
REVIEW OF THE FISHING GUIDE INDUSTRY IN OKLAHOMA



Picture: Darrin Hill

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Executive Summary

- Among 32 states with some form of fishing guide license, Oklahoma ranks 7th cheapest for state residents (average \$116.45; range \$10 - \$1,500) and 4th cheapest for nonresidents (average \$242.67, range \$10 - \$2,000). In contrast to Oklahoma, 17 of these states have tiered pricing based on residence.
- Most states (53%) require first aid/CPR certification for licensed fishing guides. Other requirements (i.e., boater safety, liability insurance, exams) are less common (16-31%).
- A census of 757 currently or formerly licensed fishing guides (2021-2023) yielded 293 responses, 84% of which had guided in the past 12 months. Most guides (61%) have been operating for 5 years or less, and a large majority of these activities occur in March-June (87%) or in October (81%) on reservoirs (87%) or rivers (12%).
- Striped bass are pursued by a majority of guides (51%) and was the most popular single species targeted (37.1%; >2x that of the next popular species- crappie). Striped bass guides also hosted the highest average number of clients per year (235) compared to other single species (range 35-125).
- The average daily rate reported by fishing guides was \$219.13 per person (range \$75.00-\$850.00). Daily rates varied by target species with trout demanding the highest price at \$283.16. Other species' averages ranged \$170.00 to \$277.89.
- Estimated gross revenues accrued by licensed fishing guides averaged \$42,584.20 (range \$300-\$480,000). Guides targeting striped bass reported the largest average revenues (\$44,189.58), followed by trout (\$29,850.59) and paddlefish (\$19,502.00). The cost of an Oklahoma fishing guide license offsets only 0.2%, 0.3%, and 0.5% of annual revenues for striped bass, trout, and paddlefish guides, respectively.
- Most (71%) guides aim to harvest fish, with the remainder focused on catch and release (C&R). Guides targeting trout, smallmouth, and largemouth basses were focused on C&R, whereas others were harvest oriented. According to guides, half of their clients always take a limit (17%) or usually take a limit (33%).
- Many fishing guides use various types of boat sonar technology (down-imaging: 83.9%, side-imaging: 66.5%, and forward-imaging: 46.5%). Forward-imaging sonar was ranked highest importance among all forms of technology, equipment, or information. Reported use of forward-imaging sonar varied for guides focused on harvest or C&R.
- Guides overwhelmingly ranked a "fun experience" for clients as highest among aspects provided for their clients, regardless of species targeted or harvest goal.

- 74% of guides reported that the Oklahoma fishing guide license is priced appropriately, with 9% reporting it is too high (suggesting \$35.12) and 17% reporting it is too low (suggesting \$565.71).
- Only 15% of Oklahoma fishing guides are full-time, with 30.8% receiving less than 10% of their income from guiding clients. Guides strongly agreed that they are responsible for the safety of their clients (87%) and for their clients following applicable fish and wildlife laws (68%), however, support for enhanced requirements for licensed fishing guides was minimal or absent. There was generalized support (51%) for a CPR/first aid requirement, but support for other hypothetical safety or accountability requirements ranged 14-38%.
- A survey of 7,000 licensed anglers yielded 1,722 responses (response rate 22%) with 14% of active anglers reporting the use of a fishing guide in the last year. Many of these (49%) reported that they would use guide services again. Nonresidents hired more guides than resident anglers (27.2% and 11.7%, respectively).
- Fishing guide usage was dominated by striped bass anglers (56% of guide users) fishing on Lake Texoma (58% of Lake Texoma license holders used guides), however resident lifetime license holders used more guide services than resident senior or resident annual license holders (13%, 9%, and 8%, respectively).
- Regardless of license type, most guide users (65%) reported that they would have fished about the same, had they not hired a guide, with 23% reported fishing a lot less often and 12% reported fishing slightly less often.
- Guided anglers reported spending an average of \$325.46 (or 48% of fishing expenses) on guide fees. Fees reported by anglers conflicted with average fees reported by guides (\$219.13), with anglers reporting inflated values in nearly all cases, regardless of species.
- Recommended changes to Oklahoma fishing guide license include increasing the price (especially for nonresidents to align with recent increases in nonresident license fees from SB 941), with USCG option retained, and require first aid/CPR certification for guides.

Introduction

Fishing guides play a unique role in the management of fish and fisheries in the United States. As understood by wildlife law across the country, natural resources (i.e., “the fish”) belong to the public while state fish and wildlife agencies are charged with the equitable and sustainable management of recreational opportunities. These recreational fisheries are supported by a user-pay model in the North American Model of Wildlife Conservation and funded, in part, by the individual sale of fishing privileges in the form of annual licenses. Fishing guides serve as an intermediary between individual anglers and the management agency by assisting with fishing activities for a fee. This assistance may include tangible goods and services such as providing all necessary equipment and watercraft and cleaning fish, in addition to intangible contributions such as experience or local knowledge. All these factors are expected to lower the learning curve for the angler while increasing catch rates and overall satisfaction.

Fishing guides are both profiting off public resources as well as benefiting the public by making these resources more accessible to them. The fishing guide industry may also directly benefit the Department by possibly recruiting new anglers who may need the assistance of a guide to start fishing, retaining anglers by providing new or unique opportunities, and reactivating anglers that may need an excuse or assistance to get back on the water. The Department recognizes these benefits to the management of the resources while also accepting oversight responsibility to ensure that guides are equipped to host anglers safely and legally within sustainable fisheries.

Licensed fishing guides play a unique role, in that they are operating, in part, as commercial fishers, but providing services for clients within a recreational fishery. In many cases, the guided fishing industry is harvest-oriented and volume-focused, as both directly translate to more or higher guide fees. However, the revenues accrued by the Department (which are used to manage these fisheries) are largely decoupled from the success or revenues generated by individual guides beyond the direct annual revenues from the sale of fishing guide licenses. It is not known what indirect influences the licensed fishing guide industry has on Oklahoma fishing license sales through the recruitment, retention, or reactivation of anglers.

This project was selected as a need by the ODWC Fisheries Division Research Review Committee. The overall goal of the project was to describe the fishing guide industry in Oklahoma and to determine if adjustments to the requirements or pricing of the annual fishing guide license (required of anyone that guides in Oklahoma) are warranted. We determined that a three-part approach would be best to gain this information. First, we audited other fish and wildlife agencies in the United States to determine market pricing and what, if any, requirements, or accountabilities are associated with their guide licenses. Next, we conducted a census of all licensed fishing guides over the last three years in Oklahoma. Finally, we used the statewide angler survey to reach a broad group of Oklahoma anglers to determine the extent to which anglers in Oklahoma use fishing guides.

GOALS

- Part 1: Nationwide license pricing and requirement audit
 - Describe the pricing for fishing guide licenses issued by state fish and wildlife agencies or state board of outfitters nationwide
 - Determine the requirements or accountabilities (i.e., reporting) other states have, if any, for their fishing guide licenses and whether modeling similar requirements in Oklahoma would be a benefit
- Part 2: Guides Census
 - Examine guiding activity in Oklahoma and based on the nationwide audit, use this survey to explore how possible changes may impact guides in their business operations
- Part 3: Angler Survey
 - Examine guide use in Oklahoma by resident and nonresident license holders including why they choose to use guides, how much they are spending in local economies while on guided fishing trips, and whether the fishing guide industry influences anglers' fishing frequency relevant to the recruitment, retention, and reactivation of Oklahoma fishing license buyers.

These three approaches were designed to inform ODWC whether the current (2023) pricing of a fishing guide license (\$90 annually, discounted to \$20 annually with US Coast Guard certification) and the requirements and accountabilities (none) are appropriate to best serve the Department, Oklahoma anglers, and the sustainable

use of Oklahoma’s fisheries resources. This investigation aimed to inform larger conversations within Fisheries Division and within fisheries management nationwide on the role, value, and accountability of licensed fishing guides.

Methods

This project was split into three separate parts to get a full picture of the industry and its users. This included a nationwide audit to directly compare the current ODWC fishing guide license structure with other states, a census of guides, and a survey of guide users. Below are the methods that each followed.

Part 1: Nationwide Guide License Audit

For all 50 states, we searched respective fish and wildlife agency websites for regulations related to a fishing guide license, or as close to a fishing guide license as they have. We created a spreadsheet displaying if the states have a guide license and if it is tiered based on different privileges. We also determined if it is based on residency, the cost of the license for a resident compared to a nonresident, if they require reporting, if there are any other special requirements, and the source webpage of the information we found.

To compare, we conducted basic descriptive statistics to determine percentages that require a guide license and percentages with other specific requirements. We also conducted a geographic analysis of license requirements to determine if there are regional trends. In many coastal states, fishing guide licenses are available for both freshwater and saltwater, often with differences in pricing and requirements. For direct comparability to Oklahoma, which is not a coastal state, we only report on the license requirements for freshwater fishing guides.

Part 2: Census of Oklahoma Licensed Guides

We conducted a census of fishing guide license holders, and we opened the pool of those surveyed to anyone with an active fishing guide license in the previous 3 years

(July 2020- July 2023, N=1,537). In Oklahoma, the two types of licenses that guides can have are a regular Fishing Guide License, or a Coast Guard license. The regular guide licenses costs \$90 but this fee is reduced to \$20 regardless of residence when the applicant provides US Coast Guard mariner credentials (Appendix B). Acquisition of this USCG credential as a “non-qualified” rating requires an application (issue) fee of \$45 in addition to an evaluation fee of \$95 (total cost \$140). The USCG credential is valid for five years, after which a renewal can be acquired at a reduced cost of \$95 (https://www.dco.uscg.mil/nmc/merchant_mariner_credential/). While these USCG credentials likely hold value by way of boater education and safety for the benefit of guided anglers, the fees do not contribute to the management of fisheries resources in Oklahoma. All licensed fishing guides in Oklahoma are also required to have an annual or lifetime fishing license, in addition to other endorsements required depending on the location or species.

When we de-duplicated the fishing guide population we were left with 757 unique guides to survey. Of the guides that received a survey, 587 had an Oklahoma mailing address, 135 Texas, 13 Missouri, 8 Kansas, 7 Arkansas, 2 California, 1 Pennsylvania, 1 New Mexico, 1 North Carolina, 1 Montana, and 1 Iowa. Table 1 breaks out type of license per year and how many had an out of state vs in state mailing address.

Table 1: Number of guides per year by license type and residency. Data for 2020 and 2023 represent a portion of the calendar years, as the scope of the project spanned June 30, 2020 – June 20, 2023. Data indicate that average of approximately 500 fishing guide licenses are issued annually and most are issued in the first half of the calendar year.

Year of Purchase	Fishing Guide License Regular (\$90)		Fishing Guide License USCG Discounted (\$20)		Total
	Resident	Non-Resident	Resident	Non-Resident	
2020	67 (77.0%)	17(19.5%)	1 (1.1%)	2 (2.3%)	87
2021	384 (76.6%)	100 (20.0%)	8 (1.6%)	9 (1.8%)	501
2022	384 (75.3%)	117 (22.9%)	5 (1.0%)	4 (0.8%)	510
2023	341 (77.9%)	89 (20.3%)	4 (0.9%)	4 (0.9%)	438

We sent an invitation letter to all participants on Monday, August 7th, 2023, with notification that they were selected to take part in a survey of fishing guides and to

keep an eye on their mailbox for their access to the survey. A week later (Monday, August 14th), we sent a postcard with QR code to all participants to access the survey online. On Monday, August 21st, we emailed all those with a valid email address via Survey Monkey with a direct link to the online survey. We sent a reminder email on Thursday, August 24th, and a reminder postcard with QR code on Monday, August 28th. The final email invite was sent to those who had not responded on Tuesday, September 5th and the survey closed on Friday, September 15th. For those who were not able to take the survey online, we conducted their survey via phone.

We asked guides if they guided in the previous 12 months. If not, they were asked why they were inactive in the previous 12 months. If they were inactive, they were not disqualified from future questions, but were asked to respond to the survey based on their previous activity as a guide. We asked all respondents how long they had been a guide in Oklahoma, what species they target, and what single species they target most often. We asked guides what types of water bodies they guide, specific water bodies they guide on, and during what months they actively guide. To examine financial aspects of the guide industry, we asked them to report their daily rate per client and how many clients they take per year, what portion of their annual income comes from guiding, and how they feel about Oklahoma fishing guide license pricing. To examine the impacts of the industry on fisheries resources in Oklahoma, we asked if they guide for catch and release or harvest and how often their clients catch the bag limit (if applicable). To understand what values fishing guides provide to presumably less-experienced anglers, we asked what technologies or educational resources they use while guiding and how important those are to their clients' success. This helped provide insights on value of the educational and information resources provided by the Department. Lastly, we inquired about the importance of different aspects of a fishing trip in respect to their clients' experience, whether they feel it is their responsibility to ensure safety and regulation compliance, and finally their feelings on whether various proposed changes to the guide license structure would have a positive, neutral, or negative impact on their business.

Part 3: Survey of Fishing Guide Users

These data were collected as part of the 2023 statewide angler survey. This survey, typically conducted every 4-5 years, covers many topics, including historical trend questions in addition to specific modules designed to address current needs identified by Fisheries Division. In 2023, this survey was sent to 7,000 anglers with a section on fishing guide usage. We asked if active anglers used a fishing guide, why they used the services of a fishing guide, how the use of a fishing guide affected their fishing activity, what species they targeted on their most recent trip, what waterbody they fished with the assistance of a guide, how much they spent on their most recent guided trip, and if they plan to use a guide again in the next 12 months. Full detail of the methods used for the 2023 Statewide Angler Survey are reported separately [ODWC report in preparation and will be posted on the Department's website upon completion].

Results

Part 1: Nationwide Guide License Audit

More than half (27) of the 50 states examined require a freshwater guide license through the state fish and wildlife agency. Another five states require a license that is furnished through a state board of outfitters, a government entity tasked with issuing privileges or permits to fishing and hunting guides (Fig. 1). Functionally, the fishing guide licenses issued directly by the states are equivalent to the fishing guide licenses issued by the outfitters' board although there sometimes are extra requirements for the outfitting company which houses the individual fishing guides in most instances. There does not seem to be a clear trend in where licenses are required or not, although states that provide a fishing guide license through an outfitter are clustered in the Rocky Mountains. Across the 32 states requiring a guide license, the average cost of a fishing guide license for state residents is \$116.45 (ranging from \$10.00 in West Virginia to \$1,500.00 in Nevada) which is less than half the average cost of a nonresident fishing guide license \$242.67 (ranging from \$10.00 in West Virginia to \$2,000.00 in Mississippi). In contrast, the price of a fishing guide license in Oklahoma is \$90 for both residents and nonresidents. Seventeen (53%) of 32 states have varied prices between residents and nonresident.

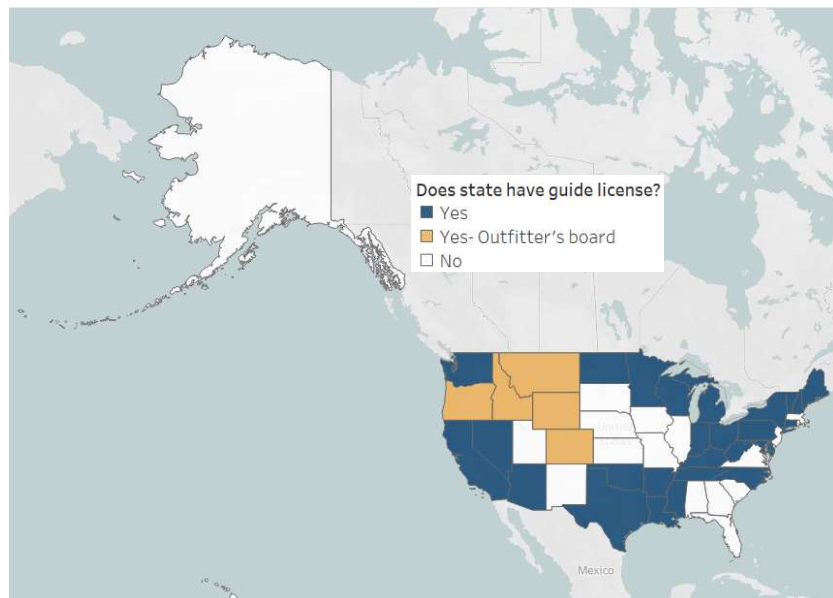


Figure 1: Map of the United States depicting which states require a fishing guide license (blue), those that do not (white) and those that have a guide license but through a different body of government (yellow)

Of the 32 states that require a fishing guide license, additional requirements or credentials are varied. Only ten states (31%) require fishing guides to provide proof of liability insurance. Seventeen states (53%) require first aid/CPR certification for fishing guide licensees. In contrast, only eight states (25%) require a boater safety course. In two states this course is solely offered through the agency, in the other three they offer a variety of online courses that may satisfy the requirement to have boater safety credentials. However, some states note, such as Minnesota and Texas, that for navigable waters in their states, a fishing guide must possess a USCG license, as those are federal waters. This USCG license requires boater safety within its requirements.

Perhaps at the extreme end of requirements or accountability for fishing guide applicants, seven states (22%) require an exam covering fish and wildlife rules and regulations.

This information is accurate at time of report writing. Requirements for fishing guide licenses will likely change as, for example, Michigan just created a guide license beginning March 1, 2024, shortly before this report was finalized.

Part 2: Census of Oklahoma Licensed Guides

When the census of guides closed on September 15, 2023, we exported 299 responses to a spreadsheet and began reviewing and cleaning the responses. There were three entries removed as they had duplicate ID numbers entered. The more complete response was retained. Three entries did not have an ID number associated with them but comparing responses and system IP addresses did not deem them necessary to remove. Although, this did lead to them not being able to be tied to demographics such as license type or residency. After review and cleaning, 293 responses remained, yielding a survey response rate of 38.7% (293 of 757). Recipients of the survey were apportioned between 505 active fishing guides (i.e., licensed in 2023) and 252 inactive fishing guides (i.e., licensed in 2021 or 2022, but not 2023). The response rate among these two groups varied, with 49.9% for active guides and 16.3% for inactive guides. It is not known whether outdated contact info for inactive guides played a role in the lower survey response rate or if their inactivity was assumed to render them ineligible to complete the survey. Of the respondents, 282 had purchased the license at regular price, eight had purchased the discounted license with USCG certification, and three were unable to be linked back to the type of license they purchased. All of those with the USCG credentials

targeted striped bass on Lake Texoma most often and all but one had a Texas mailing address. 81% of guide respondents had an Oklahoma address on their license profile, 16% had a Texas address and 1% had an Arkansas, Kansas, and Missouri mailing address respectively.

The first question on the survey asked guides if they had guided in the last 12 months (84% of respondents). For those that did not guide in the last year, the most often selected answer was not interested/other priorities (34%), followed by health issues (29.2%), too expensive (12.2%), not enough business (14.6%), and “other”. Write-ins under the other category included reasons such as being retired (4.9%) and some saying they had not guided in the last year because they were a brand-new business so would be guiding going forward once they had resources built up and found clients (12.2%). Not guiding in the previous year did not disqualify respondents from the rest of the survey and all guides were asked the subsequent questions.

We asked guides how many years they had been a guide in Oklahoma (61% responded five years or less, 25% 6-20 years, 14% 21 years or more) and how many of the last five years they had actively guided in Oklahoma (average 3.1 years). Multiple questions focused on what species their clients target and the single species they target most often (Table 2; respondents were first instructed to select all species that they targeted while guiding and then the one they guide for most often). Species targeted by fishing guides were *a priori* determined to be relevant to the remainder of the survey, therefore it was used as a classification variable.

Table 2: Species pursued by guides in Oklahoma (n=286)

Species Guided CHECK ALL THAT APPLY	Percent of guides (%)	Number of guides	Species Guided Most SELECT ONLY ONE	Percent of guides (%)	Number of guides
Striped bass	51.0	145	Striped bass	37.1	106
Crappie	39.5	113	Crappie	18.2	52
Catfish	37.1	106	Catfish	9.1	26
Hybrid striped bass	24.5	70	Paddlefish	6.6	19
Largemouth bass	21.3	61	Largemouth bass	6.3	18
Smallmouth bass	19.6	56	Trout	5.6	16
Paddlefish	16.4	47	Smallmouth bass	4.2	12
Other-White bass	10.5	30	Hybrid striped bass	4.2	12
Trout	8.4	24	Bowfishing guide	3.5	10
Bowfishing guide	7.7	22	Other	3.1	9
Other- Walleye	2.1	6	White bass	2.1	7

Other- Saugeye	1.0	3	Total	100%	286
Other- Spotted bass	.70	2			
Other- Alligator gar	.35	1			
Other- Bass	.35	1			
Other- Drum	.35	1			
Other- Redhorse	.35	1			

Note: several analyses throughout the rest of this report were done by grouping guides according to the species that they guide for most often. It is important to remember that although they guided for that species most often, 62% of all guides targeted more than one species so the answer to the question may be taking into consideration all species they guide for not just the one they guide for most often although their most guided for species likely sways their response most heavily.

When looking into trends and the diversity of species pursued by guides, 38% of guides selected that they target one species. Twenty-four percent target two species, 19% target three species, 12% target four species, 3% target five or more species. Of those that only target one species (n=110), the top three species pursued were striped bass (47%), crappie (white and black crappies, in aggregate; 17%), and trout (rainbow and brown trouts, in aggregate; 9%). The most common combination of species targeted by guides was catfish and striped bass (8% of total respondents). No other species combinations were more than 2% of total guides.

A high proportion of respondents (87%) reported that lakes were the preferred waterbody type that they guide most often, with only 12% reporting guiding in rivers most often, and fewer than 1% guiding in ponds and streams most often. We also asked guides what months they are most active. This followed a similar trend across all guides with the peak being from March-June (an average 86.9% of all guides reporting activity in these months) although there was strong participation in October (81.0% active).

Another goal of this survey was to determine the economics of the guide industry in Oklahoma. We asked the number of clients that each guide takes out per year on a guided trip for each of the species they guide for (Fig. 2). Two outliers were removed from analysis for striped bass (one respondent stated they took 5,000 clients per year) and trout (another respondent stated 2,750 clients per year). To determine if species guided for most often had a significant effect on number of clients taken per year, we ran a Kruskal-Wallis test with a significant result ($p < 0.05$). To determine what was driving this significance, we employed a Dunn's post-hoc test with Bonferroni correction and found that pairwise comparisons between striped bass

and other species were significant ($p\text{-adj}<0.05$) except for striped bass vs. trout. All other species comparisons were non-significant ($p\text{-adj}>0.05$).

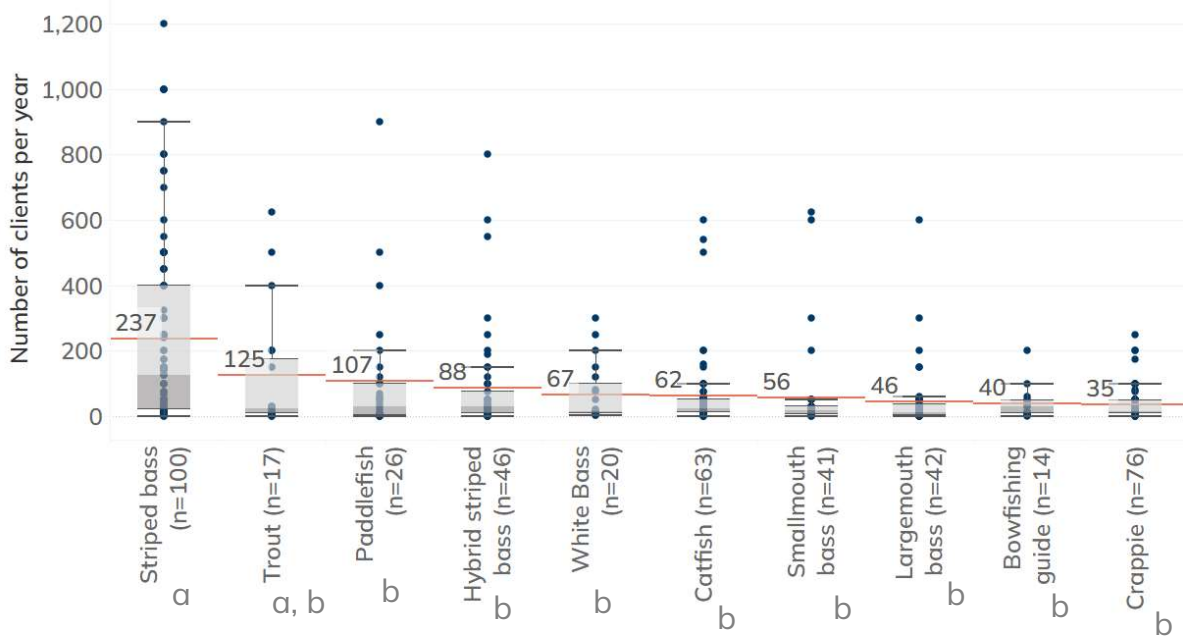


Figure 2: Number of clients per year by species sought, averages depicted with orange line and label for each species (“other” response option omitted due to low sample sizes but white bass retained as its own category).

The average daily rate reported by fishing guides was \$219.13 per person (range \$75.00-\$850.00). We also asked the average daily rate of clients for different species (Fig. 3) and ran the same comparison analysis (Kruskal-Wallis with post-hoc Dunn’s with Bonferroni correction). The Kruskal-Wallis test determined the data had significant differences within it ($p<0.05$) and the Dunn’s test revealed further what guide types were driving the significance. The top five species yielding the highest daily rates were not significantly different from each other ($p>0.05$).

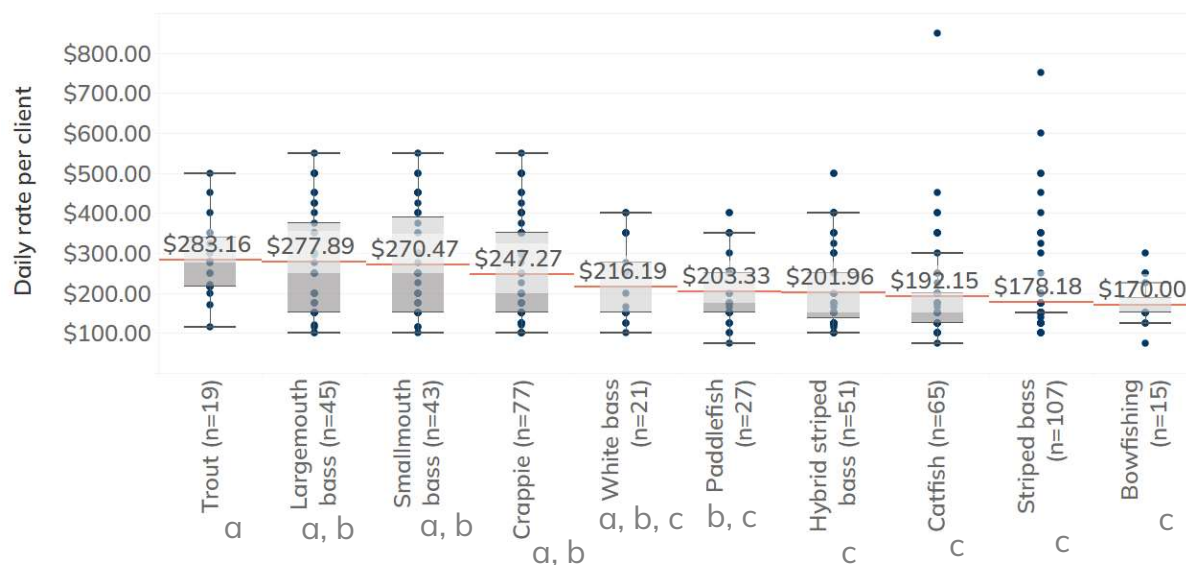


Figure 3: Daily rate per client by species sought, as reported by fishing guides. Averages depicted with orange line and label for each species (“other” response option omitted due to low sample sizes but white bass retained as its own category)

Combining these two estimates, we can get a crude estimate of the total dollar value that guides are bringing in based on their guiding activity in a year. This can be done by multiplying for each guide the number of clients they take by the average dollar amount they charge each client. Overall, the average estimated gross revenue guides are bringing in is \$42,584.20, although the distribution of estimated revenues per guide ranges widely- with the top guide reporting \$480,000 in the last year and another reporting only \$300 in the last year (which was greater than three times the cost of the \$90 fishing guide license). The average estimated revenue for striped bass guides was \$44,189.58 followed by trout guides at \$29,850.59. Paddlefish guiding was the next highest species, generating average revenues of \$19,502.00. However, the individual species totals may not accurately represent the totality of guiding income, as guides may have combinations of species that they guide for that comprise their overall total income from guiding clients.

The next question we asked was whether guides typically guide with the purpose of catch and release (C&R) or harvest. Overall, 71% of guides selected that their typical goal is harvest with 29% selecting C&R. We analyzed this information by the waterbody they guide in most often and the species that they target most often (Fig. 4).

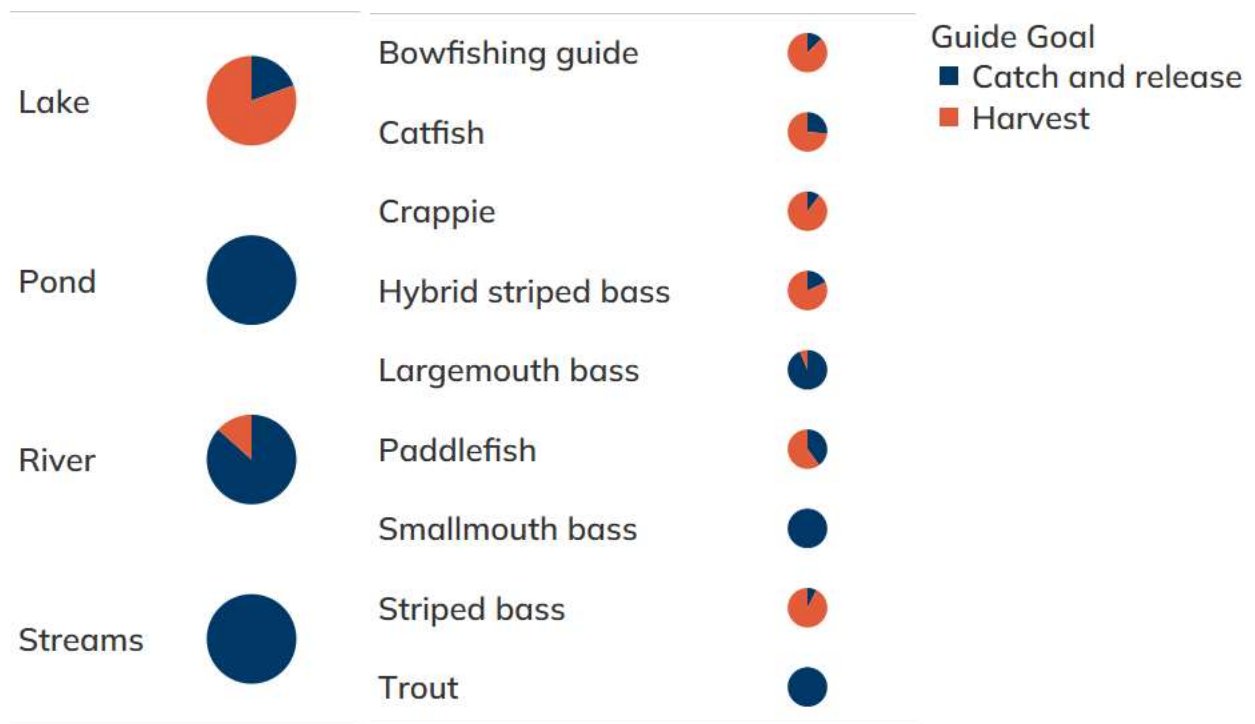


Figure 4: Analysis of catch and release or harvest by what waterbody they guide and what species they guide for most often (n=230)

In relation to their goal of catch and release or harvest, we also asked guides how often their clients take the bag limit of the species that they are harvesting. Overall, the most often selected option (33%) was that they “usually (75% of the time)” take the limit (Fig. 5), however approximately half of responses indicated that they “Always” or “Usually” keep a limit. Considering the reported goal of the guide (harvest vs. C&R), guides focused on C&R report “never catching the limit” and “rarely catching the limit” at much higher frequency. Those that focus on harvest most often selected “usually” at an elevated rate of 44%. We can also look at this by the species that guides most often target. Bowfishing guides and trout guides reported “not applicable” and “never take the limit” most often, respectively, however these answers may represent different scenarios. Bowfishing guides are targeting species with no harvest limits while trout guides are possibly describing a strict practice of C&R. Striped bass guides tend to take the limit “always” or “usually” most often.

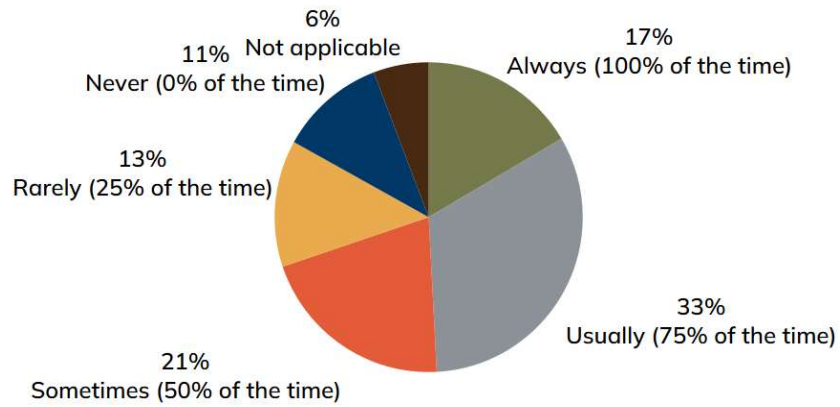


Figure 5: Percent of guides selecting how often their clients take the bag limit of the species that they are pursuing (n=242)

To determine what guides are using to assist with their business and the experience that they offer their clients, we proposed eight different types of technology or information and wanted to first know if they used it (Table 3) and then, if they do, how important is it to the success of their business and the experience they offer their client.

Table 3: Percent of guides that selected they use the technologies as a guide. Multiple options were selected.

Technology / Information	Percent of users (n=230)
Down-imaging, boat-mounted sonar	83.9%
Side-imaging, boat-mounted sonar	66.5%
Specialized tackle or fishing equipment	51.3%
Forward-imaging, boat-mounted sonar	46.5%
Customized or specialized watercraft	28.7%
Technical assistance from ODWC	18.3%
Informative videos by other entities	16.1%
Interactive map of artificial habitat	14.8%

For all the technologies that a guide selected, we asked them to rate the importance of that technology. For this and subsequent questions framed similarly, we converted the Likert scale to numerical data (1= very unimportant to 5= very important) and created averages of each technology. Overall, forward-imaging, boat mounted sonar was rated the most important by those that use it with ODWC information and fish attractors equivalently rated as the least important (Fig. 6). When conducting a Kruskal-Wallis comparison on this data, we found a significant difference and running a Dunn's post-hoc test we found that the only significant

differences were between the top-rated technology (forward-imaging boat mounted sonar) and the three pieces of technology of least importance (informative videos, artificial habitat, and ODWC technical assistance; $p\text{-adj}<0.05$).

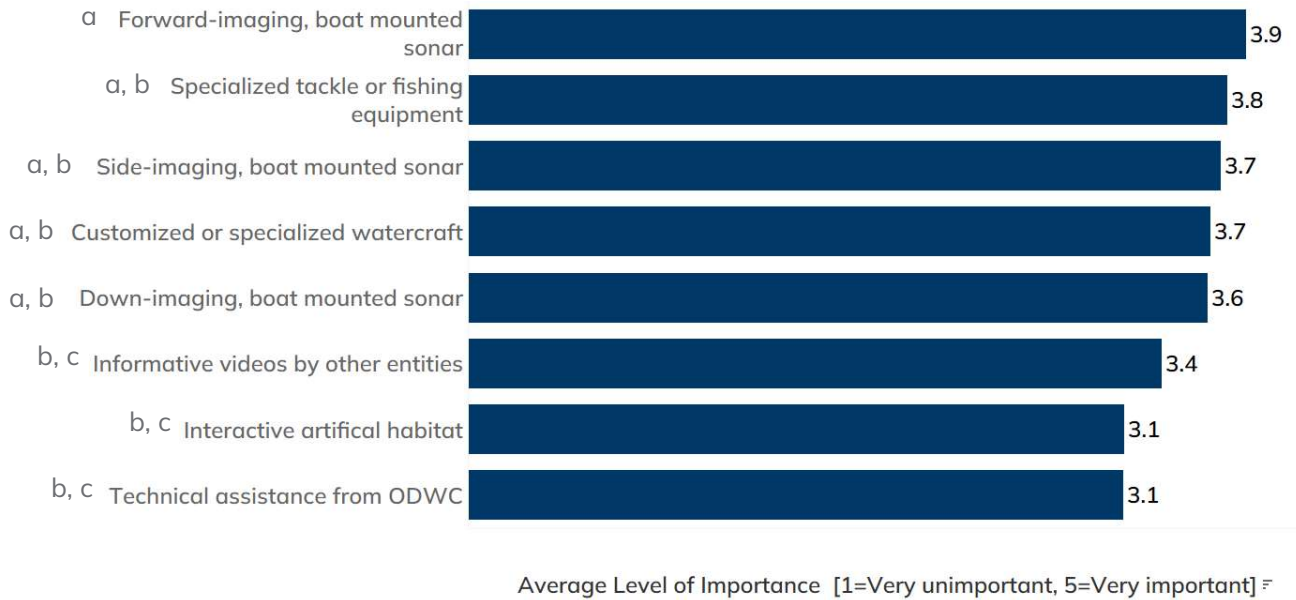


Figure 6: The average importance of different technologies that guides use (n=237)

Looking further into the types of technology used, we wanted to understand how guides might be using forward-imaging sonar as part of their business and the goal that they have for their typical client (i.e., harvest vs. C&R). We looked at the species that they guide for most often and separated responses by whether they use forward-imaging sonar or not and then what the typical goal of the guide is (C&R or harvest; Table 4). For most species examined, if the guide used forward-imaging sonar, there was a higher likelihood the guide focused on harvest. The only species where this is not the case is striped bass.

Table 4: Number of guides using forward-imaging sonar (FIS) in relation to the typical goal they have for their guided trips.

Uses FIS				Does not use FIS		
Goal of guide (%)		# Guides using FIS	Species Most Guided	# Guides not using FIS	Goal of guide (%)	
C&R	Harvest				C&R	Harvest
13.6	86.4	22	Striped Bass	72	5.6	94.4
8.3	91.7	36	Crappie	3	33.3	66.7
18.2	81.8	11	Catfish	8	37.5	62.5
0	0	0	Trout	16	100.0	0
93.3	6.7	15	Largemouth bass	1	100.0	0
25.0	75.0	8	Paddlefish	7	57.1	42.9
100.0	0	2	Smallmouth Bass	10	100.0	0
16.7	83.3	6	Hybrid Striped Bass	5	20.0	80.0
100.0	0	1	Bowfishing	7	0	100.0
28	73	101	Totals	129	40	89

We also wanted to determine what types of technologies are most beneficial to different types of fishing guides. When separating guides out by what species they said they guide for most often, we plotted the average rating of that type of technology to them. Guides that target striped bass and crappie use more types of technology than other guides (Fig. 7). Trout guides use the least amount of technology. The least important to guides overall are ODWC technical assistance and artificial fish attractors. Imaging and specialized tackle, equipment, and boats are most important. Bowfishing guides and trout guides had the highest variability in what types of technology they find useful. These two groups of guides were the only ones that ranked a form of information as most important. Trout guides were the only group to rank ODWC technical assistance as most important and they ranked this factor higher than any other group (4.5). Bowfishing guides ranked informative videos of greatest importance (though equivalent to forward-imaging sonar). Information transfer via social media and internet videos has been noted as associated with the growth of bowfishing. As this form of fishing is still relatively uncommon compared to forms of hook and line fishing, information on when, where, and how to bowfish successfully and satisfactorily may be gained through access to videos more so than aided by technology.

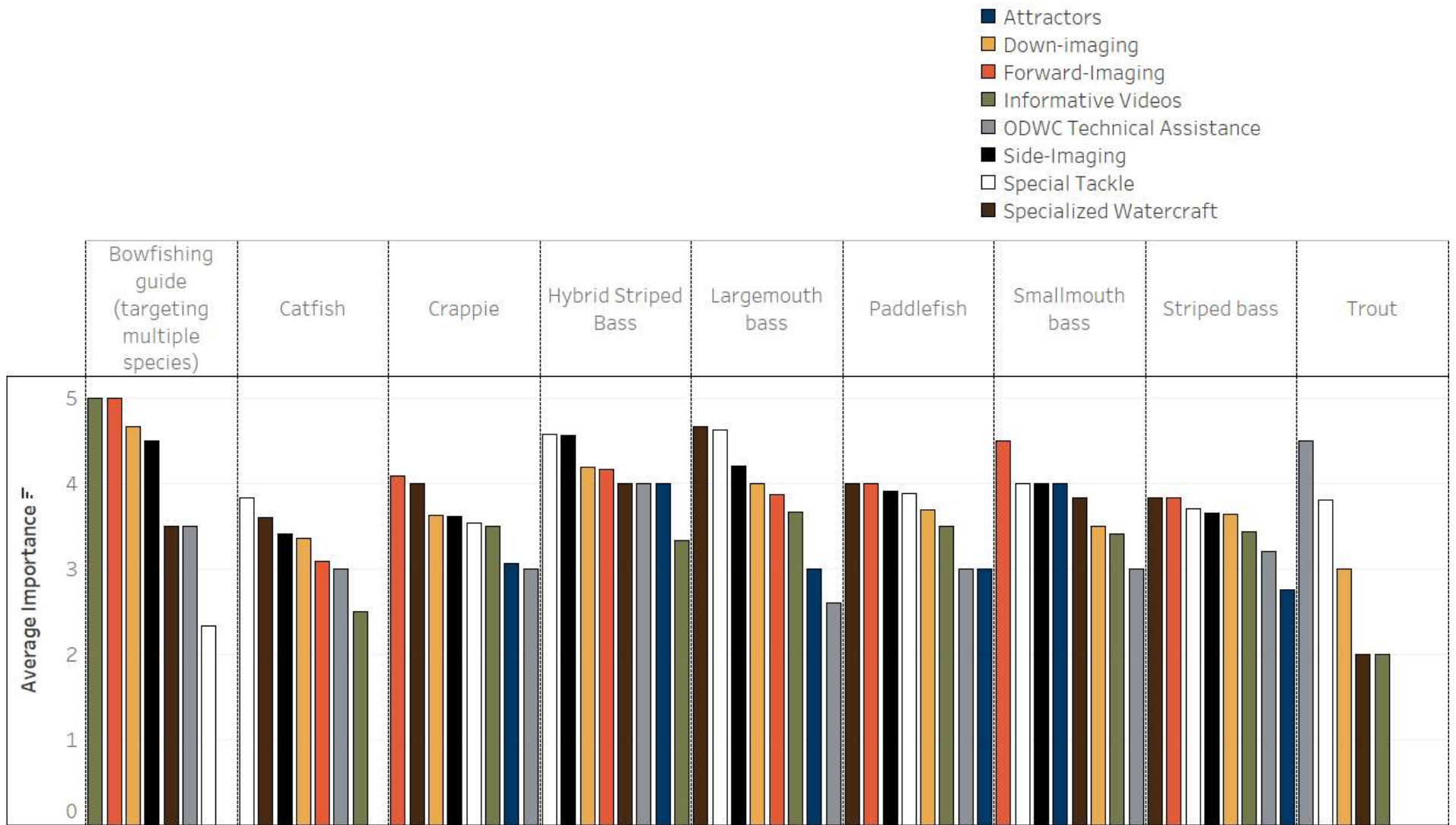


Figure 7: The average importance of different technologies that guides use (1 being not important at all and 5 being very important) separated by the species they report guiding for most often with clients

Some questions on this survey also focused on the trip characteristics that the guide is offering to the client by providing a list of trip characteristics that a guide can offer a client. We asked each of the guides how important each of the following characteristics is to them to offer their clients and to ensure that their clients receive when paying for a guided trip with them. Overall, guides rated “fun experience” as the most important thing they offer followed by a “learning opportunity” (Fig. 8).

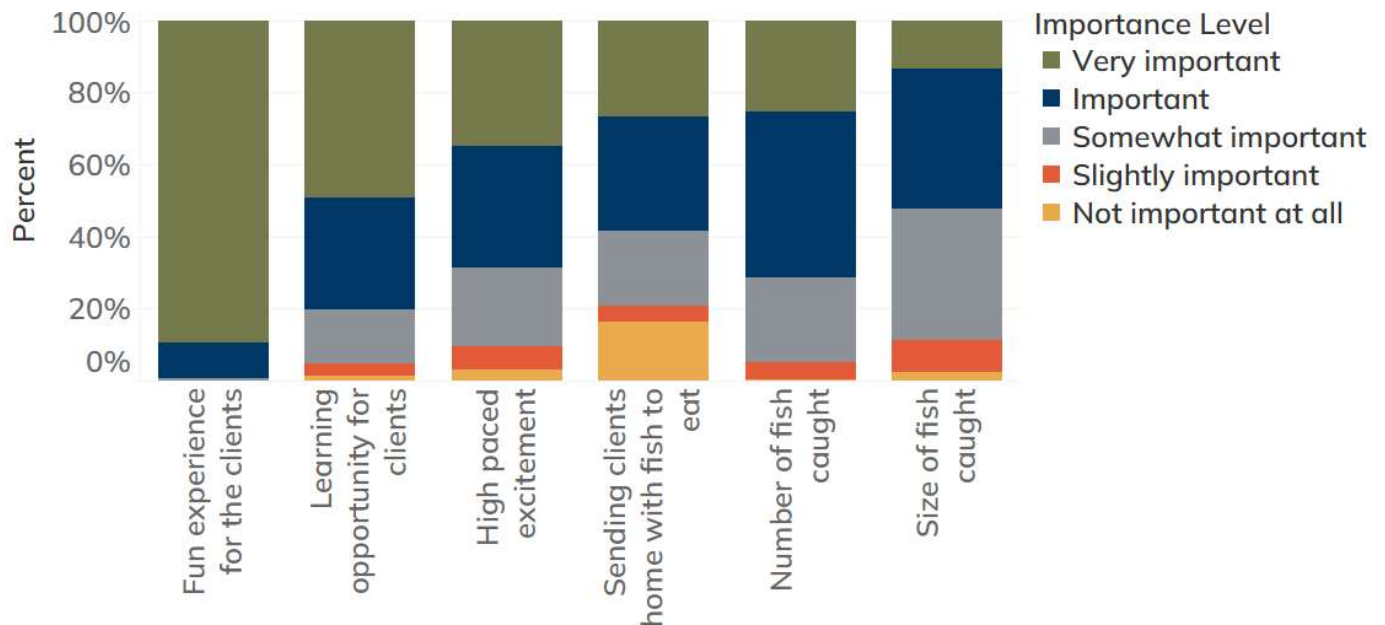


Figure 8: Guides' rating of how important each of the following aspects of a guided fishing trip are to the experience that they offer their clients (n=241)

This question was also analyzed by the species that the guide selected they target most often (Fig. 9). Universally, “fun experience” was ranked highest for all guides grouped within target species. Similar patterns overall were observed in the ranked importance of experiences except for striped bass guides, which placed a higher importance on consumptive qualities such as number of fish caught and catching fish to eat. Meanwhile, catching fish to eat was ranked as unimportant or very unimportant for bowfishing, smallmouth bass, and trout guides.

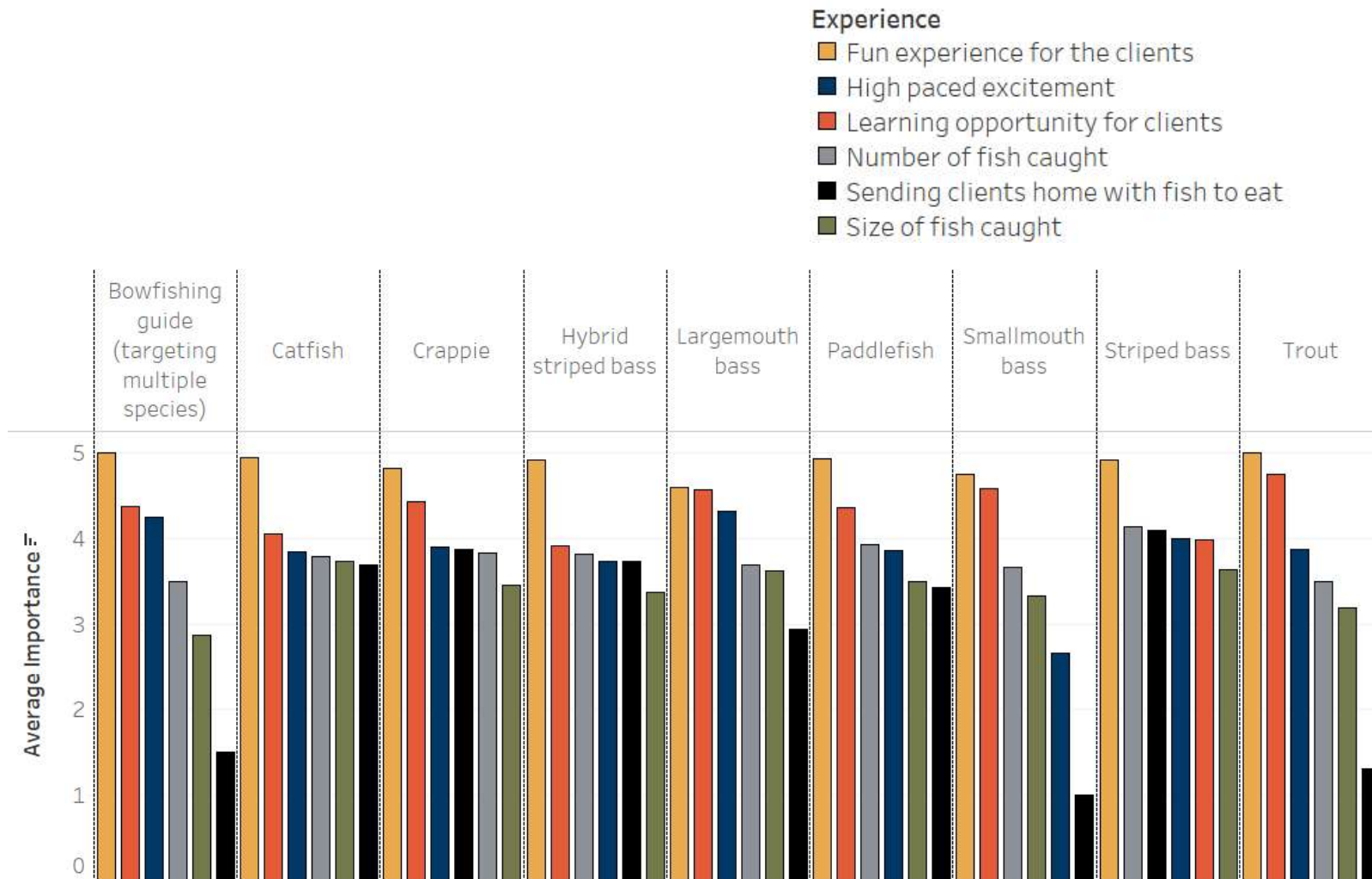


Figure 9: Guides' (grouped by the species that they target most often) ratings of how important each of the following aspects of a guided fishing trip are to the experience that they offer their clients

Also, to better understand what guides in Oklahoma offer their clients, we asked them two questions about their responsibilities on the water. We wanted to know if guides feel responsible for the safety of their clients and if they feel responsible for their clients complying with applicable fishing regulations. In both cases, guides strongly agree that they are responsible for their clients (Fig. 10).

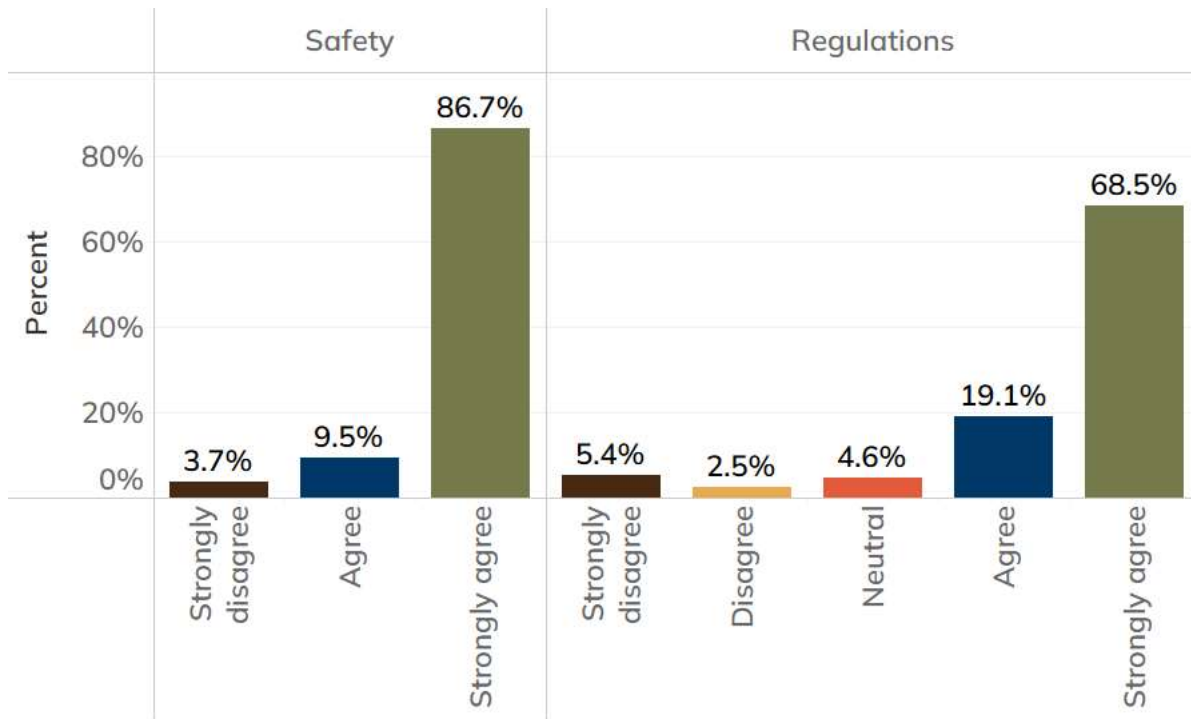


Figure 10: Guide response to the idea that they are responsible for the safety of their clients (left, n=241) and that they are responsible for their clients following applicable regulations and license requirements (right, n=241)

The final section of the survey focused on possible adjustments to the license guide fee and license guide structure. To get an idea of the impact that these changes could have on their livelihood, we determined that 42.5% of guides depend on their guiding activity for 10% or less of their total income (Fig. 11). Only 15% of guides receive 100% of their income from guiding and 12.9% receive between half and 99% of their income from their guiding business.

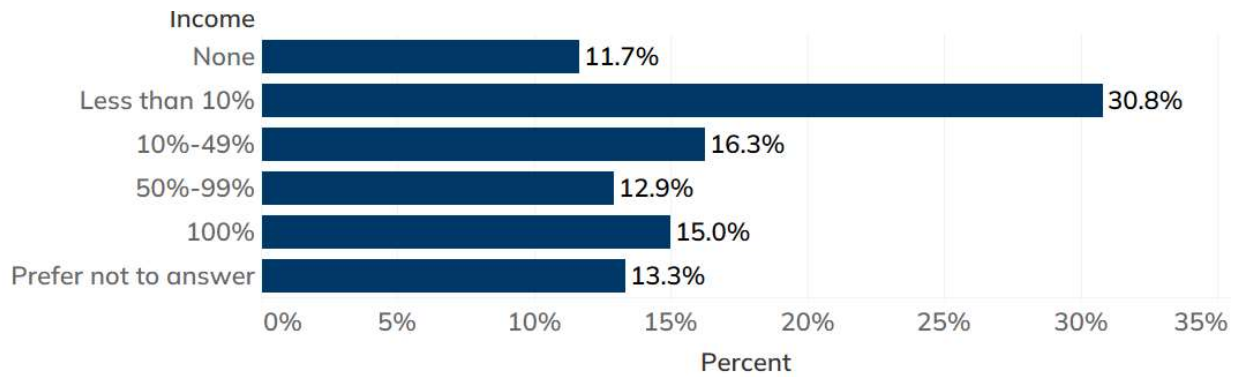


Figure 11: The percent of annual income that guides report come from their annual guiding activity (n=240)

These numbers adjusted slightly when separating by the species that the guide pursues most often. A chi-squared test determined there were significant difference in how different species contributed to total income from guiding ($\chi^2= 70.6$, $df=45$, $p<0.05$). Based on residuals of the chi-squared analysis, the species that contribute to the highest percentage of income were hybrid striped bass, trout, and striped bass.

Next, we asked guides if they feel the current price to become a licensed guide in Oklahoma is too low, too high, or just right. Seventy-four percent felt that the price is just right, 9% believe it is too high and 17% believe it is too low. This question was stated to include the full price (\$90) and the reduced price (\$20 with USCG certification); however, we cannot reliably assume whether the respondents were answering based on the full price, reduced price, a combination of the two, or the price they specifically paid. Therefore, we examined a summary of the fishing guide license fees paid annually during 2020-2023 (Table 1). Out of the eight guides that responded with USCG credentials, six believed that the price was just right and two believed it was too low.

Differences in opinion on license price emerged when separating by species guided for most often (Fig. 12), however the sentiment that the price was “just right” was consistent across all groups. None of the guides targeting bowfishing, paddlefish, or trout responded that the price was too high, and this segment of responses was highest for crappie and catfish guides.

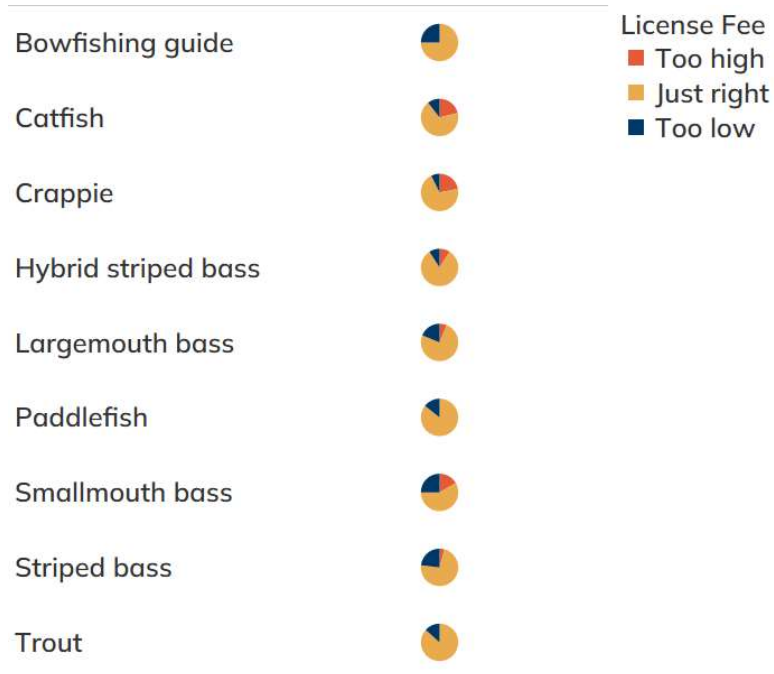


Figure 12: Overall feelings of current license fee price separated by species sought most often

For respondents who said it was too high or too low we followed up and asked them what they do feel is a fair price. For those that said the price was too high (9% of respondents), the average stated fair price was \$35.12. When asked why they felt it was too high, justifications related to cost/benefit for part-time guides and concerns that the license fees were not being used to improve fishing or access. For those who felt the fee was too low (17% of respondents), the average stated fair price was \$565.71. Stated justification for increasing the guide license fees related to nonresident fees should be higher, licensed guides are currently too numerous (due to the low license cost), and a higher price would improve the quality of services by excluding less serious guides. Those who said the fee is just right (74% of respondents) stated that it is affordable at this price, allowing them to make investments in their business. They acknowledge that it is lower than other states and that this price point allows them to guide on weekends only as a part-time income generator.

To better understand how much of their income would be affected by a license fee change in comparison to how they feel about the current fee, we analyzed their feelings based on their reported income from guiding. Though most groups

(regardless of income from guiding) felt the price was just right, guides receiving less than 10% of their income from guiding were less likely than all of the higher income groups to report that the price was too low (8.1% versus an average of 24.3% across the three other higher income groups) and more likely to report that the price was too high (12.2% versus an average of 8.0% across the three higher income groups; Fig. 13). However, using a chi-squared test to compare different groups, these differences were not significant (Fig. 13; $\chi^2=17.3$, $df=10$, $p=0.068$).

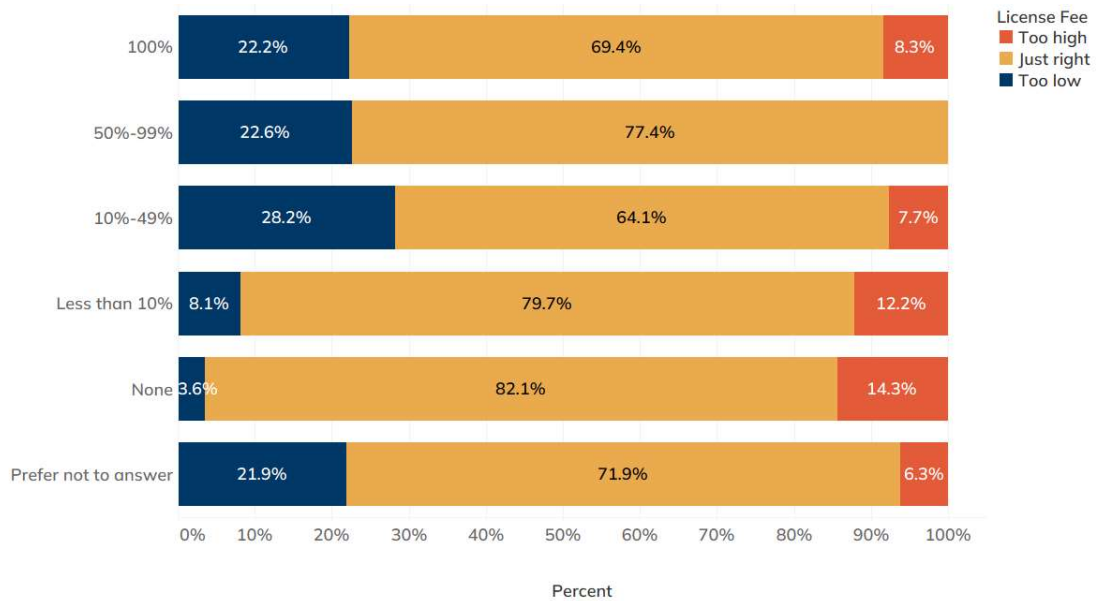


Figure 13: Overall feelings of current license fee price by how much of their income comes from their guiding activities (n=240)

Finally, we asked guides about five different hypothetical changes to the requirements for their guide license and if it would have a positive, neutral, or negative effect on their guiding business (Fig. 14). Opinions were generally mixed on all changes, however, requiring first aid/CPR certification was reported to have a positive impact on a majority (51%) of respondents. In contrast, nearly half (48%) of guides reported that a requirement of enhanced boater safety would negatively impact their business.

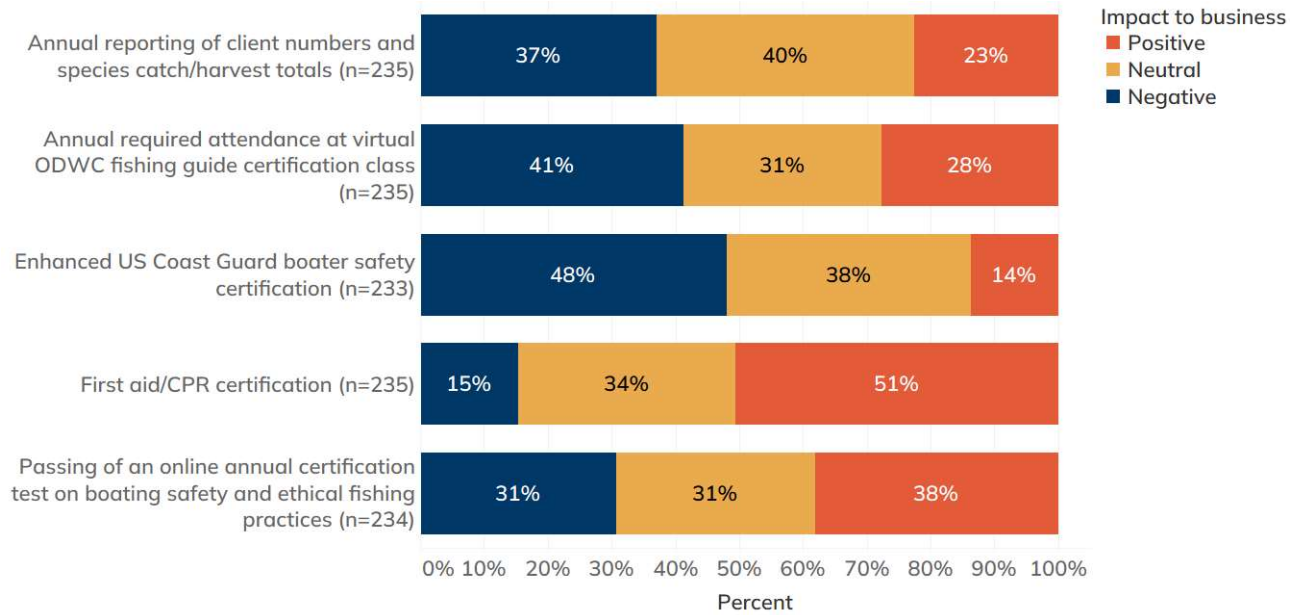


Figure 14: The impact of five different license changes on the business of guides

When trying to determine what influenced these positive or negative responses, we first looked at the difference when separated by the amount of their income from guiding (i.e., less than half of income compared to majority of income; Fig. 15) there were no significant differences between the two groups for any of the change categories proposed. Descriptively, however, those who obtain most of their income from guiding tend to have lower reported negative consequences of changes to their businesses. For example, 32% negative impact due to annual reporting compared to 38% negative impact reported by those who receive less than half their income.

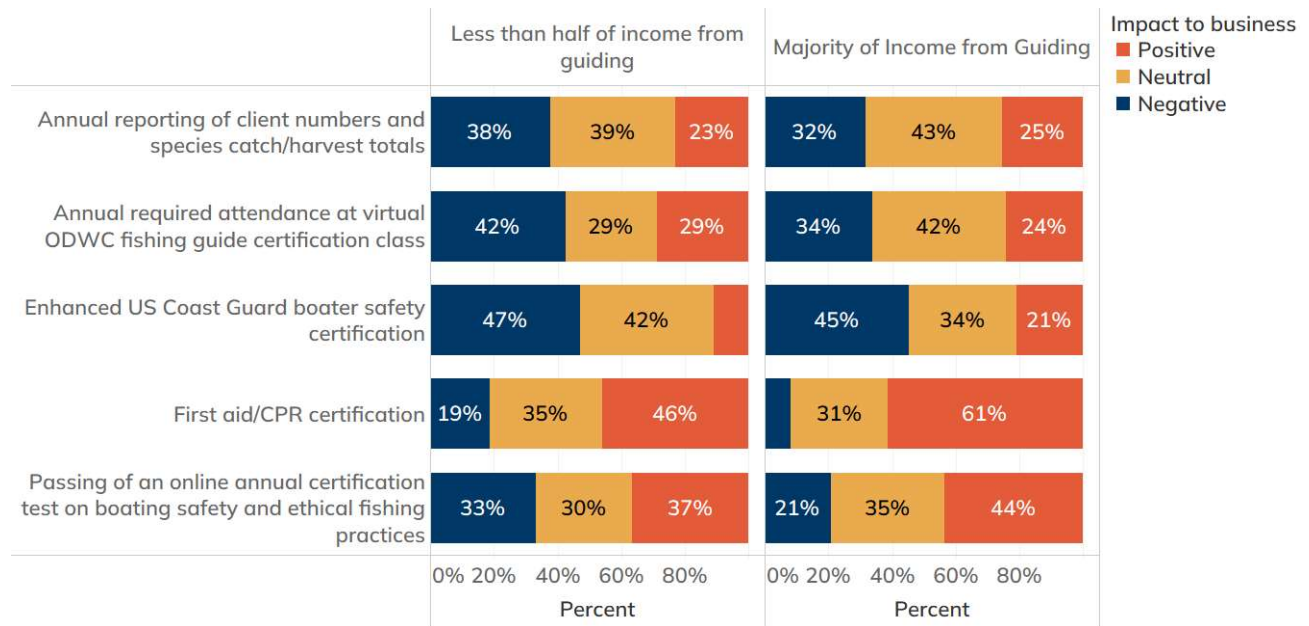


Figure 15: Feelings about impact of changes on guiding business separated by how much of their overall annual income comes from guiding business

Years guiding did not seem to have an impact on how guides feel about the changes. When separating guides into three categories (guided for less than 10 years, guided between 10-20 years, and guided over 21 years) there were no significant differences across any of the change categories when conducting chi-squared analyses. Descriptively, however, those respondents who have guided for over 21 years tended to report negative impacts across all proposed change categories except for first aid.

We also asked guides to explain why they determined that the proposed changes would have a positive, neutral, or negative influence on their guiding business. These were qualitatively analyzed and grouped among common themes (Table 5).

Table 5: Themes by proposed change and effect rating

Annual reporting of client numbers and species/catch/harvest totals		
<i>Negative or very negative</i>	<i>Neutral</i>	<i>Positive or very positive</i>
<ul style="list-style-type: none"> • No time/too much work • What will it even be used for/won't be accurate • None of the government's business 	<ul style="list-style-type: none"> • Could be good, but probably won't be accurate • Tough for catch and release guides 	<ul style="list-style-type: none"> • Would keep more people compliant • Would maintain stocks • Helpful for ODWC
First aid/CPR certification		
<i>Negative or very negative</i>	<i>Neutral</i>	<i>Positive or very positive</i>
<ul style="list-style-type: none"> • Government overreach • Too much time and money for something they won't use • Have access to emergency services and cell phones 	<ul style="list-style-type: none"> • they are already certified so they are good but shouldn't be required 	<ul style="list-style-type: none"> • Responsible for the safety of clients while they are on your boat • Makes clients feel more comfortable
Annual required attendance of a virtual ODWC fishing guide certification class		
<i>Negative or very negative</i>	<i>Neutral</i>	<i>Positive or very positive</i>
<ul style="list-style-type: none"> • Depends on more specifics of what would be required • More government intervention not needed • Would learn better on the water and not ever year 	<ul style="list-style-type: none"> • No time for it • Need more specifics • Would be good for first-time guide license buyers 	<ul style="list-style-type: none"> • Always good to learn more • Good to keep up on new rules and regulations
Passing an online annual certification test on boating safety and ethical fishing practices conducted by ODWC		
<i>Negative or very negative</i>	<i>Neutral</i>	<i>Positive or very positive</i>
<ul style="list-style-type: none"> • One time requirement okay but not every year • Irrelevant for guides that wade or walk 	<ul style="list-style-type: none"> • Would be good for some guides • Annual would be excessive 	<ul style="list-style-type: none"> • Safety is good for both clients and guides
Enhanced U.S. Coast Guard boater safety certification (beyond what is currently optional for a discounted license)		
<i>Negative or very negative</i>	<i>Neutral</i>	<i>Positive or very positive</i>
<ul style="list-style-type: none"> • Do not use a boat so unnecessary • Only needed on the ocean not freshwater lakes • We don't need more certifications, leave us alone • Too much time and cost 	<ul style="list-style-type: none"> • Not applicable for non-navigable waters 	<ul style="list-style-type: none"> • Would eliminate guides who aren't serious • Good for client safety and comfort

Part 3: Survey of Fishing Guide Users

Overall, the angler survey received 1,722 responses after data cleaning for a response rate of 22%. Out of the 1,195 anglers who were active in the last year, only 14% (167 anglers) used the services of a fishing guide and 49% of those that used a guide said that they would use a guide again. There was a significant difference when using chi-square to compare this by residency ($\chi^2=28.017$, $df=1$, $p<0.01$); active residents use guides at a rate of 11.7% and active nonresidents use at 27.2% (Fig. 16). License types were used to determine residency in most cases, except for the Lake Texoma license. The Lake Texoma license can be purchased by any angler regardless of residence if the only waterbody they plan to fish is Lake Texoma. We determined residency for these individuals through examination of their mailing address in their license profile.

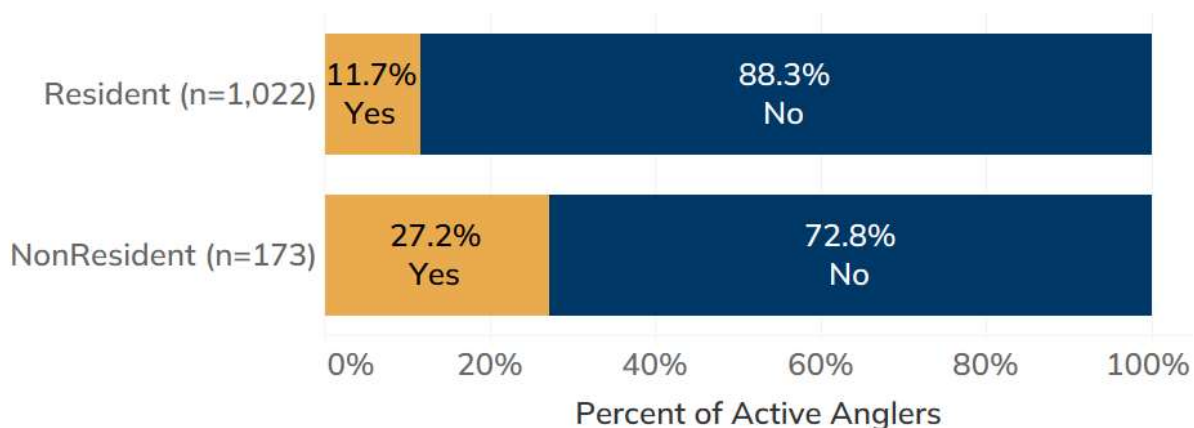


Figure 16: Use of fishing guides by residency

We also examined differences in guide use by category of license. Having determined that Lake Texoma fishing license holders are much more likely to use fishing guides (58% of Lake Texoma fishing license holders used a guide in the last year compared to an average across all other categories of 8.9%), we removed this license type. Also, as nonresident usage of fishing guides is significantly different than residents, we removed nonresident license holders out of this analysis to focus more on the possible experience level of the user based on resident license type.

With these licenses taken out of the analysis, we were left with 96 active guide users equating to 10.0% of active resident anglers who do not use the Lake Texoma license (n=969). When comparing these licenses in their use of fishing guides, we received a significant result when comparing between the three license types and use of guides by way of a chi-squared analysis ($\chi^2=6.70$, $df=2$, $p=0.04$). Lifetime license holders were most likely to use a fishing guide at a rate of 13.0% followed by senior license holders at a rate of 8.7% and finally by annual license holders at a rate of 7.5% (Fig. 17).

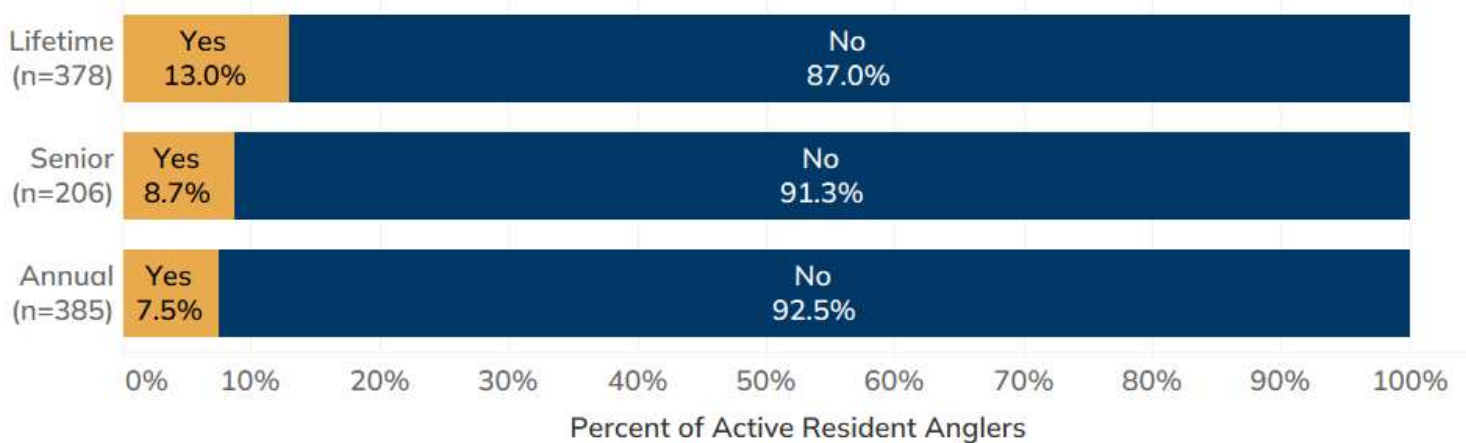


Figure 17: Guide use by license category

The top two license types with the most use of fishing guides were the Lake Texoma Fishing license (which can be bought by either residents or nonresidents; 58% used guides) and the nonresident one-day license (39% use of guides). This mirrors our data from Part 2 showing that there are many more guides operating on Lake Texoma compared to other areas of the state.

Looking back at all license types together (nonresident, resident, and Lake Texoma) when comparing the age of guide users and those who did not use a guide, we used a t-test to compare the two groups. There was not a significant difference in age between the two groups ($p=0.55$). The average age of guide users was 53.5 (range of 15.0-83.0; median=57.0). The average age of those who *did not* use a guide in 2023 was 52.7 (range of 5.0-88.0; median=55.0)

Most guide users (65%) stated that if they had not used a guide, they still would have fished about the same. Twenty-three percent stated they would have fished a lot less often and 12% stated they would have fished slightly less often. There was a significant difference by way of a Fisher's Exact Test on this question when separating by license type (Table 6; $p < 0.05$). Annual license holders are nearly three times as likely than lifetime license holders to fish “a lot less often” without the assistance of a fishing guide. This logically follows that more proficient anglers are more likely to possess or purchase a lifetime fishing license. These license groups include Lake Texoma and nonresident license holders as a part of the annual license holder group.

Table 6: The impact of guide use on fishing activity by license category

	I would have fished a lot less often	I would have fished slightly less often	I would have fished about the same
Annual (n=86)	31.4%	9.3%	59.3%
Lifetime (n=43)	11.6%	20.9%	67.4%
Senior (n=16)	12.5%	12.5%	75.0%

We asked guide users why they decided to hire a guide to take them fishing. The most selected answer (53%) was that their chance of success is higher (i.e., more fish or bigger fish), followed by 49% that hire a guide for the guides' overall knowledge, new skills acquired from the guide (33%), new locations to fish (31%), chance to fish from a boat (22%), and increased safety by hiring a guide (3%). The most selected answer for senior license holders was a tie between new skills and higher chance of success while annual license holders selected the overall knowledge of a guide most often. A higher chance of success was also selected most often by nonresidents, lifetime license holders, and Lake Texoma license holders.

When asked what species they targeted on their most recent fishing trip (multiple species allowed), striped bass was reported most often (56% of users targeting), followed by hybrid striped bass (17%) and crappie (17%, Table 7).

Table 7: Percent of guided anglers who targeted each of the species presented, multiple responses allowed

Species	Percent of users targeting
Striped bass	56%
Hybrid striped bass	17%
Crappie	17%
Catfish	14%
Largemouth bass	7%
Paddlefish	7%
Smallmouth bass	6%
Trout	6%

We also wanted to know how much anglers are spending on their guided fishing trips. To determine money spent, we asked guide users to estimate the amount of money that they spent on their most recent guided fishing trip on the categories of guide fees, lodging/food, transportation (e.g., gas, tolls), and provided an “Other” category for any expenses that did not fit into the categories. Guide users spent the most money on guide fees (48%), followed by lodging/food (29%), and transport (13%, Fig. 18).



Figure 18: Average reported amount of money spent on a user's most recent guided fishing trip across four categories.

If we look at this in comparison to the data that we collected from licensed fishing guides, there are differences in the amount of money charged for guide fees. We asked respondents to report on how much they personally spent on guide fees, but it is possible that if they paid for two people on a guide trip, they were reporting that full cost rather than the per-person fee we asked of guides (Table 8). This could be the case as in some instances the reported fee by the client is almost double (Striped bass, catfish, etc.) Although the variability in daily rates reported by guides (Fig. 3) is high, in all cases, the average rates reported by clients are higher than those reported by guides (Table 8). Three angler responses were removed from striped bass reported guide fees that equated to \$1,600.00, \$2,250.00, and \$2,500.00. It is possible that anglers are reporting guide fee costs accrued from multi-day trips instead of the single daily rate, which would inflate the means.

Table 8: Comparison of client reported guide fees paid and the guide reported daily rate, grouped by species targeted (statistically compared across species using Kruskal-Wallis test for non-parametric data; If significant denoted with *)

Species	Guide Reported (Average)	Client Reported (Average)	Difference
Trout	\$283.16	\$383.33	\$100.17
Largemouth bass	\$277.89	\$300.00	\$22.11
Crappie	\$247.27	\$279.17	\$31.90
Paddlefish	\$203.33	\$228.13	\$24.80
Hybrid striped bass*	\$201.96	\$337.50	\$135.54*
Catfish	\$192.15	\$196.25	\$4.10
Striped bass*	\$178.18	\$272.73	\$94.55*
Overall*	\$219.13	\$325.50	\$106.37*

Discussion

This project was conducted over three parts to understand the regulatory, economic, and user side of the Oklahoma fishing guides industry. The results obtained from the nationwide audit, the survey of guides, and the survey of users can be pooled together to best inform ODWC's strategy moving forward in relation to any proposed changes to the industry in the state. As such, this discussion is broken into four key topics using data from all three sections. First, we discuss data related to fees for fishing guide license within the larger landscape of fees for services and value added to ODWC budgets for fisheries management. Second, we examine data on five potential requirements to obtain a fishing guide license and accountabilities for licensed fishing guides to benefit anglers and Oklahoma fisheries. Third, we examine the prevalence and types of technology that guides use within the resources available and those provided by the Department. Finally, we consider the fishing guide industry's contribution to fishing R3 in Oklahoma.

One key limitation of this investigation is that the Oklahoma fishing guide industry in general is skewed to the eastern half of the state and most likely biased to Lake Texoma. This is where most guides are practicing, with striped bass ranked as the top pursued species by guides. Also, the concentration of large, public reservoirs on the eastern half of the state is where most guides focus their trips. As such, interpretations made from this report may not best characterize guiding activity happening outside of Lake Texoma or in the western half of the state, but the few numbers of guides in these regions would make it impossible to conduct a survey and get usable data. Most likely, a more in-depth interview process of individuals in these areas would be necessary.

Guide License Fees and Rates

According to the nationwide audit, most states that require a fishing guide license have requirements and different price point variations when compared to Oklahoma. First and foremost, 17 of the 32 states that license fishing guides through their state fish and wildlife agency or board of outfitters have varying prices between residents and nonresidents (53.1%). In all cases where a difference does exist, the difference between the two prices is at least double for nonresidents (percent differences vary

from 100% higher in Vermont and Michigan, to 894% higher in North Carolina). As such, Oklahoma is in the minority of states who do not utilize a tiered-pricing system. ODWC would have justification based on other states' practices to require a price difference between resident and nonresident guides. Following a trend in the modernization of all Oklahoma fishing and hunting license prices in 2024 (see Oklahoma Senate Bill 941), it would follow that a tiered price increase for fishing guide licenses would be both justified and socially/politically acceptable.

When looking at the survey of fishing guides in relation to license pricing, most guides feel that the current price is just right. This observation is a predictable one, according to polling science, as we would assume respondents are less likely to ask to be charged more for something. Although, one common thread throughout the guide survey was that there is a vast difference between guides who want to make the profession more challenging to break into and those guides who want to be able to do it as a side business. Differences lie in what they believe the price for the license should be and what requirements or accountabilities accompany the license. Those who want to make it more challenging feel that the price is too low- allowing too many part-time "weekend warrior" guides to be able to participate (and therefore compete for clients). Though, these differences did surface in the open-ended responses, there were no significant differences in their feeling on the price based on years guiding or percent of income from guiding.

Justifications provided by fishing guides that the current fishing guide license price (\$90) is too high included comments related to their license fees being wasted or not being used to improve fisheries. For proper context, the annual Department revenue for fishing guide licenses in 2023 was \$48,820. These funds do not qualify as "license sales" in apportionment of federal funds (because having a fishing license is a pre-requisite for fishing guide license application), however, the revenues can be used as 25% state match for 75% federal funds. Therefore, the practical impact of 2023 Oklahoma fishing guide license sales revenue may approach \$200,000. The approximate 2023 operating budget for Fisheries Division was \$11M, including propagation and stocking, natural or artificial habitat enhancement or restoration, and boating and fishing access improvements.

For licensed fishing guides with low monetary and time investment in guiding trips, the cost of the fishing guide license is likely a more important factor in their

cost/benefit analysis, whereas- for more active guides with higher incomes, reduction in competition by raising the cost of fishing guide licenses might be viewed as beneficial to their business. Open-ended comments from the guide survey provide justification for an increase in nonresident pricing based on agency priorities and recent license changes, but based on guide feedback, there would likely be pushback from most guides if resident fees for the guide license increased. This is based in the fact that 58.8% of guides use guiding for less than half of their income- perhaps closer to the “weekend warrior” mindset of guiding. This is something to consider as the Department moves forward with proposing license fee changes or regulations. Fee changes may result in smaller, part-time business being pushed out of the industry. When considering a revision of fishing guide license fees and structure, the Department should consider the weight of these fees in comparison to average annual guide revenues. Based on self-reported incomes here, most Oklahoma fishing guides are paying less than 0.5% of their annual revenues for the license to operate guide services. A hypothetical doubling of the guide license fee would only increase this cost to 1%, and while this increase may be easily absorbed by established fishing guide businesses, it may provide a barrier for an upstart with zero income. Examination of permitting costs as a percentage of expected revenues for other service industries may provide additional insights on accepted thresholds when considering a license fee increase.

Additional facts may support the establishment of a tiered fishing guide license fee structure, with nonresidents paying higher fees. Two of the largest and most popular fishing lakes in Oklahoma straddle (Lake Texoma) or are proximal to (Grand Lake) a state border. Fishing guides operating on these lakes are likely represented by a mixture of resident and nonresident guides. Though an argument can be made that fees paid to resident fishing guides are recirculated in Oklahoma's economy, this cannot be said for nonresident guides, who likely spend most of their guide revenues in their home state.

Data indicate that very few fishing guides (~3% or fewer) are paying the discounted license fee with USCG certification. The relevance of this enhanced endorsement is discussed further in the section below, and it is therefore retained in pricing models here as an applicable discount.

We can model the direct revenue impacts of a variety of simulated license fee changes based on fishing guide license issue data from 2022 (Table 1). Estimated revenues based on residence and price (regular vs. USCG discount) yielded \$45,270 as state match for a total revenue of \$181,080. Through the simple implementation of a tiered residence-based pricing, with resident fees unchanged and nonresidents paying double the resident rate, this would yield total revenue of \$223,520 (an increase of \$42,440). Adoption of the national average (\$116.45 for residents and \$242.67 for nonresidents; no discount for USCG endorsement) would yield \$298,648 (an increase of \$117,568 from current revenue).

Other options may be preferred, such as a modest price increase for residents and a more substantive one for nonresidents, while retaining (and encouraging) the discounted rate for USCG certification. For example, if the regular rate for residents is increased by 11% to \$100, by 150% for nonresidents to \$225 (both are still less than the national average), and the USCG rates are increased, but set at 50% of the regular price (\$50 and \$112.50, respectively) this pricing framework yields total revenues to \$261,700 (an increase of \$80,620). A pricing structure like the latter may be more palatable to resident guides while still being far below the average suggested price of \$565.71 reported by 17% of guides and while making a meaningful financial impact for fisheries management in Oklahoma.

Our surveys indicated a discrepancy between daily rates self-reported by guides and those fees reported by their clients. In all cases (regardless of species targeted), the client-reported fees were higher. If the client-reported rates were considered more accurate, then the average estimates of fishing guide revenues here would be deflated. It is likely that guides self-reported their per-person daily rate accurately, whereas clients may be associating other costs as guide fees (e.g., fees + gratuity, fees for multiple clients or multiple days).

Guide License Requirements

On the guide survey, we proposed five hypothetical changes to the requirements to obtain a fishing guide license partly informed by the nationwide audit and what other states require for their guide licenses. We wanted to know how these changes

might impact the businesses of the respondents. Most proposed changes did not have a strong lean to either positive or negative impact on business

First Aid / CPR Certification: Of the five proposed changes to requirements or accountabilities for licensed fishing guides, only first aid/CPR certification trended positive (51%). This result aligns with the fact that a high majority of guides (87%) stated they feel responsible for their clients' safety. The fact that other proposed requirements had no clear trend positive or negative could be due to guides needing more information on what exactly would be required before they determine the impact. Many of the changes were described in intentionally broad terms, as this was more of a scoping exercise on what sort of accountabilities or requirements would be deemed acceptable. Introduction of unpopular requirements simultaneous to a fishing guide license price increase would likely be received poorly.

Most other states that have a fishing guide license require those guides to be first aid/CPR certified (53%). Though feedback from guides on their role in client safety (see above paragraph) would possibly indicate broad support for requiring CPR/first aid certification for fishing guides in Oklahoma, feedback from clients painted a different picture. Only 3% of guided anglers reported that increased safety was a reason for hiring a guide. While it is possible that personal safety risks of fishing/boating may be underestimated by clients, it is more likely that their decision to hire guide services weighs other aspects more heavily. It is probable that clients would generally support a requirement for enhanced safety certification for fishing guides, presuming that it doesn't have a substantive impact on pricing. However, we did not ask anglers this question directly.

Enhanced USCG Boater Safety Certification: Only eight states required boater safety certification (25%). Of Oklahoma fishing guides licensed in 2023, only 2% reported having USCG certification (Table 1), therefore the price discount alone may be an inadequate motivator to seek the certification, especially when the regular price is low compared to other states. The 5-year USCG certification makes financial sense with the current guide license pricing structure if the fishing guide is committed and forward-thinking. However, for an upstart guide, the initial financial investment may be more difficult to justify. The basic level USCG certification is available online and with a minimal time requirement. We phrased this requirement adjustment as "enhanced" USCG training, which is typically more appropriate for ocean vessels

and may require more fees and time investment. Overall, only 14% of guides viewed this proposed requirement positively, compared to 48% viewing it negatively (Fig. 14).

If the Department required USCG certification rather than making it optional with a reduced license fee, this, like other requirements to any license credential may be met with opposition (especially when accompanied by a price increase). Prioritizing angler safety may be easier to achieve (i.e., first aid, CPR, or boater safety certifications) than requirements having no direct relation to safety (i.e., fish and game laws).

While 87% of guides feel responsible for client safety (Fig. 10; here, we are logically extending this concern to boater safety in addition to first aid/CPR), it was interesting to see that safety is not a main reason that clients choose to hire a fishing guide. This could be due to it being an expectation of hiring a guide rather than something they specifically want in comparison to going out on their own. If prices for guides increase due to increased safety training requirements, this cost may be passed on to the client for something that they do not consider or prioritize in their selection of a guide.

Fishing guides typically transport clients via watercraft (Part 2 results of this report), which likely is accompanied by some risk or liability. Rationales for requiring liability insurance by ten states in addition to rationales for NOT requiring insurance by 22 states are likely worth further exploration. Oklahoma fishing guides are generally operating as small businesses or independent contractors on small vessels <26' in length. While navigable waters do exist in the McClellan-Kerr Arkansas River Navigation system in eastern Oklahoma, most licensed guides (87%) reported that they operate on reservoirs. Thus, it is likely that the basic boater safety curriculum within the USCG certification is adequate for most Oklahoma public waters.

Online Examination on Boating Safety and Ethical Fishing: Only seven states (22%) require a form of annual exam on fish and game laws. Proposing a similar requirement in Oklahoma would likely require strong justification although fishing guides reported strong agreement (68%) that they are responsible for their clients following applicable fish and wildlife laws. The hypothetical requirement of an online annual certification on boating safety and ethical fishing practices was viewed

positively by 38% of guides, however this response varied based on guide income. For guides receiving most of their income from guiding, this possible requirement was supported by 44% of respondents, compared to 37% of guides receiving less than half of their income from guiding (Fig. 15).

While fish and wildlife rule noncompliance is hopefully the exception rather than the rule on guided fishing trips, a strong argument can be made that fishing guides are legally accountable for such noncompliance. Further, clients reported that they hired guides because of their overall knowledge (49%) and desire to learn new skills from the guide (33%). For these reasons, there is some support for holding licensed fishing guides to an accountability standard by ensuring that they are knowledgeable on fishing regulations. Fishing guides are serving as a paid mentor for less experienced anglers. As the Department is licensing these fishing guides to serve Oklahoma anglers, we have an obligation to ensure fishing guides are acting within the mission, ethics, and laws of the Department. A proposal requiring an annual test on regulations may be met with opposition, but a reasonable alternative could include a distinct acknowledgement on the license application that the fishing guide is familiar with current regulations and is accepting some form of responsibility for the actions of their clients.

In contrast to the reticence highlighted above by guides to embark on enhanced USCG safety training, responses indicate that an annual certification test on boater safety and ethical fishing practices might be a more palatable requirement for fishing guides, as this would be facilitated by the Department, would likely be relevant to Oklahoma waters and local fishing topics, and be free or low cost. If the Department were to consider an exam requirement on the topics of safety and ethics/compliance, a deeper inquiry with these seven states would be essential in development of this requirement.

Other Proposed Requirements or Accountabilities: Two additional requirements were proposed, receiving mixed responses. Only 23% of fishing guides viewed positively an annual reporting requirement of client numbers and species catch/harvest totals (Fig. 14). More often (37%), guides reported that this requirement would negatively impact their business. Similar results, although slightly more polarized ones, were seen regarding a virtual certification class to become a fishing guide. For this, 28% of guides viewed it positively, whereas 41% viewed it

negatively (Fig. 14). For both requirements, similar results were revealed when guides were grouped by the fraction of their income acquired by guiding (Fig. 15). Harvest reporting by commercial fishers is likely a common practice in all states where freshwater commercial fishing is permitted. While detailed client/catch reporting may be viewed as an excessive requirement by fishing guides, perhaps more coarse reporting would be palatable. As a related, but not directly comparable example, the Department issues tournament exemptions to directors of black bass tournaments. This privilege comes with compulsory reporting on tournament catches to renew these exemption permits. Alternatively, because the roster of licensed fishing guides is known, the Department could implement an annual or semi-annual census of guides to acquire data of interest. Renewal of fishing guide licenses could be contingent on timely participation in a harvest reporting survey. Like any new requirement, however, strong justification would be necessary to overcome the opposition from fishing guides.

Patterns of Catch and Technology Use by Guides

These survey results indicate that the Oklahoma fishing guide industry is primarily focused on harvest. Most guides (71%) reported that harvest was their typical goal, with half of their clients always (17%) or usually (33%) keeping a limit (Fig. 5). Fundamentally, however, it is likely that the fate of fish caught (kept or released) is influenced by an interaction between the fishing culture associated with the species pursued in addition to that of the waterbody fished. For example, guides specializing in trout or smallmouth bass are likely fishing streams or rivers exclusively, where these fishes are perhaps viewed as of limited supply in a non-consumptive fishery. On public waters (primarily lakes), harvest is prioritized, and fisheries are generally consumptive. On private waters (ponds and likely streams), fish may be viewed in a more limited supply and C&R is more common.

The dominance of harvest on lakes in our survey results may be influenced by the over-representation of striped bass guides which operate on lakes and prioritize harvest. Paddlefish guides likely pursue this species in a combination of lakes and rivers, depending on the timing, and the frequency of harvest may depend on whether the guide specializes in a trophy experience on Keystone Lake, where C&R is prominent, versus the more harvest-oriented culture on Ft. Gibson Lake. Although

bowfishing is viewed as a consumptive activity, 18% of bowfishing guides responded that they prioritize C&R.

Most guided anglers (53%) reported that they hired a guide to increase their chance of success (i.e., more fish or bigger fish). While this study did not evaluate or quantify the enhanced success realized by guided anglers versus un-guided anglers, it is likely that guided anglers indeed harvest more fish. There is also a reasonable likelihood that the size and age structure of fish harvested by guided anglers compared to that of un-guided anglers may differ substantively. Although outside of the scope of this study, guided paddlefish harvest anglers in Oklahoma were found to not only keep larger, older, and more female paddlefish, but they also caught and released more fish than un-guided harvest anglers (ODWC unpublished data).

Theoretically, fishing guides themselves are having no greater maximum numerical harvest impact than any other angler (although the quality or size of the fish may differ). Daily bag limits on Oklahoma fishes should consider harvest from all legal sources and methods. In fisheries that are a popular choice for guides (such as striped bass on Lake Texoma), where average individual harvest may be inflated through the assistance of fishing guide expertise or technology, managers should consider this when setting species limits for that waterbody.

Aside from expertise and knowledge provided by a guide to enhance catch success for their clients, guides often are early to adopt and become proficient using new technologies. Therefore, we inquired about what technologies, equipment, or information are most valued by Oklahoma fishing guides. Overall, equipment and technology were ranked of higher importance than information from ODWC or other outlets. Although forward-imaging sonar was not the most widely used technology (46.5% compared to down-imaging at 83.9%), it was ranked as most important. Appreciation for a form of technology (such as forward-imaging sonar) may be dependent on usage, therefore guides using a particular technology may see it as having higher value. Similarly, a guide not using forward-imaging sonar, while other guides have demonstrated proficiency, may influence that guide's sense of importance for that piece of technology regardless of any potential performance gains. Guides use a lot of technology and the technology they use is important to the success of their clients. The purchase of an expensive piece of fishing technology

may be easier to justify as a business expense (with a potential ROI) than one associated with a fishing hobby.

Guides pursuing different species (Table 4) are variable in the frequency of adoption of forward-imaging sonar. The technology has been nearly universally adopted by crappie and largemouth bass guides. However, striped bass guides are still using the technology at a ratio of 3:1 and non-users indicated that they were more harvest-oriented than users. Guides pursuing catfish, paddlefish, and hybrid striped bass are mixed in their adoption of the technology, though each has a majority using it. In contrast to striped bass guides, for crappie, catfish, paddlefish, and hybrid striped bass, guides using forward-imaging sonar are more harvest-oriented than those not using it.

Additional insights on usage and ranked importance of information sources, including those provided by the Department were less informative. Overall, guides valued the information or equipment that they were providing over the resources provided by the Department. However, those resources are not targeted to fishing guides, but rather to any angler interested in learning where, when, or how to fish.

Impact of Guides on Fishing R3

Another piece of this effort the Wildlife Department was most interested in was how fishing guides can help contribute to the mission of the Department and be in partnership to our R3 (recruit, retain and reactivate) goals for anglers. Survey results indicate that guides prioritize a fun, exciting, and educational experience for their clients. This aligns with the mission of the Department, therefore, guides are acting as fishing ambassadors in a sense. If guided anglers have a positive and lasting experience, this could contribute to R3 objectives of recruiting new anglers, retaining anglers, and reactivating anglers who have lapsed.

Our survey results indicate that fishing guides may play a greater role in retaining anglers rather than recruiting new anglers. Annual and senior license holders were less likely to use guides than lifetime license holders. However, when R3 is viewed through the restricted lens of annual license sales, fishing guides may play a very minor role. From a pure dollars and cents perspective of R3 (independent of actual angling), an annual license holder can be recruited, retained, or reactivated. But a

lifetime license holder can only be recruited to make the one-time purchase. Lifetime license holders, which have been shown in other surveys to be the most avid type of angler, were the most likely group to use guides. Therefore, the highest user group of guides is not contributing to annual license sales in Oklahoma and any financial benefits of guide trips are accrued only to the guides themselves.

Overall, the results indicate that fishing guide clients expect their guide to provide a combination of elevated fishing expertise, enhanced knowledge of techniques or locations, and specialized equipment. However, this expectation does not appear to extend to enhanced safety. It also is promising for R3 initiatives that 71% of guides focus on harvest. R3 literature has shown that if an angler can have the full experience of catching, harvesting, and cooking their own fish, that experience will stick with them and contribute to a higher level of recruitment or reactivation to fishing.

In response to how their use of guides influenced their fishing in the last year, the differences in answers by license type was illuminating. Thirty-nine percent of annual license holders said that not using a guide would have caused them to fish less often, implying that the use of guides can contribute to the recruitment of new anglers (this included both nonresidents coming to the state and Lake Texoma licenses which also includes a good number of nonresidents which can contribute to local economies). Thirty-one percent of lifetime license holders stated it would have caused them to fish less often which could indicate that fishing guides can be a tool to retain or reactivate lifetime license holders as anglers.

This study is of overall benefit to the Department in that we now have a better understanding of what other states require and charge their guides, the impact that possible changes in guide fee and license requirements may have on the fishing guide industry in Oklahoma, and the impact that the guide industry has on recreational angling on Oklahoma waters. This study stands to benefit any future decisions made in relation to this important and impactful industry in Oklahoma.

Recommendations

When conducting these research pieces in tandem - nationwide guide license audit, census of Oklahoma fishing guides, and a survey of guided anglers, we found that there are justifications to change pricing and some aspects of the requirements to the Oklahoma fishing guide license as well as things for the Department to consider in terms of how guides can contribute to R3 goals.

1. Adjust guide license pricing structure: Oklahoma is currently priced quite low compared to other states and does not utilize a tiered pricing structure based on residence. Total annual revenues from fishing guide licenses issued barely exceed the average annual revenues generated by fishing guides. A small, but acceptable increase in guide license pricing can have a meaningful impact on Department revenues and aligns with recent trends in license price adjustments.
 - a. Resident fishing guide license Increase In fee
 - i. Could increase the fee and remain below the national average of \$116.45
 - b. Nonresident fishing guide license Increase In fee
 - i. Could increase the fee and remain below national average of \$242.67
 - ii. The recent passage of senate bill 941 sets a precedent to set nonresident license fees at a higher rate than resident license fees for similar privileges
 - iii. There is also precedent in that the majority of states (53%) of those that require a guide license have varied fees between residents and nonresidents.
2. Enhance guide license application: Add emphasis on responsibility and accountability.
 - a. The vast majority of guides agreed that they are responsible for their clients' safety and their clients' compliance with regulations. By being more explicit in the recognition of this by guides there will be little pushback.
3. Enhance requirements for fishing guide license: Our survey results indicate that boater safety and personal safety should be prioritized, therefore enhanced requirements relate to these topics.

- a. First aid/CPR Certification
 - i. Require fishing guide applicants to be first aid/CPR certified. Recognize third-party certifications. The majority of guides believed this would have a positive Impact on their business.
 - b. USCG Certification
 - i. ODWC should retain the option for this certification as It mimics other proposed changes to the requirements/certifications for the guide license. If the normal fishing guide license Is Increased In price, the price of the USCG license should remain at a discounted price but Increase proportionally to the determined Increase.
4. The Wildlife Department should consider fishing guides as an Industry partner In the recruitment, retention and reactivation of anglers. Survey results showed that 31% of annual license holders would have fished less often In the previous 12 months If they had not used the services of a licensed fishing guide.
- a. The Department has recently worked with guides to provide "Outdoor Oklahoma Adventure" raffles with guides. As lifetime license holders were most likely to use guides (and would likely be under the reactivation or retention category of R3), these opportunities should continue to be promoted as exciting and different opportunities for experienced and Inexperienced anglers to take advantage of.
 - b. Communication and Education should take the opportunity to share the benefit of using guides to fish In regular communications to anglers such as the section's regular R3 fishing emails.

Appendix A: Oklahoma Department of Wildlife Conservation Fishing Guide License Application (September 2022)



Street Address:
1801 N. Lincoln
Oklahoma City, OK 73105
(405) 521-3852

Mailing address:
P.O. Box 53465
Oklahoma City, OK 73152

FISHING GUIDE LICENSE APPLICATION

License Year _____ \$90.00 Standard _____ \$20.00 USCG* License Required (Copy Attached)
_____ \$6.00 Collectible Card (Optional Hard Card)

NOTE: The fee for a fishing guide license shall be \$90.00 for residents and non-residents of this state who do not hold any valid United States Coast Guard mariner credential. The fee for a fishing guide license shall be \$20.00 for residents and nonresidents of this state who do hold any valid United States Coast Guard mariner credential.

NAME _____
Last Name First Name Middle Initial

BUSINESS NAME: _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

DATE OF BIRTH ____/____/____ LAST 4 OF SOCIAL SECURITY _____

DRIVER'S LICENSE # _____ DAYTIME PHONE NUMBER (____) ____-____

BUSINESS PHONE NUMBER (____) ____-____ EMAIL ADDRESS: _____

NAMES OF WATERS GUIDED: _____

*US COAST GUARD LICENSE NUMBER: _____ (copy of license must be attached)

SIGNATURE OF APPLICANT: _____

Do you wish for the Department to publish your business contact information to the public? ___Yes ___No

Fishing Guide License Information and Requirements:

Beginning July 31, 2010, an annual fishing guide license is required for residents and non-residents who assist, accompany, or transport, guide or aid persons in the taking of fish for commercial purposes. A fishing guide license does not exempt the license holder from an Oklahoma Fishing License. The fishing guide license must be with you or on your person. Licenses can be obtained via mail, online or in person at ODWC Headquarters.

Exemptions include:

- 1) Landowners or agriculture lessees who provide such services on properties they own or lease.
- 2) Persons assisting the licensed guide in the same vessel.

To charge this purchase to your Discover, Visa, or MasterCard, complete the section below:

Card Number: _____ - _____ - _____ - _____ Exp Date: ____/____

Card Holder Name: _____

Card Holder Address: _____

Signature: _____

Instructions for Required Affidavit:

All natural persons applying for a commercial license from the Oklahoma Department of Wildlife Conservation ("Department") are required, by the provisions of 56 O.S. Supp. 2007 § 71, to provide the Department with verification of lawful presence in the United States by executing the Affidavit below before a notary public or other officer authorized to notarize affidavits under State law. If submitting your license application by mail, this form must be signed, notarized and returned with your application before a license can be issued. The Department's main office in Oklahoma City is staffed with notaries who will provide notary service at no cost to Applicants who appear in person.

AFFIDAVIT VERIFYING LAWFUL PRESENCE IN THE UNITED STATES

Affidavit of

[Applicant's Name]

STATE OF OKLAHOMA)
) ss:
COUNTY OF _____)

_____, of lawful age, being first duly sworn, upon
[Applicant's Name]
oath states, under penalty of perjury, as follows:

I am a United States Citizen, or I am a qualified alien under the federal Immigration and Naturalization Act, and I am lawfully present in the United States.

[Signature of Applicant]

Subscribed and sworn to or affirmed before me this ____ day of _____, 20___, by

[Applicant]

NOTARY

My Commission Expires: _____

(Seal)

Appendix B: Fishing Guide Survey Instrument

Fishing Guide Survey

1. Please enter your unique survey ID number. This can be found above your name and address on the front of the postcard that was mailed to you.
(If you no longer have this number, please hit next)

Fishing Guide Survey

The Oklahoma Department of Wildlife Conservation (ODWC) is interested in feedback from current or previously licensed fishing guides in our evaluation of the fishing guide industry operating in Oklahoma state waters.

2. Did you conduct guided fishing trips in Oklahoma in the past 12 months?

- Yes
 No

Fishing Guide Survey

3. Why did you not guide in the last 12 months?

Check all that apply.

- Too expensive
- Health issues
- Not interested
- Not enough business
- Other (please specify)

Fishing Guide Survey

4. How many years have you been a guide in Oklahoma?

5. How many of the last 5 years have you actively guided in Oklahoma?

For the following questions, please respond about your current business if you still actively guide. If you no longer actively guide, please respond based on when you were actively guiding in Oklahoma.

6. What species do your clients target while you are guiding?

Check all that apply.

- Bullheadfish
- Crappie
- Catfish
- Trout
- Striped bass
- Largemouth bass
- Smallmouth bass
- Hybrid striped bass
- Bowfishing guide (targeting multiple species)
- Other (please specify)

7. What species do you guide for MOST OFTEN?

Select only one.

- Paddlefish
- Crappie
- Catfish
- Trout
- Striped bass
- Largemouth bass
- Smallmouth bass
- Hybrid striped bass
- Bowfishing guide (targeting multiple species)
- Other (please specify)

8. What type of water body do you guide in?

Check all that apply.

- River
- Lake
- Pond
- Streams

9. What type of waterbody do you guide in MOST OFTEN?

Select only one.

- River
- Lake
- Pond
- Streams

10. On which specific waterbodies in Oklahoma do you guide MOST OFTEN?

11. What months do you actively guide in Oklahoma?

Check all that apply.

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

Fishing Guide Survey

Your responses to the following questions will only be used for ODWC internal research purposes and individual responses will not be reported.

12. What is your daily rate (\$) per person for a guided trip for each of the species that you target?

Paddlefish	<input type="text"/>
Crappie	<input type="text"/>
Catfish	<input type="text"/>
Trout	<input type="text"/>
Striped bass	<input type="text"/>
Largemouth bass	<input type="text"/>
Smallmouth bass	<input type="text"/>
Hybrid striped bass	<input type="text"/>
Bowfishing guide (targeting multiple species)	<input type="text"/>
[Insert text from Other]	<input type="text"/>

13. Please estimate how many individual clients you take out per year for each of the species that you guide for.

Paddlefish	<input type="text"/>
Crappie	<input type="text"/>
Catfish	<input type="text"/>
Trout	<input type="text"/>
Striped bass	<input type="text"/>
Largemouth bass	<input type="text"/>
Smallmouth bass	<input type="text"/>
Hybrid striped bass	<input type="text"/>
Bowfishing guide (targeting multiple species)	<input type="text"/>
[Insert text from Other]	<input type="text"/>

14. Do you primarily guide for catch and release or harvest?

- Catch and release
 Harvest

15. When species bag limits apply, how often do your clients keep the limit for the species that they are targeting?

- Always (100% of the time)
- Usually (75% of the time)
- Sometimes (50% of the time)
- Rarely (25% of the time)
- Never (0% of the time)
- Not applicable

16. Please select which, if any, technologies you use in your activities as a fishing guide.

- Technical assistance/knowledge provided by ODWC (i.e., fishing reports, research/management data, ODWC's Ask an Angler videos, information on the Department website or social media)
- Interactive artificial habitat/fish attractor database provided by ODWC on the Department website
- Angling information videos provided by other online entities
- Down-imaging, boat mounted sonar
- Side-imaging, boat mounted sonar
- Forward/live-imaging, boat mounted sonar
- Specialized tackle or other fishing equipment
- Customized or specialized watercraft
- Other (please specify)

17. How important or unimportant are each of the technologies you use to your angling success while guiding clients?

	Very unimportant	Unimportant	Neutral	Important	Very important
Technical assistance/knowledge provided by ODWC (i.e., fishing reports, research/management data, ODWC's Ask an Angler videos, information on the Department website or social media)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interactive artificial habitat/fish attractor database provided by ODWC on the Department website	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Angling information videos provided by other online entities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Down-imaging, boat mounted sonar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Side-imaging, boat mounted sonar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forward/live-imaging, boat mounted sonar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Specialized tackle or other fishing equipment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customized or specialized watercraft	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
[Insert text from Other]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Fishing Guide Survey

18. When guiding, how important or unimportant are the following to the experience that you offer your clients.

	Not important at all	Slightly important	Somewhat important	Important	Very important
Number of fish caught	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Size of fish caught	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning opportunity for clients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sending clients home with fish to eat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fun experience for the clients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High paced excitement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Is there anything else you strive to provide for your clients not listed above?

19. What portion of your annual income comes from being a fishing guide?

- None
- Less than 10%
- 10%-49%
- 50%-99%
- 100%
- Prefer not to answer

20. Do you believe the fees required to become a licensed fishing guide in Oklahoma are too low, too high, or just right?

The current price is \$90/year, reduced to \$20/year with United States Coast Guard (USCG) certification.

- Too low
- Just right
- Too high

Why? Please explain.



Fishing Guide Survey

21. What do you believe is a fair price to become a licensed fishing guide in Oklahoma?
The current price is \$90/year, reduced to \$20/year with United States Coast Guard (USCG) certification.

Fishing Guide Survey

22. To what extent do you disagree or agree with the following statements:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
It is my responsibility as a fishing guide to ensure my clients comply with all applicable fishing regulations (including license requirements and harvest limits).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is my responsibility as a fishing guide to ensure my clients' safety while fishing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Fishing Guide Survey

Oklahoma is considering altering the requirements for the fishing guide license. As part of this effort, we have conducted a nationwide audit into what other states require of their guides. We would like your feedback on the following requirements being considered.

To what extent would the following changes create either a positive or negative

effect on your fishing guide business?

23. Annual reporting of client numbers and species/catch/harvest totals (License renewal contingent on successful reporting.)

- Very negative
- Negative
- Neutral
- Positive
- Very positive

Please explain

24. First aid/CPR certification

- Very negative
- Negative
- Neutral
- Positive
- Very positive

Please explain

25. Annual required attendance of a virtual ODWC fishing guide certification class

- Very negative
- Negative
- Neutral
- Positive
- Very positive

Please explain

26. Passing an online annual certification test on boating safety and ethical fishing practices conducted by ODWC

- Very negative
- Negative
- Neutral
- Positive
- Very positive

Please explain

27. Enhanced U.S. Coast Guard boater safety certification (beyond what is currently optional for a discounted license)

- Very negative
- Negative
- Neutral
- Positive
- Very positive

Please explain

28. Do you have any other feedback for the Wildlife Department?

Appendix C: Statewide Angler Survey- Fishing Guide User Section

14. Did you use the services of a licensed fishing guide in Oklahoma within the last 12 months (if you are a licensed fishing guide, only answer yes if you used the services of another guide)?

Yes

No→ Please skip to question 21.

15. Why did you use the services of a licensed fishing guide?

Check all that apply.

Chance of success is higher

Chance to fish from a boat

New locations to fish

Increased safety by hiring a guide

New skills acquired from guide

Overall knowledge level of guide

Other: _____

16. If you had not used a fishing guide in the previous 12 months, how would that have affected your overall fishing activity in Oklahoma?

- I would have fished a lot less often I would have fished slightly less often I would have fished about the same

17. On your most recent guided fishing trip in Oklahoma, what species did you target?

Check all that apply.

- | | | |
|-------------------------------------|--|---|
| <input type="checkbox"/> Paddlefish | <input type="checkbox"/> Striped bass | <input type="checkbox"/> Bowfishing (carp, gar, etc.) |
| <input type="checkbox"/> Crappie | <input type="checkbox"/> Largemouth bass | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Catfish | <input type="checkbox"/> Smallmouth bass | |
| <input type="checkbox"/> Trout | <input type="checkbox"/> Hybrid striped bass | |

18. On your most recent guided trip in Oklahoma, what waterbody did you fish?

19. On your most recent guided fishing trip in Oklahoma, how much did you personally spend within 25 miles of where you fished in each of the following expense categories?

Transport (gas, tolls): _____

Lodging/food: _____

Guide fees: _____

Other: _____

20. Do you plan to use the services of a licensed fishing guide again in the next 12 months in Oklahoma?

- Yes No Unsure

Appendix D: Nationwide License Audit

State	Freshwater Guide License?	Minimum Resident (\$)	Minimum Nonresident (\$)	Difference (\$)	First aid/CPR	Liability Insurance	Board of Outfitters	Exam	Boater Education	Background check	Required reporting?
AK	No										
AL	No										
AR	Yes	25.00	500.00	475.00							
AZ	Yes	300.00	300.00	0.00				X			X
CA	Yes	269.25	618.00	348.75							X
CO	Yes	107.00	107.00	0.00	X	X	X				
CT	Yes	100.00	100.00	0.00							
DE	Yes	100.00	300.00	200.00							
FL	No										
GA	No										
HI	No										
IA	No										
ID	Yes	115.00	115.00	0.00	X		X				
IL	No										
IN	Yes	100.00	100.00	0.00							X

KS	No										
KY	Yes	150.00	400.00	250.00	X				X	X	
LA	Yes	150.00	1,000.00	850.00		X					
MA	No										
MD	Yes	20.00	50.00	30.00	X				X		
ME	Yes	235.00	235.00	0.00	X			X		X	
MI	Yes	150.00	300.00	150.00	X					X	
MN	Yes	125.00	400.00	275.00							
MO	No										
MS	Yes	500.00	2,000.00	1,500.00	X	X			X		
MT	Yes	175.00	175.00	0.00	X		X				
NC	Yes	16.00	159.00	143.00							
ND	Yes	100.00	400.00	300.00		X				X	X
NE	No								X	X	
NH	Yes	100.00	100.00	0.00	X			X			
NJ	No										
NM	No										
NV	Yes	1,500.00	1,500.00	0.00	X	X		X	X		X
NY	Yes	100.00	100.00	0.00	X			X	X		
OH	Yes	50.00	50.00	0.00							
OK	Yes	90.00	90.00	0.00							
OR	Yes	150.00	150.00	0.00	X	X	X				
PA	Yes	101.97	401.97	300.00	X	X			X		
RI	No										

SC	No										
SD	No										
TN	Yes	150.00	650.00	500.00							
TX	Yes	132.00	132.00	0.00							
UT	No										
VA	No										
VT	Yes	100.00	200.00	100.00	X	X		X			
WA	Yes	300.00	760.00	460.00	X	X					X
WI	Yes	40.00	100.00	60.00							X
WV	Yes	10.00	10.00	0.00	X	X			X		X
WY	Yes	145.00	145.00	0.00	X		X	X			