



SC DEPARTMENT *of*
**ENVIRONMENTAL
SERVICES**

SC Adopt-a-Stream

Volunteer Water Quality Monitoring

Lexi Thomason Toole
SC Adopt-a-Stream Program Coordinator

ADOPT a STREAM



SC DEPARTMENT of
**ENVIRONMENTAL
SERVICES**

CLEMSON



**+ OTHER PARTNERS
STATEWIDE**



Program Overview

- **Mission:** South Carolina Adopt-a-Stream empowers community members to protect and improve water quality through education and certified volunteer monitoring.
- **Vision:** South Carolina is known for healthy watersheds because of a collaborative statewide network of volunteers.



Program Goals



Foster environmental stewards by educating communities about their watersheds.

Education

Certification



Certify volunteers to collect long-term water quality data accessible for public use.



Enable communities to address watershed needs through local partnership and collaboration.

Collaboration

Cultivation



Secure support and resources to ensure sustainable program growth.

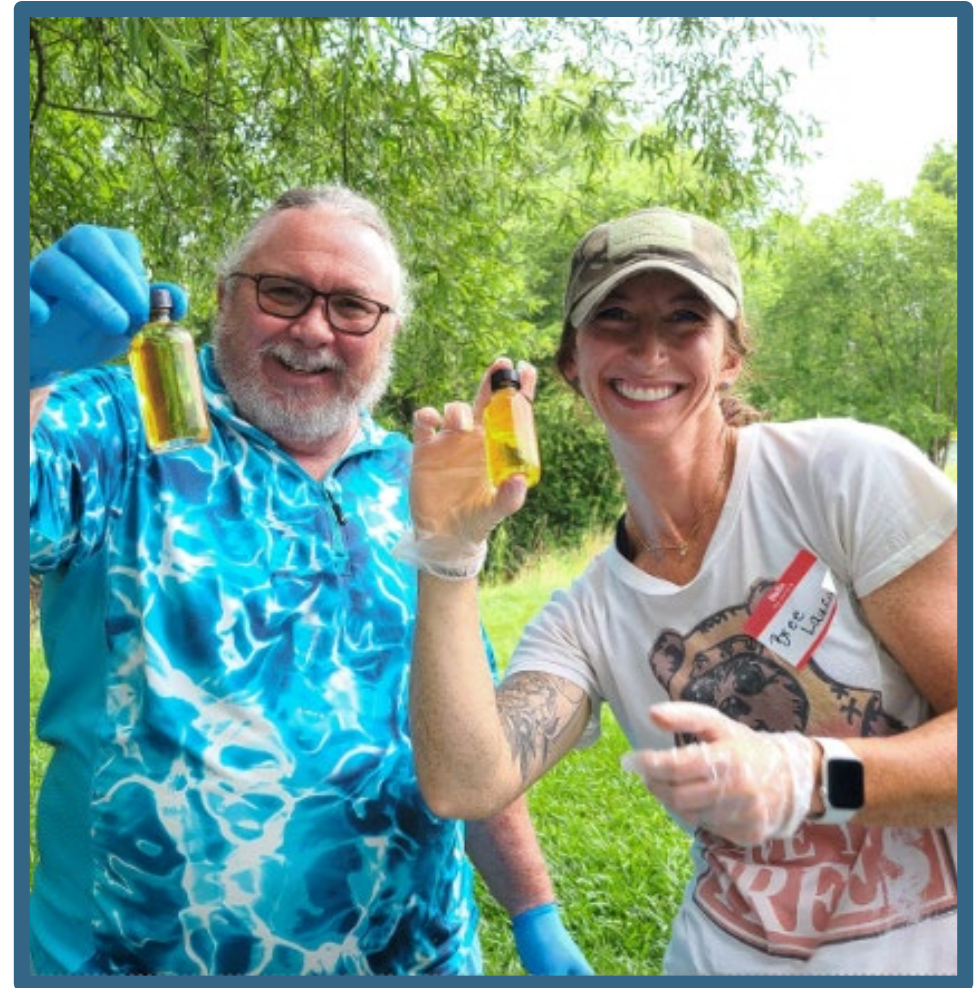
Who?

- Everyone!
- Free workshops
- No experience required



Participants

- Wide audience
- Educational for everyone
- Multiple learning styles
 - Classroom and outdoor learning



What?

- Workshop types:
 - Freshwater Stream
 - Tidal Saltwater
 - Macroinvertebrate
 - Lake
- Fully in-person, hybrid and online



When?

Workshops

- Year-round
- On demand: Contact us!

Sampling

- **Monthly:**
FW, SW, Lakes
- **Biannually:**
Macroinvertebrates



Workshop Types

Freshwater Stream

- Habitat assessment
- Air and water temperature
- Transparency
- pH
- Dissolved oxygen
- Bacteria: *E. coli*



Workshop Types

Tidal Saltwater

- Habitat assessment
- Air and water temperature
- Transparency
- pH
- Dissolved oxygen
- Salinity



Workshop Types

Macroinvertebrate

- Collect for 1 hour
- Identify 20 target groups
- Calculate Water Quality Index Score



Workshop Types

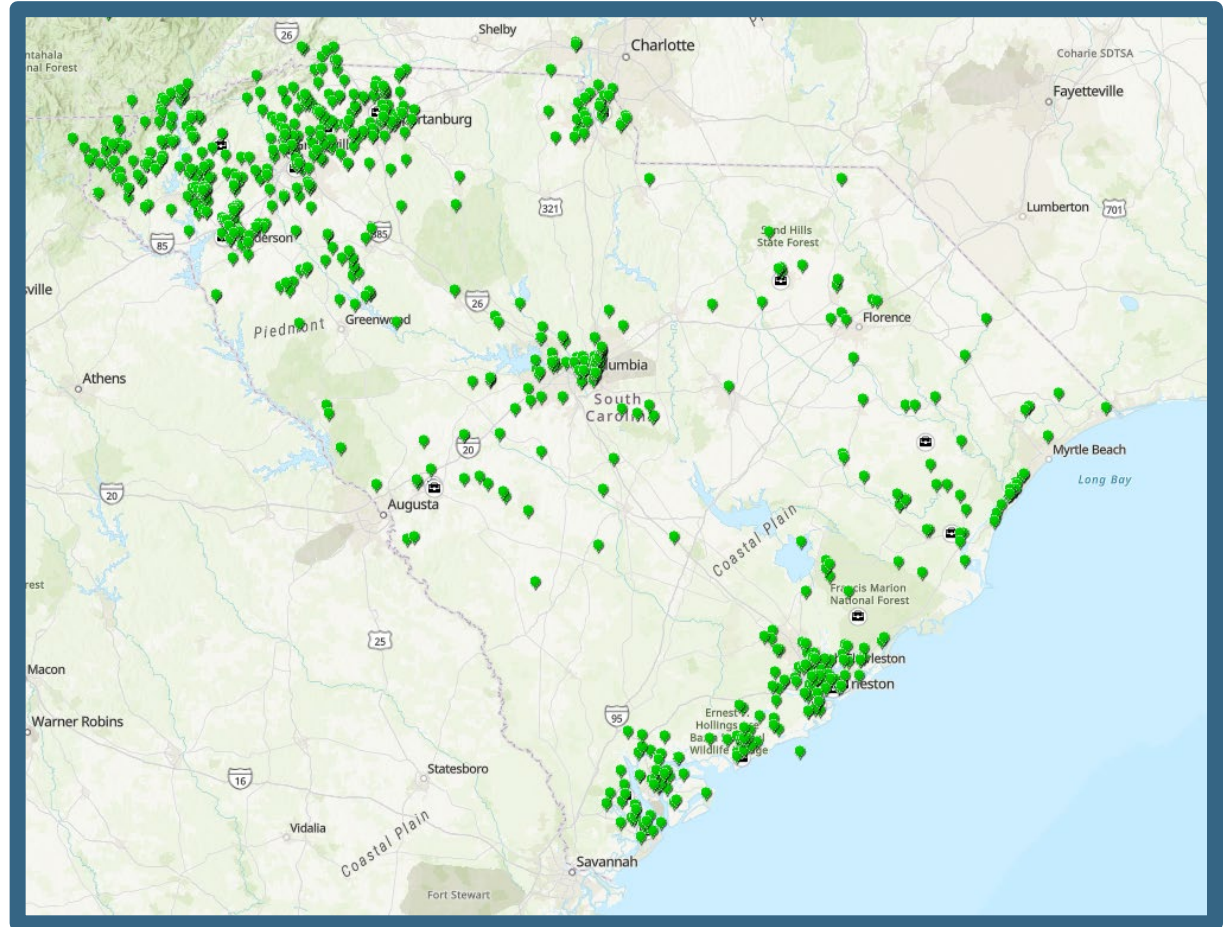
Lake

- Online training
- Air and water temperature
- Transparency
- Water hue
- Aquatic plants



Where?

- Streams, lakes and tidal salt waters
- Statewide
- Volunteer site selection



Site Requirements

- Safe
- Accessible
- Public or private sites
 - Landowner permission required



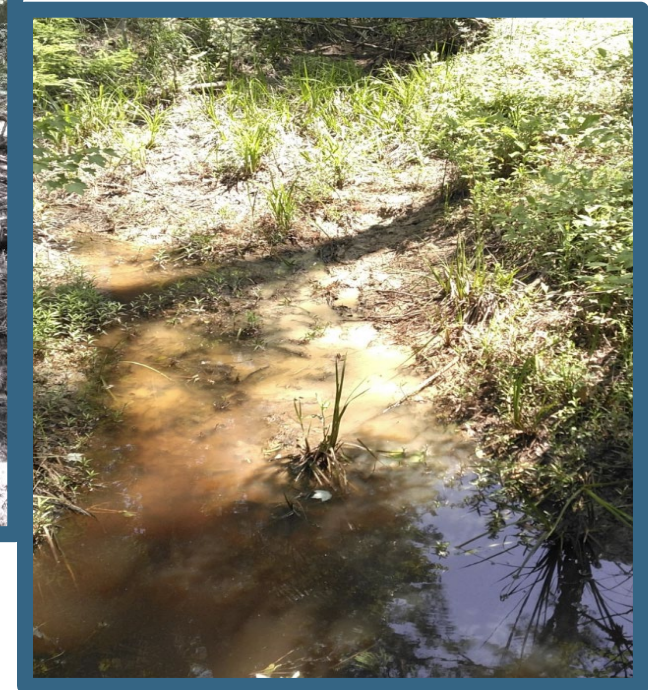
Site Requirements

Freshwater & Macroinvertebrate

- Wrist-deep to hip-deep
- Year-round flow
- Well-mixed and flowing water



Not flowing year-round



Too shallow

Site Requirements

Tidal Saltwater

- Dock, pier, landing, bank, boat
- Salinity > 0.5 ppt

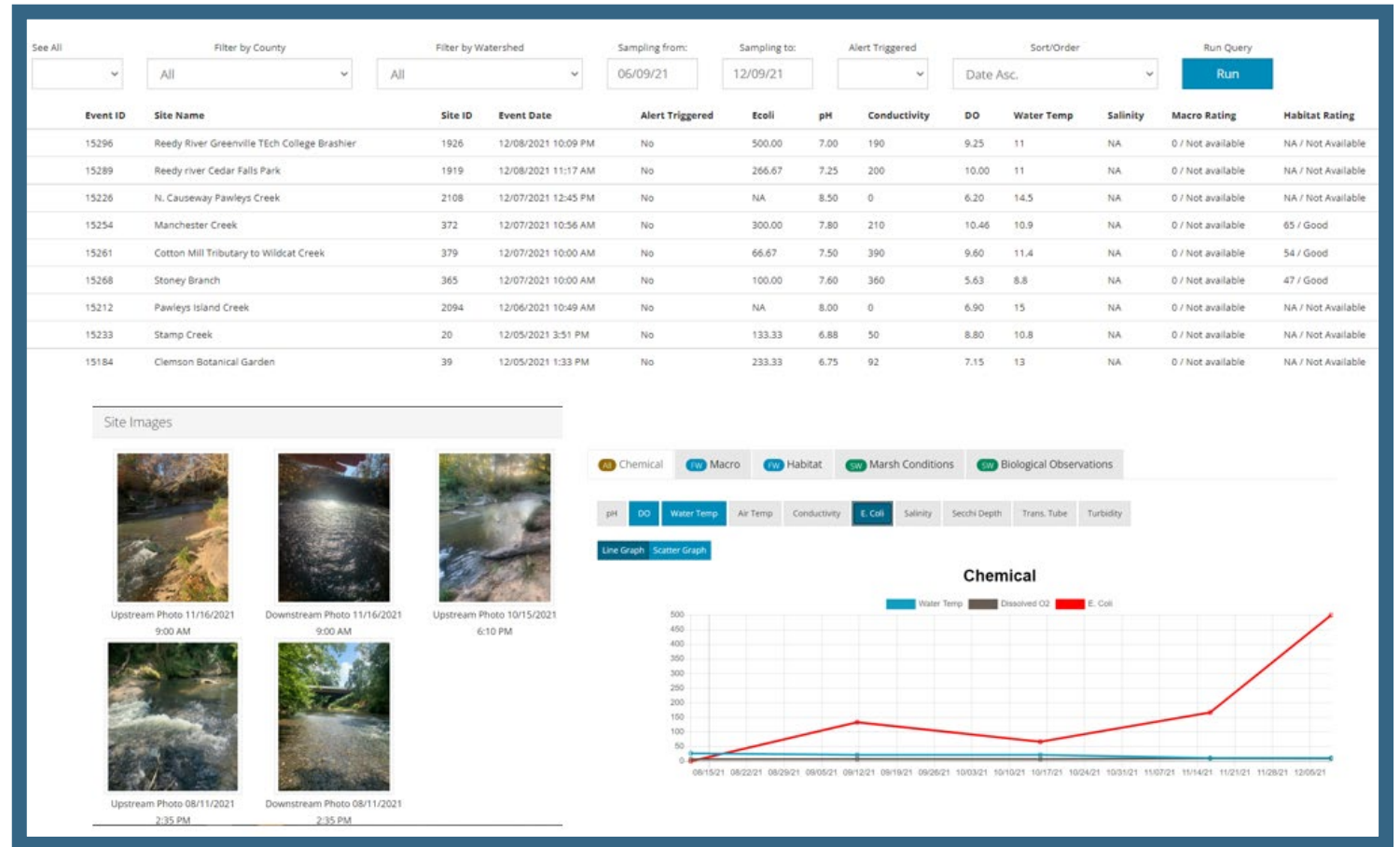
Lake

- Larger than 5 acres
- Not a stormwater/engineered pond
- Deep enough to use a Secchi disk



Why?

- Valuable, high-quality data
- Non-regulatory
- Education, establishing baseline conditions and screening for issues



Quality Assurance Project Plan (QAPP)

- Pass certification test
- Recertify annually
- Follow protocol
- Only certified volunteers enter data



Impact

- **2,200+** Certified Volunteers
- **730+** Sampling Sites
- **9,000+** Sampling Events
- **16,000+** Volunteer Hours



Impact

- Education
- Data trends
- Water quality alerts
- Community building



Success Stories

- Pump station overflow
- Broken sewer pipe identification
- Failed construction BMP
- Improved agriculture BMP
- Community outreach through data sharing
- Litter clean-ups



Get Involved!

- Become a volunteer
- Become a trainer
- Suggest kit loan locations
- Suggest funding opportunities
- Share about SC AAS
- Use SC AAS Database and Atlas



Website Resources

- SC AAS Database
- SC AAS Atlas
- Handbooks
- Data forms
- Protocol videos



www.scadoptastream.org

Friends of SC Adopt-a-Stream

- Managed by EEASC
- Donor platform supporting kits, chemical refills, workshops, program supplies
- www.eeasc.org/scaas



**BECOME A
FRIEND OF
SOUTH CAROLINA
ADOPT-A-STREAM!**

Stay Connected

- **Facebook:**
facebook.com/scadoptastream
- **Instagram:**
[@scadoptastream](https://instagram.com/scadoptastream)
- **Website:**
www.scadoptastream.org
- **Monthly e-newsletter**





SC DEPARTMENT *of*
**ENVIRONMENTAL
SERVICES**

Get in touch

Lexi Thomason Toole // SC Adopt-a-Stream Program Coordinator

Alexandra.Thomason@des.sc.gov

scaas@des.sc.gov

des.sc.gov



South Carolina Department of
Environmental Services



@SouthCarolinaDES



@SouthCarolinaDES



South Carolina Department of
Environmental Services



@SC_EnvServices