

**MEMORANDUM FOR Biologist, Operations Division (CENWP-OD)**

**SUBJECT:** Bonneville Project, Fishway and Fish Activities for **Week 52** of 2020, which covers the period from **20-26 December**.

**1. OPERATION SUMMARY:**

a. Daily average river flows ranged from 136.2 to 159.5 kcfs. Daily average powerhouse forebay elevation ranged from 73.1' to 74.6' msl. Daily average project tailwater ranged from 13.3' to 15.1' msl. Secchi disk measurements ranged from 4.5' to 7.0'. Daily average water temperature ranged from 43-44°F.

b. Daily average spill ranged from 0.5 to 2.4 kcfs.

c. Unit Operation. PH1 will remain the priority powerhouse until the end of February 2021 due to winter maintenance in PH2, Cascades Island fishway, and Washington Shore fishway. Main unit drawdowns are measured every Monday and more frequently as needed.

- Table 1. Main Unit Outages:

Unit	OOS	RTS	Reason
1	0700 on 30 Nov	---	Station Service Work
2	0700 on 30 Nov	---	Station Service Work
18	1250 on 30 Nov	---	4 Yr. Overhaul
14	1800 on 23 Dec	0932 on 26 Dec	F.O. due to breaks not releasing

d. Fish Units. Second Powerhouse fish units provide attraction flow for the Washington Shore (WS) fish ladder.

Fish Unit Outages: Fish Units are periodically placed into reserve service (RS) to float trash when debris differentials become excessive and trash raking is not possible.

- Table 2. Fish Unit Outages:

Unit	OOS	RTS	Reason	Duration
F1	0610 on 01 Dec	---	2 yr overhaul/WA Shore Fishway outage	---
F2	0610 on 01 Dec	---	2 yr overhaul/WA Shore Fishway outage	---

- Table 3. Fish Unit Drawdowns, in Feet: Nothing to report.

**2. MAINTENANCE ACTIVITIES:**

a. Auxiliary Water System Closures:

- FV 1-1 was closed for cleaning from 0804 to 0820 on 21 December.
- FV 3-7 and 3-9 were closed for cleaning from 1015 to 1150 and from 1255 to 1337 on 21 December.
- FV 1-1 was closed for cleaning at 1245 to 1312 on 22 December.

b. STS/VBS Inspections: STS's were removed on 16 December for annual winter maintenance activities.

c. Dewatering and Fish Salvages: – Nothing to report

**3. RESEARCH:**

- a. Four Peaks Environmental - Fish counting contract: Daytime video counting (0400 to 2000) began on 01 December. Fish counts can be viewed [here](#).
- b. USFWS – Lamprey Metamorphosis Study: Juvenile lamprey researchers are onsite, and the work is underway.

**4. FISHWAYS:**

- a. Project biologists inspected 21 and 22 December.
- b. Fish passage plan observations.

• Table 5. FPP Items Out of Criteria:

Date	Location	FPP Violation	Cause	Response
Bradford Island				
12/21-22	A-Branch	Weir Staff Gauge >1.1'	NA	NA
Cascades Island – Nothing to report.				
Washington Shore – Nothing to report.				

c. Adult Fishways:

- (1) The Cascades Island Fishway went out of service and into orifice flow on 01 December.
- (2) The Washington Shore Fishway went out of service and into orifice flow on 01 December.
- (3) The AFF was taken out of service for the winter on 25 November.
- (4) Sensor calibration occurred on 21 December.
- (5) SLEDs are installed at all locations.

d. Juvenile Fishways:

- (1) The ITS remains in service (auto-chain gates 3B, 6C, & 10B only).
- (2) The hydro-cannon remains in service.
- (3) The B2CC was open from 1825 to 2300 on 23 December, but otherwise remains out of service.
- (4) The DSM was placed out of service for annual winter maintenance on 17 December.
- (5) STS are removed and out of service for annual winter maintenance.

e. Lamprey Fishways:

- (1) LPSs remain out of service.
- (2) The Bradford Island Wetted Wall (BIWW) remains out of service.
- (3) The PH2 Lamprey Flume Structure (LFS) remains out of service.

(4) The AFF lamprey trap remains out of service.

(5) The CI Lamprey trap remains out of service.

f. Avian Monitoring. Avian counts are recorded 01 April – 31 October.

**5. WATER QUALITY MONITORING:**

a. Fishway Temperatures: Temperature logs are no longer being taken this year, data collection will begin again 01 March, 2021.

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

**6. CONSTRUCTION:** Nothing to report.

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

**8. TELETYPES CURRENTLY IN EFFECT:**

- A teletype was sent out on 16 December stating as of 1200 on 16 December and until further notice the Bonneville Dam Tailwater must operate within the range of 11.8 - 13.0 feet, with caveats specified in teletype message BON R 121620 1125. This teletype replaces CBT MSG: BON R 102120 1417. The purpose is to improve conditions at the Ives/Pierce Island Complex for Chum Salmon Spawning.

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