State of California Department of Fish and Wildlife

Memorandum

Date: 12/23/2015

To: Kevin Thomas

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From: Amber Mouser

Environmental Scientist

Plumas/Sierra County Fisheries- NCR

Cc: Region 2 Fish Files

Subject: Plumas County fisheries monitoring- Saucer Lake (LakelD: 11817)

On September 20, 2015, California Department of Fish and Wildlife (CDFW) personnel conducted fisheries and amphibian monitoring surveys at Saucer Lake (CA Lakes ID 11817 Fig. 1), southwest of Humbug Valley, in Plumas County. One gill net was set for a total of 14 hours. The net captured zero fish and one salamander. Also, one garter snake was observed on the shoreline. Due to the lack of fish captured CDFW believes fish are not present in the lake. However, Saucer Lake should not be returned to the stocking program.



Figure 1. Saucer Lake looking Southeast on September 20, 2015 (CDFW).

INTRODUCTION

Saucer Lake was formerly planted with fingerling trout by CDFW between 1950 and 2000 (Fig. 2). Due to a lack of recent fish surveys uncertainty existed about the status of the fishery at Saucer Lake. 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 northwestern Plumas County.

Name

Name Date Page #

ENVIRONMENTAL SETTING

Saucer Lake sits at an elevation of 6,273 feet above mean sea level and has a surface area of 7.8 acres. It is a natural lake that is set at the top of the watershed. The lake is approximately 14.7 meters deep. The littoral zone habitat consists primarily of silt, aquatic vegetation, some rocks, and log debris. An intermittent stream channel comes off to the north and drains to Soda Creek, which ultimately drains to the Feather River. The terrestrial habitat consists of mixed conifer forest. The lake is located in the Lassen National Forest approximately six air miles northwest of the town of Belden. It can be accessed by graveled road 26N31, off of Humbug Summit, to the Saucer Lake trailhead and hiking in 2.8 miles on 5E05 from the northwest. This trail passes near Frog Lake and crosses the Green Island Lake (Fig.3) outlet prior to ending at Saucer Lake. Saucer Lake can also be accessed by road 26N74 on Soda Ridge, which is approximately a quarter mile south of the lake. There is no known trailhead with this route.



Figure 3- Green Island Lake looking south on September 20, 2015 (CDFW).

HISTORY

Saucer Lake was planted with brook trout (*Salvelinus fontinalis*) between 1950 and 1967, in 1987, 1989, and 1992 through 1993. Rainbow trout (*Onchorynchus mykiss*) were planted from 1968 through 1983, 1991, and 1994 through the year 2000. Stocking was discontinued after the year 2000 as part of a project to assess native amphibian and fish distributions throughout the Sierra Nevada (North Central Region Fish Files). The lake was surveyed by gill net in 2005. No fish were captured or observed during this survey (HML Database).

RESULTS

On September 20, 2015, one standard 36 meter long x 1.8 meter high 6 panel variable mesh gill net was checked after an overnight set for 14 hours. This effort did not capture any fish. However, one juvenile long-toed salamander (*Ambystoma macrodactylum*) (Fig. 4) was captured in the net and one garter snake (*Thamnophis spp.*) was observed on the shoreline during the amphibian survey (Stebbins 2003). In addition, juvenile brook trout were observed in the Green Island Lake outlet. One brook trout was captured by hand; the fish was 80 millimeters in total length and weighed five grams (Fig. 5).

Name Date Page #



Figure 4. Saucer Lake long-toed salamander on September 20, 2015 (CDFW).



Figure 5. Green Island Lake brook trout on September 20, 2015 (CDFW).

Name Date Page #

CONCLUSION

Saucer Lake was formerly planted with brook and rainbow trout by CDFW and had not had a fisheries survey since 2005, thus the status of its fishery was uncertain. Most recently, Saucer Lake was stocked with fingerling rainbow trout through the year 2000. No evidence of reproduction was observed in 2015 when the gill netting effort resulted in no fish. Based on the historic records and the most recent fish survey, Saucer Lake does not contain a self-sustaining fishery. However, nearby Green Island Lake displays evidence of a self-sustaining fishery. Due to the remoteness of Saucer Lake, the proximity to a self-sustaining fishery in Green Island Lake, and the long-toed salamander presence, CDFW recommends leaving Saucer Lake fishless. Green Island Lake and Frog Lake should be evaluated in subsequent years in order to determine future management direction.

LITERATURE CITED

High Mountain Lakes Database (HML Database); CDFW North Central Region.

North Central Region Fish Files. Saucer Lake, Plumas County. California Department of Fish and Wildlife.

Stebbins, Robert C. *A Field Guide to Western Reptiles and Amphibians. 3rd Edition*. Houghton Mifflin Company, 2003. pp. 156-157 & 446-448.