

**State of California
Department of Fish and Wildlife**

M e m o r a n d u m

Date: June 23, 2014

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Subject: Milton Lake Gillnet Survey May 28-29, 2014

Milton Reservoir, located in Nevada County, is a twenty seven surface acre reservoir that impounds the Middle Fork Yuba River at an elevation of 5694 feet (Figure 1). Milton is easily accessed from the Henness Pass Road via Highway 89 north of the town of Truckee. Milton supports a thriving fishery for wild brown trout. As such it is being considered for inclusion in the Department of Fish and Wildlife's (Department) Heritage and Wild Trout Program.

The Department stocked rainbow trout (*Oncorhynchus mykiss*), Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*), and brown trout (*Salmo trutta*) into Milton Reservoir with brown trout last stocked in 1993 (Table 1). Angler survey box information suggests that rainbow trout and brown trout are self-sustaining and caught by anglers.

On May 7th fisheries biologist Kenneth N. Kundargi and scientific aides Mike Mamola and Nick Hood conducted a general fish survey via gillnet. The purpose of this sampling effort was to gather basic fisheries information at low cost, an effort which will guide fisheries managers in making the management decision to propose this water body for inclusion in the Heritage and Wild Trout Program. One variable mesh gillnet was set on the south side of the lake 19:00 hours on May 28, 2014 at and pulled at 17:00 hours on May 29, 2014 (Figure 1) This net set perpendicular to the shoreline for a distance of approximately 100 feet. Water temperature was 9 degrees Celsius. Fish captured were identified to species and measured to the nearest millimeter total length.

Seventeen brown trout were captured with a mean size of 276 mm \pm 41 mm total length at the 95% confidence with a range of 180 to 524 mm (Table 2, Figure 2). Because brown trout were last stocked in 1993 it is unlikely that any brown trout

captured were from this stocking allocation. Rainbow trout were not captured despite the presence of this species being reported in angler survey box data.

Overall, the results of this general fisheries survey indicate that the fishery is viable in the context of wild trout recreational fishing. Milton Lake is managed by CDFW as a "Special Fishing Regulation" fishery. Currently, the lake is opened to angling from the last Saturday in April through November 15. The daily bag limit is two trout with a 12 inch maximum size limit. Only artificial lure with barbless hook may be used to angle. Milton Lake is further managed as a "Trophy Trout Water" which is defined as "Waters that have trout that exceed 18 inches or greater and that are caught by anglers based on current survey information."

Creel survey data indicate that from 2003 to 2012 (excluding 2004 and 2005) indicate that 236 hours were expended by 54 anglers who caught 230 fish for a catch per unit effort of 0.98 fish per hour. Four percent of the fish captured were equal to or greater than 18 inches. Based on this creel survey data and the results of gillnet surveys it is recommended that Milton Lake should be submitted to the California Fish and Game Commission for consideration for inclusion in the Department's Heritage and Wild Trout Program.

Table 1 Milton Lake Stocking History

Species	Year	Fish Size	Number
Rainbow trout	1981	sub-catchable	sub-catchable
Lahontan cutthroat trout	1981	fingerling	fingerling
Lahontan cutthroat trout	1982	brood stock	brood stock
Brown trout	1982	catchable	catchable
Brown trout	1993	sub-catchable	sub-catchable

Table 2 Descriptive statistics for the brown trout total lengths (mm) Milton Reservoir gillnetting.

Statistic	Value
Mean	276.2353
Standard Error	19.11046
Median	265
Mode	180
Standard Deviation	78.79446
Sample Variance	6208.566
Kurtosis	5.818621
Skewness	1.927613
Range	344
Minimum	180
Maximum	524
Sum	4696
Count	17
Largest(1)	524
Smallest(1)	180
Confidence Level (95.0%)	40.51237

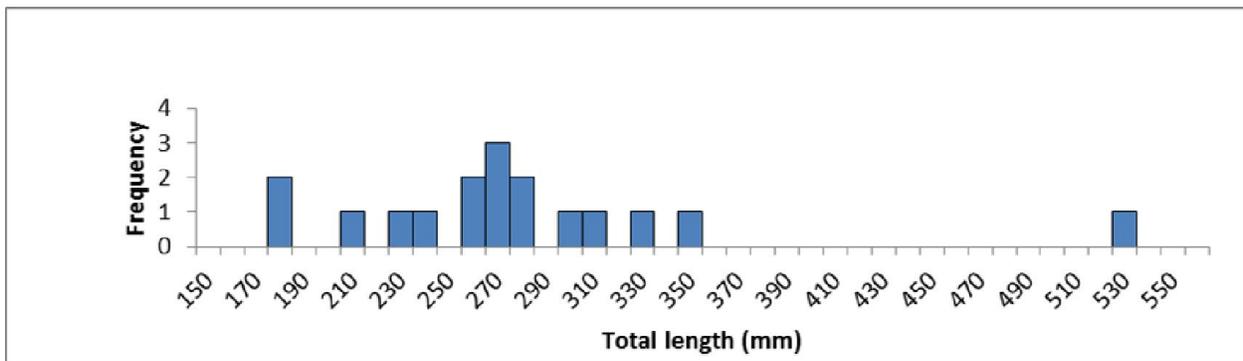


Figure 2 Length frequency brown trout Milton Lake gillnet survey May 28, 2014