GEORGIA ADOPT-A-STREAM: FIELD DEMONSTRATIONS

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Abstract. Georgia is blessed with a diversity of natural resources. From the foothills of the Blue Ridge Mountains in the north, to the black water creeks in the south, to the estuarine habitats on the coast, Georgia's aquatic ecological diversity rivals that of any state. Georgia is also one of the fastest growing states in America and this growth comes at an environmental price. Now more than ever, citizens in the state of Georgia must accept responsibility to help protect and preserve our existing greenspaces while helping to remediate already impacted systems. Georgia Adopt-A-Concerned citizens interested in Stream can help. learning about, protecting and preserving their streams, lakes, and wetlands can make a difference by participating in Adopt-A-Stream activities. Specific field demonstrations include watershed wide monitoring events, amphibian, lake and coastal wetland monitoring, citizen-based activities targeting urban watersheds, conservation practices that home owners can implement, and resources for connecting with students (K-12).

INTRODUCTION

Georgia Adopt-A-Stream (AAS) is housed in the Education Outreach Unit of the NonPoint Source Program in the Water Protection Branch of the Georgia Environmental Protection Division. The program is funded by a Section 319(h) Grant. The goals of Georgia Adopt-A-Stream are to (1) increase public awareness of the State's nonpoint source pollution and water quality issues, (2) provide citizens with the tools and training to evaluate and protect their local waterways, (3) encourage partnerships between citizens and their local government, and (4) collect quality baseline water quality data.

To accomplish these goals, Georgia Adopt-A-Stream encourages individuals and communities to monitor and/or improve sections of streams, wetlands, lakes or estuaries. Manuals, training, and technical support are provided through Georgia EPD, Adopt-A-Stream Regional Training Centers and more than 50 established Community/Watershed Adopt-A-Stream organizers. These centers play a key role in providing training,

technical support and organizational support to citizens throughout Georgia.

There are more than 50 Community/Watershed Programs that organize Adopt-A-Stream groups in their watershed, county or city. These local Adopt-A-Stream programs are funded by counties, cities and nonprofit organizations and use the Georgia Adopt-A-Stream model, manuals and workshops to promote nonpoint source pollution education and data collection in their area. The State office works closely with these programs to ensure that volunteers are receiving appropriate support and training.

Levels of Involvement

The Adopt-A-Stream program offers different levels of involvement. At the most basic level, a new group informs their local government about their activities and creates partnerships with local schools, businesses and government agencies. A watershed survey and 4 visual surveys are conducted within a year's time. Volunteers create a "Who To Call List" so that if something unusual is sighted, the appropriate agencies can be notified. Getting To Know Your Watershed and Visual Stream Survey manuals provide guidance in these activities.

If volunteers wish to learn more about their adopted body of water, they are encouraged to conduct biological or chemical monitoring. The *Biological and Chemical Stream Monitoring* manual guides volunteers through the monitoring process. Free workshops are provided at regular intervals in the Atlanta region and as needed in other areas of the State. Volunteers can monitor their waterways without attending a workshop, but those who attend and pass a QA/QC test will then be considered quality data collectors under the Georgia Adopt-A-Stream Quality Assurance Plan. QA/QC data is posted on the Adopt-A-Stream database.

The title "Adopt-A-Stream" is a little misleading since the program also provides manuals and training for lake and wetland monitoring. The *Freshwater Wetland Monitoring* manual and workshops highlight wetland values and functions and guides volunteers through the monitoring of soils, vegetation and hydrology. A separate *Coastal Wetland Monitoring* manual created by UGA Marine Extension Service provides guidance for volunteers interested in monitoring coastal habitats and the biological and chemical parameters specific to marine conditions. The Adopt-A-Lake program is a collaborative effort between Georgia Adopt-A-Stream and Georgia Lake Society. The Georgia Lake Society provides training workshops and technical advice throughout the state. An Adopt-A-Stream *Educator's Guide* is also available and provides educators with easy to use activities in a lesson plan format.

FIELD DEMONSTRATIONS

Georgia Adopt-A-Stream and its numerous partners across the state will highlight various activities available for volunteers. These activities will be conducted in an informal format, allowing for sharing of information and when possible, providing hands-on opportunities for participants.

Life At the Water's Edge

Recently Georgia Adopt-A-Stream has teamed up with government and non-government groups to provide access to technical information and assistance to citizens interested in preserving and restoring streams and riparian corridors. This network helps local governments educate citizens about the importance of protecting these critical greenspaces. The network also provides landowners with information they need to conduct minor property and riparian improvement and restoration projects to reduce erosion, improve water quality, and provide wildlife habitat through native plantings. Learn about the various opportunities that are available for homeowners.

Coastal Georgia Adopt-A-Wetland

Coastal Georgia wetlands are home to one of the most nutrient rich and productive ecological systems in the world. These wetlands are also important for waterfowl, fish nurseries and as a tourist attraction. Learn from the folks at the Coastal Marine Service how you can help protect coastal wetlands through hands on activities covering water chemistry and biology.

Watershed Wide Monitoring Events

Several years ago, Athens, Georgia conducted a single day watershed monitoring event the called the River Rendezvous. Since then, other communities have implemented their own version of this synoptic watershed monitoring event. Representatives will be on hand to discuss, provide advice, and promote the worthiness of these events.

Lake Monitoring

Georgia has thousands of lakes and ponds with their own unique requirements. Since almost all are created lakes, individuals and communities are often empowered with the responsibility of ownership and thereby maintenance. Learn how the Georgia Lake Society can help you monitor, learn about, and protect your lake.

Amphibian Monitoring

North America boasts the greatest diversity of salamanders in the world. The Southeastern US is home to a large number of these salamanders and a diversity of frogs and toads. Because of their sensitivity to stresses on the environment, amphibians serve as early indicators of water quality problems. With some simple tools, volunteers can learn how to identify and assess the health of amphibian populations.

Urban Challenges

Urban watersheds pose unique challenges for environmental protection and preservation. Local governments realize this and have hired environmental educators to work with citizens and communities. Several leading educators in the Atlanta area will provide an overview of the uniqueness of these urban watersheds and the challenges communities face to protect and preserve remaining greenways.

Tools for Educators

Protecting Georgia's water resources is not just an adult activity – students can do it too. Often hands-on activities provide a more enriching experience then students would receive if they were just sitting in a classroom reading about it. Educators often comment that learning about water related issues is a great way to involve the students in their community and raise their awareness about how individual actions impact our water. To assist educators, AAS created an Adopt-A-Stream Educator's Guide that looks at water monitoring, from visual surveys to bug identification. Don't be surprised if you're required to participate in an activity.

CONCLUSIONS

For citizens interested in being the solution to their water quality problems, the opportunity is there for learning a variety of different monitoring and conservation activities. This includes activities targeting freshwater and estuarine habitats and urban and rural environments with low cost simple solutions that can be implemented by anyone. Come join Georgia Adopt-A-Stream as we highlight activities that can help make everyone stewards of their watershed.