

Memorandum

Date: 8/24/2018

To: Sarah Mussulman
Senior Environmental Scientist, Supervisor
Department of Fish and Wildlife

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

Subject: **Round Top Lake Amphibian Survey**

On August 21, 2018, California Department of Fish and Wildlife (Department) completed an amphibian evaluation at Round Top Lake. The purpose of the survey was to determine if any Sierra Nevada yellow-legged frog (*Rana sierra*) were present, and to assess if the lake could continue to be on the Department fish stocking list.

Round Top Lake is a six-acre lake in Alpine County located at 38° 40' 01.84 N 120° 00' 44.46 W situated at 9,358 feet above mean sea level (Figure 1). The shoreline is a mix of rocks, sand, willow (*Salix* genus) and conifer (*Pinopsida* class) forest (Figure 2). The lake bottom appears mostly sand and various sized rock substrate. Maximum depth of the lake is approximately 40 to 50 feet (Region 2 Fish Files). At the time of the survey the lake appeared to be at the high water mark. When Round Top Lake spills, water drains into nearby Woods Lake. The lake receives water from rain and snowmelt runoff from the immediate area. The lake historically received fingerling golden trout (*Oncorhynchus mykiss aguabonita*), rainbow trout (*Oncorhynchus mykiss*), and Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*) with the last recorded stocking being rainbow trout in 2018.

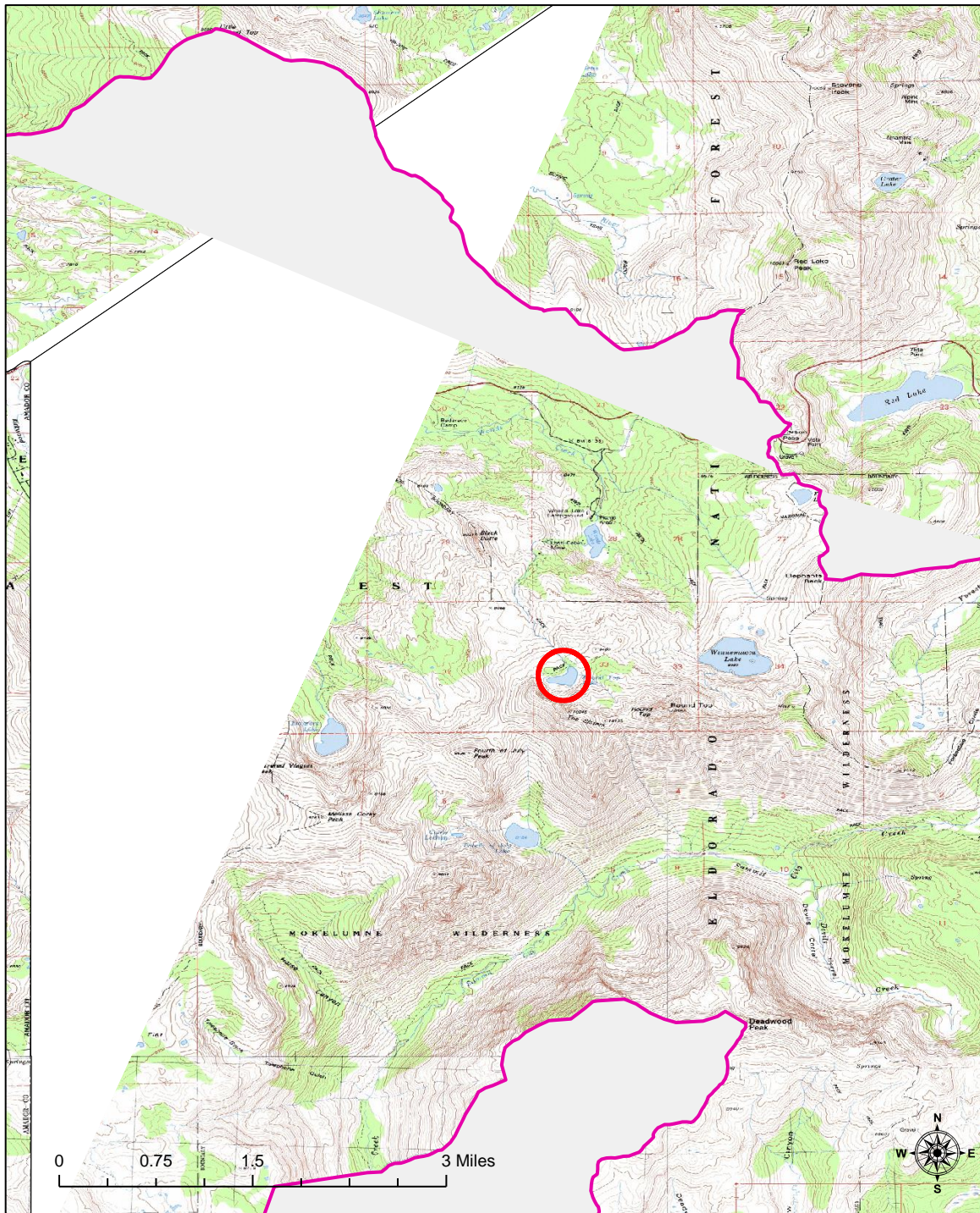


Figure 1. Round Top Lake, Alpine County, CA.

Department personnel used the Fellers and Freel 1995 Visual Encounter Survey (VES) Protocol as modified by the Department to conduct the amphibian survey at Round Top Lake. The VES began at 10:08 and ended at 10:45 on August 21 where most of the lake's shoreline was surveyed. Surface temperature of the lake was 15.6° C. No amphibians were seen

during the survey. In 2001 during a High Mountain Lakes survey at the lake, no amphibians were observed while 53 Lahontan cutthroat trout were recovered in the gillnet (CDFW HML Database 2014). In 2012 during a High Mountain Lakes survey at the lake, only one Lahontan cutthroat trout was recovered in the gillnet (CDFW HML Database 2014). The lack of trout recovered as well as the lack of suitable spawning habitat suggests this fishery is not self-sustaining. In 2014, a VES was conducted in which no amphibians were observed (Ewing 2014). Based on the results of the evaluations completed, a pre-stocking evaluation will be completed to keep Round Top Lake on the Department fish stocking list.



Figure 2. Round Top Lake, Alpine Co. (B.Ewing, 8/21/2018).

Literature Cited:

1. California Department of Fish and Wildlife, High Mountain Lakes Database, North Central Region.
2. Ewing, B. Round Top Lake Amphibian Survey. California Department of Fish and Game; 11/17/2014. [Cited 2018 August 24]. Available from: <http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=91242>

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).
4. Round Top Lake Fish Survey. California Department of Fish and Wildlife Region 2 Fish Files. Unpublished.