

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

15 July 2020

**SUBJECT:** Bonneville Project, Fishway and Fish Activities for **Week 28** of 2020, which covers the period from **05 – 11 July**.

**1. OPERATION SUMMARY:**

a. Daily average river flows ranged from 216.8 to 255.9 kcfs. Daily average powerhouse forebay elevation ranged from 73.3' to 73.8' msl. Daily average project tailwater ranged from 17.8' to 20.1' msl. Secchi disk measurements remained 5.0'. Daily average water temperature ranged from 63° to 64°F.

b. Daily average spill ranged from 95.2 to 95.6 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	0653 on 08 Jul	1110 on 08 Jul	P.O., Replace Blade MLDT
5	0700 on 07 Jul	1432 on 07 Jul	P.O., Exciter Fan Replacement
8	0700 on 15 Jun	---	P.O., 5 year overhaul
18	0738 on 07 Jul	1052 on 07 Jul	P.O., Exciter Maintenance

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	2301 on 04 Jul	0510 on 05 Jul	R.S., Nighttime Lamprey Ops	6 hrs, 9 mins
F2	2259 on 05 Jul	0508 on 06 Jul	R.S., Nighttime Lamprey Ops	6 hrs, 9 mins
F1	2254 on 06 Jul	0510 on 07 Jul	R.S., Nighttime Lamprey Ops	6 hrs, 16 mins
F2	2254 on 07 Jul	0511 on 08 Jul	R.S., Nighttime Lamprey Ops	6 hrs, 17 mins
F1	0356 on 08 Jul	0444 on 08 Jul	R.S., Float Trash	48 mins
F2	2301 on 08 Jul	0515 on 09 Jul	R.S., Nighttime Lamprey Ops	6 hrs, 14 mins
F1	0828 on 09 Jul	1422 on 09 Jul	P.O., ROV Inspection	5 hrs, 54 mins
F2	0829 on 09 Jul	1420 on 09 Jul	P.O., ROV Inspection	5 hrs, 51 mins
F2	2300 on 09 Jul	0543 on 10 Jul	R.S., Nighttime Lamprey Ops	6 hrs, 43 mins
F2	2300 on 10 Jul	0528 on 11 Jul	R.S., Nighttime Lamprey Ops	6 hrs, 28 mins
F1	2300 on 11 Jul	---	R.S., Nighttime Lamprey Ops	---

• Table 3. Fish Unit Drawdowns, in Feet.

Date	F1	F2
7/5	0.1'	0.3'
7/6	0.3'	0.2'
7/7	2.6'	1.8'
7/8	0.2'	0.2'
7/9	0.1'	0.1'
7/10	0.2'	0.4'
7/11	0.2'	0.3'

**2. MAINTENANCE ACTIVITIES:**

**a. Auxiliary Water System Closures.**

- FV 3-7 closed for cleaning from 0725 to 0739 on 06 July.
- FV 3-9 closed for cleaning from 0725 to 0739 on 06 July.
- FV 6-9 closed for cleaning from 0715 to 0730 on 08 July.
- FV 1-1 closed for cleaning from 1310 to 1320 on 09 July.

**b. STS/VBS Inspections.**

UNIT #	PREVIOUS STS HRS	HRS WHEN INSPECTED	HRS RUN	REMARKS
11	51434	52869	1435	n/a
12	39603	39888	285	n/a
13	0285	01708	1423	n/a
14	10495	11921	1426	n/a
15	20953	22305	1352	n/a
16	33814	35228	1414	n/a
17	29109	30545	1436	n/a
18	00286	00331	45	New hr meter installed

**c. Dewatering and Fish Salvages. Nothing to report.**

**3. RESEARCH:**

**a. Four Peaks Environmental - Fish counting contract: Daytime visual counting (0500 to 2100) began on 01 April. Nighttime video counting (2100-0500) began on 15 May. Fish counts can be viewed [here](#).**

**b. PSMFC – Smolt Monitoring: Sample collections at the SMF began at 0700 on 02 March. Debris at the PDS and fish/debris separator was light to moderate consisting mostly of aquatic macrophytes and a few sticks. GBT examinations began on 19 April and are typically performed two days per week through spill. Results of this week’s GBT examinations: 200 subyearling Chinook examined with no GBT symptoms observed. Three steelhead and thirteen salmon fallbacks were observed this week. No fish collections for research purposes were conducted this week. More details can be found on the [FPC web page](#).**

**c. USDA - Avian hazing: Deck-based hazing began 01 March.**

**d. CRITFC – Adult Salmonid Sampling. Adult Salmonid sampling in the AFF began on 25 May and typically occurs 5 days per week.**

**4. FISHWAYS:**

**a. Project biologists inspected 05 - 11 July.**

**b. Fish passage plan observations.**

- Table 5. FPP Items Out of Criteria.

Date	Location	FPP Violation	Cause	Response
Bradford Island				
7/5-8,10	A-Branch	Weir Staff Gauge > 1.4'	Unknown	NA
7/5	B-Branch	Entrance Diff > 2.0'	Lag	NA
Cascades Island – Nothing to report.				
Washington Shore – Nothing to report.				

- FG6-11 (Cascades Island) is broken in the partially open position. The diffuser shaft broke 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  $\geq 14.0'$ .
- FG6-12 (Cascades Island) is mechanically bound in the open position. The diffuser 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.
- FG6-18 (Cascades Island) is mechanically bound in the closed position. The diffuser 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.
- FG6-19 (Cascades Island) is mechanically bound in the closed position. The diffuser should be open with tailwaters  $> 15.0'$ . Due to the subsidence issues at Cascades Island, repairs cannot occur until crane support is allowed in the vicinity.

c. Adult Fishways.

- (1) The AFF remains in service.
- (2) Sensor calibration occurred on 07 July.
- (3) 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 in service.
- (4) The DSM remains in service.
- (5) STSs are installed.

e. Lamprey Fishways.

- (1) CI and WA LPSs remain in service. BI LPS was taken out of service on 03 July due to a pump failure, and returned to service on 06 July.
- (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 in service.

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

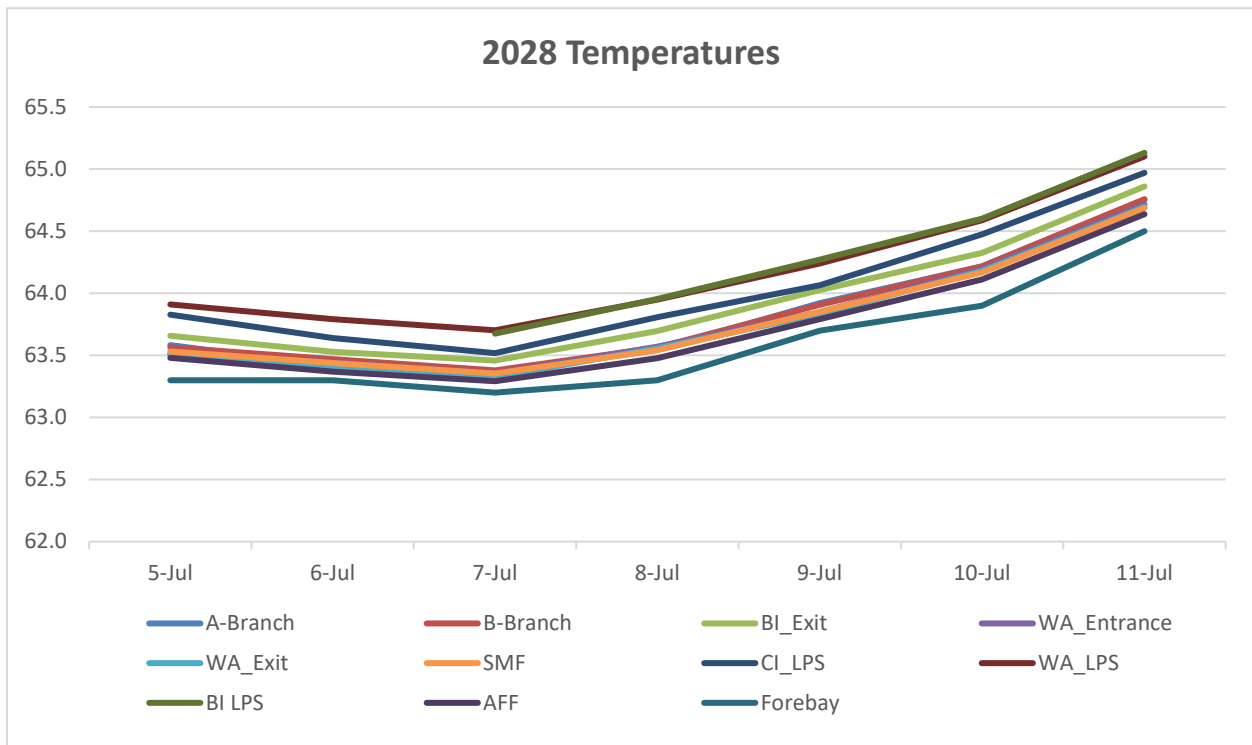
(1) Table 5. Avian Counts.

Date	Gulls	Cormorants	Terns	Wh. Pelicans	Grebes
7/5	1	7	0	0	0
7/6	1	6	0	0	0
7/7	---	---	---	---	---
7/8	0	6	0	0	0
7/9	0	1	0	0	0
7/10	6	2	0	0	0
7/11	4	2	0	0	0

**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	CI_LPS	WA_LPS	BI LPS	AFF	Forebay
5-Jul	63.6	63.6	63.7	63.5	63.5	63.5	63.8	63.9		63.5	63.3
6-Jul	63.4	63.5	63.5	63.4	63.4	63.4	63.6	63.8		63.4	63.3
7-Jul	63.4	63.4	63.5	63.4	63.3	63.4	63.5	63.7	63.7	63.3	63.2
8-Jul	63.5	63.6	63.7	63.6	63.6	63.5	63.8	64.0	64.0	63.5	63.3
9-Jul	63.9	63.9	64.0	63.8	63.8	63.9	64.1	64.2	64.3	63.8	63.7
10-Jul	64.2	64.2	64.3	64.2	64.2	64.2	64.5	64.6	64.6	64.1	63.9
11-Jul	64.8	64.8	64.9	64.7	64.7	64.7	65.0	65.1	65.1	64.6	64.5



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 sent on 11 June states that effective 16 June through 31 August, operate in accordance with the FOP to provide Summer spill for fish passage. See teletype for details
- A teletype sent on 30 June requests that Bonneville pool operate within a 1.5' band, hard constraint, from 0600 on 01 July through 1800 on 03 July and 0600 on 06 July through 1800 09 July to facilitate treaty fishing.
- A teletype sent on 09 July requests that Bonneville pool operate within a 1.5' band, hard constraint, from 0600 on 13 July through 1800 on 16 July to facilitate treaty fishing.

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