

# The Role of Volunteers in Managing the City of Auburn's Stormwater Program

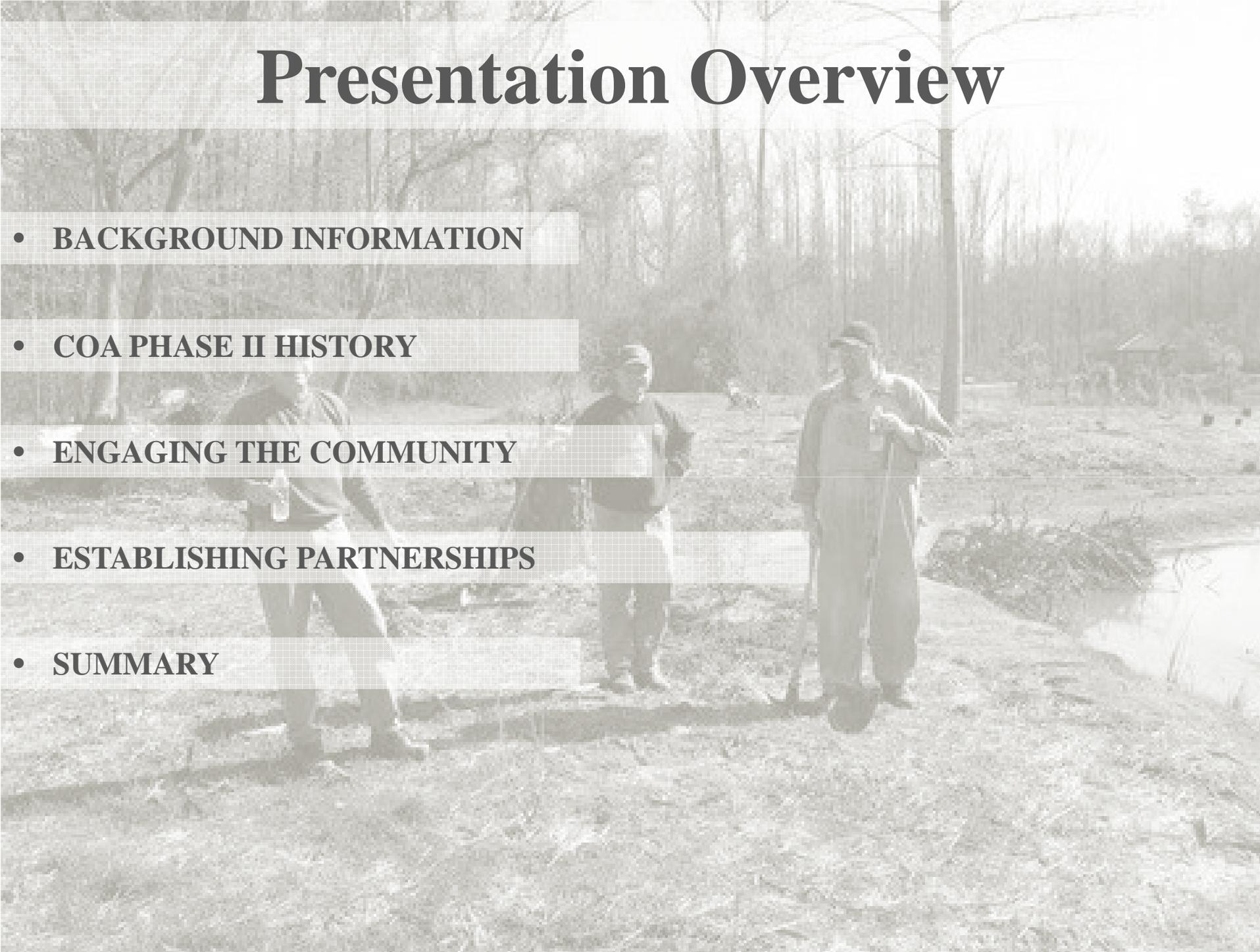


City of Auburn

ADEM Nonpoint Source Conference  
January 24, 2012



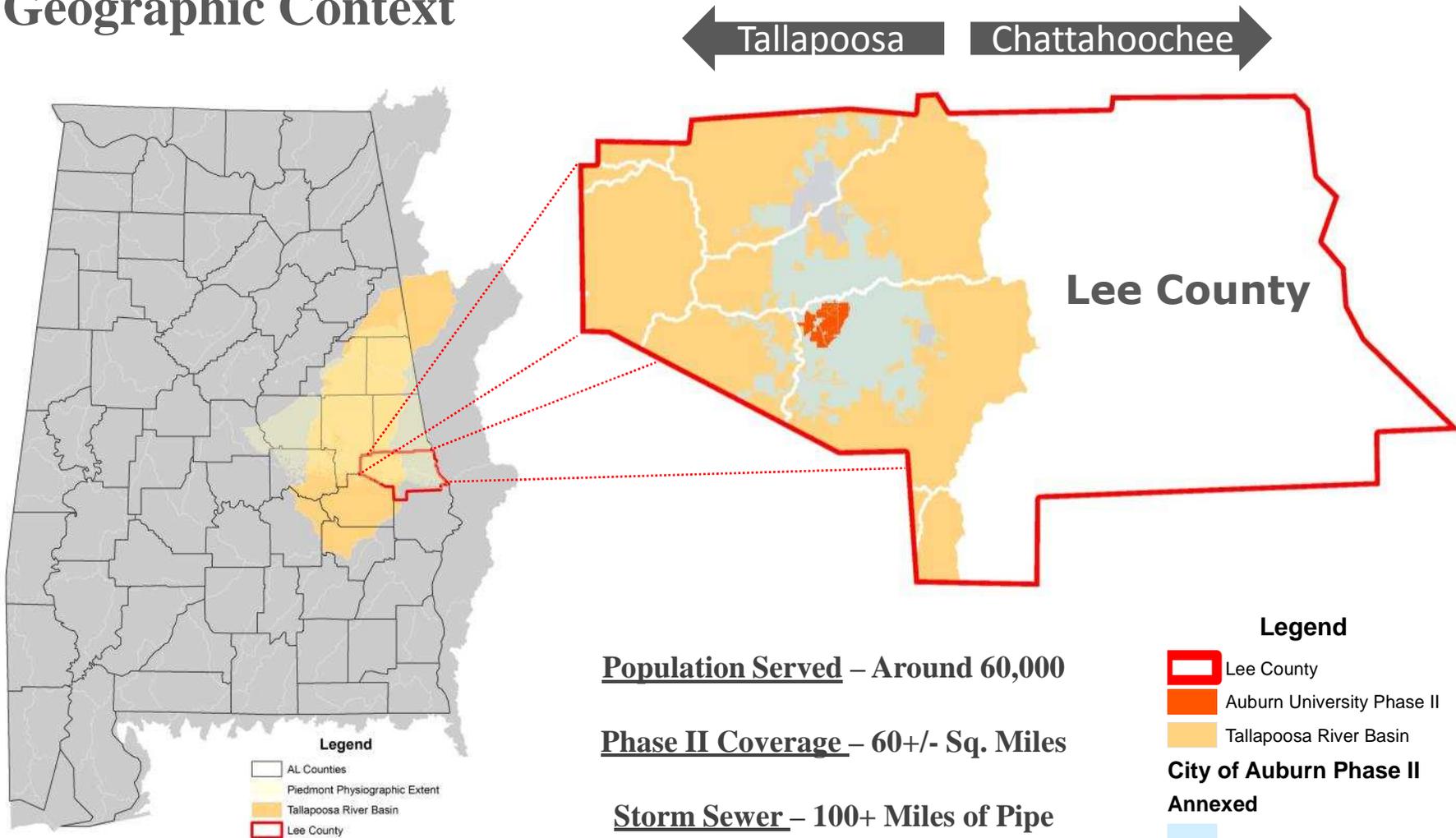
# Presentation Overview

A black and white photograph of three people standing in a field, possibly a farm or garden, with a large arched structure in the background. The image is semi-transparent, allowing the text to be overlaid.

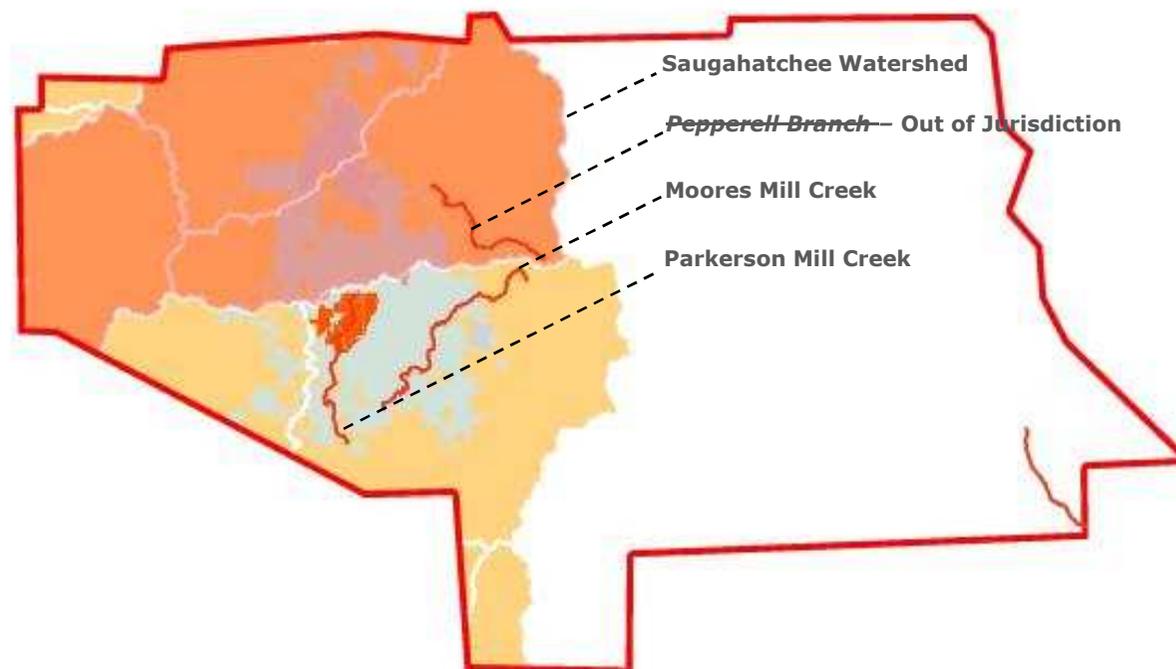
- **BACKGROUND INFORMATION**
- **COA PHASE II HISTORY**
- **ENGAGING THE COMMUNITY**
- **ESTABLISHING PARTNERSHIPS**
- **SUMMARY**

# BACKGROUND INFORMATION

## Geographic Context



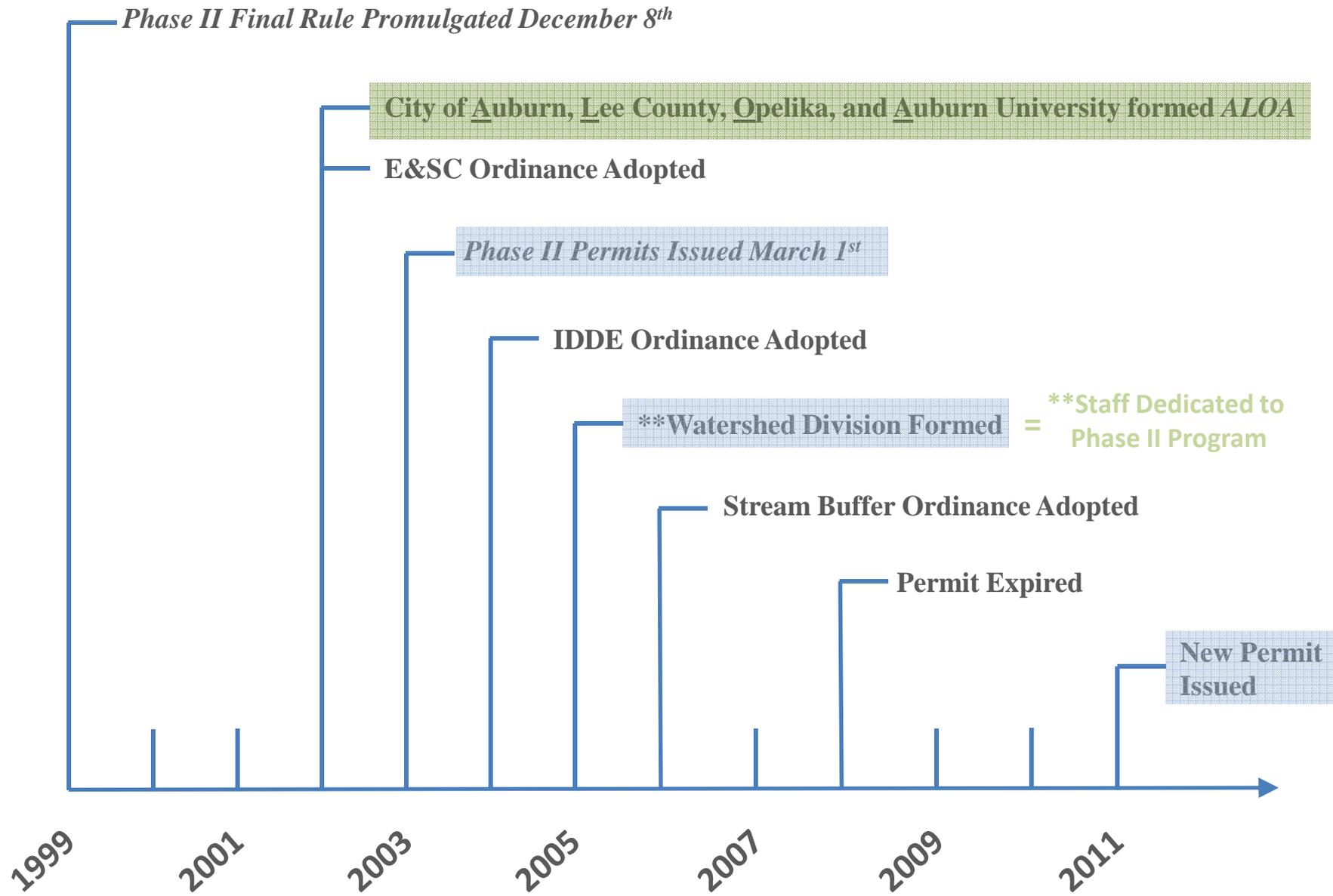
# BACKGROUND INFORMATION (Cont.)



## WATER QUALITY CONCERNS

<u>Waterbody</u>	<u>Impairment</u>	<u>Status</u>
**Saugahatchee Watershed	DO/OE	Approved TMDL & Watershed Management Plan
Moores Mill Creek	Siltation	Watershed Management Plan
Parkerson Mill Creek	Pathogens	Approved TMDL & Watershed Management Plan

# COA Phase II History



# Engaging the Community

- **What is the community's role in the City's Stormwater Management Program?**
- **How do we educate our community so that they understand their role?**
- **How do we focus our education efforts to target various audience groups?**
- **How does a well educated community benefit the City's Stormwater Management Program?**

# Educational Materials

## Open Line

A Monthly Newsletter for City of Auburn Citizens

### Too Much Phosphorus Can Impact Local Water Quality

Spring is the time of year when many residents will begin their annual lawn fertilization program. It is recommended that residents have a soil test performed prior to any fertilizer application. The soil test will verify whether a fertilizer application is warranted. The soil test may reduce fertilizer cost and can also assist with protecting water quality in local watersheds. Fertilizers are generally comprised of nitrogen, phosphorus and potash. For more information concerning soil tests, please contact the Soil Testing Laboratory at Auburn University at [www.aces.edu/soil/soiltest](http://www.aces.edu/soil/soiltest) or call 844-3958. The average cost of a soil test is \$7.00 per sample and usually takes approximately 3 to 5 days to get results.

Over-fertilization of lawns leads to the runoff of nitrogen and phosphorus into local watersheds. Water quality impacts associated with this nutrient-rich runoff include the creation of algae blooms which can lower dissolved oxygen levels, threaten aquatic habitats, lead to fish kills, decrease water clarity, increase water treatment costs and impair recreational uses such as boating, fishing and other water sports.

If a fertilizer treatment is necessary for your lawn, please do the following in an effort to protect our local watersheds:

- Select a fertilizer based on the recommendations of your soil test.
- When applying fertilizer, please select a slow-release fertilizer, use the recommended application rate and follow the instructions for application.
- If you live along a stream or lake, try to maintain a natural buffer zone between your lawn or garden and the stream or lake. This buffer zone will protect water quality by allowing excess fertilizers and chemicals to be absorbed into the soil in lieu of entering the stream or lake.

Additional lawn maintenance information can be found in the free Alabama Cooperative Extension System publication, *Alabama Smart Yards*, which is available at [www.smartyards.org](http://www.smartyards.org). For future information regarding water quality, please contact the Water Resource Management Department at 334-501-3060.



### Developer To Build City's First Conservation Subdivision

Auburn home buyers will soon have a new kind of lifestyle housing to choose from; one that takes unprecedented steps to conserve the environment. The developer of Lundy Chase subdivision plans to build Phase III of Lundy Chase that will meet criteria necessary to be zoned as a "conservation subdivision," the City's newest zoning category. In this category, a minimum of 50% of the acreage must be left as open-space in perpetuity. In 2007, the Auburn City Council approved the new zoning category to protect the Lake Oglethorpe watershed on the City's south side, zoning the area as a conservation district. However, the zoning ordinance also allowed for a conservation district to be zoned anywhere in the City.

Current estimates show that Lundy Chase, West will include 12 acres of open space for walking trails and greenways, all planned to be constructed by the developer. According to the City's Planning Director, the open space is planned to "be donated to the City and maintained by the Parks and Recreation Department. "This is a good project that balances the desires of the City, Developer, and surrounding neighborhood," said Forrest Cotten, the City's Planning Director. The subdivision is in the process of being approved by the Auburn Planning Commission. For more information on conservation districts, please contact the Auburn Planning Department at 501-3040.

### Erosion and Sediment Control Workshop

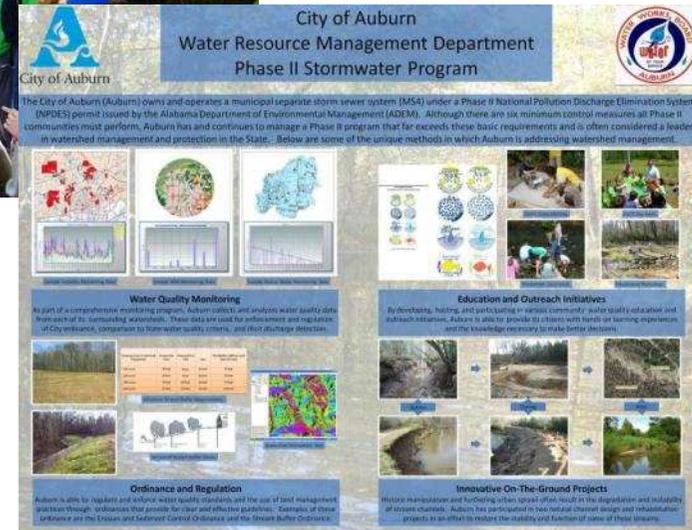
On December 14, 2006, the Water Resource Management Department hosted the City of Auburn's fourth annual Erosion and Sediment Control Workshop at Keesel Park as part of the City's Phase II Storm Water Management Program. The purpose of the workshop was to educate and interact with engineers, developers, and contractors who are governed by the City's Erosion and Sediment Control (ESC) Ordinance and the Alabama Department of Environmental Management's (ADEM) storm water regulations. More than 70 participants attended this year's event.

A local erosion and sediment control consultant conducted a presentation on the Qualified/Credentialed Professional (QCP)/Qualified/Credentialed Inspector (QCI) construction site inspection process. In addition to typical problems that inspectors are encountering as a result of poor or improper maintenance of erosion and sediment control best management practices (BMPs), ADEM requires that all permitted construction sites be inspected after each 3/4-inch rainfall event or a minimum of once a month by a registered QCP/QCI. Devices Erosion Control and Environmental Supply provided field demonstrations on the latest technologies in erosion and sediment control as well as the proper installation of existing erosion and sediment control best management practices.

Watershed Division Manager Matt Dunn gave an overview

# Public Presentations

- ✓ AU Biosystems Eng.
- ✓ JROTC
- ✓ Local Water Watch
- ✓ SERWQAN
- ✓ LID Workshops
- ✓ E&SC Workshop
- ✓ Elementary Schools
- ✓ AU Landscape Architecture
- ✓ Rotary Club
- ✓ City Council
- ✓ State Floodplain Association
- ✓ State of Our Watershed
- ✓ Conference
- ✓ State Floodplain Association
- ✓ AWEA
- ✓ Greenspace Adv. Board



**Presentations Strengthen Partnership Relations!**

# Storm Drain Marking Program



CITY OF AUBURN/SPRING AUBURN NEWS  
Auburn mayor Bill Ham, right, looks over the drawing of Macy Parker, second from right, of Ogletree Elementary School. Students from Auburn elementary schools who won the 2010 Storm Drain Marker Artwork Competition got a chance to meet the mayor Friday. The artwork will be used on markers to be placed on the some 2500 storm drains.

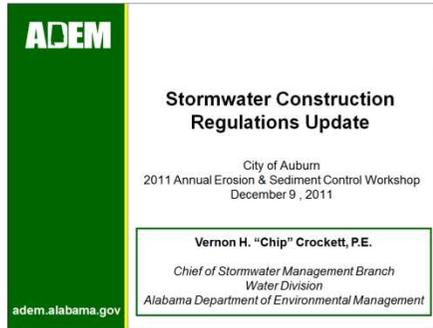




# Earth Day / Water Festival



# Targeting the Audience



Annual E&SC Workshop

Rain Barrel Workshops

LID Design Workshop

# Partnerships - ALOA



## A Citizen Advisory Committee That Meets Quarterly to:

- 1) Review Policies – PE & O
- 2) Discuss Concerns
- 3) Outline Goals
- 4) Collaborate Ideas/Projects
- 5) Get positive feedback

**Storm Water Management Program**

*In May of 2001 the governmental agencies that make up ALOA joined together to address EPA's upcoming Phase II requirements.*

*This brochure is one of a series of publications regarding storm water issues in Lee County.*

*The series is produced by the ALOA Storm Water Advisory Panel and is intended to protect, maintain, and restore the chemical, physical, and biological integrity of local waters in order to enhance the quality of life for our citizens.*

**Contact Information**

For more information regarding your community's storm water program please contact the following agencies:

City of Auburn – Department of Water Resource Management  
334-953-3077  
[www.auburnalabama.org/wrm](http://www.auburnalabama.org/wrm)

Lee County – County Engineer  
334-742-9700  
[www.lee-co.org](http://www.lee-co.org)

City of Opelika – Department of Public Works  
334-765-5440  
[www.opelika.org](http://www.opelika.org)

Auburn University – Risk Management and Safety  
334-844-4800  
[www.auburn.edu/administration/rms](http://www.auburn.edu/administration/rms)

*"Local Citizen Groups and Governments Working Together for Clean Water"*

**MOORE'S MILL CREEK AT A GLANCE:**  
Moore's Mill Creek is an approximate 6-mile long nonpoint tributary of Chevalas Creek, a major tributary of Uprater Creek and subsequently the Willapa River. Moore's Mill Creek originates in rural Opelika, generally flowing southeast through the eastern side of Auburn and into Chevalas Park. It also finally discharges to Chevalas Creek. Land use within much of the Moore's Mill Watershed is heavily urbanized with a mix of residential, industrial, commercial, and recreational uses accounting for over 45% of the total drainage basin. Current problems associated with urban stormwater runoff, combined with historic impacts from agriculture and development activities, have contributed to increased sediment loads within Moore's Mill Creek and are identified as the likely cause for its placement on the Alabama Department of Environmental Management (ADEM) list of impaired waterbodies. As such, ALOA was established to lead a Total Maximum Daily Load (TMDL) for Moore's Mill Creek by 2012. This TMDL would establish specific enforceable regulations for the entire Moore's Mill Creek watershed, thereby determining specific allowable limits of sediment to Moore's Mill and set specific priorities for erosion discharge. ALOA and its partners are committed to improving water quality, aquatic habitat, and riparian corridors as part of its comprehensive watershed management strategy.

**LAND USE AND AERIAL PHOTOGRAPHS OF MOORE'S MILL WATERSHED**

Robert G. Pitts Airport  
Simpleshatche County Club  
Chevalas Lake

Land Use/Category	Sq. Miles	% Coverage
Forest	0.22	4.1
Commercial/Industrial	1.04	19.2
Open Space	3.15	57.0
Agriculture	0.97	17.8
Urban	1.15	20.8
Open	0.14	2.6
Agriculture	0.35	6.3
Open	11.5	208

2008 Lookout for Moore's Mill Creek Watershed

**WHAT'S BEING DONE AND HOW CAN I HELP?**  
State and local governments and citizens groups alike have all taken great strides toward protecting the future of Moore's Mill Creek and the Moore's Mill Watershed. Ongoing projects, such as the Moore's Mill Watershed Management Plan and the Moore's Mill Creek Stream Restoration Project, offer opportunities for improving the chemical, biological, and ecological aspects necessary for a healthy aquatic ecosystem. Additionally, partnerships such as ALOA and the newly formed Lee County Stream Restoration Partners for Clean Water are working together to develop solutions that will allow future generations to enjoy the benefits derived from healthy water resources. In addition to providing on-the-ground projects, both ALOA and Lee County Stream Partners for Clean Water perform numerous education and outreach initiatives to inform local citizens about managing concerns and ways in which they may become involved in a solution. If you are interested in getting involved with any of these programs or would simply like additional information, please visit any one of the websites listed below or contact the City of Auburn Water Resource Management Department at (334) 301-3077.

Moore's Mill Creek Stream Restoration Work

Lee County Stream Partners for Clean Water

**FOR MORE INFORMATION ON HOW TO GET INVOLVED WITH ANY OF THESE ORGANIZATIONS:**

[WWW.AUBURNALABAMA.ORG/WRM](http://www.auburnalabama.org/wrm)  
[WWW.LEEALIOA.COM](http://www.leealioa.com)  
[HTTP://WWW.AUBURNALABAMA.ORG/WRM](http://www.auburnalabama.org/wrm)  
[WWW.OPELIKA.ORG](http://www.opelika.org)  
[WWW.LEE-COUNTY.COM](http://www.lee-county.com)  
[WWW.AUBURN.EDU/ADMINISTRATION/RMS](http://www.auburn.edu/administration/rms)  
[WWW.ADE.STATE.AL.US/WATERSHED](http://www.ade.state.al.us/watershed)

# Partnerships – Citizen Monitoring Groups

- **Advantages to Partnering With Citizen Monitoring Groups**

- Provides additional “eyes” in the field to assist us with addressing issues in a more timely manner.
- Provides additional useful monitoring data that can be used to target potential issues such as illicit discharges, sanitary sewer overflows, etc.
- Establishes good public relations between the City and these environmental stakeholder groups
- Helps spread the word about your program to ordinary citizens and other citizen and civic organizations



# Summary

- **Effective public education heightens public awareness and builds public relations.**
- **An educated audience produces effective volunteers.**
- **Be creative in your education efforts.**
  - **How do I utilize the resources I have?**
  - **How do I engage other City/municipal departments?**
- **Establish good working relationships with local and regional environmental stakeholder organizations.**

# QUESTIONS?



City of Auburn

**Matt R. Dunn, P.E.**  
**Watershed Division Manager**  
**Water Resource Management Department**  
**City of Auburn**  
**1501 West Samford Avenue**  
**Auburn, AL 36832**  
**PH: 334-501-3077**

Email: [mdunn@auburnalabama.org](mailto:mdunn@auburnalabama.org)

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