



# Annual Report of Activities

YEAR 4 / SEPTEMBER 2011 - AUGUST 2012

OCTOBER 2012



The 2011-2012 reporting year represents the fourth year in the Florence Darlington Stormwater Consortium's history of providing stormwater education and involvement activities throughout Florence and Darlington Counties in an effort to enhance water resource protection and stewardship. The Consortium continues to seek additional partners which increases the opportunities to reach local citizens. This year saw the addition of the Natural Resources Conservation Service (NRCS).

As is reflected in the quotation to the right from Darlington County, stormwater education is a difficult task. It has become apparent through feedback during programs and activities, that many people are unaware of the problems associated with stormwater runoff. The construction of storm drains and ditches to alleviate flooding makes stormwater a somewhat invisible problem. Demonstrations with tools such as the EnviroScape® Watershed/Nonpoint Source Model help to provide a visual example of how pollutants can be transported to local waterways during rain events.

The Pee Dee Backyard Landscape Series has become a recurring Consortium program. The Series is based on the Carolina Yards & Neighborhoods program which is designed to assist South Carolina homeowners in conserving water in the landscape and in making positive changes in the environmental quality of their yards, neighborhoods, and surrounding waterways. Since numerous landscaping practices can have a negative impact on water quality, the Series is a good venue for providing programming that is of interest to residents while also educating them about ways to reduce their watershed footprint and protect water quality.

Year four also saw the addition of a Total Maximum Daily Load (TMDL) for fecal coliform for Black Creek and tributaries. This brings the total number of TMDLs for waterbodies in Florence and Darlington Counties to four with all four addressing fecal coliform levels which exceed water quality standards. As we move into Year 5, the Consortium will continue to promote the proper disposal of pet waste. A new mascot and slogan have been developed for use in public service announcements and promotional material with the hope that citizens will come to realize that picking up after pets is not just a courtesy, but the healthy and environmentally sound thing to do.



*“Education about, and involvement in, mitigating the effects of stormwater pollution is a daunting and challenging task. Changing people’s attitudes and habits, and raising awareness can only be done through creative means. Darlington County, by its participation in the Florence Darlington Stormwater Consortium, has done just that! Creative avenues have been explored together and implemented to accomplish this.”*

## 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.
- Through a partnership with Keep Florence Beautiful, a demonstration site utilizing three natural resource conservation practices was created in downtown Florence.
- Two rain gardens were installed in Timrod Park. The rain gardens treat overland flow and serve as a public demonstration of this homeowner-scale low impact development practice.
- Sixty-five children from Florence and Darlington Counties participated in the 2012 Earth Day Coloring Contest. Support from the Florence and Darlington Conservation Districts provided monetary prizes for first, second, and third place in each of three age groups.
- Critters in the River, a new workshop focusing on river ecology was established through a partnership with the Environmental Discovery Center and support from the Pee Dee District of the Water Environment Association of SC and Davis & Brown.

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

1. We All Live Downstream! Stormwater Outreach Campaign: **133,265**
2. Internet and Social Media: **26,956**
3. Radio: **190,000**
4. Publications: **445,450**
5. Outreach Materials: **>240**
6. Public Events: **61,090**
7. Presentations: **4,010**
8. Workshops, Summer Camps, Outdoor Tours: **2,726**
9. Community Cleanups: **>249 Volunteers/19 Tons of Litter**
10. Storm Drain Marking: **86 Drains/130 Houses**
11. Installations/Demonstrations: **>50 Volunteers/3 Sites**
12. Council/Committee Meetings: **164**

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The Florence Darlington Stormwater Consortium includes representatives from three regulated Small Municipal Separate Storm Sewer Systems: the City of Florence, Darlington County, and Florence County. Through the Consortium, these representatives work as a single entity to maximize the efficiency of stormwater education and outreach efforts in the Pee Dee region of South Carolina.

## Local SMS4 Consortium Representatives

| SMS4              | Representatives  |
|-------------------|--|
| City of Florence  | Michael Hemingway<br>Forrest Whittington<br>Jerry Dudley |
| Darlington County | Doug Reimold<br>Charles Brooks<br>Julie Ritz             |
| Florence County   | Benjamin Smith<br>Tripp Ward                             |



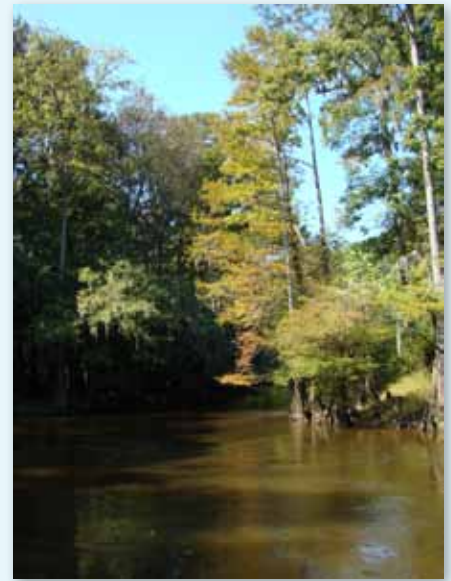
The Florence Darlington Stormwater Consortium partners with a variety of organizations including government agencies, non-profits, and businesses who value water resource protection. These education partners are a tremendous asset which allow the Consortium to reach a larger and more diverse audience than any single entity acting alone.



## MISSION STATEMENT

*To enhance water resource protection and stewardship throughout Florence and Darlington Counties through stormwater education, public involvement and outreach, and by fostering partnerships with local governments, citizens, businesses, schools, and organizations to support healthy waterways.*

- Maximize efficiency of stormwater education efforts in the upper Pee Dee region of South Carolina by using a regional/watershed approach.
- Develop and implement a cohesive education strategy that addresses the range of stormwater pollutants using a prioritized approach that capitalizes on local training resources.
- Foster and expand upon citizen involvement in stormwater management through this effort's education and participation in programs.
- Encourage behavioral change towards improved environmental protection and awareness through stormwater education.
- Facilitate collaboration among local organizations interested in watershed-related education to best meet the educational needs of the local communities and their public.
- Through partnership with MS4s, leverage local education resources and organized outreach programs to meet the NPDES Phase II permit requirements for public stormwater education and outreach to achieve greater water resource protection.
- Actively participate in collaborative stormwater education that can be presented and applied in South Carolina and nationwide.



*“Unless we practice conservation, those who come after us will have to pay the price of misery, degradation, and failure for the progress and prosperity of our day.”*

*~Gifford Pinchot*

# Annual Report of Activities Format

The annual report has a new look this year but follows the same general format as the previous Florence Darlington Stormwater Consortium annual reports and the reports of other regional consortiums coordinated by Clemson’s Carolina Clear program. It is meant to be a comprehensive document that provides a summary of all stormwater related public education and outreach activities carried out by the Consortium in the reporting year which runs from September 1, 2011 through August 31, 2012. Please note that some dates may include previous or future reporting years due to varied reporting time frames.

Information included in the annual report is obtained from an online database. Consortium members and partners have unique logins which allow them to contribute to the database throughout the year as activities are conducted.

The report delineates between two basic activity categories: public education and public involvement. Each activity includes information about the following: lead provider, supporting partner, activity description, date, number of impacts and target audiences. Due to space limitations, target audience have been abbreviated throughout the report and are identified in the table below.

## Target Audience Abbreviations

| Abbreviation | Audience   |
|--------------|--|
| GP           | General Public   |
| HM           | Homeowners   |
| YT           | K-12 Youth and Teachers  |
| T            | Technical (Engineers, Developers, Contractors, Landscape Architects)   |
| EA           | Elected and Appointed Officials  |
| DIS          | Directly-Involved and Supervisory Staff (Stormwater Managers, Maintenance, Facilities, Custodians, Groundskeepers, etc.) |
| P            | Pet Owners   |

*“Children of a culture born in a water-rich environment, we have never really learned how important water is to us. We understand it, but we do not respect it.”*

*~William Ashworth*



**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.

## Downstream Campaign (Cable and Television)

| PROVIDER          | MEDIA TYPE | DATES                     | TOTAL HOUSEHOLDS/<br>IMPACTS | TOTAL # OF<br>PLAYS | COMMENTS  |
|-------------------|------------|---------------------------|------------------------------|---------------------|---|
| Time Warner Cable | Cable      | 4/30/12 - 6/10/12         | 53,665                       | 686                 | Ad space on rr.com and video pre-rolls  |
| Knology.net       | Pre-roll   | 08/01/12*<br>See comments | 40,000                       | N/A                 | Banner ad as a pre-roll to video on rr.com. Will run until 40,00 impacts reached. |



**COMMERCIAL CREDITS:** *This commercial was filmed and edited by Clemson University Video Productions. Special thanks go to Paul Ruszkowski for directing and editing, and to Glenn Spake for filming and photography. The actors in this commercial are for the most part, not professional actors, but demonstrated their passion and dedication to watershed protection through their enthusiasm on film, and their time and efforts are so much appreciated. Special thanks especially goes to Tracy Abeles and her family for playing a large role in the piece and doing the professional reads at the closing of each consortium commercial. Finally, appreciation is expressed to Cal Sawyer for assistance with the script.*

## WE ALL LIVE DOWNSTREAM! STORMWATER OUTREACH CAMPAIGN 2011-2012:

### Social Marketing Test

Social marketing value was tested against a small national test panel. The 30-second commercial rated well for the viewer’s ability to retain the message and relay it back through the evaluation instrument used. Several panelists referenced the “We all live downstream” message in stating why this commercial demonstrated important and meaningful concepts that affect their lives or that of their families and the urgency of the issue at hand.” As for importance to society, urgency of issue and its effect on the panelist or their family, the commercial scored a 3.43 on a 4-point scale (average for social marketing pieces tested is 3.23). Out of a ranking of 5, 4.62 viewers felt that the commercial was “about the audience and what we can do” versus “about somebody else and what they can do.” One panelist states that the commercial is for “Everyone: Its purpose is to make people aware of the consequences of their seemingly harmless actions. You forget that your action/inaction can affect people you have never met.”

### Billboards

Billboards featuring actors from the commercial connected by a river system from the mountains to the coast will be 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.

## Downstream Campaign (Billboards)

| LOCATION                                   | APPROXIMATE DATES | DAILY ESTIMATED VIEWS |
|--|-------------------|-----------------------|
| Darlington, I-20, 0.4 miles east of US 401 | 6/20/11 - current | 18,200                |
| Florence, I-20 Spur east of Beltline Drive | 6/20/11 - current | 21,400                |

**AWARDS:** *The 30-second television spot has won three awards to date:*

- *National Association of County Agricultural Agents 2011 Communications Award - 2nd Place, Video Communications [National Award];*
- *Association for Communication Excellence in Agriculture, Natural Resources, and Life and Human Sciences - Gold Award [International Award];*
- *17th Annual Communicator Awards - Distinction [International Award].*



## Mass Media (Radio)

| LEAD PROVIDER     | SUPPORTING PARTNER    | ACTIVITY   | DATE            | NUMBER OF IMPACTS | TARGET AUDIENCE |
|-------------------|-----------------------|--|-----------------|-------------------|-----------------|
| Clemson Extension | Miller Communications | Interview on <i>Kinard 'N Koffee</i> morning show which airs on 1310 AM and 93.7 FM to speak about the 2012 Pee Dee Backyard Landscape Series.                             | 2/14/12         | 12,000            | GP, HM          |
| Clemson Extension | SC ETV                | Interview on <i>Your Day</i> discussed homeowner scale stormwater management through the use of rain barrels and rain gardens.   | 8/2/12 - 8/2/13 | 30,000            | GP, HM          |
| Clemson Extension | SC ETV                | Recorded segment on stormwater and watershed protection for insertion on <i>Your Day</i> . Outlined actions individuals can take to eliminate and better manage runoff.    | 8/2/12 - 8/2/13 | 30,000            | GP, HM          |
| Clemson Extension | SC ETV                | Interview on <i>Your Day</i> about onsite wastewater treatment system care, maintenance, and how systems may affect local water quality.                                   | 8/2/12 - 8/2/13 | 30,000            | GP, HM          |
| Clemson Extension | SC ETV                | Recorded segment on pet waste disposal and the harmful potential effects of pet waste on water quality for insertion on <i>Your Day</i> .                                  | 8/2/12 - 8/2/13 | 30,000            | GP, P           |
| Clemson Extension | SC ETV                | Recorded segment on phosphorus and harmful effects of excess fertilizer on local waterways, water quality, and water dwelling organisms for insertion on <i>Your Day</i> . | 8/2/12 - 8/2/13 | 30,000            | GP, HM, DIS, T  |
| Clemson Extension | SC ETV                | Recorded segment on the importance of shoreline vegetation to protect water quality, stabilize shorelines, and create habitat for insertion on <i>Your Day</i> .           | 8/2/12 - 8/2/13 | 30,000            | GP, HM          |

**RADIO:** “*Your Day*” is a radio magazine produced as a public service of Clemson University Radio Productions, featuring a wide range of topics of interest to South Carolina residents and visitors alike. Each Monday through Thursday at noon, “*Your Day*” provides programming in the NPR tradition, but with a South Carolina flavor. Recurring programs highlight horticulture, entomology/pesticides, and natural resources.



## Mass Media (Internet)

| LEAD PROVIDER     | SUPPORTING PARTNER | ACTIVITY  | DATE           | NUMBER OF IMPACTS | TARGET AUDIENCE           |
|-------------------|--------------------|---|----------------|-------------------|---------------------------|
| Clemson Extension |                    | Carolina Clear website  | 9/1/11-8/31/12 | 26,030 page views | GP, HM, YT, T, EA, DIS, P |
| Clemson Extension |                    | Florence Darlington Stormwater Consortium website   | 9/1/11-8/31/12 | 592 page views    | GP, HM, YT, T, EA, DIS, P |
| Darlington County |                    | Darlington County Stormwater Management webpage   | 9/1/11-8/31/12 | 299 page views    | GP, HM, YT, T, EA, DIS, P |
| Clemson Extension |                    | Florence Darlington Stormwater Consortium Facebook Page. The page received 20 new "likes" from the previous reporting year. | 9/1/11-8/31/12 | 35 "likes"        | GP, HM, YT, T, EA, DIS, P |



## Publications

### NEWSPAPER

| LEAD PROVIDER     | SUPPORTING PARTNER | ACTIVITY   | DATE    | NUMBER OF IMPACTS | TARGET AUDIENCE |
|-------------------|--------------------|--|---------|-------------------|-----------------|
| Clemson Extension |                    | T. Young's personal column "Wash the car on the grass, make nature happy" in the Morning News and scnow.com discussed the benefits of washing vehicles on pervious surface.  | 9/4/11  | 33,000            | GP, HM          |
| Clemson Extension |                    | T. Young's personal column "Greening Downtown Florence" alerted readers to a demonstration project in downtown Florence that utilized Permeable Interlocking Concrete Pavers(PICP). The column also discussed the benefits associated with PICP. | 10/2/11 | 33,000            | GP, HM, T, DIS  |



**MORNING NEWS** T. Young authors a personal column which appears in the Pee Dee Living Section of the Morning News and scnow.com on the first Sunday of each month. The Morning News has featured several Consortium activities and events. The photo to the left was taken by reporter Elizabeth Lamb and depicts an interactive demonstration about stormwater pollution with students from Moore Intermediate School's Environmental Club.

|                   |                   |  |          |        |        |
|-------------------|-------------------|--|----------|--------|--------|
| Clemson Extension |                   | T. Young's personal column "An alien in my backyard" explained the characteristics of a non-native plant and encouraged readers to choose native plants whenever possible.   | 11/6/11  | 33,000 | GP, HM |
| Morning News      | Clemson Extension | Elizabeth Lamb with the Morning News wrote an article and recorded a video that aired on the 6 PM news that highlighted the environmentally friendly activities at Moore Intermediate School. The published photograph and video showed the Environmental Club participating in an EnviroScape® demonstration. | 11/17/11 | 33,000 | GP, YT |

## Publications

### NEWSPAPER

| LEAD PROVIDER     | SUPPORTING PARTNER | ACTIVITY   | DATE    | NUMBER OF IMPACTS | TARGET AUDIENCE |
|-------------------|--------------------|--|---------|-------------------|-----------------|
| Clemson Extension |                    | The importance of recycling, including the removal of toxic substances from the waste stream was discussed in T. Young's personal column "Recycling can become habit when learned in youth".           | 12/4/11 | 33,000            | GP, HM          |
| Morning News      | Kalmia Gardens     | Journalist John D. Russell wrote an article about the storm drain marking at Coker College campus. A video clip also aired on the 6 PM news on WBTW.   | 1/25/12 | 33,000            | GP              |
| Clemson Extension |                    | "Don't fertilize yet" column by T. Young capitalized on the unseasonably warm temperatures to promote the 2012 Pee Dee Backyard Landscape Series being held February 18, May 19, and June 23.          | 2/5/12  | 33,000            | GP, HM          |
| Clemson Extension | Morning News       | Gavin Jackson wrote an article "State report on Black Creek pollution doesn't thrill environmentalists" which appeared on the front page. The article focused on the TMDL development for Black Creek. | 2/20/12 | 33,000            | GP              |



Credit: MORNING NEWS/JOHN D. RUSSELL

**MORNING NEWS** *Morning News Journalist John D. Russell wrote an article about storm drain marking at Coker College which was organized by Dan Hill of Kalmia Gardens. Storm drain markers and installation supplies were provided by the Florence Darlington Stormwater Consortium. The photo caption read: Coker College Science Club member Nicole Lamparello, left, and Jaclyn Wessinger clean a place to put a drain marker as part of an effort to raise awareness for stormwater pollution near the campus of Coker College in Hartsville, on Wednesday, January 25, 2012.*

## Publications

### NEWSPAPER

| LEAD PROVIDER     | SUPPORTING PARTNER | ACTIVITY  | DATE   | NUMBER OF IMPACTS | TARGET AUDIENCE |
|-------------------|--------------------|---|--------|-------------------|-----------------|
| Clemson Extension |                    | T. Young's column "Northern Naivety" discussed the natural resource conservation practices utilized in the Florence Cultural Garden including the use of permeable pavers and rainwater harvesting.   | 4/1/12 | 33,000            | GP, HM          |
| Clemson Extension |                    | T. Young's column "Be wise when you fertilize" told about the importance of applying the proper amount and type of fertilizer for the health of the lawn and local waterways.   | 5/6/12 | 33,000            | GP, HM          |
| Clemson Extension |                    | T. Young's column "Development Inspiring in 'Grey to Green' Initiative" told readers about green development and sustainable stormwater management practices in Portland, Oregon as a seque to a bioretention project in Timrod Park in Florence. | 6/3/12 | 33,000            | GP, HM          |
| Clemson Extension |                    | T. Young used examples from her trip to the West Coast to illustrate the value placed on natural resources.   | 7/1/12 | 33,000            | GP, HM, P       |
| Clemson Extension |                    | T. Young's column "Summer Storms and Water Quality" encouraged readers to periodically check storm drains for debris, especially after heavy storms.  | 8/5/12 | 33,000            | GP, HM          |

## Publications

### NEWSLETTER

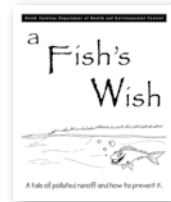
| LEAD PROVIDER     | SUPPORTING PARTNER | ACTIVITY   | DATE   | NUMBER OF IMPACTS | TARGET AUDIENCE         |
|-------------------|--------------------|--|--------|-------------------|-------------------------|
| Clemson Extension | US EPA             | EPA Watershed News included feature on Carolina Clear and the regional stormwater education and involvement partnerships underway in SC. | 2/8/12 | 16,450            | EPA Listserv Recipients |

## Outreach Materials

### BROCHURES, POSTCARDS, COLORING PAGES

| LEAD PROVIDER     | SUPPORTING PARTNER | ACTIVITY   | DATE           | NUMBER OF IMPACTS | TARGET AUDIENCE |
|-------------------|--------------------|--|----------------|-------------------|-----------------|
| Darlington County | SC DHEC            | "A Fish's Wish" activity book is given to children who come with their parents to the Planning Department. | 9/1/11-8/31/12 | 80                | GP, YT          |

The images on the right are taken from the SC DHEC publication "A Fish's Wish". This short activity book helps young learners find out about runoff pollution from a fish's point of view. Staff from Darlington County Planning provide the activity book to parents accompanied by children and encourage them to read it together.



|                   |         |   |                |    |        |
|-------------------|---------|---|----------------|----|--------|
| Darlington County | SC DHEC | "The Facts About Groundwater" fact sheet is given to children who come with their parents to the Planning Department.   | 9/1/11-8/31/12 | 80 | GP, YT |
| Darlington County | SC DHEC | The "Environmental Outreach Activity Book" is given to children who come with their parents to the Planning Department. | 9/1/11-8/31/12 | 80 | GP, YT |

Carolina Clear added two new topics to its stormwater postcard series in the Spring of 2012; pressure washing and FOG management. Previously developed topics include: litter and the environment, stormwater awareness, rain gardens, rain barrels, pet waste, and septic systems. These postcards are available to citizens at the Florence and Darlington County Planning Department offices and the Environmental Discovery Center at Lynches River County Park. They are also distributed at various events and workshops along with several other brochures, flyers, and give-a-way items such as compressed sponges.





## Public Events

### FAIRS, FESTIVALS, AND CONFERENCES

| LEAD PROVIDER                   | SUPPORTING PARTNER           | ACTIVITY   | DATE             | NUMBER OF IMPACTS | TARGET AUDIENCE          |
|---------------------------------|------------------------------|--|------------------|-------------------|--------------------------|
| Clemson Extension               | SC Department of Agriculture | T. Young gave a seminar about the Carolina Yards & Neighborhoods program at the Fall Plant and Flower Show.  | 9/30/11          | 3                 | HM                       |
| Environmental Discovery Center  | Clemson Extension            | The Consortium set up a table at River Jamboree where children could make a "Don't Be A Litterbug" bag.  | 10/1/11          | 65                | YT                       |
| Clemson Extension               |                              | A functioning rainwater harvesting model was placed on exhibit at the Eastern Carolina Agricultural Fair along with various outreach media.                            | 10/5/11-10/15/11 | 60,000            | GP, HM, YT               |
| Keep Florence Beautiful         | Clemson Extension            | The "Don't Be A Litterbug" craft was available to children at the Pecan Festival.  | 11/5/11          | 45                | YT                       |
| Kalmia Gardens                  | Clemson Extension            | Kalmia Gardens participated in the Hartsville Community Market and included a display on several stormwater related topics.  | 3/3/12           | 100               | GP, HM, YT, P            |
| Clemson Extension               |                              | A functioning rainwater harvesting model along with information about Carolina Yards & Neighborhoods was displayed at the 13th Annual Pee Dee Home & Garden Workshop . | 3/10/12          | 106               | GP, HM                   |
| Clemson Extension               | SC Master Gardener Program   | A booth on the Carolina Yards & Neighborhoods Program was displayed at the statewide Master Gardener Conference.   | 3/16/12          | 125               | GP, HM, Extension Agents |
| Clemson Extension               | Kalmia Gardens               | Darlington County 4-H participated in the Earth Day event at Kalmia Gardens. Students learned the importance of keeping water clean and safe through litter control.   | 4/10/12          | 85                | YT                       |
| Kalmia Gardens                  | Clemson Extension            | D. Hill attended an Earth Day event at Sumter Elementary where he distributed Carolina Clear postcards.  | 4/20/12          | 150               | YT                       |
| All Saints Episcopal Day School | Clemson Extension            | T. Young used the EnviroScope® to talk to the children about how they can keep water clean and safe as part of the school's Farm Day.                                  | 4/20/12          | 346               | YT                       |

## Public Events

### FAIRS, FESTIVALS, AND CONFERENCES

| LEAD PROVIDER     | SUPPORTING PARTNER | ACTIVITY   | DATE    | NUMBER OF IMPACTS | TARGET AUDIENCE |
|-------------------|--------------------|--|---------|-------------------|-----------------|
| Clemson Extension |                    | T. Young set up a booth at the Rural Heritage Festival at the Pee Dee Research and Education Center. The booth focused on the Carolina Yards & Neighborhoods program which assists homeowners in using environmentally friendly landscaping practices. | 4/21/12 | 65                | HM, GP          |

*Carolina Yards & Neighborhoods (CYN) was designed to assist and guide South Carolina homeowners in conserving water in the landscape and in making positive changes in the environmental quality of their yards, neighborhoods, and surrounding waterways by implementing the principles of environmental landscape management. The image to the left below is of the CYN banner, while the other two images are the front and back side of the Recognition Items flyer which directs those already certified to Clemson's Public Service Activities Shopping Mall where CYN recognition items can be purchased. The recognition items are purposed to create a "neighbors educating neighbors" approach and appeal to the new cultural norm of environmentally responsible home landscapes. For those not certified, the flyer gives a brief description of the certification program and directs people to the CYN website.*



## Presentations

| LEAD PROVIDER                  | SUPPORTING PARTNER | ACTIVITY  | DATE     | NUMBER OF IMPACTS | TARGET AUDIENCE       |
|--------------------------------|--------------------|---|----------|-------------------|-----------------------|
| Kalmia Gardens                 |                    | D. Hill spoke to students at Thomas Hart Academy. He discussed stormwater runoff, the outfall located in the Gardens, and the impact on Black Creek.  | 9/16/11  | 65                | YT                    |
| Kalmia Gardens                 |                    | D. Hill spoke to the Lake City Rotary Club and included information about stormwater pollution. The group was especially interested in pet waste and its effect on water quality.                                       | 9/30/11  | 75                | GP, HM, EA, T, DIS, P |
| Environmental Discovery Center |                    | Students participating in “The Tiny Seed” program learned about water quality at Lynches River during the nature walk portion of the visit.   | 10/6/11  | 50                | YT                    |
| Environmental Discovery Center |                    | Students participating in “The Tiny Seed” program learned about water quality at Lynches River during the nature walk portion of the visit.   | 10/7/11  | 50                | YT                    |
| Environmental Discovery Center |                    | Students visiting for a program on threatened and endangered species learned about water quality during the nature walk portion of the field trip.  | 10/12/11 | 40                | YT                    |
| Environmental Discovery Center |                    | Students learning about threatened and endangered species also learned about water quality during the nature walk portion of the field trip.  | 10/13/11 | 40                | YT                    |
| Environmental Discovery Center |                    | Students participating in the “One Tiny Turtle” program learned about water quality during the nature walk portion of the trip.   | 10/14/11 | 51                | YT                    |
| Clemson Extension              |                    | T. Young spoke to the Bay Blossom Garden Club about the Carolina Yards & Neighborhoods program. The presentation covered the nine principles of the program as well as the yard certification component of the program. | 10/18/11 | 14                | HM                    |

## Presentations

| LEAD PROVIDER                  | SUPPORTING PARTNER | ACTIVITY   | DATE     | NUMBER OF IMPACTS | TARGET AUDIENCE |
|--------------------------------|--------------------|--|----------|-------------------|-----------------|
| Environmental Discovery Center |                    | Students participating in “The Tiny Seed” program learned about water quality during the nature walk portion of the field trip.  | 10/19/11 | 60                | YT              |
| Environmental Discovery Center |                    | Students participating in “The Tiny Seed” program learned about water quality during the nature walk portion of the field trip.  | 10/20/11 | 60                | YT              |
| Environmental Discovery Center |                    | Students participating in the “Ecosystem Investigation” program learned about water quality during the nature walk portion of the program.                                     | 11/4/11  | 46                | YT              |
| Environmental Discovery Center |                    | Participants of the “Ecosystem Investigation” program learned about water quality during the nature walk portion of the program.   | 11/4/11  | 50                | YT              |
| Environmental Discovery Center |                    | Students in the “Eye On The Sky” program learned about water quality during the nature walk portion of the field trip.   | 11/9/11  | 37                | YT              |
| Environmental Discovery Center |                    | Students participating in the “Ecosystem Investigation” program learned about water quality during the nature walk portion of the program.                                     | 11/10/11 | 50                | YT              |
| Clemson Extension              |                    | T. Young gave a presentation about stormwater to Moore Intermediate School’s Environmental Club. The interactive demonstration illustrated how stormwater can become polluted. | 11/16/11 | 20                | YT              |
| Environmental Discovery Center |                    | Students in the “Birds and Worms” program learned about water quality during the nature walk portion of the field trip.  | 11/18/11 | 46                | YT              |
| Environmental Discovery Center |                    | Students in “The Tiny Seed” program learned about water quality during the nature walk portion of the field trip.  | 11/29/11 | 37                | YT              |

## Presentations

| LEAD PROVIDER                  | SUPPORTING PARTNER | ACTIVITY  | DATE     | NUMBER OF IMPACTS | TARGET AUDIENCE  |
|--------------------------------|--------------------|---|----------|-------------------|------------------|
| Clemson Extension              |                    | T. Young spoke to the Junior Optimist Club at Lester Elementary School. The “Be Kind to the Earth” presentation described ways we can protect natural resources.  | 12/7/11  | 15                | YT               |
| Clemson Extension              |                    | T. Young held a training for SC Green Steps Schools at Moore Intermediate School. Projects in the “Protect: Water” category were highlighted.   | 12/8/11  | 20                | YT               |
| Environmental Discovery Center |                    | The importance of water quality was incorporated into the Reptile Rodeo outreach program.   | 12/12/11 | 50                | YT               |
| Clemson Extension              |                    | T. Young spoke to the Florence West Rotary to encourage participation in the Storm Drain Marking program. The presentation explained the importance of marking drains as a way to raise awareness of the connection storm drains make with local waterways. | 1/12/12  | 29                | GP, HM, T, EA, P |
| Kalmia Gardens                 |                    | In a talk to students at St. Joseph Head Start, D. Hill spoke about the importance of keeping our waterways clean and safe.   | 1/15/12  | 65                | YT               |
| Environmental Discovery Center |                    | The importance of water quality was incorporated into the Reptile Rodeo outreach program.   | 2/8/12   | 35                | YT               |
| Clemson Extension              |                    | T. Young spoke to the Maple Park Neighborhood Association in Florence about protecting water quality from curbs to creeks including the top 10 ways to prevent stormwater pollution.  | 2/16/12  | 11                | HM               |
| Environmental Discovery Center |                    | Students in the “Fossil Discovery” program learned about water quality on the nature walk portion of the field trip.  | 3/2/12   | 8                 | YT               |
| Kalmia Gardens                 |                    | D. Hill spoke at the Chesterfield County Library about protecting Kalmia Gardens including minimizing stormwater pollution.   | 3/13/12  | 13                | GP               |

## Presentations

| LEAD PROVIDER                  | SUPPORTING PARTNER         | ACTIVITY   | DATE    | NUMBER OF IMPACTS | TARGET AUDIENCE |
|--------------------------------|----------------------------|--|---------|-------------------|-----------------|
| Kalmia Gardens                 |                            | D. Hill spoke to the Sumter Garden Club. Stormwater runoff, common pollutants, and ways to minimize pollution were included in the presentation.             | 3/13/12 | 10                | HM              |
| Clemson Extension              | SC Master Gardener Program | A presentation on how to deliver Carolina Yards & Neighborhoods, showcasing the flexibility of outreach through CYN programming across SC.                   | 3/16/12 | 14                | HM              |
| ScienceSouth                   |                            | Fourth graders at Hannah Pamplico Elementary tested water samples for pH, temperature, and conductivity. They also investigated ways to separate pollutants. | 3/24/12 | 104               | YT              |
| Environmental Discovery Center |                            | Students in the “Extinction is Forever” program learned about water quality during the nature walk portion of the field trip.                                | 3/27/13 | 60                | YT              |
| Environmental Discovery Center |                            | Students in the “Extinction is Forever” program learned about water quality during the nature walk portion of the field trip.                                | 3/28/12 | 64                | YT              |
| Environmental Discovery Center |                            | Students in the “Extinction is Forever” program learned about water quality during the nature walk portion of the field trip.                                | 3/29/12 | 46                | YT              |
| Environmental Discovery Center |                            | Students in the “Birds and Worms” program learned about water quality on the nature walk portion of the field trip.  | 4/3/12  | 48                | YT              |
| Environmental Discovery Center |                            | Students in the “Eye on the Sky” program learned about water quality during the nature walk portion of the field trip.                                       | 4/4/12  | 45                | YT              |
| ScienceSouth                   |                            | Students at Timmons Middle School tested water samples for pH, temperature, and conductivity. They also investigated ways to separate pollutants.            | 4/4/12  | 100               | YT              |

## Presentations

| LEAD PROVIDER                  | SUPPORTING PARTNER | ACTIVITY   | DATE    | NUMBER OF IMPACTS | TARGET AUDIENCE |
|--------------------------------|--------------------|--|---------|-------------------|-----------------|
| Environmental Discovery Center |                    | Students in the “Eye on the Sky” program learned about water quality during the nature walk portion of the field trip.   | 4/5/12  | 45                | YT              |
| Environmental Discovery Center |                    | Students in the “Buzzing Bugs” program learned about water quality on the nature walk portion of the field trip.   | 4/10/12 | 40                | YT              |
| Environmental Discovery Center |                    | Students in the “One Tiny Turtle” program learned about water quality on the nature walk portion of the field trip.  | 4/17/12 | 25                | YT              |
| Environmental Discovery Center |                    | Students in the “Fossil Discovery” program learned about water quality on the nature walk portion of the trip.   | 4/17/12 | 18                | YT              |
| Environmental Discovery Center |                    | Students in the “Fossil Discovery” program learned about water quality on the nature walk portion of the trip.   | 4/18/12 | 71                | YT              |
| City of Florence               | Clemson Extension  | T. Young and A. Ard spoke to the City of Florence Afterschool Program in celebration of Earth Day. The children participated in an interactive story titled “Who polluted the river?” which illustrated they were all responsible for protecting water resources. The children also participated in a litter cleanup game. See photos below. | 4/19/12 | 60                | YT              |



## Presentations

| LEAD PROVIDER                  | SUPPORTING PARTNER                         | ACTIVITY   | DATE    | NUMBER OF IMPACTS | TARGET AUDIENCE |
|--------------------------------|--|--|---------|-------------------|-----------------|
| Environmental Discovery Center |  | Students in the “Fossil Discovery” program learned about water quality on the nature walk portion of the field trip.                   | 4/19/12 | 74                | YT              |
| Environmental Discovery Center | Columbia Marionette Theater, PalmettoPride | Students watched the “Litter Trashes Everyone” play which showed that litter trashes everyone.   | 4/20/12 | 500               | YT              |
| Environmental Discovery Center |  | Students in the “Extinction is Forever” program learned about water quality on the nature walk portion of the field trip.              | 4/24/12 | 80                | YT              |
| Sneed Middle School            | Clemson Extension                          | T. Young talked to students about her job responsibilities associated with Carolina Clear as part of Sneed Middle School’s Career Day. | 4/24/12 | 415               | YT              |
| Environmental Discovery Center |  | Students visiting to learn about environmental careers discussed water quality while on a guided nature walk.                          | 4/25/12 | 60                | YT              |
| Environmental Discovery Center |  | Students in the “How Many is Too Many” program learned about water quality during a nature walk.                                       | 4/26/12 | 45                | YT              |
| Environmental Discovery Center |  | Students in the “Buzzing Bugs” program learned about water quality during a guided nature walk.  | 4/27/12 | 46                | YT              |
| Environmental Discovery Center |  | Students visiting to learn about environmental careers discusses water quality while on a guided nature walk.                          | 4/27/12 | 60                | YT              |
| Environmental Discovery Center |  | Students in the “Birds and Worms” program discussed water quality during a guided nature walk.   | 5/1/12  | 45                | YT              |
| Environmental Discovery Center |  | Students in the “Birds and Worms” program discussed water quality during a guided nature walk.   | 5/2/12  | 45                | YT              |
| Environmental Discovery Center |  | Students participating in the “Weather Watcher” program learned about water quality while on a nature walk.                            | 5/3/12  | 5                 | YT              |



## Presentations

| LEAD PROVIDER                  | SUPPORTING PARTNER | ACTIVITY   | DATE    | NUMBER OF IMPACTS | TARGET AUDIENCE |
|--------------------------------|--------------------|--|---------|-------------------|-----------------|
| Kalmia Gardens                 | Clemson Extension  | D. Hill gave a stormwater presentation for the Tarleton Estates Homeowners Association. It focused on protecting waterways by minimizing stormwater pollution. | 5/3/12  | 28                | HM              |
| City of Florence               |                    | City staff gave a presentation on stormwater and water quality to the students at RN Beck School.  | 5/8/12  | 15                | YT              |
| City of Florence               |                    | City staff gave a presentation on stormwater and water quality to the participants of Leadership Florence.   | 5/8/12  | 35                | GP              |
| Environmental Discovery Center |                    | Students participating in the “Eye on the Sky” program learned about water quality during a nature walk.   | 5/8/12  | 60                | YT              |
| Environmental Discovery Center |                    | Students participating in the “Birds and Worms” program learned about water quality during a nature walk.  | 5/9/12  | 50                | YT              |
| Environmental Discovery Center |                    | Students participating in the “Tiny Seed” program learned about water quality during a guided nature walk.   | 5/10/12 | 23                | YT              |
| Environmental Discovery Center |                    | Students participating in the “One Tiny Turtle” program learned about water quality during a nature walk.  | 5/11/12 | 42                | YT              |
| Kalmia Gardens                 | Clemson Extension  | D. Hill and A. Harris talked to the Jr. Master Gardener class about the importance of protecting local streams and waterways.                                  | 5/14/12 | 10                | YT              |
| Environmental Discovery Center |                    | Students participating in the “Whose Habitat is That” program learned about water quality while on a guided nature walk.                                       | 5/18/12 | 43                | YT              |
| Environmental Discovery Center |                    | Students in the “Buzzing Bugs” program learned about water quality during the nature walk portion of the trip.   | 5/23/12 | 40                | YT              |
| Environmental Discovery Center |                    | Students participating in the “Wetland Ecosystem” program learned about the value of wetlands and talked about water quality during a guided nature walk.      | 6/1/12  | 77                | YT              |

## Presentations

| LEAD PROVIDER                  | SUPPORTING PARTNER | ACTIVITY   | DATE    | NUMBER OF IMPACTS | TARGET AUDIENCE |
|--------------------------------|--------------------|--|---------|-------------------|-----------------|
| Environmental Discovery Center |                    | Students participating in the “Fossil Discovery” program learned about water quality during a nature walk.                             | 6/7/12  | 13                | YT              |
| Environmental Discovery Center |                    | Students participating in the “Ecosystem Investigation” discussed water quality during a nature walk.                                  | 6/7/12  | 12                | YT              |
| Environmental Discovery Center |                    | Students performed a water quality assessment of the Lynches River.  | 6/15/12 | 10                | YT              |
| Environmental Discovery Center |                    | Visitors received a tour of the EDC and a guided nature walk that discussed water quality at Lynches River.                            | 6/20/12 | 10                | YT              |
| Environmental Discovery Center |                    | Students participating in the “Tiny Seed” program learned about water quality during a guided nature walk.                             | 6/21/12 | 13                | YT              |
| Environmental Discovery Center |                    | Students participating in the “How Many is too Many” program learned about water quality during a guided nature walk.                  | 6/21/12 | 22                | YT              |
| Environmental Discovery Center |                    | Visitors received a tour of the EDC and a guided nature walk that discussed water quality at Lynches River.                            | 6/22/12 | 15                | YT              |
| Environmental Discovery Center |                    | Students participating in the “Fossil Discovery” program learned about water quality during a nature walk.                             | 6/28/12 | 45                | YT              |
| Environmental Discovery Center |                    | Students performed a water quality assessment of the Lynches River.  | 6/29/12 | 10                | YT              |
| Environmental Discovery Center |                    | Information about water quality was included in the Reptile Rodeo Outreach Program.  | 7/3/12  | 30                | YT              |
| Environmental Discovery Center |                    | Information about water quality was included in the Reptile Rodeo Outreach Program.  | 7/6/12  | 55                | YT              |
| Clemson Extension              |                    | T. Young presented to the Lester Elementary Summer Program about engaging in earth-friendly activities that protect natural resources. | 7/30/12 | 26                | YT              |

## Presentations

| LEAD PROVIDER                  | SUPPORTING PARTNER | ACTIVITY  | DATE    | NUMBER OF IMPACTS | TARGET AUDIENCE |
|--------------------------------|--------------------|---|---------|-------------------|-----------------|
| Environmental Discovery Center |                    | Water quality information was included in the Reptile Rodeo Outreach Program.   | 8/2/12  | 20                | YT              |
| Environmental Discovery Center |                    | Water quality information was included in the Reptile Rodeo Outreach Program.   | 8/4/12  | 50                | YT              |
| Clemson Extension              |                    | T. Young gave a presentation to four 4th grade classes at Lucy T. Davis Elementary School. The presentation reviewed the water cycle and used the EnviroScape® to illustrate how stormwater runoff can become polluted. | 8/30/12 | 91                | YT              |



## Workshops, Summer Camps, and Outdoor Tours

| LEAD PROVIDER | SUPPORTING PARTNER | ACTIVITY   | DATE          | NUMBER OF IMPACTS | TARGET AUDIENCE |
|---------------|--------------------|--|---------------|-------------------|-----------------|
| 9/1/11-6/1/12 | Clemson Extension  | Darlington County 4-H conducted water quality activities in the school during the school year. Students learned how human activities can pollute water and how to keep our water safe. | 9/1/11-6/1/12 | 1800              | YT              |

## Workshops, Summer Camps, and Outdoor Tours

| LEAD PROVIDER                  | SUPPORTING PARTNER | ACTIVITY  | DATE          | NUMBER OF IMPACTS | TARGET AUDIENCE  |
|--------------------------------|--------------------|---|---------------|-------------------|------------------|
| Clemson Extension              |                    | Darlington County 4-H Community Garden taught over 400 youth and adults the importance of keeping water safe and clean. The garden promoted public awareness of litter and its impact on stormwater.    | 9/1/11-8/1/12 | 268               | GP, YT           |
| Environmental Discovery Center |                    | During a guided canoe excursion, paddlers were informed about the impact of stormwater on water quality.  | 10/1/11       | 24                | GP               |
| Kalmia Gardens                 |                    | Coker College freshman learned about stormwater during a tour.  | 10/5/11       | 16                | YT               |
| Kalmia Gardens                 |                    | A group of seniors from NC learned about stormwater during a tour.  | 10/5/11       | 25                | GP, HM           |
| Kalmia Gardens                 |                    | A group visiting the Gardens learned about stormwater and way to prevent stormwater pollution during a tour.  | 10/20/11      | 20                | GP, HM           |
| Environmental Discovery Center |                    | During a guided canoe excursion, paddlers were informed about the impact of stormwater on water quality.  | 12/3/11       | 7                 | GP               |
| Kalmia Gardens                 |                    | D. Hill escorted a new Biology professor from Coker College on a walk through the Gardens. The two stopped at the stormwater outfall and discussed its use at an educational tool for college students. | 1/30/12       | 1                 | College Students |
| Clemson Extension              | Kalmia Gardens     | The first class of the 2012 Pee Dee Backyard Landscape Series focused on the following principles: fertilizing, mulching, and recycling yard waste.   | 2/18/12       | 25                | HM               |



## Workshops, Summer Camps, and Outdoor Tours

| LEAD PROVIDER                  | SUPPORTING PARTNER             | ACTIVITY   | DATE            | NUMBER OF IMPACTS | TARGET AUDIENCE |
|--------------------------------|--------------------------------|--|-----------------|-------------------|-----------------|
| Environmental Discovery Center |                                | During a guided canoe excursion, paddlers were informed about the impact of stormwater on water quality.   | 3/10/12         | 24                | GP              |
| Kalmia Gardens                 |                                | Students on a tour learned about stormwater while observing the outfall.   | 4/17/12         | 30                | YT              |
| Kalmia Gardens                 |                                | Children and teachers from Carolina Elementary talked about stormwater while touring the Gardens.  | 4/17/12         | 28                | YT              |
| Kalmia Gardens                 |                                | Elementary school students talked about stormwater and water quality while on a nature walk.   | 4/18/12         | 30                | YT              |
| Kalmia Gardens                 |                                | Children and teachers from Carolina Elementary talked about stormwater while touring the Gardens.  | 4/18/12         | 26                | YT              |
| Kalmia Gardens                 |                                | Members of a NC Garden Club discussed stormwater and water quality while observing the stormwater outfall.   | 4/19/12         | 9                 | GP, HM          |
| Kalmia Gardens                 |                                | D. Hill conducted a tour for a group of ladies. The group read the "What is Stormwater?" sign and ways to minimize stormwater pollution.                         | 4/19/12         | 15                | HM              |
| Clemson Extension              | Kalmia Gardens                 | Participants of the Jr. Master Gardener Program learned about watersheds and water quality.  | 4/20/12-5/30/12 | 16                | YT              |
| Kalmia Gardens                 |                                | D. Hill conducted a tour of the Gardens for the Council on Aging. The tour stopped at the stormwater outfall and discussed ways to prevent stormwater pollution. | 4/26/12         | 53                | GP              |
| Kalmia Gardens                 |                                | Children from McBee Head Start read about how to prevent stormwater pollution from carrying pollutants to waterways.   | 5/3/12          | 17                | YT              |
| Clemson Extension              | Environmental Discovery Center | During the Critters in the River Workshop, children learned about water quality and its importance to various organisms.   | 5/5/12          | 18                | YT              |

## Workshops, Summer Camps, and Outdoor Tours

| LEAD PROVIDER                  | SUPPORTING PARTNER | ACTIVITY  | DATE            | NUMBER OF IMPACTS | TARGET AUDIENCE |
|--------------------------------|--------------------|---|-----------------|-------------------|-----------------|
| Kalmia Gardens                 |                    | Second grade students from Chesterfield Elementary talked about stormwater and ways to keep pollutants from being carried to waterways.                                       | 5/14/12         | 54                | YT              |
| Clemson Extension              | Kalmia Gardens     | The second part of the 2012 Pee Dee Backyard Landscape Series focused on choosing the right plant for the right place and irrigating efficiently.                             | 5/19/12         | 12                | HM              |
| Kalmia Gardens                 |                    | Students from the Governor's School for Math and Science talked about stormwater during a tour.   | 6/1/12          | 30                | YT              |
| Environmental Discovery Center |                    | During a guided canoe excursion, paddlers were informed about the impact of stormwater on water quality.  | 6/2/12          | 24                | GP              |
| Kalmia Gardens                 |                    | D. Hill conducted a tour of the Gardens for a Parks & Recreation group from Raleigh, NC. They were interested in the "What is Stormwater" sign installed at the outfall pipe. | 6/6/12          | 3                 | DIS             |
| Environmental Discovery Center |                    | During a guided canoe excursion, paddlers were informed about the impact of stormwater on water quality.  | 6/8/12          | 10                | DIS             |
| Kalmia Gardens                 |                    | Darlington County 4-H and Kalmia Gardens hosted 4-H2O Water Quality Camp. The camp teaches youth about watersheds and water quality.  | 6/13/12-6/15/12 | 20                | YT              |
| Kalmia Gardens                 |                    | Children from Carolina Kids participated in Week in the Wild camp. The camp included many water related activities.   | 6/18/12-6/22/12 | 20                | YT              |
| Clemson Extension              | Kalmia Gardens     | The third part of the 2012 Pee Dee Backyard Landscape Series focused on gardening for wildlife and managing yard pests.   | 6/23/12         | 11                | HM              |

## Workshops, Summer Camps, and Outdoor Tours

| LEAD PROVIDER  | SUPPORTING PARTNER | ACTIVITY  | DATE           | NUMBER OF IMPACTS | TARGET AUDIENCE |
|----------------|--------------------|---|----------------|-------------------|-----------------|
| Kalmia Gardens |                    | D. Hill conducted a tour of the Gardens for students from the Governor’s School for Math and Science. The tour stopped at the stormwater outfall to discuss stormwater, its impact on Black Creek, and ways to prevent stormwater pollution.                            | 6/25/12        | 30                | YT              |
| Kalmia Gardens |                    | For 3 weeks, Kalmia Gardens hosted Week in the Wild summer camp for a different age-group of children. Many water quality activities were included such as: games relating to water quality, sampling of macroinvertebrates, and observation of the stormwater outfall. | 7/9/12-7/28/12 | 60                | YT              |



*“We are doing everything we can to make sure that our future generation understands the process of water protection, and how important it is to save our water. They need to learn about protecting their environment now so they can ensure it has a future.*

*If we don’t use it wisely, it won’t be there.”*

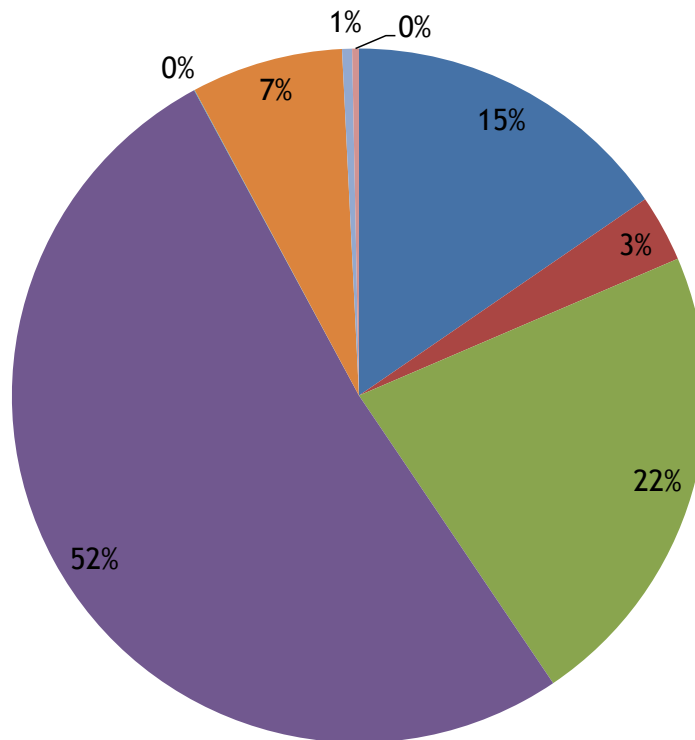
*~Alma Harris, Darlington County 4-H*



The Florence Darlington Stormwater Consortium utilized a variety of methods to provide stormwater education including: Downstream Media Campaign, radio, outreach materials, presentations, internet/social media, publication, public events, workshops, summer camps, and outdoor tours. The chart below shows the percentage of impacts by each activity type for Year 4.

### YEAR 4 EDUCATION IMPACTS BY ACTIVITY TYPE

- Downstream Campaign
- Radio
- Outreach Materials
- Presentations
- Internet/Social Media
- Publications
- Public Events
- Workshops, Summer Camps, Outdoor Tours





## Community Cleanups

| LEAD PROVIDER    | SUPPORTING PARTNER | ACTIVITY   | DATE           | NUMBER OF IMPACTS      | TARGET AUDIENCE |
|------------------|--------------------|--|----------------|------------------------|-----------------|
| City of Florence |                    | The City of Florence maintains 3 sites where the public can safely and properly dispose of used motor oil and filters. | 9/1/11-8/31/12 | 2367 gallons collected | GP              |

*Right: Photos of the Pee Dee Group of the Sierra Club during two of its Adopt-A-Highway cleanups. The Adopt-A-Highway program in South Carolina is coordinated by the SC Department of Transportation. It began in 1988 and is considered to be one of the most successful program in combatting litter along highways.*



|                                 |  |  |               |     |            |
|---------------------------------|--|--|---------------|-----|------------|
| Clemson Extension               |  | Darlington County 4-H adopted a highway and beautification spot in Darlington.   | 9/1/11-5/2/12 | 125 | YT         |
| SC DNR, SC Sea Grant Consortium | Clemson Extension, Keep Florence Beautiful | T. Young and M. Bailey served as site captains for River Sweep at Jeffries Creek Park in Florence. 620 lbs. of litter was collected.   | 9/17/11       | 53  | GP, HM, YT |
| Pee Dee Group of Sierra Club    | Clemson Extension                          | Approximately 300 lbs. of litter was collected during this Adopt-A-Highway cleanup.  | 10/22/11      | 10  | GP, HM, YT |
| Clemson Extension               |  | Darlington County 4-H youth participated in a cleanup at the Animal Shelter and learned about the importance of cleaning up pet waste.   | 11/4/11       | 39  | YT         |
| Pee Dee Group of Sierra Club    | Clemson Extension                          | Approximately 345 lbs. of litter was collected during this Adopt-A-Higway cleanup.   | 1/14/12       | 10  | GP, HM, YT |
| City of Florence                | Clemson Extension, Keep Florence Beautiful | A latex paint collection was included in the Great American Cleanup held at Timrod Park. 92 containers of paint were collected. The City of Florence contracted with The Paint Exchange to re-manufacture usable paint and dispose of remaining paint. | 3/24/12       | 12  | GP, HM     |

## Community Cleanups

| LEAD PROVIDER           | SUPPORTING PARTNER | ACTIVITY  | DATE            | NUMBER OF IMPACTS                         | TARGET AUDIENCE |
|-------------------------|--------------------|---|-----------------|---|-----------------|
| Keep Florence Beautiful | City of Florence   | Each year, Keep Florence Beautiful with the assistance of the City of Florence, organizes a Great American Cleanup event on the last Saturday of March.   | 3/24/12         | 17 tons of litter/ trash/debris collected |                 |
| City of Florence        |                    | Residents were able to place recyclable metal on the curb for pickup. This event is conducted annually to ensure proper disposal of metals and prevent illicit dumping.   | 3/26/12-3/30/12 | 4000 lbs collected                        | GP, HM          |
| Kalmia Gardens          |                    | D. Hill led a group of Boy Scouts on a service project. Part of the project involved the removal of Chinese Privet ( <i>Ligustrum sinense</i> ) from around the stormwater outfall in Kalmia Gardens. The Scouts learned about the impact of stormwater on water quality as well as the problems with invasive species. | 8/10/12         | 8   | YT              |



*A Great American Cleanup participant reaches through the vines to pick up litter along the fence.*



*Group shot of the FMU Student Alumni Association relaxing after the Cleanup.*



*The paint collected at the Latex Paint Collection was transported back to the City of Florence's Public Works department for later pickup by The Paint Exchange.*

## Storm Drain Marking

| LEAD PROVIDER     | SUPPORTING PARTNER | ACTIVITY   | DATE    | NUMBER OF IMPACTS              | TARGET AUDIENCE |
|-------------------|--------------------|--|---------|--------------------------------|-----------------|
| Clemson Extension |                    | T. Young and volunteer J. Harlan installed 37 storm drain markers in the Deerfield Subdivision in Florence. Educational door hangers were placed on all houses in the neighborhood (~80) alerting them of the activity and highlighting ways they could protect water quality. | 1/7/12  | 37 drains marked/80 households | HM              |
| Kalmia Gardens    | Clemson Extension  | D. Hill organized storm drain marking at the campus of Coker College by Coker's Science Club. T. Young provided supplies and D. Hamilton with the City of Hartsville helped lead the activity.   | 1/25/12 | 27 drains marked               | GP              |
| Kalmia Gardens    | Clemson Extension  | 5 volunteers from Kalmia Gardens along with T. Young and D. Hamilton installed 22 storm drain markers in the Kalmia Place Subdivision in Hartsville and placed approximately 50 door hangers.  | 2/29/12 | 22 drains marker/50 households | HM              |



## Installations/Demonstrations

| LEAD PROVIDER           | SUPPORTING PARTNER                  | ACTIVITY  | DATE            | NUMBER OF IMPACTS  | TARGET AUDIENCE |
|-------------------------|-------------------------------------|---|-----------------|--|-----------------|
| Keep Florence Beautiful | City of Florence, Clemson Extension | An empty lot in downtown Florence was transformed into a public greenspace. The project consists of permeable interlocking concrete pavers, a Carolina Fence® Garden, and rainwater harvesting. More than 30 volunteers from the community assisted with the installation and some continue to help with maintenance. | 9/14/11-8/31/12 | >30 directly involved with installation. Difficult to assess how many people pass through the area.  | GP              |
| Clemson Extension       |                                     | Darlington County 4-H youth created and maintained a butterfly garden. The youth involved learned about how gardening activities are related to water quality.  | 3/1/12-6/2/12   | 20   | YT              |
| Clemson Extension       | City of Florence                    | Two rain gardens were installed in Timrod Park in Florence as a public demonstration. Volunteers from the Timrod Park Neighborhood Association and Florence County Master Gardeners assisted with the planting.   | 6/11/12-6/15/12 | No sign in sheet was provided to record the number of volunteers assisting. Park visitation unknown. | GP              |



*Left: David Creech from Belgard, the paver manufacturer, hands a paver to staff from the City of Florence. Right: Jerry Biscup with Keep Florence Beautiful cuts a hole in the weed barrier fabric.*



*Volunteers, Clemson staff and students, and City of Florence staff work to plant in the larger of the two rain gardens in Timrod Park.*

## Council/Committee Meetings

| LEAD PROVIDER    | SUPPORTING PARTNER | ACTIVITY   | DATE     | NUMBER OF IMPACTS | TARGET AUDIENCE |
|------------------|--------------------|--|----------|-------------------|-----------------|
| City of Florence |                    | The Stormwater Advisory Board (SWAB) met to further develop the stormwater aspects of the City's Unified Development Ordinance (UDO).  | 10/27/11 | 28                | GP, DIS, T      |
| City of Florence |                    | The City met with the SWAB to update them on regulatory changes.   | 11/17/11 | 30                | GP, DIS, T      |
| City of Florence |                    | The SWAB reviewed Part 1 of the UDO and was provided an introduction to part 2.  | 12/15/11 | 15                | GP, DIS, T      |
| City of Florence |                    | The SWAB received a state regulatory update and information regarding the Five Star Grant. Phillip Lookadoo with the City discussed problems with the current code, considerations for future development, and various philosophies on zoning. | 1/19/12  | 15                | GP, DIS, T      |
| City of Florence |                    | The SWAB met to discuss details and development of the UDO, specifically residential development standards.  | 2/16/12  | 17                | GP, DIS, T      |
| City of Florence |                    | The SWAB met to further discuss the development of the UDO.  | 3/15/12  | 16                | GP, DIS, T      |
| City of Florence |                    | The SWAB met to discuss landscaping, buffers, and tree preservation as it relates to the UDO.  | 4/19/12  | 22                | GP, DIS, T      |
| City of Florence |                    | Brett Keast of Kendig Keast presented an overview of the UDO and explained how it was to include a rewrite of the Zoning Ordinance and Subdivision Code with language that includes compliance with the City's MS4 Permit.                     | 5/17/12  | 21                | GP, DIS, T      |

*“The City of Florence is proud of what we have accomplished regarding stormwater education and BMP implementation. We are fortunate to have supportive citizens, businesses, and community groups to work toward the common goal of improving water quality.”*

## Florence Cultural Garden

Spearheaded by Keep Florence Beautiful, the Florence Cultural Garden transformed a vacant lot in downtown Florence into a public green space. The project promotes natural resource conservation through three practices that nearly and home or business owner can implement: Permeable Interlocking Concrete Pavers (PICP), a Carolina Fence™ Garden, and rainwater harvesting.

The Florence Cultural Garden was the epitome of collaboration with donations and assistance provided from both the public and private sector. Clemson University and Carolina Clear provided funding for the overall design and rainwater harvesting component. Worth approximately \$15,000, the PICP was donated by Belgard, an Adams Product. Excavation and much of the installation was completed by the City of Florence. Assistance for the Carolina Fence™ Garden was provided by: Lowes, local Boy Scouts, Florence County Master Gardener Association, CSX, Hatchell Landscape, and community volunteers.

While there is no accurate way to measure the impacts of this site, it is located in a highly visible area of downtown Florence that has been a part of a recent redevelopment effort. It is in close proximity to the Francis Marion University Performing Arts Center, directly across the street from the site of the new Florence Museum which is currently under construction, and on the street which hosts a monthly concert series from April through October.



*Taken during initial site inspection, this photo shows an extremely unattractive space.*



*Now completed, the Florence Cultural Garden serves as an aesthetically pleasing green space for the citizens of Florence.*

## Timrod Park Rain Gardens

Consisting of about 18 acres, Timrod Park is a highly used City-owned park surrounded by urbanized area. Located within the park is Gully Branch, a degraded urban stream with a TMDL for fecal coliform. Because of its high visitation, Timrod Park is a perfect location for public demonstrations of stormwater management practices.

Two rain gardens were installed in June 2012 to treat overland flow generated by storm events, otherwise discharging to Gully Branch. Installation began at the large rain garden (RG1) on June 11, 2012, but was stalled by a 2" rain storm which caused flooding in Florence. On Wednesday, excavation continued on RG1, and a second rain garden (RG2) was also excavated. RG1 is approximately 50' x 70' (3500 square feet); RG2 is approximately 20' by 35' (700 square feet).

Funds for the project were obtained from Clemson University Cooperative Extension Service. The City of Florence completed the excavation. Staff from both entities contributed to the planting as well as volunteers from the community.



*City of Florence staff, Clemson students, and volunteers planting in the larger of the two rain gardens (RG1).*



*The larger rain garden (RG1) after planting and mulching were complete.*



*Master Gardener volunteer Janet Bugbee working in the smaller rain garden (RG2).*



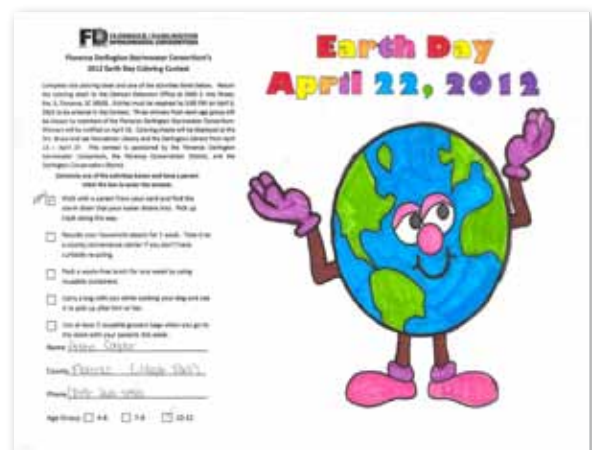
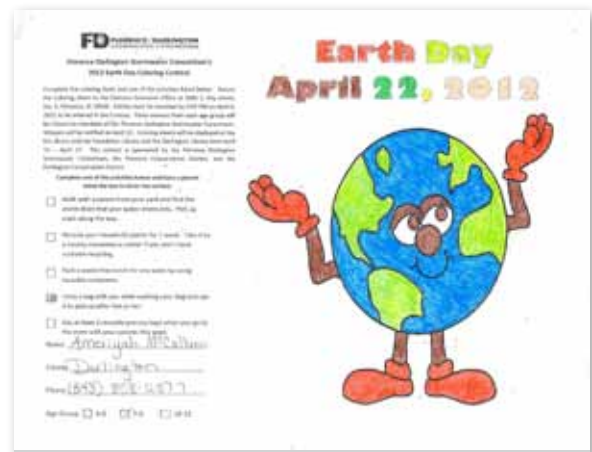
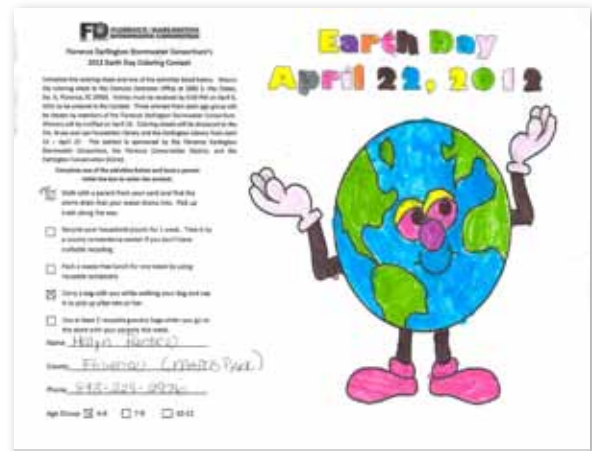
*Attractive rock was used to enhance the aesthetic appeal of the rain gardens. Shown here is RG2.*

## 2012 Earth Day Coloring Contest

Sixty-five children from across Florence and Darlington Counties participated in the 2012 Earth Day Coloring Contest. Prizes were awarded for 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place for each of the three age groups thanks to sponsorship from the Florence and Darlington Soil and Water Conservation Districts. Entries from Florence County were displayed at the Drs. Bruce and Lee Foundation Library while entries from Darlington County were displayed at the Darlington Library from April 13 - April 27. In addition to coloring, students were asked to complete at least one of the following five earthy friendly activities:

- Walk with a parent from your yard and find the storm drain that your water drains into. Pick up trash along the way.
- Recycle your household plastic for 1 week. Take it to a county convenience center if you don't have curbside recycling.
- Pack a waste-free lunch for 1 week by using reusable containers.
- Carry a bag with you while walking your dog and use it to pick up after him or her.
- Use at least 2 reusable grocery bags when you go to the store with your parents this week.

*Right: Scanned images of the 1st place winner from each of the three age groups.*





## Articles

Samples of T. Young's personal column which appears in the Pee Dee Living section of the *Morning News* on the first Sunday of each month.

### Don't fertilize yet

If unseasonably high temperatures have you itching to get outside and work in the yard, you aren't alone. I have found myself thinking about what perennials I want to add to what I call the wildflower garden (even though it isn't all wildflowers), what annuals might look nice in my hanging baskets and what vegetables should replace the collards and cabbage we have enjoyed this winter.

And while there are some things that can be done, don't let Mother Nature fool you. As much as you might wish your lawn was a pretty shade of green instead of dull brown, it is not yet time to fertilize your lawn.

Speaking of fertilizing, would you like to know more about why you should have your soil tested before applying fertilizer or what the numbers on a fertilizer bag represent? How about turning your kitchen and yard waste into rich organic matter that can reduce your need to purchase fertilizer, help your soil hold water, and save space in landfills?

Have you always wondered how long your sprinkler system needs to run to apply an inch of water? Do you wish you knew more about choosing native plants that require less maintenance, pesticides, and fertilizers? Can you identify the "good" bugs from the ones that cause damage?

You can learn about all of these things by attending the 2012 Pee Dee Backyard Landscape Series. This free interactive series, based on the Carolina Yards & Neighborhoods



**Terasa Young**  
Natural Resources Agent

program, is designed to assist homeowners in achieving their desired landscape while saving time and money and protecting South Carolina's Natural Resources.

The three-part series is being held on Feb. 18, May 19, and June 23 from 10 a.m. to noon at the Joslin Education Center at Kalmia Gardens in Hartsville. Advance registration is required and space is limited to 25.

Each two-hour class will combine classroom discussion with hands-on experiences. Those attending in February will have a chance to see and learn about the three-bin compost system in use at Kalmia Gardens. Some lucky attendees might even get their hands dirty collecting a soil sample. All skills levels are welcome from novice to experienced gardeners. For more information or to register for the 2012 Pee Dee Backyard Landscape Series, you can contact me at 843-661-4800, ext. 113, or [terasa@clemson.edu](mailto:terasa@clemson.edu).

Terasa Young is a natural resources agent for Clemson Extension, Carolina Clear Coordinator for the Florence/Darlington Stormwater Consortium and a Master Naturalist. Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, marital or family status and is an equal opportunity employer.

8C • SUNDAY, OCTOBER 2, 2011

### Home & Garden



**Terasa Young**  
Clemson Extension  
Natural Resources

### Greening downtown Florence

Last week, this Yankee became a redneck—literally. I spent the better portion of four days on my hands and knees installing permeable interlocking concrete pavers (PICP) at the Florence Cultural Garden. Apparently the sun exposure was enough to surpass the protection of my SPF 30 sunblock. In addition to the red neck, I felt like the Tin Man from "The Wizard of Oz." Perhaps a little oil in the joints would fix me up.

I imagine there are lots of other people experiencing the aches and pains associated with this labor-intensive project since I was not the only person getting my hands dirty. But all of the aches and pains will be worth it in the end. In addition to creating an aesthetically pleasing green space, the Florence Cultural Garden, a Keep Florence Beautiful project, will demonstrate several natural resource conservation practices.

Using PICP is an example of such a practice. Traditional walkway surfaces such as asphalt and concrete are impervious. This means that water cannot penetrate the surface. Instead, water runs off that surface carrying pollutants directly into waterways. This can be especially problematic in urban settings where a large portion of the landscape is covered in impervious surfaces.

PICP is composed of pavers separated by joints filled with small stones. The stone-filled joints allow water to flow through which reduces the rate and volume of runoff, provides treatment of pollutants, reduces downstream erosion and flooding and recharges groundwater. With all of those benefits, it is hard to believe this is the first application of PICP in the Florence area.

PICP is manufactured by various companies, is available in different shapes and sizes. It can be used in numerous applications such as walkways, sidewalks, driveways, parking lots and low-volume roadways. The pavers at the Florence Cultural Garden are from the Belgard Environmental Collection and were donated by the manufacturer.

Belgard is a brand owned by Oldcastle Architectural, a U.S. subsidiary of CRH plc.

Next time you are in downtown Florence, stop by the Florence Cultural Garden in the 100 block of Dargan Street beside Alchemy Tapas Bar and Lounge.

And, if you are planning your own landscaping project this fall, why not consider a permeable surface like PICP? You can achieve the look and functionality desired while protecting our water resources.

Article written by journalist Gavin Jackson on the TMDL for Black Creek.

Black Creek report bugs environmentalists | SCNow

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**Black Creek report bugs environmentalists**  
Old data makes conclusions suspect

Recommend this on Google

By [GAVIN JACKSON](#) | SCNow  
Published: February 19, 2012

Comments | Post a Comment


**FLORENCE, S.C.** — A new report could begin the process of cleaning up Black Creek, an important natural waterway in the Pee Dee that suffers from what might be called "natural" pollution, but some local environmentalists say that unless the state puts more money into stream monitoring it will be hard to tell if anything is being accomplished.

The report from the South Carolina Department of Health and Environmental Control (DHEC) outlines the Total Maximum Daily Load (TMDL) — that is, the largest amount of pollutants that can enter a waterway and have it remain at safe levels — for Black Creek. After a long comment period, the document soon will be on its way to the Environmental Protection Agency for approval. It does outline contamination problems in the Black Creek watershed, including an astonishing amount of ... pollution from local pets, and Wade Cantrell, manager of the DHEC Bureau of Water, said once the TMDL is approved by the EPA (probably in March) it will help counties and citizens implement contaminant reduction plans. Some of which are already in place.

"Reductions for non-point sources to meet the load allocation (levels) are voluntary and generally depend on partnership projects between DHEC and local entities paid for using EPA grant money and local funds," Wade said. "Timeframes vary, but having a TMDL in place helps the process."

But the process itself is flawed, said Jay James, treasurer and secretary of the Black Creek Land Trust. James said the current report includes only has one Black Creek stem monitoring station, something he mentioned at a DHEC informational meeting in Darlington last August, and notes that because of monitoring station outbacks, the report is based on information so old as to be worthless.

"I don't think the TMDL is a measure of health or lack of health of Black Creek," said James. "If it has problems I would like to know what they are and find out how to fix them. Without data that's not more than several years old we won't know."



Bess, a black lab, roams in the Black Creek in Darlington on August 18, 2011. The South Carolina Department of Health and Environmental Control (DHEC) will be holding a meeting today (Monday) on pollution levels in the creek. Levels of fecal coliform have been high in several locations over the past 10 years.

<http://www2.scnow.com/news/pee-dee/2012/feb/19/black-creek-report-bugs-environmentalists-ar-3249769/> [3/6/2012 1:28:32 PM]

## Year 4 Adaptive Education Plan

| Lead Service Provider   | Activity  | Target Geography/<br>Land Use | Target Pollutant(s) |          |                    |          |           |        |        |             |       |  | Participation by other Service Providers | Expected Month/<br>Quarter (if date unknown) |                     |
|-------------------------|---|-------------------------------|---------------------|----------|--------------------|----------|-----------|--------|--------|-------------|-------|--|--|--|---------------------|
|                         |   |                               | General             | Bacteria | Toxic Contaminants | Sediment | Nutrients | Volume | Debris | Temperature | Other |  |  |  |                     |
| General Public          |   |                               |                     |          |                    |          |           |        |        |             |       |  |  |  |                     |
| Clemson                 | Beach Sweep/<br>River Sweep                               | Pee Dee Region                | X                   |          |                    |          |           |        |        |             | X     |  |  | Kalmia Gardens                               | Sep-11              |
| Keep Florence Beautiful | Florence Cultural Garden Installation                     | City of Florence              | X                   |          |                    |          |           |        | X      |             |       |  |  | Clemson, City of Florence                    | Sep-11              |
| Keep Florence Beautiful | Pecan Festival: "Litterbug" craft                         | Florence County               | X                   |          |                    |          |           |        |        |             | X     |  |  | Clemson                                      | Nov-11              |
| City of Florence        | Scrap Metal Week  | City of Florence              |                     |          | X                  |          |           |        |        |             |       |  |  |  | Mar-12              |
| Keep Florence Beautiful | Great American Cleanup - cleanup + latex paint collection | City of Florence              | X                   |          | X                  |          |           |        |        |             | X     |  |  | City of Florence, Clemson                    | Mar-12              |
| Clemson                 | Rural Heritage Festival                                   | Pee Dee Region                | X                   | X        |                    |          |           | X      |        |             |       |  |  |  | Apr-12              |
| Clemson                 | Stormwater Billboards - new downstream campaign           | Pee Dee Region                | X                   |          |                    |          |           |        |        |             |       |  |  |  | June 2011-Fall 2012 |
| Clemson                 | Downstream Commercial                                     | Pee Dee Region                | X                   |          |                    |          |           |        |        |             |       |  |  |  | Spring/Summer 2012  |
| City of Florence        | Residential Oil Collection                                | City of Florence              |                     |          | X                  |          |           |        |        |             |       |  |  |  | throughout          |
| Clemson                 | Website and Facebook Page                                 | Pee Dee Region                | X                   | X        | X                  | X        | X         | X      | X      | X           | X     |  |  |  |                     |
| Clemson                 | Monthly Article in Morning News                           | Florence County               | X                   |          |                    |          |           |        |        |             |       |  |  |  | throughout          |

## Year 4 Adaptive Education Plan

| Lead Service Provider           | Activity   | Target Geography/<br>Land Use | Target Pollutant(s) |          |                    |          |           |        |        |             |       | Participation by other Service Providers | Expected Month/<br>Quarter (if date unknown) |   |                         |
|---------------------------------|--|-------------------------------|---------------------|----------|--------------------|----------|-----------|--------|--------|-------------|-------|--|--|---|-------------------------|
|                                 |  |                               | General             | Bacteria | Toxic Contaminants | Sediment | Nutrients | Volume | Debris | Temperature | Other |  |  |   |                         |
| Youth / K-12 / Teachers         |  |                               |                     |          |                    |          |           |        |        |             |       |  |  |   |                         |
| Environmental Discovery Center  | River Jamboree: "Litterbug" craft                        | Florence County               | X                   |          |                    |          |           |        |        |             | X     |  |  |   | Oct-11                  |
| Clemson                         | Adopt A Highway Darlington 4-H                           | Darlington County             | X                   |          |                    |          |           |        |        |             | X     |  |  | Keep Darlington County Beautiful / SC DOT | throughout              |
| Darlington County               | Coloring/Activity Pages for Youth                        | Darlington County             | X                   | X        |                    |          |           |        |        |             | X     |  |  | SC DHEC                                   | throughout              |
| Kalmia Gardens                  | Stormwater Education included with field trips and tours | Pee Dee Region                | X                   | X        | X                  |          |           | X      |        |             | X     |  |  |   | throughout              |
| Environmental Discovery Center  | Stormwater Education included with field trips and tours | Pee Dee Region                | X                   | X        | X                  |          |           | X      |        |             | X     |  |  |   | as requested by schools |
| Pee Dee Group Sierra Club       | Adopt A Highway  | Pee Dee Region                |                     |          |                    |          |           |        |        |             | X     |  |  | SC DOT                                    | throughout              |
| Clemson                         | Earth Day @ Kalmia Gardens (Darlington County 4-H)       | Pee Dee Region                |                     |          |                    |          |           |        |        |             | X     |  |  |   | Apr-12                  |
| All Saints Episcopal Day School | Farm Day   | City of Florence              | X                   | X        | X                  | X        | X         |        |        |             | X     |  |  | Clemson                                   | Apr-12                  |

## Year 4 Adaptive Education Plan

| Lead Service Provider | Activity                       | Target Geography/<br>Land Use | Target Pollutant(s) |          |                    |          |           |        |        |             | Participation by other Service Providers | Expected Month/<br>Quarter<br>(if date unknown)     |                                |                    |
|-----------------------|--------------------------------|-------------------------------|---------------------|----------|--------------------|----------|-----------|--------|--------|-------------|--|---|--------------------------------|--------------------|
|                       |                                |                               | General             | Bacteria | Toxic Contaminants | Sediment | Nutrients | Volume | Debris | Temperature |  |   | Other                          |                    |
| Clemson               | Earth Day Coloring Contest     | Pee Dee Region                | X                   |          |                    |          |           |        |        |             |  | "earth friendly" activities                         |                                | Apr-12             |
| Sneed Middle School   | Career Day                     | Florence County               | X                   | X        | X                  | X        | X         | X      | X      |             |  | job responsibilities associated with Carolina Clear | Clemson                        | Apr-12             |
| Clemson               | Critters in the River          | Pee Dee Region                | X                   | X        | X                  | X        | X         |        | X      |             |  | importance of water quality to various organisms    | Environmental Discovery Center | May-12             |
| Clemson               | 4H2O Water Quality Camp        | Pee Dee Region                | X                   | X        |                    |          |           | X      |        | X           | X  | watershed awareness                                 | Kalmia Gardens                 | Jun-12             |
| Clemson               | Junior Master Gardener Program | Darlington County             | X                   |          |                    |          |           | X      |        | X           |  | watershed awareness                                 | Kalmia Gardens                 | April and May 2012 |

## Year 4 Adaptive Education Plan

| Lead Service Provider  | Activity   | Target Geography/<br>Land Use | Target Pollutant(s) |          |                    |          |           |        |        |             |       | Participation by other Service Providers                                     | Expected Month/<br>Quarter (if date unknown) |                         |
|--|--|-------------------------------|---------------------|----------|--------------------|----------|-----------|--------|--------|-------------|-------|--|--|-------------------------|
|  |  |                               | General             | Bacteria | Toxic Contaminants | Sediment | Nutrients | Volume | Debris | Temperature | Other |  |  |                         |
| Kalmia Gardens   | Week in the Wild Summer Camp                                       | Darlington County             | X                   |          |                    |          |           |        |        | X           |       | watershed awareness  | Clemson                                      | June and July 2012      |
| ScienceSouth   | "What's In Your Watershed" program                                 | Florence County               | X                   | X        | X                  | X        | X         |        | X      | X           |       | watershed awareness  |  | as requested by schools |
| Clemson  | Storm Drain Marking and Watershed Education                        | Pee Dee Region                | X                   | X        | X                  | X        | X         |        | X      | X           |       |  |  | throughout              |
| Planning Commission / Advisory Board / Elected and Appointed Officials |  |                               |                     |          |                    |          |           |        |        |             |       |  |  |                         |
| City of Florence   | Stormwater Advisory Board / Unified Development Ordinance Meetings | City of Florence              | X                   | X        | X                  | X        | X         |        | X      | X           |       | ordinance review, enforcement review, overall stormwater management guidance |  | monthly throughout      |
| Homeowners & Homeowner Associations                                    |  |                               |                     |          |                    |          |           |        |        |             |       |  |  |                         |
| Clemson  | Fall Plant and Flower Festival                                     | Pee Dee Region                | X                   | X        | x                  |          | X         |        |        |             |       |  |  | Oct-11                  |
| Clemson  | ECA Fair   | Pee Dee Region                | X                   |          |                    |          |           |        |        |             |       | CYN  |  | Oct-11                  |

## Year 4 Adaptive Education Plan

| Lead Service Provider            | Activity                                  | Target Geography/<br>Land Use | Target Pollutant(s) |          |                    |          |           |        |        |             |       | Participation by other Service Providers | Expected Month/<br>Quarter (if date unknown) |                            |
|----------------------------------|---|-------------------------------|---------------------|----------|--------------------|----------|-----------|--------|--------|-------------|-------|--|--|----------------------------|
|                                  |   |                               | General             | Bacteria | Toxic Contaminants | Sediment | Nutrients | Volume | Debris | Temperature | Other |  |  |                            |
| Clemson                          | 2012 Pee Dee Backyard Landscape Series    | Pee Dee Region                | X                   |          | X                  | X        | X         | X      |        |             |       | CYN                                      | Kalmia Gardens                               | February, May, June        |
| Clemson                          | Kinard-n-Koffee episodes                  | Pee Dee Region                | X                   | X        | X                  | X        | X         | X      | X      | X           |       |  | City of Florence                             | In conjunction with events |
| Florence County Master Gardeners | Pee Dee Home & Garden Workshop            | Florence                      | X                   |          |                    |          |           | X      |        |             |       | CYN and rainwater harvesting             | Clemson                                      | Mar-12                     |
| Clemson Extension                | Statewide Master Gardener Conference      | Statewide                     | X                   |          |                    |          |           | X      |        |             |       | CYN                                      | SC Master Gardener Program                   | Mar-12                     |
| Clemson                          | HOA/Civic Group/Garden Club Presentations | Pee Dee Region                | X                   | X        | X                  | X        | X         | X      | X      |             |       |  |  | throughout                 |

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

Produced October 2012





*“We have forgotten how to be good guests, how to walk lightly  
on the earth as its other creatures do.”*

*~Barbara Ward*

