



Annual Report of Activities

YEAR 5 / OCTOBER 2012 - SEPTEMBER 2013

NOVEMBER 2013





Executive Summary

Sumter Stormwater Solutions has completed its fifth year of stormwater education, outreach, and public involvement programming. Looking back over the previous year, there have been several important changes. Sumter County said good-bye to Dr. Peter Wilson, who resigned as County Engineer in June, and warmly welcomed Alfred Conyers as the new head of the stormwater program. While Dr. Wilson will be missed, SSS is enthusiastic about the new direction Mr. Conyers brings to the program.

Productivity increased in 2012-2013 with the addition of Jolie Brown to the SSS team. Jolie is a new Water Resources Agent with Clemson Carolina Clear. She coordinates the public involvement and participation efforts in Sumter County. Mary Caflisch continues to oversee the public education and outreach program areas. Jolie's efforts have expanded the number of cleanups offered and strengthened the volunteer storm drain marking and rain garden maintenance efforts. Jolie made numerous contacts with neighborhood associations, schools and civic groups and established a relationship with Shaw Air Force Base that has proven to be very valuable, resulting in more volunteers for cleanups and opportunities to reach citizens on base.

SSS increased its reach this year with two new regular newspaper and magazine columns, as well as an online fact sheet series to address homeowner concerns related to stormwater pollution. Two new permanent installations also provide education to visitors to Sumter County parks. Pet owners in Dillon Park now have pet waste disposal stations available to them, and visitors to Patriot Park can view a new rain garden sign to learn about the stormwater feature installed there.

In fall 2013, Carolina Clear began its second regional telephone surveys. From September through October Sumter and Richland County residents received phone calls inquiring into their attitudes and behaviors related to water resources and pollution prevention. The survey findings will be analyzed and published in 2014 and compared with those from the 2009 survey and with other regions of the state. The results will be used to focus public education and involvement programs with a clearer understanding of how efforts have impacted citizens over the past four years.

Year 5 has been an exciting and successful year. As programming continues to expand, SSS will prioritize efforts according to target pollutants and audiences of the greatest need, while reaching out to all citizens in new ways to involve them in efforts to protect rivers and streams.



Jolie Brown
Water Resources Agent

Jolie Brown is the new Carolina Clear Agent for Sumter Stormwater Solutions. She will specifically be working to increase public involvement and education for the citizens of Sumter. Jolie joins us from NRCS where she previously was a Soil Conservationist and also spent three summers as a student trainee. She is a Clemson alumni with a degree in Agricultural Education and an emphasis in Leadership.



Year 5 Highlights

- In November of 2012, Jolie Brown joined the Carolina Clear team as co-coordinator of Sumter Stormwater Solutions. Jolie Brown oversees public involvement and participation activities, such as cleanups and storm drain marking (p. 1).
- A bimonthly column in Lakeside Magazine and a monthly e-newsletter provide Sumter residents two new ways to learn about stormwater pollution (p. 6).
- To reduce litter and debris, 135 brochures on illegal dumping and illicit discharges were distributed, and a new post-cleanup sign was used to recognize volunteer efforts (p. 7).
- Four local schools participated in a rain barrel art contest to inspire creativity and concern for local streams and rivers (p. 11).
- Pet waste stations were installed at Dillon Park to encourage visitors to pick up after their pets and reduce the amount of bacteria entering streams (p. 17).
- The rain garden at Patriot Park received a new sign informing park visitors about the purpose and design of rain gardens. Master Gardener volunteers cared for this garden at two work days during the year (p. 21).

TOTAL OUTREACH ACTIVITIES AND TOTAL NUMBER REACHED (*estimated*)

1. Television and video: 16,457 reached
2. Radio: 44,130 reached
3. Publications, newsletters and articles: 112,287 reached
4. Websites and social media: 5,549 reached
5. Brochures and outreach materials: 580 reached
6. Festivals and events: 275 reached
7. Exhibits and displays: 11,200 reached
8. Presentations: 1,541 reached
9. Council and committee meetings: 7 reached
10. Conferences: 300 reached
11. Workshops: 1,027 reached
12. Community cleanups: 88 reached
13. Public involvement (other): 53 reached



Table of Contents

Executive Summary	1
Community Partners	1
Education Partners	2
Mission and Goals	3
Public Education	
Indirect Outreach Methods	
Internet	4
Television and Radio	5
Publications	6
Fairs and Festivals	8
Direct Outreach Methods	
Youth Activities	9
Elected and Appointed Officials	12
Professionals: Contractors, Engineers and Developers	13
Homeowners	15
Commercial Citizens	16
Public Involvement	
Stream Cleanups	18
Storm Drain Marking	19
Rain Garden Volunteer Workdays	20
Rain Barrel Workshops	20
Year 3 Highlights	7, 11, 17, 21
SSS Year 3 Summary	22
Appendix A - Articles	23
Appendix B - Event Data	27
Appendix C - Partner Websites	32



Community Partners

Sumter Stormwater Solutions includes Sumter County and the City of Sumter. Both city and county were instrumental during Year 5 for prioritizing efforts, evaluating stormwater pollutants and challenges, and developing new initiatives. In addition, the communities assisted with cleanups, displayed stormwater information at public events, made presentations to elected officials, high level staff and professional groups, and other activities. Their leadership and support is essential to the function and progress of this group.

Municipality & Position	Representative
SUMTER COUNTY	
Stormwater Manager	Alfred Conyers
Environmental Technician	Dan Geddings
Environmental Technician	John Merkel
Water Utility Office Manager	Cheryl Johnson
CITY OF SUMTER	
Stormwater Manager	Teige Elliott





Education Partners

Sumter Stormwater Solutions education partners include government agencies, non-profit and community organizations and businesses who share the consortium's mission of providing education to the public on stormwater issues throughout the County. Each partner brings a unique skill set to the organization and enhances the variety of programs the consortium is able to offer.





Mission and Goals

GOAL STATEMENT

To enhance water resource protection and stewardship through education, public involvement and partnerships.

OBJECTIVES

- Use a watershed approach to develop and implement a comprehensive education strategy that addresses stormwater pollution using a prioritized approach capitalizing on local training resources.
- Foster and expand upon citizen involvement in stormwater management through education and participation programs to encourage behavioral change towards improved environmental protection and awareness.
- Facilitate collaboration among local organizations interested in watershed-related education to best meet the educational needs of local communities.
- Through partnerships, leverage education resources and organize outreach programs to meet the NPDES Phase II permit requirements for public stormwater education and outreach to achieve greater water resource protection.
- Participate in collaborative stormwater education that can serve as a model for others.



Photo by Ruth Ann Bigger

*“Water links us to our neighbor
in a way more profound and
complex than any other.”*

John Thorson



Public Education

Internet and Social Media

LEAD PROVIDER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	Sumter Stormwater Solutions Website	Ongoing	944 page views	General Public
Carolina Clear	Midlands Stormwater Consortiums Facebook page	Ongoing	154 “likes”	General Public
Santee Riverkeeper	Santee Riverkeeper Facebook page	Ongoing	58 “likes”	General Public

Sumter Stormwater Solutions maintains a website and Facebook page to share information widely over the internet. This year all of the Carolina Clear websites received an updated look for easier navigation and visual appeal. Daily Facebook posts keep audiences engaged and provide a forum for discussion and feedback. The Sumter County and City of Sumter stormwater departments maintain their own websites, and the Santee Riverkeeper has a website and Facebook page as well. A list of our education partner websites can be found in Appendix C.





Public Education

Television/Video

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Clemson University	Carolina Clear	Water quality segments on <i>Making It Grow</i> television show on ETV.	1/1/13 & 2/5/13	16,457* each episode	General Public



In 2013, two episodes of Clemson University's *Making It Grow* television gardening program featured information about water quality, with interviews from Carolina Clear staff. *Making It Grow* airs on Tuesdays at 7:00 PM.

**Number reported is the average number of persons per household applied to the number of households that viewed Making It Grow! during the monitored period of November 2011 through July 2012 in Columbia and Charleston markets only. This number should be considered very conservative and only represents one episode's viewing.*

Radio

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	Miller Communications	Radio commercials featuring stormwater messages on Miller Communication Stations	10/16/12-3/1/13 & 3/28/13-8/31/13	14,130 daily listeners	General Public
Clemson University	Carolina Clear	Water quality segments on <i>Your Day</i> radio program on ETV Public Radio	6 segments	30,000 listeners	General Public



Stormwater messages aired on Miller Communications radio stations in the Sumter and Florence areas in two rotations during the year. Topics for the fall rotation included pet waste and yard debris disposal, and topics for the spring rotation included fertilizer use and "Only rain down the storm drain!"

On a statewide level, Clemson University's *Your Day* radio program covers a wide range of topics for the public. Six segments throughout the year focused on water quality. Topics included pet waste, fertilizer, rain barrels, rain gardens, shorelines and other water quality issues.



Public Education

Publications

NEWSPAPER, MAGAZINE, ONLINE ARTICLES AND NEWSLETTERS

LEAD PROVIDER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Clemson Extension	"Keeping Sumter Beautiful" column written for the Sumter <i>Item</i> newspaper	12 articles	Circulation 77,102	General Public
Carolina Clear	Bimonthly water quality column written for <i>Lakeside Magazine</i>	5 articles	Circulation 15,000	General Public
SC Department of Agriculture	<i>South Carolina Market Bulletin</i> featured an article on rain barrels	3/21/13	Circulation 20,000	General Public
Carolina Clear	<i>H2Ownership</i> fact sheets on HGIC website (six fact sheets total)	Ongoing, from Sept. 2012	2,422 views	General Public
Carolina Clear	<i>Take Action E-News</i> email newsletter	Monthly, from Jan. 2013	Circulation 185	General Public

Clemson Extension Water Resources agent Jolie Brown writes water quality articles for the Sumter Item's "Keeping Sumter Beautiful" column and the Lakeside Magazine. Over the past year, Jolie contributed fifteen articles for these two publications, on topics ranging from "shorescaping" and geese waste to rain barrels and rain gardens. Horticulture agent Amanda McNulty also contributes articles to the Keep Sumter Beautiful column. Two of her articles related to fertilizer, which can have a big impact on water quality. Both of these outlets provide great venues for the public to read about the issues and the solutions. See Appendix A for an example of an articles from these two columns.

In September 2012, Carolina Clear introduced a new online fact sheet series called H2Ownership. Located on the Clemson Home and Garden Information Center (HGIC) website (www.clemson.edu/hgic), these fact sheets help make the connection between actions at a person's home and water quality.

In January 2013, Sumter Stormwater Solutions produced its first Take Action E-News email newsletter. This monthly newsletter keeps readers up to date on recent and upcoming programs as well as local news related to water quality.





Year Five Highlights

Illegal Dumping Campaign

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Sumter County	N/A	Illicit discharge and illegal dumping brochures distributed during inspections, violations and events	Ongoing	135 brochures distributed	General public

Illegal dumping is a serious issue in Sumter area watersheds. Trash and debris not only hurt the appearance of a community, they can clog storm drains and ditches and contribute to flooding. Illegal dumping can also be a source of bacteria if the trash contains soiled diapers, animal waste or food scraps.

Volunteer litter cleanups are held throughout the year to remove trash from the worst streams and stormwater ditches (p. 18). To help keep areas litter-free following cleanups, a new temporary sign was developed. The sign, which thanks volunteers and includes a littering hotline number for citizens to call, is displayed near the cleaned waterway for several weeks following a cleanup event. The sign was first used after the September 21st River Sweep Cleanup along Berry Street in the Turkey Creek Watershed.

Sumter County also distributes brochures with information on illegal dumping and illicit discharge during inspections and investigations of violations. The brochures explain the impacts of illegal dumping and illicit discharges on stormwater and give information and resources for correct disposal of unwanted materials.

In 2014, Sumter Stormwater Solutions plans to partner with the Sumter Sheriff's Department to more widely distribute illegal dumping and illicit discharge brochures. The sheriff department responds to many reports of littering and dumping and has the opportunity to provide outreach to the public on this topic. It will take a lot of effort, but with so many people working together we can make a difference to improve waterways and restore beauty and pride to Sumter communities.





Public Education

Fairs and Festivals

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	Multiple partners	Displays at the Sustainable Sumter Earth Day Celebration	4/20/13	400	General Public
Carolina Clear	Master Gardeners	Displays at the Sumter Iris Festival	5/25/13	200	General Public
Carolina Clear	Master Gardeners	Displays at the Sumter County Fair	9/24/13-9/29/13	10,000	General Public

Festivals and fairs offer great opportunities to reach a large number of people at one time. General events such as the Sumter County Fair, attract a broad audience that may know little about environmental protection, while environmentally themed events, such as the Sumter Earth Day Celebration, attract audiences already tuned into green issues and eager to learn more ways to make a difference. By drawing visitors with colorful displays and hands-on activities, such as the Enviroscape watershed model or live pond creatures, Sumter Stormwater Solutions can build general awareness and provide detailed information on specific issues.



Rain barrels submitted by students were voted on at Sumter Earth Day.



Kids search water samples for pond creatures at Earth Day.



Central Carolina Technical College demonstrates a water purifier.



Sumter City-County Planning displays the Greenway Master Plan for Shot Pouch Creek.



A Carolina Yards display at the Sumter Iris Festival.



Iris Festival attendees took the Carolina Yards Challenge for a chance to win a rain barrel.



Sumter Master Gardeners answered questions and sold plants at the Iris Festival.



Carolina Yards display at the Sumter County Fair.



Public Education

Youth Activities

ACTIVITIES FOR ELEMENTARY SCHOOL STUDENTS

LEAD PROVIDER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear, Conservation District, Sumter County	Water quality presentations for elementary schools: Thomas Sumter Academy, Cherryvale Elementary, R.E. Davis Elementary, and Millwood Elementary	4 presentations	284	Youth
Carolina Clear	Career Day at Alice Drive Elementary School	2/22/2013	250	Youth
Carolina Clear	Career Day at Crosswell Elementary School	3/27/2013	200	Youth
Carolina Clear, Conservation District	Water quality presentations at Earth Day events: Cherryvale Elementary, Oakland Elementary, and Shaw Air Force Base	4/22/13	250	Youth

To increase the variety of in-school presentations, Carolina Clear introduced a new macroinvertebrate lesson for elementary schools. In this activity, students investigate water samples from a pond, searching for insect larva, tadpoles and other aquatic life. These tiny creatures are indicators of water quality, and the species found give clues to how clean or polluted the water may be.

Working with students is very valuable because not only will they grow up to be the future citizens of Sumter, at present they take the messages they learn home to their parents and positively influence adult behavior.



Students at Thomas Sumter Academy learn about sources of pollution with the Enviroscape watershed model.



Students learn about water pollution at Cherryvale Elementary School's Earth Day celebration.



Second graders at Cherryvale Elementary School search pond water samples for aquatic life.



Public Education

Youth Activities

ACTIVITIES FOR MIDDLE AND HIGH SCHOOL STUDENTS

LEAD PROVIDER	SUPPORTING PARTNERS	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	N/A	Crestwood High School Lunch & Learn	1/10/2013	50	Youth
Sumter Conservation District	N/A	Career Day at Bates Middle School	2/7/13	100	Youth
Carolina Clear	Boy Scouts of America	Soil & Water Conservation merit badge at Boy Scout Hornaday Award Weekend	3/10/13	9	Youth
SCDNR	Central Carolina Technical College, Carolina Clear	SC Envirothon competition	4/3/13	18 teams, 90 students	Youth
Carolina Clear	N/A	Career Fair at Crestwood High School	4/17/2013	100	Youth

Two Sumter area high schools were very active in stormwater education programs in 2012 and 2013. Crestwood High School invited Carolina Clear agent Jolie Brown to give attend their career fair and give a “lunch and learn” presentation on water quality. In addition, students from Mr. Higginbotham’s biology classes participated in two litter cleanups during the school year (p. 18). In past years, Crestwood High School has participated in cleanups and marked storm drains in Sumter neighborhoods.

St. Francis Xavier High School was involved in several activities as well. They participated in the Rain Barrel Art Competition (p. 11), receiving second place. A team of students from the school also marked neighborhood storm drains on three dates during 2013 (p. 19).

These students are showing great initiative in their community, and their hard work and caring speak of a bright future for Sumter’s waterways.



Jolie Brown talks about being a Water Resources Extension Agent at Crestwood High School’s career fair.

ACTIVITIES FOR TEACHERS

LEAD PROVIDER	SUPPORTING PARTNERS	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	Thomas Sumter Academy	Watershed interactive whiteboard lessons, downloadable online	Ongoing	100	Teachers
Clemson University	Carolina Clear	Carolina Clear display at the Next Step for STEM Schools three-day institute for teachers and administrators	9/30/13-10/2/13	300	Teachers



Year Five Highlights

Youth Activities

RAIN BARREL ART CONTEST FOR SCHOOLS

LEAD PROVIDER	SUPPORTING PARTNERS	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	Sumter County Schools	Rain Barrel Art Contest for Sumter County Schools	February-April 2013	130 students participating	Youth

In the spring of 2013, Sumter Stormwater Solutions hosted a rain barrel art competition. The purpose of this project was to involve kids and their families in protecting water quality with an educational and fun activity. The competition was open to all elementary, middle, and high schools, both public and private, in Sumter County. The schools were provided with a 50-gallon rain barrel which they were asked to decorate with an Earth Day theme. Participating schools had the option of either installing the barrel at the school or donating it back to the local Clemson Extension office to be auctioned off to the public. Four schools participated in the contest. The barrels were voted on by the public at the Sumter Earth Day Celebration. The winners were as follows:

- 1st Place - Lakewood High School
- 2nd Place - St. Francis Xavier High School
- 3rd Place - Kingsbury Elementary School
- Honorable Mention - Chestnut Oaks Middle School

The first, second and third place winners received a pizza party for the participating class, and the first place winners also received a prize pack with frisbees and water bottles.

This competition will be held again in 2014. It is hoped that even more schools will enter the contest and install rain barrels at their school. Participating schools are also encouraged to have a speaker from Sumter Stormwater Solutions visit beforehand to teach students about preventing water pollution.



Students at Kingsbury Elementary paint their rain barrel with an earth day theme.



Announcing the winners at the Sumter Earth Day Celebration.



Students from Francis Xavier High School enjoy their second-prize pizza party.



Public Education

Elected and Appointed Officials

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	SC Association of Counties	Carolina Clear booth and demonstration of Canada goose fencing and water quality protection practices at the annual South Carolina Association of Counties Conference	8/4/13-8/5/13	300	Elected Officials

To strengthen relationships with elected and appointed officials, Carolina Clear attended the South Carolina Association of Counties Annual Conference held in Hilton Head in August, 2013. This event is attended by County Council members, administrators, and clerks representing South Carolina's 46 counties. Carolina Clear displayed an educational booth on water quality protection as well as a demonstration of special fencing for deterring Canada geese. Geese are a large problem in stormwater ponds. They contribute to shoreline erosion and spread invasive weeds, and their feces contaminate the water with harmful bacteria. Bacteria is a high priority pollutant in the Sumter area, particularly in the Turkey Creek Watershed. This demonstration helped to raise county leadership's awareness of this and other important stormwater issues and provide them with tools for solving problems in their local watersheds.





Public Education

Professionals: Contractors, Engineers, Developers PRESENTATIONS AND DISPLAYS

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Clemson University	Carolina Clear	South Carolina Water Resources Conference	10/11/12-10/12/12	300	Professionals
Sumter City-County Planning	URS	Turkey Creek Greenways Master Plan brainstorming session	5/16/13	7	Professionals
URS, City of Florence	SC APA	“LID, Planning and Regulatory Requirements” presentation for the South Carolina Chapter of the American Planning Association Summer 2013 Conference	7/17/13	120	Professionals
Carolina Clear	SC APWA	Presented on ditch maintenance and shaping practices for water resource protection at the SC American Public Works Association Summer Conference	8/6/13	25	Professionals
Carolina Clear	SC APWA	Maintenance Jeopardy presentation for Public Works staff at the SC American Public Works Association Summer Conference	8/6/13	40	Professionals

Sumter County and City of Sumter are working together to improve stormwater management and connectivity in and around Turkey Creek. In May the Planning Department hosted a brainstorming session to discuss various engineering issues related to Turkey Creek. These included existing conditions pertaining to wetlands, floodplain, stormwater, water quality, brownfield issues and ideas for developing a greenway system for the creek.

The third biennial South Carolina Water Resources Conference was held in Columbia October 10-11, 2012. The conference is coordinated by Clemson University’s Center for Watershed Excellence (www.clemson.edu/watershedcenter). The conference provides a forum for academics, public water managers and private consultants to come together to discuss water policies, research projects and water management in order to prepare for and meet the growing challenge of providing water resources to sustain and grow South Carolina’s economy, while preserving our natural water resources.

Several other presentations were given at the statewide level during the summer of 2013. Geoff Smith of URS and Jerry Dudley of the City of Florence presented on Low Impact Development (LID), planning and regulatory requirements at the South Carolina Chapter of the American Planning Association Summer 2013 Conference in Florence. Carolina Clear also gave two presentations for the SC American Public Works Association Summer Conference in Myrtle Beach.



**2012
S.C. Water Resources Conference**

Exploring Opportunities for Collaborative Water Research, Policy and Management





Public Education

Professionals: Contractors, Engineers, Developers TRAININGS AND CERTIFICATIONS

LEAD PROVIDER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Clemson University	CEPSCI (Certified Erosion Prevention and Sediment Control Inspector) courses	11 trainings	922	Professionals
Clemson University	CSPR (Certified Stormwater Plan Reviewer) courses	2 trainings	56	Professionals

The CEPSCI and CSPR are courses from Clemson University that educate stormwater professionals on the proper design and review of stormwater and sediment control plans for development sites and on the proper installation, maintenance and inspection of erosion prevention and sediment control measures at construction sites in order to meet regulatory and environmental requirements. Preventing sediment-laden runoff not only protects our rivers, creeks and streams, but it is also a trademark of a quality construction project. A total of four CEPSCI initial trainings and seven CEPSCI recertification trainings were held in Columbia this year. For the CSPR course, one initial training and one recertification training were held. Both courses have recently been updated to meet the requirements of South Carolina's new Construction General Permit. The lists of certified inspectors and reviewers for South Carolina are available at <http://www.clemson.edu/public/cepisci/inspectors.html> and <http://www.clemson.edu/public/cspr>.



DATE	NUMBER ATTENDING
CEPSCI INITIAL TRAINING	
12/05/2012	96
3/13/2013	120
5/24/2013	129
9/18/2013	123
CEPSCI RECERTIFICATION	
11/08/2012	33
11/28/2012	35
12/18/2012	69
4/12/2013	54
5/23/2013	76
4/11/2013	134
6/11/2013	53
CSPR INITIAL TRAINING	
5/29/2013	17
CSPR RECERTIFICATION	
5/29/2013	39



Public Education

Homeowners

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Clemson Extension	Sumter Master Gardeners	Master Gardener Training Class, including Carolina Yards presentation	Jan. - May 2013	8	Homeowners
Clemson Extension	N/A	Pond management workshop	3/12/13	9	Homeowners
Sumter City-County Planning	N/A	"Sumter Connectivity & Greenways Master Plan for Shotpouch Creek" presentation for the Forum women's leadership group	May 2013	25	Homeowners
Carolina Clear	N/A	Participated in Sumter neighborhood association VIP meetings, sharing program information	4/3/13	50	Homeowners
Clemson Extension	N/A	Carolina Yards program	Ongoing	Not assessed	Homeowners

In 2013, eight people joined the ranks of Master Gardeners by participating in Clemson Extension's annual Master Gardener Training Class (MGTC). Each year, class participants receive over 40 hours of intensive, practical horticultural training, which includes fertilizing correctly, safe pesticide use, and protecting natural resources. Following their training, Master Gardeners serve the community by making use of and passing on their knowledge. They assist at the Extension office by answering gardening questions from citizens, plant and maintain gardens at Swan Lake and other city and county parks, and provide informational displays at events such as the Sumter County Fair (p. 10). Master Gardener volunteers have been a great asset in caring for the rain garden at Patriot Park.



Master Gardener volunteers pull weeds in the Patriot Park rain garden.

On March 12, Clemson Extension hosted a pond management workshop. The workshop was designed to benefit private owners in addition to those belonging to an association who may have a pond or lake access. Topics covered included fertilizing, controlling weeds, stocking and managing fish populations.



Carolina Yards is a program from Clemson Extension that helps homeowners to make their lawn better for the environment while saving time and money. The program provides resources for working with the environment instead of against it.

Participants complete actions in their yards to earn credits, and those with enough credits can apply to become a certified Carolina Yard. Only two yards in Sumter have been certified to date, but interest in the program is growing, based on public feedback at events and visits to the Carolina Yards website, www.clemson.edu/cyn.



Public Education

Commercial Citizens

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	Central Carolina Technical College	Pollution prevention presentations for automotive technology classes	10/24/12	23	Businesses
Sumter County	N/A	Stormwater issues presentation for Leadership Sumter environmental day	4/10/13	15	Community Leaders
Carolina Clear	Sumter County Fair Commission	Grease disposal handouts distributed to food vendors at Sumter County Fair	9/24/13	25	Businesses

Central Carolina Technical College has a strong automotive technology program. Auto repair businesses handle harmful materials every day, such as motor oil, gasoline and antifreeze, that can cause water pollution. To prepare these students to work with these materials safely, Carolina Clear gave presentations to two automotive classes on pollution prevention in the automotive repair industry. The knowledge gained will help them in their future careers to protect local water resources and comply with City of Sumter and Sumter County regulations regarding pollution.

Preventing illicit discharges is a high priority in Sumter watersheds. In the upcoming year, Sumter Stormwater Solutions will expand its outreach to businesses by providing educational materials for car washes, carpet cleaners, dry cleaners and other business types that are at risk of causing illicit discharges.



Oil and gasoline residue on a parking lot from leaking cars.



Used motor oil and oil filters incorrectly stored where rain can fall on them. Photo courtesy of Brian Wisnewski.



Used motor oil containers are drained and shredded for recycling at Sumter County Public Works.



Year Five Highlights

Pet Waste Campaign

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	N/A	Pet waste posters and post cards distributed at veterinarian offices	December 2012	250 cards	General Public
Carolina Clear	Petco	Pet waste doggie bandanas distributed through Petco to promote picking up pet waste	December 2012	50 bandanas	General Public
Sumter County Parks	Carolina Clear, Sumter Soil & Water Conservation District	Pet Waste Stations installed at Dillon Park	March 2012	Not assessed	General Public
Carolina Clear, Conservation District	Sumter County Parks	Dog Day at Dillon Park, to promote new pet waste stations	3/12/13	40	General Public

Picking up pet waste is important in reducing the amount of harmful fecal bacteria entering waterways. To build awareness, educational post cards and posters about pet waste disposal were distributed to veterinary offices where pet owners would see them. Doggie bandanas with a message about pet waste were distributed through a partnership with Petco.

In March, new pet waste stations were installed at Dillon Park. These stations include a dispenser for pet waste disposal bags and a sign reminding park visitors to pick up after their pets. Sumter County Parks and the Sumter Soil and Water Conservation District are partners in this project, helping to purchase bags and maintain the pet waste stations. To celebrate the new stations and build public awareness, a Dog Day event was held on March 12, 2013. Visitors to the park received pet waste bandanas, frisbees, and information on the importance of picking up after pets. Conservation District Commissioner Betty Martin stopped by to represent the District along with TJ Yarber, the Conservation District Office Manager. Since March, the stations have seen a lot of use, and park staff reported that the bags have needed refilling many times.





Public Involvement

Stream Cleanups

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	Sumter County, City of Sumter	Earth Day stream cleanup - Turkey Creek	3/16/13	10 volunteers	General Public
Carolina Clear	City of Sumter	Shot Pouch Creek cleanup with kayaks	6/8/13	37 volunteers	General Public
Carolina Clear	Sumter County, City of Sumter	River Sweep 2013 - Berry Street	9/20/13	11 volunteers	General Public
Clemson Extension	Keep America Beautiful	Manchester State Forest Cleanup	5/18/13	30 volunteers	General Public
City of Sumter	Neighborhood Associations	Sumter neighborhood cleanups	Ongoing	Not assessed	General Public

Volunteers made a big difference in Sumter this year by participating in litter cleanups. 4 cleanups were held throughout the year. Two of the cleanups were in the Turkey Creek watershed, one benefited Shot Pouch Creek, and one was at Manchester State Forest. Volunteers groups included Crestwood High School, Sumter King Leadership Council, Shaw Air Force Base, Sumter Girl Scouts, and neighborhood associations. The amount of litter collected was not recorded for every event, but at least 50 bags of trash, 30 bags of recyclables and 24 tires were collected. Other large items found included three mattresses, two bike wheels, a toilet, and trash bags full of dirty diapers and clothes. Removing litter and debris from our waterways not only improves water quality but enhances the beauty of the community.



Volunteers from Shaw Air Force Base were eager to test their kayaking skills and make a difference by cleaning up Shot Pouch Creek.



Students with the Sumter King Leadership Council pick up trash along Shot Pouch Creek.



Volunteers use kayaks to collect trash from hard to reach areas in Shot Pouch Creek.



Crestwood High School students bag trash from a ditch along Berry Street near Turkey Creek.



Trash and recyclables removed from Turkey Creek at the Earth Day stream cleanup.



Public Involvement

Storm Drain Marking

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	St. Francis Xavier High School	Storm drain marking at Idlewild Subdivision	1/31/13, 5/15/13	13 volunteers each date	General Public
Carolina Clear	N/A	Storm drain marking at Tudor Place Subdivision	9/11/13	1 volunteer	General Public
Carolina Clear	St. Francis Xavier High School	Storm drain marking at The Arbors Subdivision	9/18/13	10 volunteers	General Public
City of Sumter Stormwater	N/A	Storm drain marking at The Willows Subdivision	2013	5 drains marked	General Public
Sumter County	N/A	Installed stormwater catch basin lids displaying stormwater messages	2013	15 lids installed	General Public



Marking storm drains is a valuable public involvement activity because it notifies the neighborhood residents that water down storm drains goes to streams and rivers. Most of the 2013 marking projects were completed by volunteers from St. Francis Xavier High School, which has designated its own storm drain marking crew! This team gets together once a month to mark storm drains for their community service project. This group of students is very energetic and they enjoy the project. So far this year 75 storm drains have been marked by the St. Francis

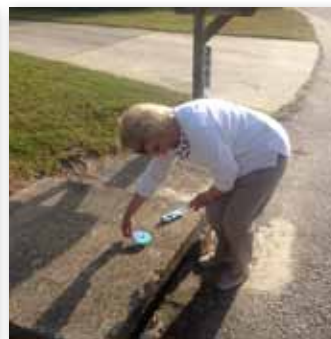
Xavier crew. A private citizen also marked drains in her neighborhood to let her neighbors and the landscaping crew know that only rain should go down the drains. In addition, City of Sumter Stormwater staff marked five storm drains near an intersection where illegal dumping had occurred, and Sumter County installed 15 new stormwater catch basin lids bearing stormwater messages.



St. Francis Xavier High School students mark storm drains in the Idlewild subdivision.



Markers remind residents that water in storm drains goes to streams and rivers untreated.



Concerned citizen Ms. Carolyn Huggins marks storm drains in her neighborhood.



Continuing their commitment, St. Francis Xavier students mark drains in the Arbors.



Public Involvement

Rain Garden Volunteer Work Days

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Master Gardeners	Carolina Clear	Rain Garden volunteer workdays	12/5/12 & 5/7/13	16 volunteers	Homeowners

Master Gardeners and other volunteers weren't afraid to get their hands dirty to keep the Patriot Park rain garden looking its best. At work days in December and May they spread mulch, pulled weeds and planted new plants. Read more about Sumter's rain gardens on page 21.



Rain Barrel Workshops

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	Sumter County	Rain Barrel workshops	3/7/13 & 8/15/13	32 participants, 25 barrels made	Homeowners

Two rain barrel workshops were offered this year to give homeowners a chance to create and install a rain barrel at their houses. Rain barrels are a direct way citizens can improve water quality. By capturing and storing roof runoff, rain barrels reduce local flooding and decrease the amount of pollution carried by runoff from yards and driveways.

Lower right, rain barrel built and painted by Carolyn Huggins





Year Five Highlights

Demonstration Rain Gardens

LEAD PROVIDER	SUPPORTING PARTNER	ACTIVITY	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Sumter County	Carolina Clear	Rain Garden Sign Dedication Event at Patriot Park	5/23/15	15	General Public

Sumter County has three rain gardens that serve as demonstration sites for stormwater management. Two rain gardens are located at the Sumter County Public Works office, where they collect runoff from a fueling station and a parking lot (lower right). The third garden is at Patriot Park and filters runoff from a very large parking lot and several soccer fields (lower left). On May 23, 2013, a new educational sign was installed at the Patriot Park Rain Garden. This sign informs park visitors about the purpose and function of rain gardens as well as suggested plants for use in rain gardens. A dedication ceremony was held to commemorate the new sign, attended by Sumter Stormwater Solutions representatives, Sumter County Staff, and Sumter Master Gardeners. The Master Gardeners assist with maintenance of the rain garden throughout the year (p.. 20).



The rain garden at Patriot Park in May 2013



Blue flag irises attract pollinators with their bright petals.



The rain garden at Sumter Public works in October 2013



Beautyberry is a hardy shrub that adds fall color and food for birds.



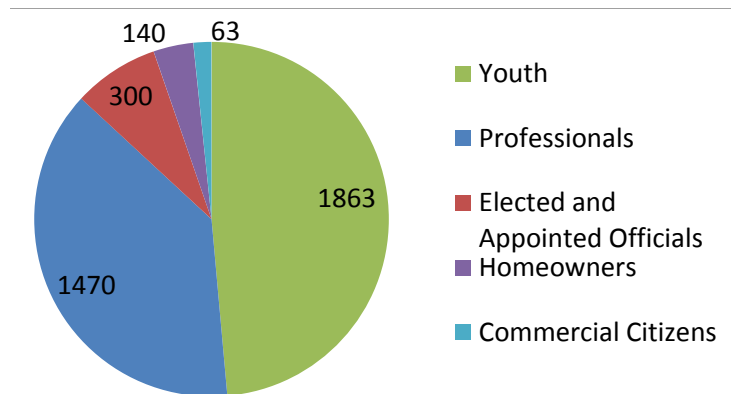
Outreach Summary

Year 5, September 2012 - October 2013

In terms of direct outreach, youth was the target audience reached in greatest numbers in Year 5. The new rain barrel art competition made an effective addition to the standard classroom presentations, career fairs, and school Earth Day events. Presentations and displays at statewide conferences for engineers and developers, along with increased CEPSCI and CSPR trainings, allowed the number of professionals reached to more than triple. In the upcoming year, emphasis on homeowner audiences will be renewed with additional programs related to the Carolina Yards program. Elected and appointed officials will receive presentations on a utility study recently completed by the City of Sumter and URS, as well as on the implications of the new NPDES Small MS4 Stormwater Permit from the SCDHEC, which will go into effect in January 2014. To increase impacts for commercial audiences, SSS will branch

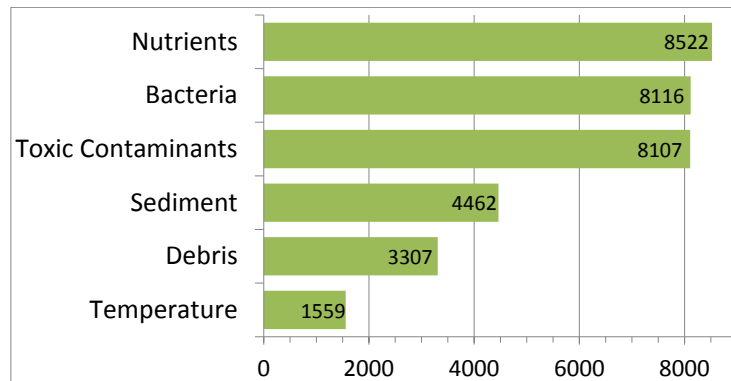
out to new business types with specific information on pollution prevention in their fields.

NUMBER IMPACTED,* BY TARGET AUDIENCE



Nutrients, bacteria and toxic contaminants were the target pollutants most effectively addressed in Year 5. This was primarily due to the popular H2Ownership fact sheet series added to Clemson's Home & Garden Information Center website. In the upcoming year, additional fact sheets will be created to expand the topics covered. A shorescaping workshop in 2014 will target sediment. To better address debris, SSS will strive to increase the number of volunteers participating in litter cleanup events and utilize new channels, such as local law enforcement, to distribute literature on illegal dumping.

NUMBER IMPACTED,* BY TARGET POLLUTANT



To comply with the new NPDES Stormwater Permit, SSS will focus efforts more heavily on specific audiences and pollutants. The telephone survey that was conducted in the fall of 2013 will provide insight into the attitudes and behaviors of Sumter residents and help to identify needs and opportunities for education. We look forward to the implementing programs and engaging the public to protect water quality in the year ahead.

*Excludes mass media impacts and Sumter County Fair



Appendix A

Articles

Article on rain water harvesting published in *Lakeside Magazine*, April-May edition, 2013.

Collect rainwater

TO MAKE HOME CHORES EASY AND FREE

by JOLIE ELIZABETH BROWN
Special to Lakeside

Rain barrels collect rainwater that flows off a roof, through a downspout, and into a barrel where it is stored for future use. Rain barrels are a wonderful way to help with storm water problems. After a large rain event, storm water can rush through the yards and streets, collecting pollutants and litter as it goes, and clog your local storm water drains. A single rain barrel can collect up to 80 gallons of rain water.

Rain barrels have a lot of uses. Not only are they pleasing to the eye when decorated, but they store rain water (which is free) to use at another time. Most folks use this collected rain water for chores such as washing the dog or car, watering your plants, as emergency water for flushing the toilets, and much, much more. Avid gardeners can even set up their barrels to use the water to drip-irrigate their gardens.

Some say it's not safe to use rain barrel water – non-potable or safe-to-drink water – to water your vegetable garden, but you can use common sense and your own judgment. Some tests have shown that the water run-off from roofs holds bacteria from bird droppings, etc. However, if you water your vegetable garden soil, and not the veggies themselves, the soil will filter the bacteria. If you are still concerned, simply use the water for other activities. And always remember, when harvesting vegetables from your own garden or bringing fresh produce home from the grocery store, wash them well before eating and enjoying them.

Rain barrels should be installed properly. Before you begin collecting water, make sure you have chosen the proper location for your barrel and have the barrel there ready for its first rain event. The barrels weigh approximately 460 pounds after they have collected their full capacity of wa-

ter. You do not want to move a full barrel!

The barrel should be placed under your gutter. The barrel should be elevated off of the ground by a cinder block or bricks. A downspout is attached to the barrel. A screen is placed under the downspout before water enters the barrel. The faucet to release your collected water should be installed at the bottom of the barrel. If you are in or around the Sumter County area, keep your eyes and ears open for rain barrel workshops held by Clemson Extension's Carolina Clear program and local consortiums!

Rain barrels do require some maintenance. You need to periodically check for leaks. Make sure your screen, which filters leaves and other debris, is secure. The most important part of your maintenance duties will be to use the water! Some people are concerned about mosquitoes, but if you use your water regularly, the mosquitoes will not have time to develop out of their larval state.

Overall, a rain barrel is a wonderful addition to anyone's landscape. They can be painted any theme you like, from your favorite football team, to lovely flowers. Speaking of flowers, some very creative people even train their vines to cover the rain barrels and give them not only a fresh fragrance, but a beautiful picture underneath your gutter. If you have any questions or concerns, please call your friendly local Clemson Extension agents, and if they don't know the answer, they will direct you to the right person.

For more specific directions, please visit the Carolina Clear website www.clemson.edu/public/carolinaclear/ where you can download a free rain water harvesting manual or order a printed copy for \$8.

IGA Fresh & Full of Flavor
Fresh Grocery Values Every Day of the Week
225 Branchdale Hwy., Eutawville, SC 29048
803-492-7515
Greg Murray, Store Manager
Open 7 Days A Week • 7am - 9pm
Home Town Proud
3 DAY SALES • NO CARD REQUIRED

42 APRIL - MAY 2013 | LAKESIDE

Shannon Greens COME ENJOY GREAT GOLF!
ANNUAL MEMBERSHIPS AND DRIVING RANGE MEMBERSHIPS AVAILABLE
SAVE \$300 WITH THIS AD
*EXCLUDES INITIATION FEE AND OTHER DISCOUNTS
www.shannongreensgc.com 803.435.8752



Appendix A

Articles

Article on safe pesticide use, published in the Sumter *Item* newspaper.

Keeping Sumter Beautiful

Jolie Brown
Clemson Extension • Carolina Clear,
Sumter County



DEFINE A PEST

What is your definition of a pest? Is it an annoying little brother, an uncle with bad jokes, or an unwanted insect in your garden? All of these things can qualify as a pest, but the ones I want to talk about are in your garden. Not all insects in your garden are unwelcomed pests. Many insects are beneficial and help to keep the actual pests under control. Many other insects simply coexist with humans and cause no harm to you or your garden.

I want to introduce you to some of the "good guys" in your garden. A few that are on this list include the Lady Beetle or "lady bug" as they are commonly known, Assassin Bug, Green Lacewing, Big-eyed Bug, Earwig, and the Syrphid Fly. All of these are beneficial insects that help fight your actual pests. For more information on these beneficial insects go to the Beneficial Insects Aid to Identification and Control sheet at <http://www.clemson.edu/psapublishing/pages/entom/ce25.pdf>

A lot of communities and home gardeners are using IPM or Integrated Pest Management, a system to protect the beneficial insects by reducing the use of pesticides. This is easy to practice in

your yard or garden. Follow these 6 easy steps,

1. Check your lawn and gardens regularly for pest problems.
2. Identify the problem. Your local Clemson Extension office can help!
3. Be tolerant! If you don't have much of a pest problem, chances are you won't have much problem with plant damage and the little bit of pests you have are a food source to your beneficial insects.
4. If your pest problem does reach a plant damaging level, try using non-chemical approaches such as insecticidal soaps and horticultural oils.
5. Spot treat. If you only have a problem with chinch bugs in one area of your yard, treat that area, not the entire yard.
6. Remember, the label is the law! Always read pesticide labels carefully for information on the uses and proper disposal.

As always, contact your local Clemson Extension office with any questions. Don't forget, not all insects in the garden are pests, just like that annoying little brother has his sweet moments (like when he's asleep!).

XEROX SOLID INK PRINTED



Appendix A

Articles

Announcement for a volunteer litter cleanup, published in the Sumter *Item* newspaper.

Volunteers needed for annual Turkey Creek cleanup

FROM STAFF REPORTS

Help Sumter Stormwater Solutions keep local waterways clean of trash, debris and pollution during the 2013 River Sweep Cleanup.

Volunteers can join the cleanup of the Turkey Creek watershed from 10 a.m. to noon Sept. 21. Volunteers should meet at Eastside Baptist Church, 701 Boulevard Road. Registration is not required.

For more information, contact Jolie Brown at (803) 773-5561 or jolie2@clemson.edu.

Sumter Stormwater Solutions will provide trash bags, safety vests, gloves and drinking water. Participants are encouraged to wear long pants and sturdy, closed-toed shoes.

A waiver is required (available on site) for all volunteers. A parent or guardian must sign a waiver for all volunteers under the age of 18. Unaccom-



panied youth must be 14 years old or older. An adult must supervise any youth group of three or more.

The annual River Sweep is South Carolina's largest one-day volunteer waterway cleanup event. It is organized statewide by the S.C. Sea Grant Consortium and S.C. Department of Natural Resources.

The 2013 Sumter River Sweep is hosted by Sumter Stormwater Solutions, a partnership between Clemson Extension, Sumter County and the city of

Sumter. Sumter Stormwater Solutions is a regional collaboration involving Clemson University's Carolina Clear program in partnership with communities and educators from universities, state agencies and nonprofits.

Last year, thousands of people across the state helped remove tens of thousands of pounds of litter and debris from rivers, swamps, beaches, lakes, marshes and creeks.

In 2009, the S.C. Department of Natural Resources calculated that a healthy environment is worth \$30 billion to the state's economy. Litter and debris can decrease this value when parks and beaches become unsightly and rivers become clogged with trash.

Sumter Stormwater Solutions is a regional collaboration involving the Carolina Clear program in partnership with communities and educators from universities, state agencies and nonprofits.

One year - \$153; Six months - \$81.25; Three months - \$43; Two months, \$29; One month - \$14.50. EZPay, \$12.75 per month.
Saturday and Sunday: One year - \$84; Six months - \$43; Three months - \$22; One month - \$7.50.

HOME DELIVERY: Call (803) 774-1258, Mon-Fri, 8 a.m. to 5 p.m. Sat./Sun., 7 to 11 a.m.

TES: The *Item* is published six days a week except for July 4, Thanksgiving, Christmas and New Years Day (unless it falls on a Sunday) by Osteen Publishing Co., 20 N. Magnolia St., Sumter,

SC 29150.
Periodical postage paid at Sumter, SC 29150.
Postmaster: Send address changes to Osteen Publishing Co., 20 N. Magnolia St., Sumter, SC 29150 Publication No. USPS 525-900
Member, Verified Audit Circulation.

NATIONAL ADVERTISING REPRESENTATIVE: All carriers and dealers of *The Item* are independent contractors. Advance payment for subscriptions may be made directly to Osteen

Publishing Co. as agent. No responsibility for advance payments is assumed by the company until the money is received at this office.

CORRECTIONS: If you see a statement in error, contact the City Desk. Corrections will appear on this page.

RECYCLING: This newspaper is printed on recycled paper and uses environmentally safe soy inks to reduce ruboff. It is recyclable.

The Item 9/10/2013



Appendix A

Articles

Article on rain barrels published in the *South Carolina Market Bulletin* magazine.





Appendix B

2012-2013 Activity Data

Public education, outreach, involvement, and participation efforts for Year 5, with the number of individuals impacted by the activity.

Lead Service Provider	Activity	Target Geography/ Land Use	Target Pollutant(s)							Participation by other Service Providers	Location and Date Delivered	Number Impacted	Assessment Type
			General Stormwater Awareness	Bacteria	Toxic Contaminants, petroleum products, pesticides, heavy metals	Sediment	Nutrients	Debris	Temperature				
General Public													
Clemson University	Water quality segments on <i>Making It Grow</i> television show	State-wide	x		x	x	x			Carolina Clear	1/1/13 & 2/5/13	16,457 each episode	
Carolina Clear	Radio commercials featuring stormwater messages on Miller Communication stations	Sumter County	x	x				x		Miller Communications	10/16/12-3/1/13 & 3/28/13-8/31/13	14,130 daily listeners	
Clemson University	Water quality segments on <i>Your Day</i> radio program	State-wide	x	x		x	x	x		Carolina Clear	6 segments	30,000 listeners	Telephone/web survey
Clemson Extension	"Keeping Sumter Beautiful" column written for the <i>Sumter Item</i> newspaper	Sumter County	x	x	x	x	x	x			11 articles	Circulation 77,102	
Carolina Clear	Bimonthly water quality column written for <i>Lakeside Magazine</i>	Sumter County	x	x	x	x	x				5 articles	Circulation 15,000	
SC Department of Agriculture	<i>South Carolina Market Bulletin</i> featured an article on rain barrels	State-wide	x							Carolina Clear	3/21/13	Circulation 20,000	
Carolina Clear	Sumter Stormwater Solutions website	Sumter County	x	x	x	x	x	x			Ongoing	944 page views	Number of page views
Carolina Clear	Midlands Stormwater Consortiums Facebook page	Midlands	x	x	x	x	x	x	x		Ongoing	154 "likes"	feedback on page
Santee Riverkeeper	Santee Riverkeeper Facebook page	State-wide	x	x	x	x	x	x	x		Ongoing	109 "likes"	feedback on page



Appendix B

2012-2013 Activity Data

Lead Service Provider	Activity	Target Geography/ Land Use	General	Bacteria	Toxic Con-taminants	Sediment	Nutrients	Debris	Temp.	Partici-pation by other Service Providers	Location and Date Delivered	Number Im-pacted/ Reached	Assess-ment Type
Carolina Clear	H2Ownership fact sheets on HGIC website (six fact sheets total)	State-wide	x	x	x		x			Clemson Extension	Online	4,342	
Carolina Clear	Pet waste posters and post cards distributed at veterinarian offices	Sumter County	x	x			x				December 2012	250	
Carolina Clear	Take Action E-Newsletter	Sumter County	x	x	x	x	x	x			Monthly, email	185	
Sumter County	Illicit discharge and illegal dumping brochures distributed during inspections, violations, and events	Sumter County	x		x		x	x			Ongoing	135 bro-chures distrib-uted on 15 streets	
Carolina Clear	Storm drain marking volunteer program with accompanying door hanger	Sumter County	x	x	x	x	x	x	x	Sumter County, City of Sumter	Ongoing	37	drains marked
Sumter County	Storm drain markers installed by Sumter County staff	Sumter County	x		x			x			Ongoing	5 drains marked	drains marked
City of Sumter	Storm catch basin lids bearing stormwater message installed by City of Sumter staff	Sumter County	x		x			x			Ongoing	15 lids installed	drains marked
Sumter County Parks	Pet waste stations installed at Dillon Park	Sumter County	x	x						Carolina Clear, Conservation District	March, 2013, Dillon Park	Not As-sessed	
Carolina Clear	Pet waste doggie bandanas distributed through Petco to promote picking up pet waste	Sumter County	x	x			x			Petco	December, 2012	50	
Carolina Clear, Con-servation District	Dog Day at Dillon Park, to promote new pet waste stations	Sumter County	x	x						Sumter County Parks	3/12/13, Dillon Park	40	
Sumter County	Rain garden sign dedication event	Sumter County	x		x		x			Carolina Clear	5/23/13, Patriot Park	15	
Carolina Clear	Displays at Sustainable Sumter Earth Day Celebration	Sumter County	x	x	x	x	x	x		Multiple partners	4/20/13, Swan Lake	400	
Carolina Clear	Displays at Sumter Iris Festival	Sumter County	x							Sumter Master Garden-ers	5/25/13, Swan Lake	200	



Appendix B

2012-2013 Activity Data

Lead Service Provider	Activity	Target Geography/Land Use	General	Bacteria	Toxic Contaminants	Sediment	Nutrients	Debris	Temp.	Participation by other Service Providers	Location and Date Delivered	Number Impacted/Reached	Assessment Type
Carolina Clear	Displays at Sumter County Fair	Sumter County	x	x	x	x	x	x		Master Gardeners	9/24/13-9/29/13, Sumter Fairgrounds	10000	
Carolina Clear	Earth Day stream cleanup	Sumter County	x		x			x		Sumter County, City of Sumter	3/16/13, Turkey Creek	10	lbs. trash collected
Carolina Clear	Shot Pouch Creek cleanup with kayaks	City of Sumter	x		x			x		City of Sumter	6/8/13, Shot Pouch Creek	37	lbs. trash collected
Carolina Clear	River Sweep stream cleanup	City of Sumter	x		x			x		Sumter County, City of Sumter	9/21/13, Berry St.	11	lbs. trash collected
City of Sumter	Sumter neighborhood cleanups	City of Sumter	x		x			x		City of Sumter			lbs. trash collected
Youth / K-12 / Teachers													
Carolina Clear, Conservation District, Sumter County	Water quality presentations for elementary, middle and high schools	Sumter County	x	x	x	x	x	x	x		9 presentations	984	
Carolina Clear	Rain barrel art contest for schools	Sumter County	x							Sumter County Schools	Feb.-April 2013	130	
Carolina Clear	Soil & Water Conservation merit badge at Boy Scout Hornaday Award Weekend	State-wide	x	x	x	x	x	x		Boy Scouts of America	3/10/13, Sumter County Fairgrounds	9	
SCDNR	SC Envirothon competition	State-wide	x							Central Carolina Tech, Carolina Clear	4/3/13, Sandhills REC	18 teams, 90 students	Team scores
Carolina Clear, Conservation District	Water quality presentations at school Earth Day events	Sumter County	x	x	x	x	x	x	x		April 2013, Cherryvale ES, Oakland ES, Shaw AFB	250	
Clemson University	Display at the Next Step for STEM Schools three-day institute for teachers and administrators	State-wide	x		x	x	x			Carolina Clear	9/30/13-10/2/13, North Charleston	300	Feedback



Appendix B

2012-2013 Activity Data

Lead Service Provider	Activity	Target Geography/ Land Use	General	Bacteria	Toxic Contaminants	Sediment	Nutrients	Debris	Temp.	Participation by other Service Providers	Location and Date Delivered	Number Impacted/ Reached	Assessment Type
Carolina Clear	Watershed interactive whiteboard lessons	Sumter County	x		x					Thomas Sumter Academy	Ongoing	100	Teacher survey
Elected and Appointed Officials and High-Level Staff													
Carolina Clear	Carolina Clear booth and demonstration of Canada Goose fencing and water quality protection practices at the annual SC Association of Counties Conference.	State-wide	x	x			x			SC Association of Counties	8/4/13-8/5/13, Hilton Head Island, SC	300	
Professionals: Contractors, Engineers, Developers, Landscape Architects													
Clemson University	CEPSCI (Certified Erosion Prevention and Sediment Control Inspector) course	Midlands	x			x					11 trainings	922	Exam
Clemson University	CSPR (Certified Stormwater Plan Reviewer) course	Midlands	x			x					2 trainings	56	Exam
Clemson University	South Carolina Water Resources Conference	State-wide	x							Carolina Clear	10/11/12-10/12/12, Columbia Metropolitan Convention Center	300	
Sumter City-County Planning	Turkey Creek Greenways Master Plan brainstorming session	Sumter County	x	x		x		x		URS	5/16/2013	7	
URS, City of Florence	"LID, Planning and Regulatory Requirements" presentation for the SC Chapter of the American Planning Association Summer Conference	State-wide	x							SC APA	7/17/13, Victor's Bistro Hotel Florence	120	
Carolina Clear	"Maintenance Jeopardy" presentation for public works staff at the SC American Public Works Association Summer Conference	State-wide	x	x		x				SC APWA	8/6/13, Myrtle Beach	40	
Carolina Clear	Presented on ditch maintenance and shaping practices for water resource protection at the SC American Public Works Association Summer Conference	State-wide	x			x	x			SC APWA	8/6/13, Myrtle Beach	25	



Appendix B

2012-2013 Activity Data

Lead Service Provider	Activity	Target Geography/Land Use	General	Bacteria	Toxic Contaminants	Sediment	Nutrients	Debris	Temp.	Participation by other Service Providers	Location and Date Delivered	Number Impacted/Reached	Assessment Type
Homeowners & Homeowner Associations													
Clemson Extension	Master Gardener Training Class, including Carolina Yards presentation	Sumter County	x		x	x	x			Sumter Master Gardeners	Jan.-May 2013, extension office	8	Exam
Clemson Extension	Pond Management Workshop	Sumter County	x		x		x				3/12/13, Swan Lake	9	
Carolina Clear	Participated in Sumter neighborhood association VIP meetings, sharing program information	Sumter County	x								4/3/13, James Clyburn Building	50	
Sumter City-County Planning	"Sumter Connectivity & Greenways Master Plan for Shotpouch Creek" presentation for the Forum women's leadership group	Sumter County	x		x				x		May, 2013	25	
Master Gardeners	Rain garden volunteer workdays	Sumter County	x				x			Carolina Clear	12/5/12 & 5/7/13, Patriot Park	16 volunteers	
Carolina Clear	Rain barrel workshops	Sumter County	x			x				Sumter County	3/7/13 & 8/15/13, Sumter County Public Works	32 participants, 25 barrels made	Survey
Commercial Citizens													
Carolina Clear	Pollution prevention presentations for automotive technology classes	Sumter County	x		x					Central Carolina Technical College	10/24/12, Central Carolina Technical College	23	
Sumter County	Stormwater issues presentation for Leadership Sumter environmental day	Sumter County	x	x					x		4/10/2013	15	
Carolina Clear	Grease disposal handouts distributed to food vendors at Sumter County Fair	Sumter County	x								9/24/13, Sumter County Fairgrounds	25	



Appendix C

Partner Websites

CAROLINA CLEAR WEBSITES

Sumter Stormwater Solutions - <http://www.clemson.edu/carolinaclear/scsc>

Carolina Clear - <http://www.clemson.edu/carolinaclear>

Midlands Stormwater Consortiums on Facebook - <http://www.facebook.com/midlandsstormwater>

Carolina Clear on Facebook - <http://www.facebook.com/CarolinaClear/>

COMMUNITY PARTNERS

Sumter County - <http://www.sumtercountysc.org/>

City of Sumter - <http://www.sumtersc.gov>

EDUCATION PARTNERS

Central Carolina Technical College - <http://www.cctech.edu/>

Green Steps Schools - <http://www.greenstepschools.com/>

Santee Riverkeeper - <http://santeeriverkeeper.org/>, <http://www.facebook.com/SanteeRiverkeeperAlliance>

Shaw Air Force Base - <http://www.shaw.af.mil/>

South Carolina Department of Health & Environmental Control - <http://www.scdhec.gov/index.htm>

South Carolina Department of Natural Resources - <http://www.dnr.sc.gov/>

Sumter City/County Planning Department - http://svr4.sumtercountysc.org/Sumter_City_County_Planning1/

Sumter County Master Gardeners - <http://www.clemson.edu/extension/mg/counties/sumter/index.html>

Sumter Soil and Water Conservation District - <http://www.dnr.sc.gov/conservation/districtsdnr/sumter.html>

URS - <http://www.urscorp.com/>

USDA Natural Resource Conservation Service - <http://www.nrcs.usda.gov/wps/portal/nrcs/site/sc/home/>



Authors

AUTHORS

MARY CAFLISCH

Clemson Extension, Richland County
PO Box 102406, Columbia, SC 29223
(803) 865-1216 ext. 122
mnevins@clemson.edu

JOLIE BROWN

Clemson Extension, Sumter County
115 N. Harvin St., 5th Floor
Sumter, SC 29150
(803) 773-5561
jolie2@clemson.edu

KATIE GIACALONE

Clemson University
Strom Thurmond Institute
230 Kappa Street, Clemson, SC 29634
(843) 730-5076
kgiacal@clemson.edu

SPECIAL THANKS TO THE FOLLOWING DATA CONTRIBUTORS:

Alfred Conyers, Teige Elliot, Dan Geddings, Amanda McNulty,
Jeremy Pike, Claudia Rainey and Tammy Yarber

PHOTOS PROVIDED BY

Susan Lavergne, Sylvester Hickman, Ruth Ann Bigger, Brian Wisnewski,
Katie Giacalone, Jolie Brown and Mary Caflisch



Carolina Clear is a program of Clemson University's Public Service Activities. Information is provided by Faculty and Cooperative Extension Agents. Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, sex, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer.


Produced 11/18/2013



Sumter Stormwater Solutions celebrates the rain garden at Patriot Park with a new sign. From Left to right: Claudia Rainey, Bob Waite, Kristin Roberts, Joann Waite, John Merkel, Peter Wilson, Alfred Conyers, Cheryl Johnson, Jolie Brown, Dan Geddings, Mary Caflich.



www.clemson.edu/carolinaclear

 Follow us at www.facebook.com/pages/Carolina-Clear

