Georgia Adopt-A-Stream



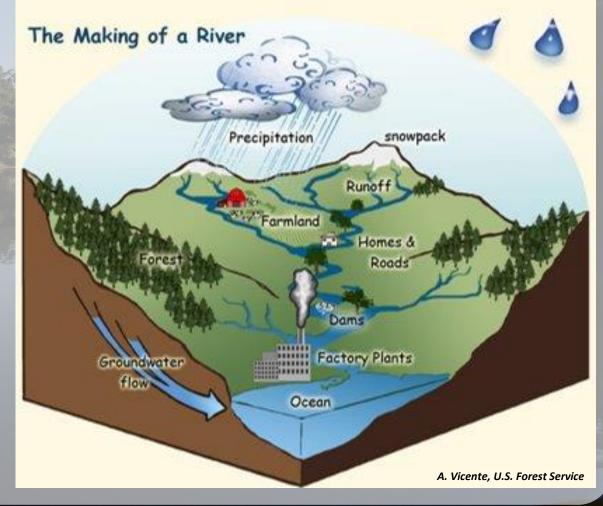
Introduction



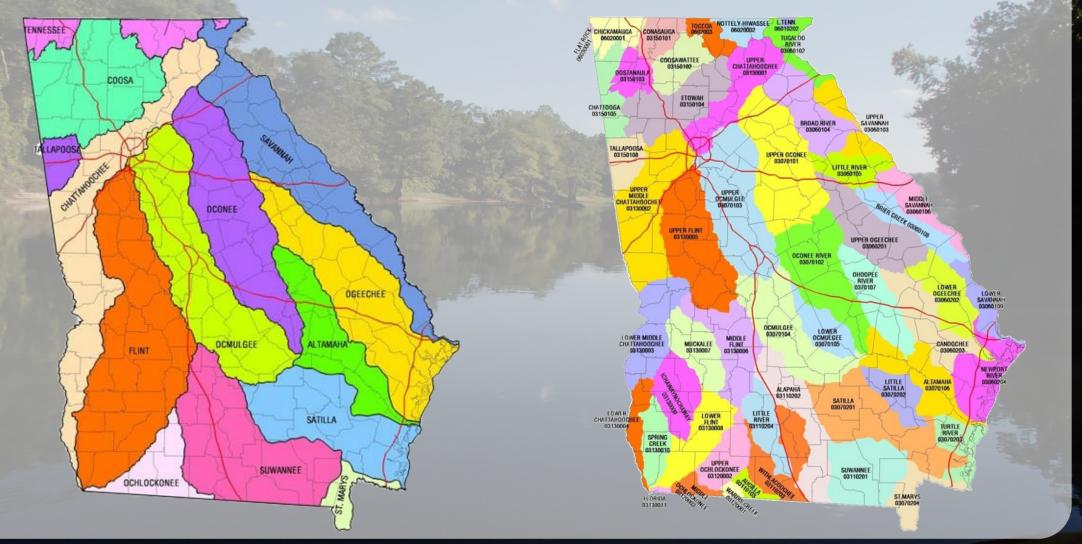
ENVIRONMENTAL PROTECTION DIVISION

What is a Watershed?

- A land area from which water, sediment, and dissolved materials drain to a common point along a stream, wetland, lake, or river.
- Its boundaries are defined by the highest points of land around the waterbody.



Where is Your Watershed?



Point vs. Nonpoint Source Pollution

Point Source

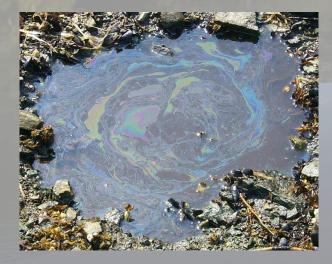
- Easily identifiable pollutant source
- Regulated by GA EPD through the NPDES permitting process



Point vs. Nonpoint Source Pollution

Nonpoint Source

- Sources that are not easily distinguishable or identifiable
- Everyone contributes
- The main cause of water quality problems in GA







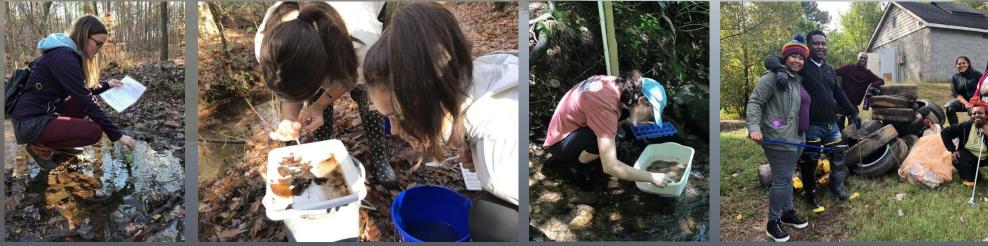
Why Monitor Water Quality?

- Our quality of life is directly related to the quality of the rivers, streams and wetlands around us.
- Regular monitoring provides baseline information about the health of our local streams and other water bodies.
- All the water we have now is all the water we'll ever have!



What is Georgia Adopt-A-Stream?



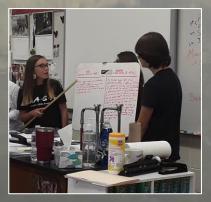


Georgia Adopt-A-Stream

A citizen science water quality monitoring program encouraging all Georgians to get familiar with their watersheds, monitor impacts, improve streams, rivers, wetlands, lakes, and estuaries, and inform others about their effect on water quality.



Awareness



Increase public <u>awareness</u> of nonpoint source pollution & water quality issues



Data

Collect baseline water quality <u>data</u> according to Adopt-A-Stream protocols



Take <u>observations</u> of sites to note water quality conditions

Seek **partnerships** with local gov'ts, nonprofits, & other organizations to share results & resources

Partnerships

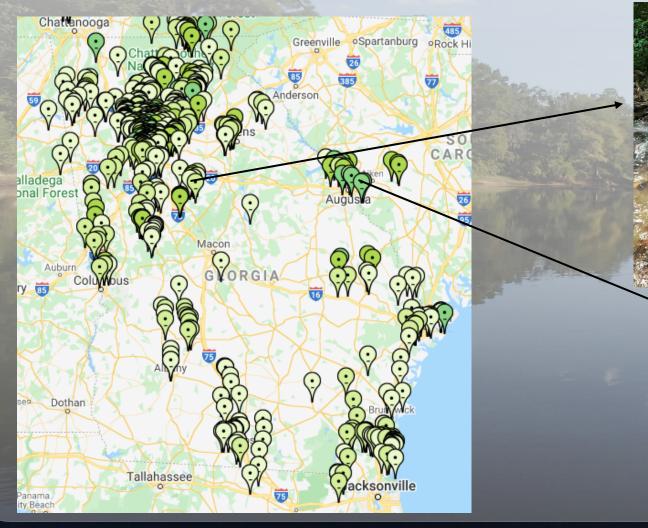


Tools & Training



Utilize <u>tools & training</u> provided by staff & local coordinators

Volunteer Network and Support





Volunteer Network and Support



Volunteers 3,000 +

Getting Started with AAS

I. Determine Your Goals 2. Attend a Monitoring Workshop 3. Form a Group and Select a Site 4. Obtain Equipment 5. Start Monitoring!

Determine Your Goals

- Questions to consider:
 - Why do I want to monitor?
 - What site might I like to adopt?
 - What type of data do I want to collect?
 - Who might be interested in my data?
- Can be driven by group, site, community, etc.
- Goals may shift over time, but can help focus monitoring efforts and maintain participation



Attend a Monitoring Workshop

QA/QC workshops

- Quality Assurance/Quality Control
- Procedure based data collection
- More frequent monitoring
- Non-QA/QC workshops
 - Observational data collection
 - Less frequent monitoring
- Allows you to create an AAS account



QA/QC Monitoring Programs

Macroinvertebrate

- Test for stream macroinvertebrate diversity
- Survey quarterly or once every season

Chemical

- Test for basic parameters: dissolved oxygen, temperature, pH, & conductivity
- Survey monthly

Bacterial

- Test for *E. coli* bacteria, which can indicate the presence of pathogens
- Survey monthly



Quality Assurance Project Plan

Certification

- QA/QC and Trainer workshops
- Annual recertifications
- Consistent monitoring schedule and set protocol
- Database
 - Only certified volunteers can enter and edit data
 - Errors and warnings



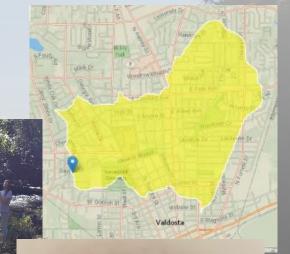
Non-QA/QC Monitoring Programs

Watershed Survey

- Map your watershed and conduct survey of the land uses around your waterbody
- Survey annually

Visual Stream Monitoring

- Visual and physical evaluation of stream conditions
- Survey quarterly or once every season
 Amphibian Monitoring
- Passively monitor for frogs and salamanders
- Survey quarterly or once every season



Form a Group and Select a Site

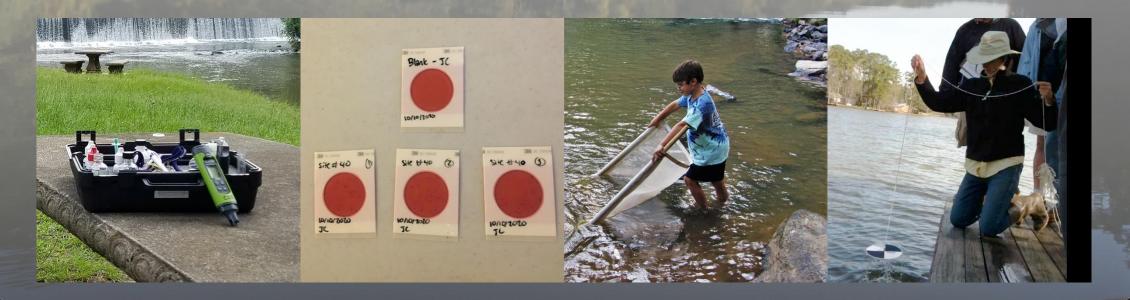
• Form a Group

- Must register a group to register site and enter data
- Can be an individual, but recommend at least 2 people
- Community groups, classes, families, etc.
- Select a Site
 - AAS does not assign sites
 - Ask local coordinators for suggestions
 - Easy, safe, and legal to access!



Obtain Equipment

- Purchasing info on AAS website
- Reach out to local coordinator for loan
- Contact state office



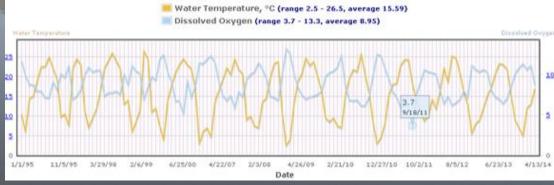
Start Monitoring!

- Set up monitoring schedule
- Consistently monitor one or more sites
- Submit and review data
- Follow up on problems



How are your data used?

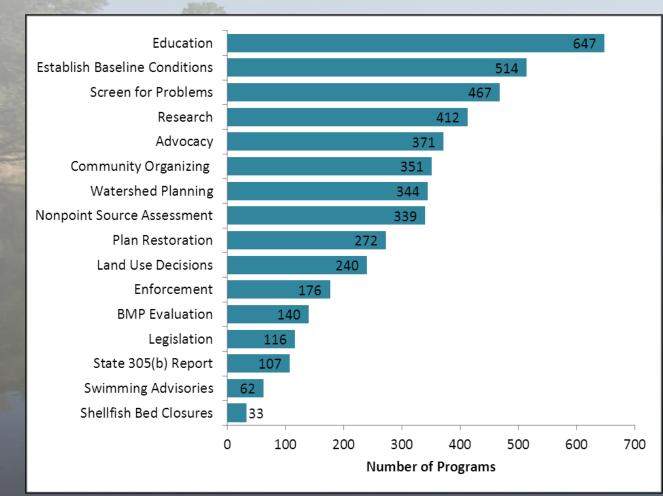
- Establish baseline conditions for waterbodies across the state
- Discover and report water quality issues
- Educate your community
- Help inform status of streams for 303d/305b list







Volunteer Monitoring Data Uses





More Ways to Get Involved

Confluence

- Annual volunteer conference
- Expert talks and workshops
- Networking and social events

• Awards

- Volunteers
- Trainers
- Watershed groups
- Quarterly E-Newsletter
- Green Infrastructure
 - Stream restoration
 - Rain gardens and barrels





January-March 2021 Newsletter

IN THIS ISSUE:

The Georgia Green Landscape Stewards Program
 Confluence 2021 Recap
 Farewell to Jenna Dodson, State Coordinator
 Program Updates
 Riffles Around Us

The Georgia Green Landscape Stewards

Jessica Warren, Camden County Extension Coordinato

The Georgia Green Landscape Stewards program, created by the University of Georgia Extension, provides educational resources that teach Georgians about protecting natural resources, increasing plant and animal biodiversity, conserving sould and water, providing wildlife and polinator habitat, and improving public and environmental health. After learning about sostainable land management practices, participants can measure their own activities with the program metric scorecard and earn Georgia Georgia Centralization status for their landscape.

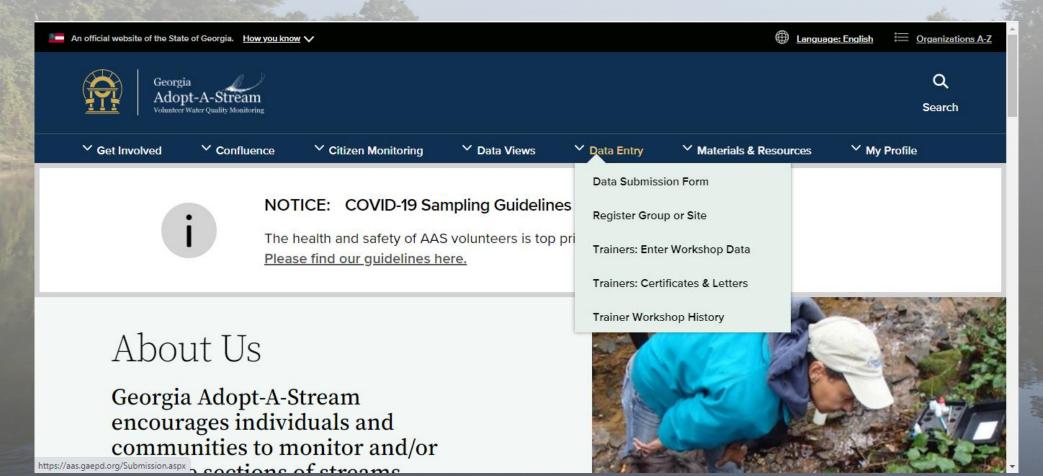


AAS Website - Get Involved

An official website of the State of Georgia. How you kr	<u>ow</u> V				ge: English 🗮 Organizations A-Z
Georgia Adopt-A-Stream Volunteer Water Quality Monitoring					Q Search
Get Involved Confluence	✓ Citizen Monitoring	✓ Data Views	Ƴ Data Entry	✓ Materials & Resources	✓ My Profile
Get Started with Adopt-A- Stream Find your local AAS Coordinator Workshop Calendar Workshop Descriptions	Adopt-A-Stream Newsletters Science & News Stream Stewardship Meet the AAS Team	g Guidelin nteers is top			
ADOUT US Georgia Adopt-A- encourages indiv communities to r	iduals and				

https://adoptastream.georgia.gov/how-do-i-get-started-adopt-stream

AAS Website - Data Entry



AAS Website - Materials & Resources

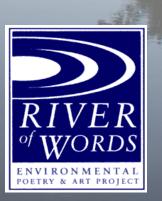
An official website of the State of Georgia. How you know 🗸 🗮 Organizations A-Z							
Georgia Adopt-A-Š Volunteer Water Qualit					Q Search		
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i	NOTICE: COVID-19 The health and safety of <u>Please find our guidelin</u>	Data Forms AAS Manuals Workshop Presentations Monitoring Resources	Trainer Resources Educator Resource Outreach Resource Additional Resource	25			
About Us Georgia Adopt-A-Stream		Equipment Purchasing Information	COVID-19 Guidelin	es			
encourages communiti	s individuals and ies to monitor and/o otions of streams	or					

Other EPD Outreach Programs

- **Rivers Alive-** Georgia's statewide annual volunteer waterway cleanup program
- **Project WET** (Water Education Today)-Curriculum designed for formal and nonformal educators of K-12 students to promote stewardship of water resources
- River of Words- Annual youth poetry and art contest that inspires children to translate observations of their watersheds into creative expression



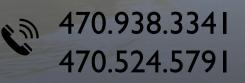




Follow AAS and Stay Connected!

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