Stanislaus River Juvenile Outmigration Summary # 11

March 24th - March 30th, 2003

Note: Data is preliminary and subject to revision.

Oakdale:

Between March 24th and March 30th 817 Chinook were captured increasing the season total to 87,182. Total catch was only 1/3 the previous week's catch. This pattern was observed in previous years when the fish were of similar size. Daily catch ranged from 81 to 220 Chinook between March 24th and March 29th. However, on March 30th only 4 Chinook were captured because the trap was damaged by vandals. Mean forklength for the week was 58.4 mm (range 33 to 100 mm), which was an increase of 4.3 mm over the previous week. Mean weight increased to 2.2 g, which was a 0.7 g increase over the previous week. No trout were captured during this sampling period.

Between March 24th and March 29th flow at Orange Blossom Bridge (OBB) ranged between 433 cfs and 439 cfs. On March 30th flow increased to 451 cfs due to a 50 cfs increase in discharge from Goodwin Dam (GDW). Turbidity ranged between 1.4 NTU and 3.3 NTU and temperature fluctuated between 53 and 54 degrees Fahrenheit.

A total of 108 natural Chinook marked caudal fin green (CFG) were released on the night of March 26th using the traditional method (check livebox ~ 1 hour after release). Flow at release was 434 cfs at OBB and turbidity was 1.4 NTU at Oakdale. The estimated trap efficiency was 7.4% and mean length was 55.7 mm at release and 49.5 mm at recapture. The discrepancy between mean length at release and recapture was observed in previous years with fish of similar size. Data suggests fish size plays an important role in capture efficiency during the parr lifestage.

One livebox efficiency test was conducted on March 27th 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. Estimated livebox efficiency was 87.1%, which was similar to previous tests conducted this year. Mean length for the group was 54.2 mm at release and 54.7 mm at recapture.

Caswell:

Between March 24th and March 28th a total of 323 Chinook were captured increasing the season total to 10,215. Total Chinook catch was almost 1,200 fewer fish than the previous week. Daily catch ranged between 36 and 88 Chinook during the sampling period. Mean forklength increased 6.1 mm to 72.6 mm (range: 47 mm to 90 mm). Mean weight only increased 0.1 g to 4.1 g. No trout were caught during this sampling period. Due to consistently low catch, the traps were raised on March 28th. The traps will continue to sample intermittently as long as catch and flow remain stable.

Flow at Ripon (RIP) ranged between 472 cfs and 480 cfs throughout the sampling period. Turbidity fluctuated between 1.1 NTU and 4.1 NTU, and temperature ranged between 58 and 59 degrees Fahrenheit. Turbidity and flow peaked simultaneously following a rain event on March 23rd and March 24th.

Trap efficiency releases were conducted on March 26th and March 27th using the traditional method (check livebox ~ 1 hour after release). Each release group consisted of 82 natural

Chinook marked either caudal fin pink (CFP) or caudal fin yellow (CFY). Flow was 475 cfs at RIP during both releases and turbidity ranged between 2.1 NTU and 3.0 NTU at Caswell. The pooled trap efficiency was 10.4%, which was similar to other releases conducted this year using the same method. Combined mean length for the groups was 74.1 mm at release and 71.4 mm at recapture. No livebox efficiency tests were conducted during this sampling period due to low catch.