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

Kinney Reservoir, Alpine County

2024 Angler Survey Box Analysis

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Introduction

In August, 2020, the California Department of Fish and Wildlife (CDFW) installed an angler survey box (ASB) at Kinney Reservoir, located along Highway 4, to evaluate the fishery (**Figure 1**). Anglers voluntarily completed a survey form after their fishing trip and deposited it in the ASB. CDFW uses these data to assess angler satisfaction, species composition/sizes, and general angler statistics at Kinney Reservoir.

Environmental Setting

Kinney Reservoir is located in the Humboldt-Toiyabe National Forest of the Sierra Nevada Mountain range in Alpine County. Kinney Reservoir is within the Carson River watershed. Much of the surrounding habitat consists of open bedrock, shrubs, hardwood forest, and coniferous forest (CalFire 2021).

Kinney Reservoir

Kinney Reservoir is an approximately 40-acre reservoir in Alpine County (38.553725 N, 119.810028 W), situated at 8,369 feet above mean sea level (**Figure 1**). The shoreline is a mix of rocks, sand, and conifer forest. The lake bottom appears to be primarily composed of mud and various-sized rock substrate. Water leaving Kinney Reservoir flows into Kinney Creek and eventually into the East Carson River. Kinney Reservoir receives water from Kinney Creek, and rain and snowmelt runoff from the immediate area. Only CDFW stocks Kinney Reservoir. CDFW historically stocked Kinney Reservoir with fingerling and catchable-sized Lahontan Cutthroat Trout *(Oncorhynchus clarkii henshawi*; LCT), fingerling-sized Brook Trout (*Salvelinus fontinalis*; BK), and catchable-sized Rainbow Trout (*Oncorhynchus mykiss*; RT), with the last recorded stocking of RT in July 2023. Due to a change in stocking practices as well as availability, BK and LCT are no longer stocked into Kinney Reservoir. CDFW currently manages Kinney Reservoir as a “put and take” fishery and currently stocks catchable-sized RT due to the combination of high angler use, low natural recruitment, and immediate proximity to a state highway.

Kinney Reservoir is open all year for fishing and other recreational opportunities, but has limited access during the winter season when there is snow. CalTrans closes

the Ebbetts Pass area of Highway 4 during winter and the road is not plowed (CalTrans 2025).

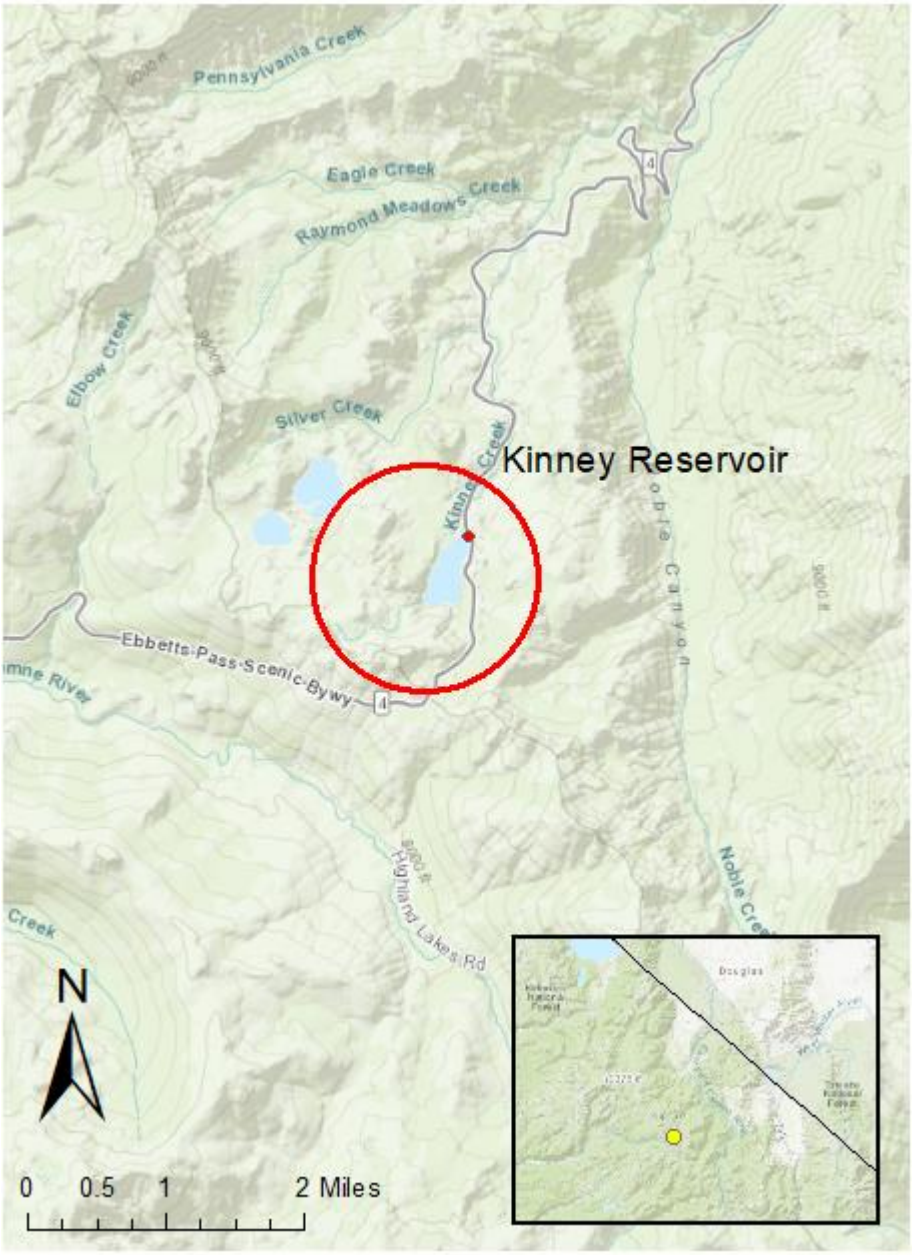

Figure 1. Kinney Reservoir (circled in red), Alpine County. Location of the Angler Survey Box is indicated by the red dot within red circle. Kinney Reservoir is also indicated by yellow dot in smaller data frame in relation to Lake Tahoe.

Methods

The survey asked anglers for information regarding hours fished, type of gear used, angling method, and the number of landed fish. This information was used to calculate catch per angler and catch per unit effort (in this case, CPUE). Anglers were also asked the size and species of landed fish and whether they kept or released their catch. Lastly, anglers were asked three questions, and their answers were recorded on a scale of -2 to +2, with "+2" representing most satisfied and "-2" representing least satisfied. The questions pertained to the level of satisfaction with their overall angling experience, and with the size and number of fish they caught. Anglers were able to use the back of the survey form to include additional comments (**Appendix 1**).

Results

In 2024, Kinney Reservoir had 25 respondents compared to seven respondents in 2023, 11 in 2022 (Ewing 2025) 19 in 2021 (Ewing 2024) and 20 in 2020 (Ewing 2021) **(Table 1**). These anglers landed 73 fish and fished for 78.3 hours compared to 38 fish and 19.5 hours in 2023, 26 fish and 32.0 hours in 2022 (Ewing 2025), 58 fish and 76.5 hours in 2021 (Ewing 2024), and 18 fish caught and 56 hours fished in 2020 (Ewing 2021). The 2024 CPUE was 0.93, compared to 1.95 in 2023, 0.81 in 2022, 0.76 in 2021, and 0.32 in 2020. The 2024 catch per angler was 2.92, compared to 5.43 in 2023, 2.36 in 2022, 3.05 in 2021, and 0.90 in 2020.

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

Year	Respondents	Hours Fished	Fish Landed	Catch/Hour	Catch/Angler
2020	20	56.0	18	0.32	0.90
2021	19	76.5	58	0.76	3.05
2022	11	32.0	26	0.81	2.36
2023	7	19.5	38	1.95	5.43
2024	25	78.3	73	0.93	2.92

Six anglers (24.0%) reported no angling method, which resulted in the best success in terms of catch per angler for the first time (3.67) in the last three years (**Table 2**). Additionally, CPUE was 1.16, and highest in this category. Seventeen anglers (68.0%) reported fishing from shore/wading, which resulted in the second highest rate in terms of catch per angler (2.88). These shore/wading anglers also recorded the second highest CPUE value of 1.06.

Table 2. The number of anglers and catch per angler based on angling method at Kinney Reservoir from 2022-2024.

	2022			2023			2024		
Method	Number of Anglers	Catch/ Angler	Catch/ Hour	Number of Anglers	Catch/ Angler	Catch/ Hour	Number of Anglers	Catch/ Angler	Catch/ Hour
Boat/Kayak	4	3.50	1.17	0	NA	NA	2	1.00	0.15
Float tube	0	NA	NA	1	13.00	4.33	0	NA	NA
Shore/Wading	7	1.71	0.60	6	4.17	1.52	17	2.88	1.06
Multiple	0	NA	NA	0	NA	NA	0	NA	NA
No Record	0	NA	NA	0	NA	NA	6	3.67	1.16

In 2024, anglers used various combinations of gear while fishing at Kinney Reservoir (**Table 3**). Four anglers (16.0%) used lures to catch fish and reported the highest catch rate (3.75 catch per angler) for the first time in three years. The CPUE value was 2.38, also an increase from the prior two years. In 2024, bait anglers had the second highest catch per angler value (3.64) and CPUE value of 1.19. In 2024, anglers who did not record their method of gear had the third highest catch per angler value (2.50) and CPUE value of 1.67. One angler (4.0%) used flies to catch fish and reported the fourth highest catch rate (2.00 catch per angler) for the first time in three years. The CPUE value was 0.31, a decrease from 2023. In 2024, one multiple-gear angler recorded no fish caught for the first time in the last three years.

Table 1. The number of fish landed by the type of gear from 2022–2024 at Kinney Reservoir.

	2022			2023			2024		
Gear	Number of Fish	Catch/ Angler	Catch/ Hour	Number of Fish	Catch/ Angler	Catch/ Hour	Number of Fish	Catch/ Angler	Catch/ Hour
Bait	10	2.00	0.65	19	6.33	2.00	51	3.64	1.19
Lure	NA	NA	NA	4	2.00	1.33	15	3.75	2.38
Fly	0	0.00	0.00	13	13.00	4.33	2	2.00	0.31
Multiple	16	3.20	1.10	2	2.00	0.50	0	0.00	0.00
No Record	NA	NA	NA	NA	NA	NA	5	2.50	1.67
Total	26			38			73		

From 2022–2024, all fish landed were RT (n = 26, 2022) (n = 38, 2023) (n = 73, 2024). In 2024, fish landed ranged from 6.0–7.9 inches (in.) (n = 3) to 18.0–19.9 in. (n = 2) **Figure 2**). In 2023, fish landed ranged from 6.0–7.9 in. (n = 8) to 14.0–15.9 in. (n = 2). In 2022, fish landed ranged from 8.0–9.9 in.(n = 1) to 12–13.9 in. (n = 20). In 2024, the modal length class was the 10.0–11.9 in. (n = 25) length class. In both 2023 (n = 15) and 2022 (n = 20), the modal length class at Kinney Reservoir was the 12.0–13.9 in. length class.

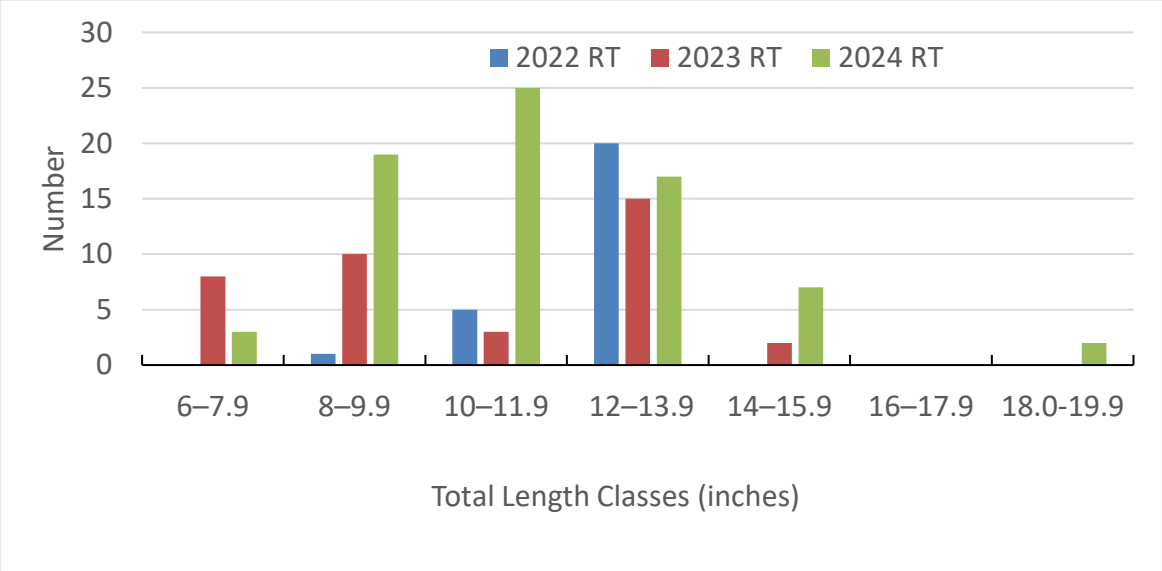

Figure 2. Frequency of fish in each length class that anglers reported landing at Kinney Reservoir from 2022-2024.

In 2024, anglers released 16% of RT caught, a large decrease from 2023, but a small increase from 2022 when 15.4% of RT were released (**Table 4**). No LCT or BK were reported caught for a third consecutive year.

Table 4. Kept and released fish at Kinney Reservoir from 2022-2024.

Year	Species	Kept	Released	Total Caught	% of Total Catch	% Released
2022	RT	22	4	26	100.0%	15.4%
2023	RT	19	19	38	100.0%	50.0%
2024	RT	61	12	73	100.0%	16.4%

Anglers reported being satisfied with their overall angling experience (0.79) for a fifth consecutive year and second highest in five years (**Table 5**). Angler satisfaction for both the size (0.67) and the number of fish (0.89) caught were also positive for a fifth consecutive year.

Table 5. Angler satisfaction response averages for the Kinney Reservoir fishery from 2020-2024.

	Overall Angling Experience	Size of Fish	Number of Fish
2020	0.16	1.00	0.38
2021	0.69	0.64	0.91
2022	0.75	1.67	1.67
2023	1.71	0.86	1.57
2024	0.79	0.67	0.89

Discussion

Kinney Reservoir anglers caught 2.92 fish on average in 2024, compared to 5.43 in 2023, 2.36 fish in 2022, 3.05 fish in 2021, and 0.90 fish on average per trip in 2020. In 2024, Kinney Reservoir anglers had an average CPUE of 0.93 fish per hour, which is the second highest CPUE on record. It is possible the high CPUE rate was because of the 900 RT stocked in July 2023. Prior to 2023, CDFW stocked 1,600 RT in June of 2021, but did not stock any RT into Kinney in 2022 or 2020 (**Appendix 2**).

The greatest number of RT caught in 2024 were in the 10.0–11.9 in. length class. This differed from the last three years. Additionally, 84% of trout caught were kept. The combination of sizes caught and number kept corresponds with anglers being “satisfied” with the size of their catch. There may be a sustainable balance between number of fish and available resources in Kinney, thus allowing the trout in Kinney to grow large, since many of the trout stocked were less than 10.0 in. Anglers were also “satisfied” with the numbers of trout caught in 2024 for a fifth consecutive year. This may have been due to CDFW stocking Kinney Reservoir in 2023, in combination with enough holdovers/released fish.

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). The positive “size” and “number” values for a fifth consecutive year likely contributed to the positive overall fish experience value. 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. Kinney Reservoir is located over 8,000 feet elevation, with magnificent views (**Figure 3**) and although next to Highway 4, does not receive as much tourist and angler usage as nearby waters.

Figure 3. View north from Ebbetts Peak in September 2021. Kinney Reservoir is visible at right, while Sherrold Lake is in the foreground, at bottom left. (CDFW)

The number of respondents (25) in the 2024 survey was the highest in the last five years. The reason for an increase in angler participation in 2024 is unclear, but may be attributed to the lack of wildfires in the area as well as a trout stocking in July of 2023. In 2020 and 2021 the area was temporarily closed due to wildfires in the vicinity and there were no trout stockings in 2020 and 2022. It is possible more anglers may have chosen to fish Kinney Reservoir in 2024 if there would have been scheduled stockings. Ideally, the more respondents, the more data CDFW has available on angler success at the fishery. Angler participation is essential for CDFW to provide useful information on the results of fishing trips, and help directly inform management of the fishery.

Recommendations

- Continue to stock Kinney Reservoir for at least the next five years.

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Appendix 1.

Kinney Reservoir

The California Department of Fish and Wildlife is conducting an evaluation of the fishery at Kinney Reservoir. 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 Kinney Reservoir by one angler only.

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

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		Other	
	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.

If you would like a copy of the most recent Kinney Reservoir Angler Survey Report,contact 530 906 3934

Appendix 2.

CDFW stocking events at Kinney Reservoir from 2017–2024.

Rainbow Trout		
Year	lbs.	Number
2017	800	2,400
2018	400	400
2019	800	1,520
2021	485	1,600
2023	250	900