The Public's Perceived Importance and View of State Fish and Wildlife Agencies

Produced by:



With the assistance of:



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Executive Summary

To effectively manage fish and wildlife resources, an agency must understand its stakeholders. For clarity, we define stakeholders as anyone who has an interest in the decisions, actions, or outcomes of the state natural resource agency. These include, but are not limited to, license buyers. In October 2023, on behalf of 12 states within the Southeastern Association of Fish and Wildlife Agencies (SEAFWA), a survey was fielded to both recreational license holders and a general population panel inquiring about several major topics, including:

- 1) How relevant their state fish and wildlife agency is to them,
- 2) How important the various responsibilities handled by their state fish and wildlife agency are,
- 3) Whether they believed the state was doing a good job fulfilling these tasks,
- 4) Funding priorities,
- 5) Interactions with the agency, and more.

This project was funded by the Multistate Conservation Grant Program F23AP00489, a program funded through the Wildlife and Sport Fish Restoration Program and jointly managed by the U.S. Fish and Wildlife Service and the Association of Fish and Wildlife Agencies.

Respondents were split into three activity groups:

- **Licensed Participants**: Hunters and anglers who purchased a hunting and/or fishing license per data provided by each state fish and wildlife agency. Roughly 15% of the U.S. population fishes and 6% hunts².
- **Unlicensed Participants:** People who participated in at least one outdoor activity *except* hunting or fishing in the past three years. An estimated 40% of the U.S. belongs in this category³.
- **Unlicensed Nonparticipants:** Individuals from the general population panel who did not participate in any outdoor-related activity in the past three years. Roughly 45% of the U.S. population fits this category.

These results reflect the opinions of the survey respondents. This does not mean their responses accurately reflect state fish and wildlife agencies' actual responsibilities, accomplishments, and needs. However, the public's perception of state agencies is their reality. To the extent that the public's perceived reality does not match what state fish and wildlife agencies see, a need for increased engagement and communication exists to correct misconceptions and improve education. The results of this project are to help state fish and wildlife agencies understand how to better engage and interact with the public.

State-specific results have been shared directly with each state agency.

¹ The online panel provider Qualtrics was used to field the general population sample. Individuals who indicated they hunted or fished were screened out of the survey.

² 2022 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

³ Estimated from the <u>2023 Outdoor Industry Association Participation Trends Report</u>



Key Findings

Participation

- Participation in outdoor recreation varies across demographics and location:
 - Compared to "Whites or Caucasians", participation by the "Black or African-American" community in running, walking, and/or jogging was slightly greater, yet was lower in most other activities, often significantly so for all types of boating, hiking, recreational shooting, foraging and others.
 - Hispanics were more likely to participate in biking and geocaching, while non-Hispanics were more likely to participate in gardening.
 - People in urban areas (more than 50,000 people) were more likely to participate in biking, boating, hiking, swimming, running, and racket sports than were those from rural areas. In contrast, those from rural areas (fewer than 2,500 people) were more likely to engage in off-roading, foraging, and gardening.
- There are reasons that limit people's outdoor participation, some of which can be addressed by outdoor recreation advocates and state agencies:
 - Across all groups, the top reasons limiting outdoor recreation are physical limitations,
 time constraints, no one to go with, and monetary costs of participation.
 - Limitations associated with fear of wildlife and feeling unwelcomed were stated as reasons more often by "Blacks or African-Americans" and Hispanics. Although these were issues for only a few of the respondents these may still be important issues to address.
 - Those in rural areas more often reported physical limitations than those from urban areas, whereas those in urban areas suggested distance to access sites, lack of knowledge, and time were greater limitations than rural residents. As anticipated, providing urban residents with more and closer sites to recreate at would likely increase their participation.

Familiarity and Perceptions

- A majority of the public reports being familiar with their state fish and wildlife agency. Those
 with the least familiarity are people who do not hunt, fish, or participate in some type of
 outdoor recreation, with 46% saying they were not familiar at all with their state fish and
 wildlife agency. Differences by race and ethnicity were minor.
- Most participants believed their state fish and wildlife agency was relevant, agreed that the agency completed important tasks, and agreed that it could be trusted to carry out those tasks.
- Of those who report being familiar at any level with the state agency, a majority of Licensed and Unlicensed Participants feel the state agency holds the same values as they do.
 - However, 31% of Licensed Participants, 42% of Unlicensed Participants, and 58% of Nonparticipants feel the state agency's values conflict with theirs in some way.
 Together, this group represents 48% of the public. This significant portion of the public



- could potentially present opposition to agency needs and actions if not properly understood and engaged.
- "Blacks or African-Americans" were less likely to agree their state agency held the same values as they do.
- Interestingly, a slightly higher percentage of all participants and nonparticipants supported agency actions, meaning roughly 5% of those who think the state agency holds different values than themselves still support its actions.
- Roughly 70% of Licensed and Unlicensed Participants who were aware of their state fish and
 wildlife agency felt the agency was doing a good job managing fish and wildlife. A lesser percent
 (57% 69%) of these groups think their agency meets other core responsibilities well, such as
 making good decisions for the resource, being scientifically sound, operating in an open and
 honest fashion, and providing the general public the ability to provide input.
 - 19% to 25% of the general public either disagrees or is neutral regarding statements that the fish and wildlife agency does a good job meeting its basic responsibilities. This indicates a potential need for the state to increase its engagement and understanding with core segments of the public.
 - Across all questions tested in this study, younger people were more likely to report being unaware of the state agency and its mission, indicating the need for greater communication efforts by the state.
 - This may partly reflect the fact that more of our population, especially younger people, reside in more urbanized areas compared to previous generations. A lack of familiarity with nature and the difficulty in accessing nature within urban areas may preclude many from listening to state wildlife agencies' communications or seeking similar information. This indicates an opportunity for state wildlife agencies if they are willing to provide recreational and educational services to these urban audiences.
 - Licensed male participants generally held less favorable opinions of their state fish and wildlife agency than licensed female participants. In most agencies, older males represent the bulk of the license buyers. Likely, these also represent the bulk of what Manfredo in "America's Wildlife Values" terms the "traditionalists". As such, part of their dissatisfaction may represent how the agencies are changing to meet new societal demands.
 - Compared to "Blacks or African-Americans", "White or Caucasian" audiences were more likely to state their agency was doing a good job, was honest and open, scientific, accepting of public input and could be trusted to make good fish and wildlife management decisions. Fewer differences were seen in Hispanic vs non-Hispanic audiences, though Hispanics who do not engage in any form of outdoor recreation had low agreement rates. Many "Blacks or African-Americans" participate in outdoor recreation, yet question the state agencies' honesty and effectiveness. This presents an opportunity for state agencies to reach out into African American communities to better understand what can be done to improve this relationship.



These insights indicate a need for state fish and wildlife agencies to better understand the actions and values that would make them align more closely with current societal values, then to communicate its values, actions and guiding principles to all communities.

Responsibilities

• There was a high level of agreement between Unlicensed Participants and Unlicensed Nonparticipants (97% correlation among the rankings) on which responsibilities were of most importance. In general, both groups highlighted activities that protect the environment and habitat first, then actions that protect the animals, and finally actions focused on the people. In contrast, Licensed Participants rated protecting habitat first and protecting game animals second, suggesting their priorities reflect actions that improve their primary experience.

Responsibility	Unlicensed Participants	Licensed Participants	Unlicensed Nonparticipants
Protect Environment	1	6	1
Protect Fish and Wildlife Habitat	2	1	2
Protect Game Animals	3	2	4
Enforce Game Laws	4	5	6
Control Pollution	5	7	3
Protect Non-game Animals	6	9	5
Manage Lands	7	3	7
Provide Access	8	4	10
Manage Nuisance Wildlife	9	8	8
Manage Urban Wildlife	10	11	9
Skills Education	11	10	11
Provide Technical Guidance	12	12	13
Boat Registration	13	14	12
Regulate Mining	14	15	14
Recruitment Programs	15	13	15

- Not surprisingly, Licensed Participants indicated that agencies' responsibilities were of higher importance to them than they were for Unlicensed Participants and Nonparticipants.
- Across the various topics, those 55 and older thought these responsibilities were of greater importance than those 35-54 years old, and the group of 18-34-year-olds were least likely to view these responsibilities as important.
- Females were more likely to suggest that protecting the environment, protecting fish and
 wildlife habitat, protecting non-game animals, controlling pollution, and managing urban
 wildlife were of higher importance than were males. In contrast, males were more likely to
 suggest that recruiting new outdoor enthusiasts, providing technical guidance, providing access,
 and managing public lands were of higher importance than were females.

- "Blacks or African Americans" who are licensed to hunt or fish were most likely to agree that
 the various responsibilities were Very to Extremely Important (on average 74%; overall average
 was 71% across the other races), whereas unlicensed "Blacks or African Americans" were least
 likely to agree that the various responsibilities were Very to Extremely Important (on average
 44%; overall average was 51% across the various races).
- No overall differences were seen between Hispanics and non-Hispanics in their sense of importance for the agencies' responsibilities.
- Respondents from rural communities rated agency responsibilities a little less important (on average 5%) than other respondents.
- Considering some of the tested responsibilities are not actual responsibilities for most state fish
 and wildlife agencies, such as pollution control and mining regulation, public education
 regarding agencies' actual duties may be warranted. In some cases, specific audiences rated
 such responsibilities as high, such as "Blacks or African-Americans" stating pollution control as
 one of the most important responsibilities for state fish and wildlife agencies. This presents an
 opportunity for state fish and wildlife agencies to engage with these groups to highlight how
 they work with other state and federal agencies to ensure protection of fish and wildlife
 resources.

Agency Trust

- There were fewer differences overall between the levels of trust held for state agencies across the various tested groups compared to the importance assigned to the listed responsibilities. More than half of participants trusted their agency to fulfill its responsibilities, regardless of what the responsibility was. Participants gave agencies the highest levels of trust in protecting fish and wildlife habitat, enforcing game laws, and protecting game animals. Agencies also received high marks in providing access and managing public lands. However, participants had slightly less trust in agencies' abilities to protect the environment and non-game species.
 - Agencies should consider developing further messaging to highlight how funding issues reduce their ability to meet all the challenges they face. In doing so, they might work to highlight how the passage of the Recovering America's Wildlife Act could benefit the agency and its stakeholders.
- Licensed Participants were more likely to trust their state's fish and wildlife conservation
 agency to fulfill its obligations than were Unlicensed Participants. Unlicensed Nonparticipants
 were least likely to trust the agency, though a majority reported trusting the agencies' decisions
 regarding 13 of the 15 tested responsibilities (excluding mining regulation—when applicable—
 and in recruiting new participants).
- Across the various topics, in general those 55 and older trusted the agency more than did those 35-54 years old. People 18-34 years of age have the lowest levels of trust and support for their state agency, even among licensed hunters and anglers, indicating a need to better engage with this critical constituency.
- Details on the public's reactions and perceptions regarding the 15 areas of responsibility for state fish and wildlife agencies are within this report.



Funding

- Licensed Participants were most likely to know that state fish and wildlife conservation funding came from a mix of license sales and other taxes. In contrast, almost half of Nonparticipants were willing to say that they really did not know where funding came from, indicating an area of possible attention for future public communication efforts. Blacks and Hispanics were least likely to be aware of state fish and wildlife conservation agencies' funding sources.
- In many cases, hunters, anglers, and target shooters provide much, if not most, of the funding for their state fish and wildlife agency. However, the vast majority of all respondents believed that funding of the state's fish and wildlife agency should be essentially a 50:50 balance between the user-pay and the public-pays models.
- When respondents were asked whether they would be willing to reallocate current state funds
 if those funds were used for state fish and wildlife needs, a significant minority of unlicensed
 respondents (i.e., 28% of Unlicensed Participants and 41% of Unlicensed Nonparticipants)
 suggested they did not want funds reallocated.
 - Among Unlicensed Nonparticipants, 14% suggested they thought that funding for the agency should be reduced. Those who were younger, female, "Black or African-American", or Hispanic were more likely to suggest funding be reduced than other groups. Looking at race and ethnicity, "Blacks or African-Americans" were more likely than others to suggest reducing funding.
- In contrast, most Licensed Participants supported the reallocation of current funds.
 - Between about 30% -50% of Licensed Participants thought that states should consider moving funds from public welfare, transportation, and the justice system to fund fish and wildlife; however, few supported moving funds from education or health care.
- Those 55 years old and older were less likely to support funding reallocation, whereas younger respondents were more likely to be open to moving funds from any of the other sources.
- Male participants were more likely than females to be willing to move funds from other programs into fish and wildlife agency budgets.
- The highest ranked sources of new funding that respondents thought that agencies should consider were redirecting portions of their state's lottery or sales tax or offering a voluntary or mandatory conservation license.
- Urban residents, especially those who were Licensed Participants, were somewhat more open to new fees to fund state fish and wildlife conservation agencies than were rural residents.

Communications

- Most Unlicensed Participants and Nonparticipants had not interacted with their state fish and
 wildlife conservation agency in the past year, whereas 70% of Licensed Participants had
 engaged in either one-way communications (e.g., sent or received an email, visited a website),
 two-way communications (e.g., emails with responses, in-person conversations, etc.), or both.
 - For all three groups of respondents, email was the most common way they had communicated with the agency.



When asked how they would like to learn more about the agency, both Licensed and
Unlicensed Participants suggested that they would prefer to visit an agency website. Facebook,
YouTube, and mailed newsletters also ranked highly for these two groups. In contrast, 44% of
Nonparticipants reported no interest in learning anything more, indicating a possible need to
communicate the relevance of healthy ecosystems to all Americans.

The remainder of this report provides detailed results along with the survey questionnaire, which can be found in Appendices A and B.

While not all segments of the public will ever be fully engaged or supportive, the various ratings and details of public feedback in this report indicate a fairly high level of approval and acceptance for Southeastern state fish and wildlife agencies. Gaining public support for current and future initiatives may not necessarily depend on increasing public support but might rely more on increasing public awareness of the needs faced by fish, wildlife, and the agencies responsible for their management.



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Background and Purpose

Effective fish and wildlife management requires meaningful interactions with all segments of society, not just the people who buy hunting and fishing licenses. According to previous USFWS National Surveys, most state residents do not fish, hunt, boat, or participate in other related activities. Despite this fact, states are charged with managing natural resources for the benefit of all residents, which often proves difficult. As illustrated by the America's Wildlife Values project, there has been an ongoing value shift away from those of traditional stakeholders to people who view their interactions with wildlife more mutualistically (Manfredo et al., 2018).

Significant segments of the public may not be aware of their state fish and wildlife agency at all, much less its responsibilities, services, and benefits provided. Similarly, state fish and wildlife agencies have a limited understanding of how they are perceived by the public, especially by their non-traditional stakeholders. Together, these issues hinder agencies' abilities to effectively communicate and engage with the public and make it difficult to deliver programs relevant to the diverse range of communities served. Until agencies have a better understanding of their relevancy to the public and how to better engage with under-served communities, the ability to effectively manage and maintain fish, wildlife, and conservation will be minimized.

The ultimate purpose of this project was to better understand the public's knowledge and perceptions of their state fish and wildlife agency, with an emphasis on the agencies' relevance to the portion of the public that does not buy hunting and/or fishing licenses. The purpose is not to convert these audiences into anglers, hunters, target shooters or boaters, but to help states adapt their approaches, programs, messaging, and outreach to better connect with existing communities and individuals regarding conservation.

These insights were produced under funding provided to the Southeastern Association of Fish and Wildlife Agencies (SEAFWA) under Multistate Conservation Grant F23AP00489. Twelve states within the Southeast region participated. Utah also participated, at their request. (Figure 1). The inclusion of Utah was found to not have any statistical impact or difference on the region-wide results reported for the Southeast, so they were included in this report.



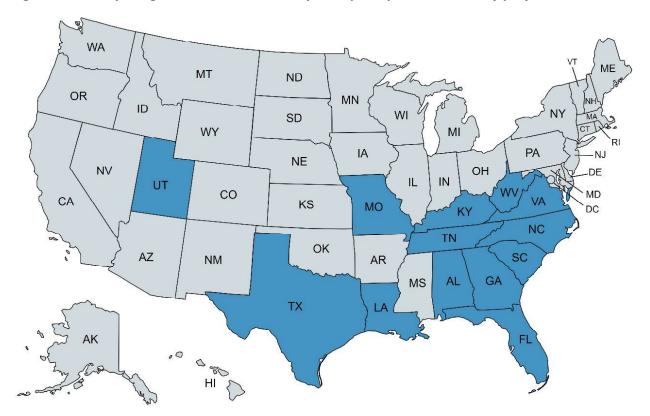


Figure 1. Participating states in the SEAFWA public perceptions/relevancy project.

Data and Methods

The population of interest was all adult residents. Two sampling frames were used: 1) those with a hunting or fishing license (license frame), and 2) those who did not hunt or fish (GenPop frame). The overall sample size for the license frame was 237,972. For the license frame, states provided 2022 fishing and hunting license data sufficient to draw an email-based sample. For the GenPop frame, we used a general population panel fielded through the online panel provider Qualtrics. GenPop quotas for each state were developed using the most current U.S. Census data for gender, age, and race/ethnicity (Table 1).

80%

63%

64%

74%

41%

61%

93%

78%

5%

11%

7%

7%

40%

11%

2%

16%

12%

21%

26%

16%

12%

19%

4%

1%

3%

5%

3%

3%

6%

8%

1%

5%



Table 1.

Missouri

Tennessee

Texas

Utah

Virginia

North Carolina

South Carolina

West Virginia

Age Class Race/Ethnicity Hispanic Black or 65 and White or or African State Gender 18 - 3435 - 4950 - 64older Caucasian Latino American Other 50/50 26% 26% 25% 23% All States Varies by state, as shown below Alabama 5% 27% 2% 66% Florida 54% 27% 15% 4% Georgia 52% 11% 32% 5% Kentucky 85% 5% 8% 2% 58% 7% 32% 3% Louisiana

Gender, age, and race/ethnicity quotas used in the general population sample.

Hunting and Fishing License Sampling Frame

Between October 10 and October 27, 2023, individuals were contacted up to five times via email with an invitation to complete an online survey. To reduce response bias that might dissuade people who do not engage in the outdoors from participating, survey recipients were not informed the survey was related to outdoor recreational activities; rather, they were invited to complete a survey about their state's fish and wildlife conservation agency. Following the final email reminder, we allowed an additional week for responses before the survey closed.

Overall, 23,354 completed responses were received from a sample of 237,963 across all participating states. After accounting for bounced or undeliverable emails (n = 13,804), we achieved a 10.4% response rate. A rake weighting procedure on age, gender, and region was used on several key questions to determine if weighting was necessary. We investigated yet did not see any differences between weighted and unweighted responses that we considered relevant differences for policy decisions. Consequently, we did not weight the dataset.

GenPop Frame

Qualtrics was contracted to conduct an online panel survey of residents within each state of interest. Respondents were compensated for their participation in the study, and Qualtrics managed the quotas to ensure there is adequate representation of genders, age classes, and race/ethnicity. All survey respondents were at least 18 years old and had not participated in either hunting or fishing in the past



three years. Trap questions and other steps were taken in the fielding and data analysis phase to eliminate bots and otherwise suspect, inconsistent and/or untruthful responses.

The survey fielded started on September 26, 2023, and concluded approximately one month later.

Questionnaire Development

Prior to developing the questionnaire, we surveyed managers in participating states to ascertain the broad responsibilities of their agency, their mission statement, governance structure, and top 3 management challenges. We then distilled this information and created the initial draft. That draft was shared among agency staff and was edited and refined to produce the final version.

Data Analysis

We analyzed responses using IBM SPSS and Program R software using standard statistical techniques. Margins of error were produced and are shared for all survey results using two standard errors away from the mean as the benchmark value of a 95% confidence interval. For questions in which we compared various groups, we controlled the family-wise error using a Bonferroni adjustment. To estimate the confidence intervals for reported proportions, visit https://statpages.info/confint.html.

Results

Respondents

Throughout this document respondents were split into three activity groups:

- 1. Those who participate in outdoor activities and hunt or fish as determined by the purchase of a resident hunting or fishing license, referred to as Licensed Participants,
- 2. Those who participate in outdoor activities, but had not hunted or fished within the past three years, referred to collectively as **Unlicensed Participants**, and
- 3. Those who did not participate in outdoor activities, or **Unlicensed Nonparticipants**.

Respondents were segregated during analysis based on age, gender, race, ethnicity, and communitysize to test for any statistically significant differences in responses based on these variables (Table 2 and Table 3).

From the hunting and fishing license frame, of the 237,963 email addresses that we initially attempted to distribute the survey to, 150 failed, and another 13,654 bounced and were undeliverable. Of those that were delivered, 33,866 were started and 23,354 individuals responded, which yielded an adjusted response rate of 10%. Of those 23,354 respondents, we received 22,738 valid and completed surveys. These are our Licensed Participants.

From the GenPop sample frame we collected data from an additional 11,105 Unlicensed Participants and 1,999 Unlicensed Nonparticipants.



Respondent demographics, by survey group. Table 2.

		Unlicensed Participants ¹		Licensed Participants ²		icensed articipants
Demographic	N	Percent	N	Percent	N	Percent
Female	5,811	53%	2,976	13%	1,155	58%
Age Group	_					
18 to 34	1,802	31%	476	16%	239	21%
35 to 54	2,131	37%	1,124	38%	451	39%
55 and over	1,878	32%	1,376	46%	465	40%
Male Age Group	_ 5,219	47%	19,629	87%	826	42%
18 to 34	1,670	32%	2,215	11%	205	25%
35 to 44	1,939	37%	6,996	36%	275	33%
55 and over	1,610	31%	10,418	53%	346	42%

^{1.} For Unlicensed Participants there were 75 individuals with a non-binary gender, for Licensed Participants there were 133 individuals with a non-binary gender, and for Unlicensed Nonparticipants there were 18 individuals with a non-binary gender. These individuals were excluded from this table but included in the full results.

Table 3. Respondents by state of residency and frame.

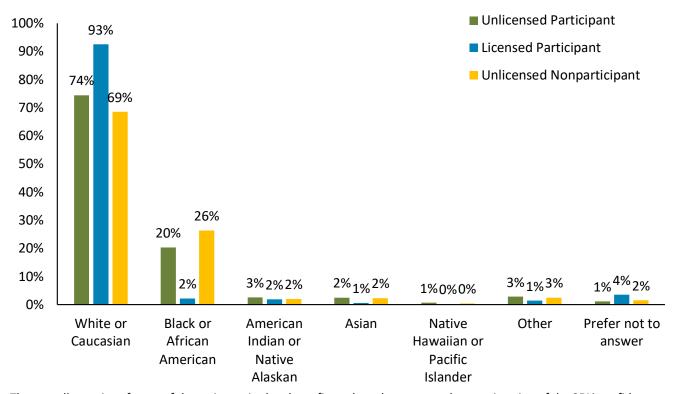
			Unlicensed
State of Residency	Unlicensed Participants	Licensed Participants	Nonparticipants
Alabama	805	1,264	177
Florida	1,213	700	155
Georgia	787	989	175
Kentucky	824	1,785	161
Louisiana	830	2,663	147
Missouri	944	1,336	154
North Carolina	794	2,450	184
South Carolina	814	3,996	174
Tennessee	818	2,624	150
Texas	794	856	154
Utah	895	1,830	94
Virginia	825	1,071	145
West Virginia	762	1,174	129
Total Respondents	11,105	22,738	1,999

 $^{^{2\}cdot}$ In the Licensed Participants sample, respondents' gender skewed towards males, which matches information from license databases.



We found that most respondents identified as "White or Caucasian" regardless of their participation group membership (Figure 2). That said, Licensed Participants were significantly more likely to be White, and less likely to be Black, whereas the opposite was true to Unlicensed Nonparticipants. Across all three activity groups, older respondents (ages 55 and older) were most likely to identify as "White or Caucasian" and least likely to identify as one of the other races.

Figure 2. Percentage of respondents by race.



The overall margins of error of the estimate in the above figure based on a normal approximation of the 95% confidence bounds are no more than 1% for Unlicensed Participants, 0.7% for Licensed Participants, and 2.3% for Unlicensed Nonparticipants.



As for ethnicity, Hispanics comprised a larger percentage of Unlicensed Participants (9.5%) compared to licensed hunters and anglers in the Southeast (2.2%). Younger Hispanics appear to be more engaged in outdoor recreation than those 35 years and older (Table 4).

Table 4. Percentage of respondents by ethnicity.

Age group	Unlicensed Participant	Licensed Participant	Unlicensed Nonparticipant
	% Hispanic	% Hispanic	% Hispanic
All ages combined	9.5%	2.2%	8.3%
Between 18-34 years old	15.1%	3.2%	12.4%
Between 35-54 years old	9.8%	2.6%	9.4%
At least 55 years old	3.9%	1.7%	5.1%

Participation

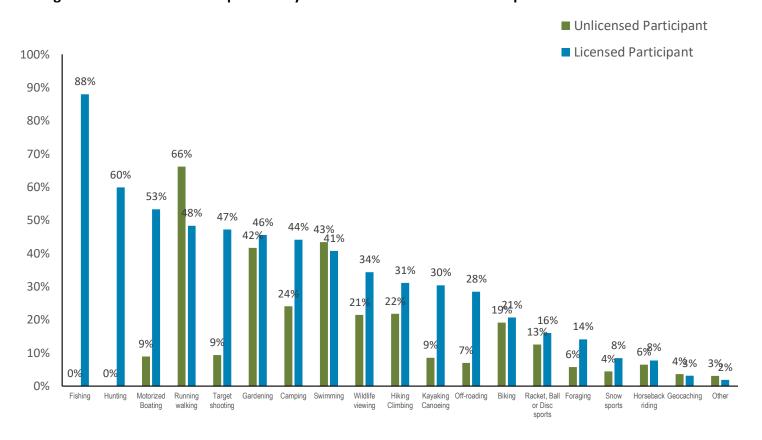
Outdoor Participation

Respondents were asked to designate which outdoor activities they had participated in within their home state within the past three years. Anyone who selected "I did not participate in any of these activities" was designated as an "Unlicensed Nonparticipant".

The most popular activities (Figure 3) by Licensed Participants were fishing, followed by hunting. In contrast, running or walking was the most popular amongst Unlicensed Participants. Obviously, Unlicensed Nonparticipants are not included in this graph as they did not participate in any of these activities. Licensed Participants were significantly more likely to participate in almost all outdoor activities, with some minor exceptions (e.g., swimming, and those activities in which few overall respondents participated). Older respondents (55 and older) were less likely to participate in most outdoor activities; the exceptions were gardening, motorized boating, wildlife viewing, and recreational target shooting. Males were more likely to participate than females in most outdoor activities; the exceptions were swimming, gardening, and running or walking.



Figure 3. Outdoor activities pursued by Licensed and Unlicensed Participants.

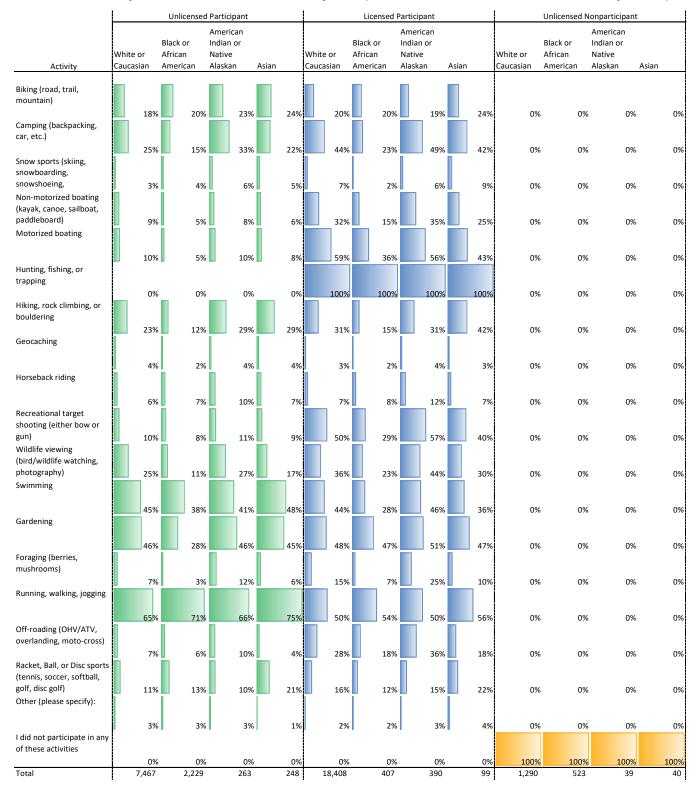


Differences were noted by race and ethnicity (Table 5 and Table 6). Specifically, compared to Whites, participation by the Black community in running, walking, and/or jogging was slightly greater, and lower in most other activities, often very significantly. Hispanics were more likely to participate in biking and geocaching, while non-Hispanics were more likely to participate in gardening. When comparing the two groups among Licensed Participants, non-Hispanics were more likely to participate in motorized boating, recreational shooting, wildlife viewing, foraging and off-roading.

Those who lived in urban areas (more than 50,000 people) were more likely to participate in biking, boating, hiking, swimming, running, and racket sports than were those from rural areas. In contrast, those from rural areas (fewer than 2,500 people) were more likely to engage in off-roading, foraging, and gardening. Licensed Participants in rural areas were also more likely to go horseback riding and engage in recreational shooting (Table 7).

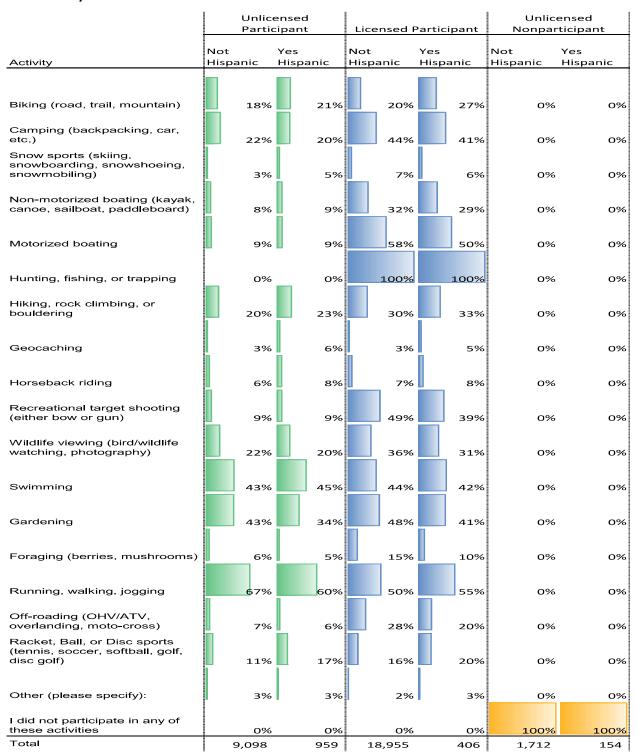


Table 5. Participation in outdoor activities by race (Totals in the bottom row are the sample size).



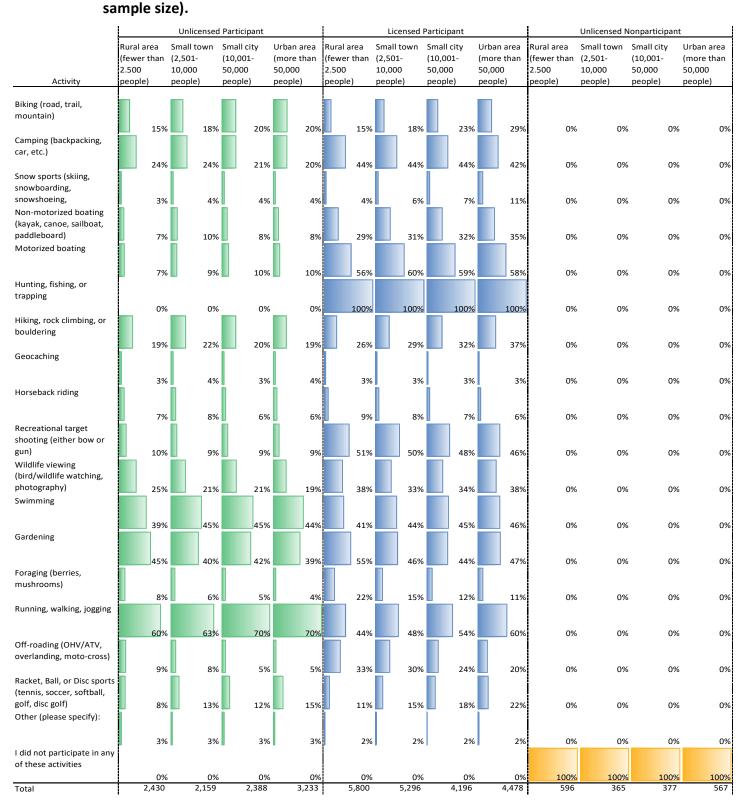


Participation in outdoor activities by ethnicity (Totals in the bottom row are the sample Table 6. size).





Participation in outdoor activities by urbanization (Totals in the bottom row are the Table 7.



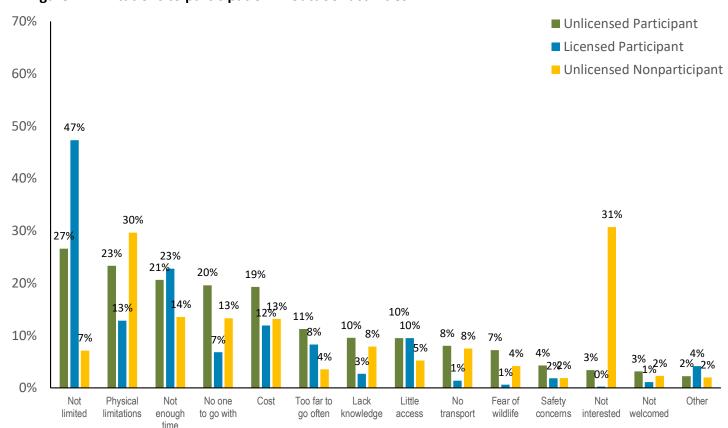


Limitations to Participation

Reasons that reduce people's activities were also investigated. We found that for both Licensed and Unlicensed Participants, the top-chosen response was that they were "Not at all limited" in participating (Figure 4).

For Unlicensed Nonparticipants, many (31%) selected they were simply not interested in participating in outdoor activities, and another 30% suggested they had physical issues that had limited their outdoor participation; even for Participants, physical issues was one of the top limitations. Those respondents 55 and older were more likely to choose physical limitations as a response than were younger respondents, and this choice was the first or second highest choice for these older respondents across all three activity groups. Unsurprisingly, cost and lack of time were also highly rated limitations for all three groups. Among Participants, the youngest groups (18-34 years old) were most likely to suggest they were limited. Similarly, females were more likely than males to suggest that cost, fear of wildlife, lack of knowledge, physical limitations, and lack of companions were limitations.

Figure 4. Limitations to participation in outdoor activities.





Differences were noted by race and ethnicity (Table 8 and Table 9). Limitations associated with fear of wildlife and feeling unwelcomed were states as reasons more often by Blacks and Hispanics compared to others, but overall were minor limitations. Also, Unlicensed Black and Asian Participants were less likely to suggest they had physical limitations. This likely reflects the fact that both groups were younger than other participants. Similarly, Hispanics were less likely to suggest that physical issues were a limitation; likely because Hispanics were younger than non-Hispanics.

Those in rural areas more often selected they had physical limitations than did those from urban areas, whereas those in urban areas suggested access and sites are too far away, lack of knowledge, and time were more important for them than for rural residents (Table 10). As anticipated, providing urban residents with more and closer sites to recreate at would likely increase their participation. Overall, while minor differences were observed that were associated with urbanization, the chosen limitations were fairly consistent across levels of urbanization within the participation group.



Table 8. Participation limitations by race (Totals in the bottom row are the sample size).

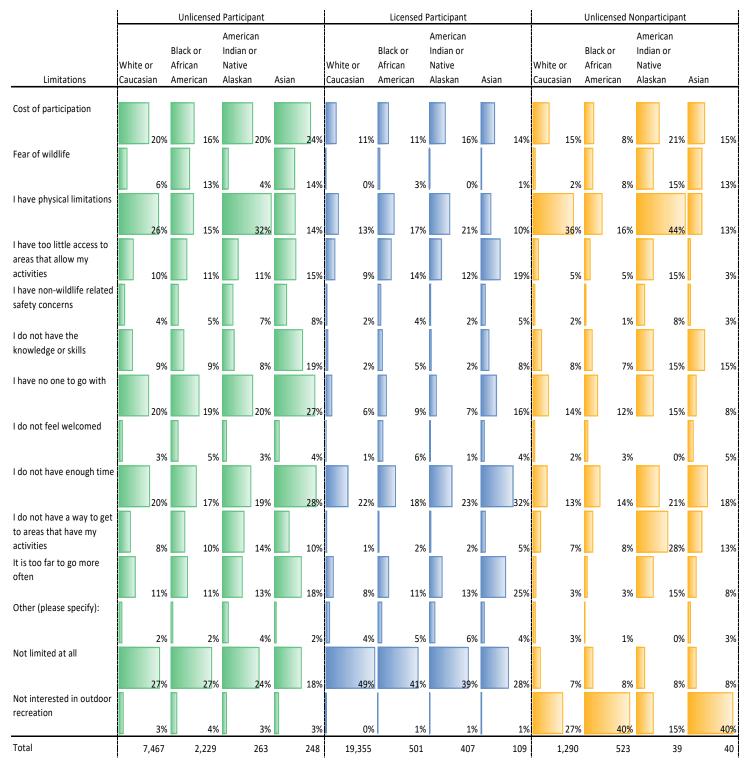
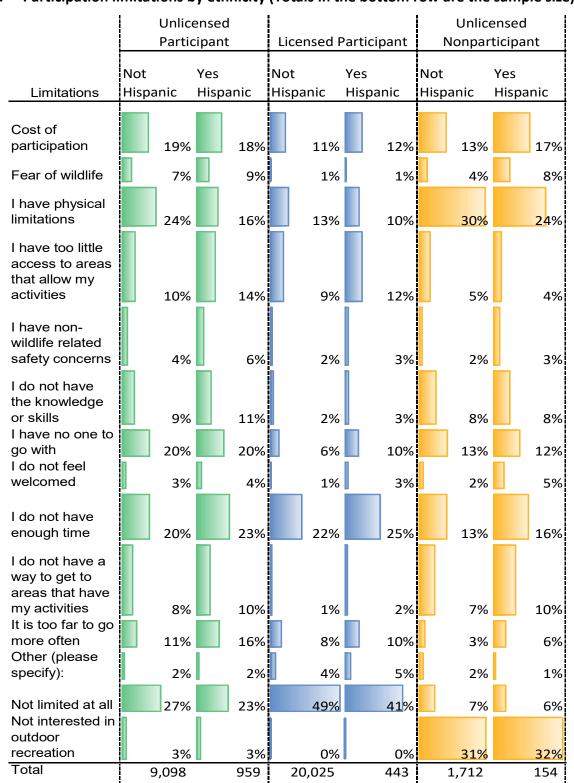




Table 9. Participation limitations by ethnicity (Totals in the bottom row are the sample size).





Total

2,430

2,159

2,388

3,233

6,171

5,606

4,422

4,709

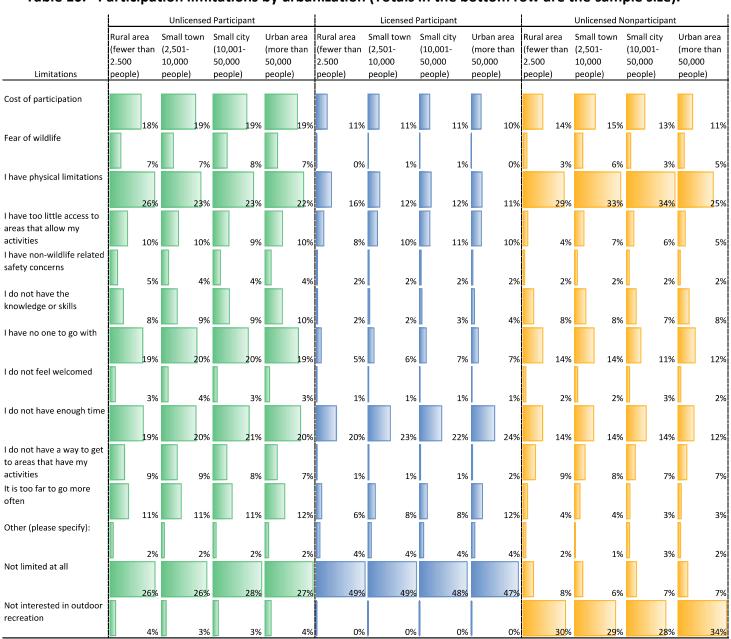
596

365

377

567

Table 10. Participation limitations by urbanization (Totals in the bottom row are the sample size).



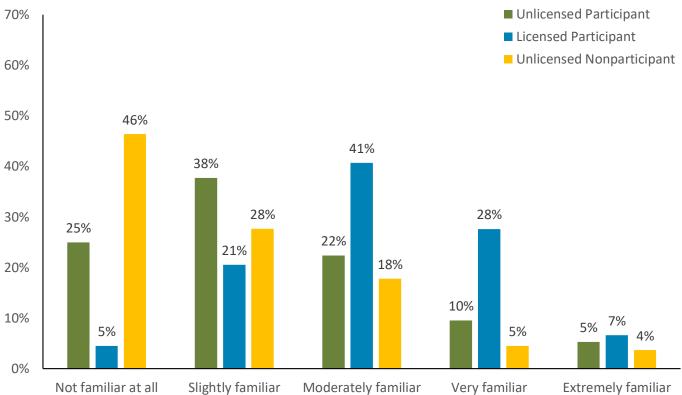


The Public's Perceptions of Their Fish and Wildlife Agency and Relevancy Opinions

Familiarity with State Fish and Wildlife Conservation Agency

Unsurprisingly, Nonparticipants were least likely (46%) to be familiar with the state fish and wildlife conservation agency, whereas Licensed Participants were most likely (Figure 5). Younger Unlicensed Participant respondents were more likely to be familiar with the agency than those 55 and older. Licensed and Unlicensed male Participants were more likely than females to suggest they were "very or extremely familiar" (18% versus 12% for Unlicensed Participants and 37% versus 19% for Licensed Participants).

Figure 5. Familiarity with the state fish and wildlife conservation agency.





Differences in familiarity with their state fish and wildlife agency were noted by race and ethnicity (Table 11 and Table 12). Participants from the Black community were less likely to report familiarity than Whites or Native Americans. Licensed Hispanics were less likely than licensed non-Hispanics to report being familiar with the agency.

Table 11. Familiarity with their state fish and wildlife agency by race (Totals in the bottom row are the sample size).

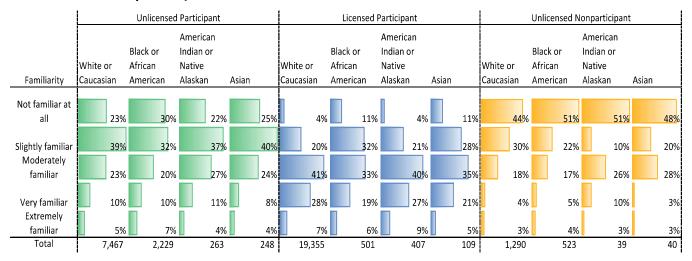


Table 12. Familiarity with their state fish and wildlife agency by ethnicity (Totals in the bottom row are the sample size).

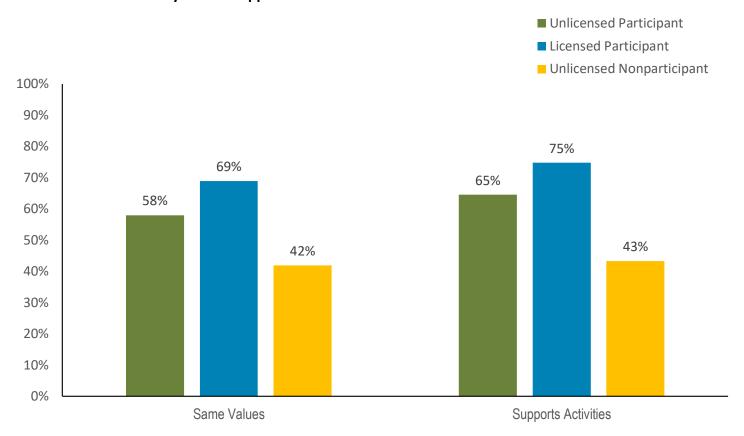
	Unlicensed Participant		Liconcod	Participant	Unlicensed Nonporticipant		
	Parti	пранс	Licensed	Participant	Nonparticipant		
	Not	Yes	Not	Yes	Not	Yes	
Familiarity	Hispanic	Hispanic	Hispanic	Hispanic	Hispanic	Hispanic	
Not familiar at all	25%	23%	4%	10%	46%	50%	
Slightly familiar	38%	33%	20%	26%	28%	21%	
Moderately familiar	22%	22%	41%	37%	18%	16%	
Very familiar	9%	12%	28%	22%	4%	5%	
Extremely familiar	5%	10%	7%	5%	3%	8%	
Total	9,098	959	20,025	443	1,712	154	



Sharing the Same Values

Most Licensed Participants (69%) agreed that the agency shared the same values and supported their activities (Figure 6), as did most Unlicensed Participants, although support was slightly lower (58% and 65%, respectively).

Figure 6. Percent of respondents who agreed that their state fish and wildlife agency holds the same values as they do and supports their outdoor recreational activities.



People's opinions that their state agency held the same values differed by race, but there were no notable differences based on ethnicity (Table 13 and Table 14). Respondents from the Black community were slightly less likely to say the agency shared the same values as they did. Licensed Hispanics were more likely to strongly agree that the agency shared their values, but overall agreement (Somewhat and Strongly Agree) was not different.



Table 13. Percent of respondents who agreed that their state fish and wildlife agency had the same values as they did or supported their outdoor recreational activities - by race (Totals in the bottom row are the sample size).

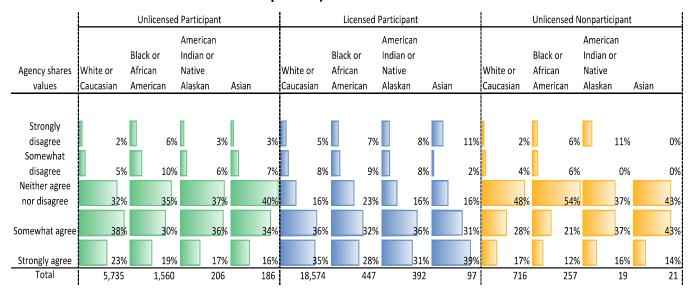
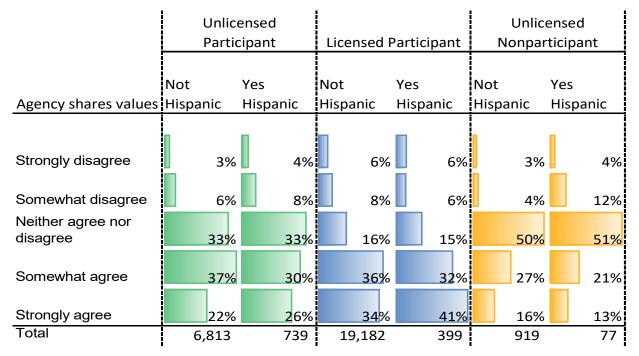


Table 14. Percent of respondents who agreed that their state fish and wildlife agency had the same values as they did or supported their outdoor recreational activities – by ethnicity (Totals in the bottom row are the sample size).

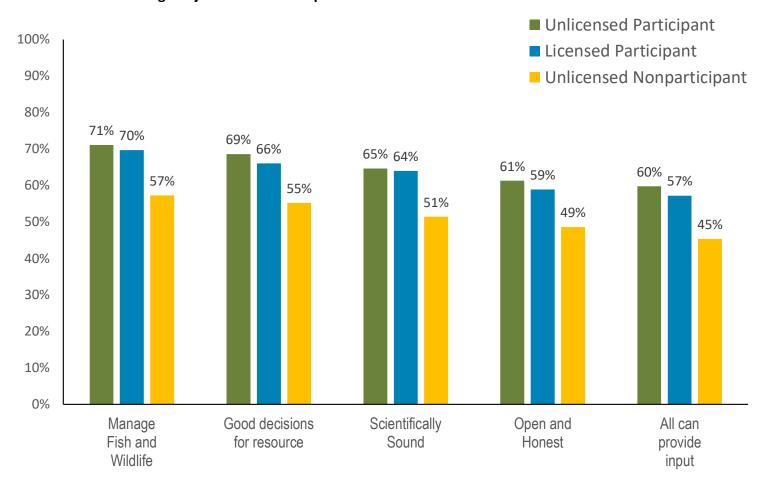




Perceptions of agency performance

Participants (licensed and unlicensed) were more likely than nonparticipants to suggest that the agency was doing a good job, with majorities agreeing their agencies are doing a good job across all five tracked characteristics (Figure 7). Unlicensed Nonparticipants scored their agencies at lower levels, which is not surprising as they have less engagement and interest in the outdoors. State agencies scored highest in their ability to manage fish and wildlife, but scores declined slightly when asked about other management characteristics. However, in most cases, a majority of the public approved of their state agency's performance.

Figure 7. Percent of respondents who agreed that their state fish and wildlife conservation agency does a good job with these responsibilities.



Few differences were noted based on age, gender, and race/ethnicity - with the following exceptions:

- 1. Younger members of the Unlicensed Nonparticipants category stood out. While Unlicensed Nonparticipants 55+ years old generally responded the same as all Licensed and Unlicensed Participants, younger members of this category agreed at significantly lower rates, especially those 18-34 years of age. They do not disagree that the state is doing a good job. Instead, they report no opinion at much higher rates, indicating an educational and communications opportunity for state fish and wildlife agencies. For participants, the oldest respondents (55 and older) were routinely more likely to agree that the agency was doing a good job, and less likely to disagree.
- 2. Males who are hunting and fishing license holders (Licensed Participants) are slightly more likely to agree that agencies are not doing a good job. In general, Licensed Participants are less likely to agree that the state agency is doing a good job compared to Unlicensed Participants; Unlicensed males and Licensed females often agreed strongly that agencies were doing a good job. License holders, being more personally involved and financially vested in fishing and hunting, are likely more demanding of state agencies and therefore more critical. Table 15 presents the average response across all five dimensions listed in Figure 7, above, with details by gender.

Table 15. Percent of the Southeastern public agreeing or disagreeing their state fish and wildlife conservation agency does a good job across all tested dimensions.

Agency does good job:
Strongly disagree
Somewhat disagree
Neither agree nor disagree
Somewhat agree
Strongly agree

Unlicensed Participant			censed Partic	ipant U	Unlicensed Participant			
<u>Male</u>	<u>Fema</u>	<u>le</u> <u>Mal</u>	<u>e Fen</u>	<u>nale</u> <u>Ma</u>	<u>le Fer</u>	<u>male</u>		
I	3%	2%	6% 📗	4% 📗	3% 📗	2%		
	7%	6%	11%	7% 📗	7% 📗	4%		
	23%	29%	20%	24%	37%	43%		
	37%	37%	35%	31%	30%	30%		
	30%	26%	28%	34%	22%	21%		

- 3. Unlicensed White Participants are most likely to agree the agency is doing a good job, and less likely to think the agency is doing a poor job.
- 4. There were few consistent differences between Hispanics and non-Hispanics, although unlicensed non-Hispanic respondents, both participants and non-participants, were more likely to agree the agency was doing a good job than did Hispanics who were Licensed Participants.

Considering the fortunes of all state agencies are largely based on the support received from their state legislatures, which reflects public sentiment, it is worthwhile to look at the percentage of the public that rates their state agencies' job performance as "low" or "have no opinion." These results can help state agencies better understand the topics needing greater attention and engagement. We matched the percentage of the Southeastern general population belonging to each group - Unlicensed Participants (45%), Licensed Participants (15%) and Unlicensed Nonparticipants (40%) – with the



proportion of each that disagreed to some level or had no opinion (Table 16). The results show that 19% to 25% of the public either disagrees or is neutral regarding statements that their state fish and wildlife agency does a good job.

Table 16. Percent of the Southeastern public (not just survey respondents) who do not agree or are neutral their state fish and wildlife conservation agency does a good job with these responsibilities.

	Unlicensed Participants		Licensed Participants		Unlicensed Nonparticipants		All Combined
Viewpoint	% Neutral	% Disagree	% Neutral	% Disagree	% Neutral	% Disagree	Neutral + Disagree
My agency does a good job managing fish and wildlife in my state	13%	5%	3%	3%	7%	2%	19%
When deciding about fish and wildlife management in my state, my agency will be open and honest in the things they say and do	17%	6%	5%	3%	9%	2%	24%
My agency can be trusted to make decisions about fish and wildlife management that are good for the resource	14%	5%	3%	3%	7%	2%	21%
My agency manages fish and wildlife in a scientifically sound manner	16%	5%	4%	3%	8%	1%	22%
My agency provides the general public the ability to provide input into fish and wildlife issues	18%	6%	5%	3%	9%	2%	25%



Across all the responsibilities tested above, younger people were more likely to disagree that the agency is doing a good job, while males were more likely to disagree than females that the agency is doing a good job.

Whites were more likely to say their agency is doing a good job managing fish and wildlife and that their agency could be trusted to make good fish and wildlife management decisions versus the other tested groups. Among Unlicensed Participants and Nonparticipants, Blacks and Hispanics agreed their agency was doing a good job and could be trusted in its decisions.

Overall, higher percentages of respondents reported their agency was doing a good job than said their agency was honest and open in its actions. Among Licensed and Unlicensed outdoor Participants, roughly 60% of Whites said their agency was open and honest. Among Nonparticipants, only 52% of Whites said their agency was open and honest, and only 39% of Blacks agreed their agency was open and honest. Few differences were seen by ethnicity, though fewer Hispanic Nonparticipants said their agency was honest (35% agreement for Hispanics compared to 50% for non-Hispanics).

Roughly two-thirds of Whites who participate in outdoor activity, both licensed and unlicensed, said their agency manages wildlife in a scientific manner, though only 56% of Nonparticipating Whites felt the same. Blacks in all three groups (licensed and unlicensed participants plus nonparticipants) agreed at rates lower than Whites. Hispanics who are Licensed Participants were more likely to agree than Whites, while all others, especially Nonparticipants, agreed at lower rates. The same general differences were seen in the rates of those agreeing their agency provides the public with the ability to provide input into management decisions.

Responsibilities of State Fish and Wildlife Agencies: Importance and Trust

Importance of various public trust responsibilities

Respondents were asked to rate the importance of a suite of responsibilities typical of state fish and wildlife agencies. The list of agency responsibilities was developed based upon feedback from the participating states then reviewed by the same states before the survey was implemented. For each question, respondents were allowed to answer, "I do not think this is managed by my agency," as state fish and wildlife agencies do not all share the same responsibilities. Due to the long list of 15 responsibilities received from states, this question was split into two parts with each respondent presented half of the list to reduce survey fatigue and improve accuracy.

Licensed anglers and hunters (Licensed Participants) differ in their top agency priorities compared to all others. There was a high level of agreement between Unlicensed Participants and Unlicensed Nonparticipants (97% correlation among the rankings) (Table 17), especially with their top choice of "Protect the environment." In contrast, Licensed Participants rated "Protecting fish and wildlife habitat" first followed by "Protect game animals", suggesting their priorities reflect actions that improve their primary experience. This difference highlights a source of potential conflict for state fish and wildlife agencies.



Licensed Participants hold greater passion for the activities managed by state fish and wildlife agencies. These key constituents indicated that the agency priorities were of higher importance to them than they were for Unlicensed Participants, which ranked priorities higher overall than Unlicensed Nonparticipants (Table 18). All priorities except for regulating mining/extraction were important to over 50% of hunters and anglers; however, only the top 11 responsibilities had more than 50% support from Unlicensed Participants, and only the top 4 had more than 50% support from Unlicensed Nonparticipants. Nonparticipants definitively value the agency responsibilities less than participants. These results can help states better set priorities, allocate resources, and plan communications.

Table 17. Importance of responsibilities, rankings from respondents who thought the given task was either "Very" or "Extremely Important", by participant type.

	Unlicensed	Licensed	Unlicensed
Responsibility	Participants	Participants	Nonparticipants
Protect Environment	1	6	1
Protect Fish and Wildlife Habitat	2	1	2
Protect Game Animals	3	2	4
Enforce Game Laws	4	5	6
Control Pollution	5	7	3
Protect Non-game Animals	6	9	5
Manage Lands	7	3	7
Provide Access	8	4	10
Manage Nuisance Wildlife	9	8	8
Manage Urban Wildlife	10	11	9
Skills Education	11	10	11
Provide Technical Guidance	12	12	13
Boat Registration	13	14	12
Regulate Mining	14	15	14
Recruitment Programs	15	13	15



Table 18. Importance of the various tasks that state conservation agencies can perform. Rankings were generated from respondents who thought the given task was either "Very" or "Extremely Important", by participant type.

⊃		Licensed Participant			Unlicensed Nonparticipant	participant	
Very important	Not at all important or	>		Not at all important or		Very important	:
Moderately or Extremely Ov important important Ra	Overall Slightly Moderately Rank important important	ately or Extremely tant important	nely Overall ant Rank	Slightly important	Moderately important	or Extremely important	Overall Rank
13% 75% 1	4%	11%	81% 6	%	15%	%95	\leftarrow
I	Č			,			(
12% 75% 2	2%	7%	89% 1	10%	13%	55%	7
17% 68% 3	3%	8%	87% 2	%6	16%	51%	4
15% 67% 4	4%	11%	83% 5	12%	14%	20 <mark>%</mark>	9
15% 67% 5	7%	12%	73% 7	10%	13%	52%	က
18% 66% 6	%8	17%	6 %02	10%	16%	20%	2
7000	700	80	040	706/	760/	/0 <u>7</u> V	٢
S	9/2				SOT I	The state of the s	`
19% 63% 8	3%	10%	84% 4	12%	18%	44%	10
010	/0 Ľ	170/	0 /0 /2	7	700/	AE0/	o
				S of			o
20% 61% 10	10%	21%	62% 11	11%	19%	45%	6
Ĭ				i i	(Č	;
25% 57% 11	%0T	19% 19%	10	15%	70%	40%	11
24% 49% 12	10%	21%	61% 12	13%	22%	34%	13
				,	,		:
21% 49% 13	16%	20%	54% 14	16%	18%	35%	12
21% 46% 14	15%	19%	45% 15	15%	19%	31%	14
26% 33% 15		210/	75% 13	73%	30%	24%	15



Using an ANOVA to test for significant differences in the importance of agency responsibilities across age, gender, race, ethnicity, participation group, urbanization level, and topic, we noted differences across the various demographics including:

- Younger people aged 18-34 placed lower importance on state agencies' responsibilities. Specifically, the average rating for the top two categories for those 35-54 years old was about 4% higher than those aged 18-34, and the average rating for those 55 and older was about 12% higher.
- 2. Licensed Participants had scores that were on average about 10% higher than Unlicensed Participants, and 27% higher than Unlicensed Nonparticipants.
- 3. Across all tested responsibilities, males and females scored very similarly. However, females were more likely than males to suggest that protecting the environment, protecting fish and wildlife habitat, protecting non-game animals, controlling pollution, and managing urban wildlife were of higher importance. In contrast, males were more likely than females to suggest that recruiting new outdoor
 - enthusiasts, providing technical guidance, providing access, and managing public lands were of higher importance. Further, protecting game animals was more important to licensed males than licensed females.
- 4. With respect to agency responsibilities shown in Table 19, looking at the average response across all 15 responsibilities, Licensed Blacks were most likely to agree that the various responsibilities were Very to Extremely Important (on average 74%; overall average was 71% across the other races), whereas Unlicensed Blacks were least likely to agree that the various responsibilities were Very to Extremely Important (on average 44%; overall average was 51% across the various races).
- 5. When comparing Hispanics and non-Hispanics we found no overall differences in their sense of importance for the agencies' responsibilities. We did notice that Unlicensed Nonparticipants who were non-Hispanic had a slightly higher sense of the importance (43%) than did those who were Hispanic (37%); however, both groups had a lower sense of importance than did Licensed Participants (72%).
- 6. Table 19 shows some differences by race. For example, Blacks show higher preferences for pollution control, and lower preferences for game management and enforcement. Considering state fish and wildlife agencies in general have very limited responsibilities for pollution management, greater public education efforts regarding their responsibilities may be warranted.
- 7. While, in general, where the respondent lived did not change whether the task was important or not, we did find that those who came from rural areas were less supportive (by on average 5%) of the agencies' responsibilities than those who lived elsewhere (Table 20).

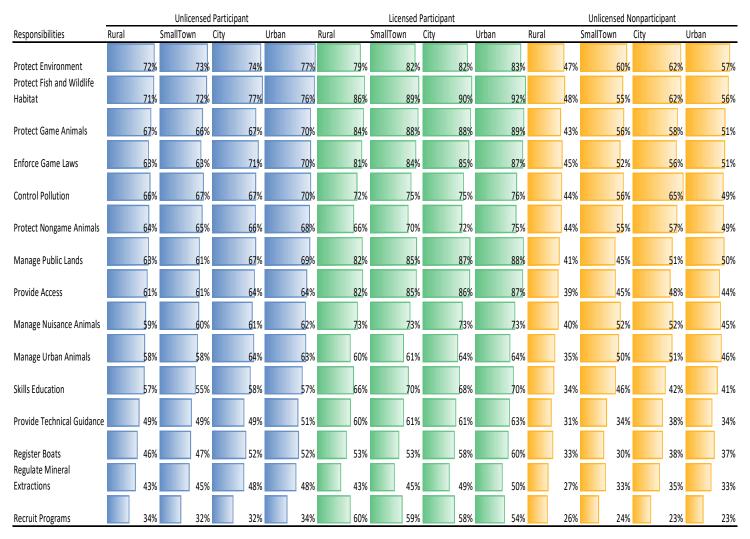


Table 19. Importance of responsibilities, rankings from respondents who thought the given task was either "Very" or "Extremely Important", by race and participant type (UP=Unlicensed Participants, LP=Licensed Participants, and UN=Unlicensed Nonparticipants).

	White	e or Caud	casian		ck or Afri Americar			rican Indi tive Alas			Asian	
Responsibility	UP	LP	UN	UP	LP	UN	UP	LP	UN	UP	LP	UN
Protect Environment	2	6	2	1	2	1	1	3	1	1	5	1
Protect Fish and Wildlife Habitat	1	1	1	3	1	3	2	1	4	2	2	4
Protect Game Animals	3	2	4	4	5	5	3	2	7	3	1	2
Enforce Game Laws	4	5	3	5	6	8	9	5	5	10	6	5
Control Pollution	5	7	5	2	3	2	4	7	2	3	7	2
Protect Non-game Animals	6	9	6	6	8	4	4	10	6	3	9	7
Manage Lands	7	3	7	7	7	10	9	4	3	6	3	6
Provide Access	8	4	9	10	4	9	8	6	9	7	4	8
Manage Nuisance Wildlife	9	8	8	11	9	6	6	7	7	9	8	11
Manage Urban Wildlife	10	11	10	8	11	7	7	11	10	8	13	9
Skills Education	11	10	11	9	10	11	13	9	11	11	10	10
Provide Technical Guidance	12	12	13	13	12	12	12	14	15	13	11	13
Boat Registration	13	14	12	12	13	14	14	12	12	14	12	12
Regulate Mining	14	15	14	14	15	13	11	15	12	12	14	14
Recruitment Programs	15	13	15	15	14	15	15	13	14	15	15	15



Table 20. Importance of responsibilities: displayed are the sum of percentages from respondents who thought the given task was either "Very" or "Extremely Important", by urban type and participant type.



Trusted to make good decisions for various responsibilities

For those individual responsibilities listed in Table 17Table 17 -Table 19Table 21, respondents who suggested that a responsibility was important were then asked whether the agency could be trusted to make good decisions when deciding how to approach it. Table 21 Table 21andTable 22Table 22Table 22 rank agencies' responsibilities with the highest ranked choice having the greatest levels of trust among the public.



Table 21. Trust rankings from respondents who chose either "Somewhat Agree" or "Strongly Agree" that their state fish & wildlife agency could be trusted to perform this task well, by participant type.

Responsibility	Unlicensed Participant	Licensed Participant	Unlicensed Nonparticipant
Protect Fish and Wildlife Habitat	1	2	1
Enforce Game Laws	2	1	3
Protect Game Animals	3	3	2
Manage Public Lands	4	5	7
Provide Access	5	4	6
Protect Environment	6	8	10
Protect Non-game Animals	7	9	4
Boat Registration	8	7	8
Manage Nuisance Wildlife	9	10	5
Skills Education	10	6	13
Manage Urban Wildlife	11	14	9
Provide Technical Guidance	12	11	12
Control Pollution	13	12	11
Regulate Mining	14	15	15
Recruitment	15	13	14

Across the listed responsibilities, all respondents were in general agreement with which responsibilities they trusted their agency to make good decisions and where their trust is lower. Both participant groups agreed on the same top five responsibilities, though in a slightly different order. Nonparticipants differed from participants as they were less likely to believe that the agency could be trusted to protect nongame species.



Table 22. Trust rankings from respondents who chose either "Somewhat Agree" or "Strongly Agree" that their state fish & wildlife agency could be trusted to perform this task well, by race and participant type (UP=Unlicensed Participants, LP=Licensed Participants, and **UN=Unlicensed Nonparticipants).**

					ck or Afri			ican Ind				
	White	e or Cauc	asian	,	Americai	1	Na ⁻	tive Alas	kan		Asian	
	UP	LP	UN	UP	LP	UN	UP	LP	UN	UP	LP	UN
Protect Fish and Wildlife Habitat	1	2	1	1	3	2	1	2	2	4	3	3
Enforce Game Laws	2	1	3	4	2	11	6	3	6	1	2	7
Protect Game Animals	3	3	2	6	5	5	9	4	1	5	9	6
Manage Lands	5	5	7	3	6	10	3	5	5	10	1	8
Provide Access	4	4	6	5	4	6	4	1	8	7	8	5
Protect Environment	6	7	8	2	1	9	2	8	13	1	6	1
Protect Non-game Animals	7	9	4	10	11	1	10	14	9	6	10	10
Boat Registration	8	8	9	7	7	8	7	7	3	13	5	2
Manage Nuisance Wildlife	10	10	5	8	9	3	5	10	10	9	14	11
Skills Education	9	6	13	11	8	13	11	6	4	3	4	13
Manage Urban Wildlife	11	14	10	9	10	7	13	15	11	12	15	4
Provide Technical Guidance	12	12	12	13	12	12	8	13	7	11	11	14
Control Pollution	13	11	11	12	13	4	15	11	14	8	12	9
Regulate Mining	14	15	14	14	15	14	14	12	12	14	13	11
Recruitment Programs	15	13	15	15	14	15	12	9	15	15	7	15

Some notable differences exist by race, shown above. Whites showed less trust in their agency's ability with environmental and game protection duties, but more trust in law enforcement efforts. Reasons why are not known.

Table 23 presents details about the different levels of trust people have in state fish and wildlife agencies' decision making:

- 1. More than half of Licensed and Unlicensed Participants trusted their agency to fulfill its responsibilities, regardless of what the responsibility was.
- 2. Participants gave agencies the highest levels of trust in protecting fish and wildlife habitat, enforcing game laws, and protecting game animals. Agencies also received high marks in providing access and managing public lands.
- 3. Participants had slightly less trust in agencies protecting the environment and protecting nongame species.
- 4. A majority of Unlicensed Nonparticipants also trusted the state to make good decisions, but at lower rates than Participants. The exceptions were mining regulation (with very few states having this responsibility) and recruitment programs, with both showing trust from slightly less than half of all Unlicensed Nonparticipants.



Table 23. Can state fish and wildlife agencies be trusted to make good decisions regarding...

		Jnlicense	Unlicensed Participant			Licensed Participant	articipant		Ď	Alicensed N	Unlicensed Nonparticipant	
Task	Strongly disagree or Somewhat disagree	Neither agree nor disagree	Somewhat r agree or Strongly agree	Overall e Rank	Strongly disagree or Somewhat disagree	Neither agree nor disagree	Somewhat agree or Strongly agree	Overall	Strongly disagree or Somewhat disagree	Neither agree nor disagree	Somewhat agree or Strongly agree	Overall Rank
Protect Fish and												,
Wildlife Habitat	%	%/T	/P%		% ×	%II.	81%	7	% •	%/7	%/9	- 1
Enforce Game Laws	%9	19%	74%	2	7%	11%	82%	П	7%	28%	65%	33
Protect Game Animals	7%	20%	74%	ю	%6	11%	80%	ო	2%	29%	%99	2
Manage Public Lands	%9	50%	74%	4	%8 	13%	79%	Ŋ	%9	32%	61%	7
Provide Access	%9	20%	% 74%	2	%/	13%	80%	4	2%	32%	92%	9
Protect Environment	%8	19%	% 72%	9	%8	18%	74%	∞	%9	34%	%09	10
Protect Non-game Animals	7%	23%	%07 %	7	%9	22%	72%	6	4%	31%	65%	4
Boat Registration	7%	24%	%07 %	8	%9	50%	74%	7	7%	32%	61%	∞
Manage Nuisance Wildlife	7%	25%	%89 %	6	10%	21%	% 6 9	10	%9	32%	62%	5
Skills Education	7%	25%	%89 %	% 10	2%	20%	75%	9	%6	36%	858	13
Manage Urban Wildlife	%8	25%	%29 %	% 11	88	792	% 9 9	14	%9	34%	%09	6
Provide Technical Guidance	%	28%	% 64%	% 12	7%	25%	%89	11	2%	36%	26%	12
Control Pollution	10%	25%	% 64%	% 13	%6	23%	%89	12	7%	36%	27%	11
Regulate Mining	%6	31%	%09 %	% 14	88	34%	57%	15	%8	44%	48%	15
Recruitment Programs	%6	33%	% 28%	% 15	2%	792	67%	13	10%	42%	48%	14



We combined the responses for the top two categories of "trust" and used that as a response variable in an ANOVA to test for significant differences across age, gender, race, ethnicity, participation group, and topic. Results show:

- 1. Older residents, in general, placed more trust in their agencies than younger people. Across all topics, the average rating for the top two categories for 35-54-year-olds was about 5% higher than for those aged 18-34, and the average rating for those 55 and older was about 14% higher.
- 2. Licensed Participants were more likely to trust their state's fish and wildlife conservation agency to fulfill its obligations than were Unlicensed Participants. Unlicensed Nonparticipants were least likely to trust the agency. Licensed Participants had scores that were on average about 3% higher than Unlicensed Participants, and 14% higher than Unlicensed Nonparticipants. These results suggest less differences in Trust between the three groups than in the Responsibilities.
- 3. When it came to trust in the agency Licensed Blacks were most likely to agree that the agencies could be trusted to carry out the various responsibilities (on average 76% selected Somewhat to Strongly Agree compared to an overall average was 72% across the various races), whereas Unlicensed Blacks were least likely to agree that the agencies could be trusted to carry out the various responsibilities (on average 57% selected Somewhat to Strongly Agree compared to an overall average was 62% across the various races).
- 4. Overall non-Hispanics had slightly more trust (68% selected Somewhat to Strongly Agree) in the agency than did Hispanics (64%); however, this differed among participant group, among Unlicensed respondents non-Hispanics had slightly higher trust whereas among Licensed Participants Hispanics had slightly more trust in the agency.

Observations for several key agency responsibilities include:

Importance and Trust for protecting the environment

- 1. Protecting the environment was ranked first in importance for Unlicensed Participants and Unlicensed Nonparticipants, but 6th for Licensed Participants. Sixty to seventy percent of respondents agreed that the state agency could be trusted to do a good job protecting the environment. However, the public's trust in their agency to make good decisions regarding protecting the environment was lower, with ratings placing it somewhere in the middle (6th for Unlicensed Participants, 8th for Licensed Participants, and 10th for Unlicensed Nonparticipants). This distrust could either suggest that the public does not believe the agencies are doing as well as they should in protecting the environment, or could reflect the understanding that this task is a shared responsibility with many other agencies.
- 2. On average, 47% of participants rated protecting the environment extremely important, with females rating it significantly higher than males (e.g., 58% of female Licensed Participants rated this extremely important whereas only 47% of males did so; Table 24).
- 3. When it came to trust (Table 25), Unlicensed Participants aged 18-24 were less likely to trust the agency to do a good job, whereas those participants 55 and older were more likely to trust their agency.

- 4. Comparing the various races (Table 26), Unlicensed Blacks were least likely to think protecting the environment was a very important task (39% of Black Unlicensed Participants rated this extremely important compared to the average of 49% for the other Unlicensed Participants; 28% of Black Unlicensed Nonparticipants rated this extremely important compared to the average of 33% for the other Unlicensed Nonparticipants. Qualitatively, however, this was their top-ranked responsibility (see Table 19). The level of trust was comparable to other races.
- 5. When we compared Hispanics and non-Hispanics we saw that responses were guite similar: both groups thought protecting the environment was very important. The levels of trust were also comparable between Hispanics and non-Hispanics.

Table 24. Importance of protecting the environment, by gender. (Totals in the bottom row are the sample size)

	Unlicer	nsed			Unlic	ensed
	Partici	pant	Licensed Pa	articipant	Nonpar	ticipant
Protect the environment	Male	Female	Male	Female	Male	Female
No Opinion	6%	6%	3%	3%	18%	17%
Not at all important	2%	1%	1%	1%	3%	3%
Slightly important	4%	4%	3%	2%	6%	4%
Moderately important	14%	12%	11%	8%	15%	16%
Very important	28%	28%	33%	28%	25%	26%
Extremely important	44%	49%	47%	58%	28%	32%
I do not think this task is managed by my agency	2%	1%	2%	1%	4%	3%
Total	2,608	2,890	9,803	1,517	392	606

Table 25. Trust in the state agency to protect the environment, by age classes. (The bottom row labeled "Total" is the sample size)

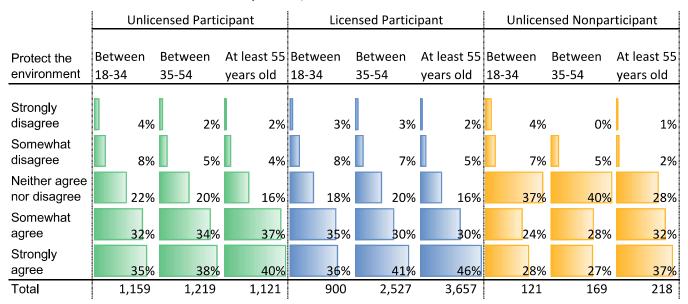


Table 26. Importance of protecting the environment, by race. (The bottom row labeled "Total" is the sample size)

		Unlicense	d Participant			Licensed F	Participant			Unlicensed N	onparticipant	
			American				American				American	
		Black or	Indian or			Black or	Indian or			Black or	Indian or	
Protect the	White or	African	Native		White or	African	Native		White or	African	Native	
environment	Caucasian	American	Alaskan	Asian	Caucasian	American	Alaskan	Asian	Caucasian	American	Alaskan A	sian
No Opinion	5%	89	3%	4%	2%	4%	1%	7%	17%	19%	18%	11%
Not at all		ī				i		Ī				
important	1%	29	2%	3%	1%	2%	0%	2%	3%	4%	0%	11%
Slightly												
important	3%	69	2%	4%	3%	2%	4%	3%	4%	7%	0%	0%
Moderately												
important	12%	15%	12%	15%	10%	4%	10%	7%	14%	16%	0%	16%
Very important	27%	289	29%	26%	33%	28%	30%	20%	26%	22%	35%	21%
Extremely												
important	49%	39%	48%	48%	49%	60%	53%	59%	<mark>3</mark> 2%	28%	41%	42%
Later makatististi												
I do not think												
this task is												
managed by my		30	30/	4.0/	40/	30/	10/	30/	30/	F0/	CO/	00/
agency Total	1% 3,677	29 1,167	3% 122	1% 120	1% 9,710	2% 246	205	3% 61	3% 659	5% 243	6% 17	0% 19
iotai	3,0//	1,107	122	120	9,710	240	205	01	059	243	17	19

Importance and Trust for protecting fish and wildlife habitat

- 1. The public places a high priority on protecting fish and wildlife habitat and has a high level of trust in their agencies to do so. Highlighting this successful responsibility as part of communications covering other topics might help increase support for agency actions. Details include:
 - a. The importance of protecting the habitat of fish and wildlife resources was ranked second for Unlicensed Participants and Unlicensed Nonparticipants, and 1st for Licensed Participants.
 - b. Sixty-seven to eighty-one percent of respondents agreed that the state agency could be trusted to do a good job protecting fish and wildlife habitat; this ranked first or second highest across all respondents.
 - c. On average, 46% of Unlicensed Participants rated protecting fish and wildlife habitat as extremely important, compared with 58% of Licensed Participants and 31% of Unlicensed Nonparticipants.
 - d. Males and females had similar strong ratings for this task.
 - e. Among Unlicensed Participants and Nonparticipants, those 55 and older were more likely to rate protecting fish and wildlife habitat as very or extremely important than were younger respondents. In contrast, for Licensed Participants, 64% of the 18-34year-olds rated this task extremely important, compared to 56% of those 34-55 and 59% of those 55 and older.
 - f. Comparing the various races (Table 27), Unlicensed Blacks were least likely to think protecting fish and wildlife habitat was a very important task (35% of Black Unlicensed Participants rated this extremely important compared to the average of 49% for the other Unlicensed Participants; 23% of Black Unlicensed Nonparticipants rated this extremely important compared to the average of 35% for the other Unlicensed Nonparticipants. Similarly, Unlicensed Blacks were less likely to trust the agency to protect habitat: 68% of Black Unlicensed Participants selected Somewhat or Strongly Agreed compared to the average of 78% for the other Unlicensed Participants.
 - g. When we compared Hispanics and non-Hispanics we saw that responses were quite similar: over 71% of both groups thought protecting the environment was very important. There were slight differences in trust between Hispanics and non-Hispanics who were unlicensed (Table 28). In this instance non-Hispanics had more trust than did Hispanics: 77% of non-Hispanics who were Unlicensed Participants Somewhat or Strongly Agreed the agency could be trusted to protect the habitat whereas only 69% of Hispanics felt the same. Similarly, for Unlicensed Participants, 68% of non-Hispanics Somewhat or Strongly Agreed the agency could be trusted to protect the habitat whereas only 53% of Hispanics felt the same.
- 2. When it came to trust, 18-24 Unlicensed Participants were less likely to trust the agency to do a good job protecting fish and wildlife habitat, whereas those participants 55 and older were more likely to trust (Table 29).

Table 27. Importance of protecting fish and wildlife habitat, by race (The bottom row labeled "Total" is the sample size)

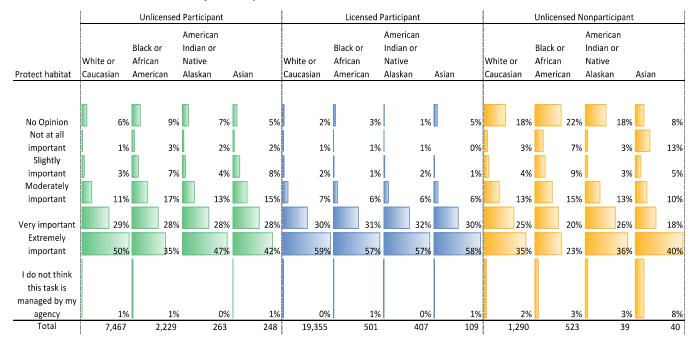


Table 28. Trust in the agency to protect fish and wildlife habitat, by ethnicity (The bottom row labeled "Total" is the sample size)

		ensed				ensed
	Parti	cipant	Licensed F	Participant	Nonpar	ticipant
Trust agency to	Not	Yes	Not	Yes	Not	Yes
Protect Habitat	Hispanic	Hispanic	Hispanic	Hispanic	Hispanic	Hispanic
Strongly disagree	2%	3%	2%	2%	2%	4%
Somewhat disagree	5%	6%	5%	4%	4%	2%
Neither agree nor disagree	17%	23%	11%	11%	26%	41%
Somewhat agree	37%	31%	36%	29%	34%	30%
Strongly agree	39%			54%		23%
Total	8,269	871	19,495	428	1,273	105

Unlicensed Participant Licensed Participant Unlicensed Nonparticipant 18-34 35-54 18-34 35-54 55 years 18-34 35-54 55 years 55 years old Protect habitat years old years old old years old years old old years old years old 1% 3% 2% 3% 1% Strongly disagree 2% 3% 4% 2% 8% 7% 6% Somewhat disagree 5% 3% 4% 8% 4% 2% Neither agree nor 12% 21% 19% 13% 13% 10% 38% 30% 20% disagree 34% 37% 39% 38% 37% 35% 36% Somewhat agree 26% 33% 34% 37% 45% 38% 41% 49% 25% 30% 40% Strongly agree Total 3,092 3,715 3,284 2,630 7,912 11,549 298 522 648

Table 29. Trust in the agency to protect fish and wildlife habitat, by age classes (The bottom row labeled "Total" is the sample size)

Importance and Trust for protecting fish and wildlife game animals

- 1. Protecting fish and wildlife game species is another strong point for state fish and wildlife agencies:
 - a. The importance of protecting the fish and wildlife resources that hunters and anglers pursue (game animals) was ranked third for Unlicensed Participants and fourth for Unlicensed Nonparticipants. Not surprisingly, Licensed Participants ranked it second.
 - b. Sixty-six to eighty percent of respondents agreed that the state agency could be trusted to do a good job protecting game animals.
 - c. On average, 68% of Unlicensed Participants rated protecting game animals very or extremely important, compared with 87% of Licensed Participants and 51% of Unlicensed Nonparticipants.
 - d. Both genders had similar ratings for this task. However, those 55 years old and older were much more likely to think this was an important task than were the younger ages (Table 30).
 - e. Unlicensed Blacks thought protecting game animals was less important than did other races (Table 31): 59% of Unlicensed Black Participants rated protecting game animals Very or Extremely Important compared with 71% of the other Unlicensed Participants. Similarly, only 41% of Unlicensed Black Nonparticipants rated protecting game animals Very or Extremely Important compared with 56% of the other Unlicensed Nonparticipants. When it came to trusting agencies to do a good job at protecting game animals, Whites had the highest level of trust, regardless of participant group (Table 32).

- f. When we compared Hispanics and non-Hispanics we saw that responses were quite similar within participant groups: Hispanics and non-Hispanics opinions within all participant groups differed by less than 8%. There were no notable differences in trust between Hispanics and non-Hispanics.
- g. When it came to trusting the agency to protect game animals, 18–24-year-olds were less likely to trust the agency to do a good job protecting game animals, whereas those participants 55 and older were more likely to trust their agency (Table 33).

Table 30. Importance of protecting game animals for the three participant groups, by age classes (The bottom row labeled "Total" is the sample size)

	Unlice	nsed Partic	ipant	Licer	sed Partici	oant	Unlicen	sed Nonpar	ticipant
	Between	Between	At least	Between	Between	At least	Between	Between	At least
Protect game animals	18-34	35-54	55 years	18-34	35-54	55 years	18-34	35-54	55 years
No Opinion	8%	8%	5%	3%	2%	2%	26%	19%	18%
Not at all important	3%	2%	1%	1%	1%	0%	4%	5%	2%
Slightly important	7%	5%	3%	3%	3%	2%	6%	8%	3%
Moderately important	21%	17%	14%	9%	9%	7%	15%	20%	12%
Very important	27%	32%	34%	29%	34%	35%	23%	25%	31%
Extremely important	33%	35%	42%	56%	51%	54%	21%	19%	32%
I do not think this task is									
managed by my agency	1%	1%	1%	0%	0%	0%	6%	4%	2%
Total	1,822	1,982	1,735	1,340	4,142	5,907	234	358	412

Table 31. Importance of protecting game animals for the three participant groups, by race (The bottom row labeled "Total" is the sample size)

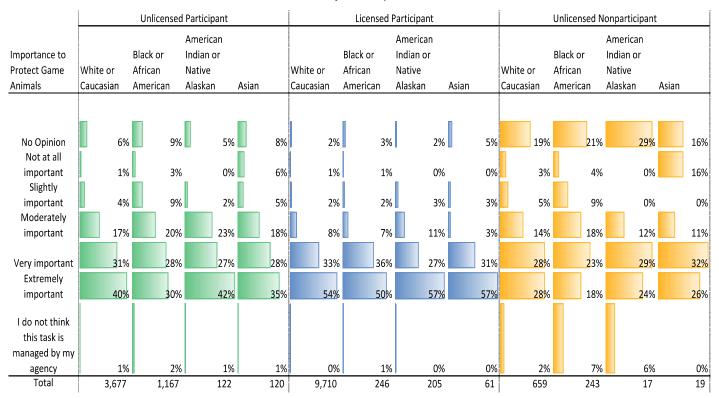
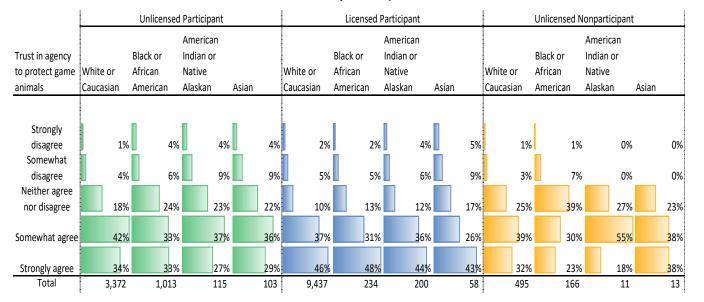


Table 32. Trust in agency to protect game animals for the three participant groups and races (The bottom row labeled "Total" is the sample size)



Unlicensed Participant Licensed Participant Unlicensed Nonparticipant Between Between At least Between Between At least Between Between At least 35-54 35-54 18-34 55 years 18-34 35-54 55 years 18-34 55 years years old years old old years old years old old years old years old old Protect game animals Strongly disagree 1% 5% 3% 1% 3% 2% 2% 1% 1% Somewhat disagree 7% 5% 2% 7% 7% 5% 7% 5% 2% Neither agree nor disagree 13% 23% 20% 15% 12% 10% 40% 31% 23% Somewhat agree 44% 38% 39% 36% 40% 38% 35% 26% 41% 40% Strongly agree 30% 33% 37% 38% 48% 25% 34% 24% Total 1,603 1,782 1,291 3,989 323 1,614 5,756 151 257

Table 33. Trust in agency to protect game animals for the three participant groups and age classes (The bottom row labeled "Total" is the sample size)

Importance and Trust for controlling pollution

- 1. The importance of controlling pollution was ranked 5th for Unlicensed Participants, 3rd Unlicensed Nonparticipants, but 7th for Licensed Participants. In contrast to the first two responsibilities, respondents had considerably less trust that the state agency was doing a good job in his arena, although in fairness it should be noted that this responsibility is shared across a myriad of local, state, and federal agencies. Efforts to educate the public about pollution management responsibilities may have merit.
- 2. Fifty-seven to sixty-eight percent of respondents agreed that the state agency could be trusted to do a good job of controlling pollution (giving it a rank between 11 and 13). On average, 64% of Unlicensed Participants rated controlling pollution extremely important, compared with 68% of Licensed Participants and 51% of Unlicensed Nonparticipants.
- 3. Males and females generally had similar ratings for this task.
- 4. As with many other responsibilities, as respondents become older, they regard this task as more important.
- 5. When it comes to trust, 18-24 year old Unlicensed Participants were less likely to trust the agency to do a good job addressing pollution, whereas those participants 55 and older were more likely to trust the agency (Table 34).
- 6. From a quantitative perspective, Unlicensed Blacks thought controlling pollution was less important than did other races (Table 35), but qualitatively they ranked this responsibility higher than other races: although 64% of Unlicensed Black Participants rated controlling pollution Very or Extremely Important compared with 71% of the other Unlicensed Participants, this was the second highest activity for Unlicensed Black Participants, but was no better than 4th for other Unlicensed Participants. Similarly, only 47% of Unlicensed Black Nonparticipants rated controlling pollution Very or Extremely Important compared with 55% of the other Unlicensed Nonparticipants. But again, qualitatively this was Unlicensed Black Nonparticipants' second-

- highest ranked responsibility. When it came to trusting agencies to do a good job at controlling pollution, all races had little trust they could do it well in comparison to the other responsibilities.
- 7. When we compared Hispanics and non-Hispanics we saw that responses were quite similar within participant groups: Hispanics and non-Hispanics opinions within all participant groups differed by less than 5%. There were no notable differences in trust between Hispanics and non-Hispanics.

Table 34. Trust that the state agency can be trusted to protect natural resources from pollution (The bottom row labeled "Total" is the sample size).

	Unlice	nsed Partici	pant	Licer	nsed Partici	pant	Unlicen	sed Nonpar	ticipant
	Between	Between	At least	Between	Between	At least	Between	Between	At least
	18-34	35-54	55 years	18-34	35-54	55 years	18-34	35-54	55 years
Control pollution	years old	years old	old	years old	years old	old	years old	years old	old
	40/	20/	40/	40/	201	201	201	10/	407
Strongly disagree	4%	2%	1%	4%	3%	2%	3%	1%	1%
Somewhat disagree	10%	8%	5%	8%	7%	6%	10%	6%	4%
Neither agree nor disagree	25%	26%	25%	25%	24%	21%	36%	40%	32%
Somewhat agree	33%	34%	41%	36%	34%	35%	28%	30%	34%
Strongly agree	27%	29%	28%	27%	31%	36%	23%	23%	30%
Total	1,583	1,731	1,510	1,181	3,703	5,327	160	254	304

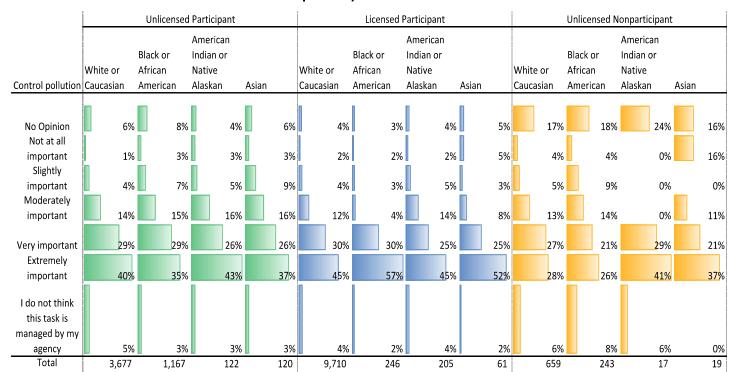


Table 35. Importance of controlling pollution for the three participant groups, by race (The bottom row labeled "Total" is the sample size)

Importance and Trust for recruitment of new outdoor enthusiasts

- 1. The importance of recruiting new outdoor enthusiasts was ranked low for all three groups: it ranked fifteenth for Unlicensed Participants and Unlicensed Nonparticipants, and thirteenth for Licensed Participants (Table 23). There was agreement with this perspective across all races and ethnicities.
- 2. Only 48% to 67% of respondents agreed that the state agency could be trusted to do a good job of recruiting new outdoor enthusiasts.
- 3. All ages had similar ratings for this task; however, male participants rated this task higher than did females (Table 36).
- 4. When it came to trusting the state agency to do a good job of recruiting outdoor enthusiasts, all ages within each of the three participation groups, all races, and both ethnicities had about the same level of trust.
- 5. A low rating for a focus on recruitment programs probably should not be a surprise. These R3 programs may not positively impact current participants and could negatively affect them through increased crowding and competition for limited resources. Further, R3 programs are really programs for the agency to enhance their conservation capabilities by increasing license buyers and relevancy and are not a benefit for the bulk of their constituents.

Unlicensed Unlicensed **Participant** Licensed Participant Nonparticipant Male Female Male Female Male Female Recruitment programs No Opinion 13% 16% 5% 10% 25% 30% Not at all important 8% 10% 6% 6% 14% 13% 14% 9% 9% 12% 8% Slightly important 14% Moderately important 26% 27% 21% 23% 19% 21% 30% 25% 12% 21% 18% 14% Very important 15% 12% 27% 24% 13% 9% Extremely important I do not think this task is 4% 3% 1% 1% 4% 7% managed by my agency

2,921

Table 36. Importance of recruiting new hunters, anglers, and outdoor enthusiasts by gender (The bottom row labeled "Total" is the sample size)

Funding

Total

Sources of funding for state fish and wildlife conservation agencies

2,611

Licensed Participants were most likely to know that state fish and wildlife conservation funding comes from a mix of license sales and other taxes. In contrast, almost half of Unlicensed Nonparticipants (47%) were willing to say that they really did not know how fish and wildlife agencies are funded (0). Unlicensed Participants were more closely aligned with Licensed Participants on knowledge of funding sources than they were to Unlicensed Nonparticipants.

9,826

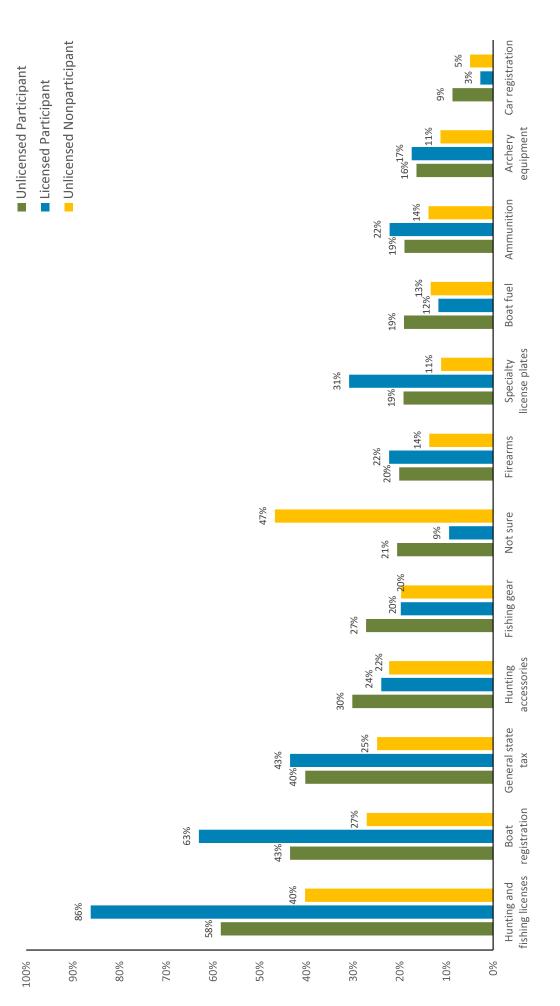
1,459

434

549



Figure 8. Expected sources of funding for state fish and wildlife conservation agencies by the various types of respondents.





In general, those 55 and older were more likely to select any category as a funding source than were those between 18-55 years old (Table 37), and males were more likely than females (Table 38).

Table 37. Expected sources of funding for state fish and wildlife conservation agencies by age (The bottom row labeled "Total" is the sample size)

		Unlice	ensed I	Partio	cipar	nt	Lice	nsed Partic	ipant		Unlicen	sed Nonpa	rticipar	nt
	18-3	34	35-54		55 y		18-34	35-54	55 years	č	3-34	35-54	55 yea	ars
Funding sources	yea	rs old	years	old	old		years old	years old	old	yε	ears old	years old	old	
Taxes on motor boat fuel		19%		18%		21%	11%	10%	139	6	10%	12%		16%
Boat registration fees		36%		41%		54%	58%	61%	669	6	15%	23%		38%
Hunting and fishing license sales		46%		58%		71%	86%	87%	869	6	25%	35%		53%
Car registration fees		10%		9%		6%	4%	3%	29	6	5%	5%		5%
Specialty auto license plates		13%		19%		26%	29%	34%	299	6	5%	10%		15%
Portion of general state tax revenues (property, income,		36%		39%		46%	52%	44%	419	6	16%	22%		32%
Documentary stamp taxes		1%		1%		3%	0%	0%	09	6	0%	0%		1%
Taxes on the sale of fishing gear		29%		26%		26%	21%	17%	219	6	15%	19%		23%
Taxes on the sale of hunting and shooting accessories		31%		29%		31%	27%	21%	259	6	17%	21%		26%
Taxes on the sale of firearms		19%		21%		21%	24%	20%	249	6	9%	13%		17%
Taxes on the sale of archery equipment		17%		16%		16%	19%	15%	189	6	8%	11%		13%
Taxes on the sale of ammunition		18%		19%		20%	24%	20%	239	6	8%	13%		18%
l am not sure		21%		20%		21%	8%	9%	109	6	59%	49%		38%
Other (please specify):		1%		1%		1%	3%	3%	39	6	0%	1%		1%
Total	1,	.266	1,5	91	1,	613	1,402	3,587	4,898	-	73	160	26	4

Table 38. Expected sources of funding for state fish and wildlife conservation agencies by the various types of respondents, by gender (The bottom row labeled "Total" is the sample size)

		nlicer artici _l		Licensed P	articipant	•	Unlice onpart		3
Funding sources	Mal	e	Female	Male	Female	M	ale	Fer	nale
Taxes on motor boat fuel	2	21%	17%	12%	13%		15%		12%
Boat registration fees	4	17%	41%	64%	55%		30%		25%
Hunting and fishing license sales	5	9%	58%	87%	79%		42%		39%
Car registration fees	1	10%	8%	3%	3%		5%		5%
Specialty auto license plates	2	21%	17%	31%	30%		14%		9%
Portion of general state tax revenues (property,	4	13%	38%	44%	41%		27%		24%
Documentary stamp taxes		2%	1%	0%	0%		1%		0%
Taxes on the sale of fishing gear	2	29%	26%	20%	17%		20%		19%
Taxes on the sale of hunting and shooting	3	31%	29%	24%	22%		23%		22%
Taxes on the sale of firearms	2	24%	17%	23%	18%		17%		11%
Taxes on the sale of archery equipment	1	L8%	15%	18%	14%		12%		11%
Taxes on the sale of ammunition	2	22%	17%	23%	18%		16%		12%
I am not sure	1	16%	24%	8%	17%		43%		49%
Other (please specify):		1%	1%	3%	2%		1%		1%
Total	2,24	7	2,196	8,602	1,218	22	21	2	74

Across all participant groups, Blacks and Hispanics were least likely to know sources of funding for state fish and wildlife conservation agencies (Table 39 and Table 40).

Table 39. Expected sources of funding for state fish and wildlife conservation agencies by the various types of respondents, by race (The bottom row labeled "Total" is the sample size)

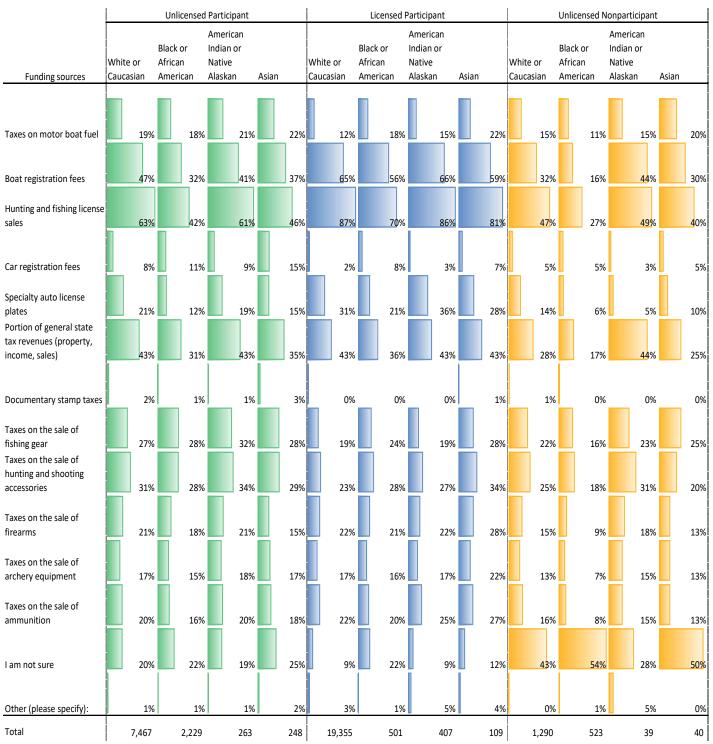
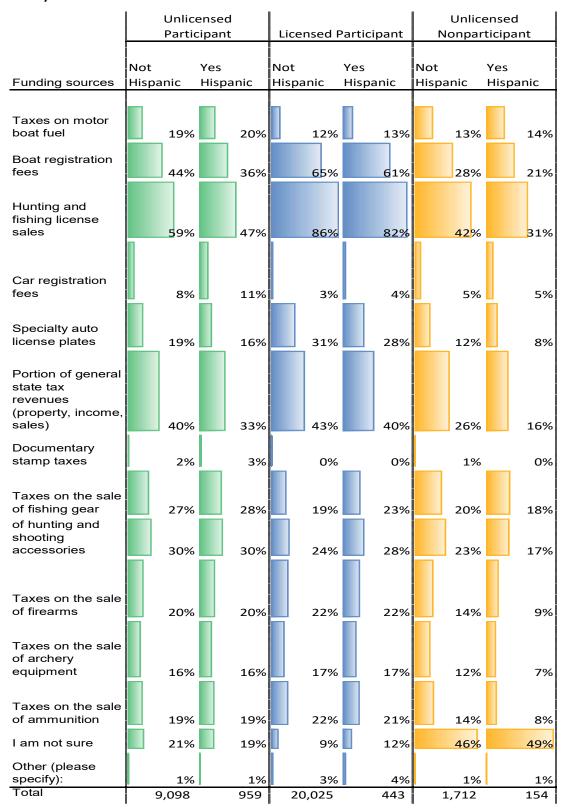


Table 40. Expected sources of funding for state fish and wildlife conservation agencies by the various types of respondents, by ethnicity (The bottom row labeled "Total" is the sample size).



Who respondents think should pay for fish and wildlife conservation services

Regardless of which of the three participation groups respondent belonged, the trends were quite similar (Figure 9). The bulk of each group believed that funding of the state's fish and wildlife agency should be a balance of the user-pays and the public-pays model (i.e., balanced). Not only that, but the balance should be essentially 50:50. There were slight differences in that Licensed Participants rated Public Pays above User Pays, whereas Unlicensed Participants and Nonparticipants rated User Pays over Public Pays.

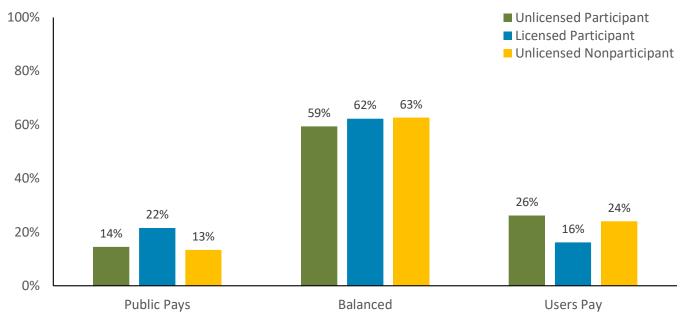


Figure 9. Support for fish and wildlife funding models, by participant group.

Older respondents (those 55 and older) were less likely to choose the Public Pays option than were those younger than 55, and more likely to choose a balanced approach (Table 41). Females were more likely than males to prefer the balanced approach, whereas males were slightly more likely than females to choose the User Pays model (Table 42).

	Unlice	nsed Particip	ant	Licer	nsed Partici	pant	Unlicen	sed Nonpar	ticipant
		Between	At least	Between	Between	At least	Between	Between	At least
	Between 18-	35-54 years	55 years	18-34	35-54	55 years	18-34	35-54	55 years
Wildlife funding model	34 years old	old	old	years old	years old	old	years old	years old	old
Public Pays	16%	15%	12%	29%	24%	18%	19%	15%	9%
Balanced	59%	58%	61%	59%	62%	63%	60%	63%	64%
Users Pay	25%	26%	27%	12%	14%	18%	21%	23%	27%

Table 41. Respondent ideas regarding who should pay for conservation, by group and age class.

Unlicensed Unlicensed **Participant** Licensed Participant Nonparticipant Wildlife funding model Male Female Male Female Male Female **Public Pays** 15% 14% 22% 20% 14% 13% Balanced 56% 63% 62% 67% 61% 64% 17% 25% Users Pay 30% 23% 13% 24% Total 5,219 5,811 19,629 2,976 826 1,155

Table 42. Respondent ideas of who should pay for conservation, by group and gender (The bottom row labeled "Total" is the sample size)

Although all races tended to be in agreement, there were some minor differences with ethnicity, at least for those who were unlicensed. In both cases (Unlicensed Participants and Unlicensed Nonparticipants) slightly fewer respondents selected a balanced funding plan and instead selected a user-pay model (Table 43).

Table 43. Respondent ideas of who should pay for conservation, by group and ethnicity (The bottom row labeled "Total" is the sample size).

	1	ensed cipant	Licensed	Participant		ensed ticipant
Wildlife funding model	Not Hispanic	Yes Hispanic	Not Hispanic	Yes Hispanic	Not Hispanic	Yes Hispanic
-	<u> </u>	·	•	· · · · · · · · · · · · · · · · · · ·	•	•
Public Pays	15%	14%	21%	24%	13%	14%
Balanced	60%	55%	63%	59%	63%	55%
Users Pay	25%	31%	16%	16%	24%	31%
Total	9,098	959	20,025	443	1,712	154

Redirecting funds to state fish and wildlife conservation

Respondents were asked whether they would be willing to reallocate current state funds if those funds were directed to state fish and wildlife needs. A significant portion of Unlicensed respondents (Participants and Nonparticipants) suggested they did not want funds reallocated (Figure 10). In fact, this was the most popular response for Unlicensed respondents. Further, among Unlicensed Nonparticipants, 14% thought that funding for the agencies should be reduced.

Licensed Participants have opposite opinions. Only 1% suggested funding should be reduced, and 17% suggested funds should not be moved. However, between approximately 30%-50% of Licensed

Participants thought that states should consider moving funds from public welfare, transportation, and the justice system. Few from any of the three participation groups supported moving funds from education or health care budgets.

Those 55 years old and older were more likely to prefer the status quo for funding, whereas younger respondents were more likely to be open to moving funds from other sources.

Male participants were more willing than females to move funds from other programs into fish and wildlife (Table 44).

Figure 10. Sources of new funds for state fish and wildlife conservation agencies using the current budget.

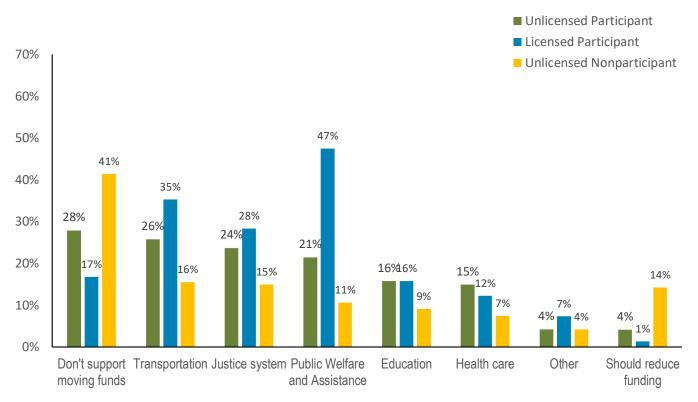


Table 44. Sources of new funds for state fish and wildlife conservation agencies using the current budget segregated by type of respondent and gender (The bottom row labeled "Total" is the sample size).

	Unlice Partic		Licensed P	articinant	Unlice Nonpari	
Funding source	Male	Female	Male	Female	Male	Female
Education	18%	14%	16%	13%	10%	9%
Health care	16%	13%	13%	9%	8%	7%
Transportation	27%	25%	36%	33%	15%	16%
Public Welfare and Assistance	23%	20%	49%	40%	13%	9%
Justice system	26%	21%	29%	27%	17%	13%
Other (please suggest a source)	4%	5%	7%	9%	4%	4%
No, I do not support moving funds						
to fish and wildlife conservation	24%	31%	17%	17%	40%	42%
No. We should reduce funding for						
F&W conservation	3%	5%	1%	2%	12%	16%
Total	5,219	5,811	19,629	2,976	826	1,155

Interestingly, among Unlicensed Participants, Whites were least likely to want to reduced Education and Health Care funding (Table 45); however, for Licensed Participants, Blacks were least likely to reduce these funding streams. Similarly, Black participants were least likely to reduce Transportation and Public Welfare funding streams. Finally, compared to other races, Blacks were most likely to suggest funding could be reduced.

Further, among Unlicensed Participants, non-Hispanics were less likely to want to reduce Education, Health Care, and Transportation funding (Table 46), and less likely to support moving funds in general. In contrast, Licensed non-Hispanics were more likely to support moving funds from Public Welfare and Assistance programs.

While the majority believe funding for state conservation agencies should be balanced between users and the public, there is limited support for moving current state funds into fish and wildlife. If agencies cannot get support to obtain funding through reallocation of current funding streams it might become necessary to explore other options for new funding. This question was asked and this report provides some insight into this question in the sections ahead.

Table 45. Sources of new funds for state fish and wildlife conservation agencies using the current budget segregated by type of respondent and race (The bottom row labeled "Total" is the sample size).

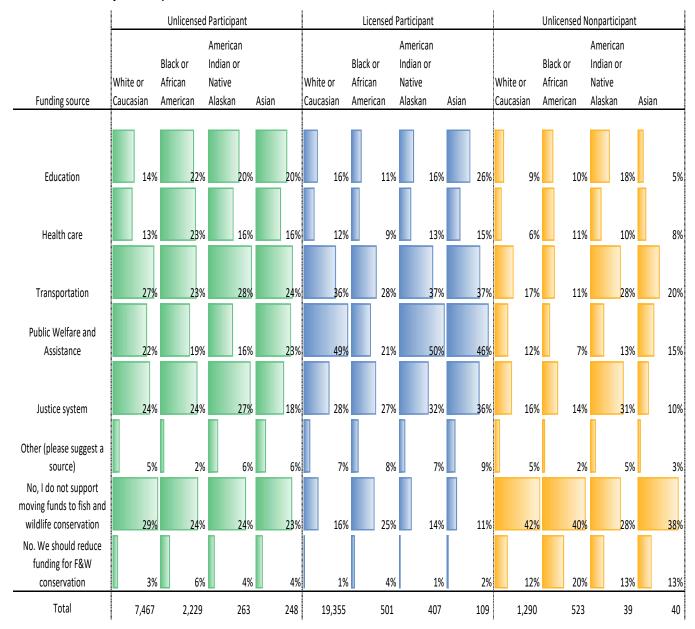
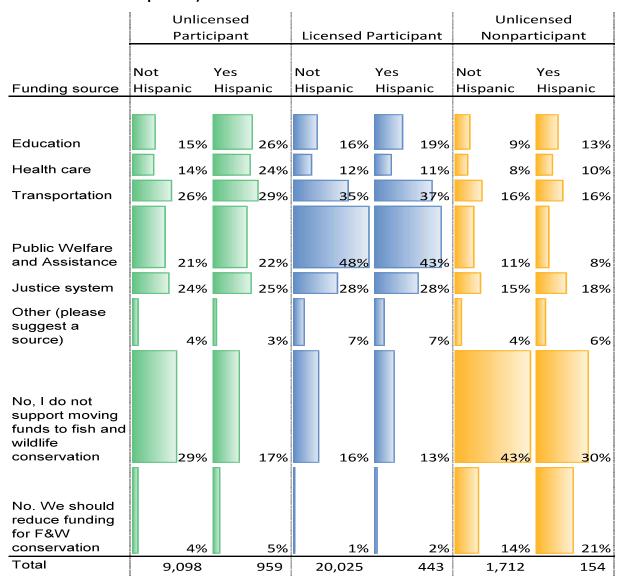


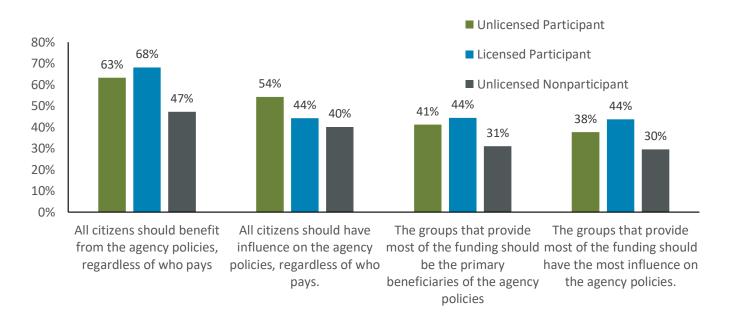
Table 46. Sources of new funds for state fish and wildlife conservation agencies using the current budget segregated by type of respondent and ethnicity (The bottom row labeled "Total" is the sample size).



Primary beneficiaries of state fish and wildlife policies

Within the survey, we made it clear that the current hunters and anglers routinely provided a large proportion of states' fish and wildlife agency funding. We then asked whether the type of funding model should affect who benefits from or has the most influence on the agency's policies. Across the board, more respondents agreed that all citizens should benefit from agencies' actions and have equal influence on the agency, regardless of who pays. Even a majority of licensed hunters and anglers agreed with this statement (Figure 11, and 0). The only minor variation was that both White and American Indian Licensed Participants ranked the statement "All citizens should have influence" lowest. When looking across ethnicities, there were some minor differences in their rankings as well, although all agreed that all citizens should benefit regardless of who pays (Table 48).

Figure 11. Respondents view on whether those who provide the most funding should also receive the most benefit or have the most influence.





nts, Table 47. Rankings from respondents who chose either "Somewhat Agree" or "Strongly Agree" on whether those who provide the most

Table 47. Rankings from respondents who chose either "Somewhat Agree" or "Strongly Agree" on whether those who provide the most funding should also receive the most benefit or have the most influence, by race and participant type (UP=Unlicensed Participant LP=Licensed Participants, and UN=Unlicensed Nonparticipants). (The bottom row labeled "Total" is the sample size)	who chose the most k id UN=Unl	e either ' oenefit o icensed	'Somewr r have th Nonparti	hat Agre ne most i icipants)	either "Somewhat Agree" or "Strongly Agree" on whether those who provide the most enefit or have the most influence, by race and participant type (UP=Unlicensed Particip; censed Nonparticipants). (The bottom row labeled "Total" is the sample size)	ongly Ag , by race :tom rov	gree" on and par v labele	whethe rticipant d "Total'	r those ' type (U ' is the s	who pro IP=Unlico sample s	wide the ensed Pa ize)	most
	White	e or Caucasian	an	Black or	Black or African American		American In	American Indian or Native Alaskan	re Alaskan		Asian	
Beneficiaries	UP	П	N	dN	LP	NN	UP	٩٦	NN	dN	ď	N
All citizens should benefit from the agency policies, regardless of who pays	1	1	-	1	1	1	1	1	П	1	1	1
All citizens should have influence on the agency policies, regardless of who pays.	2	4	2	2	2	2	2	4	2	2	2	2
The groups that provide most of the funding should be the primary beneficiaries of the agency policies	٣	2	æ	က	en .	4	8	2	က	æ	က	3
The groups that provide most of the funding should have the most influence on the agency policies.	4	က	4	4	4	٣	4	m	4	4	4	4
Total	7,467	2,229	263	248	19,355	501	407	109	1,290	523	39	40

Participants, LP=Licensed Participants, and UN=Unlicensed Nonparticipants). (The bottom row labeled "Total" is the sample size) Rankings from respondents who chose either "Somewhat Agree" or "Strongly Agree" on whether those who provide the most funding should also receive the most benefit or have the most influence, by ethnicity and participant type (UP=Unlicensed Table 48.

	Z	Not Hispanic			Yes Hispanic	
	UP	LP	NN	UP	LP	NN
All citizens should benefit from the agency policies, regardless of who pays	1	1	<u>~</u>	+	1	—
All citizens should have influence on the agency policies, regardless of who pays.	2	8	2	2	2	2
The groups that provide most of the funding should be the primary beneficiaries of the agency policies	က	2	m	m	4	4
The groups that provide most of the funding should have the most influence on the agency policies.	4	4	4	4	က	٣
Total	860'6	626	20,025	443	1,712	154



Sources of new funds for state fish and wildlife conservation

Licensed Participants would prefer to reallocate funds by redirecting current state lottery funds, whereas Unlicensed Nonparticipants chose "None" as their highest priority (Table 49). This is not too surprising since 41% of nonparticipants did not want funds moved from other programs, and 14% suggested that they believed current funding should be reduced (see Figure 10).

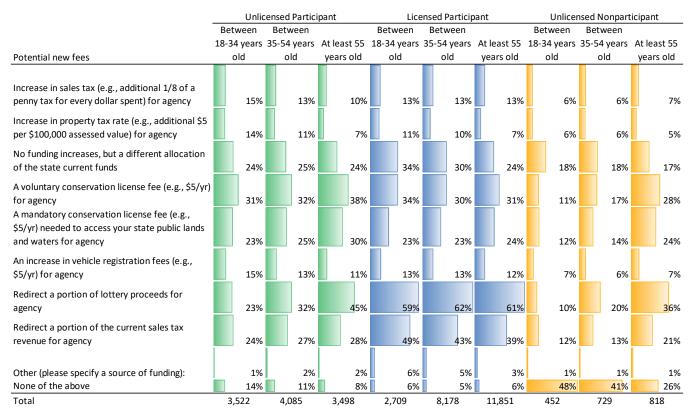
Table 49. Potential new sources for funds for state fish and wildlife conservation agencies.

	Unlicensed	Licensed	Unlicensed
Funding Source	Participant	Participant	Nonparticipant
Voluntary conservation license	1	3	3
Redirect lottery	2	1	2
Redirect sales tax	3	2	6
Mandatory conservation fee	4	5	5
Different allocation of current funds	5	4	4
Vehicle registration	6	7	7
Sales tax	7	6	8
None of the above	8	9	1

Additional funds through the issuing of voluntary or mandatory conservation licenses also ranked fairly high for participants, although neither option received over 35% support. Overall, the general sense is that few respondents would support new mechanisms for collecting more money for conservation.

The age of the respondent did affect the responses but was not consistent across the three different groups (Table 50). Male Unlicensed Participants were slightly more supportive of the sales tax increase than were females (15% compared to 10%) as well as the increased vehicle registration fee (15% compared to 11%).

Table 50. Support for new sources of revenue by participant type and age class (Totals in the bottom row are the sample size)



The race of the respondent did affect the responses but was not consistent across the three different groups or options (Table 51). That said, there were a considerable number of new funding options wherein support was least among Blacks; further, Blacks had the highest support among all races for the statement "None of the above". So, while many were open to moving current revenue, these results suggest they were least likely to want to explore new ways of funding state fish and wildlife agencies.

Unlicensed Participant Licensed Participant Unlicensed Nonparticipant American American American Indian or Black or Indian or Black or Black or Indian or White or African Native White or African Native White or African Native Potential new funds Caucasian American Alaskan Asian Caucasian American Alaskan Asian Caucasian American Alaskan Asian Increase in sales tax (e.g., additional 1/8 of a penny tax for every dollar spent) 12% 15% 13% 15% 13% 9% 14% 15% 6% 6% 15% 10% Increase in property tax rate (e.g., additional \$5 per \$100,000 assessed 10% 13% 11% 14% 9% 6% 10% 10% 5% 6% 13% 5% No funding increases, but a different allocation of the state current funds 24% 24% 26% 29% 26% 26% 28% 18% 16% 23% 23% A voluntary conservation license fee (e.g., \$5/yr) for agency 26% 29% 31% 26% 30% 24% 12% 21% 28% A mandatory conservation license fee (e.g., \$5/yr) needed to access your 25% 29% 28% 24% 19% 26% 28% 19% 13% 18% 23% 27% An increase in vehicle registration fees (e.g., \$5/yr) for agency 12% 14% 17% 16% 13% 8% 11% 15% 7% 7% 31% 8% Redirect a portion of lottery proceeds for agency 40% 24% 30% 33% 30% Redirect a portion of the current sales tax revenue for agency 28% 21% 27% 27% 43% 32% 44% 43% 19% 11% 33% 18% Other (please specify a source of funding): 1% 1% 2% 2% 4% 3% 7% 8% 8% 1% 1% 3% None of the above 10% 13% 10% 14% 5% 11% 7% 6% 31% 46% 23% <mark>3</mark>5%

Table 51. Support for new sources of revenue by participant type and race (Totals in the bottom row are the sample size)

Among participants, Hispanics were slightly more willing to support an increase in sales taxes, property taxes, and vehicle registration. Unlicensed Hispanics were less likely to support redirecting lottery funds or redirecting the current sales tax revenue (Table 52).

19,355

501

407

109

1,290

523

40

Total

7,467

2,229

263

248

Urban residents, especially those who were Licensed Participants, were somewhat more open to new fees to fund state fish and wildlife conservation agencies than were rural residents (Table 53).

Although most respondents support a balanced funding model, determining how to best get the public to pay will be a difficult task, and may be something each state needs to explore separately. The easiest way to get more funding might be to educate stakeholders how passage of the Recovering America's Wildlife Act could protect the states' natural resources without adding another tax.

Table 52. Support for new sources of revenue by participant type and ethnicity (Totals in the bottom row are the sample size)

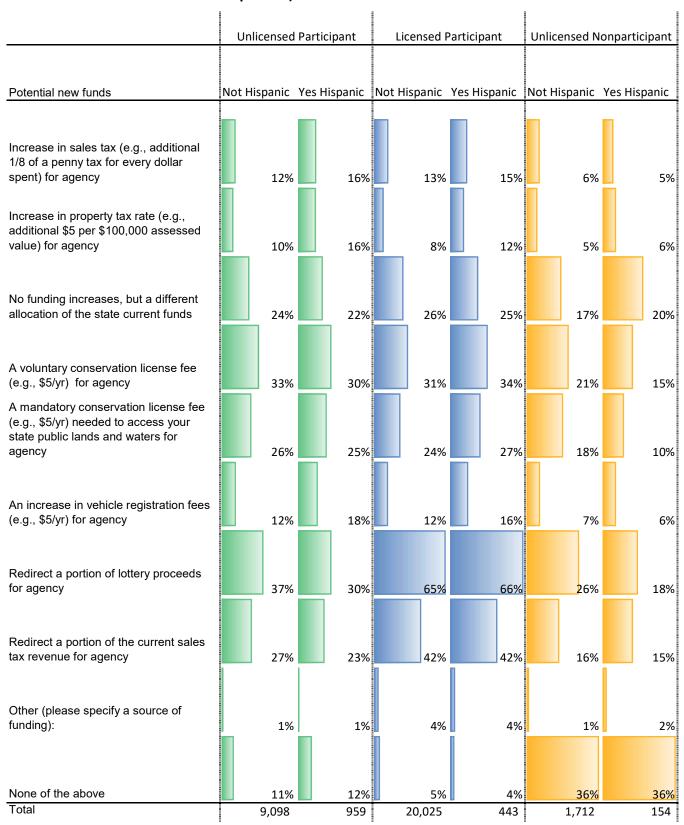
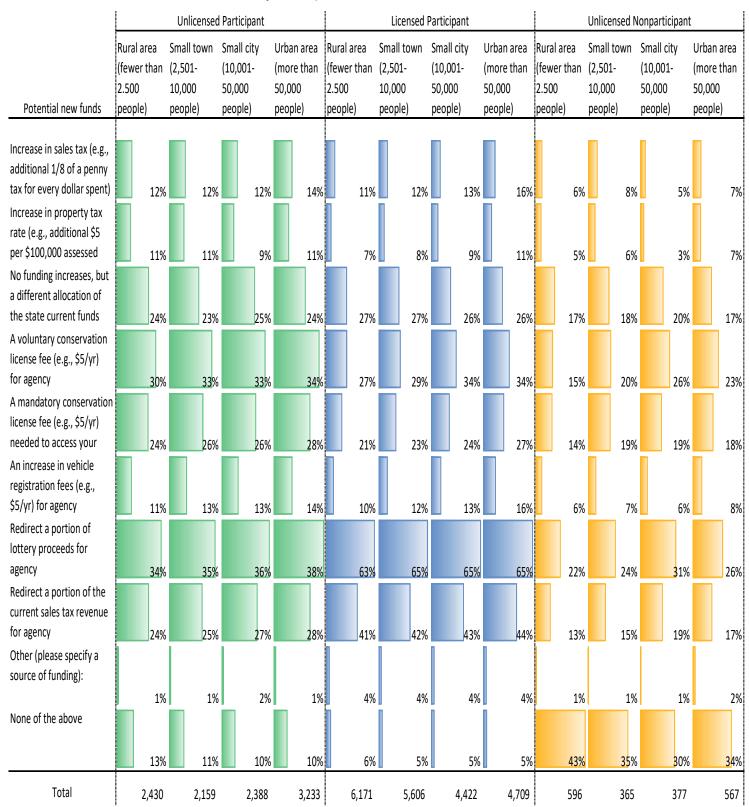


Table 53. Support for new sources of revenue by participant type and urbanization (Totals in the bottom row are the sample size).



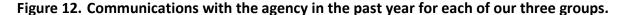
Communications

Respondents were asked about their past communications with their state fish and wildlife conservation agency and how they would prefer to receive information in the future.

Past Communications

Most Unlicensed Participants and Nonparticipants had not interacted with their state fish and wildlife conservation agency in the past year (Figure 12). In contrast, the majority of Licensed Participants (70%) had engaged in either one-way communications, two-way communications, or both.

Unlicensed Participants below the age of 55 years old were much more likely to have communicated with their state agency than were those 55 years old and older (33% compared to 12%). Males were more likely than females to have interacted with their state agency (Table 54).



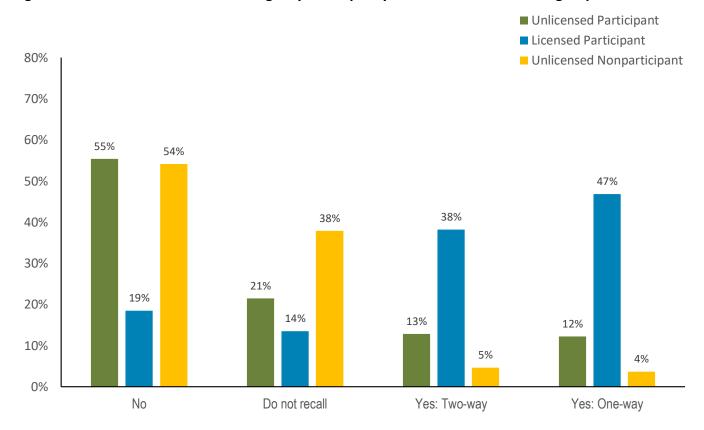
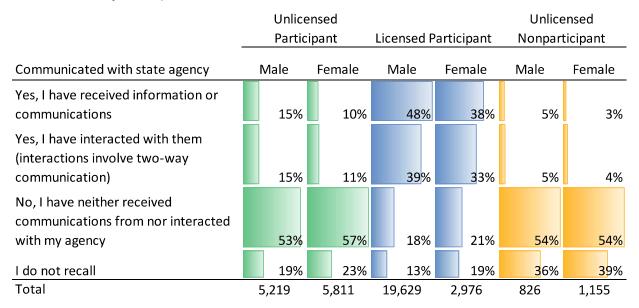
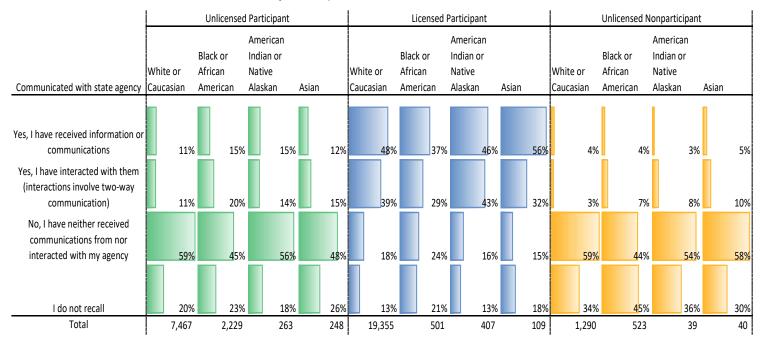


Table 54. Communication with the state agency, by gender (The bottom row labeled "Total" is the sample size).



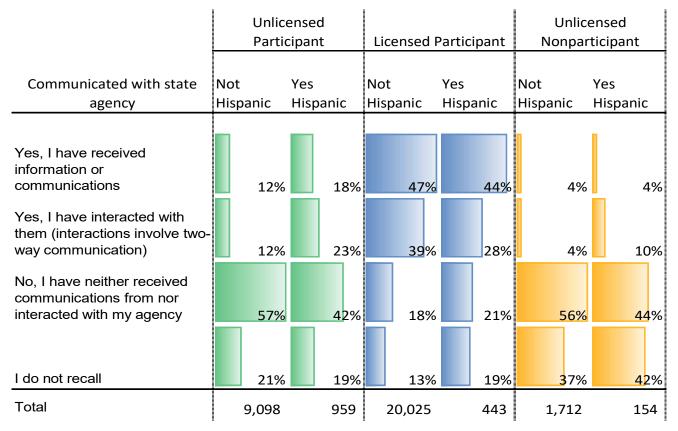
No differences of note were found when results were examined by race (Table 55).

Table 55. Communication with the state agency, by race and participation type (The bottom row labeled "Total" is the sample size).



Among Unlicensed Participants, Hispanics were more likely to have communicated with the agency, but for Licensed Participants they were less likely (Table 56).

Table 56. Communication with the state agency, by ethnicity and participation type (The bottom row labeled "Total" is the sample size).



Media used in past communications

For all three participation groups of respondents, email was the most common way they had communicated with the agency (0). We did not differentiate between emails that were sent to the agency and those sent from the agency, so this could be either. For Licensed Participants, the other most common methods were the agency website and communication with law enforcement. While almost 50% of Licensed Participants had visited the website, few Unlicensed respondents had done so. Unlicensed Participants were most likely to have engaged with the agency via social media, whereas nonparticipants looked to postal mail and YouTube. When we look at these findings by age class, we see that individuals younger than 55 years old seem more likely to interact via social media, whereas the older age class seems more focused on postal mail and going to the agency website (0). For Licensed Participants, there were some minor gender differences, the largest being that males were more likely to suggest they had interacted with law enforcement (28% for males compared to 20% for females).



Figure 13. Media used in past communications by the various groups of respondents.

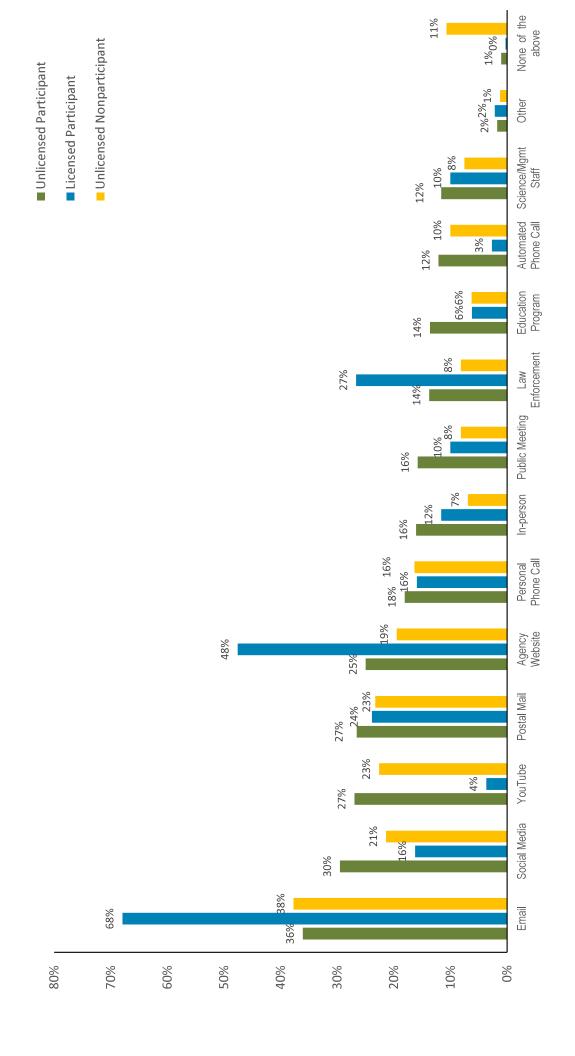
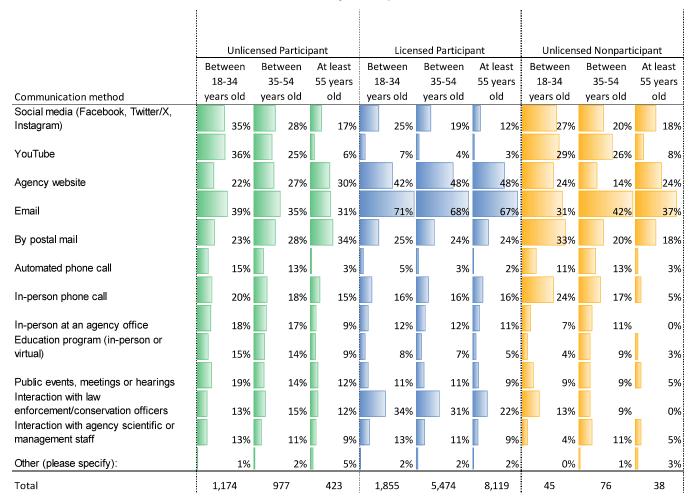


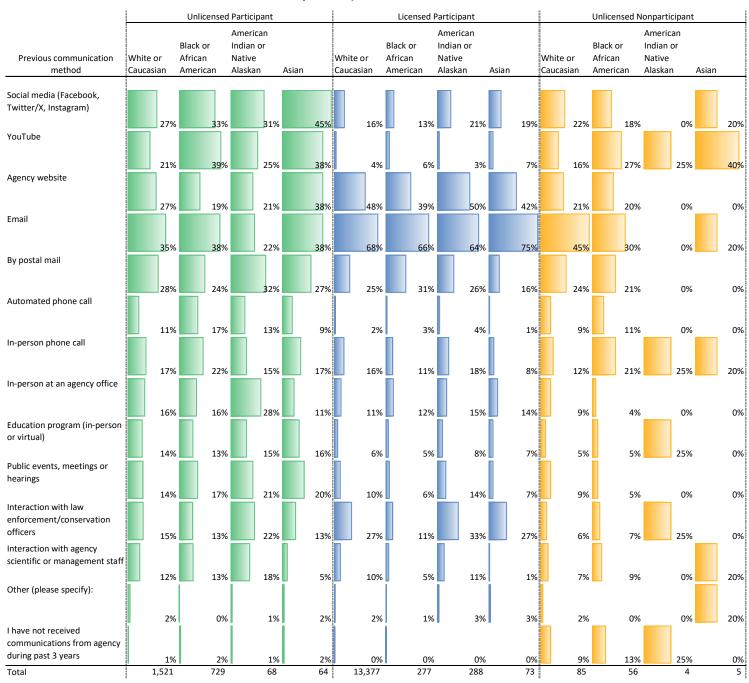


Table 57. Communication channels for the various age classes for each respondent group (The bottom row labeled "Total" is the sample size)



Although we did not some differences amongst the various races, again the findings were often dependent upon the type of participant (Table 58) and is confounded by some low sample sizes, especially among Unlicensed Nonparticipants. That said, Black participants were the least likely to have interacted with the agency website or law enforcement. When comparing by ethnicity, there were some minor differences, but nothing of note.

Table 58. Communication channels for the various races for each respondent group (The bottom row labeled "Total" is the sample size)



Learning more about the state agency

Respondents were asked about which communication avenues they would prefer the agency employ in the future to learn more about the agency. Among Participants, the most-frequently chosen response was the "agency website" (0). Other electronic communications also scored highly among Unlicensed Participants, but surprisingly, the second-highest choice for Licensed Participants was a mailed magazine.

In contrast, 44% of Unlicensed Nonparticipants suggested they were not at all interested in getting any more information from the agency. Unsurprisingly, across the board younger respondents leaned towards electronic communications, whereas those 55 and older leaned more towards traditional media (0). Likewise, Hispanics were often more likely to look to new electronic means to interact (Table 60). There were no consistent findings when we looked at desired communications by race.



Figure 14. Ways to learn more about the agency.

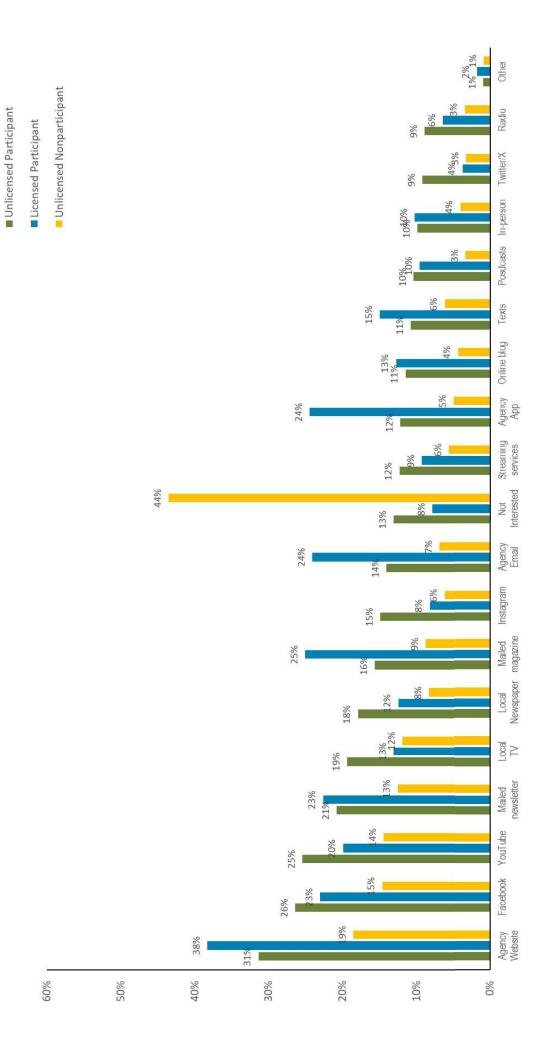
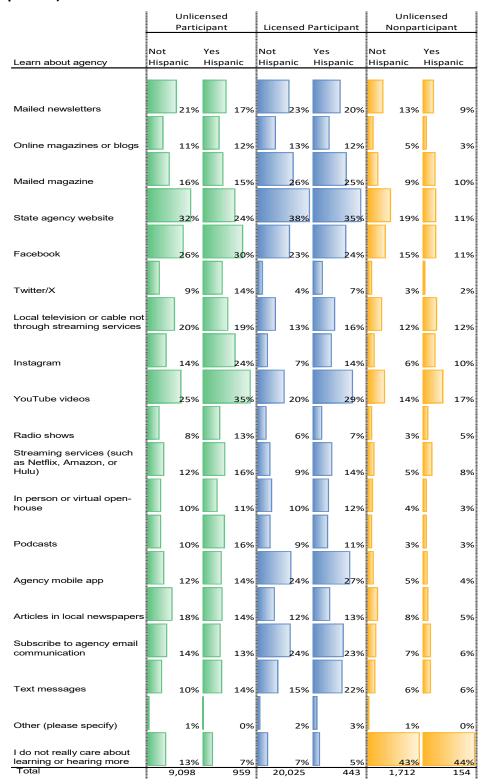




Table 59. Ways to learn more about the agency by age class (The bottom row labeled "Total" is the sample size)

	Unlic	ensed Partic	cipant	Lice	nsed Partici	pant	Unlicen	sed Nonpar	ticipant
	18-34	35-54	55 years	18-34	35-54	55 years	18-34	35-54	55 years
Learn about the agency		years old	old	years old	years old	old	years old	years old	old
Mailed newsletters Online magazines or	13%	22%	27%	22%	22%	23%	7%	10%	18%
blogs	13%	12%	10%	12%	12%	14%	4%	4%	5%
Mailed magazine	11%	17%	18%	25%	25%	25%	5%	8%	11%
State agency website	22%	33%	39%	33%	37%	41%	10%	16%	26%
Facebook	30%	29%	19%	31%	28%	18%	16%	17%	12%
Twitter/X Local television or cable	16%	8%	3%	7%	5%	2%	7%	3%	1%
not through streaming	14%	18%	27%	12%	11%	14%	7%	9%	17%
Instagram	26%	14%	4%	20%	11%	4%	13%	7%	2%
YouTube videos	34%	25%	17%	29%	22%	17%	19%	15%	11%
Radio shows Streaming services	10%	9%	7%	8%	7%	6%	3%	4%	3%
(such as Netflix,	17%	12%	8%	17%	11%	6%	8%	5%	5%
In person or virtual open-house	11%	11%	8%	14%	12%	8%	4%	4%	4%
Podcasts	15%	10%	6%	19%	11%	6%	4%	3%	3%
Agency mobile app Articles in local	11%	14%	11%	29%	28%	21%	5% 1	6%	4%
newspapers Subscribe to agency	14%	16%	23%	12%	10%	14%	5%	5%	13%
email communication	11%	14%	17%	19%	22%	26%	4%	5%	10%
Text messages	14%	11%	7%	13%	15%	16%	10%	6%	4%
Other (please specify) I do not really care	1%	1%	1%	2%	2%	2%	1%	1%	1%
about learning or	430/	4304	430/	001	00/	70/	4504	400/	2004
hearing more Total	13% 3,522	4,085	13% 3,498	9% 2,709	8% 8,178	7% 11,851	46% 452	48% 729	39 <mark>%</mark> 818

Table 60. Ways to learn more about the agency by ethnicity (The bottom row labeled "Total" is the sample size)



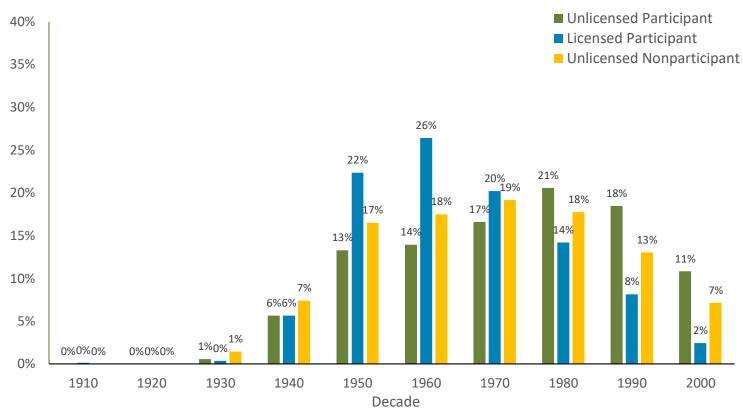
Respondent Demographics

The final section of the survey asked about respondents' year of birth, the size of community they lived in, and how much education they had completed.

Ages

Licensed Participants were slightly older than Unlicensed Nonparticipants, who were slightly older than Unlicensed Participants (Licensed Participants had a mean age of 53.8 years, Nonparticipants' mean age was 49.9 years, and Unlicensed Participants' mean age was 45.6 years). Licensed Participants had the highest percentage of respondents born in the 1950s and 1960s. Nonparticipants' peak birth decade was the 1970s, and as the youngest group, Unlicensed Participants' peak decade was the 1980s (Figure 15).

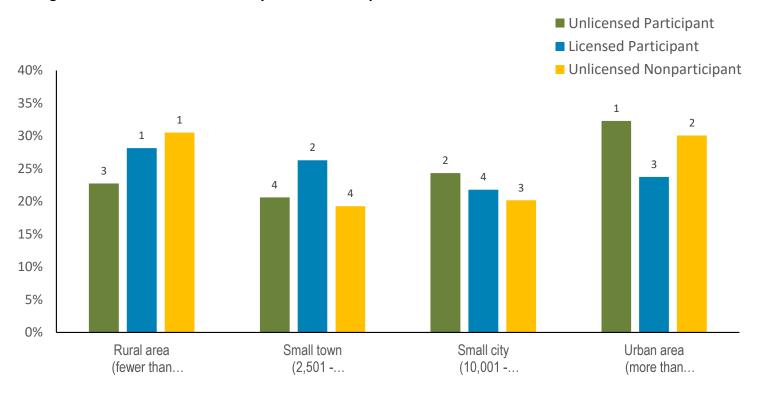
Figure 15. Histograms showing year of birth for the respondents, separated into three participation groups.



Urbanization

There was a surprisingly even distribution of respondents across our four urbanization categories of Rural, Small Town, Small City, and Urban (Figure 16). However, our Licensed Participants were most likely to come from rural areas, and our Unlicensed Participants were most likely to come from urban areas, indicating major differences in how states should attempt to engage with each group, especially in regards to content and imagery.

Figure 16. Level of urbanization by the various respondents.



Blacks were less likely to be from rural areas, regardless of participation group and more likely to be from urban areas. For Unlicensed respondents, those who were Native American were primarily from either rural areas or urban areas. For Asians and Whites, their residency changed within each participation group (Table 61). Hispanics were most likely to come from urban areas (Table 62)

Table 61. Urbanization by race (Totals in the bottom row are the sample sizes)

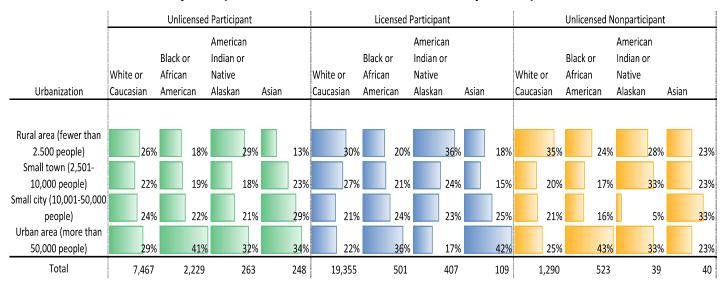


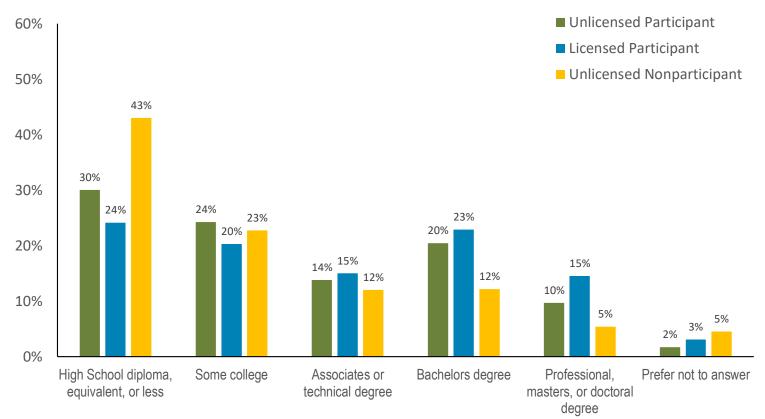
Table 62. Urbanization by ethnicity (Totals in the bottom row are the sample sizes)

	Unlicense	d Partic	ipant	Licen	sed Pa	articipa	ınt		Unlice onpar		nt
	Not	Yes		Not		Yes		Not		Yes	
Urbanization	Hispanic	Hispa	nic	Hispani	ic	Hispar	nic	Hispa	nic	Hispa	nic
Rural area (fewer than 2.500 people)	249	6	20%		30%		16%		32%		19%
Small town (2,501- 10,000 people)	219	6	20% 1		27%		22%		19%		21%
Small city (10,001- 50,000 people)	249	⁄ ₆	21%		21%		23%		20%		19%
Urban area (more than 50,000 people)	319	/ ₆	38%		22%		39%		2 9%		40%
Total	9,098	;	959	20	,025		443	1	.,712		154

Education

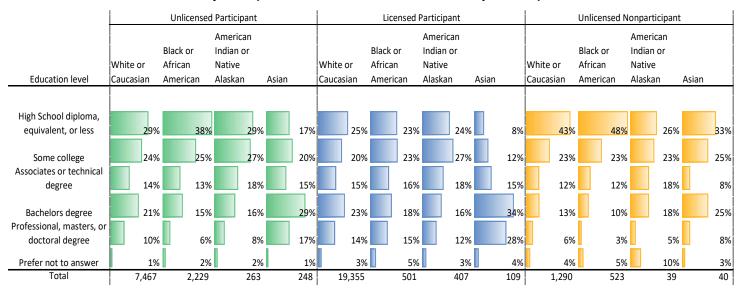
Unlicensed respondents were more likely to have a high school diploma, or possibly some college education, whereas over half of Licensed Participants were more likely to have at least an Associate's degree (Figure 17).

Figure 17. Education level of respondents.



Of the races we looked at, Asians were most likely to have either a college degree (bachelors or higher). Among the Licensed Participants, 62% of Asians had at least a bachelor's degree (Table 63).

Table 63. Education level by race (Totals in the bottom row are sample sizes).



Acknowledgments

Southwick Associates would like to thank the Agency conservation social science and R3 coordinators for their contributions to this survey. Multiple iterations were developed, and the final survey instrument was refined per their comments. We also appreciated that many took the time to ask statespecific questions. We hope those contributions were helpful to participating states. We also thank Dr. Ashley Dayer from Virginia Tech University, whose 2020 work with Virginia wildlife viewers helped inform some of this survey (Grooms et al., 2020).

References

Grooms, B., Rutter, J.D., Barnes, J.C., Peele, A., & A.A. Dayer (2020). Supporting Wildlife Recreationists in Virginia: Survey report to inform the Virginia Department of Wildlife Resources' Wildlife Viewing Plan. Department of Fish and Wildlife Conservation, Virginia Tech University. https://vtechworks.lib.vt.edu/server/api/core/bitstreams/a17ef646-ec26-4fc9-bd6d-6164b76ebc9b/content.

Manfredo, M.J., Sullivan, L., DonCarlos, A.W., Dietsch, A.M., Teel, T.L., Bright, A.D., & Bruskotter, J. (2018). America's Wildlife Values: The Social Context of Wildlife Management in the U.S. National report from the research project entitled, "America's Wildlife Values". Fort Collins, CO. Colorado State University, Department of Human Dimensions of Natural Resources. https://www.fishwildlife.org/application/files/9915/4049/1625/AWV - National Final Report.pdf.

Appendix A. Email Invitations

The following invitations and reminder emails were used to field the surveys to license holders:

Email Invitation (October 10th, 2023)

Subject: [contact("first name")], the [state agency name] wants to know how we are doing

Dear [contact("first name")],

This survey is sent on behalf of the [state agency name], who is interested in learning how you feel about fish and wildlife conservation issues. You are among a small group of people asked to participate in this important study. The survey takes less than 10 minutes to complete and your answers are very important. The information will ultimately be used to help the agency understand what issues are important to you and deliver programs that are beneficial to all citizens.

Your response and identity will be kept strictly confidential and will never be used for any purpose beyond this study.

Please follow the link below to participate:

Follow this link to the Survey:

Take the Survey

Or copy and paste the URL below into your internet browser:

https://southwick.qualtrics.com/jfe/form/[randomly generated string]&Q CHL=email

This survey is being conducted by Southwick Associates, a well-known research firm that specializes in outdoor recreation. If you have any questions or problems with the survey, please reply to this email, and we will respond as quickly as possible.

Thank you in advance for your time!

[state agency name] and Southwick Associates

Follow the link to opt out of future emails:

Click here to unsubscribe

First Email Reminder (October 14th, 2023)

Subject: Reminder: [contact("first name")], the [state agency name] wants to know how we are doing

A few days ago, we sent you a survey on behalf of the [state agency name], who is interested in learning how you feel about fish and wildlife conservation issues. You are among a small group of people asked to participate in this important study and would very much like your opinions. The survey takes less than 10 minutes to complete and your answers are very important. The information will

ultimately be used to help the agency understand what issues are important to you and deliver programs that are beneficial to all citizens.

(The rest of the email was identical to the initial email message)

Second Email Reminder (October 18th, 2023)

Subject: Reminder: [contact("first name")], the [state agency name] wants to know how we are doing Dear [contact("first name")],

Last week, we sent you a survey on behalf of the [state agency name], who is interested in learning how you feel about fish and wildlife conservation issues. Since we haven't heard from you, we wanted to give you another chance to share your thoughts. The survey does not take long to complete and your answers are very important. The information will ultimately be used to help the [state agency name] understand what issues are important to you and deliver programs that are beneficial to all citizens. (The rest of the email was identical to the initial email message)

Third Email Reminder (October 23rd, 2023)

Subject: [contact("first name")], the [state agency name] wants to know how we are doing Dear [contact("first name")],

Over the last 2 weeks, we have invited you to take a survey on behalf of [state agency name], who is interested in learning how you feel about fish and wildlife conservation issues. Since we haven't heard from you, we wanted to give you another chance to share your thoughts. The survey does takes about 12 minutes to complete and your answers are very important. The information will ultimately be used to help the [state agency name] understand what issues are important to you and deliver programs that are beneficial to all citizens.

(The rest of the email was identical to the initial email message)

Final Email Reminder (October 27th, 2023)

Subject: Final Reminder: [contact("first name")], the [state agency name] wants to know how we are doing

Dear [contact("first name")],

We wanted to reach out to you one final time with a request to take this survey on behalf of the [state agency name]. They are interested in learning how you feel about fish and wildlife conservation issues. The survey takes about 12 minutes to complete and your answers are very important. The information will ultimately be used to help the [state agency name] understand what issues are important to you and deliver programs that are beneficial to all citizens.

(The rest of the email was identical to the initial email message)

Appendix B. Web-based questionnaire.

SEAFWA License and GenPop 2023

The same general survey was given to both licensed hunters and anglers, and to unlicensed residents, with a few exceptions. On questions 5-7, 10-15, 17-19, 21, and 22 the order of the non-exclusive responses was randomized to reduce order bias. Exclusive responses are marked with a \otimes . There was no question numbered Q23.

"This study is being conducted on behalf of the Agency Name. The goal of the project is learn how {hunters and anglers for the licensed survey/ you for the genpop survey} feel about their state fish and wildlife agency. You are among a small group of people who were selected to participate in the project.

Please know your responses will be kept strictly confidential, and you can quit at any time. The survey is taking most people about 10-12 minutes to complete."

You must be at least 18 years old to participate. Are you at least 18 years old?

- Yes
- o No

Q1. What is your age?

- Between 18-34 years old
- Between 35-54 years old
- At least 55 years old

Q2. In which state do you currently reside?

Perceptions/Relevancy Section

Q8. How familiar would you say you are with your state's fish and wildlife conservation agency, the Agency_Name?

- Not familiar at all^A
- Slightly familiar
- o Moderately familiar
- Very familiar
- o Extremely familiar

Q9. Please indicate the extent to which you disagree or agree with the following statements. Select a response for each statement.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
My state fish and wildlife conservation agency shares the same values as I do	0	0	0	0	0
My state fish and wildlife conservation agency supports my outdoor activities	0	0	0	0	0

 $^{^{\}rm A}$ If the respondent selected anything except "Not at all familiar" they were asked questions Q9 and Q10. Otherwise, they skipped these two questions.

Q10. Please let us know how you feel about the Agency_Name by indicating the extent to which you disagree or agree with the statements below. Please select one answer for each statement.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
My agency does a good job managing fish and wildlife in my state	0	0	0	0	0
When deciding about fish and wildlife management in my state, my agency will be open and honest in the things they say and do	0	0	0	0	0
My agency can be trusted to make decisions about fish and wildlife management that are good for the resource	0	0	0	0	0
My agency manages fish and wildlife in a scientifically sound manner	0	0	0	0	0
My agency provides the general public the ability to provide input into fish and wildlife issues	0	0	0	0	0

Responsibilities

Respondents were directed to either Q11 or Q13 randomly (with approximately half answering each question). For each responsibility the respondent deemed from Slightly Important to Extremely Important, they were asked to rate the trust they had in the agency to accomplish this task (Q12 or Q14, respectively).

Q11. The following is a list of responsibilities that are typical for state fish and wildlife conservation agencies. The Agency_Name may not have primary responsibility for all of these. Please indicate how important each responsibility is to you using the scale Not at all Important to Extremely Important. If you truly do not have an opinion on the responsibility, choose the No Opinion option. Please select one answer for each responsibility.

How important is it that the Agency_Name focus on ...

	Not at all important	Slightly important	Moderately important	Very important	Extremely important	No Opinion	I do not think this task is managed by my agency
Controlling pollution	0	0	0	0	0	0	0
Protecting the environment	0	0	0	0	0	0	0
Protecting fish and wildlife habitat (i.e., land and water resources)	0	0	0	0	0	0	0
Protecting fish & wildlife populations that anglers and hunters pursue	0	0	0	0	0	0	0
Protecting fish & wildlife populations that are not hunted or fished	0	0	0	0	0	0	0
Managing nuisance wildlife	0	0	0	0	0	0	0
Managing wildlife in urban settings	0	0	0	0	0	0	0
Providing technical guidance to citizens including private lands management	0	0	0	0	0	0	0
Providing public access to the outdoors (piers, boat ramps, trails, campsites)	0	0	0	0	0	0	0

Q12. You noted these were important functions of the Agency_Name. Please indicate how much you agree or disagree with the following statements. Please select one answer for each statement.

The Agency_Name can be trusted to make good decisions when deciding on ...

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Controlling pollution	0	0	0	0	0
Protecting the environment	0	0	0	0	0
Protecting fish and wildlife habitat (i.e., land and water resources)	0	0	0	0	0
Protecting fish & wildlife populations that anglers and hunters pursue	0	0	0	0	0
Protecting fish & wildlife populations that are not hunted or fished	0	0	0	0	0
Managing nuisance wildlife	0	0	0	0	0
Managing wildlife in urban settings	0	0	0	0	0
Providing technical guidance to citizens including private lands management	0	0	0	0	0
Providing public access to the outdoors (piers, boat ramps, trails, campsites)	0	0	0	0	0

Q13. The following is a list of responsibilities that are typical for state fish and wildlife conservation agencies. The Agency_Name may not have primary responsibility for all of these. Please indicate how important each responsibility is to you using the scale Not at all Important to Extremely Important. If you truly do not have an opinion on the responsibility, choose the No Opinion option. Please select one answer for each statement.

How important is it that the **Agency_Name** focus on ...

	Not at all	Slightly	Moderately	Very	Extremely	No	I do not think this task is managed by my
	important	important	important	important	important	Opinion	agency
Boat titling and registration	0	0	0	0	0	0	0
Managing public lands for outdoor recreation	0	0	0	0	0	0	0
Protecting fish and wildlife habitat (i.e., land and water resources)	0	0	0	0	0	0	0
Regulating extraction such as minerals and gravel	0	0	0	0	0	0	0
Enforcing hunting, fishing, and boating regulations	0	0	0	0	0	0	0
Recruiting new hunters, anglers, and outdoor enthusiasts	0	0	0	0	0	0	0
Providing technical guidance to citizens including private lands management	0	0	0	0	0	0	0
Providing "How To" education on outdoor recreation (such as, how to hunt, fish, camp, or paddle)	0	0	0	0	0	0	0
Providing public access to the outdoors (piers, boat ramps, trails, campsites)	0	0	0	0	0	0	0

Q14. You noted these were important functions of the Agency_Name. Please indicate how much you agree or disagree with the following statements. Please select one answer for each statement.

The Agency_Name can be trusted to make good decisions when deciding on ...

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Boat titling and registration	0	0	0	0	0
Managing public lands for outdoor recreation	0	0	0	0	0
Protecting fish and wildlife habitat (i.e., land and water resources)	0	0	0	0	0
Regulating extraction such as minerals and gravel	0	0	0	0	0
Enforcing hunting, fishing, and boating regulations	0	0	0	0	0
Recruiting new hunters, anglers, and outdoor enthusiasts	0	0	0	0	0
Providing technical guidance to citizens including private lands management	0	0	0	0	0
Providing "How To" education on outdoor recreation (such as, how to hunt, fish, camp, or paddle)	0	0	0	0	0
Providing public access to the outdoors (piers, boat ramps, trails, campsites)	0	0	0	0	0

Funding

Q15. Where do you think fish and wildlife agencies currently receive their funding? (Please check all
that apply)
☐ Taxes on motor boat fuel
☐ Boat registration fees
 Hunting and fishing license sales
☐ Car registration fees
☐ Specialty auto license plates
☐ Portion of the general state tax revenues (property, income, sales)
□ Documentary stamp taxes
☐ Taxes on the sale of fishing gear
☐ Taxes on the sale of hunting and shooting accessories
☐ Taxes on the sale of firearms
☐ Taxes on the sale of archery equipment
☐ Taxes on the sale of ammunition
□ ⊗I am not sure
Other (please specify):
Q16. Common models for funding public services can vary from ones in which only the users of the service pay (User Pay) to those in which all citizens pay (Publicly Funded). How do you think your state's fish and wildlife conservation should be funded?
Tiow do you tillik your state's lish and wildlife conservation should be fullded:
Please move slider to your ideal funding mix. A value of 0 suggests the agency should be entirely "Publicly Funded" whereas a value of 100 suggests the agency should be entirely "User Pay" funded. A
A The original position of the slider was random between 0 and 100, and the user had to move the slider before they could advance to the next question.
Publicly A Balance of Publicly Funded and User Pay User Pay Funded
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

□ ⊗No. We should reduce funding for fish and wildlife conservation

Q18. Licenses, along with special taxes on equipment and fuel, are paid by hunters, anglers, target shooters, and boaters and provide much of the funding for the Agency_Name. Please indicate how much you agree or disagree with the following statements. (Please select one answer for each statement.)

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
The groups that provide the most funding should have the most influence on the agency's policies.	0	0	0	0	0
The groups that provide the most funding should be the primary beneficiaries of the agency's policies	0	0	0	0	0
All citizens should influence the agency's policies, regardless of who pays.	0	0	0	0	0
All citizens should benefit from the agency's policies, regardless of who pays	0	0	0	0	0
The policies of the fish and wildlife agency should <u>NOT</u> primarily benefit hunters, anglers, target shooters, and boaters.	0	0	0	0	0
All citizens should pay for fish and wildlife conservation, regardless of whether they hunt, target shoot, fish, or boat.	0	0	0	0	0

	Idlife conservation agency. What mechanism(s) would you support for providing additional g to the Agency_Name?(Select all the options you support)
	Increase in sales tax (e.g., additional 1/8 of a penny tax for every dollar spent) dedicated to your state's fish and wildlife conservation agency
	Increase in property tax rate (e.g., additional \$5 per \$100,000 assessed value) dedicated to your state's fish and wildlife conservation agency
	No funding increases, but a different allocation of the state's current budget
	A voluntary conservation license fee (e.g., \$5/yr) dedicated to your state's fish and wildlife conservation agency
	A mandatory conservation license fee (e.g., \$5/yr) needed to access your state's public lands and waters that is dedicated to your state's fish and wildlife conservation agency
	An increase in vehicle registration fees (e.g., $5/yr$) that would go to your state's fish and wildlife conservation agency
	Redirect a portion of the state lottery proceeds to your state's fish and wildlife conservation agency
	Redirect a portion of the current sales tax revenue to your state's fish and wildlife conservation agency
	Other (please specify a source of funding):
Coi	⊗None of the above mmunications
obtain apply)	o the best of your knowledge, have you received any communications from, interacted with, or ed information from the Agency_Name in the past year (i.e., twelve months)? (Select all that
	Yes, I have received information or communications
	Yes, I have interacted with them (interactions involve two-way communication such as
	renewing a license or permit, talking to someone in person, online, or by phone or email) ⊗No, I have neither received communications from nor interacted with my state's fish and wildlife conservation agency (0) ^A
	⊗I do not recall ^A
^A Respo	ondents who chose either of these options skipped the next question.

Q19. As noted, currently licenses plus special excise taxes provide much of the funding for your fish

☐ Subscribe to agency email communication

☐ ⊗I do not really care about learning or hearing more

☐ Other (please specify)

☐ Text messages

Demographics - Asked of all respondents

Q24. What year were you born? Please enter all 4 digits.

Q25. Which of the following best describes the community where you currently live?

- o Rural area (fewer than 2.500 people)
- o Small town (2,501-10,000 people)
- o Small city (10,001-50,000 people)
- Urban area (more than 50,000 people)

Q26. What is the highest degree or level of school you have completed?

- o High School diploma, equivalent, or less
- o Some college
- Associate's or technical degree
- o Bachelor's degree
- o Professional, master's, or doctoral degree
- Prefer not to answer