

#### **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 30 October 2013

MEMORANDUM FOR Biologist, Operations Division (CENWP-OD)

SUBJECT: Bonneville Project, Fishway and Fish Activities for <u>Week 43</u> of 2013, which covers the period from <u>20 through 26 October 2013</u>

## 1. OPERATION SUMMARY:

- a. Daily average river flows ranged from 104.2 to 121.2 kcfs. Daily average project tailwater ranged from 9.6' to 11.1' msl. Daily average powerhouse forebay elevation ranged from 72.6' to 73.3' msl. Daily average water temperatures ranged from 58°F to 59°F. Secchi disk measurements were 7.0' or greater.
- 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 1.2 kcfs.
- c. Unit Operation. Powerhouse One became the priority powerhouse on 9 October. For in-service and out-of-service times and dates, see Unit Operation Closures Table.
- 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.
- (1) FU02 went out of service at 0700 on 15 October for digital governor installation and servo repairs.

#### 2. ACTIVITIES:

- a. <u>Auxiliary Water System Closures</u>. The following AWS closures occurred this reporting week:
  - (1) FV1-1 was closed for cleaning from 0708 to 0716 on 21 October.
  - (2) FV 3-9 was closed for cleaning from 0734 to 0740 on 21 October and from 1618 until 1625 on 24 October.

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b. <u>STS/VBS inspections</u>. Table 2. STS and VBS inspection.

Unit	Date	Run Hours	Comments	
11	N/A	oos	Unit 11 remains out of service	
12-18	N/A	N/A	All STSs removed by 11 Oct	

c. <u>Dewatering and Fish Salvage</u>. The following fish salvage activities occurred this reporting week: On 22 October, Project Biologists recovered 33 White sturgeon and 2 Channel catfish from the Unit 17 draft tube. All fish were returned to the tailrace in good condition.

## 3. RESEARCH:

- a. <u>CRITFC.</u> Annual Chinook, Coho, sockeye, and steelhead sampling in the AFF concluded on 15 October.
  - b. Normandeau Fish Counting. Visual counting continues.
- c. <u>Oregon and Washington Departments of Fish and Wildlife Tule counting.</u> Tule counting began on 15 August.
- d. <u>PSMFC Smolt Monitoring Program.</u> Juvenile fish condition and index monitoring concluded on 12 October as the DSM was dewatered to facilitate repairs to the WA Shore LFS. Truck releases of summer out-migrants originating from Snake River dams began on 18 August.
- e. <u>University of Idaho AFF.</u> USACE funded adult salmonid sampling concluded on 15 October.
- f. <u>WDFW AFF</u>. Sampling for the alternative gear study control group concluded the week of 21 October.

# 4. FISHWAYS:

- a. Project biologists inspected 20 through 26 October.
- b. Fish Passage Plan Observations.
- (1) Table 3. FPP Out of Criteria items.

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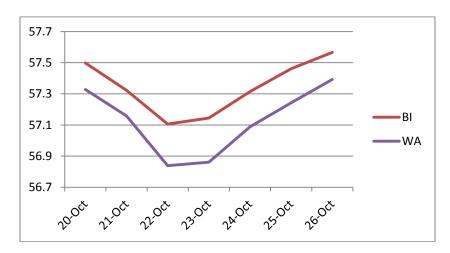
Date	Location	FPP Items	Cause	Response				
BRADFORD ISLAND (BI)								
10/21, 25, 26	PH1CC	South ent diff < 1.0' See 4.b.(3)		None				
10/20	PH1CC	North ent diff > 2.0'	Unknown	None				
10/20	BI weir	Staff gauge < 1.0'	FV3-9 in manual	Ops Adjusted				
10/20	A-branch	Staff gauge < 1.0'	FV3-9 in manual	Ops Adjusted				
10/20	B-branch	Staff gauge < 1.0'	FV3-9 in manual	Ops Adjusted				
10/21	B-branch	Staff gauge < 1.0'	Unknown	Ops Adjusted				
CASCADES ISLAND (CI) – Nothing to report								
WASHINGTON SHORE (WS)								
10/20	Weir 37	Staff gauge < 1.0'	Unknown	None				

- (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. <u>Fishway Temperatures</u>. Temperatures are normally taken from 01 March through 30 November.

Table 4. Daily Average Temperature in Degree Fahrenheit (F).

	Daily I	Averages	
Date	BI		WA
20-C	Oct	57.5	57.3
21-C	Oct	57.3	57.2
22-C	Oct	57.1	56.8
23-C	Oct	57.1	56.9
24-C	Oct	57.3	57.1
25-C	Oct	57.5	57.2
26-C	Oct	57.6	57.4

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Graph 1. Daily Average Temperature in Degree Fahrenheit (F).

d. <u>Zebra Mussel Monitoring</u>. No signs of colonization were observed this reporting week.

# e. Adult Fishways.

- (1) Calibration was checked on 26 October.
- (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. On 10 October, stab plates for FOG numbers 14, 15, 17, and 18 were installed to provide safe conditions for divers working on the WA shore LFS repairs.
  - (3) All SLEDs are removed.
  - (4) All ladders remain in service.

# 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 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.

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- (2) STSs were removed from PH2 units 9-11 October and the DSM was dewatered on 12 October. This early outage is required to facilitate dive work associated with the WA Shore LFS repairs. The B2CC was opened on 11 October to provide a passage/fallback route while the DSM remains out of service.
  - (3) The hydrocannon is no longer is use as the DSM and SMF are out of service.
- (4) The B2CC was opened on 11 October in lieu of the DSM being taken out of service early for the WA Shore LFS repairs. The B2CC closes during daytime dive work, and opens at night when units operate at PH2.
- (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.
  - g. Lamprey Fishways.
  - (1) The Bradford Island LPS was taken out of service on 16 October.
  - (2) The WA shore AWS LPS was taken out of service on 16 October.
  - (3) The WA shore LPS/LFS remains out of service. The butterfly valve is closed.
- (4) Cascades Island LPS was taken out of service by NOAA on the morning of 04 October based on low passage numbers.
- **5. CONSTRUCTION:** WA Shore LPS/LFS Installation. Repairs and modifications to the LFS began 15 October and will continue until 12 November.
- **6. HAZMAT, SPILLS AND CLEANUP:** Nothing to report.
- **7. TELETYPES CURRENTLY IN EFFECT:** A teletype sent on 17 October updates a previous teletype which states that beginning 09 October and continuing until the DSM returns to service (no later than 14 November), implement special operations to accommodate repairs of the WA Shore LFS.

Encl

JERRY A. CARROLL Operations Manager Bonneville Project