MEMORANDUM FOR THE RECORD - 19MCN10

SUBJECT: Emergency debris spill on June 06, 2019

Narrative: Similar to past years, a moderate amount of surface debris had accumulated across the spillway. The debris continued to come in about midstream and much of the debris accumulated on the forebay surface area along the spillway. In order to prevent wind from carrying the debris over to the powerhouse in the future or to insure debris is not drawn into the three Washington ladder auxiliary water intakes, the debris was spilled to clear the forebay on June 6. Due to past debris incidents, McNary staff felt it prudent to remove this debris as soon as possible. This was especially timely as the TSWs', which pass much of the incoming debris, closed on June 10. After the operation, the debris along the spillway could be described as very light.

Location: Across the spillway.

Method: The project staff used spillbays operated in split leaf mode, which expedited debris removal from these and adjacent bays. Bays were closed and opened in a rotating fashion, which drew the debris to one of three split leaf bays and passed it to the tailwater. The bays used were 9, 11, and 16, with each open for 20 to 30 minutes. With the spillgates operated split leaf, the top leaf was raised completely out of the water (approximately 14 feet and approximately 23 kcfs was spilled). This draws debris from the adjacent slots, which required the bays to be open for 20 to 30 minutes.

Time Line - Duration: The operation began at 1108 hours and concluded at 1525 hours on June 6. The spillway gates settings were verified after the operation.

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 peaks. Juvenile numbers are currently relatively low. Spring/Summer Chinook salmon are the adult species passing most frequently with steelhead and sockeye present in very low numbers.

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: River debris loads are uncontrollable and the accumulation points are unpredictable. Removing the debris in a timely and proactive manner minimizes potential impacts to juvenile and adult fish passage. Also, risk is removed from the powerhouse and ladder systems.

G. Photos Taken: None.

Bobby Johnson Project Fisheries Biologist McNary Lock and Dam