

MEMORANDUM FOR CENWP-OP, ATTN: Operations Biologist

SUBJECT: Bonneville Lock and Dam, Fishway and Fish Activities for Week 28 of 2013, which covers the period from 07 through 13 July 2013.

1 OPERATION SUMMARY

- 1.1 Daily average river flows ranged from 201.9 to 256.9 kcfs. Daily average project tailwater ranged from 16.3' to 20.2' msl. Daily average powerhouse forebay elevation ranged from 73.0' to 74.2' msl. Daily average water temperatures ranged from 67°F to 69°F. Secchi disk measurements ranged from 6.0' to greater than 7.0'.
- 1.2 Spill Bays 1 and 18 provide attraction flow for Cascades Island and B-branch, respectively. Daily average spill ranged from 89.7 to 100.0 kcfs. Summer spill operations congruent with FPP section 2.2.3 took effect on 16 June.
- 1.3 Unit Operation. Powerhouse Two is the priority powerhouse.
 - 1.3.1 Unit 5 was out of service from 1208 until 1248 on 10 July for switching.
 - 1.3.2 Unit 6 was out of service from 1208 until 1248 on 10 July for switching.
 - 1.3.3 Unit 7 was out of service from 2118 on 08 July until 1248 on 10 July for a Bank 7/8 outage and bi-annual maintenance.
 - 1.3.4 Unit 8 was out of service from 2118 on 08 July until 1248 on 10 July for a Bank 7/8 outage.
 - 1.3.5 Unit 11 went out of service at 0900 on 09 September 2012 for high thrust bearing temperatures.
 - 1.3.6 Unit 16 went out of service at 0748 on 29 April for digital governor install #1 / air gap install.
- 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. The following AWS closures occurred this reporting week:
 - 2.1.1 FV3-7 was closed for cleaning from 0958 until 1010 on 08 July.
 - 2.1.2 FV5-9 was closed for pump work from 1013 until 1100 on 09 July.
- 2.2 STS/VBS inspections.
 - 2.2.1 Table 3. STS and VBS inspection.

Unit	Date	Run Hours	Comments
11	N/A	OOS	Unit 11 remains out of service.
12		677	OK
13		676	OK
14		653	OK
15		669	OK
16		47	OK
17		673	OK
18		672	OK

- 2.3 Dewatering and Fish Salvage. No fish recoveries occurred this reporting week.

3 RESEARCH

- 3.1 CRITFC. Annual Chinook, Coho, sockeye, and steelhead sampling in the AFF continues.
- 3.2 NOAA – Lamprey. LPS count network installed. HD-PIT tagging is currently being conducted by University of Idaho for NOAA until NOAA staff can be on site.

- 3.3 Normandeau – Fish Counting. Visual counting continues. Nighttime video counts commenced on 15 June.
- 3.4 PSMFC – Smolt Monitoring Program. Juvenile fish condition and index monitoring continues. Separation by Code for NOAA studies by D. Marsh concluded on 03 July. This week 200 subyearling Chinook were examined with no GBT symptoms observed. Fallbacks recorded crossing the separator bars this week: 2 salmon. Fallback observations are available at the FPC website: <http://www.fpc.org/adultsalmon/bonkeltcounts.htm>.
- 3.5 University of Idaho – AFF. USACE funded adult salmonid sampling continues.
- 3.6 University of Idaho – Lamprey. HD-PIT and JSATs tagging continues from the AFF traps. USDA - Avian Hazing. Land-based hazing continues.
- 3.7 USFWS – National Fish Health Survey. Adult shad collection will begin in June. Juvenile shad collection is scheduled to begin in September.
- 3.8 Yakama Nation – Lamprey. Collection of 238 lamprey for translocation concluded on 02 July.
- 3.9 Yakama Nation – Shad. Collection of adult shad from the AFF for the white sturgeon broodstock program was scheduled to begin in June.
- 3.10 Nez Perce – Lamprey. Collection of 238 lamprey for translocation studies began on 21 June.

4 FISHWAYS

- 4.1 Project biologists inspected 07 through 13 July.
- 4.2 Fish Passage Plan Observations.

4.2.1 Table 4. FPP Out of Criteria items.

Date	Location	FPP Items	Cause	Response
BRADFORD ISLAND (BI)				
7/10, 12	B-branch	FG 3-23 incorrect position	Unknown	None
CASCADES ISLAND (CI) – Nothing to report				
WASHINGTON SHORE (WS)				
7/8	SDE	Diff < 1.0'	Unknown	None

- 4.2.2 A-branch diffuser FG3-3 is partially open and FG3-6 is closed. Repairs will occur when the Bradford Island ladder is dewatered. The next possible time period will be 2013/14 winter maintenance.
- 4.2.3 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 13 July.
 - 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 were removed from fishway entrances by 13 June.
 - 4.5.4 All ladders remain in service.
 - 4.5.4.1 All ladders were switched to Shad Mode on 22 May, congruous with FPP 2.5.1.2.a. WA Shore and Cascades Island ladders returned to Salmon Mode on 26 June. The Bradford Island ladders returned to Salmon Mode on 03 July.
 - 4.5.4.2 On 01 June nighttime lamprey operations commenced at PH2 fishway entrances.
- 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.
 - 4.7.1 The Bradford Island LPS remains in service.

- 4.7.2 The WA shore AWS LPS remains in service.
- 4.7.3 The WA shore LPS/LFS was shut down on 24 June; no fish were found in the system prior to dewatering. The system was returned to service at 0830 on 12 July.
- 4.7.4 Cascades Island LPS was returned to service on 01 July after a brief dewatering due to electrical tripping of the supply pumps.

5 CONSTRUCTION

- 5.1 WA Shore LPS/LFS Installation. Flume construction is complete. Pumps were installed on 30 May and punch list items are being addressed.

6 HAZMAT, SPILLS AND CLEANUP Nothing to report.

7 TELETYPES CURRENTLY IN EFFECT

- 7.1 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.
- 7.2 A teletype sent on 09 July requests that BON forebay be maintained between elevation 75.0 - 76.5' as a hard constraint and 75.5 - 76.5' as a soft constraint from 1400 to 2000 hours on 10 August for a sail boat race near Cascade Locks.
- 7.3 A teletype sent on 09 July states that effective 11 July from 1300-1600 hours, operate units 14 and 17 as a target flow of 12 kcfs, to help facilitate an underwater ROV inspection of the WA Shore LFS.
- 7.4 A teletype sent on 11 July requests that from 0600 on 15 July until 1800 on 18 July, operate Bonneville pool within a 1.5' band as a hard constraint for treaty fishing.
- 7.5 A teletype sent on 12 July updates the spill priority list and spill caps for fish passage season starting 15 May until further notice based on observed TDG data.

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