

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

**SUBJECT:** Bonneville Project, Fishway and Fish Activities for **Week 01** of 2021, which covers the period from **27 December 2020 to January 02, 2021.**

**1. OPERATION SUMMARY:**

a. Daily average river flows ranged from 134.3 to 168.1 kcfs. Daily average powerhouse forebay elevation ranged from 73.1' to 74.7' msl. Daily average project tailwater ranged from 12.8' to 15.2' msl. Secchi disk measurements remained at 7.0'. Daily average water temperature ranged from 42-43°F.

b. Daily average spill remained at 0.5 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

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 0735 to 0800 on 28 December.
- FV 3-7 and 3-9 were closed for cleaning from 1008 to 1115 on 28 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 28-30 December.

- b. Fish passage plan observations.

- Table 5. FPP Items Out of Criteria.

Date	Location	FPP Violation	Cause	Response
Bradford Island				
12/28-30	PH1CC	S. Ent. Diff. < 1.0'	Possible Equipment Calibration issues	NA
12/30	B-Branch	Ent/TW diff < 1.0'	NA	Control Rm Notified
12/28-30	A-Branch	FG3-4 Open	FG3-4 mechanically bound partially open	W.O.
12/17	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 Nov.
- (4) Sensor calibration occurred on 29 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 remains out of service.
- (4) The DSM was placed out of service for annual winter maintenance at 1017 on 17 December.
- (5) STS removal for winter maintenance was completed on 16 December.

- 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 30 December stating effective 1 January 2021 at 0001 hours, until further notice, the Bonneville Dam minimum tailwater elevation is 11.8 feet during all hours. The intent of this teletype is to provide sufficient tailwater elevation to protect the chum redds in the Ives/Pierce Island are during the egg incubation period. This teletype replaces the previous CBT message: BON R 122019 0926. Please see teletype BON R 122920 1520 for more details.

MICHAEL ADAMS, P.E.  
Operations Project Manager  
Bonneville Project