### ANDERSON & PICKENS COUNTIES

# stormwater PARTNERS

BY CLEMSON° EXTENSION







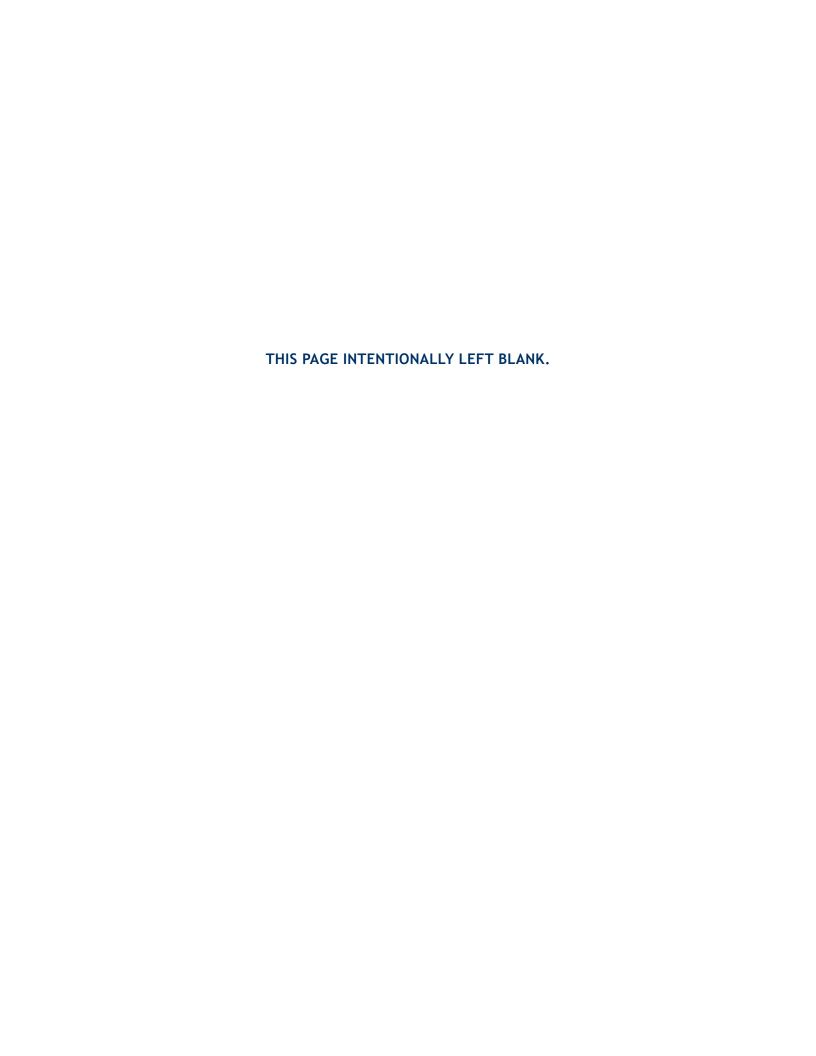


# Annual Report of Activities

YEAR 9 / JANUARY - DECEMBER 2022





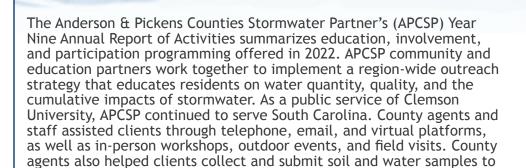


# Acronyms Used In This Report

ACRONYM	FULL WORDING	ACRONYM	FULL WORDING
APCSP	Anderson & Pickens Counties Stormwater Partners	LKSWPT	Lake Keowee Source Water Protection Team
ARJWS	Anderson Regional Joint Water System	MCMs	Minimum Control Measures
ASWCD	Anderson County Soil and Water Conservation District	MEP	Maximum Extent Practicable
BMPs	Best Management Practices	NPDES	National Pollutant Discharge Elimination System
CAFLS	Clemson University College of Agriculture, Forestry, and Life Sciences	PC	Pickens County
CEPSCI	Certified Erosion Prevention and Sediment Control Inspector	POC	Pollutants of Concern
CSPR	Cetified Stormwater Plan Reviewer	PSWCD	Pickens County Soil and Water Conservation District
CU	Clemson University	SC	South Carolina
CY	Clemson Extension Carolina Yards	SC AAS	South Carolina Adopt-a-Stream
EFNEP	Expanded Food and Nutrition Education Program	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
LID	Low Impact Development	WOW Jr.	What's In Our Waters Jr.



### **Executive Summary**



Clemson laboratories for analysis and interpretation of results.

Programming is guided by our strategic education plan, a living document identifying target pollutants of concern (POC), outreach strategies, and short to long-term goals. A plan was created in 2014 using the 303(d) List of Impaired Waterbodies, Total Maximum Daily Loads (TMDLs), workshop and event surveys, and feedback from citizens and stormwater professionals in the region. Using this input, POC were identified as bacteria from animal waste; sediment and erosion; and fats, oils, and grease (FOG). Litter was added as a target pollutant in 2015. Input from partners at the June 18, 2018, strategic planning meeting generated an updated plan describing our top three POC (sediment, litter, and bacteria), behaviors that contribute to the pollutant load of waterways, and actions APCSP would take to educate and engage our target audiences to reduce non-point source pollution from stormwater runoff. The education plan and associated timeline can be found in the Appendix.

Eduction and outreach highlights for 2022 included a new mass media campaign focused on the prevention of sanitary sewer overflows (SSOs), presentations at multiple conferences and seminars, field training for stormwater professionals on how to properly inspect and maintain stormwater control structures, and implementation of experiential learning projects. In-person programs and field days were conducted throughout 2022, and educational outreach materials were developed and distributed. Topics included: SC AAS; septic systems; pet waste; FOG: reducing waste, litter, and stormwater pollution; recreational and stormwater pond management; erosion and sediment control; home and farm water management; stream bank repair; lead in drinking water; green infrastructure; and low impact development. Online content was delivered through social media posts, fact sheets, blogs, e-news, videos, webinars, and virtual 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.



Steven O'Shields Anderson County



Haley Denison Clemson University



Susan Lunt
Pickens County

Steven O'Shields, Haley
Denison, and Susan Lunt are
Water Resources Agents for the
Clemson Cooperative Extension
Service. As part of their
work with the Carolina Clear
program, they co-coordinate
the Anderson & Pickens
Counties Stormwater Partners.



### **Executive Summary**



- APCSP experienced continued success with inperson and virtual programming in 2022 and
  expanded its offerings to continue reaching
  citizens of South Carolina. Via synchronous and
  asynchronous online training, educational videos,
  social media, conferences, webinars, workshops,
  in-person trainings, experiential learning, and
  exhibits, information was delivered on various
  topics like erosion prevention and sediment
  control, inspection and maintenance of stormwater
  control structures, prevention of SSOs, and green
  infrastructure.
- Both new and existing partnerships allowed programs to thrive in Anderson and Pickens Counties. APCSP reached various audiences through presentations given on numerous topics, including septic systems, lot erosion control measures, stormwater best management practices (BMPs), rainwater harvesting, water quality, watersheds, environmental stewardship, citizen science, green infrastructure, low impact development, and recreational and stormwater ponds.
- Our latest mass media campaign and existing demonstration sites throughout the region continued to be observed in 2022. Citizens gained knowledge about the prevention of sanitary sewer overflows (SSOs) through billboard messaging and television commercials, 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: 1,197,928

2. Mass Media including television and billboards.

NUMBER REACHED: 823,940

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

NUMBER REACHED: 3,254

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

NUMBER REACHED: 20,381

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

NUMBER REACHED: 7,440

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

NUMBER REACHED: 1,422



# **Executive Summary**

### 2022: A Year in Pictures



Extension faculty & staff sharing about Green Infrastructure during stream restoration & BMPs tour on campus



Family learning pH testing protocol for the SC Adopt-a-Stream program



Educators discuss methods for implementing AAS in the classroom during the first ever SC AAS Curriculum Educator Workshop



Local residents picking up their rain barrels as part of Anderson & Pickens Counties Stormwater Parnters' annual rain barrel sale.



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APCSP staff provide outreach materials to residents during the 2022 rain barrel sale.



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: 2022

SMS4	Partner Representative
Anderson County	Jon Batson
City of Anderson	Adam Cromer
City of Belton	Bo Barnes
City of Clemson	Nathan Hinkle and 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.

### 2022 Education Partners





























American Water Works Association
South Carolina Section





































### 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
- 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. Code Sections 48-1-10 et age, 1976) and with the provisions of the Clean Water Act, 33 U.S.C. §1251 et seq., (hereafter CWA or the Act), as amended by the Water Cquisity Act of 1987, P.L. 100-4 and subsequent regulations. Upon being 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

e: January 1, 2014

Issued:

November 1, 2013

December 31, 20



To meet the APCSP program goals, education and programming priorities were identified and highlighted through the APCSP Education Plan 2018-2023. The Education Plan was created with input from partners at a strategic planning meeting on June 18, 2018 at the Department of Natural Resources facility in Clemson, SC. Partners included city and county staff and a council member, representatives from non-profits, Clemson University staff and students, and Clemson Extension agents. Input included prioritizing pollutants of concern, developing a list of contributing behaviors, and brainstorming barriers and benefits for each behavior.

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

Pollutant of Concern	Contributing Behaviors
Sediment	<ul> <li>Construction companies who do not properly install and maintain BMPs for erosion prevention and sediment control are contributing sediment to the local waterways.</li> <li>Homeowners with sediment issues who do not properly install and maintain BMPs are contributing sediment to local waterways.</li> </ul>
Litter	<ul> <li>People who contribute to roadside littering or improperly dispose of household items.</li> <li>People who dump their trash illegally in business dumpsters, causing them to overflow.</li> </ul>
Bacteria	<ul> <li>Septic systems that are not properly maintained/repaired.</li> <li>FOG (fats, oils, and grease) that are not disposed of properly.</li> <li>Dog owners who don't pick up and dispose of their pet waste.</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: www.clemson.edu/extension/carolinaclear/regional-consortiums/apcsp.



### 2022 Highlights



### Statewide Mass Media Campaign



The Flush Only TP billboard was placed on Hwys 28, 81, 123, & 8 roads in the Consortium region

In 2022, Clemson Extension's Carolina Clear program launched our newest mass media campaign focused on the prevention of sanitary sewer overflows (SSOs). SSOs can lead to degradation of water quality in local water bodies through bacteria and other forms of pollution as well as cause costly damages to infrastructure. Stormwater Consortiums across the State, including the Anderson & Pickens Counties Stormwater Partners, have identified bacteria in waterways as a pollutant of concern. The prevention of flushing non-flushable materials has been identified as a target behavior to address through education.

The multi-part mass media campaign included a billboard and television commercial. The theme of the campaign is "Flush Only TP." The billboard reads "Protect Your Pipes. Flush Toilet Paper Only. Trash Everything Else." In the fall of 2022, 18 copies of the billboard were installed around the state through a partnership with the Outdoor Advertising Association of South Carolina. These billboards impacts are documented with weekly views and had a combined total of over 13 million people. In the APCSP Consortium-region, billboards are rotating through select locations and have included Hwys 28, 81, 123 and 8 with a combined 381,935 estimated views.

Development of the commercial was based on feedback from regional Consortiums and the Carolina Clear Advisory Committee. The commercial aimed to include humor, demonstrate positive behavior adoption, and share a clear message. As a result, the "angelic plumber" was created who arrives just in time to prevent a non-flushable wipe from entering the toilet. The commercial directs viewers to visit Clemson.edu/carolinaclear for more information about the prevention of SSOs in their community. The commercial was shared on five stations and streaming services around the State and reached over 3 million viewers across South Carolina during the two months it aired in fall of 2022. Locally, total impressions from WYFF were 422,600.

To view the commercial visit:

https://www.clemson.edu/extension/carolinaclear/campaign.html



The Angelic Plumber, who also appeared in the 2020 Carolina Clear mass media campaign focused on fats, oil, and grease management; starred in the 2022 campaign which focused on the prevention of sanitary sewer overflows. Seen here, the commercial was filmed in front of a green screen since the angelic plumber is standing on the edge of a toilet seat in the commercial.



## 2022 Highlights

### Post-Construction BMP Inspector

In Spring 2022, field days for Clemson Extension's Post-Construction BMP Inspector program were held on the Clemson University campus for the first time. The purpose of the program is to train professionals in methods and strategies for conducting routine and thorough inspections of stormwater management practices. This hybrid certification course provides multi-week training that takes place both online and in the field. Participants must pass an exam for certification and re-certify every three years. Field days for the Spring certification and re-certification courses were held on May 18 and 19, 2022, respectively. Participants gained hands-on knowledge of how to properly inspect and maintain stormwater control structures and practices, including wet detention basins, dry detention basins, bioretention, bioswales, permeable pavement, and more. The spring courses resulted in 25 new certifications and 19 recertifications.



Field instructions being given on inspection and maintenance of wet detention basins



Students inspecting a bioretention cell



Classroom component of Post-Construction BMP Inpsector field days



Students learning about stormwater treatment trains



# 2022 Highlights

### Stormwater Projects for Experiential Education on Campus

Building off service-learning opportunities in 2021, the 2022 school year brought exciting new partnerships for APCSP at Clemson University. Our Water Resource Agent for campus partnered with University Facilities: Landscape, Energy, and Utility Services, and Landscape Architecture Faculty to create experiential education opportunities for students. Experiential education is a teaching philosophy that engages students in a direct or real-world experience to increase knowledge, develop skills, and gain the capacity to contribute to their community (AEE).















Throughout the year, staff worked with two different classes within the Landscape Architecture Program to design and install a planting plan for a site on campus with pre-existing Green Infrastructure (GI) stormwater management practices. Throughout both semesters, students engaged with our Water Resource Agent and Facilities staff members for some introductions to the stormwater management/GI and site visits to the project area. Following site analysis, students presented their prototypes featuring concept statements, site analyses, plant palettes, master plans, and perspectives for the proposed site redesign. Staff members shared feedback, students completed a final design plan, and installation began in Fall 2022 with students from a planting techniques class. Nearly 60 students participated and contributed to the project in 2022. Thank you to all the students, staff, and architecture faculty who made these projects possible in 2022!

Sources

The Association for Experiential Education (AEE), "What is Experiential Education?"

Photo Credits: Lara Browning, Haley Denison

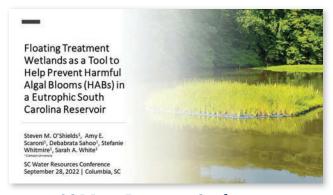


#### **Conferences & Seminars**

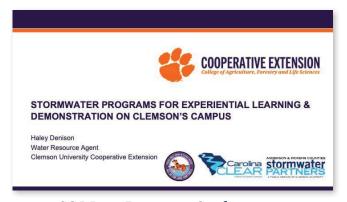
In 2022, Water Resource Agents presented at multiple conferences and seminars on our work through the consortium and statewide. Below are selected examples.



Food Forward Symposium



SC Water Resources Conference



SC Water Resources Conference



CU Water Research Symposium



CU Water Research Symposium



ANREP Annual Conference



SESWA Spring Seminar



This annual report is intended to give the reader a comprehensive look at the APCSP from January 1, 2022 through December 31, 2022. 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	TELEVISION: The 2022 Carolina Clear mass media campaign focused on water pollution associated with sanitary sewer overflows. See report highlight for additional information. Commercial messaging was provided on the target behavior "Protect Your Pipes, Flush only TP, Trash Everything Else," on WYFF in Pickens and Anderson Counties	Clemson Extension, Carolina Clear, APCSP	422,600
2022	BILLBOARD: The 2022 Carolina Clear mass media campaign focused on water pollution associated with sanitary sewer overflows. See report highlight for additional information. Billboard messaging was provided on the target behavior "Protect Your Pipes, Flush only TP, Trash Everything Else," in high-visibility locations in 2022 as the following:" 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)	Clemson Extension, Carolina Clear, APCSP	381,935
2022	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	19,405
INTERNET MEDI	A		
2022	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	8,700
2022	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	2,162
2022	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	49,591
2022	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	8,888

PUBLIC EDUCATION: INDIRECT

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DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2022	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	904,440
2022	CU Stormwater Instagram: Provides updates and highlights of campus stormwater programs. Impacts=total impressions for 2022 posts	APCSP, Clemson Extension, Carolina Clear	154
2022	INTERNET: Total unique views in 2022 for the Carolina Clear, APCSP, Carolina Yards, Stormwater Ponds, Clemson Extension Water Team, Rain Gardens, and Living Shorelines, Lead Solutions, Be Septic Safe, Stream Bank Repair, LID, Be Well Informed, CPIT, Dam, Salt Marsh, Seeds to Shorelines websites	Clemson Extension, Carolina Clear	132,046
2022	Carolina Clear YouTube Channel: Average view duration was 1 minute 46 seconds. Provides video segments on a diverse array of topics related to watershed stewardship	Clemson Extension, Carolina Clear	21,943
2022	Video tutorial for septic find and fix application as part of the LKSWPT 319 grant program	APCSP, Clemson Extension, Carolina Clear, LKSWPT	ongoing
2022	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. In 2022, the total unique views for these factsheets was 52,129. 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	52,129
2022	Land Grant Press publications authored by the Clemson Extension Water Resources Team include 12 publications since 2020. Topics include pond dredging, headwater streams, watershed based planning, harmful algal blooms and more. This publications can be accessed at Igpress.clemson.edu	Carolina Clear, Clemson Extension, LGP	17,875

PUBLIC EDUCATION: INDIRECT

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DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
PUBLICATIONS			
2022	APCSP monthly E-newsletter: Provides upcoming events and education recaps for outreach and involvement within the consortium	APCSP, Clemson Extension	311
10/1/2022	Articles for FOLKs Newsletter The Sentinel on the Mass Media Campaign: Sanitary Sewer Overflows	APCSP, FOLKs	1,200
10/1/2022	Articles for PSWCD Newsletter on the Mass Media Campaign: Sanitary Sewer Overflows	APCSP, PSWCD	400
2/1/2022	Articles for The Journal (Oconee) on SC AAS mini training focus on macroinvertebrates for high school students	APCSP, Carolina Clear, Clemson Extension, 4H, Center for Watershed Excellence	8,500
2022	Developed new rack card to educate residents on the requirements to cover your load in the back of a truck or trailer to secure items from blowing out; thus, reducing litter	APCSP, Clemson Extension	500
2022	Manuals distributed: Guide to Rain Gardens in SC Manual, Stream Bank Repair Manual, Carolina Yards Manual, Rainwater Harvesting for Homeowners Manual	Clemson Extension Carolina Clear	60
OUTREACH MATI	ERIALS & GIVEAWAYS		
2022	Rack Cards distributed (Anderson County Stormwater office, City of Anderson Stormwater office, Pickens County office lobby, PC & Easley 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	575
2022	APCSP Promotional Items: FOG lids, Pot Holders, rack card (lobby, events, EFNEP, FoodForward, campus dining)	APCSP, Clemson Extension, Carolina Clear, EF-NEP, Clemson University	400

PUBLIC EDUCATION: INDIRECT 2022 Annual Report





DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2022	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	100
2022	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	150
10/28/2022	Tip sheets provided (yard waste) and PC stormwater stickers and pencils for Halloween for Pickens County trick or treat	PC, Clemson Extension	50
12/1/2022	Promotional Items PC Holiday ornaments (APCSP meeting, lobby) to promote APCSP	APCSP, Clemson Extension, Carolina Clear	25
2022	Promotional Items: Septic Magnets, key chains, stress plungers (contractors, SCDHEC, events, lobby)	APCSP, Clemson Extension, Carolina Clear, SCDHEC	50
9/27/2022	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	50
2022	Designed a hall poster for Anderson County Public Works that highlighted the Anderson County Stormwater Management program	APCSP, Clemson Extension	ongoing
2022	The City of Anderson Wastewater Utilities Division provided local restaurants with training packets (produced by APCSP) on proper FOG management	APCSP, City of Anderson, Clemson Extension	10
12/1/2022	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	8,000

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DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
DISPLAYS & DEM	ONSTRATION SITES		
2022	Protecting Water Resources Display at Pickens County Art & History Museum	APCSP, Pickens County Art & History Museum	3,096
2022	Permeable pavement demonstration sites across the consortium region: # of sites	APCSP, City of Anderson, Clemson University	3
2022	Rain barrels installed across consortium region : # of barrels	APCSP, Clemson Extension, Clemson University	67
2022	Pet waste stations & educational signs installed across consortium region: # of stations	APCSP, Clemson Extension, Clemson University	46
2022	Rain gardens and bioretention cells installed across consortium region: # of sites	APCSP, Clemson Extension, Clemson University	42



CU students in Landscape Architecture help install plants in a bioretention cell on campus





DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
DIRECT CONTAC	TS & SITE VISITS		
2022	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	20
2022	Site Visits on campus (green infrastructure, stream restoration, BMPs, landscape design, construction activities, FOG)	APCSP, Carolina Clear, Clemson Extension, Clemson University	8
2022	Site visits conducted in Anderson County (recreational ponds, stormwater ponds, and residential stormwater management)	APCSP, Carolina Clear, Clemson Extension	5
2022	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, storm drains, 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
2022	Water Resource Agent on campus responded to 100 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, pet waste, etc.	APCSP, Clemson Extension, Clemson University	100
2022	Water Resources Agent in Anderson County responded to 37 requests from the public for information on, or technical assistance with various stormwater and water quality-related issues	APCSP, Clemson Extension, Carolina Clear	37

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ial Report





DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS	
WEBINARS & PR	VEBINARS & PRESENTATIONS			
3/28/2022	Spring Into Action to Maintain a Healthy Pond Webinar: topics included land based and in pond actions to protect and improve water quality	APCSP, Carolina Clear, Clemson Extension	15	
2022	Master Gardener Mondays is a series of virtual learning opportunities to help Master Gardener volunteers strengthen their horticultural knowledge and skills. The October session covered stream bank repair and reducing sediment pollution in streams	Clemson Extension, Master Gardener	86	
2/5/2022	Golf Industry Show presentation by Walker Course Superintendent on rain gardens	APCSP, Clemson Extension, Carolina Clear, CU	100	
11/3/2022	SPEED (Stormwater Plan Education for Engineering Design) Survey and presentation at SCASM to gather data and inform the planning process of a new course offering by Clemson Extension	Clemson Extension, SCASM, SCDHEC	60	
2/24/2022	Tarps, bungees and Trash Blows! Tarp It- It's The Law rack cards distributed at the Pickens County Cattleman's Association meeting along with a quick presentation on the requirements to cover your load in the back of a truck or trailer to reduce litter	APCSP, Clemson Extension, Carolina Clear, Pickens County Cattleman's Association	67	
4/22/2022	Clemson Sunrise Rotary Club A presentation on Best Management Practices for Your Yard	APCSP, Clemson Extension, Carolina Clear, Clemson Sunrise Rotary Club	20	
4/11/2022	A Day in the Life of a Clemson Extension Water Resources Agent presented to CU students of Sigma Alpha Agriculture Sorority	APCSP, Clemson Extension, Carolina Clear, CU, Sigma Alpha Agriculture Sorority	12	
4/22/2022	Presentation at SESWA Spring Seminar: Utilizing GI Maintenance for Service-Learning & Demonstration on a University Campus	APCSP, Carolina Clear, Clemson Extension, Clemson University, SESWA	141	
10/19-20/2022	South Carolina Water Resources Conference presentations on: On-Site Visits: Sharing BMPs with Residents, Stormwater Programs for Experiential Learning and Demonstration on Clemson's Campus, Floating Treatment Wetlands as a Tool to Help Prevent Harmful Algae Blooms in a Eutrophic SC Reservoir	Clemson Extension, Center for Watershed Excellence	80	

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DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
5/9/2022	Water Research Symposium presentations on: On- Site Visits: Sharing BMPs with Residents, Stormwater Programs for Experiential Learning and Demonstration on Clemson's Campus, Post Construction BMP Inspector Course	Clemson Extension, Carolina Clear, CU	80
6/2/2022	Association of Natural Resource Extension Professionals Conference presentation: Creative Thinking for Continued Compliance-Based Trainings	Clemson Extension	10
9/15/2022	FoodForward presentation: Encouraging Best Practices for Fats, Oils, and Grease (FOG) Management through Education and Outreach (including distribution of potholders and rack card)	Clemson Extension, CU, Carolina Clear	150
2/4/2022	Clifford The Big Red Dog Event at Pickens County Library included a presentation on minimizing the impacts of pet waste on our waterways and distributing outreach materials: pet waste bags and dispenser, pet food lid with a reminder top pick up after your pet, a coloring activity with crayons, and an infographic card; the movie was viewed after the presentation	APCSP, Clemson Extension, Carolina Clear, Pickens County Library	68
4/8/2022, 9/23/2022	Carolina Yards booth and rain barrel display at the SCBG spring & fall plant sale	APCSP, Clemson Extension, SCBG	551
10/26/2022	APCSP Represented at Clemson University's Solid Green Day	APCSP, Clemson Extension, Carolina Clear, Clemson University	40
3/10/2022	McKissick Academy of Science and Technology Community Resource Fair booth to share information on the education and outreach provided by APCSP	APCSP, Carolina Clear,Clemson Exten- sion, SDPC	100
10/24/2022	The City of Anderson presented information on its stormwater program to an organized group at Holy Trinity Lutheran Church	City of Anderson	23
3/10/2022	Presentation on residential stormwater management given to Clemson University Construction Science class by Anderson County	Anderson County, Clemson University	20

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DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
4/23/2022	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 educational outreach materials	City of Anderson, APCSP	2,500
3/7/2022	Presentation on Green Infrastructure and Stormwater Management to Planting Design students within the Landscape Architecture Department at Clemson	APCSP, Clemson Extension, Clemson University	34
11/1/2022	Presentation on Green Infrastructure and Stormwater Management/ Planting Design to Planting Techniques students within the Landscape Architecture Department at Clemson	APCSP, Clemson Extension, Clemson University	25
4/11/2022	Planting Design students within the Landscape Architecture Department at Clemson presented preliminary designs to Clemson Extension and University Facilities staff with feedback	APCSP, Clemson Extension, Clemson University	34
5/26/2022	APCSP Represented in Protecting Our Water Resources Panel at Duke's World of Energy	APCSP, Clemson Extension, Duke Energy, Easley Chamber of Commerce, Oconee Chamber of Commerce, Anderson Area Chamber of Commerce, Clemson Area Chamber of Commerce	
WORKSHOPS & 7	TRAININGS		
5/8/2022	Watershed Monitoring and Green Infrastructure: Understanding and Managing Stormwater in a Campus Environment: Field Tour as part of the Water Research Symposium	Clemson Extension, Clemson University	14
11/10/2022	Stream Bank Repair Workshop outreach materials booth	Clemson Extension, APCSP, Save Our Saluda	
3/9/2022	Site visit with Planting Design students within the Landscape Architecture Department at Clemson. Students evaluated maintenance and design analysis for bioretention cells within a solar canopy parking lot	APCSP, Clemson Extension, Clemson University	34

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DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
10/15/2022	Woods in Your Backyard Workshop: presentation on protecting and enhancing riparian areas including resources	APCSP, Carolina Clear, Clemson Extension, SCBG	14
11/15/2022	Presentation on being a backyard environmental steward & citizen scientist including making a pinecone turkey and take and make kits including outreach materials  APCSP, PSWCD, Pickens County Library		30
2022	Caroina Yards Online Course: The 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 maintaing low impact and low maintenance yard practices	Clemson Extension	27
2022	The Post-Construction BMP Inspector certification and re-certification courses were offered in the spring and fall of 2022: 73 individuals were certified, and 40 were re-certified; this is an online and field-based training focused on inspection and maintenance of best management practices used for stormwater management	Clemson Extension	112
2022	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. In 2022 certifications and recertifications were offered as online and in-person formats	Clemson Extension, Clemson University, SCDOT, SCDHEC	1,581
2022	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. In 2022 certifications and recertifications were offered in-person	Clemson Extension, Clemson University, SCDHEC	85

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DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS		
11/17/2022	Certificate in Native Plant Studies course provides information on salt marsh ecosystem ecology and associated garden stewardship; class participants travelled from around the state for this full day workshop which included classroom and field-based components on Folly Beach on November 17, 2022 with 14 participants	Clemson Extension 1			
3/5/2022	Managing Water in the Home Landscape Workshop at SCBG: an interactive outdoor workshop demonstrating how to manage yards as a miniature watershed to address common flooding and erosion issues	APCSP, Clemson Extension, Carolina Clear, SCBG	12		
4/8/2022	Stream Restoration Lunch & Learn hosted by Clemson University, Land Planning Associates, and WEASC/ SCAWWA	APCSP, Clemson University, LPA, WEASC, SCAWWA	25		
2022	MS4 Stormwater Compliance Training Program for Clemson University Employees. 112 Participants passed certification in 2022	APCSP, Clemson Extension, Carolina Clear, Clemson University	112		
5/24/2022	FOG best practices training for dining managers of Clemson University's Madren Conference Center	APCSP, Carolina Clear, Clemson Extension, Clemson University	6		
7/14/2022	FOG best practices training for dining staff of PAW'S Bistro at Clemson University	APCSP, Carolina Clear, Clemson Extension, Clemson University	12		
SOIL & WATER SAMPLES					
2022	Clemson Extension in cooperation with Clemson's Agricultural Service Lab processed soil and water samples for PC	Clemson Extension	444		
2022	Clemson Extension in cooperation with Clemson's Agricultural Service Lab processed soil and water samples for Anderson County	Clemson Extension	237		

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DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS		
EVENTS & TRAININGS (WITH INVOLVEMENT COMPONENT)					
11/3/2022	Installing plants in bioretention cell as part of Planting Techniques Experiential Learning Project with Landscape Architecture Students and Clemson University Landscape Services	APCSP, Clemson Extension, Clemson University	25		
5/7/2022	Pickens County Azalea Festival booth and activity to share information on how to minimize the impacts of stormwater through plants and help protect water quality and tour the native plant garden and complete the native plant scavenger hunt	APCSP, Clemson Extension, Carolina Clear, PC, South Carolina Native Plant Society	100		
4/27/2022	Rain Barrel sale at the T. Ed Garrison Livestock Arena	APCSP, Clemson Extension, T. Ed Garrison Livestock Arena	48		
5/2/2022	Barrels & Beer event to create rain barrels and inform citizens about rain water harvesting including youth education and crafts	APCSP, ASWC, ARJWS, Clemson Extension	30		
7/25-28-2022	Litter pick up at Pickens County Libraries including presentations re: litter and our oceans	APCSP, Pickens County Library, Clemson Exten- sion, KPCB, SC Aquarium	25		
8/27/2022	Litter pick up at the edge of Lake Hartwell on Pike Rd	APCSP, KPCB, Clemson Extension	6		
3/11/2022	Litter pickup with Clemson University Solid Green Club students and UPIC interns	APCSP, Clemson Extension, Clemson University, Pickens County Litter Enforcement	7		
3/31/2022	Litter pickup with Clemson University American Fisheries Society Chapter students on the 12 Mile River	APCSP, Clemson Extension, Clemson University, Pickens County Litter Enforcement	8		
10/7/2022	Litter pickup with Clemson University American Fisheries Society Chapter students on the 12 Mile River	APCSP, Clemson Extension, Clemson University, Pickens County Litter Enforcement	7		





DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
4/22/2022	Terra Cotta Pots (plant seeds) Carry-Out Craft, Tree Giveaway, and Reading & Video of The Giving Tree by Shel Silverstein for Earth Day at the Pickens County Library	Pickens County Library, APCSP, Clemson Exten- sion, Carolina Clear, PC, 4-H, PowerPlant SC	558
2022	Rain Garden maintenance at Pickens County Extension Office	Clemson Extension	1
2022	The Master Pond Manager (MPM) course teaches recreation and stormwater pond management training participants trough online classroom and field-based curriculum; it was offered in the fall of 2022, with field days hosted in North Charleston & Mount Pleasant, SC with 27 participants	ield Clemson Extension 27	
2022	The Master Rain Gardener online classroom was held between September and October 2022 including two field days in October in Folly Beach, SC with a total of 46 participants in the Certification Track and 13 participants in the Letter of Completion Track; this is an online and field based training focused on rain garden and rainwater harvesting system design and implementation	Clemson Extension	59
PARTNER MEETIN	NGS		
2022	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
2022	Lake Keowee Source Water Protection Team Monthly Meetings: 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





DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
2022	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
2022	KPCB monthly meetings: members gather to discuss litter initiatives throughout Pickens County	PC, KPCB, Clemson Extension	8
2022	PSWCD meetings: members and commissioners gather to discuss natural resource conservation in Pickens County	APCSP, Clemson Extension, Carolina Clear, PSWCD	25
2022	Clemson University Solid Green Committee Meetings: members gather to discuss sustainability initiatives and events on campus		
2022	Clemson University Sustainability Commission Meetings: members gather to discuss sustainability reporting, tracking, and engagement on campus	ngs: Clemson Extension, Clemson University, 2 APCSP	
2022	Anderson Area Chamber of Commerce Water Resources Committee Monthly Meetings: members gather to discuss public water supply, wastewater treatment, watershed protection, power generation, and legislative updates	Anderson County, APCSP, City of Anderson, Clem- son Extension	10
2022	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 CERTIFICATIONS			
2022	Carolina Yards certified in 2022 in SC: residents who meet CY principles for healthy, watershed-friendly, low-maintenance landscapes	Clemson Extension	60

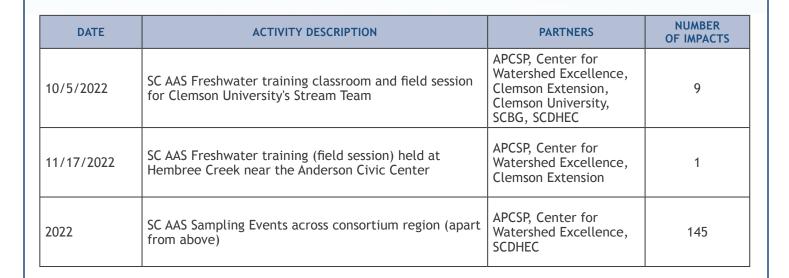




DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS	
WATER QUALITY MONITORING				
2/11/2022	SC AAS mini training focus on macroinvertebrates for high school students using AAS protocols and equipment	APCSP, Clemson Extension, Center for Watershed Excellence, 4-H, Walhalla HS	65	
9/2/2022	SC AAS mini training focus on macroinvertebrates for high school students using AAS protocols and equipment	APCSP, Clemson Extension, Center for Watershed Excellence, 4-H, Walhalla HS	20	
11/30/2022	SC AAS mini training focus on pH and macroinvertebrates for high school students	Clemson Extension, Center for Watershed Excellence, 4-H	10	
6/27-6/28/22	SC AAS HS Educator Workshop at Renewable Water Resources, Greenville	Clemson Extension, Center for Watershed Excellence, ReWa	10	
1/13/2022	SC AAS Freshwater training classroom and field session	APCSP, Center for Watershed Excellence, Clemson Extension, Clemson University, SCBG, SCDHEC	20	
4/15/2022	SC AAS Freshwater training classroom and field session for Clemson University's Stream Team	APCSP, Center for Watershed Excellence, Clemson Extension, Clemson University, SCBG, SCDHEC	6	
5/25/2022	SC AAS Freshwater training (classroom and field sessions) held at Tri-County Technical College	APCSP, Clemson Extension, Center for Watershed Excellence	16	
9/6/2022	SC AAS Freshwater training (classroom session) held at Clemson University	APCSP, Clemson Ex- tension, Center for Watershed Excellence, Clemson University	11	
9/13/2022	SC AAS Freshwater training (field session) held at Clemson University	APCSP, Clemson Ex- tension, Center for Watershed Excellence, Clemson University	11	



### **Public Involvement**









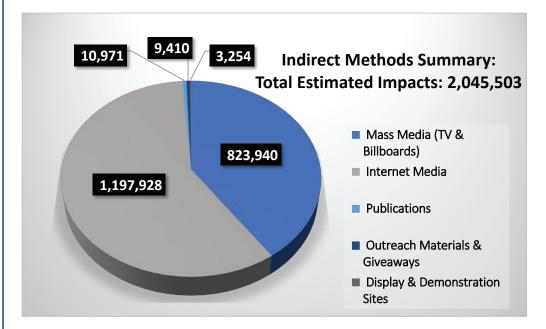
SC AAS Freshwater training and curriculum workshops

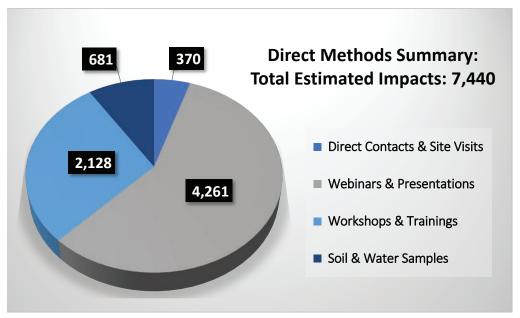


### **Outreach Summary**



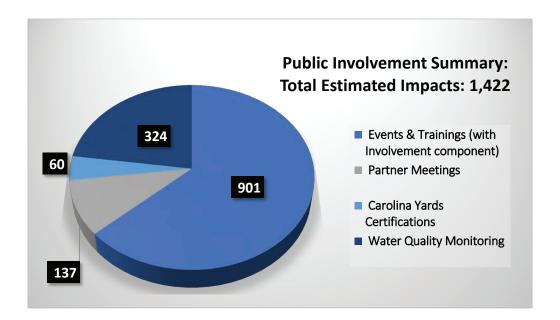
The Anderson & Pickens Counties Stormwater Partners impacted an estimated 2,054,365 people through direct & indirect education & outreach and public involvement in 2022. Indirect methods resulted in 2,045,503 impacts through mass media and other efforts. Direct methods reached 8,862 individuals through presentations, trainings, workshops, and public involvement opportunities.







# **Outreach Summary**





Litter Pickup at Pickens County Libraries



CU students from the American Fisheries Society Chapter assist with a shoreline sweep on the 12 Mile River



### **Education Plan:**

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- 1. Erosion from Construction Sites
- 2. Residential Erosion

#### 1. Erosion from Construction Sites

**Target audience:** Construction companies who do not properly install and maintain BMPs for erosion and sediment control

**Problem:** Some construction companies do not properly install and maintain BMPs for erosion prevention and sediment control.

Goal: Decrease time to stabilization and amount of bare soil.

**Objective:** Increase the number of construction sites that utilize BMPs for sediment control in a timely manner.

Message	Format and distribution	Resources	Evaluation	
<ul> <li>It is the law to stabilize.</li> <li>Save time and money by doing it right.</li> </ul>	<ul> <li>Silt Fence and Beyond</li> <li>CEPSCI</li> <li>Economics brochure</li> <li>LID workshops</li> <li>IECA Field Day</li> <li>Post Construction BMP Inspector</li> <li>Homebuilder's Association presentations</li> </ul>	<ul> <li>SCASM</li> <li>Municipalities</li> <li>University</li> <li>Contractors and construction companies</li> </ul>	<ul> <li>Number of people who attend workshops &amp; evaluation data</li> <li>Number of brochures distributed</li> </ul>	

#### **Actions:**

- Host Silt Fence and Beyond workshop, with a new focus on economics.
- Create brochure that focuses on economics at pre-con meetings, directly to construction companies, Homebuilder's Association, etc.
- Continue offering and offer support for CEPSCI, IECA Field Day, LID workshops and other existing programs.

#### 2. Residential Erosion

Target audience: Homeowners

**Contributing behavior:** Homeowners with sediment issues who do not properly install and maintain BMPs are contributing sediment to local waterways.

Goal: Decrease time to stabilization and amount of exposed soil.

**Objective:** Increase the number of BMPs installed for sediment control in a timely manner.



# **Appendix**

### **Education Plan:**

Message	Format and distribution	Resources	Evaluation
<ul> <li>Bare soil negatively impacts our water health.</li> <li>Sites need to be stabilized ASAP.</li> <li>Riparian buffers help protect your land from erosion.</li> </ul>	<ul> <li>Billboards</li> <li>Newspaper articles</li> <li>Factsheet geared toward homeowners</li> <li>Carolina Yards (CY) &amp; Rain Garden workshops</li> <li>Rain barrel sale, painting, building, etc.</li> </ul>	<ul> <li>University</li> <li>Municipalities</li> <li>Home &amp; Garden Information Center (HGIC)</li> </ul>	<ul> <li>Number of people who attend &amp; participant evaluation from workshops</li> <li>Rain barrels sold</li> <li>Viewership from billboards/ newspaper</li> <li>CY certifications</li> <li>Number of phone calls asking for help</li> </ul>
	Format and distribution, contd.		Evaluation, contd.
	<ul> <li>Riparian buffer workshop</li> <li>Master Pond Manager &amp; Master Rain Gardener</li> </ul>		<ul> <li>Number of rain gardens installed</li> <li>Riparian buffer demo site</li> <li>Number of people accessing erosion factsheet</li> </ul>

#### **Actions:**

- Host Carolina Yards & Rain Garden workshops.
- New and existing rain barrel programs.
- Host Master Pond Manager and Master Rain Gardener courses.
- Create homeowner erosion factsheet.
- Create regional billboard.

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- 1. Litter
- 2. Illegal Dumping

#### 1. Litter

Target audience: People Who Litter

**Contributing behavior:** People who contribute to roadside littering or improperly dispose of household items.

Goal: Decrease litter found on the land and in waterways.



# **Appendix**



### **Education Plan:**

Objective: Increase litter clean up campaigns for streams.				
Message	Format and distribution	Resources	Evaluation	
<ul> <li>Litter is getting into the stormwater systems and our streams, polluting the environment and potentially causing storm drain failure.</li> <li>Litter can negatively affect tourism and property values and can increase crime.</li> </ul>	<ul> <li>Mass media</li> <li>Factsheets</li> <li>Newspaper articles</li> <li>Who to Call List</li> <li>List of approved dump locations</li> <li>Community clean-up efforts</li> </ul>	<ul> <li>Municipalities</li> <li>University</li> <li>Invested organizations in the county (Keep America Beautiful, Adopt a Highway)</li> <li>Palmetto Pride or other grants for litter prevention and clean-up</li> <li>Solid waste departments</li> <li>Law enforcement/litter officers</li> </ul>	<ul> <li>Number of organized clean ups on streams</li> <li>Number of published articles about litter clean ups</li> <li>Number of bags of waste picked up</li> </ul>	

#### Actions:

- Create or streamline online resources, including Who to Call list.
- Organize stream clean ups.

#### 2. Illegal Dumping

Target audience: People dumping trash in business dumpsters

**Contributing behavior:** People who dump their trash illegally in business dumpsters, causing them to overflow.

Goal: Decrease illegal dumping and overflowing of business dumpsters.

**Objective:** Increase awareness and education of illegal dumping.

Message	Format and distribution	Resources	Evaluation
<ul> <li>Dumping homeowner trash in business dumpsters is illegal.</li> </ul>	<ul> <li>Mass Media</li> <li>Fact Sheets</li> <li>Educational packets for businesses</li> <li>Who to Call List</li> <li>List of approved dump locations</li> </ul>	<ul> <li>Municipalities</li> <li>University</li> <li>Chamber of Commerce</li> <li>Solid waste departments</li> <li>Law enforcement/ litter officers</li> </ul>	<ul> <li>Number of signs distributed</li> </ul>



#### **Education Plan:**

#### Actions:

- Create or streamline online resources, including Who to Call list
- Create signage for businesses with link to resources

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- 1. Septic System Maintenance
- 2. FOG Disposal
- 3. Dog Waste

#### 1. Septic System Maintenance

Target audience: Homeowners on septic

Contributing behavior: Septic systems that are not properly maintained/repaired.

Goal: Decrease bacteria contributed by failing septic.

**Objective:** Increase awareness and proper maintenance of septic systems.

Message	Format and distribution	Resources	Evaluation
<ul> <li>Failing septic contributes to pathogens in the environment that can make humans sick.</li> <li>Save money by maintaining instead of waiting for failure.</li> </ul>	<ul> <li>Billboards</li> <li>Newspaper articles</li> <li>Updated fact sheets/postcards</li> <li>Economic emphasis</li> <li>Septic workshops</li> </ul>	<ul> <li>DHEC factsheets</li> <li>319 grants</li> <li>Septic companies</li> <li>Realtors</li> <li>University</li> </ul>	<ul> <li>Number of people who attend workshops &amp; program evaluations</li> <li>Self-reporting on state survey</li> <li>Site specific website hits on developed webbased material</li> <li>Number of magnets distributed</li> </ul>

#### **Actions:**

- Create map for septic in our counties and determine problem areas.
- Create workshop/presentation for septic owners.
- Develop online resources contractors, tips for inspection.
- Update septic postcard and create magnet.

#### 2. FOG Disposal

Target audience: Homeowners and rental properties

Contributing behavior: FOG (fats, oils, and grease) that is not disposed of properly.

**Goal:** Decrease bacteria contributed by FOG-related sewer overflows.

**Objective:** Increase awareness and proper disposal of FOG.



# Appendix



### **Education Plan:**

Message	Format and distribution	Resources	Evaluation
<ul> <li>FOG down drains can clog pipes and lead to sewer overflows.</li> <li>Save money on pipe repairs by properly disposing of FOG.</li> </ul>	<ul> <li>Apartment-specific FOG info</li> <li>Updated postcard</li> <li>Newspaper articles</li> </ul>	<ul> <li>Municipalities/ wastewater utilities</li> <li>Apartment rental offices</li> <li>HOAs</li> <li>DHEC</li> </ul>	<ul> <li>Number of educational materials distributed</li> </ul>

#### **Actions:**

- Distribute FOG magnets/ FOG lids to apartment complexes.
- Create poster/door hanger for apartment complexes.
- Write newspaper articles regarding residential FOG.

#### 3. Dog Waste

Target audience: Pet owners

**Contributing behavior:** Dog owners are not properly picking up and disposing of their pet

**Goal:** Increase the amount of pet waste picked up and thrown away.

**Objective:** Increase awareness about why people should clean up after their pet.

Message	Format and distribution	Resources	Evaluation
<ul> <li>Pet waste contributes to bacteria pollution of our surface water.</li> <li>A small change in habit can make a big difference for water quality.</li> <li>Utilize pet waste stations when available.</li> </ul>	<ul> <li>Commercial and billboards</li> <li>Factsheet</li> <li>Dog park signage and education</li> <li>Puppy packets with educational material at dog adoption centers</li> </ul>	<ul><li>University</li><li>Adoption clinics</li><li>Dog parks</li></ul>	<ul> <li>Number of signed puppy pledges</li> <li>Number of pet waste bags clips distributed</li> <li>Viewership of mass media campaign</li> <li>Number of public events /programs where relevant information is distributed</li> </ul>

#### **Actions:**

- Distribute pet waste bag clips.
- Get puppy pledges signed at adoption centers.
- Mass media campaign commercial and billboards.
- Update postcard.
- Create signage for pet waste stations.



# **Appendix**

### **Education Plan:** OND JAS AMJ OND JFM OND AMJ OND Create brochure that focuses on economics, for distribution at pre-con meetings, directly to construction companies, Homebuilder's Associations, etc. Continue offering and offer support for CEPSCI, IECA Field Day, LID workshops, and other existing programs Continue offering existing rain barrel programs including school presentations Host Silt Fence and Beyond workshop, with a new focus on economics Write newspaper articles regarding residential FOG, once per year Create or streamline online resources, including Who to Call lis Create or streamline online resources, including Who to Call list Create map for septic in our counties and determine problem Create workshop/presentation for septic owners Distribute FOG magnets/FOG lids to apartment complexes Develop online resources- contractors, tips for inspection Create poster/door hanger for apartment complexes Create signage for businesses with link to resources Mass media campaign - commercial and billboards Host rain barrel painting program for the publi APCSP 5 year education timeline Get puppy pledges signed at adoption centers Update septic postcard and create magnet and installations and rain barrel sale Create signage for pet waste stations Host Master Pond Manager course Distribute pet waste bag clips Septic System Maintenance Residential Erosion Illegal Dumping Dog Waste Juamibac Litter Bacteria



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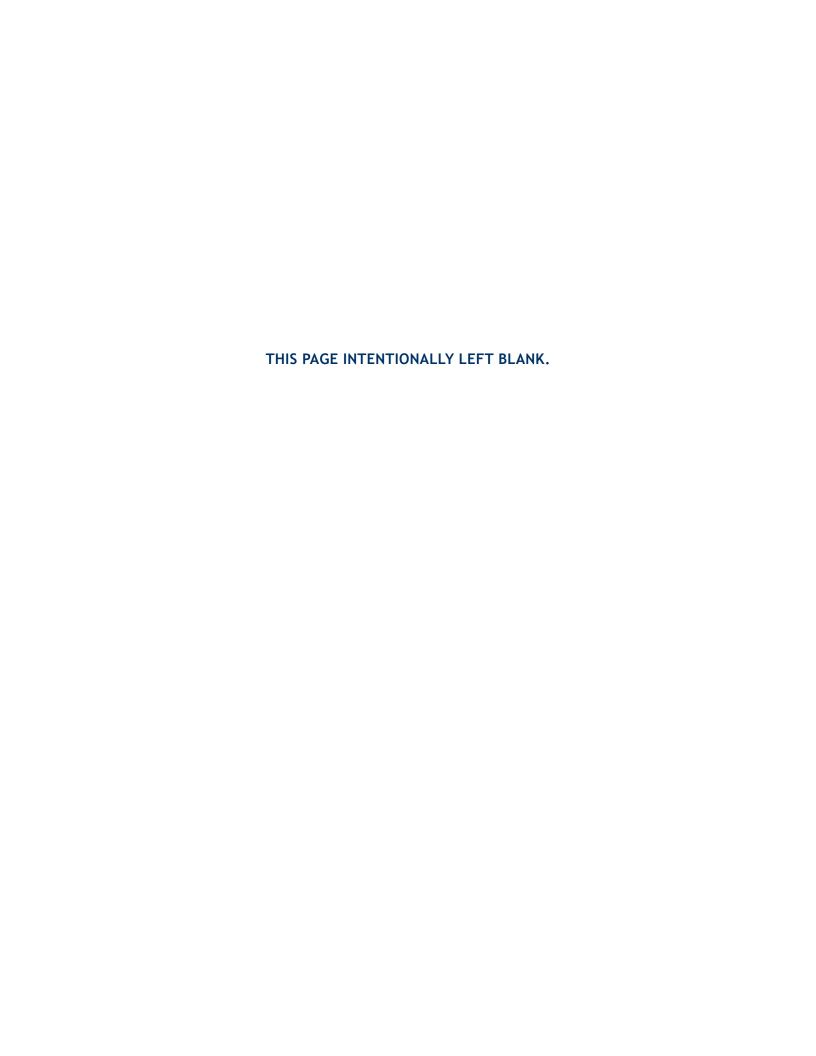
#### ADDITIONAL PHOTO CREDITS

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Clemson Extension Water Resource Agents & APCSP Coordinators (from left to right: Steven O'Shields, Susan Lunt, Haley Denison)

