Memorandum

Date: 10/27/2015

- To: Kevin Thomas Senior Environmental Scientist (Supervisor) North Central Region
- From: Sarah Mussulman Environmental Scientist North Central Region
- Cc: Region 2 Fish Files

Subject: Fisheries monitoring in Plumas County – Chips Lake (11919) and unnamed lake (11899).

On June 8, 2013, California Department of Fish and Wildlife (CDFW) conducted fisheries monitoring surveys at Chips Lake (Figure 1) and a nearby unnamed lake (CA Lakes ID 11899) (Figure 2) in Plumas County. Brook trout (*Salvelinus fontinalis*) and low numbers of brown trout (*Salmo trutta*) were captured in Chips Lake, along with large numbers of golden shiners (*Notemigonus crysoleucas*); and a single small brown trout was captured in lake 11899. Due to the persistence of two trout species in the watershed CDFW will not resume fish plants at Chips or 11899 and will manage both lakes as self-sustaining trout fisheries.

Figure 1: Chips Lake from the southwest on 6/8/2015 (CDFW).



Figure 2: Unnamed lake (11899) from the southwest on 6/8/2015. Chips Lake is just visible in the foreground (CDFW).



INTRODUCTION

The High Lakes are a group of lakes in western Plumas County on a bench above the North Fork Feather River (Figure 3). The lakes are approximately 6,000' in elevation above mean sea level and can be accessed via a rugged OHV trail or steep hiking trails from the Feather River. Fish planting was halted in the area in 2000 and plants have not been resumed. The following lakes have not had a fish survey since fish plants were halted and the status of their fisheries was unknown: Saddle Lake (CA Lakes ID 11986), Campbell Lake (CA Lakes ID 11961), Long Lake (CA Lakes ID 11971), Morris Lake (CA Lakes ID 11961), Murphy Lake (CA Lakes ID 11980), Chips Lake (CA Lakes ID 11919) and Unnamed Lake (11899). 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. Fishery monitoring surveys were conducted at each lake in 2013 in order to determine fish population status and future management direction for each lake.

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. In order to fully assess the lakes for stocking potential, amphibian surveys were simultaneously conducted. Chips Lake and Unnamed Lake 11899 are discussed in this memorandum.

ENVIRONMENTAL SETTING

Chips Lake is accessible via either a long drive on a rugged OHV trail and a short crosscountry hike or via a long steep hike from the Feather River. A steep and bushy unofficial trail accesses Chips Lake from a small parking area at the end of an OHV road. Chips Lake has a 2.37 hectare surface area and is 11.7 meters deep. Unnamed Lake 11899 is located 200 meters downstream of Chips Lake and a short section of stream flows from Chips Lake down into 11899. Lake 11899 has a 1.1 hectare surface area and is 3 meters deep. Shoreline habitat at both lakes consists of dense willows, small meadows and mixed conifer forest, while littoral substrate is primarily silt with small sections of cobbles. This area burned in the Storrie Fire of 2000 and part of each shoreline consists of dead blackened trees. Lassen National Forest manages the land.



Figure 3: Location of Chips, Long, Campbell, Saddle, Grassy and Morris Lakes in Plumas County, Lassen National Forest. High Lakes OHV trail is also displayed.

RESULTS AND DISCUSSION

On June 8-9, 2013 a standard 36 meter long x 1.8 meter high 6-panel variable mesh gill net was set overnight in Chips Lake for 11.8 hours and returned 19 brook trout, 4 brown trout and 22 golden shiners. Historically Chips Lake was planted with brook trout from 1955 through 1992. A single rainbow trout (*Oncorhynchus mykiss*) plant occurred in 1991. A CDFW visual fish survey in 2001 observed fish but a gill net survey was necessary to determine species composition and discover whether trout are persisting in the absence of plants.

On June 8, 2013 a standard 36 meter long x 1.8 meter high 6-panel variable mesh gill net was set in Unnamed Lake 11899 for 0.75 hours and returned 1 brown trout and 138 golden shiners. Historically 11899 was planted with brook trout from 1955 through 1992. A single rainbow trout (*Oncorhynchus mykiss*) plant occurred in 1991. A CDFW visual fish survey in 2001 observed fish but a gill net survey was necessary to determine species composition and discover whether trout are persisting in the absence of plants.

Based on 2013 gill net survey results both brook and brown trout are likely to persist in the watershed. Due to this and the difficulty of accessing this area CDFW will not resume plants at Chips or 11899 and will manage the area as a self-sustaining trout fishery.

LITERATURE CITED

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