

# Memorandum

Date: 9/13/2021

To: Sarah Mussulman  
Senior Fisheries Supervisor, Region 2 Sierra District  
Department of Fish and Wildlife

From: Ben Ewing  
District Fishery Biologist (Alpine, Amador, Calaveras, and Lake Counties)

Subject: **2021 Woods Lake (14562) Amphibian Survey**

On July 21, 2021, California Department of Fish and Wildlife (Department) completed an amphibian survey at Woods Lake. The purpose of the survey was to determine if any Sierra Nevada Mountain Yellow-Legged Frog (*Rana sierra*) were present, and to assess if the Woods Lake pre-stocking evaluation (PSE) could be re-approved.

Woods Lake is a 16-surface acre lake in Alpine County located at 38.682580 N, 120.008910 W situated at 8,213 feet above mean sea level. The shoreline is a mix of rocks, sand, willows, and conifer forest (**Figures 1, 2, and 3**). The lake bottom appears mostly mud and various sized rock substrate. When Woods Lake spills, water drains into Woods Creek and eventually into the South Fork American River. Woods Lake receives snow and rain runoff from the immediate area and multiple small tributaries from Round Top and Winnemucca Lakes. Woods Lake has historically had stockings of Brook Trout (*Salvelinus fontinalis*), Lahontan Cutthroat Trout (*Oncorhynchus clarkii henshawi*, LCT), and Rainbow Trout (*Oncorhynchus mykiss*, RT) with the last recorded stocking of RT in 2020.



**Figure 1.** Looking across to Woods Lake's southwestern shoreline on July 21, 2021 (Photo by B. Ewing).



**Figure 2.** Looking across to Woods Lake's western shoreline on July 21, 2021 (Photo by B. Ewing).



**Figure 3.** Looking across to Woods Lake's southwestern shoreline on July 21, 2021 (Photo by B. Ewing).

Department personnel conducted the Fellers and Freel (1995) Visual Encounter Survey (VES) Protocol as modified by the Department to conduct the amphibian survey at Woods Lake. The VES began at 09:19 and ended at 10:05 on July 21 where the majority of Woods Lake's shoreline was surveyed. No herpetofauna were observed. In 2001 during a High Mountain Lakes survey at Woods Lake, no herpetofauna were observed (CDFW HML Database 2021). No Sierra Nevada Yellow-Legged Frog have been documented at Woods Lake according to the California Natural Diversity Database (CNDDDB 2021). Based on the results of the evaluation completed, Woods Lake is still appropriate for fish stocking. These data will be used to create a new PSE.

#### Literature Cited:

1. California Department of Fish and Wildlife, High Mountain Lakes Database. September 13, 2021. Accessed by B. Ewing.
2. California Natural Diversity Database. September 8, 2021. Accessed by B. Ewing, CDFW.

3. Fellers, G. M. and K. L. Freel. 1995. A standardized protocol for surveying aquatic amphibians. National Biological Service Cooperative Park Studies Unit, University of California Division of Environmental Studies, Davis, CA. Technical Report No. NPS/WRUC/NRTR95-01 (UC CPSU TR # 58).