

State of California
California Department of Fish and Wildlife
North Central Region

Caples Lake, Alpine County

2005 Creel Census
And
Catchable Trout Evaluation Study



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Introduction

Caples Lake (Caples) is an El Dorado Irrigation District (EID) managed reservoir in Alpine County. At full capacity Caples covers 620 surface acres and is situated at approximately 7,820 feet above mean sea level. Caples is located off Highway 88, roughly one mile west of the Carson Pass and about 17 miles south of Lake Tahoe (Figure 1). Woods Creek and Emigrant Creek are the two main sources of inflow for the reservoir. Water exiting Caples drains into Caples Creek, which flows into the South Fork American River. Caples Lake is open to angling all year with a five trout bag limit and 10 in possession regulation.

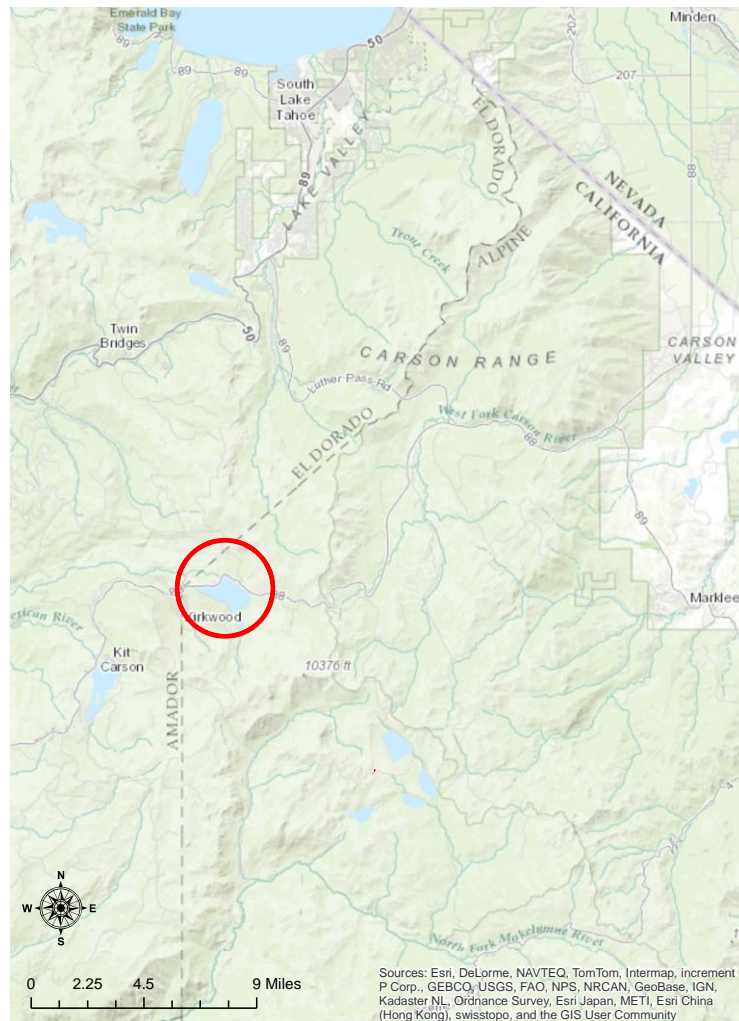


Figure 1. Caples Lake (Alpine County) in relation to Lake Tahoe.

California Department of Fish and Wildlife (Department) fish files indicate Caples has been stocked since 1930 by the Department and since 2008 by EID for recreational fishing. Historically, Caples has been stocked with rainbow trout (*Oncorhynchus mykiss*) (RT), brook

trout (*Salvelinus fontinalis*) (BK), brown trout (*Salmo trutta*) (BN), and lake trout (*Salvelinus namaycush*) (LT). Currently, RT and BN are stocked in Caples by the Department and RT by EID. Caples also supports a self-sustaining, recreational LT fishery. Along with current and past Department recreational stockings, Caples also supports populations of native, non-game fish such as Lahontan reddsides (*Richardsonius egregius*) and tui chub (*Gila bicolor*).

The purpose of this creel survey/tagging study was to determine how much the Caples Lake fishery is utilized and if the fish that are being stocked are being caught.

Methods

For the 2005 census, 28 days (15 weekdays; 13 weekend days) were selected (unknown whether random/non-random) from the middle of June through late October. The number of days surveyed varied from month to month due to scheduling issues with other nearby lakes where surveys were being conducted. Survey start times were randomly stratified into either an AM or PM sampling period. Anglers were interviewed and asked a standard series of survey questions to determine angling effort, catch rate, size of fish, tagged fish returns, and species caught (Appendix 1).

Each angler was asked between one and three standard “yes or no” questions to determine angling satisfaction. Every angler interviewed was asked the question: “Were you satisfied with your angling experience today?” If an angler reported catching one or more fish, they were asked two follow-up questions: “Were you satisfied with the number of fish caught?” and “Were you satisfied with the size of fish caught?” If an interviewed angler had fish in possession, a Department creel clerk measured the total length of the fish in millimeters (mm) and were inspected for Floy® T-Bar Anchor Tags. The tags were randomly inserted into 400 of the 13,450 RT at American River Hatchery prior to being stocked into Caples in 2005. For the fish released by anglers, the species and the total number caught were recorded; no size ranges were taken.

Results

In total, 400 anglers were surveyed. Total effort was 1,149 angling hours, averaging 2.87 hours per angler. A total of 338 fish were caught for an average Catch Per Unit Effort (CPUE) of 0.29 fish per hour (Table 1).

Table 1. Catch Statistics for Caples Lake, 2005.

Number of Anglers	400
Total Fish Caught	338
Number of Fish per Angler	0.85
Total Hours Fished	1,149
Hours per Angler	2.87
Average CPUE	0.29

A total of 227 anglers (57%) reported fishing from shore, which resulted in a catch per angler of 0.77 (Table 2). Boat angling resulted in a catch per angler of 0.95.

Table 2. The number of anglers and catch per angler based on angling method at Caples Lake.

Method	Number of Anglers	Catch per Angler
Shore	227	0.77
Boat	173	0.95
Total	400	

Anglers used bait, lures, and flies while fishing at Caples (Table 3). In 2005, 305 anglers (76%) used bait to catch fish. The least frequent gear used was multiple gear types ($n = 2$; ~ 1%). Bait anglers had the highest catch per angler (0.88 fish per angler). Fly anglers had the second highest catch per angler (0.80 fish per angler). Multiple gear anglers had the lowest catch per angler (0.00 fish per angler). Of the 338 fish reported caught, 293 were kept (87%) and 45 were released (13%).

Table 3. The frequency of anglers that used each angling method and their corresponding catch per angler.

Angling method	Number of Anglers	Catch per Angler
Bait	305	0.88
Lure	88	0.70
Fly	5	0.80
Multiple	2	0.00
	400	

The total length of the fish measured ranged from the 9.0 – 9.9 inch to 25.0 – 25.9 inch total length classes. Of the 284 fish measured, 105 were in the size range of 12.0 – 12.9 inches (Figure 2).

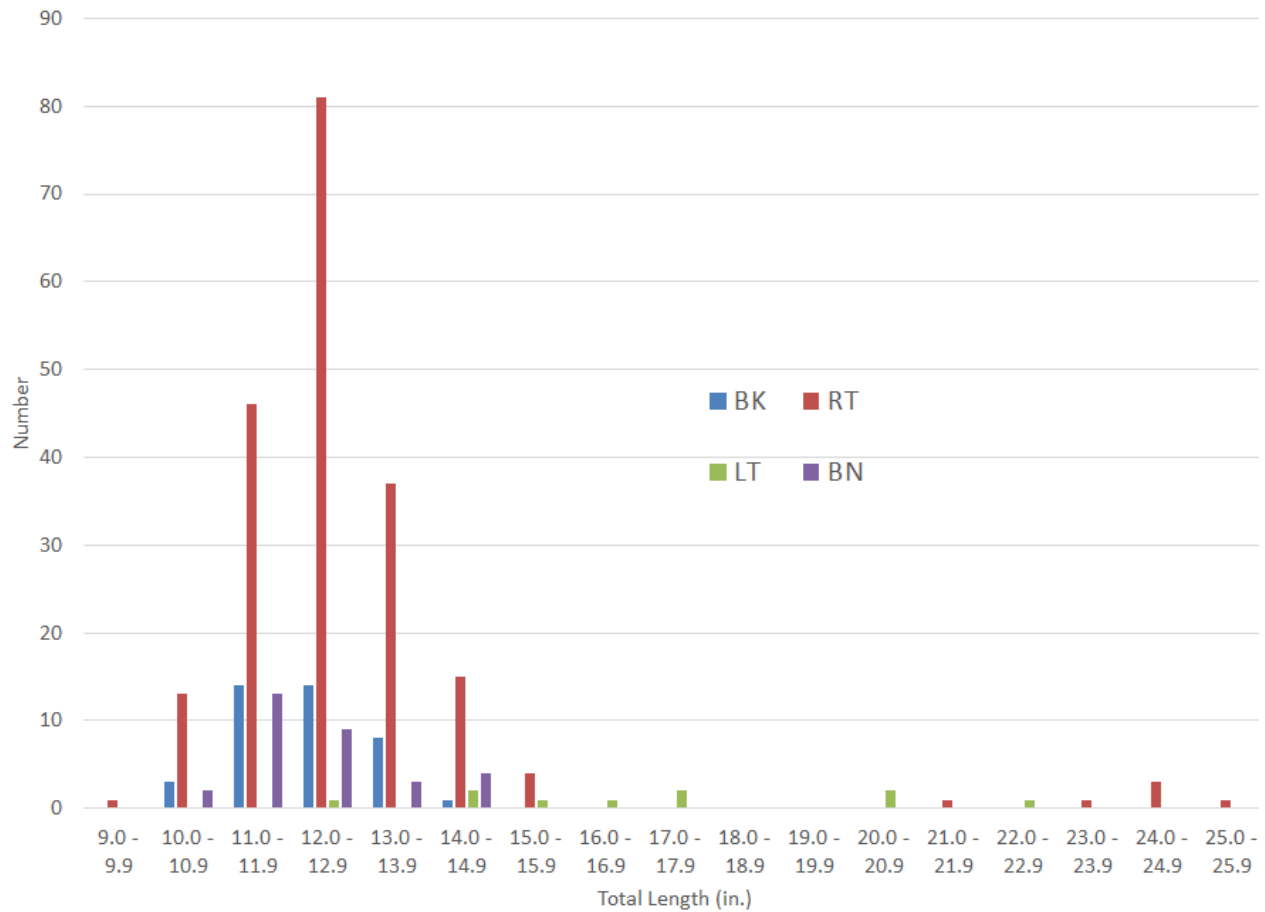


Figure 2. Length-frequency distribution for fish caught and measured at Caples Lake, Alpine County, 2005.

Anglers who were asked the survey questions; 92.5% of anglers were satisfied with their overall fishing experience, 89.7% were satisfied with the number of fish, and 87.0% were satisfied with the size of the fish they caught (Table 4).

Table 4. Angler Satisfaction Response Averages for Caples Lake, 2005.

	Yes	No	Percent Satisfied
Overall Fishing Experience	370	30	92.5%
Number of Fish Caught	165	19	89.7%
Size of Fish	160	24	87.0%

There were a total of 13,450 RT that were stocked into Caples in 2005. Of the 13,450 stocked, 400 were randomly tagged. Of the 400 RT tagged, 78 were caught and returned, with a final return rate of 20% (Table 5) (CDFG 2005).

Table 5. Tag return results for rainbow trout stocked in select lakes and reservoirs in the Sacramento Valley and Central Region from 2000 - 2005.

Water	Number of Fish Released	Number of Tagged Fish Released	Number of Tags Returned	Return Rate
Fuller Lake	14,250	800	332	42%
Blue Lake, Lower	5,400	300	112	37%
Sugar Pine Reservoir	20,140	1,194	405	34%
Silver Lake	18,100	398	132	33%
Blue Lake, Upper	9,000	400	132	33%
Icehouse Reservoir	10,000	399	128	32%
Scotts Flat Reservoir, Upper	18,900	1,099	256	23%
Loon Lake	13,450	400	93	23%
Rollins Reservoir	12,700	798	185	23%
Jenkinson Lake	22,100	1,194	273	23%
Thermalito Forebay	8,800	797	175	22%
Jackson Meadows Reservoir	12,700	299	62	21%
Caples Lake	13,450	400	78	20%
Union Valley Reservoir	7,300	400	77	19%
Folsom Lake	22,575	1,295	246	19%
Boca Reservoir	23,500	1,200	220	18%
Donner Lake	110,600	1,999	280	14%
Stampede Reservoir	37,000	1,791	110	6%

Discussion

During the 2005 creel census, Caples had an average CPUE of 0.29 fish per hour, which is not very good. A CPUE of 0.50 fish per hour or greater is considered an acceptable number if fish size is considered satisfactory (Hickey 2013). It is possible that a lot of the stocked RT were eaten by the large RT, BN, and LT that inhabit Caples, thus not available for the public to catch.

In total, 76% of anglers only used bait when targeting trout, resulting in 80% of all fish caught. Of the 338 fish caught, 293 (87%) were kept. From the angling method and number of fish kept, it is clear that Caples is a fishery where the majority of anglers are looking for a relaxing, easy place to catch and harvest fish, especially for families.

The majority of fish harvested were between 11.0 and 13.0 inches. The 2005 creel surveys at nearby Upper and Lower Blue Lakes found that these size classes also represented the majority of fish harvested (Ewing 2017). This suggests that the majority of fish caught are from recent stockings, with few juvenile or holdover fish.

Of the 400 anglers, 92.5% responded that they were satisfied with their overall fishing experience, 89.7% were satisfied with the numbers of fish they were catching, and 87.0% were satisfied with the sizes of fish caught. The nice sizes of fish caught, as well as the high catch per angler supports this feedback. Caples is a beautiful, high elevation reservoir with beautiful scenery, which may contribute to the overall satisfaction anglers had while fishing.

Of the 18 waters that had a trout tagging program in 2005, Caples had the 13th highest return rate. The lower return rate compared to the other waters might suggest an inefficient utilization of the fish stocked by the Department. This may have been the result of the allotment and/or loss due to fish predation.

Recommendations

- When available, the Department should look into stocking Caples with a larger allotment than in 2005 and/or larger-size fish.
- Conduct another creel survey to which the 2005 data may be compared.

References

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