

MEMORANDUM FOR THE RECORD**SUBJECT: 21BON089 MFR Failure to Open Attraction Flow Gates in Spillway Prior to Hydro-Survey**

On 03 September 2021, a pre-rock removal hydro-survey was conducted in the Bonneville Lock & Dam Spillway Tailrace. The operation was coordinated in “21BON075 MOC Pre-Rock Removal Hydro-Survey” with the attraction flow outage planned to occur between the hours of 0900-1500. Unfortunately, due to human error, Bays 1 and 18 were not opened at 0630 that morning as spelled out in the FPP. There was no attraction water spill from 0630 until 1433 when flow was restored after the survey concluded. Ladder attraction flow at both the Cascades and B-Branch Entrances maintained the 1.5 feet of differential criteria throughout the entire hydro-survey.

Fish Impacts:

Due to the failure of opening attraction flow gates between the hours of 0630-0859 on September 3rd, fish that would have used this flow from Bays 1 & 18 could have experienced passage delays. These potential delays increase exposure to predators, such as Steller Sea Lions. Point count of Steller Sea Lions at Bonneville Lock & Dam on the morning of September 3, 2021 was 31 animals (source: FFU). See **Table 1** for total passage at Bonneville fish ladders between the hours of 0600-0859 on September 3, 2021 (FPC, 2021).

Table 1: Total Passage at Bonneville Fish Ladders Between the Unplanned Hours of 0600-0859 on 03 September 2021

Fall Chinook	Coho	Steelhead	Pink	Lamprey
1,672	994	260	1	1

- A. Species Potentially Impacted: Chinook Salmon (*Oncorhynchus tshawytscha*), Coho Salmon (*Oncorhynchus kisutch*), Steelhead (*Oncorhynchus mykiss*), Pink Salmon (*Oncorhynchus gorbuscha*), and Pacific Lamprey (*Entosphenus tridentatus*)
- B. Origin – N/A
- C. Length – N/A
- D. Marks and tags – N/A
- E. Marks and Injuries found on carcass – N/A
- F. Cause and Time of Death – No mortalities were found
- G. Future and Preventative Measures – The operator was made aware of this mistake and the importance of morning attraction flows to get fish into the ladder to protect them from sea lion predation. In the future we should ensure all personnel involved in operation are aware of specific action plans and reasoning behind plans prior to conducting operation.

Sincerely,
Bonneville Project Fisheries