



DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, PORTLAND DISTRICT  
BONNEVILLE LOCK AND DAM PROJECT  
PO BOX 150  
CASCADE LOCKS OR 97014-0150

CENWP-OD-B

23 December 2013

MEMORANDUM FOR Biologist, Operations Division (CENWP-OD)

SUBJECT: Bonneville Project, Fishway and Fish Activities for Week 51 of 2013, which covers the period from 15 through 21 December 2013.

**1. OPERATION SUMMARY:**

a. Daily average river flows ranged from 124.7 to 135.4 kcfs. Daily average project tailwater ranged from 11.8' to 12.5' msl. Daily average powerhouse forebay elevation ranged from 74.2' to 74.7' msl. Daily average water temperatures ranged from 40°F to 41°F. Secchi disk measurements were 7.0' or greater all week.

b. Spill Bays 01 and 18 provide attraction flow for Cascades Island and B-branch, respectively. They are open 6" during daylight hours. Spill Bay 18 is closed so not to attract fish while B-Branch remains at tailwater. Daily spill remained at 0.5 kcfs this reporting week.

c. Unit Operation. Powerhouse Two became the priority powerhouse on 01 November.

(1) Unit Outages. Table 1. Unit Outages.

Unit	OOS Date	RTS Date	Reason
4	0830 on 15 October	1646 on 19 December	5 year overhaul
11	0900 on 09 Sept 2012	NA	High Thrust Bearing Temps
12	0700 on 16 December	1145 on 16 December	STS removal
13	0920 on 16 December	1159 on 16 December	STS removal
14	0700 on 18 December	1226 on 18 December	STS removal
15	1149 on 17 December	1501 on 17 December	STS removal
16	0700 on 17 December	1145 on 17 December	STS removal
17	1200 on 16 December	1455 on 16 December	STS removal
18	0748 on 16 December	1159 on 16 December	STS removal

d. 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. Gatewell drawdowns are measured on

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Tuesdays and more frequently as needed.

(1) FU2 went out of service at 0700 on 15 October for digital governor installation and servo repairs.

## 2. ACTIVITIES:

### a. Auxiliary Water System Closures.

(1) FV1-1, FV3-7, FV3-9, FV4-3, and FV4-4 remain closed while locked/tagged out during the Bradford Island fishway overhaul.

### b. STS/VBS inspections. Table 2. STS and VBS inspection.

<i>Unit</i>	<i>Date</i>	<i>Run Hours</i>	<i>Comments</i>
11	N/A	OOS	Unit 11 remains out of service
12	16 Dec	1453	STS Removed
13	16 Dec	1453	STS Removed
14	18 Dec	1146	STS Removed
15	17 Dec	1075	STS Removed
16	17 Dec	1437	STS Removed
17	16 Dec	441	STS Removed
18	16 Dec	1456	STS Removed

c. Dewatering and Fish Salvage. The following dewatering and salvage activities occurred this reporting week:

(1) On 18 December Project Biologists salvaged 11 white sturgeon, 10 sculpin spp., 10 suckers, and 12 crayfish from the Unit 04 tail logs. All fishes were released to the tailrace in good condition.

## 3. RESEARCH:

a. Normandeau – Fish Counting. Video counting continues.

## 4. FISHWAYS:

a. Project biologists inspected on 16 through 19 December.

b. Fish Passage Plan Observations.

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(1) Table 3. FPP Out of Criteria items.

Date	Location	FPP Items	Cause	Response
<b>BRADFORD ISLAND (BI) - Dewatered</b>				
<b>CASCADES ISLAND (CI) – Nothing to report</b>				
<b>WASHINGTON SHORE (WS)</b>				
12/16-19	PH2CC	Entrance diffs < 1.0'	High drawdown on FU1	Cleaned/floated
12/19	SUE	Differential <1.0'	FU1 OOS	NA

(2) PH2CC diffuser A2 is stuck closed. Diffuser B7 has been closed until repairs to the diffuser motor can be performed. The next possible time period will be 2014/15 winter maintenance.

c. Fishway Temperatures. Temperatures are taken from 01 March through 30 November.

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

e. Adult Fishways.

(1) Calibration was checked on 16 December.

(2) 10 of 12 floating orifice gates (FOGs) are installed. Two gates remain out for maintenance. Stab plates for all FOGs are installed, with the NUE closed while FU2 is out of service.

(3) All SLEDs are removed.

(4) PH2-NUE, B-Branch, A-Branch, and the PH1CC remain out of service during winter maintenance.

f. Juvenile Fishways.

(1) The south end gate of the Ice and Trash Sluiceway (ITS) was discovered to be in serious disrepair on 01 September. The gate has been removed for repair, plating has been placed over the bottom of the guide slot, and the ITS was reopened on 25 September. The ITS will reclose briefly for reinstallation of the gate once repairs are complete. On 17 December the ITS was closed briefly for a boat survey in the PH1 Forebay.

(2) The DSM remains in service.

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(3) The hydro-cannon remains out of service.

(4) The B2CC remains closed.

(5) The PH2 and B2CC avian arrays were removed on 09 and 10 October to facilitate the WA Shore LFS repairs. The PH1 and Spillway arrays remain intact. The PH1 array currently has one broken line.

g. Lamprey Fishways. All LPSs remain dewatered. The butterfly valve to the WA shore LPS/LFS is closed.

**5. CONSTRUCTION:**

a. WA Shore LPS/LFS Installation. Dive work to repair the LFS completed on 30 October. Repairs and modifications to the LFS/LPS continue.

**6. HAZMAT, SPILLS AND CLEANUP:** Nothing to report.

**7. TELETYPES CURRENTLY IN EFFECT:**

a. A teletype sent on 26 November request that the Bonneville minimum forebay be no lower than 73.5' as a soft constraint effective immediately and until further notice. This request is to assist with navigation due to a surveyed high spot below The Dalles downstream lock entrance. River ops regarding Bonneville tailwater requirements for Chum Salmon take precedence as do normal river ops to meet regional power demands.

b. A teletype sent on 18 December updated tailwater operations for Chum Salmon spawning and egg incubation. At 1800 on 24 December, maintain tailwater at 11.5' as a hard constraint. This modifies the previous teletype requiring a minimum tailwater elevation of 11.6' and additional tailwater operations described within.

c. A teletype sent on 19 December provides updated wintertime spill caps for fish passage and lack of load spill conditions based on observed TDG data. The teletype is to be used from 0000 on 01 January, 2014 to 2359 on 01 March, 2014.

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