

MEMORANDUM FOR THE RECORD: 16 MCN 03 MFR Fish Loss at NcNary Juvenile Fish Facility

SUBJECT: Juvenile Salmonid Fish Loss

Sometime between sampling A-side and B-side the recirculation tank, located downstairs in the maintenance room below the wet lab, developed a slow leak in the drain valve. This caused the water in the tank to drop below the level required for the chiller pump to circulate water. As a result the water temperature raised approximately 10 degrees F. The system had been working and differential was checked prior to sampling. However, the tank river differential was not checked between sampling A-Side and B-Side. Fish were sent into the lab normally and being worked up until SMP (Smolt Monitoring Program) Lead Biologist Thomas VanNice noticed the water temp differential and immediately started getting fish back into cooler water by releasing them to the sample raceway. This shock however resulted in the loss of 76 Juvenile Salmonids.

The remainder of the B-Side sample was quickly examined outside the building at the B sample tank anesthetic chambers and bucketed to the sample recovery raceway. No other mortalities occurred.

A. Species –

Yearling Chinook 38 Non Clipped

Yearling Chinook 26 AD Clipped

Sub-yearling Chinook 4 Fry

Steelhead 4 Non Clipped

Sockeye 2 Non Clipped

B. Origin – See Above

C. Length – 45mm-230mm

D. Marks and tags – Unknown

E. Marks and Injuries found on carcass – None, Heat Stress

F. Cause and Time of Death – Temperature Differential at 0900 hours

G. Future and Preventative Measures – A new nipped is being welded onto the chiller tank, the drain valve is being replaced and the drain line will be refitted with PVC. The chiller should be ready by next sample, which is April 15 at 0700 hours. In the future, temperature differentials will be checked prior to every dip (sub sample of fish in the sample holding tanks). Also, we will look into an alarm system to notify staff when

temperature differentials reach a certain point. Finally, the air conditioning in the wet lab will be reinstalled, which should reduce air temperature.

Sincerely,

Thomas VanNice
PSMFC

Bobby Johnson
Project Fisheries