

## Stanislaus River Juvenile Outmigration Summary # 16

**May 5<sup>th</sup> - May 11<sup>th</sup>, 2003**

*Note: Data is preliminary and subject to revision.*

### **Oakdale:**

Between May 5<sup>th</sup> and May 9<sup>th</sup> a total of 338 Chinook were captured increasing the season total to 90,491. Daily catch ranged between 43 and 86 Chinook. Mean forklength for the week was 77.6 mm (range: 52 mm to 104 mm), which was a 4.0 mm increase over the previous week. Mean weight increased 1.0 g to 5.7 g compared to the previous week. Five trout were captured during the week increasing the season total to 33. Please refer to table below for date captured, forklength, and smolt indices of the trout. The trap was raised for the weekend on May 9<sup>th</sup> due to consistently low daily catch.

<b>Date</b>	<b>Forklength (mm)</b>	<b>Smolt Index</b>
5-May-03	42	3
6-May-03	65	3
6-May-03	64	3
6-May-03	57	3
6-May-03	44	3

We are still observing an obvious discrepancy between the readings at the GDW and OBB gages, although the difference is currently less than 100 cfs. Flow at GDW was stable during the week and ranged from 598 cfs to 607 cfs. Turbidity fluctuated between 0.5 NTU and 1.2 NTU, and water temperature ranged from 53 to 55 degrees Fahrenheit.

Between May 5<sup>th</sup> and May 11<sup>th</sup> a total of 8 CWT fish were captured in the Oakdale trap increasing the total to 136 CWT Chinook. Daily catch ranged between 0 and 5 CWT fish. The mean length of CWT fish captured decreased 2 g over the previous week to 82.9 mm (range: 77 mm to 91 mm).

One trap efficiency release was conducted during this sampling period using the traditional method (check livebox ~ 1 hour after release). A total of 73 natural Chinook marked caudal fin yellow (CFY) were released on May 6<sup>th</sup>. Flow at release was 515 cfs at OBB and turbidity was 1.2 NTU at Oakdale. The estimated trap efficiency was 2.7%, which is similar to previous releases conducted this year. Mean length was 79.4 mm at release and 73.5 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 Oakdale during the week due to low trap catches.

### **Caswell:**

Between May 5<sup>th</sup> and May 9<sup>th</sup> a total of 811 Chinook were captured increasing the season total to 13,691. Although the trap sampled fewer days this week than the previous week, total Chinook catch was more than double the total catch from the previous week. Daily catch fluctuated between 89 and 257 Chinook. Mean forklength increased 3.1 mm over the previous week to 83.7 mm (range: 68 mm to 115 mm), and mean weight increased 0.7g to 6.3 g. No trout were captured at Caswell during the week.

Flow at Ripon (RIP) decreased by almost 275 cfs between May 5<sup>th</sup> and May 6<sup>th</sup>, due to a reduction in discharge at GDW from 1,500 cfs to 650 cfs. Throughout the remainder of the week flow gradually decreased to approximately 650 cfs. Turbidity ranged between 2.0 NTU and 2.9 NTU, and temperature fluctuated between 57 degrees and 60 degrees Fahrenheit.

Between May 5<sup>th</sup> and May 11<sup>th</sup> a total of 82 CWT fish were captured in the Caswell trap increasing the total to 163 CWT Chinook. Daily catch during the week ranged between 4 and 29 CWT fish. The mean length of CWT fish captured decreased 2.9 g over the previous week to 89.1 mm (range: 78 mm to 104 mm). A peak in catch of natural Chinook was observed simultaneously with peaks in CWT Chinook catch.

Two trap efficiency releases were conducted at Caswell during the week using the traditional method (check livebox ~ 1 hour after release). A total of 309 natural Chinook marked caudal fin pink (CFP) were released on the nights of May 6<sup>th</sup> and May 8<sup>th</sup>. Flow at release was between 667 cfs and 733 cfs at RIP and turbidity was between 2.0 NTU and 2.6 NTU at Caswell. The pooled estimated trap efficiency was 14.2%, which is similar to previous releases conducted this year. Mean length was 84.5 mm at release and 80.7 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 the week.