

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

Woods Lake, Alpine County
2024 Angler Survey Box Analysis



Photo by D. Kaffer

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Introduction

Woods Lake is a 16-surface acre lake in Alpine County situated at 8,211 feet above mean sea level. Woods Lake is located off Highway 88, one mile southwest of the Carson Pass and 18 miles south of Lake Tahoe (**Figure 1**). Woods Lake receives runoff from rain and snowmelt from its immediate watershed and small tributaries. Woods Lake drains into Woods Creek, a five-mile-long creek that flows into Caples Lake. Woods Lake is open all year to the public and has a five trout bag limit with a 10 in possession sport-fishing regulation.



Figure 1. Woods Lake, Alpine County. Woods Lake is also indicated by the red dot in the smaller inset map in relation to Lake Tahoe.

California Department of Fish and Wildlife (CDFW) has stocked Woods Lake annually since 1930 for recreational fishing. CDFW historically stocked Woods Lake

with Brook Trout (*Salvelinus fontinalis*; BK), Rainbow Trout (*Oncorhynchus mykiss*; RT), and Lahontan Cutthroat Trout (*Oncorhynchus clarkii henshawi*; LCT) with the last recorded stocking of RT on June 24, 2024. Currently only RT are being stocked.

To assess the fishery, CDFW installed an angler survey box (ASB) at Woods Lake on August 4, 2020 (**Figure 2**). Anglers voluntarily complete a survey form after they complete their fishing trip and then deposit their survey in the box. CDFW uses these data to assess angler satisfaction, species composition of the catch, and general angler statistics at Woods Lake. This report covers the data collected from Woods Lake's ASB from 2020–2024.



Figure 2. The red dot denotes the location of the Woods Lake Angler Survey Box (Alpine County).

Methods

Participating anglers complete a voluntary survey form about their fishing experience. The survey asks anglers for information regarding the number of hours they fished, type of gear and method used, and the number of landed fish. Anglers are also asked the size (total length, TL, inches, in.), species of fish (RT, BK, Brown Trout (*Salmo trutta*, BN) or Other) fish landed, and whether they kept or released their catch. Finally, anglers are asked three questions addressing their satisfaction with their overall angling experience, fish size, and number of fish caught. Their answers were recorded on a scale of “-2 to +2”, with “+2” representing most satisfied and “-2” representing least satisfied. The back of the survey form was reserved for anglers who had additional comments (**Appendix 1**).

Results

In 2024, Woods Lake had 22 respondents compared to nine in 2023, 15 in 2022, seven in 2021, and 13 in 2020 (**Table 1**). These anglers caught 82 fish and fished for 88 hours, compared to 21 fish caught and 25.5 hours fished in 2023, 16 fish caught and 42 hours fished in 2022 (Ewing 2025), 21 fish caught and 28 hours fished in 2021 (Ewing 2023) and 53 fish caught and 47 hours fished in 2020 (Ewing 2021). The 2024 catch per angler was 3.73, compared to 2.33 in 2023, 1.07 in 2022, 3.00 in 2021, and 4.08 in 2020. In 2024, hours fished per angler was 4.00, compared to 2.83 in 2023, 2.80 in 2022, 4.00 in 2021, and 3.62 in 2020.

Table 1. Collection of average effort and catch statistics recorded from the 2020-2024 angler survey box (ASB) at Woods Lake.

Year	Respondents	Hours Fished	Fish Landed	Catch per Hour	Catch per Angler	Hours per Angler
2020	13	47	53	1.13	4.08	3.62
2021	7	28	21	0.75	3.00	4.00
2022	15	42	16	0.38	1.07	2.80
2023	9	25.5	21	0.82	2.33	2.83
2024	22	88	82	0.93	3.73	4.00

In 2024, float tube anglers (n=2) (9.1%), shore/wading anglers (n=15) (68.2%), and Multiple method anglers (n=1) (4.5%) all had the highest average catch per angler (4.0) (**Table 2**). The next highest catch per angler (3.00) was reported by one angler (4.5%), who did not report their fishing method. Two boat anglers (9.1%) finished with a

1.50 catch per angler value. Float tube, Shore/wading, Multiple, and unidentified anglers all experienced their highest catch per angler values in the last four years.

Table 2. The number of anglers and catch per angler based on angling method at Woods Lake from 2021–2024.

	2021		2022		2023		2024	
Method	No. of Anglers	Catch/Angler	No. of Anglers	Catch/Angler	No. of Anglers	Catch/Angler	No. of Anglers	Catch/Angler
Boat	3	5.33	3	0.33	1	1.00	2	1.50
Float tube	0	NA	7	1.86	2	1.00	3	4.00
Shore or Wading	4	0.80	3	0.67	5	2.67	15	4.00
Multiple	NA	NA	2	0.00	NA	NA	1	4.00
Unidentified	NA	NA	NA	NA	1	2.00	1	3.00

In 2024, anglers used various types of gear while fishing at Woods Lake (**Table 3**). For the first time in four years, lure anglers reported the highest average catch rate per angler (5.00) in 2024, compared to 1.00 in 2023, and 0.50 in 2022. Four fly anglers had the second highest catch rate (4.00) for the second time in four years. Fifteen bait anglers had the third highest catch rate (3.67) for the first time in four years. One multiple gear method angler finished with a 1.00 catch per angler value.

Table 2. Frequency of anglers that used each angling gear and their corresponding catch rates 2021–2024.

Angling method	Catch per Angler (Number of Anglers)			
	2021	2022	2023	2024
Bait	3.50 (6)	0.67 (3)	3.20 (5)	3.67 (15)
Lure	NA	0.50 (2)	1.00 (2)	5.00 (2)
Fly	NA	1.63 (8)	1.50 (2)	4.00 (4)
Multiple	0.00 (1)	0.00 (2)	NA	1.00 (1)

In 2024, 82.9% (n = 68) of fish landed were RT, and 17.0% (n = 14) were BK. In 2023, 61.9% (n = 13) of fish landed were RT, and 38.1% (n = 8) were BK. In 2022, 43.8% (n = 7) of fish landed were RT, 37.5% (n = 6) were BK, and 18.8% (n = 3) were BN. In 2021, 66.7% (n = 14) of fish landed were BK, 28.6% (n = 6) were RT, and 4.8% (n = 1) were Other. In 2020, 94.3% (n = 50) of fish landed were RT while the remaining 5.7% (n = 3) were Other (**Table 4**).

In 2024, anglers released 36.8% of RT compared to 15.4% in 2023, 100% in 2022, 33.3% in 2021 and 66.0% in 2020 (**Table 4**). Anglers also released 50.0% of BK in 2024, compared to 12.5% in 2023, 83.3% in 2022, and 21.4% in 2021.

Table 3. Kept and released fish at Woods Lake from 2020–2024.

	Species	Kept	Released	Total Caught	Percent of Total Catch	Percent Released
2020	RT	17	33	50	94.3	66.0
	Other	0	3	3	5.7	100.0
	Total	17	36	53		
2021	RT	4	2	6	28.6	33.3
	BK	11	3	14	66.7	21.4
	Other	1	0	1	4.8	0
	Total	16	5	21		
2022	RT	0	7	7	43.8	100.0
	BK	1	5	6	37.5	83.3
	BN	0	3	3	18.8	100.0
	Total	1	15	16		
2023	RT	11	2	13	61.9	15.4
	BK	7	1	8	38.1	12.5
	Total	18	3	21		
2024	RT	43	25	68	82.9	36.8
	BK	7	7	14	17.0	50.0
	Total	50	32	82		

In 2024, 23% (n = 19) of the landed fish measured <10 in. TL while 18 fish landed measured between 12 and 16 in. TL (**Figure 3**). In 2023, 52% (n = 11) of the landed fish measured <10 in. TL while three fish landed measured between 12 and 16 in. TL (**Figure 3**). In 2022, 69% (n = 11) of the landed fish measured <10 in. TL while zero fish landed measured between 12 and 16 in. TL.

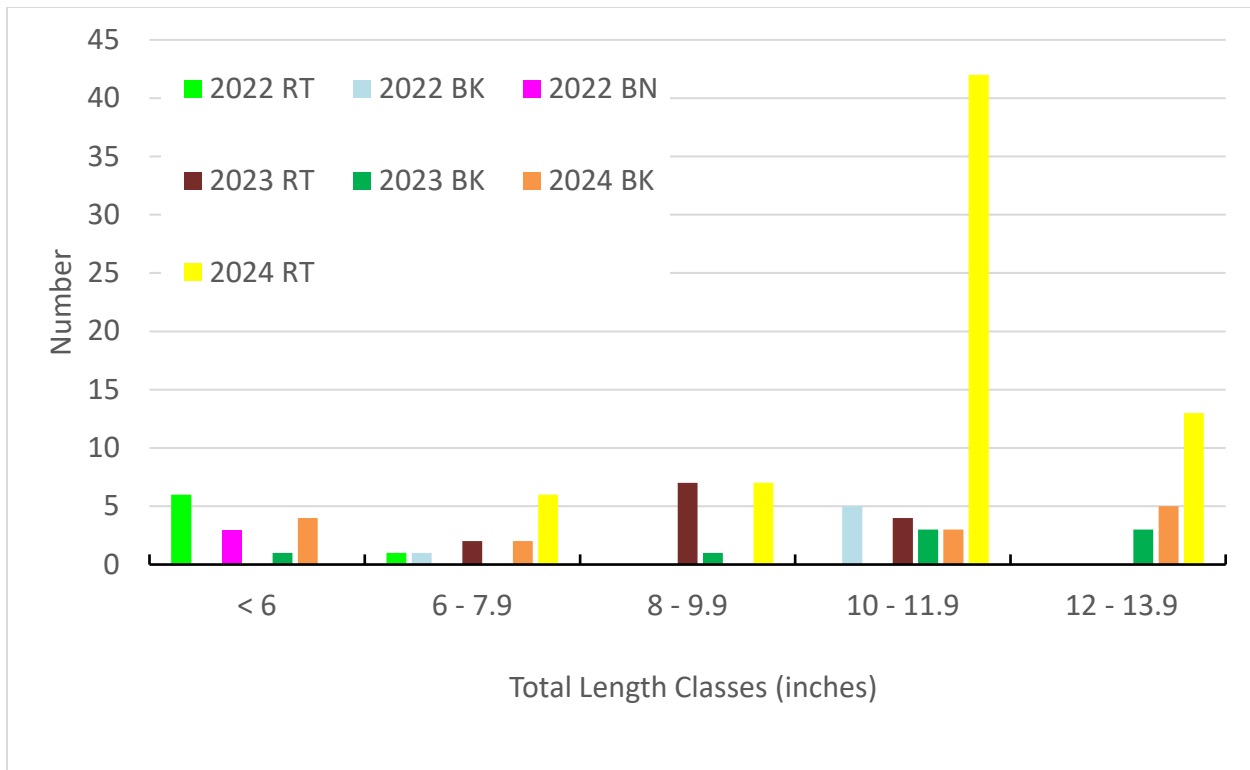


Figure 3. Frequency of fish in each size class that anglers reported landing at Woods Lake from 2022-2024.

Anglers reported being satisfied with their overall angling experience (1.10) for a fifth consecutive year and 2024 was just shy of the five-year record of 1.11 (**Table 5**). In 2024, angler satisfaction for fish size (0.81) set a five-year positive record. In 2024, the angler satisfaction for number of fish caught (1.25) was the highest in five years and remained positive for a fifth consecutive season.

Table 5. Angler satisfaction response averages for the Woods Lake fishery from 2020–2024.

Year	Overall angling experience	Size of the fish	Number of fish
2020	0.55	-0.11	0.67
2021	0.60	0.50	0.75
2022	0.21	0.38	0.88
2023	1.11	-0.29	0.29
2024	1.10	0.81	1.25

Discussion

In 2024, reporting anglers in the Woods Lake sport fishery had increased catch per hour and catch per angler when compared to 2021-2023. The 2024 values were indicative of a relatively good fishery. The increase in catch rates from the previous three years is likely due to the return of trout stocking by CDFW in 2023. Prior to 2023, the last trout stocking into Woods Lake was July 2020, with 2,625 RT. The evacuation of trout at American River Hatchery in June 2021 due to concerns over elevated water temperatures contributed to a decrease in availability of catchable-size trout for Woods Lake and many North Central Region waters.

For the first time in three years, the greatest number of fish caught were in the 10.0 – 11.9 in. TL size class. This was likely a large contributing factor to angler reported satisfaction with the size of their catch at a record high value. These fish were likely two fish to the pound in size, which many anglers would consider satisfactory for a small lake population. Fish at these sizes generally possess a higher value to anglers compared to smaller-sized fish. It is possible that anglers were expecting to catch smaller fish like the previous two years' mean length classes. The high number of fish kept in 2024 and 2023 seems reasonable considering the high inflation in the cost of food in California and the rest of the country. Anglers were satisfied with the number of trout caught for a fifth consecutive year, including a record value in 2024. Anglers did not report capturing any BN for a second consecutive year.

The primary objective when managing recreational fisheries is often to improve the quality of fishing or optimize human benefit (Pollock et al. 1994; Weithman 1999). For a fifth consecutive year, the overall fishing experience for anglers was positive at Woods Lake, and that experience was just shy of the record high value in 2023. The positive value in overall satisfaction in 2024 was likely influenced by anglers being satisfied with the number and size of fish caught; however, angler trip satisfaction can also be influenced by factors other than fishing success (McCormick and Porter 2014). For some anglers, satisfaction with the overall fishing experience may have been due less to the fishing itself, and more to outside factors, such as weather, fishing access, lack of crowds, and scenery.

CDFW is the only public agency or organization that stocks Woods Lake. RT currently stocked by CDFW are catchable-sized fish. These catchable trout are stocked under a put and take (2–3 trout/pound) catchable-size management strategy due to the combination of high angler usage and proximity to a state highway.

The number of respondents in the 2024 survey was 22, a record high in the five years of surveys. The return of fish stockings and the lack of fires that were present likely contributed to the increase of anglers. There continues to be a \$10.00 day use fee charged by Royal Elk Park Management, Inc., the concessionaire that contracts with the

Eldorado National Forest to run day use areas and campgrounds. These fees may detract some anglers from fishing Woods Lake.

After five years of surveys, Woods Lake has shown to be a productive fishery, when stocked and forest closures aren't present. This information helped inform management of the fishery going forward. The ASB will be removed from Woods Lake and likely be installed at another waterbody.

Recommendations

- Continue to stock Woods Lake for at least the next five years with available, catchable-sized RT.

Literature Cited

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Appendix 1.

Woods Lake

The California Department of Fish and Wildlife is conducting an evaluation of the fishery at Woods Lake. We request your help in this evaluation by providing the following information in this survey. Please use this form for one day's fishing at Woods Lake by one angler only.

Date Fished: _____ # Hours Fished: _____
mm/dd/yyyy

Primary gear type used (check one):

☐ Bait ☐ Lure ☐ Fly

Primary method or location (check one):

☐ shore/wading ☐ float tube ☐ boat/kayak

Enter the total number of fish caught by species and size class:

Size	Rainbow trout		Brook trout		Other:	
	Kept	Released	Kept	Released	Kept	Released
Less than 6"						
6"-7.9"						
8"-9.9"						
10"-11.9"						
12"-13.9"						
14"-15.9"						
16"-17.9"						
18"-19.9"						
20"-21.9"						
22"-23.9"						

24"-25.9"						
26" and Greater						

Please indicate your level of satisfaction with the following statements
regarding your fishing experience today:

	Least satisfied		Neutral	Most satisfied	
Overall angling experience today:	-2	-1	0	+1	+2
Size of fish:	-2	-1	0	+1	+2
Number of fish:	-2	-1	0	+1	+2

Please use the back of this form for any additional comments. Thank you
for helping us manage and protect California's wild trout resources.