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Annual Report of Activities

YEAR 1 / JANUARY 2019 - DECEMBER 2019

MARCH 2019



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Executive Summary

Sumter Stormwater Solution's Annual Report of Activities summarizes education, involvement, and participation programming provided by Sumter Stormwater Solutions' (SSS) community and education consortium partners. Programming activities strive to educate community members about stormwater quality and quantity and its role in the health of our local waterways. Program areas are determined by the SSS Strategic Plan, which identifies target pollutants of concern, outreach strategies, and short-term and long-term goals.



Katie Altman

SSS Coordinator

Katie Altman has been a Clemson Extension Water Resources Agent since September 2016 and is the coordinator of Sumter Stormwater Solutions. She is a native South Carolinian and is passionate about protecting the natural resources and quality of life in Sumter and throughout the state. Katie's professional interests include Upland BMPs to improve water quality, stream bank stabilization, and youth education.

OUTREACH ACTIVITIES AND TOTAL NUMBER REACHED (*estimated*)

1. Internet: 223,475
2. Television: 114,556
3. Billboard: 54,000
4. Publication: 17,975
5. Brocures and outreach materials: 550
6. Festivals/Fairs: 8,800
7. Demonstrations sites: 102,620
8. Trainings, presentations, direct contacts: 3,484
9. Public involvement: 110



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Community Partners

Sumter Stormwater Solutions community partners include Sumter County and the City of Sumter. Both City and County are instrumental for prioritizing efforts, evaluating stormwater pollutants and challenges, and developing new initiatives. In addition, the communities assisted with cleanups, displayed stormwater information at public events, and participated in planning meetings. Their leadership and support is essential to the function and progress of this group.

Local MS4 Consortium Representatives: 2019

Municipality & Position	Representative
Sumter County	
Stormwater Manager	Alfred Conyers
Environmental Technician	Dan Geddings
Environmental Technician	Reggie Felder
City of Sumter	
Stormwater Manager	Teige Elliot
Engineering Associate	Aashad Carter



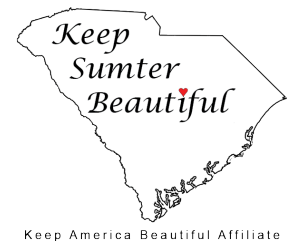


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Education Partners

Sumter Stormwater Solutions education partners include government agencies, non-profit and community organizations and businesses who share the consortium's mission of providing education to the public on stormwater issues throughout the City and County. Each partner brings a unique skill set to the organization and enhances the variety of programs the consortium is able to offer.

Education Partners





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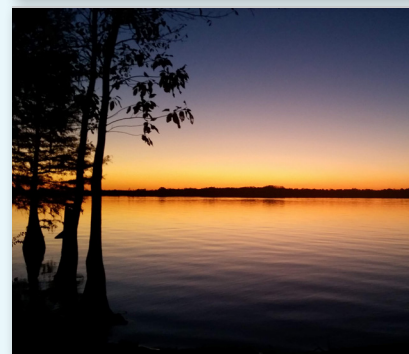
Mission and Goals

MISSION STATEMENT

To enhance water resource protection and stewardship through education, public involvement and partnerships.

PROGRAM GOALS

- Use a watershed approach to develop and implement a comprehensive education strategy that addresses stormwater pollution using a prioritized approach capitalizing on local training resources.
- Foster and expand upon citizen involvement in stormwater management through education and participation programs to encourage behavioral change towards improved environmental protection and awareness.
- Facilitate collaboration among local organizations interested in watershed-related education to best meet the educational needs of local communities.
- Through partnerships, leverage education resources and organize outreach programs to meet the NPDES Phase II permit requirements for public stormwater education and outreach to achieve greater water resource protection.
- Participate in collaborative stormwater education that can serve as a model for others.





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Education and Involvement Program History

The Sumter Stormwater Solutions Strategic Education Plan was developed in 2018 to guide the education efforts of the consortium from January 2019 through December 2023. It was developed with input from consortium partners and identified Pollutant of Concerns and Target Behaviors to be addressed through public education and involvement activities. Messages and programs will be further refined throughout implementation as new information is obtained through social

Priority Pollutants of Concern (POC) and Target Behaviors identified in the Sumter Stormwater Solutions Strategic Education Plan (2019-2023)

Pollutant of Concern	Target Behavior
Bacteria	<ul style="list-style-type: none"> Residents are able to identify and report sanitary sewer overflows (SSO)
Sediment	<ul style="list-style-type: none"> Construction professionals know how to properly install and maintain sediment control and erosion BMPs
FOG	<ul style="list-style-type: none"> Residents properly dispose of FOG by recycling or throwing in trash Restaurant owners/employees know how to properly dispose of grease and maintain grease receptacles
Litter	<ul style="list-style-type: none"> Residents report illegal dumping sites and activity Potential litterers understand the long-term effects of littering
General Awareness	<ul style="list-style-type: none"> Adults and youth are aware of how local stormwater runoff affects the larger watershed Property owners adopt home BMPs and land management practices that minimize pollution in runoff (including drainage ditch maintenance) Residents are able to identify and report illicit discharges



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Year 1 Highlight

Storm Drain Art at eSTEAM

In October of 2019, Sumter, SC hosted its 2nd annual eSTEAM festival, aimed at educating residents and youth about science, technology, engineering, arts, and math. As a way to combine art and science education, Clemson Extension Agent Katie Altman and volunteer Molly Jones painted temporary murals at several storm drains throughout the festival area with messages about stormwater pollution and simple depictions of local wildlife. Temporary “chalk” paint was mixed using corn starch, food coloring, and water. The paintings stretched across the street and were highly visible to festival attendees. Several attendees participated in a scavenger hunt, to find messages within the storm drain art, for a chance to win prizes. Prizes included reusable shopping bags, travel cutlery sets, sponges with stormwater education messages, and pet-waste bag dispensers.

Over 6,000 people attended the festival and many stopped to view the storm drain murals. Over 200 individuals participated in the storm drain scavenger hunt and 49 people completed all of the questions. In a follow-up survey, 94% of those that completed the scavenger hunt indicated that they learned new information from the activity and 78% said they intended to change their behavior based on what they learned.



TOP LEFT: MOLLY JONES PAINTS A STORM DRAIN MURAL, TOP RIGHT: PARTICIPANTS RECIEVE SCAVENGER HUNT, TOP MIDDLE AND BOTTOM: STORM DRAIN MURALS DISPLAYED DURING ESTEAM



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Year 1 Highlight

Rain Barrel Art Contest

The 2019 Rain Barrel Art Contest was hosted by Sumter Stormwater Solutions, the City of Sumter, and Sumter County. The South Atlantic Canners donated 55 gallon drums. Hardware was added to the barrels such as hose bibs and overflow hoses, transforming them into rain barrels. These barrels were then distributed to schools in Sumter County. Students used their imagination and some paint to turn each barrel into a unique work of yard art.

The painted barrels made their debut at the City of Sumter Earth Day Celebration. Five K-12 art and science classes participated in the event. Hundreds of Earth Day attendees voted for their favorite rain barrel and the winning classes recieved a pizza party.



ABOVE: FIVE RAINBARRELS, PAINTED BY LOCAL SCHOOLS, WERE DISPLAYED AT SUMTER'S EARTH DAY CELEBRATION
RIGHT: A RAINBARREL PAINTED BY EBENEZER MIDDLE SCHOOL





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Year 1 Highlight

Pet Waste Billboard

Carolina Clear's 2018-2019 billboard campaign focused on reducing bacteria from pet waste. The target audience for this campaign was dog owners who know why they should pick up dog poop but don't always remember to bring a bag. The billboard shows a photo modeling the desired behavior with the text "Be prepared. Always bring a bag!" Two billboards displayed this image along highway 378 in Sumter County. An estimated 54,000 motorists viewed these billboards.

BE PREPARED. ALWAYS BRING A BAG!

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ABOVE: 2018-2019
BILLBOARD DESIGN

LEFT: BILLBOARD
DISPLAYED ALONG
378 IN SUMTER
COUNTY



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Year 1 Highlight

4-H2O Summer Camp

Sumter County Clemson Extension Water Resources and 4H agents partnered with Central Carolina Technical College's Environmental and Natural Resources department to provide a hands-on, water-themed, science summer camp called 4H2O for 9-14 year olds. Participants learned about water quality concerns in Sumter County and how they can prevent stormwater pollution. They also learned about Sumter's native flora and fauna and how our actions impact habitat and water quality.



TOP LEFT: 4-H2O SUMMER CAMP PARTICIPANTS WATER THEIR TAKE-HOME CRAFT (PLANTERS MADE FROM REUSED SODA BOTTLES) AT THE COOL-OFF MIST STATION

TOP RIGHT: 4-H2O PARTICIPANTS LEARN ABOUT ALLIGATORS IN A HANDS-ON DEMONSTRATION

BOTTOM LEFT: STORM DRAIN MURAL DRAWN BY A CAMP PARTICIPANT



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Annual Report of Activities Format

This annual report details all stormwater education, outreach, involvement, and participation activities provided by Sumter Stormwater Solutions from January 2018 to December 2018. Activities are obtained from an online database managed by Carolina Clear that consortium partners contribute to throughout the year.

Activities are divided into two categories: public education and public involvement. Public education is further broken down into direct and indirect outreach methods. Direct methods include activities that are implemented through direct contact (workshops, presentations). Indirect activities include internet, television, radio, print, and billboard activities.

For each activity, the following information is provided: lead provider, supporting partners (if applicable), date conducted, and number of impacts.

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 ACSEC. 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.



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Public Education: Indirect

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Ongoing	Carolina Clear website	Clemson Extension	14,015
Ongoing	Clemson Extension Water Resources website	Clemson Extension	64,750
Ongoing	Stormwater Pond Management website	Clemson Extension	54,083
Ongoing	Carolina Yards website	Clemson Extension	24,563
Ongoing	Carolina Rain Garden Initiative website	Clemson Extension	3,935
Ongoing	Carolina Clear Youtube page	Clemson Extension	6,300
Ongoing	Carolina Clear Facebook page	Clemson Extension	53,694
Ongoing	Sumter Stormwater Solutions Facebook page	Clemson Extension	2,135
Ongoing	Water quality tips and segments on <i>Making It Grow</i> television show on ETV	Clemson Extension, SCETV	25,046
Winter 2019	<i>Television: The "Be a Scooper Hero" pet waste campaign encouraged dog walkers to always bring a bag on dog walks to dispose of pet waste.</i>	Clemson Extension	89,510



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Public Education: Indirect

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Ongoing	Billboard reading "Bring a bag. Always be prepared." and displaying a photo of someone correctly picking up pet waste. Two billboards were displayed on 378 in Sumter.	Clemson Extension	54,000
Jan-July 2019	Keeping Sumter Beautiful column written for the Sumter Item newspaper	Clemson Extension, The Sumter Item	15,000
Ongoing	<i>Take Action E-News</i> (online newsletter)	Clemson Extension	40
Ongoing	Clemson Newstand: water-related articles	Clemson Extension	2,933
Ongoing	9 educational postcards/rack cards covering the following topics: rain gardens, litter prevention, stormwater pollution prevention, septic system maintenance, fats, oils, and grease (FOGs), pressure washing, rain barrels, freshwater shorescapes, and dog waste	Clemson Extension	50
Ongoing	Dog waste brochures: distributed to local pet stores, veterinarians, and animal shelters to encourage picking up after pets	Clemson Extension	100
Ongoing	Doggie bandanas: Distributed to veterinarians, pet stores, shelters, and to pet owners at tabling events, presentations, and local parks	Clemson Extension	20
Ongoing	Dog bag dispenser: Distributed to veterinarians, pet stores, shelters, and to pet owners at tabling events, and presentations	Clemson Extension	150
Ongoing	SSS reusable water bottles: Distributed at events and programs	Clemson Extension	100



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Public Education: Indirect

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Ongoing	FOG (Fats, Oils, and Grease) educational doorhanger	Clemson Extension, City of Sumter	30
Ongoing	Rain garden at Patriot Park with interpretive sign	Sumter County, Clemson Extension	100,000
Ongoing	Rain barrel at Natural Resources Management Center with interpretive sign	Central Carolina Technical College, Clemson Extension	120
Ongoing	Dog waste stations: 4 located at Patriot Park, 4 located at Dillon Park	Sumter County	2,000
Ongoing	Dog waste stations: 5 at Palmetto Park	City of Sumter	500
2/15/19	Clemson Extension display with rain barrel and rain garden information at Wateree Headstarts's Have-A-Heart fair	Clemson Extension	200
4/13/19	Rain Barrel Art display at Sumter's Earth Day celebration	Clemson Extension	500
4/23/19	Earth Day stormwater display at Caterpillar plant	Clemson Extension	50
9/23-27/19	Rain Barrel Display at Master Gardener booth during Sumter County Fair	Master Gardeners, Clemson Extension	2,000
11/16/19	Litter and waste reduction display at Central Carolina Technical College Community day	Clemson Extension, CCTC	50



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Public Education: Indirect

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
10/5/19	Temporary Stormdrain Murals and Sumter County Stormwater table at Sumter's eSTEAM festival	Clemson Extension, Sumter County, City of Sumter	6,000
Monthly	Yard Talks: Lunch and learn series, presented in person and streamed on Facebook live, featuring short educational presentations on horticulture and water-related issues (rain gardens, rainwater harvesting, pervious pavement, stormwater reduction)	Clemson Extension, City of Sumter	306 online



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Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Ongoing	In-Person, Phone, Email: Clemson Extension Agents and Master Gardeners answered questions relating to a variety of home landscaping issues that impact water quality; topics including compost, mulch, fertilizers, native plants, irrigation, etc.	Clemson Extension	Unknown
Ongoing	In-Person, Phone, Email: Clemson Extension Agents answered questions and provided services to a variety of Sumter County audiences regarding water resources and stormwater-related best management practices	Clemson Extension	200
Ongoing	Soil Samples: Clemson Extension, in cooperation with Clemson's Agricultural Service Lab, processed soil samples for Sumter County residents and commercial audiences	Clemson Extension	900
Spring 2019	Sumter Master Gardener Training- new certified Master Gardeners	Clemson Extension	11
Ongoing	<i>Carolina Yards Online Guide to Environmentally Friendly Gardening</i> *Statewide	Clemson Extension	40
May-June 2019	CSPR (Certified Stormwater Plan Reviewer) *Statewide	Clemson Extension	66 (46 re-cert.)
Ongoing	CEPSCI: Clemson provides training and certification for the Certified Erosion Prevention and Sediment Control Inspector (CEPSCI) program to assist in pollution prevention control on construction projects. *Statewide	Clemson Extension	1,775
Ongoing	Master Pond Manager hybrid course *Statewide	Clemson Extension	64
Ongoing	Post Construction BMP Inspector *Statewide	Clemson Extension	84 (37 re-cert.)



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Public Education: Direct

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Ongoing	Master Rain Gardener *Statewide	Clemson Extension	43
3/14/19	Rain garden presentation for the Tuesday Morning Book Club	Clemson Extension	30
4/8/19	Carolina Yards presentation for the Sumter Master Gardener class	Clemson Extension	11
4/12/19	Stormwater and aquatic macroinvertebrate presentation for Earth Fest at Cherryvale Elementary	Clemson Extension	80
7/8-10/19	4-H2O summer camp	Clemson Extension, Central Carolina Technical College	10 youth, 2 volunteers
9/12/19	Midlands area pond workshop, "Maintaining an Healthy Pond" (Richland, Sumter, and Lexington counties)	Clemson Extension	27
10/5/19	Storm drain art scavenger hunt at eSTEAM festival	Clemson Extension	49
10/24/19	Stormwater presentation at Ebenezer Middle School's career day	Clemson Extension	60
Monthly	Yard Talks: Lunch and learn series, presented in person and streamed on Facebook live, featuring short educational presentations on horticulture and water-related issues (rain gardens, rainwater harvesting, pervious pavement, stormwater reduction)	Clemson Extension, City of Sumter	32 in person



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Public Involvement

DATE	ACTIVITY DESCRIPTION	PARTNERS	NUMBER OF IMPACTS
Feb-April 2019	Rain Barrel Art contest: K-12 students decorate rain barrels to be displayed at Sumter's Earth Day celebration	Clemson Extension, Sumter County Schools	5 classes, 50 student volunteers
5/31/19	Litter cleanup: Central Carolina Technical College highway cleanup	CCTC, Clemson Extension	25 volunteers, 33 bags picked up
9/13/19	Litter cleanup: Central Carolina Technical College highway cleanup	CCTC, Clemson Extension	17 volunteers, 13 bags picked up
12/7/19	Litter cleanup: Sumter Highschool Dillon Park cleanup	Sumter Highschool, Clemson Extension	18 volunteers, 10 bags picked-up
Ongoing	Litter cleanup: Hastie Law Firm cleanups	Hastie Law firm, Clemson Extension	50 bags picked up

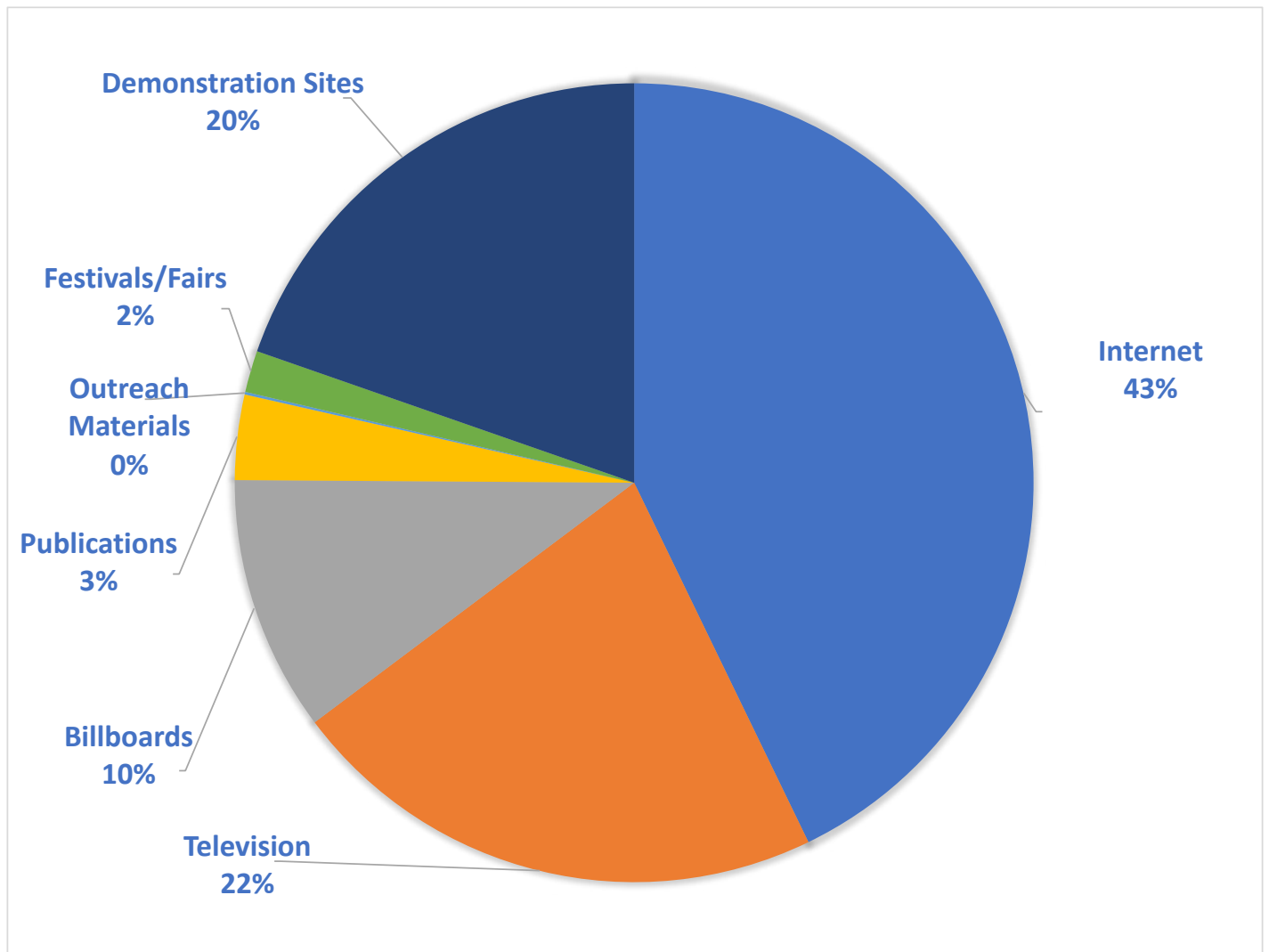


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Outreach Summary

Total impacts for the Year 1 reporting year (2019): 525,770 individuals.

**INDIRECT METHODS SUMMARY,
TOTAL ESTIMATED IMPACTS: 522,176**

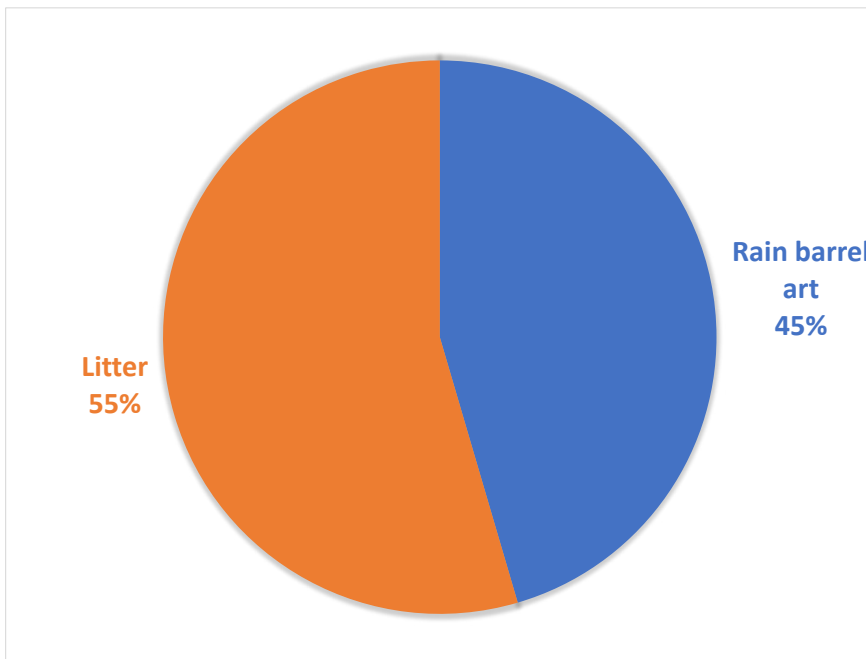
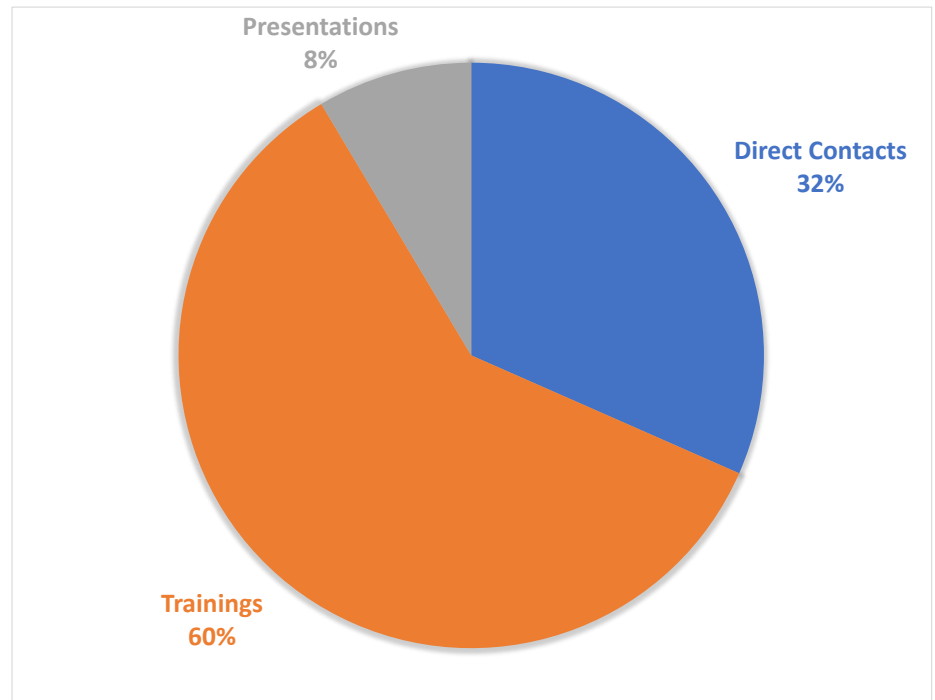




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Outreach Summary

**DIRECT METHODS SUMMARY,
TOTAL ESTIMATED IMPACTS: 3,484**



**PUBLIC INVOLVEMENT SUMMARY,
TOTAL ESTIMATED IMPACTS: 110**



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