CENWP-OD-McNary **January 29, 2019**

MEMORANDUM FOR THE RECORD 19MCN002

SUBJECT: Oregon (south) shore ladder, subyearling Chinook smolt mortality.

The Oregon shore ladder was being dewatered for winter maintenance. The upstream and downstream corners between the count station and the ladder wall are filled in with a "spacer". These "spacers" eliminate the eddy in each corner and help to direct the fish into and out of the counting slot. The downstream "spacer" is covered and has an access hatch. The downstream "spacer" is the same area the adult lamprey mortalities occurred last year. When initially dewatering on January 24, this access hatch was opened and with aid of a flashlight the area was examined, no adult lamprey were noted. The remainder of the day, the fisheries staff concentrated on the ladder from the count station to the tailwater. On January 25, the biologist salvaged fish and removed debris from the count station to the regulating weir. There was still 2 to 3 inches of water around the count station. On January 28, the exit pool was pumped down and fisheries staff completed fish salvage and debris removal. The biologist returned to the access hatch for a second look and discovered the smolt mortalities. There was no longer enough water around the count station. The mortalities were very fresh.

A. Species – eleven subyearling Chinook smolts.
B. Origin – assume wild.
C. Length – 4 to 5 inches.
D. Marks and tags – non-clipped.
E. Marks and Injuries found on carcass – none.
F. Cause and Time of Death – dewatered just before discovery.
G. Future and Preventative Measures – initial examination of the "spacer" revealed no openings big enough for fish this size. However, the "spacer" face is covered with a slotted screen. These slots might allow very small fish (fry) or juvenile lamprey into the area behind the spacer face. First, we will examine the possibility of replacing the "spacer" face in a way which would exclude small fish. Second, we will review the dewatering procedures, checks and communication.

No photos available.

Sincerely,

Bobby Johnson
Project Fisheries Biologist
McNary Lock and Dam