

2025 Clemson Extension's Carolina Clear Program Survey Report

Stacy Johnson & Victoria Charles, Project Researchers
Paul Gremillion & Kristie Marr, Project Managers



COOPERATIVE EXTENSION
College of Agriculture, Forestry and Life Sciences



This project was a collaborative effort between the staff of the Office of Research and Organizational Development (OROD) within the Clemson University Learning Institute (CULI) and the Clemson University Cooperative Extension.

Stephen Lance
Executive Director, CULI

Justine Gradillas
Associate Executive Director, Research

Victoria Charles
Director of Applied Research

Paul Gremillion
Director of Project Operations

Stacy Johnson
Research Associate

Kristie Marr
Project Manager

Shat'e Griffin
Call Center Manager

OROD would like to acknowledge the valuable contribution made by the OROD research assistants.

Justin Bowman

Adams Howard

OROD would like to thank all the Clemson University Cooperative Extension staff as they provided support and guidance throughout the development of this survey.

Derrick Phinney
Program Team Director, Water Resources

Susan Lunt
Carolina Clear Coordinator

Tess Moody
Natural Resources Extension Associate

Table of Contents

Study Overview	1
<i>Methodology</i>	<i>1</i>
<i>Statewide Results.</i>	<i>6</i>
<i>Summary</i>	<i>18</i>
Appendices	20
<i>Appendix A</i>	<i>21</i>
<i>Region 1: Ashley Cooper Stormwater Education Consortium</i>	
<i>Appendix B</i>	<i>31</i>
<i>Region 2: Lowcountry Stormwater Partners</i>	
<i>Appendix C</i>	<i>41</i>
<i>Region 3: Coastal Waccamaw Stormwater Education Consortium</i>	
<i>Appendix D</i>	<i>51</i>
<i>Region 4: Florence/Darlington Stormwater Partners</i>	
<i>Appendix E</i>	<i>61</i>
<i>Region 5: Anderson and Pickens Counties Stormwater Partners</i>	
<i>Appendix F</i>	<i>71</i>
<i>Region 6: Sumter Stormwater Solutions</i>	
Contact Information	81

Study Overview

Clemson Extension's Carolina Clear works to protect South Carolina's water resources. As part of their ongoing efforts to provide education and resources to the public, Carolina Clear implemented a statewide telephone survey in 2009 and has continued this effort every five years since. Survey results are used to guide strategic planning and public outreach efforts. In 2024, the Carolina Clear team began working with the Office of Research and Organizational Development (OROD) within Clemson University Learning Institute (CULI) to develop and administer the survey in 2025.

Study Purpose

The aim of this study was to assess the effectiveness of previous outreach efforts by Carolina Clear. Carolina Clear wanted to learn more about South Carolina residents' perceptions on water resource education. The study consisted of a survey of residents in the six regions listed below. Data collected through this survey is intended to guide future education endeavors.

The regional consortia for outreach are as follows:

Region 1: Charleston, Berkeley, and Dorchester Counties (Ashley Cooper Stormwater Education Consortium)

Region 2: Beaufort County (Lowcountry Stormwater Partners)

Region 3: Horry and Georgetown Counties (Coastal Waccamaw Stormwater Education Consortium)

Region 4: Florence and Darlington Counties (Florence/Darlington Stormwater Partners)

Region 5: Anderson and Pickens Counties, including Clemson University campus (Anderson and Pickens Counties Stormwater Partners)

Region 6: Sumter County (Sumter Stormwater Solutions)

Methodology

This study was completed through a coordinated effort between OROD and Carolina Clear. OROD was responsible for drafting and programming the instrument, designing and conducting the study, while Carolina Clear identified the survey topics, defined key terms, and provided strategic planning materials. OROD implemented and monitored data collection and provided regular updates on statewide survey totals to Carolina Clear. The OROD team conducted incentive management tasks on a weekly basis, ensuring that all gift cards were distributed to selected recipients as indicated in study protocols. This methodology section provides a detailed description of each major task performed to complete the study.

Instrument

OROD collaborated closely with the Carolina Clear team to design an electronic survey instrument, informed by the Carolina Clear's 2024–2029 Strategic Education Plan Summary and areas of inquiry identified by the partner. The final instrument consisted of 16 questions covering the following topics: sources of water pollution, individual impact on water quality, marketing reach of Carolina Clear ads, utilization and reception of educational resources, sources of information about water protection, and participation and barriers surrounding water stewardship activities. Three optional demographic questions were listed at the end of the survey to capture respondents' self-reported socioeconomic background, boosting the total number of questions to 19. The instrument was programmed into Qualtrics and administered online. The final survey is available in [preview mode](#). The actual survey is inaccessible to prevent entries beyond the closing date.

IRB Review

The research plan, instrument, and recruitment materials were submitted to the Clemson University Institutional Review Board (IRB) for review in March 2025. All recruitment materials were submitted along with the application. This included the initial emailed survey invitation, an electronic version of the postcard, a reminder email, and the telephone script, which was used to conduct targeted calling. All materials were reviewed, and the Office for Research Compliance determined that this project did not meet the criteria for review as research involving human subjects.

Study Sample

The target audience for this survey project was the general population residing in the South Carolina counties served by the six regional consortia. OROD acquired a contact list from a vendor that included residents across the six regions in South Carolina, supported by Carolina Clear and its partner consortia through Clemson Extension. The sampling frame included names, addresses, phone numbers, and email addresses of individuals living in the 11 counties within the six regions partnered with Carolina Clear. Population data and study sample are listed in Table 1.

Table 1: Population and Study Sample

Regional Consortium (Counties)	2020 Census Data	%	Sample Size	%	Margin of Error
Region 1: Ashley Cooper Stormwater Education Consortium (Charleston, Berkeley, and Dorchester)	799,636	39.2%	529	37.7%	4.4%
Region 2: Lowcountry Stormwater Partners (Beaufort)	187,117	9.2%	113	8.1%	9.2%
Region 3: Coastal Waccamaw Stormwater Education Consortium (Horry and Georgetown)	414,433	20.3%	339	24.2%	5.6%
Region 4: Florence/Darlington Stormwater Partners (Florence and Darlington)	199,964	9.8%	171	12.2%	7.7%
Region 5: Anderson and Pickens Counties Stormwater Partners (Anderson and Pickens)	335,122	16.4%	197	14.0%	7.0%
Region 6: Sumter Stormwater Solutions (Sumter)	105,556	5.2%	54	3.8%	13.5%
Totals	2,041,828	100%	1,403	100%	2.7%

Recruitment

To be eligible for the study, each potential participant was required to be a current resident of a South Carolina county served by one of the six consortia and be contacted using the sampling frame list (N=81,741). Study recruitment was planned to occur in four waves to maintain random sampling and fit within the allotted budget for this project. Each potential participant was assigned a randomly generated six-digit identifier. Once assigned an ID, the list was sorted from least to greatest, and the first 40,000 people were the initially selected stratified random sample using the consortia as the stratum.

Recruitment involved potential respondents receiving a postcard, an initial email invitation, and two follow-up contacts if they had not completed the survey. Reminder emails were sent every two weeks, with a total of three emails distributed in each wave. Postcards were sent to provide information about the study, serve as a second method of contact to further legitimize the study, and include a QR code for ease of access. Finally, targeted calling was conducted.

Because this was the first time the study was conducted online, the OROD team monitored each wave of data collection to identify ways to improve response rates. Several changes were made to the recruitment process during the data collection period. Recruitment outreach methods varied over the course of data collection as improvements were implemented. For example, OROD leveraged its call center and Clemson University Research Assistants to conduct outreach; approximately 2,600 calls were placed during these waves to boost completion rates. Phone calls yielded little return; therefore, reminder calls were stopped at the end of Wave Two. Table 2 displays each type of outreach used during each wave of data collection.

Table 2: Recruitment Outreach by Type and Wave

	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5
Postcard	4/29/2025	5/27/2025	-	7/30/2025	8/25/2025
1st Email	5/5/2025	5/27/2025	6/24/2025	8/5/2025	8/29/2025
2nd Email	5/13/2025	6/10/2025	7/8/2025	8/20/2025	9/11/2025
3rd Email	6/3/2025	6/24/2025	7/22/2025	9/2/2025	9/23/2025
Calls Began	5/27/2025	6/10/2025	-	-	-

Piloting

The pilot phase collected feedback from respondents about their experience with the survey, allowing for minor adjustments to the wording or survey programming in Qualtrics. Respondents in Wave One (n = 10,000) were given the option to participate in the pilot following full survey completion. The pilot recruitment script was included in the invitation email to Wave One. Wave One participants were invited to opt in to the pilot portion of the study by clicking a link at the end of the primary survey and answering the pilot study questions. To qualify for the pilot study, a respondent was required to first complete the full survey, submit it, and then access the pilot study questions. Anyone who completed the survey and participated in the pilot received two entries into the weekly incentive drawing.

The research team reviewed respondent recommendations from the pilot data and adjusted instrument items and survey programming in Qualtrics. Full survey responses from the pilot audience were retained for analysis. Following pilot closure in June 2025, OROD presented initial findings to Carolina Clear team members through a comprehensive presentation and discussion. Several changes were implemented based on information learned from the pilot. Changes included removing the respondent authenticator at the beginning of the survey and replacing it with three self-reported items. The first item required respondents to enter their email address. The second item was a Completely Automated Public Turing test to tell Computers and Humans Apart (CAPTCHA) to discern human responses from non-human responses. The final item requested that respondents select their county from a list provided that included only counties covered by the consortia, in order to remove residents in non-eligible counties.

Data Collection

Data collection began in April 2025 and concluded in October 2025. Throughout data collection, the OROD team monitored data within Qualtrics and responded to email inquiries from participants daily. Monitoring included meeting at least weekly to discuss and plan for upcoming data collection tasks, remove respondent contacts who completed the survey or requested removal, and review study progress.

Participants who completed the entire survey were eligible for one entry in a weekly drawing for a \$20 electronic gift card. Pilot study participants received two entries. All processes and procedures were followed in accordance with [Clemson University’s incentive card management policies](#). All incentive gift cards were distributed by November 6, 2025, via the ORODsurvey@clemson.edu email account. A spreadsheet was maintained to track each card and its distribution, documenting this process.

OROD remained committed to maximizing response rates throughout data collection, ultimately adding a fifth wave of respondents and utilizing all contacts. Table 3 displays method of survey access for completed surveys. Tracking method of survey access provided information to make decisions about next steps for data collection. In total, the research team made 313,830 unique contacts (emails, postcards, and calls) to participants. Throughout the data collection period, the partner organization received weekly email updates on the total of completed responses. Upon completion of data collection on October 4, 2025, the survey was officially closed in Qualtrics.

Table 3: Method of Survey Access

Method	Frequency	Percent
Used link from email	728	51.9%
Used QR code from postcard	670	47.8%
Anonymous	5	0.4%
Total	1,403	100%

Sample Representativeness and Limitations

The statewide sample included respondents from all six regional consortia. The distribution of responses across the regions closely matched the proportions reported in the most recent U.S. Census (2020) data. The survey respondents generally reflected the residential classification types found in South Carolina. However, the sample contained higher proportions of college-educated and higher-income households than are found in the general population, and the survey’s demographic categories of income and education do not perfectly match official census classifications. Because of these differences, and because the study’s purpose was descriptive rather than to produce statistically weighted population estimates, no sample weights were applied. Although the survey achieved broad geographic coverage, certain demographic groups, particularly lower-income and less-educated households, were underrepresented. Additionally, since the contact list used for recruitment was purchased from a private company rather than drawn from a randomized sampling frame, some population segments may not have had an equal chance of inclusion. These factors may limit the generalizability of the results, and findings should be interpreted as broadly reflective of statewide opinions rather than as statistically representative of all South Carolina households.

Data Analysis

Once data collection was completed, the dataset was downloaded from the Qualtrics survey platform to Microsoft Excel for cleaning, restructuring, and merging with the Wave One dataset. The Wave One dataset was separate because minor modifications were made to the survey in Qualtrics following the pilot phase of the project. Since no structural changes were made to the survey, both datasets could be easily merged.

Data were reviewed for duplicates and anomalies. Blank surveys and those with only authenticator questions answered were listwise deleted. Partial surveys in which at least the first substantive question was answered were retained. No missing data were imputed. String cleaning and data type conversions were performed by removing leading spaces and converting text responses to numeric values. Data were imported to SPSS 29, and variable and value labels were added to each item.

A diagnostic review of the data was conducted to identify response distributions and survey timing. Response distributions indicated similar patterns across the full and regional samples. The most dramatic differences in responses were found between those who were familiar with the Carolina Clear program and those who were not, as the vast majority of respondents were unfamiliar with Carolina Clear prior to being surveyed. In this case, the study sought to examine perceptions among the public, not just those familiar with Carolina Clear programming. Therefore, the difference in response observed is meaningful and, in fact, integral to the study. Since this study aimed to be descriptive and to examine significant differences in responses to encountering Carolina Clear materials, it is not reasonable to address outliers.

Fixed-response items were summarized using SPSS 29. All open-ended data were categorized. Responses from question 15 (*Please rank your list of barriers to participating in activities that promote water stewardship by dragging the largest barrier to the top, the next largest barrier second, and so on.*) were excluded from the analysis because they did not provide any unique information not already gleaned from respondents in question 14 (*Select the barriers that prevent you from participating in water stewardship activities.*). Upon reviewing the data from question 15, the responses appeared unreliable because the ordered list of barriers mirrored the order in which the barriers were presented on the survey, suggesting that many respondents likely did not reorder the barriers to officially rank them. In future surveys, the follow-up item should ask respondents to identify their top barrier to participation in a similar manner to survey question three (*Which one of these sources do you believe has the biggest impact on South Carolina waterways?*), by repopulating the selected list of items from question two (*Carolina Clear is interested in your thoughts on water quality in our South Carolina waterways. Please select all of the sources you believe affect our South Carolina waterways.*) for participants.

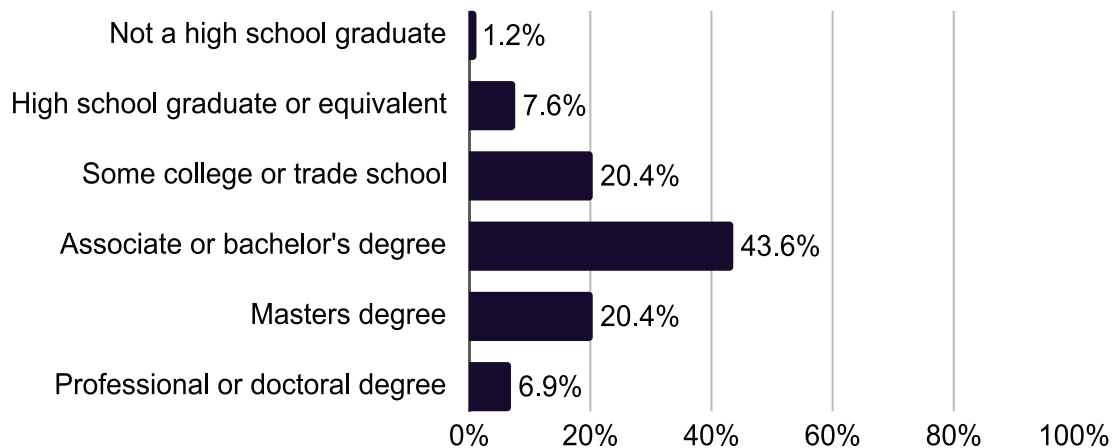
Data Management

The final dataset was downloaded from Qualtrics and saved in an encrypted container on the researchers' CULI-issued computers. Once analysis and reporting are completed, the dataset will be de-identified, shared with the Carolina Clear team through Box Secure, and archived on the OROD call center server. The OROD research team will delete the Veracrypt containers on their computers once the dataset is archived. The file will remain on the server for five years to ensure no other information is needed between when this study ends and when Carolina Clear conducts this survey again. In five years, the dataset will be permanently deleted.

Statewide Results

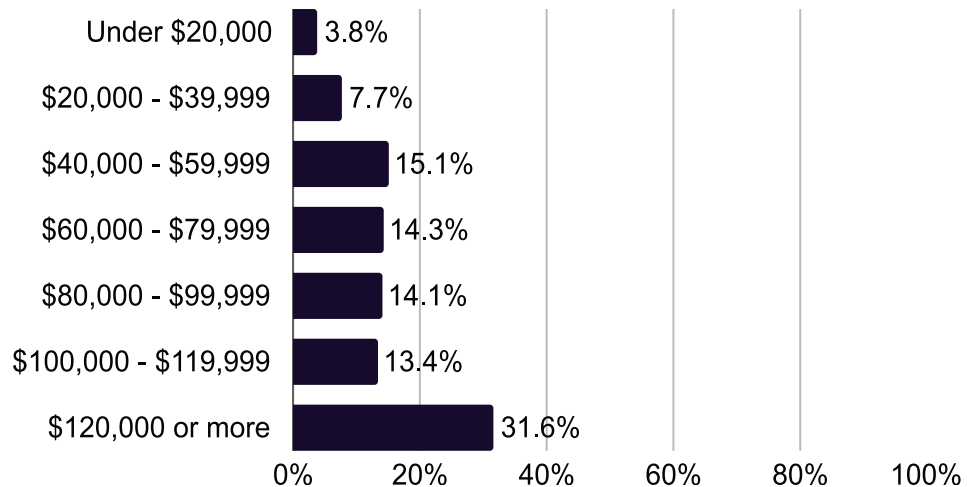
Question: What is the highest level of education you have completed? (n=1,163)

Figure 1: Highest Education Completed



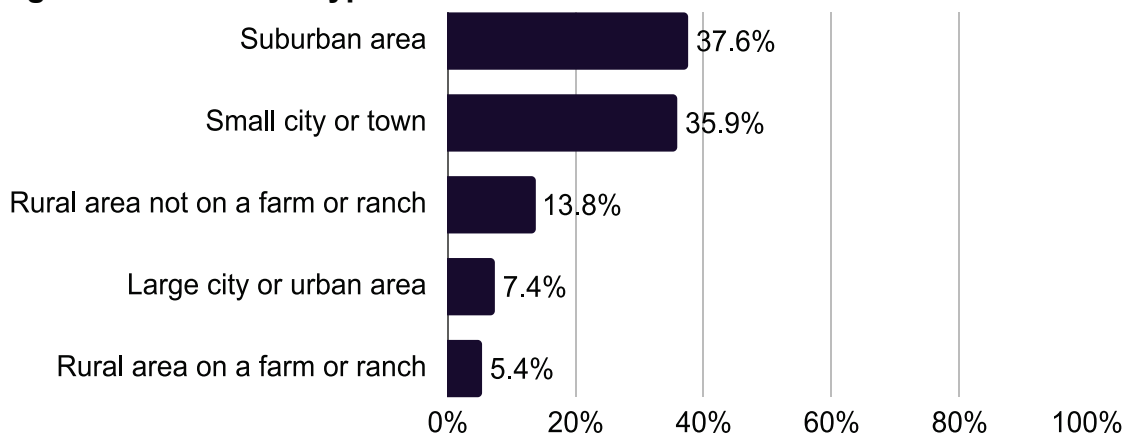
Question: Which of these categories best describes your total household income before taxes last year? (n=956)

Figure 2: Income Level



Question: How do you classify your place of residence? (n=1,129)

Figure 3: Residence Type



Question: Carolina Clear is interested in your thoughts on water quality in our South Carolina waterways. Please select all of the sources you believe affect our South Carolina waterways. (n=1,403)

Table 4: Sources Impacting South Carolina waterways

Source	Yes (n)	Yes (%)
Littering or illegal dumping of trash	1,280	91.2%
Stormwater runoff	1,210	86.2%
Bacteria from septic systems	1,149	81.9%
Nutrients from fertilizer	1,115	79.5%
Bacteria from fats, oils, and greases	1,086	77.4%
Bacteria and nutrients from pet waste	916	65.3%
Sediment/erosion	916	65.3%
Bacteria from nuisance wildlife	863	61.5%
Low Impact Development (LID)	474	33.8%
Best Management Practices (BMPs)	470	33.5%
Native plants	382	27.2%
Vegetative buffers	345	24.6%
None	8	0.6%
Other	121	8.6%

Other Responses by Category:

Negative impacts of (over)development (n=23)

Industrial waste (n=22)

Landfills and illegal dumping (n=12)

Irresponsible boating/water recreation (n=11)

Environmental changes (n=9)

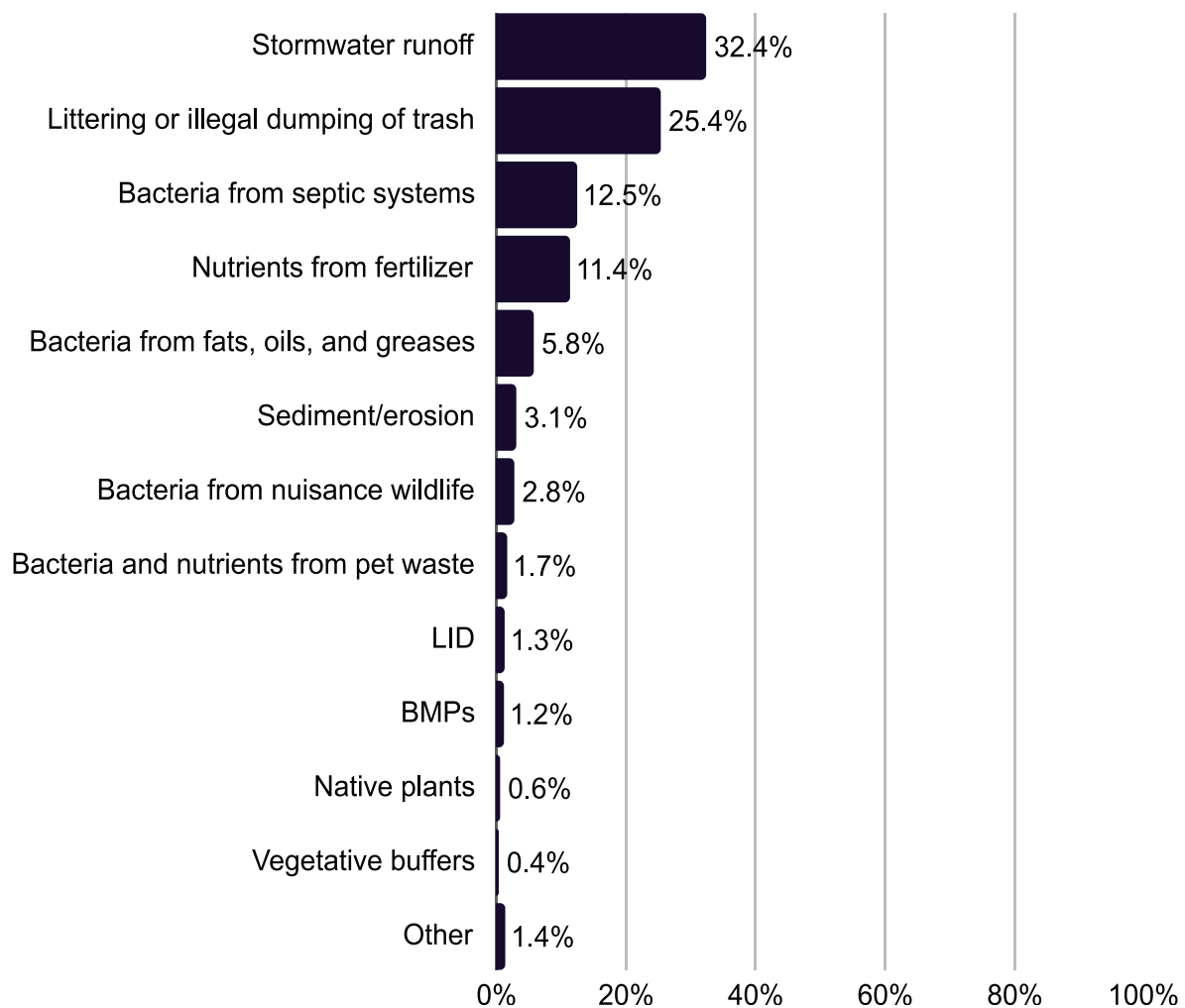
Fertilizers/chemicals (n=7)

Issues with stormwater and wastewater (n=6)

Farming practices (n=3)

Question: Which one of these sources do you believe has the biggest impact on South Carolina waterways? (n=1,372)

Figure 4: Source with Biggest Impact on South Carolina Waterways



Other Responses by Category:

Negative impacts of (over)development (n=5)

Industrial waste (n=4)

Issues with stormwater and wastewater (n=2)

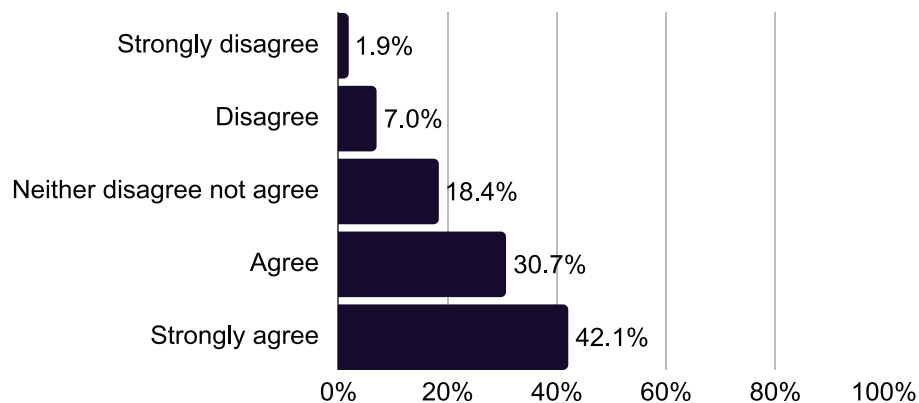
Irresponsible boating/water recreation (n=1)

Farming practices (n=1)

Question: Please indicate your level of agreement or disagreement with the statements below.
(n=1,318)

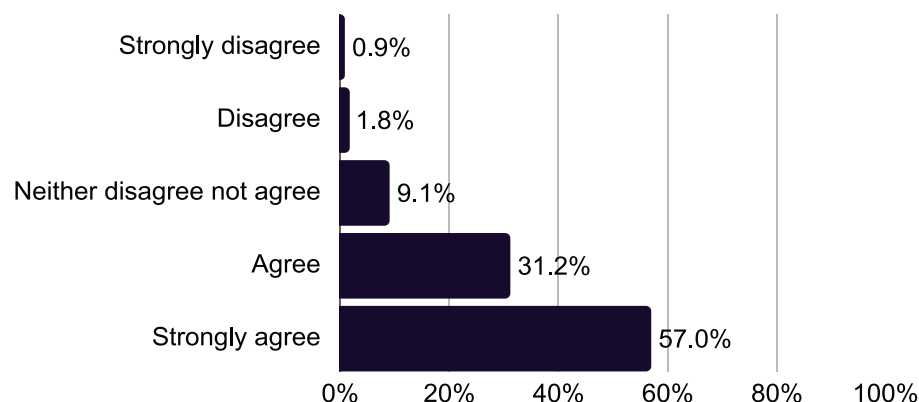
My actions have an impact on water quality.

Figure 5: Actions Impacting Water Quality



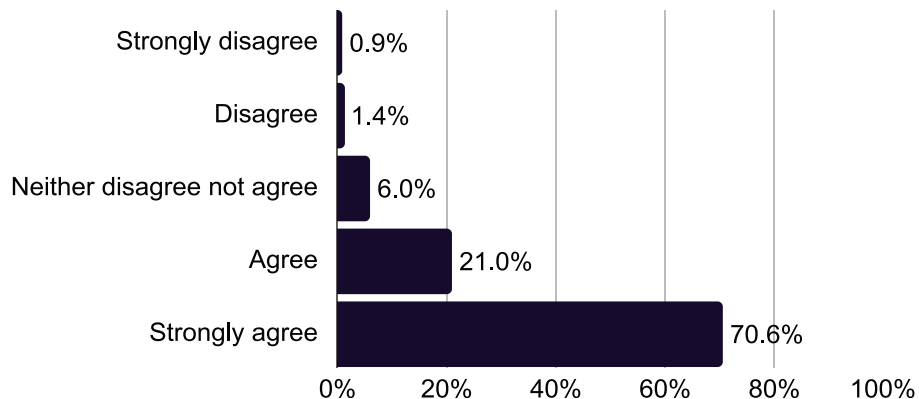
I would be willing to change my behavior if I knew what I was doing harmed water quality.

Figure 6: Willingness to Change Behavior



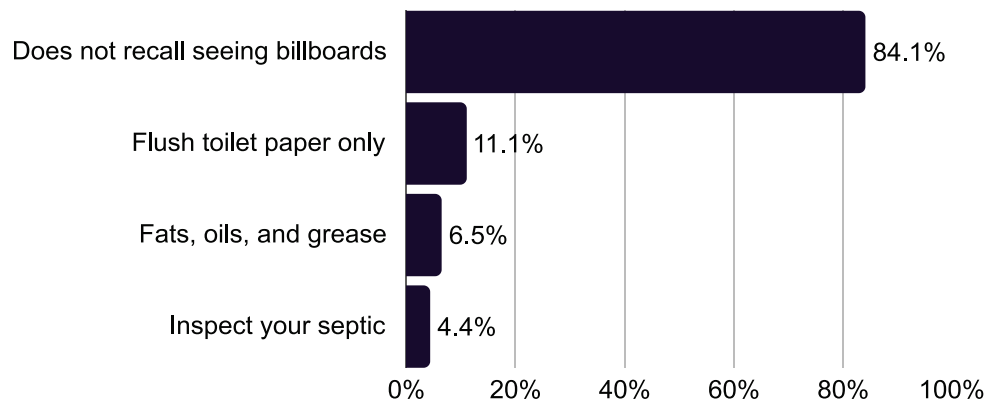
The quality of life in my community depends on good water quality in local streams, rivers, and lakes.

Figure 7: Quality of Life Depends on Water Quality



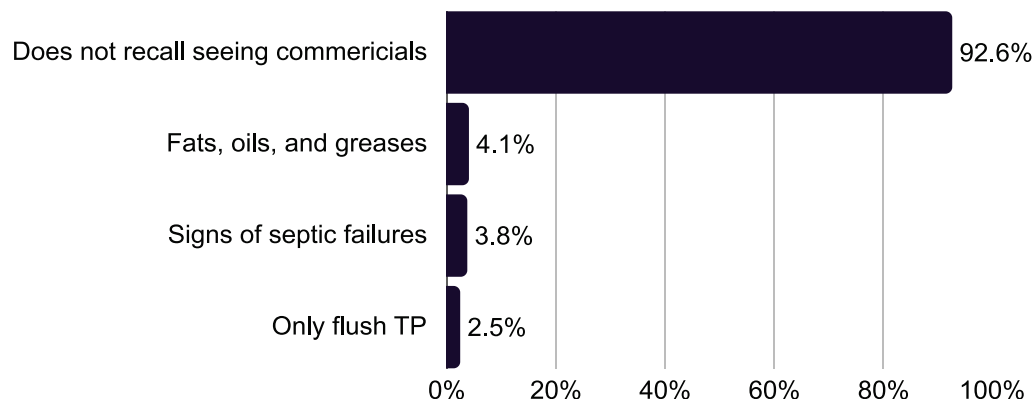
Question: Please select all the billboards you have seen. (n=1,313)

Figure 8: Billboards Recalled



Question: Please select all the commercials you have seen. (n=1,306)

Figure 9: Commercials Recalled



Question: Please select all the in-person, online, and hybrid courses you have engaged with.
(n=1,205)

Table 5: Course Content Engaged

Courses	Yes (n)	Yes (%)
Did not complete listed courses	1,190	98.8%
Master Rain Gardener	27	2.2%
Salt Marsh Short Course	23	1.9%
Carolina Yards	21	1.7%
Living Shorelines	17	1.4%
Certified Erosion Prevention and Sediment Control Inspector	17	1.4%
Seasonal Pond Management	16	1.3%
Master Pond Manager	16	1.3%
Be Well Informed	13	1.1%
Certified Stormwater Plan Reviewer	13	1.1%
Post-Construction BMP Inspector	11	0.9%
Dam Ownership	9	0.7%

Question: Please select all of the printed or online Clemson Extension resources you have used from the list below. (n=1,284)

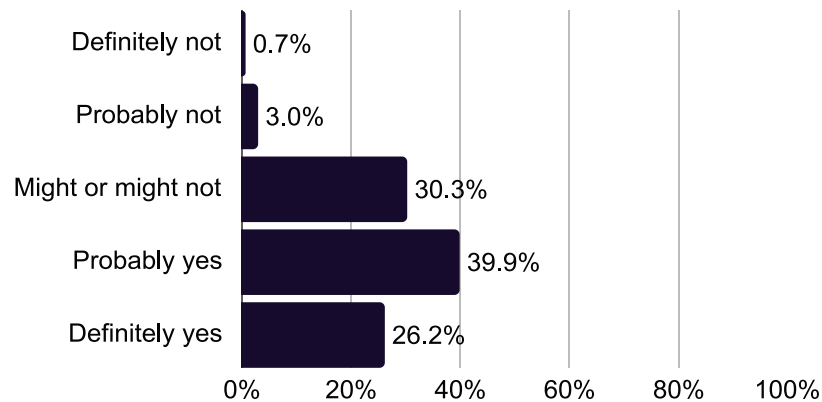
Table 6: Resources Used

Resources	Yes (n)	Yes (%)
Did not use listed resources	1,044	81.3%
Yards & Erosion: Carolina Yards, gardening, native plants, trees and groundcovers, compost, stream bank repair, yard maintenance, wet or erosion issues, rain barrels, rain gardens, rainwater harvesting	165	12.9%
Ponds: management, treatment, siting, vegetative buffers, floating wetlands, fish, nuisance plants, dyes, dredging, liming, fertilizing, pH, quality	86	6.7%
Litter & Erosion: litter/tarps, maintaining ditches, storm drains, lot erosion control measures	54	4.2%
Bacteria Contamination: pet waste, nuisance wildlife, fats, oils, and greases, septic systems	52	4.0%
Farms & Youth: BMPs for farming, dams, 4H20 camps	30	2.3%

Question: Please tell us how likely you are to... (n=439)

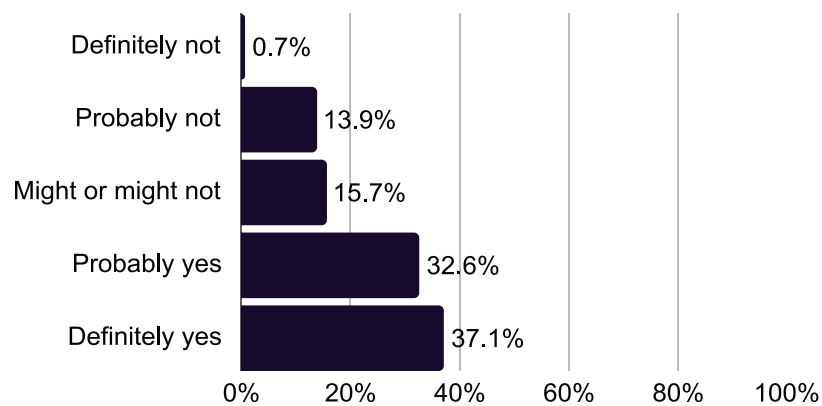
Recommend the courses or resources you used to others.

Figure 10: Recommend Resources to Others



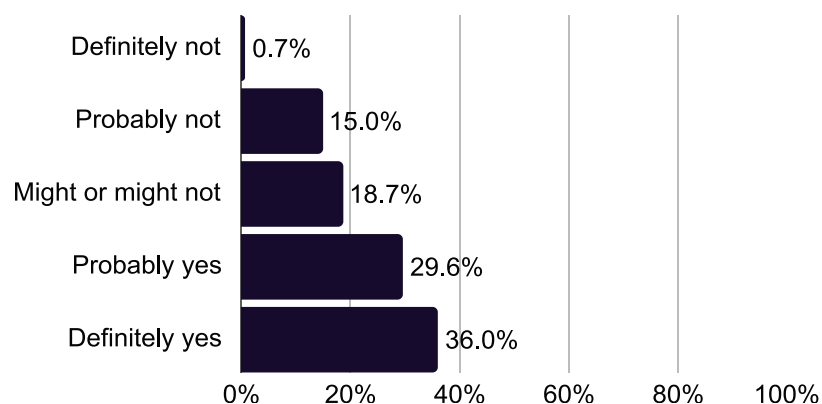
Share the information you obtained with others.

Figure 11: Share Information with Others



Use these resources again in the future.

Figure 12: Use Resource Again



Question: What, if anything, did you change because of what you learned from these materials?
(n=324)

Responses by Category:

Changed behavior (n=137)

Gained knowledge (n=85)

Unaware/no changes (n=44)

Developed awareness of impact and the value of taking action (n=26)

Confirmed their knowledge (n=21)

Shared information with others (n=11)

The Stages of Change Model, also known as the Transtheoretical Model (TTM) of Change, can be effectively applied to sustainable water management practices by addressing the various stages individuals or communities typically undergo when adopting new behaviors. TTM is a stage-based model that helps explain how and why people adopt new behaviors. TTM proposes that people progress through five stages when making a behavioral change: precontemplation, contemplation, preparation, action, and maintenance, with the possibility of relapse (sometimes referred to as recidivism) when someone slips back into an earlier stage. By recognizing where individuals or communities are in the TTM, tailored interventions and strategies can be applied specifically to support the educational goals of those at each stage, helping them move forward in adopting and maintaining sustainable water management practices.

Table 7: Application of TTM

Stages	Precontemplation	Contemplation	Preparation	Action	Maintenance	
Definition	Lack awareness and are not thinking about making changes	Begin to recognize a change might be needed but are not taking action	Start planning for change	Begin to adopt the new behavior	Work to sustain behavior over time	
Survey Response (%)	Unaware/no changes	Developed awareness of impact and the value of taking action	Gained knowledge	Changed behavior	Confirmed their knowledge	Shared information with others
	13.6%	8.0%	26.0%	42.3%	9.9%	
Goal	Create basic awareness; make the issue personally relevant.	Help individuals think through the issue, understand benefits, and begin weighing options.	Provide practical, actionable information so people feel ready to begin.	Reinforce new behaviors and help people stay motivated.	Help individuals sustain the behavior over time and prevent relapse.	
Focus	Awareness, visibility, basic facts	Reflection, understanding, valuing action	Skills, steps, how-to, planning tools	Support, reminders, troubleshooting	Reinforcement, leadership, deeper learning	

Question: Carolina Clear is interested in where and how you obtained our information and resources regarding water quality. Please select all that apply. (n=446)

Table 8: Method of Access to Carolina Clear Information

Method	Yes (n)	Yes (%)
Website	117	26.2%
Direct mail or printed newspaper	109	24.4%
E-newsletter or email	102	22.9%
Social media	85	19.1%
Printed materials	79	17.7%
Friends, family, or word of mouth	64	14.3%
Clemson office/venue	63	14.1%
Festival or local event	47	10.5%
Farmer's market	42	9.4%
County or government administrative building	31	7.0%
YouTube	26	5.8%
Library	26	5.8%
Television commercial	23	5.2%
Phone	19	4.3%
Streaming or radio	18	4.0%
Professional service provider	17	3.8%
Billboard	0	0.0%
Other	35	7.8%

Other Responses by Category:

Professional experience or education (n=9)

Involvement with community organization or volunteering (n=5)

Sought information independently (n=3)

This survey (n=2)

Carolina Clear educational materials (n=2)

Advertisement (n=1)

Question: How do you prefer to receive our information and resources regarding water quality?
(n=1,237)

Table 9: Preferred Method to Receive Carolina Clear Information

Method	Yes (n)	Yes (%)
E-newsletter or email	703	56.8%
Direct mail or printed newspaper	395	31.9%
Social media	366	29.5%
Website	329	26.6%
Printed materials	328	26.5%
Television commercial	264	21.3%
Billboard	176	14.2%
Festival or local event	166	13.4%
YouTube	150	12.1%
Streaming or radio	146	11.8%
Farmer's market	137	11.1%
Friends, family, or word of mouth	104	8.4%
Library	97	7.8%
Clemson office/venue	66	5.3%
Professional service provider	42	3.4%
County or government administrative building	41	3.3%
Phone	14	1.1%
Other	23	1.9%

Other Responses by Category:

All methods (n=4)
 Public broadcasting/local channels (n=3)
 Schools (n=3)
 Online methods (n=2)
 Local government/water authority (n=2)
 Businesses (n=1)
 Direct communication (n=1)

Question: Carolina Clear is interested in your involvement in community activities that promote water stewardship. Please select all of the activities which you have participated in from the list below.
(n=1,230)

Table 10: Involvement with Water Stewardship Activities

Activity	Yes (n)	Yes (%)
Water recreational activities (boating, kayaking, fishing, swimming, visiting a South Carolina waterway)	598	48.6%
Does not participate in listed activities	410	33.3%
Litter clean up (beach or river sweep)	388	31.5%
Community or volunteer conservation activity	168	13.7%
Native plant/rain barrel/rain garden installation as part of a community project	122	9.9%
Stream bank or shoreline repair/planting	61	5.0%
Rain barrel sale	60	4.9%
Other	52	4.2%

Other Responses by Category:

Participate in community efforts (n=24)

Personal efforts (at home) (n=17)

Professional experience (n=6)

Question: Select the barriers that prevent you from participating in water stewardship activities.
(n=1,221)

Table 11: Barriers to Participating in Water Stewardship Activities

Activity	Yes (n)	Yes (%)
Not knowing where to participate	670	54.9%
Understanding how to participate	515	42.2%
Time required	497	40.7%
Having physical or health limitations	342	28.0%
Not knowing others who participate	228	18.7%
Cost	170	13.9%
Lacking the necessary materials or equipment to participate	154	12.6%
Not knowing why my participation is important	132	10.8%
Restrictions from local government or governing body (ex. Homeowner's Association)	66	5.4%
Other	84	6.9%

Other Responses by Category:

Advanced age &/or health/mobility challenges (n=18)

Competing priorities/responsibilities (n=13)

Did not know about it (n=9)

Don't see a need (n=9)

No barriers (n=8)

Doing other activities instead (n=7)

Transportation/location (n=5)

Lack of concern from leadership (n=4)

Question: Is there anything else you would like to share with the people who run the Carolina Clear program? (n=399)

Response Categories:

Need for More Information / Awareness / Outreach (n=103)

Category Examples: "Please continue to share information", "Just received post card that made me aware of survey", "unaware of it - needs more PR"

Praise / Appreciation / Positive Feedback (n=94)

Category Examples: "Great program", "Thank you for taking the time and effort to bring this to my attention", "Keep up the good work!"

Environmental Concerns / Observations (n=64)

Category Examples: "Litter on roadsides have a tremendous impact!", "People in general have negative and positive impact. Large industries have an even larger impact both negative and can be positive", "I think runoff from farm pesticides may contribute and be the easiest to correct"

Requests for Courses / Programs / Assistance (n=49)

Category Examples: "I'm interested in the courses that are available. I never knew they existed or I would have taken advantage of them. It's some very useful information.", "Info on Rain Barrel's and making more accessible in our area", "I would Love, love love two water barrels to collect rain water for my plants and chickens."

General Comments / Miscellaneous (n=48)

Category Examples: "I'm doing my part to protect waterways by reducing pollution and improving garden management.", "Good luck in educating the public!", "Clean water is important"

Suggestions for Improved Outreach Tools (n=41)

Category Examples: "More signs close to waterway entrances like public boat landings", "I am active on social media and do tend to apply what useful things I see there. Make it funny (as the commercials are) and people are more likely to share.", "Clear explanations of opportunities in our local area would allow us to be more involved"

Summary

This survey was conducted to better understand how residents view issues related to water quality. A secondary aim of this study was to determine the extent to which educational materials are reaching and impacting South Carolinians. There were two primary groups of respondents in this audience: those familiar with Carolina Clear's marketing and/or educational materials, and those who were unaware of the program's information or resources. The majority of survey respondents fell into the latter group, as they were unfamiliar with Carolina Clear's initiatives.

Several survey items assessed respondents' knowledge of sources affecting water quality in South Carolina's waterways. Generally, most respondents identified both individual behaviors (i.e., littering, bacteria from septic systems and household waste, and use of fertilizers) and community-level issues (i.e., stormwater runoff, sediment/erosion, and bacteria from nuisance wildlife) impacting water quality. The top issue identified was stormwater runoff. Additionally many identified individual behaviors as impacting water quality. It is essential to understand the extent to which they recognize their own actions as contributing to water quality issues. Most survey respondents acknowledged that their actions have a direct impact on water quality and were willing to change their behavior, if needed. The vast majority agreed that there is a link between quality of life in their community and water quality. Taken together, these responses demonstrate that the importance of water quality is known and there is a willingness to engage in learning more about how to protect waterways in South Carolina.

Previous media campaigns did not seem to reach a significant number of people in the six regions. Most respondents did not recall seeing a billboard or commercial from the past three media campaigns. Respondents indicated they would like to receive information via e-newsletter or email from Carolina Clear. Social media and the Carolina Clear website were also selected, rounding out the top three online methods. Many still prefer direct mail, printed newspapers, or some type of printed materials. In the last item of the survey, respondents suggested using existing community groups and organizations to target sharing information to reach a broader audience, such as outreach to schools from elementary to colleges, garden clubs, the South Carolina Department of Natural Resources (DNR), libraries, and local community events and businesses.

Approximately one-third of respondents are not participating in community activities that promote water stewardship. Almost half of those who are participating engage in water recreational activities. Almost another one-third acknowledged they participated in litter clean-up. The top three barriers cited for participating in water stewardship activities were: not knowing where to participate, how to participate, or having the time required. This revelation connects back to the finding that communicating with residents could improve participation, particularly if this is done in an easy-to-follow, concrete manner using one or more of the methods identified earlier.

Most respondents had not previously encountered or utilized educational materials, including courses and printed/online Clemson Extension resources. Reported course participation was sporadic, while most people indicated they used the Yards and Erosion resources available. About two-thirds of those who used the materials indicated that they would recommend or share the resources with others and/or use the resource again. When respondents were asked what changed as a result of what they learned, most cited a change in their behavior.

The Transtheoretical Model of Change can be used to identify educational goals and focal activities for individuals and communities at any given stage. For example, most of the respondents in this study were unaware of the Carolina Clear program. This means that many are in the precontemplation or contemplation stage based on what they took away from encountering the material used in the survey project. For those in the precontemplation phase, the focus should be on developing awareness, making water quality issues visible in the community, providing basic facts, and making water quality a personally relevant issue. For those in the contemplation stage, issues affecting water quality should be discussed along with the benefits and different options for taking action. The people who are already using Carolina Clear materials need support for their newly learned or adopted behaviors. This support should be provided by helping implement what they have learned, helping them troubleshoot barriers, and offering reminders to reinforce their application. They likely require a different type of outreach that resembles coaching, mentoring, or technical assistance.

In conclusion, this study provides relevant information about respondents' perspectives to guide strategic planning and outreach. Findings suggest that respondents are primed for taking an active role in combating water quality issues. Outreach efforts must be congruent with meeting people where they are in the various stages of change to support a continuum of behavioral adjustments.

Appendices

Report appendices contain the statewide results alongside results for each of the six regional consortia. [Appendix A](#) contains results for Region 1, Ashley Cooper Stormwater Education Consortium. [Appendix B](#) contains results for Region 2, Lowcountry Stormwater Partners. [Appendix C](#) contains results for Region 3, Coastal Waccamaw Stormwater Education Consortium. [Appendix D](#) contains results for Region 4, Florence/Darlington Stormwater Partners. [Appendix E](#) contains results for Region 5, Anderson and Pickens Counties Stormwater Partners. [Appendix F](#) contains results for Region 6, Sumter Stormwater Solutions.

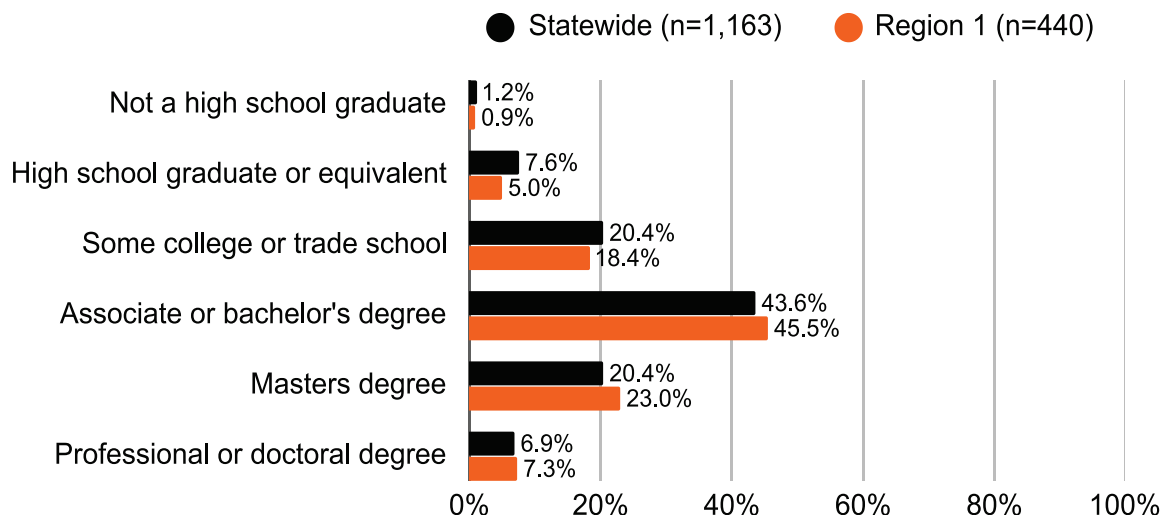
Appendix A

Region 1: Ashley Cooper Stormwater Education Consortium

This appendix provides a comparison of the statewide survey results and the results from survey participants residing in an area serviced by Ashley Cooper Stormwater Education Consortium. This area includes the following counties: Berkeley, Charleston, and Dorchester.

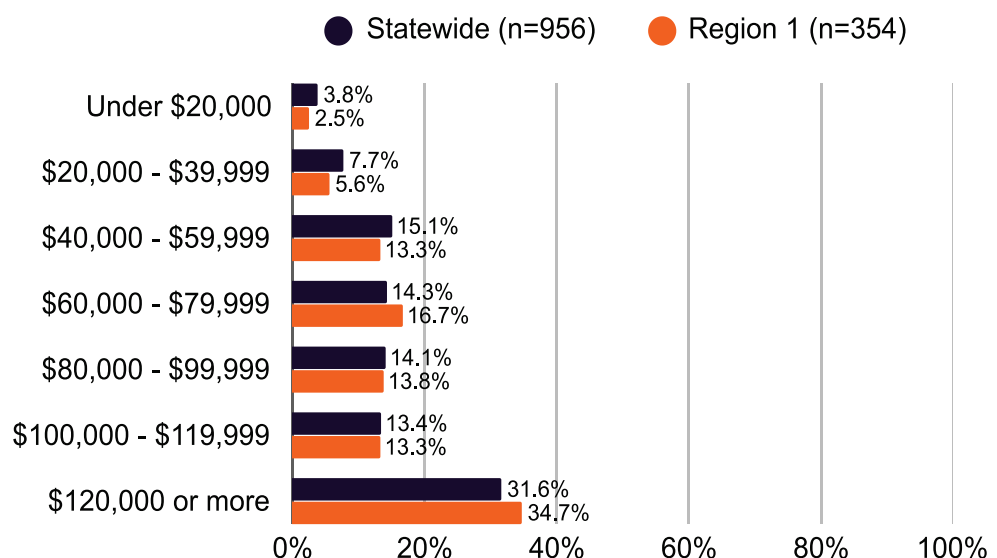
Question: What is the highest level of education you have completed?

Figure A1: Highest Education Completed



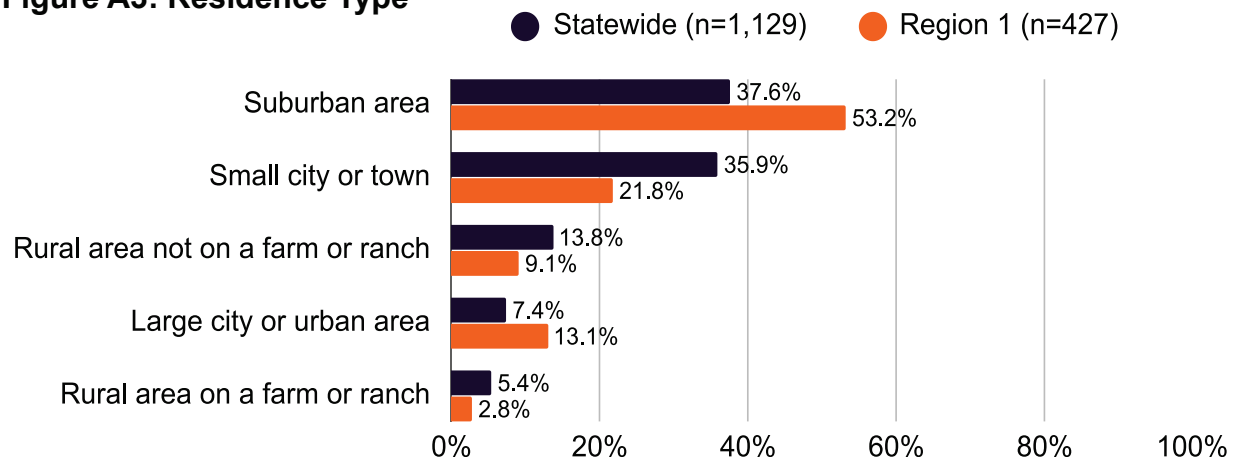
Question: Which of these categories best describes your total household income before taxes last year?

Figure A2: Income Level



Question: How do you classify your place of residence?

Figure A3: Residence Type



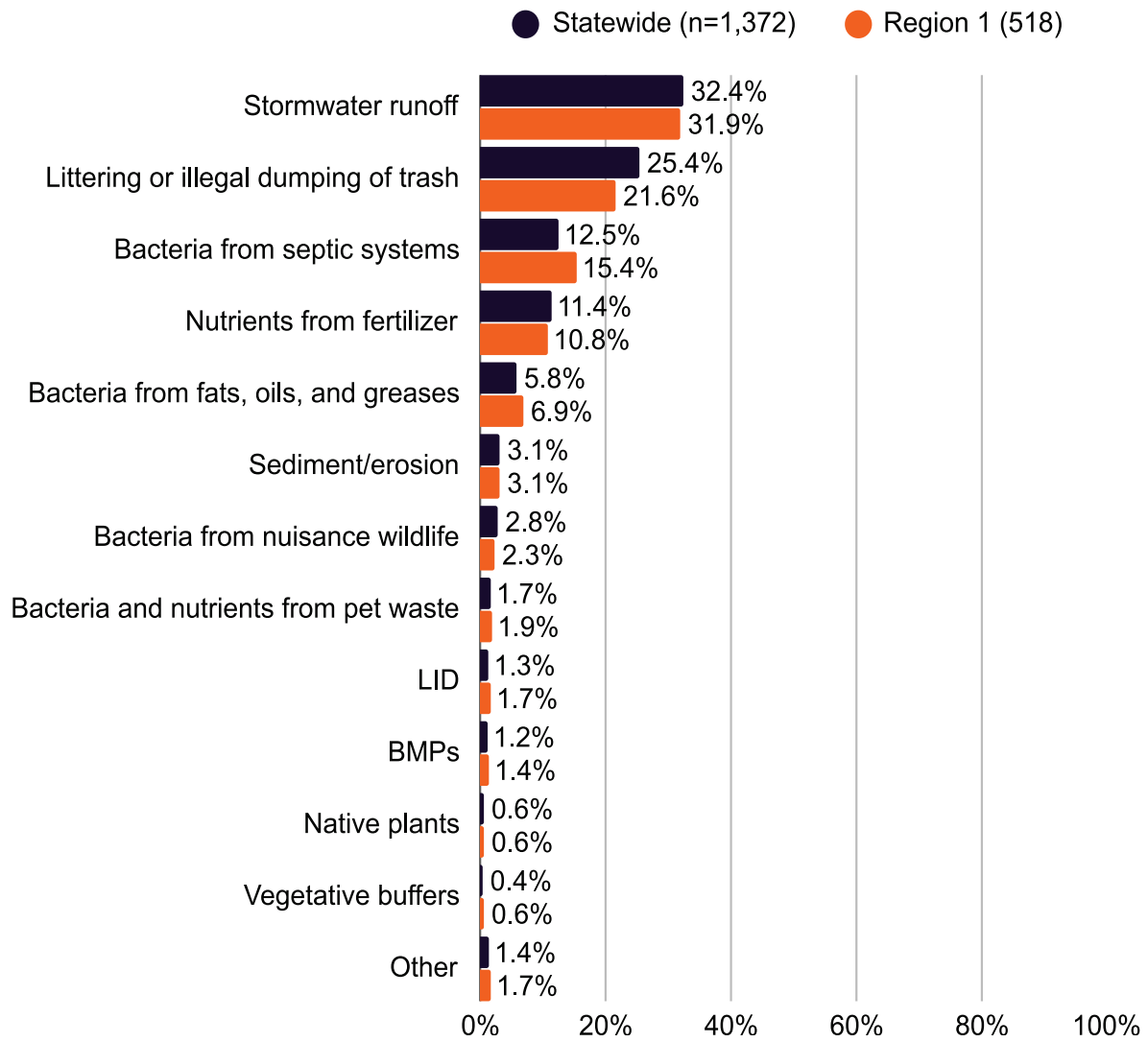
Question: Carolina Clear is interested in your thoughts on water quality in our South Carolina waterways. Please select all of the sources you believe affect our South Carolina waterways.

Table A1: Sources Impacting South Carolina Waterways

Source	Statewide Yes (n=1,403)	Statewide Yes (%)	Region 1 Yes (n=529)	Region 1 Yes (%)
Littering or illegal dumping of trash	1,280	91.2%	489	92.4%
Stormwater runoff	1,210	86.2%	472	89.2%
Bacteria from septic systems	1,149	81.9%	452	85.4%
Nutrients from fertilizer	1,115	79.5%	435	82.2%
Bacteria from fats, oils, and greases	1,086	77.4%	413	78.1%
Bacteria and nutrients from pet waste	916	65.3%	369	69.8%
Sediment/erosion	916	65.3%	351	66.4%
Bacteria from nuisance wildlife	863	61.5%	338	63.9%
Low Impact Development (LID)	474	33.8%	190	35.9%
Best Management Practices (BMPs)	470	33.5%	195	36.9%
Native plants	382	27.2%	162	30.6%
Vegetative buffers	345	24.6%	156	29.5%
None	8	0.6%	3	0.6%
Other	121	8.6%	43	8.1%

Question: Which one of these sources do you believe has the biggest impact on South Carolina waterways?

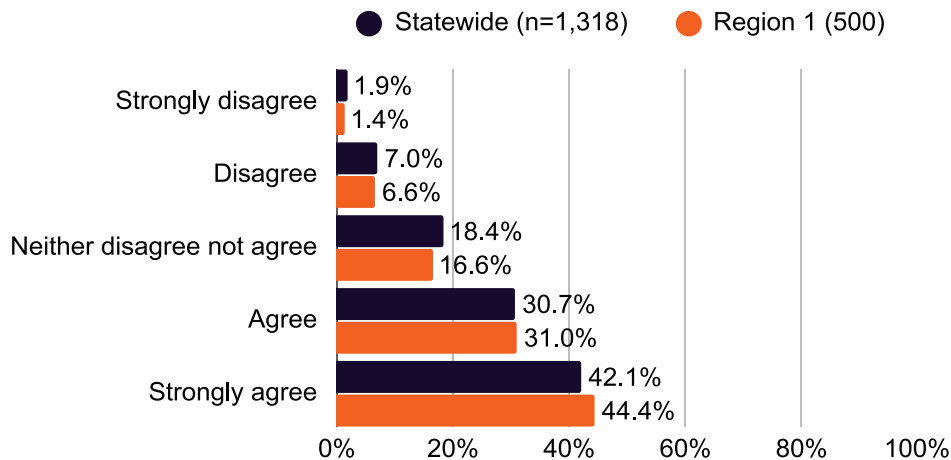
Figure A4: Source with Biggest Impact on South Carolina Waterways



Question: Please indicate your level of agreement or disagreement with the statements below.

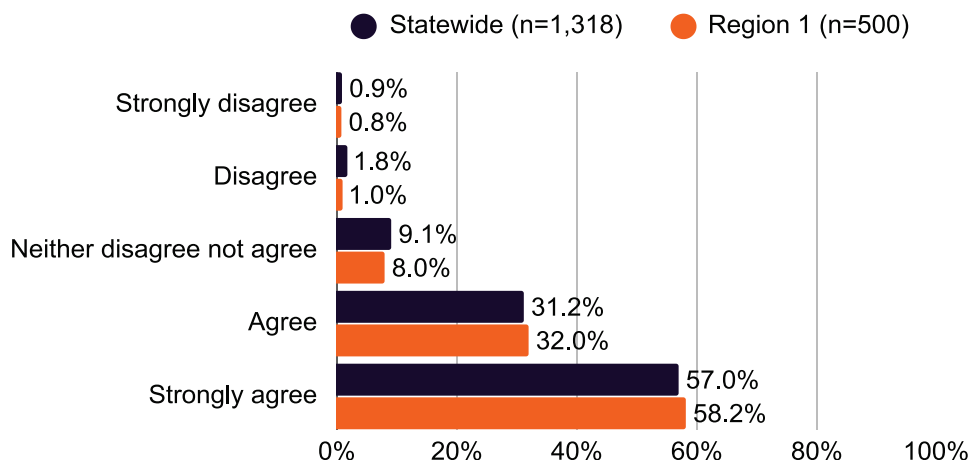
My actions have an impact on water quality.

Figure A5: Actions Impacting Water Quality



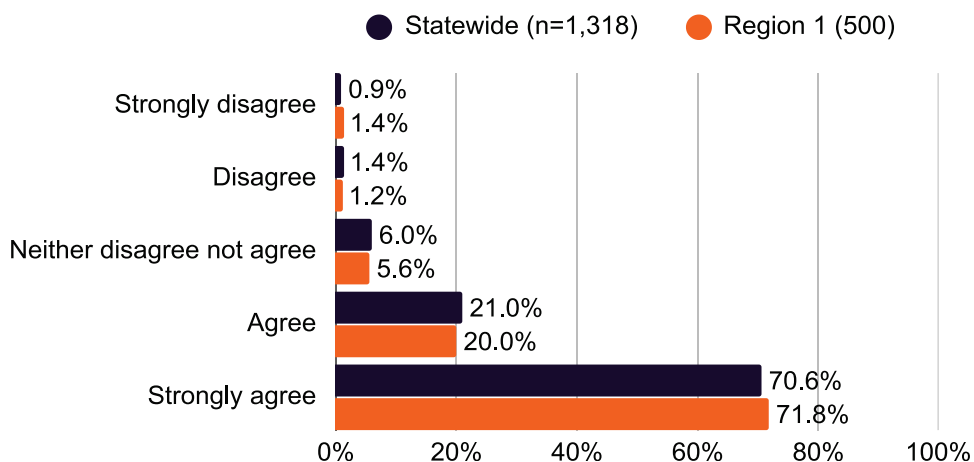
I would be willing to change my behavior if I knew what I was doing harmed water quality.

Figure A6: Willingness to Change Behavior



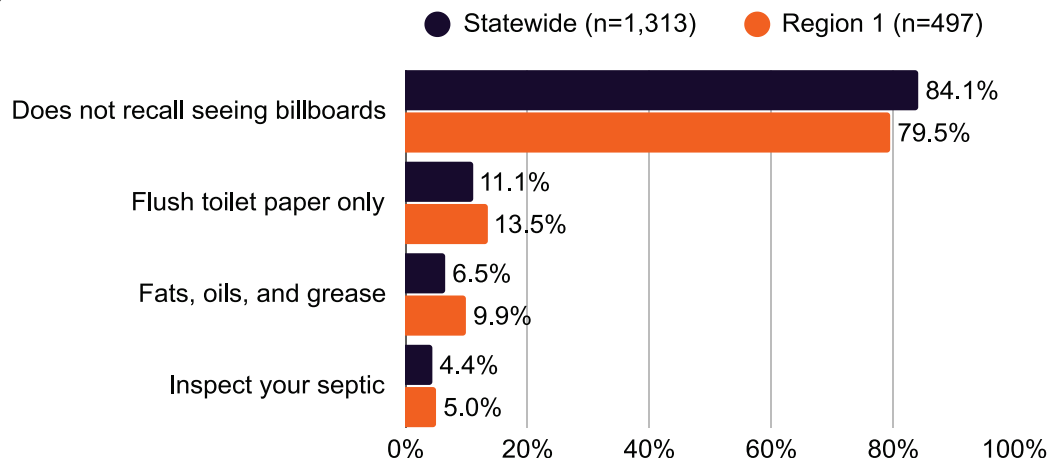
The quality of life in my community depends on good water quality in local streams, rivers, and lakes.

Figure A7: Quality of Life Depends on Water Quality



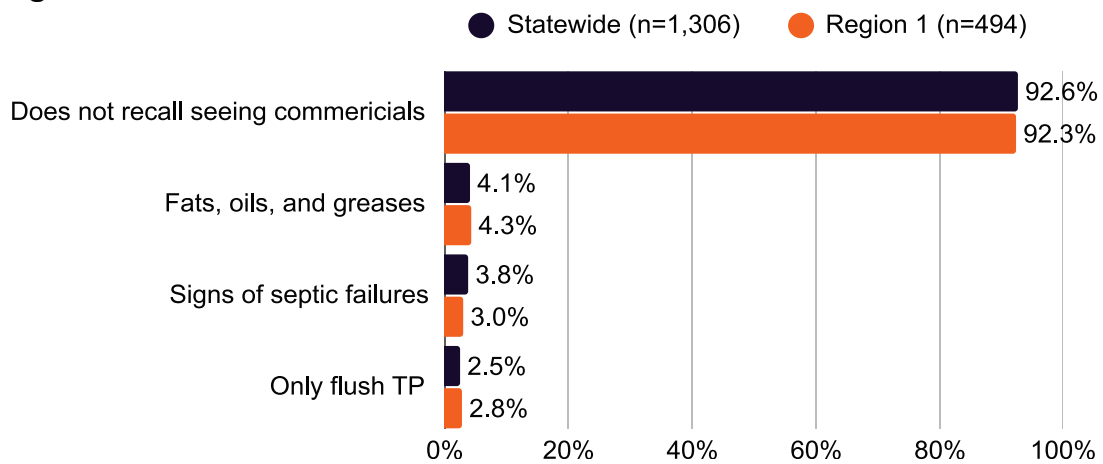
Question: Please select all the billboards you have seen.

Figure A8: Billboards Recalled



Question: Please select all the commercials you have seen.

Figure A9: Commercials Recalled



Question: Please select all the in-person, online, and hybrid courses you have engaged with.

Table A2: Course Content Engaged

Courses	Statewide Yes (n=1,205)	Statewide Yes (%)	Region 1 Yes (n=491)	Region 1 Yes (%)
Did not complete listed courses	1,190	98.8%	450	91.6%
Master Rain Gardener	27	2.2%	12	2.4%
Salt Marsh Short Course	23	1.9%	7	1.4%
Carolina Yards	21	1.7%	7	1.4%
Living Shorelines	17	1.4%	5	1.0%
Certified Erosion Prevention and Sediment Control Inspector	17	1.4%	7	1.4%
Seasonal Pond Management	16	1.3%	4	0.8%
Master Pond Manager	16	1.3%	3	0.6%
Be Well Informed	13	1.1%	2	0.4%
Certified Stormwater Plan Reviewer	13	1.1%	4	0.8%
Post-Construction BMP Inspector	11	0.9%	3	0.6%
Dam Ownership	9	0.7%	2	0.4%

Question: Please select all of the printed or online Clemson Extension resources you have used from the list below.

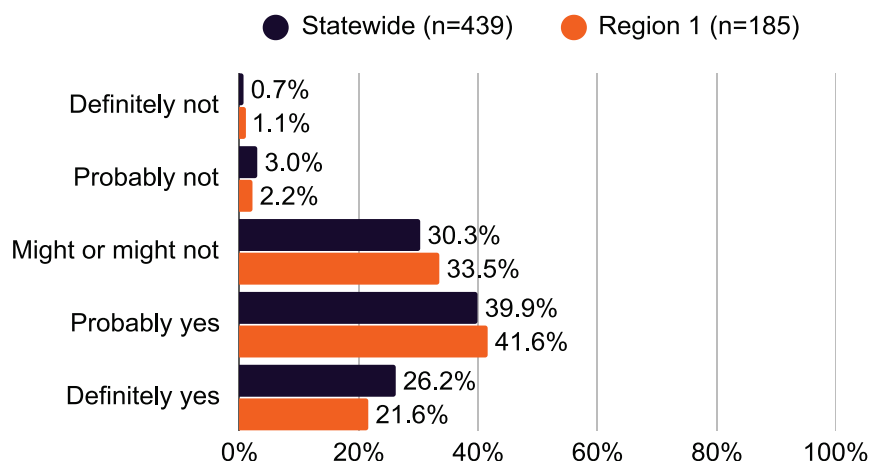
Table A3: Resources Used

Resources	Statewide Yes (n=1,284)	Statewide Yes (%)	Region 1 Yes (n=486)	Region 1 Yes (%)
Did not use listed resources	1,044	81.3%	391	80.5%
Yards & Erosion: Carolina Yards, gardening, native plants, trees and groundcovers, compost, stream bank repair, yard maintenance, wet or erosion issues, rain barrels, rain gardens, rainwater harvesting	165	12.9%	71	14.6%
Ponds: management, treatment, siting, vegetative buffers, floating wetlands, fish, nuisance plants, dyes, dredging, liming, fertilizing, pH, quality	86	6.7%	28	5.8%
Litter & Erosion: litter/tarps, maintaining ditches, storm drains, lot erosion control measures	54	4.2%	21	4.3%
Bacteria Contamination: pet waste, nuisance wildlife, fats, oils, and greases, septic systems	52	4.0%	20	4.1%
Farms & Youth: BMPs for farming, dams, 4H20 camps	30	2.3%	7	1.4%

Question: Please tell us how likely you are to...

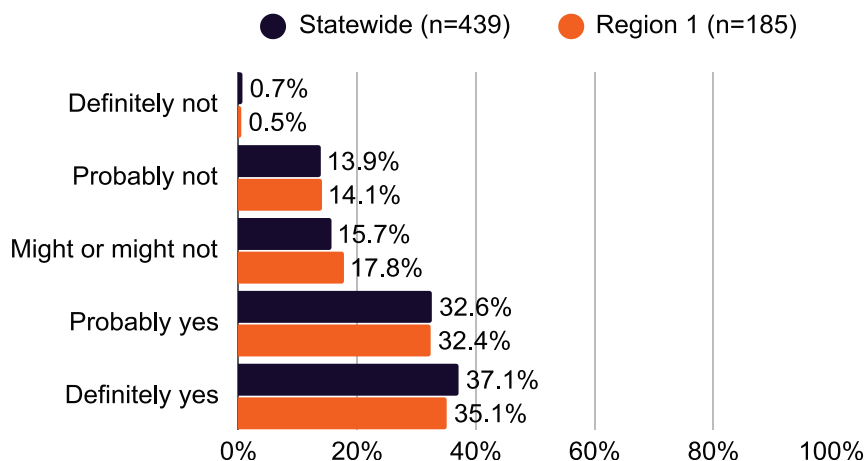
Recommend the courses or resources you used to others.

Figure A10: Recommend Resources to Others



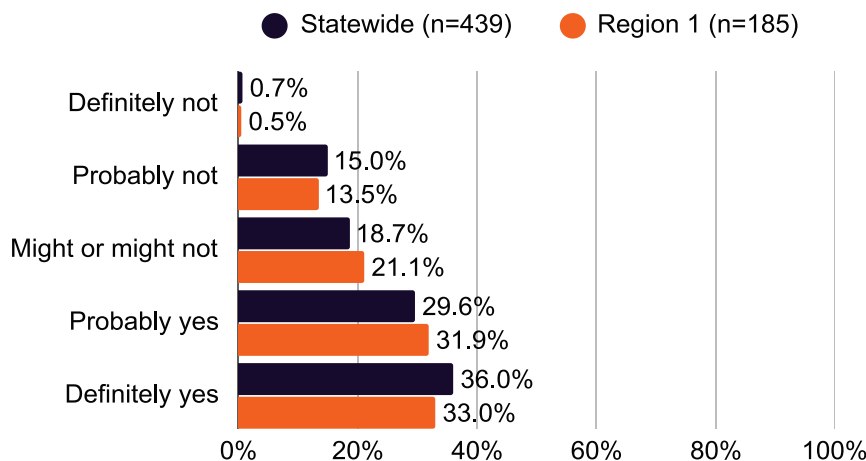
Share the information you obtained with others.

Figure A11: Share Information with Others



Use these resources again in the future.

Figure A12: Use Resource Again



Question: Carolina Clear is interested in where and how you obtained our information and resources regarding water quality. Please select all that apply.

Table A4: Method of Access to Carolina Clear Information

Method	Statewide Yes (n=446)	Statewide Yes (%)	Region 1 Yes (n=188)	Region 1 Yes (%)
Website	117	26.2%	43	22.9%
Direct mail or printed newspaper	109	24.4%	49	26.1%
E-newsletter or email	102	22.9%	40	21.3%
Social media	85	19.1%	39	20.7%
Printed materials	79	17.7%	33	17.6%
Friends, family, or word of mouth	64	14.3%	29	15.4%
Clemson office/venue	63	14.1%	26	13.8%
Festival or local event	47	10.5%	15	8.0%
Farmer's market	42	9.4%	17	9.0%
County or government administrative building	31	7.0%	13	6.9%
YouTube	26	5.8%	6	3.2%
Library	26	5.8%	11	5.9%
Television commercial	23	5.2%	4	2.1%
Phone	19	4.3%	6	3.2%
Streaming or radio	18	4.0%	7	3.7%
Professional service provider	17	3.8%	7	3.7%
Billboard	0	0.0%	0	0.0%
Other	35	7.8%	21	11.2%

Question: How do you prefer to receive our information and resources regarding water quality?

Table A5: Preferred Method to Receive Carolina Clear Information

Method	Statewide Yes (n=1,237)	Statewide Yes (%)	Region 1 Yes (n=467)	Region 1 Yes (%)
E-newsletter or email	703	56.8%	264	56.5%
Direct mail or printed newspaper	395	31.9%	148	31.7%
Social media	366	29.5%	155	33.2%
Website	329	26.6%	121	25.9%
Printed materials	328	26.5%	120	25.7%
Television commercial	264	21.3%	107	22.9%
Billboard	176	14.2%	78	16.7%
Festival or local event	166	13.4%	61	13.1%
YouTube	150	12.1%	70	15.0%
Streaming or radio	146	11.8%	76	16.3%
Farmer's market	137	11.1%	59	12.6%
Friends, family, or word of mouth	104	8.4%	43	9.2%
Library	97	7.8%	43	9.2%
Clemson office/venue	66	5.3%	24	5.1%
Professional service provider	42	3.4%	21	4.5%
County or government administrative building	41	3.3%	18	3.9%
Phone	14	1.1%	3	0.6%
Other	23	1.9%	11	2.4%

Question: Carolina Clear is interested in your involvement in community activities that promote water stewardship. Please select all of the activities which you have participated in from the list below.

Table A6: Involvement with Water Stewardship Activities

Activity	Statewide Yes (n=1,230)	Statewide Yes (%)	Region 1 Yes (n=466)	Region 1 Yes (%)
Water recreational activities (boating, kayaking, fishing, swimming, visiting a South Carolina waterway)	598	48.6%	241	51.7%
Does not participate in listed activities	410	33.3%	129	27.7%
Litter clean up (beach or river sweep)	388	31.5%	166	36.1%
Community or volunteer conservation activity	168	13.7%	79	17.0%
Native plant/rain barrel/rain garden installation as part of a community project	122	9.9%	64	13.7%
Stream bank or shoreline repair/planting	61	5.0%	32	6.9%
Rain barrel sale	60	4.9%	31	6.7%
Other	52	4.2%	21	4.5%

Question: Select the barriers that prevent you from participating in water stewardship activities.

Table A7: Barriers to Participating in Water Stewardship Activities

Activity	Statewide Yes (n=1,221)	Statewide Yes (%)	Region 1 Yes (n=464)	Region 1 Yes (%)
Not knowing where to participate	670	54.9%	259	55.8%
Understanding how to participate	515	42.2%	193	41.6%
Time required	497	40.7%	182	39.2%
Having physical or health limitations	342	28.0%	124	26.7%
Not knowing others who participate	228	18.7%	85	18.3%
Cost	170	13.9%	62	13.4%
Lacking the necessary materials or equipment to participate	154	12.6%	54	11.6%
Not knowing why my participation is important	132	10.8%	40	8.6%
Restrictions from local government or governing body (ex. Homeowner's Association)	66	5.4%	23	5.0%
Other	84	6.9%	36	7.8%

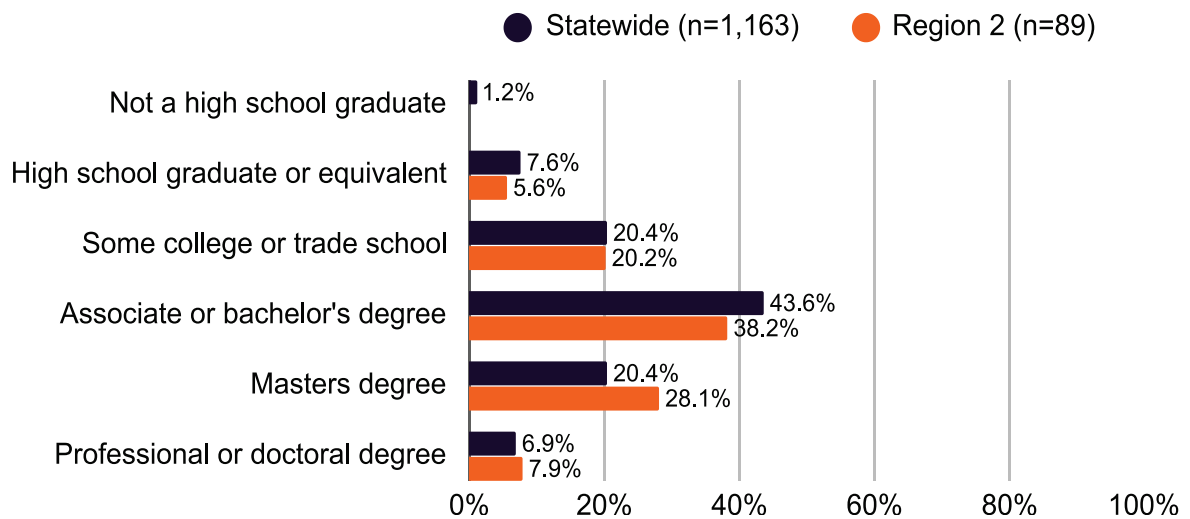
Appendix B

Region 2: Lowcountry Stormwater Partners

This appendix provides a comparison of the statewide survey results and the results from survey participants residing in an area serviced by Lowcountry Stormwater Partners. This area includes Beaufort County.

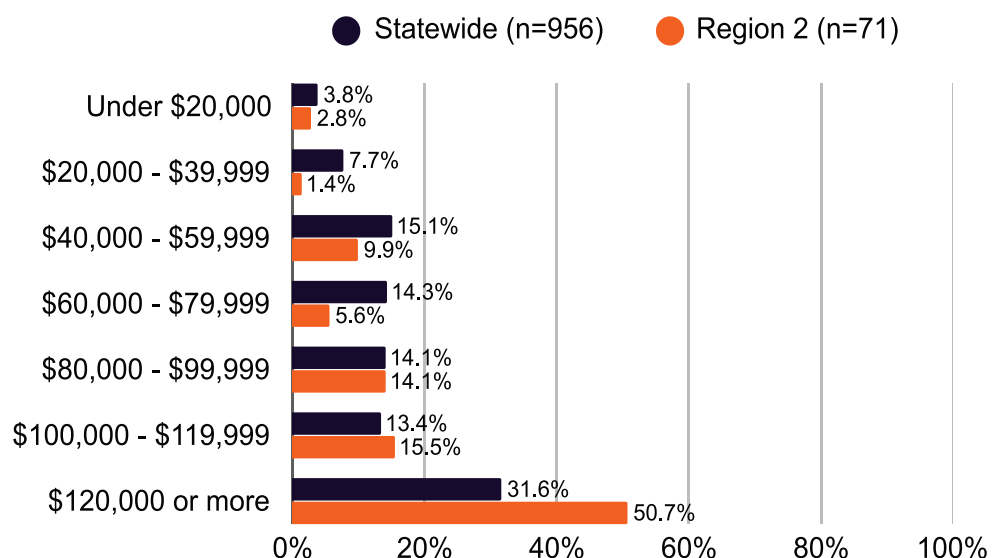
Question: What is the highest level of education you have completed?

Figure B1: Highest Education Completed



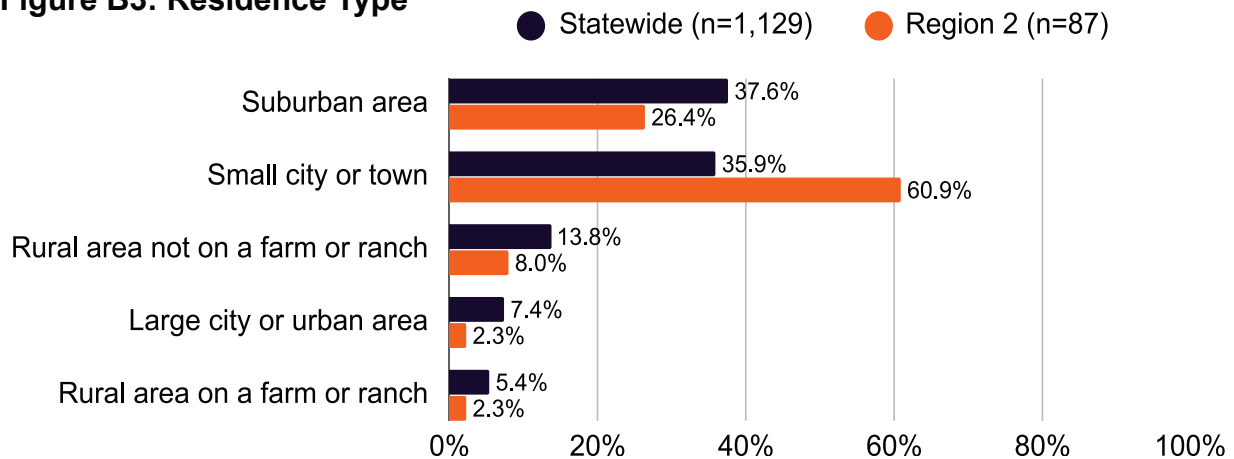
Question: Which of these categories best describes your total household income before taxes last year?

Figure B2: Income Level



Demographics: Residence type

Figure B3: Residence Type



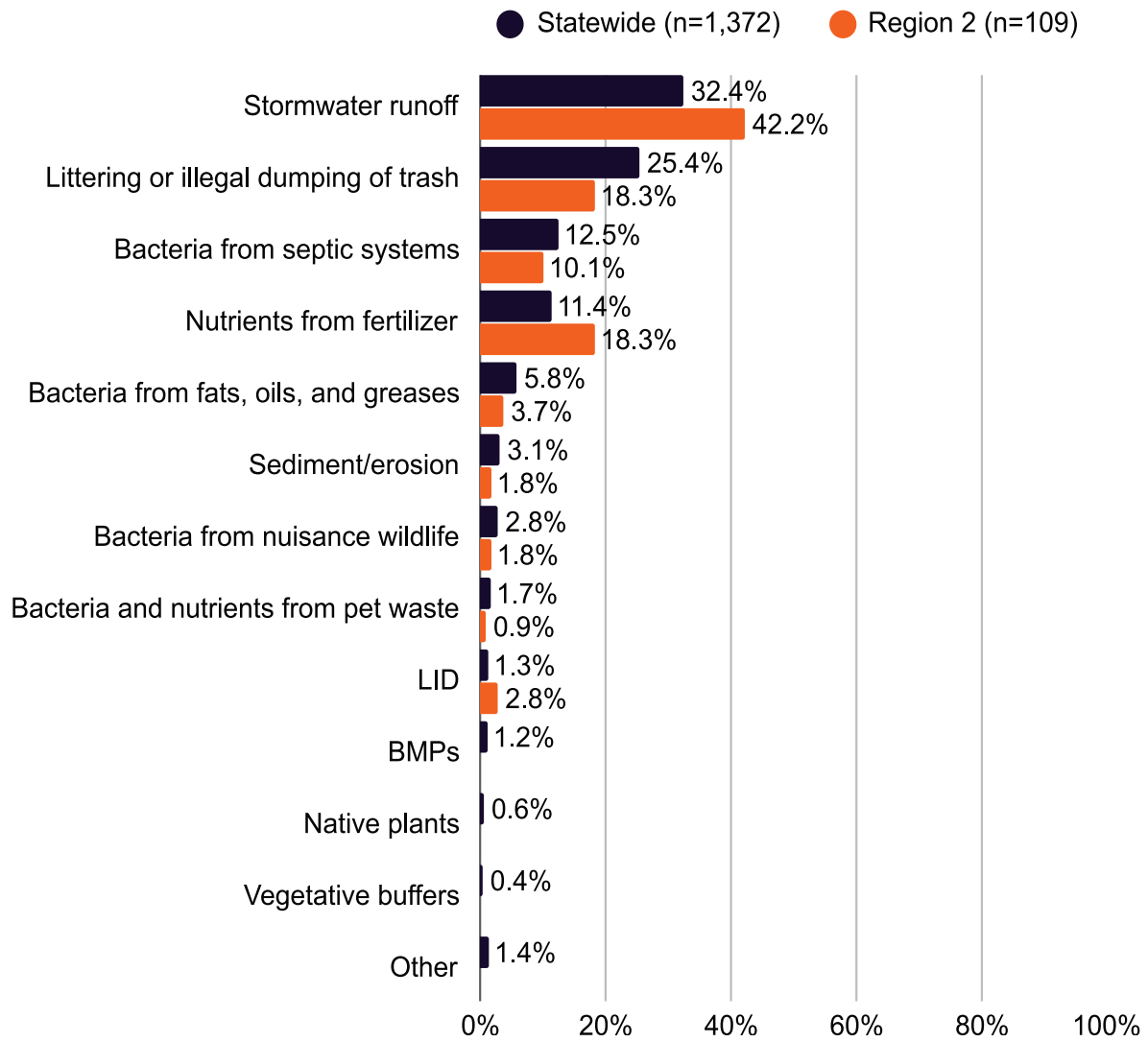
Question: Carolina Clear is interested in your thoughts on water quality in our South Carolina waterways. Please select all of the sources you believe affect our South Carolina waterways.

Table B1: Sources Impacting South Carolina Waterways

Source	Statewide Yes (n=1,403)	Statewide Yes (%)	Region 2 Yes (n=113)	Region 2 Yes (%)
Littering or illegal dumping of trash	1,280	91.2%	103	91.2%
Stormwater runoff	1,210	86.2%	97	85.8%
Bacteria from septic systems	1,149	81.9%	92	81.4%
Nutrients from fertilizer	1,115	79.5%	97	85.8%
Bacteria from fats, oils, and greases	1,086	77.4%	82	72.6%
Bacteria and nutrients from pet waste	916	65.3%	68	60.2%
Sediment/erosion	916	65.3%	76	67.3%
Bacteria from nuisance wildlife	863	61.5%	66	58.4%
Low Impact Development (LID)	474	33.8%	36	31.9%
Best Management Practices (BMPs)	470	33.5%	42	37.2%
Native plants	382	27.2%	34	30.1%
Vegetative buffers	345	24.6%	22	19.5%
None	8	0.6%	0	0.0%
Other	121	8.6%	13	11.5%

Question: Which one of these sources do you believe has the biggest impact on South Carolina waterways?

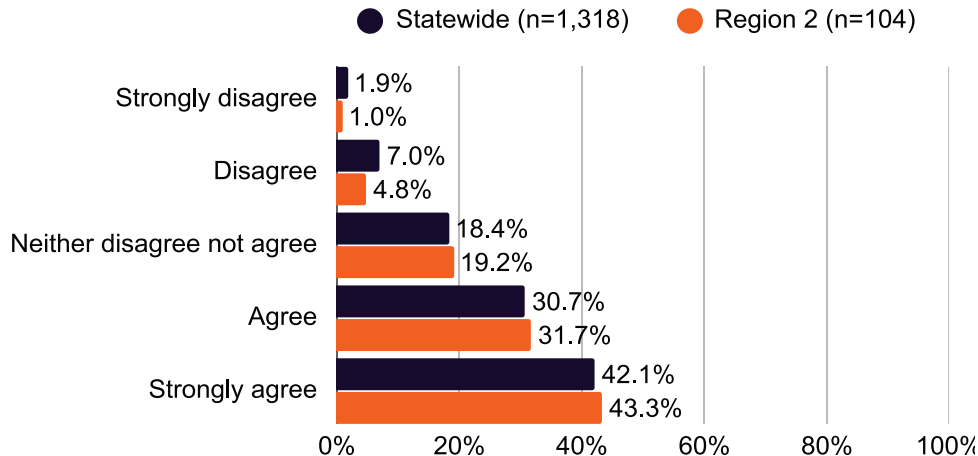
Figure B4: Source with Biggest Impact on South Carolina Waterways



Question: Please indicate your level of agreement or disagreement with the statements below.

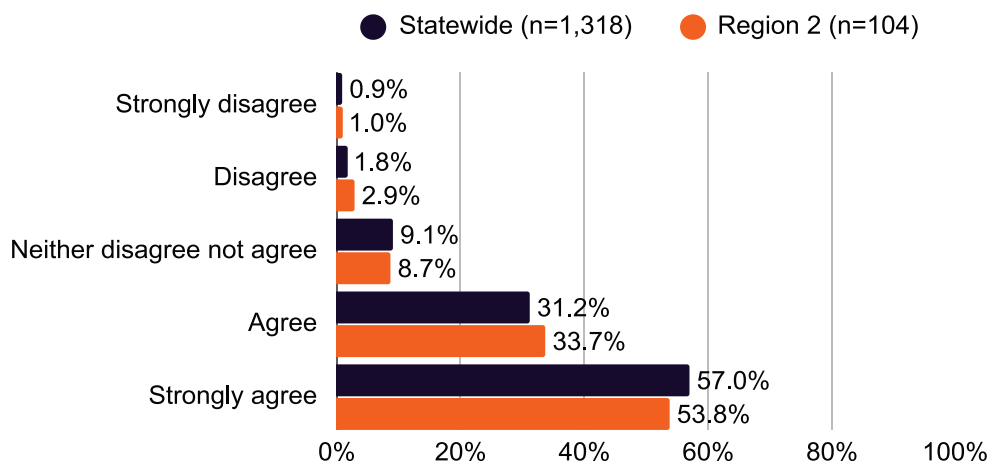
My actions have an impact on water quality.

Figure B5: Actions Impacting Water Quality



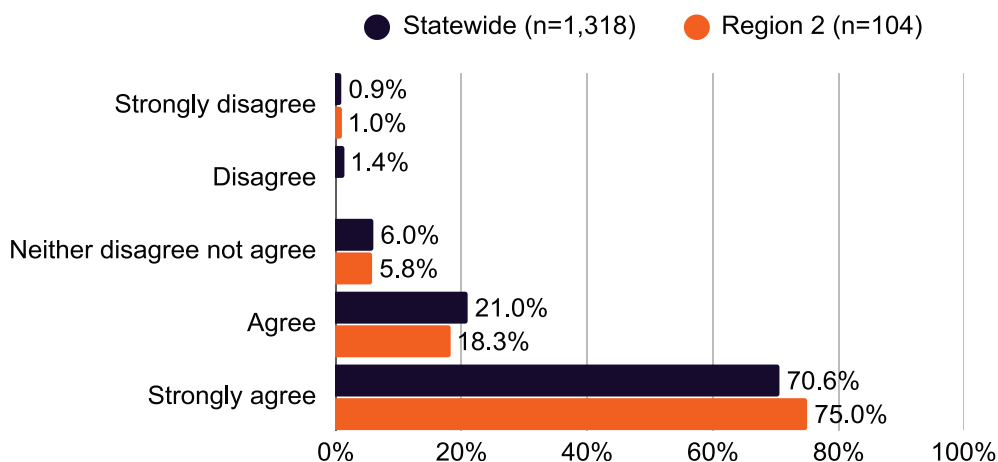
I would be willing to change my behavior if I knew what I was doing harmed water quality.

Figure B6: Willingness to Change Behavior



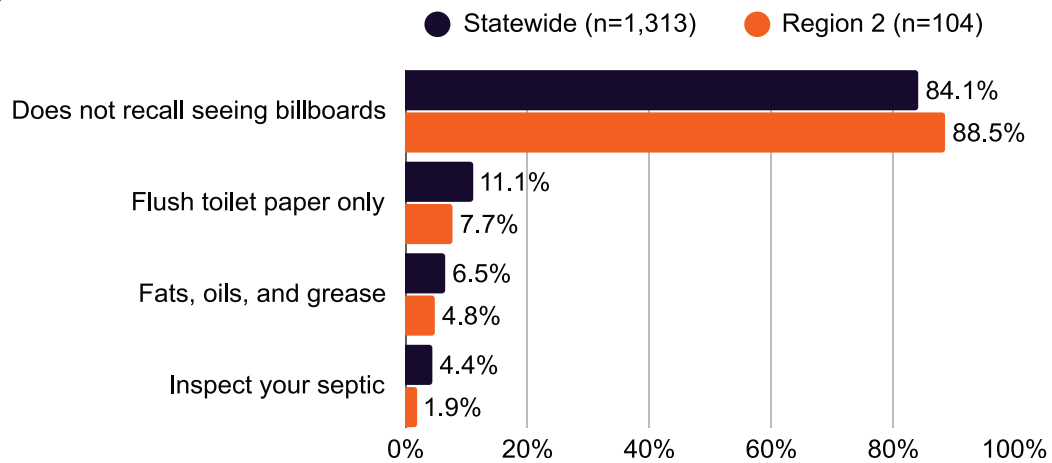
The quality of life in my community depends on good water quality in local streams, rivers, and lakes.

Figure B7: Quality of Life Depends on Water Quality



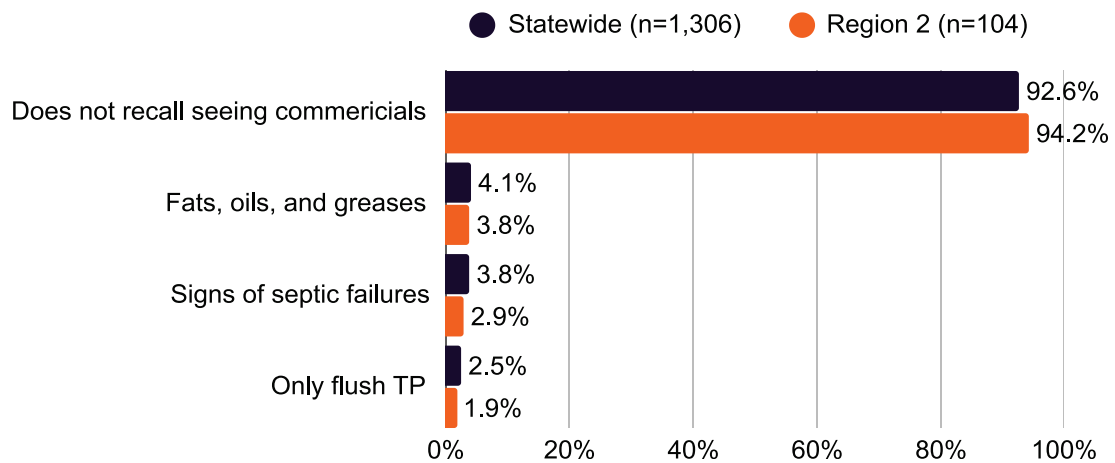
Question: Please select all the billboards you have seen.

Figure B8: Billboards Recalled



Question: Please select all the commercials you have seen.

Figure B9: Commercials Recalled



Question: Please select all the in-person, online, and hybrid courses you have engaged with.

Table B2: Course Content Engaged

Courses	Statewide Yes (n=1,205)	Statewide Yes (%)	Region 2 Yes (n=102)	Region 2 Yes (%)
Did not complete listed courses	1,190	98.8%	94	92.2%
Master Rain Gardener	27	2.2%	3	2.9%
Salt Marsh Short Course	23	1.9%	3	2.9%
Carolina Yards	21	1.7%	2	2.0%
Living Shorelines	17	1.4%	4	3.9%
Certified Erosion Prevention and Sediment Control Inspector	17	1.4%	0	0.0%
Seasonal Pond Management	16	1.3%		
Master Pond Manager	16	1.3%	2	2.0%
Be Well Informed	13	1.1%	1	1.0%
Certified Stormwater Plan Reviewer	13	1.1%	0	0.0%
Post-Construction BMP Inspector	11	0.9%	0	0.0%
Dam Ownership	9	0.7%	0	0.0%

Question: Please select all of the printed or online Clemson Extension resources you have used from the list below.

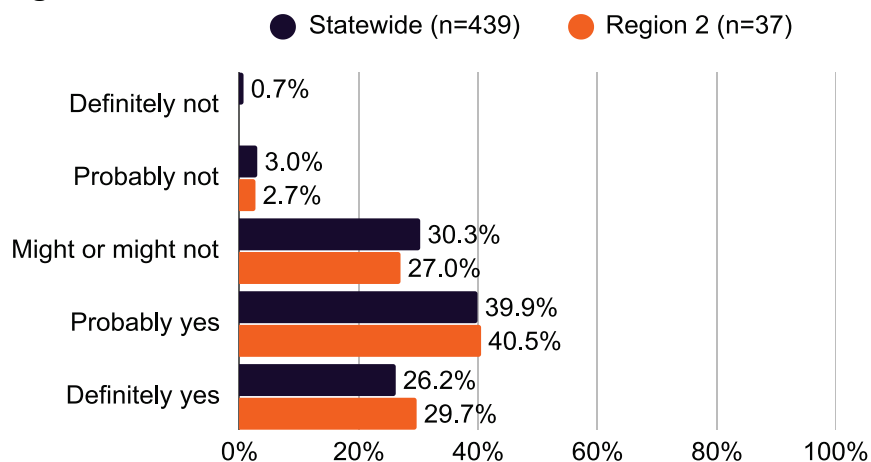
Table B3: Resources Used

Resources	Statewide Yes (n=1,284)	Statewide Yes (%)	Region 2 Yes (n=102)	Region 2 Yes (%)
Did not use listed resources	1,044	81.3%	81	79.4%
Yards & Erosion: Carolina Yards, gardening, native plants, trees and groundcovers, compost, stream bank repair, yard maintenance, wet or erosion issues, rain barrels, rain gardens, rainwater harvesting	165	12.9%	15	14.7%
Ponds: management, treatment, siting, vegetative buffers, floating wetlands, fish, nuisance plants, dyes, dredging, liming, fertilizing, pH, quality	86	6.7%	10	9.8%
Litter & Erosion: litter/tarps, maintaining ditches, storm drains, lot erosion control measures	54	4.2%	1	1.0%
Bacteria Contamination: pet waste, nuisance wildlife, fats, oils, and greases, septic systems	52	4.0%	2	2.0%
Farms & Youth: BMPs for farming, dams, 4H20 camps	30	2.3%	0	0.0%

Question: Please tell us how likely you are to...

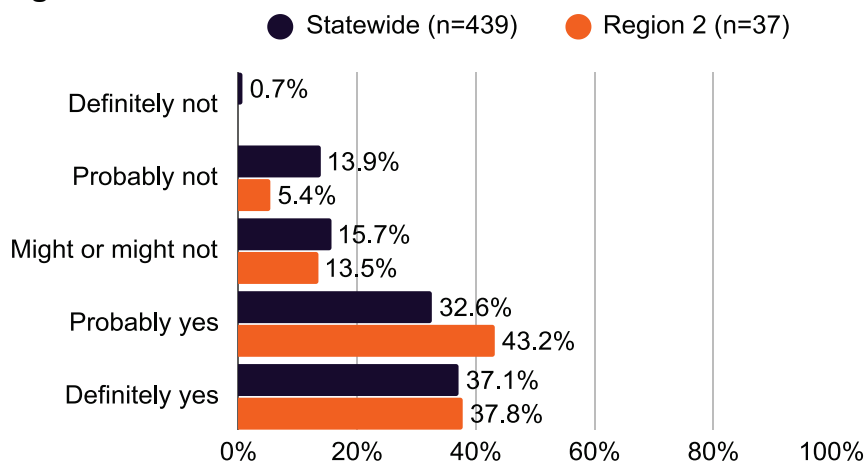
Recommend the courses or resources you used to others.

Figure B10: Recommend Resources to Others



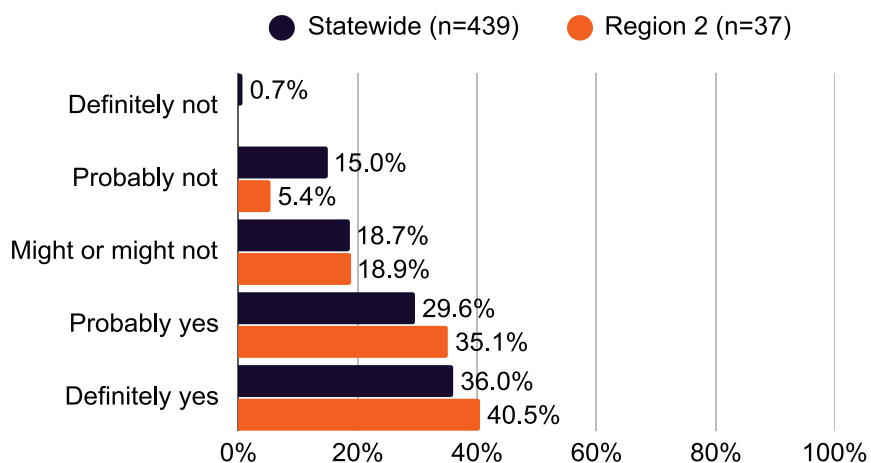
Share the information you obtained with others.

Figure B11: Share Information with Others



Use these resources again in the future.

Figure B12: Use Resource Again



Question: Carolina Clear is interested in where and how you obtained our information and resources regarding water quality. Please select all that apply.

Table B4: Method of Access to Carolina Clear Information

Method	Statewide Yes (n=446)	Statewide Yes (%)	Region 2 Yes (n=37)	Region 2 Yes (%)
Website	117	26.2%	13	35.1%
Direct mail or printed newspaper	109	24.4%	6	16.2%
E-newsletter or email	102	22.9%	12	32.4%
Social media	85	19.1%	7	18.9%
Printed materials	79	17.7%	8	21.6%
Friends, family, or word of mouth	64	14.3%	8	21.6%
Clemson office/venue	63	14.1%	2	5.4%
Festival or local event	47	10.5%	8	21.6%
Farmer's market	42	9.4%	5	13.5%
County or government administrative building	31	7.0%	3	8.1%
YouTube	26	5.8%	2	5.4%
Library	26	5.8%	2	5.4%
Television commercial	23	5.2%	3	8.1%
Phone	19	4.3%	2	5.4%
Streaming or radio	18	4.0%	1	2.7%
Professional service provider	17	3.8%	0	0.0%
Billboard	0	0.0%	0	0.0%
Other	35	7.8%	1	2.7%

Question: How do you prefer to receive our information and resources regarding water quality?

Table B5: Preferred Method to Receive Carolina Clear Information

Method	Statewide Yes (n=1,237)	Statewide Yes (%)	Region 2 Yes (n=97)	Region 2 Yes (%)
E-newsletter or email	703	56.8%	69	71.1%
Direct mail or printed newspaper	395	31.9%	35	36.1%
Social media	366	29.5%	16	16.5%
Website	329	26.6%	26	26.8%
Printed materials	328	26.5%	27	27.8%
Television commercial	264	21.3%	15	15.5%
Billboard	176	14.2%	5	5.2%
Festival or local event	166	13.4%	18	18.6%
YouTube	150	12.1%	10	10.3%
Streaming or radio	146	11.8%	6	6.2%
Farmer's market	137	11.1%	12	12.4%
Friends, family, or word of mouth	104	8.4%	10	10.3%
Library	97	7.8%	7	7.2%
Clemson office/venue	66	5.3%	6	6.2%
Professional service provider	42	3.4%	2	2.1%
County or government administrative building	41	3.3%	3	3.1%
Phone	14	1.1%	1	1.0%
Other	23	1.9%	1	1.0%

Question: Carolina Clear is interested in your involvement in community activities that promote water stewardship. Please select all of the activities which you have participated in from the list below.

Table B6: Involvement with Water Stewardship Activities

Activity	Statewide Yes (n=1,230)	Statewide Yes (%)	Region 2 Yes (n=96)	Region 2 Yes (%)
Water recreational activities (boating, kayaking, fishing, swimming, visiting a South Carolina waterway)	598	48.6%	50	52.1%
Does not participate in listed activities	410	33.3%	30	31.3%
Litter clean up (beach or river sweep)	388	31.5%	32	33.3%
Community or volunteer conservation activity	168	13.7%	14	14.6%
Native plant/rain barrel/rain garden installation as part of a community project	122	9.9%	5	5.2%
Stream bank or shoreline repair/planting	61	5.0%	4	4.2%
Rain barrel sale	60	4.9%	5	5.2%
Other	52	4.2%	1	1.0%

Question: Select the barriers that prevent you from participating in water stewardship activities.

Table B7: Barriers to Participating in Water Stewardship Activities

Activity	Statewide Yes (n=1,221)	Statewide Yes (%)	Region 2 Yes (n=95)	Region 2 Yes (%)
Not knowing where to participate	670	54.9%	49	51.6%
Understanding how to participate	515	42.2%	46	48.4%
Time required	497	40.7%	40	42.1%
Having physical or health limitations	342	28.0%	23	24.2%
Not knowing others who participate	228	18.7%	19	20.0%
Cost	170	13.9%	9	9.5%
Lacking the necessary materials or equipment to participate	154	12.6%	11	11.6%
Not knowing why my participation is important	132	10.8%	8	8.4%
Restrictions from local government or governing body (ex. Homeowner's Association)	66	5.4%	10	10.5%
Other	84	6.9%	4	4.2%

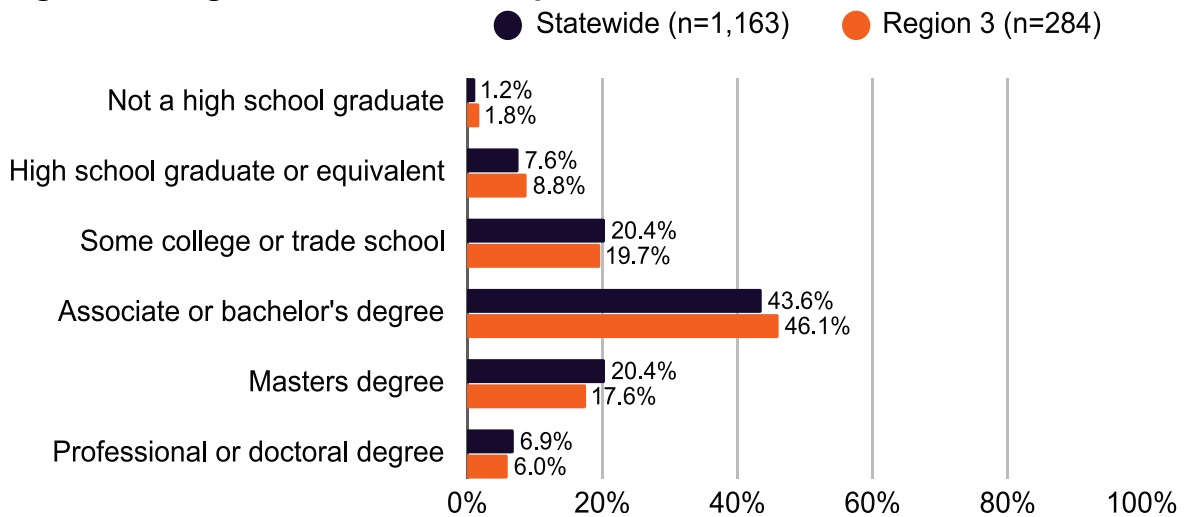
Appendix C

Region 3: Coastal Waccamaw Stormwater Education Consortium

This appendix provides a comparison of the statewide survey results and the results from survey participants residing in an area serviced by Coastal Waccamaw Stormwater Education Consortium. This area includes the following counties: Horry and Georgetown.

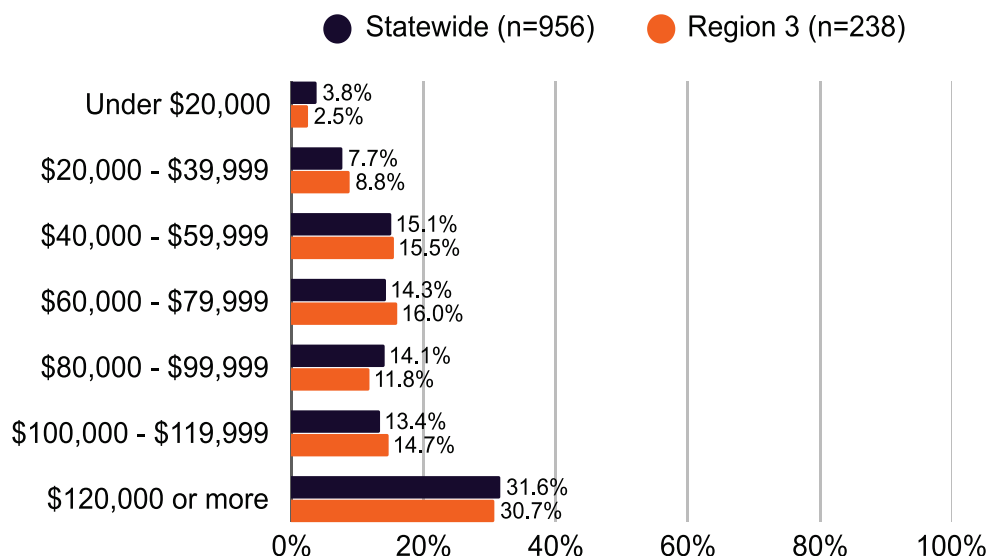
Question: What is the highest level of education you have completed?

Figure C1: Highest Education Completed



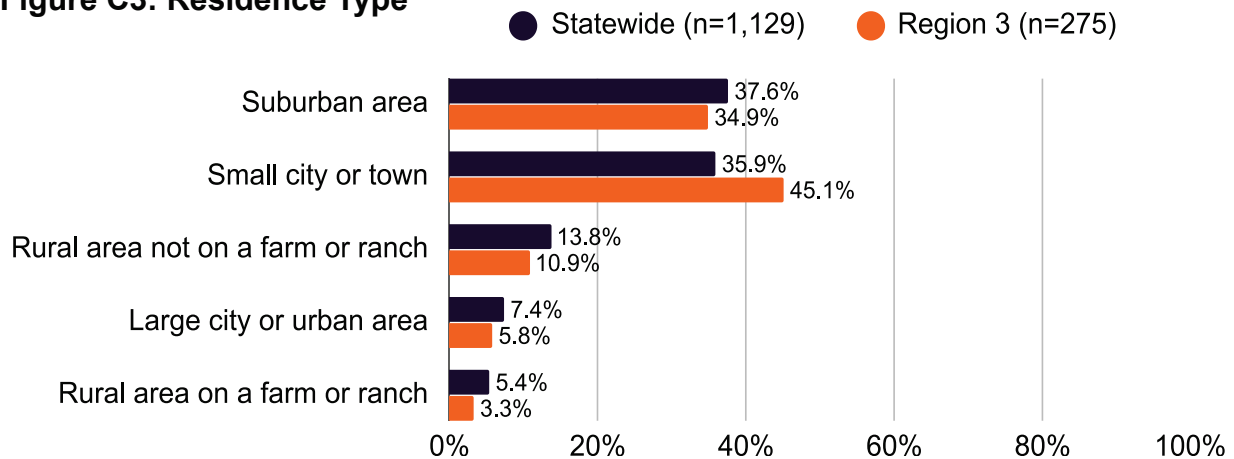
Question: Which of these categories best describes your total household income before taxes last year?

Figure C2: Income Level



Demographics: Residence type

Figure C3: Residence Type



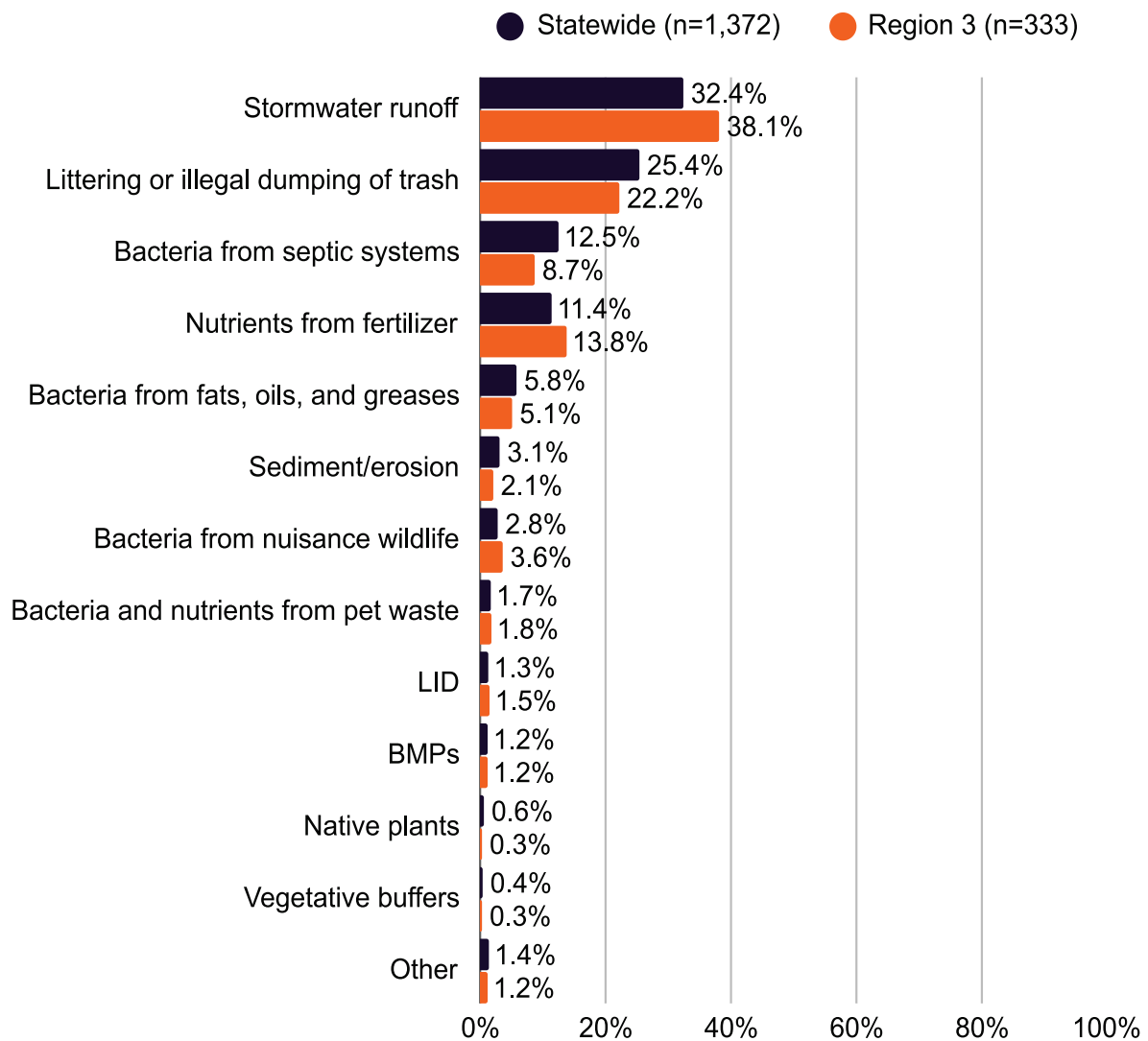
Question: Carolina Clear is interested in your thoughts on water quality in our South Carolina waterways. Please select all of the sources you believe affect our South Carolina waterways.

Table C1: Sources Impacting South Carolina Waterways

Source	Statewide Yes (n=1,403)	Statewide Yes (%)	Region 3 Yes (n=339)	Region 3 Yes (%)
Littering or illegal dumping of trash	1,280	91.2%	312	92.0%
Stormwater runoff	1,210	86.2%	305	90.0%
Bacteria from septic systems	1,149	81.9%	276	81.4%
Nutrients from fertilizer	1,115	79.5%	273	80.5%
Bacteria from fats, oils, and greases	1,086	77.4%	258	76.1%
Bacteria and nutrients from pet waste	916	65.3%	230	67.8%
Sediment/erosion	916	65.3%	228	67.3%
Bacteria from nuisance wildlife	863	61.5%	215	63.4%
Low Impact Development (LID)	474	33.8%	114	33.6%
Best Management Practices (BMPs)	470	33.5%	102	30.1%
Native plants	382	27.2%	76	22.4%
Vegetative buffers	345	24.6%	77	22.7%
None	8	0.6%	2	0.6%
Other	121	8.6%	30	8.8%

Question: Which one of these sources do you believe has the biggest impact on South Carolina waterways?

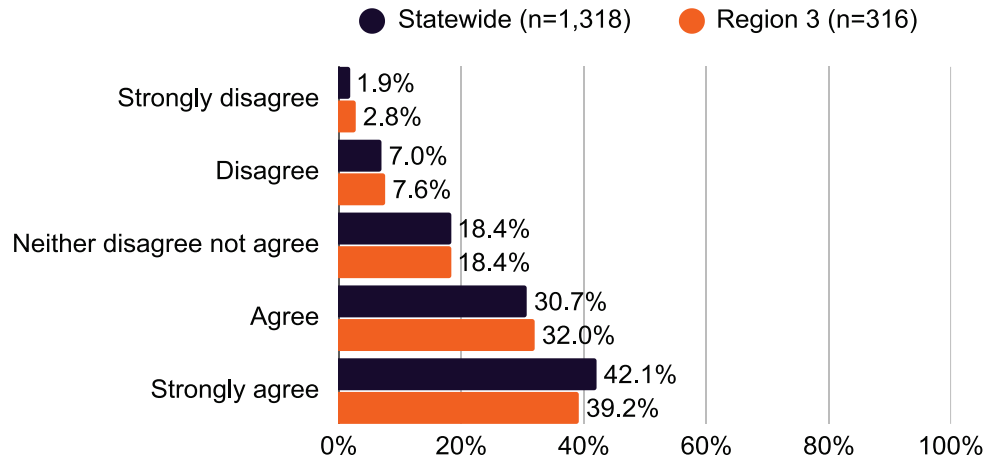
Figure C4: Source with Biggest Impact on South Carolina Waterways



Question: Please indicate your level of agreement or disagreement with the statements below.

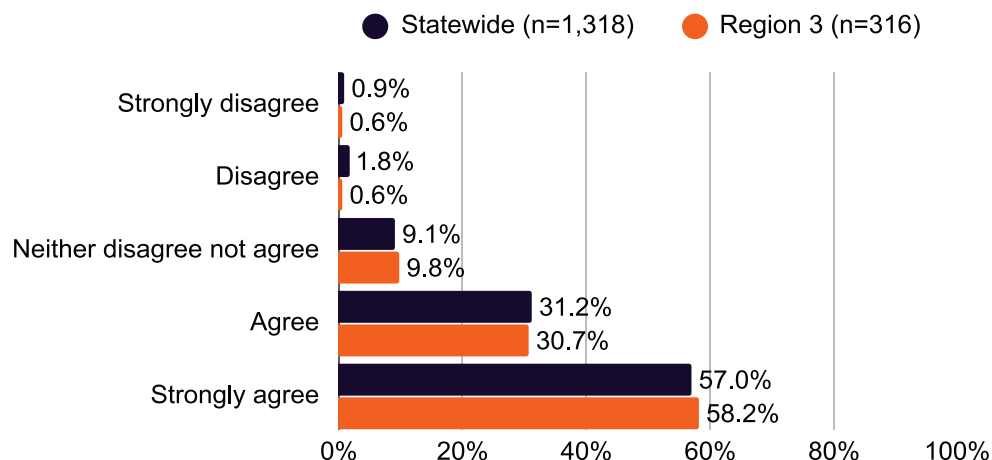
My actions have an impact on water quality.

Figure C5: Actions Impacting Water Quality



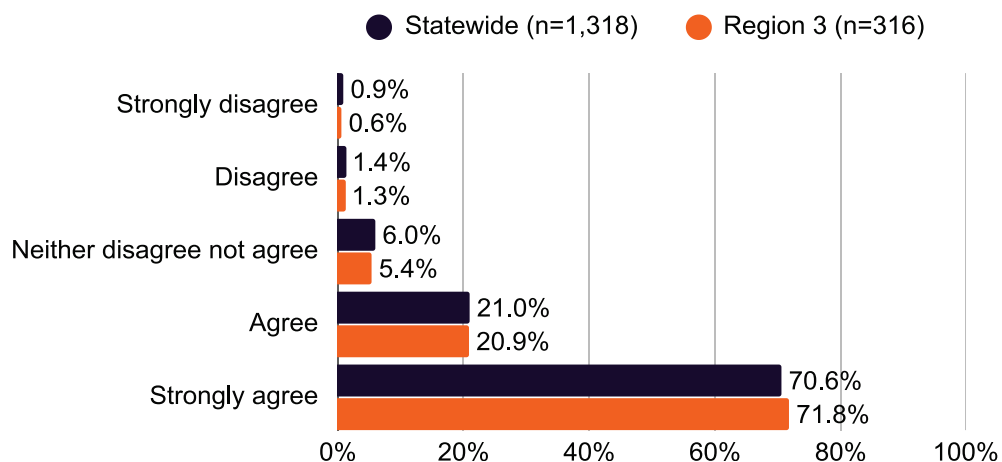
I would be willing to change my behavior if I knew what I was doing harmed water quality.

Figure C6: Willingness to Change Behavior



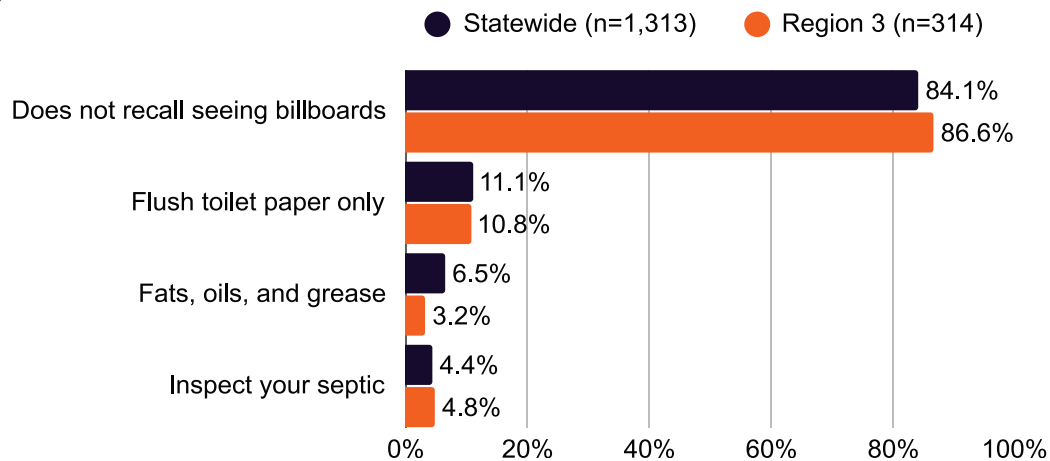
The quality of life in my community depends on good water quality in local streams, rivers, and lakes.

Figure C7: Quality of Life Depends on Water Quality



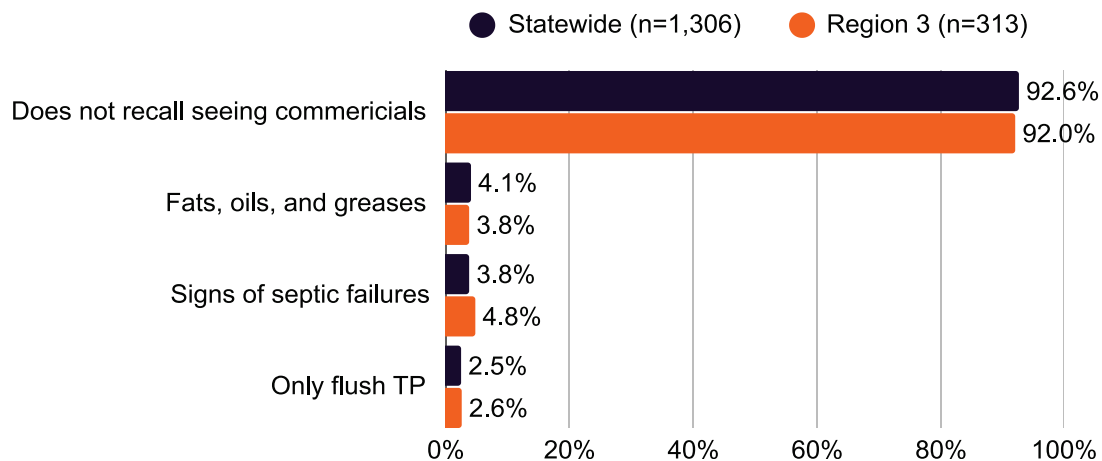
Question: Please select all the billboards you have seen.

Figure C8: Billboards Recalled



Question: Please select all the commercials you have seen.

Figure C9: Commercials Recalled



Question: Please select all the in-person, online, and hybrid courses you have engaged with.

Table C2: Course Content Engaged

Courses	Statewide Yes (n=1,205)	Statewide Yes (%)	Region 3 Yes (n=311)	Region 3 Yes (%)
Did not complete listed courses	1,190	98.8%	291	93.6%
Master Rain Gardener	27	2.2%	4	1.3%
Salt Marsh Short Course	23	1.9%	6	1.9%
Carolina Yards	21	1.7%	6	1.9%
Living Shorelines	17	1.4%	6	1.9%
Certified Erosion Prevention and Sediment Control Inspector	17	1.4%	4	1.3%
Seasonal Pond Management	16	1.3%	7	2.3%
Master Pond Manager	16	1.3%	4	1.3%
Be Well Informed	13	1.1%	2	0.6%
Certified Stormwater Plan Reviewer	13	1.1%	4	1.3%
Post-Construction BMP Inspector	11	0.9%	3	1.0%
Dam Ownership	9	0.7%	2	0.6%

Question: Please select all of the printed or online Clemson Extension resources you have used from the list below.

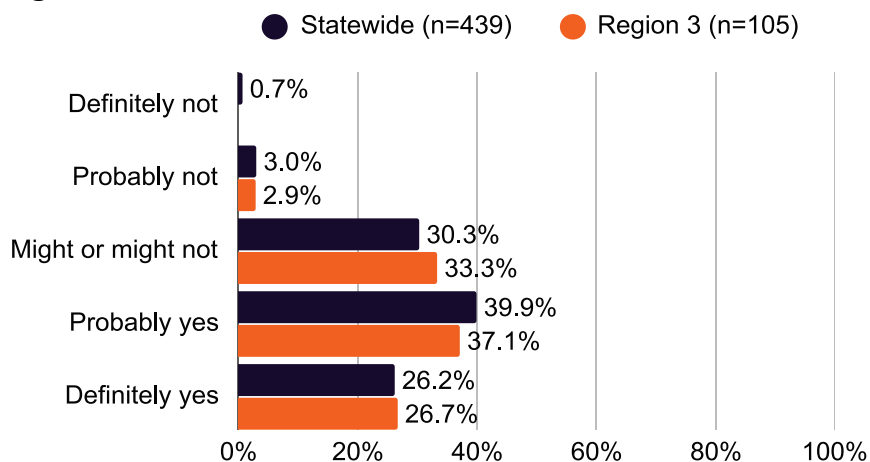
Table C3: Resources Used

Resources	Statewide Yes (n=1,284)	Statewide Yes (%)	Region 3 Yes (n=309)	Region 3 Yes (%)
Did not use listed resources	1,044	81.3%	250	80.9%
Yards & Erosion: Carolina Yards, gardening, native plants, trees and groundcovers, compost, stream bank repair, yard maintenance, wet or erosion issues, rain barrels, rain gardens, rainwater harvesting	165	12.9%	37	12.0%
Ponds: management, treatment, siting, vegetative buffers, floating wetlands, fish, nuisance plants, dyes, dredging, liming, fertilizing, pH, quality	86	6.7%	25	8.1%
Litter & Erosion: litter/tarps, maintaining ditches, storm drains, lot erosion control measures	54	4.2%	12	3.9%
Bacteria Contamination: pet waste, nuisance wildlife, fats, oils, and greases, septic systems	52	4.0%	11	3.6%
Farms & Youth: BMPs for farming, dams, 4H20 camps	30	2.3%	8	2.6%

Question: Please tell us how likely you are to...

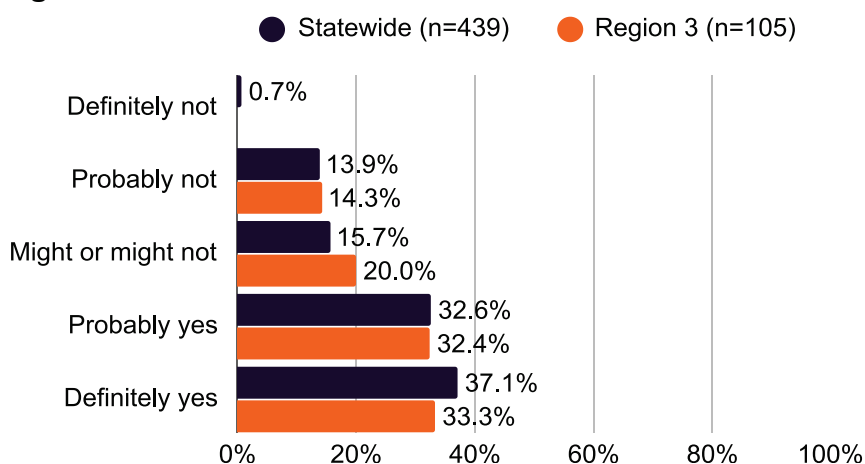
Recommend the courses or resources you used to others.

Figure C10: Recommend Resources to Others



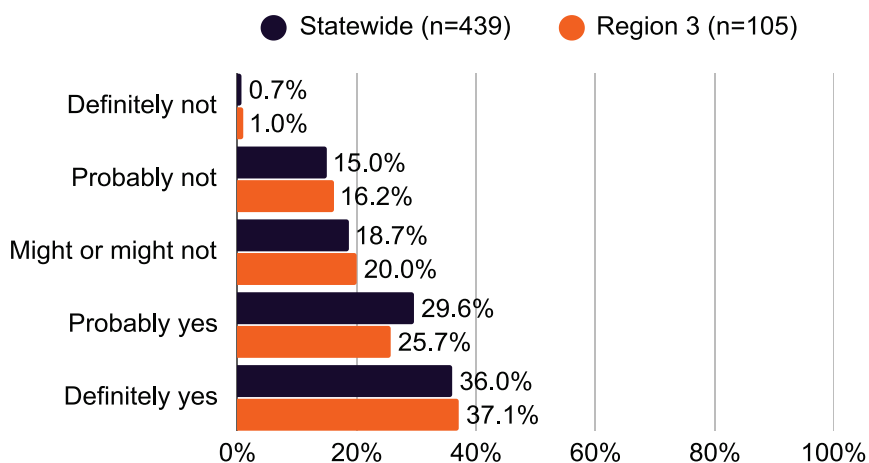
Share the information you obtained with others.

Figure C11: Share Information with Others



Use these resources again in the future.

Figure C12: Use Resource Again



Question: Carolina Clear is interested in where and how you obtained our information and resources regarding water quality. Please select all that apply.

Table C4: Method of Access to Carolina Clear Information

Method	Statewide Yes (n=446)	Statewide Yes (%)	Region 3 Yes (n=107)	Region 3 Yes (%)
Website	117	26.2%	32	29.9%
Direct mail or printed newspaper	109	24.4%	32	29.9%
E-newsletter or email	102	22.9%	23	21.5%
Social media	85	19.1%	20	18.7%
Printed materials	79	17.7%	20	18.7%
Friends, family, or word of mouth	64	14.3%	17	15.9%
Clemson office/venue	63	14.1%	12	11.2%
Festival or local event	47	10.5%	11	10.3%
Farmer's market	42	9.4%	7	6.5%
County or government administrative building	31	7.0%	3	2.8%
YouTube	26	5.8%	8	7.5%
Library	26	5.8%	5	4.7%
Television commercial	23	5.2%	8	7.5%
Phone	19	4.3%	6	5.6%
Streaming or radio	18	4.0%	4	3.7%
Professional service provider	17	3.8%	8	7.5%
Billboard	0	0.0%	0	0.0%
Other	35	7.8%	6	5.6%

Question: How do you prefer to receive our information and resources regarding water quality?

Table C5: Preferred Method to Receive Carolina Clear Information

Method	Statewide Yes (n=1,237)	Statewide Yes (%)	Region 3 Yes (n=296)	Region 3 Yes (%)
E-newsletter or email	703	56.8%	177	59.8%
Direct mail or printed newspaper	395	31.9%	101	34.1%
Social media	366	29.5%	87	29.4%
Website	329	26.6%	90	30.4%
Printed materials	328	26.5%	82	27.7%
Television commercial	264	21.3%	64	21.6%
Billboard	176	14.2%	35	11.8%
Festival or local event	166	13.4%	49	16.6%
YouTube	150	12.1%	32	10.8%
Streaming or radio	146	11.8%	32	10.8%
Farmer's market	137	11.1%	28	9.5%
Friends, family, or word of mouth	104	8.4%	23	7.8%
Library	97	7.8%	20	6.8%
Clemson office/venue	66	5.3%	11	3.7%
Professional service provider	42	3.4%	9	3.0%
County or government administrative building	41	3.3%	7	2.4%
Phone	14	1.1%	3	1.0%
Other	23	1.9%	3	1.0%

Question: Carolina Clear is interested in your involvement in community activities that promote water stewardship. Please select all of the activities which you have participated in from the list below.

Table C6: Involvement with Water Stewardship Activities

Activity	Statewide Yes (n=1,230)	Statewide Yes (%)	Region 3 Yes (n=295)	Region 3 Yes (%)
Water recreational activities (boating, kayaking, fishing, swimming, visiting a South Carolina waterway)	598	48.6%	140	47.5%
Does not participate in listed activities	410	33.3%	101	34.2%
Litter clean up (beach or river sweep)	388	31.5%	100	33.9%
Community or volunteer conservation activity	168	13.7%	37	12.5%
Native plant/rain barrel/rain garden installation as part of a community project	122	9.9%	28	9.5%
Stream bank or shoreline repair/planting	61	5.0%	9	3.1%
Rain barrel sale	60	4.9%	7	2.4%
Other	52	4.2%	14	4.7%

Question: Select the barriers that prevent you from participating in water stewardship activities.

Table C7: Barriers to Participating in Water Stewardship Activities

Activity	Statewide Yes (n=1,221)	Statewide Yes (%)	Region 3 Yes (n=294)	Region 3 Yes (%)
Not knowing where to participate	670	54.9%	171	58.2%
Understanding how to participate	515	42.2%	123	41.8%
Time required	497	40.7%	119	40.5%
Having physical or health limitations	342	28.0%	83	28.2%
Not knowing others who participate	228	18.7%	64	21.8%
Cost	170	13.9%	35	11.9%
Lacking the necessary materials or equipment to participate	154	12.6%	38	34.2%
Not knowing why my participation is important	132	10.8%	35	11.9%
Restrictions from local government or governing body (ex. Homeowner's Association)	66	5.4%	22	7.5%
Other	84	6.9%	22	7.5%

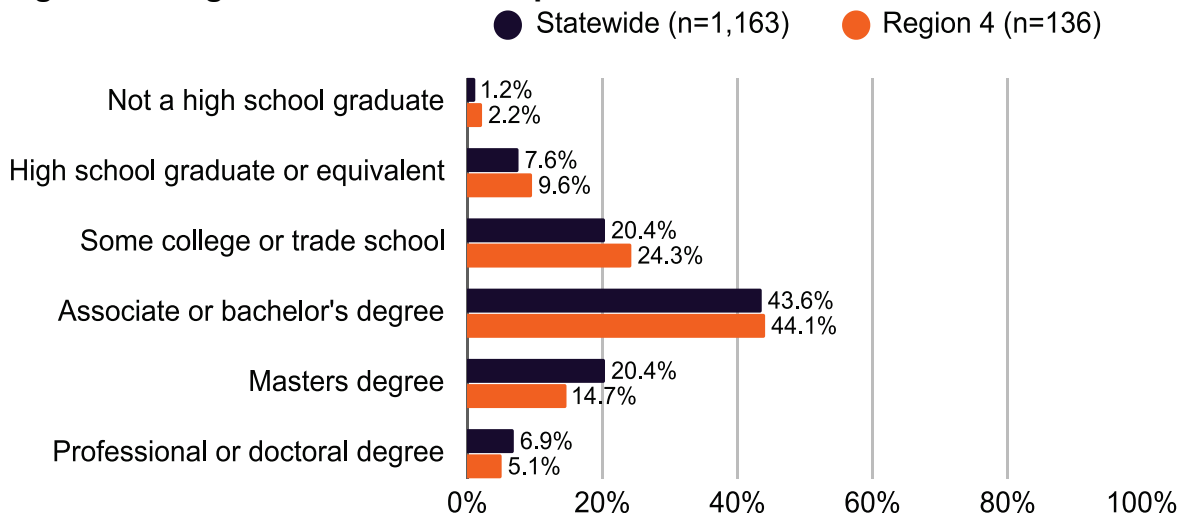
Appendix D

Region 4: Florence/Darlington Stormwater Partners

This appendix provides a comparison of the statewide survey results and the results from survey participants residing in an area serviced by Florence/Darlington Stormwater Partners. This area includes the following counties: Florence and Darlington.

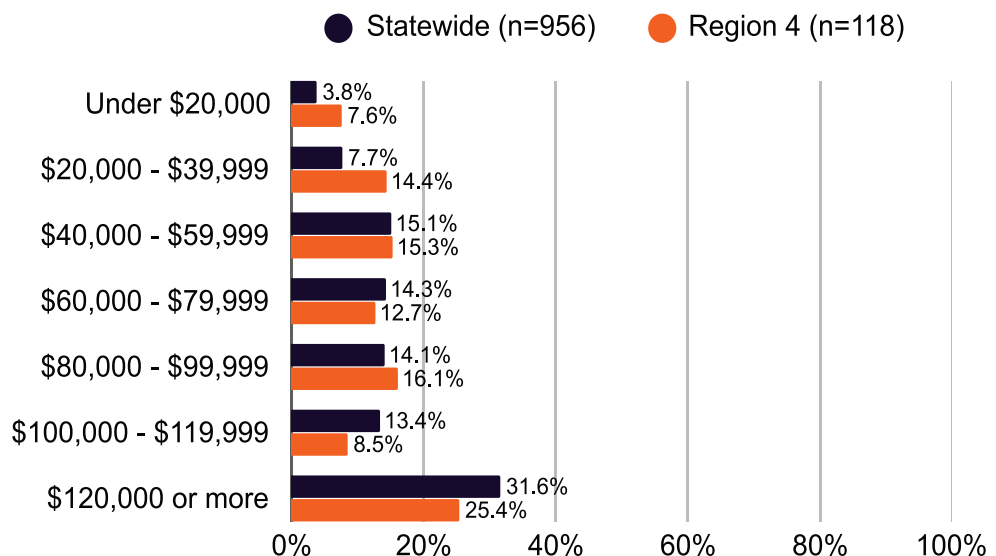
Question: What is the highest level of education you have completed?

Figure D1: Highest Education Completed



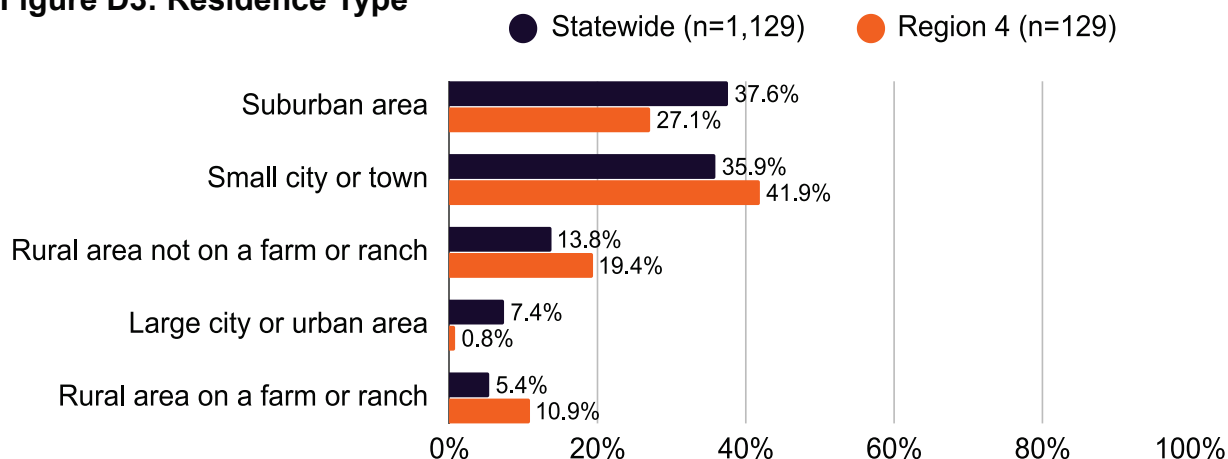
Question: Which of these categories best describes your total household income before taxes last year?

Figure D2: Income Level



Demographics: Residence type

Figure D3: Residence Type



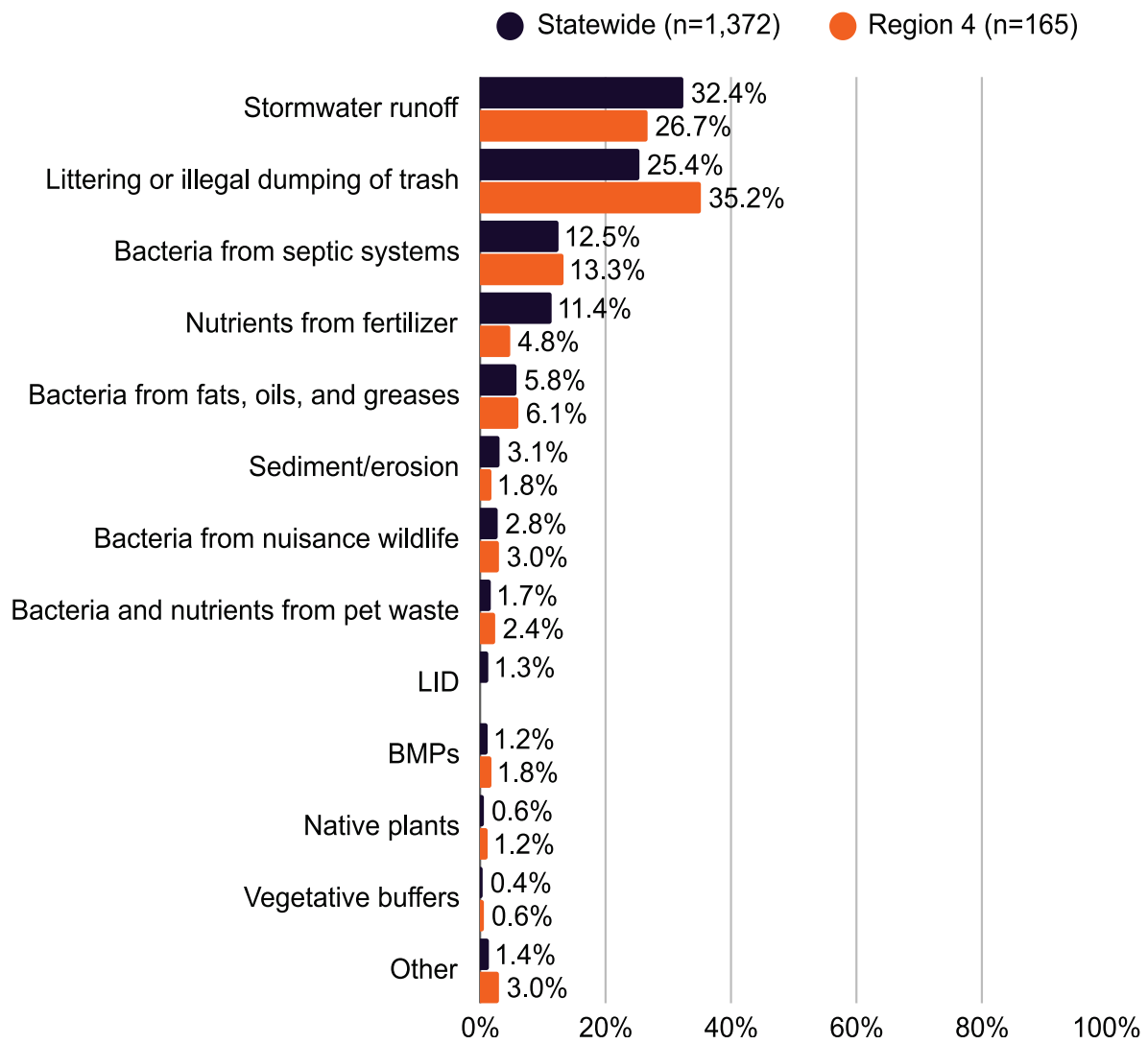
Question: Carolina Clear is interested in your thoughts on water quality in our South Carolina waterways. Please select all of the sources you believe affect our South Carolina waterways.

Table D1: Sources Impacting South Carolina Waterways

Source	Statewide Yes (n=1,403)	Statewide Yes (%)	Region 4 Yes (n=171)	Region 4 Yes (%)
Littering or illegal dumping of trash	1,280	91.2%	151	88.3%
Stormwater runoff	1,210	86.2%	135	78.9%
Bacteria from septic systems	1,149	81.9%	138	80.7%
Nutrients from fertilizer	1,115	79.5%	120	70.2%
Bacteria from fats, oils, and greases	1,086	77.4%	133	77.8%
Bacteria and nutrients from pet waste	916	65.3%	106	62.0%
Sediment/erosion	916	65.3%	97	56.7%
Bacteria from nuisance wildlife	863	61.5%	102	59.6%
Low Impact Development (LID)	474	33.8%	57	33.3%
Best Management Practices (BMPs)	470	33.5%	53	31.0%
Native plants	382	27.2%	37	21.6%
Vegetative buffers	345	24.6%	32	18.7%
None	8	0.6%	2	1.2%
Other	121	8.6%	14	8.2%

Question: Which one of these sources do you believe has the biggest impact on South Carolina waterways?

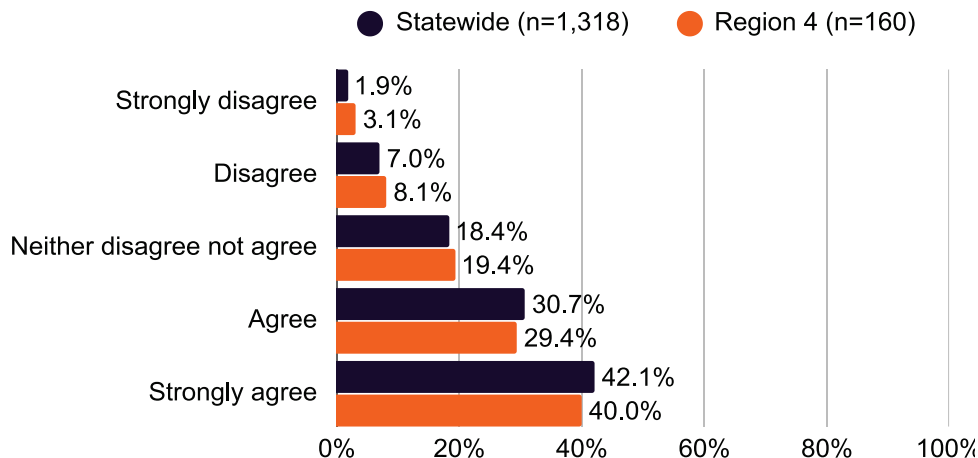
Figure D4: Source with Biggest Impact on South Carolina Waterways



Question: Please indicate your level of agreement or disagreement with the statements below.

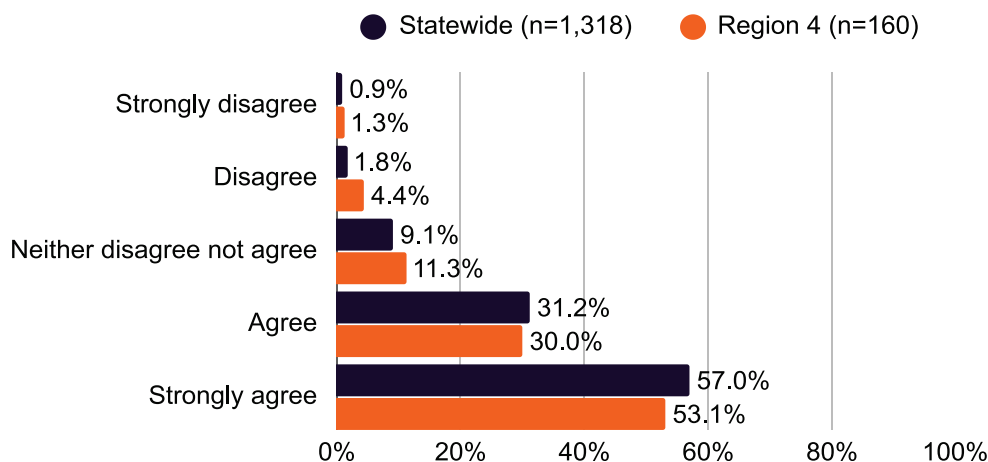
My actions have an impact on water quality.

Figure D5: Actions Impacting Water Quality



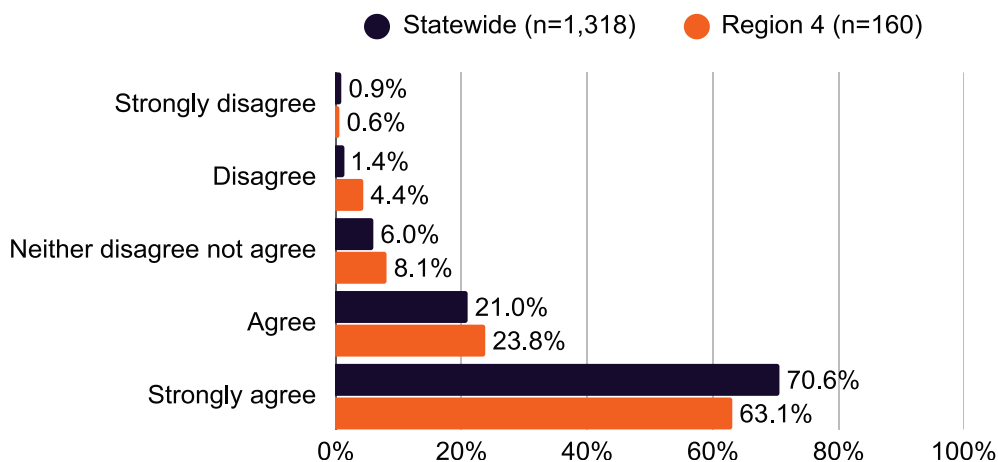
I would be willing to change my behavior if I knew what I was doing harmed water quality.

Figure D6: Willingness to Change Behavior



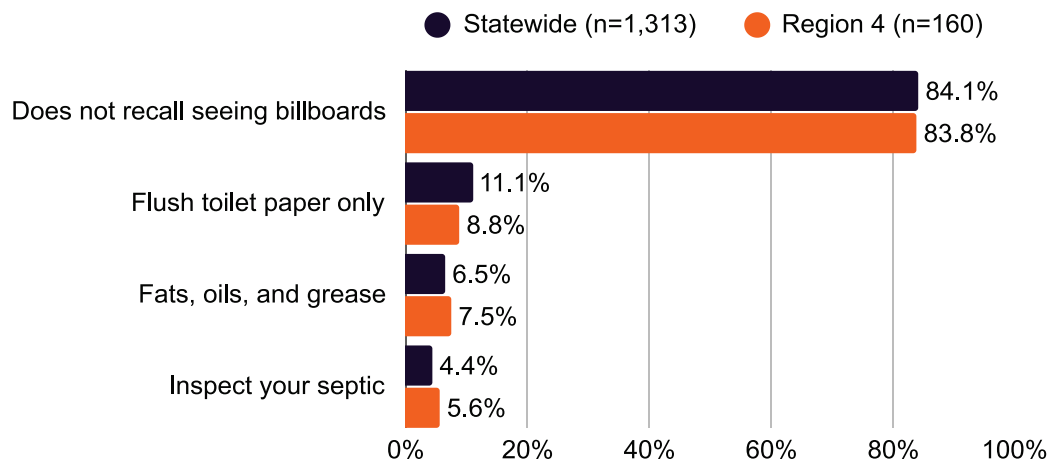
The quality of life in my community depends on good water quality in local streams, rivers, and lakes.

Figure D7: Quality of Life Depends on Water Quality



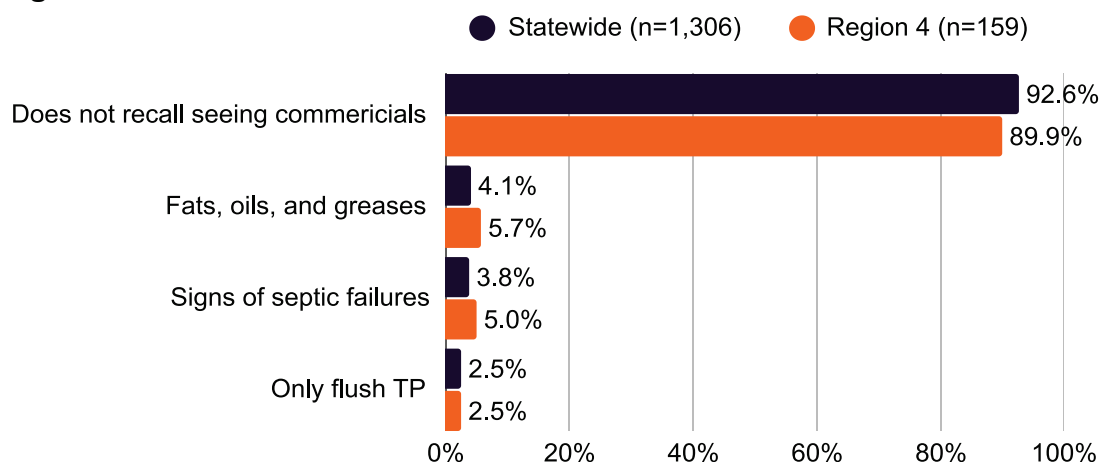
Question: Please select all the billboards you have seen.

Figure D8: Billboards Recalled



Question: Please select all the commercials you have seen.

Figure D9: Commercials Recalled



Question: Please select all the in-person, online, and hybrid courses you have engaged with.

Table D2: Course Content Engaged

Courses	Statewide Yes (n=1,205)	Statewide Yes (%)	Region 4 Yes (n=156)	Region 4 Yes (%)
Did not complete listed courses	1,190	98.8%	139	89.1%
Master Rain Gardener	27	2.2%	2	1.3%
Salt Marsh Short Course	23	1.9%	4	2.6%
Carolina Yards	21	1.7%	1	0.6%
Living Shorelines	17	1.4%	0	0.0%
Certified Erosion Prevention and Sediment Control Inspector	17	1.4%	2	1.3%
Seasonal Pond Management	16	1.3%	1	0.6%
Master Pond Manager	16	1.3%	3	1.9%
Be Well Informed	13	1.1%	4	2.6%
Certified Stormwater Plan Reviewer	13	1.1%	1	0.6%
Post-Construction BMP Inspector	11	0.9%	1	0.6%
Dam Ownership	9	0.7%	3	1.9%

Question: Please select all of the printed or online Clemson Extension resources you have used from the list below.

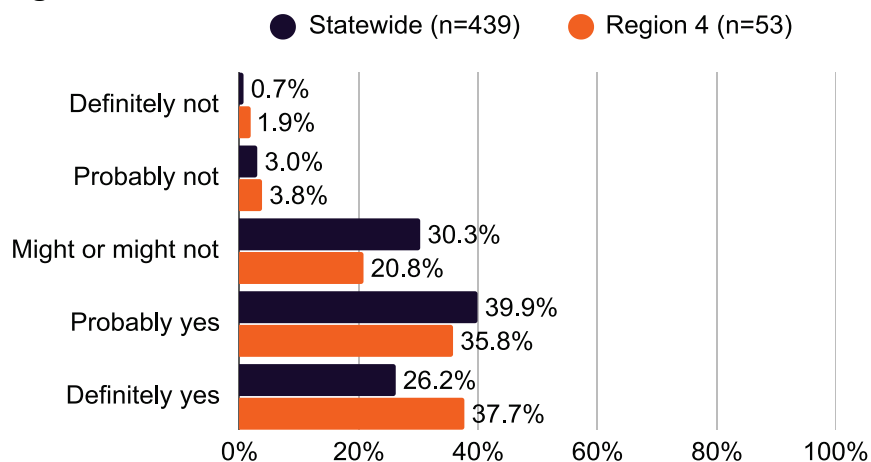
Table D3: Resources Used

Resources	Statewide Yes (n=1,284)	Statewide Yes (%)	Region 4 Yes (n=154)	Region 4 Yes (%)
Did not use listed resources	1,044	81.3%	129	83.8%
Yards & Erosion: Carolina Yards, gardening, native plants, trees and groundcovers, compost, stream bank repair, yard maintenance, wet or erosion issues, rain barrels, rain gardens, rainwater harvesting	165	12.9%	15	9.7%
Ponds: management, treatment, siting, vegetative buffers, floating wetlands, fish, nuisance plants, dyes, dredging, liming, fertilizing, pH, quality	86	6.7%	15	9.7%
Litter & Erosion: litter/tarps, maintaining ditches, storm drains, lot erosion control measures	54	4.2%	11	7.1%
Bacteria Contamination: pet waste, nuisance wildlife, fats, oils, and greases, septic systems	52	4.0%	11	7.1%
Farms & Youth: BMPs for farming, dams, 4H20 camps	30	2.3%	8	5.2%

Question: Please tell us how likely you are to...

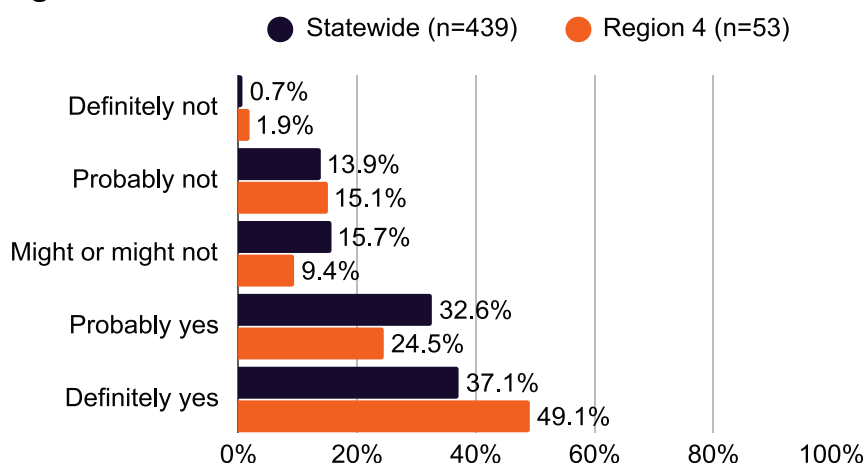
Recommend the courses or resources you used to others.

Figure D10: Recommend Resources to Others



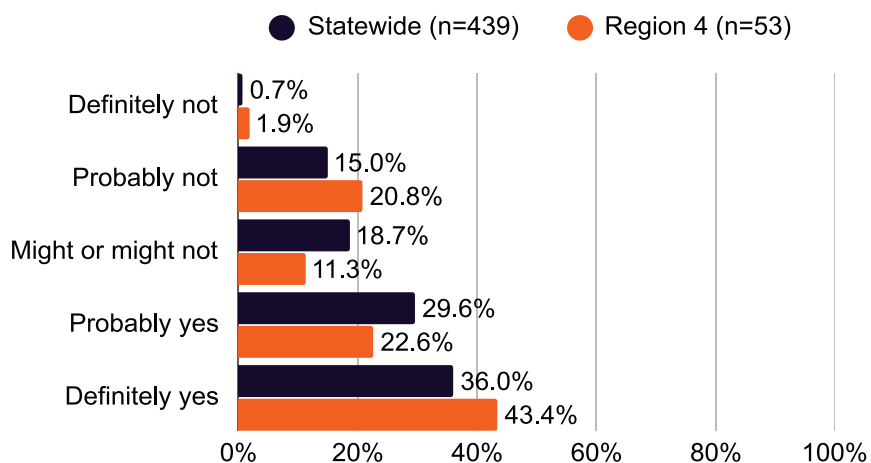
Share the information you obtained with others.

Figure D11: Share Information with Others



Use these resources again in the future.

Figure D12: Use Resource Again



Question: Carolina Clear is interested in where and how you obtained our information and resources regarding water quality. Please select all that apply.

Table D4: Method of Access to Carolina Clear Information

Method	Statewide Yes (n=446)	Statewide Yes (%)	Region 4 Yes (n=53)	Region 4 Yes (%)
Website	117	26.2%	15	28.3%
Direct mail or printed newspaper	109	24.4%	10	18.9%
E-newsletter or email	102	22.9%	12	22.6%
Social media	85	19.1%	8	15.1%
Printed materials	79	17.7%	11	20.8%
Friends, family, or word of mouth	64	14.3%	5	9.4%
Clemson office/venue	63	14.1%	10	18.9%
Festival or local event	47	10.5%	6	11.3%
Farmer's market	42	9.4%	7	13.2%
County or government administrative building	31	7.0%	6	11.3%
YouTube	26	5.8%	8	15.1%
Library	26	5.8%	5	9.4%
Television commercial	23	5.2%	6	11.3%
Phone	19	4.3%	3	5.7%
Streaming or radio	18	4.0%	3	5.7%
Professional service provider	17	3.8%	0	0.0%
Billboard	0	0.0%	0	0.0%
Other	35	7.8%	2	3.8%

Question: How do you prefer to receive our information and resources regarding water quality?

Table D5: Preferred Method to Receive Carolina Clear Information

Method	Statewide Yes (n=1,237)	Statewide Yes (%)	Region 4 Yes (n=151)	Region 4 Yes (%)
E-newsletter or email	703	56.8%	73	48.3%
Direct mail or printed newspaper	395	31.9%	41	27.2%
Social media	366	29.5%	39	25.8%
Website	329	26.6%	42	27.8%
Printed materials	328	26.5%	34	22.5%
Television commercial	264	21.3%	37	24.5%
Billboard	176	14.2%	21	13.9%
Festival or local event	166	13.4%	17	11.3%
YouTube	150	12.1%	17	11.3%
Streaming or radio	146	11.8%	17	11.3%
Farmer's market	137	11.1%	20	13.2%
Friends, family, or word of mouth	104	8.4%	15	9.9%
Library	97	7.8%	10	6.6%
Clemson office/venue	66	5.3%	10	6.6%
Professional service provider	42	3.4%	6	4.0%
County or government administrative building	41	3.3%	6	4.0%
Phone	14	1.1%	1	0.7%
Other	23	1.9%	5	3.3%

Question: Carolina Clear is interested in your involvement in community activities that promote water stewardship. Please select all of the activities which you have participated in from the list below.

Table D6: Involvement with Water Stewardship Activities

Activity	Statewide Yes (n=1,230)	Statewide Yes (%)	Region 4 Yes (n=148)	Region 4 Yes (%)
Water recreational activities (boating, kayaking, fishing, swimming, visiting a South Carolina waterway)	598	48.6%	68	45.9%
Does not participate in listed activities	410	33.3%	66	44.6%
Litter clean up (beach or river sweep)	388	31.5%	35	23.6%
Community or volunteer conservation activity	168	13.7%	16	10.8%
Native plant/rain barrel/rain garden installation as part of a community project	122	9.9%	7	4.7%
Stream bank or shoreline repair/planting	61	5.0%	5	3.4%
Rain barrel sale	60	4.9%	5	3.4%
Other	52	4.2%	5	3.4%

Question: Select the barriers that prevent you from participating in water stewardship activities.

Table D7: Barriers to Participating in Water Stewardship Activities

Activity	Statewide Yes (n=1,221)	Statewide Yes (%)	Region 4 Yes (n=146)	Region 4 Yes (%)
Not knowing where to participate	670	54.9%	81	55.5%
Understanding how to participate	515	42.2%	58	39.7%
Time required	497	40.7%	56	38.4%
Having physical or health limitations	342	28.0%	40	27.4%
Not knowing others who participate	228	18.7%	24	16.4%
Cost	170	13.9%	32	21.9%
Lacking the necessary materials or equipment to participate	154	12.6%	25	17.1%
Not knowing why my participation is important	132	10.8%	16	11.0%
Restrictions from local government or governing body (ex. Homeowner's Association)	66	5.4%	6	4.1%
Other	84	6.9%	9	6.2%

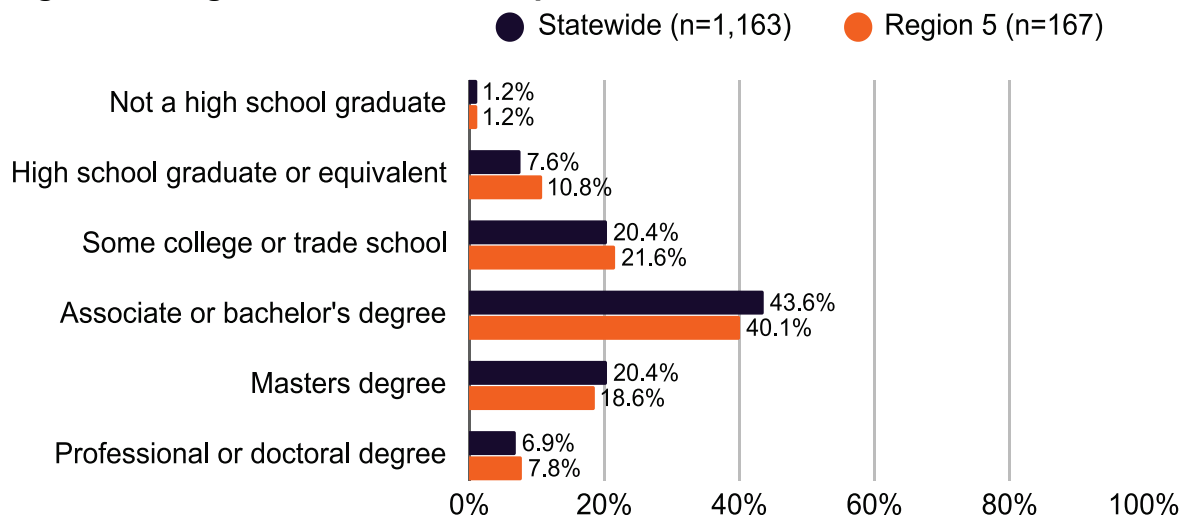
Appendix E

Region 5: Anderson and Pickens Counties Stormwater Partners

This appendix provides a comparison of the statewide survey results and the results from survey participants residing in an area serviced by Anderson and Pickens Counties Stormwater Partners. This area includes Anderson and Pickens counties and Clemson University campus.

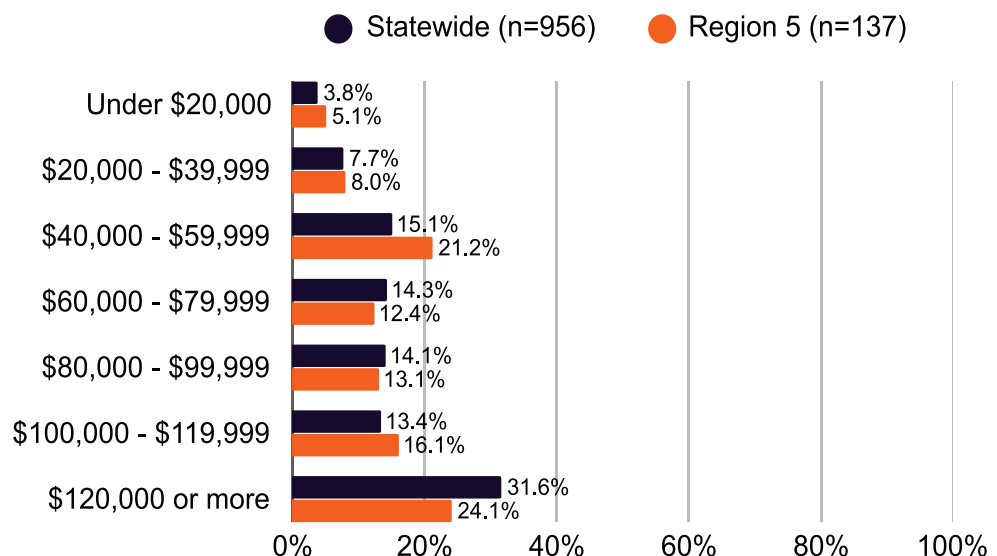
Question: What is the highest level of education you have completed?

Figure E1: Highest Education Completed



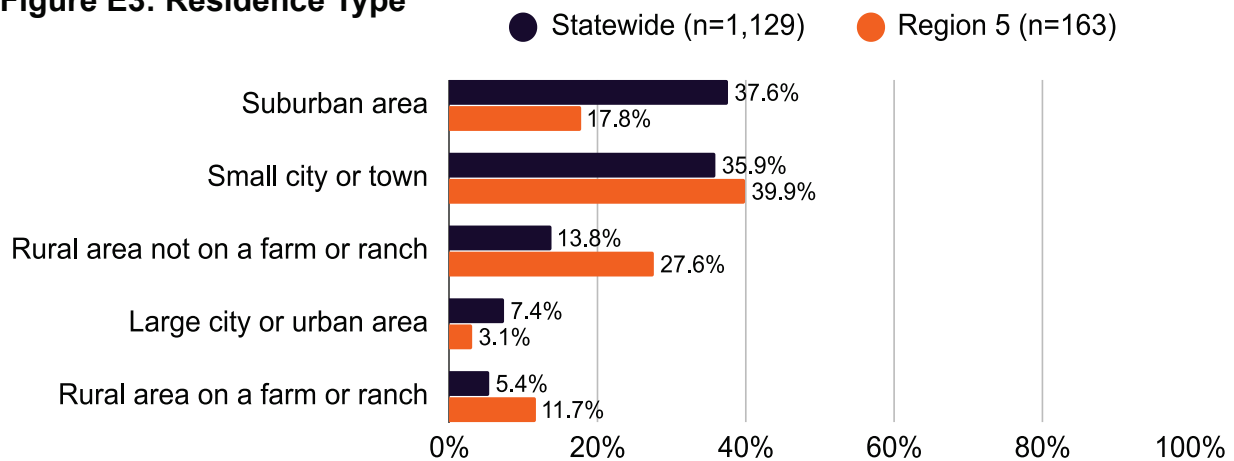
Question: Which of these categories best describes your total household income before taxes last year?

Figure E2: Income Level



Demographics: Residence type

Figure E3: Residence Type



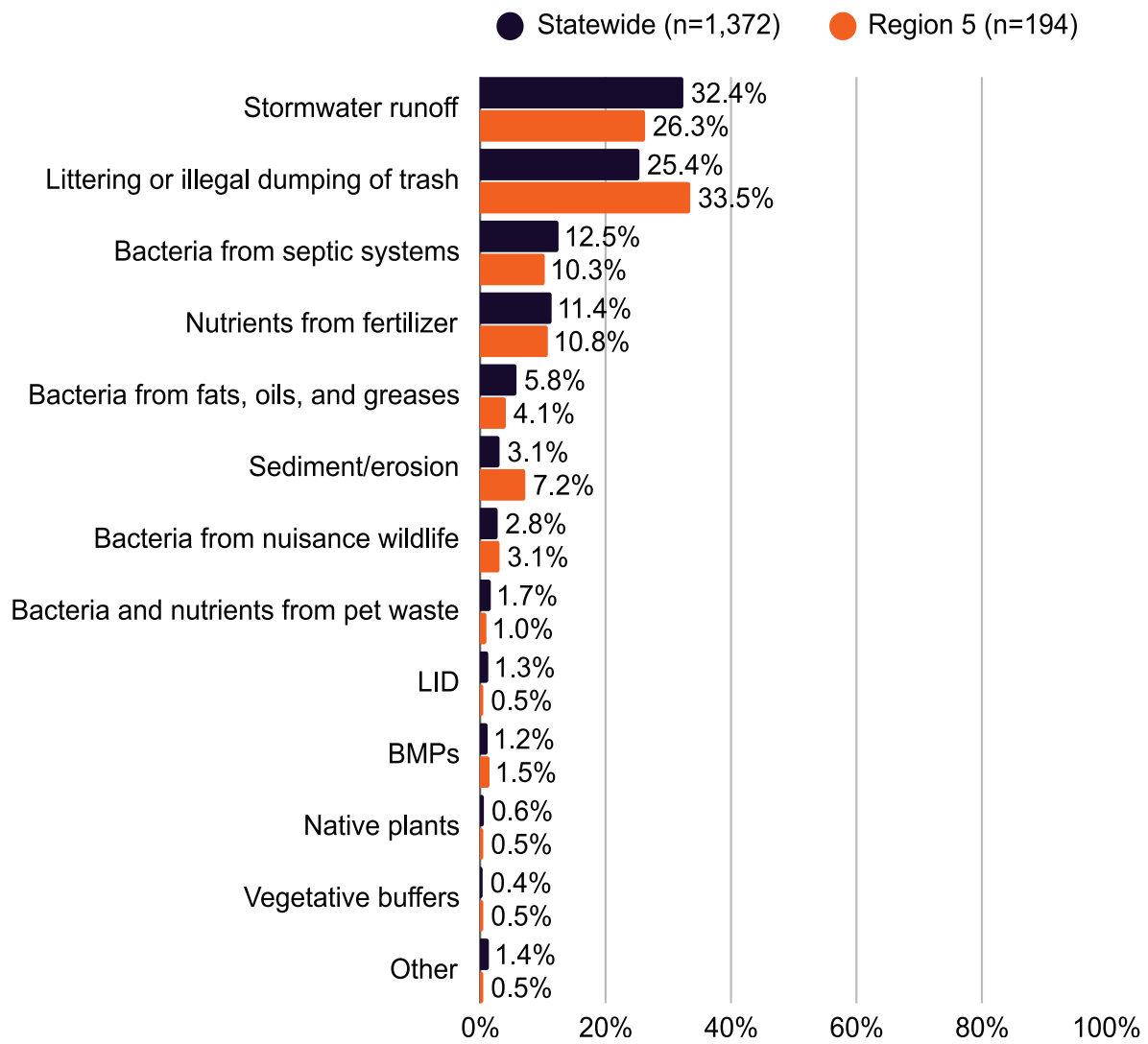
Question: Carolina Clear is interested in your thoughts on water quality in our South Carolina waterways. Please select all of the sources you believe affect our South Carolina waterways.

Table E1: Sources Impacting South Carolina Waterways

Source	Statewide Yes (n=1,403)	Statewide Yes (%)	Region 5 Yes (n=197)	Region 5 Yes (%)
Littering or illegal dumping of trash	1,280	91.2%	176	89.3%
Stormwater runoff	1,210	86.2%	156	79.2%
Bacteria from septic systems	1,149	81.9%	152	77.2%
Nutrients from fertilizer	1,115	79.5%	151	76.6%
Bacteria from fats, oils, and greases	1,086	77.4%	156	79.2%
Bacteria and nutrients from pet waste	916	65.3%	113	57.4%
Sediment/erosion	916	65.3%	130	66.0%
Bacteria from nuisance wildlife	863	61.5%	110	55.8%
Low Impact Development (LID)	474	33.8%	60	30.5%
Best Management Practices (BMPs)	470	33.5%	62	31.5%
Native plants	382	27.2%	59	29.9%
Vegetative buffers	345	24.6%	48	24.4%
None	8	0.6%	1	0.5%
Other	121	8.6%	20	10.2%

Question: Which one of these sources do you believe has the biggest impact on South Carolina waterways?

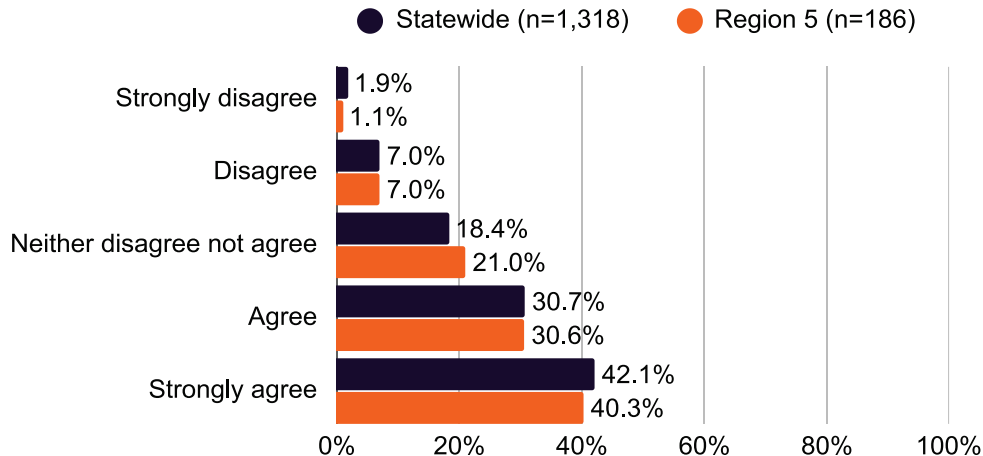
Figure E4: Source with Biggest Impact on South Carolina Waterways



Question: Please indicate your level of agreement or disagreement with the statements below.

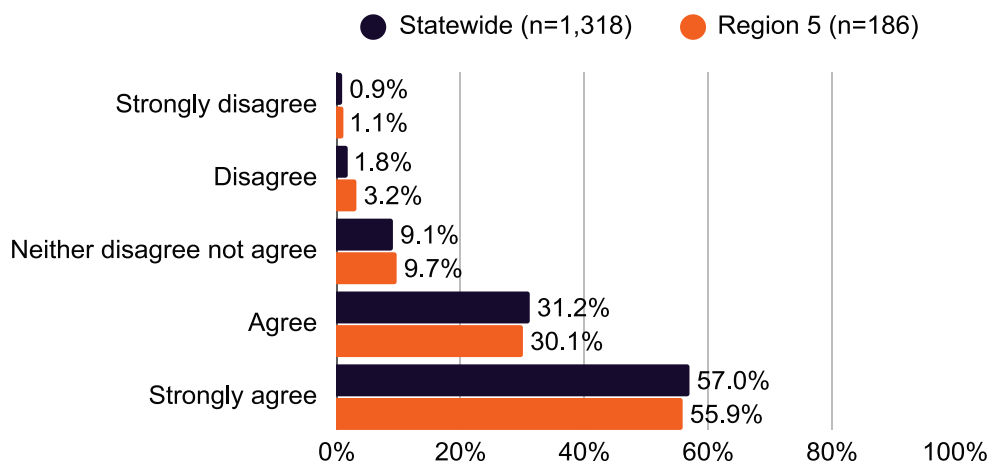
My actions have an impact on water quality.

Figure E5: Actions Impacting Water Quality



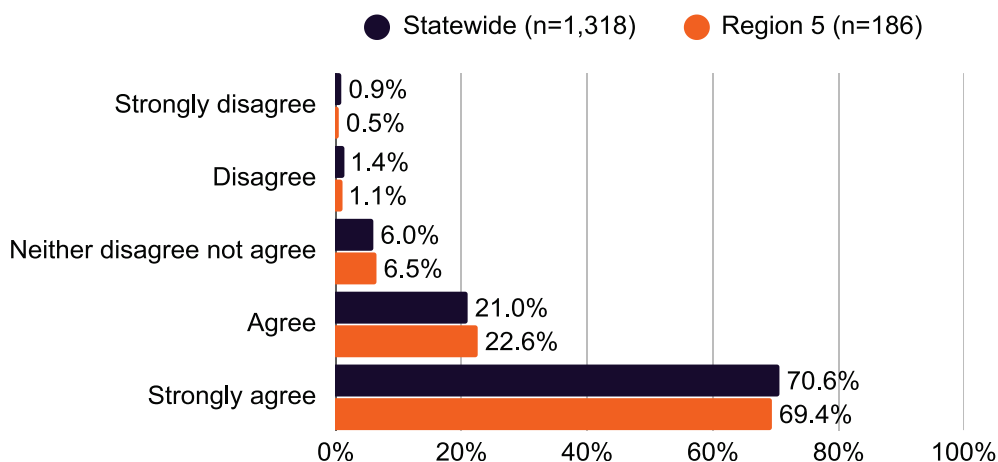
I would be willing to change my behavior if I knew what I was doing harmed water quality.

Figure E6: Willingness to Change Behavior



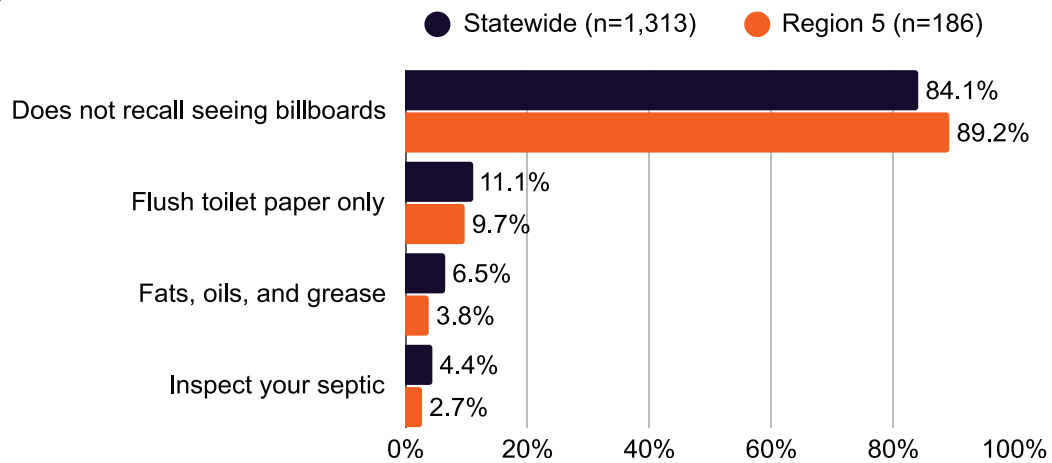
The quality of life in my community depends on good water quality in local streams, rivers, and lakes.

Figure E7: Quality of Life Depends on Water Quality



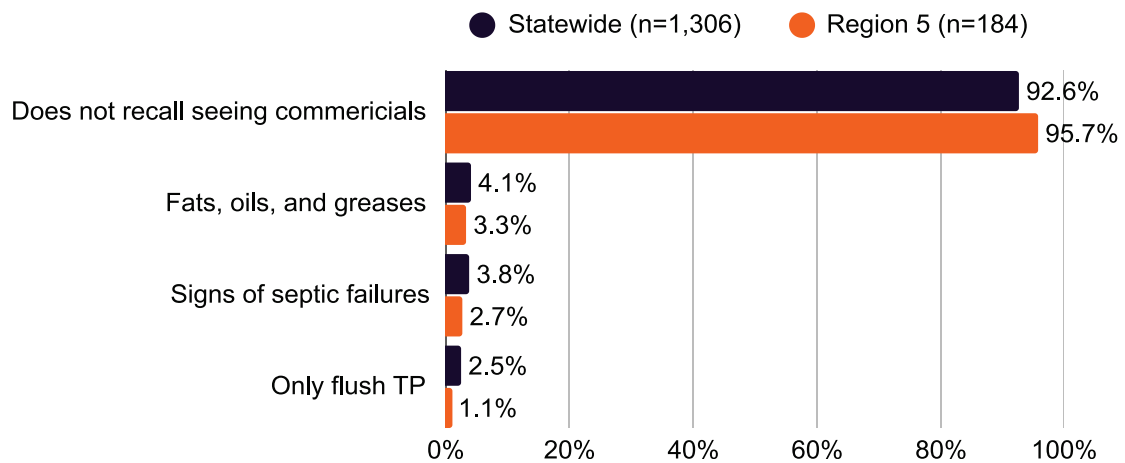
Question: Please select all the billboards you have seen.

Figure E8: Billboards Recalled



Question: Please select all the commercials you have seen.

Figure E9: Commercials Recalled



Question: Please select all the in-person, online, and hybrid courses you have engaged with.

Table E2: Course Content Engaged

Courses	Statewide Yes (n=1,205)	Statewide Yes (%)	Region 5 Yes (n=183)	Region 5 Yes (%)
Did not complete listed courses	1,190	98.8%	169	92.3%
Master Rain Gardener	27	2.2%	4	2.2%
Salt Marsh Short Course	23	1.9%	2	1.1%
Carolina Yards	21	1.7%	5	2.7%
Living Shorelines	17	1.4%	1	0.5%
Certified Erosion Prevention and Sediment Control Inspector	17	1.4%	3	1.6%
Seasonal Pond Management	16	1.3%	1	0.5%
Master Pond Manager	16	1.3%	1	0.5%
Be Well Informed	13	1.1%	4	2.2%
Certified Stormwater Plan Reviewer	13	1.1%	2	1.1%
Post-Construction BMP Inspector	11	0.9%	2	1.1%
Dam Ownership	9	0.7%	1	0.5%

Question: Please select all of the printed or online Clemson Extension resources you have used from the list below.

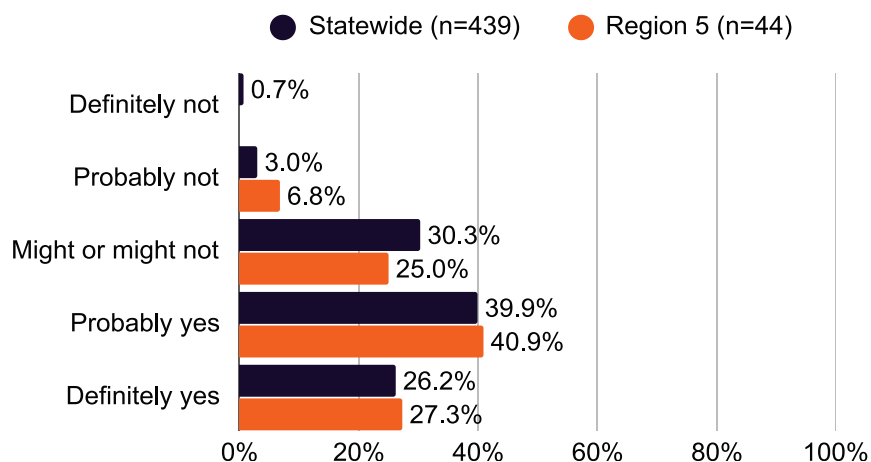
Table E3: Resources Used

Resources	Statewide Yes (n=1,284)	Statewide Yes (%)	Region 5 Yes (n=)	Region 5 Yes (%)
Did not use listed resources	1,044	81.3%	151	83.4%
Yards & Erosion: Carolina Yards, gardening, native plants, trees and groundcovers, compost, stream bank repair, yard maintenance, wet or erosion issues, rain barrels, rain gardens, rainwater harvesting	165	12.9%	20	11.0%
Ponds: management, treatment, siting, vegetative buffers, floating wetlands, fish, nuisance plants, dyes, dredging, liming, fertilizing, pH, quality	86	6.7%	5	2.8%
Litter & Erosion: litter/tarps, maintaining ditches, storm drains, lot erosion control measures	54	4.2%	6	3.3%
Bacteria Contamination: pet waste, nuisance wildlife, fats, oils, and greases, septic systems	52	4.0%	5	2.8%
Farms & Youth: BMPs for farming, dams, 4H20 camps	30	2.3%	5	2.8%

Question: Please tell us how likely you are to...

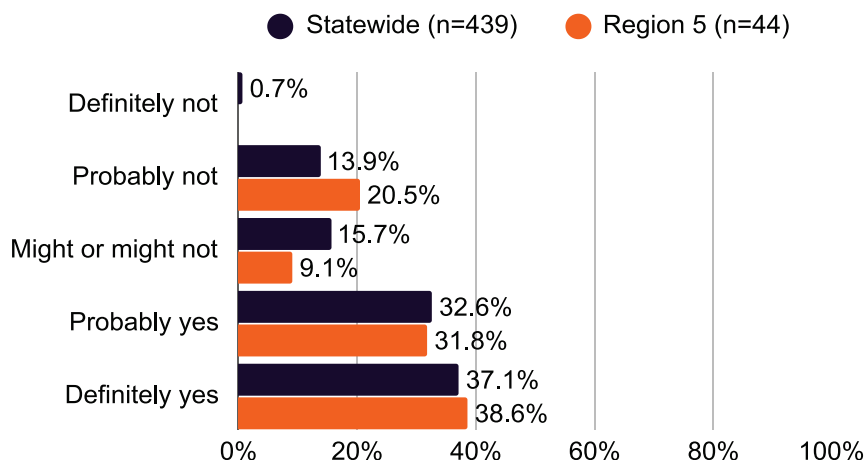
Recommend the courses or resources you used to others.

Figure E10: Recommend Resources to Others



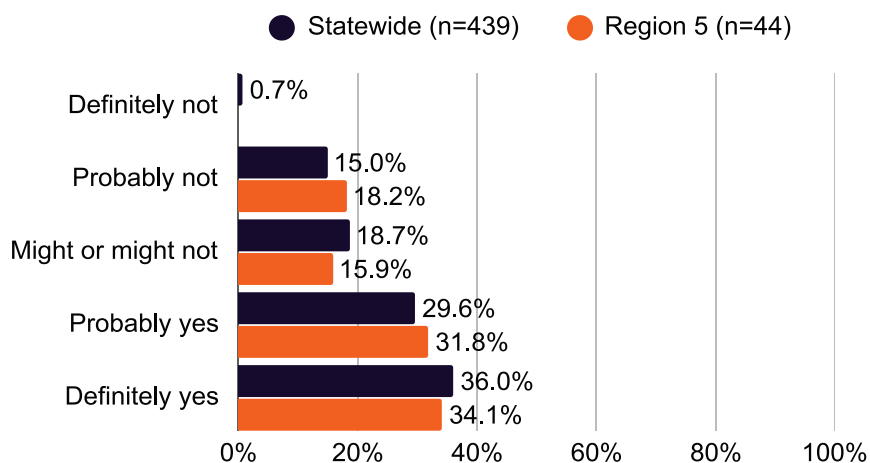
Share the information you obtained with others.

Figure E11: Share Information with Others



Use these resources again in the future.

Figure E12: Use Resource Again



Question: Carolina Clear is interested in where and how you obtained our information and resources regarding water quality. Please select all that apply.

Table E4: Method of Access to Carolina Clear Information

Method	Statewide Yes (n=446)	Statewide Yes (%)	Region 5 Yes (n=46)	Region 5 Yes (%)
Website	117	26.2%	12	26.1%
Direct mail or printed newspaper	109	24.4%	8	17.4%
E-newsletter or email	102	22.9%	11	23.9%
Social media	85	19.1%	6	13.0%
Printed materials	79	17.7%	6	13.0%
Friends, family, or word of mouth	64	14.3%	3	6.5%
Clemson office/venue	63	14.1%	9	19.6%
Festival or local event	47	10.5%	3	6.5%
Farmer's market	42	9.4%	3	6.5%
County or government administrative building	31	7.0%	5	10.9%
YouTube	26	5.8%	2	4.3%
Library	26	5.8%	2	4.3%
Television commercial	23	5.2%	2	4.3%
Phone	19	4.3%	1	2.2%
Streaming or radio	18	4.0%	2	4.3%
Professional service provider	17	3.8%	2	4.3%
Billboard	0	0.0%	0	0.0%
Other	35	7.8%	3	6.5%

Question: How do you prefer to receive our information and resources regarding water quality?

Table E5: Preferred Method to Receive Carolina Clear Information

Method	Statewide Yes (n=1,237)	Statewide Yes (%)	Region 5 Yes (n=175)	Region 5 Yes (%)
E-newsletter or email	703	56.8%	93	53.1%
Direct mail or printed newspaper	395	31.9%	46	26.3%
Social media	366	29.5%	51	29.1%
Website	329	26.6%	37	21.1%
Printed materials	328	26.5%	47	26.9%
Television commercial	264	21.3%	37	21.1%
Billboard	176	14.2%	25	14.3%
Festival or local event	166	13.4%	15	8.6%
YouTube	150	12.1%	11	6.3%
Streaming or radio	146	11.8%	12	6.9%
Farmer's market	137	11.1%	14	8.0%
Friends, family, or word of mouth	104	8.4%	10	5.7%
Library	97	7.8%	17	9.7%
Clemson office/venue	66	5.3%	11	6.3%
Professional service provider	42	3.4%	4	2.3%
County or government administrative building	41	3.3%	5	2.9%
Phone	14	1.1%	3	1.7%
Other	23	1.9%	3	1.7%

Question: Carolina Clear is interested in your involvement in community activities that promote water stewardship. Please select all of the activities which you have participated in from the list below.

Table E6: Involvement with Water Stewardship Activities

Activity	Statewide Yes (n=1,230)	Statewide Yes (%)	Region 5 Yes (n=173)	Region 5 Yes (%)
Water recreational activities (boating, kayaking, fishing, swimming, visiting a South Carolina waterway)	598	48.6%	80	46.2%
Does not participate in listed activities	410	33.3%	61	35.3%
Litter clean up (beach or river sweep)	388	31.5%	42	24.3%
Community or volunteer conservation activity	168	13.7%	16	9.2%
Native plant/rain barrel/rain garden installation as part of a community project	122	9.9%	17	9.8%
Stream bank or shoreline repair/planting	61	5.0%	10	5.8%
Rain barrel sale	60	4.9%	11	6.4%
Other	52	4.2%	9	5.2%

Question: Select the barriers that prevent you from participating in water stewardship activities.

Table E7: Barriers to Participating in Water Stewardship Activities

Activity	Statewide Yes (n=1,221)	Statewide Yes (%)	Region 5 Yes (n=171)	Region 5 Yes (%)
Not knowing where to participate	670	54.9%	84	49.1%
Understanding how to participate	515	42.2%	70	40.9%
Time required	497	40.7%	73	42.7%
Having physical or health limitations	342	28.0%	49	28.7%
Not knowing others who participate	228	18.7%	28	16.4%
Cost	170	13.9%	24	14.0%
Lacking the necessary materials or equipment to participate	154	12.6%	18	10.5%
Not knowing why my participation is important	132	10.8%	26	15.2%
Restrictions from local government or governing body (ex. Homeowner's Association)	66	5.4%	2	1.2%
Other	84	6.9%	11	6.4%

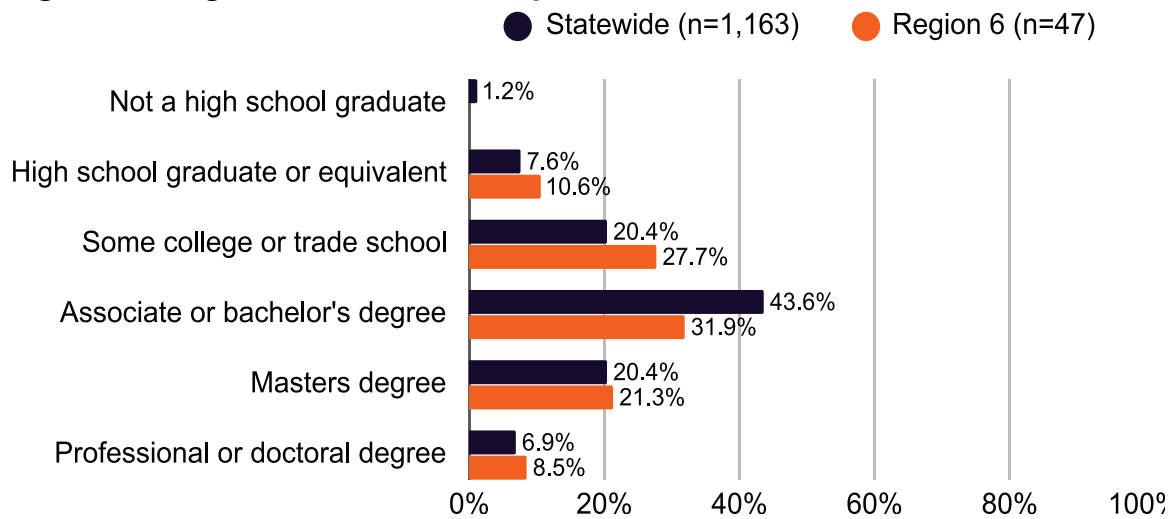
Appendix F

Region 6: Sumter Stormwater Solutions

This appendix provides a comparison of the statewide survey results and the results from survey participants residing in an area serviced by Sumter Stormwater Solutions. This area includes Sumter County.

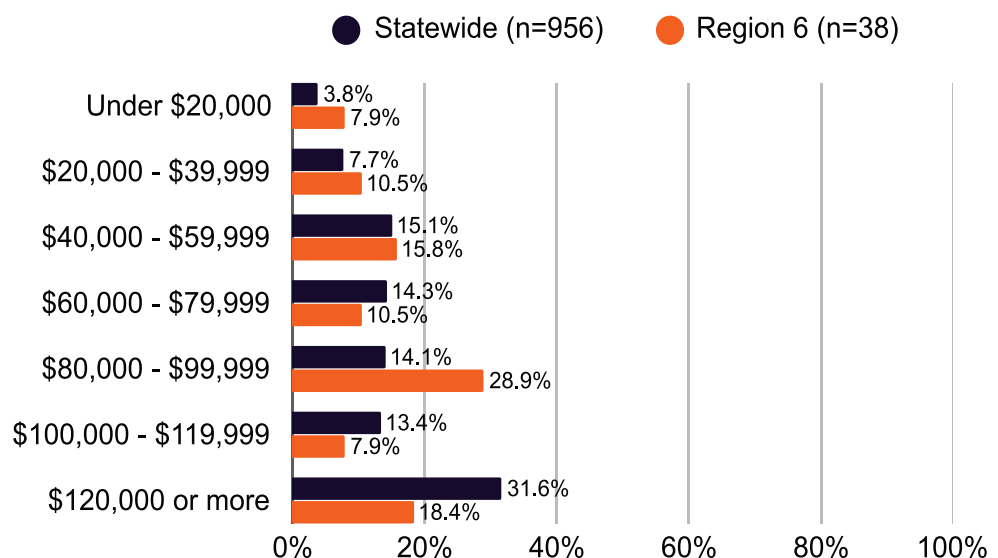
Question: What is the highest level of education you have completed?

Figure F1: Highest Education Completed



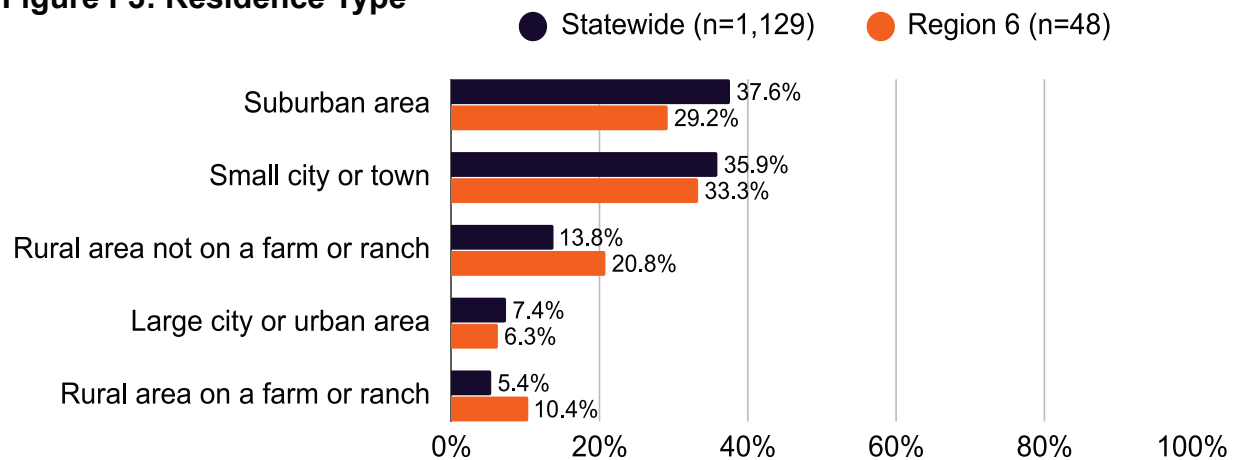
Question: Which of these categories best describes your total household income before taxes last year?

Figure F2: Income Level



Demographics: Residence type

Figure F3: Residence Type



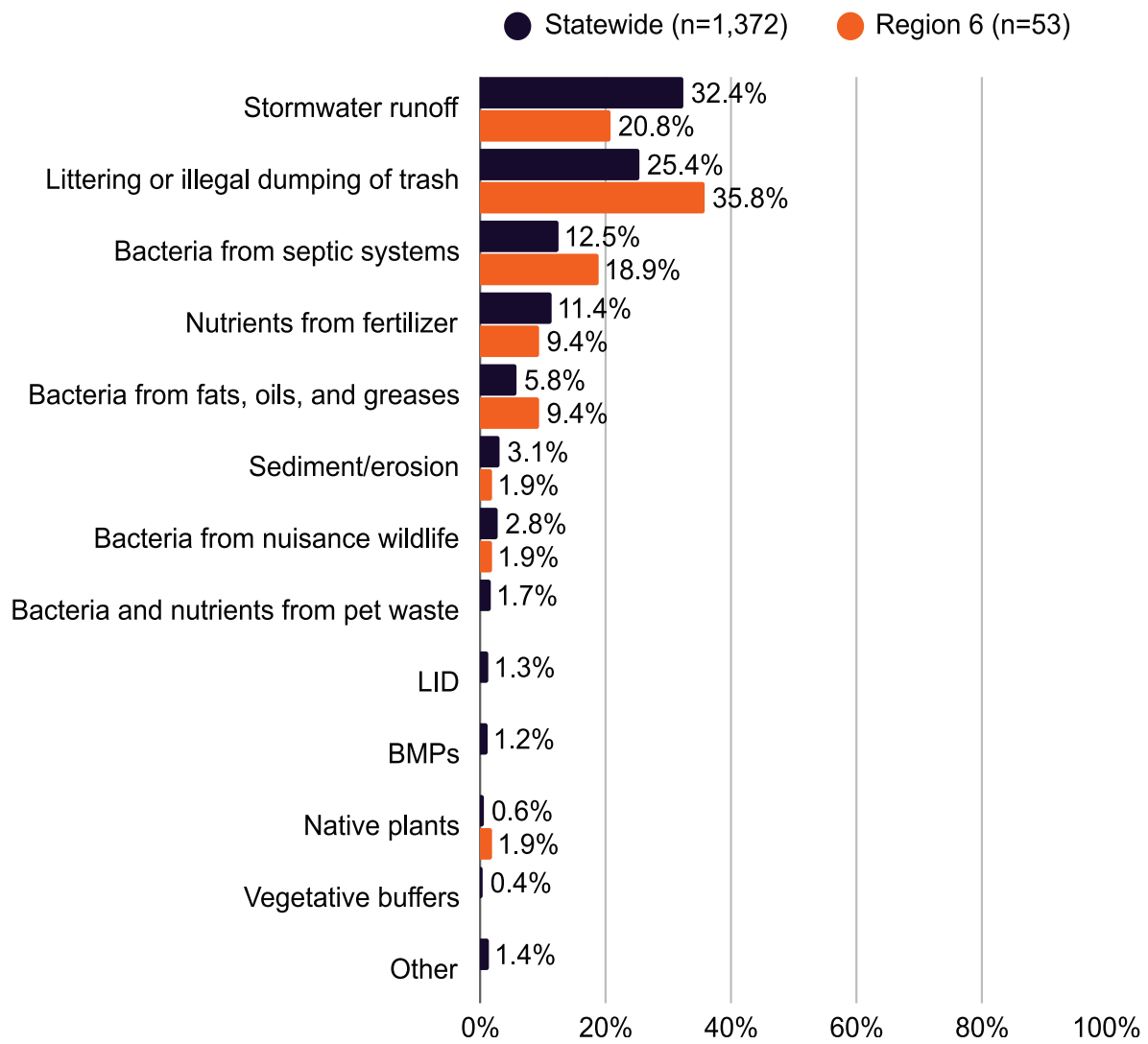
Question: Carolina Clear is interested in your thoughts on water quality in our South Carolina waterways. Please select all of the sources you believe affect our South Carolina waterways.

Table F1: Sources Impacting South Carolina Waterways

Source	Statewide Yes (n=1,403)	Statewide Yes (%)	Region 6 Yes (n=54)	Region 6 Yes (%)
Littering or illegal dumping of trash	1,280	91.2%	49	90.7%
Stormwater runoff	1,210	86.2%	45	83.3%
Bacteria from septic systems	1,149	81.9%	39	72.2%
Nutrients from fertilizer	1,115	79.5%	39	72.2%
Bacteria from fats, oils, and greases	1,086	77.4%	44	81.5%
Bacteria and nutrients from pet waste	916	65.3%	30	55.6%
Sediment/erosion	916	65.3%	34	63.0%
Bacteria from nuisance wildlife	863	61.5%	32	59.3%
Low Impact Development (LID)	474	33.8%	17	31.5%
Best Management Practices (BMPs)	470	33.5%	16	29.6%
Native plants	382	27.2%	14	25.9%
Vegetative buffers	345	24.6%	10	18.5%
None	8	0.6%	0	0.0%
Other	121	8.6%	1	1.9%

Question: Which one of these sources do you believe has the biggest impact on South Carolina waterways?

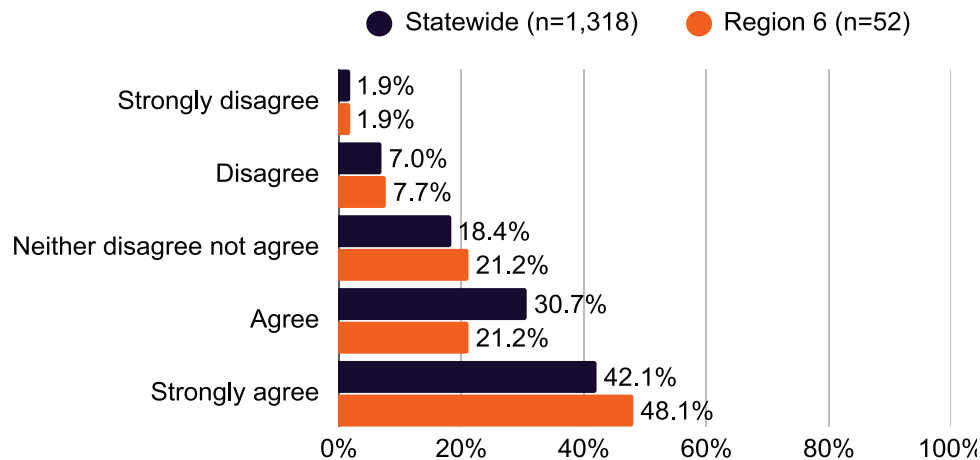
Figure F4: Source with Biggest Impact on South Carolina Waterways



Question: Please indicate your level of agreement or disagreement with the statements below.

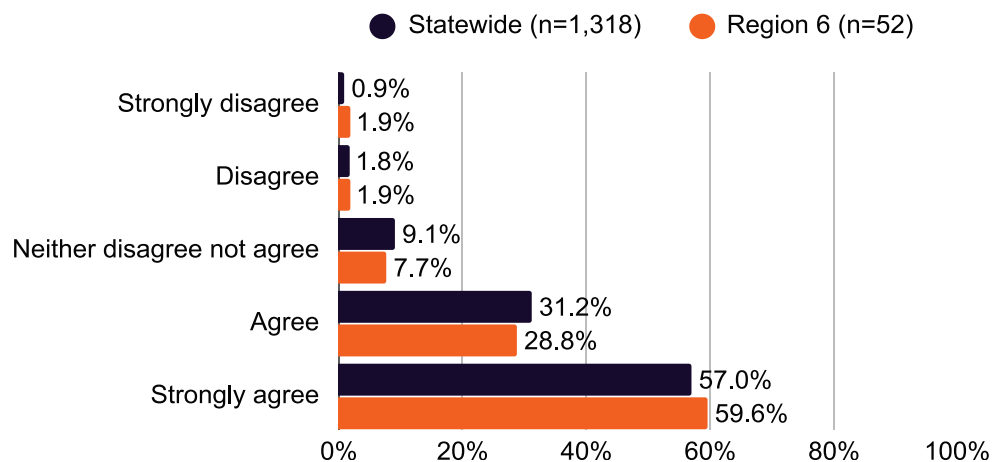
My actions have an impact on water quality.

Figure F5: Actions Impacting Water Quality



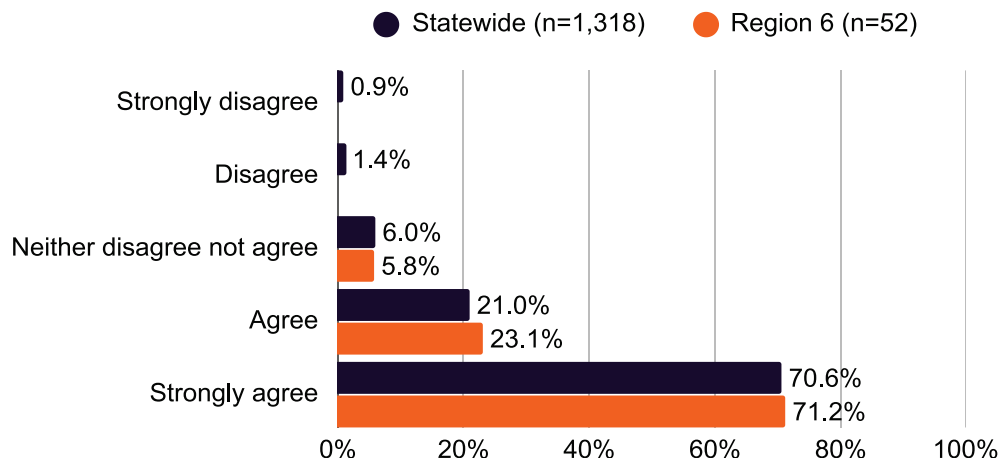
I would be willing to change my behavior if I knew what I was doing harmed water quality.

Figure F6: Willingness to Change Behavior



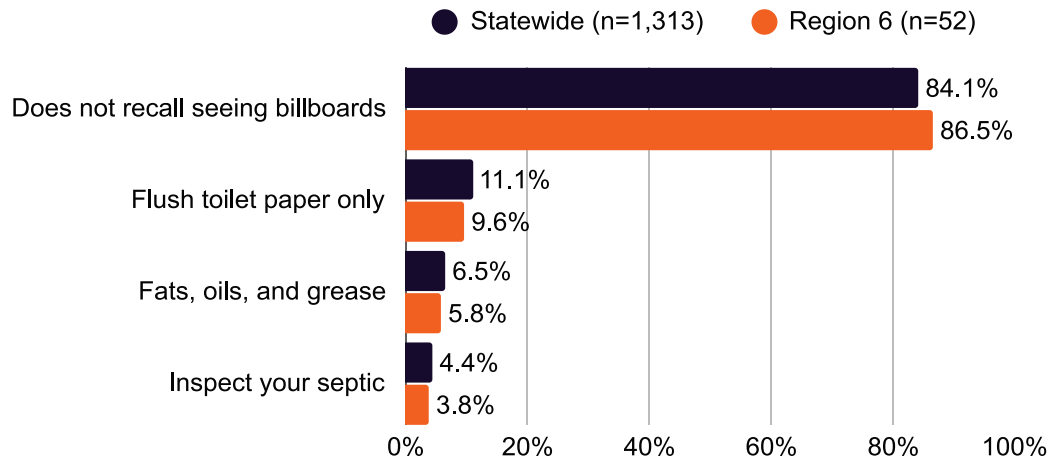
The quality of life in my community depends on good water quality in local streams, rivers, and lakes.

Figure F7: Quality of Life Depends on Water Quality



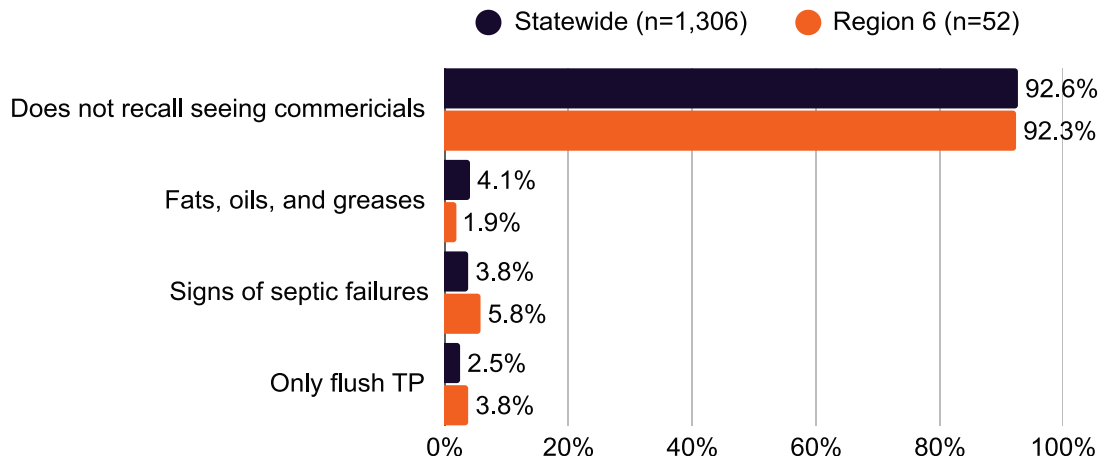
Question: Please select all the billboards you have seen.

Figure F8: Billboards Recalled



Question: Please select all the commercials you have seen.

Figure F9: Commercials Recalled



Question: Please select all the in-person, online, and hybrid courses you have engaged with.

Table F2: Course Content Engaged

Courses	Statewide Yes (n=1,205)	Statewide Yes (%)	Region 6 Yes (n=52)	Region 6 Yes (%)
Did not complete listed courses	1,190	98.8%	47	90.4%
Master Rain Gardener	27	2.2%	2	3.8%
Salt Marsh Short Course	23	1.9%	1	1.9%
Carolina Yards	21	1.7%	0	0.0%
Living Shorelines	17	1.4%	1	1.9%
Certified Erosion Prevention and Sediment Control Inspector	17	1.4%	1	1.9%
Seasonal Pond Management	16	1.3%	0	0.0%
Master Pond Manager	16	1.3%	3	5.8%
Be Well Informed	13	1.1%	0	0.0%
Certified Stormwater Plan Reviewer	13	1.1%	2	3.8%
Post-Construction BMP Inspector	11	0.9%	2	3.8%
Dam Ownership	9	0.7%	1	1.9%

Question: Please select all of the printed or online Clemson Extension resources you have used from the list below.

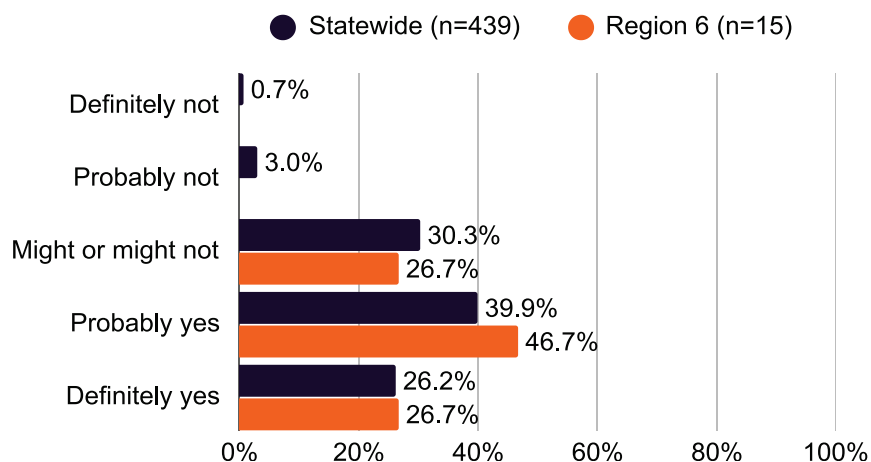
Table F3: Resources Used

Resources	Statewide Yes (n=1,284)	Statewide Yes (%)	Region 6 Yes (n=52)	Region 6 Yes (%)
Did not use listed resources	1,044	81.3%	42	80.8%
Yards & Erosion: Carolina Yards, gardening, native plants, trees and groundcovers, compost, stream bank repair, yard maintenance, wet or erosion issues, rain barrels, rain gardens, rainwater harvesting	165	12.9%	7	13.5%
Ponds: management, treatment, siting, vegetative buffers, floating wetlands, fish, nuisance plants, dyes, dredging, liming, fertilizing, pH, quality	86	6.7%	3	5.8%
Litter & Erosion: litter/tarps, maintaining ditches, storm drains, lot erosion control measures	54	4.2%	3	5.8%
Bacteria Contamination: pet waste, nuisance wildlife, fats, oils, and greases, septic systems	52	4.0%	3	5.8%
Farms & Youth: BMPs for farming, dams, 4H20 camps	30	2.3%	2	3.8%

Question: Please tell us how likely you are to...

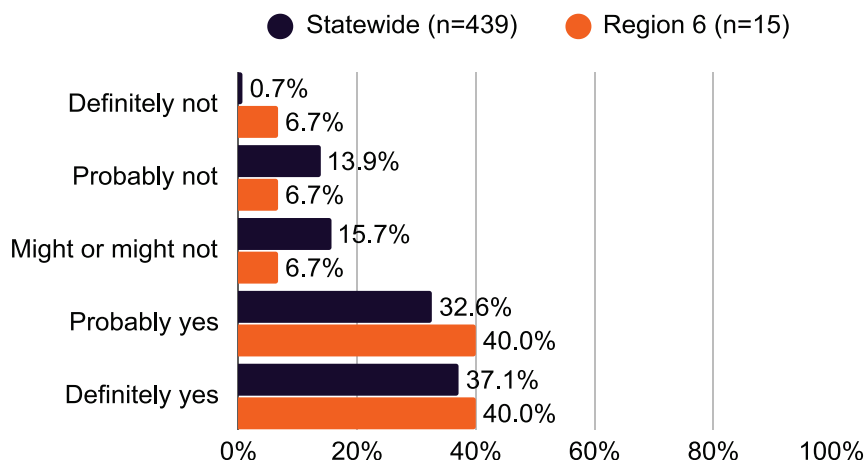
Recommend the courses or resources you used to others.

Figure F10: Recommend Resources to Others



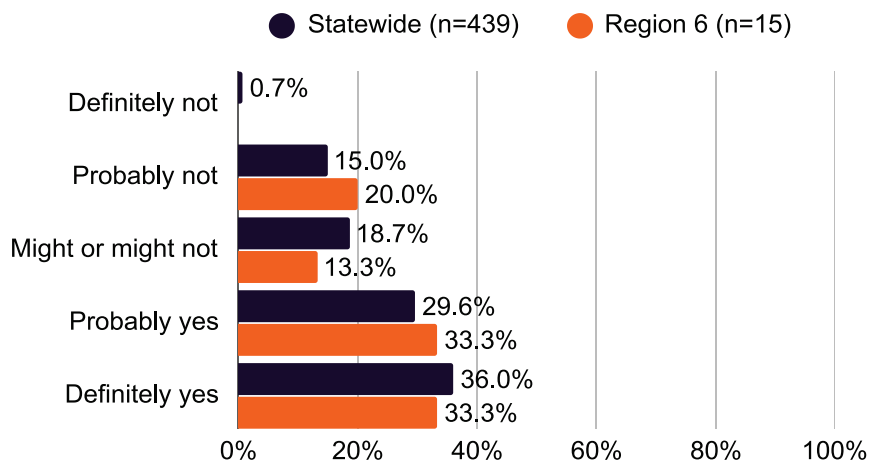
Share the information you obtained with others.

Figure F11: Share Information with Others



Use these resources again in the future.

Figure F12: Use Resource Again



Question: Carolina Clear is interested in where and how you obtained our information and resources regarding water quality. Please select all that apply.

Table F4: Method of Access to Carolina Clear Information

Method	Statewide Yes (n=446)	Statewide Yes (%)	Region 6 Yes (n=15)	Region 6 Yes (%)
Website	117	26.2%	2	13.3%
Direct mail or printed newspaper	109	24.4%	4	26.7%
E-newsletter or email	102	22.9%	4	26.7%
Social media	85	19.1%	5	33.3%
Printed materials	79	17.7%	1	6.7%
Friends, family, or word of mouth	64	14.3%	2	13.3%
Clemson office/venue	63	14.1%	4	26.7%
Festival or local event	47	10.5%	4	26.7%
Farmer's market	42	9.4%	3	20.0%
County or government administrative building	31	7.0%	1	6.7%
YouTube	26	5.8%	0	0.0%
Library	26	5.8%	1	6.7%
Television commercial	23	5.2%	0	0.0%
Phone	19	4.3%	1	6.7%
Streaming or radio	18	4.0%	1	6.7%
Professional service provider	17	3.8%	0	0.0%
Billboard	0	0.0%	0	0.0%
Other	35	7.8%	2	13.3%

Question: How do you prefer to receive our information and resources regarding water quality?

Table F5: Preferred Method to Receive Carolina Clear Information

Method	Statewide Yes (n=1,237)	Statewide Yes (%)	Region 6 Yes (n=51)	Region 6 Yes (%)
E-newsletter or email	703	56.8%	27	52.9%
Direct mail or printed newspaper	395	31.9%	24	47.1%
Social media	366	29.5%	18	35.3%
Website	329	26.6%	13	25.5%
Printed materials	328	26.5%	18	35.3%
Television commercial	264	21.3%	14	27.5%
Billboard	176	14.2%	12	23.5%
Festival or local event	166	13.4%	6	11.8%
YouTube	150	12.1%	10	19.6%
Streaming or radio	146	11.8%	3	5.9%
Farmer's market	137	11.1%	4	7.8%
Friends, family, or word of mouth	104	8.4%	3	5.9%
Library	97	7.8%	0	0.0%
Clemson office/venue	66	5.3%	4	7.8%
Professional service provider	42	3.4%	0	0.0%
County or government administrative building	41	3.3%	2	3.9%
Phone	14	1.1%	3	5.9%
Other	23	1.9%	0	0.0%

Question: Carolina Clear is interested in your involvement in community activities that promote water stewardship. Please select all of the activities which you have participated in from the list below.

Table F6: Involvement with Water Stewardship Activities

Activity	Statewide Yes (n=1,230)	Statewide Yes (%)	Region 6 Yes (n=51)	Region 6 Yes (%)
Water recreational activities (boating, kayaking, fishing, swimming, visiting a South Carolina waterway)	598	48.6%	19	37.3%
Does not participate in listed activities	410	33.3%	23	45.1%
Litter clean up (beach or river sweep)	388	31.5%	11	21.6%
Community or volunteer conservation activity	168	13.7%	6	11.8%
Native plant/rain barrel/rain garden installation as part of a community project	122	9.9%	1	2.0%
Stream bank or shoreline repair/planting	61	5.0%	1	2.0%
Rain barrel sale	60	4.9%	1	2.0%
Other	52	4.2%	2	3.9%

Question: Select the barriers that prevent you from participating in water stewardship activities.

Table F7: Barriers to Participating in Water Stewardship Activities

Activity	Statewide Yes (n=1,221)	Statewide Yes (%)	Region 6 Yes (n=51)	Region 6 Yes (%)
Not knowing where to participate	670	54.9%	26	51.0%
Understanding how to participate	515	42.2%	25	49.0%
Time required	497	40.7%	27	52.9%
Having physical or health limitations	342	28.0%	23	45.1%
Not knowing others who participate	228	18.7%	8	15.7%
Cost	170	13.9%	8	15.7%
Lacking the necessary materials or equipment to participate	154	12.6%	8	15.7%
Not knowing why my participation is important	132	10.8%	7	13.1%
Restrictions from local government or governing body (ex. Homeowner's Association)	66	5.4%	3	5.9%
Other	84	6.9%	2	3.9%

Contact Information

Inquiries about the 2025 Clemson Extension's Carolina Clear Program Survey Report instrument, data frequencies, or report should be directed to:

Office of Research and Organizational Development

698 Concord Church Road

Pickens, SC 29671

Phone: 864-397-0329

Email: orod@clemson.edu

Website: <https://yli.sites.clemson.edu/orod>

