State of California Department of Fish and Wildlife

Memorandum

Date: 8/7/2015

To: Kevin Thomas

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North Central Region

From: Sarah Mussulman

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Cc: Region 2 Fish Files

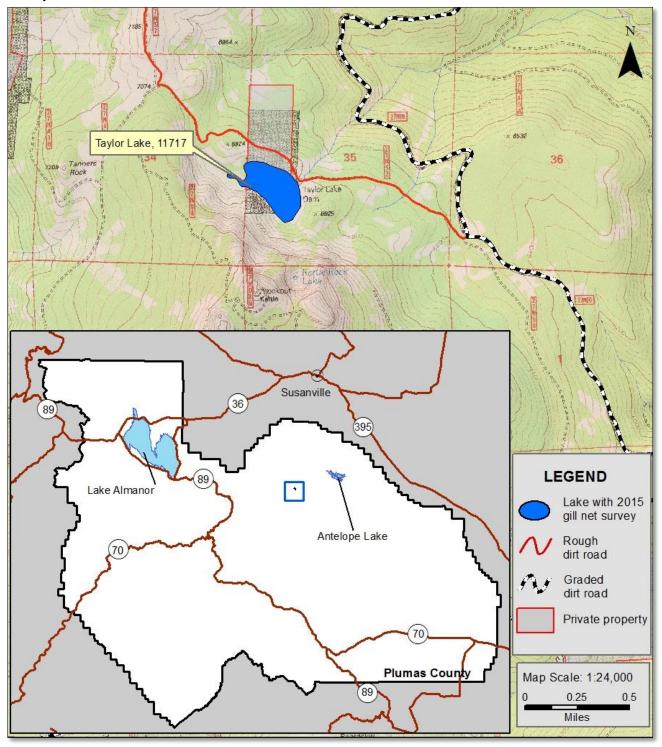
Subject: Fisheries monitoring in Plumas County – Taylor Lake (11717).

On May 19-20, 2015, California Department of Fish and Wildlife (CDFW) conducted fisheries monitoring surveys at Taylor Lake (CA Lakes ID 11717) in northern Plumas County. Two overnight gill nets were set for 13 hours each and collectively returned 46 brook trout and 794 golden shiners. Due to the numbers of brook trout captured CDFW will not resume plants at the lake and will manage Taylor Lake as a self-sustaining brook trout fishery.

INTRODUCTION

Taylor Lake is a relatively large isolated lake, formerly planted with catchable and fingerling trout by CDFW, in a small watershed in northeastern Plumas County (Fig. 1). Due to lack of recent fish surveys uncertainty existed about the status of the fishery at Taylor 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 1: Location of the survey area in northeastern Plumas County. Taylor Lake was surveyed on May 19-20, 2015.



ENVIRONMENTAL SETTING

Taylor Lake has a surface area of 12.82 hectares and a maximum recorded depth of 5 meters. Surveyors observed a tributary flowing out of the lake and an earthen dam runs along the northern edge of the lake near the outlet stream. A small inlet appears to flow into the lake from the rocky cliffs on the south shore; a second inlet flows into the northwest corner of the lake through a small meadow. Terrestrial habitat consists of mixed conifer forest, meadows and rocky cliffs at an elevation of approximately 2070 meters above mean sea level. Access to Taylor Lake is via well-maintained dirt roads and a short drive on a rough dirt road. A number of campsites and fire rings are present along the north shore. The watershed drains into Hungry Creek and eventually into Indian Creek. Plumas National Forest manages the land in the watershed.

HISTORY

CDFW conducted fishery surveys in this area between 1971 and 1973. Two reports summarize survey results and provide justifications for changes in fish planting (Flint 1972; Flint 1974). Both the 1971 and 1974 surveys found large healthy brook trout as well as golden shiners. Comments in 1974 mention a rotenone treatment took place on September 18 (1973) – the day after the gill net survey – but do not state the purpose of the treatment (Flint).

RESULTS

On May 19-20th two variable mesh sinking gill nets were set for 13 hours each. One net was set near the outlet and one near the meadow inlet. Collectively 46 brook trout (Fig. 2) and 794 golden shiners were captured. Most recently, Taylor Lake was planted with brook trout (*Salvelinus fontinalis*) between 1953 and 2000. Rainbow trout (*Onchorynchus mykiss*) plants occurred in 1950-51 and 1968 through 1975. A single large brook trout was captured in an August 2, 2004 gill net survey in which one gill net was set for 24 hours. Due to the size and depth of the lake uncertainty remained about the status of the fishery. The 2015 survey results suggest a healthy population of brook trout is present at Taylor Lake. For these reasons plants will not be resumed at Taylor Lake and CDFW will manage the lake as a self-sustaining brook trout fishery.

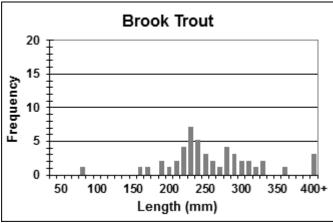


Figure 2: Histogram of brook trout lengths and frequencies from May 19-20th, 2015 gill net survey which suggests fish are naturally reproducing in the lake.

LITERATURE CITED:

- Flint, R. A. Taylor Lake, 1971 Management Summary. California Department of Fish & Game; 3/9/1972. Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=105275
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- Jones & Stokes. 2010. Hatchery and Stocking Program Environmental Impact Report/Environmental Impact Statement. State clearinghouse #2008082025.