

**MEMORANDUM FOR THE RECORD – 19 LMN 04 MFR Juvenile Mortalities in Raceway**

**SUBJECT:** Several juvenile Chinook mortalities were discovered on the tail screens of Raceway 3 on the B (large fish) side of the collection system on Saturday, April 27. Separator technician and Biologist removed the dead fish as they found them and monitored conditions closely. A total of 227 dead juvenile salmonids were collected in the raceway throughout the day. Fish appeared to be coming into the raceway unable to hold in the current and being swept against the tail screens. Although small woody and grassy debris has been prevalent, no blockages were discovered during this timeframe. Orifices and gatewells were inspected and also found to be in regular working order. The raceway had approximately 11,000 lbs. of fish according to our estimation and the water flow was set for 12,500+ lbs. of fish. Conditions of fish in all raceways are being continuously monitored and no other mortality events have occurred. Most of the fish appeared to be of the same origin, hatchery yearling Chinook. The total numbers of collected fish can be found in the table below.

Clipped CH1	Unclipped CH1	Clipped Steelhead	Unclipped Steelhead	Clipped CH0	Unclipped CH0	Clipped Sockeye	Unclipped Sockeye	Total
169	49	9	-	-	-	-	-	227

- A. Species – Chinook salmon *Oncorhynchus tshawytscha*, Steelhead *Oncorhynchus mykiss*
- B. Origin – Hatchery and Wild
- C. Length – N/A
- D. Marks and tags – Fish were identified and counted by Biologist but not scanned for tags due to the continuation of the event. The fish were initially treated as regular raceway mortalities.
- E. Marks and Injuries found on carcasses –descaling and signs of fish disease observed.
- F. Cause and Time of Death – Unknown cause. Found throughout the day on April 27. Fish appeared to have been too weak to hold in flows. Several fish showed signs of fungus and disease.
- G. Future and Preventative Measures – Project staff will continue to be vigilant in checking facility for blockages and monitoring fish condition within the raceways.

Sincerely,  
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