

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

**SUBJECT:** Bonneville Project, Fishway and Fish Activities for **Week 10** of 2020, which covers the period from **01 - 07 March**.

**1. OPERATION SUMMARY:**

a. Daily average river flows ranged from 139.5 to 164.1 kcfs. Daily average powerhouse forebay elevation ranged from 74.4' to 74.8' msl. Daily average project tailwater ranged from 12.4' to 14.2' msl. Secchi disk measurements ranged from 4.0' to 5.0'. Daily average water temperature ranged from 41° to 42°F.

b. Daily average spill ranged 1.2 to 1.3 kcfs.

c. Unit Operation. PH2 remains the priority powerhouse. Main unit drawdowns are measured every Monday and more frequently as needed.

- Table 1. Main Unit Outages.

Unit	OOS	RTS	Reason
1	1308 on 03 Mar	1449 on 03 Mar	P.O., Trash Raking
3	1034 on 03 Mar	1226 on 03 Mar	P.O., Trash Raking
10	0825 on 03 Mar	0933 on 03 Mar	P.O., Trash Raking
14	0740 on 24 Feb	---	P.O., 4 year 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. Nothing to report.

- Table 3. Fish Unit Drawdowns, in Feet.

Date	F1	F2
3/1	0.6'	0.3'
3/2	0.4'	0.2'
3/3	0.5'	0.3'
3/4	0.5'	0.2'
3/5	0.5'	0.2'
3/6	0.6'	0.2'
3/7	0.6'	0.3'

**2. MAINTENANCE ACTIVITIES:**

a. Auxiliary Water System Closures.

- FV 1-1 was closed for cleaning from 0735 to 0805 on 05 March.
- FV 3-7 was closed for cleaning from 0829 to 0835 on 05 March.
- FV 3-9 was closed for cleaning from 0829 to 0835 on 05 March.

b. STS/VBS Inspections. Nothing to report.

c. Dewatering and Fish Salvages. Nothing to report.

**3. RESEARCH:**

a. Four Peaks Environmental - Fish counting contract: Daytime video (0400 to 2000) began on 01 March. Fish counts can be viewed [here](#).

**4. FISHWAYS:**

a. Project biologists inspected 01-07 March.

b. Fish passage plan observations.

• Table 5. FPP Items Out of Criteria.

Date	Location	FPP Violation	Cause	Response
Bradford Island – Nothing to report				
3/1-2, 4-7	B-Branch	FG 3-26 Closed	Unknown	WOR
3/1-5	B-Branch	FG 3-29 Closed	Unknown	NA
3/3	PH1CC	N. Ent. Diff. > 2.0'	Unknown	NA
3/6-7	A-Branch	Staff Gauge Diff. > 1.1'	Unknown	NA
3/7	PH1CC	S. Ent. Diff. < 1.0'	Unknown	NA
Cascades Island – Nothing to report				
Washington Shore – Nothing to report				

- On 01 May 2018, FG6-11 (Cascades Island) was found broken partially open. The diffuser shaft had broken away from the motor. Due to the subsidence issues at Cascades Island, repairs cannot occur until crane support is allowed in the vicinity. FG6-11 should be open at tailwaters  $\geq 14.0'$ .
- On 18 August 2018, FG6-12 (Cascades Island) was found to be mechanically bound in the open position. FG6-12 should only be open with tailwaters ranging from 11.0'-33.0'. Due to the subsidence issues at Cascades Island, repairs cannot occur until crane support is allowed in the vicinity.
- On 27 March 2019, FG6-18 (Cascades Island) was found to be mechanically bound in the closed position. FG6-18 should be open with tailwaters  $> 12.0'$ . Due to the subsidence issues at Cascades Island, repairs cannot occur until crane support is allowed in the vicinity.

c. Adult Fishways.

(1) The Bradford Island fishway remains in service.

(2) The AFF remains out of service.

(3) Sensor calibration occurred on 07 Mar.

(4) 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 remains in service.

(5) STSs are installed.

e. Lamprey Fishways.

(1) All Lamprey Passage Structures 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.

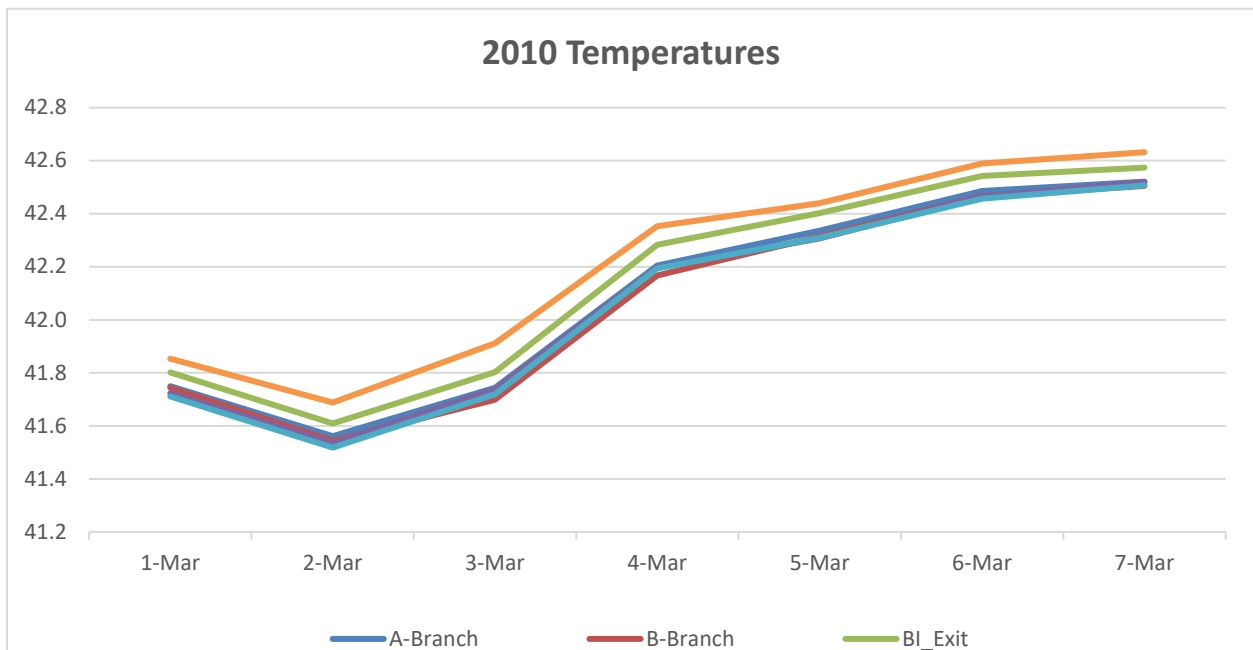
(4) The AFF Lamprey trap remains out of service.

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

5. WATER QUALITY MONITORING:

a. Fishway Temperatures. Temperatures are taken from 01 March - 30 November.

Date	A-Branch	B-Branch	BI_Exit	WA_Entrance	WA_Exit	SMF
1-Mar	41.7	41.7	41.8	41.7	41.7	41.9
2-Mar	41.6	41.5	41.6	41.5	41.5	41.7
3-Mar	41.7	41.7	41.8	41.7	41.7	41.9
4-Mar	42.2	42.2	42.3	42.2	42.2	42.4
5-Mar	42.3	42.3	42.4	42.3	42.3	42.4
6-Mar	42.5	42.5	42.5	42.5	42.5	42.6
7-Mar	42.5	42.5	42.6	42.5	42.5	42.6



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

**6. CONSTRUCTION:**

- a.** Construction on the new PH2 Oil Water Separator began 14 October.

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

**8. TELETYPES CURRENTLY IN EFFECT:**

- A teletype sent on 20 December updated the Chum Salmon spawning operations. Effective 24 December at 1200 until further notice, maintain Bonneville tailwater elevation at a minimum of 11.3' at all hours. The official tailwater staff gauge is located 50' upstream of Tanner Creek (Oregon side).

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