

MEMORANDUM FOR Biologist, Operations Division (CENWP-OD)

SUBJECT: Bonneville Project, Fishway and Fish Activities for **Week 24** of 2020, which covers the period from **07 – 13 June**.

1. OPERATION SUMMARY:

- a. Daily average river flows ranged from 287.2 to 364.0 kcfs. Daily average powerhouse forebay elevation ranged from 73.2' to 74.6' msl. Daily average project tailwater ranged from 21.8' to 25.5' msl. Secchi disk measurements ranged from 3.0' to 5.0'. Daily average water temperature ranged from 57° to 59°F.
- b. Daily average spill ranged from 132.9 to 149.9 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
10	1024 on 08 Jun	1109 on 08 Jun	P.O., Trash Raking
12	0753 on 20 Apr	---	P.O., 4 year overhaul
14	0031 on 09 Jun	1450 on 09 Jun	P.O., Quarterly Thrust Collar Insp.

- 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
F2	2232 on 06 Jun	0514 on 07 Jun	R.S., Nighttime Lamprey Ops	6 hrs, 42 mins
F2	2232 on 07 Jun	0512 on 08 Jun	R.S., Nighttime Lamprey Ops	6 hrs, 40 mins
F1	2243 on 08 Jun	0517 on 09 Jun	R.S., Nighttime Lamprey Ops	6 hrs, 34 mins
F2	2236 on 09 Jun	0515 on 10 Jun	R.S., Nighttime Lamprey Ops	6 hrs, 39 mins
F2	2230 on 10 Jun	0602 on 11 Jun	R.S., Nighttime Lamprey Ops	7 hrs, 32 mins
F1	2229 on 11 Jun	0526 on 12 Jun	R.S., Nighttime Lamprey Ops	6 hrs, 57 mins
F2	2229 on 12 Jun	0534 on 13 Jun	R.S., Nighttime Lamprey Ops	7 hrs, 5 mins
F1	2230 on 13 Jun	---	R.S., Nighttime Lamprey Ops	---

- Table 3. Fish Unit Drawdowns, in Feet.

Date	F1	F2
6/7	0.3'	0.2'
6/8	1.1'	0.3'
6/9	0.2'	3.9'
6/10	0.5'	0.2'
6/11	---	---
6/12	0.2'	1.6'
6/13	0.5'	0.3'

2. MAINTENANCE ACTIVITIES:

a. Auxiliary Water System Closures.

- FV 1-1 closed for cleaning from 0720 to 0730 on 08 June.
- FV 3-7 closed for cleaning from 0730 to 0740 on 08 June.
- FV 3-9 closed for cleaning from 0730 to 0740 on 08 June.
- FV 3-7 closed for cleaning from 0827 to 0837 on 10 June.
- FV 3-9 closed for cleaning from 0827 to 0837 on 10 June.
- FV 6-9 closed for cleaning from 0911 to 0928 on 11 June.
- FV 1-1 closed for cleaning from 1245 to 1320 on 11 June.
- FV 3-7 closed for cleaning from 1510 to 1530 on 11 June.
- FV 3-9 closed for cleaning from 1510 to 1530 on 11 June.

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 visual counting (0500 to 2100) began on 01 April. 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, “mulch like” debris 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 yearling Chinook, subyearling Chinook and Steelhead plus one mountain whitefish, one sucker and one stickleback examined with no GBT symptoms observed. two steelhead, and four 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 - Pinniped 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 07 - 13 June.

b. Fish passage plan observations.

- Table 5. FPP Items Out of Criteria.

Date	Location	FPP Violation	Cause	Response
Bradford Island – Nothing to report.				
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 11 June.
- (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) LPSs remain in 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.

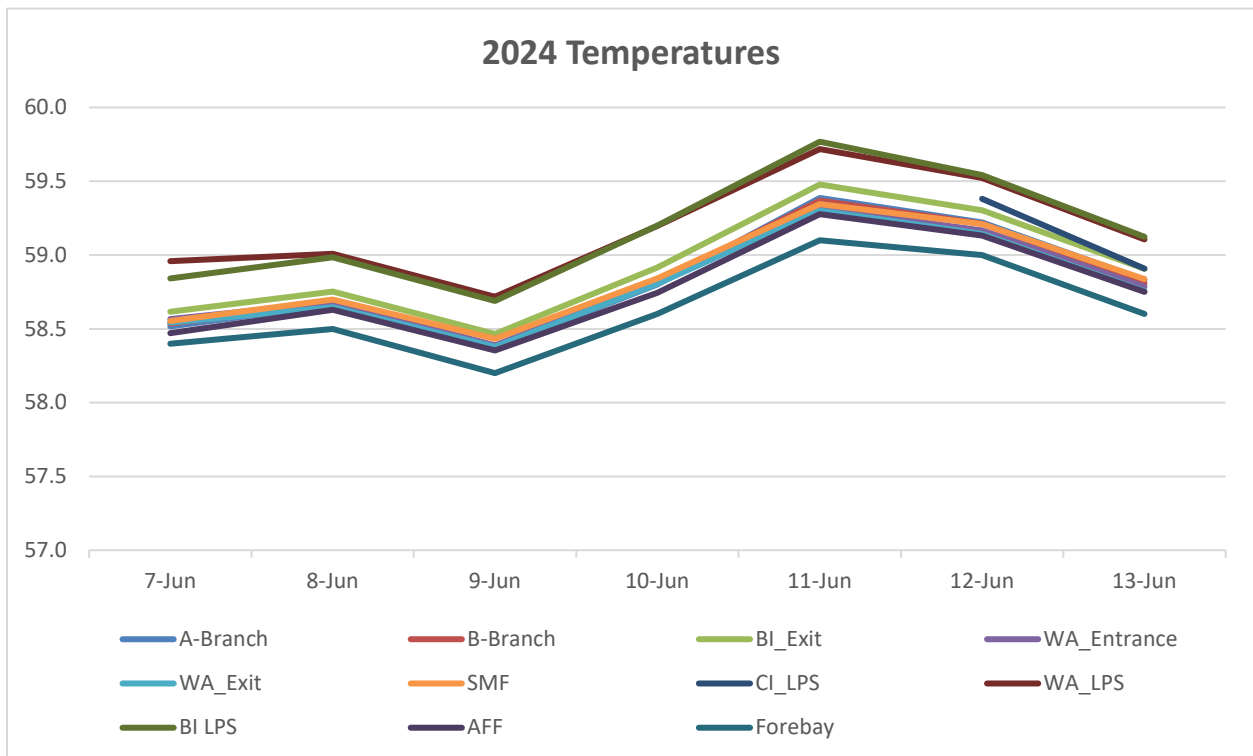
(1) Table 5. Avian Counts.

Date	Gulls	Cormorants	Terns	Wh. Pelicans	Grebes
6/7	2	7	0	0	0
6/8	---	---	---	---	---
6/9	14	16	0	0	0
6/10	15	5	0	0	0
6/11	11	6	0	0	0
6/12	4	14	0	0	0
6/13	3	15	0	0	0

5. WATER QUALITY MONITORING:

a. Fishway Temperatures. Temperatures are taken from 01 March - 30 November. CI LPS logger failure.

Date	A-Branch	B-Branch	BI_Exit	WA_Entrance	WA_Exit	SMF	CI_LPS	WA_LPS	BI_LPS	AFF	Forebay
7-Jun	58.5	58.5	58.6	58.6	58.5	58.6	---	59.0	58.8	58.5	58.4
8-Jun	58.7	58.7	58.8	58.7	58.6	58.7	---	59.0	59.0	58.6	58.5
9-Jun	58.4	58.4	58.5	58.4	58.4	58.4	---	58.7	58.7	58.4	58.2
10-Jun	58.8	58.8	58.9	58.8	58.8	58.8	---	59.2	59.2	58.7	58.6
11-Jun	59.4	59.4	59.5	59.3	59.3	59.3	---	59.7	59.8	59.3	59.1
12-Jun	59.2	59.2	59.3	59.2	59.1	59.2	59.4	59.5	59.5	59.1	59.0
13-Jun	58.8	58.8	58.9	58.8	58.8	58.8	58.9	59.1	59.1	58.8	58.6



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. TELETYPE CURRENTLY IN EFFECT:

- A teletype sent on 06 April states that effective 10 April through 15 June, operate in accordance with the FOP to provide Spring spill for fish passage. See teletype for details.
- 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

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