MEMORANDUM FOR THE RECORD 17 MCN 15 MFR Spillbay 2 Closed

SUBJECT: BPA noticed at 0830 hours on July 13 that Inflows were off by about 10 KCFS since June 29th or 30th. After the two top spillway weirs (TSW) were removed and the standard spillgates in bays 19 and 20 were installed on June 29, crane 7 was uncoupled from bay 2. Spillbay position indication for bay 2, in the control room showed the bay open at 4.8 feet both at the SC board and on GDACS. However, operations investigated and it was verified spillbay 2 was in fact on seal/closed. This is about 8.6 KCFS difference. The control room operator informed the BPA scheduler, Bobby Johnson (Fish Biologist) and the Chief of Operations (Bill Gersbach).

The Chief of Operations directed an instrumentation alignment/calibration at the SC board for spillbay 2. Spillbay 2 was placed back in service at 1105 hours July 13. Current spill pattern is now in compliance per Fish Passage Plan.

The overall percentage of spill for the dates of June 29 through July 13 are slightly impacted and reduced.

Adult sockeye and summer Chinook are the dominate species passing, with steelhead and lamprey passing in lower numbers. Adult passage was likely unaffected by the inadvertent closure of spillbay 2.

Subyearling Chinook are the primary race/species of juvenile salmonids passing through the spillway at this time. Yearling Chinook, steelhead, sockeye and coho smolts could be present but in very low numbers. Over 99 percent of smolts passing are subyearling Chinook.

Data below is from the from the Fish Passage Center website and organized by the biological service contractor, Anchor QEA.

Total passage year to date (YTD).	1,972,799
Passage June 29 to July 12.	819,322
Percentage of Run YTD.	41.5
Estimated Percentage of Fish Impacted.	1.9

Subyearling Chinook Passage Year to Date, 2017.

This data does not separate out powerhouse and bypass system smolt passage numbers from spillway numbers. Smolt passage through the powerhouse and juvenile fish facility would have been unaffected. That said, as a rough estimate, with one of 22 spillbays closed and assuming fish pass evenly across the spillway/river, 1.9 percent of the subyearling Chinook run YTD would have been affected by the closure of bay 2. Fish approaching the bay would have had to search for another route such as spillbays 1 or 3. Overall, there was likely minimal delay in smolt passage. Also, no eddies in the tailwater were noted in the spill pattern before the discovery of the closed bay.

A. Species – no fish were lost. Subyearling chinook might have been slightly delayed.

B. Origin – NA

C. Length – NA

- D. Marks and tags NA
- E. Marks and Injuries found on carcass NA
- F. Cause and Time of Death NA

Future and Preventative Measures – Weekly Verification of spill bay flows will be verified against GDACS indication.

Sincerely,

Bobby Johnson with assistance from Bill Gersbach and Kathleen Carter McNary Project Fisheries