

Stanislaus River Juvenile Outmigration Summary #2

January 1 - January 8, 2003

Oakdale:

The screw trap resumed fishing at Oakdale on the evening of January 1 and sampling continued until January 8. Total catch for the week was 550 Chinook increasing the season total to 561. Mean length for the week was 34.3 mm forklength and mean weight was 0.3 g. Forklengths ranged between 28 mm and 38 mm, and catch fluctuated between 31 and 133 Chinook. Due to the low catch and no significant change in flow, the screw trap was raised on Wednesday, January 8 after the livebox was processed. However, rain is predicted for the weekend and if flow increases the trap will be lowered to resume sampling during the rain event. Two trout were captured on January 5 increasing the season total to 3 trout. The trout were 226 mm and 232 mm and both had a smolt index rating of 5.

Flow at OBB fluctuated slightly between 331 cfs and 339 cfs, and turbidity ranged from 1.1 NTU to 1.9 NTU. Temperature ranged between 48 and 51 degrees Fahrenheit through the week.

Preliminary data obtained from CDFG (summary distributed December 16, 2002) carcass surveys indicate that peak spawning occurred around the week of November 11, 2002 (based on peak redd counts). From the peak spawning date, degree day analysis was used to calculate peak emergence. Peak emergence occurred around December 23, which is within a couple of days of calculated peak emergence in previous years. This explains the increased catch observed after the 1st of the year as compared to the first week of sampling (December 19-23). We observed the same pattern in previous years.

In the next few weeks we expect to see consistent numbers of Chinook in the trap, unless a significant change in flow occurs. If the flow increases, as it did in 2000 and 2001, we can expect to see between 20,000 and 50,000 fish in a 24-hour period. If this happens, the trap will be manned around the clock until catches subside. On the other hand, if we do not see any significant changes in flow in late January, we will most likely begin to see a cyclic pattern of 1-2 days of increased catch followed by a large drop in catch over a couple of days. This is likely due to "thinning" as more fish emerge from the gravel and begin to disperse. In 2002, when winter flows were low and stable, this cyclic pattern became very clear and predictable.