State of California Department of Fish and Wildlife

Memorandum

Date: 10/21/2019

To: Sarah Mussulman

Senior Fisheries Supervisor, North Central Region

Department of Fish and Wildlife

From: Ben Ewing

District Fishery Biologist (Alpine, Amador, Calaveras, and Lake Counties)

Department of Fish and Wildlife

Subject: Kilpepper Creek Fish Survey

On June 12, 2019, three California Department of Fish and Wildlife (Department) employees and one public volunteer conducted a backpack electrofishing survey on Kilpepper Creek (Lake County). Kilpepper Creek is one of the tributaries to Indian Valley Reservoir (IVR). The purpose of the survey was to discover if there were any Rainbow Trout (*Oncorhynchus mykiss*) (RT) in IVR that spawn in Kilpepper Creek. Information collected would be used to inform the Department and public of the wild RT component in IVR. A single electrofishing pass was made on an approximately 527-foot stretch of water beginning at 39.16746 N, 122.52658 W at 11:29 and ending at 39.167816 N, 122.52514 W at 12:48. The location of the survey was at 1,500 feet above mean sea level (Figure 1).

The shoreline of Kilpepper Creek, in the survey area, was a mix of willows, rocks, and montane hardwood-conifers (Figure 2). The creek bottom appears mostly rock. The estimated depth of the creek where the survey was conducted ranged from approximately one foot to two and a half feet. The creek receives water from rain runoff from the local area where it then flows into IVR. Rainbow Trout (*Oncorhynchus mykiss*), California Roach (*Lavinia symmetricus*), Riffle Sculpin (*Cottus gulosus*), and Sacramento Pikeminnow (*Ptychocheilus grandis*) have been documented in Kilpepper Creek (Grondalski 1977).

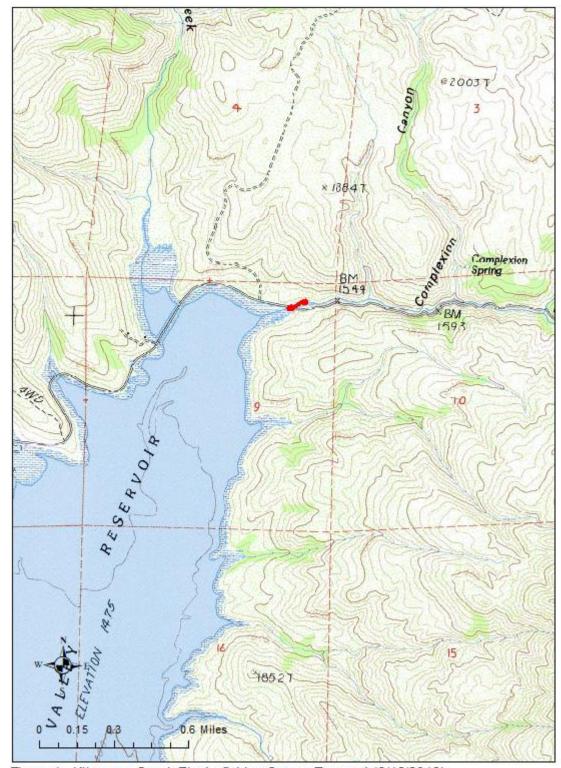


Figure 1. Kilpepper Creek Electrofishing Survey Transect (6/12/2019).



Figure 2. Kilpepper Creek (A.Chang, 6/12/2019).

Table 1 presents the number, mean length, and length ranges for species collected from the survey. The survey yielded a combined 12 fish and one frog with four species collected. California Roach (Figure 3) made up 61.5% of the total catch and was the greatest number of a given species collected. Speckled Dace (*Rhinichthys osculus*) (Figure 4), Largemouth Bass (*Micropterus salmoides*) (Figure 5), and Foothill Yellow-Legged Frog (*Rana boylii*) (Figure 6) composed 23.1% and 7.7% of the remaining catch. The frog appeared to be unharmed and was immediately released.

Table 1. Species composition from Kilpepper Creek, June 12, 2019. Mean Total Length (TL) was measured in millimeters (mm).

Species	Number	Percent	Total Length	Length Ranges
California Roach	8	61.5%	63.7	58 - 70
Speckled Dace	3	23.1%	53.7	41 - 75
Largemouth Bass	1	7.7%	365.0	NA
Foothill Yellow-Legged Frog	1	7.7%	NA	NA
Water temperature 70°F	13			



Figure 3. California Roach collected from Kilpepper Creek (A. Chang, 6/12/19).



Figure 4. Speckled Dace collected from Kilpepper Creek (A. Chang, 6/12/19).



Figure 5. Largemouth Bass collected from Kilpepper Creek (A. Chang, 6/12/19).



Figure 6. Foothill Yellow-Legged Frog collected from Kilpepper Creek (A. Chang, 6/12/19).

A water temperature of 70° F during the survey likely made the chances of collecting a RT very low. The Department will attempt to perform another spring survey when water temperatures are lower and more conducive to Rainbow Trout spawning.

Literature Cited

Grondalski, J. W. Chemical treatment. California Department of Fish and Game; 3/8/1977. Available from: http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=66710