RICHLAND COUNTYWIDE
STORMWATER CONSORTIUM

Stormwater Education and Involvement Strategic Plan 2012-2015

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Executive Summary

The Richland Countywide Stormwater Consortium is comprised of the communities of Richland County, the Town of Arcadia Lakes, and the City of Forest Acres, Clemson Carolina Clear, and numerous educational alliances. The goal of the consortium 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.

Effective sustainability-related outreach results in sustained behavior change that meets the goals of the outreach effort. As in all sustainability-related outreach, there are several approaches with varying results that the consortium employs.

1. Broad education to raise awareness of an issue across a large select or geographic audience;
2. Targeted outreach that utilizes specific messages and information to motivate a targeted audience or geography;
3. Involvement on behalf of the audience to develop greater stewardship and to demonstrate alternative behaviors that meet sustainability goals.

Stormwater pollution is in most cases, people pollution, since runoff from storms, snowmelt, or excess irrigation picks up everything we leave out on the landscape including cigarette butts and trash, pet waste, excess fertilizer, herbicides and pesticides, auto fluids, and other chemicals and products that get washed to local waterways directly across the landscape or by pipes and ditches. Therefore, each individual can impact local water quality by changing their behaviors and teaching others about this water resource threat.

To best meet the goals of protecting and restoring healthy waterways, all Richland County residents need to be aware and involved in eliminating pollutants on the landscape and better managing runoff. Currently, several Richland County waterways are not meeting established water quality standards for various pollutants including fecal coliform, total suspended solids, and total phosphorus, all pollutants typical of nonpoint source runoff. To most effectively and efficiently address shortfalls in water quality attainment and improved watershed management for the

"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

protection of healthy waterways, the consortium has agreed on an approach that is strategic for the following reasons:

- Directs resources to known issues and behaviors;
- Has shared goals with community and education partners, therefore capitalizing on organizational strengths and objectives and reducing duplication;
- Includes measurable goals that will aid future direction and compliance with the General National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit;
- Includes a timeline of implementation that provides a framework for interested partners to become involved and for new audiences to be aware of the consortium's outreach activities.

This Three-Year Strategic Plan for Stormwater Outreach [henceforth, Strategic Plan] is a guide to this consortium's activities, a planning tool for partners, a means of communicating strategy, process, and goals, and also a living document that will consider the daily requests of an educational organization serving many communities with varying water quality-related outreach needs. This document is based on US Environmental Protection Agency (EPA) guidance on target public outreach and involvement program development (US EPA, 2010), social science and sustainability education lessons (McKenzie-Mohr and Smith, 1999), and the Five-Year Strategic Plan completed by the Ashley Cooper Stormwater Education Consortium (ACSEC) in 2012.

Thank you to all of the RCSC partners for their participation, insight and experiences that lead to the development of this Strategic Plan!

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Background

NPDES MS4 Permit

Stormwater pollution is regulated through the NPDES program, created under the Clean Water Act. The following program overview is from the Environmental Protection Agency, or EPA, MS4 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.)*

Each regulated MS4 is required to develop and implement a stormwater management program (SWMP) to reduce the contamination of stormwater runoff and prohibit illicit discharges. Stormwater management programs must include the development and implementation of the following six minimum control measures (MCM's):

1. *Public education and outreach*
2. *Public participation/involvement*
3. *Illicit discharge detection and elimination*
4. *Construction site runoff control*
5. *Post-construction runoff control*
6. *Pollution prevention/good housekeeping for municipal operations.*

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.

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REQUIREMENTS FOR PUBLIC EDUCATION AND PUBLIC INVOLVEMENT

The purpose of the Richland Countywide Stormwater Consortium is to assist Richland County, Arcadia Lakes, and Forest Acres in meeting the requirements of Minimum Control Measures (MCM) 1 and 2.

- MCM 1 addresses public education and outreach in order to garner greater public support, provide awareness, and foster behavior change and greater compliance. By making the public aware of stormwater pollution problems and their sources in their community, RCSC empowers them to take actions to protect or improve the quality of waters in their area and to support the MS4s in implementing and funding their stormwater programs.
- MCM 2 addresses public participation and involvement in order to provide the public with opportunities to advocate for water quality, educate others, and take action to directly reduce pollution. These opportunities include but are not limited to public meetings, citizen-led watershed organizations, storm drain marking, community litter cleanups, and rain garden and rainwater harvesting installations.

Developing the Consortium Framework

Discussions of a regional stormwater consortium began in October of 2004. The need for such an organization sprang from a growing concern about water quality in Richland County, accelerated by the EPA's mandate to regulate stormwater pollution and the impending community designation 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. The consortium was modeled after several regional stormwater education consortiums in South Carolina led by or with involvement from Clemson's Carolina Clear program. These include the Coastal Waccamaw, Ashley Cooper, and Lexington Countywide Stormwater Education Consortiums.

Clemson University and Richland County, along with the Town of Arcadia Lakes and the City of Forest Acres, entered into a formal contract and Memorandum of Understanding in June of 2008. The first official meeting of the Richland Countywide Stormwater Consortium was held on December 10, 2008, at which an initial Education Plan of Work was drafted. In May, Clemson Extension hired a coordinator, Mary Caflisch, to develop programs and materials, and to help the partners work together efficiently and effectively. Over the next few months, a mission statement and list of goals were written by the consortium partners in June 2009. A logo was also designed to represent the joint effort of all of the municipalities and education partners, giving the citizens a local and non-biased entity to look to for education, partnership and assistance.

On October 15, 2009, a Joint Proclamation was signed by Richland County, the City of Forest Acres, and the Town of Arcadia Lakes. The proclamation signified these three communities formally coming together to recognize the consortium and commitment on behalf of city and county councils to protecting water quality.

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HIGHLIGHTS OF THE PAST FOUR YEARS

Over the last 4 years, the Richland Countywide Stormwater Consortium has had several significant achievements. Two television commercials were aired successfully on Time Warner Cable. The first aired in the summer of 2009, and the second in the summer of 2011 and again in Spring 2012. Both were statewide efforts, with the same messages run in every consortium area around the state and matching billboards utilized in some areas. Another achievement was the creation of the Crane Creek Watershed Association. Stakeholders and concerned citizens came together to form the backbone of this new organization dedicated to protecting this high-priority watershed, and the first meeting was held in March of 2010.

In June 2010, the first week-long 4-H2O day camp for youth was held at Harbison Forest. 4-H2O is a water-based learning experience for 10-14 year olds sponsored by Clemson Extension in many counties throughout South Carolina. The Richland County camp was designed to complement the long established 4-H2O program held in Lexington County on Lake Murray. On August 28, 2010 Richland County held its 1st annual Summer Celebration of Water, a free family festival building appreciation and stewardship of local water resources. The festival was a joint venture between Richland County and the City of Columbia. A true partnership effort, nearly all of the consortium's education partners participated in the festival. With close to 700 people in attendance, the celebration was a great success, and the start of a fun new summer tradition. Both programs have become annual signature events for the consortium.

Richland County itself passed an important milestone in 2011. Since 2006, Richland County had been working to fulfill a Consent Order from SCDHEC to improve its stormwater program. In May of 2011, SCDHEC announced that the county had met the requirements of the order, and the Consent Order was closed. Not only does the stormwater program now meet SCDHEC's standards, it has been nationally recognized. The National Association of Counties awarded Richland County for their Stormwater Management Water Quality Monitoring and Improvements program for 2011.

RCSC TIMELINE

2008

June 24, 2008 - CC Contract signed

Dec. 10, 2008 - First Consortium meeting held

2009

Dec. 10, 2008 - First Education Plan of Work completed

May 1, 2009 - Coordinator hired

June 6, 2009 - Mission and goal statements written

July 15, 2009 - Logo designed

July-Aug., 2009 - Telephone Survey conducted

Aug.-Dec., 2009 - First TV commercial aired

Oct. 15, 2009 - Joint Proclamation signed

2010

Mar. 4, 2010 - Crane Creek Watershed Association formed

June, 2010 - First Richland County 4-H2O camp held

Aug. 28, 2010 - First Annual Summer Celebration of Water held

2011

May 2011 - SCDHEC consent order closed

Aug. 6, 2011 - Second Annual Summer Celebration of Water held

Aug.-Oct, 2011 - Second TV commercial aired

2012

Jan., 2012 - Partners for Healthy Watersheds business recognition program launched

May-June, 2012 - Second television PSA repeated

Aug. 25, 2012 - Third Annual Summer Celebration of Water held

2013

RCSC Partners

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.

Community Partners

1. Richland County

2. City of Forest Acres

3. Town of Arcadia Lakes

Education Partners

1. Carolina Children's Garden
   - Key Activities: Provide youth education on topics related to gardening and the environment, primarily for elementary school and homeschool audiences.

2. 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.

3. Congaree Riverkeeper
   - Key Activities: Build community involvement and provide outreach related to water quality of the Congaree, Lower Saluda and Lower Broad Rivers; engage public in advocacy efforts; organize litter cleanups of these rivers and their tributaries.

RCSC Partners

EDUCATION PARTNERS (CONTINUED...)

4. Conservation Station
   - Key Activities: Provide aquatics lessons within their field trip programs for schools.

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

6. East Piedmont Resource Conservation and Development
   - Key Activities: Provide assistance with rain garden installations and other water conservation related projects.

7. Fuss & O'Neill
   - Key Activities: Provide technical expertise related to bioretention and other best management practices.

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.

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.

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RCSC Partners

EDUCATION PARTNERS (CONTINUED...)

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.

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: Provide guidance to the consortium on meeting compliance goals for public outreach, education, involvement and participation within MS4 Stormwater Permit.

RCSC Partners

EDUCATION PARTNERS (CONTINUED...)

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. South Carolina State Museum
    - Key Activities: Provide educational workshops and offer technical expertise related to rain gardens and rain barrels.

20. 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.

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

22. Sustainable Carolina
    - Key Activities: Involve University of South Carolina students in activities related to protecting water quality, including organizing cleanups, installing best management practices on campus, and providing outreach to their peers.

23. URS Corporation
    - 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.

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Mission and Goals

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

- Maximize stormwater education efforts by using a regional/watershed approach. Develop and implement education strategies addressing the range of stormwater pollutants using a prioritized approach that capitalizes on local training resources.
- Involve citizens in stormwater management and change behaviors to improve environmental protection and awareness.
- Facilitate collaboration among local organizations interested in watershed-related education to best meet the needs of local communities.
- Through partnerships with MS4s, leverage local education resources and organized outreach programs to meet NPDES permit requirements for public stormwater education and outreach to achieve greater water resource protection.
- Participate in collaborative stormwater education that can be universally presented and applied.

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Creating a Plan

In previous years, RCSC determined its activities for the year by creating an annual Education Plan of Work. This plan is a living document, which is drafted at the beginning of each program year (beginning June 11). The plan establishes tasks to be accomplished, including new and ongoing efforts, media campaigns, festivals and events to be attended, etc. During the year, new items may be added to take advantage of educational opportunities or to address new issues. Items not accomplished within the year are carried over to the next planning cycle. The limitation of the Education Plan is that it is primarily a list of tasks, and does not establish priorities. Nor is it structured to encompass multi-year efforts, though they very frequently occur across years or are repeated annually. In order to better strategize and prioritize education efforts over a multiple year period, RCSC set out to develop a Three-Year Strategic Plan. This plan does not replace the yearly Education Plan, but serves as a guideline for creating the plan each year, with better vision towards the future.

In order to create the Strategic Plan, RCSC members considered several factors. They looked at public attitude survey data, pollutant monitoring data, the strengths and weaknesses of existing programs, and the priorities of each of the partners, relating to their own education goals.

Public Telephone Survey

To assess awareness, attitudes and behaviors of South Carolina residents that might affect our shared water resources, Carolina Clear in partnership with the Clemson University Department of Sociology and Anthropology and the School of Computer Science conducted a telephone survey of consortium area residents in the late summer of 2009. The data collected from the survey was separated by region, and also by demographics to gain a clear picture of the citizens within each consortium. The data from the Midlands (Richland, Lexington and Sumter Counties) was used to establish a baseline of knowledge and awareness and identify behaviors that could be impacting water quality and modified through education delivery. These data strongly influenced the development of future education plans.

Using the data gathered with the telephone survey instrument, the consortium was able to identify behaviors and attitudes that can be improved through education efforts. Based on the published survey data (Mobley et al., 2009), nearly half of Midlands respondents (45.5%) indicated that they were “very concerned,” and another 37.5% were “somewhat concerned” about water quality (thus, 83% identifying themselves as concerned about their local water quality). The results also confirmed that with the proper motivation, residents are willing to get involved in protecting water resources; 80.5% of respondents indicated they would be “very likely” to become involved if they were directly impacted by water quality. The consortium’s challenge, therefore, is to alert residents that water pollution does impact them directly whether or not they notice it, and there are many actions individuals can take to manage their contribution to water resource concerns. In addition, 38.7% of Midlands respondents indicated that they would be very likely to get involved if the local media ran positive stories of steps taken by local residents to improve water quality. Richland County is relatively unique in the state that it has several local

grassroots groups working to protect local rivers and streams, including the Gills Creek Watershed Association, Congaree Riverkeeper and the Rocky Branch Watershed Alliance, and their efforts could be publicized more widely. Greater than responses received in other surveyed regions, nearly 26% of respondents indicated that they have participated in a lake or river clean up, and 15% have joined or volunteered for a conservation organization in the past two years; this demonstrates a community invested in continued and strengthened public involvement programming that the consortium and its regional partners can provide.

Additional findings of the survey instrument have and will continue to guide outreach and involvement programming direction based on the behaviors undertaken by respondents that affect local water quality and watershed management. Picking up and properly disposing of pet waste as well as avoiding applying fertilizer before a rain storm are two easily targeted behaviors that need improvement, according to the survey. Other findings include the following perspectives:

- 33% of respondents knew the correct definition of a watershed – the highest percentage of surveyed regions. Also, more than 50% felt some level of confidence naming the waterway that receives runoff from their property.
- While the surveyed population was not active on waterways (for instance, nearly 80% never or hardly ever kayak or canoe, and only 1 in 10 fish), there is a connection with the local rivers and streams in this region where three major river basins converge.
- Slightly more than 80% of surveyed participants who have a lawn indicated that someone in their household is responsible for mowing the property.

To read more on the results of this 2009 Telephone Survey, please refer to the Executive Summary in Appendix A. The full report can also be accessed at the 2009 Telephone Survey Reports webpage at *www.clemson.edu/carolinaclear*.

Priority Pollutants and Audiences

The RCSC is comprised of representatives from three municipalities and twenty-six 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 perspectives. Developing a plan that met the needs and interests of all consortium members required giving every partner the opportunity to provide input in the development of a common strategic plan. In July of 2011, the consortium members were asked to participate in a survey to determine what they felt to be the highest priority pollutants, behaviors and audiences to be targeted with outreach, education and public involvement efforts. In giving their responses, participants were asked to consider the results of Richland County's surface water monitoring data (URS, 2012) from recent years, impaired water bodies within the county, the member's experiences with the public, and the goals of their own organizations. Participants ranked three lists (pollutants, pollution-causing behaviors or sources of pollution, and

target audiences) in order of priority, with the option to add to the list if their top priority was not included. The members were also asked for comments on current and potential education and involvement activities.

Using Richland County's monitoring data and the results of the RCSC members survey, the following priorities were identified:

Priority	Pollutants	Behaviors/Sources	Audiences
Primary	• Fecal Bacteria • Sediment • Nutrients	• Sanitary Sewer Overflow • Construction Runoff	• Elected/Appointed Officials • Homeowners • Contractors, Developers
Secondary	• Toxic Contaminants • Fats, Oils & Grease	• Reducing Impervious Surfaces • Pet Waste	• Business/commercial

Please refer to Appendix C for the survey and Appendix D for the survey results.

Existing Core Programs

In developing the three-year plan, the consortium members also considered the existing programs that were successful in order to determine which of the priorities were already being addressed satisfactorily. These programs will continue to be consistently provided for the public, meeting a level of expectation with involved public. To the extent that these programs fall in line with the focused objectives identified for the next three years, these efforts may be expanded. Highlights and activities of the past year that will serve as building blocks are available in the RCSC Annual Report of Activities – Year 4 (RCSC, 2012).

MASS MEDIA

Stormwater and runoff management information has been distributed over the past four years through 30-second commercials on Time Warner Cable, weather tickers on The Weather Channel, articles in The State newspaper, interviews on Richland County's local radio program, and slides on public access channel. Mass media continues to present new opportunities for reaching a broad audience with simple awareness messages of individual actions that protect water quality and better manage or eliminate runoff.

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Creating a Plan

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 2010, the first Summer Celebration of Water was held at Riverfront Park, drawing over 700 visitors. This free family festival focusing on building appreciation and stewardship of local rivers, lakes, and streams, has become a popular annual event in the Midlands, attracting crowds of 1200 and 1500 people in 2011 and 2012, respectively.

YOUTH

RCSC's most successful youth program currently is the 4-H2O Exploring Waterways summer day camp. These week-long, full day youth camps teach middle school age students about water quality, pollution, and the environment, while building stewardship and appreciation for local water resources. Other activities include school visits using a tabletop watershed model, and water quality classes at the Conservation Station & Carolina Children's Garden.

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.

Another method that RCSC has used to communicate information to homeowners is by providing individual Neighborhood Associations and Homeowner Associations with presentations and listening sessions by the local watershed advocacy groups, including the Gills Creek Watershed Association, Rocky Branch Watershed Alliance, and Congaree Riverkeeper.

Finally, RCSC has been running a pet waste campaign for the last three years that includes distributing brochures with pet registration renewals, at veterinary offices and adoption centers, and at public events. Signs were also installed at county facilities and libraries advising people to pick up after their pets.

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Three-Year Education Strategy

Purpose:

The purpose of this plan is to provide a strategy for deciding on education activities that includes long term goals, prioritizes items, and gives a framework for multi-year efforts. The US EPA (2010) states that, "The public education and outreach program must be tailored and targeted to specific water quality issues of concern in the relevant community. These community-wide and targeted issues must then guide the development of the comprehensive outreach program, including the creation of appropriate messages and educational materials."

In this effort to elevate public education and involvement programming towards tailored and targeted implementation, regional survey, data analysis, and stakeholder feedback has yielded five focused objectives for the RCSC. These are listed here in order of priority:

1. Increase awareness of runoff problems and solutions (for the protection of water quality).
2. Improve communications related to stormwater with and among decision makers.
3. Increase awareness and availability of tools related to Low Impact Development.
4. Continue trend of decreased fecal coliform loading to Richland County streams.
5. Increase the availability of tools toward the prevention of sediment leaving construction sites.

Under each objective, several tasks were selected. For each task, the appropriate target audience was determined, and ownership was assigned either to the consortium as a whole or to a specific education partner as lead based on the partner's goals and mission and ability to successfully implement. Through partner discussion and planning, a series of steps were determined to set along a three-year timeline according to their anticipated starting and ending times. Some steps are anticipated to take only a portion of a year, while others span multiple years and many are a factor of availability of community leadership. Also included on the timeline is the continuation of existing programs as well as time designated for research and planning.

This Strategic Plan, therefore, sets out to achieve medium to long term goals, prioritize distribution of resources among mutually agreed upon efforts, and provides an expectation of time frame towards achieving these strategies over multiple years, benefiting from the partnerships that exist amongst the RCSC. Each task of this Strategic Plan includes a period of evaluation so that programs can be further refined before broad or continued implementation. The plan is flexible and can be modified as needed to reflect changes in opportunities and priorities as they arise.

KEY TO FORMATTING

Italics:	*Planning and research*
Regular:	Continuing key initiatives
Bold:	**New key initiative**

PARTNER ABBREVIATIONS:

CC	Carolina clear
GCWA	Gills Creek Watershed Association
RBWA	Rocky Branch Watershed Association
RC	Richland County
RCSC	Richland Countywide Stormwater Consortium

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Three-Year Education Strategy

Focused Objective: Increase awareness of runoff problems and solutions (for the protection of water quality).				
Audience: general public, businesses				
Task	**Ownership**	**Audience**	**Year 5 (2012-2013)**	
Educate and involve audience of target watersheds	RCSC & RBWA	General Public	**Support growth of the Rocky Branch Watershed Alliance with programming targeted to Olympia neighborhood.**	
	RCSC & CCWA	General Public		**Re-initiate Crane Creek Watershed stakeholder meetings**
	RCSC	General Public	**Press releases on relevant watershed specific issues**	
	RCSC & GCWA	General Public	Support watershed improvement projects by the Gills Creek Watershed Association	
	GCWA	General Public	Continue Gills Creek Watershed presentations and homeowner listening sessions	
Implement Carolina Yard & Neighborhood program countywide	RCSC	Homeowners	Continue CYN presentations for HOA's, garden clubs, etc.	**Hold a county-wide CYN workshop or presentation series**
		Businesses	**Produce TV PSA on fertilizer/pesticides**	*Research opportunities to partner with landscaping businesses*
Implement Partnerships for Healthy Watersheds countywide	RCSC	Businesses	**Media campaign to build program awareness**	**Presentations and personal contacts for program awareness**
Expand variety of programming for youth.	RCSC	Youth	Continue watershed model presentations for schools	*Identify new partners to assist with youth programming*
				Research opportunities for Green Steps School projects and promote these to teachers

Focused Objective: Improve communications related to stormwater with and among decision makers.				
Audience: elected and appointed officials				
Task	**Ownership**	**Audience**	**Year 5**	
Provide education to County Council on ways to further protect water resources	RCSC	Elected and Appointed Officials	*Research methods and timing to meet and provide resources to Council*	**Provide education on Low Impact Development**
	RC	Elected and Appointed Officials	Continue Development Roundtable discussions	
			Continue presentations by stormwater staff on current program goals and accomplishments.	
Develop tools for citizens to communicate with individual council members	RCSC	General Public	Provide press releases on current issues and maintain website or other informational source on agenda items being considered by Council that relate to stormwater	
	Non-profit partners	General Public		**Encourage letter-writing campaigns on specific watershed concerns and activities; post follow up and information provided to partners and public on approvals by Council**
			Encourage involvement on relevant issues through HOA presentations.	
Work with other local governments: Forest Acres City Council, Arcadia Lakes Town Council, Blythewood Town Council	RCSC	Elected and Appointed Officials		**Establish relationships with councilmembers**

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Three-Year Education Strategy

Year 6 (2013-2014)		**Year 7 (2014-2015)**	
Support Watershed improvement projects by the Rocky Branch Watershed Alliance			
Increase awareness of Crane Creek Watershed Association			
Assess priorities and opportunities for establishing additional watershed groups		**Begin stakeholder meetings in additional watersheds**	
Support watershed improvement projects by the Gills Creek Watershed Association			
Continue Gills Creek Watershed presentations and homeowner listening sessions			
Assess participation, and recognize certified yards	**Hold a county-wide CYN workshop or presentation series**	*Assess participation, and recognize certified yards*	
Produce and distribute materials		**Hold a workshop on CYN for landscaping professionals**	Evaluate
Market certification		Evaluate businesses and strategy	
Develop new youth program ideas	**Implement new youth programs**		Evaluate
Plan Green Steps projects, research other opportunities for youth programming.	**Implement Green Steps Schools projects**		Evaluate and begin additional projects

Year 6		**Year 7**	
	Provide education on water quality issues related to sediment runoff from construction	**Provide education on additional relevant topics**	Evaluate
Continue Development Roundtable discussions			
Continue presentations by stormwater staff on current program goals and accomplishments.			
Provide press releases on current issues and maintain website or other informational source on agenda items being considered by Council that relate to stormwater			
Encourage letter-writing campaigns on specific watershed concerns and activities; post follow up and information provided to partners and public on approvals by Council	**Evaluate success of letter writing campaign**	**Identify additional issues and provide press releases**	**Begin new letter writing campaign**
Encourage involvement on relevant issues through HOA presentations.			
Provide Education on relevant issues	**Re-establish relationships with new councilmembers**	**Organize a training for municipal officials from all local governments within the county**	Evaluate

Three-Year Education Strategy

Focused Objective: Increase awareness and availability of tools related to Low Impact Development.				
Audience: general public, businesses				
Task	**Ownership**	**Audience**	**Year 5**	
Educate developers on LID	RCSC	Developers		**Promote examples of LID already existing in Midlands**
Provide outreach to audience on LID	RCSC	Professionals	*Assess available guidance documents for professionals*	**Produce and distribute guidance materials on implementing LID tools**
	RCSC	Homeowners	Continue rain barrel and rain garden workshops for homeowners	

Focused Objective: Continue trend of decreased fecal coliform loading to Richland County streams.				
Audience: general public, businesses				
Task	**Ownership**	**Audience**	**Year 5**	
Educate audience on effects of FOGs	RCSC	Homeowners	**Produce TV PSA on FOGs**	**Conduct presentations for HOA groups**
		Sewer providers	*Research opportunities and needs for providing information to sewer customers*	**Create and distribute new materials**
Educate audience on reporting of sanitary sewer overflows	RCSC	Homeowners	Continue to distribute Stormwater Hotline magnets and maintain IDDE website	Develop new education materials directing citizens to report SSO's to Ombudsmans office
		Sewer providers	*Research opportunities and needs for providing information to sewer customers*	**Create and distribute new materials**
	GCWA	General Public	Continue to promote reporting through the iPhone ranger project	
Educate audience on proper septic tank maintenance	RCSC	Homeowners	Continue to distribute septic tank care post cards	*Research methods for educating the public*
		Septic tank service providers		
Educate audience on proper disposal of pet waste	RCSC	Pet Owners	**Produce TV PSA on pet waste**	
			Continue to distribute pet waste brochures with pet registration renewals and	
		Businesses	Continue to distribute pet waste brochures at veterinary and pet supply businesses	

Focused Objective: Increase the availability of tools toward the prevention of sediment leaving construction sites.				
Audience: professionals, general public, elected officials				
Task	**Ownership**	**Audience**	**Year 5**	
Educate professionals on correct installation of BMP's	CC & RC	Professionals		*Research most common errors/reasons BMP's fail*
Increase reporting of violations by the general public	CC & RC	General Public	Continue to distribute hotline magnets	
			Produce TV PSA on sediment	
	GCWA	General Public	Continue to promote reporting through the iPhone ranger project	

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Year 6		**Year 7**	
Host general workshop on LID (cost effectiveness, tools available, etc.	**Work with planning department to promote incentives to implement LID**		
Locate potential demonstration sites, plan projects and apply for funding	**Install LID practices at demonstration sites with successful funding.**	**Host specific workshops on implementing LID tools (bioretention, pervious pavement, etc.)**	Evaluate
Encourage home buyers to choose communities with LID through education provided to real estate agents. Supply hand outs for real estate distribution.			

Year 6		**Year 7**	
Create and distribute new materials			Evaluate
Evaluate homeowner behavior with telephone survey	**Modify materials according to survey results and distribute**		
Research additional methods for educating the public	**Implement new outreach promoting the reporting of sanitary sewer overflows**		Evaluate
Evaluate homeowner behavior with telephone survey	**Modify materials according to survey results and distribute**		
Continue to promote reporting through the iPhone ranger project		Evaluate	
Create and distribute new materials on septic tank maintenance		Evaluate	
Research opportunities and needs for providing information to septic service customers	**Create and distribute new materials**	**Work with septic tank companies to develop incentive program**	**Implement incentive program**
Evaluate homeowner behavior with telephone survey	**Develop and implement media campaign**		Evaluate
Continue to distribute pet waste brochures with pet registration renewals and animal shelters			Evaluate
Continue to distribute pet waste brochures at veterinary and pet supply businesses	**Contact new businesses and provide materials**	Evaluate	**Develop new materials as needed**

Year 6		**Year 7**	
Produce new education materials for contractors, distribute during site inspections	**Training workshops on correct construction BMP usage**	Evaluate	
Continue to distribute hotline magnets	**Produce additional materials and distribute**	Evaluate	
Continue to promote reporting through the iPhone ranger project		Evaluate	

RICHLAND COUNTYWIDE
STORMWATER CONSORTIUM

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RICHLAND COUNTYWIDE STORMWATER CONSORTIUM

Appendix A

Telephone Survey: Environmental Attitudes, Knowledge, and Behaviors of Residents of the Midlands Region, S.C.

Executive Summary

In May 2009, Carolina Clear of the Clemson University Restoration Institute contracted with researchers from Clemson University's Department of Sociology and Anthropology (Dr. Catherine Mobley and Dr. James Witte) and the School of Computing (Dr. Roy Pargas) to conduct a telephone survey of residents of the Midlands region of South Carolina.

The population of the Midlands region is such that a sample of 385-400 respondents would permit estimates of the survey results with a margin of error of + 5% at a 95% confidence level. The survey was conducted from mid-July to early August 2009. Data were collected from 403 residents from the following 28 zip code areas in the Midlands region:

29016	29061	29150	29169	29201	29205	29210
29033	29063	29152	29170	29202	29206	29212
29040	29072	29153	29172	29203	29207	29223
29053	29073	29154	29177	29204	29209	29229

The main goal of the survey was to obtain information about residents' attitudes, knowledge, behaviors, and intentions as they relate to the environment. The results can serve as a baseline for measuring the success of future environmental and stormwater education efforts. The information collected about the various subgroups (and reported in the cross-tabulation analyses of the full report) can assist staff in targeting educational efforts by sociodemographic characteristics.

Brief Description of Sample

When compared to the general population as reflected in Census 2000 data, the Midlands region survey sample was disproportionately female (63.3% of the sample vs. 51.7% of the actual population in the 28 zip code areas, as reported by the U.S. Bureau of the Census) and better educated than the general population (with 52.4% of the sample earning a bachelor's degree or higher vs. 28.5% of the general population). With respect to race, 74.7% of the sample was white as compared to 61.0% of the general population. There were also some differences in the age profiles, with the survey comprised of a greater proportion of individuals 55 and older than found in the general population (46.3% vs. 24.0%, respectively) and a lower proportion of 18-24 year olds (5.3% of the phone survey vs. 15.8% of the general population). Approximately 88.5% of respondents indicated they were homeowners (as compared to 2/3 (66.0%) of the general population) and a minority of 41.2% of respondents indicated they lived next to a creek, stream, river, pond or other water body.

Research has shown that some of these segments of the population (e.g., higher-educated females) are more likely to participate in surveys. Thus, we adjusted for the demographic differences between the telephone sample and Census data by using standard statistical weighting procedures. The resulting weighted data are a closer approximation of Census population figures and are thus a better representation of the public's views on the issues covered in this survey. The results reported and discussed in this Executive Summary and the full report are based on the weighted data.

Main Findings

Survey results reveal a complex picture of the environmental views of Midlands residents. The summary below presents some of the main research findings.

- **Residents of the Midlands region are concerned about water quality in the region and place a high value on greenways.** Approximately 44.5% of respondents are "very concerned" and 37.6 % are "somewhat concerned" about pollution and the environmental quality of local streams and waterways. Nearly 81% of respondents indicated that greenways were valuable assets to the community.

- **Residents have a basic level of understanding about the various causes of poor water quality.** When asked about the impact of humans on the environment, 62.6% of respondents indicated that what people do on the land affects the quality of their local streams and waterways "a great deal." Nearly 78% of respondents "strongly agreed" or "agreed" that inspection and pump out of septic tanks protects water quality; 13.0% indicated "do not know" for this question. Slightly more than 79% of respondents "strongly agreed" or "agreed" that pet waste is a source of bacteria pollution in local waterways (although nearly 10% indicated they did not know). Regarding beliefs about the treatment of stormwater, nearly 3/4 of respondents (74.1%) did not believe that stormwater was treated before reaching lakes, rivers and streams.

- **Respondents were also asked to rate the extent to which nine different activities impacted streams and lakes in the area.** Respondents were most likely to say that the following sources of pollution had either a "great impact" or "some impact" on water quality: fertilizers and lawn chemicals (83.4%), fuel and oil leaks from trucks, buses or automobiles (82.9%), and industrial sites (81.1%). Of the items listed, respondents were most likely to indicate that the following sources of pollution had either "very little impact" or "no impact" on water quality: waste from birds (49.4%); run off from people washing their cars (43.0%) and pet waste (35.8%).

- **The high level of concern about water quality is generally matched by a fairly good level of knowledge among residents about the basics of watersheds.** When asked to choose the correct definition of the term "watershed," nearly one-third (33.1%) of respondents selected the correct answer ("area that drains into specific river or lake"). However, slightly more than one-fourth (25.3%) of respondents indicated "do not know" when asked to choose the correct definition of the "term" watershed. A nearly equal proportion selected either "low area that retains water" (14.7%) or "reservoir that serves as a municipal water source

(14.6%). When asked if they could name the local body of water that absorbs runoff after a rainstorm, a large proportion of respondents (43.6%) indicated they could not do so.

- **For the most part, Midlands residents are involved in water and environmental conservation efforts.** Slightly more than 72% of respondents of respondents indicated that, in the past two years, they had made an effort to reduce water usage out of concern for water quantity (i.e., drought) issues. However, a smaller proportion (40.8%) reduced water usage out of concern for water quality. In general, Midlands residents are somewhat active in citizen-based environmental efforts: nearly 26% of respondents indicated they had participated in a lake or river cleanup and 15% had joined or volunteered for a conservation organization in the past two years.

- **There are some indications that Midlands residents are engaging in environmentally-friendly household behaviors, although some residents are engaging in behaviors that could harm local rivers and streams.** Nearly all respondents (99.5%) indicated that, in the past two years, they "never" stored fertilizers and pesticides in leaking containers, disposed of oil, paint, or other chemicals down storm drains (98.8%) or dumped grass clippings down storm drains or backyard creeks (98.4%). Nearly 82% (81.7%) of respondents indicated they "never" operated a motor vehicle with a leak. However, a slight majority of respondents (50.7%) indicated that they "never" washed their car on the lawn or gravel instead of pavement, 42.2% of respondents indicated they "never" considered the likelihood of a rainstorm before treating their lawn with fertilizers or pesticides, and nearly 30% of respondents indicated they "never" cleaned up after their pets when taking them for a walk.

- **Midlands residents are not very active in outdoor recreational behaviors, especially as it concerns water-based recreational activities.** Hiking and fishing were the two most popular recreational activities for Midlands respondents (with 17.2% and 10.7% of respondents indicating they participated in these activities "often," respectively). However, nearly 83% of respondents indicated they have "never" gone hunting or trapping, 78.2% indicated they "never" had kayaked or canoed, 60.5% had "never" gone motorboating, and 56.4% indicated they had "never" gone swimming in rivers or lakes. And, although fishing was the second most popular activity, still 44.8% of respondents indicated they had "never" fished.

- **The high level of concern about water quality is generally matched by a somewhat high level of willingness to get involved in water resource issues.** Nearly 80% of respondents indicated they would "very likely" become involved if they were directly impacted by water quality. However, for the other four items, the proportion of respondents indicating they would "very likely" get involved was substantially lower than if they were directly impacted: if they knew local government could save money by taking actions to improve water quality (47.4% said "very likely"), if the local media ran positive stories taken by local residents to improve water quality (38.7%), the local media ran stories on local water pollution problems (37.5%), and if they had more information about water quality issues in the area (30.3%).

Appendix A

- **Respondents use a variety of media for receiving local and regional information and news.** Respondents were asked to choose the three primary ways that they receive local and regional information and news. By far, the most popular source of information and news was television evening news broadcasts, with slightly more than 85% of respondents indicated that they received their news through this source. Slightly more than 55% indicated they listened to the morning news for local and regional information. Local newspapers were the third most important source of information for respondents: 47.6% of respondents indicated this as one of their three primary sources of news. Regional newspapers were one of the top three choices for 24.2% of respondents. Billboards and posters and events/workshops were the least frequently mentioned source of news: 5.7% and 3.0% indicated these sources as one of their three primary sources of news, respectively. In response to a separate question, nearly 69% of respondents indicated they used the Internet to get their local and regional news.

- **There is a low level of awareness among respondents about local organizations that seek to improve water quality. Nearly 88% of respondents indicated they had never heard of Carolina Clear.** However, 11.5% indicated they had heard of Carolina Clear, but were not aware of its programs; less than 1% indicated they were aware of both Carolina Clear and its programs. Respondents had a similar level of awareness of the Lexington County Stormwater Consortium: just over 90% of respondents indicated they had not heard of the consortium, while just over 8% indicated they had heard of the consortium, but were not familiar with its programs. A small proportion (1.4%) indicated they were aware of both the Consortium and its programs.

- **Respondents were somewhat aware of county ordinances that are in place to protect water quality.** Nearly 11% of respondents were "very familiar" and slightly more than 15% of respondents were "somewhat familiar" with their county's ordinances that are designed to protect water quality. However, nearly 3/4 (73.7%) of those surveyed indicated they were not at all aware of these local regulations and ordinances.

Richland County Water Quality Monitoring Report

EXECUTIVE SUMMARY

Richland County has developed a comprehensive water quality monitoring program as part of NPDES Phase I regulatory compliance requirements, consisting primarily of wet weather monitoring, ambient monitoring, sediment monitoring, and macroinvertebrate monitoring. In addition, the County also conducts dissolved oxygen sampling utilizing sonde deployment and rural road runoff sampling. This report presents a summary of data collection and analysis of changes in pollutant loading resulting from the implementation of the stormwater management program. The summary of data includes an analysis of sampling completed for the three major watershed management units (WMUs) within the County, as well as overall County-wide averages.

Sampling Overview

This report summarizes sampling events and activities performed from January 2005 through June 2012. It also represents the third and fourth years of comprehensive analysis for the various monitoring programs. The goal of the monitoring program is to quantify pollutant loading throughout the County and identify trends associated with these pollutants.

The County initially reported the data and overall trends by comparing baseline loading or concentration, depending on program element (ambient, wet weather, benthic, etc.), for each sampling method to subsequent data collected at each site on an annual basis. Each pollutant was evaluated based on changes in the sampling results during the monitoring period in relation to the initial sampling event. However, as the program has continued and the County has gathered a larger data set, an analysis was conducted of the water quality parameters to determine trends and statistical significance. This was done through applying a confidence interval analysis and trend assessment. The confidence interval analysis is used to assess individual site data, and compare to historical data collected at the site to determine whether the results fall within a predicted range of results. This will allow a more accurate determination of trends and variability on some level of statistical significance. By evaluating statistical trends, the County can also determine areas of concern or improvement with confidence. Future data analysis will also include seasonal trends in order to implement a County-wide watershed management and assessment program.

Wet weather monitoring has several variables including storm duration, frequency, intensity and period since previous rainfall that can influence overall pollutant loading. Therefore, wet weather results presented in the report only reflect changes relative to baseline and do not evaluate whether the storm event actually produced more runoff than the baseline event. Given the variability within the wet weather sampling, the ambient monitoring results are considered to be the most appropriate measure of overall stream health necessary to support macroinvertebrate life and the uses for each water body.

Appendix B

Comprehensive Summary of Richland County Sampling & Monitoring Program 2005-2012				
Monitoring Activity	Number of Sampling Stations	Number of Pollutants Monitored	Number of Years of Data	Initial Sample (year)
Wet Weather	13	14	7	2005
Ambient	23	18	4	2008 (Q3)
Sediment	25	9	4	2008
Benthic	36	10	4	2008

Overall Results and Trends

As part of the monitoring program, the County analyzed annual variations in pollutant loading and concentrations for wet weather and ambient monitoring to determine a list of pollutants of concern for use a target in their education activities and inspection programs. The list of priority pollutants was revised for the 2011-2012 monitoring cycle to identify the pollutants that annually exceeded existing SCDHEC water quality standards. The pollutant list was developed based on the total percentage of exceedance of the water quality standard. This will provide a measurable reduction goal over the long-term implementation of the stormwater program. Additionally, these data can be used to verify loading reductions for existing Total Maximum Daily Load (TMDL) regulatory documents within the County. The priority pollutants are listed below:

County-wide Priority Pollutants and Parameters				
Parameter	**Overall County Average**	**WMU 202**	**WMU 301**	**WMU 502**
Residual Chlorine (mg/L)	✓	✓	✓	
Total Phosphorous (mg/L)		✓	✓	✓
Fecal Coliform (#/100mL)	✓		✓	✓
Total Kjeldahl Nitrogen (mg/L)		✓	✓	
Dissolved Oxygen (mg/L)	✓	✓		
Oil & Grease (mg/L)	✓			
Surfactants MBAS (mg/L)	✓	✓	✓	✓

Overall, water quality trends throughout the County are improving. A positive direct correlation was observed between a reduction of overall ambient concentrations throughout the County and a potential overall reduction in stormwater pollutant runoff. Potential reductions in stormwater runoff are reflected in ambient data even though direct correlation of wet weather data has not been found to be statistically significant. Most importantly, annual data collected since the inception of the monitoring program indicates that the County's water quality program may be having a positive impact on in-stream water quality since large variations in pollutant loading have been significantly reduced over the duration of the monitoring program. Increases in pollutants observed at individual sampling sites were not statistically significant, and trends show that these may be sampling anomalies based on the point-in-time nature of the sampling methods. The Richland County Stormwater Management Program has demonstrated an overall improvement to County waterways since the beginning of the monitoring program.

RICHLAND COUNTYWIDE STORMWATER CONSORTIUM

Appendix C

Priority Survey of Pollutants and Audiences

The following survey was given to the consortium partners to ascertain priorities for the group for future planning purposes. This survey was administered online using the Survey Monkey web tool (www.surveymonkey.com) Refer to Appendix D for the results of this survey.

PRIORITY SURVEY FOR 2011-2012 STORMWATER EDUCATION PLAN

As we prepare our Education plan of work for 2011-2012, it is important to have our priorities defined as clearly as possible. Everyone in the group comes to this effort from a different perspective, and those viewpoints strengthen our planning process. As you complete the questions below, please base your answers on Richland County's monitoring data, DHEC's TMDL list, personal observation, and what you hear from the public. Thank you for your input in this process!

1. Please rate the POLLUTANTS below by how much of a concern they are for Richland County waterways, in your opinion. Keep in mind that while all of these pollutants may be of concern, we would like to select a few issues to stress each year for a stronger, more organized education effort.

	highest concern	somewhat high concern	moderate concern	somewhat low concern	least concern	unsure or no opinion
Fecal bacteria	☐	☐	☐	☐	☐	☐
Sediment	☐	☐	☐	☐	☐	☐
Dissolved oxygen	☐	☐	☐	☐	☐	☐
Fats, oils, and grease (FOGs)	☐	☐	☐	☐	☐	☐
Nutrients	☐	☐	☐	☐	☐	☐
Litter	☐	☐	☐	☐	☐	☐
Toxic Contaminants (car fluids, pesticides, heavy metals, etc.)	☐	☐	☐	☐	☐	☐
Temperature	☐	☐	☐	☐	☐	☐
Other (please specify)	_____					

Appendix C

2. Based on the pollutants you chose above, please rate the priority of targeting the following BEHAVIORS or SOURCES of pollution with education messages.

	highest concern	somewhat high concern	moderate concern	somewhat low concern	least concern	unsure or no opinion
Pet Waste	☐	☐	☐	☐	☐	☐
Waste from waterfowl and other wild animals	☐	☐	☐	☐	☐	☐
Septic tanks	☐	☐	☐	☐	☐	☐
Sanitary sewer overflows	☐	☐	☐	☐	☐	☐
Construction runoff	☐	☐	☐	☐	☐	☐
Fertilizer/pesticide use	☐	☐	☐	☐	☐	☐
Rain gardens, rain barrels, other landscaping BMPs	☐	☐	☐	☐	☐	☐
Proper disposal of FOGs	☐	☐	☐	☐	☐	☐
Littering	☐	☐	☐	☐	☐	☐
E-waste	☐	☐	☐	☐	☐	☐
Car care issues	☐	☐	☐	☐	☐	☐
Car washing	☐	☐	☐	☐	☐	☐
Reducing impervious surfaces	☐	☐	☐	☐	☐	☐
General awareness	☐	☐	☐	☐	☐	☐
Other (please specify)	_____					

Appendix C

3. Based on the pollutants and behaviors you chose above, please rate the priority of targeting the following AUDIENCES with education messages.

	highest concern	somewhat high concern	moderate concern	somewhat low concern	least concern	unsure or no opinion
Youth	☐	☐	☐	☐	☐	☐
Homeowners	☐	☐	☐	☐	☐	☐
General public	☐	☐	☐	☐	☐	☐
Business/commercial: in general	☐	☐	☐	☐	☐	☐
Business/Commercial: specific type – please list	☐	☐	☐	☐	☐	☐
Industrial	☐	☐	☐	☐	☐	☐
Professional: Engineers	☐	☐	☐	☐	☐	☐
Professional: Contractors & developers	☐	☐	☐	☐	☐	☐
Elected/Appointed officials	☐	☐	☐	☐	☐	☐
County staff	☐	☐	☐	☐	☐	☐
Other (please specify)	_____					

4. For at least one of the pollutants, behaviors, and/or audiences you indicated as the highest priority, please suggest one or more program ideas that you feel would address this topic. This can be something we have done in the past or something new.

5. Do you have any comments on activities or initiatives from previous years, either positive or negative?

6. Do you have any additional comments on new activities or initiatives that you think are important for the upcoming year.

7. Do you have any comments on our annual planning process?

RICHLAND COUNTYWIDE STORMWATER CONSORTIUM

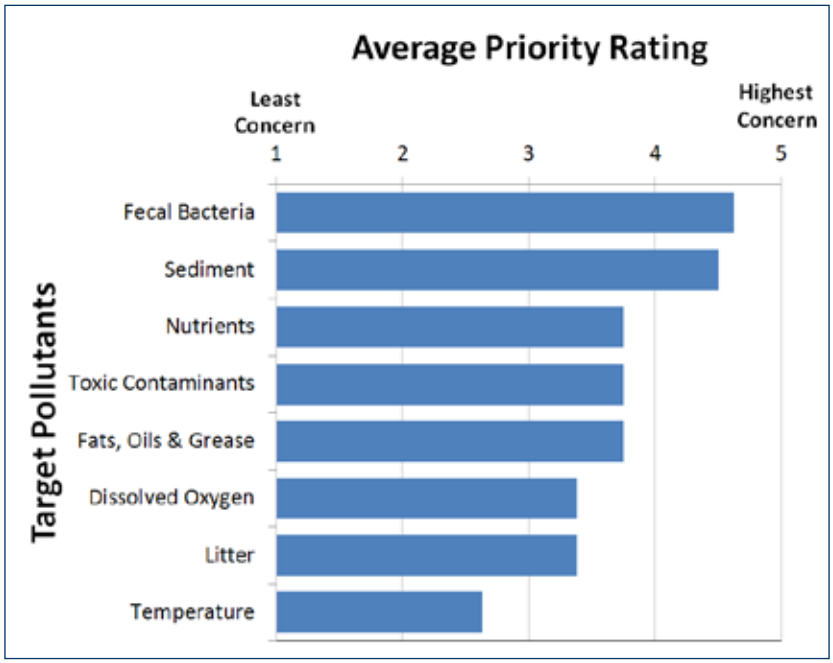
Appendix D

Richland County Priority Pollutants

Appendix C: Priority Survey Results

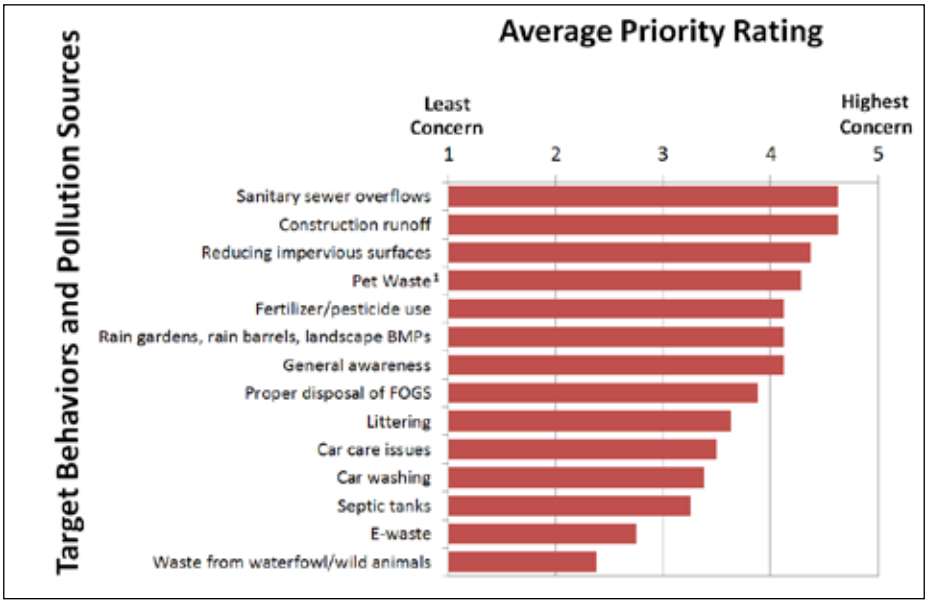
The following three graphs show the results of the priority survey of pollutants and audiences given to consortium members. Respondents were asked to rate pollutants, behaviors and pollution sources, and target audiences according how much of a concern or priority they are for protecting Richland County waterways, in each person's opinion. Highest concern is indicated by a 5; 1 indicates least concern. The number of respondents was eight for all questions (n=8), unless otherwise noted.

PRIORITY POLLUTANTS



Appendix D

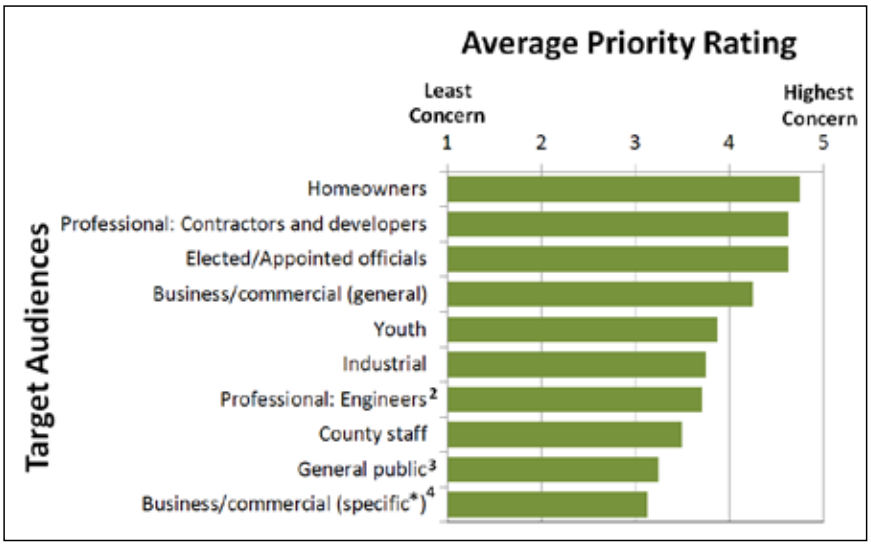
PRIORITY BEHAVIORS AND POLLUTION SOURCES



1. n=7: one respondent failed to answer this question

Appendix D

PRIORITY AUDIENCES



2. n=7: One respondent failed to answer this question.
3. n=7: One respondent answered this question with "no opinion/unsure."
4. n=6: Two respondents answered this question with "no opinion/unsure."

* Respondents were asked to list any specific business types to be targeted. Answers given were "businesses located in commercial areas with high concentrations of impervious surfaces" and "landscaping companies; big box chains that sell fertilizers, pesticides, herbicides, etc.; golf courses."

In addition to the target audiences listed above, respondents were allowed to list other audiences they felt were priorities. Answers given were "civic groups such as Rotarians, Kiwanis, churches" and "agriculturalists."

ANSWERS TO DISCUSSION QUESTIONS

4. For at least one of the pollutants, behaviors, and/or audiences you indicated as the highest priority, please suggest one or more program ideas that you feel would address this topic. This can be something we have done in the past or something new.

- A RCSWC pet collar clip-on flashing light to keep the pet owner aware to clean up pet waste while walking there pet. It can also be a safety light walk for night use. I have some if you want to try them.
- More recruiting for waterway clean ups and brings the public officials up to date on problem areas and gain their support on important issues.

Appendix D

- For above, education on general stormwater and impervious surface implications is important as well as green infrastructure/on-site treatment options.
- Education of food service industry on proper FOG disposal
- I am thinking about this. I think we need to employ social marketing techniques that reach into neighborhoods and address their concerns.
- Partner with a developer to highlight a green development project.
- Fecal bacteria--pet waste/doggie dooley seminars at local pet fests/kennels/training centers/veterinary clinics/businesses

5. Do you have any comments on activities or initiatives from previous years, either positive or negative?

- Summer of Water Celebration is good. It would be good to scale something similar to it at the community festival level to reach people who would not normally come. Health Fairs are sometimes a good "in"
- Youth outreach is going well--the EnviroScape is very successful, and demos at schools, festivals, and other events should continue! Also, the rain barrel/rain garden/Carolina Yard initiatives seem successful.

6. Do you have any additional comments on new activities or initiatives that you think are important for the upcoming year.

- Richland 101 --have you been participating in that?
- I would like to see us work with the development community more.

7. Do you have any comments on our annual planning process?

- Can we plan for more than one year at a time? Maybe three years? One year goes by so quickly and it is hard to think about long-term change in one year increments.

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Carolina CLEAR
A Public Service of Clemson University

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