CENWW-ODL **June 19, 2020**

MEMORANDUM FOR THE RECORD: 20 LWG 05

SUBJECT: Juvenile subyearling Chinook sample recovery tank mortality.

LWG is currently transporting fish every other day with barges departing on odd days in June. There was one Anchor biologist, one SMP biologist, and two SMP technicians working up the June 16 sample of 573 fish which included 327 clipped and 238 unclipped subyearling Chinook. The sample was completed with all fish sent to the sample recovery tank by 0900 hours. When the sample recovery tank was checked at about 1150 hours June 16 there were 35 subyearling Chinook mortalities. Three of the 35 subyearling Chinook mortalities had injuries consistent of steelhead predation with the other 32 showing no signs of injury or maladies. It is the opinion of LWG Project Biologist, Anchor Biologist and SMP Biologist the mortalities were likely related to overexposure to MS222 or possibly overcrowding during handling but this cannot be confirmed. LWG fish team have looked into preventative measures and have since provided additional training to new employees to recognize symptoms of overcrowding and over anesthetizing. Anchor and SMP leads have agreed to ensure both biologists will work in the lab and technicians will crowd fish outside to prevent this from occurring in the future.

A. Species – Juvenile subyearling Chinook
B. Origin – 23 clipped and 12 unclipped subyearling Chinook.
C. Length – N/A
D. Marks and tags – No PIT tags were detected.
E. Marks and Injuries found on carcass – Three of the mortalities had signs of steelhead predation. There was also two juvenile steelhead ingesting subyearling chinook.
F. Cause and Time of Death – Likely over anesthetizing or overcrowding.
G. Future and Preventative Measures – Additional and continuous review of fish handling protocols will be provided by lead biologist in the lab. Both biologist on site each day will be in the lab performing fish anesthetizing and working up the sample.

Sincerely,
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