



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

3 October 2013

MEMORANDUM FOR Biologist, Operations Division (CENWP-OD)

SUBJECT: Bonneville Project, Fishway and Fish Activities for Week 39 of 2013, which covers the period from 22 through 28 September 2013

**1. OPERATION SUMMARY:**

a. Daily average river flows ranged from 80.3 to 105.8 kcfs. Daily average project tailwater ranged from 8.4' to 10.1' msl. Daily average powerhouse forebay elevation ranged from 75.1' to 75.5' msl. Daily average water temperatures ranged from 68°F to 70°F. Secchi disk measurements remained equal to or greater than 7.0'.

b. Spill Bays 01 and 18 provide attraction flow for Cascades Island and B-branch, respectively. They are open 6" during daylight hours. Daily average spill ranged from 1.1 to 1.3 kcfs.

c. Unit Operation. Powerhouse Two is the priority powerhouse. Split flow operation ended on 23 September.

(1) Unit 01 went out of service at 0946 on 23 July for a 5 year overhaul.

(2) Unit 11 went out of service at 0900 on 09 September 2012 for high thrust bearing temperatures.

(3) Unit 14 went out of service at 0741 on 09 September for digital governor installation.

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 Tuesdays and more frequently as needed.

**2. ACTIVITIES:**

a. Auxiliary Water System Closures. The following AWS closures occurred this reporting week:

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- (1) FV1-1 was closed for cleaning from 1507 to 1600 on 26 September.
- (2) FV 3-7 was closed for cleaning from 0712 to 0727 on 23 September.
- (3) FV 3-9 was closed for cleaning from 0712 to 0727 on 23 September.

b. STS/VBS inspections. Table 3. 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	9/26	463	OK
13	9/26	822	OK
14	9/26	235	OK
15	9/26	469	OK
16	9/26	315	OK
17	9/26	673	OK
18	9/26	855	OK

c. Dewatering and Fish Salvage. No fish salvage activities occurred this reporting week.

### 3. RESEARCH:

a. CRITFC. Annual Chinook, Coho, sockeye, and steelhead sampling in the AFF continues.

b. NOAA – Lamprey. LPS count network installed. HD-PIT tagging continues from the AFF traps.

c. Normandeau – Fish Counting. Visual counting continues.

d. Oregon and Washington Departments of Fish and Wildlife – Tule counting. Tule counting began on 15 August.

e. PSMFC – Smolt Monitoring Program. Juvenile fish condition and index monitoring continues. No research fish were collected. Fallbacks recorded crossing the separator bars this reporting week: 22 salmon and one steelhead. Truck releases of summer out-migrants originating from Snake River dams began on 18 August.

f. University of Idaho – AFF. USACE funded adult salmonid sampling continues.

g. University of Idaho – Lamprey. HD-PIT and JSATs tagging continues from the

AFF traps.

h. WDFW – AFF. Sampling for the alternative gear study control group began on 20 September.

**4. FISHWAYS:**

a. Project biologists inspected 22 through 28 September.

b. Fish Passage Plan Observations.

(1) Table 4. FPP Out of Criteria items.

Date	Location	FPP Items	Cause	Response
<b>BRADFORD ISLAND (BI)</b>				
9/26	PH1CC	South ent diff < 1.0'	Unknown	None
9/28	PH1CC	North ent diff > 2.0'	Unknown	None
<b>CASCADES ISLAND (CI) – Nothing to report</b>				
<b>WASHINGTON SHORE (WS) – Nothing to report</b>				

(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.

(3) A-branch diffuser FG3-3 and 3-6 are partially open in manual. FG3-5 is closed in manual. Repairs will occur when the Bradford Island ladder is dewatered. The next possible time period will be 2013/14 winter maintenance.

(4) 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 normally taken from 01 March through 30 November. Forebay temperature as taken from the USACE website was unavailable.

Table 5. Daily Average Temperature in Degree Fahrenheit (F).

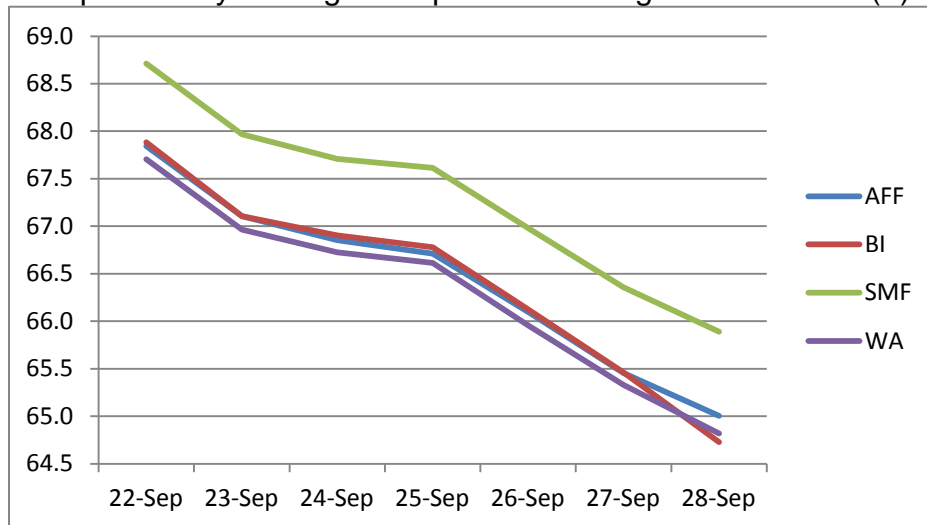
	Daily Averages			
	AFF	BI	SMF	WA
22-Sep	67.8	67.9	68.7	67.7
23-Sep	67.1	67.1	68.0	67.0
24-Sep	66.9	66.9	67.7	66.7
25-Sep	66.7	66.8	67.6	66.6

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26-Sep	66.1	66.1	67.0	66.0
27-Sep	65.5	65.5	66.4	65.3
28-Sep	65.0	64.7	65.9	64.8

Graph1. Daily Average Temperature in Degree Fahrenheit (F).



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

e. Adult Fishways.

(1) Calibration was checked on 28 September.

(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.

(3) All SLEDs are removed.

(4) All ladders remain in service.

(5) The Bradford Island exit was closed for cleaning from 0720 until 0727 on 23 September.

f. Juvenile Fishways.

(1) The intake gate for the downstream exit of the Ice and Trash Sluiceway (ITS) was discovered to be in serious disrepair on 01 September. The gate has been

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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.

- (2) DSM2 remains in service.
- (3) The hydrocannon remains in service.
- (4) The B2CC remains closed.
- (5) All avian arrays are installed.

g. Lamprey Fishways.

- (1) The Bradford Island LPS remains in service.
- (2) The WA shore AWS LPS remains in service.
- (3) The WA shore LPS/LFS was taken out of service on 30 August due to LPS pump and electrical issues. The LFS butterfly valve remains closed.
- (4) Cascades Island LPS remains in service.

**5. CONSTRUCTION:** WA Shore LPS/LFS Installation. Flume construction is complete. Repairs and modifications to the LFS are scheduled for 15 October – 12 November 2013.

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

**7. TELETYPES CURRENTLY IN EFFECT:**

a. A teletype sent on 04 September cancels a previous teletype intended to improve PH2 gatewell conditions for passing fish. Effective immediately all units are to resume operating within the upper and lower limits of the 1% efficiency range as defined in the FPP section 5.

b. A teletype sent on 27 September updates previous teletypes for treaty fishing. From 0600 on 30 September through 1800 on 03 October, request that Bonneville pool

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operate within a 1.5' band as a hard constraint, with emphasis on steady nighttime operations.

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