

# New Mexico Angler Satisfaction Report 2023-2024 License Year



Completed by  
Fisheries Management Division  
New Mexico Department of Game and Fish



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### Cover photo

*Adelynn Thompson with a nice sized Rainbow Trout from the Red River City Ponds. Photo taken by Estrella Thompson.*

### Suggested citation

*New Mexico Department of Game and Fish. 2024. New Mexico Angler Satisfaction Survey 2023-24 License Year. Santa Fe, NM.*

## Introduction

The New Mexico Department of Game and Fish uses angler satisfaction as one of its measurable objectives for management success. Traditionally the Department has been tasked with maintaining an overall angler satisfaction rate of 80% regarding angler opportunity, fishing experiences, and management of sport fishing issues. In 2022, this benchmark was raised to an overall satisfaction rate of 90%. Since the 1990's the Department has been conducting various types of polling survey to measure angler satisfaction and determine if the objective was met. In addition to measuring angler satisfaction the survey also researches trends in angler needs, seeks input on emerging issues, and provides direction for future management decisions. Information and knowledge gained through this survey is vital to effectively manage the State's aquatic resources. This report summarizes the method used and results from the 2024 survey.

## Methods

The survey was conducted using web-based survey software (Snap Surveys LTD). This method involves sending an email invitation to a random stratified sample of licensed anglers. The email contains a uniform resource locator (URL) link to a questionnaire hosted on a Department owned web-server. Once participants complete the survey data is collected and compiled on the web-server.

The survey was conducted April 29 to May 31, 2024 ( $n_{\text{days}}=33$ ). An email invitation was sent to 20,000 anglers that purchased a fishing license in the 2023-24 license year (April 1, 2023 to March 31, 2024). During the 2023-24 license year 270,336 fishing licenses were sold, but only 172,639 (63.9%) customers provided an email address when purchasing a license. The survey sample was a random stratified subsample representing the different fishing license types and the percentage sold of each license type (Table 1). The sample comprised of 72.6% resident anglers and 27.4% non-resident anglers. Microsoft Excel was used to generate a random representative sample of each license type.

Table 1. Fishing license types showing percentage of total sold in the 2023-24 license year and target sample size of each license type including resident and non-resident.

License type	% of total sold	<i>n</i> resident for sample	<i>n</i> non-resident for sample
One Day Fishing	13.8%	731	2,032
Five Day Fishing	10.6%	82	2,045
Annual Fishing	34.7%	5,830	1,103
Disabled Vet Hunting and Fishing	1.0%	191	n/a
Game Hunting and Fishing	18.7%	3,731	n/a
Handicapped Fishing	1.0%	206	n/a
Handicapped Hunting and Fishing	0.5%	93	n/a
Junior Fishing	6.3%	962	306
Junior Hunting and Fishing	2.3%	454	n/a
Senior 70 and Over Fishing	6.8%	1,369	n/a
Senior Fishing	2.9%	583	n/a
Senior Hunting and Fishing	1.4%	283	n/a
<b>Totals</b>	<b>100%</b>	<b>14,541</b>	<b>5,486</b>

The survey included 22 questions (17 fishing and 5 demographic related) most of which have been included in past surveys. Three new questions were added related specifically to the San Juan River tailwater fishery. Anglers may have been asked all or only a few questions depending on their answers to expedite the survey (e.g., if they indicated they did not fish during the license year then they were only asked the demographic questions). Most of the fishing questions were set as “must answer” whereas the demographic questions had a “prefer not to answer” option.

Two additional email invitations were sent after the original invitation (e.g., 7 days and 16 days post) as a reminder to enhance the response rate.

### **Results and Discussion**

Responses were received from 2,060 licensed anglers resulting in an overall 10.3% response rate. Residents and non-residents demonstrated the same response rate of 10.3%. About 74.8% of the responses were received within 48 hours of the initial and reminder invitation and response rates significantly declined post 72 hours of the invitations. Average time spent completing the survey by participants was 4 minutes 46 seconds.

The following is a list of the questions asked during the survey and results. All confidence intervals are presented as 80% unless otherwise noted.

#### **Question 1. Did you fish in New Mexico in the past 12 months?**

This question was asked to estimate the number of anglers that purchased a fishing license but did not fish. It also expedited the survey for anglers that did not fish (i.e., if they did not fish then they were routed to only answer the demographic questions). Of the 2,060 respondents 14.3% indicated that they did not fish during the past 12 months. This was similar to last license year (14.1%) and slightly above the ten-year average of 12.0% (Figure 1).

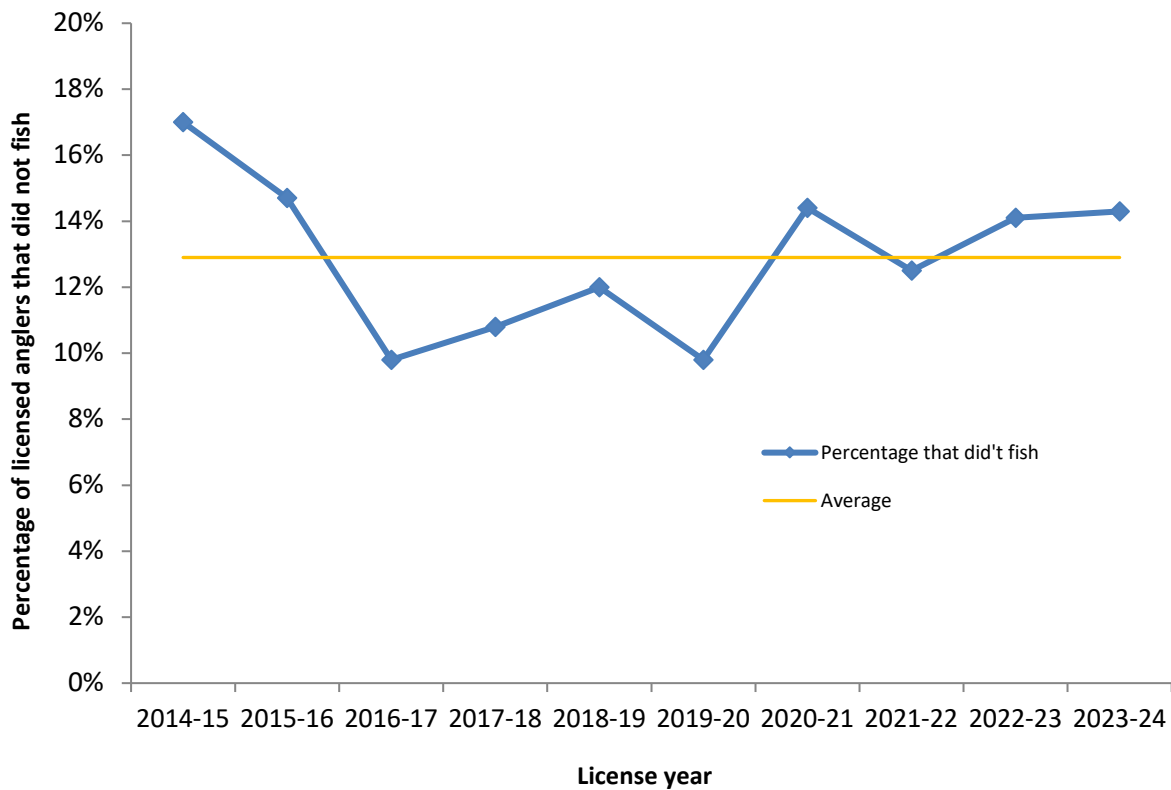


Figure 1. Percentage of licensed anglers that reported they did not fish from the 2014-15 to 2023-24 license years and the ten-year average.

**Question 2. How many days of parts of days did you fish in New Mexico during the past 12 months?**

When only including the anglers that indicated they fished during the past 12 months ( $n=1,767$ ) results showed a wide range of days fished from 1 to 365 with a mean of  $15.6 \pm 0.8$  days and a median of 6 days. This was a decrease in average days fished from last license year and below the ten-year average (Figure 2). If including anglers that did not fish (i.e., fished zero days) the mean and median was  $13.4 \pm 0.7$  days and 5 days, respectively. Responses were separated into six categories (0 days, 1-2 days, 3-5 days, 6-10 days, 11-20 days, and 21 days or more) and into resident and non-resident license type for analysis. Most (77.0%) non-resident anglers fished 5 days or less; whereas resident anglers' days fished were more equally distributed (Figure 3).

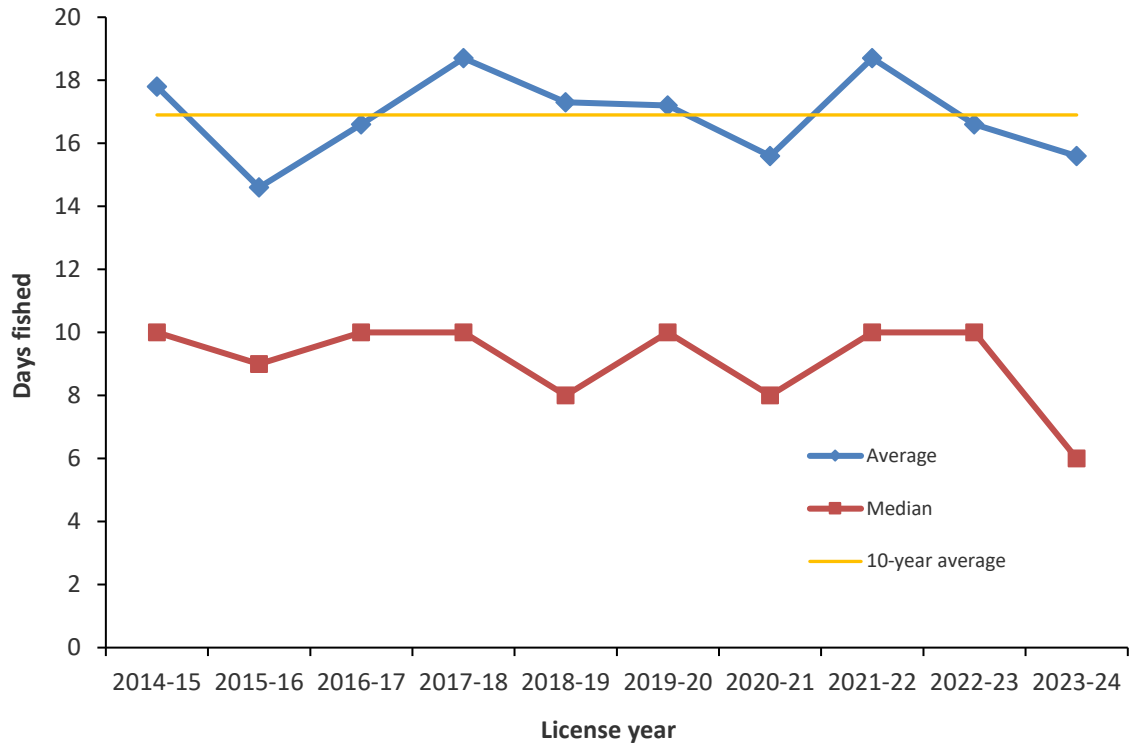


Figure 2. Average by year, median, and nine-year average days fished by anglers that indicated they fished one day or more from the 2014-15 to 2023-24 licenses years.

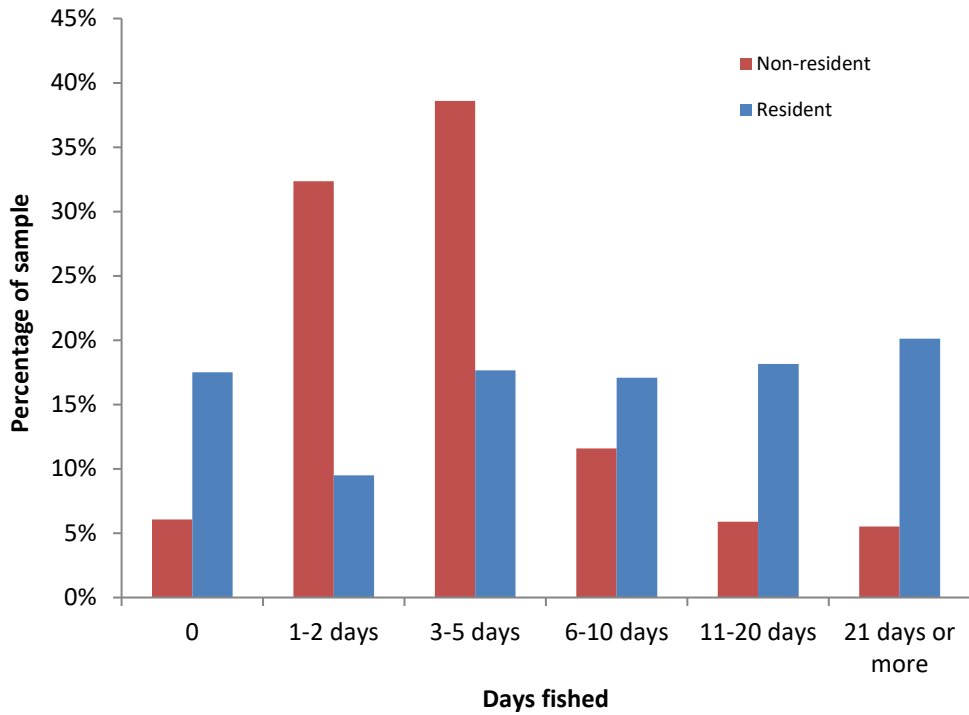


Figure 3. Number of days fished during the 2023-24 license year separated into resident and non-resident license types.

**Question 3. In general, how satisfied or dissatisfied were you with fishing in New Mexico during the past 12 months (Fishing Satisfaction Rate)?**

Anglers were asked to rate their fishing experience on a Likert scale of 1 to 5. A rating of 1 was “not at all satisfied” and a rating of 5 was “very satisfied”. Most (89.6%) anglers indicated being satisfied with their fishing experience giving a rating of 3, 4, or 5; whereas 10.4% indicated being dissatisfied giving a rating of 1 or 2 (Figure 4). Anglers rating fishing experience as 4 or 5 increased slightly and dissatisfaction was mostly flat compared to the 2022-23 license year. Similar to the past several years, non-residents continue to be more satisfied. About 79.9% of non-resident anglers gave a rating of 4 or 5; whereas only 62.5% of resident anglers gave the same rating. Also, dissatisfaction rate for non-resident and resident anglers was 7.0% and 11.8%, respectively (Figure 5).

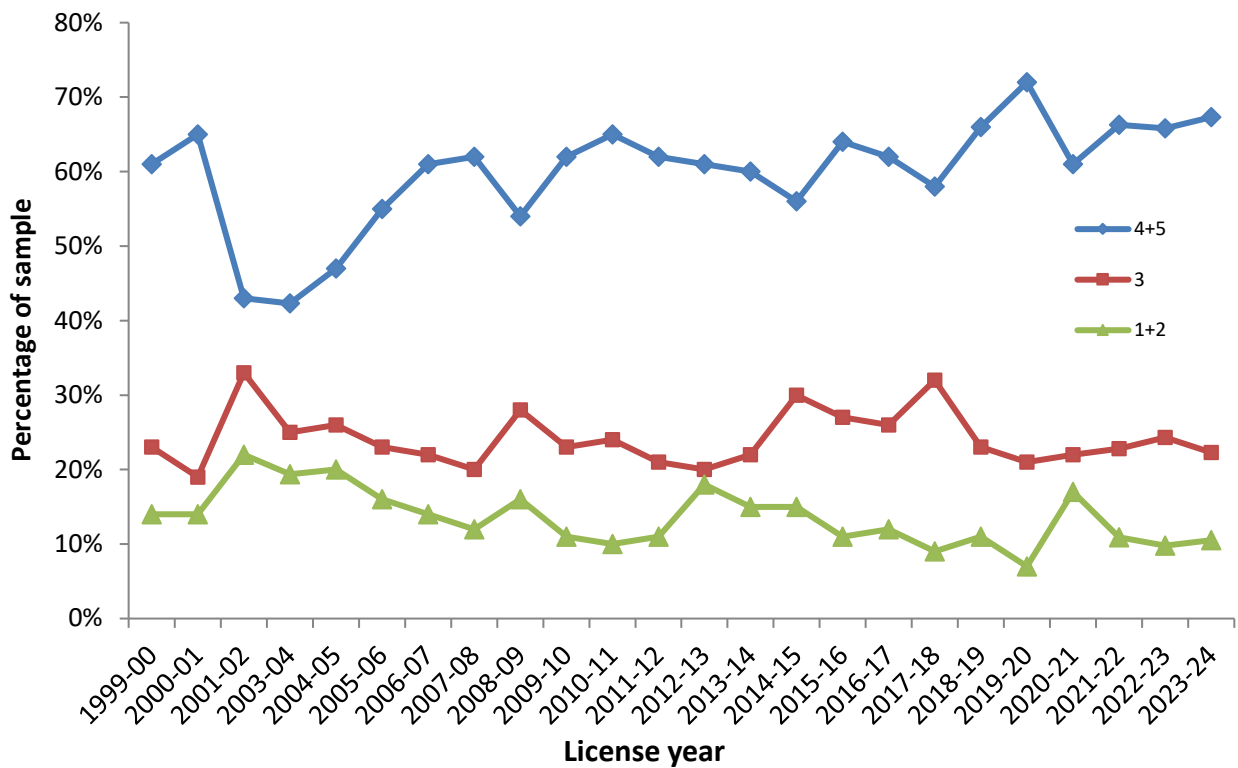


Figure 4. Overall satisfaction rating of anglers surveyed from the 1999-00 to 2023-24 license years. A rating of 1 was “not at all satisfied” and a rating of 5 was “very satisfied”.

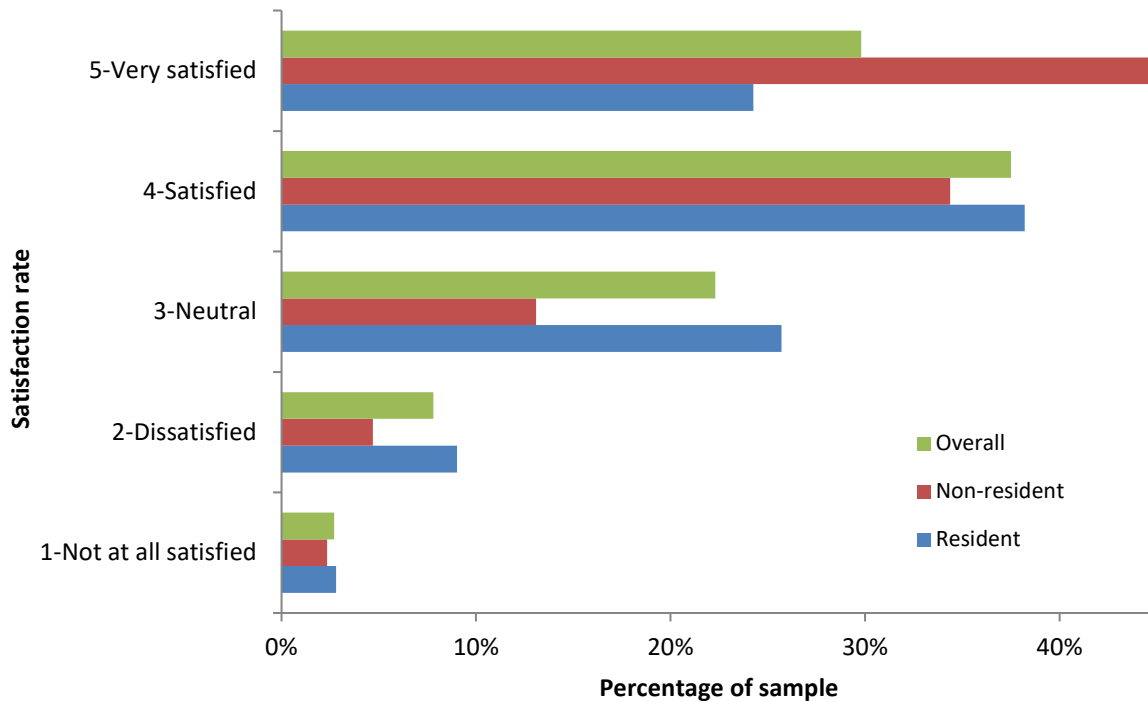


Figure 5. Satisfaction rate of resident and non-resident anglers during the 2023-24 license year.

**Question 4. Why do you feel this way?**

This was a follow up to Question 3 to identify key reasons related to satisfaction or dissatisfaction. This question was optional to answer, but most respondents (84.6%) provided a reason. Even though anglers provided a wide range of reasons to support their satisfaction rate, most of the answers fit into 27 categories. “Poor catch rates” was the primary reason for dissatisfied and neutral respondents followed by “poor opportunity or access”. Alternatively, “good catch rates” was the primary reasons for satisfaction (Table 2).



Table 2. Categorized reasons for satisfaction rating given by surveyed anglers and percentage of frequency by rating for the 2023-24 license year. Note: Sum of each category equals 100% since the percentages are totaled by grouped rating. **Bolded** percentages are the highest for each grouped rating.

Reason for satisfaction rating	Rating		
	Dissatisfied (1-2)	Neutral (3)	Satisfied (4-5)
Good catch rates		0.3%	<b>25.7%</b>
Poor catch rates	<b>33.0%</b>	<b>27.2%</b>	4.3%
Large fish caught			1.0%
Fish too small		6.6%	2.1%
Good water levels, conditions, flow			1.9%
Poor water levels, conditions, flow	8.3%	13.0%	2.0%
Too crowded	6.0%	8.7%	2.1%
Good opportunity or access			9.0%
Poor opportunity or access	11.9%	9.4%	1.8%
Facilities good or clean			4.2%
Facilities poor or trashy	4.1%	4.9%	3.5%
Good stocking	0.5%	0.3%	4.3%
Poor stocking	9.6%	8.1%	1.2%
Regulations good/enforcement adequate			1.0%
Regulations poor/not enough enforcement	4.1%	3.6%	0.9%
Beautiful location		0.3%	8.4%
Enjoyable experience/just like to fish		0.5%	14.9%
Weather	0.5%	2.5%	2.1%
Good fisheries management		0.3%	1.1%
Poor fisheries management	7.3%	2.0%	0.1%
Others not following rules	1.4%	1.0%	1.4%
Invasive/unwanted fish species		0.5%	
License/activity costs acceptable			0.2%
License/activity costs too high	2.8%	0.8%	0.1%
COVID-19 related closures and issues			0.1%
Fire related closures	0.5%	0.3%	0.2%
Other	4.1%	9.9%	6.8%

**Question 5. Regarding your species preference, do you prefer to fish for cold water species like trout or salmon or do you prefer to fish for warm water species like bass or walleye?**

The largest percentage of the anglers (53.9%) indicated they preferred to fish for “cold water” species such as trout and salmon. About 36.4% of anglers indicated they preferred to fish for both “cold water” and “warm water” species. Overall, these percentages have not changed significantly for several years (Figure 6). When combining anglers that indicated they preferred to fish for “cold water” species and “both” it appears that most (90.3%) of anglers fish for cold water species compared to 46.1% for warm water species.

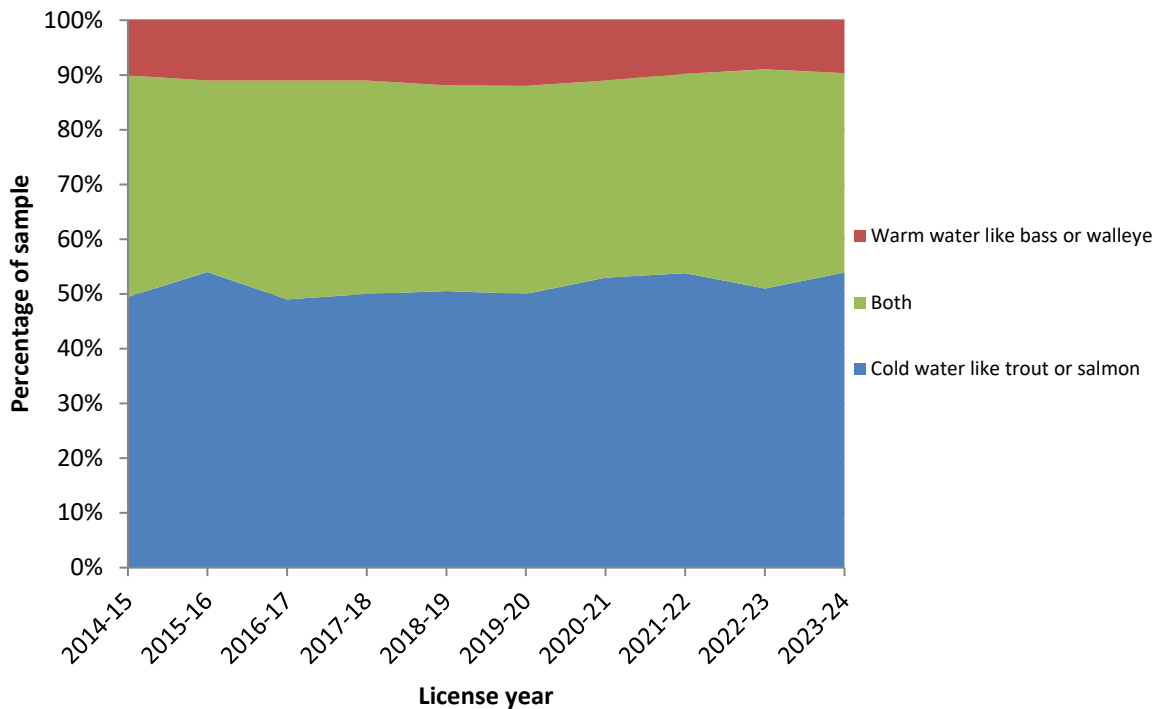


Figure 6. Fishing preference to fish for “cold water”, “warm water”, or “both” species of surveyed anglers during from the 2014-15 to 2023-24 license years.

**Question 6. Which cold water species do you prefer to fish for in New Mexico (May select up to 3)?**

Anglers were asked this question if they indicated they prefer to fish for “cold water” species or “both”. Similar to the past several years, Rainbow Trout and Brown Trout continue to be the cold water species most preferred (Table 3).

Table 3. Cold water species in order of preference by anglers during the 2023-24 license year.

Species	Percent preferred*
Rainbow Trout	86.7%
Brown Trout	67.3%
Cutthroat Trout	38.9%
Brook Trout	24.7%
Kokanee	14.4%
Lake Trout	11.2%
Gila Trout	9.7%

\*Percentages do not sum 100% since this is a multiple response question

**Question 7. Of the following statements which comes closest to your personal view when fishing for cold water species? (Stocked vs. wild fish)**

This question was asked if anglers indicated they fished for “cold water” species or “both”. The purpose of this question was to identify if anglers chose their fishing location where they expected to catch stocked fish or wild fish. The percentage of anglers indicating they chose their fishing

location where they expected to catch wild fish (54.7%) was higher than those indicating they chose their fishing location where they expected to catch stocked fish (45.3%). There’s a slow increasing trend of anglers selecting fishing locations for wild trout from last year since the 2014-15 license year (Figure 7).

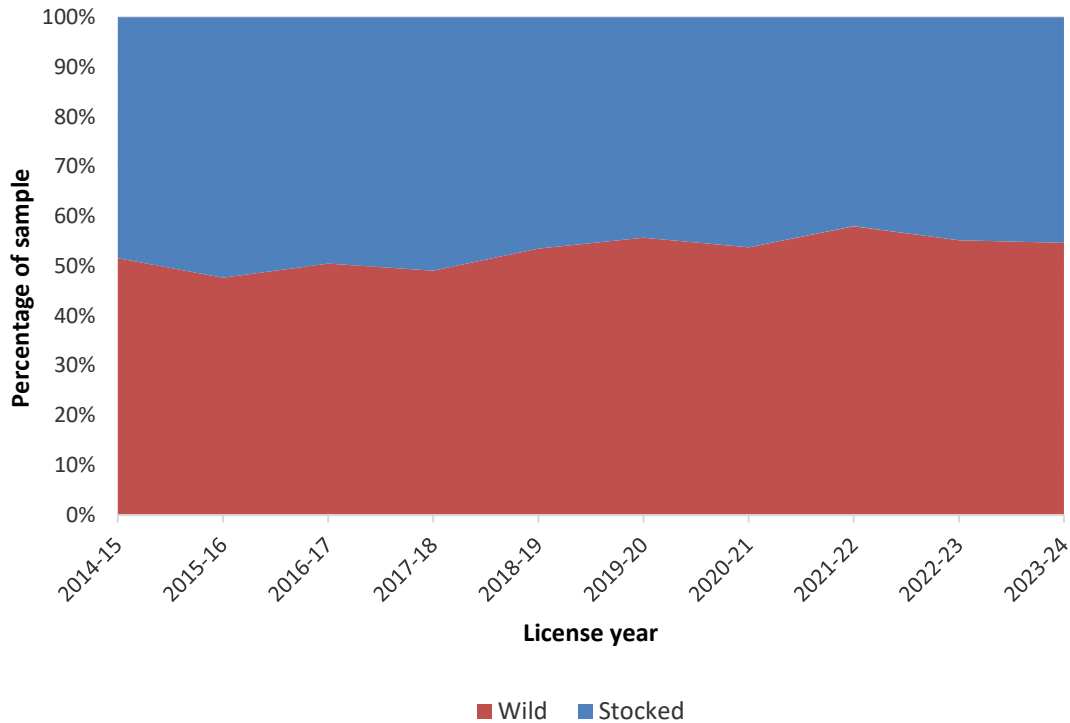


Figure 7. Percentage of cold water anglers that indicated they chose their fishing location where they expect to catch wild fish versus stocked fish from the 2014-15 to 2023-24 license years.

**Question 8. Which warm water species do you prefer to fish for in New Mexico (May select up to 3)?**

Anglers were asked this question if they fished for “warm water” species or “both”. When comparing results to past surveys there were slight percentage changes for each species, but Largemouth Bass continues to be the most popular warm water species followed by catfish and Smallmouth Bass (Table 4). Spotted Bass and Yellow Perch continue to be the least popular warm water species.

Table 4. Warm water species in order of preference by anglers during the 2023-24 license year.

Species	Percent preferred*
Largemouth Bass	59.4%
Catfish	38.0%
Smallmouth Bass	36.7%
Walleye	36.3%
Crappie	26.1%
White Bass	21.7%
Bluegill/Sunfish	12.5%
Northern Pike	12.3%
Striped Bass	10.8%
Tiger Muskie	10.7%
Spotted Bass	4.5%
Yellow Perch	4.4%

\*Percentages do not sum 100% since this is a multiple response question

**Question 9. Of the following statements which comes closest to your personal view? (Catch-and-release vs. catch-and-keep)**

This question was to determine if anglers prefer to practice catch-and-release or keep most of the fish they catch. During this survey most (67.9%) anglers indicated they prefer to release most of the fish they catch. This question has been included in the survey for multiple years and there’s an increasing trend in the percentage of anglers that prefer to practice catch-and-release (Figure 8).

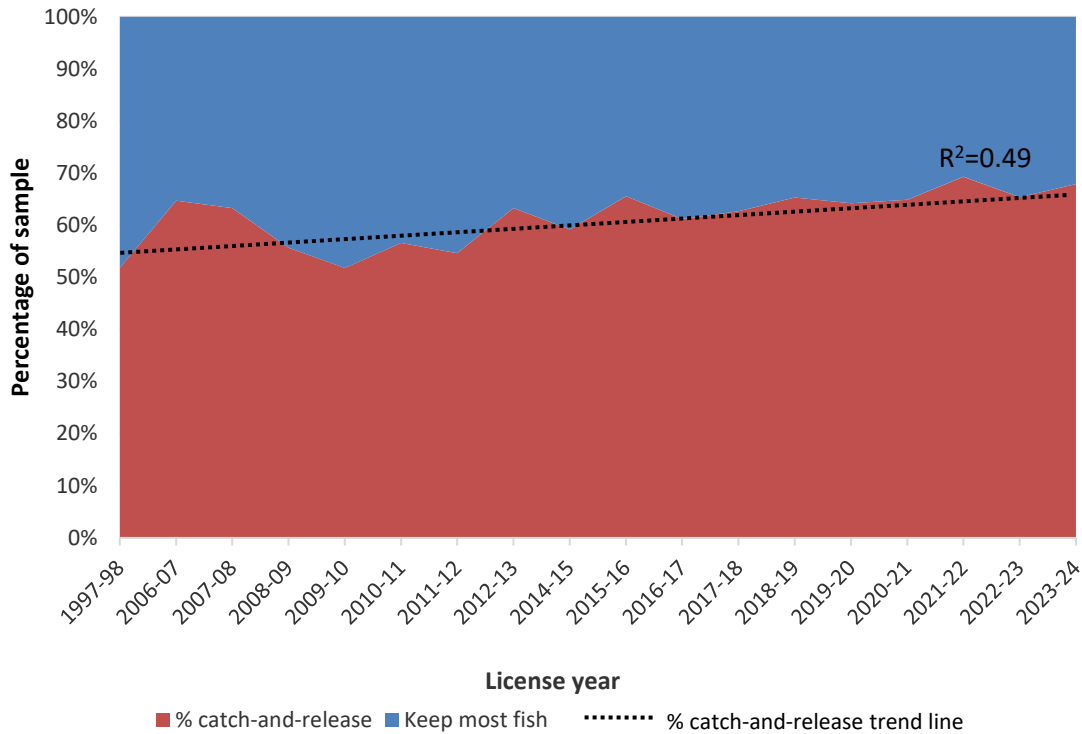


Figure 8. Percentage of anglers that indicated they keep most of the fish they catch versus release most of the fish they catch with trend line from 1997-98 to 2023-24 license years.

**Question 10. Of the following statements which comes closest to your personal view? (Lots of fish vs. one or two large fish)**

This question was asked to determine if anglers chose fishing locations based upon where they will “catch lots of fish” or “one or two larger fish”. Most (61.6%) anglers indicated they chose their fishing location based on where they will “catch lots of fish”.

**Question 11. Did you fish the San Juan River tailwater fishery within the past twelve months?**

This was a new question and asked as part of a focused management effort on the San Juan River. It was also used to identify San Juan River anglers for follow up Question 12 to 14. About 20.8% of anglers indicated they fished the San Juan River tailwater fishery within the past twelve months. When comparing the number of respondents that indicated they fished the San Juan River and zip codes of respondents there’s a higher percentage of non-resident anglers that fish the San Juan River compared to other waters statewide (Figure 9).

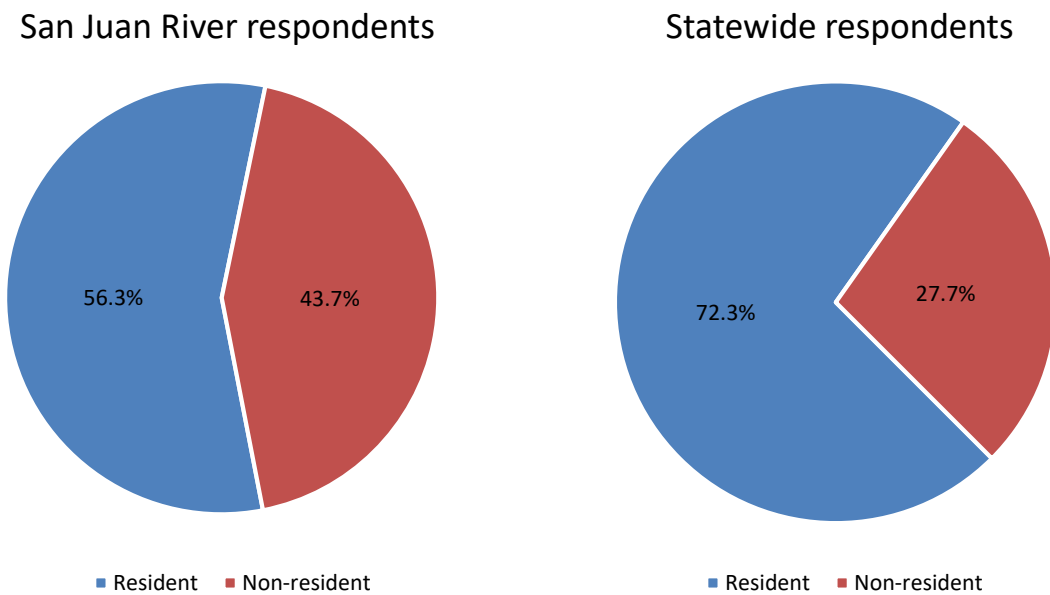


Figure 9. Resident status of San Juan River respondents and all respondents during the 2023-34 license year.

**Question 12. Did you fish with a professional guide on the San Juan River?**

Most (62.9%) San Juan River anglers indicated they did not fish with a professional guide. About half that fished with a guide stated they fished with a guide on every visit (Figure 10).

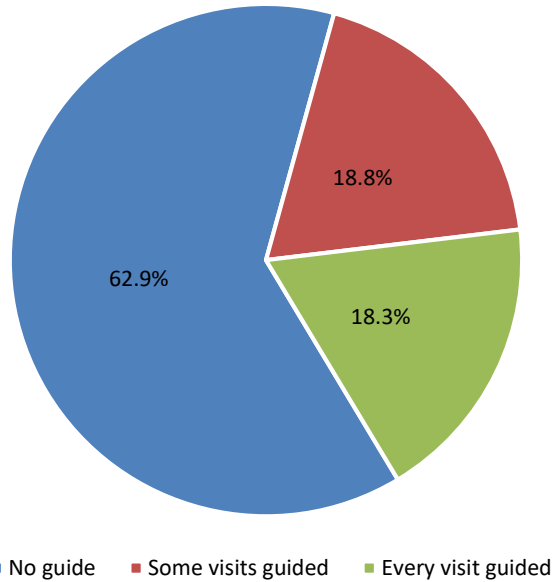


Figure 10. Percentage of anglers that fished with and without a professional guide on the San Juan River tailwater fishery during the 2023-24 license year.

**Question 13. Did you catch any fish from the San Juan River that past twelve months?**

Most (89.1%) anglers indicated that they caught fish from the San Juan River the past twelve months. When comparing guide and catch data, anglers that fished with a guide were more likely to catch fish (Table 5).

Table 5. Percentage of San Juan River anglers that caught fish compared to anglers that fished with and without a professional guide during the 2023-24 license year.

Fished with a professional guide?	Caught fish?	
	Yes	No
No guide	85.7%	14.3%
Some visits guided	94.2%	5.8%
Every visit guided	95.5%	6.0%

**Question 14. How many total of each trout species did you catch during the past twelve months (Rainbow and Brown trout)?**

Most (78.2%) of the reported catch was Rainbow Trout. Mean number of Rainbow Trout and Brown Trout caught per angler was  $40.2 \pm 10.8$  and  $11.2 \pm 1.6$ , respectively (Figure 11). Most anglers reported catching ten or less Brown trout during the past twelve months (Figure 12).

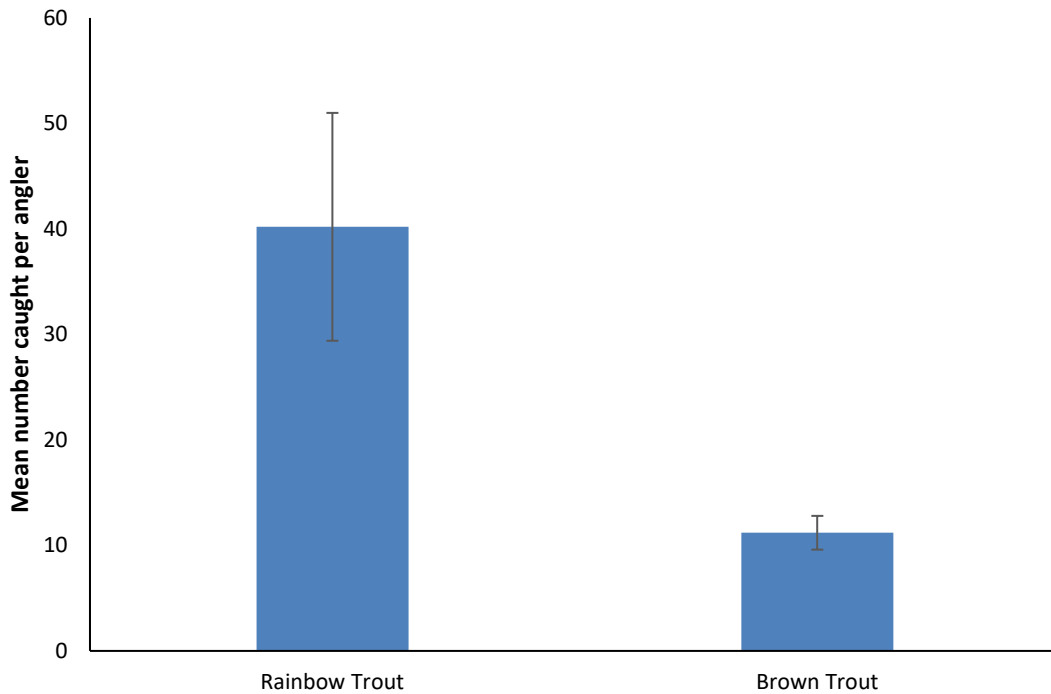


Figure 11. Mean number of Rainbow and Brown trout caught per angler the past twelve months from the San Juan River during the 2023-34 license year.

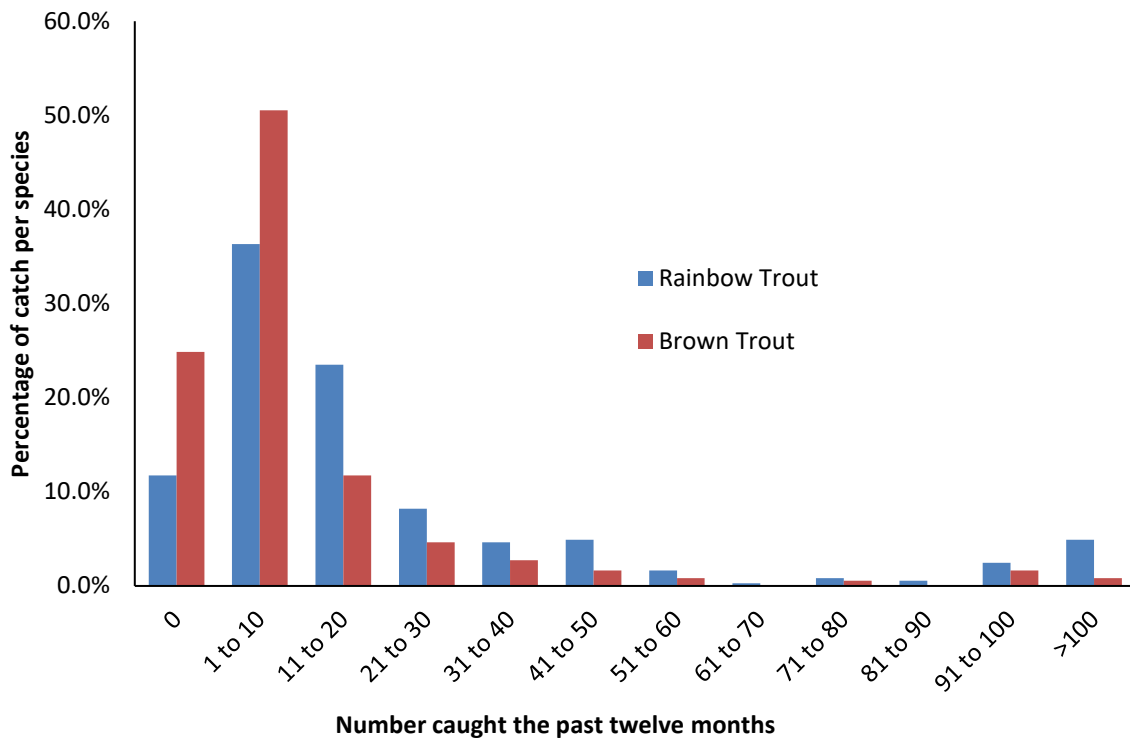


Figure 12. Relative frequency of Rainbow and Brown trout caught reported by San Juan River anglers during the 2023-24 license year.

**Question 15. Do you use live bait when fishing?**

Most (72.8%) anglers indicated they do not use live bait when fishing. This is slightly above the ten year mean of  $69.5 \pm 1.9\%$ , but the percentage hasn't changed significantly for several years (Figure 13).

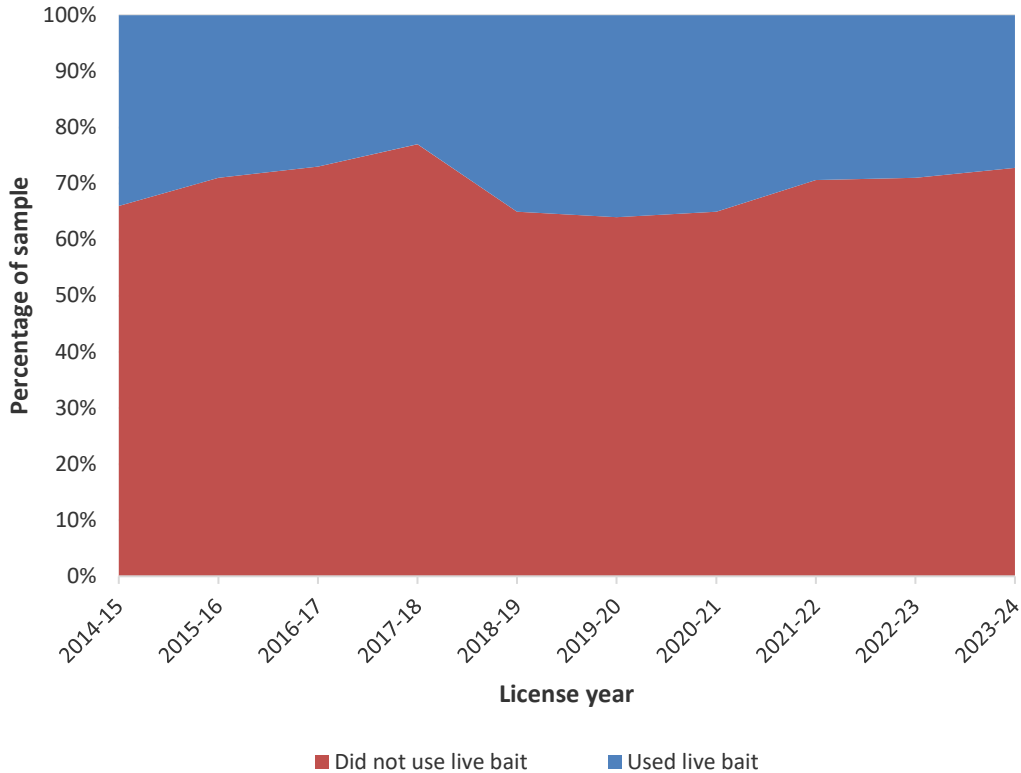


Figure 13. Percentage of anglers that indicated they used live bait versus those that did not use live bait while fishing from the 2014-15 to 2023-24 license years.

**Question 16. What types of live bait do you use when fishing?**

This was a follow up question to Question 15 for the 27.2% of anglers that indicated they use live bait when fishing. Similar to past surveys, “earthworms/night crawlers” were by far the most popular live bait used and “Water dogs/salamander larvae” continue to be the least popular (Figure 14). About 5.0% of anglers indicated an “other” live bait. Other live baits mentioned included cicadas, Bluegill, horseflies, and hellgrammites.



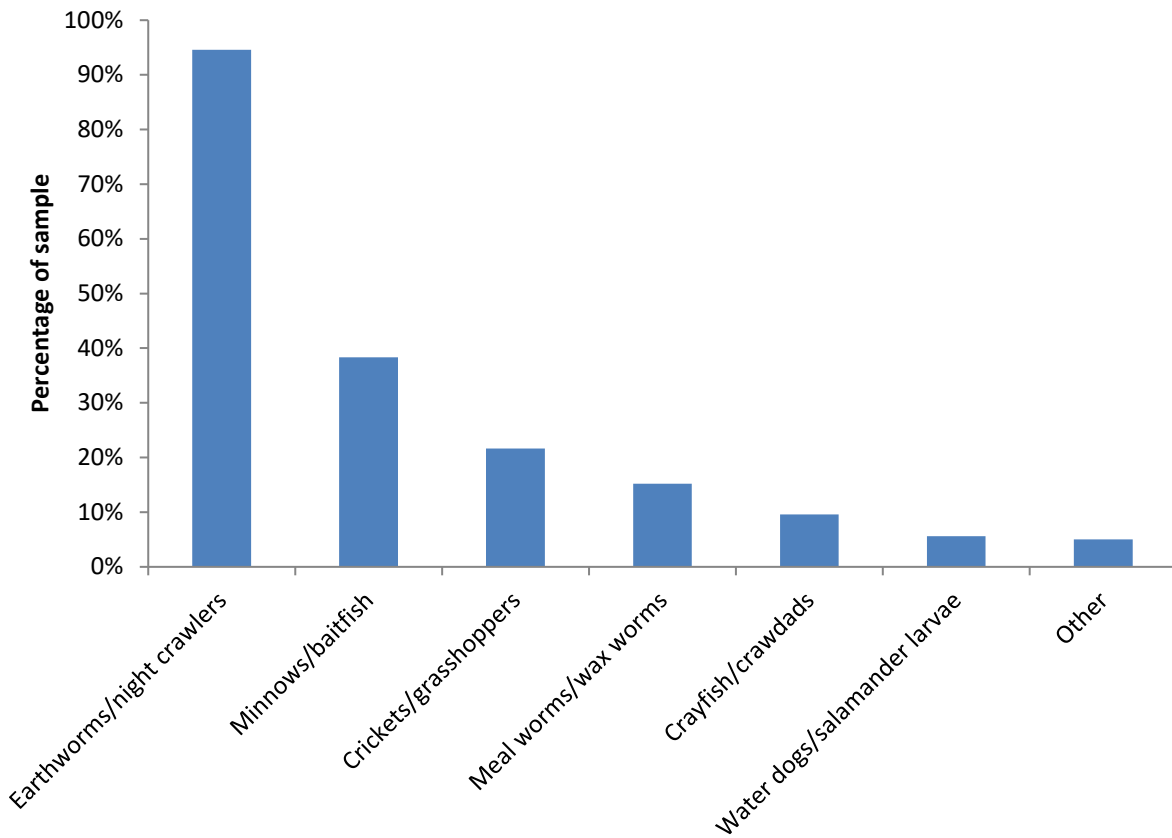


Figure 14. Types and percentage of live bait used by anglers during the 2023-24 license year. Note: percentages do not equal 100% since this is a multiple response question.

**Question 17. In what major river drainage do you use live bait in when fishing?**

The Rio Grande drainage continues to receive the most (56.3%) live bait use according to anglers surveyed. The Mimbres River drainage continued to receive the least amount of live bait use (Table 6).

Table 6. Live bait use by major river drainage and order of use by anglers during the 2023-24 license year in order of usage.

Major River Drainage	Percent preferred*
Rio Grande	56.3%
Pecos	28.3%
Canadian	18.8%
San Juan	16.0%
Gila and San Francisco	9.0%
Mimbres	3.3%

\*Percentages do not sum 100% since this is a multiple response question

When comparing types of live bait used and percentage of use by major river drainage “earthworms/night crawlers” continue to be the most utilized in all drainages, whereas “waterdogs/salamander larvae” and “crayfish/crawdads” were consistently used the least in all drainages (Table 7).

Table 7. Types of live bait and percentage\* of reported use by anglers in major river drainages during the 2023-24 license year.

Bait type	Rio		Gila and San			
	Grande	Pecos	Francisco	Canadian	San Juan	Mimbres
Earthworms/night crawlers	58.9%	29.7%	9.2%	18.0%	16.4%	3.4%
Meal worms/wax worms	10.1%	5.6%	1.6%	2.9%	2.9%	0.2%
Minnnows/baitfish	24.7%	10.8%	2.9%	9.7%	5.2%	1.3%
Water dogs/salamander larvae	3.8%	2.0%	0.4%	2.5%	1.4%	0.2%
Crayfish/crawdads	6.5%	2.9%	0.7%	1.8%	1.6%	0.2%
Crickets/grasshoppers	13.5%	8.3%	2.5%	4.7%	2.7%	0.7%

\*Percentages do not sum 100% since this is a multiple response question

Questions 18 to 20 were related to demographics and were optional to answer by survey participants.

**Question 18. What is your gender?**

Most of the survey participants identified themselves as male, representing 86.6% of the sample (Figure 15). Based on 2023-24 license purchasing data about 24.7% of fishing license buyers were female which matched the percentage of females in the survey invitee pool. Similar to past surveys, female license buyers seem to be under represented in the survey as only 12.1% of respondents identify themselves as female.

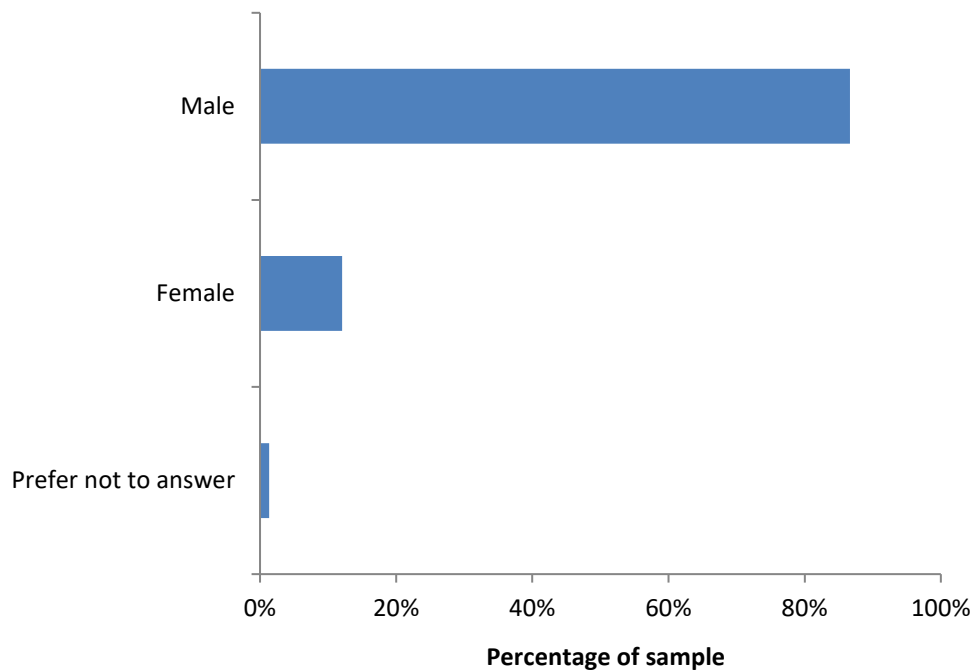


Figure 15. Gender of survey participants by percentage.

**Question 19. What is your age category?**

The largest age category was 65 years and older, representing 34.2% of the sample, followed by age category 50 to 64 years (Figure 16).

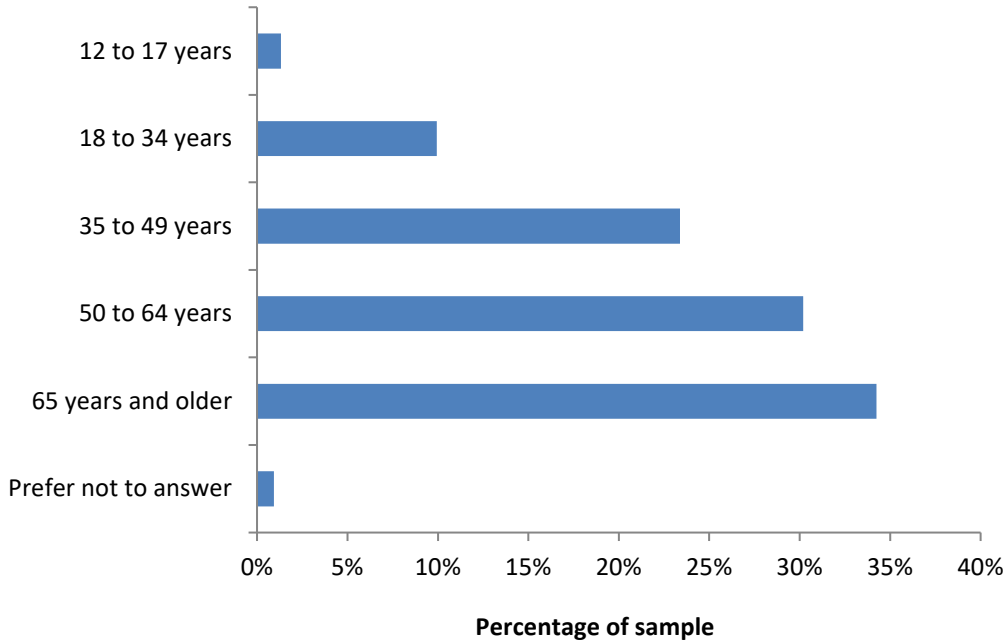


Figure 16. Age categories of survey participants by percentage.

**Question 20. Do you consider yourself to be (ethnicity):**

Most of the participants consider themselves Anglo/Caucasian representing about 55.4% of the sample (Figure 17).

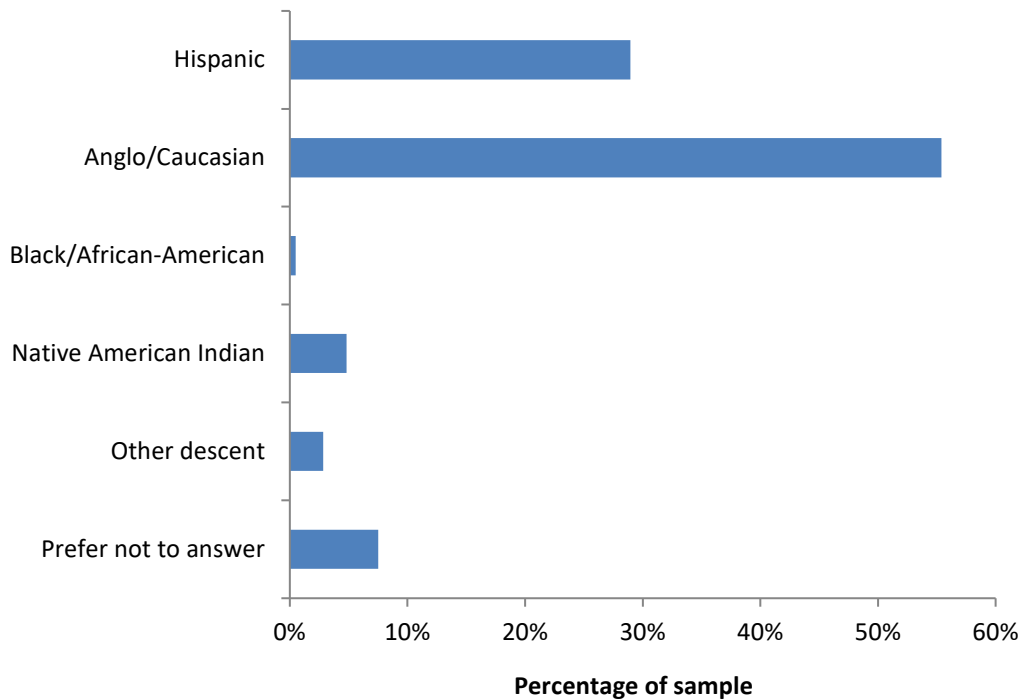


Figure 17. Ethnicity of survey participants by percentage.

**Question 21. What is the highest level of education you have had the opportunity to complete?**  
 The largest percentage of participants indicated completing “some college/associates degree/vocational certificate” representing 33.0% of the sample. Participants that indicated “grade school” was the smallest percentage (Figure 18).

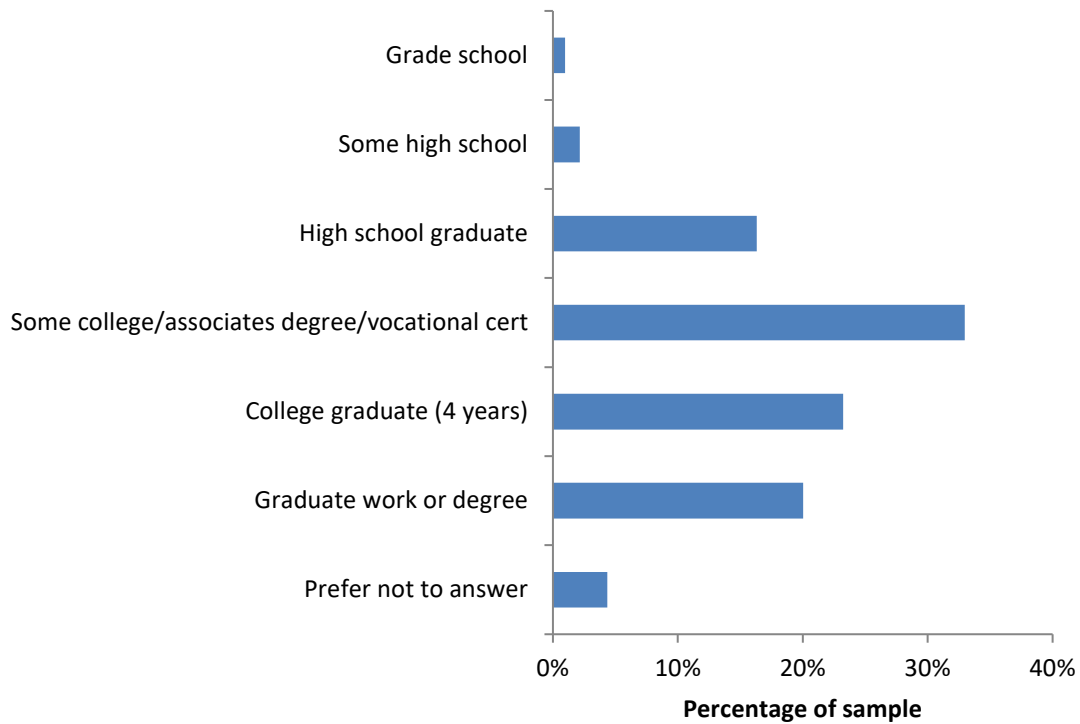


Figure 18. Highest education level of survey participants by percentage.

**Question 22. What is the zip code of your residence?**

Survey participants represented 605 different zip codes and 41 different states (Figure 19). Two hundred twenty seven of the 365 (62.2%) New Mexico zip codes were represented.

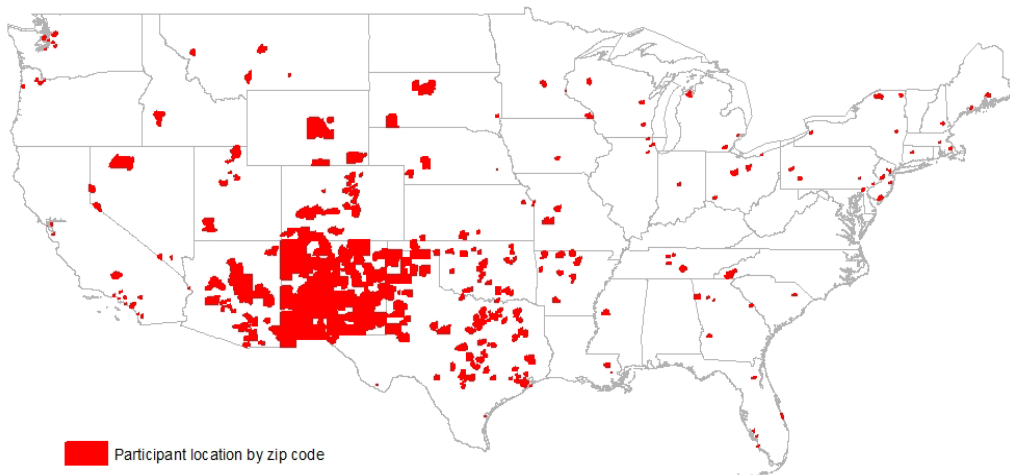


Figure 19. Location of survey participants based upon zip code. Note: Alaska and Hawaii not displayed since there were no survey participants from these states.

## **Conclusion**

Results from this survey continue to provide insight on angler trends that guide fisheries management. Overall, the angler satisfaction percentage (89.6%) was slightly below the object of 90%; however, the percentage of anglers indicating they were very satisfied did increase from last year. Information gained on the San Juan River (e.g., species of trout caught, guide use, etc.) will be useful in developing future research. Results for most questions (e.g., species preference, stocked vs. wild preference, etc.) didn't change from previous surveys, but there are noticeable trends on others (e.g., increasing trend of catch-and-release anglers). The survey continues to provide an understanding angler needs, trends, and preferences to ensure we can meet the satisfaction goal.

Thank you to the survey participants for providing your input and helping us successfully manage your aquatic resources.