



Field Activity Advisory

Egg Survival and Emergence Study Extended

November 14, 2014 (Updated: January 5, 2015)

The San Joaquin River Restoration Program plans to extend the egg survival and emergence study from February 2015 to the end of April 2015. Staff will additionally post signage near certain emergence traps to inform river users and prevent tampering. The activity is part of a larger study to understand salmonid spawning habitat quality in Reach 1. These surveys focus on: 1) locating redds (nests); 2) describing the physical habitat characteristics where redds are placed; 3) installing redds grates and evaluating their effectiveness in preventing redd superimposition (another female laying eggs on an existing redd); and 4) monitoring egg survival and emergence rates from capped redds. This study assists the SJRRP identify potential limitations in the available spawning habitat and inform managers of the need, or lack thereof, to implement spawning habitat restoration actions.

Who: U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW)

What: Since mid-November, weekly surveys have been conducted by boat to find, measure, and mark redds produced by Chinook salmon that were transported to Reach 1 as part of adult trap and haul program at the San Joaquin River confluence of the Merced River.

Chinook salmon carcasses encountered during redd surveys were sampled for scales, otoliths, and physical observations and measurements. Staff

will install and monitor emergence traps at up to 10 locations in Reach 1 of the San Joaquin River.

Redds placed naturally by transported adults will be capped to assess egg survival and emergence rates.

Water quality monitoring equipment has also been installed to understand factors affecting egg survival and fry emergence rates. Emergence traps are monitored regularly to assess the number and condition of emerging juveniles. Additionally, reinforcing bar are placed over redd tailspills of early spawning fish to evaluate whether these “redd grates” could be an effective method to minimize redd superimposition.

All activities have been implemented consistent to the preparation and distribution of a California Environmental Quality Act Notice of Exemption and a National Environmental Policy Act Categorical Exclusion.

When: Redd surveys began November 18, 2014. Emergence traps will be installed approximately one week before expected fry emergence and monitored regularly through April 2015.



Figure 1: Chinook salmon spawning in Reach 1 of the San Joaquin River during 2013. Arrows point to Peterson disc tags implanted in transported adults.

Where: These activities will occur in Reach 1 of the San Joaquin River from approximately 2 miles downstream of the Highway 99 bridge to Friant Dam.

Access will occur from the public right-of-way or in areas where private landowners have granted access.



Figure 2: Emergence trap placed over redd in Reach 1 of the San Joaquin River during 2013.

Questions about this activity should be directed to the study's agencies points-of-contact:

Zachary Jackson, Fisheries Biologist

U.S. Fish and Wildlife Service
Office: (209) 334-2968 ext. 408
Email: Zachary_Jackson@fws.gov

Andy Shriver, Environmental Scientist

California Dept. of Fish and Wildlife
Phone: (559) 243-4014 ext. 351
Email: Andy.Shriver@wildlife.ca.gov

For more information, please visit the SJRRP Web site at www.restoresjr.net. Questions about activities on public and private land should be directed to the SJRRP Landowner Coordinator, Craig Moyle. Craig's contact information is provided below.

Craig Moyle, Landowner Coordinator

Office (operator): 916-924-8844
Office (direct line): 916-418-8248
Mobile: 916-642-6383
E-mail: craig.moyle@mwhglobal.com

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