

Sumter Stormwater Solutions



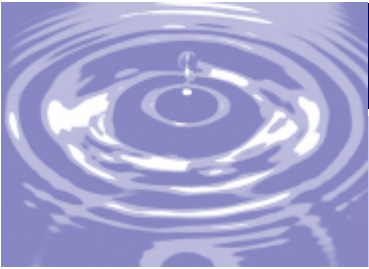
Year 3
2010-2011

Annual Report of Activities

November 2011



Don't let a good drop go bad...



Executive Summary

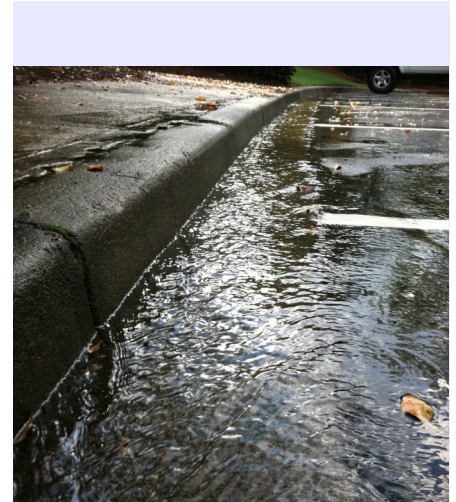


Sumter Stormwater Solutions completed its third year of education and public involvement activities in September 2011. Many activities were modeled on successful events from Years 1 and 2, using lessons learned to make these programs even more effective. Many new programs were also developed, to meet evolving needs and test new strategies for changing behaviors.

One large accomplishment of the year was the release of a new statewide mass media campaign, including a television public service announcement, also distributed online via youtube.com, and accompanying billboard design. Another major achievement was the creation of a rain garden at Patriot Park. This installation will serve as a model of this technique for homeowners and developers interested in low impact methods of managing stormwater. Sumter Stormwater Solutions seeks to encourage more effective stormwater management, particularly for new development. Properly educating professional audiences on using available tools and best management practices is the first step towards accomplishing that goal.

Both Sumter County and the City of Sumter worked hard to map their stormwater infrastructure and identify the sources of pollution most urgently in need of attention at present. Reducing illicit discharge was determined to be one of the most important education issues for Year 3. Strategies included a new website, storm drain marking, and brochures to be distributed at public events and during inspections. Both residential and commercial audiences were determined to be sources of illicit discharges, so efforts targeted both of these audiences. A second priority for the year was to reduce littering and illegal dumping. Three litter cleanups of stormwater channels and natural areas were held during the year, including an Earth Day cleanup, which is intended to become an annual event. Brochures on illegal dumping were also designed and distributed. Sumter Stormwater Solutions also put special emphasis on targeting commercial audiences, with automotive repair businesses targeted specifically for 2011 efforts.

Year 3 showed a lot of progress in the types of education and public involvement activities that were utilized. Using the information compiled by city and county, specific audiences and pollution issues were identified and targeted more effectively. For the upcoming year, current data will be used to re-evaluate pollution threats and outreach opportunities, so that public education and involvement efforts will continue to produce as much positive change as possible.



“The education and outreach requirements of the MS4 Stormwater program are critical components in reaching the permit goal of improving water quality. Many people do not realize that their actions contribute to the overall quality of our water resources. We appreciate Carolina Clear’s efforts in educating the Sumter area and providing opportunities for citizens to be involved in programs that have a positive effect on our water resources.”

**- Teige Elliot,
Stormwater Manager
for the City of Sumter**

Executive Summary

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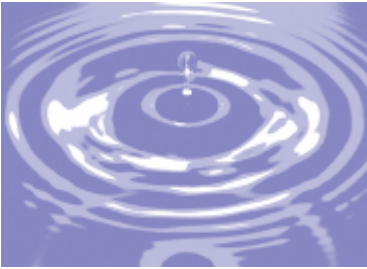
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Sumter MS4's

Sumter Stormwater Solutions includes Sumter County and the City of Sumter. During Year 3, both municipal partners strengthened all aspects of their stormwater programs, including outreach, education, and public involvement. Both County and City now have a stormwater utility ordinance, to provide the resources necessary for a successful management program.

Table 1. Summary of Local Consortium Representatives

Co-permittees	Consortium Representatives
City of Sumter	<p>Teige Elliott</p> <p>Pearce Atkins</p>
Sumter County	<p>Peter Wilson</p> <p>Alfred Conyers</p> <p>Elizabeth Ervin</p> <p>Dan Geddings</p>



Sumter's MS4's

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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. In Year 2, the consortium focused on building new partnerships and strengthening existing ones. Central Carolina Technical College joined the consortium as a partner, and the City-County Planning Department and Soil and water Conservation District both expanded their roles by offering new types of programs. Each partner brings a unique skill sets to the organization and enhances the variety of programs the consortium is able to offer.

Table 2. Summary of Local Education Partners

Organization	Representative
Sumter City-County Planning Dept.	Susannah Smith, Claudia Rainey, Charley Holmes
SCDHEC BOW	Amanda Ley
Sumter Soil & Water Conservation District	Pearce Atkins, Tammy Yarber
BP Barber and Associates	Geoff Smith
Sumter County Master Gardeners	Amanda McNulty
Santee Riverkeeper	Mark Bruce
Central Carolina Technical College	Joshua Castleberry
CCTC Natural Resources Management Club	Joshua Castleberry
Sonoco Recycling and Green Steps Schools	Jane Hiller
SC Department of Natural Resources	Marc Cribb



Education Partners

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Goal and Objectives

Goal Statement

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

Objectives

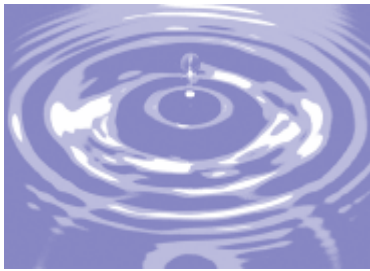
1. Use a watershed approach to develop and implement a comprehensive education strategy that addresses stormwater pollution using a prioritized approach capitalizing on local training resources.
2. Foster and expand upon citizen involvement in stormwater management through education and participation programs to encourage behavioral change towards improved environmental protection and awareness.
3. Facilitate collaboration among local organizations interested in watershed-related education to best meet the educational needs of local communities.
4. 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.
5. Participate in collaborative stormwater education that can serve as a model for others.



Swan Lake Iris Garden

Goals and Objectives

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General Public - Mass Media

Lead Provider	Activity	Location and Date Delivered	Number of Participants	Other Providers Involved
Carolina Clear	“Downstream” stormwater awareness commercial released on-line	Beginning Feb. 7, 2011, youtube.com	44 views	N/A
Carolina Clear	“Downstream” stormwater awareness billboards	Beginning July 2011, Highway 378, 2 locations	20,300 daily views	N/A
Carolina Clear	“Downstream” stormwater awareness commercial aired on Time Warner Cable	August, 2011, Time Warner Cable (570 total spots)	26,297* Sumter households	N/A
Carolina Clear	“Downstream” stormwater message on Time Warner Cable local weather crawl.	August, 2011, Time Warner Cable (252 total spots)	26,297* Sumter households	
Carolina Clear	Interview on "Your Day" radio program.	Dec. 9, 2010, SC ETV (statewide)	30,000	SC ETV
Sumter County, City of Sumter	Radio Public Service Announcements on Miller Communications Stations	Fall 2010, Sept. 2011 Florence, Darlington, & Sumter Counties	200,700 Sumter listeners	Miller Communications

*There are 26,297 households that subscribe to Time Warner in the Sumter Area, and within those households, an estimated 60% of the men (core demographic, ages 25-54) were reached an average of 4.1 times in the course of the 4 week airing.

In 2010, Carolina Clear began work on a new statewide mass media campaign, focusing on demonstrating how pollution-preventing behaviors allow everyone to enjoy water activities, both for recreation and livelihood. A television public service announcement was produced, with accompanying billboard design. The billboards went up in July in two locations along Hwy 378. The PSA was first released on youtube.com and the Carolina Clear websites in February 2011, then aired on Time Warner Cable during the month of August. A corresponding message also ran on the weather crawl (at the bottom of the screen during local weather broadcasts) during this time.

Two radio public service announcements aired on 8 stations in Florence and Sumter: a pet waste produced by the

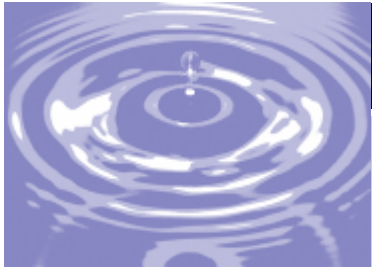


Florence-Darlington Stormwater Consortium in November 2010, and the Carolina Clear “Goldfish” radio message in March. In addition, two stations in Sumter were used to advertise the River Sweep stream cleanup in September. Another PSA on illicit discharge and illegal dumping will air in the late fall of 2011.

For more information and to play the commercial, please go online at www.clemson.edu/public/carolinaclear and click on “Mass Media.”

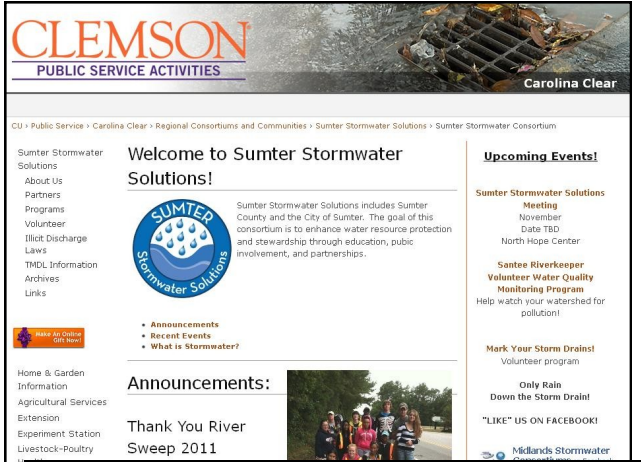
General Public

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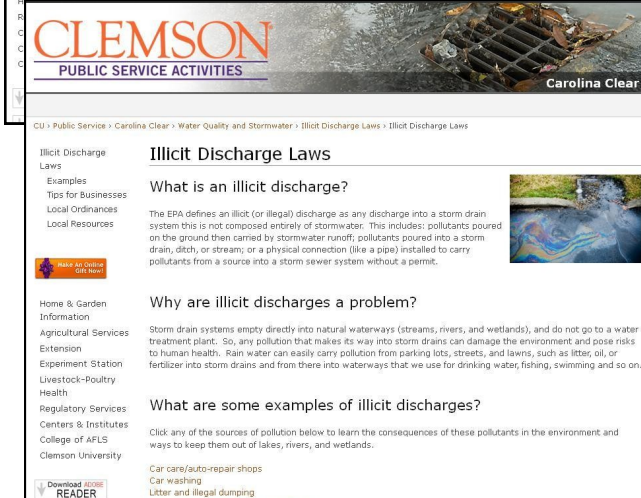


General Public - Internet

Lead Provider	Activity	Location and Date Delivered	Number of Participants	Other Providers Involved
Carolina Clear	Sumter Stormwater Solutions website	Ongoing	1142	N/A
Sumter County	Links to Stormwater information on County website	Ongoing	Not Assessed	N/A
Carolina Clear	Illicit Discharge Detection & Elimination (IDDE) Website	Beginning Winter 2011, online	735	N/A
Carolina Clear	Midlands Stormwater Consortiums Facebook Page	Ongoing from July 2011, Online	33 "fans"	N/A



Sumter Stormwater Solutions took several big steps this year to improve its internet presence. A Facebook page was created for Sumter, Richland and Lexington County stormwater consortiums. Fans receive updates on upcoming activities, photos from recent events, and tips on pollution prevention. Facebook adds an interactive component too, letting citizens give their own feedback by commenting on posts and photos, and sharing announcements with their own social network friends.



In order to help the county and city inform citizens of illegal discharge laws, an Illicit Discharge Detection and Elimination website was created, containing information about specific common ID-DE pollutants, such as residential and charity car washing, oil and fluids from auto repair shops, and household hazardous wastes. It was immediately apparent that the information on the site was not only helpful for Sumter residents, but was relevant to audiences statewide. The page was converted to a statewide resource with links to local ordinance language and resources for proper disposal of wastes in all counties with Carolina Clear consortiums.



Check us out on the web at www.clemson.edu/carolinaclear/scsc and on Facebook at www.facebook.com/midlandsstormwater



General Public - Publications

Lead Provider	Activity	Location and Date Delivered	Number of Participants	Other Providers Involved
Sumter County Extension Service	Multiple water quality related articles written for the <i>Sumter Item</i>	5 articles, Sumter County & City of Sumter	Circulation of 33,000 for each article	N/A
Sumter County Extension Service	Multiple water quality related articles written for <i>The State Newspaper</i>	2 articles, greater Columbia area, including Sumter	Circulation of 96,737 for each article	N/A
Carolina Clear	Rain water harvesting article in <i>South Carolina Nurseryman Magazine</i>	July 2011, mail distribution	Circulation 535	South Carolina Nurseryman Magazine
SC Wildlife Magazine	Rain garden and rain barrel articles published in <i>South Carolina Wildlife Magazine</i>	April 26, 2011	Circulation of 47,000	Carolina Clear
Sumter County	Illicit discharge and illegal dumping brochures distributed during inspections, violations, and events	Ongoing from Feb. 2011	Not assessed	N/A



Clemson Extension agent Amanda McNulty writes gardening columns for the *Sumter Item* and *The State* newspapers. She also is co-host of *Making It Grow!* and coordinates the Master Gardener Program in Sumter County. Her articles frequently focus on water quality and environmentally conscious gardening, and are a huge asset for stormwater education in Sumter County.

Right: Rain water harvesting article in South Carolina Wildlife Magazine.



Title	Date	Publication	Topic/Pollutant
Leaves, Glorious Leaves	10/19/2010	<i>Sumter Item</i>	Mulching
Leaves on the Curb	11/4/2010	<i>The State</i>	Mulching, nutrients
We All Live Downstream	2/3/2011	<i>The State</i>	Nutrients, herbicides
What Happens on the Cruise...	2/15/2011	<i>Sumter Item</i>	Buffers
Pink Neck	3/22/2011	<i>Sumter Item</i>	Car washing
Let the clippings fall where they will	7/14/2011	<i>Sumter Item</i>	Nutrients
Pastoral Goes Postal	8/30/2011	<i>Sumter Item</i>	Litter, rain gardens

General Public

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General Public - Festivals

Lead Provider	Activity	Location and Date Delivered	Number of Participants	Other Providers Involved
Sumter City-County Planning	Greenway Plan Display at Shaw Air Force Base Earth Day	Shaw Air Force Base, April 29, 2011	100	Shaw Air Force Base
Sumter Conservation District	Display at Sustainable Sumter Earth Day Celebration	Swan Lake Iris Gardens, April 30, 2011	450	City of Sumter
Carolina Clear, Master Gardeners	Displays at Sumter Iris Festival	Swan Lake Iris Garden, May 28, 2011	100	City of Sumter
Sumter County, Carolina Clear	Displays at the Sumter County Fair	Fair Grounds, Sept. 27 - Oct. 2 2011	10,000	Master Gardeners



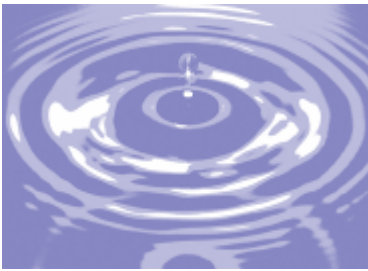
Above: At Sumter's Earth Day Celebration, kids have fun painting "pollution" onto a model watershed, then washing it away with "rainstorms" from a squirt bottle.

Right: The stormwater display at the Sumter County Fair won first place for the Agriculture building.

New marketing materials were produced for 2011 festivals, including a Frisbee displaying the Sumter Stormwater Solutions logo with pollution prevention tips printed on the inside. Festivals are an excellent venue for raising stormwater pollution awareness for large and diverse groups of people at once and in a fun way.



General Public



General Public - Involvement

Lead Provider	Activity	Delivered	Number of Participants	Other Providers Involved
Sumter County	Hatchet Camp Branch Cleanup	DeLaine Community Center, April 9, 2011	12 volunteers	Crestwood High School
Sumter County	Manchester State Forest Community Cleanup	Manchester State Forest, May 7, 2011	54 volunteers	Shaw Air Force Base
Carolina Clear, City of Sumter	River Sweep 2011 Cleanup: Sumter Mall Stormwater Channel	Sumter Mall, Sept. 17, 2011	16 volunteers	Crestwood High School, Sumter Girl Scouts

Public involvement projects build ownership of water quality conditions and encourage stewardship in the community. Sumter residents made a personal impact on local waterways through community cleanups of neighborhoods, wetlands, and streams. Throughout the year, 82 volunteers removed an estimated 5000 pounds of trash. The Sumter Mall cleanup on September 17 was part of the statewide Beach Sweep/River Sweep initiative organized by the S.C. Sea Grant Consortium and the S.C. Department of Natural Resources.



Litter and illegal dumping at Hatchet Camp Branch, BEFORE cleanup.



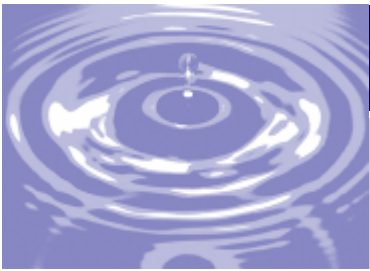
Volunteers at Hatchet Camp Branch AFTER cleanup - what a difference!



River Sweep 2011 volunteers behind the Sumter Mall.

General Public

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General Public - Involvement

Lead Provider	Activity	Delivered	Number of Participants	Other Providers Involved
Carolina Clear	Storm drain marking program	Trailwood Neighborhood, Sumter Feb. 22, 2011	10 volunteers, 39 drains, 150 homes (450 impacts estimated)	Girl Scout Troop 5111, City of Sumter
Sumter County	Rain Garden Installation at Patriot Park	Patriot Park, Aug. 12 & 16, 2011	30 volunteers	Carolina Clear, Sumter Master Gardeners

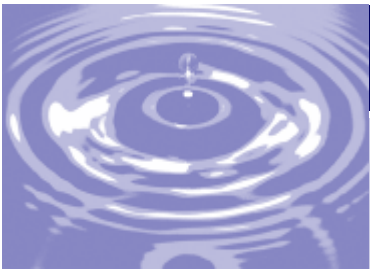


In September 2010, Sumter Stormwater Solutions began a storm drain marking program with the goal of marking all of the storm drains on city and county maintained residential streets. In one afternoon, six scouts from Girl Scout Troop 5111 marked 39 storm drains and distributed door hangers to 150 homes in Sumter's Trailwood neighborhood. While no additional markings were completed this year, interest in the program is growing, and hopefully more communities will become involved in the upcoming year.



In July Sumter County constructed a rain garden at Patriot Park to treat stormwater runoff from the parking lot and soccer fields, and to minimize channelization from the high velocity flow coming from the parking lot. In August, 30 volunteers planted the new garden with native perennials. With the inclusion of educational signage to be produced in the upcoming year, the garden will serve as an example of this management practice for homeowners and professionals, and can be used in the future for demonstration workshops.

General Public



Youth & Teachers

Lead Provider	Activity	Location and Date Delivered	Number of Participants	Other Providers Involved
Carolina Clear	Watershed and Stormwater Interactive Whiteboard Lessons, correlated to SC Science Standards for 5th and 7th grades	3 lessons created, available online January 2011	5 teachers, 420 students	N/A
Carolina Clear	Enviroscape presentation for 4-H Club	Red Barn Pony Park, March 4, 2011	7	Clemson 4-H
Carolina Clear	Soil and Water Conservation Merit Badge Workshop	Sumter Fairgrounds March 13, 2011	16	Pee Dee Boy Scout Council
Sumter Conservation District	EnviroScape presentations at Cherryvale Earth Day Celebration	Cherryvale Elementary School, April 26, 2011	280	Carolina Clear

A River Runs Through It

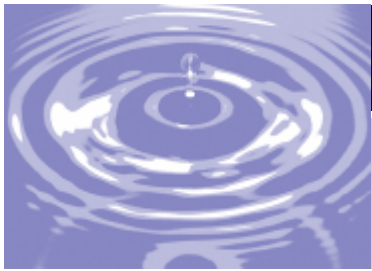
Objective: Students will identify the different ways that humans change the land and explore the connection between land uses, in relation to upstream-downstream. Students will also match common pollutants found in waterways with associated land uses.

SC Science Standards:
 5-3.6 Explain how human activity (including conservation efforts and pollution) has affected the land and the oceans of Earth.

Left: In “A River Runs Through It,” one of three lessons for 5th-7th graders, students learn how humans change the landscape and how this impacts rivers.

Right: Students at the Cherryvale Elementary Earth Day Celebration study stormwater runoff using a hands-on watershed model. (Photo courtesy Cherryvale ES teacher Cathy Perry.)





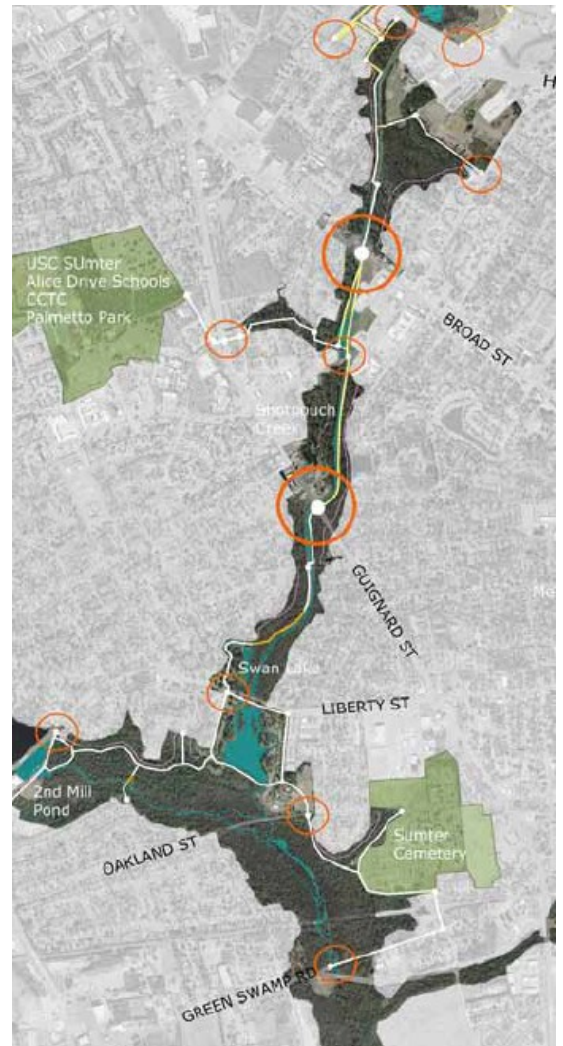
Elected & Appointed Officials

Lead Provider	Activity	Location and Date Delivered	Number of Participants	Other Providers Involved
City of Sumter	Presentation at City Council budget workshop on stormwater permit requirements.	Council Chambers, March 8, 2011	10	N/A
City of Sumter	City Council public hearing for creating a Stormwater Utility ordinance	Council Chambers, June 7, 2011	25	N/A
Sumter City-County Planning	<i>Sumter Connectivity & Greenway Master Plan for Shotpouch Creek</i> report produced and presented	Online distribution and 3 presentations	90	N/A

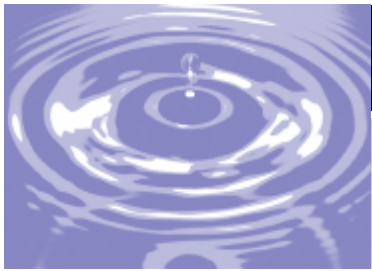
In 2011, the Sumter City Council passed an ordinance creating a stormwater utility, with a fee structure to pay for improvements to infrastructure, monitoring, and other needs related to maintaining water quality. This came after Sumter County passed a similar measure the previous year. City staff worked hard to advise council on the needs of the stormwater program and guide them in the creation of the ordinance.

Looking towards the future of the city the Sumter City-County Planning Department developed the *Sumter Connectivity & Greenway Master Plan for Shotpouch Creek*. This design would establish a greenway running from Dillon Park to Green Swamp Road, intersecting two major commercial nodes: Broad Street and Guinard Street. The greenway would provide a buffer of green space along the creek and encourage biking and walking in the city, thereby reducing pervious area, protecting the floodplain, and reducing vehicle traffic in Sumter. The Greenway Plan was presented to City Council, Sumter Planning Commission, and the transportation committee, as well as displayed at the Shaw Air Force Base Earth Day and Sumter Earth Day at Swan Lake (p. 8).

Excerpt from Sumter Connectivity & Greenway Master Plan for Shotpouch Creek



Elected & Appointed Officials



Professionals: Contractors & Engineers

Lead Provider	Activity	Location and Date Delivered	Number of Participants	Other Providers Involved
Center for Watershed Excellence	SC Water Resources Conference, including speakers from throughout the State, booth, presentation and posters by Carolina Clear	Columbia Metropolitan Convention Center, Oct. 13-14, 2010	350	Carolina Clear, others
Carolina Clear	Presentation on Carolina Yards & Neighborhoods program as part of University of Florida webinar.	Online webinar, Jan. 18, 2011	84	University of Florida
Clemson Extension	Pond Management Workshops	Bethel UMC, Oswego, Nov. 11, 2010 & May 16, 2011	68	N/A
Sumter City -County Planning	Turkey Creek Work Session for Erosion Control and Watershed Projects	Sumter City Centre, Oct. 18, 2010	19	Sumter County, City of Sumter, FEMA, NRCS, Army Corps of Engineers

An evaluation of changes in water conservation habits of homeowners in the Upstate of South Carolina



Abstract

The purpose of this poster is to present the development, implementation and preliminary evaluation of an education and outreach workshop aimed at reducing stormwater runoff and promoting water conservation. This workshop has been delivered in several counties statewide within South Carolina through many partnerships including Clemson Extension, Carolina Clear, county public works and parks departments, Master Gardener Associations, community groups and non-profit organization. As of the date of this submission, more than 100 state residents have participated in this exercise, and there is often a waiting list to meet demands.

The "Build Your Own Rain Barrel" workshop was developed to educate the public about stormwater, while responding to drought conditions experienced throughout the state. Registered attendees at each workshop participated in a classroom session, which introduced attendees to stormwater pollution, habits that homeowners can modify to reduce pollution from their own yard, and the real impacts of stormwater to our community. In the second part of the classroom session, the benefits of rain harvesting and the positive effects that it has for stormwater management were discussed.

Participants then spent the afternoon of the workshop building their own rain barrel. Barrels were acquired through commercial suppliers and the plumbing of rain barrels was directed by Extension staff and implemented by the individual attendees, often working in pairs.

Attendees evaluated the effectiveness of the workshop immediately after completion. Furthermore, participants were provided with an evaluation several weeks after the workshop to assess any changes in their behaviors at home. The goal of this type of outreach activity is to educate homeowners on real local issues pertaining to stormwater, provide tools for homeowners to get involved in stormwater pollution prevention, and to initiate behavioral change in the individual's practices leading to greater conservation of our water resources.

Situation

Stormwater management in the upstate region of South Carolina has become a more pertinent issue as more counties and communities are being permitted. The Upstate has also had other water related issues in recent years due to several summers in drought condition. In response to this situation, Clemson Extension, through its stormwater education programs, has developed a "Build Your Own Rain Barrel Workshop" for homeowners in the region. The workshop addresses rain harvesting as both a drought and stormwater mitigation technique.

Learning Objectives

Participants will:

- Identify sources of general stormwater pollution and mitigation techniques
- Understand the positive impact rain harvesting has on stormwater
- Construct a rain barrel
- Implement rain harvesting and other stormwater mitigation strategies at their home

Program Overview

- Morning Classroom Session
 - What is stormwater?
 - How we contribute to stormwater pollution
 - What homeowners can do to help
- Afternoon Session
 - Rain barrel design introduction
 - How to make your rain barrel work the best for you
 - Rain barrel construction



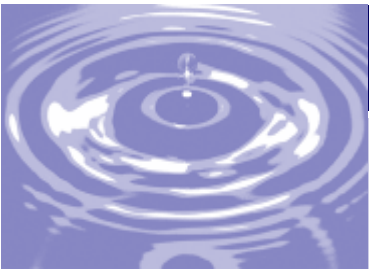
Above: Excerpt from poster by Marguerite Porter and George Dickert presented at the SC Water Resources Conference, 2010.

Right: At two pond management workshops, participants learn about fertilizing ponds, stocking fish, managing aquatic weeds, and safe herbicide use

At the SC Water Resources Conference, a two day conference organized by Clemson's Restoration Institute and Center for Watershed Excellence, professionals from across the state came together to discuss current water policies, research, and water management issues in South Carolina. Carolina Clear participated by giving a presentation on the telephone survey of attitudes and behaviors conducted in 2009, and displayed posters on water conservation behavior changes, the Low Impact Development Mapping Tool, and the Watershed Stewardship Mapping Project.



Professionals: Contractors & Engineers



Homeowners

Lead Provider	Activity	Location and Date Delivered	Number of Participants	Other Providers Involved
Sumter Extension Service	Master Gardener Training Class	Sumter Extension Office, Jan-May 2011	13	Sumter Master Gardeners
Carolina Clear	Carolina Yards & Neighborhoods Training for Master Gardeners	Sumter Extension Office, April 11, 2011	14	Sumter Master Gardeners
Carolina Clear	Build a Rain Barrel Workshop	Sumter Co. Public Works, May 14, 2011	12	Sumter County
Carolina Clear	Rain Garden Workshop	Swan Lake Visitor Center, Sept. 23, 2011	17	Sumter County, Sumter City-County Planning
Sumter Extension Service	Presentations to civic organizations on stormwater topics related to gardening	4 presentations throughout the year	120	N/A
Sumter County	Assisted homeowners in disconnecting sanitary sewer discharge from storm sewer.	Ongoing	3 residences	N/A



The Carolina Yards and Neighborhoods program is a recognition program for homeowners who want to make their yards more environmentally friendly. Participants complete actions from the *Carolina Yardstick Workbook* to earn “inches” or credits, and those earning 36 inches qualify as a Carolina Yard. Most of the actions are good for the environment, and also reduce yard maintenance. For example by following the “right plant, right place” principle, homeowners choose plants that will need less pruning, watering, fertilizers and pesticides. Master Gardeners received special instruction in this program so that they could spread the word about the CYN program within their own communities.



On Sept. 17, a rain garden workshop was held, showcasing the new rain garden at Patriot Park. Participants learned how to take the principles used for this public garden and apply them on a smaller scale to their own yards.

Top left: Rain garden at Patriot Park just after planting.

Bottom left: At the rain barrel workshop in May, participants made rain barrels for their own homes.



Homeowners

Commercial Citizens

Lead Provider	Activity	Location and Date Delivered	Number of Participants	Other Providers Involved
Carolina Clear	Presentation for Chamber of Commerce Environmental Committee	Chamber Building, Sept. 22, 2011	7	Sumter Chamber of Commerce
Carolina Clear	IDDE brochures mailed to high risk businesses: Auto Repair	Feb 2011	103 businesses	N/A
Sumter County, City of Sumter	Leadership Sumter community development program, Environmental Day	Sumter Co. Public Works, April 13, 2011	14	Carolina Clear, DOT, others

Auto Repair Stormwater Pollution Prevention Guide



DID YOU KNOW?

It only takes four quarts of oil (about one oil change) to contaminate one million gallons of drinking water. That's enough to fill two Olympic size swimming pools!

Auto repair businesses handle materials every day, like oil and antifreeze, that can cause water pollution. Water pollution is harmful to the environment and against the law in Sumter County. Businesses have a responsibility to protect Sumter's streams, rivers, and wetlands. Learn what your auto repair business can do to prevent pollution!



Illicit discharge detection and elimination is one of the top priorities for pollution prevention in the Sumter area. Businesses are large contributor to illicit discharge. For 2011, automotive repair businesses were chosen as a high pollution risk business type to receive special emphasis. A brochure was created discussing the pollution issues related to auto repair businesses, and was mailed to 103 businesses of this type. Follow-up calls to businesses were conducted to better improve the delivery method and content of this message. In 2012, ___ businesses will be targeted.

Effort is also being made to reach more businesses through the Sumter Chamber of Commerce. In September, a presentation was given to the Chamber of Commerce Environmental Committee on the Industrial Stormwater Permit.



Photo courtesy SCDHEC

Homeowners

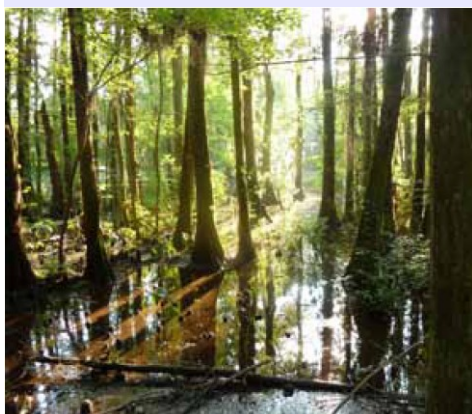


Conclusions for Year 3 (10-11)

Lead Provider	Activity	Location and Date Delivered	Other Providers Involved
Carolina Clear	Sumter Stormwater Solutions Planning Meetings	6 business meetings, North Hope Center	All MS4's and Educational Partners



Flood plain map of Shotpouch Creek at Broad Street, with greenway conceptual design, excerpt from "Sumter Connectivity & Greenway Master Plan for Shotpouch Creek"



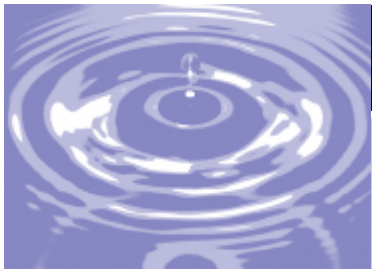
View of wetlands at Swan Lake, photo by Claudia Rainey

2010-2011 has been a busy year with many changes. These changes affect education efforts as well as stormwater management in general. By being adaptable and proactive, Sumter Stormwater Solutions has stepped up to the challenge the past year has delivered and prepared the way for the year ahead.

In 2010, the South Carolina Department of Health and Environmental Control began drafting the new NPDES General Stormwater Permit for Small MS4's (Municipal Separate Storm Sewer Systems). An initial draft was released in November 2010, and a revised draft was issued in March 2011. The new requirements of the draft permit as compared to the previous permit strongly influenced the development of the Year 3 and Year 4 education plans. These changes include an increased focus on commercial audiences and illicit discharge issues, and additional emphasis on evaluation of programs. While the new permit is still in development, Solutions intends to be ahead of the curve and already implementing many of the new requirements by the time the permit is finalized.

In June 2011, the City of Sumter passed a stormwater utility ordinance, ensuring the resources needed for a successful stormwater management program. This follows Sumter County's adoption of a stormwater utility ordinance in 2010. Both City and County currently charge a flat rate stormwater fee for commercial properties, but this will soon be converted to a rate based on impervious area. Commercial properties in Sumter County that implement best management practices to improve infiltration of stormwater will be able to apply for credits to reduce their utility fee. In the upcoming year, Sumter Stormwater Solutions will offer a series of workshops for business owners, developers, and engineers on how to apply for stormwater utility credits, what practices count towards the credits, and how to install those practices correctly. By offering a financial incentive to reduce impervious area and implement BMPs to increase infiltration, Sumter County hopes to both reduce the quantity of stormwater runoff from commercial properties as well as improve the water quality of the runoff entering local streams.

Conclusions



Conclusions for Year 3 (10-11)

Changes are also coming to the way citizens view stormwater infrastructures in their communities. With the creation of the Shot Pouch Creek Greenway Master Plan, efforts have already begun to educate Sumter on the use of Low Impact Development principles. LID improves not only the function of stormwater infrastructure, but also its aesthetics, making it an asset rather than an eyesore. To increase the use of LID in the Sumter area, a multi-audience approach must be used. Homeowners and the general public need to understand the value of greenways, rain gardens, bioswales and buffers to the environment and the community. Engineers and developers must learn how to properly implement these tools. Finally, City and County government must recognize the value of these tools so they can adopt ordinances that encourage their usage.

Increasing the adoption of a greener mindset for Sumter will require greater community engagement in pollution prevention. Partnerships are the backbone of public involvement efforts. In Year 4, Solutions plans to strengthen its relationships with individual neighborhoods and homeowner associations in Sumter. Working through the Sherriff department's neighborhood coordinator, efforts are being made to gain participation from neighborhoods on litter cleanups, storm drain marking, and other volunteer projects. The first step will be to speak at as many neighborhood meetings as possible, to gain a personal relationship with Sumter citizens. By demonstrating how water pollution affects individuals directly, we hope to change citizens to a more caring and participatory attitude when it comes to local water resources.

Over the past year, both City of Sumter and Sumter County have strengthened their stormwater management programs. With greater knowledge of the pollution issues facing local watersheds, Sumter Stormwater Solutions can prioritize pollutants and audiences much more effectively. In Year 3, public education and involvement efforts have become more specific in focus, and in Year 4, even more attention will be paid to targeting businesses, professionals, and homeowners, as well as illicit discharge and dumping activities, which were found to be the greatest sources of water pollution at present. Sumter Stormwater Solutions has a challenging year ahead of it, but with a positive attitude and a solid foundation to build from, we look forward to another productive year!



Rain Garden at Sumter Public Works



Conclusions



Appendix A - Education Plan of Work

Each year, an Education Plan of Work is drafted to serve as an outline for initiatives over the upcoming year. Lessons learned in year 1 were applied in creating the year 2 plan, with successful programs being continued, and new programs being developed to meet additional programming needs. As a living document, the plan is constantly updated as programs are completed and new opportunities and ideas develop. Appendix A shows the Year 1 Education Plan updated to the end of the permit year, with delivery dates, participation data, and assessment information. Appendix B shows the new education plan developed for the 2009-2010 reporting year. The latest version of the Education plan is made available to the public for download at http://www.clemson.edu/public/carolinaclear/consortiums/sumter_home/about.html.

Table 3. Year 3 Education Plan of Work, Page 1

ADAPTIVE Stormwater Education Plan		Year 3 (2010-2011) Sumter Stormwater Solutions										Living Document (last updated 11/9/2011)					
Lead Service Provider	Activity	Target Geography/ Land Use	Target Pollutant(s)										Participation by other Service Providers	Location and Date Delivered	Number Impacted/ Reached	Assessment Type	
			General Stormwater Awareness	Bacteria	Toxic Contaminants, petroleum products, pesticides, heavy metals	Sediment	Nutrients	Debris	Temperature	Other							
General Public																	
Carolina Clear	Television Commercial on Time Warner Cable	Statewide	x	x	x	x									August 2011, Time Warner Cable (570 total spots)	26,297 Sumter households	
Carolina Clear	Stormwater Message on Time Warner Cable local weather crawl														August 2011, Time Warner Cable (252 total spots)	26,297 Sumter households	
Carolina Clear	Radio Public Service Announcements	Sumter County	x	x	x	x	x								Sumter & Florence Counties, Fall 2010, Sept. 2011	200,700	
Carolina Clear	Interview on "Your Day"	Statewide	x										Your Day radio program	12/09/10, SC ETV	30000		
Carolina Clear	Stormwater Billboards	Sumter County	x											July 2011	20,300 estimated daily views		
Clemson Extension	Water Quality articles written for <i>The State</i> newspapers	Midlands	x	x	x	x	x							2 articles, greater Columbia area, including Sumter	Circulation 96737 each article		
Sumter Extension Service	Water Quality articles written for the <i>Sumter Item</i>	Sumter County	x		x	x	x							5 articles, Sumter County & City of Sumter	Circulation 33000 each article		
Carolina Clear	Rain water harvesting article in <i>South Carolina Nurseryman Magazine</i>	Statewide	x										South Carolina Nurseryman Magazine	July 2011, mail distribution	535		
SC Wildlife Magazine	Two articles in SC Wildlife Magazine on rain gardens and rain barrels.	Statewide	x			x	x		x				Carolina Clear	4/26/11	Circulation 47000	None	
Carolina Clear	Sumter Stormwater Solutions Website	Statewide	x	x	x	x	x	x						Ongoing	1142	Number of page views	
Carolina Clear	Midlands Stormwater Consortiums Facebook Page	Midlands	x											Ongoing from Aug. 2011	33 "fans"	Number of fans, feedback	

Continued.....

Appendix A - Education Plan of Work



Appendix A - Education Plan of Work

Table 3. Year 3 Education Plan of Work, Page 2

Lead Service Provider	Activity	Target Geography/ Land Use	Target Pollutant(s)										Participation by other Service Providers	Location and Date Delivered	Number Impacted/ Reached	Assessment Type
			General Stormwater Awareness	Bacteria	Toxic Contaminants	Pesticides, herbicides, petroleum products	Sediment	Nutrients	Debris	Temperature	Other					
General Public																
Carolina Clear	Illicit Discharge Detection & Elimination (IDDE) Website	Statewide	x	x	x	x	x	x						Online, Winter 2011	735	Number of page views
Sumter County	Illicit discharge and illegal dumping brochures distributed during inspections, violations, and events	Sumter County	x		x		x	x						Ongoing from Feb. 2011	Not assessed	
Carolina Clear	Display at Sustainable Sumter Earth Day Celebration	Sumter County	x	x	x	x	x	x					City of Sumter, City-County Planning	Swan Lake, 4/30/11	450	
Sumter City-County Planning	Greenway Plan display at Shaw Air Force Base Earth Day	Sumter County	x		x					x			Shaw Air Force Base	Shaw Air Force Base, 4/9/11	100	
Carolina Clear	Displays at Iris Festival	Sumter County	x	x	x	x	x	x					Sumter Master Gardeners	Swan Lake, 5/28/11	100	
Sumter County, Carolina Clear	Displays at Sumter County Fair	Sumter County	x	x	x	x	x	x						Sumter County Fairgrounds 9/27/11-10/2/11	10,000	
Sumter County	Earth Day Cleanup: Hatchet Camp Branch	Sumter County	x		x					x			Sumter County, City of Sumter	DeLaine Community Center, 4/9/11	12	lbs. trash collected
Sumter County Public Works	Manchester State Forest Cleanup	Sumter County	x		x					x			Shaw Air Force Base	Manchester State Forest 5/7/11	32	lbs. trash collected
Carolina Clear	Riversweep Stream Cleanup	Sumter County	x		x					x			Sumter County, City of Sumter	Sumter Mall, 9/17/11	16	lbs. trash collected
Youth / K-12 / Teachers																
Carolina Clear	Enviroscape Presentations for 4-H club	Sumter County	x	x	x	x	x	x	x				Clemson 4-H	Red Barn Pony Park, 3/4/11	7	
Carolina Clear	Soil and Water Conservation Merit Badge Workshop	Sumter County	x	x	x	x	x	x	x				Pee Dee Boy Scout Council	Sumter Fairgrounds, 3/12/11-3/13/11	16	
Carolina Clear	Presentation at Cherryvale Earth Day Festival	Sumter County	x	x	x	x	x	x						Cherryvale Elementary, 4/26/11	280	
Carolina Clear	Watershed Interactive Whiteboard Lessons	Sumter County	x		x									Available from January 2011, online	5 teachers, 420 students	Teacher survey
Elected and Appointed Officials and High-Level Staff																
Sumter County	Presentation at City Council budget workshop on stormwater permit requirements.	City of Sumter	x											Council Chambers, 3/8/2011	10	
City of Sumter	City Council public hearing for creating a Stormwater Utility ordinance	City of Sumter	x											Council Chambers, 6/7/11	25	
Sumter City-County Planning	"Sumter Connectivity & Greenways Master Plan for Shotpouch Creek" report produced and presented	Sumter County	x		x					x			City of Sumter	Online distribution and 3 presentations	90	

Continued.....

Appendix A - Education Plan of Work



Appendix A - Education Plan of Work

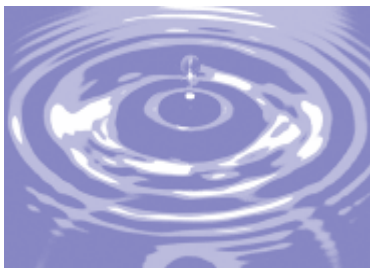
Table 3. Year 3 Education Plan of Work, Page 3

Lead Service Provider	Activity	Target Geography/ Land Use	Target Pollutant(s)										Participation by other Service Providers	Location and Date Delivered	Number Impacted/ Reached	Assessment Type	
			General Stormwater Awareness	Bacteria	Toxic Contaminants	Pesticides	petroleum products	Sediment	Nutrients	Debris	Temperature	Other					
Professionals: Contractors, Engineers, Developers, Landscape Architects																	
Clemson Extension	Pond Management Workshops	Sumter County	x		x		x								Bethel UMC, Oswego, 11/11/10 & 5/16/11	68	
Center for Watershed Excellence	SC Water Resources Conference, including speakers from throughout the State, booth, presentation and posters by Carolina Clear	Statewide	x	x	x	x	x	x	x	x				Many	Columbia Metropolitan Convention Center, 10/13/10, 10/14/10	350	Post Surveys for each session
Carolina Clear	Presentation on Carolina Yards & Neighborhoods program as part of University of Florida webinar.	National	x	x			x						University of Florida	Internet, 1/18/11	84	Pre- and post-surveys	
Sumter City-County Planning	Turkey Creek Work Session for Erosion Control and Watershed Projects	Sumter County	x				x						Sumter County, City of Sumter, FEMA, NRCS, Army Corps of Engineers	Sumter City Centre, 10/18/2010	19		

Homeowners & Homeowner Associations																
Sumter Extension Service	Master Gardener Training Class	Sumter County	x		x	x	x						Sumter Master Gardeners	Jan-May 2011, Sumter Extension Office	13	
Sumter County	Rain Garden Installation at Patriot Park	Sumter County	x		x								Carolina Clear, Sumter Master Gardeners	Patriot Park, 8/12/11, 8/16/11	30	
Carolina Clear	Rain Garden Workshop	Sumter County	x	x	x	x	x	x	x				Sumter County, Sumter City-County Planning	Swan Lake Visitor Center, 9/23/11	17	
Carolina Clear	Carolina Yards and Neighborhoods Training for Master Gardeners	Sumter County	x		x	x	x		x				Sumter Master Gardeners	Sumter Extension Office, 4/11/11	14	
Sumter Extension Service	Presentations to civic organizations on stormwater topics related to gardening	Sumter County	x		x		x							4 presentations throughout the year	120	
Carolina Clear	Rain Barrel Workshop	Sumter County	x	x	x	x	x	x	x				Sumter County	Sumter Co. Public Works, 05/14/11	12	
Carolina Clear	Storm Drain Marking program (10 volunteers, 150 homes, 39 drains)	Sumter County	x	x	x	x	x	x					Girl Scout Troop 5111	Trailwood Neighborhood, 2/22/11	450	
Sumter County	Assisted homeowners in disconnecting illegal sanitary sewer discharge from storm sewer system	Sumter County	x	x										Ongoing	3 residences	

Commercial Citizens (Landscapers and Agriculture Sector)																
Carolina Clear	Presentation for Chamber of Commerce Environmental Committee	Sumter County	x	x	x	x	x	x	x					Chamber Building, 9/22/11	7	
Carolina Clear	IDDE brochures mailed to high risk businesses: Auto Repair	Sumter County	x		x									Feb 2011	103	
Sumter County, City of Sumter	Leadership Sumter Environmental Day	Sumter County	x	x	x	x	x	x	x				Carolina Clear	Sumter Co. Public Works, 4/13/11	14	

Appendix A - Education Plan of Work



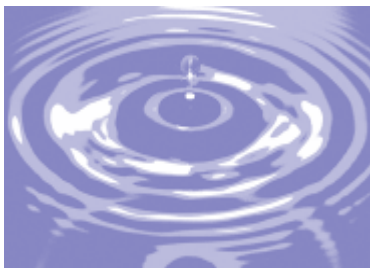
Appendix A - Education Plan of Work

Table 4. Year 4 Education Plan of Work (Draft), Page 1

ADAPTIVE Stormwater Education Plan		Year 4 (2011-2012) Sumter Stormwater Solutions										Living Document (last updated 11/9/2011)					
Lead Service Provider	Activity	Target Geography/ Land Use	Target Pollutant(s)										Participation by other Service Providers	Location and Date Delivered	Number Impacted/ Reached	Assessment Type	
			General Stormwater Awareness	Bacteria	Toxic Contaminants	petroleum products, pesticides, heavy metals	Sediment	Nutrients	Debris	Temperature	Other						
General Public																	
Carolina Clear	Radio Public Service Announcements	Sumter County	x	x	x		x	x							Florence & Sumter Counties		
Carolina Clear	Stormwater Billboards	Sumter County	x												Ongoing		
Sumter Extension Service	Water Quality articles written for the Sumter <i>Item</i> and <i>The State</i> newspapers	Sumter County	x		x	x	x								Ongoing		
Carolina Clear	Sumter Stormwater Solutions Website	Statewide	x	x	x	x	x	x							Ongoing		Number of page views
Carolina Clear	IDDE Website	Sumter County	x	x	x		x								Ongoing		Number of page views
Carolina Clear, Sumter County, City of Sumter	Illicit discharge and illegal dumping brochures distributed during inspections, violations, and events	Sumter County	x		x		x	x							Ongoing		Reduction in violations
City of Sumter	Utility bill inserts with stormwater awareness message	City of Sumter	x														
Sumter County	"No Dumping" signage placed along county roads in problem areas	Sumter County	x														Reduction in dumping
Sumter County	Stormwater reporting hotline, and materials promoting this	Sumter County	x	x	x	x	x	x					Carolina Clear				Number of calls
Carolina Clear, Sumter County, City of Sumter	Storm drain marking volunteer program with accompanying door hanger	Sumter County	x	x	x	x	x	x					Volunteer groups	Ongoing			Number of drains marked
Carolina Clear	Pet waste brochures distributed at veterinarian offices, animal control, ASPCA, pet supply stores	Sumter County	x	x				x						Ongoing			
Carolina Clear	Promote greenways at public events	Sumter County	x										x	Sumter City-County Planning			
Carolina Clear	Display at Sustainable Sumter Earth Day Celebration	Sumter County	x	x	x	x	x	x					City of Sumter	April 2012			
Carolina Clear	Displays at Iris Festival	Sumter County	x	x	x	x	x	x					Sumter Master Gardeners	May 2012			
Sumter County Public Works	Displays at Sumter County Fair	Sumter County	x	x	x	x	x	x					Carolina Clear	September 2012			

Continued.....

Appendix A - Education Plan of Work



Appendix A - Education Plan of Work

Table 4. Year 4 Education Plan of Work (Draft), Page 2

Lead Service Provider	Activity	Target Geography/ Land Use	Target Pollutant(s)										Participation by other Service Providers	Location and Date Delivered	Number Impacted/ Reached	Assessment Type	
			General Stormwater Awareness	Bacteria	Toxic Contaminants: petroleum products, pesticides, heavy metals	Sediment	Nutrients	Debris	Temperature	Other							
General Public																	
City of Sumter, Sumter Extension Service	Sumter Neighborhood Cleanups	City of Sumter	x		x						x						lbs. trash collected
Santee Riverkeeper	Earth Day Cleanup	Sumter County	x		x						x		Sumter County, City of Sumter	April 2012			lbs. trash collected
Carolina Clear	Riversweep Stream Cleanup	Sumter County	x		x						x		Sumter County, City of Sumter	September 2012			lbs. trash collected
Sumter County Public Works	Manchester State Forest Cleanup	Sumter County	x		x						x		Shaw Air Force Base	March 2012			lbs. trash collected
Youth / K-12 / Teachers																	
Carolina Clear, Conservation District	Enviroscape Presentations for Schools	Sumter County	x	x	x	x	x	x	x	x							Quiz
Carolina Clear	Enviroscape Presentations for 4-H clubs, Girl Scouts, Boy Scouts, and other youth groups	Sumter County	x	x	x	x	x	x	x	x							
Carolina Clear	Presentation at Cherryvale Earth Day Festival	Sumter County	x	x	x	x	x	x						April 2012, Cherryvale Elementary			
Carolina Clear	Rain Barrel Project through Green Steps Schools Program	Sumter County	x										Sonoco Recycling	Cherryvale Elementary			Feedback
Carolina Clear	Watershed Interactive Whiteboard Lessons	Sumter County	x		x									Ongoing			Teacher survey
Elected and Appointed Officials and High-Level Staff																	
Sumter County	Presentations for County/City Council on pertinent stormwater-related topics	Sumter County	x										Carolina Clear				Pre- and Post-Survey
Sumter City-County Planning	Educate City/County Council on proposed landscaping ordinance	Sumter County	x		x	x	x			x			Carolina Clear				
Carolina Clear	Low Impact Development presentation for City and County Council	Sumter County	x		x	x	x			x			Sumter City-County Planning				
Professionals: Contractors, Engineers, Developers, Landscape Architects																	
Sumter Conservation District	Stormwater Basics Workshop: Erosion control through grass establishment	Sumter County	x							x	x						Post-survey
Clemson Extension	Pond Management Workshop	Sumter County	x		x						x						
Sumter County	Develop guidelines for Stormwater Utility Credits for properties with BMPs and promote this option	Sumter County	x							x	x		Carolina Clear				Number of properties qualifying for credits
Sumter County	Stormwater BMP workshop on techniques qualifying for utility credits	Sumter County	x	x	x	x	x	x	x				Carolina Clear				Pre- and post-surveys
Carolina Clear	Promote examples of LID design through web and printed materials	Sumter County	x							x							

Continued.....

Appendix A - Education Plan of Work

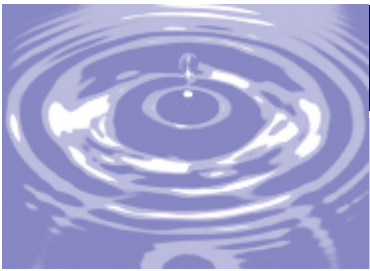


Appendix A - Education Plan of Work

Table 4. Year 4 Education Plan of Work (Draft), Page 3

Lead Service Provider	Activity	Target Geography/ Land Use	Target Pollutant(s)										Participation by other Service Providers	Location and Date Delivered	Number Impacted/ Reached	Assessment Type
			General Stormwater Awareness	Bacteria	Toxic Contaminants, petroleum products, pesticides, heavy metals	Sediment	Nutrients	Debris	Temperature	Other						
Homeowners & Homeowner Associations																
Sumter Extension Service	Master Gardener Training	Sumter County	x		x	x	x						Sumter Master Gardeners	Spring 2012, North Hope Center		
Carolina Clear	Rain Garden maintenance volunteer projects	Sumter County	x										Sumter Master Gardeners			
Sumter County, Carolina Clear	Educational signage for rain garden and stormwater wetlands at Patriot Park	Sumter County	x	x	x	x	x		x				Sumter City-County Planning	Patriot Park		
Sumter Extension Service	Carolina Yards and Neighborhoods workshops	Sumter County	x		x	x	x		x							
Carolina Clear	Rain Barrel Workshop	Sumter County	x	x	x	x	x	x	x							Post-Survey
Carolina Clear	Storm Drain Marking	Sumter County	x		x				x					Ongoing		
Sumter City-County Planning	"Sumter Connectivity & Greenways Master Plan for Shotpouch Creek" presentations	Sumter County	x		x						x					
Sumter Extension Service	Presentations to civic organizations on stormwater topics related to gardening	Sumter County	x		x			x								
Carolina Clear	Presentations to Home Owners Associations	Sumter County	x	x	x	x	x	x	x							Feedback
Commercial Citizens																
Carolina Clear	Presentation for Chamber of Commerce	Sumter County	x													
Carolina Clear	IDDE brochures mailed to high risk businesses	Sumter County	x		x											Follow-up survey
Sumter County	Seminar for businesses and industries on stormwater utility credits	Sumter County	x				x	x								
Carolina Clear, Sumter County	Education on grease disposal for food vendors at Sumter County Fair	Sumter County	x		x									September 2012		Reduction in grease dumping
Carolina Clear	Brochures for new businesses distributed through Business License Bureau	Sumter County	x		x			x								
Sumter County, City of Sumter	Leadership Sumter Environmental Day	Sumter County	x	x	x	x	x	x	x				Carolina Clear	April 2012		

Appendix A - Education Plan of Work



Appendix B - Example Newspaper Article



What happens on a cruise...

*Amanda McNulty, County Extension Agent
Published in The Item
Feb. 15, 2011*

I've never been on a cruise and don't think I'll take one. Whenever the topic of cruising comes up, people say, "What happens on the cruise, stays on the cruise." As you kind readers of my column know, I've disclosed just about everything about me but my underwear size so if I had any amorous encounters, (although given the size of my underwear that's highly unlikely), it would probably be in print one Tuesday morning not long thereafter.

What happens in our yards, unfortunately, is a different matter. Sumter is blessed with ponds and lakes all over town that are tended by loving hands. Well-manicured lawns edge most of these waters; certainly an improvement over bare banks. But when we get rains like those of recent weeks, chemicals, dog dung -- or even worse, goose poop, silt and more all flood over that closely mown grass and right into those now not so pristine waters.

Think about it. What do people do on mowed grass -- they roll balls -- croquet or golf or bocce -- because grass is smooth and offers little resistance. What we need to get going is some vegetation with some oomph.

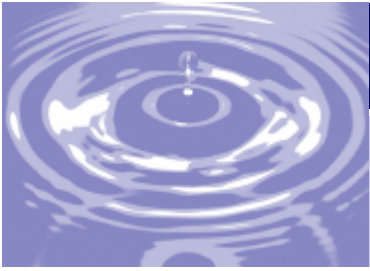
My landscape design professor at Clemson once talked about "view, step dichotomy," and half the class put down their mechanical pencils and took a nap. So I'm not going to lecture you about "riparian buffers." But taller grasses that you mow just once or twice a year can effectively slow down those torrents of water. The water can then slowly seep through the soil where those remarkable microscopic creatures scarf down all the nasty (to us, delicious to them) junk that is riding in that rainfall. Your pond stays clean and clear so grandchildren can wade or swim and you can eat fish without worries of getting nasty diseases.

Once you've got this accomplished, you can run out and buy a bottle of red fingernail polish. "Sorene," my grandparents' place (named for their first two granddaughters) in lower Richland County where the pond water was so pure that moonshiners delighted in its presence, had bottles of that lacquer in every bedroom. When we went there as children, the car would barely have stopped before we tore out, flinging shoes and socks behind, and all of us, male or female, painted our toenails. Then we ran down to the dock and dangled our feet in the water. Oh, oh -- it was delicious torture when the minnows nibbled our toes, thinking that red polish was some delicious snack. (If you had any sense, you'd remember to take it off before football practice -- my brother once had to do some fast explaining.)

If you'd like some help making a change in your landscape, give us a call at the Clemson Extension office (773-5561). Clemson's Carolina Clear's website (www.clemson.edu/public/carolinaclear) has a toolkit to help with smart water design, too. Mary Nevins (mnevin@clemson.edu) is our local coordinator. If you've got a neighborhood association or even just one neighbor who's interested, we'll come to your property and talk it over with you. I just went through my daughters' drawers and have a choice of polish colors to complete the package. Scorching Scarlett or Cherries in the Snow?

Appendix B - Example Newspaper Article

2010-2011 Annual Report
Sumter Stormwater Solutions



Appendix B - Example Newspaper Article

We all live downstream

Amanda McNulty, County Extension Agent

Published in The State Newspaper

Feb. 03, 2011

Stormwater runoff is a hot issue. For many years, construction sites have included detention basins. These “dry ponds” are designed to capture water that runs off the roofs of buildings, across parking lots, or closely mowed lawns and slowly release it into the drainage system. But if you’ve ever been in Five Points in Columbia or anywhere South of Broad in Charleston during a thunder shower, you know what happens when the stormwater system gets overloaded. Now cities and counties are required to test this water and report on what they find. Yuck-o-la, all over!

Besides possibly ruining those new suede shoes, stormwater picks up all sorts of debris. Fertilizer, soil, and pesticides, when in the wrong place, become pollutants. Almost all of us spend money, and a fair amount at that, for chemicals designed to make our yards and gardens more productive and less weedy. Well-meaning people far too often put out products that add to stormwater pollution. Weed and feed formulas are prime examples.

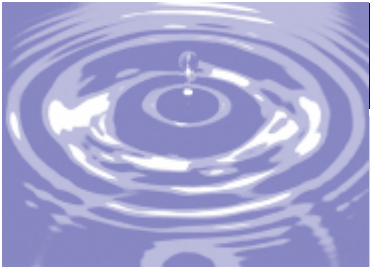
We’ve had some blessedly warmer days and the weeds that germinated back in October – henbit, mustard, and chickweed to name a few — are getting big. They look mighty green against that brown centipede lawn. Big box stores are promoting weed and feed products that promise a lush, weed-free lawn — even though those formulas are designed for northern, cool-season grasses.

In the South, informed lawn lovers apply pre-emergent herbicides only, no fertilizer, when the redbuds and forsythia are in full bloom. They see good results in August when the summer weeds are reaching full glory in the yard next door. But many lawn lovers see the winter weeds growing now and think those combination products will zap those intruders and fertilize their lawns. Sadly, pre-emergent herbicides have no effect what so ever against weeds that are up and growing. And the expensive fertilizer in that combo will simply wash away in stormwater as the roots of dormant warm-season grasses can’t absorb those nutrients.

Continued...

Appendix B - Example Newspaper Article

2010-2011 Annual Report
Sumter Stormwater Solutions



Appendix B - Example Newspaper Article

“We all live downstream” - Continued...

How about doing our beautiful streams, rivers and lakes a favor? Clemson may be in the far upper corner of the state but fine researchers there are concerned about what is flowing down stream to us flatlanders. The HGIC website (www.clemson.edu/extension/hgic) has maintenance calendar factsheets for any kind of grass you'd care to grow. Each gives you a schedule of when to fertilize, when to apply herbicides, and when to look for insects and diseases. A constant across the spectrum of grass varieties is the recommendation to apply no fertilizer before April 15 or after the end of August. You can call from 9 a.m. to 1 p.m. weekdays, and ask specific questions.

Carolina Clear is another Clemson-supported program that gives citizens and decision-makers information needed to keep our waters clean and healthy for fishing, swimming, canoeing or just lounging in an inner tube (some of us can even float without extra buoyancy devices). Their site has information on constructing rain barrels and rain gardens, how to use leaves and grass clippings as organic fertilizer, and even the importance of trailing behind Fido with a plastic bag. Visit www.clemson.edu/public/carolinaclear and help ensure that the only pollution at the lake this summer is from plump ladies from the country floating in their (thank the Lord) one-piece bathing suits.

Source: <http://www.thestate.com/2011/02/03/1676652/we-all-live-downstream.html#ixzz1D0RdJmm9>



Appendix C - Partner Websites

Carolina Clear Websites

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

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

Carolina Clear on Facebook - <http://www.facebook.com/carolinaclear/141393752563116>

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

Municipalities

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

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

Education Partners

BP Barber - <http://www.bpbarber.com/>

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

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

Santee Riverkeeper - <http://santeeiverkeeper.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>

Appendix C - Partner Websites

