



WITH THE CLEMSON EXTENSION SERVICE



Stormwater Education and Involvement Strategic Plan 2016-2018

May 2016



Stormwater pollution—or non-point source pollution—is difficult to prevent, as it comes from a variety of sources in a community. From leaving pet waste on the ground to excessive fertilizer application, people create the opportunity for pollutants to enter a waterway every time it rains.

The Richland Countywide Stormwater Consortium (RCSC), co-facilitated by Richland County Stormwater Management and Clemson’s Carolina Clear, is comprised of Richland County, the Town of Arcadia Lakes, City of Forest Acres municipalities, and numerous educational partners. The mission statement of RCSC is to support the restoration and protection of healthy waterways in Richland County through outreach, stormwater education, public involvement, and partnerships with local governments, citizens, businesses, schools and organizations. During the strategic planning period, RCSC members evaluate the goals to ensure they reflect current local needs while remaining true to the mission statement. The following are goals for the 2016-2018 Strategic Plan:

- Develop and implement targeted outreach projects that address a range of stormwater pollutants through collaboration and utilization of local resources.
- Engage citizens in stormwater management through interactive programs and encourage attitudes that promote environmentally responsible behaviors.
- Facilitate collaboration among local organizations interested in watershed-related education to best meet the needs of local communities.
- Increase the availability of tools and trainings for professionals involved with stormwater management and water pollution-prevention activities.
- Utilize local media resources to increase awareness of stormwater quality and water pollution to the general public.



“Partnerships have many advantages, including providing access to resources; increasing effectiveness, efficiency, and public influence; allowing for creativity and innovation; and improving communication between typically adversarial parties.”

- US Environmental Protection Agency, 2003



Executive Summary

Keeping these goals in mind, RCSC members worked together to develop pollutant-focused programs and activities with a target audience. Identifying specific types of pollution and narrowing down their sources is an efficient means of curbing unwanted substances from entering surface water bodies; and because the waterways in Richland County have great economic and recreational value, people are primed to become more involved in activities that will help maintain excellent water quality. The priority pollutants of concern identified by RCSC members and designated by South Carolina Department of Health and Environmental Control include E. Coli/Fecal Coliform; pesticides, herbicides, and fertilizers; sediment; household hazardous waste; fats, oils, and grease; and litter.

The 2016-2018 Strategic Plan includes the pollutant-targeted activities, general stormwater awareness efforts, and professional development workshops that aim to teach skills to professionals who have an impact on local water quality. Many local municipalities, companies, and organizations also have vested interests in addressing issues relevant to water quality and improved environmental resource conservation. Those mutual interests encourage partnerships that can result in effective outreach efforts that reach large and diverse audiences. By collaborating on events, activities, grants, programs and special projects, RCSC members are able to utilize one another's resources to create consistent, collaborative messages focused on water quality improvement in Richland County.

Thank you to all of the Richland Countywide Stormwater Consortium partners for their participation and input during the development of the 2016-2018 Strategic Plan. We look forward to the many good things to come!



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NPDES MS4 Permit

The Clean Water Act prohibits pollutants from being discharged into "waters of the United States" unless they have a National Pollutant Discharge Elimination System (NPDES) permit. This permit limits the amount of pollution that can enter a water body and requires water quality monitoring to measure pollution levels. Stormwater runoff, which comes from rain and melted snow, can pick up chemical pollutants and debris. Those pollutants are considered non-point source pollutants, and as such, are regulated by NPDES stormwater programs with the purpose of reducing the amount of chemicals, sediment, and debris washed into waterways during a rain event. The following summary is from the Environmental Protection Agency (EPA) website (2012):

Polluted stormwater runoff is commonly transported through Municipal Separate Storm Sewer Systems (MS4s), from which it is often discharged untreated into local water bodies. To prevent harmful pollutants from being washed or dumped into an MS4, operators must obtain a NPDES permit and develop a stormwater management program.

- *Phase I, issued in 1990, requires medium and large cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges. (Richland County is designated as a Phase I MS4.)*
- *Phase II, issued in 1999, requires regulated small MS4s in urbanized areas, as well as small MS4s outside the urbanized areas that are designated by the permitting authority, to obtain NPDES permit coverage for their stormwater discharges. (The City of Forest Acres and the Town of Arcadia Lakes are Phase II MS4s.)*

Richland County was re-issued a Phase I permit in 2016 with the Town of Arcadia Lakes and City of Forest Acres as co-permittees. Each regulated MS4 is required to develop and implement a stormwater management program (SWMP) that includes pollution prevention measures, stormwater quality monitoring, pollution removal techniques, and legal measures of control, when necessary. Richland County's MS4 permit and SWMP includes enforcing new development and re-development controls; inspecting roadways, municipal facilities, industrial facilities and structural best management practices; public education and participation efforts; and illicit discharge and improper disposal detection to reduce pollutant discharges.

Compliance with the permit and SWMP requires the submittal of an annual report that outlines the permittee's activities and permit fulfillments. In most states, the EPA gives the responsibility of implementing the NPDES program to the state agencies. In South Carolina, the Department of Health and Environmental Control (SCDHEC) is the permitting authority for the NPDES program.



Background

REQUIREMENTS FOR PUBLIC EDUCATION AND PUBLIC INVOLVEMENT

The purpose of Richland Countywide Stormwater Consortium (RCSC) is to assist Richland County, Arcadia Lakes, and Forest Acres in meeting the Public Education and Public Participation requirements of the MS4 permit. In addition to creating a plan that outlines the targeted outreach efforts and measurements of impact, the permittees must conduct educational programs to target the following topics.

- Green Infrastructure and Low Impact Development Practices
- Pesticide, Herbicide, and Fertilizer Application
- Illicit Discharges and Improper Disposal
- Oils, Toxics and Household Hazardous Waste Control
- Construction Site Runoff
- Animal Waste
- Litter Control

Developing the Consortium Framework

Discussions of a regional stormwater consortium began in October 2004 as a result of a growing concern about water quality in Richland County and the impending designation of Richland County as an MS4 community. The designation of an MS4 community identifies the responsible party for ensuring that stormwater discharges transported within the separate storm sewer system are not degrading existing water quality and requires the community to become “operators” of their system. RCSC was modeled after several regional stormwater education consortiums in South Carolina, including the Coastal Waccamaw, Ashley Cooper, and Lexington Countywide Stormwater Consortiums.

Clemson University and Richland County, along with the Town of Arcadia Lakes and the City of Forest Acres, first entered into a formal contract and Memorandum of Understanding in June of 2008. The first official RCSC meeting was on December 10, 2008, at which an initial Education Plan of Work was drafted.

With Richland County Stormwater Management Division and Clemson Extension’s Carolina Clear as co-facilitators, RCSC has become a network of local organizations with a mutual interest in educating the citizens of Richland County about watershed health and stormwater pollution prevention measures. Past activities have included a variety of indirect and direct outreach to the general public through festivals, social media, and mass media campaigns. RCSC members have also worked together and independently on targeted programs. RCSC is now in its 8th year, and a new strategic plan that addresses the MS4 permit needs of Richland County and the surface water quality concerns of the community has been developed.

HIGHLIGHTS OF THE PAST FOUR YEARS

The growth of RCSC resulted in many achievements. Carolina Clear was featured in EPA's Watershed News for its stormwater partnership and created the Partners for a Healthy Watershed business recognition program. RCSC partnerships were also formed with the Smith Branch and Rocky Branch Watershed Alliances.

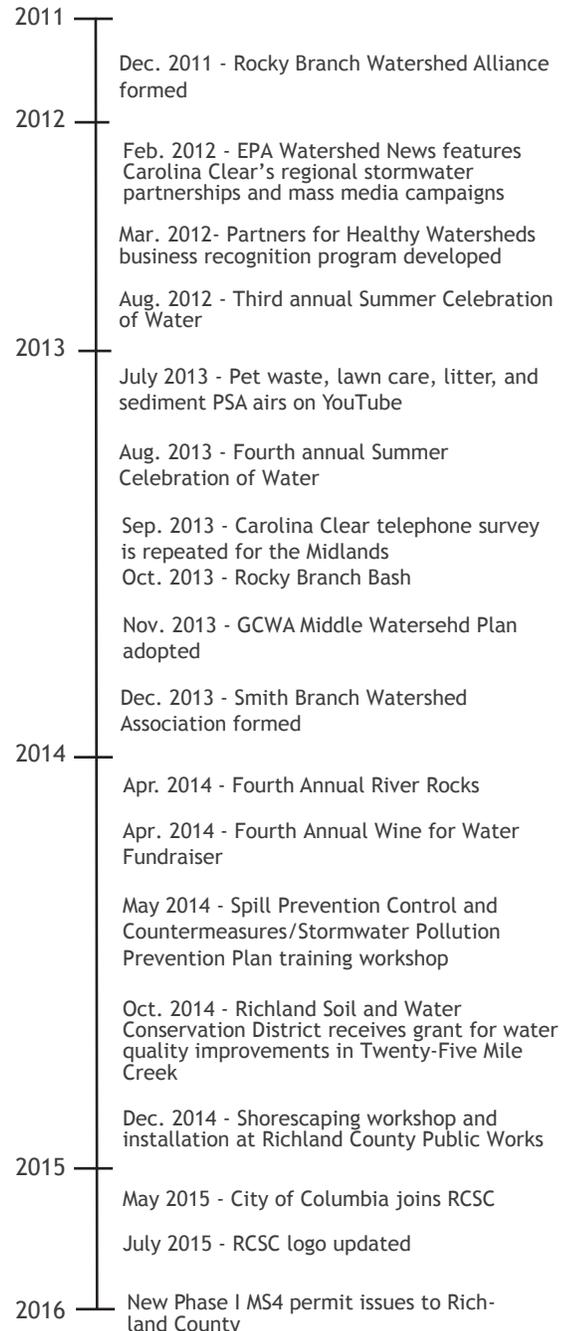
In July 2013, Richland County aired pet waste television PSAs on Time Warner Cable, and launched a series of water quality and recycling videos on YouTube and the Richland County television station. Carolina Clear conducted the second round of telephone surveys in the Midlands that resulted in great insight about the public's perception of water quality and the environment. Later that year, Gills Creek Watershed Association adopted their Middle Watershed Plan to improve the water quality in Gills Creek and create greenway and blueway trails in the lower portion of the watershed.

In 2014 the Clearly Doing Good program began with the installation of a shorescaping demonstration site at the Richland County Public Works retention pond. That project water later expanded in 2015 when a floating wetland was installed to uptake nutrients in the pond. Richland Soil and Water Conservation District received a grant in 2015 for water improvements in Twenty-Five Mile Creek. Using these funds, they have reached out to farmers and landowners in the watershed to offer financial assistance to implement conservation practices that improve livestock health, forage production, and water quality.

The Summer Celebration of Water festival, the Water for Wine Fundraiser, and the River Rocks festival all continued their annual water quality awareness events and celebrated their fifth year in 2015.

And finally, the RCSC received an updated logo!

RCSC TIMELINE



RCSC partners include both municipalities holding MS4 permits and local education providers with an interest in protecting water resources in Richland County. All partners are committed to a regional effort to provide stormwater education and public outreach and opportunities for public involvement in stormwater pollution prevention. RCSC continuously seeks to bring new partners into this effort.



MS4 Partners

1. Richland County
2. City of Forest Acres
3. Town of Arcadia Lakes



Education Partners

1. AECOM
 - Key Activities: Provide technical expertise on water quality best management practices and water quality sampling; assist with production of annual stormwater report for Richland County.
2. Carolina Children's Garden
 - Key Activities: Provide youth education on topics related to gardening and the environment, primarily for elementary school and homeschool audiences.
3. Central Midlands Council of Governments
 - Key Activities: Educate elected and appointed officials and government staff on land use planning and management of services such as transportation and utilities, as related to water quality, conservation and environmental protection.



EDUCATION PARTNERS (CONTINUED...)



4. City of Columbia
 - Key Activities: Partner with Richland County and local organizations on outreach efforts.



5. Congaree National Park
 - Key Activities: Provide education programs to youth and adults alike on the natural and cultural history of the area.



6. Town of Blythewood
 - Key Activities: Provide opportunities for outreach related to water quality within the Town of Blythewood in Richland County.

7. Crane Creek Watershed Association
 - Key Activities: Build community involvement and provide public outreach related to protection of the Crane Creek Watershed.



8. Gills Creek Watershed Association
 - Key Activities: Build community involvement and provide outreach related to water quality within the Gills Creek Watershed; engage homeowner groups within the watershed; organize litter cleanups.



9. Green Steps Schools
 - Key Activities: Involve youth and teachers in schools in projects related to water quality, conservation of resources and environmental protection, for example, rain barrel installations.

EDUCATION PARTNERS (CONTINUED...)



10. Keep the Midlands Beautiful

- Key Activities: Organize regular litter cleanups of streets and shorelines through Adopt-a-Highway, Adopt-a-Waterway, and special events; develop anti-littering campaigns; engage citizens in beautification efforts within the Midlands



11. Richland Soil & Water Conservation District

- Key Activities: Provide education and outreach to youth and adults related to conservation of natural resources; engage agricultural audiences in soil and water protection.



12. Richland County Conservation Commission

- Key Activities: Involve land owners and local communities in conservation through negotiating conservation easements and historic preservation.



13. Richland County 4-H

- Key Activities: Provide education to youth related to water qualities through club meetings and day camps.



14. Richland County Master Gardeners Association

- Key Activities: Provide education and outreach to homeowner audiences on water quality topics related to home horticulture, such as rain gardens, rain barrels, soil testing and understanding your yards needs.



15. Rocky Branch Watershed Alliance

- Key Activities: Build community involvement and provide outreach related to water quality within the Rocky Branch Watershed; organize litter cleanups; engage citizens and homeowner groups within the watershed in advocacy to local elected and appointed officials

EDUCATION PARTNERS (CONTINUED...)



16. Sonoco Recycling

- Key Activities: Provide education and outreach related to recycling and anti-littering messages.



17. South Carolina Department of Health and Environmental Control

- Key Activities: Issue MS4 stormwater permit that dictates stormwater pollution prevention public education and participation efforts for Richland County. Provide guidance to RCSC on meeting compliance goals.



18. South Carolina Forestry Commission

- Key Activities: Provide public education on water quality as related to forestry and conservation, focusing particularly on youth and teacher audiences.



19. Sustainable Midlands

- Key Activities: Provide education and outreach related to sustainability and conservation; engage faith-based organizations in conservation through Green Congregations Initiative; engage youth through Sustainable Schools Initiative.

Thank you!

Mission Statement

Support the restoration and protection of healthy waterways in Richland County through outreach, stormwater education, public involvement and partnerships with local governments, citizens, businesses, schools, and organizations.

GOALS

- Develop and implement targeted outreach projects that address the range of stormwater pollutants through collaboration and utilization of local resources.
- Engage citizens in stormwater management through interactive programs and encourage attitudes that promote environmentally responsible behaviors.
- Facilitate collaboration among local organizations interested in watershed-related education to best meet the needs of local communities.
- Increase the availability of tools and trainings for professionals involved with stormwater management and water pollution-prevention activities.
- Utilize local media resources to increase awareness of stormwater quality and water pollution to the general public.





Three-Year Education Strategy

Core Programs

The RCSC is comprised of representatives from MS4 and education partners. While all partners are united under the common goal of protecting local water resources, each brings to the table its own goals, objectives, target geographies, areas of expertise, and programs. Together the RCSC partners address water quality concerns in the following program areas: mass media, homeowner, pollutant-targeted, professional development, public events, and youth.

MASS MEDIA

Stormwater management information has been distributed through a variety of media outlets including internet and social media, television and video, newspapers, magazines, billboards, and online articles. In 2013 alone Richland County Stormwater Management produced four videos used as television PSAs, with each video targeting a specific pollutant. RCSC also participates in social media, with nearly all partners maintaining websites and Facebook pages to share information on water quality. Interviews on local radio programs and Richland County TV channels also help RCSC to reach a wide array of audiences.

PUBLIC EVENTS

Each year, RCSC partners display information on water quality at an average of 15 public events, including fairs, festivals, kids' days, and other gatherings. In 2015, the sixth Summer Celebration of Water was held at Riverfront Park and drew over 1,000 visitors. This free family festival celebrates our local rivers, lakes, and streams and continues to grow in attendance each year.

YOUTH

RCSC's 4-H2O Exploring Waterways summer day camp consists of week-long, full day youth camps are held at Lake Murray, Harbison State Forest, and Congaree National Park for students ages 9-15. Campers have the opportunity to experience fish seining, conduct water quality tests, sample for macroinvertebrates, and learn about pollution in our local waterways and how it can be prevented. Richland Soils and Water Conservation Mini-Grants provide funding for campus conservation projects and youth environmental education initiatives at schools in Richland County. Youth activities also include classroom presentations on water quality and projects through the Green Steps program.

HOMEOWNERS

Homeowners are an especially important audience for RCSC because of the many pollution-causing activities tied to home activities like car washing and maintenance, lawn care, and pets. One tool that has been successful in reaching this audience is the Carolina Yards & Neighborhoods program, a recognition program for homeowners who want to make their yards more environmentally friendly, while also making them easier and less expensive to maintain. The program includes fertilizer management, reduction of pesticide use, efficient watering, and other steps that reduce runoff and pollution related to yard maintenance.



Three-Year Education Strategy

Another method that the RCSC uses to communicate information to homeowners is the Backyard Landscaping Series. This program provides resources and instruction for a variety of water-wise activities such as rain barrels, composting, and urban gardening. Individual Neighborhood Associations and Homeowner Associations also receive presentations and listening sessions by the local watershed advocacy groups, including the Gills Creek Watershed Association, Rocky Branch Watershed Alliance, and Congaree Riverkeeper.

POLLUTANT-TARGETED

The RCSC holds a number of events and workshops to target specific pollutants of concern across the county. Richland Recycles Day focuses on reducing hazardous household wastes and debris from entering landfills and waterways. *E. coli*, another high priority pollutant, commonly enters our waterways by way of pet waste. RCSC has continuously been running a pet waste campaign that includes distributing brochures with pet registration renewals, at veterinary offices and adoption centers, and at public events. The RCSC also gives pet waste bag dispensers to neighborhoods. Livestock are an additional source of *E. coli* in local water ways. The RCSC addresses this issue by providing technical assistance to farmers through educational workshops and field days. In the Twenty-five Mile Creek Watershed, the RCSC also provides direct on-site consulting and financial assistance to farmers. Because the primary source of sediment as a stormwater pollutant comes from construction site runoff, activities that address sediment control are listed under professional development activities, not pollutant-targeted activities.

PROFESSIONAL DEVELOPMENT

The RCSC not only works to influence homeowner behavior in terms of water-wise actions, it also provides workshops and trainings on topics that range from pesticide use to erosion control. The 2015 Pesticide, Herbicide and Fertilizer Symposium continues to guide professionals on integrated pest management, fire ant control, aquatic herbicide application, and inspection. The RCSC also addresses erosion pollution by offering Certified Erosion Prevention and Sediment Control Inspector (CEPSCI) certifications.





Three-Year Education Strategy

Since the formation of RCSC, a plan of action was created through an annual Education Plan with a description of outreach efforts or a multi-year Strategic Plan. The 2016-2018 Strategic Plan will continue to be a combination of those two approaches by setting a framework for the desired and planned projects to be executed by RCSC partners over the next three years. This framework allows other organizations within and outside of the RCSC to view upcoming projects and seek potential opportunities for collaboration in an effort to maximize impact. Projects and programs were developed based on partner priorities, results of the 2014 telephone survey conducted by Carolina Clear, and input on current RCSC programs.

STRATEGIC PLAN QUESTIONNAIRE

The RCSC was born out of Richland County Stormwater Management Division’s desire to create a partnership by leveraging the resources of its community members in order to achieve the greater purpose of watershed awareness in Richland County and meet MS4 permit requirements. As the time frame of the 2012-2015 Strategic Plan came to a close, RCSC members were surveyed to gauge the specific interests and goals of current and potential partners. The questionnaire consisted of 26 questions across three topic categories: partner priorities, RCSC evaluation, and program evaluation. The full questionnaire and responses can be found in Appendix B.

Respondents identified the following as priority pollutants of concern (POCs), sources of pollution, and target audiences:

Pollutants of Concern

- Sediment
- Nutrients
- Pesticides, herbicides, and fertilizers

Sources of Pollution

- Construction site runoff
- Impervious surfaces
- Lack of knowledge

Target Audiences

- Contractors, Engineers, and Developers
- Homeowners
- General Public

The priority POCs singled out in the questionnaire were paired with POCs designated by SCDHEC, to generate the following list of pollutants for targeted outreach activities.

- E. Coli/Fecal Coliform
- Pesticides, Herbicides, and Fertilizers
- Household Hazardous Waste
- Fats, Oils, and Grease
- Litter
- Sediment

Three-Year Education Strategy

While the above mentioned POCs have been identified as priority pollutants, some RCSC activities may address pollutants that are of concern, but not top priority. Each of these pollutants poses a threat to surface water quality. In an effort to address the POCs, sources, and target audiences and elevate public education and involvement, RCSC members also provided input on existing and future programs. From this data, a list of pollutant-targeted activities were planned, with each having an associated target audience or source.

For general stormwater awareness outreach, RCSC members expressed an interest in mass media campaigns,

general outreach programs, and programs that directly involve the public. These activities have been long-standing with RCSC and the results of the survey indicate they still remain a priority. When further asked about programs of interest, training courses for professionals, rain garden workshops, and low impact development workshops were highly suggested. Using these suggestions, additional program ideas, and currently existing activities, a series of professional development activities were planned—each designed to address a specific pollutant-reduction or education need to a target audience. While it is easy to reach stake-holders with a vested interest in local water quality, it is also important to connect with community members who do not readily engage in water quality issues. After all, we *all* live downstream. Those audiences were also identified in the questionnaire responses and RCSC members have been collaborating on new ways to bring the relevance of water resources to more audiences.

Since the creation of the RCSC in 2008, the dynamic and nature of the organization has grown. Thus a re-evaluation of the RCSC itself was necessary. In the questionnaire, many members expressed the need for improved communication and collaboration as well as more impactful programs and increased visibility of the RCSC as an organization. Members also expressed mutual interests and dedication as strengths of the organization. Working together to consider each member's interests and develop targeted programs based on those interests is an attempt to improve the efficacy of the RCSC as a unit. By collaborating on events, activities, grants, programs, and special projects the group is able to utilize one another's resources to create consistent, collaborative messages focused on water quality improvement and protection in Richland County.





Three-Year Education Strategy

PUBLIC TELEPHONE SURVEY

During the summer of 2009, Carolina Clear partnered with the Clemson University Department of Sociology and Anthropology and the School of Computer Science to conduct a telephone survey of the RCSC area residents. The responses strongly influenced the development of future outreach programs and education plans for the RCSC. In 2014 a follow-up survey was released to determine if programmatic changes resulting from the 2009 survey have been effective in reducing behaviors and attitudes that adversely affect water quality.

Using the follow up survey data, the RCSC was able to identify attitudes and behaviors that had changed positively since 2009. An overall increase in residents who were either “Very” or “Somewhat” concerned for pollution and environmental quality in local waterways increased from 82.1% to 87.3%. Additionally, residents who were aware that actions on land strongly affect local waterbodies increased 9%. In terms of sources of pollution, the public viewed industrial sites, fuel and auto fluids, and lawn chemicals as having the greatest impact on water quality. These results indicate the need to emphasize that individual actions can have just as strong, if not stronger, of an impact as industrial activities on our water quality. Another area that can be improved upon is the effectiveness and high visibility of storm drain markings. Only 34.6% of the public responded as having seen a marked storm drain. Of this percentage, 11% were able to recall the message “Drains to Waterways”, 26.6% recall the logo, and less than half (45.3%) could not recall what was on the storm drain marking.

In regards to shoreline management, respondents believed allowing vegetation to grow naturally and installing bulkhead were both “Very Effective” ways to manage land along waterways. Additionally, an equal percentage believed keeping the grass mowed to the water’s edge was “Very Effective” as “Not at All effective”. These results indicate the need for educational outreach program and workshop on ways to maintain healthy shorelines. Common recreational activities of Midlands residence are hiking, walking, or biking, as opposed to water sports such as kayaking, canoeing or paddleboarding. This presents opportunities to identify locations in the area that could benefit from educational signs, such as greenways along rivers and creeks. Greenways could present a way to inform the public on environmental issues, as an increase of nearly 9% was seen in those who feel greenways are “Valuable” or “Somewhat Valuable” to the community. In addition to this, those who believe greenways are not valuable at all decreased from 11.4% in 2009 to 5.6% in 2013.

Pet waste is an ongoing pollutant of concern in the Midlands. Attempts to educate the public on the importance of picking up after their dog was effective, as this behavior statistically increased from 68% to 77% in 2013. Also significant, 15% of dog owner respondents never picked up after their dog in 2013, compared to 30% in 2009.

Lastly, an increase in education and outreach is needed for proper disposal of yard waste and oil or chemicals, as 7% of respondents reported dumping these down storm drains.

Three-Year Education Strategy

In order to continue to positive programmatic changes, respondents were asked in the 2013 survey which program topics they found most interesting and would be most likely to attend:

- Green Gardening (35%)
- How to Build a Rain Barrel (34%)
- Volunteer Stream Clean Up (21%)
- How to Build a Rain Garden (19%)
- Local Lake and River Health Education (18%)
- None (24%)

STRATEGIC PLAN REVIEW

The 2016-2018 Strategic Plan includes the pollutant-targeted activities, general stormwater awareness efforts, and professional development workshops that aim to teach skills to professionals who have an impact on local water quality. Some activities in the plan may occur once--during a portion of a year, while others span multiple years. Also included are activities that will occur annually and projects that are dependent upon the availability of additional community partners. The narrative portion of the plan provides details about each activity, including the timeline, location, participants, and measure of success for each targeted activity, while the tabular section summarizes the target audience, target pollutant, partner, and timeline for each activity.

Overall, this Strategic Plan sets out to set specific program goals, prioritize distribution of resources among mutually agreed upon efforts, and provide an expectation of time frame towards achieving these goals over multiple years. Each task of the Strategic Plan includes a period of evaluation so that programs can be further refined before broad or continue implementation. Because these programs are addressing water quality concerns specifically in Richland County, the document is living and subject to modification as new needs arise.



PARTNER ABBREVIATIONS:

- CC - Carolina Clear
- COG - Central Midlands Council of Governments
- CCSM - City of Columbia Stormwater Management
- CCSWR - City of Columbia Solid Waste and Recycling
- GCWA - Gills Creek Watershed Association
- KMB - Keep the Midlands Beautiful
- RBWA - Rocky Branch Watershed Association
- RCSC - Richland Countywide Stormwater Consortium
- RCSH2O - Richland County Stormwater Management
- RCSWR - Richland County Solid Waste and Recycling
- RSWCD - Richland Soil and Water Conservation District
- SM - Sustainable Midlands



Three-Year Education Strategy

PROGRAM OVERVIEW: Pollutant-Targeted Activities

E. Coli/Fecal Coliform

Trash the Poop - Ongoing

Target audience: Homeowners, pet owners

Lead Participants: City of Columbia, Lexington County, Richland County

Measurement of success/impact: Number of participating neighborhoods and/or parks; numbers reached by mass media campaigns; number of leash bag holders distributed at events and adoption centers, weight (lbs.) of pet waste disposed of measured by assuming each bag weighs 0.35 lbs.

Neighborhood and public awareness program that encourages pet owners to pick up their pet waste. Neighborhoods that enroll in the program will receive a free pet waste station that they are responsible for maintaining.

Distribute pet waste brochures to veterinary offices and pet supply store - Ongoing

Target audience: Pet owners

Lead Participants: Carolina Clear

Measurement of success/impact: Number of brochures given out

Adopt-A-Stream - Ongoing

Target audience: General Public

Lead Participants: Carolina Clear, City of Columbia Stormwater Management, Gills Creek Watershed Association, Richland County Stormwater Management, Sustainable Midlands

Measurement of success/impact: Stream miles assessed; number of illicit discharges reported

Citizen science monitoring program in which volunteers conduct bacterial, biological, and chemical water quality tests on "adopted" waterways. The results of the tests can be used to detect illicit discharges and sanitary sewer overflows.

Distribute pet waste brochures with pet registration - Ongoing

Target audience: Pet owners

Lead Participants: Richland County Animal Care

Measurement of success/impact: Number of brochures handed out



Three-Year Education Strategy

Publicize identification and reporting of sanitary sewer overflows and their causes - Ongoing

Target audience: Homeowners

Lead Participants: Richland County Stormwater Management

Measurement of success/impact: Number of brochures handed out

Twenty-five Mile Creek farmer assistance program - Ends September 2017

Target audience: Farmers

Lead Participants: Richland Soil and Water Conservation District

Measurement of success/impact: Number of BMPs implemented; length of fencing installed; number of cattle given alternative water sources; pounds of manure composted; number of people reached through educational field days and workshops.

RSWCD will provide financial incentives and technical assistance for landowners to implement Best Management Practices (BMPs). These BMPs will include fencing, stream crossings, and alternative water sources to keep livestock out of waterways and away from fragile streambanks as well as manure composting facilities to prevent fresh manure from being carried into waterways by stormwater runoff.

Pesticides, Herbicides, and Fertilizers

Backyard Landscaping Series - Spring, Summer, Fall 2016

Target audience: Homeowners

Lead Participants: Various RCSC partners

Measurement of success/impact: Number of new practices taken and/or installed based on a 6 mo. follow-up survey

The updated Backyard Landscaping Series has transformed into half-day hands-on gardening workshops that focus on a variety of ways to reduce pesticide, herbicide, and fertilizer runoff and limit/prevent erosion in yards. Topics include pond/shorescaping, organic lawn care, container gardening, rain barrel and (vermi-)compost bins.

Rain Barrel and Compost Bin Sales - Various times throughout the year

Target audience: Homeowners

Lead Participants: Richland County, City of Columbia, Keep the Midlands Beautiful, Carolina Clear

Measurement of success/impact: Number of barrels/bins installed based on a 2 mo. follow-up survey; amount of water collected with each barrel based on number installed



Three-Year Education Strategy

Compost bin and rain barrel sales hosted by various RCSC members occur throughout the year. These events are intended to encourage homeowners to take advantage of roof runoff by using rain water around their homes, and reduce food waste and fertilizer use by adding compost to their gardens.

Carolina Yards - Ongoing

Target audience: Homeowners

Lead Participants: Carolina Clear, Clemson Extension

Measurement of success/impact: Number and total area of yards certified; total number of actions take

Clemson Extension's Carolina Yards program seeks to work with residents in creating healthy, watershed-friendly landscapes. Use simple and effective gardening methods to help guide you toward a low maintenance yard that works with nature, rather than against it.

Carolina SchoolYards - Ongoing

Target audience: Schools

Lead Participants: Carolina Clear, Clemson Extension

Measurement of success/impact: Schools participating; Schoolyards certified

The Carolina Schoolyards Program follows the principles of Carolina Yards as it works with teachers and school administrators to help them implement environmentally friendly education and activities within their schoolyards.

Organic Certification Workshop - Biennial

Target audience: Agricultural producers

Lead Participants: Richland Soil and Water Conservation District

Measurement of success/impact: Number of people attending workshop

This workshop helps local farmers learn more about the organic certification process and requirements. Attendees gain information on soil and pest management, organic inputs, and application completion. The workshop includes presentations from local experts.

Blue Thumb Landscaper - Ongoing

Target audience: Landscape professionals

Lead Participants: City of Columbia Stormwater Management, Richland County Stormwater Management

Measurement of success/impact: Number of participants; follow-up survey on implementation of learned practices



Three-Year Education Strategy

Water-wise landscaping campaign that encourages landscape professionals and homeowners to adopt pollution reduction and prevention practices by planting native plants, limiting the amount of water and chemicals used, and recycling yard waste through composting.

Hazardous Household Wastes

Richland Recycles Day - May

Target audience: 4th grade students, general public

Lead Participants: Richland County Solid Waste and Recycling, Sonoco Recycling

Measurement of success/impact: Number of attendees; pounds collected

Annual event during which Richland County citizens bring household items to be recycled. Items accepted include electronics, light bulbs, batteries, household hazardous waste, pesticides, fertilizers, paper for shredding, cooking oil and tires. While the collection is occurring outside, students from various schools visit exhibitor booths with hands-on presentations that focus on recycling.

Recycling Events - Various times throughout the year

Target audience: General public

Lead Participants: Keep the Midlands Beautiful, Richland County Solid Waste and Recycling, City of Forest Acres, City of Columbia Solid Waste and Recycling

Measurement of success/impact: Number of attendees; pounds collected

Recycling and shredding events are hosted by a variety of RCSC members throughout the year. These events allow people to drop off electronics, scrap metal, paper to be shredded, and other household items to be recycled and minimize waste in landfills

Cleaning with Care - March

Target audience: Homeowners, General Public

Lead Participants: Carolina Clear, Richland County Stormwater

Management Measurement of success/impact: Number of attendees

Participants learn how to make household cleaners that are effective, inexpensive, environmentally-friendly, and fun to make. All products made during with workshop can be taken home at the end.



Three-Year Education Strategy

Fats, Oils, and Grease

Recycling Drop-Off Sites

Target audience: General public, car care professionals

Lead Participants: Richland County Solid Waste and Recycling, City of Columbia Solid Waste and Recycling

Measurement of success/impact: Gallons recycled

There are several locations across the county where citizens can properly dispose of used automotive oil and oil filters. A list of these sites can be found on DHEC's website:

<http://www.scdhec.gov/HomeAndEnvironment/Recycling/WheretorecycleLocally/richland/>

Distribute materials to apartment complexes - Ongoing

Target audience: General public

Lead Participants: City of Columbia Utilities and Engineering

Measurement of success/impact: Number of brochures distributed

Trash the Grease - Ongoing

Target audience: Homeowners, General Public

Lead Participants: City of Columbia Utilities and Engineering

Measurement of success/impact: Survey given 6 mo. after campaign begins

Media campaign to bring awareness about the hazards of pouring grease down the sink drain and how FOGs impact our local waterways.

Southern Fried - Ongoing

Target audience: Homeowners, General Public

Lead Participants: City of Columbia Utilities and Engineering

Measurement of success/impact: Number of gallons of oil collected each year

A cooking oil recycling program with a collection site at Public Works that encourages everyone to recycle their cooking oil.



Three-Year Education Strategy

Litter

Adopt-A-Highway - Ongoing

Target audience: General Public

Lead Participants: Gills Creek Watershed Association, Keep the Midlands Beautiful

Measurement of success/impact: Pounds of litter collected

The Adopt-A-Highway (AAH) program is sponsored by PalmettoPride Keep the Midlands Beautiful coordinates the AAH program for roads in Richland and Lexington Counties. Keep the Midlands Beautiful also coordinates the Adopt-A-Street program for the City of Columbia.

Adopt-A-Waterway - Ongoing

Target audience: General Public

Lead Participants: Keep the Midlands Beautiful

Measurement of success/impact: Pounds of litter collected

The Adopt-A-Waterway program offers volunteer groups the opportunity to address water-based litter issues in Richland and Lexington Counties. Please join us in protecting and cleaning up our creeks, rivers, lakes, boat landings and islands.

Beach Sweep River Sweep - September

Target audience: General Public

Lead Participants: Gills Creek Watershed Association, Keep the Midlands Beautiful

Measurement of success/impact: Pounds of litter collected

Beach Sweep/River Sweep is South Carolina's largest one-day volunteer cleanup event of its kind. Every 3rd Saturday in September, from 9 a.m. to 12 p.m., thousands of South Carolinians clear beaches, rivers, lakes, marshes, and swamps of aquatic debris.

River Clean-Ups - Ongoing

Target audience: General Public

Lead Participants: Gills Creek Watershed Association, Keep the Midlands Beautiful

Measurement of success/impact: Pounds of litter collected



Three-Year Education Strategy

Street Sweeper Campaign - TBD

Target audience: General Public

Lead Participants: Richland County Stormwater Management, Roads and Drainage, Neighborhood Improvement, and Solid Waste and Recycling

Measurement of success/impact: Pounds of litter collected; miles of streets swept each year

As a part of bringing litter awareness, several County departments are coming together to launch the use of their new street sweeper and have a neighborhood litter pick-up event.

PROGRAM OVERVIEW: Stormwater Awareness Outreach Activities

See spreadsheet for list of festivals, youth programs, mass media campaigns, and other general stormwater awareness outreach activities.

PROGRAM OVERVIEW: Professional Development Activities

Certified Erosion Prevention and Sediment Control Inspector (CEPSCI) Course - Multiple trainings throughout year

Target audience: Field personnel, contractors, engineers

Lead Participants: Clemson University

Measurement of success/impact: Number of participants

Clemson University initiated the development and implementation of a program designed to inform individuals about important construction-related best management practices. The purpose of the CEPSCI program is to educate field personnel on the proper installation, maintenance, and inspection of erosion prevention and sediment control measures.

Certified Stormwater Plan Reviewer (CSPR) Course - May

Target audience: SC DHEC Stormwater Plan Reviewers, engineers

Lead Participants: Clemson University

Measurement of success/impact: Number of participants

The purpose of the Certified Stormwater Plan Reviewer (CSPR) program is to educate personnel on the proper design and review of stormwater and sediment control plans for development sites in order to meet regulatory and environmental requirements.



Three-Year Education Strategy

Erosion Control Workshop - February

Target audience: Contractors

Lead Participants: Carolina Clear

Measurement of success/impact: Number of participants

This workshop will educate technical audiences on the proper selection, installation, and maintenance of construction BMPs and how they can save time and money on their sites.

Spill Prevention Control and Countermeasures Training - May

Target audience: County employees, industrial site operators

Lead Participants: Richland County Stormwater Management

Measurement of success/impact: Number of participants

This training provides procedures, methods and equipment that will be used to prevent and clean up discharges of harmful oils.

Blue Thumb Landscaping Conference - January

Target audience: Landscape professionals

Lead Participants: City of Columbia Stormwater Management, Richland County Stormwater Management

Measurement of success/impact: Number of attendees

This one-day conference is targeted towards lawn maintenance professionals and landscape architects. Topics will include integrated pest management, aquatic pest control, stormwater runoff, turf management, pesticide resistance, good housekeeping practices, and inspections.

Green Infrastructure/Low-Impact Development Workshop - Spring

Target audience: Engineers, contractors

Lead Participants: Richland County Stormwater Management, City of Columbia Stormwater Management

Measurement of success/impact: Number of attendees; LID practices installed or carried out based on a 6 mo. follow-up survey

This workshop includes a demonstration site visit with explanation of the low impact development BMPs used, site selection and design, management practices, and cost-benefit analysis. Economic/environmental bene-fits, stormwater management, and nonpoint pollution control will also be discussed.



Three-Year Education Strategy

Teacher Workshops - Ongoing

Target audience: Education professionals

Lead Participants: Richland Soil and Water Conservation District, Richland County Stormwater Management

Measurement of success/impact: Number of teachers attending; number of students impacted based on class size

Various workshops occur throughout the year that engage K-12 teachers in projects involve stormwater quality. These trainings are meant to prepare teachers to incorporate water quality and citizen science into their curriculum. (e.g., Project Learning Tree/Project WET Curriculum Workshop, Soil Health and Composting, Project Based Learning)

Master Pond Manager Course - Fall

Target audience: Pond managers, Stormwater managers, Landscapers, Contractors

Lead Participants: Clemson University

Measurement of success/impact: Number of participants

The Master Pond Manager (MPM) achievement course is designed to teach participants a wide range of pond management knowledge and skills. As a “hybrid” course combining online and face-to-face learning, it will incorporate self-paced lectures, discussion, quizzes, and other web-based methods of participant-instructor interaction, along with hands-on participation activities in the field

SCNLA Field Day - Annually

Target audience: Landscape professionals

Participants: City of Columbia

Measurement of success/impact: Number of attendees

Sponsorship of the Field Day and tabling at the event that reaches local landscapers. Attendees gain CEUs for pesticide applicator license and landscaping PDHs.

Pasture Field Day - Annually

Target audience: Farmers/livestock owners, pesticide applicators

Participants: Richland Soil and Water Conservation District

Measurement of success/impact: Number of participants

This field day discusses soil health and pasture management, fencing techniques, weed control and information on financial assistance for land owners.



Three-Year Education Strategy

Post-Construction BMP Inspector Course - Fall, Spring

Target audience: Engineers, stormwater managers, public works staff, commercial landscapers, planners

Lead Participants: Clemson University Center for Watershed Excellence

Measurement of success/impact: Number of certifications

The purpose of the Post-Construction BMP Inspector program is to train professionals in methods and strategies for conducting routine and thorough inspections of stormwater management practices. Areas to be covered include technical elements of stormwater management practice function and performance, as well as scheduled maintenance tasks that are required to ensure these installed practices are working as intended.

Agricultural Soil Health Programming - Ongoing through 2018

Target audience: Farmers

Lead Participants: Richland Soil and Water Conservation District

Measurement of success/impact: Number of participants reached through outreach events; number of farmers participating in research and demonstration projects

RSWCD coordinates research, demonstration, and outreach on agricultural practices that promote soil health, such as reduced tillage and cover crops. These practices increase water infiltration, reduce runoff, and can reduce the use of synthetic fertilizers and pesticides, all of which have a positive effect on water quality.



Three-Year Education Strategy

PROGRAM OVERVIEW: Best Management Practice Demonstration Sites

Floating wetland

Date: September 2015

Location: Richland County Public Works Facility

Lead Participants: Richland County, Carolina Clear

Rain garden installation

Date: April 2016

Location: Longleaf Middle School

Lead Participants: Carolina Clear

Shoreline buffer

Date: March 2016

Location: Sandhill REC

Lead Participants: Richland County Stormwater, Carolina Clear, Clemson Extension Master Gardeners

Pollinator Garden

Date: May 2016

Location: Sandhill REC

Lead Participants: Carolina Clear, Clemson Extension Master Gardeners, Richland Soil and Water Conservation District

Owens Field Park Biofiltration Cells

Date: May 2016

Location: Owens Field Park

Lead Participants: Gills Creek Watershed Association

Pollutant-Targeted Activities

	Target Audience	Activity	Organization	Timeline
<i>E. coli</i> /Fecal Coliform	Pet Owners	Distribute pet waste brochures to veterinary offices and pet supply stores	Carolina Clear	Ongoing
	Pet Owners	Distribute pet waste brochures with pet registration	Richland County Animal Care	Ongoing
	Homeowners	Publicize means for SSO identification and reporting	RCSH2O	Ongoing
	Homeowners, Pet Owners	Trash The Poop	City of Columbia, Lexington County, Richland County	Ongoing
	Farmers, Land Managers	Twenty-five Mile Creek farmer assistance program	RSWCD	Ends Sept. 2017
	General Public	Adopt-A-Stream	CC, RCSH2O, GCWA, SM, CCSM	Summer 2016

Pollutant-Targeted Activities

	Target Audience	Activity	Organization	Timeline
Pesticides, Herbicides, and Fertilizers	Homeowners	Backyard Landscaping Series	RCSC	Spring, Summer, Fall
	Homeowners	Rain Barrel and Compost Bin Sales	Richland County, City of Columbia, KMB, CC	Various
	Homeowners	Carolina Yards	Carolina Clear	Ongoing
	Homeowners	Encourage environmentally-friendly landscaping	CCSM, RCSH20	Ongoing
	Schools	Carolina SchoolYards	Carolina Clear	Ongoing
	Landscaping professionals	Blue Thumb Landscaper	City of Columbia, RCSH20	Ongoing

Pollutant-Targeted Activities

	Target Audience	Activity	Organization	Timeline
Household Hazardous Waste	General Public	Cleaning with Care	Carolina Clear, RCSH2O	February 2016
	General Public	Richland Recycles Day	Richland County Solid Waste and Recycling, Sonoco Recycling	May (Annual)
	General Public	Recycling Events	KMB, RCSW, City of Forest Acres, CCSW	Various
Fats, Oils, And Grease	General Public	Recycling Drop-Off Sites	RCSWR, CCSWR	Ongoing
	General Public	Distribute information on hazards of FOGs to apartment complexes	City of Columbia Utilities and Engineering	Ongoing
	General Public	Trash the Grease	City of Columbia Utilities and Engineering	Ongoing
	General Public	Southern Fried	City of Columbia Utilities and Engineering	Ongoing

Pollutant-Targeted Activities

	Target Audience	Activity	Organization	Timeline
Litter	General Public	Adopt-A-Highway Program	GCWA, KMB	Ongoing
	General Public	Adopt-A-Waterway Program	Keep the Midlands Beautiful	Ongoing
	General Public	Beach Sweep River Sweep	GCWA, KMB	September (Annual)
	General Public	River Clean-Ups	GCWA, KMB	Ongoing
	General Public	Street Sweeper Campaign	RCSH2O, SCSWR, Richland County Roads and Drainage, Neighborhood Improvement	2016-2017

General Stormwater Awareness Outreach Activities

	Target Audience	Activity	Organization	Timeline
Festivals	Youth, General Public	Richland Recycles Day	RCSWR, CCSWR, Sonoco Recycling	May (Annual)
	General Public	Display at Rooftop Rhythms Festival	GCWA	September and October (Annual)
	General Public	Forest Lake Presbyterian Church Earth Sunday	GCWA, RSWCD	October (Annual)
	General Public	Wine for Water Fundraiser	GCWA, RBWA	April (Annual)
	General Public	Display at Sparkleberry Country Fair	GCWA, RSWCD, Master Gardeners, Richland County	April (Annual)
	General Public	Display at Big Nosh	GCWA	May (Annual)
	General Public	Urban Paddle and Picnic	GCWA	May (Annual)
	General Public	Summer Celebration of Water	Richland County, City of Columbia, CC, GCWA, SM, KMB, Sonoco Recycling	August (Annual)
	General Public	National Public Works Week Kids' Day	Richland County	May (Annual)

General Stormwater Awareness Outreach Activities

	Target Audience	Activity	Organization	Timeline
Youth Programs	Youth	SC Envirothon	RSWCD	May (Annual)
		Display at USC Green Career Fair	GCWA	March (Annual)
	Teachers/Youth	Green Steps School Training	Sonoco Recycling, Keep the Midlands Beautiful	Ongoing
	Youth	4H2O Exploring Lake Murray/Congaree Watershed	Carolina Clear	June/July (Annual)
		Green Steps	Sonoco Recycling, KMB, RSWCD, RCSH2O	Ongoing
		Public Works Week kids day	Richland County	May (Annual)
		Classroom presentations	All partners	Ongoing
		Green Apple Day of Service	Various	September (Annual)
		Conservation Education Mini-Grants	RSWCD	November, March (Annual)
		Youth Arbor Day Contest	RSWCD	December (Annual)
Eagle Scout Mini-Grants		RSWCD	November, March (Annual)	

General Stormwater Awareness Outreach Activities

	Target Audience	Activity	Organization	Timeline
Mass Media Campaigns	General Public	Blue Thumb Landscaper Billboard & Radio PSA	City of Columbia Stormwater Management	Ongoing
		Trash the Grease Billboard & TV PSAs	City of Columbia Utilities and Engineering	Ongoing
		Trash the Wipes Billboard & TV PSAs	City of Columbia Utilities and Engineering	Ongoing
		Recycling Billboards	Richland County Solid Waste, KMB, City of Columbia	Ongoing
		Stormwater Runoff Radio PSA	Richland County Stormwater Management	March 2016
		FOG Television PSA	Richland County Stormwater Management	Ongoing
		Dry Pond Management Television PSA	Richland County Stormwater Management	January 2016
		Trash the Poop Billboard & Television PSA	City of Columbia, Richland County	May 2016
		Wet Pond Management Television PSA	Carolina Clear	February 2016

General Stormwater Awareness Outreach Activities

	Target Audience	Activity	Organization	Timeline
General	General Public	Clean Water 2020	City of Columbia Utilities and Engineering	Ongoing
		Storm Drain Marking/My River Starts Here	CCSM, SM, RCSH2O	April (Annual)
		Midlands Green Congregation Initiative	Sustainable Midlands	Ongoing
		Public Presentations	All partners	Ongoing
		Homeowner Presentations	All partners	Ongoing

Professional Development Activities

Target Audience	Activity	Organization	Timeline
Contractors, engineers, developers	Certified Erosion Prevention and Sediment Control Inspector (CEPSCI)	Clemson University	Multiple times during the year
Contractors, engineers, developers	Certified Stormwater Plan Reviewer (CSPR)	Clemson University	May (Annual)
Contractors	Erosion Control Workshop	Carolina Clear	February 2016
Municipal staff, industrial site operators	Spill Prevention Control Training	Richland County	October 2016
Professionals	Blue Thumb Landscaping Conference	RCSH2O, CCSM	January 2016
Contractors, engineers, developers	Green Infrastructure/ Low-Impact Development Workshop	RCSH2O, CCSM	Annual
Farmers, Land Managers	Pasture Field Day	Richland Soil and Water Conservation District	Fall 2016
Farmers	Agricultural Soil Health Programming	Richland Soil and Water Conservation District	Ongoing through 2018
Educators	Project Learning Tree and Project WET Workshops	RSWCD, RCSH2O	May 2016
Pond Managers	Master Pond Manager Course	Clemson Extension	Fall 2016
Landscape professionals	SCNLA Field Day	City of Columbia	Annually
Engineers, stormwater staff, commercial landscapers	Post-Construction BMP Inspector Course	Clemson Extension	Fall, Spring



Activity Timeline

Richland Countywide Stormwater Consortium 2016-2018 ACTIVITY TIMELINE

Year 8 (2016)	Year 9 (2017)	Year 10 (2018)
	Adopt-A-Highway Program	
	Adopt-A-Waterway Program	
Backyard Landscaping Series	Backyard Landscaping Series	Backyard Landscaping Series
Beach Sweep River Sweep	Beach Sweep River Sweep	Beach Sweep River Sweep
	Blue Thumb Landscaping	
Blue Thumb Landscaping Conference	Blue Thumb Landscaping Conference	Blue Thumb Landscaping Conference
	Carolina SchoolYards	
	Carolina Yards	
CEPSCI (Certified Erosion Prevention and Sediment Control Inspector)	CEPSCI (Certified Erosion Prevention and Sediment Control Inspector)	CEPSCI (Certified Erosion Prevention and Sediment Control Inspector)
CSPR (Certified Stormwater Plan Reviewer)	CSPR (Certified Stormwater Plan Reviewer)	CSPR (Certified Stormwater Plan Reviewer)
Distribute information on hazards of FOGs to apartment complexes		
	Distribute pet waste brochures to veterinary offices and pet supply stores	
	Distribute pet waste brochures with pet registration	
Erosion Control Workshop		
Green Infrastructure/Low-Impact Development Workshop	Green Infrastructure/Low-Impact Development Workshop	Green Infrastructure/Low-Impact Development Workshop
Homemade Household Cleaner Workshop		
Master Pond Manager Course	Master Pond Manager Course	Master Pond Manager Course
Organic Certification Workshop	Organic Certification Workshop	Organic Certification Workshop
Pasture Field Day		
Project Learning Tree Workshop	Project Learning Tree Workshop	Project Learning Tree Workshop
Project WET Workshop	Project WET Workshop	Project WET Workshop
	Rain Barrel and Compost Bin Sales	
	Recycling Events	
Richland Recycles Day	Richland Recycles Day	Richland Recycles Day
River Clean-Ups	River Clean-Ups	River Clean-Ups
SCLNA Field Day		
Southern Fried		
Spill Prevention Control and Countermeasures Training	Spill Prevention Control and Countermeasures Training	Spill Prevention Control and Countermeasures Training
	Street Sweeper Campaign	
	Trash the Grease Media Campaign	
Trash The Poop neighborhood recruitment		Trash The Poop Neighborhood Recruitment
Twenty-five Mile Creek farmer assistance program	Twenty-five Mile Creek farmer assistance program	
Bioretention cell installation in Crane Creek watershed		
Green Steps School Training		
4H2O Exploring Lake Murray/Congaree Watershed	4H2O Exploring Lake Murray/Congaree Watershed	4H2O Exploring Lake Murray/Congaree Watershed
Public Works Week kids day	Public Works Week kids day	Public Works Week kids day
	Classroom presentations	
Green Apple Day of Service	Green Apple Day of Service	Green Apple Day of Service
Conservation Education Mini-Grants	Conservation Education Mini-Grants	Conservation Education Mini-Grants
Youth Arbor Day Contest	Youth Arbor Day Contest	Youth Arbor Day Contest
Eagle Scout Mini-Grants	Eagle Scout Mini-Grants	Eagle Scout Mini-Grants
Blue Thumb Landscaper Billboard & Radio PSA	Blue Thumb Landscaper Billboard & Radio PSA	
Trash the Grease Billboard & TV PSAs		
Trash the Wipes Billboard & TV PSAs		
Recycling Billboards	Recycling Billboards	Recycling Billboards
Stormwater Runoff Radio PSA		
		FOG Television PSA
	Dry Pond Management Television PSA	
Trash the Poop Billboard & Television PSA		
Wet Pond Management Television PSA		
	Clean Water 2020	
Storm Drain Marking	Storm Drain Marking	Storm Drain Marking



Activity Timeline

Year 8 (2016)	Year 9 (2017)	Year 10 (2018)
Midlands Green Congregation Initiative		

Highlighted activities are pollutant targeted and have the following color designations:

E. Coli/ Fecal Coliform	Litter
Fats, oils, and grease	Pesticides, herbicides, and fertilizers
Hazardous household waste	



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Richland County Pollutant Loads

The South Carolina Department of Health and Environmental Control (SCDHEC) routinely assesses the quality of the aquatic environment in order to make informed decisions concerning water quality. Physical and biological data from statewide ambient monitoring sites are used to generate water quality reports available to the public. These data are also used to prioritize watersheds, assess pollution control measures, and identify waterbodies not meeting state water quality standards. These water quality standards are made available by the SC General Assembly, approved by the Environmental Protection Agency (EPA), and implemented by SCDHEC. Section 303(d) of the Clean Water Act requires that states and territories list and prioritize waterbodies not meeting state water quality standards. Once a waterbody is listed as impaired on the 303(d) list, a Total Maximum Daily Load, or TMDL is to be established with 2-13 years. A TMDL is the amount of a specific pollutant, such as bacteria, that can enter a water body on a daily basis and still meet water quality standards. The TMDL not only provides a calculation of the pollutant entering a water body, it also identifies the source and gives a physical and biological description of the encompassing watershed.

Currently there are 21 sites on the 303(d) List for Richland County:

TMDL TARGET DATE(S)++	NOTE	BASIN	LOCATION	USE	CAUSE
2017		BROAD	WATEREE CRK. AT SR 698	AL	BIO
2017		BROAD	CRANE CREEK AT US 321	AL	BIO
2023		BROAD	CRANE CK AT S-40-43 UNDER I-20 - N COLA	AL	DO
2017		BROAD	SMITH BR AT N MAIN ST (US 21) IN COLA	AL	BIO
2024		CATAWBA	COLONELS CK AT SC 262	AL	CU
2027		SALUDA	SESQUICENTENNIAL STATE PARK	FISH	HG
2017		SALUDA	LIGHTWOOD KNOT BRANCH AT TRENHOLM RD EXTENSION	AL	BIO
2027		SALUDA	FOREST LAKE AT DAM	FISH	HG
2015	*	SALUDA	BROAD RIVER DIVERSION CANAL AT COLA WATER PLANT	REC	ECOLI
2027		SALUDA	CONGAREE RIVER @ BARNEY JORDAN RAMP	FISH	HG
2027		SALUDA	CONGAREE RIVER @ ST HWY 378	FISH	HG
2016		SALUDA	MILL CK AT SC 262	REC	ECOLI
2017		SALUDA	REEDER POINT BR AT SC 48	REC	ECOLI
2022		SALUDA	CEDAR CK AT S-40-734	AL	BIO
2016		SALUDA	CONGAREE RVR, WEST BOUNDARY OF CONGAREE SWAMP MONUMENT	REC	ECOLI
2015	*	SALUDA	CEDAR CK CANOE ACCESS OFF S-40-1288 (SO CEDAR CK RD)	REC	ECOLI
2015	*	SALUDA	CEDAR CREEK IN CONGAREE NATIONAL PARK - WESTON LAKE LOOP TRAIL AT BRIDGE B	REC	ECOLI
2016		SALUDA	TOMS CK AT SC 48	REC	ECOLI
2017		SALUDA	TOMS CREEK AT POWER LINE AND RR TRACK	AL	BIO
2020		SALUDA	TOM'S CREEK AT RED BLUFF RD.	AL	PH
2016		SALUDA	TOM'S CREEK AT RED BLUFF RD.	REC	ECOLI



Appendix A

Macroinvertebrate: BIO
Copper: CU
Dissolved Oxygen: DO
Eschericia coli: ECOLI
Mercury: HG
Hydrogen Ion Concentration: pH

* TMDL to be developed within two years
Further investigation planned

Richland Countywide Stormwater Consortium Strategic Planning Questionnaire

The following survey was given to consortium members to identify partner priorities, potential outreach programs, and areas for improvement within the organization. The responses were used to develop the activities hosted by the consortium. See Appendix D for the results of this survey.

Outside of the RCSC, what is your organization's primary subject of interest?

- MS4 permit compliance
- Watershed awareness
- Water quality protection
- Natural resource conservation
- Beautification
- Sustainability
- Other:

Of the following audiences, which are the TOP THREE that your organization thinks is in greatest need of education about water quality issues

- K-12 students
- College students
- Educators
- Homeowners
- General public
- Commercial citizens
- Contractors/Engineers/Developers
- Municipal staff
- Public Officials
- Farmers/Farm owners

Appendix B

Other:

Which of the following pollutants of concern are high priority for your organization? Choose up to 5

- E. Coli/Fecal Coliform from animals
- E. Coli/Fecal Coliform from humans
- Sediment
- Low dissolved oxygen
- Fats, oils, and grease
- Nutrients
- Trash and Debris
- Hazardous household waste
- Pesticide, herbicide, and fertilizer
- Automotive fluids
- Other:

Which of the following sources of pollution does your organization consider to be the greatest threats to water quality in Richland County? Choose up to 5

- Animal waste
- Agricultural runoff
- Failing septic systems
- Construction site runoff
- Impervious surfaces
- Littering
- Improper disposal of household materials
- Dumping materials into storm drains
- Car care issues
- Improper disposal of fats, oils, and grease
- Improper use and handling of chemicals
- Chemical spill control
- Industrial runoff/discharge
- Illicit discharges

Appendix B

Lack of knowledge
Which of the following audiences is your organization interested in targeting for PARTICIPATION AND INVOLVEMENT in community activities?

- K-12 students
- College students
- Educators
- Homeowners
- General public
- Commercial citizens
- Contractors/Engineers/Developers
- Municipal staff
- Public Officials
- Other:

Which of the following audiences is your organization interested in targeting for GENERAL OUTREACH AND EDUCATION?

- K-12 students
- College students
- Educators
- Homeowners
- General public
- Commercial citizens
- Contractors/Engineers/Developers
- Municipal staff
- Public Officials
- Other:

Consortium Evaluation

The following questions are intended to gauge the partners' and the public's perception of the consortium.

What do you think is the purpose of the consortium?

Appendix B

Ideally, what would you like to get out of participating in the consortium?

The consortium works as a unified front to address water quality concerns in Richland County.

1 2 3 4 5

Strongly Disagree Strongly Agree

The consortium plays a strong role in preventing pollution in Richland County.

1 2 3 4 5

Strongly Disagree Strongly Agree

Community members are aware of the consortium's existence.

1 2 3 4 5

Strongly Disagree Strongly Agree

The consortium is effective at addressing watershed issues in Richland County.

1 2 3 4 5

Strongly Disagree Strongly Agree

My organization is helping to protect water quality by participating in the consortium.

1 2 3 4 5

Strongly Disagree Strongly Agree

What do you consider to be the weaknesses of the consortium?

What do you consider to be the strengths of the consortium?

Do you attend the quarterly consortium meetings?

Do you keep up with activities sponsored by other consortium partners?

Do you keep up with the activities sponsored by environmental organizations outside of the consortium?

Program Evaluation

The following questions are intended to gain input on consortium programs.

Which of the following programs are of interest to your organization? Choose up to 5

- Shorescaping demonstrations
- Highway clean-ups
- River clean-ups
- Pond management courses
- Rain barrel workshops
- Compost bin workshops
- Rain garden workshops
- School presentations

Appendix B

- Festivals and community events
- Recycling events
- Training courses for professionals
- Low impact development workshops
- Neighborhood programs
- Training courses for public officials

Is there an audience that is not currently targeted, but you think should be?

My organization is interested in mass media campaigns (e.g. billboards, radio PSAs, television PSAs)

- True
- False

My organization is interested in activities that directly involve the public (e.g. workshops, hands-on demonstrations).

- True
- False

My organization is interested in general outreach towards the public (e.g. festivals/event attendance, community meetings).

- True
- False

What changes do you think could be made to improve our current programs?

Please suggest a program or activity to address one of the pollutants, behaviors, and/or audiences you indicated as a high priority.

Appendix B

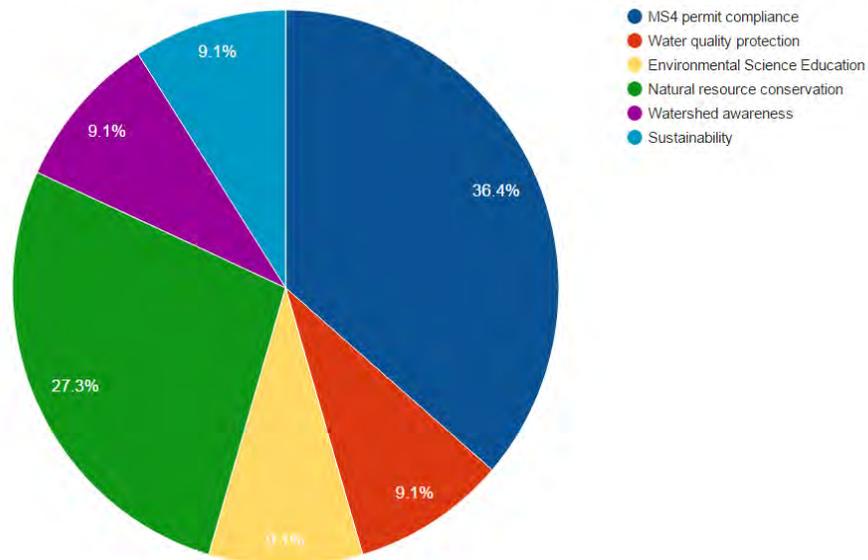
Do you have any additional suggestions for new programs?

Richland Countywide Stormwater Consortium Strategic Planning Questionnaire Results

PARTNER PRIORITIES

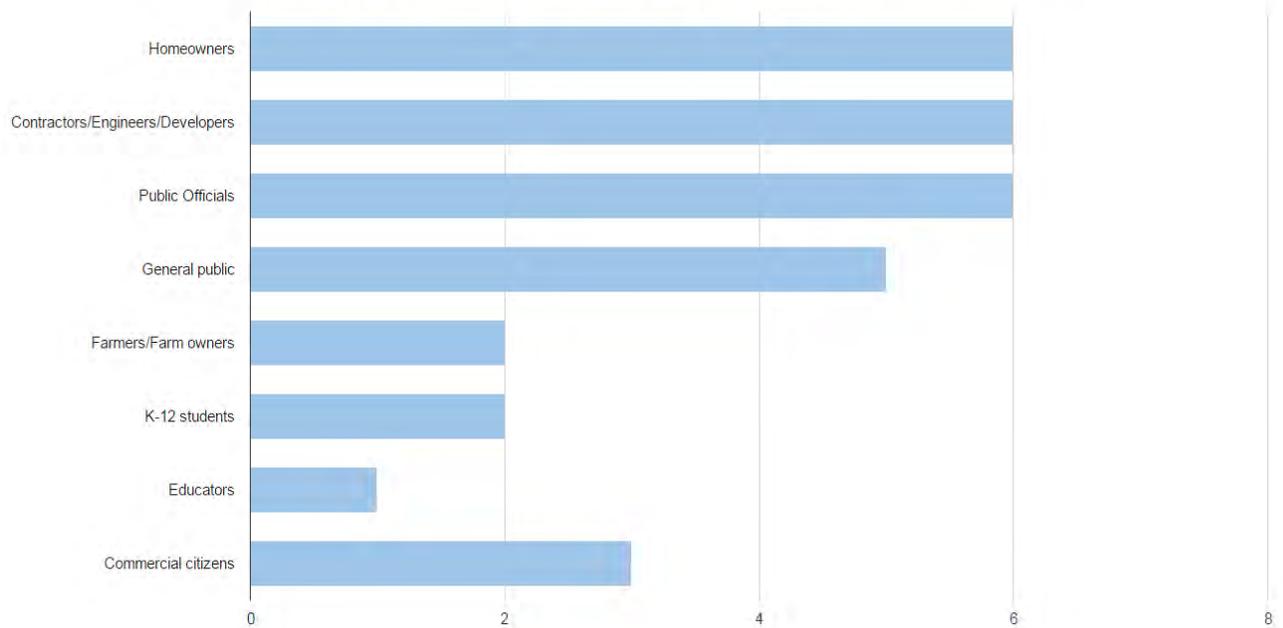
The following responses are in reference to questions about the priorities of each individual organization participating in the consortium.

Outside of the consortium, what is your organization's primary subject of interest?

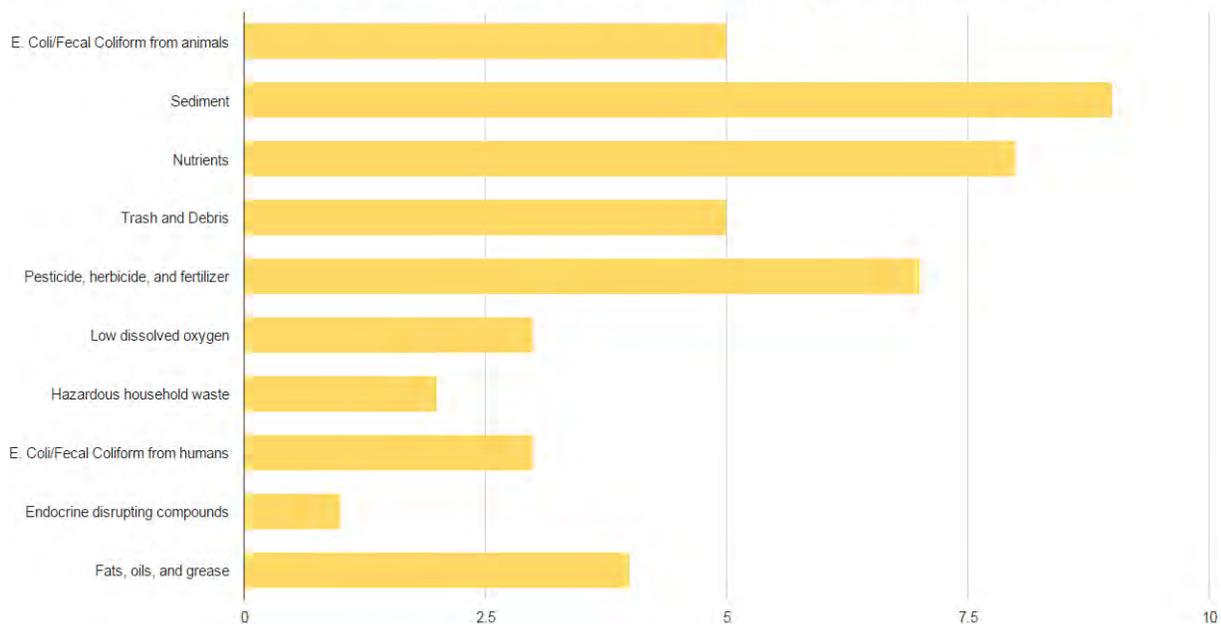


Appendix C

Of the following audiences, which are the TOP THREE that your organization thinks is in greatest need of education about water quality issues?

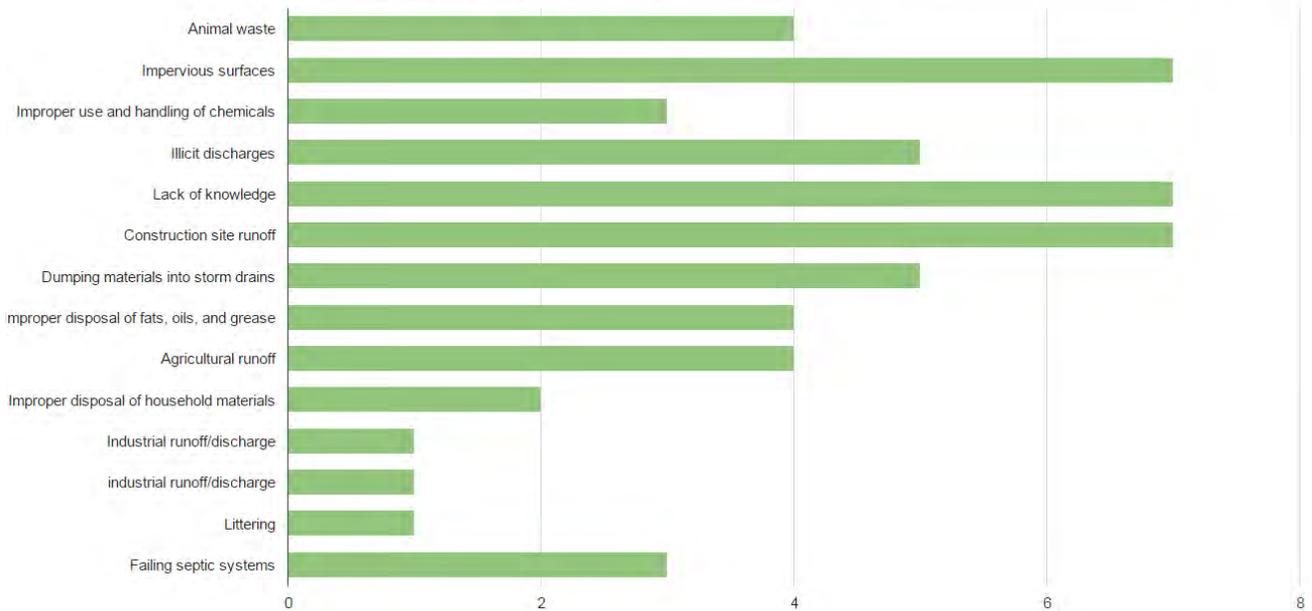


Which of the following pollutants of concern are high priority for your organization?

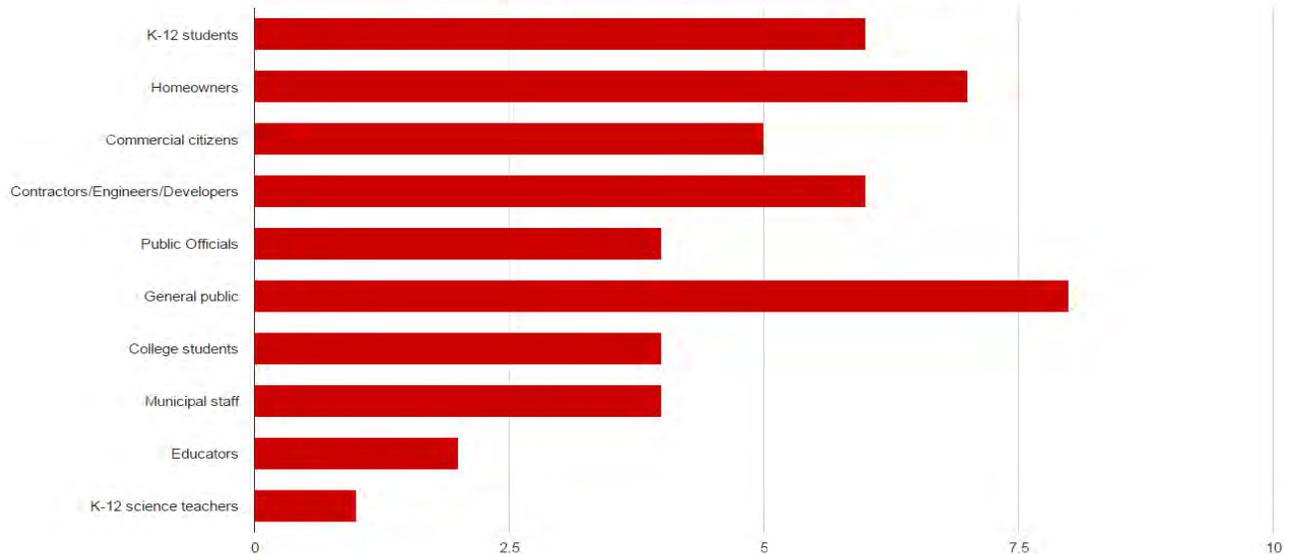


Appendix C

Which of the following sources of pollution does your organization consider to be the greatest threats to water quality in Richland County?



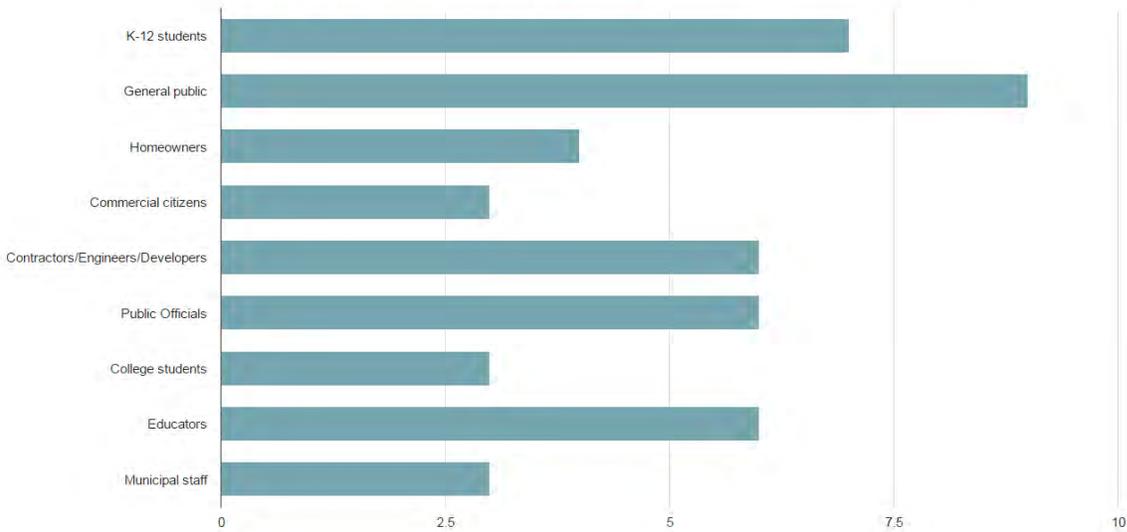
Which of the following audiences is your organization interested in targeting for PARTICIPATION AND INVOLVEMENT in community activities?



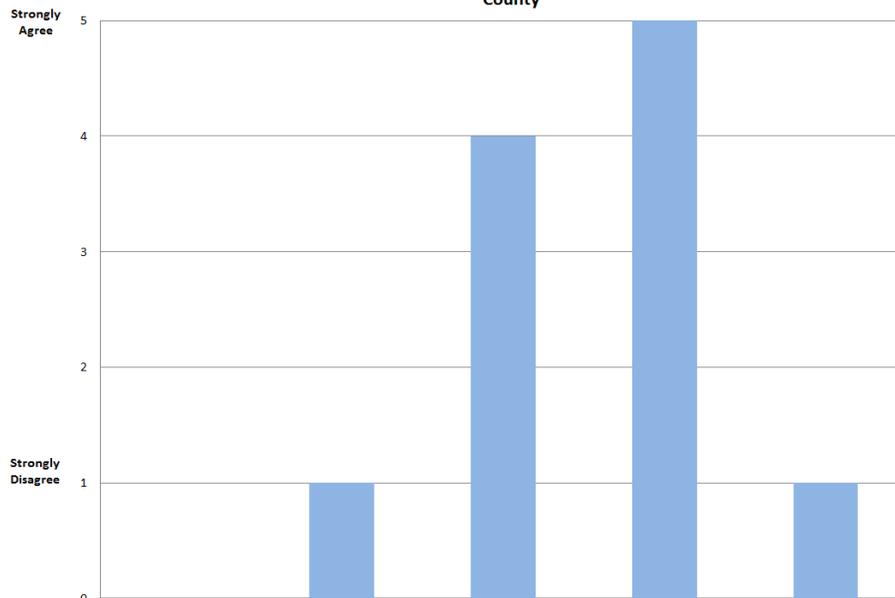
CONSORTIUM EVALUATION

The following responses are in reference to questions about the partners' perception of the consortium. Responses to open-ended questions are not included.

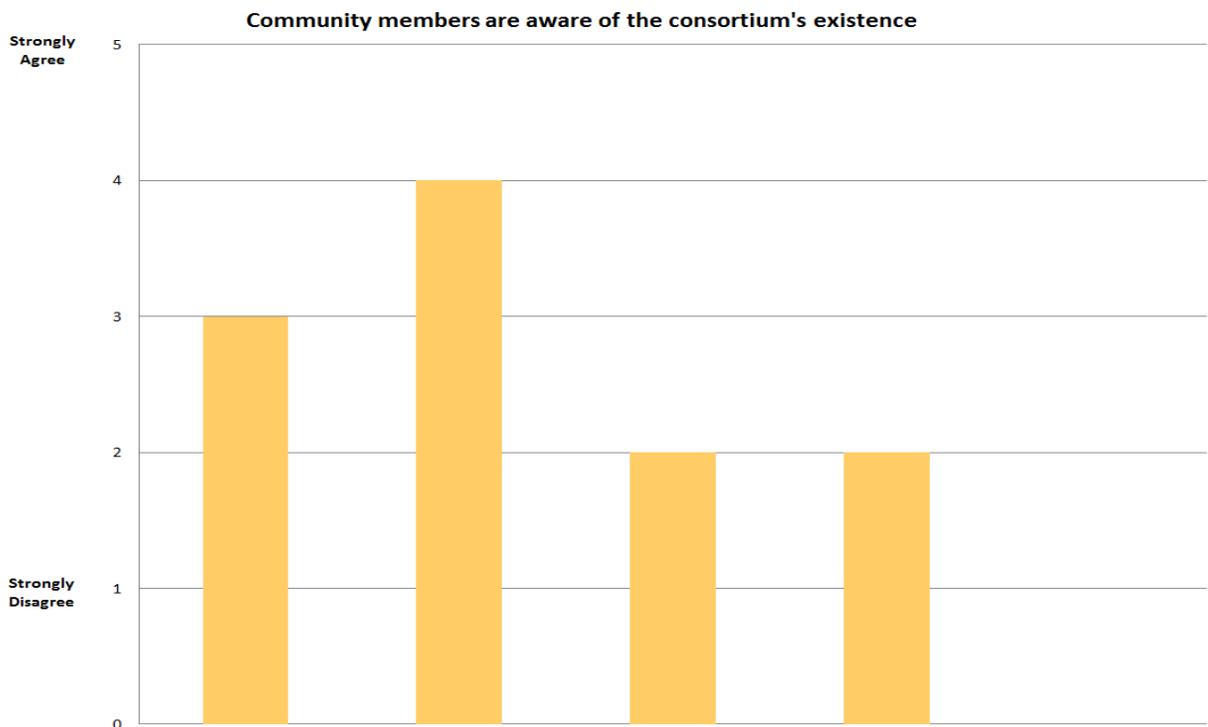
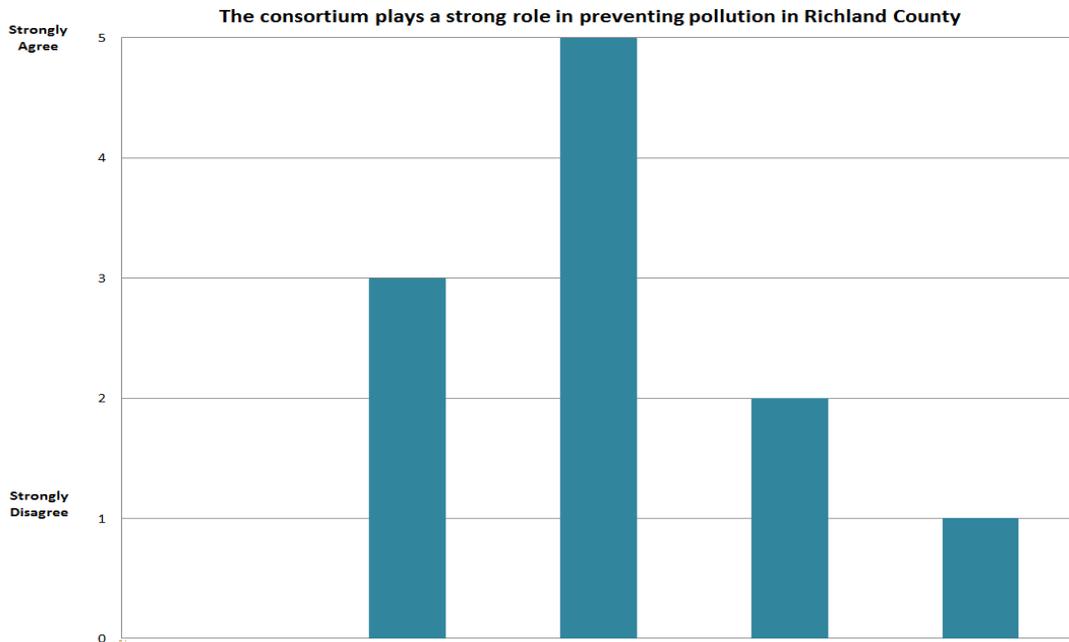
Which of the following audiences is your organization interested in targeting for GENERAL OUTREACH AND EDUCATION?



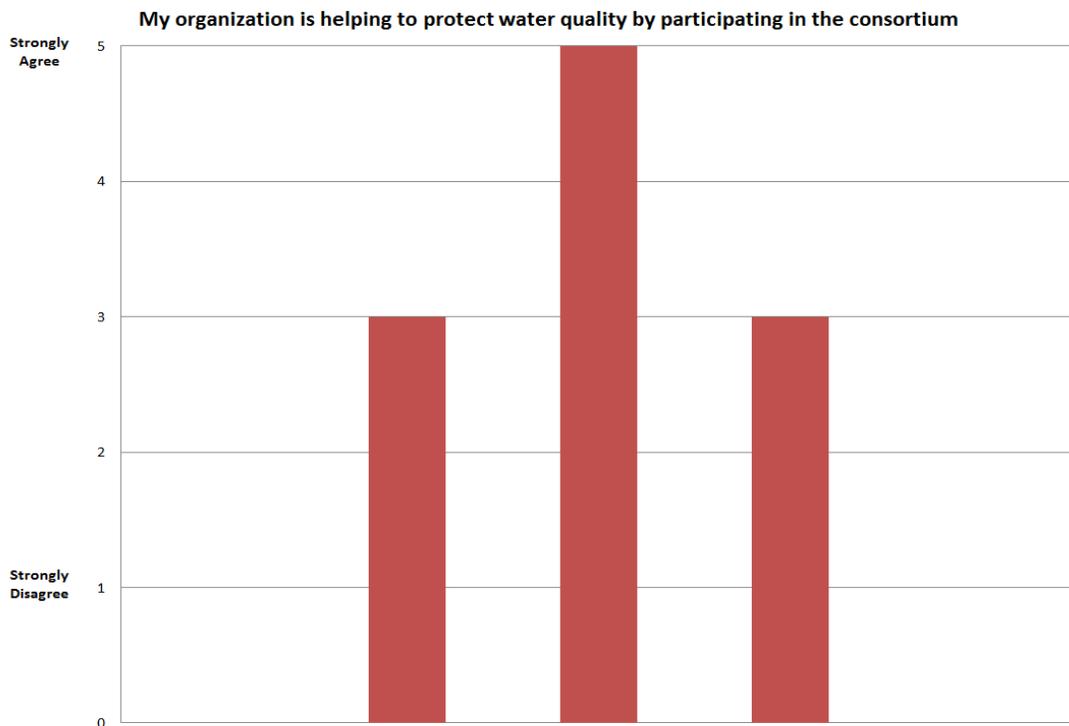
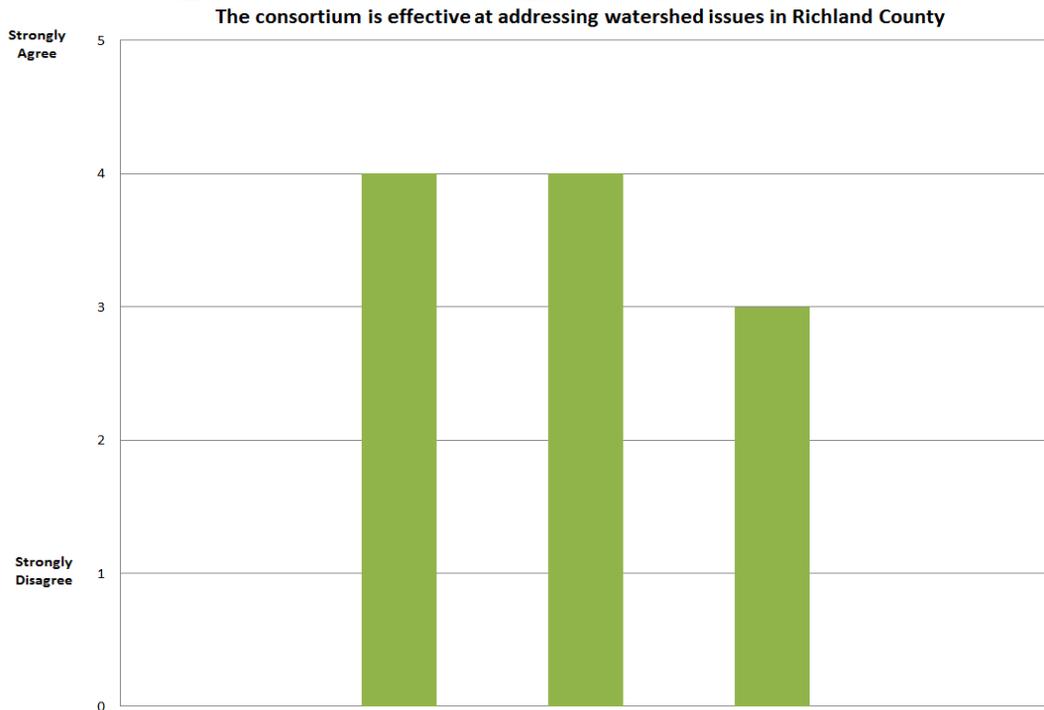
The consortium works as a unified front to address water quality concerns in Richland County



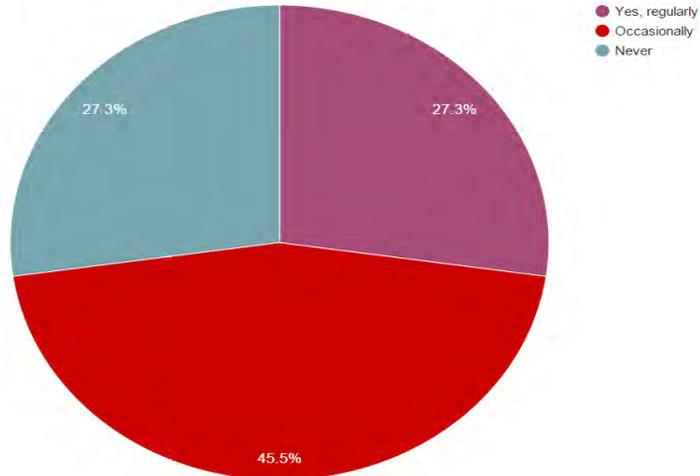
Appendix C



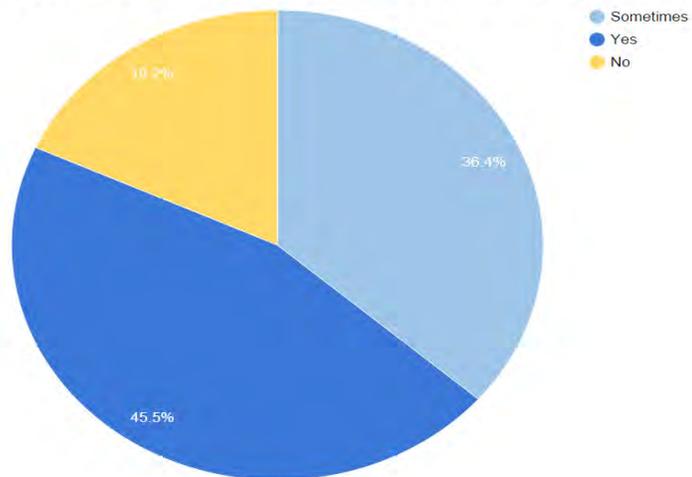
Appendix C



Do you attend the quarterly consortium meetings?



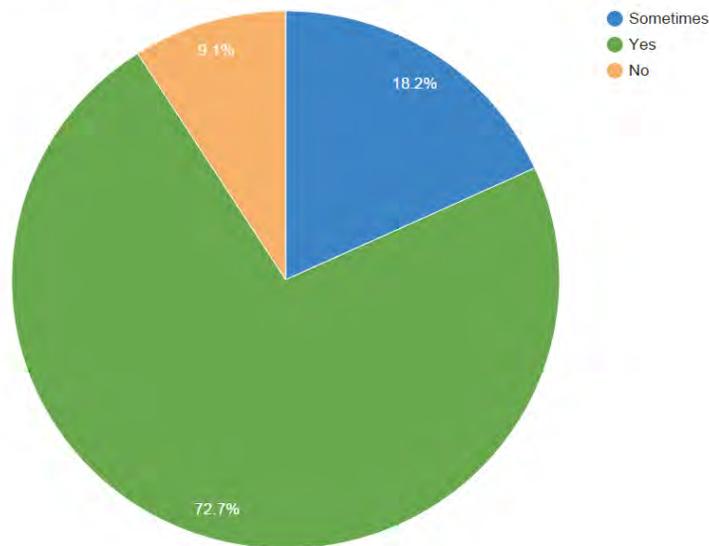
Do you keep up with activities sponsored by other consortium partners?



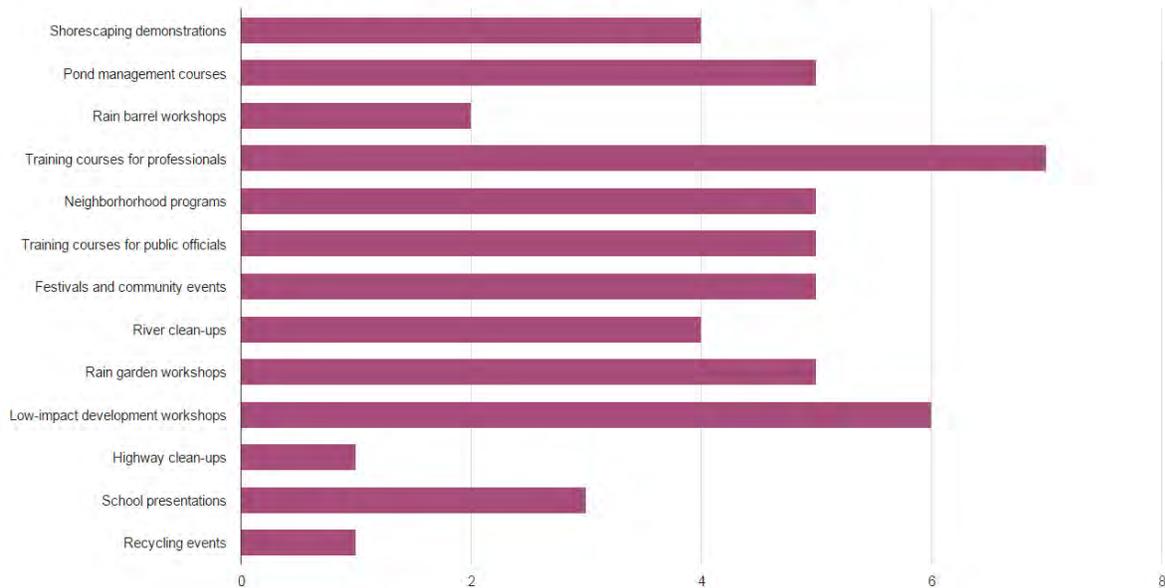
PROGRAM EVALUATION

The following responses are to questions asked about consortium programs. Responses to open-ended questions are not included.

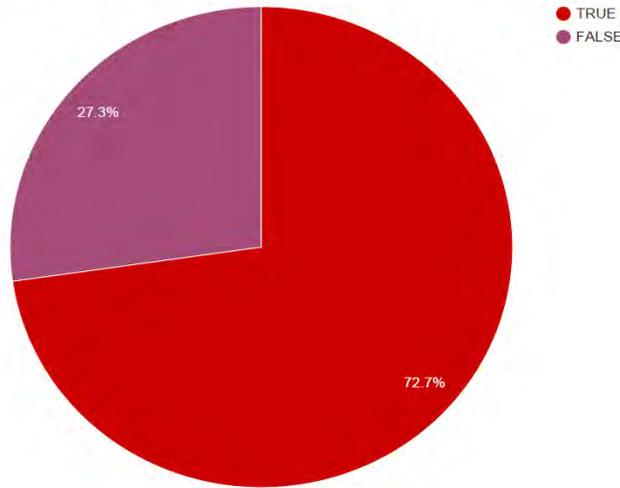
Do you keep up with the activities sponsored by environmental organizations outside of the consortium?



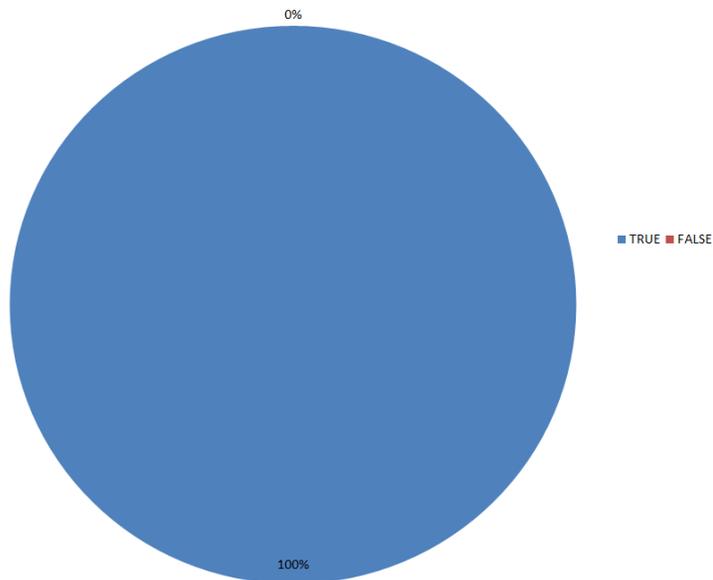
Which of the following programs are of interest to your organization?



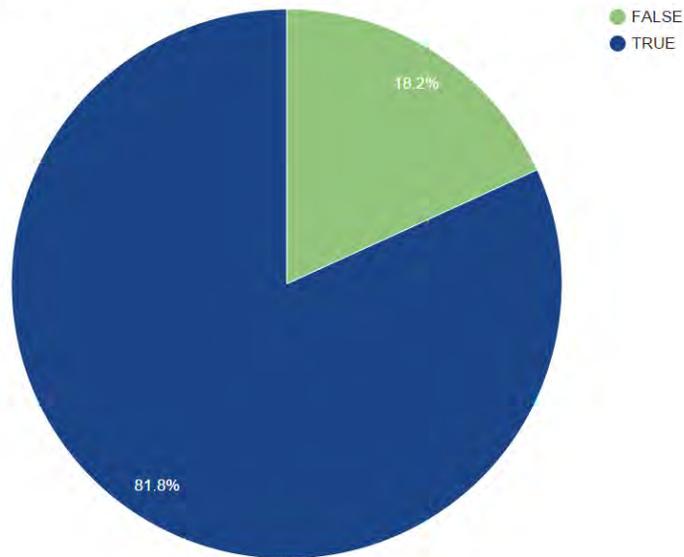
My organization is interested in mass media campaigns



My organization is interested in activities that directly involve the public



My organization is interested in general outreach towards the public





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