



Connecting Community to Local Ecology



# 2009-2010 Annual Report

Cobb County's Watershed Stewardship Program (CCWSP) is a part of Cobb County Government's effort to educate citizens of Cobb County with respect to various issues related to improving the quality of life for ourselves and future generations. Specifically, the CCWSP is a portion of the Cobb County Water System's attempt to increase awareness of ecological concerns and provide guidance that will assist residents in behaving in an environmentally conscientious manner.

## Vision

We envision all Cobb County residents becoming ecologically literate, understanding their role in water quality and environmental health.

## Mission

CCWSP promotes respect for our environment by providing the Cobb County community with learning opportunities concerning the connection between our behavior and water quality.

## Message From Program Staff

After years of drought and daily conversations emphasizing conservation and water quality, the rains of 2009 flooded our office with calls about eroding stream banks and newly discovered backyard springs. One positive result from all the heartache associated with the floods was that so many people are now interested in water and the human impact on the environment. It seemed that the September tragedy was the catalyst that really opened up the community's collective eyes to how closely tied we are to our rivers and streams. This previously abstract idea was suddenly very real to students and adults alike who had seen the effects first hand.

Although we have been teaching about water for years, it seemed that this was the appropriate time to really emphasize our role as a human living in a constructed world, as well as our role as a citizen in a community where water could alternately be both scarce and overly abundant. Our focus on informed actions and ecological literacy, looking at the big picture and how individual contributions are important, seemed to become relevant to many more residents. How does utilizing a rain barrel, or teaching your neighbors about storm drains, or planting native vegetation benefit the community at large, and the environment beyond that? These are the connections that we have been striving to make and share with the citizens of Cobb County, and in 2009 people were listening and reflecting.

In the same vein, we worked to create connections with individuals: our volunteers, colleagues, teachers, and students. We wanted to know what *they* wanted from *us*, and what we could do to benefit them the most. We worked to deepen relationships with individuals and ensure that our programs were enriching, action-oriented, and remained positive and hopeful despite the troubling subject matter and scary environmental statistics.

In the end, we strive to live up to our name. A *steward* is a caretaker, and *stewardship* refers to obligations and responsibility. We believe that we are caretakers of the Earth, and that it is our responsibility to share this ethic with others.

-The Cobb County Watershed Stewardship Program

# Report Summary

The activities and events facilitated by the Watershed Stewardship Program are designed to fulfill Cobb County Water System's education requirements as outlined by the Metro North Georgia Water Planning District and Georgia Environmental Protection Division.

This annual report summarizes the efforts made to educate Cobb's community about the issues impacting local water quality, to foster good habits and responsible behavior, and to promote an ethic of appreciation for and connection to our natural resources.

Milestones for 2009-2010 include receiving three program awards for the good works done by our staff, developing and implementing several new school outreach programs, completing correlations for all our school outreach programs to the Georgia Performance Standards, adopting 25 new volunteer stream monitoring sites, marking 477 storm drains, and reaching 14 new schools.

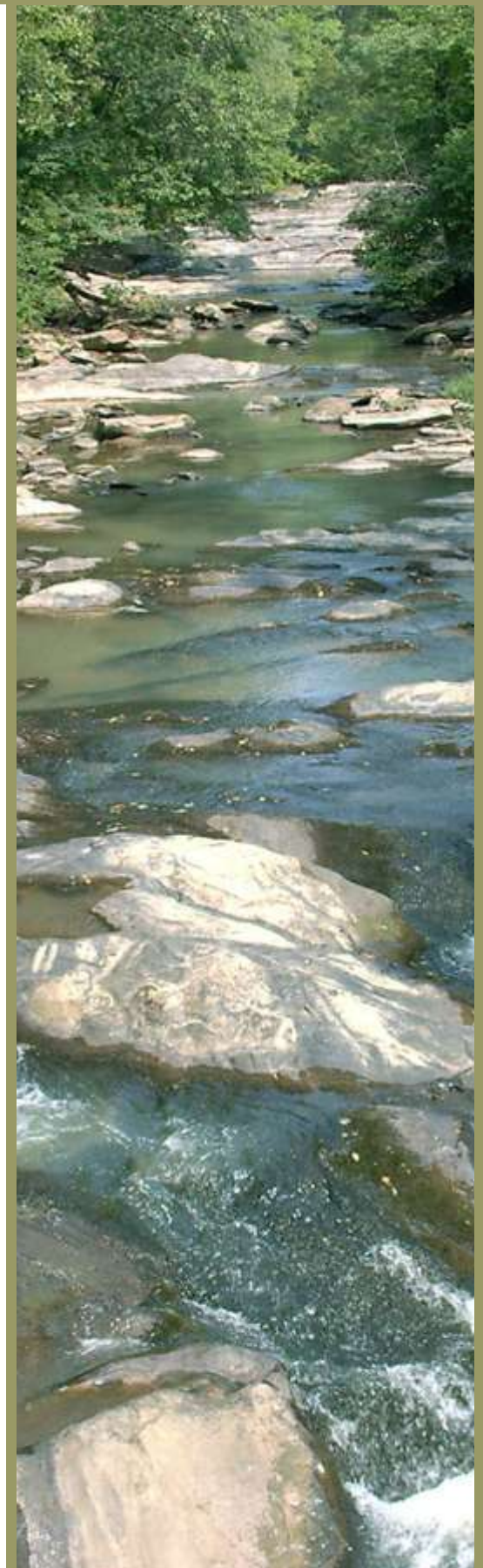
**During the 2009-2010 reporting year,  
6376 community members participated  
in the Watershed Stewardship Program.**

**Volunteer Programs:  
681 participants,  
684 training hours,  
3309 volunteer service hours**

**Community Programs:  
1079 participants, 52 hours**

**School Programs:  
4001 students, 269 hours**

**Other Programs:  
615 participants, 46 hours**



# Community Program Accomplishments

Cobb County Watershed Stewardship offers free ecology workshops throughout the year including providing the training and tools needed to be a monitoring volunteer.

During the 2009-**2010 reporting year, we estimate the value of Cobb's** volunteer watershed stewards to be \$67,000.

## *Volunteer Opportunities*

### Adopt-A-Stream Chemical Monitoring

*190 volunteers trained, 372 monitoring events, 700 service hours*

Chemical monitoring consists of taking water samples and testing for pH, levels of dissolved oxygen, temperature, and conductivity. These chemical tests gather information about the aquatic habitat and its ability to sustain life. Participants are required to attend a certification workshop and adopt their site for monthly monitoring.

### Adopt-A-Stream Biological Monitoring

*27 volunteers trained, 104 monitoring events, 990 service hours*

Participants monitor the population and diversity of benthic macroinvertebrates, aquatic insects and mollusks that act as bioindicators of water quality. By studying the diversity of organisms at a site, we can get a general picture of water quality. Individuals interested in biological monitoring are required to attend a certification workshop, adopt their waterway site, and commit to monitoring once per quarter.

### Adopt-A-Stream Bacterial Monitoring

*50 volunteers trained, 90 monitoring events, 163 service hours*

Volunteers learn how to monitor *E. coli* levels in their streams. *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 focuses on proper collection of a water sample, processing samples for incubation, and interpretation of results. Volunteers must attend a certification workshop and adopt their site for monthly monitoring.

### Anuran Monitoring

*8 volunteers trained, 50 monitoring events, 22 service hours*

Cobb County residents are learning to identify frog and toad vocalizations and recording their observations to collect data on local amphibian populations. After attending training and identifying a monitoring route, participants take an evening walk and complete a frog call survey once a week.

### Waterway Clean-ups

*279 volunteer participants, 11 events, 509 service hours*

Cobb County asks residents to help clean up local waters and raise awareness about waterway health. Scout groups, church groups, schools, and homeowners associations across the county are provided with gloves, bags, and planning assistance throughout the year to encourage trash removal efforts.

### Storm Drain Marking

*65 volunteer participants, 15 events, 150 service hours*

Rain water runs off the landscape from roads, driveways, lawns, rooftops and parking lots and carries pollution into our water. In addition, any litter on our roads will wash into our streams through the storm drain system. To emphasize the connection between runoff and water pollution, volunteers are helping mark storm drains around Cobb County. Participants are provided with marking kits including aluminum markers, adhesive glue, gloves, garbage bags, and education materials.

### Watershed Stewardship Fair

*44 volunteer participants*

The Watershed Stewardship Fair is a data sharing event that showcases volunteer stream projects. Volunteer groups are invited to create a display and share their initiatives during the event. Participants are given a chance to tour the Water Quality Laboratory. Awards are presented for the School of the Year, Adopt-A-Stream Volunteer of the Year, Anuran Monitoring Volunteer of the Year, and Storm Drain Marking Volunteer of the Year.

### River Rendezvous

*18 participants, 90 service hours*

The Sierra Club Cobb Centennial Group partners with the Water Quality Laboratory each year to monitor 30 sites along Rottenwood Creek. Parameters include dissolved oxygen, pH, conductivity, temperature, biological oxygen demand, *E. coli*, turbidity, and nutrients. This provides a comprehensive look at the Rottenwood Creek Watershed.



## Watershed Stewardship Projects - Chattahoochee

| WATERSHED            | GROUP                                       | # SITES | YEAR INITIATED | ACTIVITY TYPE    |
|----------------------|---|---------|----------------|------------------|
| Mulberry Creek       | Friends of Mulberry Creek                   | 1       | 2003           | CH, SD           |
| Nickajack Creek      | Benton MacKaye Trail Association            | 1       | 2010           | CH               |
| Nickajack Creek      | Nile Livingston                             | 1       | 2010           | CH, BAC          |
| Noses Creek          | Walker School                               | 1       | 2007           | CH, CL           |
| Noses Creek          | 4D Crew                                     | 1       | 2009           | CH, SD           |
| Noses Creek          | JVH   | 1       | 2009           | CH, BAC          |
| Powder Springs Creek | Fairfax Consulting Group                    | 1       | 2010           | CH, BAC          |
| Rottenwood Creek     | Sierra Club Centennial Group                | 3       | 2004           | CH, BIO, BAC, CL |
| Rottenwood Creek     | MCAA Rockets                                | 2       | 2007           | CH, CL           |
| Rottenwood Creek     | Powers Ferry Elementary School              | 1       | 2009           | CL               |
| Rottenwood Creek     | Water Quality Laboratory                    | 1       | 2009           | CL               |
| Sewell Mill Creek    | Dodgen Middle School                        | 8       | 2002           | BIO              |
| Sewell Mill Creek    | Boy Scout Troop 955                         | 1       | 2004           | CH               |
| Sewell Mill Creek    | Emerson Universalist Unitarian Congregation | 1       | 2008           | CH               |
| Sewell Mill Creek    | Tritt River Kids                            | 1       | 2007           | CH, BAC, CL      |
| Sewell Mill Creek    | Sumter Lake                                 | 1       | 2006           | CH, BAC          |
| Sewell Mill Creek    | Walton High School APES                     | 1       | 2006           | CH, BAC          |
| Sewell Mill Creek    | Isabel Ott                                  | 1       | 2008           | CH               |
| Sewell Mill Creek    | Brian Duke                                  | 2       | 2008           | CH, AN           |
| Sewell Mill Creek    | Ina Allison                                 | 1       | 2008           | AN               |
| Sewell Mill Creek    | Damo Achiayan                               | 1       | 2010           | CH               |
| Sope Creek           | Friends of Gable Creek                      | 1       | 2009           | CH               |
| Sope Creek           | Walton High School Environmental Club       | 1       | 1995           | CH, BAC          |
| Sope Creek           | Water Guardians                             | 1       | 2010           | CH, BAC          |
| Sope Creek           | Brownie Troop 2055                          | 1       | 2010           | SD               |
| Sope Creek           | Fox Hills HOA, Sope Creek ES Target Class   | 1       | 2010           | SD               |
| Sope Creek           | Brownie Troop 29202                         | 1       | 2010           | SD               |
| Willeo Creek         | Tritt River Kids                            | 1       | 2009           | SD               |
| Willeo Creek         | Willeo Watershed Alliance of Loch Highland  | 1       | 2006           | CH               |
| Willeo Creek         | Higgins Family                              | 1       | 2003           | CH               |
| Willeo Creek         | Bishop Lake                                 | 7       | 2008           | CH               |
| Willeo Creek         | Taylor Measures                             | 1       | 2008           | CH, BAC          |
| Willeo Creek         | Connie Ghosh                                | 1       | 2008           | AN               |
| Willeo Creek         | Willeo Watershed Warriors                   | 1       | 2009           | CH               |
| Willeo Creek         | Buck's Pond                                 | 1       | 2009           | CH               |
| Willeo Creek         | Clary Lakes                                 | 1       | 2010           | CH               |

## Watershed Stewardship Projects - Etowah

| WATERSHED            | GROUP                            | # SITES | YEAR INITIATED | ACTIVITY TYPE |
|----------------------|----------------------------------|---------|----------------|---------------|
| Allatoona Creek      | Jackie Belwood                   | 3       | 2008           | CH            |
| Allatoona Creek      | Girl Scout Troop 21              | 2       | 2009           | SD            |
| Butler Creek         | 4D Crew                          | 1       | 2009           | CH, BAC, SD   |
| Butler Creek         | Butler Creek Kennesaw            | 1       | 2009           | CH            |
| Little Noonday Creek | Leigh Lyjak                      | 1       | 2008           | CH, BAC       |
| Noonday Creek        | Chestnut Hill Subdivision        | 1       | 2009           | CH, SD, CL    |
| Proctor Creek        | North Cobb High School SAVE Club | 1       | 2008           | CH, BIO, SD   |
| Rubes Creek          | Boy Scout Troop 479              | 1       | 2004           | CH            |
| Rubes Creek          | McCleskey Middle School          | 1       | 2006           | CH, BIO, BAC  |
| Rubes Creek          | Nicholson Target Stars           | 1       | 2006           | CH            |
| Rubes Creek          | David Zandstra                   | 1       | 2008           | CH, BAC       |
| Rubes Creek          | Ric & Sharon Donato              | 1       | 2009           | AN            |
| Rubes Creek          | Rocky Mount Elementary School    | 1       | 2009           | CL            |
| Rubes Creek          | Keheley Elementary School        | 1       | 2009           | CL            |
| Rubes Creek          | 4D Crew                          | 1       | 2009           | CH, BAC       |

### Activity Type Key

- CH Adopt-A-Stream Chemical Monitoring
- BIO Adopt-A-Stream Biological Monitoring
- BAC Adopt-A-Stream Bacteria Monitoring
- AN Anuran Monitoring
- SD Storm Drain Marking
- CL Cleanup



## Community Ecology Programs

### Rain Barrel Make & Takes

*77 participants*

Urban runoff is one of the hardest sources of stream pollution to control. It can cause bank erosion, siltation and contamination of the water. Harvesting rain water from the roof of buildings is an initiative to help curb the problem. In this workshop, participants build their own 55-gallon barrel (donated by Coca-Cola Bottling), using power tools and provided supplies. The water collected from the gutters can then be used to water plants while preventing non-point source pollution and saving potable water.

### Household Hazardous Waste Reduction

*71 participants + drugs from 450 households*

Several efforts have been developed to educate Cobb residents on hazards in the home. HHW workshop participants learn about chemical labels and less harmful alternative cleaners. A residential FOG education campaign was launched before the holiday season in fall 2009 to encourage proper disposal of food wastes. Components include presentations, webpage and FAQ, fact sheet, and youth activities. A Residential Mercury Collection event was organized by the Water Quality Laboratory to remove mercury-containing thermostats and thermometers from local homes. Pharmaceutical Disposal Events were organized by Keep Cobb Beautiful to remove these hazards from the home and educate about the problems associated with flushing these products into the sewer system.

### Library Programs

*310 participants*

As in previous years, the WSP partnered with Cobb libraries for their Summer Reading Program. During the summer of 2009, WSP staff presented the Brooke & Branch Puppet Show at 7 libraries. In addition to the show, children were encouraged to share their own experiences with nature and water, as well as express their creativity by making their own puppets. We also presented a bird program at 2 libraries, which consisted of a story time, animal artifacts, and a craft.

### Parks Programs

*154 participants*

WSP partners with Cobb County Parks, Recreation, & Cultural Affairs to offer summer outreach programs. Presentations included the Brooke & Branch Puppet Show and wildlife programs about snakes, dragonflies, and butterflies for local summer camps. Presentations also focused on biology related careers. We assisted with their Earth Day Festival at Ward Recreation Center, educating about non-point source pollution, runoff, and watersheds using an *Enviroscape*, a tabletop watershed demonstration model.

### Smith-Gilbert Gardens Programs

*44 participants*

Smith-Gilbert Gardens in Kennesaw invited our Program to offer presentations for their summer children's series. Topics included frogs, snakes, birds, and butterflies. Programs involved looking at each animal's life history, characteristics, artifacts, and live specimens.



### Scout Programs

*70 participants*

Girl Scout and Boy Scout groups often participate in WSP led activities to earn badges and obtain service hours. In addition to the scout groups that participate in Adopt-A-Stream monitoring, storm drain marking, and waterway cleanups, we also participate in special events, such as the April 2010 Earth Day Festival.

### Conference/Professional Presentations

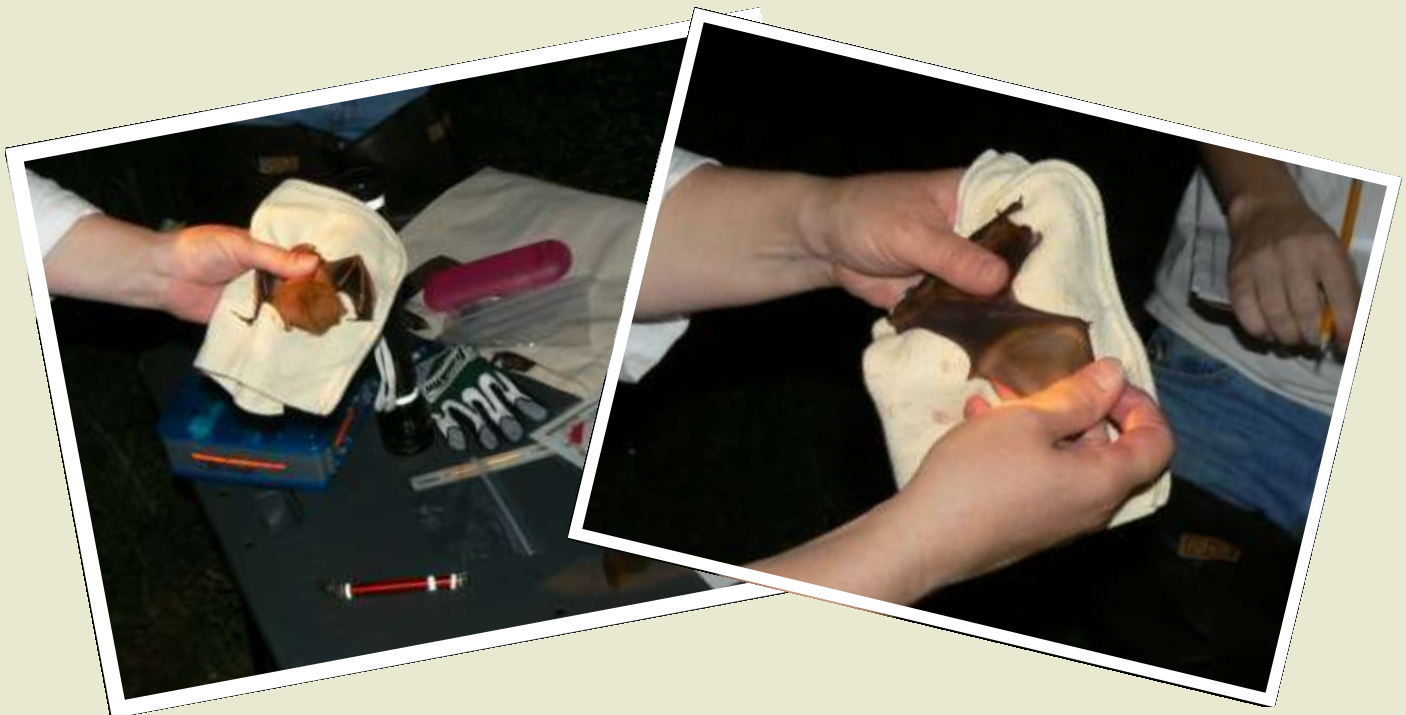
*275 participants*

Staff routinely present at conferences and during professional development seminars. During the 2009-2010 reporting year, we presented at the Georgia PTA Conference, Environmental Education Alliance of Georgia's Annual Conference, the Adopt-A-Stream Annual Conference, and for various Cobb County School System's teachers development meetings and community organization meetings including Keep Cobb Beautiful.

### Special Topics - Bats

*78 participants*

In 2009, we learned that one of our AAS volunteers is a bat expert, (who has published extensive research on bat diets), and shared her concerns about impaired water quality impacting bat populations. We invited her to share her knowledge with the Cobb community. She developed a two-part workshop that, due to inclement weather, turned into a three-part learning opportunity. It began with an in-class presentation discussing bat biology, taxonomy, diversity, distribution, and their challenges and connection to healthy streams. Part-two was held in a stream channel demonstrating how scientists study bats including using mist nets to capture and collect data on individuals. Part-three was a great success with many people coming and several specimens captured, processed, and released. Participants learned about this important and largely unknown connection between bats, stream corridors, and aquatic insect populations.



# School Outreach Accomplishments

Program staff visited local schools routinely, offering free water-related education programs to K-12 students in Cobb County, Marietta City, and private schools. In the 2009-2010 school year, our programs reached 47 schools, serving 180 classrooms. We estimate the value of this service to be nearly \$30,000.

## Ecoregions of Georgia

*391 participants*

Georgia is ranked 6th in the nation in overall species diversity, partially due to our five distinctive ecoregions! Learn how these very distinctive regions were formed and natural history facts about the state we live in. This program explores how our geographical topography contributes to our biological diversity.

## What is a Watershed?

*136 participants*

During this lesson on watersheds and sources of pollution, students learn about local water quality issues. Using an interactive watershed model, participants demonstrate pollution impacts on streams and lakes. This activity reveals to students how every day activities can affect our drinking water.

## Slithery Snake Study

*130 participants*

**Take a closer look at one of nature's most misunderstood animals. How do they move with no arms or legs? Is it true that the only good snake is a dead snake? Which species in Georgia are venomous and how can you tell? And most importantly, how do they benefit our ecosystem?**

## River to River - A Water Story

*74 participants*

Where does our drinking water come from? What happens to our water after we use it? **After you flush, it doesn't just go away. Using a tabletop model, this program takes students through the process of drinking water treatment and wastewater treatment to understand the steps taken to clean our water.** Follow this program with a trip to the wastewater treatment plant.

## Wild in the Watershed

*185 participants*

Why is a bird a bird, and how are reptiles different from amphibians? Are there mammals that lay eggs? Learn about animal groups and classification by examining animal artifacts, such as skins and bones.

## Water Molecules in Motion

*137 participants*

**What makes water... well, water? How do you know if a clear liquid is water? Learn about the physical properties of our most precious resource through a series of activities and demonstrations.**

### Macroinvertebrate Lab

*15 participants*

You can assess water quality and stream habitat by surveying the life in a stream. Macroinvertebrates (stream bugs) are excellent indicators of water quality. Learn to identify and categorize aquatic insects by pollution tolerance levels to determine stream health. Introduce your students to these fascinating water bugs before taking a water monitoring field trip to a local pond or stream. Data collected from monitoring groups will be entered into the Georgia Adopt-A-Stream statewide database.

### Erosion & The Hydrologic Cycle

*94 participants*

Study the causes and effects of erosion through visual models and activities. How have **erosion and deposition helped to construct Earth's various landforms?** How have humans impacted this natural process, and what can we do to mitigate the consequences? This class can be extended into a two part session, with the second session focusing on how water moves through the earth to reach the aquifers under the surface.

### Water Chemistry Study

*23 participants*

Learn to collect water samples and perform water quality experiments including dissolved oxygen, pH, temperature, and conductivity. This hands on chemistry experiment not only demonstrates how we monitor our water, but can also incorporate the scientific method and data collection protocol. This program is highly recommended as a pre-activity to a water monitoring field trip. Data collected from monitoring groups will be entered into the Georgia Adopt-A-Stream statewide database.

### Water Cycle

*32 participants*

Learn about the natural water cycle and how water moves across the globe in different forms including the human components of the water cycle, such as drinking water and recreation.



### Life Cycles

*126 participants*

Some animals and plants have their own unique life cycles. Explore how a butterfly, dragonfly, frog, and tree grow from a tiny egg or seed into an adult through the use of specimens and artifacts.

### Wonderful Watery Wetlands

*173 participants*

What are those muddy, yucky wetlands good for anyway? What kinds of animals and plants live in wetlands? Through an interactive tabletop model, students learn how wetlands play a very important role in water quality, flood prevention, and ecological habitat.

### Bacteria Monitoring Lab

*24 participants*

Across the globe, waterborne diseases have become an increasing threat to community health. This program explores different diseases present in the U.S. and in other countries and their impact on environmental health. Students will also have the opportunity to practice laboratory procedures by monitoring their local waterway for *E. coli*, and determining what levels exceed a healthy baseline.

### Investigating Urban Streams and Ponds

*115 participants*

Join us at a stream, pond or wetland to conduct a study about water quality and habitat. Activities may include water quality testing, sampling for aquatic insects, and investigating physical characteristics of the waterway.

### Monarch Lab (August - October only)

*156 participants*

Discover the different stages of Monarch development from egg to adult. Uncover exciting facts about their extraordinary natural history, such as their annual migration to Mexico. The Monarch Lab incorporates several stations for hands-on, individual learning.

### Anuran Lab (March - May only)

*426 participants*

Anurans are a special group of amphibians that include frogs and toads. But how do you tell the difference between frogs and toads? What habitats do they live in, why do they call, and how does a tadpole become an adult? Discover all of this as well as what anurans can tell us about our environment.





Brooke & Branch Puppet Show *1422 participants*  
 Brooke is a little girl who goes on a big adventure! Join her as she learns about water quality and biodiversity from the friends she meets along the way. This program emphasizes ecological concepts and vocabulary in a fun and engaging way while demonstrating how we can help the environment.

*This program was recognized by Georgia Adopt-A-Stream in 2010, receiving their 2009 AAS in Action Award.*

#### Traveling Treasure Trunk

*9 participating schools*

A collection of water and nature resources including books, field guides, games, music, and videos. The trunk is loaned to K-5 classrooms for three week periods.

#### Other Shared Resources

*18 participating schools*

CCWSP loans educational resources to teachers for use in their classroom, including water testing kits, nets, boots, curriculum activities, Macroinvertebrate Lab, preserved insect specimens, the Our Shared Forest Science Night Kit, and Enviroscape tabletop models.

#### **Children’s Water Festival**

*150 participants*

On May 5th, 4th graders from Brumby Elementary participated in this annual event held in partnership with other local utilities and the National Park Service at the Chattahoochee River National Recreation Area. Students attended several hands-on water education sessions including topics on pollution prevention, water source and distribution, and human impacts.

#### Green Schools

*22 schools, 350 classrooms*

**Cobb’s Green School Initiative continues to draw interest and** provide encouragement for teachers to integrate environmental education activities into their classrooms. Those that participate, complete, and log 5 EE activities are recognized as *Green Classrooms*. When 5 teachers in a school participate, the school is recognized as a *Green School*. In 2009-2010, 11 of 22 schools achieved Gold Status with 15 or more classrooms participating.



#### Professional Development for Educators

*39 participants*

- Cool Waters Workshop – Project WET & Healthy Water, Healthy People
- Monarchs In The Classroom

# Compliance Education Accomplishments

Despite the challenges experienced in the fall of 2009, with over 800 homes flooded, our Stormwater Education efforts have progressed. Staff continue to work on flooding issues while addressing routine compliance projects and activities.

## Staff Lunch and Learn Program

Monthly sessions were planned to provide employees with opportunities to learn about pollution prevention and water quality. Topics included the role of the Health Department, stormwater pollution prevention training, touring a wastewater plant, and Etowah watershed management. For the coming year, we plan to expand this program, opening the session to all Cobb County employees, every other month.

## Fact Sheets

Four new education publications were developed to address specific water quality issues: paint, livestock, landscape, Fats, Oil, and Grease (FOG). Several additional fact sheets are under development including dumpsters, storage tank labeling, drum storage, and illicit discharges.

## Community Partners for Healthy Streams

Although some progress was made this year including developing a revised inspection form and creating partner pages to recognize participating facilities on [www.cobbstreams.org](http://www.cobbstreams.org), the financial hardships facing local businesses continues to limit participation. Therefore, we have elected to suspend this program through the 2010 calendar year. The program will be re-evaluated in January 2011.

## Pet Waste Stations and Rain Barrel Demonstration Sites

In addition to continuing maintenance, a GPS inventory will be developed to map the location of all *Pick It Up* stations and Rain Barrel Demonstration Sites in Cobb County.

## Rain Garden Demonstration Site

We continue to develop the garden as an education resource, installing new plantings, creating informational displays, designing interpretive programs, and recruiting volunteers to assist with our educational efforts. To cultivate ongoing relations with their volunteer and community outreach efforts, staff is partnering with Cobb County Master Gardeners, attending training, and hosting Master Gardener events at the Water Quality Laboratory and in the Rain Garden.

## Green Industry Updates

In partnership with Cobb County Cooperative Extension's landscape industry continuing education program, staff has continued to participate in both the planning of these ongoing sessions and presenting about water quality to professionals working on landscape projects. Specific training topics include detention pond maintenance and recruiting stream bank restoration expert Jim Lanier to speak to the group about proper streamside property care.

| Resource  | Description  | Audience                        | # Distributed            |
|---|--|---------------------------------|--------------------------|
| Anuran Monitoring Manual - revised                                    | Protocol for conducting frog and toad vocalization monitoring  | general public                  | 10                       |
| Environmental Exploration for Students - updated                      | Brochure with description and GPS standards of our school program offerings.                                   | schools, scout groups           | 1300                     |
| A Healthy Environment Starts at Home Rack Card                        | A two-sided card focused on pollution prevention for HHW from yard, home improvement, and car care activities. | general public                  | 1077                     |
| Newsletter: The Thalweg   | Community events and ecological articles (4 issues per year).  | general public/<br>mailing list | 2971                     |
| Website: <a href="http://www.cobbstreams.org">www.cobbstreams.org</a> | Clearinghouse with volunteer opportunities, programs, resources, publications, calendar.                       | general public                  | average 5,100 hits/month |
| Facebook  | Social media site to promote our programs and house our images.  | general public                  | n/a                      |
| Landscape Maintenance Fact Sheet                                      | BMPs, regulations, and requirements for commercial business operators.   | targeted industry               | under final review       |
| Stormwater Runoff Fact Sheet English & Spanish                        | What is the difference between the sanitary sewer and the stormwater sewer system?                             | general public                  | 1262                     |
| Paint Fact Sheet  | BMPs, regulations, and requirements for commercial business operators.   | targeted industry               | under final review       |
| Livestock Fact Sheet  | BMPs, regulations, and requirements for landowners with livestock.   | targeted industry               | 0                        |
| FOG Fact Sheet  | What is FOG and why should I care?   | general public                  | 78                       |



# Community Connections

## Under Development

Watershed Profiles - Fact sheet format documents that provide history, statistics, and points of interest for major watersheds in Cobb County.

FOG Video - Sewer footage of grease blockages and cleanouts with voice over narrating an explanation of the visual. To be used online and in presentations.

Volunteer Opportunities Rack Card - Promotional supplement to our brochure, this document will be distributed with education materials including storm drain marking door hangers in residential areas. One side will be volunteer promotion, the other side will be a who-to-call list for water quality related problems.

Promotional Program Display - Update our tri-fold for festivals and other public events

School Outreach PowerPoint - Requested by our teachers, this presentation will be an overview of our outreach program offerings and used to promote our school programs.

Bottled Water Lesson - A GPS-correlated activity comparing tap and bottled water including costs, ecological foot print, drinking water regulations, and consumer choices.

Bookmark - A new giveaway for program participants will be developed for 2010-2011.

Expanded Staff Lunch & Learn - Opening this opportunity to all Cobb County employees, utilizing **Cobb's Communications and Training programs to promote the opportunity every other month.**

Fact Sheet Series - Topics to be developed include Dumpsters, Storage Tank Labeling, Drum Storage, and Illicit Discharges. These stormwater education resources will be developed in-house and utilized by inspection staff to address problems encountered at local facilities.

GPS Inventories for *Pick It Up* Stations and Rain Barrel Demonstration Sites - These programs will be located to ensure proper maintenance and assess where new locations are needed.

## Boards, Committees, Leadership Roles

- Cooperative Extension—Cobb County Office: Green Industry Advisory Board
- Environmental Education Alliance: Secretary, Conference Committee, Strategic Planning Committee
- Georgia Association of Water Professionals: Public Education Committee
- Georgia No Child Left Inside Coalition: Member
- Metro North GA Water Planning District: Education Technical Coordinating Committee
- Monarchs Across Georgia: Steering Committee
- Rivers Alive: Advisory Board, Education Chair
- Outdoor Classroom Council: Co-Chair
- Georgia Adopt-A-Stream: Coordinator, Technical Advisor, Conference Committee
- Georgia Conservancy: Education Committee



## Partnerships

- Georgia Adopt-A-Stream
- Rivers Alive
- GA Project WET
- GA Conservancy
- GA Project WILD
- GA Forestry Association - Project Learning Tree
- National Park Service
- Georgia Association of Water Professionals
- Monarchs Across Georgia
- American Rivers
- Outdoor Classroom Council
- Environmental Education Alliance of Georgia
- Metro North Georgia Water Planning District
- Cobb County DOT
- Cobb County School System
- Cobb County Health Department
- Cobb County Parks, Recreation & Cultural Affairs
- Keep Cobb Beautiful
- City of Kennesaw - Smith-Gilbert Gardens
- City of Acworth - Parks Department
- City of Smyrna - Keep Smyrna Beautiful
- City of Roswell
- DeKalb County
- Fulton County
- Marietta Water
- Marietta City Schools
- UGA Cooperative Extension & Cobb County Master Gardeners
- Coca-Cola Bottling Company
- Vickery Hardware
- Emory University
- Sierra Club Cobb Centennial Group
- State Botanical Gardens of Georgia



# Reflections



Teachers toured the Big Creek WRF in Roswell while learning about water related classroom lessons during the 2009 Cool Waters Workshop.



4th graders learn about aquifers by making an edible version during the 2010 Children's Water Festival.



CCWS employees participated in a solar cooking demonstration during a Lunch & Learn session.



The Somerset Garden Club participated in a Rain Barrel Make and Take workshop.



The Rain Garden at the Water Quality Lab showcases how native plants can conserve water, control stormwater runoff, and benefit wildlife.



Citizens learn to identify aquatic macroinvertebrates during an Adopt-A-Stream biological monitoring workshop.



At the summer library programs, families watched the Brooke & Branch Puppet Show and then designed their own puppets to take home.



Park Street Elementary School participated in a Monarchs in the Classroom curriculum workshop and received a grant to create their own pollinator garden.



Students at Powers Ferry Elementary discover butterflies during a Monarch Lab.



Citizens learn about frog biology during an Anuran Monitoring workshop.



Citizen volunteers shared their initiatives and efforts during the 2010 Watershed Stewardship Fair.

# Program History

- 1975 Cobb County Water System starts collecting stream data
- 1986 Stream Monitoring Program is established
- 1995 Biological Monitoring is added to routine data collection
- 1998 R. L. Sutton Watershed Study
- 2000 GA EPD accepts stream monitoring data for the Stormwater Permit  
Stream Monitoring staff is expanded to two full-time employees
- 2001 Adopt-A-Stream Program Coordinator is hired
- 2002 Adopt-A-Stream Program is launched  
Cobb AAS recognized by GA EPD  
*Outstanding Outreach & Partnership Award*  
Cobb County Water System recognized by GW&PCA  
*Outstanding Public Education Award*
- 2003 Cobb County Watershed Protection Plan implemented  
Cobb County Water System implements Watershed Staff meetings  
In-house Fish Monitoring is added to data collection  
Etowah Watershed Assessment Agreement signed
- 2004 Demonstration Rain Garden installed  
Cobb AAS and citizen volunteer recognized by GA EPD  
*Watershed Award & Excellence in Data Collection Award*
- 2005 Adopt-A-Stream staff is expanded to two full-time employees  
Cobb County recognized by GA Department of Community Affairs  
*Water First Community*  
Cobb AAS recognized by Rivers Alive  
*Outstanding Cleanup, large category (over 200 participants)*  
Cobb AAS Volunteer recognized by GA EPD  
*Red Flag Award*

- 2006 Rain Garden Demonstration Site certified  
*Back Yard Wildlife Habitat*  
*Monarch Waystation*  
*Pollinator Garden*  
 Cobb County Water System recognized by GAWP  
*Outstanding Public Education Award*
- 2007 WSP staff is expanded to include a part-time Program Assistant  
 Cobb AAS and citizen volunteer recognized by GA EPD  
*Adopt-A-Stream in Action Award* (Color Your Watershed Program)  
*Outstanding Outreach Award*
- 2008 Cobb AAS and citizen volunteer recognized by GA EPD  
*Watershed Award*  
*Outstanding Outreach & Partnership Award*  
 Cobb WSP staff recognized by Georgia Conservancy  
*Teaching Conservation Facilitator of the Year*  
 Cobb WSP staff recognized by Rivers Alive  
*Most Cleanups Attended*
- 2009 Cobb WSP staff recognized by Cobb County Board of Commissioners  
*Excellence in Customer Service*  
 Cobb citizen volunteer recognized by GA EPD  
*Excellence in Data Collection Award*  
 Cobb WSP staff recognized by Monarchs Across Georgia  
*2008 MAG Service Award*
- 2010 Cobb AAS recognized by GA EPD  
*Adopt-A-Stream in Action Award* (Brooke & Branch Puppet Show)  
 Cobb WSP staff recognized by Georgia Project WET  
*2009 Facilitator of the Year*

# Thank You

The Watershed Stewardship Program would like to thank our volunteers and supporters:

Damo Achaiyan  
Jo Adang  
Laura Aikens  
Ashley Allen  
Ina Allison  
Charles Alvarez  
Kristine Anderson  
Derek Angel  
Charity Anyanwoke  
Cheryl Ashley-Serafine  
Joni Atkinson  
Gwen Baldwin  
Delon Barfuss  
Mary Barkley  
John Baumgartner  
Richard Beard  
Michel Belland  
Jackie Belwood  
Terry Bennekou  
Becky Blades  
Robert Bourne  
Amy Boggs  
Rick Bower  
Steve Brady  
David Bridges  
Loraine Brooks  
Judy Bullard  
Michelle Bugbee  
Snow Busker  
Janice Camp  
Sharon Camp  
Kelli Casey  
Jamie Cint  
Annette Clark  
Shemaria Collins  
Sally Creel  
Erin Cress  
Janet Dalton  
Gretchen Davis  
Cherral Dempsey  
Jaap DeRoode  
Maria Dominguez  
Ric & Sharon Donato  
The Donnelly Family  
Maureen Donohue  
Carmela Dowdell  
Darcy Douglas  
Virginia Douglas  
Melissa Dunn  
Brian Duke  
Leslie Dyches  
Jeremy Eaves  
Lisa Ellison

Katey Evans  
Karen & Anna Faucett  
Soosan Faulk  
Erin Feichtner  
Pam Finley  
Denise Gadd  
Karen Garland  
Jennifer Gates  
Katie Gaudette  
Tanya Gayle  
Carolyn Gentry  
Connie Ghosh  
Alicia Giddens  
Andrea Giles  
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Stacey Haire  
Martha Haley  
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Dobson Harris  
Rick Hitchcock  
Kris Hough  
The Higgins Family  
Jerry Hightower  
Larry Hill  
Jeff Hite  
Kim Holland  
Barbara Hopper  
Steve Hopper  
Stefan Hreniuc  
Allison Hughes  
Judy Huguenard  
John Huth  
Kwabena Jackson  
Pamela & Megan Jean  
Didi Johnson  
Gray Johnson  
Nick Jokay  
Kim Kellett  
Tim Kelley  
Monica Kilpatrick  
Richard Kinzel  
Anne Kirk  
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Lyndsey Lieb  
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Carla Loosier  
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Leigh Lyjak  
Madeleine & Vicky Malcolm  
Holly Martin  
Linda May  
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Michele McKillip  
Brian McKnight  
Angie Meeks  
Susan Meyers  
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Laura Moonshower  
Tara Muenz  
Tamera Neal  
Travis Neumuller  
Frank Newton  
Kathy Nguyen  
Charlene Njoroge  
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**Carina O'Bara**  
Kay O'Brien  
**Michael O'Shield**  
Judy Osborne  
Isabel Ott  
Sharon Pace  
Sabrina Pemberton-Piper  
Karen Phillips  
Tim Phillips  
Tracy Phillips  
Susan Pleak  
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Christy Peterman  
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Eddie Rhodes  
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Brian Scanlon  
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Steve Shelton  
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Annette Simpson  
Rusty Simpson  
Kay Sims  
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Dennis Smith  
Roberta Smith  
Sharon Smith  
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Rebecca Toles  
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Teri Tornroos  
C.J. Turner  
David Tyler  
Timmy Vaughn  
Bryan Waggoner  
Wayne Waldrip  
Morning Washburn  
Alyssa Williams  
Laura Williams  
Michael Williams  
Anthony Willis  
Jeanine Whitmire  
Kaye Wilson  
David Zandstra

**... And to anyone we  
inadvertently forgot!**

# Our Team

The Watershed Stewardship Program is housed in the Water Quality Laboratory of the Cobb County Water System in the Office of Environmental Compliance.

## Jennifer McCoy, Program Coordinator

Jennifer has worked for Cobb County since 2000 as an environmental educator and as an environmental compliance inspector. Her work as a naturalist at a nature center, an instructor at a science museum, and a biologist for an environmental consultant enables Jennifer to contribute over 10 years of professional experience to our team.

### Education:

Master of Public Administration, Kennesaw State University, candidate  
Master of Science (Ecological Teaching and Learning), Lesley University, 2007  
GIS Certificate, Kennesaw State University, 2000

Bachelor of Science in Biology, Kennesaw State University, 1997

*Facilitator Certifications:* Project WET, Project Learning Tree, Project WILD, Monarchs in the Classroom, Leopold Education Project, Native Waters, Native Seasons, Biodiversity Basics, Healthy Water Healthy People, Adopt-A-Stream Chemical/Biological/Bacteria Trainer

## Vicki Culbreth, Program Specialist

Vicki joined Cobb County in 2007 and enjoys working with students and residents in conservation education. Previously, she was a program assistant at the Georgia Environmental Protection Division, an environmental educator and nature center curator in the Blue Ridge Mountains, and interned at Zoo Atlanta and the Gwinnett County Department of Public Utilities.

### Education:

Bachelor of Science in Forest Resources (Wildlife), University of Georgia, 2003

*Facilitator Certifications:* Project WET, Project Learning Tree, Project WILD, Monarchs in the Classroom, Leopold Education Project, Our Shared Forests, Native Waters, Native Seasons, Adopt-A-Stream Chemical/Biological/Bacteria Trainer

## Catherine Mercier-Baggett, Program Assistant

Catherine joined our team in 2009. Her training is in landscape architecture and urban planning. She has worked as a science educator with school children, assisted with research on stream ecology, studied amphibian distribution and conducted watershed assessments.

### Education:

Master of Public Administration, Kennesaw State University, candidate  
Bachelor of Landscape Architecture, Universite de Montreal, 2004  
Master of Urban Planning (Urban Design), Universite de Montreal, 2002  
Bachelor of Science in Biology (Ecology & Environment), Universite de Montreal, 1999

*Educator Certifications:* Monarchs In The Classroom,  
Adopt-A-Stream Chemical/Biological/Bacteria Volunteer



Connecting Community to Local Ecology

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*Cobb County...Expect the Best!*

G. Woody Thompson, *Interim Chairman*

Helen Goreham, *District One*

Bob Ott, *District Two*

Thea Powell, *District Three*

G. Woody Thompson, *District Four*

David Hankerson, *County Manager*

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