

## **Stanislaus River Juvenile Outmigration Summary # 12**

**March 31<sup>st</sup> - April 6<sup>th</sup>, 2003**

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

### **Oakdale:**

The trap resumed sampling the evening of March 31<sup>st</sup> and continued to sample through April 4<sup>th</sup>. A total of 768 Chinook were captured between April 1<sup>st</sup> and April 4<sup>th</sup> increasing the season total to 88,217. Total Chinook catch last week was similar to the total number captured the previous week. Daily catch ranged from 44 to 337 Chinook and mean forklength for the week was 63.1 mm (range 35 mm to 100 mm), which was an increase of 4.7 mm over the previous week. Mean weight increased to 2.9 g, which was a 0.7 g increase over the previous week. Two trout (37 mm and 41 mm; SI 2) were captured on April 2<sup>nd</sup> and April 3<sup>rd</sup> increasing the season total to 22 at Oakdale.

Between March 31<sup>st</sup> and April 6<sup>th</sup> flow at Orange Blossom Bridge (OBB) fluctuated between 534 cfs and 602 cfs due to variability in releases at Goodwin Dam (GDW). Turbidity remained stable throughout the sampling period (range: 1.8 NTU to 2.1 NTU) and temperature fluctuated between 51 degrees and 54 degrees Fahrenheit.

A total of 86 natural Chinook marked caudal fin green (CFG) were released on the night of April 3<sup>rd</sup> using the traditional method (check livebox ~ 1 hour after release). Flow at release was 546 cfs at OBB and turbidity was 2.1 NTU at Oakdale. The estimated trap efficiency was 4.7%, which is lower than the results from previous trap efficiency releases this year. Mean length was 63.2 mm at release and 57.8 mm at recapture. The discrepancy between mean length at release and recapture was observed in previous years using 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 April 2<sup>nd</sup> 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 87.5%, which was similar to previous tests conducted this year. Mean length for the group was 65.8 mm at release and 67.9 mm at recapture.

### **Caswell:**

The traps resumed sampling the evening of March 31<sup>st</sup> and continued to sample through April 4<sup>th</sup>. A total of 311 Chinook were captured between April 1<sup>st</sup> and April 4<sup>th</sup> increasing the season total to 10,570. Total Chinook catch for the week was similar to the total catch from the previous week. Daily catch fluctuated between 67 and 94 Chinook during the sampling period. Mean forklength increased 5.8 mm to 78.4 mm (range: 64 mm to 95 mm) and mean weight increased 1.2 g to 5.3 g. No trout were captured during the sampling period.

Between March 31<sup>st</sup> and April 6<sup>th</sup> flow at Ripon (RIP) increased from 509 cfs to 665 cfs due to variability in releases at Goodwin Dam (GDW). Turbidity fluctuated between 1.8 NTU and 3.7 NTU, and temperature fluctuated between 54 degrees and 60 degrees Fahrenheit. Catch, flow, and turbidity all peaked simultaneously on April 2<sup>nd</sup> following the greatest change in flow (80 cfs).

A total of 78 natural Chinook marked caudal fin yellow (CFY) were released on the night of April 3<sup>rd</sup> using the traditional method (check livebox ~ 1 hour after release). Flow at release was 612 cfs at RIP and turbidity was 1.8 NTU at Caswell. The estimated trap efficiency was 19.2%, which

is similar to previous estimates of trap efficiency this year, but greater than the estimates of trap efficiency from previous years using fish of similar size. Mean length was 80.4 mm at release and 76.1 mm at recapture. The discrepancy between mean length at release and recapture was observed during the previous releases 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 April 2<sup>nd</sup> 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 92.9%, which was similar to previous tests conducted this year. Mean length for the group was 77.2 mm at release and 77.5 mm at recapture.