Memorandum

Date: 11/10/2015

To: Kevin Thomas Senior Environmental Scientist (Supervisor) North Central Region

From: Sarah Mussulman Environmental Scientist North Central Region California Department of Fish and Wildlife

Cc: Region 2 Fish Files

Subject: Fish monitoring in Plumas County – Morris Lake (11914).

On October 3, 2013, California Department of Fish and Wildlife (CDFW) personnel conducted fisheries monitoring surveys at Morris Lake in Plumas County. Seven brown trout (*Salmo trutta*) were captured, along with brown bullhead (*Ictalurus nebulosus*) and large numbers of golden shiners (*Notemigonus crysoleucas*). Due to the persistence of brown trout in the lake CDFW will not resume fish plants at the lake and will manage Morris Lake as a self-sustaining brown trout fishery.

INTRODUCTION

The High Lakes are a group of lakes in western Plumas County on a bench above the North Fork Feather River (Figure 1). The lakes are approximately 6,000 feet 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 11914), Murphy Lake (CA Lakes ID 11980), and Chips Lake (CA Lakes ID 11919). 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. Morris Lake is discussed in this memorandum.



Figure 1: Location of Long, Campbell, Saddle, Grassy, Chips and Morris Lakes in Plumas County, Lassen National Forest. The High Lakes OHV trail is also displayed.

ENVIRONMENTAL SETTING

A rugged OHV trail provides access to multiple sides of Morris Lake. Morris Lake has a 17.7 hectare surface area and a maximum recorded depth of 8.8 meters. Shoreline habitat consists of a combination of mixed conifer forest, boulders, bedrock and small meadows. Littoral habitat is primarily cobbles and small boulders. Lassen National Forest manages the land.

RESULTS AND DISCUSSION

On October 2-3, 2013 two standard 36 meter long x 1.8 meter high 6-panel variable mesh gill nets were set overnight in Morris Lake for 14.5 hours each and captured 7 brown trout, 22 brown bullhead catfish and 160 golden shiners. Most recently, Morris Lake was planted with brown trout from 1996 through 2000. Rainbow trout were stocked between 1963 and 1995

and brook trout were stocked from 1950 through 1959. A 2003 CDFW gill net survey captured 2 brown trout, 2 brown bullhead and golden shiners; it was unclear whether brown trout would persist in the fishery. Based on 2013 data it appears that brown trout are likely to persist in the fishery.

Morris Lake is road accessible. Both brown trout and brown bullhead are likely to persist in the absence of stocking, therefore CDFW will not resume fish plants at the lake and will manage it as a self-sustaining brown trout fishery.

LITERATURE CITED

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