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Cc: R2 Fish Files

### Clear Lake Hitch Survey

On May 4, 2015, California Department of Fish and Wildlife (Department), along with members of Big Valley Rancheria and Robinson Rancheria, completed a boat-based electrofishing survey at Clear Lake. The purpose of the survey was to determine if there was a large population of Clear Lake hitch (*Lavinia exilicauda chi*) (hitch) inhabiting the Soda Bay area of Clear Lake (Figure 1).

A total of 75 hitch compared to only 13 Sacramento blackfish (*Orthodon microlepidotus*) (blackfish) were collected. Catch per unit effort (CPUE) was 6.8 fish/minute for hitch and 1.2 fish/minute for blackfish.

Scale samples and total lengths were collected in an attempt to determine some age and growth information on hitch in Clear Lake. Unfortunately the scales collected were not clear enough to positively indicate a specific age. The five lengths of hitch taken were 143, 162, 167, 175, and 194 mm in total length. According to Moyle (2002), these fish are likely one to two year old fish.

It was a positive sign to collect so many hitch in addition to observing many more that were not collected. Our data suggest that hitch have been in a population decline and hitch were listed as threatened under the California Endangered Species Act in August of 2014. The Department will continue to work with the public, tribes, and private sectors in trying to gather more information on the hitch when available using similar surveys. The 2014 and 2015 surveys in the Clear Lake tributaries indicated poor spawning numbers so observing these fish indicates there is still some amount of hitch spawning occurring (Ewing, 2014 and 2015).

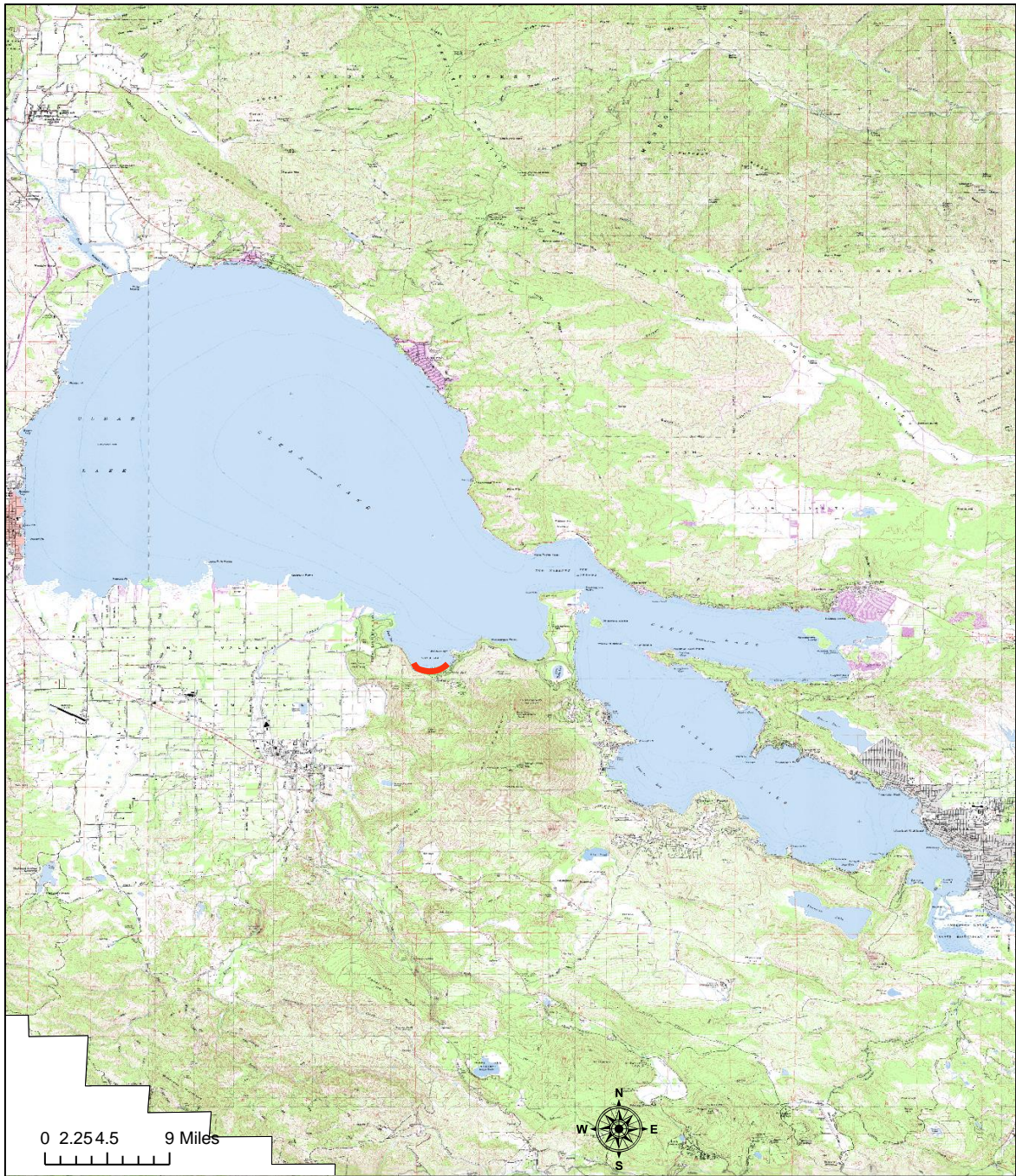


Figure 1. Clear Lake Electrofishing Transect (5/4/15) (Lake County, CA).

## Literature Cited

Ewing, B. 2014. Summary of the Clear Lake Hitch Survey on Kelsey and Adobe Creeks. California Fish and Wildlife Region 2 Fish Files. Unpublished.

Ewing, B. 2015. Summary of the Clear Lake Hitch Survey on Kelsey and Adobe Creeks. California Fish and Wildlife Region 2 Fish Files. Unpublished.

Moyle, P. 2002. Inland Fishes of California. University of California Press, Berkeley and Los Angeles, California. Pg. 138.



