

Georgia Adopt-A-Stream Introduction



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.



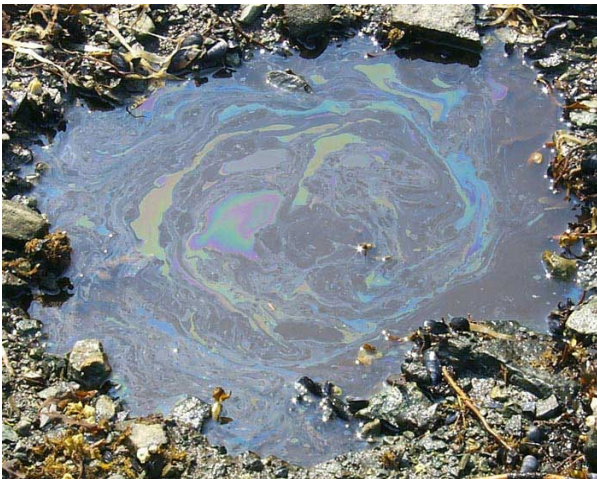
Point vs. Nonpoint Source Pollution

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



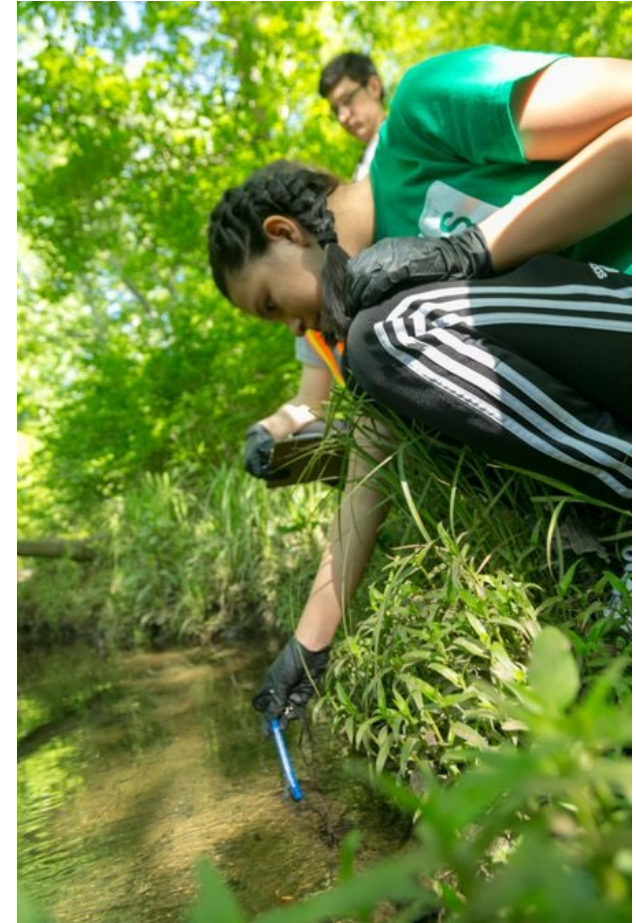
Point vs. Nonpoint Source Pollution

- **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?



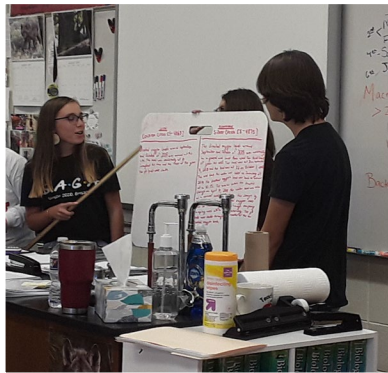
Georgia Adopt-A-Stream

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.



A

Awareness



Increase public **awareness** of nonpoint source pollution & water quality issues

D

Data



Collect baseline water quality **data** according to Adopt-A-Stream protocols

O

Observations



Take **observations** of sites to note water quality conditions

P

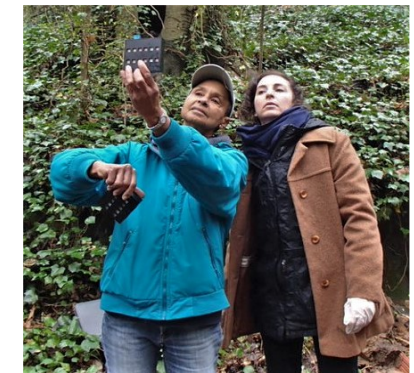
Partnerships



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

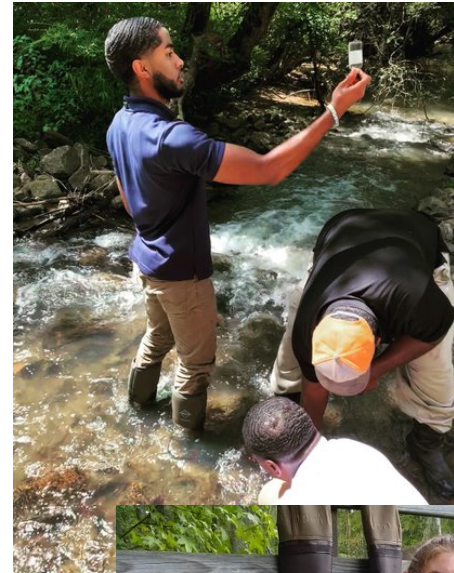
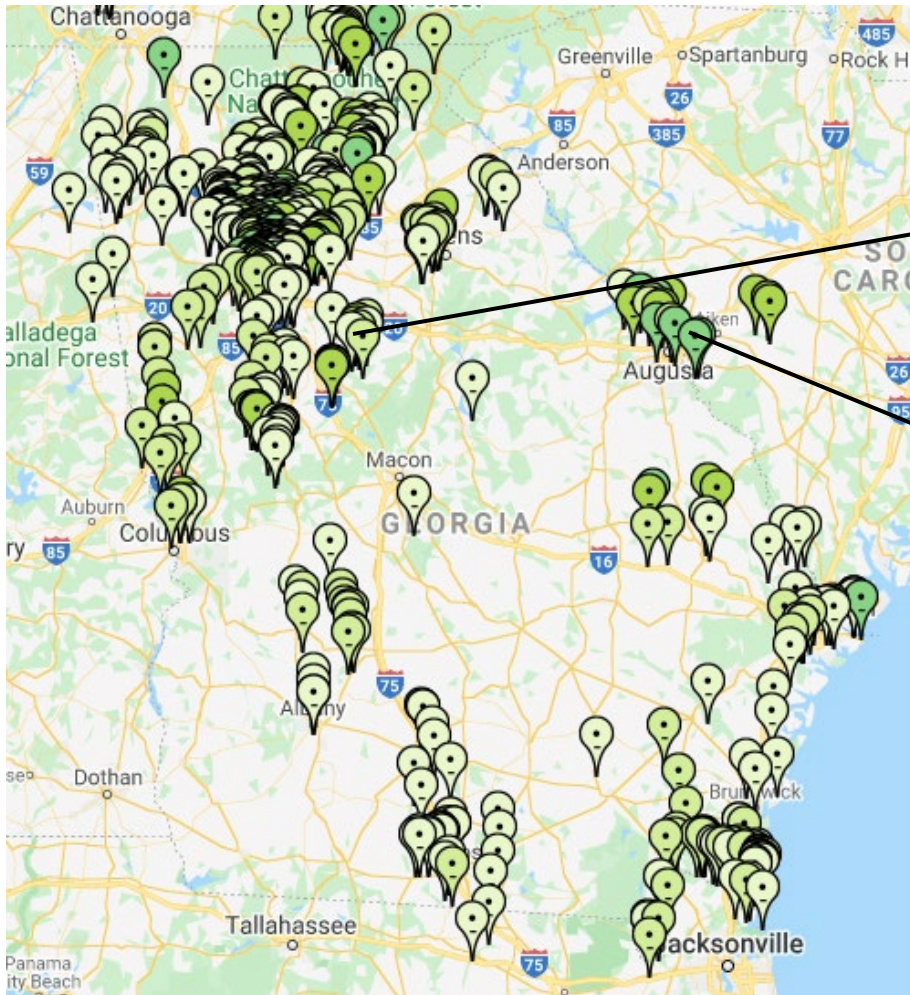
T

Tools & Training



Utilize **tools & training** provided by staff & local coordinators

Volunteer Network and Support



Volunteer Network and Support



Getting Started with AAS

1. 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

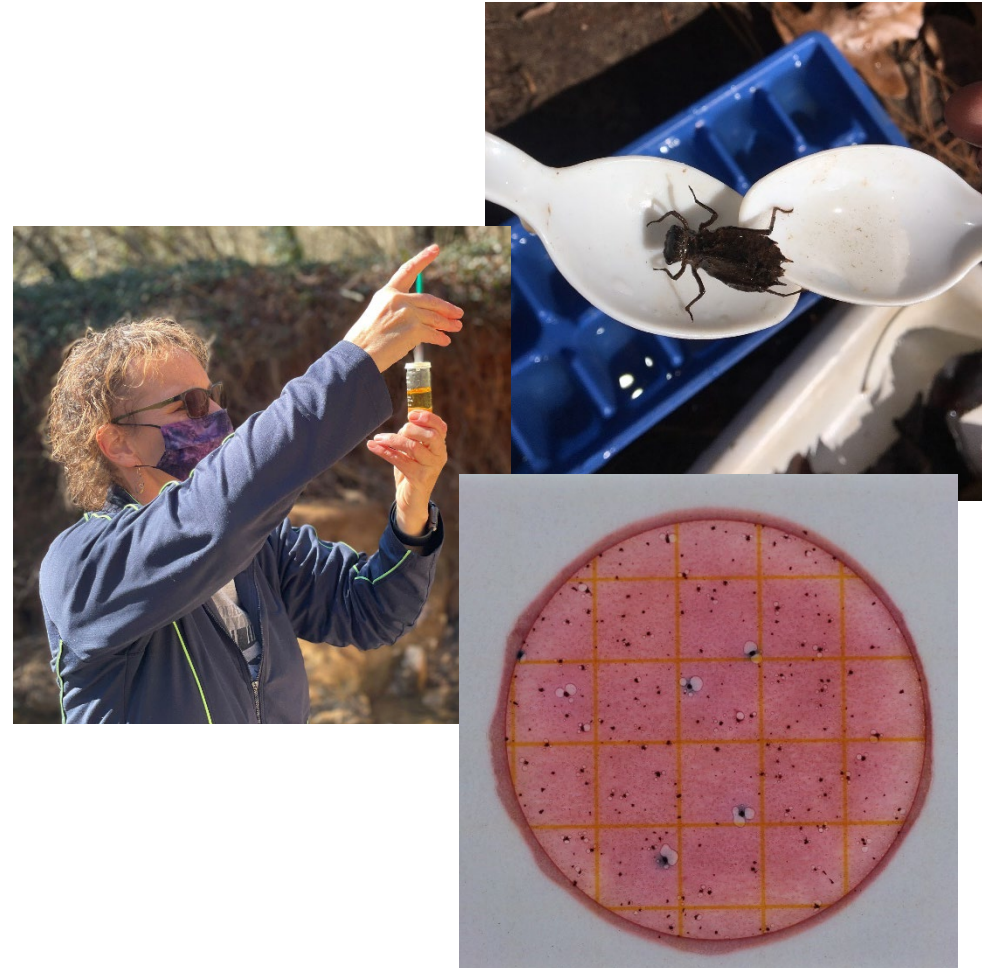
- Test for stream macroinvertebrate diversity
- Survey quarterly or once every season

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

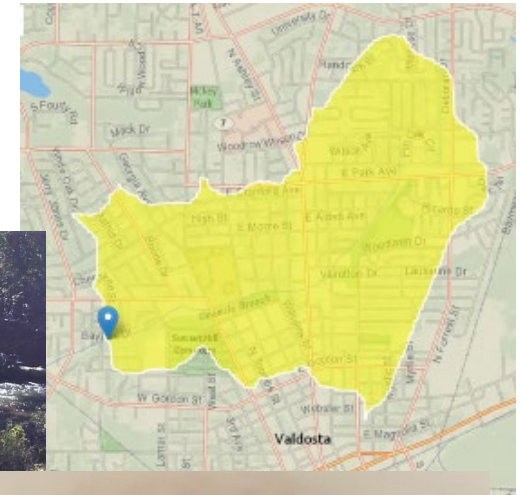
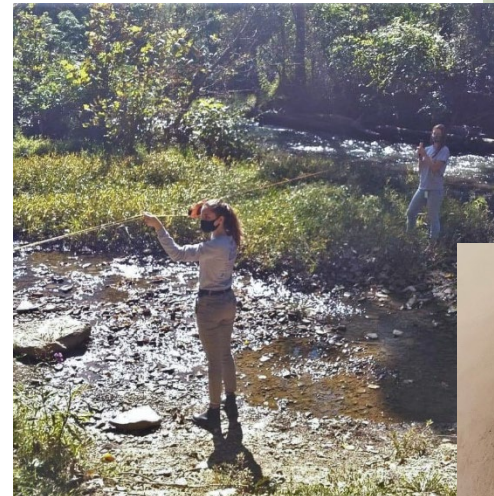
- Map your watershed and conduct survey of the land uses around your waterbody
- Survey annually

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



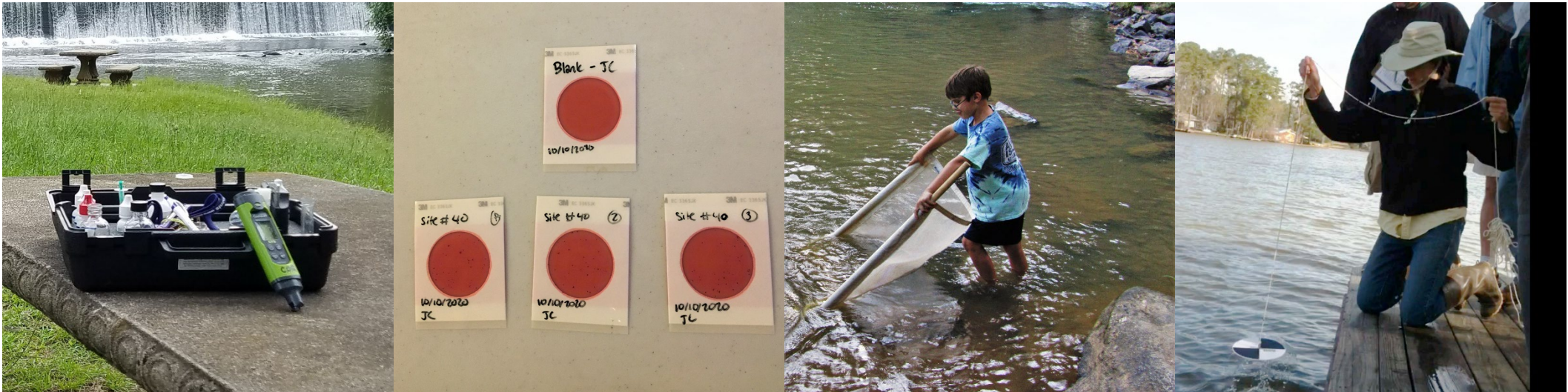
Form a Group and Select a Site

- 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



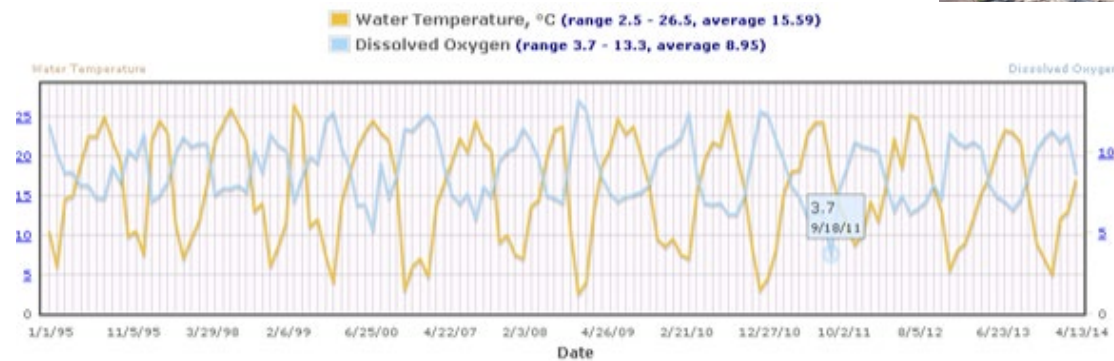
Start Monitoring!

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

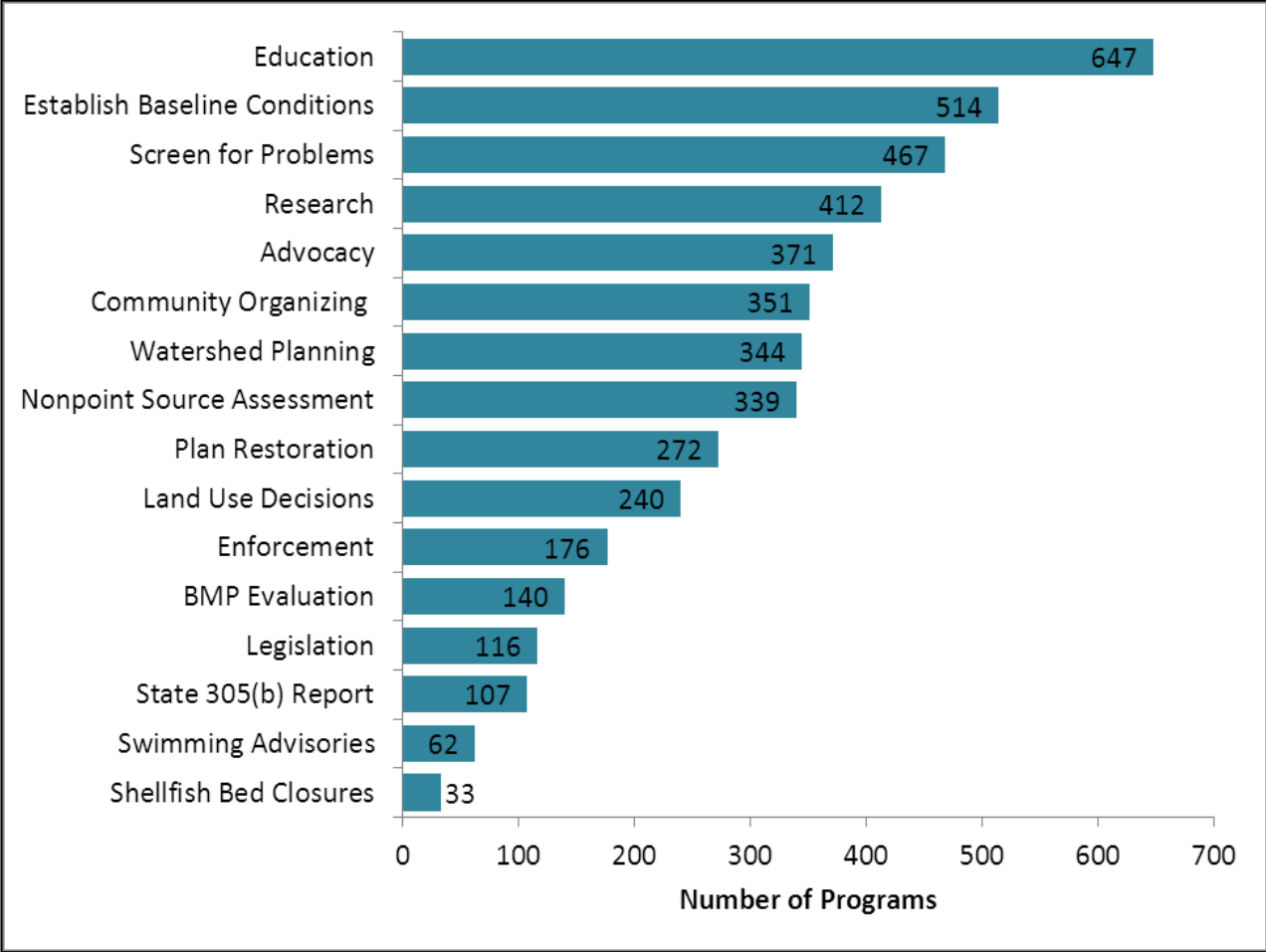


How are your data used?

- 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



AAS Website - Get Involved

An official website of the State of Georgia. [How you know](#) ▾

Language: English [Organizations A-Z](#)

 Georgia Adopt-A-Stream
Volunteer Water Quality Monitoring

Search


▾ **Get Involved** ▾ Confluence ▾ Citizen Monitoring ▾ Data Views ▾ 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
- Volunteer FAQs

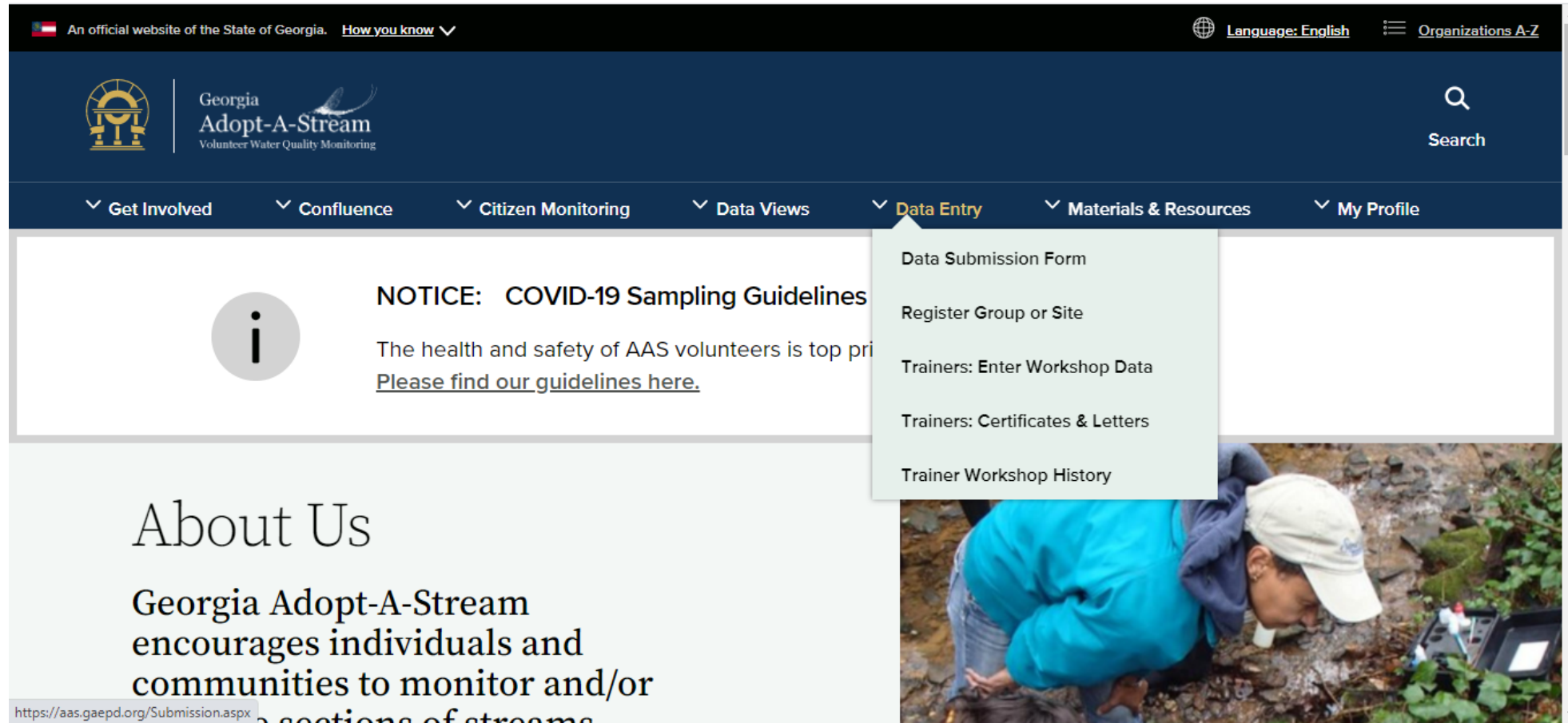
About Us

Georgia Adopt-A-Stream encourages individuals and communities to monitor and/or

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



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NOTICE: COVID-19 Sampling Guidelines
The health and safety of AAS volunteers is top priority. [Please find our guidelines here.](#)

About Us
Georgia Adopt-A-Stream encourages individuals and communities to monitor and/or

<https://aas.gaepd.org/Submission.aspx>

- Data Submission Form
- Register Group or Site
- Trainers: Enter Workshop Data
- Trainers: Certificates & Letters
- Trainer Workshop History



AAS Website - Materials & Resources

The screenshot shows the Georgia Adopt-A-Stream website. At the top, it identifies itself as an official website of the State of Georgia. The main navigation bar includes links for 'Get Involved', 'Confluence', 'Citizen Monitoring', 'Data Views', 'Data Entry', 'Materials & Resources', and 'My Profile'. The 'Materials & Resources' menu is expanded, displaying a list of resources: Data Forms, AAS Manuals, Workshop Presentations, Monitoring Resources, Equipment Purchasing Information, Trainer Resources, Educator Resources, Outreach Resources, Additional Resources, and COVID-19 Guidelines. A notice about COVID-19 is visible on the left, and an 'About Us' section is partially visible at the bottom left. A photograph of a person in a blue jacket and white cap working in a stream is shown on the right.

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<https://adoptastream.georgia.gov/data-forms-2>

Trainer Resources
Educator Resources
Outreach Resources
Additional Resources
COVID-19 Guidelines

Other EPD Outreach Programs

- **Rivers Alive-** Georgia's statewide annual volunteer waterway cleanup program
- **Project WET** (Water Education Today)- Curriculum designed for formal and non-formal 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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 AdoptAStream.Georgia.gov

 facebook.com/georgiaadoptastream

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