

# Memorandum

Date: 7/17/2017

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: **Shriner Lake (15094) Fish and Amphibian Surveys**

On July 11, 2017, California Department of Fish and Wildlife (Department) personnel completed an amphibian and fish survey at Shriner Lake. The purpose of the surveys were to determine if any Sierra Nevada yellow-legged frog (*Rana sierra*) and fish were present, and to assess if the lake could be added to the Department fish stocking list.

Shriner Lake is a small lake in Amador County located at 38.536025 N 120.159801 W situated at 6,870 feet above mean sea level (Figure 1). The majority of shoreline is a mix of bedrock with a few conifers (*Pinopsida* class) (Figure 2). The lake bottom appears mostly made up of various sized rock substrate including bedrock. A depth of 7.3 meters (24.0 ft) was taken at one area of the lake on July 11, 2017. There does not appear to be a significant inlet or outlet to the lake. Shriner Lake receives water from rain and snowmelt runoff from the immediate area and possibly an underground spring. Shriner Lake was planted with brook trout in 1951 and 1978 and from 1963 through 1969. Rainbow trout plants occurred between 1952 and 1962 and resumed in 1970. Rainbow trout were regularly planted through 2000. A CDFW gill net survey in 2002 captured 9 rainbow trout, all of which were over 295mm total length, and a 2013 gill net survey returned no trout; CDFW believes the lake is fishless. A small rock dam is present at the outlet of the lake preventing fish from accessing the outlet and no inlet streams were observed during 2002 or 2013 surveys. Although the lake is only a two mile hike from a trailhead there were few signs of human use during the 2013 survey (Mussulman et al 2016).

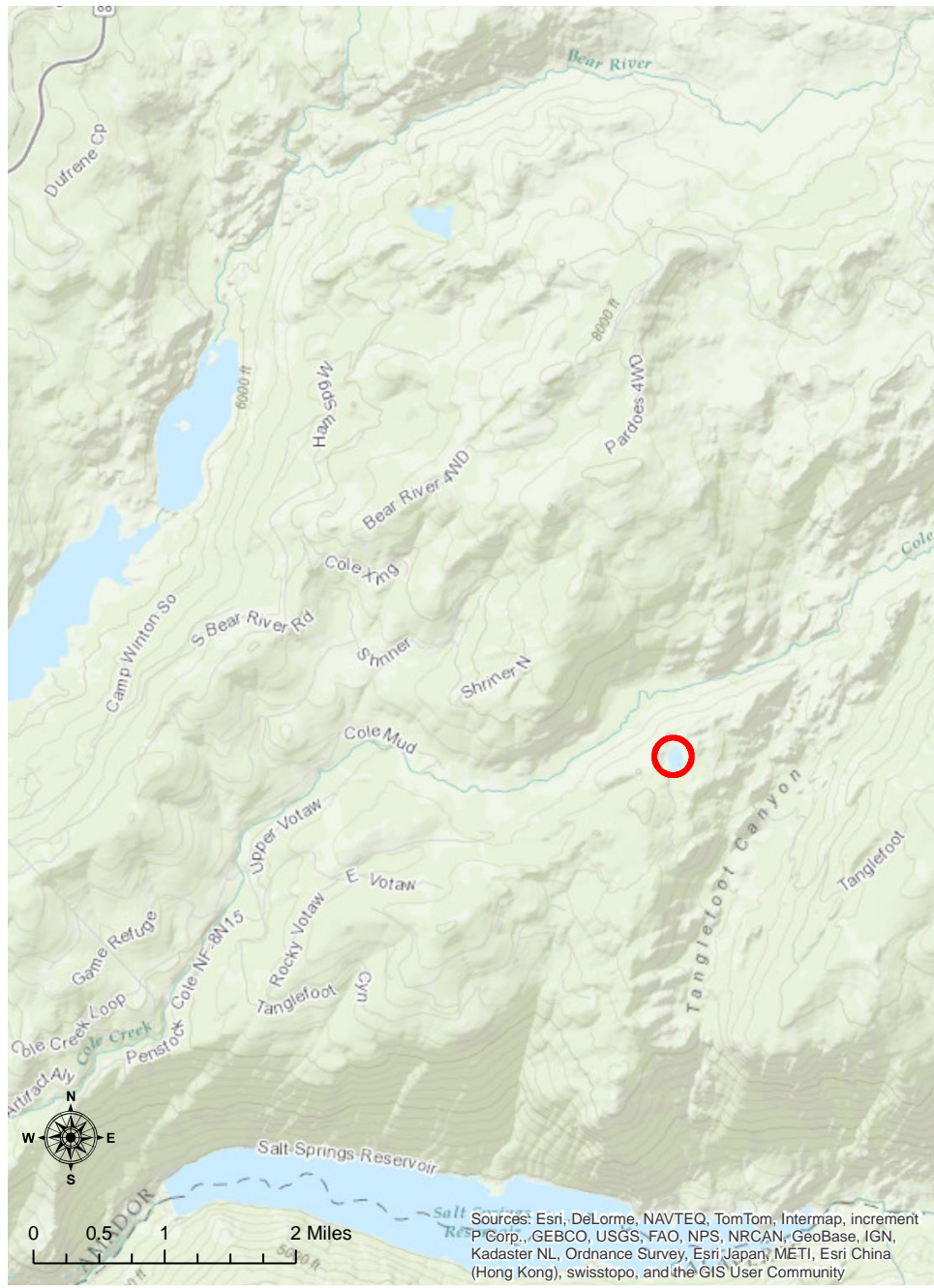


Figure 1. Shriners Lake (Amador County, CA).



Figure 2. Shriner Lake, Amador County, CA (7/11/2017).

Department personnel utilized the Fellers and Freel (1995) visual encounter survey (VES) protocol as modified by the Department to conduct the amphibian survey at Shriner Lake. Six Sierra garter snakes (*Thamnophis couchii*) were seen during the survey.

For the gillnet survey, a 120 foot long variable mesh size monofilament gillnet was set on the southeastern part of the lake's shoreline extending towards the middle of the lake at 11:19 and pulled at 17:30 (Figure 3). No fish were recovered in the net.

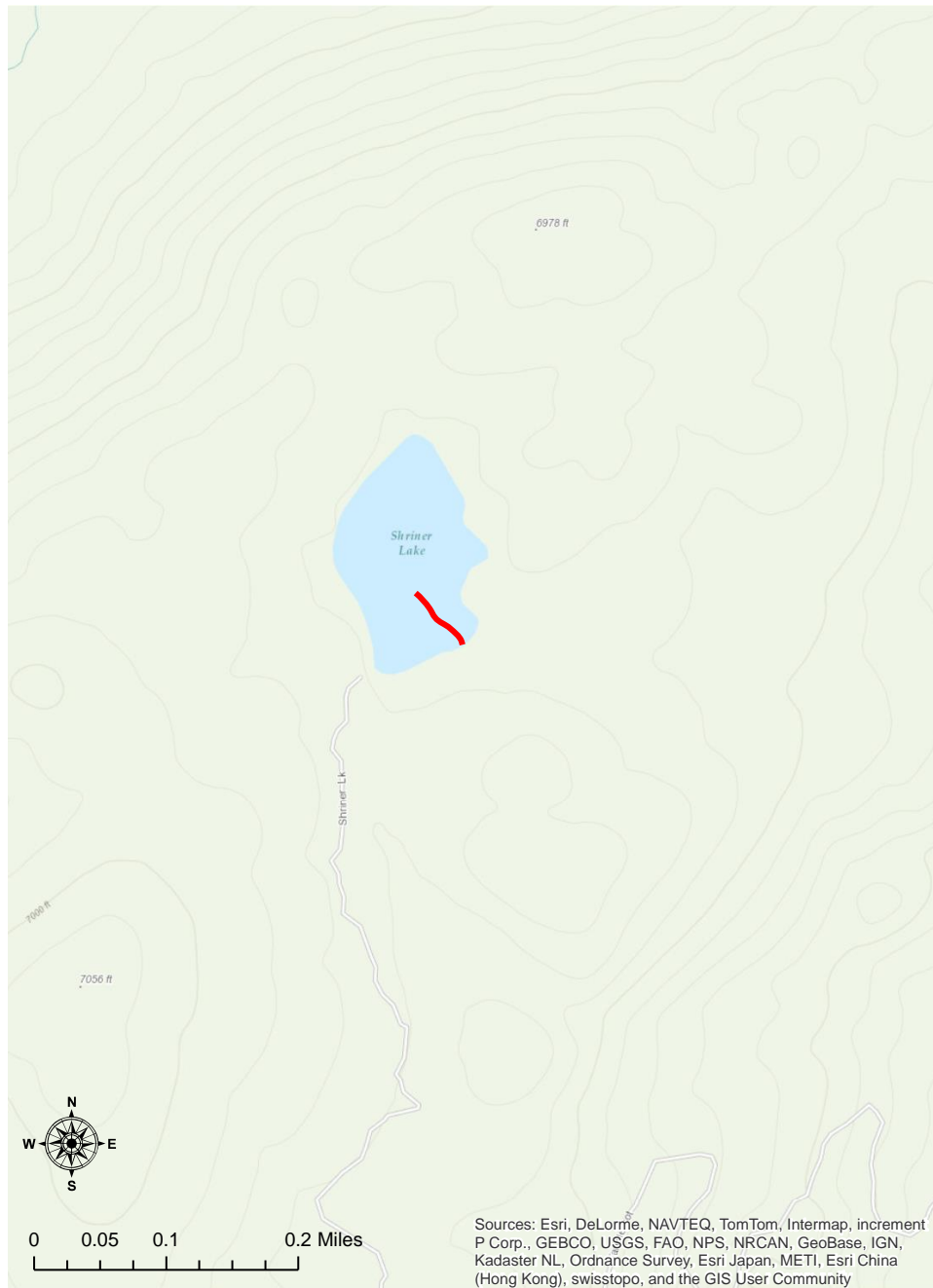


Figure 3. Shriner Lake gill net set (7/11/17).

Based on the results of the evaluations completed, a pre-stocking evaluation will be completed to add Shriner Lake to the Department fish stocking list.

**Literature Cited:**

Fellers, G. M., and K. L. Freel. 1995. A standardized protocol for surveying aquatic amphibians. Technical Report NPS/WRUC/NRTR-95-001. National Biological Service, Cooperative Park Studies Unit, University of California, Davis, CA. 123 pp.

Mussulman, S., Lockhart, M., Thomas, K., Gagnon, K. Aquatic Biodiversity Management Plan For The Upper Mokelumne Management Unit. 2016. Pg. 79. California Fish and Wildlife Region 2 Fish Files. Unpublished.