

MEMORANDUM FOR CENWP-OP, ATTN: Operations Biologist

SUBJECT: Bonneville Lock and Dam, Fishway and Fish Activities for Week 17 of 2013, which covers the period from 21 April through 27 April 2013.

**1 OPERATION SUMMARY**

- 1.1 Daily average river flows ranged from 211.6 to 258.8 kcfs. Daily average project tailwater ranged from 17.5' to 20.0' msl. Daily average powerhouse forebay elevation ranged from 73.8' to 74.9' msl. Daily average water temperatures ranged from at 49 °F to 51°F all week. Secchi disk measurements ranged from 5.0' to 7.0' or greater.
- 1.2 Spill Bays 1 and 18 provide attraction flow for Cascades Island and B-branch, respectively. Daily average spill ranged from 92.8 to 105.6 kcfs.
- 1.3 Unit Operation. Powerhouse Two is the priority powerhouse.
  - 1.3.1 Unit 08 went out of service at 1024 on 01 March 2013 for its five year overhaul.
  - 1.3.2 Unit 11 went out of service at 0900 on 09 September 2012 for high thrust bearing temperatures.
- 1.4 Fish Units. Second Powerhouse fish units provide attraction flow for the Washington Shore (WS) fish ladder. The units may be placed on standby, as necessary, during nighttime hours to float debris.
- 1.5 Gatewell drawdowns are measured on Tuesdays and more frequently as needed.

**2 ACTIVITIES**

- 2.1 Auxiliary Water System Closures. No AWS closures occurred this reporting week.
- 2.2 STS/VBS inspections.
  - 2.2.1 Table 3. STS and VBS inspection.

Unit	Date	Run Hours	Comments
11	N/A	N/A	Unit 11 OOS
14	03/26	N/A	STS installed
12,18	03/12	N/A	STS installed
13,15	03/13	N/A	STS installed
16,17	03/14	N/A	STS installed

- 2.3 Dewatering and Fish Salvage. No dewatering or fish salvage activities occurred this week.

**3 RESEARCH**

- 3.1 CRITFC – Sea Lion Hazing. Hazing from boats continues. Annual Chinook, Coho, sockeye and steelhead sampling in the AFF began 22 April.
- 3.2 Fisheries Field Unit – Sea Lion Observations. Observations commenced on 04 January and will continue until the end of May. Weekly pinniped reports can be found at: [http://www.nwd-wc.usace.army.mil/tmt/documents/fish/2013/sea\\_lion\\_hazing2013.html](http://www.nwd-wc.usace.army.mil/tmt/documents/fish/2013/sea_lion_hazing2013.html)
- 3.3 PSMFC – Smolt Monitoring Program. Juvenile fish condition and index monitoring continues. Separation by Code is currently active for separate NOAA studies by Marsh and Gilbreath. Sampling for gas bubble trauma (GBT) began on April 20 and will continue through the spill season. 141 yearling Chinook were examined with no GBT symptoms observed. Fallbacks recorded crossing the separator bars this week: 14 steelhead and one unknown salmonid. Fallback observations are available at the FPC website: <http://www.fpc.org/adultsalmon/bonkeltcounts.htm>.
- 3.4 USDA - Sea Lion Hazing. Land-based hazing continues.
- 3.5 Normandeau – Fish Counting. Visual counting continues.

**4 FISHWAYS**

- 4.1 Project biologists inspected 21 through 27 April.

## 4.2 Fish Passage Plan Observations.

### 4.2.1 Table 4. FPP Out of Criteria items.

Date	Location	FPP Items	Cause	Response
<b>BRADFORD ISLAND (BI)</b>				
4/21,23-27	WG-2	Submergence < 8.0'	N/A	None
4/22,24-27	WG-64	Submergence > 8.4'	N/A	None
All week	A-branch	FG3-3 half open	Mechanically bound	TR in place
4/23-26	A-branch	Water level > 1.1'	N/A	None
<b>CASCADES ISLAND (CI) – Nothing to report.</b>				
<b>WASHINGTON SHORE (WS)</b>				
4/23-27	DSM2	Channel elevation < 64.2'	N/A	None

4.2.2 PH1CC diffuser FG2-19 is partially open. Repairs will occur when the PH1CC is dewatered. The next possible time period will be 2013/14 winter maintenance.

4.3 Fishway Temperatures. Temperatures are normally taken from 01 March through 30 November. New temperature probes have been ordered and will be installed upon delivery.

4.4 Zebra Mussel Monitoring. No signs of colonization were observed this reporting week.

### 4.5 Adult Fishways.

4.5.1 Calibration was checked on 27 April.

4.5.2 10 of 12 floating orifice gates (FOGs) are installed. Two gates remain out for maintenance. Sea lion barriers are in place on all installed FOGs.

4.5.3 All SLEDs are installed.

4.5.4 All ladders remain in service.

4.5.5 The AFF went into service on 22 April.

### 4.6 Juvenile Fishways.

4.6.1 Manual chaingates 1A and 1B remain open and are both set to 70' msl. Automated chaingates 3B, 6C and 10B are open and functioning in auto.

4.6.2 DSM2 remains in service.

4.6.3 The hydrocannon remains in service.

4.6.4 The B2CC remains open.

4.6.5 All avian arrays are installed.

4.7 Lamprey Fishways. The Bradford Island LPS was watered up on 17 April. All other LPSs remain dewatered.

## 5 CONSTRUCTION

5.1 Cascades Island LPS Continuation. This expansion will remove the evaluation trap box and continue the LPS flume to a volitional exit near the CI fishway exit.

5.2 WA Shore LPS/LFS Installation. Construction is complete; pending pump installation and testing.

## 6 HAZMAT, SPILLS AND CLEANUP

6.1 Nothing to report.

## 7 TELETYPE CURRENTLY IN EFFECT

7.1 A teletype sent of 09 April states that during the Spring Creek Hatchery (SCH) release and turbine reduction testing (TRD) at PH2, special operations will be in effect from 0001 hours on 12 April through 0900 hours on 17 April as a hard constraint and from 0901 hours on 17 April through 0900 hours on 22 April as a soft constraint. Operation of units for TRD testing takes precedence over operations for the SCH release. Start and end dates and times may be modified as needed by Project Fisheries based on passage numbers at the SMF. Further details can be found in Appendix A of the FPP.

- 7.2 A teletype sent on 09 April provides the 2013 spill schedule for fish passage, effective from 0001 on April 10 through 2400 on August 31. Operations for the B2CC and turbine units, as well as lamprey operations, are also provided for this period.
- 7.3 A teletype sent on 25 April updates the spill priority list and spill caps for 01 April through 2359 on 15 May.

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