

Stanislaus River Juvenile Outmigration Summary # 14

April 14th - April 20th, 2003

Note: Data is preliminary and subject to revision.

Oakdale:

The trap continued to sample through April 18th and then was raised due to consistently low daily catch. A total of 411 Chinook were captured between April 14th and April 18th increasing the season total to 89,249. Approximately 200 fewer Chinook were captured this week compared to the total number captured the previous week. Daily catch ranged between 37 and 173 Chinook. Mean forklength for the week was 70.7 mm (range: 46 mm to 138 mm), which was an increase of 3.9 mm over the previous week. Mean weight increased 2.0 g over the previous week to 5.1 g. No trout were captured during the week.

We are still observing an obvious discrepancy between the readings at the GDW and OBB gages (OBB reading up to 100 cfs less than GDW). Flow at GDW decreased by 80cfs between April 13th and April 14th to approximately 650 cfs where it remained for the rest of the week. Turbidity remained stable throughout the sampling period (range: 1.0 NTU to 2.0 NTU) as did water temperature (range: 52 to 54 degrees Fahrenheit).

Two livebox efficiency tests were conducted on April 16th and April 17th by placing a known number of natural Chinook marked caudal fin orange (CFO) in the livebox overnight. The percentage remaining in the morning represented livebox efficiency. The estimated livebox efficiencies were 100.0% and 91.7%, which were similar to previous tests conducted this year using fish of similar size. Combined mean length was 69.1 mm at release and 69.0 mm at recapture.

No trap efficiency releases were conducted at Oakdale during the week due to low trap catches.

Caswell:

The trap sampled continuously until it was raised on April 18th due to stable catch and flow. A total of 362 Chinook were captured between April 14th and April 18th increasing the season total to 11,263. Total Chinook catch for the week was similar to the total catch from the past two weeks. Daily catch ranged between 20 and 153 Chinook. Mean forklength increased 2.2 mm over the previous week to 81.5 mm (range: 64 mm to 109 mm), although mean weight was similar to the previous week at 5.7 g. One 170 mm (SI 4) trout was captured at Caswell during the week.

After a 73 cfs reduction in flow at RIP occurred between April 14th and April 15th, flow at RIP remained stable throughout the rest of the week between 645 cfs and 655 cfs. Turbidity fluctuated between 1.8 NTU and 3.7 NTU, and temperature fluctuated between 56 degrees and 60 degrees Fahrenheit.

One trap efficiency release was conducted during this sampling period using the traditional method (check livebox ~ 1 hour after release). A total of 64 natural Chinook marked caudal fin yellow (CFY) were released on April 16th. Flow at release was 648 cfs at RIP and turbidity was 1.8 NTU at Caswell. The estimated trap efficiency was 13.8%, which is similar to previous releases conducted this year. Mean length was 81.4 mm at release and 78.0 mm at recapture. The discrepancy between mean length at release and recapture was observed during previous

releases with fish of similar size. Data suggests fish size plays an important role in capture efficiency during the parr and smolt lifestages.

No livebox efficiency tests were conducted at Caswell during this sampling period.