### **ANDERSON & PICKENS COUNTIES**

# stormwater PARTNERS

BY CLEMSON® EXTENSION







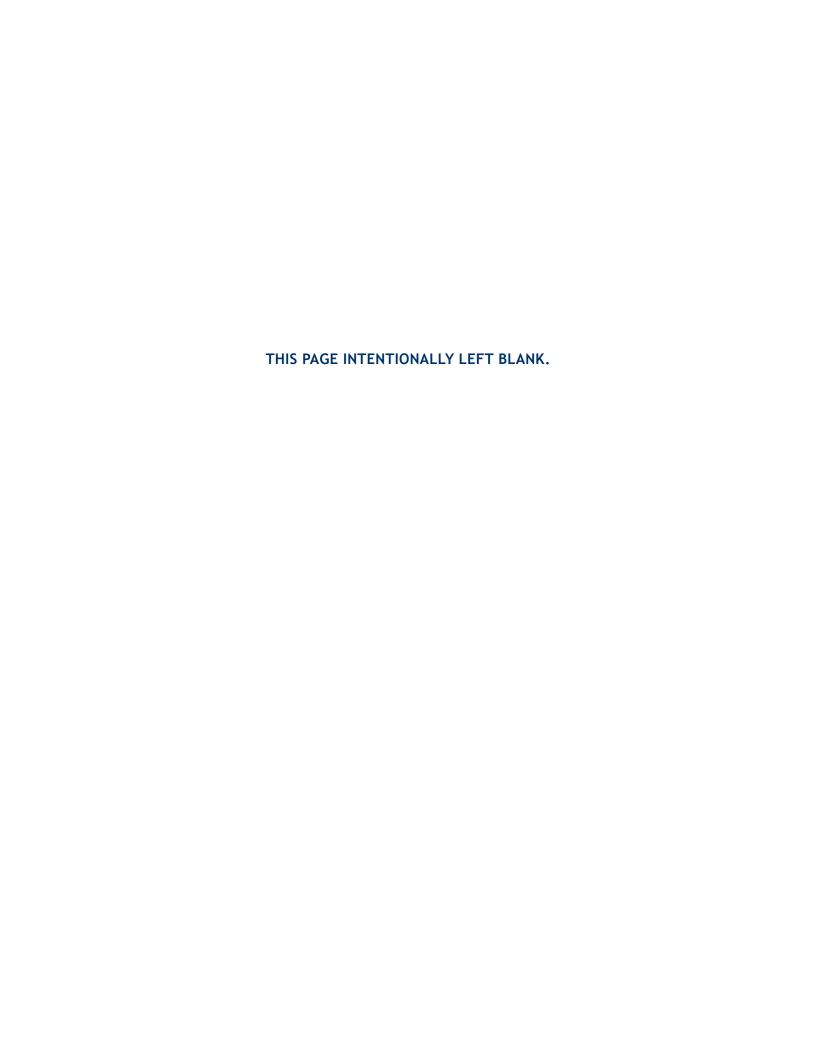


# **Annual Report of Activities**

YEAR 10 / JANUARY - DECEMBER 2023







# Acronyms Used In This Report

ACRONYM	FULL WORDING	ACRONYM	FULL WORDING
APCSP	Anderson & Pickens Counties Stormwater Partners	LID	Low Impact Development
ARJWS	Anderson Regional Joint Water System	LKSWPT	Lake Keowee Source Water Protection Team
ASWCD	Anderson County Soil and Water Conservation District	MCMs	Minimum Control Measures
BMPs	Best Management Practices	MEP	Maximum Extent Practicable
CAFLS	Clemson University College of Agriculture, Forestry, and Life Sciences	NPDES	National Pollutant Discharge Elimination System
CEPSCI	Certified Erosion Prevention and Sediment Control Inspector	PC	Pickens County
CSPR	Cetified Stormwater Plan Reviewer	POC	Pollutants of Concern
CU	Clemson University	PSWCD	Pickens County Soil and Water Conservation District
CY	Clemson Extension Carolina Yards	SC	South Carolina
EFNEP	Expanded Food and Nutrition Education Program	SC AAS	South Carolina Adopt-a-Stream
FB	Facebook	SC ETV	South Carolina Educational Television
FDSC	Florence Darlington Stormwater Consortium	SCASM	South Carolina Association of Stormwater Managers
FOG	Fats, Oils and Grease	SCBG	South Carolina Botanical Gardens
FOLKS	Friends of Lake Keowee Society	SCDHEC	South Carolina Department of Health and Environmental Control
HGIC	Home & Garden Information Center	SCDOT	South Carolina Department of Transportation
HOAs	Home Owners Associations	SDPC	School District Pickens County
IECA	International Erosion Control Association	SMS4s	Small Municipal Separate Storm Sewer Systems
КРСВ	Keep Pickens County Beautiful	TMDLs	Total Maximum Daily Loads
LHPCW	Lake Hartwell Partners for Clean Water	ТТВ	Traveling Trash Bash



### **Executive Summary**



The Anderson & Pickens Counties Stormwater Partner's (APCSP) Year Ten Annual Report of Activities summarizes education, involvement, and participation programming offered in 2023. APCSP community and education partners collaborate on a region-wide outreach strategy to educate residents about water issues, including quantity, quality, and the cumulative impacts of stormwater. As a public service of Clemson University, APCSP continued to serve South Carolina. County agents and staff assisted clients through telephone, email, and virtual platforms, as well as in-person workshops, outdoor events, and field visits. County agents also helped clients collect and submit soil, water, and plant samples to Clemson laboratories for analysis and interpretation of results.



Steven O'Shields Water Resources Agent

Programming is guided by our 5-year strategic education plan, a living document identifying target pollutants of concern (POC), target behaviors, and outreach strategies. The plan was updated in 2023 based on input from community and education parnters. Using this input, POCs were identified as bacteria from septic/sewer infrastructure and fats, oils, and grease (FOG); litter in both private and public locations; and sediment from construction/post-construction and residental activities. The education plan and associated timeline can be found in the Appendix.

In 2023, we continued a mass media campaign focused on preventing sanitary sewer overflows. We also gave presentations at various events and carried out hands-on learning projects related to stormwater. Throughout the year, we conducted in-person programs and distributed educational materials covering multiple topics including SC AAS, septic systems, pet waste, FOG, waste and litter reduction, pond management, erosion and sediment control, water management, stream bank repair, lead in drinking water, green infrastructure, and low impact development. Our online content was delivered through social media posts, fact sheets, blogs, e-news, videos, webinars, and workshops. Additionally, in partnership with Clemson Extension, APCSP staff played a significant role in managing and delivering compliance-based trainings (Certified Erosion Prevention and Sediment Control Inspector; Certified Stormwater Plan Reviewer) and hybrid trainings (Post-Construction BMP Inspector) statewide.



Haley Denison Water Resources Agent



Susan Lunt Carolina Clear Coordinator



### **Executive Summary**



#### 2023 Highlights

- APCSP had a successful year reaching the public through continued outreach and involvement programs. We provided information on various topics including erosion prevention, sediment control, stormwater BMP inspection and maintenance, SSO prevention, and green infrastructure. This information was shared through online training sessions, educational videos, social media posts, conferences, webinars, workshops and hands-on learning experiences.
- New and established partnerships contributed to the success of programs in Anderson and Pickens Counties. APCSP effectively engaged diverse audiences by delivering presentations and trainings on a wide range of subjects, such as septic systems, erosion control measures for lots, best practices for managing stormwater, rainwater harvesting, water quality, watersheds, environmental stewardship, citizen science, green infrastructure, low impact development, and pond management.
- Our ongoing mass media campaign and existing demonstration sites throughout the region continued to be observed in 2023. Citizens gained knowledge about the prevention of SSOs through billboard messaging, and about rain gardens, bioretention cells, floating wetlands, rain barrels, and shoreline plantings through the demonstration sites. Both encourage best management practices for protecting water quality.

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

 Internet Resources including social media pages, YouTube, videos, and websites. NUMBER REACHED: 1,079,779

2. Mass Media including television and billboards.

NUMBER REACHED: 823,062

 Permanent Demonstration Sites across the region demonstrating diverse best management practices for protecting water quality.

NUMBER REACHED: 6,205

4. Education & Outreach Materials including publications, brochures/rack cards, manuals, and giveaways.

NUMBER REACHED: 15,254

5. Diverse Array of Public Workshops, presentations, trainings, site visits & samples, and direct contacts pertaining to stormwater.

NUMBER REACHED: 7,383

6. Public Involvement opportunities including water quality monitoring, litter pickups, community partner meetings, BMP maintenance & installations, hybrid courses, and rain barrel sales.

NUMBER REACHED: 1,428



# **Executive Summary**

### 2023: A Year in Pictures



Clemson University restoration ecology students learning the testing protocol for the SC Adopt-a-Stream program



Clemson University landscape arthictecture students learning about green infrastructure and stormwater management



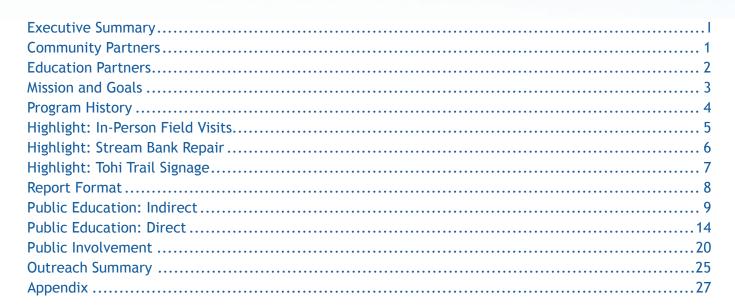
Local pond owners in Anderson County learning about water quality, fisheries, and nuisance plant/algae management



Volunteers at a harmful algal bloom workshop installing a floating wetland to help protect water quality



### **Table of Contents**





Newly installed rain barrel, educational signage, and raised garden at the Anderson Civic Center recycling center



The Small Municipal Separate Storm Sewer Systems (SMS4s) community partners in Anderson and Pickens Counties are dedicated to providing stormwater education. The partners work together to better facilitate the development of a unified approach to stormwater education and outreach throughout our region.

### Local SMS4 Consortium Representatives: 2023

SMS4	Partner Representative
Anderson County	Jon Batson
City of Anderson	Adam Cromer
City of Belton	Bo Barnes
City of Clemson	Ethan Barnette
City of Easley	Ryan Wallace
City of Liberty	Mike Calvert and Philip Trotter
City of Pickens	Charlene Carter
Clemson University	Billy Bolger and Tony Putnam
Pickens County	Kyle Bennett
Town of Norris	Mayor Odell Williams



















### **Education Partners**



The education partners include agencies, organizations, and individuals that share an interest in educating the public about stormwater and water quality. These educational partnerships ensure a uniform and consistent message while leveraging valuable resources, organizational strengths, and collaborations. APCSP is grateful to all of the partners and to the citizens of Anderson and Pickens Counties who are helping to keep our waterways clean and beautiful.

#### 2023 Education Partners



















































South Carolina Association o

























### Mission and Goals



#### **APCSP MISSION STATEMENT**

To develop and implement a broad-based education program that informs citizens about the issues of stormwater management and explains the role they and the business community can play in solving these issues.

#### **PROGRAM GOALS**

- Maximize efficiency of stormwater education efforts using a countywide regional approach.
- Help local SMS4s meet National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Program permit requirements for stormwater education and involvement by providing educational resources and services such as public education, outreach and community involvement.
- Develop a comprehensive stormwater education plan for the region that capitalizes on local training resources to meet the needs of local SMS4s.
- Serve as a model for collaborative stormwater education.

#### **SMS4 PERMIT REQUIREMENTS**

SMS4s are expected to reduce pollutants to the maximum extent practicable (MEP) through six minimum control measures (MCMs):

- 1. Public Education and Outreach
- 2. Public Involvement and Participation
- 3. Illicit Discharge, Detection and Elimination
- 4. Construction Site Stormwater Runoff Control
- 5. Post Construction Stormwater Management
- 6. Pollution Prevention/Good Housekeeping for Municipal Operations

APSCP is a collaboration between local governments and education partners who work together to address MCMs 1 & 2.



STATE OF SOUTH CAROLINA
NPDES GENERAL PERMIT
FOR
STORM WATER DISCHARGES
FROM
REGULATED SMALL MUNICIPAL
SEPARATE STORM SEWER SYSTEMS (SMS4)

The Permit is issued in compliance with the provisions of the SC Pollution Control Act (S.C. Cede Sections 48-1-10 et seq., 1976) and with the provisions of the Clean Water Act, 33 U.S.C. §1251 et. seq., thereafter CWA or the Act, as amended by the Water Quality Act of 1987, P.L. 100-44 and subsequent regulations. Upon long granted coverage under this general permit, operators of Regulated Small Municipal Separate Storm Sewer Systems that are described in Subpart 1.2 of this National Pollutant Discharge Elimination System (NPDES) general permit, except for those activities excluded from authorization of discharge in Subpart 1.3 of this permit, are authorized to discharge storm water to waters of the state of South Carolina in accordance with the conditions and requirements set forth herein.

Ann R. Clark, Director

Storm Water, Construction, Agricultural and Dams Permitting Division
Bureau of Water

Permit No.: SCR030000 Issued

xpires: December 31, 201



# **Program History**



To meet the APCSP program goals, in 2023, a new 5-year Education Plan was developed with input from partners through a series of strategic planning meetings. Partners included city and county staff, representatives from non-profits, Clemson University staff, and Clemson Extension agents. Input included prioritizing pollutants of concern and identifying the target audiences, behaviors, goals, and objectives for each.

As identified in the Education Plan, the top three pollutants of concern (POC) and their target behaviors are as follows:

Pollutant of Concern	Target Behaviors
Bacteria	<ul> <li>Septic and sewer systems that are not operating as designed and/or improperly maintained</li> <li>Improper disposal of FOG (fats, oils and grease)</li> </ul>
Litter	<ul> <li>Illegal dumping, improper disposal of construction site trash and debris, and overflowing dumpsters</li> <li>Improper covering of transported materials and lack of awareness of disposal sites</li> </ul>
Sediment	<ul> <li>Improperly installed and/or maintained BMPs that contribute to erosion and sediment control issues, leading to erosion and offsite sediment impacts to surface waters</li> <li>Residents with sediment issues who lack capacity to properly install and maintain BMPs, contributing to sediment in local waterways</li> </ul>

The Education Plan addresses these priority issues and serves as the guiding force for efforts of the Anderson & Pickens Counties Stormwater Partners. The complete Education Plan and timeline can be found in the Appendix and online at: <a href="https://www.clemson.edu/extension/carolinaclear/files/apcsp/apcsp-education-plans-2023-2028.pdf">www.clemson.edu/extension/carolinaclear/files/apcsp/apcsp-education-plans-2023-2028.pdf</a>.

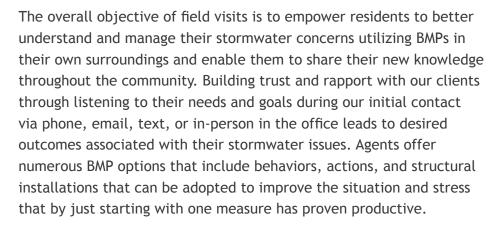


# 5 2023 Highlights



### Statewide Highlight: In-Person Field Visits

In 2023, Clemson Extension's Carolina Clear agents educated the citizens of South Carolina through coordinated and unified efforts on issues associated with stormwater. We raised awareness of actions and behaviors to help protect and manage water quantity and quality. As a team, Carolina Clear Water Resources Agents working with partners across the state, including APCSP, improved the lives and had a significant impact on our communities by delivering research-based information on best management practices (BMPs) through numerous outreach activities including approximately 200 in-person on-site field visits.



In addition to providing information on BMPs, our education involves increasing understanding on watersheds, our built environment, and population & climate changes as they relate to stormwater runoff. Onsite, agents walk the property with the clients, following the path of the water sources and potential contaminant issues to the final water destination, focusing on the clients' areas of concern, identifying areas they may not have considered, and sharing site specific BMPs in an integrated treatment train approach. Visits conclude with the sharing of Clemson Extension resources in print and online, and an introduction to hybrid courses and webinars that will allow the residents to take action and to become better Earth Stewards.











# **S** 2023 Highlights

#### Stream Bank Repair

In partnership with Upstate Forever, Clemson Extension hosted a do-it-yourself workshop on stream bank repair at Boscobel Golf Club in Pendleton, SC on March 1, 2023. The workshop consisted of a discussion on the impacts of nonpoint source pollution and the benefits of riparian buffers, followed by a hands-on installation activity. In total, 100 feet of stream bank were stabilized, and educational signage was posted on site. The workshop, made possible by SCDHEC 319 funding, was part of Clemson Extension's Stream Bank Repair program. The program aims to prevent property loss and protect water quality by working with homeowners, land managers, park staff, and landscape professionals to address small backyard streams that are suffering from bank erosion and instability. To learn more, visit <a href="https://www.clemson.edu/extension/water/programs/stream-bank-repair.html">www.clemson.edu/extension/water/programs/stream-bank-repair.html</a>.



Workshop participants receining intstruction on stream bank repair



Workshop participants rolling out erosion control matting



Workshop participants anchoring erosion control matting to stream bank



Workshop participants installing native livestakes to revegetate stream bank



### **5** 2023 Highlights



#### Tohi Trail Signage

During 2023 Susan Lunt, Pickens County Water Resources Agent, and Anaston Porter, Pickens Soil & Water Conservation District Education and Outreach Coordinator, partnered with Pickens County to create 14 signs for the Tohi Trail located behind the Pickens Administration Building in Pickens, SC. Some signs share fun facts about natural resources and stormwater. Some signs identify and discuss different tree species found along the trail. There are also signs for how to contact the Pickens County Extension office and the Pickens Soil & Water Conservation District office. A minimum of 1500 individuals are estimated to walk the trail each year. A sampling of signs is below.











Interested in learning about managing stormwater in your backyard or submitting a soil sample for your garden or farm, visit Clemson Cooperative Extension's Pickens County Office right up the road at 222 W. Main St., Pickens, SC.



# Annual Report of Activities Format



This annual report is intended to give the reader a comprehensive look at the APCSP from January 1, 2023 through December 31, 2023. This report delineates activities into public education and public involvement categories. For each activity, a brief description is provided as well as information on lead provider, supporting partners, date, number of impacts, and target audiences. Furthermore, public education activities are identified as either direct or indirect outreach strategies.

Clemson Extension's Carolina Clear program developed an online database to record detailed information on activities conducted by consortium partners. The data collected in the online database includes information on target audiences, pollutants addressed, activity type, lead service providers, supporting partners, number of impacts, location, and several other categories. This annual report provides a condensed version of the information collected in the online database as well as additional, supplementary information sourced from APCSP partners.

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. Direct methods include activities that are implemented via direct personal contact. Examples of direct methods include workshops, presentations, trainings, and public involvement activities. In contrast, 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. When dealing with direct methods, smaller numbers of people are reached yet the ones 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 APCSP. 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.

The activities in the report are listed in table format.





DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
MASS MEDIA			
2022-2023	TELEVISION: The 2022-2023 Carolina Clear mass media campaign focused on water pollution associated with sanitary sewer overflows. Commercial messaging was provided on the target behavior "Protect Your Pipes, Flush only TP, Trash Everything Else," on WYFF in Pickens and Anderson Counties. Note: there was no air time in 2023; the impact numbers are from 2022 as part of the 2022-2023 mass media campaign	Clemson Extension, Carolina Clear, APCSP	422,600
2023	BILLBOARD: The 2022-2023 Carolina Clear mass media campaign focused on water pollution associated with sanitary sewer overflows. Billboard messaging was provided on the target behavior "Protect Your Pipes, Flush only TP, Trash Everything Else," in high-visibility locations: Hwy 28 Bypass, 0.32 miles W/O Frampton Street; Hwy 81, 0.23 miles N/O Master Boulevard; Hwy 123, 240 feet N/O Eden Road; Hwy 8, 0.18 miles E/O Pope Field Road (impacts reported as total the weekly impressions in 2023)	Clemson Extension, Carolina Clear, APCSP	381,935
2023	TELEVISION: SC ETV Making It Grow! Average viewers per episode (based on average households viewing each episode and persons per household via census)	Clemson Extension, SC ETV	18,527
INTERNET MEDIA	A		
2023	APCSP FB page (Lifetime Post Total Reach: The number of people who had your Page's post enter their screen. Posts include statuses, photos, links, videos and more)	APCSP	9,358
2023	Clemson Extension PC FB page (Lifetime Post Total Reach: The number of people who had your Page's post enter their screen. Posts include statuses, photos, links, videos and more)	APCSP	2,336
2023	Clemson Extension Anderson County FB page (Lifetime Post Total Reach: The number of people who had your Page's post enter their screen. Posts include statuses, photos, links, videos and more)	APCSP	1,643
2023	Carolina Clear FB page (Lifetime Post Total Reach: The number of people who had your Page's post enter their screen. Posts include statuses, photos, links, videos and more)	Clemson Extension, Carolina Clear	17,892

PUBLIC EDUCATION: INDIRECT





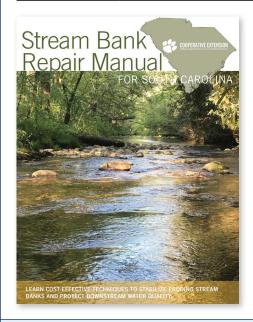
DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2023	Carolina Yards Facebook page (Lifetime Post Total Reach: The number of people who had your Page's post enter their screen. Posts include statuses, photos, links, videos and more)	Clemson Extension, Carolina Clear	6,738
2023	Making It Grow! FB page (Lifetime Post Total Reach: The number of people who had your Page's post enter their screen. Posts include statuses, photos, links, videos and more)	Clemson Extension	861,815
2023	INTERNET: Total unique views for the Carolina Clear, APCSP, Carolina Yards, Clemson Extension Water Resources Team, Rain Gardens, and Living Shorelines, CEPSCI, and CSPR websites	Clemson Extension, Carolina Clear	83,520
2023	Carolina Clear YouTube Channel: Average view duration was 1 minute 50 seconds. Provides video segments on a diverse array of topics related to watershed stewardship	Clemson Extension, Carolina Clear	10,400
2023	Video tutorial for septic find and fix application as part of the LKSWPT 319 grant program	APCSP, Clemson Extension, Carolina Clear, LKSWPT	ongoing
2023	INTERNET: 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 previous data due to google analytics platform changes this year. Note: this 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 hgic.clemson. edu	Carolina Clear, Clemson Extension, HGIC	55,000
2023	Land Grant Press publications authored by the Clemson Extension Water Resources Team include 23 publications since 2019. Topics include stormwater ponds, livestock ponds, recreational ponds, wetlands, aquoponics, funding, flooding, pond dredging, pond weeds, headwater streams, watershed based planning, harmful algal blooms and more. These publications can be accessed at lgpress.clemson.edu	Carolina Clear, Clemson Extension, LGP	31,077

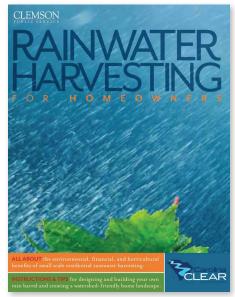
PUBLIC EDUCATION: INDIRECT

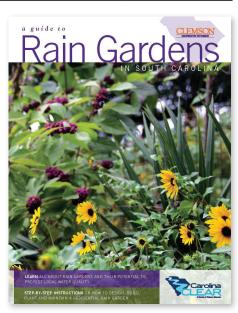




DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
PUBLICATIONS			
2023	APCSP monthly E-newsletter: Provides upcoming events and education recaps for outreach and involvement within the consortium	APCSP, Clemson Extension	310
3/3/2023	Articles for FOLKS Newsletter The Sentinel on Septic Systems	APCSP, FOLKS	1,200
2023	Manuals distributed: Guide to Rain Gardens in SC Manual, Stream Bank Repair Manual, Carolina Yarstick Manual, Rainwater Harvesting for Homeowners Manual	Clemson Extension Carolina Clear	300
2023	2022 APCSP Annual Report of Activities	APCSP, Clemson Extension	30
2023	2023-2028 APCSP Strategic Education Plan	APCSP, Clemson Extension	ongoing







PUBLIC EDUCATION: INDIRECT





DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
OUTREACH MAT	ERIALS & GIVEAWAYS		
2023	Rack Cards distributed (Anderson County Stormwater office, City of Anderson Stormwater office, Pickens County office lobby, PC Admin Bldg lobbies): Trash Blows (new), Lot Erosion Control Measures for Construction Sites, Maintaining Ditches to Prevent Flooding, Pet Waste Stinks, Healthy Ponds, Rain Garden, Rain Barrel, FOG, Litter, Storm Drains, Compost, Gardening & Native Plants	APCSP, PC, Clemson Ex- tension, Carolina Clear, City of Easley	2,150
2023	APCSP Promotional Items: FOG lids, Pot Holders, rack card (lobby, events, EFNEP, FoodForward, campus dining)	APCSP, Clemson Extension, Carolina Clear, EFNEP, Clemson University	100
2023	APCSP Promotional Items: Pet waste bag, waste baggies, tennis ball, infocard, can lid, bandana (lobby, library, events)	APCSP, Clemson Extension, Carolina Clear, Pickens County Library	130
2023	APCSP promotional items distributed at various campus events: "All In for Lake Hartwell" stickers, coasters, reusable bags, and nalgenes; Clemson Extension reusable straws and pens	APCSP, Clemson Extension, Clemson University	200
10/28/2023	Tip sheets provided (yard waste) and PC stormwater stickers and pencils for Halloween for Pickens County trick or treat	PC, Clemson Extension	50
2023	Promotional Items: Septic Magnets, key chains, stress plungers (contractors, SCDHEC, events, lobby)	APCSP, Clemson Extension, Carolina Clear, SCDHEC	150
2023	Promotional & Educational Materials: Lead Solutions packet (compliance charts, mini dry erase markers, timer, 5 factsheets, thumb drive w/ 8 videos & 5 factsheets) to inform facilities about lead in drinking water in schools and daycare centers (SDPC)	Clemson Extension, United States Envi- ronmental Protection Agency, SDPC	10
11/4- 11/18/2023	The City of Anderson Stormwater Public Works Division distributed 8,000 garbage cart notices with an educational message about adopting neighborhood storm drains and keeping them clear of pollutants	City of Anderson	10,600
6/9/2023	CU Stormwater donated spill kits to CU Dining Services and Athletics. Kits inlcuded FOG fact sheet.	Clemson University, APCSP, Clemson Exten- sion, Carolina Clear	24

PUBLIC EDUCATION: INDIRECT





DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
DISPLAYS & DEM	ONSTRATION SITES		
2023	Protecting Water Resources Display at Pickens County Art & History Museum	APCSP, Pickens County Art & History Museum	6,039
2023	Permeable pavement demonstration sites across the consortium region: # of sites	APCSP, City of Anderson, Clemson University	3
2023	Rain barrels installed across consortium region : # of barels	APCSP, Clemson Extension, Clemson University	70
2023	Pet waste stations & educational signage installed across consortium region: # of stations	APCSP, Clemson Extension, Clemson University	49
2023	Rain gardens and bioretention cells installed across consortium region: # of sites	APCSP, Clemson Extension, Clemson University	42
12/1/2023	TOHI Trail located behind Pickens County Administration Building 14 informational signs on natural resources, stormwater management including tree identifications	APCSP, Clemson Extension, PSWCD, PC	1
3/1/2023	Stream bank demonstration site with information sign Boscobel Golf Club in Pendleton, SC	APCSP, Clemson Extension, Upstate Forever	1









DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS	
DIRECT CONTAC	DIRECT CONTACTS & SITE VISITS			
2023	Pond and Site Visits in Pickens County (pond weeds and concerns, HABs, soil and water sampling demo, stormwater runoff erosion and stream bank erosion concerns, BMPs)	APCSP, Carolina Clear, Clemson Extension	12	
2023	Site Visits on campus (green infrastructure, stream restoration, BMPs, landscape design, construction activities, FOG)	APCSP, Carolina Clear, Clemson Extension, Clemson University	2	
2023	Site visits conducted in Anderson County (recreational ponds)	APCSP, Carolina Clear, Clemson Extension	9	
2023	Water Resources Agent in Pickens County responded to 200 requests from the public for information on, or technical assistance with various stormwater-related issues including: septic, wet yard, sinking yard, stream bank repair, AAS, TTB, Lot erosion, nuisance wildlife, ponds, drinking water, collaboration with Library Elementary Schools SCBot Gar PSWCD ASWCD PC, weed identification, FOG, petwaste, litter, RB and harvesting, pond sampling, water analysis, wells, algae, soil samples, fertilization, liming, pH, farming, aeration, stormdrains, lead grant, trees & ground covers, vegetative buffers, floating wetlands, outreach materials, SPEED, advocacy community professional organizations, cattlemen assoc., fairs festivals workshops conferences, native plants & CY, dams, tarps, BMPs, in-person & virtual programming, publications, and pesticide license	APCSP, Clemson Extension, Carolina Clear	200	
2023	Water Resource Agent on campus responded to 20 requests from the public and campus community for information on, or technical assistance with, various stormwater-related issues including rainwater harvesting, stormwater BMPs, green infrastructure, stormwater permitting, AAS, drinking water and private well testing, FOG disposal, petwaste, etc.	APCSP, Clemson Extension, Clemson University	20	
2023	Water Resources Agent in Anderson County responded to 26 requests from the public for information on, or technical assistance with various stormwater and water quality-related issues	APCSP, Clemson Extension, Clemson University	26	

PUBLIC EDUCATION: DIRECT 2023 Annual Report

Report 14



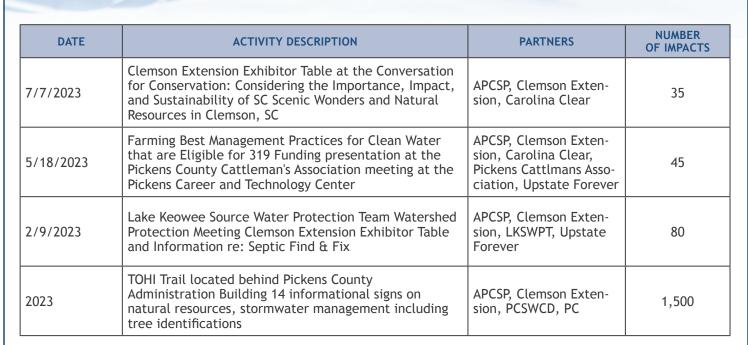


DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
WEBINARS & PR	WEBINARS & PRESENTATIONS		
3/9/2023	Presentation on Green Infrastructure and Stormwater Management to Planting Design students within the Landscape Architecture Dept at Clemson	APCSP, Clemson Extension, Clemson University	27
4/14/2023	Presented on floating treatment wetland BMP research for PES 8250 Seminar at Clemson University	APCSP, Clemson University	30
4/20/2023	APCSP served as the guest speaker at the Crescent Ag/Ed Farmer & Agribusiness Association Meeting. The presentation covered pond management with an emphasis on aquatic weeds and algae. Participants learned about common pond weeds/algae and what drives their growth, as well as options and resources for managing them.	APCSP, Carolina Clear, Clemson Extension	9
3/25/2023	The City of Anderson hosted an APCSP booth at "Trucks on Main", an annual public event presented by the Junior League of Anderson County that showcases fire trucks, police cars, construction equipment, and more. APCSP gave away free stormwater SWAG and edcational outreach materials	City of Anderson, APCSP	1500
10/19/2023	South Carolina Master Gardener Conference presentation: Rain Gardens As A Wildlife Habitat	Clemson Extension, Mas- ter Gardener, Carolina Clear	30
9/7/2023	Clemson Extension Exhibitor Table at the South Carolina Association of Stormwater Managers Meeting	APCSP, Clemson Extension, Carolina Clear, South Carolina Association of Stormwater Managers	100
9/5/2023	Water Management in the Home Landscape for the Pickens County Garden Club at the Pickens County Library	APCSP, Clemson Extension, Carolina Clear, Pickens County Library, Pickens County Garden Club	20
8/25/2023	Clemson Cooperative Extension Overview at Mt. Carmel Baptist Church in Easley, SC	APCSP, Carolina Clear, Clemson Extension, 4H	29

PUBLIC EDUCATION: DIRECT 2023 Annual Report

al Report







Presentation for the Crescent Ag/ Ed Farmer & Agribusiness Assoc.



Presentation at the SC Master Gardener Conference



Presentation for the Pickens County Garden Club



Exhibit at the LKSWPT Watershed Protection Meeting



Exhibit at the "Conversation for Conservation" meeting in Clemson



Exhibit at the SC Association of Stormwater Managers meeting

PUBLIC EDUCATION: DIRECT 2023 Annual Report





DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS	
WORKSHOPS 8	WORKSHOPS & TRAININGS			
8/25/2023	Pond Management workshop held in Belton, SC. Topics discussed included water quality, nuisance algae and aquatic plants, and fisheries.	APCSP, Clemson Extension, ASWCD	16	
3/27/2023	Site visit with Planting Design students within the Landscape Architecture Dept at Clemson. Students evaluated maintenance and design analysis for bioretention cells within a solar canopy parking lot	APCSP, Clemson Extension, Clemson University	27	
2023	Carolina Yards Online Course was developed to assist and guide 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	Clemson Extension	21	
2023	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	Clemson Extension	124	
3/27/2023- 6/9/2023 9/25/2023- 12/8/2023 10/2/2023- 12/1/2023	Post-Construction BMP Inspector certification and re-certification courses are online and field-based trainings 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 5/10 at Clemson University in Clemson, SC and in both the certification and re-certification courses were offered in the fall with the field days held on 11/8 & 9 at Trident Technical College in N. Charleston, SC: a total of 59 individuals were certified, and 15 were re-certified	Clemson Extension	74	
2023	CEPSCI Course: 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. Impacts reflect statewide trainings. Certifications and recertifications were offered as online and in-person formats	Clemson Extension, Clemson University, SCDOT, SCDHEC	2,009	

PUBLIC EDUCATION: DIRECT 2023 Annual Report

17



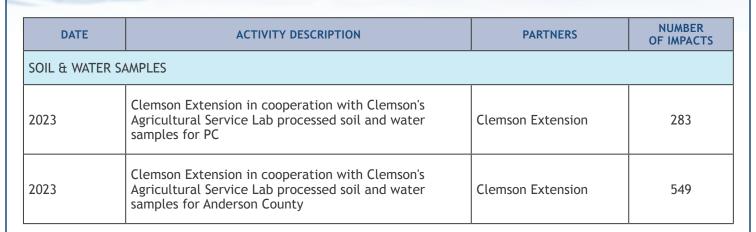


DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2023	CSPR Course: Clemson provides training and certification through the Certified Stormwater Plan Reviewer (CSPR) program to educate personnel on the proper design and review of stormwater and sediment control plans for development sites in order to meet regulator and environmental requirements. Impacts reflect statewide trainings. Certifications and recertifications were offered in-person	Clemson Extension, Clemson University, SCDHEC	73
2023	Salt Marsh Course is an on-demand online course that teaches about ecosystems, threats & stressors, flora & fauna, oysters, stewardship, and provides additional resources related to salt marshes	Clemson Extension, SC Department of Natural Resources, SC Sea Grant Consortium, National Oceanic and Atmospher- ic Administration	149
2023	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	Clemson Extension, SCDHEC, Natural Re- sources Conservation Service	137
March 2023	The Nature-Based Exchange is designed as a series of practical and outcome-based workshops, the Exchange aims to bring together an array of local partners to discuss and develop natural and nature-based solutions for South Carolina	The Nature Conservancy, Clemson Resilient Urban Design Program, City of Charleston	45
2023	MS4 Stormwater Compliance Training Program for Clemson University Employees	APCSP, Clemson Extension, Carolina Clear, Clemson University	79
2023	FOG Stormwater Compliance Training Program for Clemson University Employees	APCSP, Carolina Clear, Clemson Extension, Clemson University	4
2023	Good Housekeeping Stormwater Compliance Training Program for Clemson University Employees.	APCSP, Carolina Clear, Clemson Extension, Clemson University	119

PUBLIC EDUCATION: DIRECT 2023 Annual Report

18







Classroom instruction during the Post-Construction BMP Inspector Certification training in Clemson, SC



Field instruction during the Post-Construction BMP Inspector Certification training in Clemson, SC

PUBLIC EDUCATION: DIRECT 2023 Annual Report





DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS		
EVENTS & TRAIN	EVENTS & TRAININGS (WITH INVOLVEMENT COMPONENT)				
3/1/2023	Stream bank repair workshop held at Boscobel Golf Club in Pendleton, SC	APCSP, Clemson Extension, Upstate Forever	16		
5/20/2023	Clemson Woment's Alumni Council Event with activities showing individuals how to protect and conserve water	APCSP, Clemson Extension, Carolina Clear, CU	250		
5/22/2023	Pickens County Soil & Water Conservation District Poster/Photo/Essay Contest: theme: One Water	APCSP, Clemson Extension, PSWCD	20		
5/25, 27/2023	4H2O Environmental Science Workshops at Richard Russel Dam in Elberton, GA and at Abbeville Agricultural Building in Abbeville, SC conducting activities on human impact on our waterways and how landforms impact waterways	APCSP, Clemson Extension, Carolina Clear, 4H	200		
4/29/2023	Pickens County Azalea Festival booth to share information on how to minimize the impacts of stormwater by using a tarp to cover your load and provide free tarps, bungees, and rack card on proper use	APCSP, Clemson Extension, Carolina Clear, PC	100		
4/5/2023	APCSP hosted Rain Barrel sale at the T. Ed Garrison Livestock Arena	APCSP, Clemson Extension, T. Ed Garrison Livestock Arena	42		
4/1/2023	Barrels & Beer event to create rain barrels and inform citizens about rain water harvesting including youth education and crafts	APCSP, ASWC, ARJWS, Clemson Extension	60		
4/22/2023	APCSP hosted a booth at the Anderson County Main library in celebration of Earth Day. Promoted the SC Adopt-a-Stream program and entertained kids (and adults) by using a 3-D Enviroscape® watershed model to demonstrate the sources and effects of stormwater pollution	APCSP, Carolina Clear, Clemson Extension, An- derson County Library	30		
10/16/2023	Dissection of Aquatic Organisms Hands-On Workshop at the Pickens County Library	APCSP, Clemson Extension, 4H, Pickens County Library	30		





DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
10/14/2023	BBQ & Beer Event - participants picked up instructions and supplies to build their own rain barrel and rain chain	APCSP, PSWCD	5
9/1/2023	Stormwater Awareness Week Reading List & Activities	APCSP, Clemson Extension, Carolina Clear, PC, Pickens County Library	50
1/7/2023	Litter pick on the Doodle Trail in Pickens County	APCSP, Clemson Extension, KPCB	26
9/11/2023	Student Shoreline Clean Up on Hopewell and Old Cherry Rd	APCSP, Clemson Extension, Clemson University	5
4/1/2023	Upstate Team-Up to Clean-Up Challenge month long county wide litter clean up	APCSP, Clemson Extension, Carolina Clear, KPCB, Upstate Team Up to Clean Up	94
3/31/2023	Pet Waste Station Installations (3)	APCSP, Clemson Extension, Clemson University	7
4/24/2023	Give a HOOT! Don't Pollute! Event for Earth Day at the Pickens County Library including a presentation and live Owls and a movie	Pickens County Library, APCSP, Clemson Exten- sion, Carolina Clear, 4H	82
2023	Rain Garden maintenance at Pickens County Extension Office	Clemson Extension	1
7/31/23- 10/31/23	The Master Pond Manager (MPM) course teaches ecreation and stormwater pond management training participants through online classroom and field-based curriculum; it was offered in the fall, with field days posted in Horry County (Recreational Pond Field Day: Conway on 9/20; Stormwater Pond Field Day: Myrtle beach on 9/21), SC		42



### **Public Involvement**





Pick-up day at T. Ed Garrison Arena for the annual APCSP rain barrel sale



Free tarp give-away at the Pickens County Azalea Festival



APCSP craft table at the "Barrels & Beer" event hosted by ASWCD at Carolina Bauernhaus



"Give a HOOT! Don't Pollute!" event for Earth Day at the Pickens County Library





DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS		
PARTNER MEETIN	PARTNER MEETINGS				
2023	APCSP Quarterly Consortium meetings: members gather for education and outreach updates, strategic planning	APCSP, Clemson Extension, PC, Anderson County, City of Anderson, CU, Carolina Clear	15		
2023	Lake Keowee Source Water Protection Team Monthly Mtgs: members gather to discuss source water and watershed protection planning, specific attention to septic find and fix opportunities	Clemson Extension, LKSWPT, Duke Energy, Upstate Forever, PC, Advocates for Quality Development, FOLKS, Greenville Water, Seneca Light & Water, Oconee County, APCSP	14		
2023	LHPCW monthly meetings: members gather to discuss source water protection planning, community engagement in Lake Hartwell Watersheds	APCSP, Clemson Extension, CU, USACE, Saddlers Creek State Park, ARJWS, Powdersville Water, Duke Power, Center for Watershed Excellence, Georgia Extension	15		
2023	KPCB & Upstate Team Up to Clean Up meetings: members gather to discuss litter initiatives throughout Pickens County	PC, KPCB, Clemson Ex- tension, Upstate Team Up to Clean Up	12		
2023	PSWCD meetings: members and commissioners gather to discuss natural resource conservation in Pickens County	APCSP, Clemson Extension, Carolina Clear, PSWCD	25		
2023	Clemson University Sustainability Commission Meetings: members gather to discuss sustainability reporting, tracking, and engagement on campus	Clemson Extension, Clemson University, APCSP	30		
2/17/2023	Pickens Couty Extension Advisory Council Meeting	APCSP, Clemson Extension, PC	14		





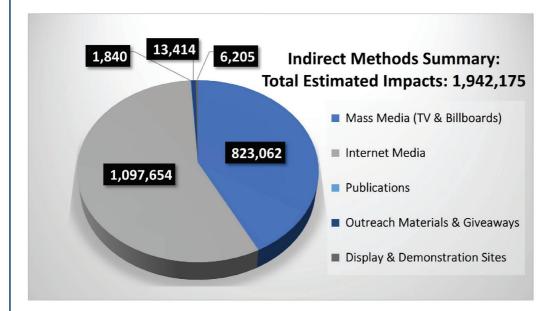
DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2/10/2023	Anderson County Extension Advisory Committee Meeting	APCSP, Clemson Extension, Anderson County, City of Anderson	20
2023	Anderson Soil & Water Conservation District Monthly Meetings: members gather to discuss land, water, and related natural resource problems at the local level	APCSP, Clemson Extension, ASWCD	10
CAROLINA YARDS	S CERTIFICATIONS		
2023	Carolina Yards certified in SC: residents who meet CY principles for healthy, watershed-friendly, low-maintenance landscapes	Clemson Extension	54
WATER QUALITY	MONITORING		
4/25/2023	SC AAS mini training focus on macroinvertebrates for high school students using AAS prototcols and equipment	APCSP, Clemson Extension, 4H, Walhall HS	55
1/12/2023	SC AAS Freshwater training (classroom session) for Restoration Ecology held at Clemson University	APCSP, Clemson Ex- tension, Center for Watershed Excellence, Clemson University	17
1/26/2023	SC AAS Freshwater training (field session) for Restoration Ecology held at SC Botanical Garden	APCSP, Clemson Ex- tension, Center for Watershed Excellence, Clemson University	17
6/16/2023	SC AAS Freshwater training held at Tri-County Technical College in Pendleton, SC	APCSP, Clemson Ex- tension, Center for Watershed Excellence, SCDHEC, ASWCD	15
9/11/2023	SC AAS Freshwater training held at McFalls Landing in Anderson, SC	APCSP, Clemson Ex- tension, Center for Watershed Excellence, SCDHEC, ASWCD	11

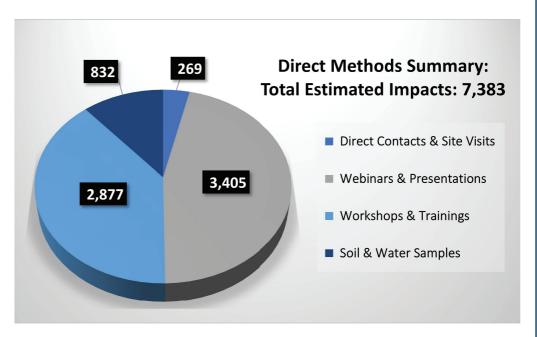


# **Outreach Summary**



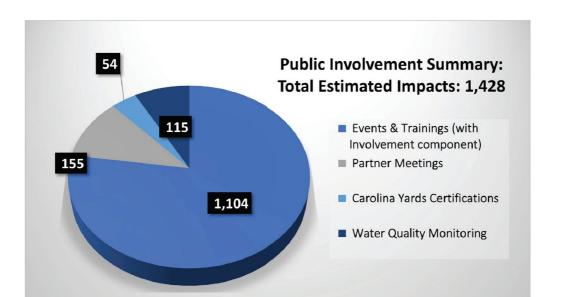
The Anderson & Pickens Counties Stormwater Partners impacted an estimated 1,950,986 people through direct & indirect education & outreach and public involvement in 2023. Indirect methods resulted in 1,942,175 impacts through mass media and other efforts. Direct methods reached 8,811 individuals through presentations, trainings, workshops, and public involvement opportunities.







# **Outreach Summary**







City cf Anderson stormwater department hosting a booth at "Trucks on Main" hosted by the Junior League cf Anderson County



# **Appendix**



#### Education Plan 2023-2028:

#### Education Strategy: Bacteria - Septic and Sewer Infrastructure

Target Audience: Septic and sewer users

Target Action: Septic and sewer systems that are not operating as designed and/or improperly maintained

**Goal:** Decrease bacteria contributed to the watershed by septic and sewer systems in Anderson & Pickens Counties; increase capacity of target audience.

Objective: Provide education and outreach on septic and sewer systems in Anderson & Pickens Counties.

designed and/or improperly maintained can contribute to harmful bacteria entering into our watershed Save time and money by ensuring proper operation and maintenance of systems Conduct routine inspections &	Economic emphasis Septic presentations Septic webinars Tabling and outreach events Share/distribute educational material directly to target audience Online training Mass media  .	319 Grants Septic Contractors University and Extension Advocacy Groups Regulatory Agencies Municipalities Utilities NRCS HGIC Factsheets	<ul> <li>Number of people who attend presentations and webinars</li> <li>Qualitative evaluations from presentations and webinars</li> <li>Site-specific webpage hits on the developed web-based material</li> <li>Number of educational outreach materials distributed</li> <li>Responses in statewide survey</li> <li>Number of participants in online trainings</li> </ul>

#### Action Items: Bacteria - Septic and Sewer Infrastructure

#### **Action Items:**

- Host Septic and Sewer presentations and webinars
- Develop and update additional outreach materials including online resources
- Distribute educational outreach materials
- Submit proposals to present message where appropriate
- Create a Be Septic Safe Users Guide
- Follow-up calls to find and fix programs including education on resources and maintenance
- · Develop window/mirror clings similar to magnets specific for renters



# **Appendix**



### Education Plan 2023-2028:

#### Education Strategy: Bacteria - FOG (Fats, Oils, & Grease)

Target Audience: Individuals who dispose of FOG (fats, oils and grease) both residential and commercial

Target Action: Improper FOG disposal

**Goal:** Decrease bacteria contributed to the watershed by improper FOG disposal in Anderson & Pickens Counties; increase capacity of target audience.

Objective: Provide education and outreach on proper FOG disposal in Anderson & Pickens Counties.

Message	Format and Distribution	Resources	Evaluation
Improper FOG disposal can contribute to harmful bacteria entering our watershed Save time and money by avoiding costly repairs Conduct routine inspections & maintenance of systems Avoid cloggers & killers down the drain Report suspected issues to user/municipality	<ul> <li>Economic emphasis</li> <li>FOG presentations</li> <li>FOG webinars</li> <li>Tabling and outreach events</li> <li>Share/distribute educational material directly to target audience</li> <li>Partner with other Clemson Extension groups (EFNEP, Rural Health, Food Systems)</li> <li>Online training</li> <li>Mass media</li> </ul>	<ul> <li>University and Extension</li> <li>Advocacy Groups</li> <li>Regulatory Agencies</li> <li>Municipalities</li> <li>Utilities</li> <li>Restaurant Associations</li> <li>HGIC Factsheets</li> </ul>	<ul> <li>Number of people who attend presentations and webinars</li> <li>Qualitative evaluations from presentations and webinars</li> <li>Site specific webpage hits on the developed web-based material</li> <li>Number of educational outreach materials distributed</li> <li>Responses in statewide survey</li> <li>Number of participants in online trainings</li> </ul>

#### Action Items: Bacteria - FOG (Fats, Oils, & Greases)

#### **Action Items:**

- Host FOG presentations and webinars
- Develop and update additional outreach materials including online resources
- · Distribute educational outreach materials
  - Collaborate with rural health and EFNEP agents to share FOG promo items and info
  - FOG outreach packets/spill kits provided to campus dining managers annually
- Submit proposals to present message where appropriate
- · Add FOG Best Practices Training Course for campus



# **Appendix**



### Education Plan 2023-2028:

#### **Education Strategy: Litter - Privately Owned Locations**

Target Audience: Builders, contractors and commercial properties

Target Behaviors: Illegal dumping, improper disposal of construction site trash and debris, and overflowing dumpsters

**Goal:** Decrease the amount of litter ending up in the watershed from locations in Anderson & Pickens Counties, increase capacity of target audience.

**Objective:** Provide education and outreach on best management practices and benefits of proper waste reduction and disposal in private locations in Anderson & Pickens Counties

Message	Format and Distribution	Resources	Evaluation
<ul> <li>Save time and money         <ul> <li>Enhance property                 image</li> </ul> </li> <li>Protect property         values</li> <li>Protect our                 watersheds</li> <li>Dumping household                 trash and other waste                 in private dumpsters                 and other                 unauthorized areas is                  illegal</li> <li>Any vehicle                 transporting material                  must be covered and                  secured</li> </ul>	Educational outreach materials     Signage     Share/distribute educational materials directly with target audience     Mass media	<ul> <li>University and extension</li> <li>Advocacy groups</li> <li>Municipalities</li> <li>Solid waste/recycling companies</li> <li>Regulatory agencies</li> <li>Law enforcement/litter officers</li> <li>Contractors and construction companies</li> </ul>	Number of educational outreach materials distributed

#### Action Items: Litter - Privately owned locations

#### Action Items:

- Develop and update additional outreach materials, including online resources
- · Distribute rack cards and other educational outreach materials
- Create signage for businesses and construction sites as appropriate
- Incorporate litter messaging into workshops and presentations related to BMPs for construction and post-construction activities





## Education Plan 2023-2028:

### **Education Strategy: Litter - Public Locations**

Target Audience: Vehicle/transportation users and campus community

Target Behaviors: Improper covering of transported materials and lack of awareness of disposal sites

**Goal:** Decrease the amount of litter ending up in the watershed from locations in Anderson & Pickens Counties, increase capacity of target audience.

**Objective:** Provide education and outreach on best management practices and benefits of proper waste reduction and disposal in public locations in Anderson & Pickens Counties

Message	Format and Distribution	Resources	Evaluation
<ul> <li>Any vehicle transporting material must be covered and secured</li> <li>To report littering, call 1-877-7Litter</li> <li>Protect our watersheds</li> <li>Dumping household trash and other waste in unauthorized areas is illegal</li> <li>Reduce, reuse, recycle</li> </ul>	<ul> <li>Educational outreach materials</li> <li>Signage</li> <li>Outreach events</li> <li>Fact sheets</li> <li>Mass media</li> </ul>	<ul> <li>University and extension</li> <li>Advocacy groups</li> <li>Municipalities</li> <li>Law enforcement/litter officers</li> <li>Volunteer groups</li> </ul>	<ul> <li>Number of educational outreach materials distributed</li> <li>Number of litter campaigns/clean-ups</li> <li>Online views</li> </ul>

### Action Items: Litter - Public locations

### Action Items:

- Develop and update additional outreach materials, including online resources
- · Distribute rack cards and other educational outreach materials
- · Organize and/or participate in litter clean-up events
- Participate in outreach events
- Participate in a Tarp-It campaign
- Organize and/or participate in storm drain marking events





## Education Plan 2023-2028:

### Education Strategy: Sediment - Construction & Post-Construction Activities

**Target Audience:** Contractors and permittees who install and maintain BMPs for erosion prevention and sediment control, students/faculty/staff on Clemson's campus

**Target Behavior:** Improperly installed and/or maintained BMPs contribute to erosion and sediment control issues, leading to erosion and offsite sediment impacts to surface waters.

**Goal:** Decrease erosion and sedimentation from construction and post-construction in Anderson & Pickens Counties, increase capacity of target audiences.

**Objective:** Provide education and outreach on BMPs for erosion prevention and sediment control in Anderson & Pickens Counties in a timely manner.

Message	Format and Distribution	Resources	Evaluation		
<ul> <li>It is the law to properly maintain and install BMPs</li> <li>Save time and money by maintaining and installing BMPs properly</li> <li>BMPs can reduce our environmental footprint and provide community engagement</li> </ul>	<ul> <li>Presentations/webinars</li> <li>Workshops</li> <li>Compliance course</li> <li>Certification courses</li> <li>Educational outreach materials</li> <li>Online trainings</li> <li>Service-learning &amp; experiential learning opportunities for student and staff with BMPs</li> <li>Mass media</li> </ul>	<ul> <li>SCASM</li> <li>Municipalities</li> <li>University/Extension</li> <li>Contractors and construction companies</li> <li>Regulatory Agencies</li> </ul>	<ul> <li># of certifications</li> <li># of course participants</li> <li># of participants attending workshops, presentations, and webinars</li> <li>qualitative evaluations</li> <li># of educational outreach materials distributed</li> <li># of participants for service-learning &amp; experiential learning opportunities</li> </ul>		

### Action Items: Sediment - Construction & Post-Construction

### **Action Items:**

- · Host workshops, webinars, and presentations related to BMPs for construction and post-construction activities
- Continue certifying campus staff in MS4 Compliance Training which includes info on erosion prevention & sediment control
- Offer service-learning opportunities for BMP maintenance on campus
- Work with campus students to offer experiential learning opportunities for BMP maintenance and design to reduce erosion on campus
- · Distribute lot erosion rack cards
- · Continue offering support for CEPSCI and classes statewide
- Continue offering Post-Construction BMP Certification course
- Continue developing and launch SPEED (Stormwater Plan Education for Engineering Design) course with SCDHEC
- Continue offering support for CSPR and classes statewide
- Expand library of education and outreach materials for erosion prevention/sediment control





## Education Plan 2023-2028:

### **Education Strategy: Sediment - Residential Activities**

Target Audience: Residents, HOAs/POAs

**Target Behavior:** Residents with sediment issues who lack capacity to properly install and maintain BMPs, contributing to sediment in local waterways.

Goal: Decrease erosion, increase riparian buffers, increase capacity of target audiences in Anderson & Pickens Counties.

Objective: Provide education and outreach on residential BMPs within Anderson & Pickens Counties.

Message	Format and Distribution	Resources	Evaluation
Erosion and sediment-laden stormwater runoff negatively impact our water health.     BMPs can help protect properties from erosion.	<ul> <li>Presentations/webinars</li> <li>Workshops</li> <li>Certification courses</li> <li>Educational outreach materials</li> <li>Online trainings</li> <li>Rain barrel sale</li> <li>Outreach events</li> <li>Factsheets</li> <li>Mass media</li> </ul>	<ul> <li>Municipalities</li> <li>HOAs/POAs</li> <li>Advocacy Groups</li> <li>University/Extension</li> </ul>	<ul> <li># of certifications</li> <li># of course participants</li> <li># of participants attending workshops, presentations, and webinars</li> <li>qualitative evaluations</li> <li># of educational outreach materials distributed</li> <li># of rain barrels sold</li> <li>responses from CC statewide survey</li> <li>online views</li> </ul>

### Action Items: Sediment - Residential

### **Action Items:**

- Share "Water Management in the Home Landscape" information
- · Conduct site visits for residents
- Provide 1-on-1 consultation for individuals via email, phone, in-person
- Host workshops, webinars, and presentations related to residential bmps, healthy landscaping, and erosion prevention
- Host rain barrel sale annually
- Promote Carolina Yards, Master Rain Gardener, Master Pond Manager, and Native Plant Studies programs to Anderson & Pickens residents
- Promote Stream Bank Repair program to Anderson & Pickens residents
- Offer Online Pond Management Short Course in the Upstate
- Distribute targeted rack cards to residents



## Education Plan 2023-2028:

Objective	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
Provide education and outreach on septic and sewer systems		Develop & Impleme Septic and Sewer presentations and w	Proposals	to present where appropriate		
	Septic and sewer users	<b>Develop</b> Be Septic Safe Users window/mirror cling	Guide, Addition	p & Implement nal outreach materi g online resources	als	Evaluate
	Septica	Implement Continued distribution	on of educational ou	itreach materials		Ā
		Implement Follow-up calls to fin	d and fix programs	including education	on resources and n	naintenance

**Bacteria: Septic and Sewer Infrastructure** 



## Education Plan 2023-2028:

## Year 5 Objective **Audience** Year 1 Year 2 Year 3 Year 4 Develop & Implement Develop individuals who dispose of FOG both residential and commercial FOG presentations and Proposals to present webinars message where appropriate Develop Additional outreach materials including online resources and updates Provide education and outreach on proper FOG disposal Implement Implement Continued distribution of Continued collaboration with educational outreach materials rural health, EFNEP, and campus **Develop & Implement** FOG Best Practices Training Course for campus

Bacteria: FOG (Fats, Oils, & Grease)



# Education Plan 2023-2028:

## Objective **Audience** Year 1 Year 2 Year 3 Year 4 Year 5 Develop Outreach material, including online resources Builders, contractors, and commercial properties Provide Implement education and Distribution of rack cards and other outreach material outreach on best management practices and benefits of proper waste reduction and disposal in **Develop & Implement** private locations Signage for businesses and construction sites Develop & Implement Litter messaging for construction and postconstruction-related workshops and presentations

# Education Plan 2023-2028:

Objective	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
Provide education and outreach on best management practices and benefits of proper waste reduction and disposal in public locations	Vehicle/transportation users and campus community	Develop Outreach material, i	ncluding online resc	ources		
		Implement Distribution of rack of	cards and other outi	reach material		Evaluate
	Vehicle/transportation		Implement Participation in lit	ter clean-ups, tarp-it	t campaigns,	Ev
			storm drain marki	ng, and other outre	ach events	





## Education Plan 2023-2028:

Objective **Audience** Year 1 Year 2 Year 3 Year 4 Year 5 Develop & Implement BMP workshops, webinars, and presentations Implement MS4 Compliance Training for campus staff Contractors, permittees, and Clemson campus community who install and maintain BMPs **Develop & Implement** Campus BMP service and experiential learning opportunities Provide education and Implement outreach on Distribution of lot erosion rack cards BMPs for erosion prevention and sediment control Implement CEPSCI, CSPR and Post-Construction BMP Certification courses Develop Implement SPEED course SPEED course **Develop & Implement** Education and outreach materials



## Education Plan 2023-2028:

Objective	Audience	Year 1	Year 2	Year 3	Year 4	Year 5
Provide education and outreach on residential BMPs	Residents and HOAs/POAs		Implement "Water Manageme	ent in the Home Lar	idscape" informatio	n
		Implement Consultations on-den	nand			
		Develop & Implement BMP workshops, web		ations		4)
		<b>Impler</b> Annual	nent rain barrel sale			Evaluate
		Implement Promotion of existin	g topical Extension	programs		
		<b>Develop</b> Upstate Pond Mgt Short e-Course	Implement Upstate Pond Mgt Short e-Course			
		Implement Distribution of lot en	osion rack cards			



## Prepared By:



## **AUTHORS**

### **SUSAN LUNT**

Carolina Clear Coordinator

### **STEVEN O'SHIELDS**

Water Resources Agent

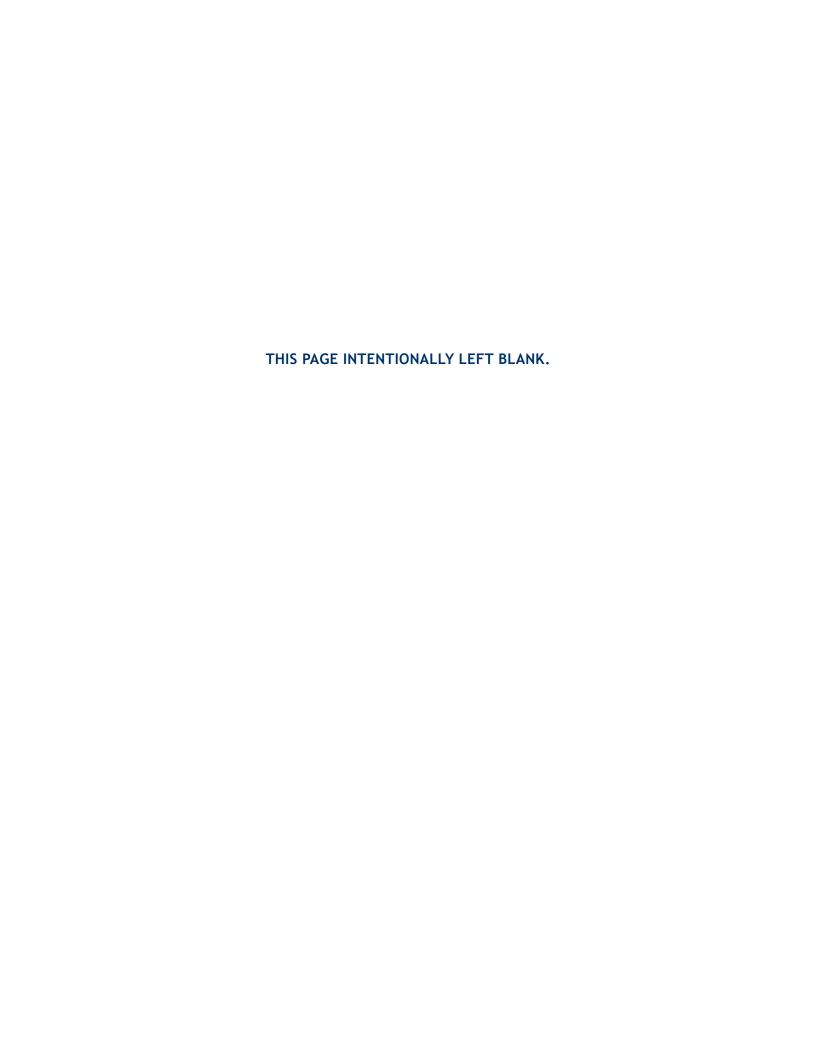
## **REVIEWERS**

Ethan Barnette, Jon Batson, Kyle Bennett, Billy Bolger, Adam Cromer, Ryan Wallace



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

Produced March 2024







Left to right: Haley Denison, Susan Lunt, Steven O'Shields

