

## Memorandum

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From: Ben Ewing  
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### **Subject: Coldstream Creek Pond Gillnet Survey April 18 and 19, 2014**

Coldstream Creek Pond (Placer County) is located at 6118 feet above mean sea level in the Tahoe National Forest south of Interstate 80 and southwest of Truckee, CA (Figure 1). Coldstream Creek Pond's main source of water is Cold Creek which is part of the Truckee River drainage. This tributary provides the primary spawning habitat for salmonid species in the lake.

From 2007 to 2014, The California Department of Fish and Wildlife (Department) has stocked Coldstream Creek Pond with Lahontan cutthroat trout (*Oncorhynchus clarki*) to provide recreational angling opportunities and supplement any natural production. Currently, the Department employs a put-and-grow Lahontan cutthroat trout fishery.

On April 18 and 19, scientific aides Nick Hood and Kassie Hickey conducted a first phase general fish survey via gillnet. The purpose of this first phase sampling effort is to gather basic fisheries information at low cost, an effort which will guide fisheries managers in making management decisions or guide further research and assessment efforts if necessary. Two variable mesh gillnets were set on the east and northeast ends of the lake in order to conduct a general fish survey (Figure 2). The net sets were perpendicular to the shoreline for a distance of approximately 100 feet. Set time for gillnet #1 was 15:22 on April 18, 2014 and pull time was 12:00 on April 19, 2014. Set time for gillnet #2 was 15:44 on April 18, 2014 and pull time was 11:00 on April 19, 2014. Fish captured were identified to species and measured to the nearest millimeter total length.

Three species of fish, Lahontan cutthroat trout, Lahontan redbreast (*Richardsonius egregius*), and sucker (*Catostomus*) genus, were collected during the survey.

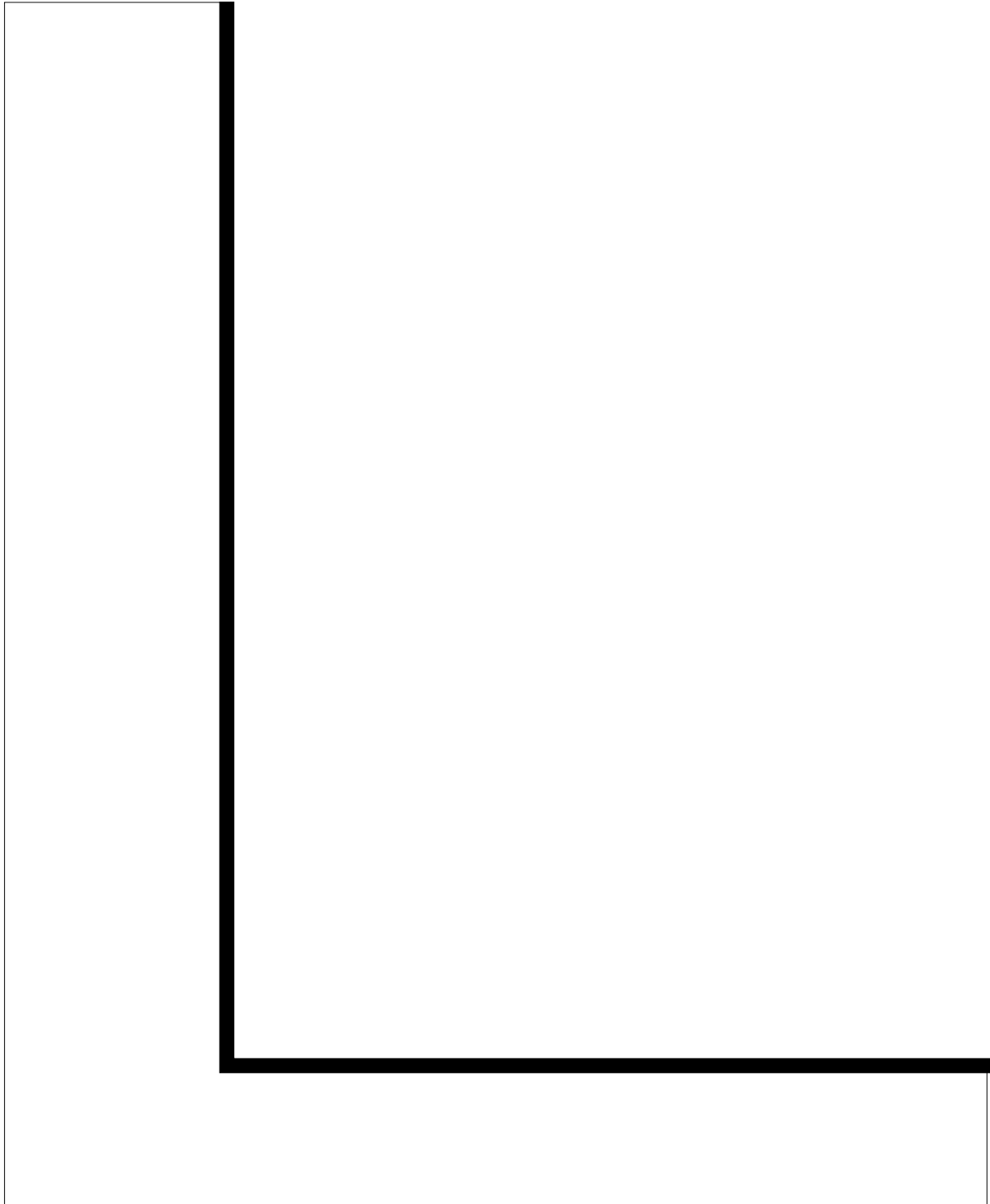
Lahontan redbreast collected and measured ranged from 80 mm (3.1 in.) to 108 mm (4.3 in.) with the 90 mm length class having the greatest number of individuals (Figure 3). These fish are likely four years of age and/or greater (Moyle 2002). Average size of the Lahontan redbreasts was 91.3 mm (3.6 in.) with a total of 84 collected in both gillnets.

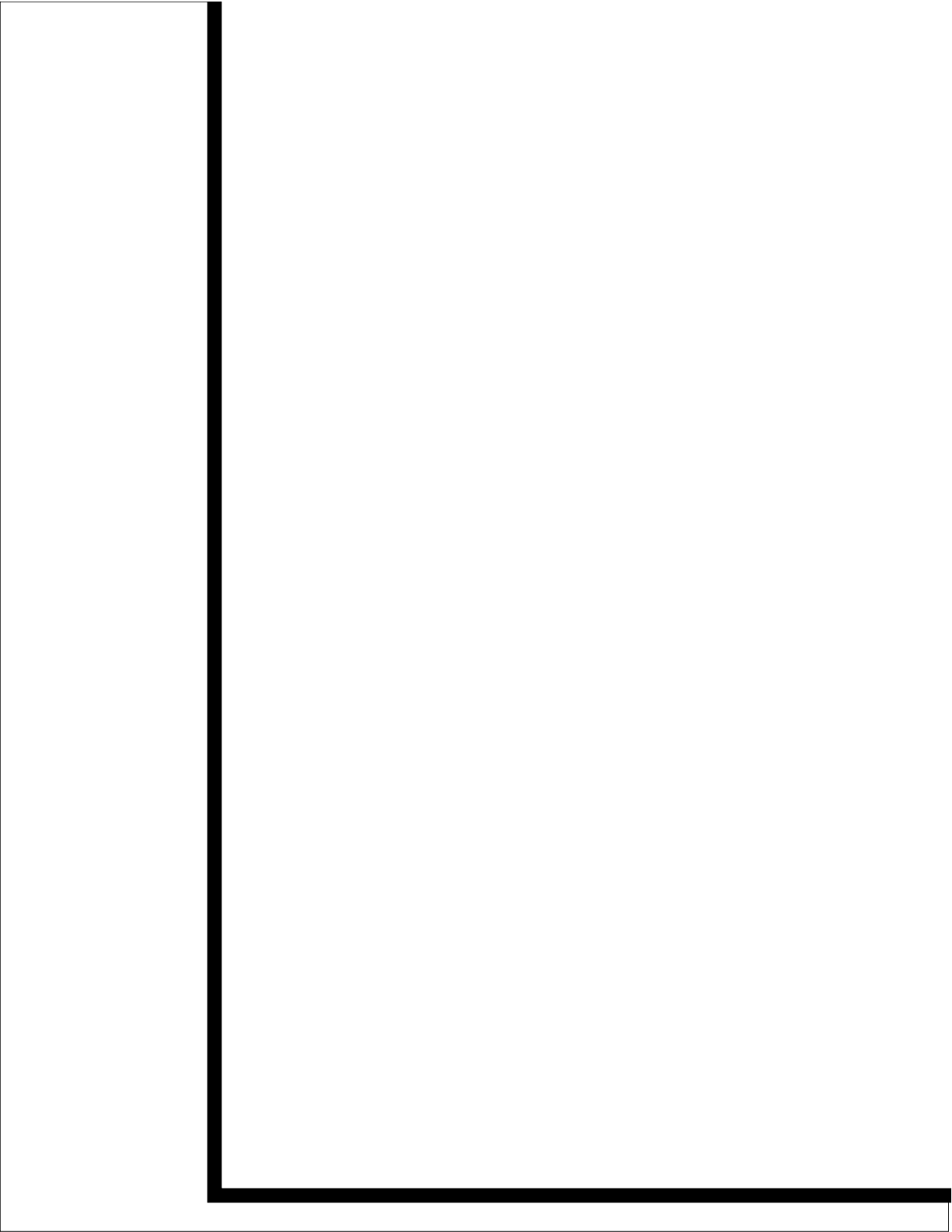
Suckers collected and measured ranged from 94 mm (3.7 in.) to 326 mm (12.8 in.) with the 150 mm length class having the greatest number of individuals (Figure 4). Average size of the suckers was 183.3 mm (7.2 in.) with a total of 74 collected in both gillnets.

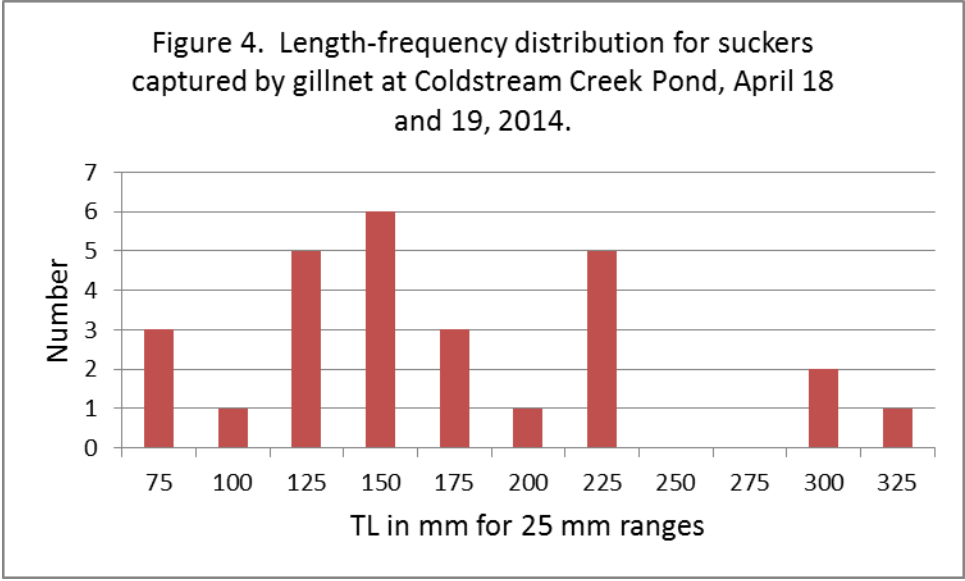
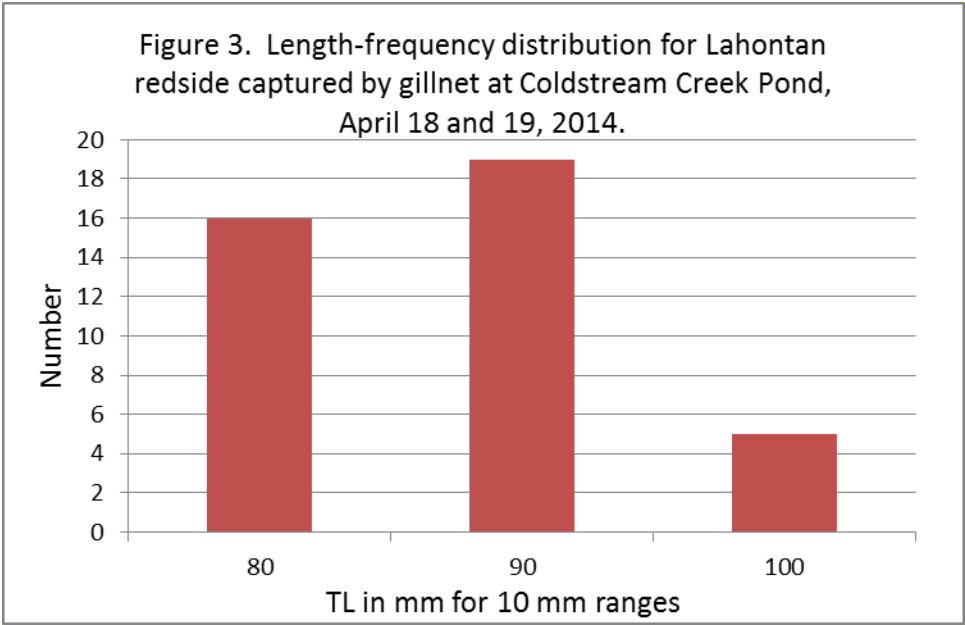
The ten Lahontan cutthroat trout collected ranged from 95 mm (3.7 in.) to 541 mm (21.3 in.) with an average size of 323.2 mm (12.7 in.). The low number of Lahontan cutthroat trout captured prevents robust statistical analysis. Although very few Lahontan cutthroat trout were collected, the large sizes seen indicates that the trout are successfully growing to greater length classes.

Overall, the results of this general fish survey do not give the Department a lot of information

on the salmonid fisheries due to the number of salmonids collected. From the large Lahontan cutthroat collected, it is likely that they are feeding on the large Lahontan redbside to obtain the greater sizes. Conducting this survey in the early spring with more gillnets and/or fall when salmonids of all species tend to be up in shallower water could help collect more fish if this survey is repeated.







References

Moyle, P. 2002. Inland Fishes of California. University of California Press, Berkeley and Los Angeles, California. Pg. 135.