



COASTAL WACCAMAW
STORMWATER EDUCATION CONSORTIUM
BY CLEMSON® EXTENSION



**Stormwater Outreach
Strategic Plan: 2024-2029**

JANUARY 2024



COOPERATIVE EXTENSION
College of Agriculture, Forestry and Life Sciences

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Executive Summary

The Coastal Waccamaw Stormwater Education Consortium (CWSEC) was created to coordinate and implement a regional, watershed-scale education strategy focused on stormwater pollution prevention through education and community involvement. The CWSEC assists communities in addressing the US Environmental Protection Agency (EPA) Phase II Municipal Separate Stormwater Sewer System (SMS4) general permit which mandates public education and involvement regarding stormwater runoff. The EPA recommends a partnership-based regional education approach in order to increase effectiveness. The strategic plan will guide the Consortium efforts and maximize program partnerships and resources.

The CWSEC 2024-2029 Strategic Plan is the result of roughly a year of meetings and analysis in the Horry and Georgetown County region. This document provides a blueprint for education strategies focused on target pollutants and behaviors; evaluation metrics are also determined to improve delivery and documentation of impacts. This strategic plan is considered a “living” document to allow for refinement, supplementation and flexibility as regional efforts evolve over the next five years.

The objective of this document is to:

1. Prioritize three issues identified as most significant to the region over a five year time span from June 1, 2024 to May 30, 2029.
2. Provide information on education strategies related to the priority issues
3. Develop timelines and identify evaluation methods to guide and measure effectiveness.

The priority issues most relevant to the region were developed with CWSEC representative input which took into account available data and personal experience. The priority issues for the CWSEC region are as follows:

POLLUTANT OF CONCERN	TARGET BEHAVIOR
NUTRIENTS	<ul style="list-style-type: none"> • Increase the number of home gardeners who install native plants. • Increase the number of home landscaper professionals who perform soil tests prior to fertilizer application & follow fertilizer BMPs.
BACTERIA	<ul style="list-style-type: none"> • Increase the number of pet owners who pick up after their dogs in their yards and while on walks. • Increase residents’ awareness of their tanks’ location & the signs/ causes of a failing septic tank. • Increase awareness of the problems associated with congregated wildlife & actions to prevent congregation.
LITTER	<ul style="list-style-type: none"> • Increase the number of people who use reusable items. • Increase the number of people who secure their load & utilize tarps before transporting it.

**The priority issues identified do not exclude other awareness and education efforts. The priority issues will form the core of efforts by the consortium coordinator over the five-year period.*

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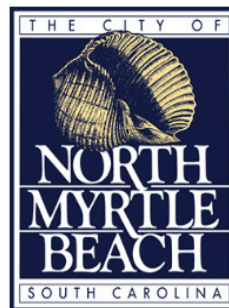
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The table below represents the designated Small Municipal Separate Storm Sewer Systems (SMS4) communities in Horry and Georgetown Counties that have committed to the CWSEC regional collaboration. These communities are represented by a dedicated group of public professionals 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
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, & Sarah Lawrence
Town of Surfside Beach	John Adair



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 the Horry and Georgetown area that have joined the effort. Education partners include universities, state and local government agencies, utilities, and nonprofits. Each brings unique expertise, resources, ideas, and programs to the CWSEC. The CWSEC fosters communication among organizations in order to create and enhance stormwater education programs.



CWSEC Education Partners

Coastal Carolina University's Waccamaw Watershed Academy	Susan Libes, Founding Director Victoria Green, 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 Maeve 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



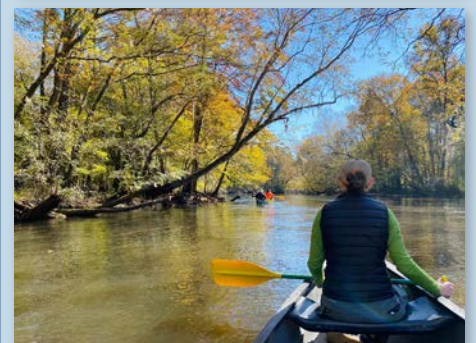
Mission and Goals

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.



Strategic Plan Development

Development of the CWSEC 2024-2029 Stormwater Outreach Strategic Plan included the identification of the following during three of CWSEC's bi-annual meetings ranging from June 2022-April 2023:

- Pollutants of concern (POC) for the region-wide watershed area
- POC to be targeted through education and involvement strategy
- Actions that may contribute to POC (ex. Illegal dumping in storm drain) and associated target audience
- Desired behavior change in target audience to address POC (ex. Residents bring reusable shopping bags to grocery store.)
- Barrier-benefit analysis for each education message to assess:
 - Barriers to behavior adoption by target audience
 - Benefits, or motivators, to the audience to adopt the behavior
- Goals and objectives of education strategy for each education message
- Education strategy that includes resource and/or program development, delivery, and evaluation

Pollutants of concern were identified through consortium community and education partner feedback, breakout groups, discussion, case studies of public feedback, and 2020-22 303(d) listed water quality impairments. See pages 7-8 for water quality impairment information in Horry & Georgetown counties.

Strategic Plan Development

During the June 2022, November 2022, and April 2023 meetings, partners worked collaboratively through a series of interactive polling, breakout group, and large discussion activities to identify region-wide POCs, target audiences, and desired behavior change and messaging.

June 29, 2022 Meeting

During the Summer CWSEC Bi-Annual meeting, CWSEC community and education partners identified a list of pollutants of concern. Consortium partners were asked to identify the top three stormwater pollution concerns for their community or organization. Partner responses included:

- Litter
- Bacteria
- Nutrients
- Kitchen fats, oils, and grease (FOG)
- Sediment
- Organic material (impacted dissolved oxygen)
- Heavy metals
- Pesticides

Prioritization of region-wide POC for CWSEC consortium area

Using flipcharts and color-coded stickers, consortium partners independently identified their top three POC from the pollutants of concern list (above). This process identified **nutrients**, **bacteria**, and **litter** as the pollutants of concern to focus on through the five-year education strategies. Partners then discussed results and considerations to be made in prioritization.

Identification of actions that contribute to target POCs

Partners worked independently to list actions, and the associated audiences, that contribute to the target POCs. There were numerous responses, but common themes emerged. As a larger group, the partners identified the following contributing actions to be addressed through the CWSEC 2024-2029 Stormwater Outreach Strategic Plan.

POLLUTANT OF CONCERN	CONTRIBUTING ACTION
NUTRIENTS	<ul style="list-style-type: none"> • EXCESSIVE OR IMPROPER USE OF FERTILIZER BY HOME GARDENER • EXCESSIVE OR IMPROPER USE OF FERTILIZER BY LANDSCAPE COMPANY
BACTERIA	<ul style="list-style-type: none"> • PET OWNERS NOT PICKING UP AFTER THEIR PETS • LACK OF SEPTIC TANK MAINTENANCE • FEEDING WILDLIFE
LITTER	<ul style="list-style-type: none"> • SINGLE-USE PLASTIC POLLUTION • NOT PROPERLY SECURING TRASH WHEN HAULING

Strategic Plan Development

November 30, 2022 Meeting

Identification of target audience and behavior and five-year education strategy and timelines

As a large group, partners discussed target audience and ultimate goal in behavior adoption for each contributing action. Target behaviors were drafted for each that laid the foundation for an education strategy and messaging. The below tables summarize these target behaviors and audiences.

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.

Bacteria

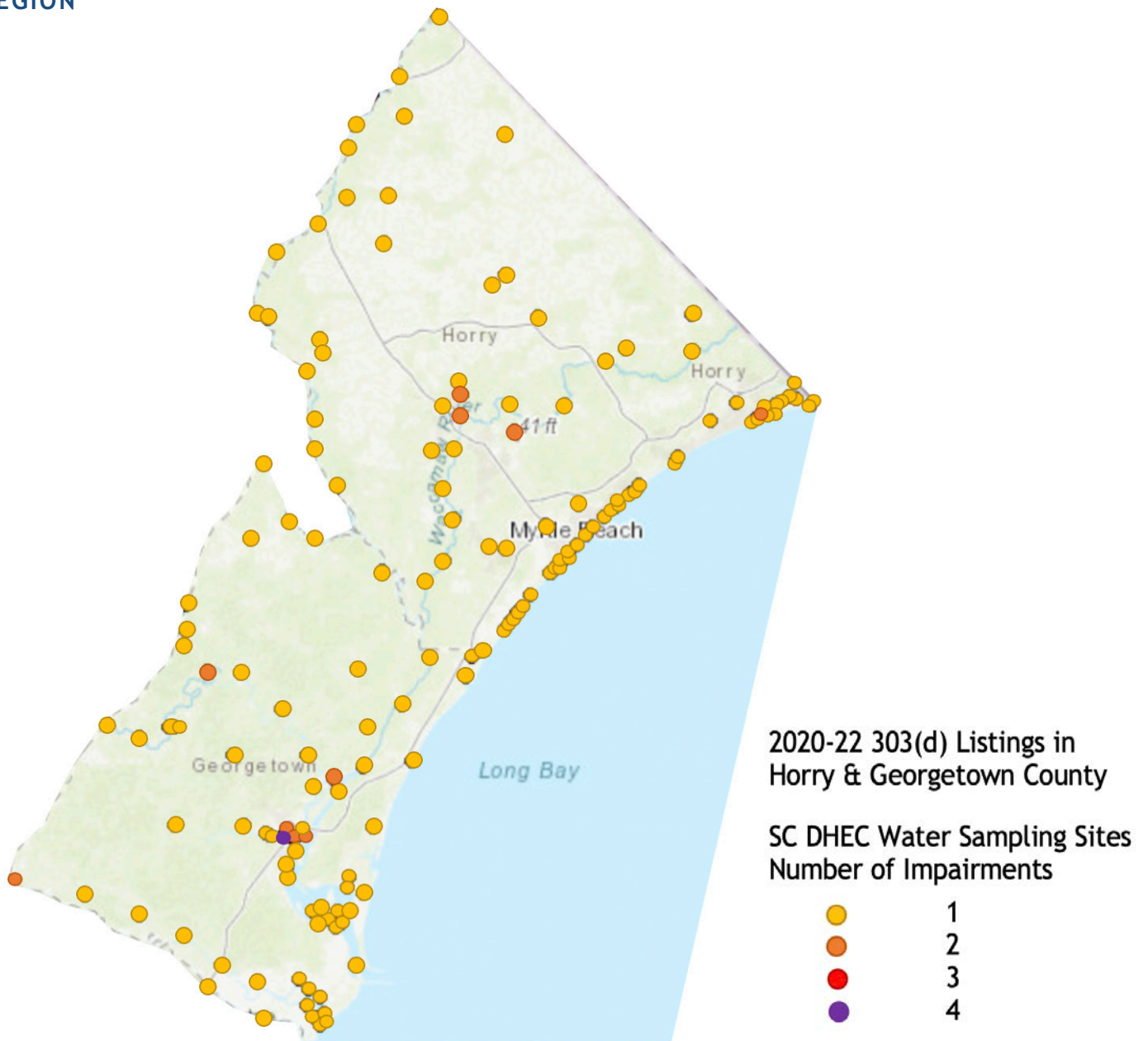
CONTRIBUTING ACTION	TARGET AUDIENCE	TARGET BEHAVIOR
Pet owners not picking up after their pets	Pet Owners	Increase the number of pet owners who pick up after their dogs in their yards and while walking
Lack of Septic Tank Maintenance	Residents with Septic Tank	Increase residents' awareness of their tanks' 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.

Partners discussed five-year education strategies and timelines for execution of each target behavior. Education strategies include goals and objectives to achieve, programming opportunities, existing resources to support, and evaluation tools. The education strategies and five-year timelines are summarized on pages 9-22.

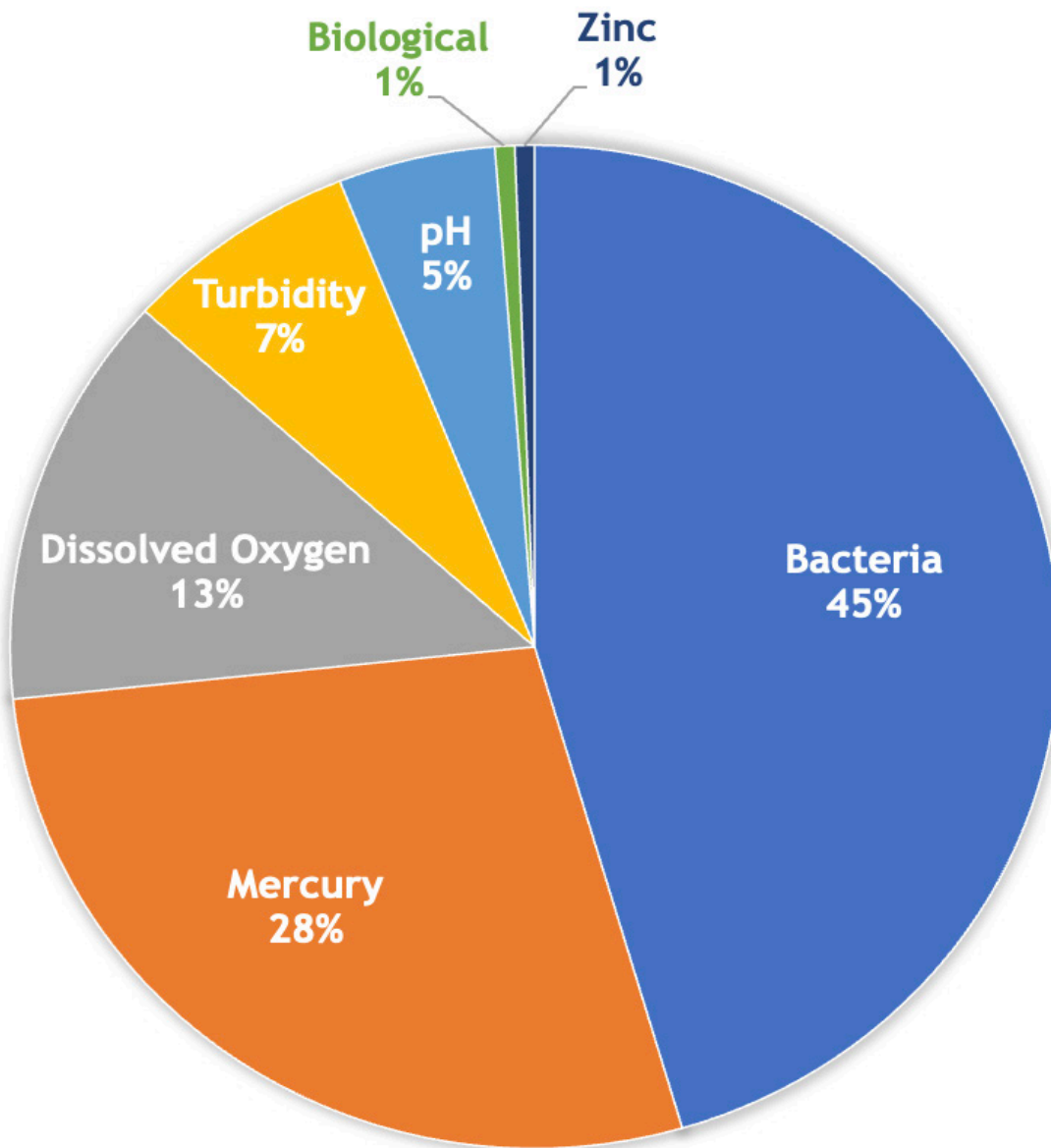
2020-22 303(D) LISTED MONITORING STATIONS IN THE HORRY AND GEORGETOWN REGION



Impaired Waterways

2020-22 303(D) IMPAIRMENTS IN HORRY AND GEORGETOWN COUNTIES

Based on the the 2020-22 303(d) list of impairments, there are 165 different impairments in the region. Frequency of listing is shown in the chart below. Bacteria (*E. Coli*, *Enterococcus*, and Fecal coliform) is the most frequently listed impairment.



Education Strategy and Timeline: Nutrients

Improper nutrient management was identified as a leading threat to water quality in the CWSEC region of focus. Excess nutrients in waterways contribute to dissolved oxygen issues, nuisance aquatic plants and algal blooms, and degraded ecosystem health. To address this, utilizing native plants in residential landscapes will be a focus through the CWSEC’s five-year strategic plan. The following education strategy and timeline provide a framework to address this priority pollutant.



EDUCATION STRATEGY: NUTRIENTS- NATIVE PLANTS

Target Audience: Home gardeners that perform their own landscaping

Contributing action: Native plants typically require little to no fertilizers once established; using native plants reduces fertilizer use and reduces the amount of nutrient pollution in stormwater runoff.

Goal: Increase the number of yards landscaped with native plants in Horry and Georgetown counties.

Objective: Provide education and outreach to increase the number of home gardeners who install native plants in Horry and Georgetown counties.

Message	Format and Distribution	Resources	Evaluation
<p>“Garden with native plants to beautify your yard, conserve water, and provide habitat.”</p>	<ul style="list-style-type: none"> Collaborate with local nurseries to increase availability of native plants Produce native plant educational signage and plant tags where plants are sold to highlight regionally appropriate plants Trainings and workshops specific to native plant landscape Recognition program for nurseries supplying native plants 2024 Waccamaw Week 	<ul style="list-style-type: none"> Clemson Extension’s Carolina Yards, HGIC Factsheets, & soil testing NIWB-NERR’s Master Naturalist SC Native Plant Society- Grand Strand Chapter Master Gardener program Area nurseries Demonstration gardens Workshops, education programs, and trainings provided by education partners Native plant rack card & promotional native seed packet giveaways 	<ul style="list-style-type: none"> Number of trainings and workshops, and associated participants, where message is addressed Number of nurseries to increase native plant availability & install educational signage Website views of Carolina Yards: Plant Database and HGIC Factsheets Number of soil tests for home gardens in Horry and Georgetown counties

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.		Develop & Implement Collaborative efforts with local nurseries to increase availability				
				Develop Recognition program for nurseries with native plants and educational signage	Implement Recognition program for nurseries with native plants and educational signage		
			Implement Existing workshops, programs, trainings, and resources offered by education partners.				Evaluate
				Develop & Implement Native plant educational signage and plant tags			

Education Strategy and Timeline: Nutrients

EDUCATION STRATEGY: NUTRIENTS- SOIL SAMPLE

Target Audience: Landscape professionals who do not currently offer soil testing as part of their service.

Contributing action: Unnecessary use of fertilizers can lead to water quality degradation as excess nutrients enter waterbodies.

Goal: Increase use of soil testing in professional fertilization applications in Horry and Georgetown counties.

Objective: Provide education and outreach to increase the number of landscape professionals who perform annual soil testing before applying fertilizers in Horry and Georgetown counties.

Message	Format and Distribution	Resources	Evaluation
<p>“Diversify your company’s services by offering soil testing to clients.”</p>	<ul style="list-style-type: none"> • Encourage soil testing in existing professional trainings (Turf School, Pesticide Applicator Training, hybrid courses, etc.) • Promote Clemson’s soil testing service • List of professional landscape companies that will soil test • Recommend and promote native plants to landscape professionals • List of professional landscape companies that utilize native plants 	<ul style="list-style-type: none"> • Clemson’s Ag Services Lab • Clemson Extension’s Carolina Yards • Clemson Extension’s SC Certified Landscape Professional course • Area landscape companies • Soil sample pocket guide • Workshops, education programs, and trainings provided by education partners • Existing and future trainings for landscape professionals 	<ul style="list-style-type: none"> • Number of soil samples per county on an annual basis • Number of trainings, and associated attendees, where message is addressed • Number of participants in the SC Landscape Professionals course • Number of program participants that demonstrate behavior adoption, through long-term survey response



Nutrient Management

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

Education Strategy and Timeline: Litter

Litter has been documented in local estuaries and exists throughout its food chain. Marine litter is largely attributed to land-based sources and stormwater runoff. Litter threatens the aesthetics of the community, ecotourism opportunities, and local wildlife. Litter, specifically single-use plastics, will be a focus through the CWSEC’s five-year strategic plan. The following education strategy and timeline provide a framework to address this priority pollutant.



EDUCATION STRATEGY: LITTER- SINGLE USE PLASTIC POLLUTION

Target Audience: People who use single-use plastics.

Contributing action: Single-use plastics are transported to local waterways in stormwater runoff causing harm to local water bodies, the wildlife that live in them, and the environment.

Goal: Reduce the amount of single-use plastics used in Horry and Georgetown counties.

Objective: Provide education and outreach to increase the number of people who reduce their usage of single-use plastics and who choose a more environmentally friendly option in Horry and Georgetown counties.

Message	Format and Distribution	Resources	Evaluation
<p>“Say No To Plastic! Help improve our water quality by reducing your single-use plastic usage.”</p>	<ul style="list-style-type: none"> • Mass-media • Community involvement activities pertaining to litter reduction and monitoring • Publicize litter clean-up collection data • Collaborate with community partners to set goals pertaining to single-use plastic reduction • Campaign to restaurants and incentivize environmentally friendly takeaway options • Educational signage and outreach material 	<ul style="list-style-type: none"> • Local research • County and city park staff • Keep America Beautiful affiliates • Winyah Rivers Alliance and the Waccamaw Waterkeeper • Palmetto Pride • Litter cleanups and events provided by education partners • Storm drain marking • Partners providing reusable items • Litter hotline • Beach Sweep/River Sweep • Murrells Inlet 2020’s monthly and annual cleanups 	<ul style="list-style-type: none"> • Number of educational outreach and promotional items distributed such as bags, water bottles, and straws • Results from litter clean-up data; amount and type of trash • Number of volunteers in litter cleanup events • Number of restaurants that adopt ‘River-Friendly’ takeaway options • Statewide survey

Litter Prevention

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

Education Strategy and Timeline: Litter

EDUCATION STRATEGY: LITTER- UNSECURED TRASH

Target Audience: People transporting loose debris.

Contributing Action: Unsecured loads are responsible for more than an estimated 20% of roadside litter resulting in the degradation of water quality and increased risk of clogging stormwater systems.

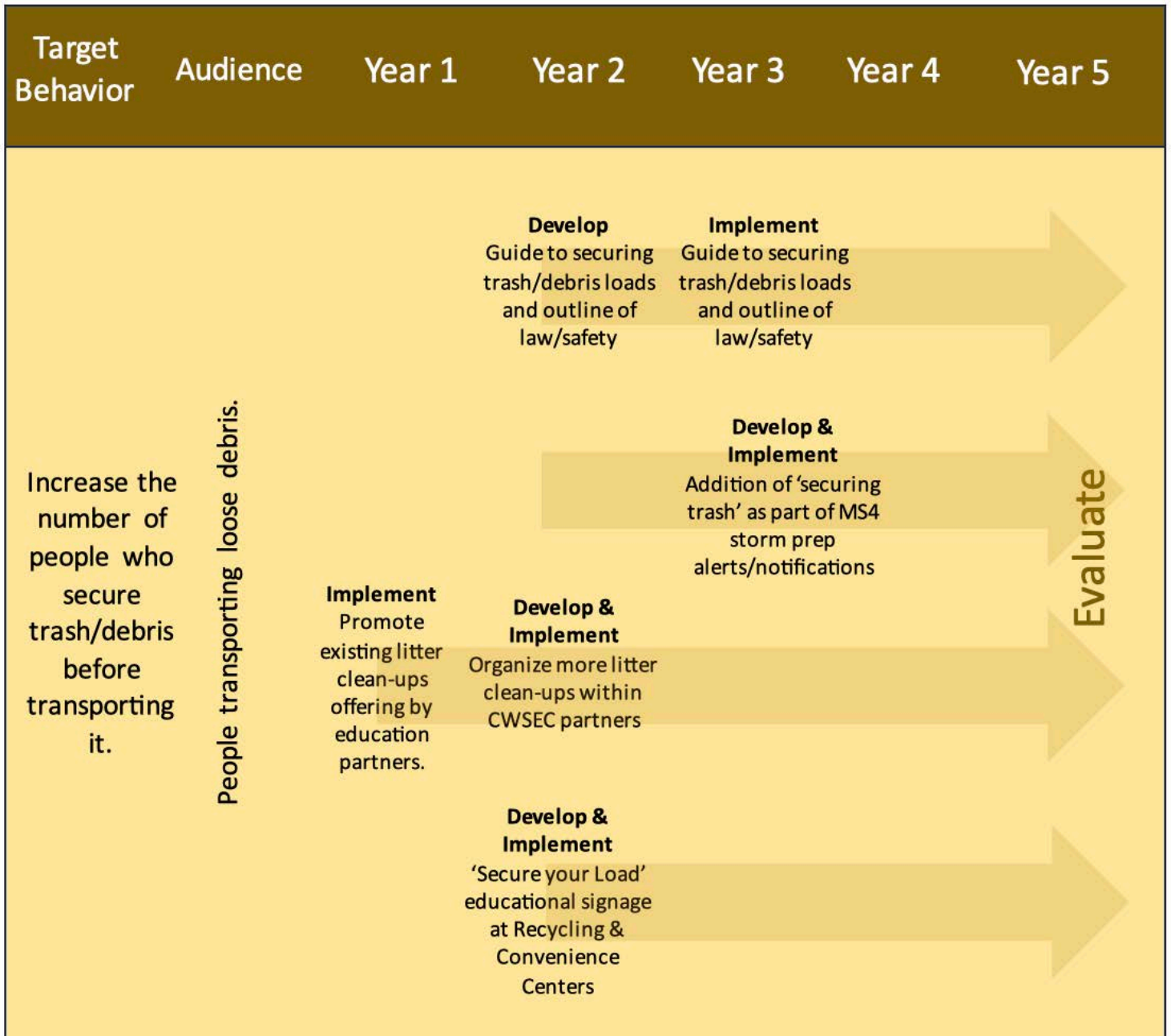
Goal: Reduce the amount of roadside litter from unsecured trash loads in Horry and Georgetown counties.

Objective: Provide education and outreach to increase the number of people who secure their trash/debris before transporting it in Horry and Georgetown counties.

Message	Format and Distribution	Resources	Evaluation
“Secure your load for a safer road!”	<ul style="list-style-type: none"> • Mass-media • Educational signs and rack cards at Recycling and Convenience Centers • Guide to securing loads and outline of laws/safety • Collaboration with community partners to include ‘securing trash’ with storm prep guidelines and notifications • Community involvement activities pertaining to litter reduction 	<ul style="list-style-type: none"> • SC state law requiring secured loads • ‘Trash Blows! Tarp it’ rack card & promotional tarp giveaways • Keep America Beautiful affiliates • Palmetto Pride • 40 Recycling and Convenience Centers across Horry and Georgetown counties • CWSEC community partners • ‘Put a Lid on It’ campaign to secure outdoor receptacles 	<ul style="list-style-type: none"> • Number of educational outreach materials and promotional items distributed to secure loads before hauling. • Number of Recycling & Convenience Centers to display educational signs about securing loads and the state law. • Incorporation of ‘securing trash’ in community partners’ alerts/notifications about storm prep



Litter Prevention



Education Strategy and Timeline: Bacteria

Bacteria is the most frequently listed impairment in South Carolina waterways, threatening recreational, drinking, tourism, and shellfish harvesting uses. Sources of bacteria can be varied; to address bacteria in the CWSEC region, a focus of CWSEC’s five-year strategic plan will include: dog waste disposal, septic tank management, and wildlife management. The following education strategy and timeline provide a framework to address this priority pollutant.



EDUCATION STRATEGY: BACTERIA- DOG WASTE			
Target Audience: People who own dogs.			
Contributing Action: While a majority of residents are aware that improperly disposed dog waste can impact water quality, some still do not pick up after their dogs.			
Goal: Increase the number of dog owners who properly dispose of dog waste in the trash or sanitary sewer in Horry and Georgetown counties.			
Objective: Provide education and outreach to increase the number of dog owners who pick up their dog’s waste in Horry and Georgetown counties.			
Message	Format & Distribution	Resources	Evaluation
“60% of dog owners pick up after their pet. Do you? Don’t forget to bag it up.”	<ul style="list-style-type: none"> • Mass-media • Educational signs at dog parks, vet offices, and public parks explaining importance of picking up waste • Online map of region’s parks detailing amenities such as pet waste stations, trash cans, etc. • Distribute ‘Pet Waste Stinks!’ rack cards, bag dispenser, etc. to shelters, vet offices, groomers. • Table adoption events and distribute giveaways • Collaborate with community partners to install pet waste stations in public parks • Annual “small grants” program to install dog bag stations on private property (HOA, apartment complexes, etc.) 	<ul style="list-style-type: none"> • Veterinarian clinics, animal shelters, dog groomers, dog daycare/boarding facilities, pet supply stores • Winyah Rivers Canines for Clean Water • ‘Pet Waste Stinks!’ rack cards and bag dispenser giveaways • County and city park staff • Adoption events: Kind Keepers, Humane Society, All 4 Paws, etc. • HOA and POA • Partner dog bag station programs • Online mapping tools • Storm Drain Marking 	<ul style="list-style-type: none"> • Statewide survey • Number of dog bag dispenser stations requested, installed, and maintained • Number of pet giveaways distributed • Viewership of the online dog bag station map • Number of educational signs and outreach material distributed

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.		Develop Online mapping tool of CWSEC region's public & dog parks detailing dog-related amenities	Implement Online mapping tool of CWSEC region's public & dog parks detailing dog-related amenities			
				Develop Small grants program to install dog bag stations on private property	Implement Small grants program to install dog bag stations on private property		
		Implement Distribution of promotional pet giveaways to shelters, vets, groomers, adoption events					
			Develop & Implement 'Pet Waste Stinks!' educational signage at vets, public parks, dog parks, etc.				
						Evaluate	

Education Strategy and Timeline: Bacteria

EDUCATION STRATEGY: BACTERIA- SEPTIC TANK MANAGEMENT			
Target Audience: Residents with septic tank systems			
Contributing Action: Residents are not maintaining septic tank systems that may be contributing to bacteria pollution to the storm drain system and nearby waterways.			
Goal: Increase the number of residents who are aware of their septic tank location and who use SCDHEC-recognized best management practices to maintain septic tank systems in Horry and Georgetown counties.			
Objective: Provide education and outreach to increase the number of residents with septic tank systems who are working with a professional to perform annual inspections in Horry and Georgetown counties.			
Message	Format & Distribution	Resources	Evaluation
<p>“Help avoid costly repairs by working with a professional to perform recommended septic tank inspections.”</p>	<ul style="list-style-type: none"> • Produce ‘Be Septic Safe’ rack card • Mass-media • Trainings and workshops by CWSEC and DHEC • Train-the-trainer for realtors • Campaign to residents and incentivize regular septic inspections • “Welcome to the Neighborhood!” packets mailed or distributed to new homeowners 	<ul style="list-style-type: none"> • Clemson’s ‘Be Septic Safe’ webpage and HGIC Factsheets • E-newsletter with automatic annual maintenance reminder to residents • S.C Sea Grant’s ‘Onsite Wastewater Treatment & Climate Change’ • Coastal Carolina Association of Realtors • Utility, septic, and sanitary system mapping • HOA and POA • Septic tank inspection/pumpout contractors • County and city planning/permitting departments • Septic giveaways 	<ul style="list-style-type: none"> • Viewership of online resources such as ‘Be Septic Safe’ • Number of residents participating in “annual inspection reminder” e-newsletter campaign • Number of individuals attending workshops • Number of educational outreach materials distributed

Bacteria Management

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.		Develop & Implement 'Be Septic Safe' rack card and promotional septic giveaways			
			Develop Residential septic inspection recognition/incentive	Develop & Implement Residential septic inspection recognition/incentive		
		Implement Promote 'Be Septic Safe' webpage and 'annual inspection reminder' e-newsletter				
				Develop 'Welcome to the Neighborhood' packets to distribute to new homeowners on septic	Develop 'Welcome to the Neighborhood' packets to distribute to new homeowners on septic	
						Evaluate

Education Strategy and Timeline: Bacteria

EDUCATION STRATEGY: BACTERIA- FEEDING WILDLIFE

Target Audience: Residents and tourists who feed wildlife

Contributing Action: Residents and tourists who feed wildlife contribute to the congregation and their habituation to humans resulting in increased levels bacteria in waterbodies from their waste.

Goal: Increase awareness of the problems associated with feeding wildlife and actions to prevent congregation in Horry and Georgetown counties.

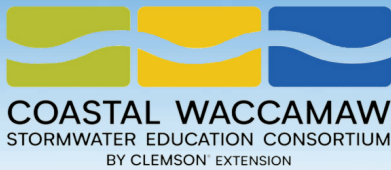
Objective: Provide education and outreach to decrease the number of people who feed wildlife in Horry and Georgetown counties.

Message	Format & Distribution	Resources	Evaluation
<p>“Elimate feeding to help keep our waters clean and the wildlife healthy!”</p>	<ul style="list-style-type: none"> • Mass-media • Produce ‘Resident Canada Geese’ rack card and educational sign explaining feeding impacts on bacteria and animal health • Distribute educational signage and rack cards to HOAs, public parks, property management companies, hotels, etc • Collaborate with Clemson’s Forestry & Wildlife team to produce HGIC factsheet on ‘Alligator’s Do’s & Don’ts’ and associated educational sign 	<ul style="list-style-type: none"> • Wildlife topic covered in pond workshops: Master Pond Manager, Healthy Pond Series, Stormwater Pond Conference, etc. • HGIC Factsheets on resident Canada geese and management techniques • Clemson’s ‘Goose Management Workshop’ • SC DNR permits • USDA APHIS • SC state law banning feeding of alligators 	<ul style="list-style-type: none"> • Number of educational signs distributed • Number of attendees at Goose Management Workshop • Viewership of HGIC factsheets • Number of educational outreach materials distributed



Bacteria Management

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.	Implement Promote pond workshops, trainings, and programs that cover wildlife management				
			Develop Produce alligator 'Do/Don't' factsheet and 'No Feeding'	Implement Produce alligator 'Do/Don't' factsheet and 'No Feeding'		
		Implement Promote and host existing 'Goose Management Workshop'				
			Develop & Implement Produce 'resident Canada geese' rack cards and revise educational sign to focus on bacteria	Implement Distribute rack cards and educational signs to CWSEC partners and beyond		
						Evaluate



Education Partner Programs

Programs listed are those that include stormwater outreach and involvement opportunities; the following is not a complete list of programs offered by each organization or entity. For more information on all program opportunities, visit partner website referenced.

CLEMSON EXTENSION



Mission: Clemson University Cooperative Extension improves the economy, environment, and well-being of South Carolinians through the delivery of unbiased research-based information and education.

CLEMSON EXTENSION'S CAROLINA CLEAR



Clemson Extension's Carolina Clear program works to educate the citizens of South Carolina of issues associated with polluted stormwater runoff and raise awareness of actions and behaviors that ultimately protect our water resources. Carolina Clear provides trainings, workshops, resources, mass media campaigns, demonstration projects, and youth programs to meet the needs of our communities. Partnering with over 38 local governments in South Carolina, Carolina Clear provides stormwater education, outreach, and public involvement opportunities.

Education Programs: Workshops, programs, technical trainings, resources, community outreach, and public involvement opportunities for diverse audiences including: Agricultural Service Laboratory Soil and Irrigation Water Samples, Be Septic Safe, Be Well Informed, Carolina Clear Webpage & Internet Media, Carolina Yards, Certified Erosion Prevention and Sediment Control Inspector (CEPSCI), Certified Stormwater Plan Reviewer (CSPR), Dam Ownership, Fats Oils & Greases, Flooding 411, Home & Garden Information Center, Land Grant Press, Lead Solutions, Litter Sweeps, Living Shorelines, Low Impact Development, Master Pond Manager, Master Rain Gardener, Petwaste, Post Construction BMP Inspector, Rain Gardens, Salt Marsh Course, Seeds to Shoreline, Silt Fence & Beyond, Statewide Mass Media Campaign, Storm Drain Marking, Stormwater BMP Demonstrations, Stormwater Pond Management, Stream Bank Repair, Rain Barrel Sales, and 4-H2O Youth Summer Camp.

Website: www.clemson.edu/extension/carolinaclear

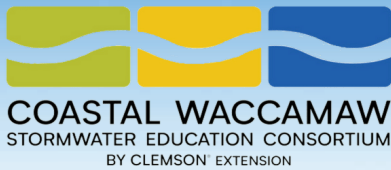
COASTAL WACCAMAW STORMWATER EDUCATION CONSORTIUM



The regional stormwater consortium in Horry and Georgetown county is the Coastal Waccamaw Stormwater Education Consortium (CWSEC).

Mission: 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.

Website: www.cwsec-sc.org



Education Partner Programs

COASTAL CAROLINA UNIVERSITY'S WACCAMAW WATERSHED ACADEMY

Mission: CCU established the Waccamaw Watershed Academy (WWA) in 2004 to meet local needs for expertise in the areas of watershed and wetland science and management. The WWA's mission is to deliver high quality educational, research, technical, and public outreach services to the university and the local region.



Education Programs: The WWA collaborates on various science communication and stormwater outreach efforts including Waccamaw Week and the Murrells Inlet Watershed Committee. One of the WWA's core offerings is the Volunteer Water Quality Monitoring Program with monitoring locations along the Waccamaw River, and in Surfside Beach, Murrells Inlet, and Briarcliffe Acres. In addition to their community science efforts, the WWA's Environmental Quality Lab conducts regulatory-level science through water quality monitoring for the Waccamaw and Pee Dee Rivers, and *Enterococcus* monitoring along the Grand Strand. WWA and EQL research includes harmful algal bloom detection, microbial source tracking, hypoxia monitoring, coastal ocean acidification, and assessment of stormwater treatment practices. WWA research and monitoring efforts are shared with municipal and public stakeholders through various presentations, meetings, and seminars throughout the Waccamaw and Coastal watersheds. The WWA also trains the next generation of water quality professionals through professional internships, graduate coursework, and undergraduate research opportunities.

Website: <https://www.coastal.edu/wwa/>

WINYAH RIVERS ALLIANCE'S WACCAMAW RIVERKEEPER

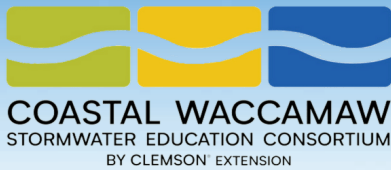


WINYAH RIVERS
ALLIANCE

Mission: Winyah Rivers Alliance is an Alliance of Riverkeepers aiming to protect, preserve, monitor, and revitalize the health of the lands and waters of the greater Winyah Bay watershed.

Educational Programs: Winyah Rivers embraces as one of its core values the education and engagement of our community in efforts to protect our rivers and clean water by hosting a variety of education and engagement programs designed to promote community stewardship including: Waccamaw River Cleanups on a monthly basis, Waccamaw Week/Waccamaw Conference, Bacteria Blitz, Winyah Rivers Spring Cleaning, Canines for Clean Water and the annual Spokesdog Contest, Winyah Rivers Adopt-A-Landing Program, and summer Swim Guide reports. The Waccamaw Riverkeeper also participants in additional public outreach including exhibiting at public events such as Georgetown's Wooden Boat Show, Pathways to Possibilities Career Expo, and various presentations at local schools.

Website: <https://winyahivers.org>



Education Partner Programs

NORTH INLET WINYAH BAY - NATIONAL ESTUARINE RESEARCH RESERVE

Mission: The North Inlet-Winyah Bay (NIWB) NERR, headquartered at Baruch Marine Field Laboratory in Georgetown, SC, was established in 1992 as a partnership between National Oceanic and Atmospheric Administration (NOAA) and the University of South Carolina's Belle W. Baruch Institute for Marine and Coastal Sciences. As one of 29 Estuarine Research Reserves around the coastal U.S., the NIWB-NERR is dedicated to conservation, research, education and stewardship in America's estuaries.



Education Programs: One of the primary goals of the NI-WB NERR is to enhance public awareness and understanding of estuarine areas and to provide suitable opportunities for public education and interpretation. The Reserve provides a variety of educational programs for a variety of audiences. The Coastal Training Program provides current science and skill-building opportunities for decision-makers in coastal communities such as Stormwater Pond Conference, Healthy Pond Series, and collaborations with Waccamaw Week/Waccamaw Conference, Calling the Coast Home realtor trainings, Flooding 411, and the Murrells Inlet Watershed Plan. The Education Program involves K-12 school programs, youth programs, public programs, and teacher professional development programs including: the naturalist-guided tour 'Paddle North Inlet', Beach Night Life, Family Fishing Clinics, Bike to the Boardwalk, Discovery Land Program, 'From Seeds to Shoreline' projects, Feeding Frenzy, and much more.

Website: <https://northinlet.sc.edu>

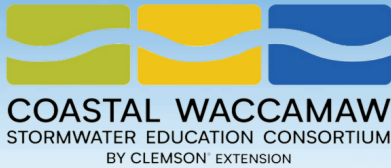
SOUTH CAROLINA SEA GRANT CONSORTIUM



Mission: The S.C. Sea Grant Consortium is a university-based program that generates and provides science-based information on issues and opportunities to improve the social and economic well-being of coastal residents while ensuring the optimal use and conservation of South Carolina's marine and coastal natural resources.

Educational Programs: S.C. Sea Grant 1) facilitates coastal and marine research by identifying and funding peer-reviewed projects, 2) supports coastal residents by making science-based information, expertise, and education about coastal issues available to the public, and 3) develops resources for educators and students. Programming and projects includes: SC Clean Marina Program, SC Low Impact Development Atlas, Water Quality Portal, Microplastics Conference, Water Chats, the CoastSnap project, 'From Seeds to Shoreline' program, SC Beach Sweep/River Sweep, and more.

Website: <https://www.scseagrant.org>



Education Partner Programs

MURRELLS INLET 2020

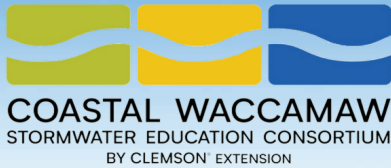
Mission: The mission of Murrells Inlet 2020 is to promote the conservation of our natural environment while fostering local community and commerce.



MURRELLS INLET 2020
A Clear Vision For The Inlet

Educational Programs: The vision of Murrells Inlet 2020 is to make Murrells Inlet a great place to live, work and visit through a combination of environmental awareness, infrastructure improvements, economic development, and community involvement. Programs and projects focusing on water quality include: creation of 'Murrells Inlet Watershed Basin Plan', annual litter clean-ups: 'Spring Tide', '4th of July', and 'Fall Haul', monthly community cleanups, partnership with WWA's Murrells Inlet Volunteer Water Quality Monitoring Program, maintaining and recording usage of pet waste stations throughout Murrells Inlet, initiating recycling efforts along Marsh Walk, and more.

Website: <https://murrellsinletsc.com>



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COASTAL WACCAMAW
STORMWATER EDUCATION CONSORTIUM
BY CLEMSON® EXTENSION



COOPERATIVE EXTENSION
College of Agriculture, Forestry and Life Sciences

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