should occur earlier for these projects.
- 8.2.14LWG03 fish pump 3 test. FPOM attendees reluctantly agreed with the testing.
- **9. 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.
 - **9.1.LWG** Thermal spill operations. Hevlin would like to see the alternatives left in because if we get to the third alternative then we are in a pretty dire situation. **ACTION:** NWW will resend the FPP change form.

10. Task Group Updates.

10.1. BON Ops group. Chaired by Lorz. Will re-convene to update/review FPP change form 14BON001. Updated form will be re-submitted for approval. Wright suggested the current change form was not one anyone wants. Wills said he hasn't seen any final reports and he does like the original form. Fredricks and Rerecich agreed that the current change form still stands. Lorz said we need a final report prior to re-meeting. Wright said the PNNL numbers showing ABOP as safe for fish would

negate the need for the trigger. She said ABOP allows for a generation neutral operation. Conder said the question is still whether you go above mid-range at PH2 or spill. RCC said now, the mid-range would be a hard constraint. There was a difference of opinion as to whether or not that would be the best option for adults. **ACTION:**NWP will find out the due date for the PNNL report. Fredricks said he was comfortable using Weiland's presentation instead of waiting for the final report.

Wright pointed out the gas cap waiver now uses a different site and that could change the operation. Fredricks stressed he does NOT want to piecemeal the operation. He also noted that the FPP has clear operating criteria for both PH1 and PH2. These criteria do not include BOP nor Gen limit operation of PH1. These criteria do include mid-range operation of PH2 up to gas cap spill. **ACTION:** Mackey will send a doodle poll to find a good meeting date.

- **10.2.** Avian task group. Chaired by NWW. Team members include: Cordie, Dugger, Fone, Fredricks, Hausmann, Madson, Setter, Skidmore, Trachtenbarg, Zorich, and Zyndol. Meeting held on 13 March. **Need to approve March meeting minutes, including edits from Fredricks.**
- **10.3.** Sea Lion task group. (Stansell). Team members include: Conder, Cordie, Fredricks, Hausmann, Mackey, J. Skidmore, Whiteaker, Van der Leeuw. Hazing is occurring at BON.
- **10.4.** AFF mods (Rerecich). Team members include: Benner, Fredricks, Lorz, Mackey, Meyer, Rerecich, Royer, Stephenson, Traylor, and Whiteaker. Will meet at the AFF on 17 March. Appendix G will be modified to reflect the recommended raking level and the recommended water elevation.

11. Other