

MEMORANDUM FOR THE RECORD

Subject: FINAL Minutes for the 13 March 2008 FPOM meeting.

The meeting was held in the St. Helen's Room, NOAA Fisheries Building, Portland. In attendance:

Last	First	Agency	Office	Email
Benner	David	FPC	503-230-7564	dbenner@fpc.org
Bettin	Scott	BPA	503-230-4573	swbettin@bpa.gov
Boyd	Scott	USACE	503-808-3995	Scott.w.boyd@usace.army.mil
Cordie	Bob	USACE	541-298-7406	Robert.p.cordie@usace.army.mil
Dykstra	Tim	USACE	509-527-7125	Timothy.A.Dykstra@usace.army.mil
Feil	Dan	RCC	503-808-3943	Dan.h.feil@usace.army.mil
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
Kruger	Rick	ODFW	971-673-6012	Rick.kruger@state.or.us
Lorz	Tom	CRITFC	503-238-3574	lort@critfc.org
Mackey	Tammy	USACE	503-808-4305	Tammy.m.mackey@usace.army.mil
Moody	Greg	USACE	509-527-7124	Gregory.p.moody@usace.army.mil
Rerecich	Jon	USACE	541-374-7984	Jonathan.g.rerecich@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
Sweet	Jason	BPA	503-230-3349	jcsweet@bpa.gov
Swenson	Larry	NOAA	503-230-5448	Larry.swenson@noaa.gov
Wills	Dave	USFWS	360-604-2500	David_wills@fws.gov

Rerecich and Hausmann were on the phone.

1. The agenda and February minutes were approved.
2. Action Items
 - 2.1. [long time ago] Switch Gate Seal at BON: **ACTION:** JDA and BON will collaborate on new seals. **STATUS:** *BON believes they have found a solution. JDA proposes another option. Please see the drawing attached to the agenda. This could be installed on the dry side of the switch gate to equalize pressure on both side of the switch gate. After further discussion, JDA Project Fisheries determined there wasn't a need for this device due to the fact that the area is inspected every two hours and fish have not been seen on the wrong side of the switchgate.*
 - 2.2. [Nov 07] TDA stub weir removal. **STATUS:** *To be removed from the action items.*
 - 2.3. [Jan 08] Late season counting ended around 20 December at Lower Granite. **ACTION:** WDFW will send counts to Moody and let FPOM know when the counts are posted. **STATUS:** *counts not yet received.*
 - 2.4. [Feb 08] BON B2CC closure. **ACTION:** Ops will put together a fact sheet for the March FPOM detailing the issues associated with closing the B2CC on 31 August as opposed to either 29 August or 2 September. **STATUS:** *Will be completed for the April FPOM.*



- 2.5. [Feb 08] BON trolley pipe installation. **ACTION:** D. Schwartz will notify FPOM of any schedule delays. **STATUS:** *No delays in schedule, even with debris removal at U11-12.*
- 2.6. [Feb 08] BON orifice lights. **ACTION:** T. Mackey will send the PNNL orifice light report to FPOM and find more on the study Chelan PUD conducted. **STATUS:** *PNNL report was sent on 15 February. Email sent to Chelan PUD fisheries on 15 February.*
- 2.7. [Feb 08] BON orifice lights. **ACTION:** FPOM will review the PNNL report and provide comments as to which lights to use (LED or halogen) no later than 22 February. **STATUS:** *BON changed back to halogens for the Spring Creek release. Fisheries still wants to discuss halogen v. LED sometime in the future.*
- 2.8. [Mar 08] Switchgate seals at BON and JDA. **ACTION:** JDA will move forward with the airbladder seals. NOAA worries about fish being able to access areas under the gate. BON will continue moving forward with reducing leakage around and under the gate.
- 2.9. [Feb 08] JDA unit priority. **ACTION:** M. Langeslay will try to get the JDA unit priority on the agenda for the 2/24 trip to Mississippi. **STATUS:** *Unit priority during testing will be posted in Appendix A.*
- 2.10. [Feb 08] JDA TSW testing options. **ACTION:** B. Wertheimer will send out the options developed at the 13 Feb. special FFDRWG. T. Mackey will forward those to the FPOM mailing list. **STATUS:** *The testing options were looked at again during the 24-29 ERDC trip. These options will be discussed at FFDRWG on 19 March.*
- 2.11. [Feb 08] JDA TSW testing options. **ACTION:** J. Sweet will discuss 50% spill plus two hours with BPA for spill operations from 10-21 April. **STATUS:** *This will be discussed at the 19 March. Options are 50% plus one hour or the 30% TSW pattern 24 hours a day from 10-21 April. No consensus reached at FPOM.*
- 2.12. [Feb 08] JDA VBS drawdown criteria. **ACTION:** Cordie will draft the FPP language detailing the 1.2' drawdown inspection criteria. **STATUS:** *Completed.* [Feb 08] PIT tag detection needs at JDA. Should the system remain watered up through November, given the freezing temperatures JDA routinely experiences? NOAA recommended B. Cordie present the temperature data and justify an end date. **ACTION:** B. Cordie will present info to FPOM and submit a FPP change form for JDA 1.1.3. **STATUS:** *The Projects settled on 17 November for 2008. They will try to stay close to 15 November, depending on weather and staffing. FPP covers an outage in Nov.*
- 2.13. [Mar 08] PIT tag detection needs at JDA. **ACTION:** FPC will query PTAGIS to see how many fish might go undetected with if the system is shutdown prior to Nov. 30.
- 2.14. [Feb 08] FPP McNary 2.3.1.2.d language for drawdown over dewatering screens. **ACTION:** Moody will get these done and in to S. Boyd. **STATUS:** *The same language that has been in the FPP since 2005. The problem is that NOAA wants a way to measure the water level at the dewatering screens, similar to what is done at other projects. MCN's dewatering structure is designed entirely different than other district dewatering structures and does not lend to the same monitoring methods. The Corps has tried to comply with NOAA's request with a water pressure sensitive monitor, but this has not worked. If there is another method that is reasonable, the facility would like to know.*
- 2.15. [Mar 08] FPP McNary 2.3.1.2.d language for drawdown over dewatering screens. **ACTION:** L. Swenson will meet with the Project to discuss options.
- 2.16. [Mar 08] MCN unit priority. **ACTION:** G. Moody will put together a change form detailing the unit priority changes. **STATUS:** *The unit priority and spill change forms were sent 14-17 March.*
- 2.17. [Mar 08] FPP change forms. **ACTION:** FPOM will review the change forms and approve or disapprove at the April FPOM.



3. Updates.

- 3.1. Orifice lights. D. Schwartz gave an update on the orifice tubes and lights. He said the team is looking for the original design criteria and whether or not lights are necessary. Gilbreath is including a lights/no lights aspect to his gatewell study in March to try to address that question. The 60% document for the orifice tubes will be available for regional review soon. The 90% is due in September. OPE will not be based on 24 hour gatewell dipping. There was concern expressed about the recent high mortality issues surrounding BON PH2 gatewells.
- 3.2. Pinnipeds at Bonneville. R. Stansell reported 12 CA sea lions are in the tailrace. They are hauling out on traps. Stellar hazing is losing effectiveness. Marking is schedule to start around the end of March. The States don't have their own crane support so marking will be determined by Project Structural Crew availability. A NOAA take permit is due 18 March but WDFW still needs two weeks to work on the SEPA. The monthly [sea lion report](#) is attached to these minutes.
- 3.3. BON FOG barriers. All 12 barriers have been welded up and painted. The rub strips are being put on the 4 large barriers by the mechanics. Hausmann estimates the gates will be installed by the end of March.
- 3.4. Sturgeon at Bonneville. Unable to view the video. Mackey mentioned the desire of BON Project Fisheries to submit a FPP change form to restrict scheduled unit outages during winter maintenance months and the month of March.
- 3.5. B2CC closing date (29 August, 31 August, 2 September). **Mackey and Hausmann to get the fact sheet together by the April FPOM.**
- 3.6. TDA F2 OOS for 30 minutes to facilitate the ROV inspection of U1 on 17 March.
- 3.7. TDA ITS closure. The ITS gates leak horribly. BPA submitted a change for to close the ITS during March. **FPOM say close the ITS for the month of March.** FPOM will discuss the change forms at the April meeting.
- 3.8. Avian lethal take. Not in 1995 SOR. No budget for NEPA right now.

4. Non- AFEP related research.

- 4.1. FPOM suggests that all research occurring on the dam go through SRWG. NOAA says that their permit was issued based on the idea that the proposal had gone through the BPA review process. No other FPOM member could find the review of the proposal on the Council website. It was suggested the researcher be denied until she takes her project through the SRWG process. Further discussions, after FPOM, indicated that the proposal had not gone through a review, was supported by the NW Fisheries Science Center. Since the take determination has been issued the Corps would be hard pressed to issue an access denial letter.
 - 4.1.1. Jennifer Tran proposal to determine mechanisms of latent mortality (BiOp Implementation, Project Code J.1). Purpose is to determine survival curves and vitality parameters to model survival rates of transported and in-river migrating juvenile Chinook salmon to a later life stage and to determine the seasonal patterns (spring and summer) of vitality parameters for transported and in-river migrating Chinook salmon. 84 fish for each treatment will be introduced to a challenge of increased water temperature ($25^{\circ}\text{C}\pm 1^{\circ}\text{C}$) and starvation. Fish will be observed at 08h00, 16h00, and 22h00 for mortality. These experiments will be repeated once a week, throughout the spring/summer chinook salmon migration season (mid-April



to July, i.e. 10 weeks total), this sequence of collection of untagged fish and challenge experiments will be repeated. For PIT-tagged fish, this will be repeated three times in the early, mid, and late migration season.

- 4.2. University of Idaho/CRITFC Pacific Salmon Commission chinook proposal. Purpose is to aid in estimating escapement of Columbia River 'upriver bright' fall chinook salmon to the Deschutes, Yakima, and Snake Rivers, the Hanford Reach, and to sites upstream from Priest Rapids Dam. Researchers will collect, PIT-tag, and release 1,200 adult fall chinook salmon at Bonneville Dam to estimate escapement of one or more indicator stocks for the Pacific Salmon Commission. This work, if funded, will begin 1 August, in conjunction with CRITFC normal sampling activities. UI and CRITFC propose to collect, PIT-tag, and release 1,200 adult fall chinook salmon at the AFF of Bonneville Dam. Salmon will be monitored as they migrate upstream to spawning areas in the Deschutes River, Hanford Reach of the Columbia River, and the Yakima and Snake rivers. Pit-tag detections will be collected using a network of fixed-site receivers located at dams and from the collection of carcasses during spawning ground surveys. Data will be analyzed to estimate escapement to spawning areas.
5. BON spillway survey dive. (Schwartz)
 - 5.1. There is a request to shut off the fishways and spill bays 1 and 18 to allow the Army divers survey the main dam tailrace 24-28 March. The divers request closing Bay 1, CI AWS (FV5-3, 5-4) for the north side of the spillway and Bay 18 and B-Branch AWS for the south side of the spillway when they are diving in those areas. It is expected that the outage will take 4-6 hours for the spill bays and 1-3 hours for the AWS valves. The fishway and attraction flow will be left in normal operating condition when diving is occurring in the middle of the spillway. **FPOM says ok, but the outage should occur between 1200-1700 and the AWS outage occurs simultaneously with the adjacent spill bay.**
6. B2CC closure for BGS fine tuning. (Schwartz). Schwartz requested permission to close the B2CC for up to four days to allow divers to realign the BGS. There is a significant kink in the BGS and one anchor point was found to be quite a distance from the required location. NOAA says no outage in April. **FPOM says get the work done, but get it done in March.**
7. BON avian contracts. (Hausmann). Hausmann requested FPOM guidance on what to do with the avian contract. Currently hazers are scheduled seven days a week from April through July. This is a month less but two days more per week than last year and the contract nearly doubled in cost. Cordie commented that they requested seven day a week coverage but were told that wasn't possible due to lack of personnel available. Not much guidance provided by FPOM other than get the contracts in place and try to reduce costs where it makes sense.
8. MCN Turbine Operations. G. Moody proposed a change to MCN turbine priority based on work done at ERDC. **FPOM agrees with the unit priority changes as discussed at ERDC. G. Moody will put together a change form detailing the unit priority changes.** Fredricks explained why the changes were supported. The changed priority will allow for better egress conditions and still allow for good JBS egress conditions.
9. Ice Harbor RSW Status. (Dykstra). Three of the five ogee plates are missing. Dykstra indicated the Corps is moving at a very quick pace to get the plates replaced. A formal RFP



was sent out on 11 March. Contractors have until 14 March to respond. Once the contract is awarded, the new plates just need to be fabricated and installed. There were some questions as to what these plates are for. Lorz explained that the plates help the flow transition from the RSW to the concrete ogee. Bettin asked if we would want to operate the RSW before the plates are replaced. Everyone would like to see the plates replaced prior to spill. The contract lays out a completion date by midnight 1 April. The Project has a good spill pattern that does not include the RSW. There was more discussion about if spill needed to be shutdown for RSW repairs later, or if it could be spilled to the north. SCT was going to look at the issue the week of 17 March. Any suggestions would then have to go to TMT for implementation. The group talked about the potential need to do a mid-season inspection of the bolts and started to express concern about the plates at the other dams with similar designs. Swenson asked about any evidence of spalling. Moody indicated there was no evidence of that at this time.

10. LMN auxiliary fish pumps. (Moody). The fish pumps should be fixed. There is a problem with the orcot bearing in pump #2 which resulted in the major overhaul. This same problem is showing up in pump #3 now. Repairs will take about a month. Moody wants to know if the work on #3 should be done now or wait until later? #1 and #2 are back in service so #3 is the back-up. If you take it out, there will be no back-up in the event of #1 or #2 going out during the season. There is concern working on #3 during the season since the pump room gets very loud and creates a noise/safety issue. **FPOM says get the parts and make the repairs during winter maintenance.**
11. Task Group updates
 - 11.1. Shad fishery (Cordie). Meeting after FPOM.
 - 11.2. TIES (Klatte). Next meeting sometime after the BGS evaluation.
 - 11.3. Fishway velocity (Cordie). Float tests are included with the weekly reports.
 - 11.4. Sea lions (Bettin). Stansell is the new chair. Robin Brown (ODFW) should be a task group member. Fredricks would like to look at other options besides just shooting sea lions from the deck. There are several issues to discuss.
12. Water forecast. (RCC). Pretty much normal.
13. FPP proposed changes.
 - 13.1. [Please see change forms attached to the minutes.](#) **FPOM will review the proposed changes and be prepared to approve at the April meeting.** The TDA ITS closure has been approved for this year, the change form will make it valid for future years.
 - 13.2. Benner asked about the 4" head criteria at LMN. FPC had requested it be reduced to 3", same as other dams and picket leads. Moody said the criteria has been that way for a very long time.
 - 13.3. Boyd asked if he could put the FPP in a better word processing format. It may change the look a little bit but it would make it far easier to add and subtract sections and still keep all the numbers in proper sequence. There was also a suggestion to remove repetitive sections from each Project and put them in an appendix. **FPOM says put it in a better word processing format but do not remove sections from the Projects and put them in an appendix.**
 - 13.4. The 2008 FPP is on the WEB. www.nwd-wc.usace.army.mil/tmt/documents/fpp/



14. Other

- 14.1.** JDA MU 16. Fredricks wanted to know the status of U16. Cordie said they rolled it today.
- 14.2.** LGS unit priority. Moody will look into the ability of LGS to run U1 independently of GDACS. The problem is that GDACS determines the most efficient and effective manner of operating turbines. The Region would like to see U1 operated at the upper end of the 1% during times when GDACS may not want to operate it that way.
- 14.3.** FPP change forms and updating the document on the web. How do we note the changes to the FPP on the website? Some suggestions included having a NEW items section or a tag within the document.
- 14.4.** Spill patterns. These will be e-mailed and agreed to by conference or e-mail. The updated patterns will need to get into the plan and sent to the operators.
- 14.5.** Fish calendar- includes FPAC meetings.

15. Finalized results from this meeting.

- 15.1.** FPOM says TDA can close the ITS for the month of March.
- 15.2.** FPOM says BON can close spill bays 1 and 18 and the associated main dam fishway AWS valves to accommodate spillway survey crews the week of 24-28 March. The outage should occur from 1200-1700 and the AWS outage occurs simultaneously with the adjacent spill bay.
- 15.3.** FPOM says BON can close the B2CC to accommodate BGS realignment dives. The work has to get done in March, no closure or diving will be allowed in April.
- 15.4.** FPOM agrees with the MCN unit priority changes as discussed at ERDC.
- 15.5.** FPOM says get the parts and make the repairs to the LMN fish pump #3 during winter maintenance.
- 15.6.** FPOM says Boyd can put the FPP in a better word processing format but do not remove sections from the Projects and put them in an appendix.







16. The following information was distributed, or emailed prior to, the FPOM meeting:

- 16.1.** Agenda, Fish Passage O&M Coordination Team. Provided by T. Mackey.
- 16.2.** [FPOM Calendar](#). Emailed prior to the meeting.
- 16.3.** [NWW handout](#). Provided by G. Moody
- 16.4.** [Pinniped Status report](#). Provided by R. Stansell (*photos were resized to better fit in the minutes. The original report is available on the TMT website or from R. Stansell*).
- 16.5.** [FPP change forms](#). E-mailed by Bettin, discussed at FPOM.
- 16.6.** RCC forecast. Provided by S. Boyd.

17. Shad task group meeting following FPOM (1300-1400)














February 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8 Revised Draft FPP Due to NWD	9
10	11	12 TDAN dewater	13 TDAN dewater	14 FPOM Meeting- NOAA	15	16
17	18	19 JDAN dewater NWP – Special FFDRWG Bonn NWW – PDT ERDC Little Goose	20 JDAN dewater NWW – PDT ERDC Little Goose	21 NWW – PDT ERDC Little Goose	22 NWW – PDT ERDC Little Goose	23
24	25 NWW Agency Trip – Little Goose NWP Agency Trip John Day TSW	26 NWW Agency Trip – Little Goose NWP Agency Trip John Day TSW	27 NWW Agency Trip – Little Goose NWP Agency Trip John Day TSW	28 SLEDs installed NWW Agency Trip – Little Goose NWP Agency Trip John Day TSW	29 Annual FPP Issued Adult fish facility maintenance ends	



March 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1 Adult Passage Season Begins – Start counting at Lower Granite Dam
2	3 Planning Mtg for Lamprey	4 SRWG	5 B2CC opens	6	7	8
9	10	11	12 TMT	13 FPOM Meeting- NOAA Shad Task Group Happy birthday	14	15
16	17	18	19 NWP FFDRWG Survival SRWG	20	21	22
23	24	25	26 TMT	27	28	29
30	31					



April 2008

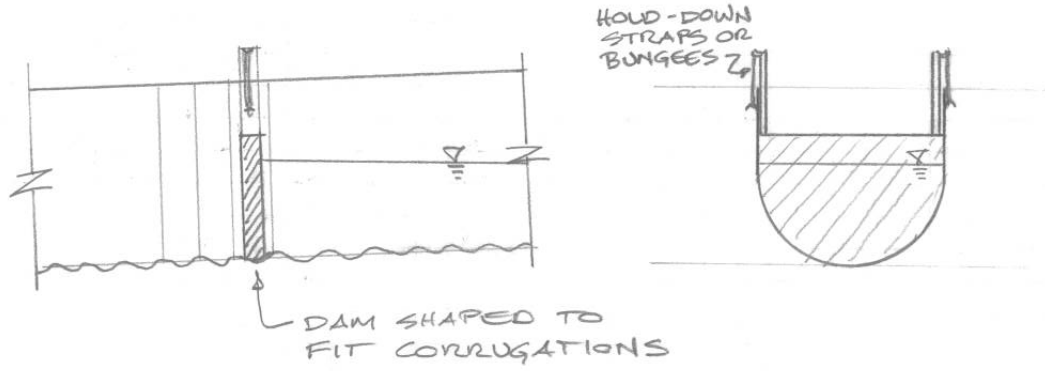
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Adult Fish Counting Starts all Dams. Juvenile Bypass Season Begins	2	3 Juvenile Spill Starts Snake River Dams – Pools to MOP	4	5
6	7	8	9 TMT	10 FPOM Meeting-McNary	11	12
13	14	15	16	17	18	19
20	21 Snake River Juvenile Transport Begins TSP PDT at ERDC	22 TSP PDT at ERDC	23 TMT TSP PDT at ERDC	24 TSP PDT at ERDC	25 TSP PDT at ERDC	26
27 Happy Birthday	28	29	30			



CONCEPT SKETCHES TO ELIMINATE SWITCHGATE DIFFERENTIAL PRESSURE

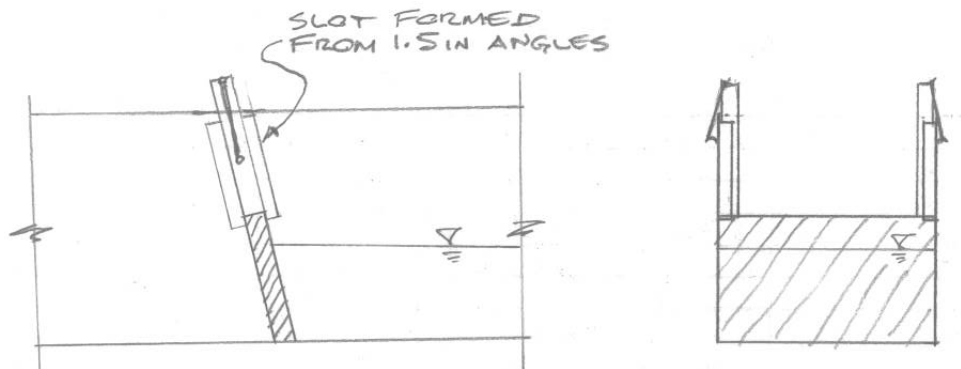
OPTION 1:

VERTICAL DAM IN CORRUGATED FLUME



OPTION 2:

ANGLED DAM IN SMOOTH RECTANGULAR FLUME





NWW updates for 13 March 2008 FPOM meeting.

Construction

McNary: U3 will return from 9-year overhaul on March 13. U13 returned to service on March 6.

Ice Harbor: U1 & 2 returned to service (respectively for fire protection and annual maintenance). U6 remains OOS due to transformer gas problem.

Lower Monumental: U6 temporarily out of service in support of RSW work until April 2.

Little Goose: U6 remains OOS due to water in stator since December 11. U5 returned after exciter repair.

Lower Granite: U 2 remains OOS for rewind and 6-year overhaul; completion expected September 2008.

Operations and Maintenance - Juvenile Fish Facilities

McNary: Transport Facility/Bypass System: Currently out of service for winter maintenance. New actuators installed in primary dewaterer floor valves. Rectangular screen cleaner repairs completed.

Ice Harbor: Juvenile channel unwatered. "Water-up" scheduled to start March 17. STSs are to be installed the week of March 24 - 27, as are trash rack raking operations. Nickel-plated STS chains have been replaced with stainless steel drive chains.

Lower Monumental: STS installations begin March 17. Primary Dewaterer: Air bubbler and cleaning brush drive system repairs completed. STS/VBS inspection camera – water tightness being improved.

Little Goose: Facility maintenance is mostly completed. Four orifice valves and air lines repaired.

Primary Dewaterer: support beam replacement commenced March 11, and is expected to take a week to complete. ESBS in slot 6A: bent cleaning brush being replaced. Trash Racks were raked in late February.

Lower Granite: Water up planned March 20, with water passing over separator bars on March 25.

Operations and Maintenance - Adult Fish Facilities

McNary: Oregon Ladder: placed back in service Feb 27, fish pumps 2 & 3 in service March 1. Fish pump #1 available on standby basis because discharge stop logs would need to be removed and swapped. Pump 1 oil leak repair will be completed soon. Damaged Visitor Viewing Room window replaced. Fishway system controls are now in full automatic operation. Washington Ladder watered back up Feb 27.

Ice Harbor: North Shore ladder watered up February 14. North Shore fish pumps #1 and 3 returned to service February 19. Fish pump #2 gearbox currently undergoing manufacturer warranty repairs. South Ladder is in service.

Lower Monumental: North ladder rewatered on Feb 9 and 10. All 3 fish pumps out of service to permit work on pump #2 until March 13. Pump #3 will be bulkheaded off and OOS once pump #2 is reinstalled. Pumps 1 and 2 will be in service March 13. "Bulkheading" will allow pumps 1 & 2 to run more efficiently. The south ladder is currently in service.

Little Goose: Fallout fence was replaced and outside-most viewing room window panes were removed to eliminate the buildup of water and algae between panes. Fish pumps and ladder returned to service Feb. 28.

Lower Granite: The ladder is currently in normal service. Pumps are operating satisfactorily.

Research

McNary: TSW: Moved from bay 22 to bay 19 with newly repaired deck crane lifting beam last week.

Ice Harbor: RSW: Radio tracking equipment is to be reinstalled March 5.

Little Goose: USGS Juvenile fish radio tracking antennas were recently removed.



**STATUS REPORT – PINNIPED PREDATION AND HAZING
AT
BONNEVILLE DAM IN 2008**

**Robert Stansell, Sean Tackley, and Karrie Gibbons
3/13/08**

This is the second status report for 2008 on the pinniped predation and hazing activities being conducted at Bonneville Dam. Regular observations began on January 11, Mondays through Fridays, and switched to 7 days a week on February 4. Observations begin roughly an hour before sunrise and end an hour after sunset. **Please remember all data are preliminary and final figures are likely to change some after further analysis and proofing, so be careful about quoting these figures.** Boat based harassment has been conducted since December 12 for Steller sea lions preying on sturgeon, 2 to 5 days a week, and has continued for California sea lions to date. Weekends are not covered. Dam based harassment by USDA WS agents began on March 3, and will be conducted 7 days a week, through the end of May. Data collection will end after May 31, as will harassment activities. Some additional observations will occur as long as sea lions are still present.

The states are anticipating permission from NOAA fisheries for lethal take of up to 30 California sea lions this spring, by lethal injection and/or shooting, or giving them to facilities expressing a desire to keep them. The states are also working with the Corps, enforcement agencies, an animal care committee, and various other groups to create a plan to address safety issues and coordination should lethal shooting become allowed. Three additional traps will be built, with a tagging barge to follow by early May. Logistics for a holding facility and potential sites that want some of these animals (request for 15 so far) are also being explored.

PRELIMINARY RESULTS

Data presented here are up through March 10, 2008. A final report of the 2005-2007 evaluation will be available in March.

PINNIPED ABUNDANCE

Steller sea lion (*Eumetopias jubatus*) numbers are declining the last few weeks and the number of California sea lions (*Zalophus californianus*) has begun to increase (Figure 1). To date, we have seen as many as 12 Steller sea lions and 12 California sea lions at the dam on any given day (see Figure 1). The most number of pinnipeds total for one day so far was 20 on March 4. A preliminary look at individuals identified at Bonneville Dam so far suggests we have seen about 18 different California sea lions, 12 Steller sea lions, and 2 Harbor seals. Thirteen of the California sea lions have been seen in previous years.

PREDATION FIGURES

Unexpanded numbers for fish observed taken between January 11 and March 10 are:

- 23 Chinook, 138 steelhead (see Figure 2)
- 421 sturgeon (14 larger than 5 feet)(see Figures 2, 3 and 4)
- 4 lamprey
- 247 unidentified (see Figure 2)

Steller sea lions are the primary predators of white sturgeon (*Acipenser transmontanus*) in the Bonneville Dam tailrace (Figure 5). Only six sturgeon were taken by California sea lions in past years; 1 this year and 2 by harbor seals (<2'). California sea lions had primarily been taking steelhead, but this past week they have begun catching numerous Chinook (Figure 7). It is likely that most unknown fish observed caught by



Steller sea lions are sturgeon, while those unknown fish observed caught by California sea lions are steelhead or Chinook. Just over half (111 of 209 or 53%) the prey taken by California sea lions has been attributed to specific individuals, or 62% (94 of 152) for salmonid prey specifically.

Most sturgeon have been caught at the spillway followed by PH2, while most steelhead and Chinook have been caught at PH1 and PH2 (Figure 6). Figure 4 shows that sturgeon take has exceeded the take of last year. However, smaller sturgeon are being taken proportionally more this year than in previous years (Figure 4).

Observations from the area of Tanner Creek to Ives Island by PSU student volunteers has been collected also, and up through February 19, an additional 5 Chinook, 6 steelhead, and 2 sturgeon have been observed taken. The area between our observers at the dam and Tanner Creek will be observed by WDFW/ODFW personnel as well from now until the end of the season.

HAZING IMPACTS

Full hazing from both boat and dam began on March 3rd. After March 15, the tailrace of PH2 will not be hazed to allow for animals to haul out more on the traps for capture and for other potential activities in the future. This may change if the situation warrants in the future. SLEDs were installed at PH2 entrances on January 28. Cascades Island SLEDs were installed the week of February 10, and PH1 and B-branch SLEDs were installed the week of February 24.

Acoustics were deployed at all major fishway entrances by January 10.

OTHER ITEMS OF INTEREST

Some California and Steller sea lions have been observed to use the one trap already. Spill occurred from March 7 through March 9. One harbor seal was observed in the forebay of PH2. The states reported seeing up to 20 Steller sea lions hauled out on Phoca Rock below Cape Horn.

SUMMARY

Pinniped numbers are now averaging between 10-20 a day, as more California sea lions are showing up. Steller sea lion predation on sturgeon has dropped off some the past week and salmonids have become the primary prey seen caught. Boat and dam based harassment continues.

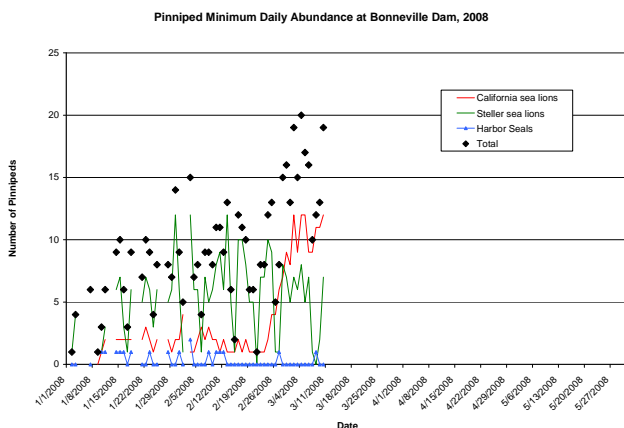


Figure 1. Daily minimum pinniped abundance. Predation by pinnipeds, unexpanded observations.

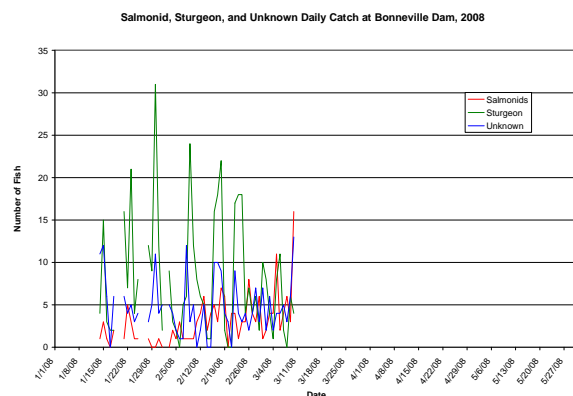


Figure 2. Daily salmonid, sturgeon, and unknown fish catch.



Cumulative Daily Sturgeon Catch at Bonneville Dam, 2006-2008

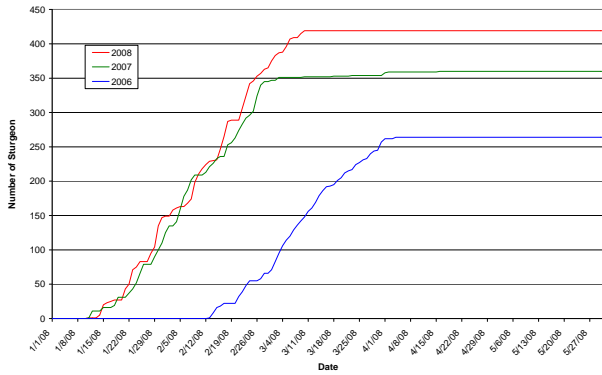


Figure 3. Cumulative estimated daily sturgeon by pinnipeds at Bonneville Dam, 2006-2008. 2008 are data not expanded and are preliminary.

Size Distribution of Sturgeon Taken by Pinnipeds at Bonneville Dam, 2006-2008

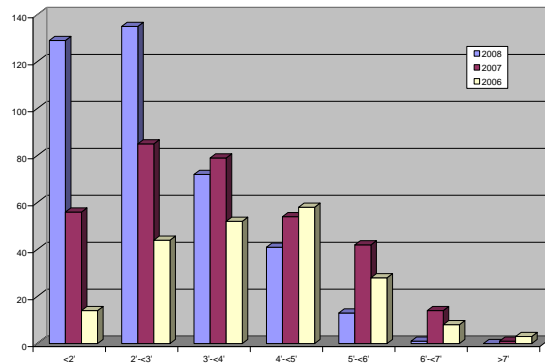


Figure 4. Size distribution of sturgeon caught at catch Bonneville Dam, 2002-2008.

Major Prey Taken by Pinniped Species, Bonneville Dam, 2008

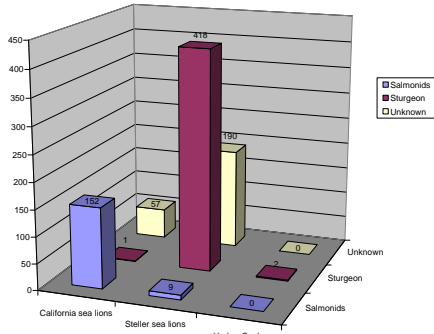


Figure 5. Prey taken by species of Pinniped Bonneville Dam, 2008.

Location of Major Prey Taken by Pinnipeds, Bonneville Dam, 2008

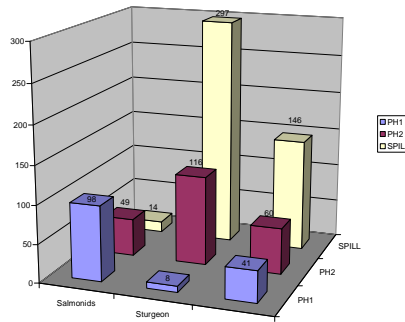


Figure 6. Location of prey taken at Bonneville Dam, 2008.

Daily Steelhead and Chinook Take at Bonneville Dam, 2008

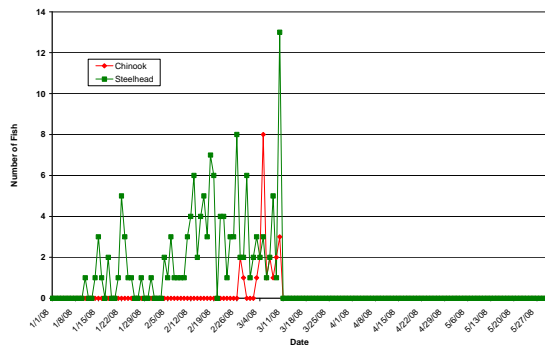


Figure 7. Daily Steelhead and Chinook take at Bonneville Dam, 2008.



Figure 8. Eight Steller sea lions at Powerhouse 2 out of a pod of 12.



FPP Change Form

9/14/07

Change Request Number:

Date: 3/12/08

Proposed by: Bonneville Power Administration

Location of Change

The Dalles section 2.5.1.2e. 2007 Fish passage plan page TDA-12

Proposed Change:

Modify the paragraph to read from December 1 through the end of **March**, put the ITS on seal (do not operate).

Reason for Change:

True up language to match the FPP language contained in section 1.1.1 of The Dalles.

FPP Change Form

9/14/07

Change Request Number:

Date: 3/12/08

Proposed by: Bonneville Power Administration

Location of Change

1997 Fish Passage plan, BON 14 section 2.2.2 Juvenile Fish

Proposed Change:

The NMFS 2004 BiOp sets a minimum spill level of 50 kcfs **from April 10 through August 31.**

Reason for Change:

Clarification of the Biological Opinion requirement. Is not intended to be applied year round.