
ALABAMA COOPERATIVE Extension SYSTEM

Mill Creek Project

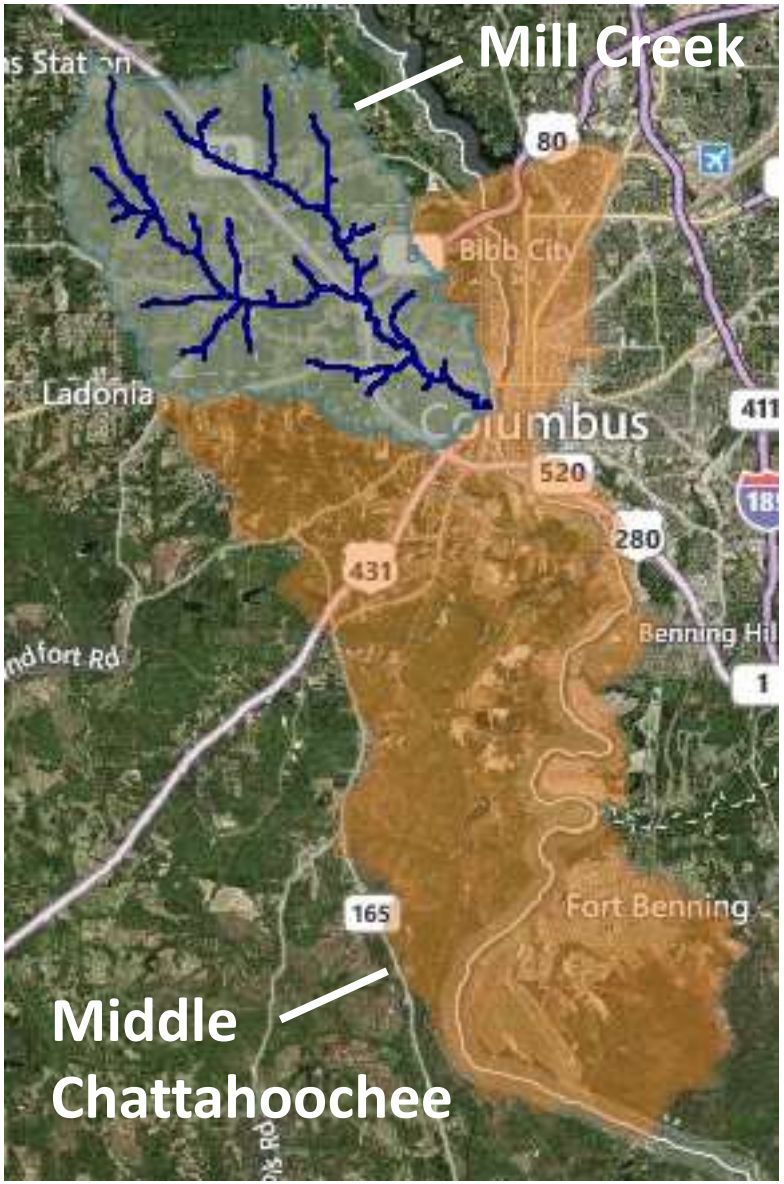
# Flashy & Trashy
# Tale of an Urban Creek

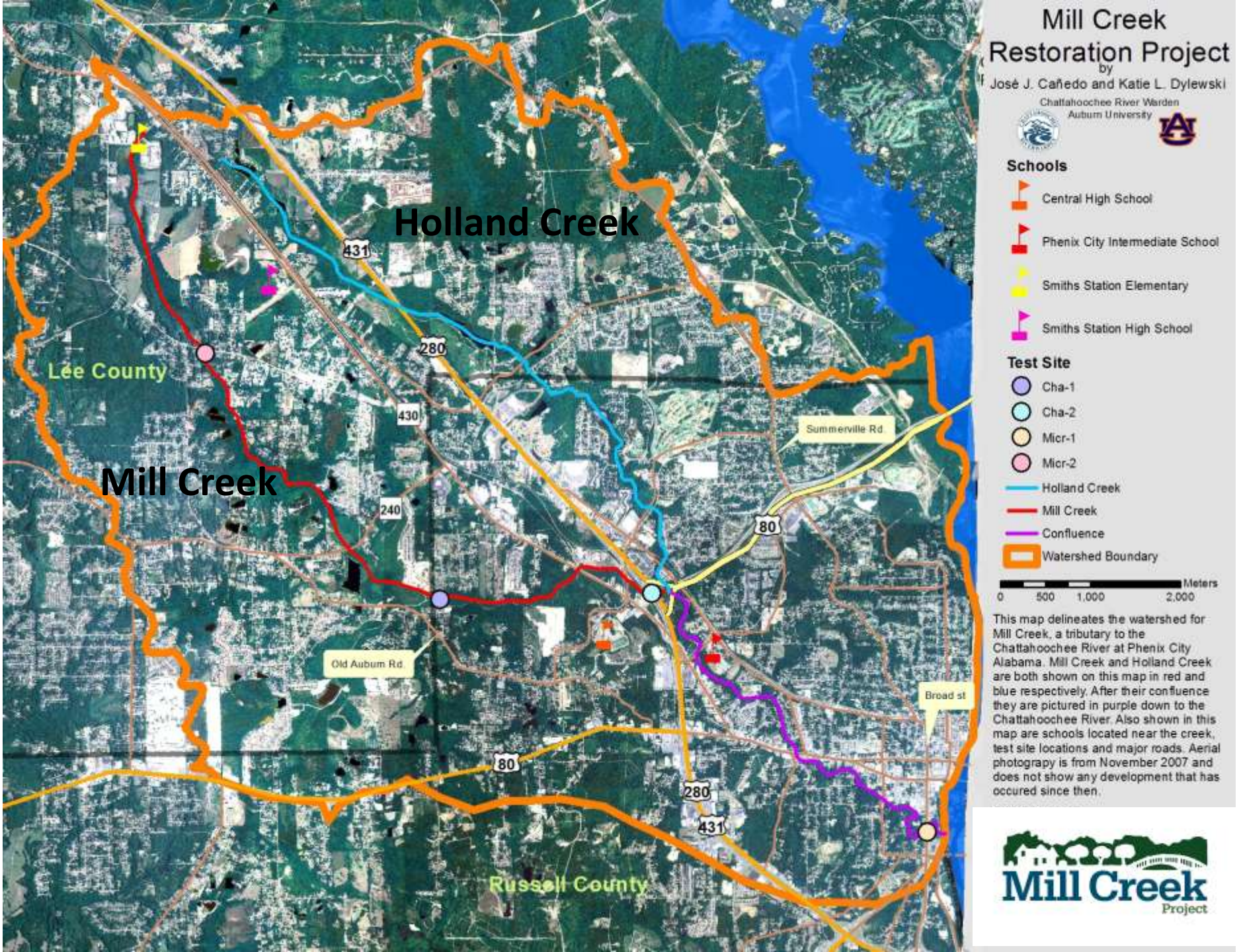
Alex James, Katie Dylewski

and Dr. Eve Brantley

September 11, 2015

**The Mill Creek Project is funded by a Section 319 grant from the Alabama Department of Environmental Management and the U.S. Environmental Protection Agency Region 4.**


Mill Creek
Middle Chattahoochee
Ladonia
Columbus
Bibb City
Fort Benning
80
520
280
431
165
411
1

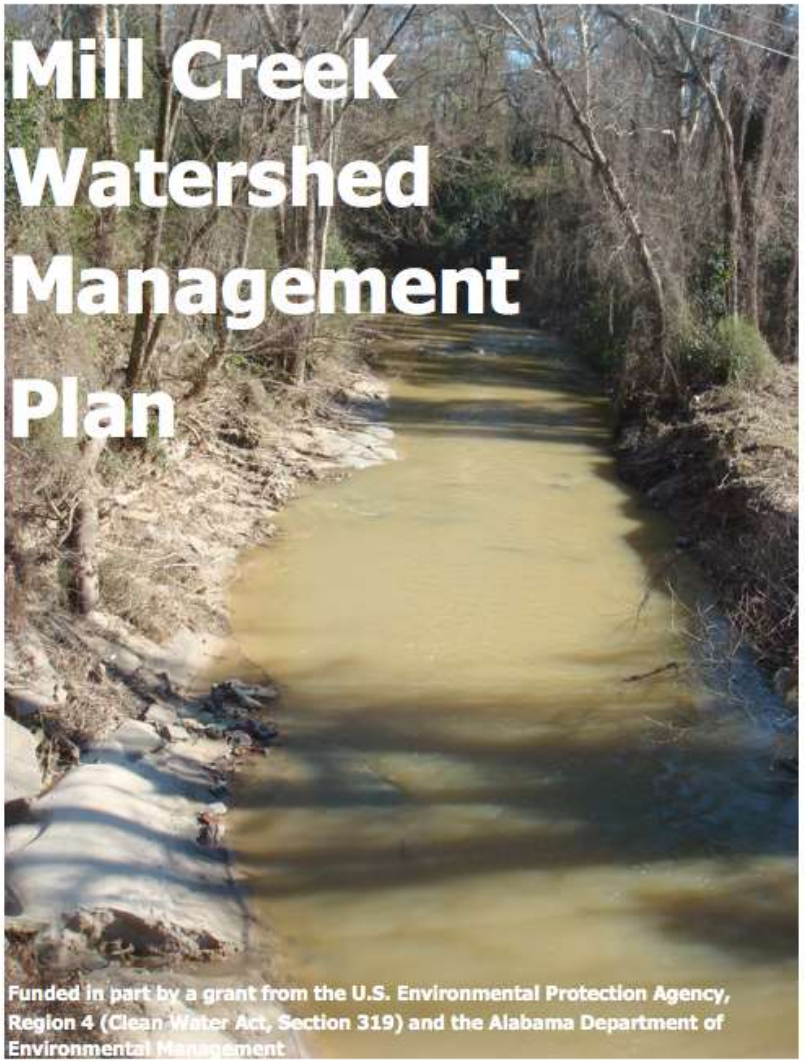

Holland Creek
Mill Creek
Lee County
Russell County
431
280
430
240
80
Summerville Rd
Old Auburn Rd
Broad st
Mill Creek Restoration Project
by
José J. Cañedo and Katie L. Dylewski
Chattahoochee River Warden
Auburn University
Schools
Central High School
Phenix City Intermediate School
Smiths Station Elementary
Smiths Station High School
Test Site
Cha-1
Cha-2
Micr-1
Micr-2
Holland Creek
Mill Creek
Confluence
Watershed Boundary
Meters
0
500
1,000
2,000
This map delineates the watershed for Mill Creek, a tributary to the Chattahoochee River at Phenix City Alabama. Mill Creek and Holland Creek are both shown on this map in red and blue respectively. After their confluence they are pictured in purple down to the Chattahoochee River. Also shown in this map are schools located near the creek, test site locations and major roads. Aerial photograpy is from November 2007 and does not show any development that has occured since then.
Mill Creek
Project

# Mill Creek

- 303(d) list – since 2006
- Organic enrichment, sediment
- Low DO
- High *E. coli* counts
- TMDL draft 2015
- Section 319 grant
- NFWF grant


# Phase I

- Watershed Management Plan
- BMPs
- 2 stream restoration sites
- 2 slope stabilization sites
- 2 bioretention basins on school campuses



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# Phase I


Before

After

CWP

AUBURN UNIVERSITY

ADEM
Alabama Department of Environmental Management

PHENIX CITY EST. 1883 ALABAMA

CHATTAHOOCHEE RIVERWARDEN

LEE COUNTY ALABAMA

Smiths Station
Alabama
Meet me at the Station!


Smiths Water & Sewer Authority

TRI RIVERS
Waterway Development Association

GOING HELP THE HOOCH GREEN

Alabama Water Watch

CONSOLIDATED RESOURCES LLC

PHENIX CITY PUBLIC SCHOOLS

LEE COUNTY SCHOOLS ALABAMA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

GOODWYN | MILLS | CAWOOD

# Phase II

- Project end date: May 2016

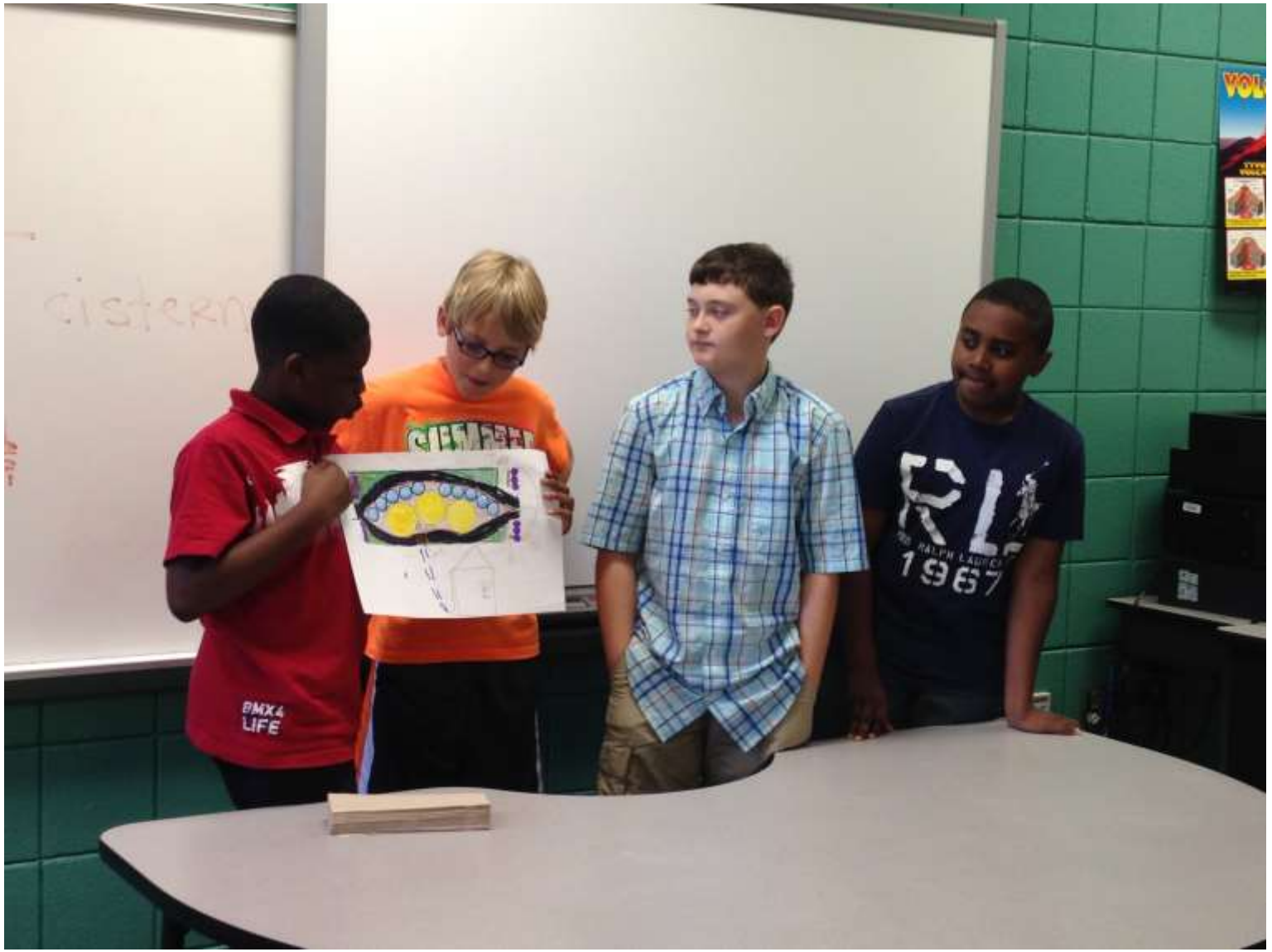
- 2 additional stream restoration projects
- Implementation of 4 BMPs

# Lakewood Elementary

- Gutters installed
- Cisterns (two, 500 gal ea.)
- Collected water to be used in greenhouse
- Rain garden to collect overflow


Cisterns
Rain Garden

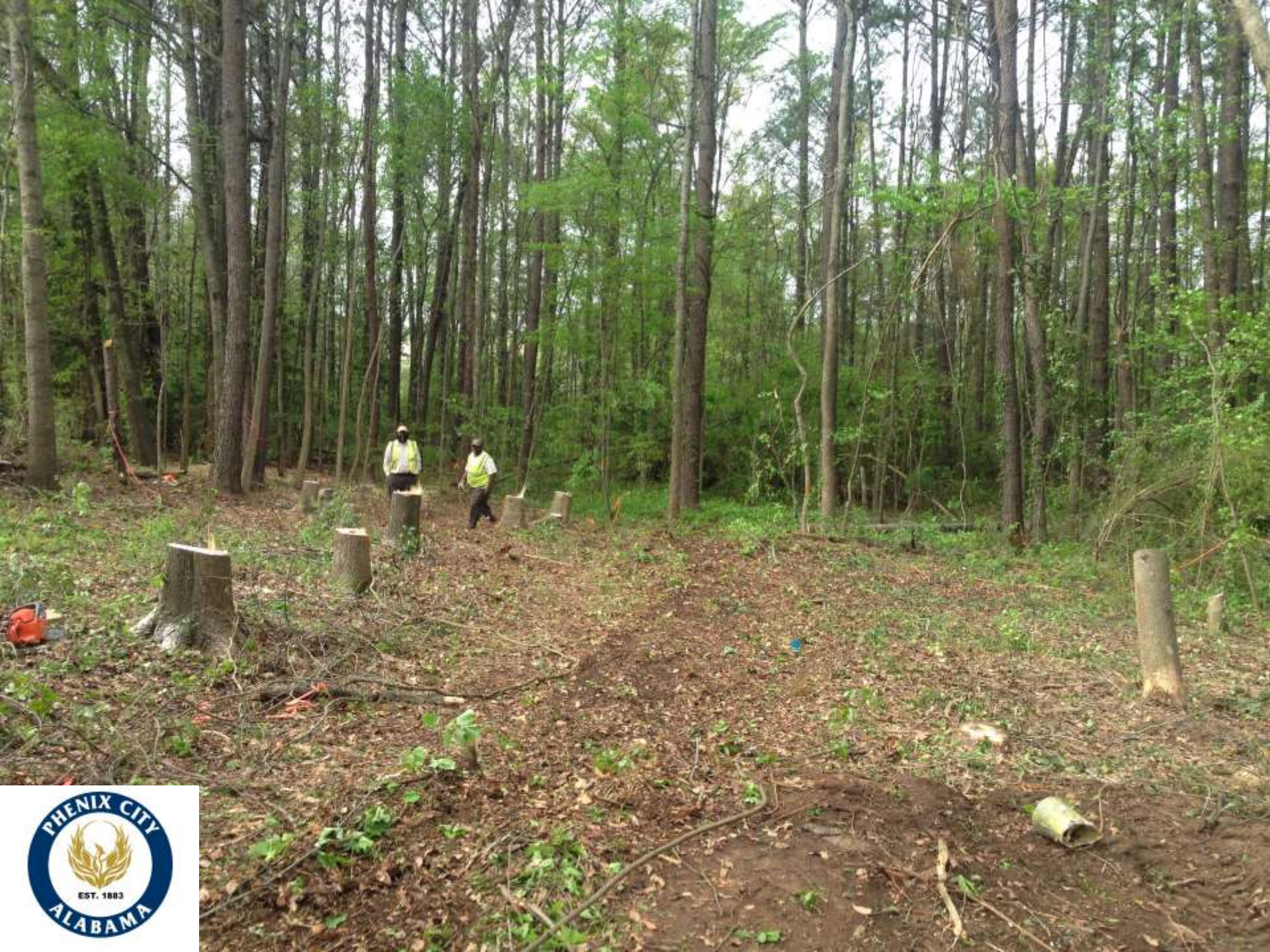
# Lakewooders Design a Rain Garden




KUBOTA


Phenix City Intermediate Sch
Existing bioretention
Mill Creek
Stadium Dr
Approx. 360' for Restoration
Planned constructed stormwater wetland
Opelika Rd

**Project #2**


PHENIX CITY
EST. 1883
ALABAMA

# Stream Enhancement – Broad St. Take Two

- On main stem
- 200 linear feet

# What Happened?

- Channel eroded and was over widened
- One vane was not sufficient to turn flow around bend
- Replaced one log vane with two log vanes
- “Boulder wall” armoring on bank


BEFORE


AFTER

# Stream Enhancement – 14th St.

- On main stem
- 100 linear feet


Project #4


VOLVO
PHENIX CITY
EST. 1883
ALABAMA


VOLVO


BEFORE


AFTER

# PCIS – Stream Restoration

- Below confluence on main stem
- 360 linear feet
- Have permit
- PC Schools to bid out this fall

**Project #5**

# Educator's Day on the River

- Professional Development
- 70 total teachers from Phenix City, Muscogee County Schools, and Russell County
- Project WET and Exploring Our Living Streams
- 2 day training then whitewater and zipline!


SERVING TRAY
SERVING TRAY

# Summer School Opportunity

- Dr. Baldwin with Gear Up grant
- Summer school science, 6th grade
- MacroMania, watersheds, rain gardens, bioretention, water testing…

- “If we had done some of this during the school year, we wouldn’t have failed science”

# Community Involvement
# Planting Opportunities

- Broad St., Crawford Rd./14th St. and PCIS streams
- Live stakes, bare roots, native grasses

# Comments and Questions

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**Social Media**

**Alabama.Extension.Water** **ACESwater**

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