

STORMWATER EDUCATION CONSORTIUM

BY CLEMSON® EXTENSION

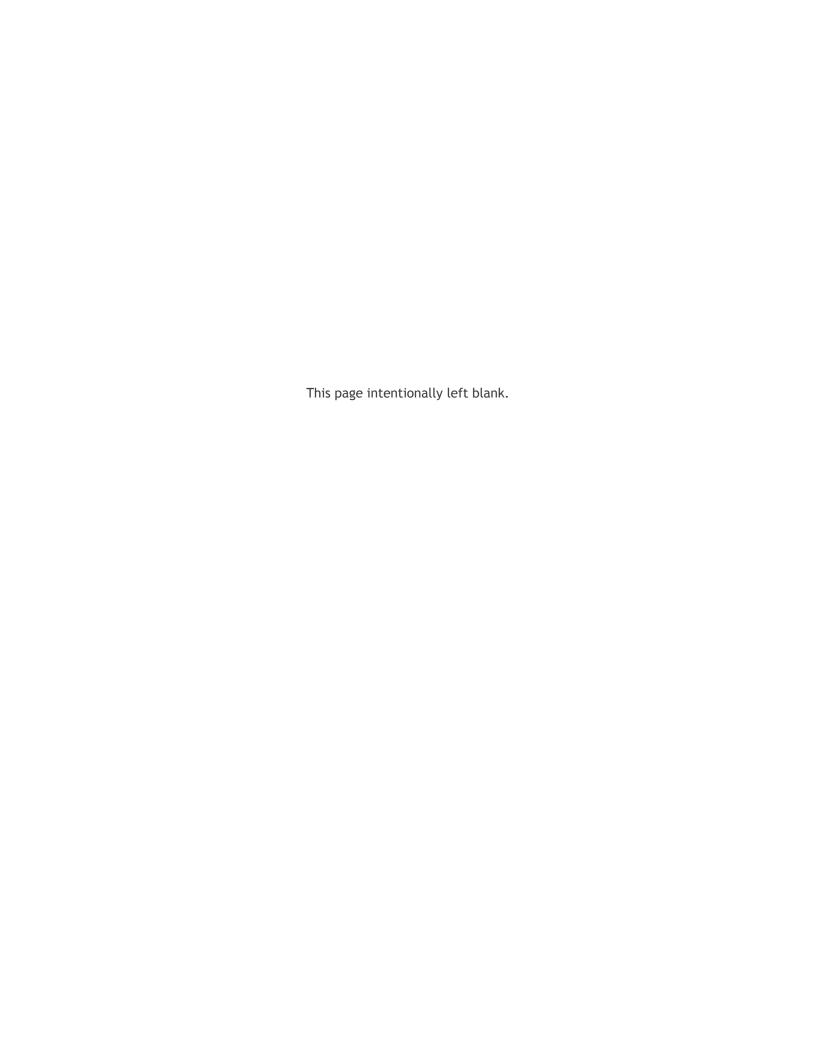


Stormwater Outreach Strategic Plan: 2024-2029

JULY 2024









Executive Summary

The Ashley Cooper Stormwater Education Consortium (ACSEC) was created to coordinate and implement a regional, watershed-scale education strategy focused on stormwater pollution prevention through education and community involvement. The ACSEC 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 ACSEC 2024-2029 Strategic Plan is the result of more than a year of meetings and analysis in the Berkeley, Charleston & Dorchester 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 July 1, 2024 to June 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 ACSEC representative input which took into account available data and personal experience. The priority issues for the ACSEC region are as follows:

POLLUTANT OF CONCERN	TARGET BEHAVIOR
BACTERIA	 Increase the number of Individuals properly disposing of pet waste. Increase the number of septic tank systems operating as designed and properly maintained.
LITTER	 Increase the number of individuals properly disposing trash. Encourage proper covering of transported materials and increase awareness of disposal sites as it relates to keeping storm drains clear
NUTRIENTS	 Educate those who visit ponds on the importance to not feed pond wildlife Minimize fertilizers negative impact on waterways by increasing the use of soil sampling recommendations prior to lawn care and maintenance.

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



BY CLEMSON® EXTENSION

Executive Summary	l
Community Partners	
Education Partners	
Mission and Goals	
Logic Model	4
Strategic Plan Development	
Impaired Waterways	
Education Strategy and Timeline: Bacteria	
Education Strategy and Timeline: Litter	
Education Strategy and Timeline: Nutrients	
Education Partner Programs	
Authors	



ASHLEY COOPER Community Partners STORMWATER EDUCATION CONSORTIUM

BY CLEMSON® EXTENSION

The majority of designated Small Municipal Separate Storm Sewer Systems (SMS4) communities in the Charleston Urbanized Area have committed to the ACSEC regional collaboration. These communities are represented by a dedicated group of public servants who have been engaged for many years in building the partnership.

































Education Partners

Collaboration is integral in developing and delivering a successful watershed-scale outreach program that reaches diverse audiences. The ACSEC is fortunate to have a variety of organizations in the Charleston Tri-County region (Berkerly, Charleston, and Dorchestor) 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 ACSEC. The ACSEC 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.



ACSEC Education Partners





































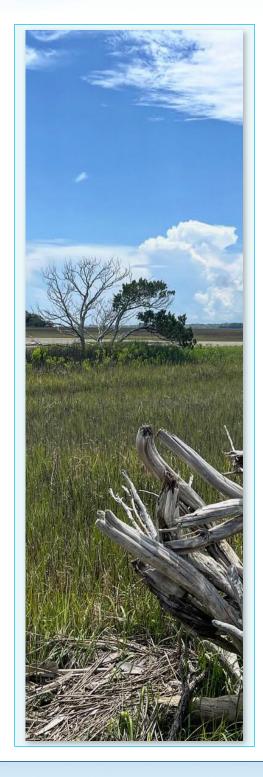


ACSEC MISSION STATEMENT

Improve water quality within the Ashley and Cooper River basins by providing educational opportunities on stormwater impacts and our community roles in supporting healthy, fishable, and swimmable waterways.

PROGRAM GOALS

- Develop and implement an education plan that defines a cohesive education strategy which outlines target audiences and associated target pollutants relevant to the region using a prioritized approach.
- Facilitate compliance with existing and future educational regulatory requirements by capitalizing on local resources and service providers.
- Foster citizen involvement in stormwater management through ACSEC education and participation programs.
- Encourage behavioral change towards environmental quality improvement through stormwater education.
- · Use research-based information and developing technologies and tools to maximize citizen exposure to ACSEC stormwater goals and objectives.
- Create an interactive reporting process to facilitate information exchange and dissemination among member entities.



Logic Model

A Logic model is conceptual framework describing the linkage among program resources, activities, outputs, and outcomes. The ASCEC Logic Model, shown here, serves as an overarching guideline for program efforts.

ACSEC Goal: Improve water quality within the Ashley and Cooper River basins by providing educational opportunities on stormwater impacts and our community roles in supporting healthy, fishable, and swimmable waterways.

Resources	Activities	Outputs	Short-Term Outcomes	Mid-Term Outcomes	Long-Term Outcomes	
Staff	Collaborate and build relationships	Committees,		Regular ACSEC meetings and communication		
SMS4 community partners	with local municipal and county governments,	work groups, regional alliances, partnerships, and	Consortium allow partners to be partners increase develop educational for increasing award	allow partners to develop educational	Local and regional approach for increasing awareness is coordinated and efficient	
Education partners	education partners, and the scientific community	other collaborative efforts	opportunities for partnership and collaboration	programming to address priority pollutants and target audiences	coordinated and efficient	
Funding	Identify target audiences and	Indirect outreach methods utilizing		Increase behavior	Community partners are in	
Facilities	priority pollutants in addressing	mass media, internet, outreach, materials,		change and adoption of best management	compliance with existing and future educational	
Community members	regional stormwater pollution issues	permanent exhibits, and participation in community events	Increase the public general awareness and relevance of	practices to reduce sources of pollution	regulatory stormwater requirements	
Equipment and supplies	Plan, develop, and deliver targeted and			targeted and and implications of degraded water		Communities are committed to becoming better coastal stewards by recognizing
Demonstration and field sites	relevant training, education programs, and workshops	Direct outreach methods through trainings, presentations,	quality	Citizens are involved in stormwater management through	the social, cultural, and economic values of coastal ecosystems	
Existing local, statewide, and national stormwater education programs	Measure direct and indirect ACSEC impacts	certifications, and public and youth involvement	Educational programs and technical training	volunteer-based programs	Decisions made reduce	
Scientific information	and evaluate the effectiveness of trainings and	Tools and products content knowledge and access to		Demonstration sites are established and	stormwater pollution in area waterways	
Trainers, speakers, and content experts	services	Annual reports	resources or services	maintained to showcase landscape-level best practices		



Strategic Plan Development

Development of the ACSEC 2024-2029 Stormwater Outreach Strategic Plan included the identification of the following during a multi-day planning period from February 2024-June 2024:

- 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 grovery 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 the analysis of the 2019 public survey data, consortium community and education partner feedback through questionnaire, anonymous polling, breakout groups, and discussion, synthesis of 2018-2023 education and outreach programs, case studies of public feedback, and 2016 303(d) listed water quality impairments. See page 8-9 for water quality impairment information in the Tri-County area.

Pre-Meeting Questionnaire

Prior to the February 2024 meeting, a pre-meeting questionnaire was completed by ACSEC community and education partners to identify 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



Strategic Plan Development

February 22, 2023 Meeting and April 10, 2024 Meeting

During the February 2029 and April 10, 2024 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.

• Prioritization of region-wide POC for ACSEC consortium area

Using an anonymous polling software, consortium partners were asked to independently rank their concern for each POC on a scale from 1-5 (1 being "no concern," and 5 being "very concerned.") Results were weighted to find the top three pollutants of most concern for the consortium. This process identified **bacteria**, **nutrients**, **and litter** as the pollutants of concern to focus on through the education strategy. Partners discussed results and considerations to be made in prioritization.

Identification of actions that contribute to target POCs

Partners then worked independently to list actions, and associated audience, that contribute to target POCs. Responses were numerous but common themes for each emerged. As a larger group, the partners identified the following contributing actions to be addressed through the ACSEC 2024-2029 Stormwater Outreach Strategic Plan.

POLLUTANT OF CONCERN	CONTRIBUTING ACTION
	PET OWNERS DO NOT PICK UP AND
BACTERIA	DISPOSE OF PET WASTE PROPERLY
DACTERIA	RESIDENTS DO NOT MAINTAIN THEIR
	SEPTIC TANK SYSTEM.
LITTER	• PEOPLE IMPROPERLY DISPOSE OF TRASH.
LITTER	STORM DRAIN POLLUTION
	HIGH NUMBERS OF NUISANCE WILDLIFE
NUTRIENTS	AROUND PONDS.
	HOME OWNERS AND LAWNCARE
	COMPANIES IMPROPERLY APPLY
	FERTILIZER.

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



Strategic Plan Development

• 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.

Bacteria

CONTRIBUTING ACTION	TARGET AUDIENCE	TARGET BEHAVIOR
Let owners improperly disposing of	Pet owners who directly take car e of their pet or pets.	Increase the number of Individuals properly disposing of pet waste.
Residents who do not maintain their septic tank system (Drain fields and tanks).	Residents and renters with septic tank systems.	Increase the number of septic tank systems operating as designed and properly maintained.

Litter

CONTRIBUTING ACTION	TARGET AUDIENCE	TARGET BEHAVIOR
Individuals improperly disposal of resident's trash.	Residents who bring their trash to the curve to be picked up.	Increase the number of individuals properly disposing trash.
Keeping Storm Drains clear from debris.	Residents and those visiting the coast who do not understand the purpose of storm drains .	Encourage proper covering of transported materials and increase awareness of disposal sites as it relates to keeping storm drains clear

Nutrients

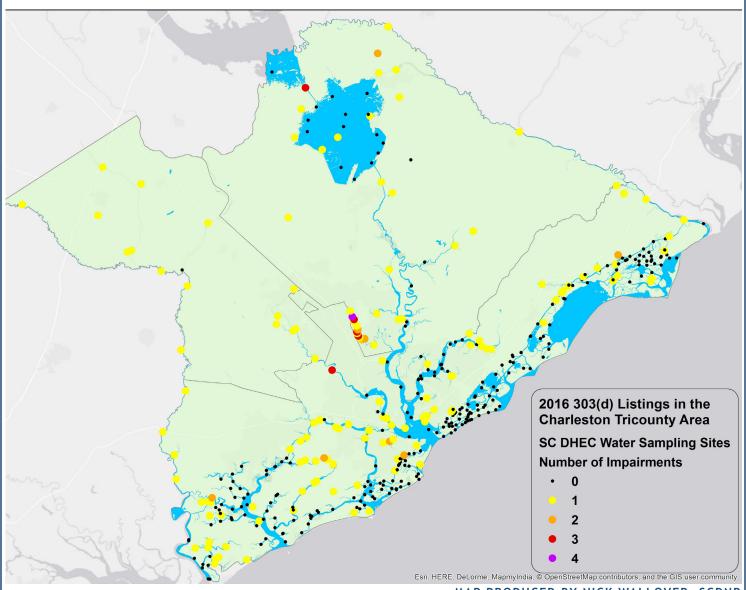
CONTRIBUTING ACTION	TARGET AUDIENCE	TARGET BEHAVIOR
Pond wildlife reducing water quality.	Members of the public who feeds wildlife.	Educate those who visit ponds on the importance to not feed pond wildlife
Lawncare companies improperly apply fertilizer.	Landscape professionals and home improvement stores that do not currently offer soil testing to clients.	Minimize fertilizers negative impact on waterways by increasing the use of soil sampling recommendations prior to lawn care and maintenance.

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 page 10-21.



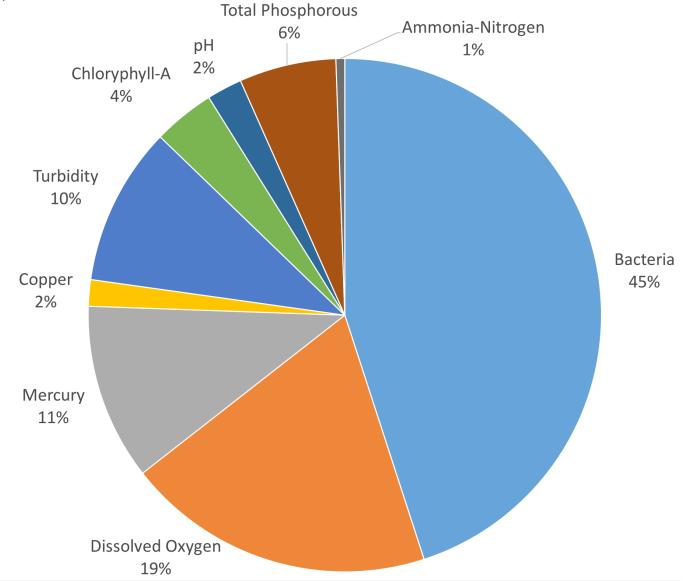
Impaired Waterways

2016 303(D) LISTED MONITORING STATIONS IN THE BERKELEY, CHARLESTON, AND DORCHESTER REGION NEW IMAGE? HTTPS://LGPRESS.CLEMSON.EDU/PUBLICATION/INTRODUCTION-TO-WATERSHED-WATER-QUALITY-MODELS/



2016 303(D) IMPAIRMENTS IN BERKELEY, CHARLESTON, AND DORCHESTER COUNTIES

Based on the 2016 303(d) list of impairments, there are 180 different impairments in the region. Frequency of listing is shown in the chart below. Bacteria (E. Coli, Entercoccus, and Fecal coliform) is the most frequently listed impairment.





ASHLEY COOPER 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 ACSEC region of focus, pet waste disposal and septic tank management will be a focus through the ACSEC's five-year strategic plan. The following education strategy and timeline provide a framework to address this priority pollutant.



EDUCATION STRATEGY: PET WASTE

Target Audience: Individuals who dispose of pet waste

Target Action: Proper pet waste disposal

Goal: Decrease bacteria contributed to the watershed by improper animal waste disposal in the Tri-County area; increase the number of animal waste disposal bins in neighborhoods and public areas.

Objective: Provide education & outreach on proper pet waste disposal the Tri-County areas

Me	Message		Format and Distribution		Resources		Evaluation	
•	Improper pet waste disposal can contribute to harmful bacteria entering our		Pet waste impact presentations Tabling and outreach events	•	Extension Advocacy Groups Municipalities Pet Adoption/Vets/	•	Number of pet owners who self report that they pick up after their dog on walks	
	watershed. Impacts on health of certain pets such as	•	Distribute educational material directly to target audience		Clinics Partner dog bag station programs	•	Number of pet bag dispenser stations requested, installed,	
•	dogs Specific examples of impacts: links of	•	Promo Items Partner with other Clemson Extension	•	HGIC Factsheets/ other education outreach resources	•	and maintained. Number of pet waste material distributed	
	oyster beds/shellfish impairments		groups (Example: Rural Health, 4H, and Food Systems)	•	School Districts County Parks Dog Days Events	٠	Number of people who attend presentations and tabling events.	
		•	Online Training Mass Media			•	Website hits with related information	

Objective	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
			Develop & Implei Presentation on p & trainings	nent roper pet waste dis	posal to include in v	workshops
	mal waste		Develop & Imple Additional outres resources	ment ach materials includ	ing factsheets, blog	s & online
Provide Education and outreach on proper animal waste disposal in he Tri-County	Individuals who dispose of animal waste	Implement Continued distributions offices, or pet stores		outreach materials (1	tabling events, vet	Evaluate
rea	Individuals w	Implement Continued collabor	ation with other Cle	emson Extension gro	oups	
				Develop & Implen New educational s	n ent ignage at pet waste	stations for pa



ASHLEY COOPER Education Strategy and Timeline: Bacteria



EDUCATION STRATEGY: SEPTIC TANK MANAGEMENT

Target Audience: Septic users including renters, new septic users, and existing septic users

Target Action: Residents and renters properly maintaining septic systems as designed.

Goal: Decrease the bacteria from septic systems in the watershed for the Tri-County Area. Increase the number

Objective: Provide education and outreach on septic systems stressing routine maintenance in the Tri-County

Message	Format and Distribution	Resources	Evaluation
 Message Help avoid costly repairs by working with a professional to perform recommended septic tank inspections. Ensuring your septic system is operating as designed and properly maintained. Avoiding clogs and 	 Publications with plans for annual reminder to homeowners Septic based presentation/webinars/training/outreach events "Welcome to the neighborhood!" packets mailed or distributed to residents Online resources: "Be 	 Charleston Trident Association of Realtors Clemson University and Extension Service HGIC Webpage Post office new residents. Utility, septic, and sanitary system mapping HOA and POA Septic tank inspec- 	 Number of contractors reported septic tank inspections and pumpouts. Publications with "Annual Inspection" reminders for septic maintenance by way of responses in statewide survey Number of materials
killers going down the drain.	 Septic Safe" Webpage Mass-media Senior Centers Septic Companies Share financial incentives program for inspections 	 Septic talk inspection/pumpout contractors County and city planning/permitting departments/regulator agencies 319 Grants 	 Number of materials given at public events Number of unique views and participants for online tools Number of unique views and participants in workshops and webinars

	Objective	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
		e e	Develop & Impleme		events, and webin	ars	
,		d existing resider	Develop & Impleme				
	Increase the number of residence with septic tank systems who are working with a	Septic users including renters, new residence, and existing residence	reminder	Additional	t Implement outreach materials videos, signage & v		Evaluate
	professional to perform annual inspections	luding renters, I	Implement			welcome packets	
		Septic users inc	Continued distribution	ion of educational o	utreach materials		
		0)			Develop & Imple Financial incentiv	ment es programs inform	ation



ASHLEY COOPER 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, local wildlife, and all around community health. Litter, specifically improperly disposed trash that travels to our storm drains, will be a focus through the ACSEC's five-year strategic plan. The following education strategy and timeline provide a framework to address this priority pollutant.

EDUCATION STRATEGY: PROPER TRASH DISPOSAL

Target Audience: All citizens residential and in transit

Target Action: Proper disposal of residential trash.

Goal: Decrease the amount of litter ending up in our local watershed and increase individuals knowledge of best practices on trash bin requirements in Tri-County area.

Objective: Provide education and outreach on best management practices and benefits of proper waste reduction and disposal for private residents in the Tri-County area.

Message	Format and Distribution	Resources	Evaluation
 Protects downstream waterways. Protect and enhance property values. "Tarp Your Load" campaign. "Don't Overfill" "Hold trash until it finds its place " 	 Mass-media Community involvement activities pertaining to litter reduction and monitoring Signage at public parks, green spaces, and major roadway intersections Educational publications at schools and outreach events Distribution of tarps 	 Local research County and city park staff HOA and POA SC Adopt-A-Highway /Community Pride events Keep America Beautiful affiliates Surfrider Foundation Charleston Waterkeeper Adopt-A-Highway Litter hotline Beach Sweep/River Sweep Clemson University and Extension Service 	 Number of educational outreach materials distributed City of Charleston Rating of Roads Neighborhood clean ups that document bags/lbs collected and number of individuals involved. SeaGrant Beach Sweep/River Sweep Number of pocket ashtrays distributed Statewide Survey

	Objective	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
			Develop Outreach material, in	s in high problem ar	eas		
	Provide education and outreach on best management	d in transit	Implement Distribution of rack of	cards and other outr	reach material		
	practices and benefits of proper waste reduction and	nts <u>s</u>					Evaluate
	disposal in private residents in the Tri-County area			Develop & Impler Signage for neighb and council group	orhood welcome c	enters, HOA/POA G	
				Davidor 9 Implem			
					nent or current and new ated events, worksh		ons



ASHLEY COOPER Education Strategy and Timeline: Litter

EDUCATION STRATEGY: STORM DRAIN

Target Audience: All citizens who live and work near storm drains.

Target Action: Protect storm drains that lead water directly into our watershed.

Goal: Keeping the storm drains clear of trash and landscaping debris in the Tri-County area.

Objective: Provide education and outreach on best management practices and benefits of proper waste reduction and disposal near and around storm drains in the Tri-County area.

"Keep storm drains clear of debris"

- Any vehicle transporting material must be covered and secure.
- To report littering, call 1-877-Litter
- Protect our waterways to improve water
- Dumping household trash and other waste in unauthorized areas is illegal.

Format and Distribution Mass-media

- Community involvement activities pertaining to litter reduction
- Factsheet and other informational materials related to the affects of trash in the watershed
- Storm Drain Markers and Stencils
- Hurricane Season Messaging
- Presentation on the importance of storm drains
- Rain Barrel Sale

Resources

- Local research
- Keep America Beautiful affiliates

Advocacy Groups

- Surfrider Foundation
- Adopt-A-Highway
- Adopt-A-Drain (City of Charleston)
- Senior Centers
- Scout Groups
- Storm drain marking
- Clemson University and Extension Service

Evaluation

Number of educational materials distributed from all organizations.

- Number of anti-Litter campaigns/cleanups
- Total number/weight of litter collected at clean-up events.
- Number of Rain Barrel sold.





PHOTO CREDIT: BEATRISS CALHOUN

EDUCATION STRATEGY AND TIMELINE: LITTER ACSEC 2024-2029 STORMWATER OUTREACH STRATEGIC PLAN

Objective	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
		Develop Outreach material	, including online reso	ources, and cleanup	s in high problem ar	eas
	rains					
Provide education and outreach on best	All Citizens who live near and around storm drains		Develop Outreach material for	local restaurants ar	nd landscaping com	panies
management practices and	d around	Implement				te
benefits of proper waste reduction and	near an	Working with com	munity groups, girl/bo adopt storm drains th			Evaluate
disposal near and around storm drains in	who live			Davidan		
the Tri-County area	Citizens			Develop Online resources i inspection, etc.	ncluding list of cont	ractors, tips for
	₹					
				ter clean-ups, tarp-i ng, and other outre		



ASHLEY COOPER Education Strategy and Timeline: Nutrients

Improper nutrient management was identified as a leading threat to water quality in the ACSEC 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, nuisance wildlife reduction and increase usage of Soil Test will be a focus through the ACSEC's five-year strategic plan. The following education strategy and timeline provide a framework to address this priority pollutant.

EDUCATION STRATEGY: POND WILDLIFE

Target Audience: Residents new and existing who are feeding wildlife in or around stormwater ponds.

Target Action: Reduce numbers of nuisance wildlife (residential geese, alligators, beavers, and more) in the Tri-County area.

Goal: Decrease the number of nuisance wildlife in stormwater ponds in the Tri-county area to improve water quality.

Objective: Provide education and outreach related to nuisance wildlife in stormwater pond in the Tri-County

Message	Format and Distribution	Resources	Evaluation	
 "Avoid feeding wildlife in or around stormwater ponds" "Feeding wildlife in or around stormwater ponds is detrimental to wildlife's natural practices" Display positive actions to do with wildlife Don't Litter- It can attract unwanted/ diseased wildlife. 	 Presentations/ Workshops Education outreach material Mass Media HOA/POA Meetings Schools Consider timing of related information. Some activities are more frequent during particular seasons. (Example: Nesting Season) 	 Clemson Ag Services Lab Clemson University and Extension Service HGIC Carolina Yards Area landscape companies Soil sample pocket guide Green Industry Training Workshops, education programs, and trainings provided by 	 Number of trainings, and associated attendees, where message is addressed Number of program participants that demonstrate behavior adoption, through long-term survey response Website hits 	
		 education partners Existing and future trainings for landscape professionals 		

Provide education and pureach related to routsance wildlife in stormwater pond in the Tri-County area Implement Shoreline planting workshops to reduce number of geese in problem areas and improve water quality Implement Shoreline planting workshops to reduce number of geese in problem areas and improve water quality Implement Workshop with messaging of "Avoid feeding pond wildlife"	Objective	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
Provide education and putreach related to nuisance wildlife in stormwater pond in the Tri-County area Implement Shoreline planting workshops to reduce number of geese in problem areas and improve water quality Implement Shoreline planting workshops to reduce number of geese in problem areas and improve water quality Implement Workshop with messaging of "Avoid feeding pond wildlife"		ormwater ponds	-	including online res	ources, publications	s, and educational si	gnage
Implement Shoreline planting workshops to reduce number of geese in problem areas and improve water quality Implement Shoreline planting workshops to reduce number of geese in problem areas and improve water quality Implement Workshop with messaging of "Avoid feeding pond wildlife"		llife in or around sto			tion of material and	resources	
Implement Workshop with messaging of "Avoid feeding pond wildlife"	o nuisance vildlife in tormwater pond n the Tri-County	ho are feeding wilc	Shoreline planting v		e number of geese i	n problem areas and	Evaluate
		nd existing w	·	ssaging of "Avoid fee	eding pond wildlife"		



ASHLEY COOPER Education Strategy and **Timeline: Nutrients**

EDUCATION STRATEGY: SOIL SAMPLING

Target Audience: Landscape Companies and Residents in charge of landscaping needs

Target Action: Increase awareness of soil sample to encourage proper use of fertilizers

Goal: Increase the number of residents in the Tri-County Area and landscape companies using soil sample recommendations prior to landscape services.

Objective: Provide education and outreach on lawncare practices as it relates to soil samples and fertilizer use within the Tri-County area.

Message

- Erosion and sedimentladen stormwater runoff negatively impacting the health of our waterway
- BMP's can help protect properties from nutrient overload and erosion.
- Soil test before you conrtol/plant

Format and Distribution

- Mass-media
- Signage and plant tags where plants are sold to highlight regionally appropriate plants
- Landscape design educational materials
- Promotional material with soil sampling information
- **Publications with** Multilingual messaging
- Connect with local landscaping stores fronts and more.
- Rain Barrel Sales

Resources

- Clemson University and Extension Services
- Carolina Yards
- Area nurseries
- Master Gardener program
- SC Native Plant Society
- SC Audubon
- Surfrider Foundation
- HGIC 87
- Workshops, education programs, and trainings provided by education partners
- Demonstration gardens
- HOAs/POAs

Evaluation

- Number of trainings, and associated attendees, where message is addressed
- Number of program participants that demonstrate behavior adoption, through long-term survey response
- Responses to statewide survey
- Number of soil sample give in the tri-county area
- Number of Rain Barrel sold







Objective	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
	education and putreach on awncare practices as it relates to soil samples and fertilizer use within the Tri-	Implement Continued distribution	tion of outreach ma	terial (HGIC factshe	ets, rack cards) at ta	abling events
Provide				rtisement from Cler	mson Extension, inc ing companies & pl	_
outreach on lawncare practices as it relates to soil samples and		Implement Soil sample and law residential audience	vn care information es	in presentations an	nd workshops for	Evaluate
within the Tri- County area					Green Industry Trai Clemson Extension	
	Landscap				Develop & Implem "We Soil Test" seal	



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.

Website: www.clemson.edu/extension



COOPERATIVE EXTENSION

ASHLEY COOPER STORMWATER EDUCATION CONSORTIUM

Mission: To Improve water quality within the Ashley and Cooper River basins by providing educational opportunities on stormwater impacts and our community roles in supporting healthy, fishable, and swimmable waterways. Carolina Clear Education Programs (including: workshops, programs, technical trainings, resources, community outreach, and public involvement opportunities for diverse audiences)

Website: www.clemson.edu/extension/carolinaclear/regional-consortiums/acsec/index.html



CLEMSON EXTENSION CAROLINA CLEAR

Carolina Clear Education Programs (including: workshops, programs, technical trainings, resources, community outreach, and public involvement opportunities for diverse audiences): 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-H20 Youth Summer Camp.

Website: www.clemson.edu/extension/carolinaclear/



Programs

COMMUNITY PRIDE, INC.

Mission: 1) To support and facilitate local efforts to enhance the visual landscape and environment of Charleston County 2) To inspire and create pride among citizens through community recognition and awards 3) To coordinate and promote the County's Adopt-A-Highway program.

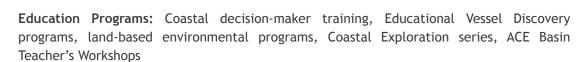
Education Programs: Adopt-A-Highway, Community Pride annual banquet

Website: https://communityprideinc.com/



ASHEPOO, COMBAHEE, EDISTO (ACE) RIVER BASIN NATIONAL ESTUARINE RESEARCH RESERVE (SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES)

Mission: To sustain the ecological health of estuaries entrusted to our care and provide natural areas for research, education, stewardship and compatible human uses.





Website: http://www.dnr.sc.gov/marine/NERR/r



SOUTH CAROLINA SEA GRANT CONSORTIUM

Mission: South Carolina Sea Grant Consortium generates and provides science-based information to enhance the practical use and conservation of coastal and marine resources that foster a sustainable economy and environment for the state of South Carolina and its citizens.

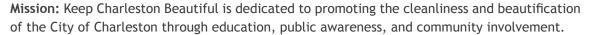
Education Programs: Seeds to Shoreline youth and teacher shoreline restoration program, Enviroscape, SC Beach Sweep/River Sweep, South Carolina Stormwater Pond Collaborative, Community marine education programs

Website: http://www.scseagrant.org/



Programs

KEEP CHARLESTON BEAUTIFUL





Education Programs: Clean City Clara and Talking Trash: Litter Prevention, Clean Cities Sweep, My City Is NOT Your Ashtray, Pick Up After Your Pet: Pet Waste Stations, Adopt-A-Stop

Website: http://www.charleston-sc.gov/index.aspx?NID=264



SURFRIDER FOUNDATION: CHARLESTON CHAPTER

Mission: The protection and enjoyment of the worlds oceans, waves and beaches through a powerful activist network.

Education Programs: Rise Above Plastics, Ocean Friendly Restaurants, Strawless Summer, beach and marsh litter sweeps, Ocean Friendly Gardens, pet waste dispensers and cigarette butt receptacles.

Website: www.charleston.surfrider.org



CHARLESTON COUNTY PARKS AND RECREATION COMMISSION

Mission: The Charleston County Park and Recreation Commission will improve the quality of life in Charleston County by offering a diverse system of park facilities, programs, and services.

Education Programs: Master Naturalist, rain garden demonstration sites, host 4-H2O summer camp, interpretive programs on diverse topics related to the natural world.

Website: www.ccprc.com



Education Partner Programs

SOUTH CAROLINA NATIVE PLANT SOCIETY: LOWCOUNTRY CHAPTER



Mission: The South Carolina Native Plant Society is a non-profit organization committed to the preservation and protection of native plant communities in South Carolina.

Education Programs: Native plant sales, community grants for native plant installation/education projects, presentations at schools, garden clubs and for other groups, monthly meetings with guest speaker, tabling community outreach events, annual statewide symposium and Native Plant Week

Website: www.scnps.org



CHARLESTON COUNTY SOIL AND WATER CONSERVATION DISTRICT

Mission: Preserve and enhance water quality, working farms, natural areas, and wildlife through locally-led conservation efforts.

Education Programs: Poster/essay contest, SC Envirothon, Arbor Day, Charleston County Science Fair, Environmental Recognition Awards Dinner

Website: http://www.charlestonconservationdistrict.com/

COLLEGE OF CHARLESTON - MASTER OF ENVIRONMENTAL STUDIES PROGRAM



Mission: The mission of the College of Charleston Master of Science in Environmental Studies (MES) Program is to provide environmental students with interdisciplinary, integrative science and policy training.

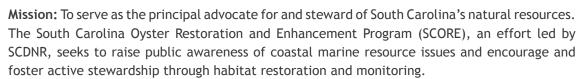
Education Programs: Partnership with Clemson Extension to support internship opportunities for graduate school students

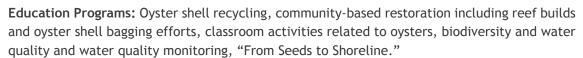
Website: http://mes.cofc.edu/



Education Partner Programs

SOUTH CAROLINA OYSTER RESTORATION AND ENHANCEMENT PROGRAM (SCORE) (SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES)









Website: www.dnr.sc.gov

TRI-COUNTY MASTER GARDENER ASSOCIATION

Mission: Provide research based information to the public in all areas of gardening and horticulture with emphasis placed on conserving and protecting the environment using sustainable practices.

Education Programs: "Ask a Master Gardener" tabling at community events and farmer's markets, Master Gardener offices in Berkeley, Charleston and Dorchester Counties, Urban Research & Demonstration Area, assistance with IVY rain barrel sales, demonstration site maintenance, school gardening programs, lectures to community members and garden clubs

Website: www.sctcmg.org/



AUDUBON SOUTH CAROLINA

Mission: Conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity.

Education Programs: Bird Friendly Communities, Native Plant Week, host 4-H2O summer camp, demonstration site establishment, native plant seed packet project, education programs and community tabling.

Website: www.sc.audubon.org/



COOPER Education Partner Programs Programs

KEEP BERKELEY BEAUTIFUL



Mission: Keep Berkeley Beautiful's mission is to end littering, improve recycling, and beautify communities.

Education Programs: Adopt-A-Landing, Adopt-A-Highway, recycling programs

Website: www.bcwsa.com/keep-berkeley-beautiful



CHARLESTON WATERKEEPER

Mission: To protect, promote, and restore the quality of Charleston's waterways while creating a more engaged public through education, outreach, and celebration of our collective right to clean water.

Education Programs: Recreational water quality monitoring, Boater pumpout program, water pollution prevention education

Website: www.charlestonwaterkeeper.org/

CLEAN WATERWOOD

MOUNT PLEASANT WATERWORKS

Mission: To provide our customers with water and wastewater services of exceptional quality and value, while protecting public health and the environment.

Education Programs: Fats, oil, and grease prevention education, water conservation programming, Clean Water Talkers, Citizen Water Academy

Website: www.mountpleasantwaterworks.com/



COOPER Education Partner Programs Programs

SOUTH CAROLINA AQUARIUM

Aquarium:

Mission: Inspire conservation of the natural world by exhibiting and caring for animals, by and research, and by providing an exceptional visitor experience.

Education Programs: Hands on tangible conservation programs that serve diverse age groups both inside the Aquarium and in the community; Instruction for "From Seeds to Shoreline" field days

Website: www.scaquarium.org

KEEP NORTH CHARLESTON BEAUTIFUL

Mission: To enhance the beauty and image of the City of North Charleston through hands-on beautification efforts, through education and by supporting community cleanups.

Education Programs: Garden installation and maintenance, litter prevention

Website: www.northcharleston.org

Charleston Water System

CHARLESTON WATER SYSTEM

Mission: Support public health and protect the environment.

Education Programs: Fats, oil, and grease prevention education, water conservation programming

Website: www.charlestonwater.com/



Prepared By:

AUTHORS

BEATRISS CALHOUN

ACSEC Co-Coordinator
Water Resources Agent
Clemson University Cooperative Extension Service
259 Meeting Street, Charleston, SC
843-729-4523
beatris@clemson.edu

SAMANTHA PORZELT

ACSEC Co-Coordinator
Water Resources Agent
Clemson University Cooperative Extension Service
259 Meeting Street, Charleston, SC
843-730-5208
sporzel@clemson.edu

SPECIAL THANKS TO ACSEC REPRESENTATIVES FOR THEIR INPUT AND REVIEW DURING THE COLLABORATIVE PROCESS



Carolina Clear is a program of the Clemson University Cooperative Extension Service. Clemson University Cooperative Extension Service offers its programs to people of all ages, regardless of race, color, gender, religion, national origin, disability, political beliefs, sexual orientation, gender identity, marital or family status and is an equal opportunity employer.

Produced July 2024



STORMWATER EDUCATION CONSORTIUM

BY CLEMSON® EXTENSION



