

## Annual Report of Activities

YEAR 4 / OCTOBER 2011 - SEPTEMBER 2012







### **Executive Summary**

Sumter Stormwater Solutions (SSS) successfully engaged a variety of audiences over the past year with new initiatives and the continuation and improvement of established efforts. One of the most popular new programs was the Sumter Backyard Landscaping Series for homeowners. This four-part series educated homeowners on how to create yards that are environmentally friendly, require lower maintenance and are less expensive to care for. Many of the participants went on to participate in additional public involvement activities such as cleanups and rain barrel workshops.

The "Stormwater Basics" workshop first presented in 2010, was reintroduced this year with the specific topic of establishing vegetative cover at construction projects to curtail erosion. Research into the construction profession showed that this is a particularly difficult step in the region's climates and soils, with potentially costly consequences for developers who fail to complete it. Mass media campaigns were renewed as well, utilizing television, radio, billboards and internet advertisements to reach widespread audiences with simple but meaningful messages.

An important theme this year, spanning multiple audiences, was Low Impact Development (LID). LID is a set of design principles that focuses on infiltrating and filtering stormwater as close to its source as possible, in order to minimize hard infrastructure and improve the appearance and function of stormwater management practices. Learning sessions on LID were held for elected and appointed officials and professional audiences to introduce them to the topic and present some of the basic LID principles. LID was also communicated to homeowners with displays, workshops, and talks on rain barrels, lawn-less gardening, greenways and rain gardens.

SSS has consistently coordinated activities that are valuable tactics in our education plan. Continued presence at fairs and festivals, partnerships with schools partnerships and like-minded organizations, annual stream cleanups, and storm drain marking rounded out the year and strengthened our presence in the public eye. As we prepare for Activity Year 5, we look forward to building on our new and established programs to engage the public and delve deeper into important stormwater issues. We are so grateful to our partners and the team spirit that makes these efforts possible.



Rain garden at Patriot Park



Stormwater wetland at Patriot Park



### 2012 Highlights

- Carolina Clear aired its second major television commercial reminding the public that "We All Live Downstream" and listing behaviors that protect water quality.
- SSS Internet presence greatly increased with expanded social media and banner ads.
- A Stormwater Basics workshop taught contractors, landscapers and other professionals how to effectively establish grass for erosion control.
- A four-part backyard landscaping lecture series presented homeowners with new ways to make their yards better for the environment while saving time and money.
- Presentations on LID introduced land use planners, developers and landscapers to innovative tools for managing stormwater.
- Education materials given to food vendors at the Sumter County Fair reduced the amount of cooking oil and grease dumped down storm drains at the fairgrounds.
- Two rain barrels installed at a local elementary school are now used by students to irrigate the school's landscaping and are helping to reduce stormwater runoff.
- A floating wetland installed at Patriot Park removes nutrients from the water and adds beauty to a stormwater pond.

#### TOTAL OUTREACH ACTIVITIES WITH TOTAL NUMBER REACHED (estimated)

- 1. Television and video: 195,924 reached
- 2. Billboards: 20,300 reached
- Websites and social media: 84,601 reached
- 4. Radio: 98,900 reached
- 5. Publications and articles: 105,552 reached
- Brochures and outreach materials: 624 reached
- 7. Festivals and events: 13,400 reached
- 8. Presentations: 673 reached
- 9. Workshops: 79 reached
- 10. Council and committee meetings: 50 reached
- 11. Trainings: 193 reached
- 12. Competitions: 150 reached
- 13. Installations and demonstrations: 272 reached
- 14. Community cleanups: 48 reached



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SSS includes Sumter County and the City of Sumter. Both city and county were instrumental during Year 4 for prioritizing efforts, evaluating stormwater pollutants and challenges, and developing new initiatives. In addition, the community partners assisted with cleanups, displayed stormwater information at public events and made presentations to elected officials, high level staff and professional groups. Partner leadership and support is essential to the function and progress of this initiative.

Municipality & Desition	Depresentative
Municipality & Position	Representative
SUMTER COUNTY	
County Engineer	Peter Wilson
Environmental Technician	Dan Geddings
Environmental Technician	Elizabeth Ervin
Water Utility Office Manager	Cheryl Johnson
CITY OF SUMTER	
Stormwater Manager	Teige Elliott
Stormwater Engineer	Pearce Atkins





SSS 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.





## **Goals and Objectives**

#### 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.



Unless someone like you cares a whole awful lot, nothing is going to get better. It's not.

> Dr. Seuss, The Lorax



### We all live downstream! Stormwater Outreach Campaign 2011-2012

The Carolina Clear campaign released in 2011 features South Carolinians using waterways, either for recreation or for occupation, and emphasizing how citizens can protect water quality through changed behaviors and reminding viewers that rivers connect us across the state, and we all live downstream from someone.

#### **CABLE AND TELEVISION**

This 30-second spot includes discussion of proper management of pet waste, yard debris,



household hazardous chemicals, and fertilizing practices and what people can do to prevent household-related stormwater pollution. The commercial features SC public, beautiful SC waterways from the upstate to the coast, and the numerous ways residents of this state appreciate and utilize these waters for recreation and making a living. Utilizing lessons learned from social sciences, the campaign includes messages of empowerment, details on appropriate behavior, language appropriate to the average viewer, and scenes that based on research would motivate a viewer to better stewardship. The spots aired on Time Warner Cable in August of 2011 and May through June of 2012. In addition, a stormwater message was also displayed on the local weather crawl and banner adds.

#### BILLBOARDS

Billboards featuring actors from the commercial connected by a river system from the mountains to the coast were displayed in most regional partnership areas across the state with local consortium and Carolina Clear logos. Billboards were released in July and August 2011 and will conclude early fall 2012. Two billboards were displayed in the Sumter area, with locations changing periodically based on availability.



LEAD PROVIDER	ΑCΤΙVΙΤΥ	DATE	DATE NUMBER OF IMPACTS	
Carolina Clear	"Downstream" stormwater awareness commercial on Time Warner Cable	May-June 2012	28,924* subscribing households	General Public
Carolina Clear	"Downstream" stormwater awareness commercial on FTC	May-June 2012	17,000 subscribing households	General Public
Carolina Clear	"Rivers Connect Us" billboards	July 2011 - September 2012	20,300 estimated daily views	General Public

\*There were 28,924 households subscribing to Time Warner Cable in the Sumter area, and within those households, an estimated 70% of the men (core demographic, ages 25-54) were reached an average of 4.4 times per week.

MASS MEDIA AND OUTREACH MATERIALS October 2011 - September 2012 Annual Report



### Television

LEAD PROVIDER	SUPPORTING PARTNER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Clemson Extension	Carolina Clear	Water quality information on "Making it Grow" TV show	Ongoing, weekly	150,000	General Public



"Making it Grow" is a live interactive call-in style program that airs weekly on ETV and on the SC Channel. The show, produced by Clemson Extension, regularly includes information related to preventing pollution, such as reducing fertilizer and pesticide use. Other water-related topics from the past year have included cooking grease recycling with Midlands Biofuels (grease contributes to sanitary sewer overflows), green roofs, and conservation easements. Host Amanda McNulty is a participant in SSS and often mentions Carolina Clear as a source of water quality information.

### Radio

LEAD PROVIDER	SUPPORTING PARTNER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Sumter County, City of Sumter	Carolina Clear	Radio commercials featuring stormwater messages on Miller Communication Stations	Nov. 2011, April 2012	98,900 potential listeners	General Public



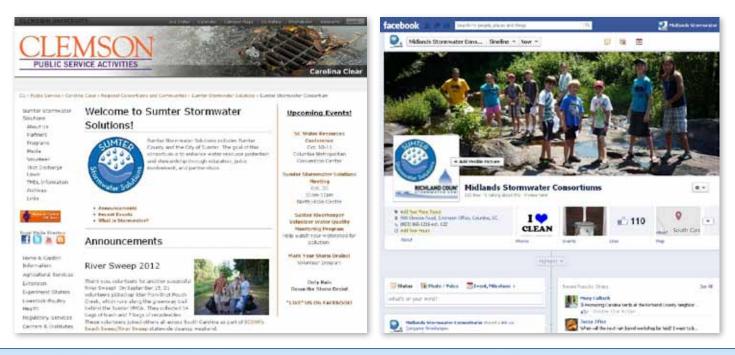
In November, SSS ran a stormwater commercial on two Miller Communication radio stations, focusing on littering, illegal dumping, and illegal connections to storm sewers. In April, a second commercial aired as part of Miller Communications' Earth Day campaign. This piece was more generalized and reminded listeners that storm drains connect directly to rivers and streams. The commercial played for a week on five stations, including Old Skool 93.3, Z95.5, Bad Dog 94.7, WDXY 105.9, and Kat Country 99.3. A follow up survey at the Sumter Earth Day festival asked visitors to recall the ways to prevent pollution listed in the message.



### Internet and Social Media

LEAD PROVIDER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	Sumter Stormwater Solutions website	Ongoing	1,112 page views	General Public
Carolina Clear	Illicit discharge detection and elimination (IDDE) website	Ongoing	1,519 page views	General Public
Sumter County	Links to stormwater information on Sumter County website	Ongoing	Not Assessed	General Public
Carolina Clear	Midlands Stormwater Consortiums Facebook page	Ongoing	110 "likes"	General Public
Santee Riverkeeper	Santee Riverkeeper Facebook page	Ongoing	1,451 "likes"	General Public
Carolina Clear	"Downstream" stormwater awareness internet banner ads	May-August 2012	180,409 spots	General Public

The Internet and social media offer versatile tools for delivering information and keeping people connected to stormwater issues. The Midlands Stormwater Consortiums Facebook page topped 100 "likes," and the Santee Riverkeeper's Facebook page reached over 1500 "likes." In addition, geographically targeted banner ads were utilized as part of the "Downstream" stormwater awareness campaign. These ads delivered 95 click-throughs directly to the SSS website.



#### MASS MEDIA AND OUTREACH MATERIALS October 2011 - September 2012 Annual Report



### Publications

#### ARTICLES

LEAD PROVIDER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	Article on Carolina Yards and Neighborhoods in Carolina Gardener magazine	Sept. 2012	12,000 subscribers	Homeowners
Clemson Extension	Water Quality article written for The State newspaper	2/16/12	Circulation 77,102	General Public
Environmental Protection Agency	EPA Watershed News featured Carolina Clear's regional stormwater partnerships and mass media campaign.	2/8/12	16,450 subscribers	General Public

The SSS has been fortunate to include stormwater tips in regional newspapers and other publications. Since stormwater affects so many outdoor topics, information is included in topics that are of known interest to our public. (See Appendix A for example articles.)

#### BROCHURES, BOOKLETS, MANUALS

LEAD PROVIDER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	Pet waste brochures distributed at veterinarian offices, ASPCA, pet supply stores	Ongoing	175	General Public
Sumter County	Illicit discharge and illegal dumping brochures distrib- uted during inspections, violations and events	Ongoing	25	General Public



A variety of brochures and handouts covering a wide range of topics were distributed at events, workshops and other activities. In Spring of 2012, Carolina Clear added two new topics to its stormwater postcard series: managing fats, oils, and grease, and pressure washing. Also, the Sumter County Stormwater Department distributes its "Illicit Discharge and Illegal Dumping" brochure during inspections to assist with compliance with local laws.





### **Permanent Exhibits**

LEAD PROVIDER	SUPPORTING PARTNER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Clemson Extension	Palmetto Pride	Floating wetland installed at Patriot Park	June 2012	Not assessed	General Public

In June, Clemson Extension installed a floating wetland in a stormwater pond at Patriot Park, with the help of a grant from Palmetto Pride. These planted islands are free-floating container gardens in which the roots grow down into the water and absorb nutrients. By decreasing nutrients, floating wetlands reduce algae and weed growth and increase dissolved oxygen in the water, making ponds healthier for aquatic life. They also provide habitat for beneficial microbes that feed on disease-causing bacteria and viruses. In addition, they are an attractive landscape feature, adding color and interest. This installation at Patriot Park serves as a demonstration site for neighborhoods and businesses looking for management tools for their own ponds. To find out more about floating wetlands, look to a recent publication at Clemson's HGIC H2Ownership (www.clemson.edu/extension/hgic).

Another stormwater management feature is taking root at Patriot Park. In August of 2011, a demonstration rain garden was planted next to the parking lot and is growing well. Rain gardens absorb and filter runoff, recharging groundwater and reducing pollution. In spring of 2012, Sumter County staff replaced plants in the Patriot Park garden that did not flourish (as is common with all new gardens). A volunteer workday is planned for the fall to keep this best management practice (BMP) looking its best. Sumter County also features a rain garden at its public works office that was installed with SSS in 2009.



Sumter County N/A "No Dumping" signage placed along county road near Turkey Creek	10/16/11	Not assessed	General Public
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Littering and illegal dumping are prominent problems along Turkey Creek in the South Sumter neighborhood area. Permanent signage warns against dumping along this section of the creek. A cleanup was organized in March, and participants hoped to reduce litter and improve community pride in the affected area.





#### Public Events FAIRS AND FESTIVALS

LEAD PROVIDER	SUPPORTING PARTNER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear, Conservation District	City of Sumter, Sumter County	Water quality displays at Sustainable Sumter Earth Day Celebration	4/28/12	300	General Public
Carolina Clear	Sumter Master Gardeners	Water quality and green gardening displays at the Iris Festival	5/29/12	100	General Public
Sumter County Public Works	Carolina Clear, Sumter Master Gardeners	Water quality and Carolina Yards & Neighborhoods displays at the Sumter County Fair	9/25/12- 9/30/12	13,000	General Public



Kids study pond life at Sumter Earth Day.



Watershed model attracts visitors at the Sumter Iris Festival



Master Gardeners sell S.C. friendly plants at the Iris Festival.



Master Gardeners display at the Sumter County Fair features green gardening tips.



Sumter County displays rain barrels and rain garden information at the County Fair.



Carolina Yards & Neighborhoods display in the Sumter County Fair Agriculture Building



### Youth Activities

LEAD PROVIDER	SUPPORTING PART- NER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear, Boy Scouts of America	N/A	Soil & Water Conservation merit badge at Boy Scout Hornaday Award Weekend	3/10/12	17	Youth
Carolina Clear, Conservation District	N/A	Enviroscape presentation at Cherryvale Earth Day festival	4/20/12	280	Youth
SCDNR	Central Carolina Technical College, City of Sumter	SC Envirothon competition (special topic category was stormwater runoff)	5/4/12	150	Youth
Carolina Clear	N/A	Enviroscape presentations for Girl Scouts	5/29/12	11	Youth
Carolina Clear	Sonoco Recycling, SC Green Steps	Rain barrel project through Green Steps Schools program	Ongoing from fall 2011	30	Youth
Carolina Clear	N/A	Watershed interactive whiteboard lessons, downloadable online	Ongoing	400	Youth

The South Carolina Envirothon is an annual statewide competition for high school students that challenges students in aquatics, forestry, soils and wildlife, as well as a special environmental topic area that students must use to prepare an oral presentation. Fortunate for the SSS, the 2012 Envirothon special topic was non-point source pollution and LID. The scenario for the oral presentation was written by Joshua Castleberry, a professor at Central Carolina Technical College and active participant in SSS.

For their presentation, students were asked to design a new high school property with stormwater management in mind, selecting BMPs and choosing between conventional stormwater BMPs and LID. The students had to consider issues such as cost effectiveness, layout, and water quality policies to be practiced at the school. This comprehensive project inspired students to think in depth about what happens to the water on their school properties.



Students at Cherryvale Elementary study a model watershed as part of Earth Day activities.



### **Elected and Appointed Officials**

LEAD PROVIDER	SUPPORTING PARTNER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Sumter County	N/A	Presentation on stormwater program for Sumter County administration and department heads	3/14/12	50	Elected and Appointed Officials
Carolina Clear	Sumter City- County Planning	LID presentation for Sumter Planning Commission	3/28/12	13	Elected and Appointed Officials

Keeping elected and appointed leaders and high level staff up to date on stormwater issues is an ongoing task. Presentations for council and administration help these leaders understand the technical details behind the decision making process.

In March Carolina Clear gave a presentation to the Sumter City-County Planning Commission on LID as a tool for stormwater management. LID is an approach to land development that works with nature to manage stormwater as close to its source as possible. When properly designed, sites utilizing LID manage stormwater more effectively and may be less costly than traditional stormwater infrastructure. This presentation gave the planning commission an overview of the concept, and listed a few of the more common LID practices that they may encounter from developers in the future, or that they may implement as part of their land planning process. For more LID activities, see page 13.



Grassed bioretention area in a captures water from a parkway median in Aiken.

Pervious pavement at Sumter Pediatrics lets the parking lot drain to the soil beneath.

The SC Low Impact Development Atlas maps LID installations throughout the state.



### Professionals: Contractors, Engineers and Developers

LEAD PROVIDER	SUPPORTING PARTNER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Sumter Conservation District	City of Sumter	Stormwater Basics Workshop: Erosion control through grass establishment	1/17/12	45	Professionals

On January 17, the Sumter Soil and Water Conservation District held a stormwater basics workshop for professionals on the subject of "Establishing Vegetative Cover." The 45 attendees came from development, construction and landscaping, companies, engineering and consulting firms, municipal stormwater and planning staff, Shaw Air Force Base, and SCANA. This topic was highly relevant due to a South Carolina regulation that contractors cannot close out a project without permanent cover established over 70% of the site, which can be a challenge in local soils and climate but can be improved through education. The workshop provided those professionals with the information they need to achieve that goal. The two speakers were from NRCS; agronomist Gordon Mikell and Bobby McGee (retired). The first part of the workshop featured field demonstrations including site preparation, planting and mulching. Participants saw both conventional tilling and seed application, as well as a no-till drill and hydro-mulching. Equipment for the workshop was made available by NRCS and Smoak Irrigation.

After the field demonstrations, the workshop continued with classroom presentations at the Swan Lake Visitor Center. Topics included seed types for long term versus temporary cover, proper seed selection, impacts if pH and nutrient needs are not addressed, reasons for mulch, proper application, planting and seed quality control, and watering, and other controllable variables for obtaining a final vegetative cover meeting permit close-out criteria. A panel discussion at the conclusion of the workshop allowed participants to ask questions and share their own positive and negative experiences with grass establishment.



Gordon Mikell with NRCS explains seeding rates for different grass species.

A seed spreader evenly distributes seed over a conventional tilled planting area.

Demonstration of a no-till drill for planting seed with minimal soil disturbance.



### Professionals: Contractors, Engineers and Developers

LEAD PROVIDER	SUPPORTING PARTNER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Clemson Uni- versity	N/A	CEPSCI (Certified Erosion Prevention and Sediment Control Inspector) course	2 trainings	179	Professionals
Sumter City/ County Planning	N/A	Draft landscaping ordinance stake- holder meeting	3/19/12	12	Professionals
Carolina Clear	Sumter City- County Planning, Sumter County	LID Lunch & Learn for developers, landscapers, & planners	4/23/12	20	Professionals
Sumter County	N/A	Pond management workshop	5/12/12	12	Professionals

In the spring of 2012, two events highlighted the value of LID as a tool to manage stormwater. The first was a presentation to the planning commission (see page 11). The second was a luncheon presentation for development and landscaping professionals, with speakers from Clemson's Center for Watershed Excellence and Sustainable Design Consultants. Attendees were introduced to commonly used LID practices, including bioretention, rainwater harvesting, pervious pavement, open space development and other tools. The presentation featured local examples and emphasized cost benefit analysis compared to traditional stormwater infrastructure. Sumter County Engineer Peter Wilson spoke about the county's stormwater utility credit program for commercial and industrial properties, which offers discounts to properties utilizing techniques, including LID, to retain and infiltrate water on site.



Classroom presentations at the Stormwater Basics Workshop.

CEPSCI courses teach how to identify and prevent erosion and sediment control issues.

Pond owners learned how to care for their ponds at a workshop led by Sumter County.



#### Homeowners

LEAD PROVIDER	SUPPORTING PARTNER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Sumter City- County Planning	N/A	"Sumter Connectivity & Greenways Master Plan for Shotpouch Creek" presentation for Azalea Garden Club	10/6/11, Alice Boyle Garden Center	30	Homeowners
Clemson Extension	Sumter Master Gardeners	Master Gardener training class	Jan May 2012	14	Homeowners

In January of 2011, the Sumter City-County planning department produced a "Connectivity and Greenways Master Plan for Shot Pouch Creek. To build community support for the plan, the planning department is in the process of presenting it to neighborhood groups, gardening clubs, and other public groups. The plan would establish a greenway running from Dillon Park to Green Swamp Road and improve connectivity at a number of commercial nodes along the way.



Carolina Clear	City of Sumter, Clemson Extension	Backyard Landscaping Series featuring Carolina Yards and Neighborhoods program	March 8, 15, 29 & April 11, 2012	140	Homeowners
Clemson Extension	N/A	Carolina Yards & Neighborhoods presentation and booth at SC Master Gardeners Conference	3/16/12	125	Homeowners



At the Backyard Landscaping Series, held at the Swan Lake Visitor Center on Thursday nights in March and April, homeowners learned how to care for their yards in an environmentally friendly manner while saving the homeowner money, time and effort. This speaker series highlighted the Carolina Yards and Neighborhoods program, a recognition program for homeowners in which participants use a workbook to identify and complete steps to improve their yards for the benefit of the environment. Topics included safe and effective use of fertilizer and pesticides, growing healthy southern lawns, choosing the right plants for your yard, native plants, lawnless gardening, watering efficiently, and managing stormwater runoff. Speakers included Amanda McNulty from "Making it Grow," a landscape architect from Sumter's planning office, the owner of Turf Master Landscape Service, and a Clemson water resources agent. Over 50 people participated. To learn more about Carolina Yards and Neighborhoods visit <u>www. clemson.edu/cyn.</u>



### **Commercial Citizens**

LEAD PROVIDER	SUPPORTING PARTNER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Sumter County, City of Sumter	N/A	Stormwater presentation for Leadership Sumter environmental day	4/11/12	25	Businesses
Carolina Clear	N/A	Grease disposal handouts distributed to food vendors at Sumter County Fair	9/25/12	24	Businesses

Everyone loves fried and greasy foods at the fair, but when the festivities are over, the used cooking oil can pose a hazard to the environment and damage storm sewers systems if disposed of incorrectly. Prior to the Sumter County Fair, all storm drains at the fairgrounds and adjacent parking areas were marked with "No Dumping" placards. On opening night, all of the food vendors were given a handout explaining why managing fats, oils, and grease (FOGs) correctly is important and showing the locations of grease disposal bins around the fair grounds. These efforts greatly reduced the amount of grease disposed of down storm drains during the fair.



To continue to reduce oil and grease contamination in local waterways, in the upcoming year, SSS will target restaurants with FOG management materials.



etter Manage Fats, Oil and Grease: Don't clog our communities' arteries!



Storm drains throughout our communities function much like the arteries of our bodies. When fats, oil and grease (FOG) flows through the stormwater system, it poses a serious threat to the health of the receiving rivers, lakes and ocean downstream. FOG can also solidify, leading to blockages that cause localized flooding. FOG accumulation in storm drains and pipes cause foul odors, bacterial contamination and harm to local waterways. **Stormwater is not treated before it is released to local waters!** 



## **Public Involvement**

### Stream Cleanups

LEAD PROVIDER	SUPPORTING PARTNER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Santee Riverkeeper	N/A	Pack's Landing cleanup	2/25/12	Not assessed	General Public
Carolina Clear	Sumter County	Earth Day cleanup at Turkey Creek	3/31/12	15	General Public
City of Sumter	N/A	Southside Sumter neighborhood cleanup	3/31/12	Not assessed	General Public
Carolina Clear	City of Sumter	River Sweep stream cleanup	9/15/12	21	General Public
Central Carolina Technical College	N/A	River Sweep cleanup kayak trip	9/15/12	12	General Public

Litter cleanups are one way that the SSS meets its goal of creating water resource stewardship opportunities. Cleanups are an excellent starting point for citizens wanting to get involved in protecting Sumter's waterways. Volunteer groups participating in this year's cleanups included high school and college environmental classes, Boy Scouts, Girl Scouts, volunteers from Shaw Air Force Base, boating enthusiasts on Lake Marion, and neighborhood groups. Targeted areas included neighborhoods in the southern part of City of Sumter, Pack's Landing on Lake Marion, Turkey Creek, and Shot Pouch Creek. Additionally, a student group from Central Carolina Technical College utilized Carolina Clear's new kayak fleet to clean up trash along the lower Saluda river.



Volunteers from Crestwood High School clean up Turkey Creek for Earth Day.

Truckload of trash collected from Shot Pouch Creek during River Sweep 2012.

Boy Scout volunteers at River Sweep 2012



## **Public Involvement**

### Storm Drain Marking

LEAD PROVIDER	SUPPORTING PARTNER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear, Sumter County, City of Sumter	Crestwood High School	Storm drain marking volunteer program with accompanying door hanger	5/12/12	22 volunteers, 60 drains marked, 220 door hangers	General Public
Sumter County	Carolina Clear	Drain marking by Sumter County staff	Nov. 2011, Sept. 2012	84 drains marked	General Public



In 2010, a volunteer program was established to mark all storm drains on city and county maintained residential streets in the Sumter area. On May 12, 2012, 22 students from Crestwood High School marked 60 drains in neighborhoods between Broad Street and Guinard Drive. They also distributed 220 door hangers to communicate to residents the purpose of the marking program

and tips for preventing pollution. In addition to efforts by volunteers, Sumter County staff marked 84 drains on residential streets and at the county fairgrounds.



### Rain Barrel Workshops

LEAD PROVIDER	SUPPORTING PARTNER	ΑCΤΙVΙΤΥ	DATE	NUMBER OF IMPACTS	TARGET AUDIENCE
Carolina Clear	Sumter County	Rain barrel workshop	9/4/12	22	Homeowners

Rainwater harvesting remains a popular way for Sumter residents to save water and money. At a workshop on September 4, 2012, 22 participants learned about stormwater pollution, then built their own rain barrels to capture runoff from their roofs. Rainwater can be used to water indoor and outdoor plants, wash cars and bikes, and many other non-potable uses.



Carolina Clear agent Nell Orscheln explains the steps for building a rain barrel.



Proud participants show off their brand new barrel.



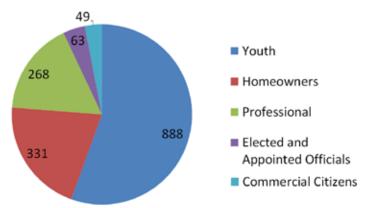
Rain barrel built and painted by participant Carolyn Hudson.



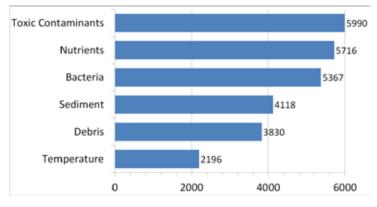
#### Year 4, September 2011 - October 2012

In terms of direct outreach, the youth audience is reached in greater numbers than any other audience with outreach efforts through school partnerships and youth special events. Homeowners and professional audiences were targeted with programs designed specifically to their needs and interests. Homeowner programs focused on backyard landscaping, gardening, greenways and rain barrels, all of which give the homeowner tools for better management of stormwater on their property and in their community. Programs for professional audiences focused on pond management, erosion control and Low Impact Development (LID), emphasizing methods that are effective in controlling the quality of stormwater as well as the quantity. Elected and appointed officials also participated in landscaping and LID discussions because of their important role in land use planning.

#### NUMBER IMPACTED,\* BY TARGET AUDIENCE



#### NUMBER IMPACTED,\* BY TARGET POLLUTANT



\*Excludes mass media impacts and Sumter County Fair

Toxic contaminants and nutrients were the most effectively targeted pollutants in Year 4, mainly through emphasis on the Carolina Yards and Neighborhoods program. This recognition program for homeowners encourages safe and efficient fertilizer and pesticide usage, and has applications for landscaping professionals as well. Bacteria continues to be a top priority for general audiences, because of its direct potential impact on human health. Sediment was an important topic for professional audiences this year, with workshops on establishing vegetative cover at construction sites and CEPSCI training courses. In the upcoming year, debris will be emphasized as SSS builds its volunteer cleanups and storm drain marking efforts.

SSS strives each year to improve the quality and quantity of programs delivered. By understanding and focusing on the needs of our audiences, programs can be tailored to have the greatest impact on the most people, and by continuing to build partner involvement, the strength and diversity of programs continues to grow.



### **Example Articles**

Carolina Yards and Neighborhoods article in the *Carolina Gardener* magazine's September 2012 issue.

### **Certify Your Yard**

As gardeners, we're all proud of our yards. Now people in South Carolina can go through a process to get their yard certified as a Carolina Yard, which is one that is healthy and attractive while working with the environment. To get certified, you can go online to www.clemson.edu/cyn and complete the activities in the Carolina Yardstick Workbook. Each action completed earns "inches" toward the final credit, which requires a total of 36 inches.



The program is made possible through the South Carolina Cooperative Extension, but the principles found in the workbook apply to gardeners throughout the Carolinas. It includes exercises focusing on basic principles such as right plant, right place, watering efficiently, mulching, recycling, fertilizing, managing yard pests and stormwater runoff. "Once you have your yard certified, your neighbors will want to join in the fun and have their yards certified, too," said Teresa Young, natural resource agent for the Clemson Extension Service. "Collectively, you can make positive changes in the environmental quality of your yards, neighborhoods and surrounding waterways."



## Appendix A

THE STATE NEWSPAPER Feb. 16, 2012 KEEPING SUMTER BEAUTIFUL Amanda McNulty, County Extension Agent

### Unstitching Your Underwear

A friend who worked at the Foxfire School in North Georgia many years ago remembers children who were sewn into their long underwear at the beginning of winter and not cut lose until spring. The school rooms and homes in that poor, remote part of the world were so cold that bathing wasn't considered a necessity. (If you aren't familiar with old-fashioned long underwear, it came with a trap door.)

I don't know what that has to do with the price of tea in China except that most plants in our landscape go into a kind of long underwear mode in winter time. Their growth rate slows dramatically. Extension agents remind clients to use irrigation systems far less often, with only newly planted shrubs and trees needing a weekly shower, be it natural or artificial.

Dormant plants, like hibernating bears, live off stored nutrients and don't require extra feeding. Not only is winter fertilization unnecessary, it can be harmful. If you put a hamburger, fries, coke, and a big hunk of chocolate cake with ice cream on your sleeping teenager's bed, you'll have a big mess to clean up the next morning (or afternoon or whenever that lazy head finally gets up).

Plants take nutrients from the soil solution (water) by a variety of chemical and physical actions. In the down time of winter, these processes slow down dramatically. Fertilizers you apply too early are going to sit in the soil until rains leach them into the moisture table or they wash off your property, down the street, and into the storm drain. As Clemson's Carolina Clear is making crystal clear in its educational programs, fertilizer in the wrong place is a pollutant.

When these dissolved fertilizers end up in ponds, lakes, or rivers the photosynthesizing algae living in that water use those nutrients to increase their population. Eventually they will scarf down every last nitrate or nitrite and then starvation, death, and decay come. At this point, decomposer micro-organisms, which require oxygen for respiration, chow down on those million zillion dead algal cells, the dissolved oxygen level drops below what the fish need, and you have a lake full of floaters.

The rule of thumb for fertilizing trees and shrubs in South Carolina is to apply nutrients in mid-March. Lawns are slower to start active growth and don't need their annual spring tonic of nitrogen, and/or phosphorus and potassium until after April 15.



# Appendix A

#### Unstitching Your Underwear - continued...

Nitrogen is exceptionally short-lived in soils, and unless you are supplying it through top dressing with compost, you'll need to add some for healthy growth. Other nutrients, however, especially phosphorus, may already be at optimum levels. Many places in the country mandate sales of phosphate-free fertilizers as their surface waters have high levels of this nutrient from runoff.

Please take a soil test to determine which and how much of these nutrients your plants and lawn need. Clemson's Home & Garden Information Center has a fact sheet on soil testing, and Clemson's Carolina Clear program is offering a dandy magnet for your mailbox tooting your eco-friendly gardening regime. Google those sites and let your plants gobble up just the right amount of nutrients they need. Make sure the fertilizer you pay for does its work in your yard and not in your neighboring lake.



See Amanda's Corner for more of Amanda McNulty's informative and published musings. You'll find articles in the Toolbox at <u>www.clemson.edu/carolinaclear</u>.



### 2011-2012 Activity Data

Public education, outreach, involvement, and participation efforts for year 4, with the number of individuals impacted by the activity.

					Ta	rge	et F	Pol	luta	ant(s)			
Lead Service Provider	Activity	Target Geog- raphy/ Land Use	General Stormwater Awareness	Bacteria	Toxic Contaminants, petroleum products, pesticides, heavy metals	Sediment	Nutrients	Debris	Temperature	Partici- pation by other Service Providers	Location and Date Delivered	Number Impacted	Assess- ment Type
				Ge	neral	lΡι	ıbli	ic					
Carolina Clear	"Downstream" stormwater awareness commercial on Time Warner Cable and FTC	Sumter County	×	x	x		x				August 2011, May-June 2012	45,924 sub- scribing house- holds	
Clemson Extension	Water quality informa- tion on "Making it Grow" TV show	Sumter County	x		x		x			Carolina Clear	Ongoing, weekly	150,000	
Carolina Clear	"Downstream" stormwater awareness billboards	Sumter County	x								Ongoing	20,300 estimat- ed daily views	
Sumter County, City of Sumter	Radio commercials featuring stormwater messages on Miller Communication Stations	Sumter County	x	x	x		x	x		Carolina Clear	Nov. 2011, April 2012	98,900 potential listeners	
Clemson Extension	Water Quality article written for <i>The State</i> newspaper	Sumter County	x		x	x	x				2/16/12	Circu- lation 77102	
Environ- mental Protection Agency	EPA Watershed News featured Carolina Clear's regional stormwater partnerships and mass media campaign.	National	x								2/8/12	16,450	
Carolina Clear	Sumter Stormwater Solutions website	Sumter County	x	x	x	x	x	x			Ongoing	1,112	Number of page views
Carolina Clear	Illicit discharge detec- tion and elimination (IDDE) website	Sumter County	x	x	x		x				Ongoing	1,519	Number of page views



Lead Service Provider	Activity	Target Geog- raphy/ Land Use	General	Bacteria	Toxic Con- taminants	Sediment	Nutrients	Debris	Temp.	Partici- pation by other Service Providers	Location and Date Delivered	Number Impacted	Assess- ment Type
		Ger	ner	alf	Publi	с (	con	ntir	ue	d)			
Carolina Clear	Midlands Stormwater Consortiums Facebook page	Midlands	x	x	x	x	x	x	x		Ongoing	110 "likes"	Feed- back on page
Santee Riverkeeper	Santee Riverkeeper Facebook page	State- wide	x	x	x	x	x	x	x		Ongoing	1451 "likes"	Feed- back on page
Carolina Clear	"Downstream" stormwater awareness internet banner ads	Sumter County	x								May-August 2012	180,409 spots	95 click thrus to web- site
Carolina Clear	Pet waste brochures distributed at veterinarian offices, ASPCA, pet supply stores	Sumter County	x	x			x				Ongoing	175	
Sumter County	Illicit discharge and illegal dumping brochures distributed during inspections, violations, and events	Sumter County	×		x		x	×			Ongoing	25	
Sumter County	"No Dumping" signage placed along county road near Turkey Creek	Sumter County	x					x			10/16/11, County road	Not assessed	
Clemson Extension	Floating island installed at Patriot Park	Sumter County	x				x			Palmetto Pride	June 2012	Not assessed	
Carolina Clear, Sum- ter County, City of Sumter	Storm drain marking volunteer program with accompanying door hanger	Sumter County	x	x	x	x	x	x	x	Crest- wood High School	5/12/12	22 vol- unteers, 220 door hangers	60 drains marked
Sumter County	Storm drain marking by Sumter County Staff	Sumter County	x		x			x		Carolina Clear	Nov. 2011, Sept. 2012	Not assessed	84 drains marked
Carolina Clear, Con- servation District	Water quality displays at Sustainable Sumter Earth Day Celebration	Sumter County	x	x	x	x	x	x		City of Sumter, Sumter County	4/28/12, Swan Lake	300	
Carolina Clear	Water quality and green gardening displays at Iris Festival	Sumter County	x							Sumter Master Garden- ers	5/29/12	100	



Lead Service Provider	Activity	Target Geog- raphy/ Land Use	General	Bacteria	Toxic Con- taminants	Sediment	Nutrients	Debris	Temp.	Partici- pation by other Service Providers	Location and Date Delivered	Number Impacted	Assess- ment Type
		Gei	ner	al I	Publi	с (	cor	ntin	ue	d)			
Sumter County Pub- lic Works	Water quality and Carolina Yards & Neighborhoods displays at Sumter County Fair	Sumter County	x	x	x	x	x	x		Carolina Clear, Sumter Master Garden- ers	9/25-9/30/12, Sumter Fair Grounds	13000	
Santee Riverkeeper	Pack's Landing cleanup	Sumter County	x		x			x			2/25/12, Pack's Landing, Rimini	Not assessed	Lbs. trash col- lected
Carolina Clear	Earth Day stream cleanup	Sumter County	x		x			x		Sumter County	3/31/12, Tur- key Creek	15	Lbs. trash col- lected
City of Sumter	South Sumter neighborhood cleanup	City of Sumter	x		x			x			3/31/12	Not assessed	Lbs. trash col- lected
Carolina Clear	River Sweep stream cleanup	City of Sumter	x		x			x		City of Sumter	9/15/12, Shot Pouch Creek	21	Lbs. trash col- lected
Central Carolina Technical College	River Sweep cleanup kayak trip	City of Sumter	x		x			x			9/15/12, Lower Saluda River	12	Lbs. trash col- lected
		Yo	out	h /	K-12	2 /	Tea	ach	ers				
Carolina Clear, Boy Scouts of America	Soil & Water Conservation merit badge at Boy Scout Hornaday Weekend	State- wide	x	x	x	x	x	x	x		3/10/12, Sumter Fairgrounds	17	
Carolina Clear, Con- servation District	Enviroscape presenta- tion at Cherryvale Earth Day festival	Sumter County	x	x	x	x	x	x			4/20/12, Cherryvale Elementary	280	
SCDNR	SC Envirothon competition (special topic category was stormwater runoff)	State- wide	x	x	x	x	x	x	x	Central Carolina Technical College, City of Sumter	5/4/12, Clemson Sandhill REC	150	Team scores
Carolina Clear	Enviroscape presentation for Girl Scouts	Sumter County	x	x	x	x	x	x	x		5/29/12, St. James Lutheran Church	11	



Lead Service Provider	Activity	Target Geog- raphy/ Land Use	General	Bacteria	Toxic Con- taminants	Sediment	Nutrients	Debris	Temp.	Partici- pation by other Service Providers	Location and Date Delivered	Number Impacted	Assess- ment Type
		Youth /	K- '	12	/ Tea	ch	ers	(c	ont	inued)			
Carolina Clear	Rain barrel installation project through Green Steps Schools Program	Sumter County	x							Sonoco Recy- cling, SC Green Steps	Cherryvale Elementary, ongoing from fall 2011	30	
Carolina Clear	Watershed interactive whiteboard lessons	Sumter County	x		x						Ongoing	400	Teach- er survey
	Electe	d and App	oin	tec	l Off	icia	als	an	dН	igh-Level Si	taff		
Sumter County	Presentation on stormwater program for Sumter County administration and department heads	Sumter County	x								3/14/12, Sumter County council chambers	50	
Carolina Clear	Low impact development (LID) presentation for Sumter Planning Commission	Sumter County	x		x	х	x		x	Sumter City- County Planning	3/28/12, Sumter Opera House	13	
	Prof	essionals:	Сог	ntra	actor	s,	Eng	gin	eer	s, Develope	rs		
Sumter Conserva- tion District	Stormwater basics workshop: Erosion control through grass establishment	Sumter County	x			х				City of Sumter	1/17/12, Swan Lake	45	Post- survey
Clemson University	CEPSCI (Certified Erosion Prevention and Sediment Control Inspector) course	Midlands	x			х					2 trainings, Columbia	179	Exam
Sumter City/County Planning	Draft landscaping ordinance stakeholder meeting	Sumter County	x		x	x			x		3/19/12, Sumter planning department	12	
Carolina Clear	LID Lunch & Learn session for developers, landscapers, & planners	Sumter County	x		x	x	x		x	Sumter City- County Planning, Sumter County	4/23/12, Sumter planning department	20	Post- survey
Sumter County	Pond management workshop	Sumter County	x		x		x				5/12/12, Parks and Recreation cultural center	12	



Lead Service Provider	Activity	Target Geog- raphy/ Land Use	General	Bacteria	Toxic Con- taminants	Sediment	Nutrients	Debris	Temp.	Partici- pation by other Service Providers	Location and Date Delivered	Number Impacted	Assess- ment Type
		Homeown	ers	£	Hom	eov	vne	r A	sso	ciations			
Sumter City-County Planning	"Sumter Connectivity & Greenways Master Plan for Shotpouch Creek" presentation for Azalea Garden Club	Sumter County	x		x				x		10/6/11, Alice Boyle Garden Center	30	
Clemson Extension	Master Gardener training class	Sumter County	x		x	x	x			Sumter Master Garden- ers	JanMay 2012, extension office	14	
Carolina Clear	Backyard Landscaping Series featuring Carolina Yards & Neighborhoods program	Sumter County	x		x	х	x		x	City of Sumter, Clemson Extension	March 8, 15, 29 & April 11, Swan Lake	140	
Clemson Extension	Carolina Yards & Neighborhoods presentation and booth at SC Master Gardeners Conference	State- wide	x				×				3/16/12, Columbia, SC	125	
Carolina Clear	Article on Carolina Yards & Neighborhoods in Carolina Gardener magazine	North & South Carolina	x							Carolina Gardener	Sept. 2012	12,000	
Carolina Clear	Rain barrel workshop	Sumter County	x			х					9/4/12, Sumter Co. public works	22	
			Coi	mm	ercia	al C	liti	zer	ıs				
Sumter County, City of Sumter	Stormwater presentation for Leadership Sumter environmental day	Sumter County	x								4/11/12, Sumter County training center	25	
Carolina Clear	Grease disposal handouts distributed to food vendors at Sumter County Fair	Sumter County	x								9/25/12, Sumter Fairgrounds	24	



				Та	rget							
Lead Service Provider	Activity	Target Geog- raphy/ Land Use	General Stormwater Awareness	Bacteria	Toxic Contaminants, petroleum products, pesticides, heavy metals	Sediment	Nutrients	Debris	Temperature	Partici- pation by other Service Providers	Location and Date Delivered	Assess- ment Type
		General P	ubli	с								
Clemson Extension	Stormwater awareness television commercial	Sumter County	x		x		x			Carolina Clear	Summer 2013	
Clemson Extension	Water quality information on "Making it Grow" TV show	Sumter County	x		x		x			Carolina Clear	Ongoing, weekly	
Sumter County, City of Sumter	Radio commercials featuring stormwater messages on Miller Communication Stations	Sumter County	x							Carolina Clear		
Clemson Exten- sion	Water Quality article written for The State and the Sumter Item newspapers	Sumter County	x			Γ					2/16/12	
Carolina Clear	Sumter Stormwater Solutions website	Sumter County	x	x	x	x	x	x			Ongoing	Number of page views
Carolina Clear	Illicit discharge detection and elimination (IDDE) website	Statewide	x	x	x		x				Ongoing	Number of page views
Carolina Clear	Midlands Stormwater Consortiums Facebook page	Midlands	x	x	x	x	x	x	x		Ongoing	feed- back on page
Santee River- keeper	Santee Riverkeeper Facebook page	Statewide	x	х	x	x	х	x	x		Ongoing	feed- back on page
Carolina Clear	Pet waste brochures distributed at veterinarian offices, ASPCA, pet supply stores	Sumter County	x	x			x				Ongoing	
Sumter County	llicit discharge and illegal dumping brochures distributed during inspections, violations, and events	Sumter County	x		x		x	x			Ongoing	
Carolina Clear, Sumter County, City of Sumter	Storm drain marking volunteer program with accompanying door hanger	Sumter County	x	x	x	x	x	x	x	Crest- wood High School	Ongoing	drains marked
Sumter County	Storm drain marking by Sumter County Staff	Sumter County	x		x			x		Carolina Clear	Ongoing	drains marked



Lead Service Provider	Activity	Target Geog- raphy/ Land Use	General	Bacteria	Toxic Con- taminants	Sediment	Nutrients	Debris	Temp.	Partici- pation by other Service Providers	Location and Date Delivered	Assess- ment Type
	Ger	neral Public (	con	tinu	ued)							
Carolina Clear	"Displays at Sustainable Sumter Earth Day Celebration"	Sumter County	x	x	x	x	x	x		City of Sumter, Sumter County	April 2013, Swan Lake	
Carolina Clear	Displays at Iris Festival	Sumter County	x							Sumter Master Gardeners	May 2013, Swan Lake	
Sumter County Public Works	Water quality and Carolina Yards & Neighborhoods displays at Sumter County Fair	Sumter County	x	x	x	x	x	x		Carolina Clear, Sum- ter Master Gardeners	Sept. 2013, Sumter Fair Grounds	
Carolina Clear	Earth Day stream cleanup	Sumter County	x		x			x		Sumter County, City of Sumter		lbs. trash col- lected
City of Sumter	Sumter neighborhood cleanups	City of Sumter	x		x			x				lbs. trash col- lected
Carolina Clear	Riversweep stream cleanup	City of Sumter	x		x			x		City of Sumter		lbs. trash col- lected
Carolina Clear	Volunteer recognition event	Sumter County	x							Sumter County, City of Sumter		
Carolina Clear	Pet waste disposal bags, key chains and other items to promote picking up pet waste	Sumter County	x	х			x					
	Yo	outh / K-12 /	Теа	che	ers							
Carolina Clear- Conservation District	Enviroscape presentations for schools, scouts, 4-H clubs, etc.	Sumter County	x	x	x	x	x	x	x			
Carolina Clear, Boy Scouts of America	Soil & Water Conservation merit badge at Boy Scout Hornaday Award Weekend	Statewide	x	x	x	x	x	x			March 2013, Sumter Fair- grounds	
Carolina Clear, Conservation District	Enviroscape presentation at Cherryvale Earth Day festival	Sumter County	x	x	x	x	x	x	x		April 2013, Cherryvale Elementary	
SCDNR	SC Envirothon competition	Statewide	x							Central Carolina Tech, City of Sumter	May 2013, Clem- son Sandhill REC	Team scores



Lead Service Provider	Activity	Target Geog- raphy/ Land Use	General	Bacteria	Toxic Con- taminants	Sediment	Nutrients	Debris	Temp.	Partici- pation by other Service Providers	Location and Date Delivered	Assess- ment Type
	Youth /	K-12 / Teach	ers	(co	ntinu	ed)						
Carolina Clear	Rain barrel installation project through Green Steps Schools Program	Sumter County	x							Sonoco Recycing, SC Green Steps	Cherryvale Elementary, ongoing	
Carolina Clear	Watershed interactive whiteboard lessons	Sumter County	x		x						Ongoing	Teacher survey
Carolina Clear	Rain barrel art contest for schools	Sumter County	x								Spring 2013	
Carolina Clear	Student stormwater video contest (investigate strategy for implementation)	Sumter County	x	х	x	x	x	x	x			
Sumter County	Stormwater utility credit work- shop for school properties	Sumter County	x							Carolina Clear		
	Elected and Appoin	nted Offici	ials	an	d Hi	gh-	Lev	/el	Sta	ıff		
Sumter County, City of Sumter	Presentation on stormwater program for county and city councils, administration and department heads	Sumter County	x									
City of Sumter	Presentation on utility rate study to Sumter City Council	Sumter County	x							URS		
Carolina Clear	Participation at SC Association of Counties meetings	State- wide	x									
	Professionals: Contractors,	Engineers,	De	vel	oper	s,	Lar	ds	cap	e Architect	s	
Clemson University	CEPSCI (Certified Erosion Prevention and Sediment Control Inspector) course	Midlands	x			x						Exam
City of Sumter	Construction site stabilization factsheet and technical workshop	Sumter County	x			x				Carolina Clear		
Carolina Clear	Low Impact Development presentations on specific BMPs	Sumter County	x		х	x	x		x			
Carolina Clear	Promote examples of LID in the Sumter area	Sumter County	x		х	x	x		x			
	Homeowner	s & Homeo	wn	er /	Asso	ciat	tior	ıs				
Sumter City- County Planning	"Sumter Connectivity & Green- ways Master Plan for Shotpouch Creek" presentations	Sumter County	x		x				x			
Clemson Extension	Master Gardener training class	Sumter County	x		x	x	x			Sumter Master Garden- ers	JanMay 2013, extension of- fice	



Carolina Clear	Backyard Landscaping Series fea- turing Carolina Yards and Neigh- borhoods program	Sumter County	x		x	x	x		x	City of Sutmer, Clemson Extension	Spring 2013	
Lead Service Provider	Activity	Target Geog- raphy/ Land Use	General	Bacteria	Toxic Con- taminants	Sediment	Nutrients	Debris	Temp.	Partici- pation by other Service Providers	Location and Date Delivered	Assess- ment Type
	Homeowners & Ho	meowner A	Asso	ocia	ation	s (	cor	tin	ue	d)		
Master Gardeners	Rain Garden volunteer workdays	Sumter County	x				x			Carolina Clear	Fall 2012, Spring 2013	
Carolina Clear	Rain barrel workshop	Sumter County	x			x				Sumter County		
	Co	ommercial	Cit	ize	ns							·
Sumter County, City of Sumter	Stormwater presentation for Leadership Sumter environmental day	Sumter County	x								Spring 2013	
Carolina Clear	Grease disposal handouts distributed to food vendors at Sumter County Fair	Sumter County	х								Sept. 2013, Sumter Fair- grounds	
Carolina Clear	Pollution prevention presentations for automotive repair classes	Sumter County	x		х					Central Carolina Tech		
Carolina Clear	Outreach materials for restaurants on Fat, Oil and Grease management	Sumter County	x									
Carolina Clear	Outreach materials for commercial car washes	Sumter County	x		х		x					
Sumter County, City of Sumter	Presentations on stormwater util- ity credit program to businesses and industry	Sumter County	x							Carolina Clear		



# Appendix D

### 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/

#### MUNICIPALITIES

Sumter County - http://www.sumtercountysc.org/index.htm 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 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://www.sumtersc.gov/Departments/Planning.aspx Sumter County Master Gardeners - http://www.clemson.edu/extension/mg/counties/sumter/index.html URS - http://www.urscorp.com/



### Authors

#### MARY CAFLISCH

SSS Coordinator Water Resources Agent Clemson University Cooperative Extension Service Carolina Clear P.O. Box 102406, Columbia, SC 29224 803-865-1216 ext. 122 mnevins@clemson.edu

#### SPECIAL THANKS TO THE FOLLOWING DATA CONTRIBUTORS:

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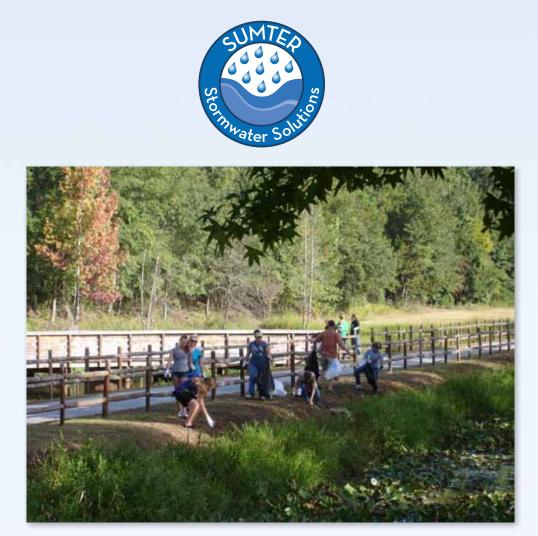
and

Sumter Stormwater Solutions Representatives



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.

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Volunteers collect trash along Shot Pouch Creek as part of the 2012 River Sweep cleanup event.



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