

## Memorandum

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Department of Fish and Wildlife

From: Ben Ewing  
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### Subject: Faucherie Lake Gillnet Survey May 7 and 8, 2014

Faucherie Lake (Nevada County) is a 3980 acre-foot, 145 surface acre lake located at 6132 above mean sea level in the Tahoe National Forest north of Interstate 80 and northwest of Truckee, CA (Figure 1). Faucherie Lake's main source of water is Canyon Creek which is part of the Yuba River drainage. This tributary provides the primary spawning habitat for salmonid species in the lake.

From 1951 to 2014, The California Department of Fish and Wildlife (Department) has stocked Faucherie Lake with rainbow trout (*Oncorhynchus mykiss*) and brown trout (*Salmo trutta*) to provide recreational angling opportunities and supplement natural production. Currently, the Department employs a put-and-grow rainbow trout fishery.

On May 7 and 8, fishery biologist Ken Kundargi and scientific aides Mike Mamola, 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 in the north end of the lake in order to conduct a general fish survey (Figure 2). The net sets began at the shoreline at the same location and veered away from each other in a v pattern. Each net went approximately 100 feet from the shore. Set time for the gillnets was 16:45 on May 7, 2014 and pull time was 13:45 on May 8, 2014. Water temperature was 11°C at 16:20 on May 7. Fish captured were identified to species and measured to the nearest millimeter total length.

Three species of fish, brown trout, Lahontan redbside (*Richardsonius egregious*), and rainbow trout were collected during the survey.

Lahontan redbside collected and measured ranged from 86 mm (3.4 in.) to 128 mm (5.0 in.) with the 100 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 redbside was 104.2 mm (4.1 in.).

The six rainbow trout collected measured 247 mm (9.7 in.), 331 mm (13.0 in.), 300 mm (11.8 in.), 236 mm (9.3 in.), 90 mm (3.5 in.), and 339 mm (13.3 in.) with an average size of 257.2 mm (10.1 in.). The low number of rainbow trout captured prevents robust statistical analysis.

The five brown trout collected measured 285 mm (11.2 in.), 260 mm (10.2 in.), 321 mm (12.6 in.), 411 mm (16.2 in.) and 127 mm (5.0 in.) with an average size of 280.8 mm (11.1 in.). The low number of brown trout captured prevents robust statistical analysis.

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



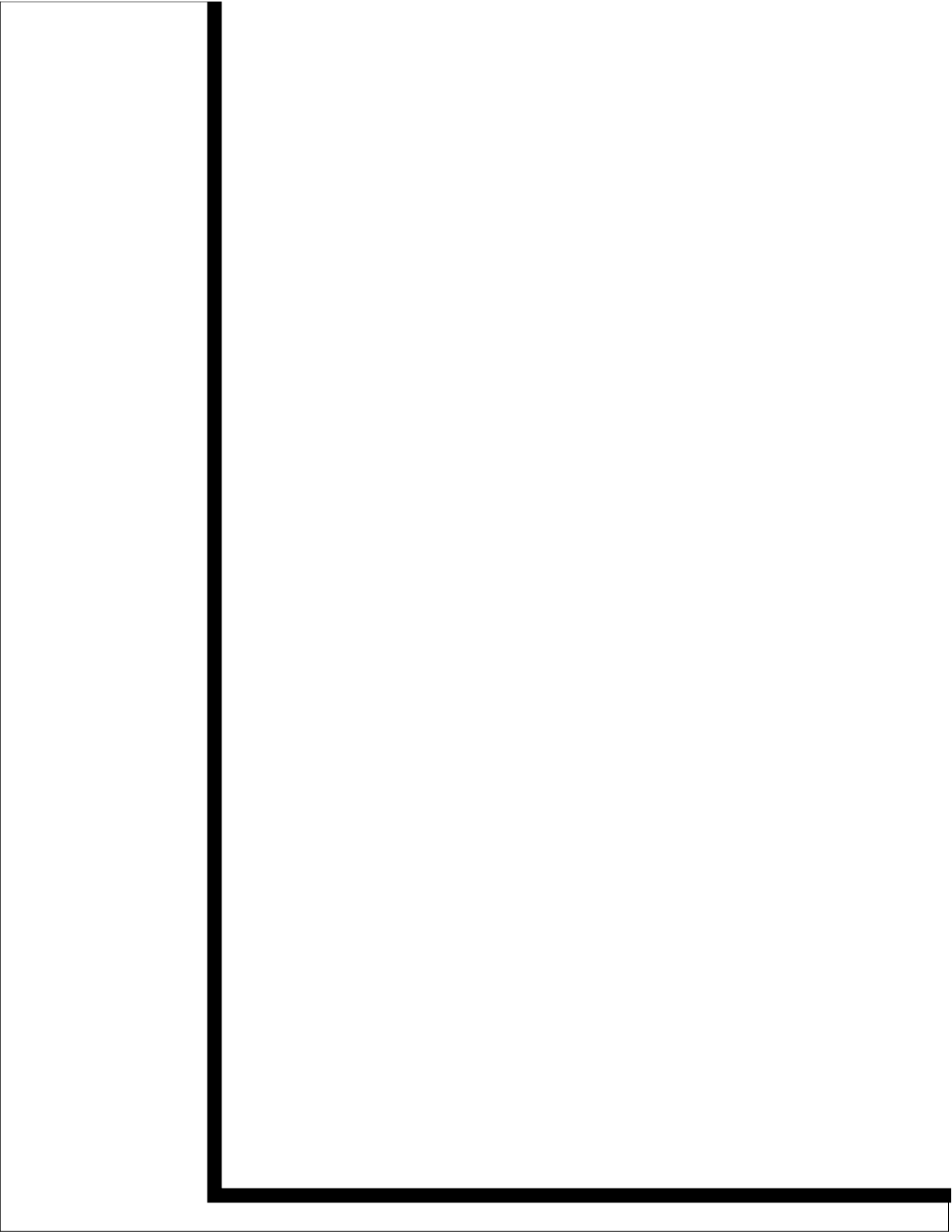
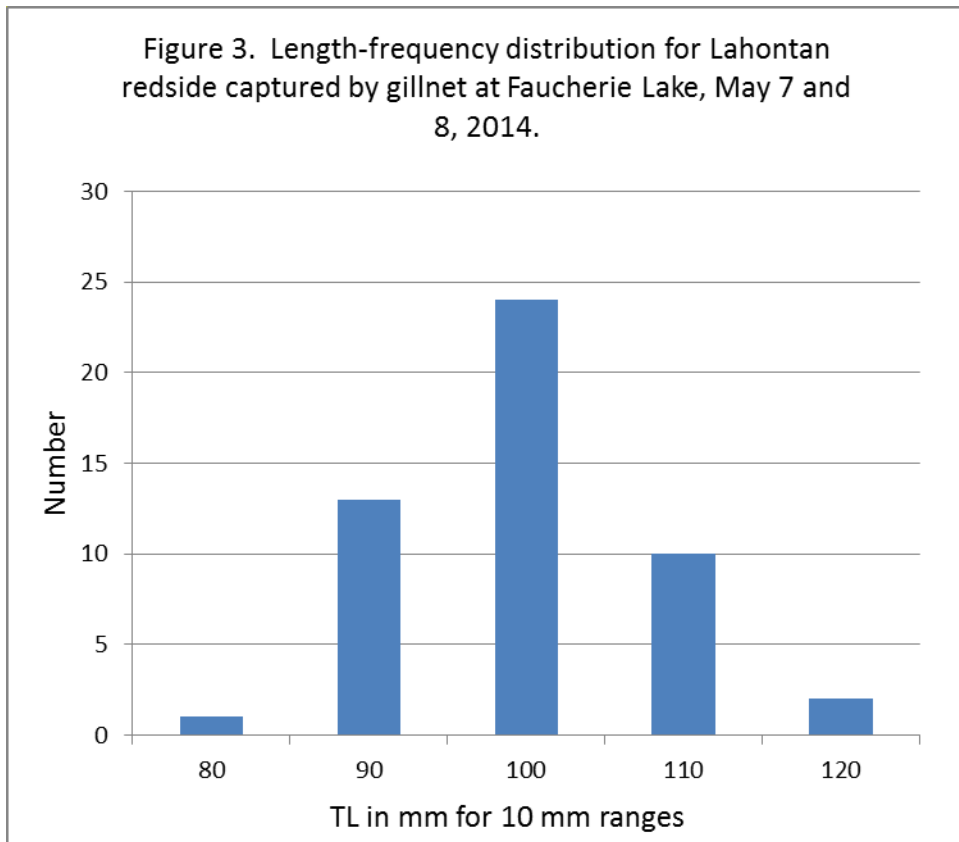


Figure 3. Length-frequency distribution for Lahontan redbreast captured by gillnet at Faucherie Lake, May 7 and 8, 2014.



#### References

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