# **Georgia Adopt-A-Stream Training Workshops\***



Getting Started with Georgia Adopt-A-Stream/Visual Stream Survey Watershed Survey, Map Assessment and Visual Stream Survey - 4 hours

This workshop is based on the manual Getting To Know Your Watershed. Volunteers learn about the process of registering the stream, wetland or lake that they will monitor. Then volunteers learn how to use maps to delineate and assess their watershed. Land use and impervious surface is discussed as it pertains to the watershed survey data forms. The second half of the workshop is spent at a stream conducting the visual stream survey and learning how to do a stream cross-section and calculate flow.

# **Chemical Monitoring Workshop for Quality Assurance**

(Coastal Chemical Monitoring also available) Chemical Monitoring – 4 hours

The Chemical Monitoring workshop is designed to teach volunteers about basic stream water chemistry and how to conduct the chemical tests using hand-held field equipment. The basic set of tests that volunteers are asked to conduct includes dissolved oxygen, conductivity, pH, and temperature. Advanced tests include alkalinity, phosphate and nitrate-nitrogen. Volunteers are given a field test and written test to assess their ability to collect accurate and precise data. Volunteers who collect data within 10% accuracy and pass the written test with a score of 80% or better will be considered a QA/QC volunteer for one year.

# **Macroinverterbate Monitoring Workshop for Quality Assurance**

Macroinvertebrate Monitoring – 5 hours

Learn how to sample the biological diversity of a stream! The macroinvertebrates (insects, mollusks & crustaceans) found in a stream are excellent indicators of the condition of both water quality and habitat. This workshop will focus on collection techniques for either rocky or muddy bottom streams as well as macroinvertebrate identification. A quality assurance test is available at the end of the workshop for those who wish to test their skills. Volunteers who identify the macroinvertebrates with 90% accuracy and pass the written test with a score of 80% or better will be considered a QA/QC volunteer for one year.

#### **Bacterial Monitoring Workshop for Quality Assurance**

Bacterial Monitoring - 3 hours

The Bacterial Monitoring Workshop will teach volunteers how to monitor *Escherichia coli* levels in their adopted waterway. *E. coli* is an indicator organism that is often used to assess the water quality. Monitoring levels of *E. coli* can help identify possible sources of pollution. This workshop will focus on proper collection of a water sample; transfer of sample onto plates that will be incubated and proper interpretation of results. Volunteers who successfully perform the bacterial monitoring and pass the written test with a score of 90% or better will be considered a QA/QC volunteer for one year.

# **Amphibian Monitoring Workshop**

Amphibian Monitoring – 3 hours

Learn how to monitor for amphibians (frogs and salamanders), through passive methods. Amphibians are found in a variety of upland and aquatic habitats including streams, wetlands, and lakes. This workshop will focus on the instruction of monitoring techniques including treefrog refugia, coverboards, and frog calls. Volunteers will also be instructed on general life history, site setup, safe handling procedures of amphibians and the need to gather life history information critical for conservation planning. Volunteers who attend will be considered an amphibian monitoring volunteer.

# **Wetland Monitoring**

3 hours

Adopt-A-Stream's Wetland Monitoring Program immerses participants into the amazing world of wetlands. During this workshop, participants will learn about Georgia's wetland types and how to classify wetlands based on their soils, hydrology and vegetation. The workshop will also introduce them to challenges facing wetlands and provide the tools necessary to participate in their protection. Volunteers who attend will be considered a freshwater wetland monitoring volunteer.

# **Educator's Guide Workshop**

5 hours

Adopt-A-Stream Educator's Guide is designed to introduce the Adopt-A-Stream monitoring program to students across Georgia. These activities will bring water quality education to your classroom and spark your students' interest in protecting our precious water resources. During this workshop, educators will participate in several of these activities and learn how to use them in the classroom. Teachers will then be asked to submit a detailed report on how they use the Adopt-A-Stream Educator's Guide as an educational tool. This workshop is suitable for formal and non-formal teachers

\*One PLU credit available to teachers for participation in any of the above workshops, for a total of 10 hours.

\*CE credits available to Water and Wastewater Treatment Operators for quality assurance workshops

\*\*Most AAS workshops combine Getting Started and Chemical workshops. The Introduction is then shortened to 1.5 hour.