CENWP-OD-McNary **05/31/2018**

MEMORANDUM FOR THE RECORD 18 MCN 04 Spillbay 1 Closure

SUBJECT: Closure of spillbay 1 for repair of Washington entrance weir, W3 electrical box on May 31, 2018

Narrative: On May 27, the biologist found the electrical box for Washington entrance weir, W3 severely damaged. The box has two sections, upper and lower. The upper section was leaning back at about a 25 degree angle. The supports appeared to be barely holding the upper section on. The lower section was damaged by the upper section leaning downstream to the point that the lower section door would not close. When examined, the lower section had one inch of water in it. The electrical crew leader examined the box on May 30 and determined this was a severe electrical hazard which could remove the weir from service. This weir is preferred over the backup weir, W1 because W3 has a deeper sill. We feel the electrical box was damaged by the high spill volume. Due to misting and splashing in the area, good photos could not be taken. Also, the electrical crew leader stated spillbay 1 had to be closed in order to affect proper repairs safely.

Location: Spillbay 1 closure in order to fix Washington entrance W3 electric box. W3 is the entrance closest to bay 1.

Method: The electricians had the chief operator close bay 1. W3 was removed from service electrically. However, the weir was set at a depth that keep it in criteria during the outage. The electrical staff did all repairs and replacement to the box and any components as needed to keep the box sealed and the weir functioning properly. Once the work was completed, the weir was returned to automatic operation and spillbay 1 was reopened.

Time Line - Duration: Spillbay 1 closure began at 0718 hours and was completed at 0731 hours. Opening the bay began at 1329 hours and was completed at 1338 hours. Timing of W3 being electronically in and out of service followed the bay closer closely. All of this occurred on May 31.

A. Species: There were no known fish losses. Subyearling Chinook are the primary race/species of juvenile salmonids passing through the spillway at this time, with sockeye, yearling Chinook, Coho, and steelhead also present along with juvenile lamprey. Subyearling Chinook have just begun their out migration and the other race/species are past their peak. Juvenile numbers are currently relatively low. Missing one of 22 bays for 6.3 hours should have minimal effect on juvenile passage. Spring Chinook salmon are the adult species passing most frequently. Steelhead are present in low numbers. Adult salmon passage might have been briefly altered along the Washington shore, yet weir W3 remained in criterion. The average Spring Chinook count of the last seven days was 453 at the Washington ladder. Passage along the Oregon shore should not have been affected. So far this year, 81.6 % of the Spring Chinook have used the Oregon ladder. Data referenced is from DART.

B. Origin: NA

C. Length: NA

D. Marks and Tags: NA

E. Marks and Injuries Found on the Carcasses: NA

F. Future and Preventative Measures: Examine all equipment fully and insure repairs are done quickly. Possibly look at a change in bay 1 spill pattern so equipment is protected.

G. Photos Taken: None.

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