



**COASTAL WACCAMAW**  
STORMWATER EDUCATION CONSORTIUM  
BY CLEMSON® EXTENSION



# Annual Report of Activities

JANUARY 2024 - DECEMBER 2024



**COOPERATIVE EXTENSION**  
*College of Agriculture, Forestry and Life Sciences*

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# Executive Summary

The Coastal Waccamaw Stormwater Education Consortium's Annual Report of Activities for 2024 summarizes outreach and involvement programming offered by the Coastal Waccamaw Stormwater Education Consortium (CWSEC) community and education partners throughout the year. The CWSEC implements a region-wide outreach strategy to educate Horry and Georgetown County residents on water quantity, quality, and the cumulative impacts of stormwater. Education programming was steered by the CWSEC's Strategic Plan for 2024-2029. This planning document identifies priority issues to address through messaging and outreach that target residential and commercial audiences. Through partner collaboration, new initiatives in stormwater outreach offered creative methods to work with communities to address pollution in the region.

## 2024 Highlights

- Clemson's Carolina Clear Mass Media Campaign focused on the pollutant of concern bacteria by targeting septic systems. The billboard focused on having your septic system inspected every 1-2 years while the commercial focused on maintaining your septic system by having it pumped every 3-5 years.
- The North Inlet-Winyah Bay National Estuarine Research Reserve (NI-WB NERR) developed the new program "Winyah Watershed Paddle" in 2024. This paddle explores the river systems that feed into the Winyah Bay Estuary while teaching participants about water quality monitoring and cleaning up litter along the way.
- The NI-WB NERR Coastal Training Program (CTP) partnered with Clemson Extension and SC Sea Grant to host the Healthy Pond Series (HPS) program. With the help of CWSEC community partners, HOAs were not only able to connect with educational organizations but also local government representatives to help solve stormwater pond problems.
- The Waccamaw Watershed Academy's volunteers continued their longstanding water quality monitoring efforts in Murrells Inlet, Surfside Beach, Briarcliffe Acres, and along the Waccamaw River.
- SC Sea Grant's CoastSnap station is up and running on the Cherry Grove Fishing Pier. CoastSnap stations will aid in decision making on beach nourishment as well as give researchers valuable information regarding erosion, accretion trends, and beach width.
- Winyah Rivers Alliance partnered with Waccamaw Watershed Academy and NI-WB NERR to host the 2024 Waccamaw Week "Grow with the Flow" themed around native plants. This week long event featured activities and events celebrating the floral beauty of the Waccamaw River watershed including a native plant garden installation!



### **CWSEC Coordinator**

*Catherine Watts is a Water Resource Agent for the Clemson Cooperative Extension Service. As part of her work with the Carolina Clear program, she coordinates the CWSEC. Catherine has a BS in Earth & Environmental Science from UNC Charlotte and an MS in Ecosystem Science and Management from University of Michigan. Originally from Conway, Catherine is happy to be back in the coastal plain of her home state, where her passion for protecting South Carolina's unique water resources first began.*

# Executive Summary

## 2024: A Year in Pictures



*Briarcliffe Acres residents collect water samples with the WWA Volunteer Water Quality Monitoring Program.*



*The Waccamaw Riverkeeper hosted a cleanup at the Coastal Science Center with students from CCU and Early College. Volunteers cleaned the drainage ditch near the CSC and removed 271 pounds of trash!*



*NI-WB NERR partners with SCDNR to host Family Fishing Clinic to teach participants the basics of saltwater fishing.*



*CWSEC first Rain Barrel Sale was a success selling over 80 rain barrels! Special thanks for Town of Surfside Beach for hosting!*

# Executive Summary

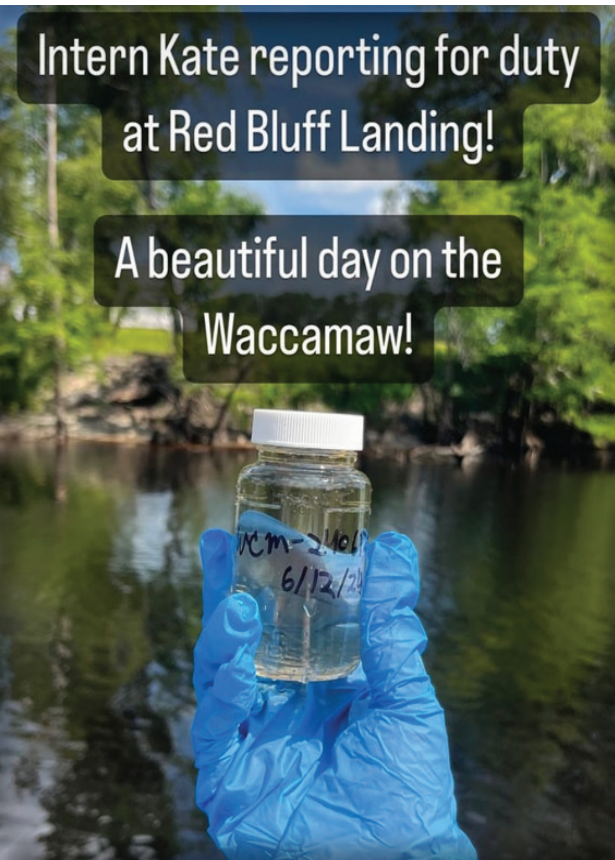
## 2024: A Year in Pictures



*Waccamaw Week 2024 concluded with a Beautification Day where volunteers installed a native plant garden at the Conway Marina.*



*NI-WB NERR hosted AP Environmental and AP Chemistry students from Waccamaw High School where they tested freshwater pond's water quality by testing a variety of different parameters.*

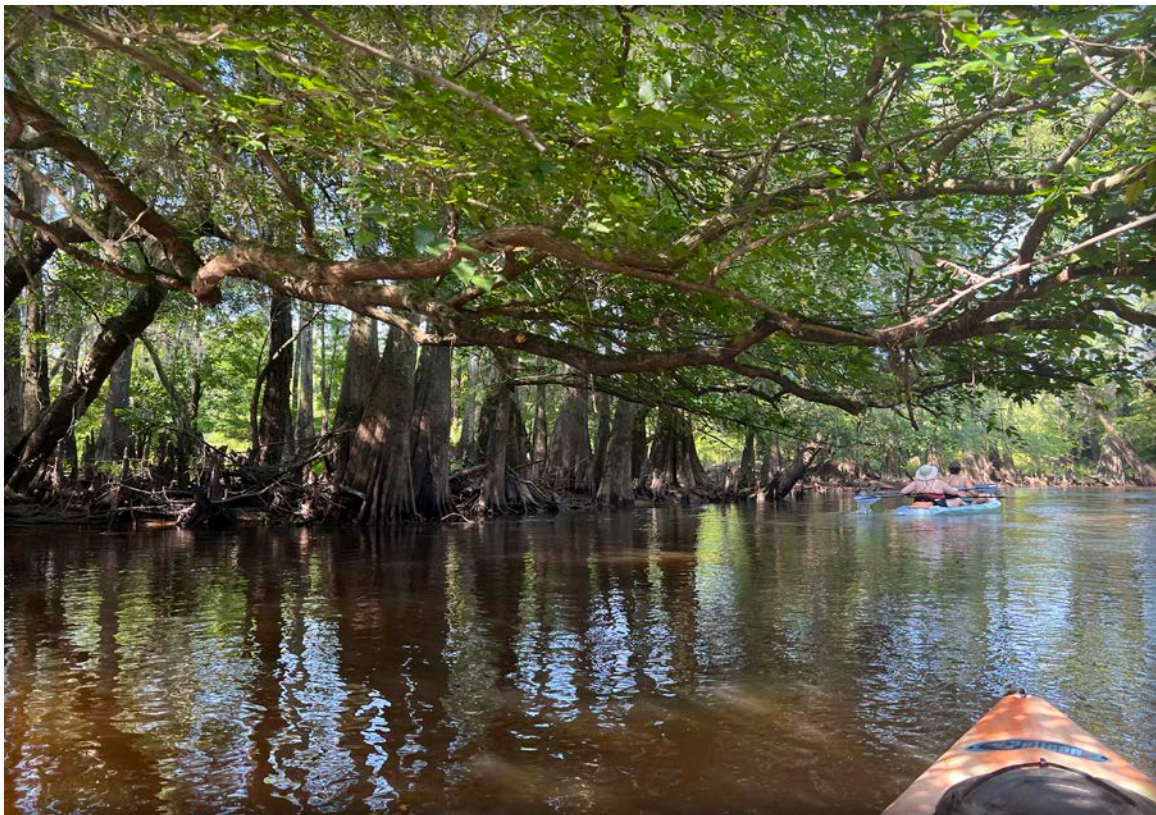


*NI-WB NERR CTP's Maeve Snyder gives overview of Healthy Pond Series to Myrtle Beach participants.*

*Winyah Rivers Alliance's Swim Guide gives up-to-date information on water quality at popular swimming locations throughout the Winyah Bay watershed (left).*

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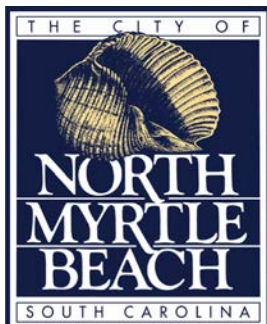
*Kayaking on the Waccamaw.*

# Community Partners

The table below represents the designated Small Municipal Separate Storm Sewer Systems (SMS4) communities in Horry and Georgetown County that have committed to the CWSEC regional collaboration. These communities are represented by a dedicated group of public servants who have been engaged for many years in building the partnership.

## Local SMS4 Consortium Representatives: 2024

Town of Atlantic Beach	Benjamin Quattlebaum
Town of Briarcliffe Acres	Brian Palliser
City of Conway	Brandon Harrelson, Braxton Fleming, & Frankie Edwards
Georgetown County	Ray Funnye, Rodney Butler, & Harley Walker
Horry County	Thomas Roth & Brent Carey
City of Myrtle Beach	Janet Curry & Liudmila Maslova
City of North Myrtle Beach	Kevin Blayton, Jay Beeson, & Dana Hamilton
Town of Surfside Beach	John Adair



# Education Partners

Collaboration is integral in developing and delivering a successful watershed-scale outreach program that reaches diverse audiences. The CWSEC is fortunate to have a variety of organizations in Horry and Georgetown County that have joined the effort. Education partners include universities, state and local government agencies, utilities, and non-profits. Each brings unique expertise, resources, ideas, and programs to the CWSEC. The CWSEC fosters communication among organizations and through this cooperative effort programs are being created or enhanced. Lead and supporting partners are noted in the following report of activities.

## CWSEC Education Partners

Coastal Carolina University's Waccamaw Watershed Academy	Susan Libes, Founding Director Victoria Green, Volunteer Monitoring Program Manager
Clemson Extension's Carolina Clear	Susan Lunt, Carolina Clear Program Coordinator Catherine Watts, CWSEC Coordinator
Murrells Inlet 2020	Stacy Johnson, Executive Director
North Inlet- Winyah Bay NERR	Beth Thomas, Education Coordinator Hayley Fournier, Education Specialist Maevae Snyder, Coastal Training Program Coordinator
S.C. Sea Grant	April Turner, Coastal Communities Program Specialist Brooke Saari, Coastal Environmental Quality Program Specialist Katie Finegan, Coastal Processes Program Specialist
Winyah Rivers Alliance	Cara Schildtknecht, Waccamaw Riverkeeper (2017-May 2024) Preston Kelly, Waccamaw Riverkeeper (October 2024-Present)





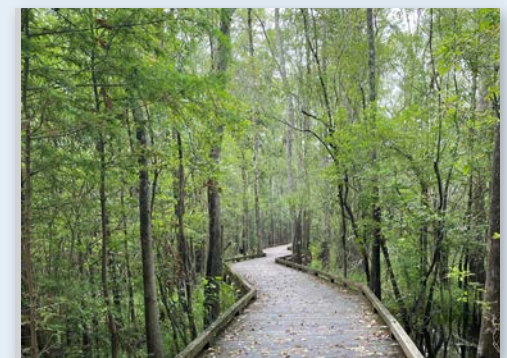
# Mission and Goals

## CWSEC MISSION STATEMENT

*Improve water quality within the Waccamaw River Basin and coastal watersheds along South Carolina's northern coast by providing educational opportunities on stormwater impacts and our community roles in supporting healthy, fishable, and swimmable waterways.*

## PROGRAM GOALS

- Maximize efficiency and effectiveness through coordinated and collaborative stormwater education activities.
- Using a regional watershed approach, help member SMS4s meet NPDES Phase II stormwater permit requirements for public education and outreach and public involvement/participation.
- Provide and exchange technical information and expertise on innovative stormwater best management practices and supporting funding opportunities.
- Improve watershed and stormwater awareness in target audiences that informs decision-making and promotes behavior change to address water quality impairments.
- Continue to serve as a model for collaborative stormwater education and involvement throughout the state of SC and beyond.



# Education and Involvement Program History

To meet the CWSEC program goals, community and education partners meet twice a year or more, if needed, to work collaboratively in the development, implementation, and evaluation of new and existing programming. These meetings and decision-making processes are open to the public.

The objective of the Coastal Waccamaw Stormwater Education Consortium is to help member SMS4s meet their NPDES Phase II stormwater permit requirements for public education and outreach (MCM #1) and public participation/ involvement (MCM #2). Since its founding in 2004 to the transfer of the CWSEC coordinating organization from Coastal Carolina University to Clemson University in 2022, the CWSEC utilized an annual Activity Plan to identify and develop programming priorities for a given year. The Activity Plan summarized the activities for a specified year that would address and prioritize pollutants of concern for the Coastal Waccamaw region and the associated target audiences. However, since the the transfer of coordinating organizations in 2022, a five-year Strategic Plan has taken the place of the annual Activity Plan with regards to educational planning. The Strategic Plan provides a framework for prioritizing regional issues, develops target outreach methods, and determines program evaluation metrics to improve the delivery and impact of CWSEC efforts. It is considered a “living” document to allow for refinement, supplementation, and flexibility as regional efforts and issues evolve over the five-year period.

The development of the Strategic Plan was a multi-year effort that involved community and education partner input and an evaluation of geography, pollutant concerns, and public perception as identified in the 2019 Carolina Clear Statewide Survey. The development of the CWSEC’s Strategic Plan began at the 2022 summer biannual meeting with the identification of the Coastal Waccamaw’s top three pollutants of concern (POC): nutrients, bacteria, and litter. These POCs were developed with CWSEC representative input which took into account available data and personal experience. Subsequent CWSEC biannual meetings and CWSEC education partner meetings throughout 2023 helped identify priority issues, contributing issues, target behaviors, and education strategies to address the pollutants of concern in the region. The 2024-2029 CWSEC Strategic Plan was completed and published in January of 2024. The CWSEC residential and commercial audience priorities are as follows:

## Nutrients

CONTRIBUTING ACTION	TARGET AUDIENCE	TARGET BEHAVIOR
Excessive or Improper Use of Fertilizer by Home Gardener	Home gardeners that perform their own landscaping.	Increase the number of home gardeners who utilize native plants.
Excessive or Improper Use of Fertilizer by Landscape Company	Landscape Professionals	Increase the number of landscape professionals who perform soil tests prior to fertilizer application & follow fertilizer BMPs.

# Education and Involvement Program History

## Bacteria

CONTRIBUTING ACTION	TARGET AUDIENCE	TARGET BEHAVIOR
Pet owners not picking up after their pets	Pet Owners	Increase the number of pet owners who pick up after their dogs in yards and while walking.
Lack of Septic Tank Maintenance	Residents with Septic Tank	Increase residents' awareness of their tanks' location & the signs/causes of a failing septic tank.
Feeding Wildlife	Residents & Tourists	Increase awareness of the problems associated with nuisance wildlife & actions to prevent congregation.

## Litter

CONTRIBUTING ACTION	TARGET AUDIENCE	TARGET BEHAVIOR
Single Use Plastics Pollution	People who use single-use plastics	Increase the number of people who use reusable items.
Not properly securing trash when hauling	People transporting loose debris	Increase the number of people who secure their load and utilize tarps before transporting it.

These priority issues, and subsequent contributing actions, target audiences, and target behaviors, will form the core efforts by the CWSEC; education strategies include five-year timelines for program implementation (see Appendix). To evaluate the effectiveness of outreach and involvement campaigns, evaluation metrics will include but are not limited to:

- Five-year surveys to gauge perceptions, knowledge gained, and behavior change of residents living in the consortium area.
- Google Analytics to evaluate impacts of web-based programming and outreach.
- Short and long-term program evaluation to evaluate workshop and training success in delivering information, assisting participants in overcoming barriers to practice implementation, and meeting the needs of the target audience.
- Other methods including analysis of distribution numbers.

The ability of the CWSEC to implement and deliver consistent messaging and programming as well as leverage partner-lead initiatives helps the Consortium-model to successfully address community priorities and concerns across multiple waterway “lines.”

\*The CWSEC 2024-2029 Strategic Plan can be found online at: [cwsec-sc.org](http://cwsec-sc.org), along with past Activity Plans & Annual Reports.

# Clemson's Carolina Clear Year 2024 Highlight

## “Septic System Maintenance” Mass Media Campaign

Clemson Extension's Carolina Clear program 2024-2025 mass media campaign focused on regular septic system maintenance which keeps you, your family, and your community healthy. By maintaining your system you are ultimately saving money, protecting your property value, keeping your family and neighbors safe, and protecting the environment. Septic systems that are not operating as designed and/or improperly maintained can contribute to harmful bacteria entering our watershed. Bacteria is currently the most common type of water pollution in SC, with over 300 impaired waterbodies found through the state. Waterbodies affected by bacteria pollution may be unsafe for swimming, fishing, harvesting shellfish, or supplying drinking water. Stormwater Consortiums across the state have identified bacteria in waterways as a pollutant of concern.

The multi-part mass media campaign included a billboard and a television commercial; each developed by a team of Carolina Clear Extension agents and was based on feedback from regional Consortiums. Billboard messaging was provided on the target behavior “Inspect your septic system every one to two years.” Twenty-three billboards were installed around the state through a partnership with the Outdoor Advertising Association of South Carolina. Locally, the billboard can be found in Horry County along US Highway 17 North and State Highway 9 North; and in two locations on US Highway 17 South in Georgetown County. These billboards impacts are documented with weekly views and had a combined total of over 380,676 totally weekly impressions in 2024 in the CWSEC region and documented total impressions reached over 13,269,871 million statewide.



**CAROLINA CLEAR BILLBOARD FOCUSES ON THE TARGET BEHAVIOR OF INSPECTING YOUR SEPTIC SYSTEM EVERY ONE TO TWO YEARS. THERE WERE FOUR BILLBOARDS DISPLAYED THROUGHOUT THE CWSEC REGION IN 2024.**

# Clemson's Carolina Clear Year 2024 Highlight

## “Septic System Maintenance” Mass Media Campaign

Commercial messaging concentrated on the target behavior: “Pump your septic system every three to five years.” The commercial aimed to be relatable and share a clear message. Locally, the commercial aired on WBTW with 460,000 total impressions delivered. Statewide, the commercial was shared on five stations and streaming services and reached over 1.9 million views.



THE 2024 CAROLINA CLEAR MASS MEDIA CAMPAIGN COMMERCIAL ALERTED VIEWERS OF SIGNS OF SEPTIC FAILURES INCLUDING SLOW-DRAINING OR BACKED UP SINKS AND TOILETS.



THE 2024 CAROLINA CLEAR MASS MEDIA CAMPAIGN COMMERCIAL FOCUSED ON MAINTAINING SEPTIC SYSTEMS WITH A CLEAR MESSAGE OF HAVING YOUR SEPTIC SYSTEM PUMPED EVERY 3-5 YEARS.

To view the commercial visit: [https://www.youtube.com/watch?v=gHW\\_SPOULbc](https://www.youtube.com/watch?v=gHW_SPOULbc).

Both the billboards and the commercial directs viewers to visit [Clemson.edu/carolinaclear](https://Clemson.edu/carolinaclear).

# NI-WB NERR's Year 2024 Highlight

## Winyah Watershed Paddle

The North Inlet-Winyah Bay National Estuarine Research Reserve's Education staff hosted monthly kayak meetups along the Winyah Bay Watershed. This new Winyah Watershed Paddle highlighted the importance of these vast ecosystems along the Winyah Bay Watershed. Not only that, staff demonstrated water quality monitoring methods with portable equipment. Kayak locations so far include: Black River, Sampit River, and Waccamaw River. The program plans to extend their meetups into other locations along the watershed. Long term partnerships have been established with this growing program including Georgetown County Parks and Recreation and Winyah Rivers Alliance. These two entities have brought numerous educational benefits to the paddles. After each paddle, as a way to say "thank you" for the wonderful time, paddlers pick up litter at the launch site, and along the kayak trip.



**THE WINYAH WATERSHED PADDLE EXPLORES THE RIVER SYSTEMS THAT FEED INTO THE WINYAH BAY ESTUARY. THE PADDLE ABOVE EXPLORED FOUR MILES OF CHOPPEE CREEK ON THE BLACK RIVER.**

**SEPTEMBER'S PADDLE SAW PARTICIPANTS CLEAN LITTER ALONG PETER'S CREEK ON THE BLACK RIVER AND AROUND THE LANDING (BELOW).**



**DURING PADDLES, FOLKS LEARN ABOUT LOCAL FLORA AND FAUNA THAT ENCOMPASS OUR MAGNIFICENT RIVER ECOSYSTEMS! DURING THE MAY PADDLE ALONG THE BALCK RIVER, PARTICIPANTS DISCOVERED BLOOMING SPIDERLILY!**

# NI-WB NERR CTP's Year 2024 Highlight

## Grand Strand Healthy Pond Series

The 2024 Grand Strand Healthy Pond Series (HPS) is an educational workshop series, co-planned by the Coastal Waccamaw Stormwater Education Consortium, the North Inlet - Winyah Bay Reserve, and S.C. Sea Grant. In 2024, we hosted four community workshops focused on stormwater pond problem solving. Each workshop was held in local community centers in different areas of the watershed: Carolina Forest, Pawleys Island, Myrtle Beach, and North Myrtle Beach. Structured as informal evening events, these workshops represented an updated education strategy for the target audience of homeowners' association board members and residents. The agenda emphasized connecting the target audience to educational organizations and local government representatives with the goal of solving pond problems, rather than general pond education. This partnership leveraged MS4 social media and contact networks to broaden marketing and improve community engagement. Across all four workshops, the HPS reached 79 community members. Participation varied and seemed to reflect population density and the number of subdivisions/ponds within each area. Overall, participants reflected the target populations and geographies we hoped to reach.



### COMMUNITY AND EDUCATIONAL PARTNERS CAME TOGETHER THROUGHOUT 2024 TO HELP MAKE HPS A SUCCESS!



**HORRY COUNTY STORMWATER GAVE A PRESENTATION AT EACH HPS EVENT IN 2024. PICTURED ABOVE IS HORRY COUNTY AT THE CAROLINA FOREST HPS EVENT.**



**WACCAMAW WATERSHED ACADEMY JOINED THE HPS PARTNERS AT THE MYRTLE BEACH HPS EVENT TO DISCUSS THE VOLUNTEER WATER QUALITY MONITORING PROGRAM WITH INTERESTED ATTENDEES.**

# Waccamaw Watershed Academy Year 2024 Highlight

## Volunteer Water Quality Monitoring Program

In 2024, volunteers with the Waccamaw Watershed Academy (WWA) continued their longstanding water quality monitoring efforts in Murrells Inlet, the Town of Surfside Beach, the Town of Briarcliffe Acres, and along the Waccamaw River. This program serves not only to fulfill Minimum Control Measures for outreach and engagement (MCM #1 and #2) but also illicit discharge detection and elimination (MCM #3).

WWA's dedicated community scientists are experienced with the specific field conditions at their monitoring sites and the rigorous sampling protocols outlined in the DES-approved Quality Assurance Project Plan. Volunteer data is quickly relayed to the MS4s to help inform their stormwater management decisions. The WWA works with community partners such as the Waccamaw Riverkeeper and Murrells Inlet 2020 to recruit new volunteers and promote the use of the volunteer water quality data.

By leveraging their expertise and passion for environmental stewardship, our volunteers exemplify the power of community-driven initiatives in safeguarding the health and vitality of our waterways, setting a standard of excellence for volunteer-based monitoring programs.



**BRIARCLIFFE ACRES VOLUNTEERS (ABOVE) AND WACCAMAW RIVER VOLUNTEERS (BELOW) POSE FOR A PHOTO WHILE SAMPLING.**



**THE WWA'S ANNUAL VOLUNTEER APPRECIATION LUNCHEON FEATURED A RECAP OF THE VOLUNTEER DATA, INTERESTING SCIENTIFIC RESEARCH RELATED TO VOLUNTEER MONITORING, AND RECOGNIZED THEIR DEDICATED COMMUNITY SCIENTISTS.**





## Cherry Grove Fishing Pier's CoastSnap

CoastSnap is a community beach monitoring program that uses cell phone photos taken by beach visitors from a specific location to track how the location's shoreline is changing over time. A CoastSnap station is mounted on the Cherry Grove Fishing Pier in North Myrtle Beach (3500 N Ocean Blvd North Myrtle Beach, S.C. 29582). There is a small fee to gain access to the pier. This station was originally installed in November of 2022 but then was taken down while the pier underwent repairs from Hurricane Ian. After the pier was reopened in summer 2024, the CoastSnap station was reinstalled in November 2024 and collected 33 images in the final months of the year.



The sand on our beaches are constantly shifting. The US Army Corps of Engineers (USACE) is responsible for nourishing North Myrtle Beach with more sand when it is needed. These photos will help the USACE make decisions on their nourishment efforts. Scientists also want to have a better understanding of the processes and factors contributing to shoreline changes such as sea level rise, spring tides, hurricanes, and nor'easters. These CoastSnap photos from beach visitors are a reliable source of data for scientists to use. Once a photo is taken and submitted, it will be reviewed by researchers to determine erosion and/or accretion trends, as well as beach width.



**CHERRY GROVE FISHING PIER'S COASTSNAP STATION IS UP AND RUNNING AGAIN! SC SEA GRANT'S KATIE FINEGAN (PICTURED) COORDINATES THIS PROGRAM.**



**IMAGES FROM THE FOLLY BEACH PEIR COASTSNAP STATION WERE USED TO MONITOR THE 2024 BEACH NOURISHMENT PROJECT.**

# Waccamaw Riverkeeper Year 2024 Highlight

## ‘Growing with the Flow’ Waccamaw Week

The Waccamaw Riverkeeper partnered with NI-WB NERR and CCU’s Waccamaw Watershed Academy to host the 2024 Waccamaw Week from March 22 through March 30. The 2024 theme ‘Grow with the Flow’ was a groovy way to explore native plants as an important part of water quality management. The week celebrated how native plants are more than just pretty flowers, but how they provide a wide-range of benefits that helps to maintain a healthy Waccamaw River watershed ecosystem. Throughout the week of World Water Day, Waccamaw Week hosted activities and events celebrating the floral beauty of the Waccamaw River watershed.



The week kicked off with an “Outdoor Movie Night” on March 22, featuring the premiere of *Flora the Explorer*, an educational video about native plants, followed by a screening of *The Day of the Triffids*.



**FLORA THE EXPLORER VISITED THREE DIFFERENT HABITATS THROUGHOUT THE WACCAMAW RIVER WATERSHED, A RIPARIAN HABITAT, A PINE SAVANNA, AND A SWAMP, TO LEARN ABOUT THE PLANTS THAT LIVE THERE.**

On March 24, nature lovers participated in “Far Out Field Day” at the Waccamaw National Wildlife Refuge. The field day included a native plant walk, a pontoon and kayak tour, a birding walk, and yoga sessions, all highlighting the beauty and benefits of native flora.

“Myrtle Beach Green Drinks”, on March 27, was hosted by the Waccamaw Week organizing committee. As always, it provided an opportunity for environmentally conscious locals to network and learn from organizations addressing environmental concerns over drinks in a casual setting.

# Waccamaw Riverkeeper Year 2024 Highlight

## ‘Growing with the Flow’ Waccamaw Week

On March 28, Waccamaw Week partnered with Coastal Carolina University’s Outdoor Rec and Sustain Coastal to remove water hyacinth (*Pontederia crassipes*), an invasive aquatic plant that can clog tributaries and swamps, from the Waccamaw River. Volunteers removed over 580 pounds of water hyacinth by kayak! The plants were then transported to the Horry County Solid Waste Authority for composting.



**BRAVE KAYAKERS HELPED RID THE WACCAMAW OF OVER 580 POUNDS OF WATER HYACINTH!**

The week concluded on March 30 with “Beautification Day” in downtown Conway, where a native plant garden was installed at the City of Conway Marina. Complete with several native plant species, plant ID tags, and an educational sign, this garden is sure to raise awareness of native plants and the variety of benefits they provide to both humans, wildlife, and the environment. After the garden was installed, Waccamaw Week officially came to a close with the annual “River Jump” where the organizing committee jumped in the Waccamaw River to celebrate a total of \$2,226 in donations!



**WACCAMAW WEEK’S ORGANIZING COMMITTEE AND VOLUNTEERS POSE FOR A PHOTO AFTER INSTALLING A NATIVE PLANT GARDEN AT THE CITY OF CONWAY MARINA.**

# Annual Report of Activities Format

## 2024 DATA COLLECTION

Activity information was gathered from CWSEC’s education partners and member SMS4s in a variety of ways in 2024. The most common format being an excel spreadsheet with a table listing each activity, date of activity, partners, and the impact number. Partners then emailed their excel spreadsheet to the CWSEC coordinator who compiled all of the data into this report. Partners were also able to use the online activity database developed by the Clemson Extension’s Carolina Clear program. This database records detailed information on activities conducted by consortium partners. The data collected in the Carolina Clear Activity Database includes information on target audiences, pollutants addressed, activity type, lead service providers, supporting partners, number of impacts, location, and several other categories. As of January 2024, CWSEC partners could input their organization’s activities in the online database if they choose.

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The annual report utilizes the same general format as other Clemson Extension’s Carolina Clear regional stormwater consortiums in South Carolina. This annual report, number 20 for the consortium, is intended to give the reader a comprehensive look at the CWSEC from January 1, 2024 through December 31, 2024. This report delineates activities into public education and public involvement categories. Further, public education activities are identified as either direct or indirect outreach strategies. For each activity, a brief description is provided as well as information on lead provider, supporting partners, date, and the number of impacts.

In the following tables, public education activities are classified into two broad categories, **direct** and **indirect** outreach methods, to express mechanisms by which information has been communicated to the public. Indirect outreach methods refer to contacts through traditional media channels including television, radio, print, and billboards. Indirect methods generally reach a much greater portion of the population due to the nature of their mediums; however, it is often more difficult to gauge specific impacts. In contrast, direct methods include activities that are implemented via direct personal contact. Examples of direct methods include workshops, presentations, trainings, and public involvement activities. When dealing with direct methods, smaller numbers of people are reached yet those that are reached generally provide a forum for direct evaluation and feedback. Each method is important in the overall education campaign, and both are part of the five year educational strategy for the CWSEC. Throughout the document, the words “direct” or “indirect” are provided at the top of each reporting table.

**\*Data provided are as accurate as possible and are reviewed by multiple individuals involved in the reporting process. However, due to the nature of indirect outreach initiatives, indirect impact numbers are typically estimates.**

# Public Education: Indirect

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2024	INTERNET: Total unique views in 2024 for the Carolina Clear, CWSEC, Carolina Yards, Clemson Extension Water Team, Rain Gardens, Living Shorelines, CSPR, and CEPSCI websites. Of the impact number, there were 1,417 visits to the CWSEC webpage.	Clemson Extension, Clemson University, & CWSEC	98,278
2024	INTERNET: Total unique views for Carolina Clear Facebook page in 2024 (3,100 followers).	Clemson Extension	22,700
2024	INTERNET: Total views on Carolina Clear YouTube channel (479 subscribers). Video segments on a diverse array of topics related to watershed stewardship. The average view duration was 1 minute and 52 seconds. Numbers based on total page views for the Carolina Clear YouTube page in 2024.	Clemson Extension & Carolina Clear	8,900
2024	INTERNET: Total unique views for Making It Grow Facebook page in 2024 (26,000 followers).	Clemson Extension	1,234,555
2024	INTERNET: Total unique views for Carolina Yards Facebook page in 2024 (2,100 followers).	Clemson Extension	26,237
2024	INTERNET: Murrells Inlet 2020 maintains a large social media following posting a variety of topics including community education about stormwater, runoff, water quality, and wildlife.	Murrells Inlet 2020	56,500
2024	INTERNET: Horry County Government posted 15 Facebook posts about the Horry County Stormwater Department. Posts were about stormwater projects happening throughout the county, drainage and flooding issues, and educational information about stormwater runoff in association with water quality.	Horry County	200,000
2024	INTERNET: Georgetown County Stormwater Division celebrated Stormwater Awareness Week by utilizing the county's Facebook page to discuss various stormwater related topics. Each day focused on a different topic including: Special Protection Areas, Stormwater Ponds, Low Impact Development, Watersheds, and HOW To Get Involved. Impact reflects Georgetown County's Facebook followers.	Georgetown County	24,000

# Public Education: Indirect

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2024	INTERNET: SC Coastal Information Network (SCCIN) is a coastal partnership of 29 local, state, and federal partners coordinated through the S.C. Sea Grant Consortium. providing educational and training opportunities for coastal community officials, staff, and the public. Two virtual meetings were held in 2024 (January 11 & October 14) with a total of 43 network members in attendance. SCCIN also hosts an online event calendar and resource portal providing educational and training opportunities for coastal community officials, staff, and the public.	SC Sea Grant	43
2024	INTERNET: SCCIN website views. The SCCIN website maximizes efficient delivery of quality training and educational material to coastal decision-makers, community planners, local officials, and the public. It also provides a directory of outreach events and links to collaborating partners. Partners listed reflect CWSEC partners; for full partner list visit: <a href="https://www.sccoastalinfo.org/about/">https://www.sccoastalinfo.org/about/</a>	SC Sea Grant, Clemson Extension, CWSEC, NI-WB NERR, & Waccamaw Watershed Academy	4,900
2024	INTERNET: SC LIDAtlas website views. Redesigned and relaunched interactive online map which displays current low impact development (LID) projects statewide. The goal of the atlas is to showcase LID projects so that they can serve as models for communities trying to address stormwater- and growth-related issues. 50 SC LID Atlas flyer were distributed in 2024 at various meetings.	SC Sea Grant	64
2024	INTERNET: SC Clean Marina website views. This website outlines the program's goal to protect and improve local water quality by reducing pollution from marinas, boatyards, and yacht clubs as well as how to become a certified 'clean marina' and where to find a 'clean marina' in SC. The updated Clean Marina Guidebook was released Nov. 12, 2024 with 27 distributed in 2024. There have been 30 rack cards distributed to prospective marinas interested in certification.	SC Sea Grant	512
2024	TELEVISION: The 2024-2025 Carolina Clear mass media campaign focused on regular septic system maintenance which keeps you, your family, and your community healthy. Commercial messaging was provided on the target behavior "Pump your septic system every three to five years" on WBTW in Horry and Georgetown Counties. Highlight on pages 10 & 11.	WBTW News 13 & Clemson Extension	460,000

# Public Education: Indirect

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2024	TELEVISION: SC ETV and Clemson Extension’s “Making It Grow” shares home and garden information for South Carolina residents; a water quality tip is included each week during the broadcast. The impact number represents the average viewers per episode.	Clemson Extension & SC Educational Television	19,866
2024	TELEVISION: Two segments on water quality aired on WBTW in 2024. The first segment, aired in January 2024, focused on bacteria pollution from dog waste. The second segment, aired in February 2024, focused on the importance of native plants and their role in reducing nutrient pollution.	WBTW News 13, Clemson Extension, CWSEC, & Florence Darlington Stormwater Consortium	436,500
Nov. 14, 2024	TELEVISION: FoxCarolina News features Clemson Extension water expert about how to keep your family safe after lead detected in Asheville City Water. Aired television interview and also can be accessed online.	Clemson Extension & Carolina Clear	845,990
2024	BILLBOARD: The 2024-2025 Carolina Clear mass media campaign focused regular septic system maintenance which keeps you, your family, and your community healthy. Billboard messaging was provided on the target behavior “Inspect your septic system every one to two years” in high-visibility locations. In Horry County, the billboards were located on State Highway 9 North, 1200 feet W/O State Highway 57 and on US Highway 17 North, 1.65 miles N/O State Highway 90. In Georgetown County, the billboards were located on US Highway 17 South, .10 miles S/O Sampit River and on US Highway 17 South, 3.23 miles S/O Sampit River. Impacts reported as total weekly impressions.	Clemson Extension	380,676



*The 2024-2025 Carolina Clear Billboard reminds people on Highway 17 in Georgetown to inspect their septic systems every 1-2 years!*

# Public Education: Indirect

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2024	MANUAL: Low Impact Development Manual in Coastal South Carolina: A Planning and Design Guide. This comprehensive manual provides engineering tools, planning guidance, and case study examples that are relevant to the South Carolina coastal zone. The manual was developed to provide local decision makers with the knowledge and resources to apply LID practices on the community, neighborhood, and site scale. This manual is available as a hard copy or for download from the S.C. Sea Grant Consortium's and NI-WB NERR's websites. Downloads from the SC Sea Grant's site totaled 158 downloads of the entire document in 2024. Impact reflects total website views.	SC Sea Grant, SCDNR, NI-WB NERR, & ACE Basin NERR	389
2024	PUBLICATION: Land Grant Press publications authored by the Clemson Extension Water Resources Team include 31 publications since 2019. Topics include stormwater ponds, livestock ponds, recreational ponds, wetlands, aquaponics, funding, flooding, pond dredging, pond weeds, headwater streams, watershed based planning, harmful algal blooms and more. This publications can be accessed at <a href="http://lgpress.clemson.edu">lgpress.clemson.edu</a>	Clemson Extension, Clemson University, Carolina Clear, & Land Grant Press	59,685
2024	PUBLICATION: Factsheets located on the Clemson Home and Garden Information Network (HGIC) that have been authored by Water Resource Agents and that directly relate to stormwater education include topics on pond management, landscape-level stormwater management, vegetative buffers, low impact development, and more. The total unique views is estimated from historical data and current trends. Note: Impact is an under estimate of the total impacts as this does not include factsheets on topics associated with fertilizer application, composting, native plants, and other best management practices associated with water quality. These publications can be accessed at <a href="http://hgic.clemson.edu">hgic.clemson.edu</a>	Clemson Extension, Clemson University, Carolina Clear, & HGIC	50,000
2024	PUBLICATION: Clemson Newspapers highlight Clemson Extension's stormwater pond preparation tips as well as how floating wetlands can bring beauty and benefits to South Carolina ponds.	Clemson University & Clemson Extension	2,177
2024	PUBLICATION: Taking Care of Business: A User's Guide For Being Septic Safe.	Clemson Extension & Carolina Clear	2,300
April 16, 2024	INTERVIEW: Greenville News Article Interview: Sustainability with Sarah: Why does polluted stormwater flow into rivers and lakes?	Clemson Extension & Carolina Clear	45,000



# Public Education: Indirect

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2024	NEWSLETTER: The Waccamaw Riverkeeper's monthly newsletters "What's Up on the Waccamaw?" shares information about programs, issues, and advocacy.	Waccamaw River Keeper	500
2024	NEWSLETTER: The Waccamaw Watershed Academy's monthly newsletter features a recap of recent Volunteer Water Quality Monitoring Program results and upcoming events in our watershed.	Waccamaw Watershed Academy	542
2024	NEWSLETTER: The CWSEC's newsletter highlights programs/ events, primarily those hosted by CWSEC education partners, happening in Horry & Georgetown counties. The impact number represents total number of newsletter subscribers.	CWSEC & Clemson Extension	81
2024	NEWSLETTER: Murrells Inlet 2020's bimonthly newsletter, "Inlet Happenings", shares information about local events, community, and environmental education.	Murrells Inlet 2020	35,000
July 30, 2024	BROCHURE: City of Myrtle Beach distributed info cards on Paint, Erosion, and Construction to the Construction Services Department.	Myrtle Beach	50
Aug. 1, 2024	BROCHURE: City of Myrtle Beach distributed "A Guide To Regulatory Floodplains and Flood Protection" to all residents within city limits. This guide and more information about floodplains and flooding can be found on the city's website.	Myrtle Beach	21,200
Oct. 4, 2024	BROCHURE: City of Myrtle Beach distributed Pet Waste info cards to the Grand Strand Humane Society and the Preserve at Pine Lakes HOA.	Myrtle Beach	200
2024	REPORTING: Provisional water quality reports from the WWA and Environmental Quality Lab's monitoring programs sent to MS4s and partners following each sampling event.	Waccamaw Watershed Academy	115
Jan. 31, 2024	SURVEY: City of Myrtle Beach's Stormwater Master Plan questionnaire gave citizens a chance to offer feedback and suggestions concerning stormwater in their neighborhood.	Myrtle Beach	152

# Public Education: Indirect

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2024	PROMOTIONAL MATERIAL: Distribute recycling activity and coloring books to school-aged children.	Murrells Inlet 2020	200
2024	DEMONSTRATION SITE: Horry County installed a shoreline buffer and floating wetland with signage in a stormwater pond at Horry County Dispatch Center. Maintenance by Horry County.	Horry County	100
2024	DEMONSTRATION SITE: Rain garden and signage at James R. Frazier Community Center in Bucksport. Installed in 2022; KHCB Board work day on December 6, 2024 & continued maintenance by Horry County	Betterment of Bucksport, Clemson Extension, Coastal Conservation League, & Horry County	100
2024	DEMONSTRATION SITE: Shoreline Planting with signage on Nixon Street in North Myrtle Beach; installed in 2022	North Myrtle Beach	250
2024	DEMONSTRATION SITE: 150-gallon cistern and an adjacent rain garden with signage installed at Andrews Public Library in the summer of 2022 demonstrates a “Treatment Train”. Rainwater is captured from the library roof into the cistern with overflow directed toward the rain garden.	Dorothy D. Smith Charitable Foundation, Nature Conservancy, Clemson Extension, Georgetown County, City of Andrews, & Sustainability Institute	200
2024	DEMONSTRATION SITE: Two 50-gallon rain barrels and an adjacent rain garden with signage installed at Andrews High School in the summer of 2022. Rainwater is captured from the roof of the school’s entrance into the rain barrels.	Dorothy D. Smith Charitable Foundation, Nature Conservancy, Clemson Extension, Georgetown County, City of Andrews, & Sustainability Institute	200
2024	DEMONSTRATION SITE: Floating wetland in stormwater pond at South Strand Rec Center; installed in 2012 with renovations in 2021	Horry County	500

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2024	WATER SAMPLES: Clemson Extension in cooperation with Clemson’s Agricultural Service Lab, processed water samples for residential and commercial audiences. Impact represents total in Horry & Georgetown Counties.	Clemson Extension & Clemson’s Agricultural Service Lab	38
2024	SOIL SAMPLES: Clemson Extension in cooperation with Clemson’s Agricultural Service Lab, processed soil samples for residential and commercial audiences. Impact represents total in Horry & Georgetown Counties.	Clemson Extension & Clemson’s Agricultural Service Lab	1,580
2024	TRAINING: CEPSCI. Clemson provides training and certification through the Certified Erosion Prevention and Sediment Control Inspector (CEPSCI) program to assist in pollution prevention control on construction projects. In 2024, certifications and re-certifications were offered as online and in-person formats. Impact reflects statewide trainings.	Clemson Extension, Clemson University, SCDOT & SCDES	1,295
2024	TRAINING: CSPR. Clemson provides training and certification through the Certified Stormwater Plan Reviewer (CSPR) program to educate personnel on the proper design and review of stormwater and sediment control plans for development sites in order to meet regulator and environmental requirements. Impacts reflect statewide trainings. In 2024, certifications and recertifications were offered in-person. Impact reflects statewide trainings.	Clemson Extension, Clemson University & SCDES	59
2024	TRAINING: The South Carolina Master Naturalist program aims to turn out volunteer citizen scientists who can positively impact the natural resources of the state. This program is currently offered through six Host Site locations around the state. These field-based training sessions typically last 12 weeks, meeting all day, one day per week. Impact reflects statewide training.	Clemson Extension	101
2024	TRAINING: The WWA hosts training sessions for interested volunteers to become certified in the Volunteer Water Quality Monitoring Program. There were a total of 6 training sessions in 2024.	Waccamaw Watershed Academy	10
Feb. 20, 2024	TRAINING: Horry County hosted a specialized training session on Illicit Discharge Detection and Elimination (IDDE) under the National Pollutant Discharge Elimination System (NPDES) in Briarcliff Acres. This training equipped attendees with the skills to identify and address unauthorized discharges into stormwater systems.	Horry County	10

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
March 6, 2024	TRAINING: On Farm Water Management Workshop for New & Beginning Farmers in Blackville, SC	Clemson Extension & Carolina Clear	15
April 17, 2024	TRAINING: “Pipe Installation & Acceptance Training” hosted by Advanced Drainage System to NMB Public Works staff.	North Myrtle Beach	16
April 17, 2024	TRAINING: “Storage (StormTech & AquaBox)” training hosted by Advanced Drainage System to NMB Public Works staff.	North Myrtle Beach	12
April 25, 2024 Nov. 12, 2024	TRAINING: The South Carolina Clean Marina Program aims to protect and improve local water quality of South Carolina waters by reducing pollution from marinas. This voluntary certification program recognizes marinas, boatyards, and yacht clubs for helping create a cleaner marine environment in South Carolina Two training workshops were held in 2024: 04/25 with 16 participants representing 6 marinas; 11/12 with 27 participants representing 10 marinas. In 2024, two marinas went through the site review process to certify/recertify as clean marinas, including Myrtle Beach Yacht Club in Little River, SC and Charleston County Parks’ Cooper River Marina in North Charleston.	SC Sea Grant, Clemson Extension, SCDNR, & SC DES: Ocean & Coastal Resource Management	43
May 15, 2024	TRAINING: Backhoe Rodeo NPDES Good Housekeeping Training for all Horry County public works, storm water, and engineering employees. This event provided hands-on experience in operating equipment for stormwater management and maintenance.	Horry County	300
2024	HYBRID TRAINING: Master Tree Farmer is a “hybrid” course combining online and face-to-face learning where participants learn scientific and practical knowledge to manage forested land to best suit ecological, economical, and recreational forest resources.	Clemson Extension	67

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Spring 2024	HYBRID TRAINING: Living Shorelines is an on-demand hybrid course that shares how this powerful tool can proactively protect estuarine shorelines and prevent erosion along residential and commercial properties. The field day was held at SCDNR's Fort Johnson in Charleston on April 23rd. Impact reflects statewide training.	Clemson Extension & Carolina Clear	75
Spring & Fall 2024	HYBRID TRAINING: Post Construction BMP Inspector certification and re-certification courses are online and field-based training focused on inspection and maintenance of best management practices used for stormwater management. The certification course was offered in the spring with the field day held on 6/25 in Clemson, SC. Certification and re-certification courses were offered in the fall with the field days held on 12/5 & 12/6 in North Charleston, SC. A total of 67 individuals were certified, and 32 were re-certified. Impact reflects statewide trainings.	Clemson Extension	99
Fall 2024	HYBRID TRAINING: Master Rain Gardener is an online and field-based training focused on rain garden and rainwater harvesting system design and implementation. The online classroom was offered in the fall, with two fields hosted in Mount Pleasant, SC in October of 2024. Impact reflects statewide training.	Clemson Extension	63



*The Living Shorelines course is designed to teach participants all about living shorelines in estuarine environments, and includes information on site assessment, installation materials and methods, and evaluating performance of living shoreline installations.*

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Fall 2024	HYBRID TRAINING: Master Pond Manager teaches recreational and stormwater pond management training to participants through online classroom and field-based curriculum. The online classroom was offered in the fall, with two field days hosted in Clemson, SC on 10/23 & 10/24. Impact reflects statewide training.	Clemson Extension	47
April 25, 2024	HYBRID TRAINING: The Ecological Landscape Design training is aimed for landscape architects, stormwater engineers, planning staff and planning officials to learn principles and best practices for creating and maintaining attractive, functional landscapes while protecting local water resources and biodiversity.	NI-WB NERR Coastal Training Program, Clemson Extension, SC Sea Grant, & SCDNR	9
2024	ONLINE TRAINING: Salt Marsh Course is an on-demand online course to teach salt marsh ecology, research and management as it relates to the South Carolina salt marsh. The course includes information on threats to the salt marsh, flora and fauna highlights, oyster reef ecology and stewardship actions. Impact reflects statewide training.	Clemson Extension, SCDNR, SC Sea Grant, & NOAA	175



*Master Pond Manager’s field days took place in Clemson, SC in 2024. Pictured are participants during the Stormwater Pond field day.*

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2024	ONLINE TRAINING: Carolina Yards Online provides online learning opportunity to South Carolina homeowners in conserving water in the landscape and making positive changes in the environmental quality of their yards, neighborhoods, and surrounding waterways by implementing and maintaining low impact and low maintenance yard practices. Impact reflects statewide training.	Clemson Extension	30
2024	ONLINE TRAINING: South Carolina Certified Landscape Professional Course is an online, self-paced course designed to provide a basic working knowledge of sound horticultural and landscaping practices. Impact reflects statewide training.	Clemson Extension	53
2024	ONLINE TRAINING: Seasonal Pond Management in the Upstate is an online, asynchronous course, providing information about how to manage recreational ponds in South Carolina.	Clemson Extension & Carolina Clear	15
2024	ONLINE TRAINING: Dam Ownership in South Carolina Course is an on-demand online course to assist dam owners and/or operator with understanding the basic concepts to protect the integrity and benefit of dams. Impact reflects statewide training.	Clemson Extension, SCDES, & NRCS	35
2024	ONLINE TRAINING: Be Well Informed is an on-demand online course that provides information for people relying on private drinking water wells including a basic introduction to groundwater, well components, well maintenance, and relevant water quality issues. Impact reflects statewide training.	Clemson Extension & Carolina Clear	115
2024	ONLINE TRAINING: Backyard Wildlife Habitat Short Course teaches participants the basic principles of creating and establishing a wildlife habitat in their own backyard; and covers topics that include the basic needs for your garden, food, shelter, water, and space requirements for attracting wildlife. Impact reflects statewide training.	Clemson Extension	345

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
March 12, 2024	WORKSHOP: Healthy Pond Series Carolina Forest. The Healthy Pond Series is for HOA board members and community residents to learn about stormwater pond problem solving and to connect with local stormwater managers and educational organizations. Highlight on page 13.	NI-WB NERR Coastal Training Program, Clemson Extension, SC Sea Grant, & Horry County	32
March 28, 2024	WORKSHOP: Clemson Extension hosted a Goose Management Workshop to give HOAs the knowledge to manage their neighborhood ponds and who to contact for assistance. Attendees will learn the impact that geese have on water and pond quality and various methods of control. Presentations from USDA, DNR, Clemson Extension, & Horry County Stormwater.	Clemson Extension, CWSEC, USDA, SCDNR, & Horry County	15
June 4, 2024	WORKSHOP: Healthy Pond Series Waccamaw Neck/Georgetown. The Healthy Pond Series is for HOA board members and community residents to learn about stormwater pond problem solving and to connect with local stormwater managers and educational organizations. Highlight on page 13.	NI-WB NERR Coastal Training Program, Clemson Extension, SC Sea Grant, Horry County, & Georgetown County	11
July 11, 2024 Nov. 1, 2024	WORKSHOP: Surfside Beach’s “Tree Canopy Workshop” is funded by a grant from the Green Infrastructure Center and the SC Forest Commission. This Tree Canopy Mapping project enlists the Stormwater Committee and resident volunteers to determine the potential canopy areas and a potential canopy goal for the town. The project helped identify ways to decrease canopy loss, beautify neighborhoods, increase shade areas, and improve and mitigate stormwater.	Surfside Beach	13



*Clemson Extension held a Goose Management Workshop for the CWSEC region at the South Strand Recreation Center. Pictured is USDA-APHIS speaking about different strategies to manage resident populations of Canada geese.*



# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Aug. 17, 2024	WORKSHOP: Landscape Design Workshop at the South Carolina Botanical Garden in partnership with Clemson Extension is an immersive experience where participants gained valuable knowledge and hands-on practice in landscape design.	Clemson Extension & SC Botanical Gardens	20
Sept. 10, 2024	WORKSHOP: Healthy Pond Series Myrtle Beach. The Healthy Pond Series is for HOA board members and community residents to learn about stormwater pond problem solving and to connect with local stormwater managers and educational organizations. Highlight on page 13.	NI-WB NERR Coastal Training Program, Clemson Extension, SC Sea Grant, Horry County, & Myrtle Beach	25
Oct. 5, 2024 Oct. 12, 2024	WORKSHOP: NI-WB NERR'S "Teacher on the Estuary: Cypress to Salt Marsh" is a professional teacher development workshop in which teachers explored the headwaters of the Black River at the Black River Cypress Preserve in Andrews and Winyah Bay & North Inlet estuaries at the North Inlet-Winyah Bay Reserve at Hobcaw Barony in Georgetown. This workshop teaches teachers how they can bring watershed and estuary education into their classrooms.	NI-WB NERR	4



*NI-WB NERR's teachers local teachers new ways to incorporate research and marine science into their classrooms! Pictured are 2024's teachers at Hobcaw Barony.*

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Dec. 3, 2024	WORKSHOP: Healthy Pond Series North Myrtle Beach. The Healthy Pond Series is for HOA board members and community residents to learn about stormwater pond problem solving and to connect with local stormwater managers and educational organizations. Highlight on page 13.	NI-WB NERR Coastal Training Program, Clemson Extension, SC Sea Grant, Horry County, & North Myrtle Beach	11
March 22-30, 2024	CONFERENCE: Winyah Rivers hosted a week of activities during the 2024 Waccamaw Week. The Waccamaw Week is an annual educational event for the public focused on the importance of our natural water resources and efforts to protect them. The theme for the 2024 Waccamaw Week “Grown with the Flow” was all about native plants and their role in maintaining a healthy Waccamaw River watershed ecosystem. The 2024 Waccamaw Week featured native plant walks, an invasive plant removal along the Waccamaw River, and a native plant garden installation. Highlight on page 16.	Waccamaw Riverkeeper, NI-WB NERR Coastal Training Program, & Waccamaw Watershed Academy	150
Jan.10-11, 2024	EXHIBIT: Pathways to Possibilities Career Expo invites 8th grade classes from schools across 10 counties for an interactive career fair that will allow students to experience 19 career pathways. Several partners were exhibitors at P2P in 2024 to educate students on water quality, environmental science, and stormwater runoff/pollution. Impact represents estimation of student interactions. Impact reaches beyond Horry & Georgetown Counties.	Clemson Extension, Waccamaw Riverkeeper, NI-WB NERR, Georgetown County, & Myrtle Beach	1,000



*Several CWSEC partners participated in 2024’s Pathways to Possibilities Career Fair. Pictured is NI-WB NERR teaching about marsh wildlife (left) and Clemson Extension displaying the ‘Watershed’ EnviroScape (above).*

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
March 9, 2024	EXHIBIT: CWSEC & Surfside Stormwater Committee tabled educational booths at the Surfside Beach BBQ Festival. Educational rack cards & handouts detailing rain garden, rain harvesting, native vegetation, FOGs, litter, etc. as well as giveaways were available at each booth. Impact represents number of guests given handouts &/or spoken to about water quality.	Surfside Beach, CWSEC, & Clemson Extension	150
March 16, 2024	EXHIBIT: Georgetown County Outdoor Expo at Northwest Regional Recreation Complex will brought together 20 outdoor-themed groups and organizations to provide information on outdoor opportunities in our area. The Outdoor Expo included presentations from participating organizations and guided trail hikes at Rocky Point Community Forest.	Georgetown County & NI-WB NERR	20
March 23, 2024	EXHIBIT: The Waccamaw Riverkeeper hosted an educational exhibit table at the 2024 Waccamaw Sportsmen’s Expo in Conway. Information about protecting clean water in terms of protecting it for hunting and fishing was shared with the public.	Waccamaw Riverkeeper	100
April 6, 2024	EXHIBIT: Poster: Singing In The Rain at the Association of Natural Resource Extension Professionals in Hershey, PA.	Clemson Extension & Carolina Clear	300



*The Surfside Stormwater Committee and CWSEC booths at the Surfside Beach BBQ Festival.*

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
May 7, 2024 Oct. 12, 2024	EXHIBIT: CWSEC was represented at SC Native Plant Society's two Grand Strand Native Plant Sales in 2024. CWSEC giveaways included native seed packets as well as rack cards about native plants, rain gardens, & rain water harvesting. Clemson Extension hosted a soil sample drive for plant sale attendees. Clemson Extension collected 33 soil samples and spoke with 100 people. Impact reflects the number of people who attended the plant sales.	SC Native Plant Society & CWSEC	1,000
May 13, 2024	EXHIBIT: Poster: Be Septic Safe at the National Health Outreach & Engagement Conference in Greenville, SC.	Clemson Extension & Carolina Clear	300
May 15, 2024	EXHIBIT: Poster: Singing In The Rain at the South Carolina Association of County Agricultural Agents in Beaufort, SC.	Clemson Extension & Carolina Clear	120
May 23, 2024	EXHIBIT: Georgetown County Stormwater Division showcased celebrated National Public Works Week by showcasing an EnviroScape model at their annual Backhoe Roadeo. Staff discussed stormwater pollution and preventative measures that can be taken to reduce stormwater pollution.	Georgetown County	70
July 14-19, 2024	EXHIBIT: Poster: Singing in the Rain: Embracing the Hybrid Method for Rain Garden Education at the National Association of County Agricultural Agents Conference in Dallas, TX.	Clemson Extension & Carolina Clear	400



*Georgetown County Stormwater Division displays an EnviroScape during their Backhoe Roadeo.*

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Sept. 5, 2024	EXHIBIT: Clemson Extension’s Carolina Clear agents tabled the Exhibitor Showcase at the SC Association of Stormwater Managers meeting. Tabling items included dog waste giveaways, septic giveaways, reusable items from Carolina Clear consortiums across the state. Impact reflects statewide meeting.	Clemson Extension, Carolina Clear, & CWSEC	125
Oct. 1, 2024	EXHIBIT: City of Myrtle Beach Public Works represented at Myrtle Beach’s National Night Out Festival. The public were able to meet fire and police officers, city council members and public works crews as well as enjoy arts and crafts, music, vendors and emergency vehicles for the kids to explore.	Myrtle Beach	1,000
Oct. 5, 2024	EXHIBIT: CWSEC & Surfside Stormwater Committee tabled educational booths at the Surfside Beach Family Fall Festival. Educational rack cards & handouts detailing rain garden, rain harvesting, native vegetation, FOGs, litter, etc. as well as giveaways were available at each booth. Impact represents number of guests given handouts &/or spoken to about water quality.	Surfside Beach, CWSEC, & Clemson Extension	150
Oct. 19-20, 2024	EXHIBIT: NI-WB NERR Staff hosted an educational exhibit at the Georgetown Wooden Boat Show to educate the public on the importance of protecting our local waterways, potential impacts from stormwater, and how communities can get involved.	NI-WB NERR	300
Nov. 21-22, 2024	EXHIBIT: Georgetown County Staff attended the International Paper Career Fair to discuss the career opportunities within the Department of Public Services. Staff described the importance of Stormwater positions and how the division can positively impact the environment.	Georgetown County	50
April 20, 2024 Oct. 26, 2024	PUBLIC EVENT: Georgetown County’s Household Hazardous Waste Collection and Paper Shredding event allows citizens to properly dispose of HHW chemicals, paper, and other environmental harmful materials. This event helps limit the amount of pollution that may end up in our stormwater systems.	Georgetown County	780
April 26, 2024	PUBLIC EVENT: Surfside Beach held a Tree Planting Ceremony to celebrate Arbor Day in 2024. There were a total of 22 people in attendance who collected information about the importance of trees and were given free trees to plant in their yards.	Surfside Beach	22

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
June 1, 2024	PUBLIC EVENT: Georgetown County’s Household Hazardous Waste Collection and Paper Shredding event allows citizens to properly dispose of HHW chemicals, paper, and other environmental harmful materials. This event helps limit the amount of pollution that may end up in our stormwater systems.	Georgetown County	150
Sept. 24, 2024	PUBLIC EVENT: NI-WB NERR hosted Green Drinks during National Estuaries Week at Between the Antlers.	NI-WB NERR	20
Sept. 28, 2024	PUBLIC EVENT: NI-WB NERR hosted an Estuaries Open House Celebration at Hobcaw Barony Discovery Center to conclude National Estuaries Week.	NI-WB NERR	75
2024	PUBLIC ACTIVITY: NI-WB NERR hosts “Feeding Frenzy” where staff feed the native animals such as fish, snakes, and alligators that are in Hobcaw Barony’s Discovery Center and talk about each species unique characteristics. There were 2 “Feeding Frenzy” events in 2024.	NI-WB NERR	8
2024	PUBLIC ACTIVITY: NIWB-NERR partners with SCDNR to host “Family Fishing Clinics”. As an introductory class to fishing, it teaches skills on how to tie fishing knots, how to rig a rod and reel, casting as well as ethical fishing practices and stewardship toward future fish generations. There were a total of 6 family fishing clinics in 2024.	NI-WB NERR & SCDNR	56



*NI-WB NERR’s “Family Fishing Clinics” teachings fishing skills and ethical fishing practices.*

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2024	PUBLIC ACTIVITY: NI-WB NERR lead a naturalist-guided tour “Paddle North Inlet” through the North Inlet Estuary while giving an overview of it’s natural history, water quality, and the research and educational happenings around the Reserve. There were a total of 10 paddle trips in 2024, however, 5 were cancelled due to bad weather.	NI-WB NERR	45
2024	PUBLIC ACTIVITY: NI-WB NERR hosts “Winyah Watershed Paddle” once a month from March to November at different locations along the Greater Winyah Bay Watershed. Throughout the paddle, participants learn about watershed/swamp education, water quality, and native plants. There were a total of 9 paddle trips in 2024, however, 4 were cancelled due to bad weather. Highlight on page 12.	NI-WB NERR	44
2024	PUBLIC ACTIVITY: NI-WB NERR’s “Fish Printing” activity utilizes native fish and sea creatures to create art and learn about fish and their habitat. There were a total of 7 “Fish Printing” events in 2024 at various locations including the reserve as well as libraries.	NI-WB NERR	123
2024	PUBLIC ACTIVITY: NI-WB NERR hosted “Edible Estuary” where participants create their own estuary using their imagination and edible goodies. There were a total of 3 events in 2024 at various locations including the reserve as well as libraries.	NI-WB NERR	26
2024	PUBLIC ACTIVITY: NI-WB NERR hosts “Bike to the Boardwalk” (5 mi) which takes participants throughout Hobcaw Barony’s pristine forests to the Reserve’s salt marsh boardwalk on North Inlet estuary. Throughout the journey, participants are given an overview of NI-WB, the research being conducted there as well as talks on wildlife and salt marsh ecology. There were a total of 3 bike events in 2024.	NI-WB NERR	18
Feb. 3, 2024	PUBLIC ACTIVITY: NI-WB NERR celebrated World Wetlands Day with an IBIS Hike where members explored the wetlands located on Hobcaw Barony.	NI-WB NERR	8
Feb. 18, 2024	PUBLIC ACTIVITY: NI-WB NERR’s “Life in a Reef” features a close look at the many organisms that live among the oyster reefs using microscopes to view and identify smaller organisms.	NI-WB NERR	15

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Feb. 21, 2024	PUBLIC ACTIVITY: NI-WB NERR teaches about wetland reptiles during “Riparian Reptiles” at the Hobcaw Barony Discovery Center. A live alligator and snakes even made an appearance!	NI-WB NERR	14
March 20, 2024	PUBLIC ACTIVITY: NI-WB NERR led a Belle W. Baruch Foundation research tour in which current research at the reserve, coastal ecosystems, native wildlife, and endangered species were discussed.	NI-WB NERR	28
April 6, 2024	PUBLIC ACTIVITY: NI-WB NERR hosted local 3rd generation herpetologist and nature photographer and educator, Parker Gibbons, for “Science from the Swamp with Parker”. Participants learned about all things wetland and were able to view a variety of reptile and amphibian species from Parker’s live specimens.	NI-WB NERR	24
June 15, 2024 Nov. 2, 2024	PUBLIC ACTIVITY: NI-WB NERR hosted “Botanical Art” where participants learn about native plants and incorporated them into a magical piece of art.	NI-WB NERR	16



*Participants enjoy NI-WB NERR’s “Botanical Art”.*



*NI-WB NERR’s “Science from the Swamp with Parker” gets up close and personal with really cool creatures!*



# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
June 18, 2024	PUBLIC ACTIVITY: NI-WB NERR partnered with Baruch Marine Field Lab scientists to take participants to watch the low tide seine and help identify and sort fish at the outdoor seawater lab.	NI-WB NERR	4
June 26, 2024	PUBLIC ACTIVITY: NI-WB NERR hosted “Beachcombing and Estuary Critters” at the Georgetown County Library. Participants learned about estuary critters big and small, and were able to see a live common sea star and thinstriped hermit crab.	NI-WB NERR	10
July 11, 2024	PUBLIC ACTIVITY: NI-WB NERR hosted a book talk/signing event for “A Pocket Wild: Notes from a Carolina Marsh” author Chip Smith. Smith, the founder of the Murrells Inlet “Spring Tide” annual clean-up, discusses how the communication of science to the general public—its processes, methods, findings and limitations—is crucial.	NI-WB NERR	32
Aug. 24, 2024	PUBLIC ACTIVITY: NI-WB NERR Education Staff teach about the plants and animals of the marsh and display a live alligator and seastar in “Creature Feature: Oyster Reef Life”.	NI-WB NERR	22
Oct. 8, 2024	PUBLIC ACTIVITY: NI-WB NERR hosted “Nature Journaling” with a focus on the estuarine environment of coastal South Carolina. Nature journaling connects you with the environment and inspires a curiosity for the natural world.	NI-WB NERR	10
Feb. 16, 2024	SCHOOL ACTIVITY: Horry County Staff helped students explore various career paths, including those in environmental science and stormwater management, at Forestbrook Middle School’s career fair.	Horry County	130
Feb. 28, 2024	SCHOOL ACTIVITY: Georgetown County Staff discussed the career opportunities within the Department of Public Services at Coastal Carolina University’s Career Fair. Staff described the importance of Stormwater positions and how the division can positively impact the environment.	Georgetown County	150
March 8, 2024	SCHOOL ACTIVITY: Georgetown County Stormwater Division attended Andrews Elementary’s Career Fair to discuss stormwater pollution and preventative measures that can be taken to reduce stormwater pollution with an emphasis that clean land can result in better water quality.	Georgetown County	80
March 9, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted Clemson students visiting Clemson’s Baruch Institute field lab. Gave overview of NERR/ USC Baruch Institute Program.	NI-WB NERR	5

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
March 20, 2024	SCHOOL ACTIVITY: Georgetown County Stormwater Division attended McDonald Elementary’s Career Fair to discuss stormwater pollution and preventative measures that can be taken to reduce stormwater pollution with an emphasis that clean land can result in better water quality.	Georgetown County	57
March 22, 2024	SCHOOL ACTIVITY: Horry County Staff helped students explore various career paths, including those in environmental science and stormwater management, at St. James Middle School’s career fair.	Horry County	120
March 26, 2024	SCHOOL ACTIVITY: Georgetown County Stormwater Division attended Waccamaw Elementary’s Career Fair showcasing the Stormwater Model while discussing the water cycle, surface/ground water runoff, and pervious vs. impervious areas.	Georgetown County	200
March 28, 2024	SCHOOL ACTIVITY: Georgetown County Stormwater Division attended Kensington Elementary’s Career Fair to discuss stormwater pollution and preventative measures that can be taken to reduce stormwater pollution with an emphasis that clean land can result in better water quality.	Georgetown County	580
March 30, 2024	SCHOOL ACTIVITY: NI-WB NERR participated in McDonald Elementary School’s Career Day where they discussed careers in marine science and estuary education on plants and animals.	NI-WB NERR	60
April 9, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted the ‘Homeschool Hiking Group’ where students hiked the Salt Marsh Midden Trail and while learning about the salt marsh.	NI-WB NERR	25



*Horry County teaches about watersheds and runoff using an EnviroScape at St. James Middle School’s career fair.*

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
April 11, 2024	SCHOOL ACTIVITY: NI-WB NERR visited Carvers Bay Middle to discuss water quality, careers, and marine debris to 7th grade students. They also featured the Enviroscope to demonstrate a watershed.	NI-WB NERR	7
April 12, 2024	SCHOOL ACTIVITY: NI-WB NERR visited Carvers Bay Middle to discuss water quality, careers, and marine debris to 8th grade students. They also featured the Enviroscope to demonstrate a watershed.	NI-WB NERR	84
April 13, 2024	SCHOOLACTIVITY: NI-WB NERR hosted the ZooTeens Conservation Team from the Riverbanks Zoo Teen Program. Students explored the Discovery Center, Baruch Marine Field Lab, and the salt marsh from the boardwalk.	NI-WB NERR	46
April 17, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted students from Socastee High School. Students toured the lab, participated in a field study, and seined at Oyster Landing.	NI-WB NERR	42
May 1, 2024	SCHOOL ACTIVITY: NI-WB hosted a “From Seeds to Shoreline” field study with students from Wilson High School. This project involves students getting out into the marsh and planting ‘Spartina’ seedlings to teach students about estuarine habitats and marsh restoration.	NI-WB NERR & SC Sea Grant	9
May 3, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted Teach my People HERO Homeschool where students toured the Baruch Marine Field Lab, participated in a fish sample, and walked the boardwalk.	NI-WB NERR	38



*NI-WB NERR hosted a HERO Homeschool group who helped scientists identify and sort species from the marsh seine!*

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
May 10, 2023	SCHOOL ACTIVITY: NI-WB hosted a “From Seeds to Shoreline” project with students from the Academy for Arts, Sciences, and Technologies at Huntington Beach State Park. This project involves students getting out into the marsh and planting ‘Spartina’ seedlings to teach students about estuarine habitats and marsh restoration.	NI-WB NERR & SC Sea Grant	24
May 16, 2024	SCHOOL ACTIVITY: Horry County participated in an essay contest organized by the Natural Resources Conservation Service (NRCS) that engaged 50 students in exploring topics related to conservation and environmental stewardship.	NRCS & Horry County	50
May 30, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted Hope Academy where students toured the Baruch Marine Field Lab and participated in a salt marsh scavenger hunt.	NI-WB NERR	9
June 10, 2024 June 13, 2024	SCHOOL ACTIVITY: NI-WB NERR participated in “Kinderwaves”, a summer outreach enrichment program at Andrews Elementary, Kensington Elementary, & Maryville Elementary Schools.	NI-WB NERR	29
July 16, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted students from the Teach my People program for a “Discover the Center” activity.	NI-WB NERR	10
Aug. 13, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted an estuary field study for students in AP Environmental Science & Chemistry classes from Waccamaw High School that included a water quality lab tour, marsh transects, water quality at the pond, and exploring macroinvertebrates.	NI-WB NERR	13
Aug. 27, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted Hemingway Day School for a marsh exploration from the boardwalk to Oyster Landing showcasing Estuary Season 1: Summer.	NI-WB NERR	17
Sept. 9, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted students from Wonder Home School for a lab tour and a marsh exploration from the boardwalk to Oyster Landing.	NI-WB NERR	9

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Nov. 7, 2024	SCHOOLACTIVITY: NI-WB NERR hosted Biology and Environmental Science students from South Florence High School for a lab tour and estuary exploration.	NI-WB NERR	27
Nov. 8, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted the Girl Scouts Oceanography Merit Badge Group for a lab tour and phytoplankton sampling.	NI-WB NERR	13
Nov. 11, 2024	SCHOOLACTIVITY: Georgetown County Staff discussed the career opportunities within the Department of Public Services at Horry Georgetown Technical College’s Career Fair. Staff described the importance of Stormwater positions and how the division can positively impact the environment.	Georgetown County	35
Nov. 12, 2024	SCHOOL ACTIVITY: NI-WB hosted a “From Seeds to Shoreline” project with horticulture and culinary students from Hemingway Career & Tech Center. This project involves students getting out into the marsh and planting ‘Spartina’ seedlings to teach students about estuarine habitats and marsh restoration.	NI-WB NERR & SC Sea Grant	19
Nov. 13, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted Hemingway Day School for a marsh exploration from the boardwalk to Oyster Landing showcasing Estuary Season 2: Fall & Winter.	NI-WB NERR	16
Nov. 21, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted students from Horry Georgetown Technical College’s Outdoor Rec lab for a fishing trip while learning about marine species.	NI-WB NERR	8
Nov. 26, 2024	SCHOOL ACTIVITY: NI-WB NERR Education Staff spent the afternoon “Crabbing at the Creek” while teaching about South Carolina’s common crabs and how to catch them with a handline.	NIWB-NERR	15
Dec. 17, 2024	SCHOOL ACTIVITY: NI-WB NERR hosted 1st grade students from Angwin Academy for a fish printing activity.	NI-WB NERR	30

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Dec. 17, 2024	SCHOOL ACTIVITY: Georgetown County Staff discussed the career opportunities within the Department of Public Services at Rosemary Middle School. Staff described the importance of Stormwater positions and how the division can positively impact the environment.	Georgetown County	70
Feb. 2, 2024	PRESENTATION: Presentation on rain gardens and rainwater harvesting at Horry Georgetown Home Builders Association's "Home Show."	CWSEC & Clemson Extension	25
Feb. 16, 2024	PRESENTATION: Panel Discussion on the importance of communicating science, how to communicate complex concepts and data, and most effective communication tactics in CCU's SUST 491: Topics in Sustainability and Coastal Resilience.	Waccamaw Riverkeeper, CCU, CWSEC, NI-WB NERR Coastal Training Program, & Waccamaw Watershed Academy	12
April 25, 2024	PRESENTATION: Horry County presented on local stormwater issues and potential solutions at a community meeting organized by the Aynor Lions Club.	Horry County	11
May 17, 2024	PRESENTATION: Lightening Talk: Natural Resources Team South Carolina Association of County Agricultural Agents in Beaufort, SC.	Clemson Extension & Carolina Clear	120



*Georgetown County discussed career opportunities within the Department of Public Services at Rosemary Middle School.*

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
June 6, 2024	PRESENTATION: Septic Panel Discussion at South Carolina Association of Storm Water Managers in Columbia, SC.	Clemson Extension & Carolina Clear	130
Aug. 27, 2024	PRESENTATION: The Surfside Stormwater Committee gave a presentation before Town Council about the Stormwater Committee's mission, key initiatives, and the many partnerships and projects held in 2024. The Stormwater Committee has been working on the town's tree ordinance for some time and wants to see it as a stand-alone Ordinance.	Surfside Beach	37
Oct. 16-17, 2024	PRESENTATION: Several presentations and posters at the South Carolina Water Resources Conference in Columbia, SC. Topics included "Be Septic Safe", "Rain Gardens As A Wildlife Habitat", and "On-Farm Water Management".	Clemson Extension & Carolina Clear	286
Nov. 7, 2024	PRESENTATION: South Carolina Association of Storm Water Managers Presentation: "Low Impact Development for Residential Properties" in Columbia, SC.	Clemson Extension & Carolina Clear	130
Nov. 18, 2024	PRESENTATION: Presentation on rain gardens and rainwater harvesting to Clemson Extension's Agribusiness course, "So You Bought Land in Horry County".	Clemson Extension & CWSEC	20
2024	MEETING: The Myrtle Beach Water Quality Beach Advisory Committee meets the 3rd Wednesday of every month. This committee advises City Council on matters related to the beach itself, including safety franchises, beach erosion and beach activities. There are a total of 7 representatives on the committee.	Myrtle Beach	7
2024	MEETING: Surfside Beach Stormwater Committee quarterly meetings promote stormwater education and outreach within Surfside Beach from collaboration between committee members, Waccamaw Watershed Academy, & CWSEC. Meetings generally include the SWC members (up to 5 persons), representatives from the department of public works, the Waccamaw Watershed Academy, the CWSEC, and the town council. In 2024, meetings were held 1/16, 5/7, & 7/16. The final meeting of the year was cancelled due to scheduling conflicts. Impact counts committee members once.	Surfside Beach, Waccamaw Watershed Academy, & CWSEC	12

# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2024	MEETING: Surfside Beach Stormwater Committee conducted 7 special meetings in 2024 to discuss and plan for upcoming Tree Workshops for the Proposed Chapter 18. Landscaping, Tree Protection and Canopy Preservation. Attendees included invited experts, SWC members, and representatives from public works, permits, building and zoning, and the town council. Impact counts committee members once.	Surfside Beach	7
2024	MEETING: The Murrells Inlet Watershed Committee is a community stakeholder group focused on implementing the MI watershed plan to improve water quality. In 2024, there were a total of four meetings: three planning meetings and one full committee meeting on Dec. 10th that focused on protecting and sustaining Murrells Inlet’s natural resources and how to implement the best management practices outlined in the Murrells Inlet Watershed Plan.	Murrells Inlet 2020, Waccamaw Watershed Academy, NI-WB NERR, Horry County, & Georgetown County	24
2024	MEETING: Keep Horry County Beautiful (KHCB) Board Meeting. The CWSEC Coordinator serves and assists on the KHCB until term expires in 2026. There were a total of nine meetings in 2024. Impact represents total board members and county liaison present at each meeting.	KHCB & CWSEC	6
April 18, 2024 Nov. 22, 2024	MEETING: Education partners & MS4s are invited to CWSEC Biannual Meetings. The purpose of these meetings is to provide partner updates, discuss activity/strategic planning, discussion, and networkings.	ALL	25
April 22, 2024	MEETING: The WWA’s Annual Volunteer Appreciation Luncheon recognizes the dedicated community scientists who comprise the Volunteer Water Quality Monitoring Program. This event also features a recap of the volunteer data and interesting scientific research related to volunteer monitoring.	Waccamaw Watershed Academy	45
Jan. 17, 2024	PUBLIC HEARING: Georgetown County Stormwater Division held a public hearing regarding the land disturbance permit for Refuel Pawleys Beaumont.	Georgetown County	30



# Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Aug. 21, 2024	PUBLIC HEARING: Georgetown County Stormwater Division held a public hearing regarding the land disturbance permit for the residential development Sweetgrass West project.	Georgetown County	35
Aug. 28, 2024	PUBLIC HEARING: Georgetown County Stormwater Division held a public hearing regarding the land disturbance permit for the residential development Magic Oaks project.	Georgetown County	30



*Cypress knees along the Waccamaw River.*

# Public Involvement

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2024	<p>WATER QUALITY MONITORING: The Volunteer Water Quality Monitoring Program monitors the health of surface waters in Horry &amp; Georgetown counties. Four monitoring programs: Waccamaw River, Surfside Beach, Murrells Inlet, &amp; Briarcliffe Acres, are monitored twice a month by trained volunteers using environmental testing equipment to sample selected sites within the watershed. Each program was designed to meet the specific water quality goals of each municipality. Impact represents the total public involvement from all four monitoring programs. Highlight on page 14.</p>	<p>Waccamaw Watershed Academy, Waccamaw Riverkeeper, Horry County, Georgetown County, Murrells Inlet, Town of Surfside Beach, &amp; Town of Briarcliffe Acres</p>	752
2024	<p>WATER QUALITY MONITORING: CCU's Campus &amp; Refuge Monitoring Program provides an assessment of water quality conditions in the stormwater ditches and retention ponds on and off campus, which flows to the Waccamaw National Wildlife Refuge and Waccamaw River. Sampling is conducted throughout the academic semesters with the help of CCU's Sustainability Department. Data are used to evaluate whether water quality is improving or degrading over time using a watershed approach.</p>	<p>Waccamaw Watershed Academy, Waccamaw Riverkeeper, &amp; Coastal Carolina University</p>	141
Jan-May 2024	<p>WATER QUALITY MONITORING: The Waccamaw Riverkeeper taught SUST 491: Waccamaw Watershed Exploration, a special topics course through Coastal Carolina University's Honors College to introduce students to water quality monitoring on campus, potential careers in the sustainability field, and participating in community service learning. The first semester of the course engaged students in water quality monitoring at three sites on the CCU campus as well as in cleanup activities and other service learning projects in the Waccamaw River watershed.</p>	<p>Waccamaw Riverkeeper &amp; Waccamaw Watershed Academy</p>	11

# Public Involvement

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Summer 2024	WATER QUALITY MONITORING: Winyah Rivers Alliance works from May through August to deliver weekly Swim Guide reports from landings on seven different rivers including the Waccamaw River. In SC, riverkeepers, volunteers, and interns collected 87 water samples from ten sites along the Waccamaw River (see below). The samples are tested to ensure the waterways of Winyah Bay were clean of coliforms and litter.	Waccamaw Riverkeeper	87
Jan. 31, 2024	OYSTER WORKSHOP: Horry County Stormwater, along with SCDNR and 25 volunteers, constructed over forty-five Manufactured Wire Reefs (MWR). These reefs will be strategically deployed in marshes in the Murrells Inlet area to promote water purification as well as help to protect precious marshlands by combatting erosion.	Horry County & SCDNR	25



*Winyah Rivers posts Swim Guide updates throughout the summer for the Waccamaw, Black, Little Pee Dee, Great Pee Dee, and Lumber, Sampit, and Lynches Rivers. The week of June 12th saw all sites on the Waccamaw meet water quality standards. The Summer Swim Guide is a tool to protect public health and ensure safe, clean water for everyone. By regularly testing water quality at popular swimming locations, Winyah Rivers Alliance helps to inform the community about potential health risks and encourage actions to improve water conditions.*

# Public Involvement

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
March 21, 2024	OYSTER WORKSHOP: Horry County Stormwater partnered with SCDNR and the Loris Future Farmers of America (FFA) chapter to build Manufactured Wire Reefs (MWR) which contribute to the creation of artificial reefs to enhance local marine habitats.	Horry County, SCDNR, & FFA Loris Chapter	30
April 1, 2024	OYSTER WORKSHOP: Horry County Stormwater, along with SCDNR and 30 volunteers, constructed Manufactured Wire Reefs (MWR). These reefs will be strategically deployed in marshes in the Murrells Inlet area to promote water purification as well as help to protect precious marshlands by combatting erosion.	Horry County & SCDNR	30
April 3, 2024	OYSTER WORKSHOP: Horry County Stormwater, along with SCDNR and 30 volunteers, deployed Manufactured Wire Reefs (MWR) in marshes in the Murrells Inlet area to promote water purification as well as help to protect precious marshlands by combatting erosion.	Horry County & SCDNR	30



*Horry County Stormwater has partnered with SC DNR to host several oyster workshop throughout 2024. Workshops either focus on constructing wire reefs (seen in photos above) or deploying the wire reefs in the Murrells Inlet marsh.*

# Public Involvement

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
June 3, 2024	OYSTER WORKSHOP: Horry County Stormwater, along with SCDNR and 30 volunteers, deployed Manufactured Wire Reefs (MWR) in marshes in the Murrells Inlet area to promote water purification as well as help to protect precious marshlands by combatting erosion.	Horry County & SCDNR	30
Dec. 19, 2024	OYSTER WORKSHOP: Horry County Stormwater, along with SCDNR and 25 volunteers, constructed Manufactured Wire Reefs (MWR) to be strategically deployed in marshes in the Murrells Inlet area. Horry County Stormwater's oyster initiative built and deployed 200 MWR into the Murrells Inlet estuary making it one of the largest reefs in the state.	Horry County & SCDNR	25
2024	LITTER SWEEP: Cleanups at Adopt-A-Landing sites throughout Horry & Georgetown counties see volunteers collect, inventory, and report more than 2,300 pounds of trash from waterways and local boat landings. Impact represents volunteer hours of over 24 cleanups throughout Waccamaw Watershed.	Waccamaw Riverkeeper & Murrells Inlet 2020	450
2024	LITTER SWEEP: Murrells Inlet 2020 hosts annual cleanups "Spring Tide", "July 5th Clean-Up" and "Fall Haul" throughout Murrells Inlet. Volunteers collected litter along various roads or took to kayaks and paddleboards to clean the marsh.	Murrells Inlet 2020	350
2024	LITTER SWEEP: Murrells Inlet 2020 hosts monthly community cleanups to engage community members in active stewardship throughout in Murrells Inlet. Impact represents total number of volunteers.	Murrells Inlet 2020	75
2024	LITTER SWEEP: City of Myrtle Beach removed over 30 tons of garbage and debris from trespassed encampments throughout the city.	Myrtle Beach	N/A
2024	LITTER SWEEP: The Waccamaw Riverkeeper hosts monthly Paddle Patrols on the Waccamaw River. Paddles are intended to engage community members with the river through paddling the river, talking with the Waccamaw Riverkeeper, and collecting any trash along the way.	Waccamaw Riverkeeper	50

# Public Involvement

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2024	LITTER SWEEP: Winyah Rivers Alliance’s “Trash Attack!” included 18 cleanups conducted at 10 landings throughout Horry and Georgetown County. The Waccamaw Riverkeeper worked alongside 184 volunteers to collect, inventory, and report just over 2,651 pounds litter removed from the local waterways and boat landings along the Waccamaw River. Impact represents the number of volunteer hours.	Waccamaw Riverkeeper	362
May 18, 2024	LITTER SWEEP: The North Myrtle Beach Aquatic & Fitness Center held their 2nd Annual Beach Sweep. Residents and Staff assisted Keep North Myrtle Beach Beautiful to clean the beach of trash.	North Myrtle Beach	N/A
March 30, 2024	LITTER SWEEP: Myrtle Beach’s “Cleanin’ for the Season” is a citywide litter pickup day with volunteers from several departments within City of Myrtle Beach. Volunteers picked up over 5 tons of garbage along the beach, streets, and within parks.	Myrtle Beach	N/A



*Waccamaw Watershed Academy and CCU students helped clean up the body of water next to the Coastal Science Center at Coastal Carolina University!*

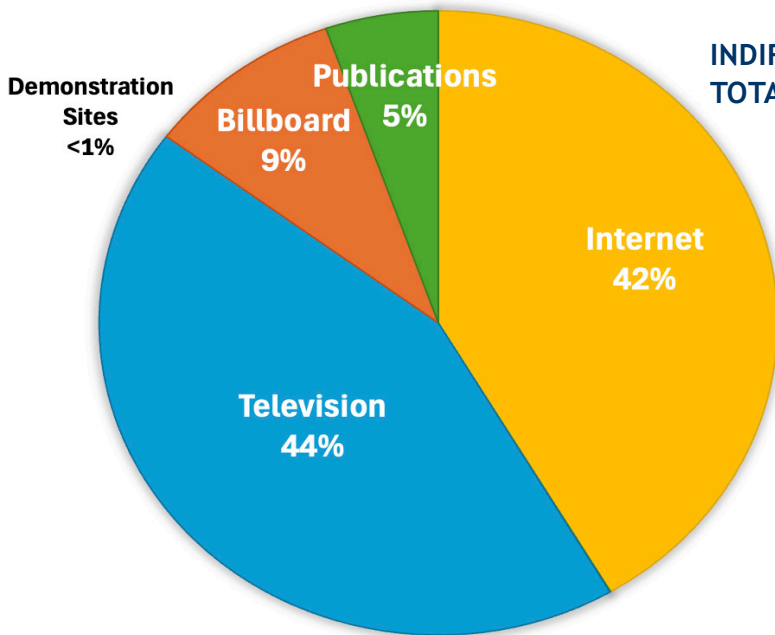
# Public Involvement

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Feb.23, 2024	STORMDRAIN WORKSHOP: Stormdrain Marking project with 8th grade students at Palmetto Academy of Learning and Success. Project teaches students about the link between the storm drain system and water quality. A total of 35 storm drain were either newly marked or were recorded (if previously marked).	CWSEC & Clemson Extension	29
April 13, 2024	RAIN BARREL SALE: CWSEC hosted a Rain Barrel Sale with the help of Surfside Beach Public Works Department. A total of 80 Ivy Rain Barrels were sold to Horry & Georgetown residents.	CWSEC, Clemson Extension, & Surfside Beach	80
April 19, 2024	RAIN GARDEN WORKSHOP: Residents from the Bucksport community were invited to help install residential rain garden. Community volunteers and CCU students helped amend the soil, plant native plants, and add mulch while learning how rain gardens function. Rain garden funded by CCU grant.	Coastal Conservation League, CCU, CWSEC, & Clemson Extension	15
2024	CERTIFICATION: 58 homeowners demonstrated commitment to healthy, watershed-friendly, low maintenance landscaping and obtained Certified Carolina Yard status in 2024. Impact reflects statewide offered certification.	Clemson Extension & Carolina Clear	58
2024	PET WASTE STATION: Georgetown County distributes pet waste bags throughout the county. They utilize pet waste stations to bring awareness to the importance of picking up pet waste and encourage citizens to properly dispose of it. (Not included in Outreach Summary on page 53-54.)	Georgetown County	20,000 Bags
2024	PET WASTE STATION: Maintain pet waste bag stations and record bags used throughout Murrells Inlet. The impact number represents the number of bags distributed throughout Murrells Inlet. (Not included in Outreach Summary on page 53-54.)	Murrells Inlet 2020	9,600 Bags
2024	PET WASTE STATION: City of Myrtle Beach maintains pet waste bag stations in dog parks and walking trails throughout Myrtle Beach.	Myrtle Beach	N/A

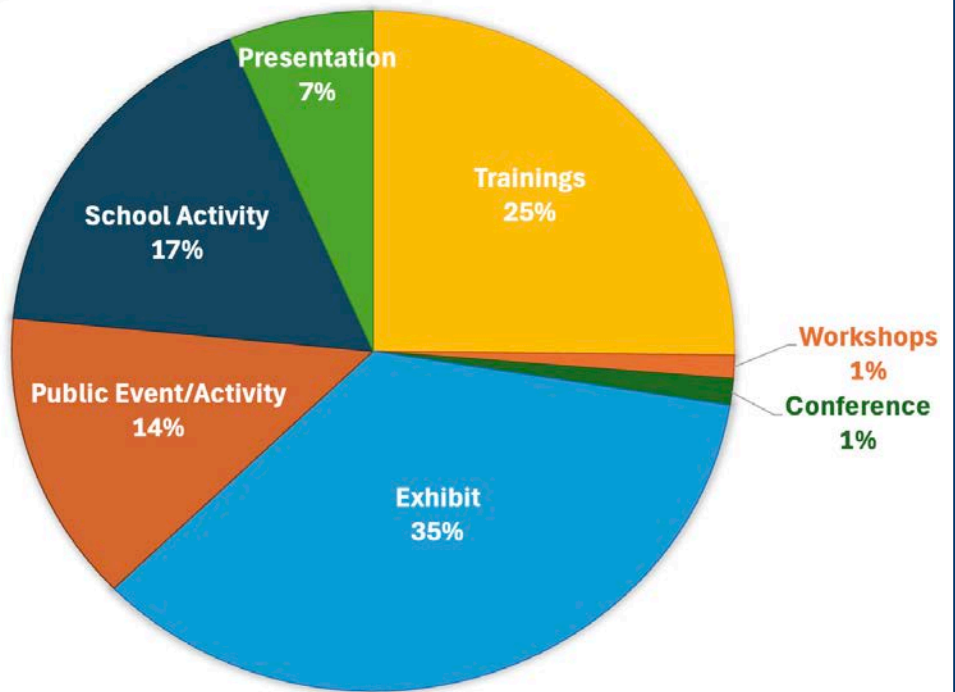
# Outreach Summary

CWSEC program success is, in part, measured by outreach impacts that represent an estimate of individuals reached through direct and indirect education and involvement activities. **Total impacts for the 2024 reporting year (January 1, 2024 - December 31, 2024) total an estimated 4,053,086 individuals.** The charts below represent the major activity groups.

**INDIRECT METHODS SUMMARY,  
 TOTAL ESTIMATED IMPACTS: 4,038,347**



**DIRECT METHODS SUMMARY,  
 TOTAL ESTIMATED IMPACTS: 12,795**

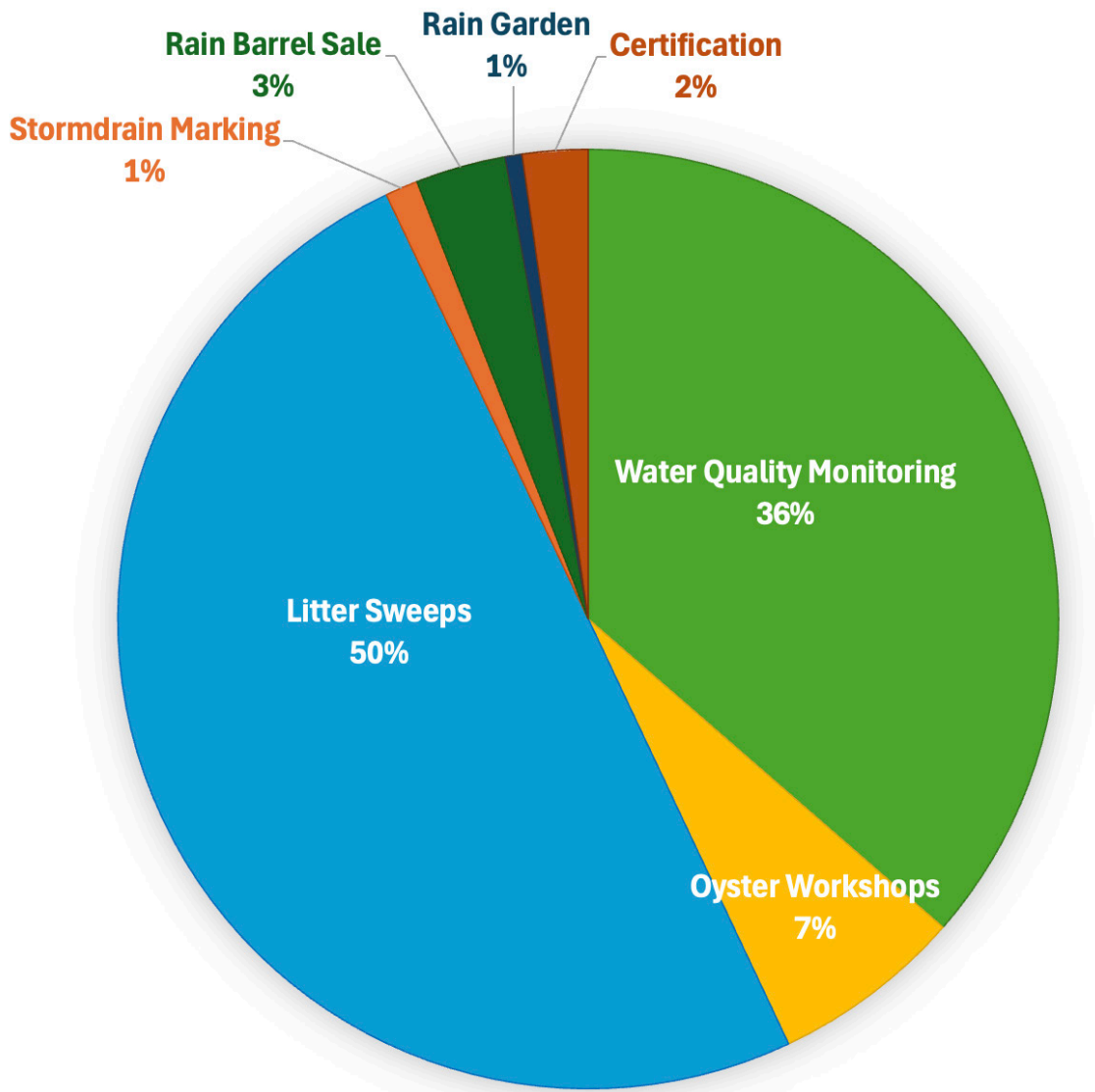




# Outreach Summary

Public Involvement is considered an activity that provided hands-on opportunities for target audiences to take part in stormwater management and pollution prevention. Public involvement opportunities include oyster reef construction, water quality monitoring, litter sweeps, storm drain marking, rain barrel sales, native plant sales, and youth involvement activities. **Total impacts attributed to public involvement for the 2024 reporting year (January 1, 2024 - December 31, 2024) total an estimated 2,630 individuals.**

**PUBLIC INVOLVEMENT SUMMARY,  
TOTAL ESTIMATED IMPACTS: 2,630**



# Appendix

## CWSEC 2024-2029 Strategic Plan: Education Timelines

### Nutrient Management

Target Behavior	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
Increase the number of home gardeners who install native plants.	Home gardeners that perform their own landscaping.		<b>Develop &amp; Implement</b> Collaborative efforts with local nurseries to increase availability		<b>Develop</b> Recognition program for nurseries with native plants and educational signage	<b>Implement</b> Recognition program for nurseries with native plants and educational signage
			<b>Implement</b> Existing workshops, programs, trainings, and resources offered by education partners.			<b>Evaluate</b>
			<b>Develop &amp; Implement</b> Native plant educational signage and plant tags			

Target Behavior	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
Increase the number of landscape professional who perform annual soil testing before applying fertilizers.	Landscape professionals who do not currently offer soil testing as part of their services.		<b>Develop &amp; Implement</b> Collaborative efforts with local nurseries to increase availability			
			<b>Implement</b> Promote soil testing and native plants segment in existing professional trainings.	<b>Develop &amp; Implement</b> Trainings/Programs for landscape professionals looking to offer 'greener' services		<b>Evaluate</b>
			<b>Develop &amp; Implement</b> List of professional landscape companies that offer soil testing as a service.	<b>Develop</b> Recognition program for landscape professional who offer soil testing as a service.	<b>Implement</b> Recognition program for landscape professional who offer soil testing as a service.	

# Appendix

## CWSEC 2024-2029 Strategic Plan: Education Timelines

# Litter Prevention

Target Behavior	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
Increase the number of people who reduce single-use plastic usage and who choose a more environmentally friendly option.	People who use single-use plastics.		<b>Develop &amp; Implement</b> Offer promotional reusable giveaways-bags, bottles, straws, etc.			
			<b>Develop &amp; Implement</b> Uniform data collection of litter and publicize data.			
		<b>Implement</b> Promote existing litter clean-ups offering by education partners.	<b>Develop &amp; Implement</b> Organize more litter clean-ups within CWSEC partners			
			<b>Develop &amp; Implement</b> Campaign to restaurants to adopt river-friendly takeout options	<b>Develop</b> Recognition program for 'river-friendly' restaurants	<b>Implement</b> Recognition program for 'river-friendly' restaurants	
						Evaluate

Target Behavior	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
Increase the number of people who secure trash/debris before transporting it.	People transporting loose debris.		<b>Develop</b> Guide to securing trash/debris loads and outline of law/safety	<b>Implement</b> Guide to securing trash/debris loads and outline of law/safety		
				<b>Develop &amp; Implement</b> Addition of 'securing trash' as part of MS4 storm prep alerts/notifications		
		<b>Implement</b> Promote existing litter clean-ups offering by education partners.	<b>Develop &amp; Implement</b> Organize more litter clean-ups within CWSEC partners			
			<b>Develop &amp; Implement</b> 'Secure your Load' educational signage at Recycling & Convenience Centers			
						Evaluate

# Appendix

## CWSEC 2024-2029 Strategic Plan: Education Timelines

### Bacteria Management

Target Behavior	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
Increase the number of dog owners who pick up their dog's waste.	People own dogs.		<b>Develop</b> Online mapping tool of CWSEC region's public & dog parks detailing dog-related amenities	<b>Implement</b> Online mapping tool of CWSEC region's public & dog parks detailing dog-related amenities		
				<b>Develop</b> Small grants program to install dog bag stations on private property	<b>Implement</b> Small grants program to install dog bag stations on private property	
		<b>Implement</b> Distribution of promotional pet giveaways to shelters, vets, groomers, adoption events				<b>Evaluate</b>
			<b>Develop &amp; Implement</b> 'Pet Waste Stinks!' educational signage at vets, public parks, dog parks, etc.			

Target Behavior	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
Increase the number of residents with septic tanks who are working with a professional to perform annual inspections.	People with septic tanks.		<b>Develop &amp; Implement</b> 'Be Septic Safe' rack card and promotional septic giveaways			
			<b>Develop</b> Financial incentives program	<b>Develop</b> Financial incentives program		
		<b>Implement</b> Promote 'Be Septic Safe' webpage and 'annual inspection reminder' e-newsletter				<b>Evaluate</b>
			<b>Develop</b> 'Welcome to the Neighborhood' packets to distribute to new homeowners on septic	<b>Develop</b> 'Welcome to the Neighborhood' packets to distribute to new homeowners on septic		

Target Behavior	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
Decrease the number of people who feed wildlife.	Residents and tourists who feed wildlife.		<b>Implement</b> Promote pond workshops, trainings, and programs that cover wildlife management			
				<b>Develop</b> Produce alligator 'Do/Don't' factsheet and 'No Feeding'	<b>Implement</b> Produce alligator 'Do/Don't' factsheet and 'No Feeding'	
		<b>Implement</b> Promote and host existing 'Goose Management Workshop'				<b>Evaluate</b>
			<b>Develop &amp; Implement</b> Produce 'resident Canada geese' rack cards and revise educational sign to focus on bacteria	<b>Implement</b> Distribute rack cards and educational signs to CWSEC partners and beyond		

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*Foggy morning on the Waccamaw River.  
Photo by Cara Schildtknecht.*



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