

# Memorandum

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**Cc:** Region 2 Fish Files

**Subject: Fisheries monitoring in El Dorado County – Lake Winifred (13778).**

On July 8-9, 2014, California Department of Fish and Wildlife (CDFW) conducted fisheries and amphibian monitoring surveys at Lake Winifred (CA Lakes ID 13778, Fig. 1) in the Desolation Wilderness. An overnight gill net was set for 14.75 hours and returned no fish. The majority of the lake is shallow and may not provide overwintering habitat for fingerling trout, therefore CDFW will not resume fish plants at Lake Winifred.



Figure 1: Lake Winifred looking southeast on July 9, 2014 (CDFW).

## INTRODUCTION

Lake Winifred was identified for stocking in the *Aquatic Biodiversity Management Plan for the Desolation Wilderness* (CDFW 2012). No fish plants have occurred since 2002 however, and due to lack of recent fish surveys uncertainty existed about the status of the fishery at Lake Winifred. Lake Winifred is one of seven currently or formerly stocked lakes east of Loon Lake on the northern edge of the Desolation Wilderness with uncertain fish status (Fig. 2). Lake Winifred, Sixteen Shot and Schuler Lakes were surveyed in 2014; Spider, Buck Island, Fawn and Rockbound will be surveyed as funding and workloads permit. As directed by the Hatchery Operations EIS/EIR (Jones and Stokes 2010) CDFW is currently evaluating the location and status of stocked and formerly stocked backcountry fisheries. All data gathered as part of this study is incorporated into the High Mountain

Lakes database and made available to both federal and state agencies. Data from this memorandum will benefit the Department in future efforts for fish stocking and wild trout management in the North Central Region.

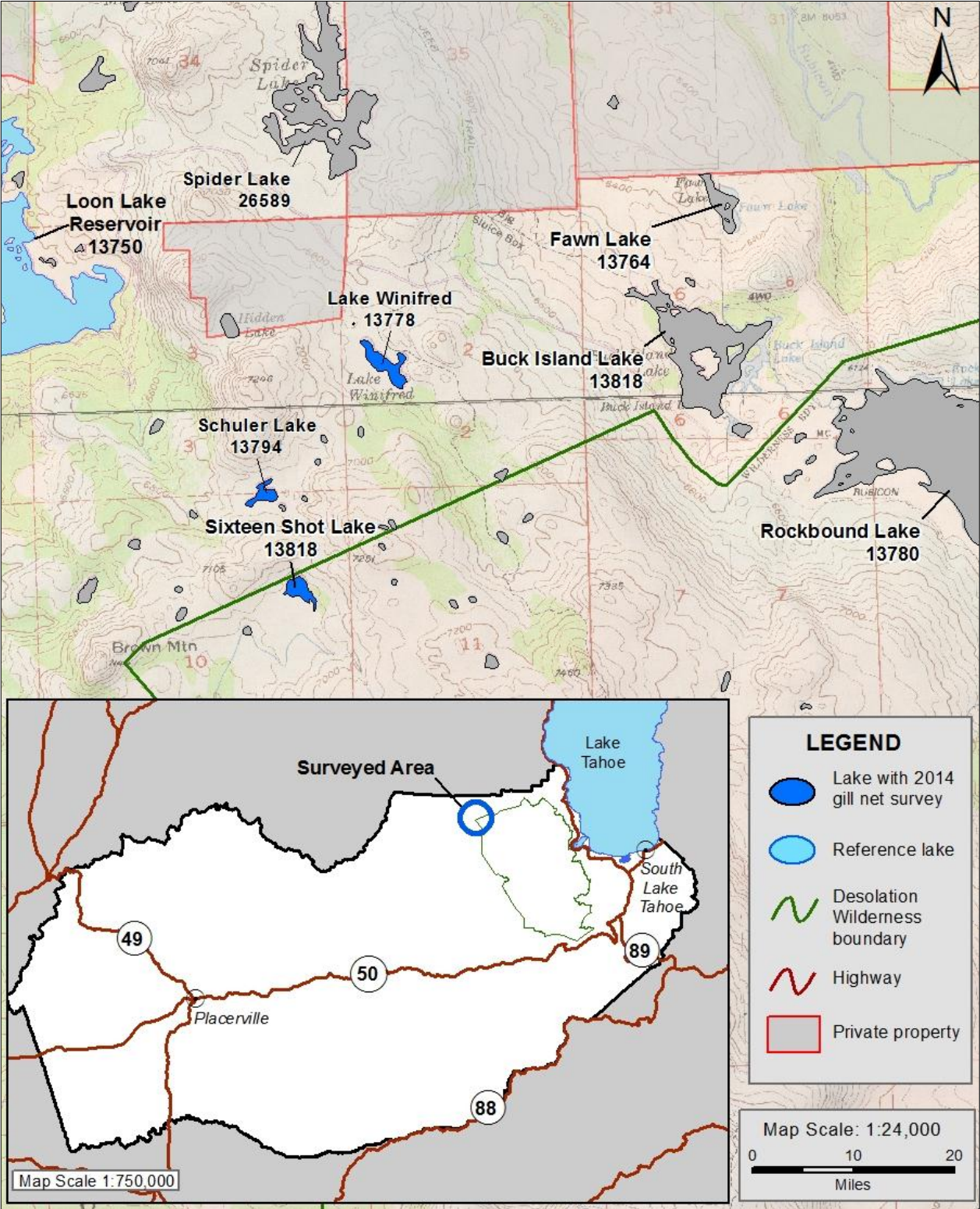


Figure 2: Location of the survey area in northeastern El Dorado County. Dark blue lakes had gill net surveys in 2014.

## ENVIRONMENTAL SETTING

Lake Winifred has a surface area of 2.0 hectares and a maximum recorded depth of 4.8 meters, although the majority of the lake is just a few meters deep (CDFW unpublished data). Aquatic vegetation is present around the edges of the lake and littoral habitat consists of a mixture of silt, woody debris, cobbles, boulders and bedrock. Surveyors observed stream channels entering and leaving the lake but both streams were dry during the survey. Terrestrial habitat consists of mixed conifer forest and meadows at an elevation of approximately 2100 meters above mean sea level. Access to Lake Winifred is via well-maintained dirt roads and at least a five mile hike along a trail. The watershed drains into the Rubicon River and eventually into the Middle Fork American River. Eldorado National Forest manages the land in the watershed.

## RESULTS

On July 8-9, 2014 a CDFW gill net was set for 14.7 hours and returned no fish; due to the gill net survey results, CDFW believes the lake is fishless. Most recently, Lake Winifred was planted with rainbow trout (*Onchorynchus mykiss*) between 1997 and 2002. Brook trout (*Salvelinus fontinalis*) plants occurred from 1934 through 1996. A single large rainbow trout was captured in a 2004 gill net survey, but due to the size and depth of the lake uncertainty remained about the ability of fish to persist there. Due to the shallow character of the lake and its relative remoteness plants will not be resumed at Lake Winifred and CDFW will not actively manage the lake.

Incidentally, CDFW conducted amphibian monitoring surveys at Lake Winifred on July 9, 2014 and observed 2 Pacific tree frog larvae (*Psuedacris regilla*, *Hyla regilla*) and 1 garter snake (*Thamnophis spp*). Water temperature at the surface of the lake was 22° C at the time of survey.

## LITERATURE CITED:

CDFW, 2012. *Aquatic Biodiversity Management Plan for the Desolation Wilderness*.

California Department of Fish and Wildlife; 12/19/2012. Available from:

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=59961>

Jones & Stokes. 2010. Hatchery and Stocking Program Environmental Impact Report/Environmental Impact Statement. State clearinghouse #2008082025.