



Bobby C. Hagler  
County Engineer

## TUSCALOOSA COUNTY PUBLIC WORKS DEPARTMENT

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Allan D. Springer, Sr.  
Assistant County Engineer

March 30, 2015

Ms. Marla Shelley Smith  
Alabama Department of Environmental Management  
MS4 Coordinator  
Water Division  
Stormwater Management Branch  
1400 Coliseum Blvd.  
Montgomery, Alabama 36110-2059

RE: 2014-2015 Annual Report  
Tuscaloosa County Municipal Separate Storm Sewer System (MS4)  
NPDES Permit Number ALR040001

Ms. Smith,

Please find the enclosed 2014-2015 Annual Report for the Tuscaloosa County Phase II MS4 Stormwater Management Plan.

The county takes this program seriously and is taking great efforts to meet and exceed the objectives and goals set forth in the plan.

If you see any areas that we can improve please contact us.

Sincerely,

Robert Cunningham  
Project Engineer

cc: County Engineer - Bobby Hagler (email)  
Assistant County Engineer - Allan Springer (email)  
County Administrator - Melvin Vines (email)  
Engineering Coordinator - Mike Henderson (email)  
Engineering Coordinator - Tracy Criss (email)  
Project Engineer - Scott Anders (email)  
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# Tuscaloosa County

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## STORMWATER MANAGEMENT PLAN

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### 2014- 2015 Annual Report, March 31, 2015



## **Introduction to Stormwater Regulations**

### **Background Regulations**

Since the passage of the Clean Water Act (CWA), the quality of our nation's waters has improved dramatically. Despite the progress, however, degraded water bodies still exist. From a national perspective, the impacts of stormwater runoff are the most common reason for impairment of water quality in our streams, rivers, lakes and estuaries. As a result of this awareness more federal and state stormwater management programs were established.

Phase I of the U.S. Environmental Protection Agency's (E) Municipal Stormwater Program was promulgated in 1990 under the CWA. Phase I relied on the National Pollutant Discharge Elimination System (NPDES) permit coverage to address stormwater runoff from: (1) "medium" and "large" municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater, (2) construction activity disturbing 5 acres of land or greater, and (3) ten categories of industrial activity.

The Phase II Program, published in 1999, expanded the Phase I Program by requiring additional operators of "small" MS4s and operators of small construction sites, through the use of NPDES permits, to implement programs and practices to control polluted stormwater runoff.

### **Phase II Stormwater Permit Coverage**

In Alabama, the NPDES permit program is administered by the Alabama Department of Environmental Management (ADEM). The Phase II Rule requires the following to apply for NPDES permit coverage:

- Operators of small MS4s located in "urbanized areas" as delineated by the Bureau of the Census,
- Operators of small MS4s so designated by ADEM due to their discharges causing , or having the potential to cause, an adverse impact on water quality, and
- Operators of small construction activities that disturb equal to or greater than 1 and less than 5 acres of land.

Once obtained, the permit authorizes stormwater discharges to the waters of the state, as long as the operators implement the required permit components.

### **Permit Requirements for Small MS4s**

The Phase II Stormwater Program was meant to address small municipal separate storm sewer systems (MS4s) located in urbanized areas and some small densely populated areas not covered by the Phase I Program. Unlike the Phase I MS4 Program, the Phase II MS4 Program involved the issuance of a general permit. The permit requires operators of regulated small MS4s to develop, implement, and enforce a Stormwater Management Program (SWMP) designed to reduce the discharge of pollutants from their MS4s to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. At a minimum, the Stormwater Management Program must employ control measures to address the following six areas:

- Public Education and Outreach on Stormwater Impacts
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination (IDDE)
- Construction Site Stormwater Runoff Control
- Post-Construction Stormwater Management in New Development and Redevelopment
- Pollution Prevention/Good Housekeeping for Municipal Operations.

To assess the effectiveness of the program, the permit requires an annual review and report of the Stormwater Management Program. During the review, the value of the control measures, referred to as Best Management Practices (BMPs), should be gauged from the outcome of the prescribed measurable goals. In the annual report, completed and planned activities must be documented, as well as any proposed changes to the program. If necessary, a monitoring plan must also be submitted and results noted in the annual report.



## Overview of Tuscaloosa County's Stormwater Management Program

The U.S. Census Bureau defines urbanized areas based on population density and total population for an area. Based on the 2010 Census, part of Tuscaloosa County was classified as being in an urbanized area. Therefore, the EPA and ADEM designated that area as a regulated small MS4 and required the county to comply with the Phase II Municipal Stormwater Program regulations, obtain coverage under the NPDES General Permit and develop a Stormwater Management Program to reduce the contamination of stormwater runoff.

The MS4 boundaries in Tuscaloosa are located within the Tuscaloosa Urbanized Area as shown in the map entitled Tuscaloosa Alabama Urbanized Area – Stormwater Entities as Defined by the 2010 Census. The permit coverage area as depicted on this map is within the green boundary and not included in the city limits of Tuscaloosa and Northport. The map may also be access through this link:

<http://www.census.gov/geo/mapdata/maps/2010ua.html>

After the finalization of the Phase II Regulations, Tuscaloosa County was defined as a Phase II community and was required to submit a Notice of Intent (NOI) to request coverage under the General NPDES Permit No. ALR040000. Tuscaloosa County applied for coverage on February 26, 2003. The first permit term was scheduled to expire on March 9, 2008.

Tuscaloosa County applied for a second permit term coverage on September 13, 2007. After an administrative extension of nearly three years, ADEM reissued the General Permit for discharges from regulated MS4s. The second permit term became effective on February 1, 2011 and is scheduled to expire on January 31, 2016.

Annual Reports 2006 through 2014, as well as the permit applications and all supporting documents, can be viewed at the Tuscaloosa County Public Works Department.

The Tuscaloosa County Stormwater Management Program is comprised of specific actions that will be taken to aid in the efforts to protect water quality and reduce pollutant discharges from the county's MS4. This Stormwater Management Program details the programs and activities, referred to as Best Management Practices, chosen to meet the regulatory requirements, as well as the associated measurable goals and implementation schedules. The Tuscaloosa County Public Works Department is responsible for overall program coordination and implementation, as well as documentation and annual reporting.

### **Best Management Practices Selection Process**

Tuscaloosa County has a history of being proactive when it comes to environmental issues. Many community organizations and governmental agencies within Tuscaloosa have had pollution prevention programs in place prior to the Phase II Rule. Consequently, the first step in the best management practice selection process was to identify the existing programs and determine if they addressed any of the six minimum control areas. Secondly, groups and organizations that promoted or supported environmental education in the area of stormwater management were contacted to establish partnerships. Then additional BMPs were selected to further address the requirements of the Phase II MS4 General Permit. These supplemental BMPs were evaluated and those that were selected typically addressed more than just one minimum control measure conditions.

In preparing this latest version of the SWMP and selecting suitable best management practices, research was done examining other recognized and successful programs. From each of these reviews, some of the BMPs were noted as having potential to help supplement the work being done in Tuscaloosa. The ADEM approved plans for the communities of Auburn, Tuscaloosa as well as Baldwin County and Madison County were used to assist in the identification of achievable, meaningful and worthy best management practices.

### **Measurable Goals Selection Process**

In accordance with the permit requirements, specific measurable goals have been developed for each best management practice. Measurable goals are objective markers used to evaluate the effectiveness of the SWMP toward protecting water quality and reducing pollutants to the maximum extent practicable. Each BMP that was selected for implementation was subjected to a thorough review to determine realistic, worthwhile and achievable goals in terms of implementation. The goals selected are specific for each BMP, some pertaining to specific public education events, others to increasing the number of points of contact with the public. The goals for each selected BMP were specific to that particular BMP, the goal planning focusing on achievable and worthwhile objectives.

## **Establishment of Implementation Schedule**

For each of the selected Best Management Practices selected by Tuscaloosa County for implementation, a proposed schedule was developed. The BMPs that involve coordination with the schedules of other agencies have been planned on a seasonal basis. The BMPs that are only dependent on the Tuscaloosa County Public Works Department for implementation can be scheduled more firmly, these have tentative schedules based upon a quarterly or monthly basis. There has been flexibility included in the schedule to accommodate unforeseen events that are also the responsibility of the Tuscaloosa County Public Works Department. These events that at times require the dedication of the work force may disrupt the scheduled implementation of the Best Management Practice schedule.

## **Stormwater Management Program Components**

The Phase II MS4 Program involves the issuance of a general permit which requires operators of regulated small MS4s to develop, implement, and enforce a Stormwater Management Program designed to reduce the discharge of pollutants from their MS4s to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The Stormwater Management Program should address the following major components:

- Public education and outreach on stormwater impacts
- Public involvement and participation
- Illicit discharge detection and elimination
- Construction site stormwater runoff control
- Post construction stormwater management in new development and redevelopment
- Pollution prevention and good housekeeping for municipal operations

For each of the major program components, this section describes the permit requirements, the selected Best Management Practices to satisfy the permit, and the schedule plan to implement the Best Management Practices.

## **Public Education and Outreach on Stormwater Impacts**

### **Minimum Control Measure #1**

#### **General**

Tuscaloosa County will implement a public education and outreach program through several avenues. This component of the program will likely provide the most significant long term benefit towards the protection of water quality, therefore a significant amount of work is planned by Tuscaloosa County to address this opportunity. Outreach is planned which will extend into schools, demonstrations to youth organizations and use of public broadcasting to share the importance of stormwater management throughout Alabama.

#### **Permit Requirement**

The permittee must implement a public education and outreach program to distribute materials to the community or conduct equivalent outreach activities about the impacts of discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff to the maximum extent practicable.

#### **Program Objective**

The objective of this component is to engage the public's interest in preventing stormwater pollution. The strategy will be to address the public's varying levels of background knowledge of both stormwater management and their role in reducing stormwater pollution. Therefore, a multi-pronged approach to outreach is planned that will generate a basic awareness of stormwater pollution, educate at groups at a more sophisticated level using more substantive content, and then building on existing recognition of the issue to prompt behavior changes that reduce pollution.

### **Program Description – Basic Awareness – Educational Brochures**

Educational brochures and fact sheets focusing on stormwater pollution prevention have been developed in partnership with the Cities of Tuscaloosa and Northport. These brochures are designed to provide basic water quality information by identifying sources and types of stormwater pollution, explaining the problem of stormwater pollution and a general guide for individuals to prevent stormwater pollution. The brochure and fact sheet further provides points of contact within each of the three governmental agencies that can provide additional information or assist with reporting a stormwater pollution concern.

### **Implementation Schedule– Basic Awareness – Educational Brochures**

Spring 2015

Tuscaloosa County will take the lead for the three governmental agencies to update the current brochure and fact sheet. The current package has out of date contact information, and will require updating. Once the brochure and fact sheet is revised, it will be printed and the updated copies distributed to the brochure display cases around the cities and county.

Further dates of the implementation schedule are presented in the Measurable Goals section.

### **Decision Process– Basic Awareness – Educational Brochures**

Through the production and distribution of the stormwater informational brochure and fact sheet, known as the Tuscaloosa Area Stormwater Management Guide, the public will be provided with basic information about the issue. This information includes a summary of reasons why stormwater quality is important, suggestions as to how a citizen can help prevent stormwater pollution and also information on pollutants that they may not be aware that degrade water quality.

The informational brochure and fact sheet offers contact information for citizens whereby they may obtain additional information or receive assistance in reporting a stormwater pollution concern.

The target audience for the informational brochure and fact sheet is the general public visiting a public building or venue.

The target pollution sources that the informational brochure and fact sheet is designed to bring awareness to include sediment erosion and deposition from exposed ground, residential yard maintenance waste, and household waste.

The outreach strategy of informational brochures and fact sheets is to provide free, attractive and readily available brochures at locations where the public gathers seeking information. The strategy plan is expected to provide information to 100 residents each year.

### **Measurable Goals– Basic Awareness – Educational Brochures**

2015

Update and have printed for distribution the Tuscaloosa Area Stormwater Management Guide by March 2015.

Working in conjunction with the City of Tuscaloosa, the City of Northport and the University of Alabama, an up to date stormwater informational brochure has been prepared. The final version, approved by all four agencies is complete and will now be sent to the printers.

#### **See Appendix A.**

Replace the current Tuscaloosa Area Stormwater Management Guides on display with the revised issue at the current distribution sites by April 2015.

Once the printer has completed the printing run, the revised brochures will be placed in the display racks at the currently used locations.

Increase the number of informational brochure and fact sheet distribution locations by 3 sites by July 2015.

2016

Install display racks for the Tuscaloosa Area Stormwater Management Guide in 3 new locations by March 2016. Possible locations to consider include Lake Lurleen State Park, Tannehill Ironworks Historical State Park, Deerlick Recreational Area and Campground, Rocky Branch Recreational Area, and Burchfield Branch Park.

2017

Review and update the Tuscaloosa Area Stormwater Management Guide as needed by March 2017.

Replace the current Tuscaloosa Area Stormwater Management Guides on display with the revised issue at the current distribution sites by April 2017.

Increase the number of informational brochure and fact sheet distribution locations by 2 sites by July 2017.

**Responsible Party– Basic Awareness – Educational Brochures**

Bob Cunningham

Tuscaloosa County Public Works Department

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205-345-6600

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**Reporting Mechanism– Basic Awareness – Educational Brochures**

The reporting mechanism for documenting progress and results will be accomplished by summarizing work towards each stated goal in the annual report to the Alabama Department of Environmental Management.

**Program Description – Public Education Outreach Sessions – Schools**

Participating in public education outreach sessions in elementary schools provides an opportunity to increase the awareness of students to the issue of stormwater pollution. The

plan to accomplish this goal is to contact public schools in Tuscaloosa County and offer to them an educational session designed around stormwater pollution, awareness and prevention. The session will include a presentation with slides, and hands on demonstration of soil erosion and deposition, and conclude with a question and session.

### **Implementation Schedule – Public Education Outreach Sessions – Schools**

#### **Winter to Spring 2015**

Assemble and prepare the Public School Outreach Presentation with the selection and organizing of slides, construction of hands on demonstration displays, and preparation of outreach program outline.

#### **Spring 2015**

Review and revise and update the Public School Outreach Presentation.

Contact 3 public schools and offer the educational outreach program for their consideration and hosting.

Provide the presentation to each of the 3 schools that agreed to host the outreach presentation.

#### **Fall 2015**

Review and revise and update the Public School Outreach Presentation.

Contact 3 public schools and offer the educational outreach program for their consideration and hosting.

Provide the presentation to each of the 3 schools that agreed to host the outreach presentation.

#### **Spring 2016**

Review and revise and update the Public School Outreach Presentation.

Contact 3 public schools and offer the educational outreach program for their consideration and hosting.



Provide the presentation to each of the 3 schools that agreed to host the outreach presentation.

#### Fall 2016

Review and revise and update the Public School Outreach Presentation.

Contact 3 public schools and offer the educational outreach program for their consideration and hosting.

Provide the presentation to each of the 3 schools that agreed to host the outreach presentation.

#### Spring 2017

Review and revise and update the Public School Outreach Presentation.

Contact 3 public schools and offer the educational outreach program for their consideration and hosting.

Provide the presentation to each of the 3 schools that agreed to host the outreach presentation.

#### Fall 2017

Review and revise and update the Public School Outreach Presentation.

Contact 3 public schools and offer the educational outreach program for their consideration and hosting.

Provide the presentation to each of the 3 schools that agreed to host the outreach presentation.

### **Decision Process – Public Education Outreach Sessions – Schools**

Through an active, current and inspiring presentation to the youth in the public school systems in Tuscaloosa County, awareness of the issues of stormwater management issues can be shared. By educating the youth, permanent behavioral changes can be made that will have long term positive effects on the overall water quality in Tuscaloosa County. The program will be designed to educate the youth on what is considered to be stormwater pollution, what they can

do to help control stormwater pollution and encourage them to help educate others in preventing further actions that contribute to stormwater pollution.

The offer of this outreach program will be accomplished through contact with the administration of selected public elementary schools. The principals of the schools will be offered the opportunity to consider and host the educational session in one or more of their grade levels. The principal will be the point of contact for the program and will offer scheduling options for the presentation.

The program will be designed for the appropriate age and educational level of the audience. The target audience is children in public elementary schools from ages 8 to 10.

The outreach program is targeted at increasing awareness of stormwater pollutants that are generated around the home. The pollutants to be included in the presentation include household debris and household waste.

The public education outreach sessions in elementary schools will include an age appropriate slide presentation to educate the students. Further, a hands on demonstration of the effects of stormwater pollutants will involve the students and facilitate their understanding of the issues. The question and answer session at the conclusion will allow for interaction between the students and the presenter, allowing for discussion of relevant problems and the offering of ways that they can help solve the problem.

The public education outreach sessions in elementary schools is expected to be made available to 300 students over the planned period.

#### **Measurable Goals – Public Education Outreach Sessions – Schools**

2015

Assemble and prepare the Public School Outreach Presentation with the selection and organizing of slides, construction of hands on demonstration displays, and preparation of outreach program outline by January 2015.

Contact 3 public schools and offer the Public School Outreach Presentation for their consideration and hosting by February 2015.

Contacts were made with 3 elementary schools in the Tuscaloosa County System. Two of the schools accepted the offer of this outreach program. Westwood School invited the county to make the presentation in January 2015

where 60 4<sup>th</sup> graders attended. Buhl Elementary has requested that the program be offered to their students in the fall. Big Sandy has not yet offered an invitation to make the presentation.

Provide the Public School Outreach Presentation to each of the 3 schools that agreed to host by May 2015.

The presentation made at Westwood Elementary on January 20, reaching 60 4<sup>th</sup> grade students. The hands- on presentation was well received by the students and teachers with an extended discussion period students commented and asked questions.

**See Appendix B for presentation photos.**

Review and revise and update the Public School Outreach Presentation by August 2015.

Contact 3 public schools and offer the Public School Outreach Presentation for their consideration and hosting by September 2015.

Provide the Public School Outreach Presentation to each of the 3 schools that agreed to host by December 2015.

2016

Review and revise and update the Public School Outreach Presentation by January 2016.

Contact 3 public schools and offer the Public School Outreach Presentation for their consideration and hosting by January 2016.

Provide the Public School Outreach Presentation to each of the 3 schools that agreed to host by May 2016.

Contact 3 public schools and offer the Public School Outreach Presentation for their consideration and hosting by September 2016.

Provide the Public School Outreach Presentation to each of the 3 schools that agreed to host by December 2016.

2017

Review and revise and update the Public School Outreach Presentation by January 2017.

Contact 3 public schools and offer the Public School Outreach Presentation for their consideration and hosting by January 2017.

Provide the Public School Outreach Presentation to each of the 3 schools that agreed to host by May 2017.

Contact 3 public schools and offer the Public School Outreach Presentation for their consideration and hosting by September 2017.

Provide the Public School Outreach Presentation to each of the 3 schools that agreed to host by December 2017.

**Responsible Party – Public Education Outreach Sessions – Schools**

Bob Cunningham

Tuscaloosa County Public Works Department

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Tuscaloosa, Alabama 35401

205-345-6600

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**Reporting Mechanism – Public Education Outreach Sessions – Schools**

The reporting mechanism for documenting progress and results will be accomplished by summarizing work towards each stated goal in the annual report to the Alabama Department of Environmental Management.

### **Program Description – Public Education Outreach Sessions – Boy Scouts**

Tuscaloosa County is working to provide an outreach program, educating youth on the importance of stormwater management, by offering to local Boy Scout troops assistance in leading the boys in work on the Soil and Water Conservation Merit Badge. This merit badge teaches that “Conservation isn't just the responsibility of soil and plant scientists, hydrologists, wildlife managers, landowners, and the forest or mine owner alone. It is the person to learn more about the natural resources on which our lives depend so that we can help make sure that these resources are used intelligently and cared for properly.”

The Soil and Water Management Merit Badge has several requirements that the scouts must fulfill which involve stormwater management. These requirements include a detailed session on soil erosion, methods of prevention of erosion, a detailed session on pollutants and the effects of the pollutants, and participating in a soil conservation project. This project starts with the identification of an eroding area, preparing a plan to control the erosion and carry out the plan using proper BMPs.

The intent of the Soil and Water Conservation Merit Badge coincides with the intent of the Stormwater Management Program of Tuscaloosa County. By offering trained personnel to teach or assist with the instruction of this merit badge at troop meetings, camporees or at resident camp, the Boy Scouts will be provided the opportunity to learn of the importance of stormwater management. The plan to address this goal is to prepare and equip personnel to lead the instruction of the Soil and Water Conservation Merit Badge, providing the necessary instruction in 4 one hour long segments.

### **Implementation Schedule – Public Education Outreach Sessions – Boy Scouts**

#### **Winter 2015**

Prepare the teaching program and materials for the Soil and Water Conservation Merit Badge.

#### **Spring 2015**

Contact 1 Boy Scout Troop and offer the opportunity to host a Soil and Water Conservation Merit Badge class at troop meetings.

Contact the Black Warrior Council of the Boys Scouts of America and offer to provide the program and materials for instruction on the Soil and Water Conservation Merit Badge at the summer scout resident camp at Camp Horne.

#### Fall 2015

Contact 1 Boy Scout Troop and offer the opportunity to host a Soil and Water Conservation Merit Badge class at troop meetings.

#### Spring 2016

Contact 1 Boy Scout Troop and offer the opportunity to host a Soil and Water Conservation Merit Badge class at troop meetings.

Contact the Black Warrior Council of the Boys Scouts of America and offer to provide the program and materials for instruction on the Soil and Water Conservation Merit Badge at the summer scout resident camp at Camp Horne.

#### Fall 2016

Revise and update the program and materials for the instruction of the Soil and Water Conservation Merit Badge.

Contact 1 Boy Scout Troop and offer the opportunity to host a Soil and Water Conservation Merit Badge class at troop meetings.

#### Spring 2017

Contact 1 Boy Scout Troop and offer the opportunity to host a Soil and Water Conservation Merit Badge class at troop meetings.

Contact the Black Warrior Council of the Boys Scouts of America and offer to provide the program and materials for instruction on the Soil and Water Conservation Merit Badge at the summer scout resident camp at Camp Horne.

#### Fall 2017

Revise and update the program and materials for the instruction of the Soil and Water Conservation Merit Badge.

Contact 1 Boy Scout Troop and offer the opportunity to host a Soil and Water Conservation Merit Badge class at troop meetings.

### **Decision Process – Public Education Outreach Sessions – Boy Scouts**

The goals of the Soil and Water Conservation Merit Badge are very similar to the stated goals of the Stormwater Management Program. By assisting the scouts with the offer of instruction with trained and qualified personnel, the scout program will benefit from having this option for instruction. Further, the scouts will benefit from receiving instruction from personnel trained and qualified to provide the instruction.

The program will be designed for the appropriate age and educational level of the audience. The target audience is Boy Scouts between the ages of 11 and 18.

The outreach program is primarily targeted at increasing awareness of erosion and sediment control, increasing the understanding of the problem and encouraging participation in activities that both repair areas prone to erosion and also to prevent erosion from becoming a problem.

The outreach program with the Boy Scouts will include age and rank appropriate presentation designed to take 4 hours of instruction time with time spent visiting areas where erosion is occurring. Further the program will require the scouts to participate in a soil conservation project.

The outreach program with the Boy Scouts is expected to be made available to 150 scouting youth over the planned period.

### **Measurable Goals – Public Education Outreach Sessions – Boy Scouts**

Winter 2015

Complete the preparation of the presentation program for instructing the Soil and Water Conservation Merit Badge.

The Boy Scouts of America Merit Badge Book for the Soil and Water Conservation Merit Badge was reviewed by staff members. Work is underway to insure that the instructional program addresses the requirements of the merit badge as well as incorporate teaching elements related to the SWMP of Tuscaloosa County.

## Spring 2015

Contact 1 Boy Scout Troop and offer the opportunity to host a Soil and Water Conservation Merit Badge class at troop meetings.

Boy Scout Troop 90, sponsored by the First United Methodist Church, was offered the opportunity to have the merit badge taught at their scout meetings. The troop leadership has decided to incorporate this merit badge in the fall program schedule, and has accepted the offer for a staff member of Tuscaloosa County to teach the class.

Contact the Black Warrior Council of the Boys Scouts of America and offer to provide the program and materials for instruction on the Soil and Water Conservation Merit Badge at the summer scout resident camp at Camp Horne.

The summer camp program at the Camp Horne Resident Camp is being compiled at this time. Consideration is being given to including this offer of instruction by camp directors.

## Fall 2015

Contact 1 Boy Scout Troop and offer the opportunity to host a Soil and Water Conservation Merit Badge class at troop meetings.

## Spring 2016

Contact 1 Boy Scout Troop and offer the opportunity to host a Soil and Water Conservation Merit Badge class at troop meetings.

Contact the Black Warrior Council of the Boys Scouts of America and offer to provide the program and materials for instruction on the Soil and Water Conservation Merit Badge at the summer scout resident camp at Camp Horne.

## Fall 2016

Revise and update the program and materials for the instruction of the Soil and Water Conservation Merit Badge.

Contact 1 Boy Scout Troop and offer the opportunity to host a Soil and Water Conservation Merit Badge class at troop meetings.



#### Spring 2017

Contact 1 Boy Scout Troop and offer the opportunity to host a Soil and Water Conservation Merit Badge class at troop meetings.

Contact the Black Warrior Council of the Boys Scouts of America and offer to provide the program and materials for instruction on the Soil and Water Conservation Merit Badge at the summer scout resident camp at Camp Horne.

#### Fall 2017

Revise and update the program and materials for the instruction of the Soil and Water Conservation Merit Badge.

Contact 1 Boy Scout Troop and offer the opportunity to host a Soil and Water Conservation Merit Badge class at troop meetings.

#### **Responsible Party – Public Education Outreach Sessions – Boy Scouts**

Bob Cunningham

Tuscaloosa County Public Works Department

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#### **Reporting Mechanism – Public Education Outreach Sessions – Boy Scouts**

The reporting mechanism for documenting progress and results will be accomplished by summarizing work towards each stated goal in the annual report to the Alabama Department of Environmental Management.

### **Program Description – Public Education Outreach – Discovering Alabama**

Discovering Alabama is an Emmy Award winning television documentary series hosted by Doug Phillips. This program, broadcasted on Alabama Public Television, aims to document for the citizens, communities and students of the state “the many interesting and changing relationships between Alabama’s lands and people”. Tuscaloosa County has partnered with Dr. Phillips to assist in preparing and having broadcast subject matter pertaining to the issues of stormwater management.

### **Implementation Schedule – Public Education Outreach - Discovering Alabama**

2014 into 2015

During the fall of 2014 meetings for the partnership formation will be held with Dr. Doug Phillips and the Discovering Alabama television series. During this process of meetings, Tuscaloosa County will assist Dr. Phillips with subject matter and information to be used to include stormwater management concerns in the television series.

### **Decision Process – Public Education Outreach – Discovering Alabama**

Discovering Alabama has been long recognized as an eminent public education platform, being used by many school systems as a teaching tool. The documentary series is also viewed by citizens throughout the state, particularly by those with an interest in environmental issues. By using this medium, the message of the importance of stormwater management will be shared with students, educators, and other environmentally conscious citizens. Through this partnership, it is expected that there will be continued educational outreach with references to responsible stormwater management.

## **Measurable Goals – Public Education Outreach – Discovering Alabama**

2015

Establishment of a partnership between Dr. Doug Phillips of Discovering Alabama and Tuscaloosa County Public Works Department for the purpose of educating the broadcast audience on the importance of stormwater management.

Two meetings were held between staff members of the Tuscaloosa County Public Works Department and Dr. Doug Phillips of Discovering Alabama. During these meetings a cooperative partnership was formed. Funding was discussed from the Tuscaloosa County Commission to aid in the sponsorship of a new documentary which focuses on water quality. The Tuscaloosa County Commission is currently evaluating the funding request.

Also from the meetings, Dr. Phillips asked that Tuscaloosa County participate in a planned Teacher's Workshop scheduled for April 13, 2015. Tuscaloosa County will do so by displaying and distributing information materials as well as making a short presentation at this event.

## **Responsible Party – Public Education Outreach – Discovering Alabama**

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## **Reporting Mechanism – Public Education Outreach – Discovering Alabama**

The reporting mechanism for documenting progress and results will be accomplished by summarizing work towards each stated goal in the annual report to the Alabama Department of Environmental Management.

## **Public Involvement and Participation Program**

### **Minimum Control Measure #2**

#### **General**

A single agency such as the Tuscaloosa County Public Works Department, even when assisted by the City of Tuscaloosa, City of Northport and the Alabama Department of Environmental Management, cannot be as effective in reducing stormwater pollution as if it has the participation, partnership, and combined efforts of other groups in the community all working towards the same goal. The point of public involvement is to build on community capital that is the wealth of interested citizens and groups to help spread the message on preventing stormwater pollution, to undertake group activities that highlight storm drain pollution, and contribute volunteer community actions to restore and protect local water resources.

Public involvement also includes facilitating opportunities for direct action, educational, and volunteer programs that benefit water quality. Groups with a vested interest in water quality who want to participate in promoting environmental causes will be encouraged and offered opportunities to participate in the stormwater management program.

#### **Permit Requirement**

The permittee must include ongoing activities for public involvement through mechanisms to facilitate opportunities for direct action, education and volunteer programs. The Permittee must comply with applicable State and local public notice requirements when implementing a public involvement / participation program.

#### **Program Objective**

There are five primary objectives of public participation in stormwater management as part of the Tuscaloosa County stormwater management program. The first objective is education focused on a clear identification and understanding of the particular problem and solutions that are being addressed through the participatory activity. The second objective is to identify the activity or practice that resulted in the problem being addressed and corrected by the activity. The third object is to promote community ownership of both the problems and solutions. The fourth objective is to change behavioral patterns that have led to the problems being addressed

by the activity. The fifth object is to incorporate feedback from the participants to further refine the process of public participation.

#### **Program Description– Public Participation –Volunteer Roadside Trash Cleanup Groups**

Organizations within Tuscaloosa County recognize the need for roadside trash cleanup in their communities. With the groups taking ownership in the solution to the problem of roadside litter a substantive reduction in the amount of roadside trash is the benefit. This reduction further reduces the amount of trash that then enters the storm drains, ditches and creeks of the county. The overall benefit of this program is first the general appearance of roadsides and second the reduction of pollutants in the waterways.

Tuscaloosa County supports the groups that volunteer to participate in roadside trash cleanup activities. This support includes the loaning of proper motorist warning signs for the work zone activity, the loaning of reflective safety vests to the participants, the issuance of suitable trash bags for the collection of the trash, the provision of work gloves to the participants, and the scheduling of a crew to pick up the collected trash from the roadsides.

#### **Implementation Schedule – Public Participation - Volunteer Roadside Trash Cleanup Groups**

As notice is received from a volunteer group expressing an interest in collecting the roadside trash in an area, a contact person is identified for the group. This person will be issued and loaned items needed to safely remove the litter from the roadsides. This program depends upon community organizations to take the initial step in scheduling the activity.

#### **Decision Process – Public Participation - Volunteer Roadside Trash Cleanup Groups**

The initiative of local community based groups to volunteer to better their community by removing roadside litter fulfills the five objectives of this program of public participation, and in particular the most important being that the group is taking ownership of the problem and working to correct it. Further, the participants in the volunteer cleanup are likely to not contribute to the problem of roadside litter themselves once they have assisted in a cleanup operation.

The target audience for this activity is community based groups and service organizations. These groups are typically based in small communities in the county, most often associated with churches and schools in their community.

As this program continues, the county is in the process of considering adding to the loaned tools to the volunteer groups. The purchase of pick up tools bearing a message about the stormwater management program is being considered; these pickup tools would be available on loan to those groups participating.

#### **Measurable Goals – Public Participation - Volunteer Roadside Trash Cleanup Groups**

2015

The measurable goal for volunteer roadside trash cleanup groups is a count of the number of times the county supports a group hosting an event.

No events have occurred in first 3 months of 2015

A community group from the Fosters area of the county has scheduled a community cleanup for April 4, 2015 and has contacted the Tuscaloosa County Public Works Department for assistance. This assistance will be provided which will include the provision of trash bags and gloves, the loaning of safety vests for participants and work zone traffic control signs. Also, Tuscaloosa County will collect the trash bags after the cleanup day and properly dispose of the refuse.

2016

The measurable goal for volunteer roadside trash cleanup groups is a count of the number of times the county supports a group hosting an event.

2017

The measurable goal for volunteer roadside trash cleanup groups is a count of the number of times the county supports a group hosting an event.

**Responsible Party – Public Participation - Volunteer Roadside Trash Cleanup Groups**

Bob Cunningham

Tuscaloosa County Public Works Department

2810 35th Street

Tuscaloosa, Alabama 35401

205-345-6600

**Reporting Mechanism – Public Participation - Volunteer Roadside Trash Cleanup Groups**

The reporting mechanism for documenting progress and results will be accomplished by summarizing work towards each stated goal in the annual report to the Alabama Department of Environmental Management.

**Program Description – Public Participation – Spring Cleanup**

The Tuscaloosa County Commission has recognized that in the unincorporated areas of the county there is a significant problem with illegal dumping. This often involves the dumping of large unwanted items on roadsides, in ditches and into ravines. This dumping typically takes place in areas with few homes and sporadic traffic. The county commission realized that the items being dumped in this fashion were not the type that are readily disposed of in the curbside pickup. Residents had one avenue of proper disposal which was to transport the items to a landfill and pay the disposal fee. Instead, items were being disposed of in a manner that negatively affects water quality. Items that were frequently being dumped illegally in these sites include computers, televisions, furniture, household chemicals and paint, and building debris.

The Tuscaloosa County Commission offers each spring to the citizens of the county a day of free disposal service. The commission has placed in strategic locations in the county large dumpsters for the disposal of these items. There is no fee for the disposal, and assistance is provided in the unloading of the debris.

#### **Implementation Schedule – Public Participation – Spring Cleanup**

2015

During the month of April the Tuscaloosa County Commission will provide to the citizens multiple manned drop off points for the disposal of items. This event is being planned to not have a fee for the service.

2016

During the month of April the Tuscaloosa County Commission will provide to the citizens multiple manned drop off points for the disposal of items. This event is being planned to not have a fee for the service.

2017

During the month of April the Tuscaloosa County Commission will provide to the citizens multiple manned drop off points for the disposal of items. This event is being planned to not have a fee for the service.

#### **Decision Process – Public Participation – Spring Cleanup**

Over many years the Tuscaloosa County Commission has been tasked with cleanup of illegal dumps on the rural roadsides. Further, property owners where a roadside gully or ravine afforded an individual the opportunity and location to dispose of unwanted articles have themselves been faced with the burden and expense of the cleanup. Practices to discourage this type of dumping have had minimal effect; the placement of No Dumping signs or barriers along the roadside did not significantly decrease the amount of illegal dumping. The commission sought to address this problem by offering a day of free dumpster service. This program is promoted by the commission in the local newspaper, radio and television announcements as well as notices to the community centers, fire stations and churches.



## **Measurable Goals – Public Participation – Spring Cleanup**

2015

The measurable goal for the Spring Cleanup is a count of the number of sites being made available to the public for use. The goal of the commission is, at a minimum, maintain the number of collection sites, and to increase as demand dictates the number of collection sites.

The Tuscaloosa County Commission has announced that on April 25, 2015 that they will sponsor a county wide Spring Cleanup. The commission will provide 10 collection sites around the county providing free disposal of unneeded items. The collection sites are at Camp Coker, Camp Samantha, the Yellow Creek Volunteer Fire Department, the intersection of North Rosser Road and Old Greensboro Road, the intersection of Hargrove Road and Oak View Lane, the intersection of Highway 216 and Woodland Lake Road, the intersection of Highway 216 and Keene's Mill Road, Holt Elementary School, Fosters Grocery Store parking lot, and the intersection of Highway 140 and Sipse Valley Road.

2016

The measurable goal for the Spring Cleanup is a count of the number of sites being made available to the public for use. The goal of the commission is, at a minimum, maintain the number of collection sites, and to increase as demand dictates the number of collection sites.

2017

The measurable goal for the Spring Cleanup is a count of the number of sites being made available to the public for use. The goal of the commission is, at a minimum, maintain the number of collection sites, and to increase as demand dictates the number of collection sites.

**Responsible Party – Public Participation –Spring Cleanup**

Bob Cunningham

Tuscaloosa County Public Works Department

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Tuscaloosa, Alabama 35401

205-345-6600

**Reporting Mechanism – Public Participation –Spring Cleanup**

The reporting mechanism for documenting progress and results will be accomplished by summarizing work towards each stated goal in the annual report to the Alabama Department of Environmental Management.

**Program Description – Public Participation – Volunteer Waterway Cleanup Groups**

Organizations within Tuscaloosa County recognize the need for waterway trash cleanup along the lakeshores and stream banks. With the groups taking ownership in the solution to the problem of waterway trash a substantive reduction in the amount of floating and submerged trash is the benefit. This pollution reduction further enhances the appearance of these treasured recreational areas and enhances aquatic plant and animal life.

Tuscaloosa County supports the groups that volunteer to participate in waterway trash cleanup activities. This support includes the issuance of suitable trash bags for the collection of the trash, the provision of work gloves to the participants, and the scheduling of a crew to pick up the collected trash from the public landing areas.

**Implementation Schedule – Public Participation - Volunteer Waterway Cleanup Groups**

As notice is received from a volunteer group expressing an interest in collecting the waterway trash along a creek, river stream or lakeshore, a contact person is identified for the group. This person will be issued and loaned items needed to safely remove the litter from the waterways.

This program depends upon community organizations to take the initial step in scheduling the activity.

### **Decision Process – Public Participation - Volunteer Waterway Cleanup Groups**

The initiative of local community based groups to volunteer to better their community by removing waterway trash fulfills the five objectives of this program of public participation, and in particular the most important being that the group is taking ownership of the problem and working to correct it. Further, the participants in the volunteer cleanup are likely to not contribute to the problem of roadside litter themselves once they have assisted in a cleanup operation.

As this program continues, the county is in the process of considering adding to the loaned tools to the volunteer groups. The purchase of pick up tools bearing a message about the stormwater management program is being considered; these pickup tools would be available on loan to those groups participating.

The target audience for this activity is community based groups and service organizations. These groups are typically have a vested interest in the water body they are volunteering to work within. Past groups that have participated in waterway cleanup activities include Friends of Hurricane Creek, Black Warrior River Keeper, and Geocaching organizations.

There are currently two waterway cleanup events each year sponsored by the City of Tuscaloosa. These are the Clean Our Lake Day and Waterfest. Tuscaloosa County will approach the City of Tuscaloosa with the offer to partner and support them in these events.

## **Measurable Goals – Public Participation - Volunteer Waterway Cleanup Groups**

2015

The measurable goal for volunteer waterway cleanup operations is a count of the number of times the county supports a group hosting an event.

Tuscaloosa County is a sponsor and participant in the two scheduled North River-Lake Tuscaloosa Watershed events. A display will be arranged on April 10, 2015 at the Phelps Activity Center where a drone demonstration will be offered as well as educational materials distributed. The following day Tuscaloosa County will assist with sponsorship of the 5<sup>th</sup> Annual Clean Our Lake Day with logistical support and volunteer participants.

We have advertised the Waterfest and Lake clean-up on our facebook page. Also fliers have been distributed to department heads and county Commissioner's.

2016

The measurable goal for volunteer waterway cleanup operations is a count of the number of times the county supports a group hosting an event.

2017

The measurable goal for volunteer waterway cleanup operations is a count of the number of times the county supports a group hosting an event.

## **Responsible Party – Public Participation - Volunteer Waterway Cleanup Groups**

Bob Cunningham

Tuscaloosa County Public Works Department

2810 35th Street

Tuscaloosa, Alabama 35401

205-345-6600

## **Reporting Mechanism – Public Participation - Volunteer Waterway Cleanup Groups**

The reporting mechanism for documenting progress and results will be accomplished by summarizing work towards each stated goal in the annual report .to the Alabama Department of Environmental Management.

## **Illicit Discharge Detection and Elimination Program**

### **Minimum Control Measure #3**

#### **General**

Illicit discharges are generally any discharge into a storm drain system that is not composed entirely of stormwater. Illicit discharges are a problem because, unlike wastewater which flows to a wastewater treatment plant, stormwater generally flows to waterways without any additional treatment. Illicit discharges often include pathogens, nutrients, surfactants, and various toxic pollutants.

The Stormwater Management Program for Tuscaloosa County includes provisions to detect and eliminate these illicit discharges. This program includes the mapping of stormwater discharge points, a plan for the reporting of illicit discharges, a plan to detect and address illicit discharges and education program on the hazards associated with illicit discharges.

The Stormwater Management Program for Tuscaloosa County is both reactive and proactive. The program is reactive in addressing spills and other illicit discharges to the storm drain system that are found. The program is also proactive in preventing and eliminating illicit discharges through education and training.

#### **Permit Requirement**

The Permittee shall include an ongoing program to detect and eliminate illicit discharges into the permittee's small MS4, and improper disposal, including spills under the purview of another

responding authority, into the MS4 owned or operated by the Permittee to the maximum extent practicable.

### **Program Objective**

The objective of the Tuscaloosa County Stormwater Management Program in handling illicit discharge detection is to provide educational outreach to those in a position to assist in the detection process. The county does not have the authority to police illicit discharges but must depend upon the enforcement powers of other agencies that have been given the authority to do so. Therefore, the objective of managing illicit discharge detection and elimination is to train public employees in detection, provide an avenue to report the discharge to the proper agency and to document the detection and reporting process.

### **Program Description – Illicit Discharge Detection and Elimination – Public Employee Education**

Employees of the Tuscaloosa Public Works Department are involved in work throughout the county on a daily basis. This work is often associated with areas where illicit discharges occur, that is in the roadside ditches and creeks throughout the county. A training program will be established and operated that will educate them in identifying illicit discharges, and the procedure to follow in reporting such an occurrence.

### **Implementation Schedule – Illicit Discharge Detection and Elimination – Public Employee Education**

2015

During the spring of 2015 personnel within the Engineering Department of the Tuscaloosa County Public Works Department will develop a training program. This program will be geared towards the maintenance and inspection employees in the department. The subject matter will be the identification of illicit discharges, and the proper steps to follow in reporting the illicit discharge.

Work is progressing with the development of a training program for county employees. The training program is being designed to educate employees in the

identification and reporting of illicit discharges. The training has been discussed with the County Commission. Once approved the course material will be prepared and course date scheduled.

During the summer of 2015 personnel in the Tuscaloosa County Public Works Department will be trained in the identification of illicit discharges, and the proper steps to follow in reporting the illicit discharge.

#### 2016

During the spring, review and revise the training program for county personnel in illicit discharge detection and reporting procedures.

During the summer personnel in the Tuscaloosa County Public Works Department will be trained in the identification of illicit discharges, and the proper steps to follow in reporting the illicit discharge.

#### 2017

During the spring, review and revise the training program for county personnel in illicit discharge detection and reporting procedures.

During the summer personnel in the Tuscaloosa County Public Works Department will be trained in the identification of illicit discharges, and the proper steps to follow in reporting the illicit discharge.

### **Permit Requirement – Storm Sewer Map Update**

Update the existing storm sewer map to include the following: location of all outfalls and the names and locations of all waters of the State that receive discharges from those outfalls; structural BMPs owned, operated and maintained by boundaries of the permittee's watershed.

### **Program Objective – Storm Sewer Map Update**

The first objective of this section is to continue the process of updating the storm sewer map for Tuscaloosa County. This ongoing process involves locating each discharge point, securing the GPS coordinates of the site, determining the type of pipe, assessing the condition of the pipe as well as the condition at the inlet and outlet ends. This information is included on a spreadsheet as well as located on the Tuscaloosa County GIS map for this purpose. This process of maintaining an inventory will require frequent updates as upgrades are made to the discharge points in the county with culvert replacements, scour repairs, and ditch repairs.

The second objective of this section is to locate and inspect the structural BMPs in place in the county that are operated and maintained by Tuscaloosa County. This process of inspection of the structural BMPs is done monthly at a minimum, and maintenance performed as needed. These structural BMPs receive this inspection until such time as a determination is made that it is no longer needed, and the BMP is removed from service.

### **Program Description– Storm Sewer Map Update**

Inspection personnel from the Tuscaloosa County Public Works Department field check discharge points in the county noting the location, condition and issues with discharge points. After the field check, the information recorded in the field is entered onto a spreadsheet which lists each of the inspected sites. The work to date has located 80 percent of the storm sewer discharge points in the MS4.

Inspection personnel from the Tuscaloosa County Public Works Department also field check the structural BMPs owned and maintained by the county. During this inspection the condition as well as any needed maintenance is recorded. The reports are filed in the engineer's office and the noted needed repairs are given to the maintenance crews for scheduling.



## **Implementation Schedule – Storm Sewer Map Update**

2015

Continue the process of locating each discharge point, securing the GPS coordinates of the site, determining the type of pipe, assessing the condition of the pipe as well as the condition at the inlet and outlet ends. Continue to record this information on a spreadsheet as well as locate the site on the Tuscaloosa County GIS map designed for this purpose.

During 2014-2015, the county located and mapped 168 outfall points.

### **See Appendix C.**

Continue the process of locating, inspecting and maintaining the structural BMPs owned by Tuscaloosa County. Continue the maintenance of the file of inspection reports.

Trained QCI inspectors have visited and reviewed all of the structural BMP's owned by Tuscaloosa County and have complied the required reports. These inspections have noted some maintenance needs and these repairs have been completed.

2016

Revise and update the map and spreadsheet of the discharge points for Tuscaloosa County.

Continue the process of locating, inspecting and maintaining the structural BMPs owned by Tuscaloosa County. Continue the maintenance of the file of inspection reports.

2017

Revise and update the map and spreadsheet of the discharge points for Tuscaloosa County.

Continue the process of locating, inspecting and maintaining the structural BMPs owned by Tuscaloosa County. Continue the maintenance of the file of inspection reports.

### **Permit Requirement**

To the extent allowable under State and local law, effectively prohibit, through ordinance or other regulatory mechanism, non-storm water discharges into the MS4 and implement appropriate enforcement procedures and actions.

### **Program Objective**

This permit requirement specifies that the Tuscaloosa County Commission prohibit through ordinance or regulatory mechanism the illicit non-permitted discharges into the MS4. Tuscaloosa County does not have “Home Rule” which would allow the passing of ordinances or regulations. The state legislature only allows the commission the authority to accept those regulations passed on at the state level, but does not allow for county specific ordinances to be adopted by the commission. This limited authority prohibits the Tuscaloosa County Commission from adopting the regulations required to police illicit discharges. Instead, Tuscaloosa County can only take action on illicit discharges by reporting the incident to another agency that does have the authority to prohibit such an activity.

### **Program Description**

Tuscaloosa County does not have a program in place to prohibit illicit discharges. Instead, reports of illicit discharges will be referred to the appropriate agency for enforcement. Agencies

that may be forwarded reports include the Alabama Department of Environmental Management, the Tuscaloosa County Health Department, the Environmental Protection Agency and the Surface Mining Commission.

### **Implementation Schedule**

Since there is no program to put in place, there is no implementation schedule for this item.

### **Permit Requirement**

Implement a program to review and update the IDDE ordinance or other regulatory mechanism to prohibit and eliminate illegal discharges and/or dumping into the MS4. This program shall include:

- Procedures for locating priority areas likely to have illicit discharges
- Field assessment activities

### **Program Objective**

Tuscaloosa County does not have the authority to prohibit illicit discharges into the MS4 through ordinances or regulations. Since a program to prohibit illicit discharges cannot be put in place, there is nothing to review or update.

### **Program Description**

Tuscaloosa County does not have the authority to prohibit illicit discharges into the MS4 through ordinances or regulations. Since a program to prohibit illicit discharges cannot be put in place, there is nothing to review or update.

## **Implementation Schedule**

An implementation schedule has not been developed since Tuscaloosa County does not have the authority to prohibit illicit discharges into the MS4 through ordinances or regulations.

## **Permit Requirement**

Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

## **Program Objective**

The objective of this section of the Stormwater Management Program is to train staff about potential sources of stormwater contamination and ways to minimize the water quality impact of county activities, as well as to identify and report conditions in the stormwater system that may indicate the presence of illicit discharges and illegal dumping. The training will include general stormwater awareness, a summary of good housekeeping measures, and examples of illicit discharge occurrences and problems caused by the discharge.

## **Program Description**

The training of personnel in the Public Works Department will include information on general stormwater awareness, a summary of good housekeeping measures to be followed at shop facilities as well as in the field, and examples of illicit discharge occurrences and procedures to follow in reporting illicit discharges. The training session will also address the handling of spills and the proper disposal of waste materials.

## **Implementation Schedule**

2015

Tuscaloosa County will host a training session for employees covering the items mentioned in the program description.

New hires will be provided training in the items mentioned in the program description as part of their orientation.

Work is progressing with the development of a training program for county employees. The training program is being designed to educate employees in the identification and reporting of illicit discharges. The training program has been discussed with the County Commission. Once approved the course material will be prepared and a course date scheduled.

## 2016

Tuscaloosa County will host a training session for employees covering the items mentioned in the program description.

New hires will be provided training in the items mentioned in the program description as part of their orientation.

## 2017

Tuscaloosa County will host a training session for employees covering the items mentioned in the program description.

New hires will be provided training in the items mentioned in the program description as part of their orientation.

### **Permit Requirement**

Develop a list of occasional incidental non-storm water discharges that will not be addressed as illicit discharges, such as non-commercial or charity car washes.

### **Program Objective**

The objective of this section of the permit is to identify non-stormwater discharge activities that are recognized as significant contributors of pollutants to the MS4. Possible contributing activities may include water line flushing, landscape irrigation, diverted stream flows, car washing, or swimming pool discharges.

## **Program Description**

Personnel trained in stormwater management will be asked to contribute to the list of possible non-stormwater discharge activities.

## **Implementation Schedule**

County personnel will contribute to the list of non-stormwater discharge activities each year during the preparation of the annual report to ADEM.

## **Decision Process**

The identification of non-stormwater discharge activities should be a goal in the stormwater management program. By noticing and checking on discharges, there is assurance that the discharge is either permitted or not in need of a permit. The identification and checking the sources of discharges keeps the inspectors aware of the overall activities within the watershed that affect water quality. The compilation of a list of non-stormwater discharge activities requires the inspectors to be accountable of both investigations of permitted discharges as well as discharges not requiring a permit.

## **Measurable Goals**

2015

Compile a list of discovered non-stormwater discharges noted and incorporate them into the list into the annual report to ADEM.

**See Appendix D**

2016

Compile a list of discovered non-stormwater discharges noted and incorporate them into the list into the annual report to ADEM.

2017

Compile a list of discovered non-stormwater discharges noted and incorporate them into the list into the annual report to ADEM.

## **Responsible Party**

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Tuscaloosa County Public Works Department  
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### **Reporting Mechanism**

The reporting mechanism for documenting progress and results will be accomplished by summarizing work towards each stated goal in the annual report to the Alabama Department of Environmental Management.

## **Construction Site Storm Water Runoff Control**

### **Minimum Control Measure #4**

#### **General**

Uncontrolled stormwater runoff from construction sites can significantly impact rivers, lakes and estuaries. Sediment in waterbodies from construction sites can reduce the amount of sunlight reaching aquatic plants, clog fish gills, smother aquatic habitat and spawning areas, and impede navigation. Phase II MS4s are required to develop a program to reduce pollutants in stormwater runoff to the MS4 for construction sites disturbing one or more acres.

In addition to the stormwater requirements that Phase II MS4s place on construction sites, construction operators must also apply for NPDES permit coverage if their project disturbs at least one acre and discharges to a waterbody.

## **Permit Requirement**

The Permittee must develop, implement and enforce a program to reduce to the MEP, pollutants in any storm water runoff to the regulated MS4 from construction activities that result in a total land disturbance of greater than or equal to one acre and activities that disturb less than one acre but are part of a larger common plan of development or sale that would disturb one acre or more.

## **Program Objective**

The objectives of the program are to reduce pollutants in stormwater runoff from construction activities, ensure that construction site operators are in compliance with the proper implementation and maintenance of erosion and sediment control practices, and to report to the appropriate agency for enforcement violations.

## **Program Description**

This control measure of the Stormwater Management Program is intended to prevent soil erosion and the subsequent deposition in the stormwater system. Sediment is the primary pollutant of concern. Through the attentive review of construction activities within the MS4, advising developers of possible issues with the BMPs on the construction sites, and the resulting siltation of the waterways can be significantly reduced.

Subdivision construction involves the clearing of tracts of land for the development, an activity that can impact water quality. Tuscaloosa County has adopted regulations governing subdivision development; contained within the regulations is a section on Erosion Control (Section 5-4-20 of the Tuscaloosa County Subdivision Regulations) as well as other references and guides to responsible development with regard to stormwater management.

The Erosion Control Section of the regulations states:

The design engineer shall submit an Erosion Control Plan in conjunction with the construction plans. A NPDES permit shall be the responsibility of the developer and shall be in accordance with the requirements of ADEM. Erosion Control shall be installed and maintained until the County accepts the project for maintenance as to prevent off-site sedimentation. A stand of grass shall be established along shoulders and back slopes. Best management practices shall be required on all projects regardless of permitting requirements. Also, a posted ADEM permit shall be in place at the subdivision, if applicable. Proof of current ADEM regulation and inspection reports shall be submitted to County Engineer at time of final plat submittal, if applicable.



The subdivision regulations further address issues of concern for stormwater management in Section 5-1 Minimum Standards. In this section the developer is instructed to comply with “the rules and standards of the Alabama Department of Environmental Management (ADEM) ...” Further, the developer is encouraged to arrange the street plan considering the topographical conditions to manage water velocities. The developer is provided direction in the design of the drainage system to further control erosion. This is accomplished through culvert design, use of curb and gutter, inlet design and placement, and the use of energy dissipation.

The monitoring of other construction sites that are not covered under the subdivision regulations is done as encountered. Personnel within the public works department routinely drive through the MS4. If a construction activity is discovered or reported that exhibits the potential for erosion and off-site sedimentation, then a more thorough investigation is made. The Tuscaloosa County Commission has adopted a policy for addressing construction sites where off-site sediment deposition is occurring or has the potential to occur. This policy involves the issuance of a letter of notice that directs the property owner to respond within 7 days to the county with an acceptable plan to correct any problems and manage the stormwater leaving their site. If the property owner fails to respond or correct the problems within the specified time, then the violations are reported to ADEM for enforcement.

Construction sites that are under the direct control of Tuscaloosa County will be managed in accordance with ADEM regulations. As required, NPDES permits will be obtained on projects that meet the area threshold. Further, projects below the threshold will be managed in a responsible manner to prevent the deposition of sediment off-site. This particular section of construction site stormwater runoff control for county managed projects will be covered in the section of this report titled Pollution Prevention and Good Housekeeping for municipal operations.

### **Implementation Schedule**

Upon receipt of each subdivision plat for review, attention by the engineering staff is given to the developer’s compliance with the subdivision regulations. Included is a review of the items affecting the proper management of stormwater. Once construction is started on the development, periodic checks are made to ensure that best management practices are in place and are effective in preventing off-site sediment deposition.

Reported or discovered stormwater management problems not covered under the subdivision regulations are investigated promptly. The owner of the property where the disturbance is located is given notice to respond and present a plan for correction within seven days of receipt of notice. If after the expiration of the seven day period and a satisfactory plane or corrective action has not been taken, then the violation is reported to ADEM for enforcement.

**During 2014- 2015, 109 subdivision plats have been reviewed by Tuscaloosa County, with the review including an examination of the proper management of storm water by the developer.**

**During this time there have been 6 inspections of subdivisions for acceptance for maintenance, of which a section is the management of stormwater. These inspections noted that there were no issues with stormwater in these 6 inspections.**

**Further visits to incomplete subdivision have been done and 1 problem noted with stormwater management.**

**Follow up actions were taken with each potential violation as presented in Appendix E.**

### **Permit Requirement**

An ordinance or other regulatory mechanism to require erosion and sediment controls, sanctions to ensure compliance and to provide all other authorities needed to implement the requirements of the construction site storm water runoff.

### **Program Objective**

The objective of this section of the permit is to require the Tuscaloosa County Commission to adopt a regulatory mechanism to effectively manage control related to construction site stormwater runoff.

### **Program Description**

Tuscaloosa County is limited by the state legislature in the adoption of ordinances or regulations. The commission can only adopt ordinances or regulations as permitted. The county

has been granted authority to adopt subdivision regulations; and as a part of these regulations, responsible stormwater management is required.

The Tuscaloosa County Commission has agreed to investigate and report to ADEM concerns about potential violations affecting water quality. The enforcement of the discovered violations is then under the purview of ADEM.

### **Implementation Schedule**

The investigation and reporting of discovered violations will be done as each incident is noted.

**Tuscaloosa County personnel have noted and reported 14 potential violations discovered in the county. A summary of these reports and the status of each is presented in Appendix C.**

### **Permit Requirement**

A training program for the MS4 site inspection staff in the identification of appropriate construction best management practices.

### **Program Objective**

The objective of this section of the permit is to ensure that inspectors and supervisors within the Tuscaloosa County Public Works Department are adequately trained in the identification of appropriate best management practices.

### **Program Description**

The training of engineering, inspection and supervisors within the Tuscaloosa County Public Works Department is done to ensure that employees are able to identify appropriate best management practices. These employees are initially trained upon promotion or hiring where they are certified as Qualified Credentialed Inspectors. These employees are also provided with annual refresher training to maintain their respective certification.

## **Implementation Schedule**

Tuscaloosa County will continue to provide training opportunities to new hires in the Engineering Department to receive Qualified Credentialed Inspector status. This training will take place within 6 months of hire for those employees involved in stormwater inspection and reporting.

Two staff members within the Engineering Department have completed the QCI training in 2015 through Thompson Engineering. A third staff member has a training class scheduled for April 30, 2015.

The county will provide training opportunities to new hires in supervision in the road and bridge maintenance operations to receive Qualified Credentialed Inspector status. This training will take place within 6 months of hire for those employees involved in stormwater inspection and reporting.

Tuscaloosa County will provide training opportunities to existing employees to maintain their Qualified Credentialed Inspector status. This training will be done annually for each QCI employee.

## **Permit Requirement**

Procedures for prioritization and frequency of inspection activities of qualifying construction sites to verify the use of appropriate erosion and sediment control practices. Priority construction sites must be inspected once per month at a minimum.

## **Program Objective**

This section of the permit has two objectives; those construction sites under the direct control of Tuscaloosa County and those construction sites under the management control of another entity. The sites under the control of Tuscaloosa County will be inspected, at a minimum, once each month and after qualifying precipitation events. The inspection after qualifying precipitation events will be conducted as soon as possible, but no later than 72 hours after the event. The sites not under the control of Tuscaloosa County that have been noted as being in possible violation of the stormwater regulations will be checked after qualifying rain events as practicable for continued compliance.

## **Program Description**

Tuscaloosa County will continue to work to ensure that county managed activities that could affect water quality are inspected in accordance with the regulations of the Alabama Department of Environmental Management. Inspectors and supervisors will complete the required inspections within the time frame outlined in the ADEM regulations.

For construction activities not managed by Tuscaloosa County, an inspector or supervisor will check to ensure continued compliance with the stormwater regulations. Any violations noted will be reported either through the 7 day warning letter from the county or by notice to ADEM.

## **Implementation Schedule**

The appropriate inspection response will be completed in accordance with the ADEM stormwater regulations.

**Routine required inspections are conducted by QCIs on each project under the control of the Tuscaloosa County Public Works Department. The inspection reports are available for review at the Engineering Department.**

**Reporting of potential violations on sites not under the control of the Tuscaloosa County Public Works Department have been reported to the Engineering Department for review.**

**The status of each reported potential violation is summarized in Appendix D.**

## **Permit Requirement**

Procedures for construction site plan review and approval to include an evaluation of plan completeness and overall BMP effectiveness.

## **Program Objective**

The purpose of construction site plan review and approval is to reduce pollutants in stormwater runoff from construction activities that are under the management control of Tuscaloosa County. The submitted plan will be reviewed to ensure that stormwater quality objectives are addressed early in the process of plan development.

## **Program Description**

The projects within the MS4 that are under the control of Tuscaloosa County or where a county approved stormwater management plan is required, will be reviewed by engineering staff for completeness and effectiveness. Critical elements of the site plan that will be addressed include minimization of clearing and grading activities to limit exposure; protection of waterways and waterbodies by buffers and structural BMPs; phased construction; prompt stabilization of exposed soils; slope protection practices; site perimeter controls; and assurance of qualified personnel to inspect and maintain construction site BMPs.

## **Implementation Schedule**

Each construction site plan review will be conducted as soon as practicable upon receipt of the plan. The owner of the plan will be advised of concerns found within the plan and also of the approval or denial of the submission.

**To date in 2015, no projects meeting the program description have been started; therefore no reviews have been conducted.**

## **Permit Requirement**

Procedures to notify ADEM of non-compliant construction sites discovered during periodic inspections to include location, name, contact information and summary of site deficiencies of the construction site.

## **Program Objective**

The objective of ADEM notification of non-compliant construction sites is to ensure complete and proper enforcement of the stormwater regulations in Tuscaloosa County.

## **Program Description**

Tuscaloosa County does not have the authority to approve ordinances or prosecute those in violation of the stormwater regulations. This authority rests with the Alabama Department of Environmental Management. The Tuscaloosa County Commission has directed that engineering staff investigate discovered or reported violations and then provide the property owner with a

registered letter of notice of possible stormwater violations. The property owner is provided seven days from the receipt of the registered letter to respond to the county with a plan to correct the possible violations. If the property owner fails to respond or correct the problems, then the violation is promptly reported to ADEM for investigation and enforcement. Tuscaloosa County provides, at a minimum, the location, property owner identification, contact information and deficiency description as part of the report.

### **Implementation Schedule**

This process of investigation and reporting to ADEM occurs after the property owner either fails to respond to the registered letter or fails to correct the deficiency within the allotted time. This process is initiated as soon as practicable upon receipt of a complaint or discovery of a deficiency.

**Appendix C provides a summary and status of each reported potential violation.**

### **Permit Requirement**

If not relying on ADEM for the setting of standards for appropriate erosion controls and sediment controls for qualifying construction sites and for enforcement of such controls, then the Permittee must have requirements for construction site operators to implement appropriate sediment and erosion control BMPs consistent with the Alabama Handbook.

### **Program Objective**

The objective of this section is to assure that if the government agency is not relying on ADEM for standards and control, that the agency assure ADEM that the standards and control is at least consistent with ADEM standards.

## **Program Description**

Tuscaloosa County does not have the authority to approve ordinances or prosecute those in violation of the stormwater regulations. This authority rests with the Alabama Department of Environmental Management. As a result, Tuscaloosa County will continue to rely upon ADEM for the standards for appropriate erosion controls and sediment controls for qualifying construction sites and for enforcement of such controls.

## **Implementation Schedule**

Tuscaloosa County will continue to rely on ADEM for the standards for appropriate erosion controls and sediment controls for qualifying construction sites and for enforcement of such controls.

## **Permit Requirement**

Requirements for construction site operators to control waste such as discarded building material, concrete truck washout, chemicals, litter, and sanitary waste at construction sites that may cause adverse impacts on water quality.

## **Program Objective**

Building materials and other construction site wastes must be properly managed and disposed of to reduce the risk of pollution from materials such as surplus or refuse building materials or hazardous wastes. Practices such as trash disposal, recycling, proper material handling, and spill prevention and cleanup measures can reduce the potential for stormwater runoff to mobilize construction site wastes and contaminate surface or ground water. The proper management and disposal of wastes should be practiced at every construction site to reduce stormwater runoff. Use waste management practices to properly locate construction site debris in proper disposal containers, to cover materials that might be displaced by rainfall or stormwater runoff, and to prevent spills and leaks from hazardous materials that were improperly stored should be considered and implemented by contractors.



## **Program Description**

A significant portion of the MS4 in Tuscaloosa County is within the planning jurisdiction of the City of Tuscaloosa or the City of Northport. In fact, over 90 percent of the land area of the MS4 is located within the jurisdictional control of these two cities. In the areas within the planning jurisdiction there are regulations in place to control the management of construction site debris. Land development permits are required by the cities for construction projects. Part of the land development permit requires the placement of a proper debris container on site, with the debris being disposed of in an approved landfill. Further, this ordinance addresses sediment control by the contractor.

Tuscaloosa County does not have the authority to pass an ordinance to require the placement of a debris disposal container on site for use during construction projects. However, Tuscaloosa County has two avenues to address the issue of construction debris disposal. First, Tuscaloosa County has the Solid Waste Management Department to handle illegal dumping. Further, the Tuscaloosa County Commission has been given the authority to enact the “Junk Law” which applies to the unincorporated areas of the county which prohibits the accumulation of junk on private property.

## **Implementation Schedule**

Tuscaloosa County will continue to seek assistance from the Cities of Tuscaloosa and Northport in the enforcement of the regulations in the Land Development Permits issued by the respective governments. The discovery of or the receipt of notice of a possible violation will be promptly reported to the proper agency. This practice will continue through the planned time frame of the program.

Upon discovery of improper construction site debris disposal outside of the jurisdictional control of the cities, the violation will be managed through the Tuscaloosa County Solid Waste Department. The notice of a discovered or reported possible violation will be forwarded to this department for investigation, cleanup and prosecution. Although this approach is reactive to a problem rather than proactive such as requiring an onsite container, the county must approach the problem in this manner since further authority to enact ordinances has not been granted to Tuscaloosa County.

**Permit Requirement**

Development and Implementation of an enforcement strategy that include escalating enforcement remedies to respond to issues of non-compliance.

**Program Objective**

The objective of this program requirement is to encourage owners, developers, and contractors to take the necessary measures to ensure that their construction sites do not create negative impacts to water quality in Tuscaloosa County. The intent is to ensure compliance through escalating enforcement remedies to issues of non-compliance.

**Program Description**

Tuscaloosa County does not have the authority to approve ordinances or prosecute those in violation of the stormwater regulations. This authority rests with the Alabama Department of Environmental Management. As a result, Tuscaloosa County will continue to rely upon ADEM for assistance in enforcement of non-compliance with the standards for appropriate erosion controls and sediment controls for qualifying construction sites.

**Implementation Schedule**

Tuscaloosa County has been and will continue to rely upon ADEM for assistance in enforcement of non-compliance with the standards for appropriate erosion controls and sediment controls for qualifying construction sites.

**Permit Requirement**

Implement an enforcement tracking system designed to record instances of non-compliance and the MS4's responding actions.

**Program Objective**

The objective of this section of the program is to document and track reports of non-compliance with the stormwater regulations in Tuscaloosa County and specifically within the MS4. This documentation will assist in identify locations with frequent compliance problems and further particular property owners and developers whose actions negatively impact water quality more frequently than others.

**Program Description**

A spreadsheet summarizing the notice, investigation and enforcement status of each discovered and reported location of non-compliance will be maintained in the Tuscaloosa County Public Works Department. The spreadsheet will be useful in the tracking of each potential violation from the time of report to the resolution of the issue.

**Implementation Schedule**

The tracking of each notice of potential violation using a spreadsheet will begin in 2015. Previous reports, investigations and enforcement status of violations noted before 2015 will be entered into the spread sheet as employee time permits.

**Permit Requirement**

Must keep records of all inspections, site plan reviews and employee training.

## **Program Objective**

The maintenance of records is critical in operating a responsible stormwater management program. Through the review of the records of previous inspections and employee training status, sound decisions regarding the stormwater program be made by the administrators of the program.

## **Program Description**

Tuscaloosa County maintains a file of inspections, both of those construction sites under the control of the county as well as inspections conducted on sites under the control of other entities. The projects for which the county is the controlling agency, the inspections are conducted meeting the requirements of ADEM, noted deficiencies are addressed and the inspection reports stored in files maintained in the Engineering Department. The records of investigations of construction sites and projects that are not under the control of the county are handled separately. A summarizing spreadsheet will list each reported or discovered potential violation, and the status of each. Inspection reports, correspondence and photographs of each investigation are stored in files maintained in the Engineering Department.

## **Implementation Schedule**

Tuscaloosa County will continue to maintain a file of the inspections of the sites under the control of the county in the Engineering Department. For projects not under the direct control of the county, a spreadsheet summarizing all reported potential violations will be developed in January 2015. Also beginning in January 2015 a file dedicated to each reported or discovered potential violation will be maintained. This file will contain information on the nature of the notice, property owner, correspondence, photographs and inspection reports. These files will be kept in the Engineering Department.

## **Decision Process**

In order to develop the Construction Site Runoff Control component of its Stormwater Management Program, Tuscaloosa County has reviewed current construction site runoff control practices that may impact water quality. From this review, areas have been identified where improvements can be instituted with an overall benefit to water quality.

The most effective control measure that is available to Tuscaloosa County in the enforcement of stormwater regulations is through the adopted subdivision regulations. These regulations, which were recently updated, have a significant emphasis on responsible stormwater management practices for the developer, engineer and contractors involved. The subdivision regulations guide the entire process of development, from the initial planning stages to project completion and acceptance by the county commission. The developer of each subdivision is required to post bonds for maintenance which can be used to correct problems that are not corrected. Further, developers that are considered delinquent with their projects are not approved to develop other properties until the issues are corrected.

Tuscaloosa County plans to continue to rely on the enforcement of the stormwater regulations through ADEM. Since Tuscaloosa County does not have the authority to adopt and then enforce ordinances, the enforcement authority of ADEM must be utilized to achieve corrective action for other entities.

Tuscaloosa County recognizes the need for effective training opportunities for employees in stormwater best management practices. The initial training for certification and subsequent training to maintain certification is an integral part of responsible stormwater management. The record keeping program for training files as well as record keeping for inspections will be upgraded to ensure compliance with the stormwater management programs.

## **Measurable Goals**

2015

Assembly of a spreadsheet summarizing the status of all reported or discovered potential violations of the stormwater regulations by February 2015.

The spreadsheet presented in appendix summarizes the status of all reported and discovered potential violations of the stormwater regulations.

Compilation of a file for each reported or discovered potential violation of the stormwater regulations by February 2015. The file will contain at a minimum the identification of the property owner.

A file has been assembled for each reported or discovered potential violation. The identification of the owner as well as other pertinent information is placed in the respective files.

Compilation of a file for each QCI noting the status of their training accomplishments, and correspondence concerning their upcoming training needs by February 2015.

A file for each QCI has been compiled which contains information on training, accomplishments and any correspondence.

Provide QCI training opportunities to new hires in the Engineering Department within 6 months of hire for those employees involved in stormwater inspection and reporting.

No new hires have joined the staff of the engineering department.

Provide QCI training opportunities to new hires in supervision in maintenance operations within 6 months of hire for those employees involved in stormwater inspection and reporting.

No new hires have joined the supervisory staff in maintenance operations.

Provide QCI training opportunities to employees promoted to supervisory positions within the maintenance operations within 6 months of hire for those employees involved in stormwater inspection and reporting.

No new promotions have been made in the supervisory staff in maintenance operations.

Inspect once each month or after every qualifying rain event the county controlled construction sites with a NPDES permit.

Inspections have been made and reports filed for each month or after each qualifying rain event for NPDES permitted sites.

## 2016

Review and summarize the spreadsheet summarizing the status of all reported or discovered potential violations of the stormwater regulations by February 2016.

Review and summarize the files for each reported or discovered potential violation of the stormwater regulations by February 2016.

Review and summarize the files for each QCI noting the status of their training accomplishments, and correspondence concerning their upcoming training needs by February 2016.

Provide QCI training opportunities to new hires in the Engineering Department within 6 months of hire for those employees involved in stormwater inspection and reporting.

Provide QCI training opportunities to new hires in supervision in maintenance operations within 6 months of hire for those employees involved in stormwater inspection and reporting.

Provide QCI training opportunities to employees promoted to supervisory positions within the maintenance operations within 6 months of hire for those employees involved in stormwater inspection and reporting.

Inspect once each month or after every qualifying rain event the county controlled construction sites with a NPDES permit.

## 2017

Review and summarize the spreadsheet summarizing the status of all reported or discovered potential violations of the stormwater regulations by February 2017.

Review and summarize the files for each reported or discovered potential violation of the stormwater regulations by February 2017.

Review and summarize the files for each QCI noting the status of their training accomplishments, and correspondence concerning their upcoming training needs by February 2017.

Provide QCI training opportunities to new hires in the Engineering Department within 6 months of hire for those employees involved in stormwater inspection and reporting.

Provide QCI training opportunities to new hires in supervision in maintenance operations within 6 months of hire for those employees involved in stormwater inspection and reporting.

Provide QCI training opportunities to employees promoted to supervisory positions within the maintenance operations within 6 months of hire for those employees involved in stormwater inspection and reporting.

Inspect once each month or after every qualifying rain event the county controlled construction sites with a NPDES permit.

**Responsible Party**

Bob Cunningham

Tuscaloosa County Public Works Department

2810 35th Street

Tuscaloosa, Alabama 35401

205-345-6600

**Reporting Mechanism**

The reporting mechanism for documenting progress and results will be accomplished by summarizing work towards each stated goal in the annual report to the Alabama Department of Environmental Management.



**Post-Construction Stormwater Management  
In New Development and Redevelopment  
Minimum Control Measure #5**

**General**

**Permit Requirement**

The Permittee must develop and implement project review, approval and enforcement procedures for new development and redevelopment projects that disturb greater than one acre, and projects less than one acre that are part of a larger common plan of development or sale. Develop procedures for the following: site plan review and approval process; re-approval process when changes to post construction controls are required; process to demonstrate and document post-construction stormwater measures have been installed properly to include enforceable procedures for noncompliant projects.

**Program Objective**

**Program Description**

**Implementation Schedule**

**Permit Requirement**

Develop and implement strategies which include a combination of structural and/or nonstructural BMPs designed to ensure, to the MEP, that the volume and velocity of preconstruction stormwater runoff is not significantly exceeded. A design rainfall event with an intensity up to that of a 2 year – 24 hour storm event shall be the basis for the design and implementation of post-construction BMPs.

**Program Objective**

**Program Description**

**Implementation Schedule**

**Permit Requirement**

To extent allowable under State law, must develop and institute the use of an ordinance or other regulatory mechanism to address post-construction runoff from new development and re-development projects.

**Program Objective**

**Program Description**

**Implementation Schedule**

**Permit Requirement**

Must develop procedures for development site plan review and approval to ensure post-construction BMPs are addressed.

**Program Objective**

**Program Description**

**Implementation Schedule**

**Permit Requirement**

Must ensure adequate long-term operation and maintenance of BMPs. The MS4 shall require maintenance agreement and provide verification of maintenance provisions of post-construction management practices. These agreements shall allow the MS4, or its designee, to conduct inspections of the management practices and also account for transfer of responsibility in leases and/or transfers.

**Program Objective****Program Description****Implementation Schedule****Permit Requirement**

Shall review and evaluate policies and ordinances related to building codes, or other local regulations, with a goal of identifying regulatory and policy impediments to the installation of green infrastructure and low-impact development techniques.

**Program Objective****Program Description****Implementation Schedule****Decision Process****Measurable Goals****Responsible Party**

Bob Cunningham

Tuscaloosa County Public Works Department

2810 35th Street

Tuscaloosa, Alabama 35401

205-345-6600

**Reporting Mechanism**

The reporting mechanism for documenting progress and results will be accomplished by summarizing work towards each stated goal in the annual report to the Alabama Department of Environmental Management.

**Pollution Prevention and Good Housekeeping**  
**For Municipal Operations**  
**Minimum Control Measure #6**

**General**

The Pollution Prevention and Good Housekeeping for municipal operations minimum control measure is a key element of the small MS4 stormwater management program. This measure requires the county to examine and subsequently alter actions to help ensure a reduction in the amount and type of pollution that collects on parking lots, open spaces and storage and vehicle maintenance areas and is discharged into local waterways. It also requires the county to examine and subsequently alter actions to reduce pollution from actions such as environmentally damaging land development and flood management practices or poor maintenance of storm sewer systems. This measure is meant primarily to improve or protect receiving water quality by altering municipal or facility operations.

**Permit Requirement**

The Permittee must develop and implement a program for pollution prevention and good housekeeping for municipal operations.

**Program Objective**

While many of the stormwater management programs have focused on external entities, this section is directed internally on county operations. County activities can have a significant impact on stormwater quality, such as the operation of the county shop and road maintenance facilities. Fleet storage and maintenance as well as materials used in road maintenance require environmentally responsible stewardship. The objective of this section is to ensure effective pollution control principles to reduce or eliminate the potential for pollutants to enter the stormwater runoff as a result of county activities.

## **Program Description**

The Tuscaloosa County Shop is the location of most activities that have the potential for pollutants to effect water quality. At this location fleet maintenance and storage requires the storage of chemicals and fluids that could be harmful to water quality.

Vehicle and equipment washing and cleaning is done in a covered wash rack area designed to contain contaminants. The wash rack has 3 internal sediment traps to collect pollutants before the liquid is pumped into an oil – water separator unit. This device removes petroleum based contaminants from the water. All vehicle and equipment cleaning is done in this wash facility. Used oil from fleet maintenance is collected and stored in above ground tanks. The collected oil is then burned during the cold weather months for heat in the shop using a heater designed for this purpose. Used antifreeze is collected in above ground tanks and removed from the site by a company specializing in recycling. Pesticides and herbicides stored on site are located in a covered facility. The empty containers are returned to the chemical distributor for re-use. Spill containment kits are kept at the shop facility as well as on the mobile service trucks.

Tuscaloosa County is engaged in activities that result in the disturbance of ground cover. These activities primarily involve road and bridge construction and maintenance. With training of supervisors in effective best management practices and the availability of materials and equipment to construct and maintain BMPs, the county employees are able to reduce or eliminate pollutants from entering the waterways.

## **Implementation Schedule**

As presented in the Measurable Goals section, segments of this portion of the management plan will be put in place beginning in 2015.

## **Decision Process**

The process of reviewing and implementing changes to the stormwater management program for activities under the control of the county is a sound practice. Through discussions with other local government agencies who are operating similar facilities and projects, ideas for further improvements will be noted and those that will benefit the county program considered for

implementation. Training sessions that county employees attend will offer additional insights into effective measures to improve water quality.

## **Measurable Goals**

### **2015**

Train county shop personnel in effective spill containment and cleanup by June.

A training class for spill containment and cleanup is being prepared.

Issue a spill containment kit to the road maintenance camp at Coker by June.

Spill containment kit is being prepared for distribution.

Issue a spill containment kit to the road maintenance camp at Cedar Cove by June.

Spill containment kit is being prepared for distribution.

In addition the county has added the annex on 7<sup>th</sup> street to the list of facilities to receive spill containment kits.

### **2016**

Train new hires to the county shop in effective spill containment and cleanup by June.

Refresh the training of existing employees at the county shop in effective spill containment and cleanup.

Issue a spill containment kit to the bridge maintenance camp by June.

2017

Train new hires to the county shop in effective spill containment and cleanup by June.

Refresh the training of existing employees at the county shop in effective spill containment and cleanup.

**Responsible Party**

Bob Cunningham

Tuscaloosa County Public Works Department

2810 35th Street

Tuscaloosa, Alabama 35401

205-345-6600

**Reporting Mechanism**

The reporting mechanism for documenting progress and results will be accomplished by summarizing work towards each stated goal in the annual report to the Alabama Department of Environmental Management.

In addition to the stated goals in this report, Tuscaloosa County achieved other objectives related to the SWMP plan. These achievements include attending Clean Water Partnership Meetings and attending the Stake Holder Symposium on Water Planning in Alabama at the University of Alabama Bryant Conference Center. County personnel gave a presentation to the Professional Land Surveyor's monthly meeting addressing the need for a solid stormwater management plan for subdivisions in the planning stage. Also, several engineering staff members attended a Low Impact Development Workshop at the Northport Civic Center.

**See Appendix "F" for supporting documentation**



# Tuscaloosa County 2014-2015 Annual Report

## **Appendix A**

New educational brochure

# Tuscaloosa County 2014-2015 Annual Report

## **Appendix B**

### Public Education in schools: Photos

# Tuscaloosa County 2014-2015 Annual Report

## **Appendix C**

### Storm Sewer Outfall Points

# Tuscaloosa County 2014-2015 Annual Report

## **Appendix D**

Spread sheet summarizing  
reported or discovered  
potential violations of  
stormwater regulations

# Tuscaloosa County 2014-2015 Annual Report

## **Appendix E**

### Further Visits to incomplete Subdivisions

# Tuscaloosa County 2014-2015 Annual Report

## **Appendix F**

### Documents for Meetings Attended

# Tuscaloosa County 2014-2015 Annual Report

## **Appendix G**

### QCI Certificates

# Tuscaloosa County 2014-2015 Annual Report

## **Appendix A**

New educational brochure



# COMMON STORMWATER POLLUTANTS

For More Information  
Or  
To Report A Problem  
Visit Our Website At:  
[www.townstormwater.com](http://www.townstormwater.com)

Or Call:  
CITY OF TUSCALOOSA  
Josh Yates - 248-5380



## POLLUTANT IMPACT

<b>SEDIMENT</b> <i>Dirt and Sand</i>	Flooding due to blocked ditches and storm drains Choked streams that cannot support fish or animals
<b>DEBRIS</b> <i>Grass Clippings, Cigarette Butts, Trash, Plastic</i>	Polluted lakes and rivers
<b>HEAVY METALS</b> <i>Lead, Mercury</i>	Fish that are unsafe to eat
<b>HOUSEHOLD WASTE</b> <i>Antifreeze, Gas, Oil, Pesticides, Fertilizers, Paint</i>	Increased water treatment costs Polluted groundwater Fish kills and polluted waterways



*Water Quality Equals  
Quality of Life*

**CITY OF NORTHPORT**  
John Powell Webb - 339-7000



**UNIVERSITY of ALABAMA**  
Hal Barrett - 348-5905

Proud Partners of:



TUSCALOOSA AREA  
**STORMWATER**  
MANAGEMENT GUIDE



Always remember....

# “ONLY RAIN DOWN THE DRAIN”

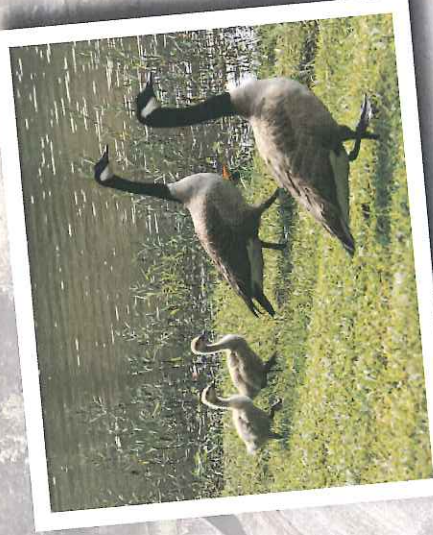
## WHAT IS STORMWATER POLLUTION?

Think of a single rain drop falling from the sky. It lands on your roof, flows down into the gutter, across your lawn and down your driveway. Along the way it picks up pesticides, fertilizer, oil and grease, pet waste, and many other chemicals and trash.

Next, it reaches the road where it can pick up sediment, cigarette butts, and more. Then, it flows into a drain, stream, river, or network of pipes that flow into your favorite fishing hole.

Now, imagine an entire storm, millions of raindrops, catching all these pollutants and flowing into our water bodies.

This is “Stormwater Pollution” and it occurs every time it rains!



## WHY IS STORMWATER POLLUTION A PROBLEM?

Stormwater pollution can result in dirty lakes and streams, fewer and less healthy fish and wildlife, limits on recreational use of Lake Tuscaloosa, and increased water and sewer treatment costs.

## HOW CAN I PREVENT STORMWATER POLLUTION?

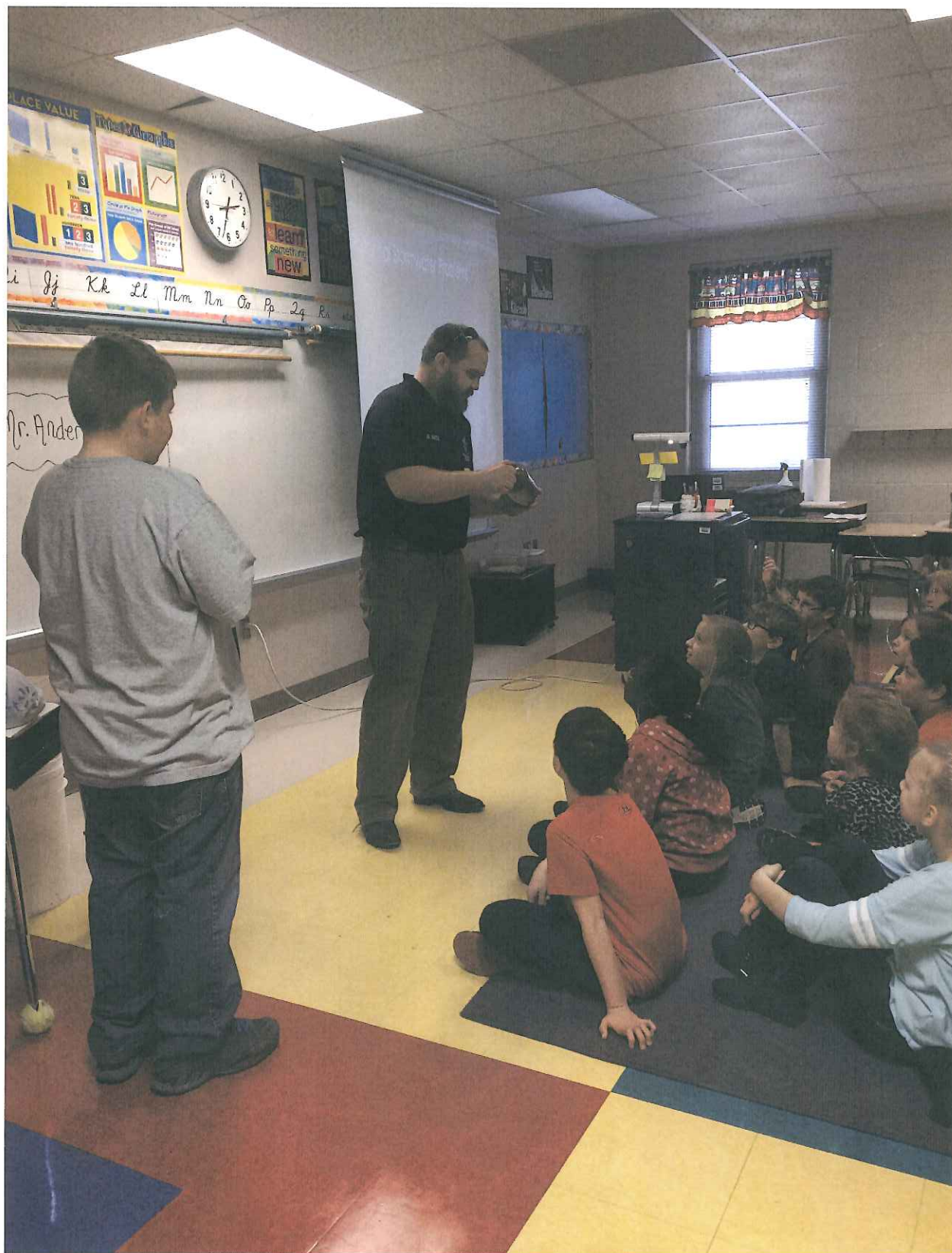
- Report Spills or Erosion Problems Immediately
- Establish Grass on Bare Areas to Prevent Erosion
- Wash Your Car On The Lawn Instead Of The Driveway
- Dispose of Clippings, Leaves and Garbage Properly - Compost or Place Behind the Curb
- Recycle Used Oil and Antifreeze
- Sweep Your Driveway Instead of Pressure Washing
- Maintain Septic Tanks Properly
- Use Silt Fencing and Other Erosion Control Measures in Construction
- Don't Over Fertilize Your Lawn and Don't Apply Before Heavy Rainfall

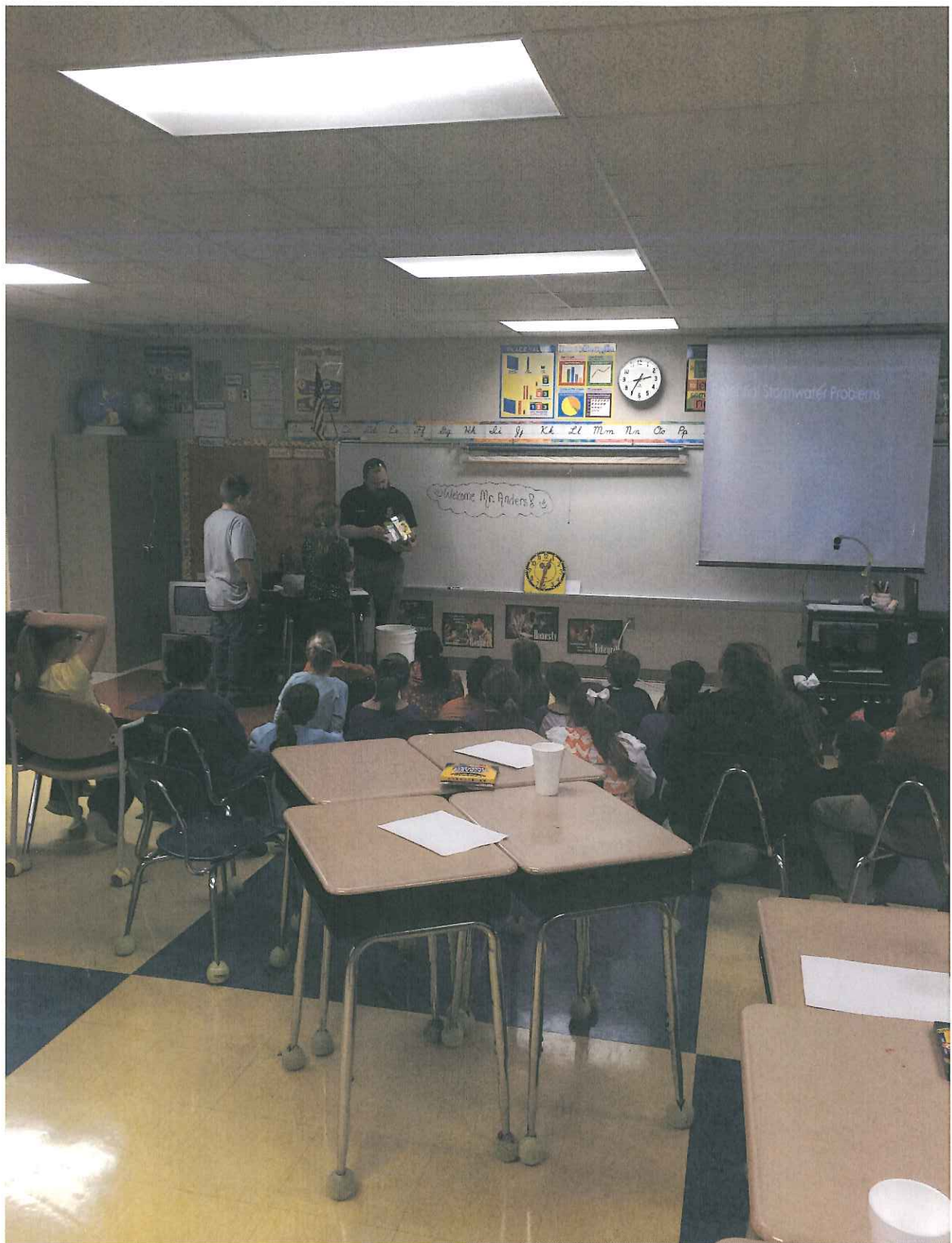
# Tuscaloosa County 2014-2015 Annual Report

## **Appendix B**

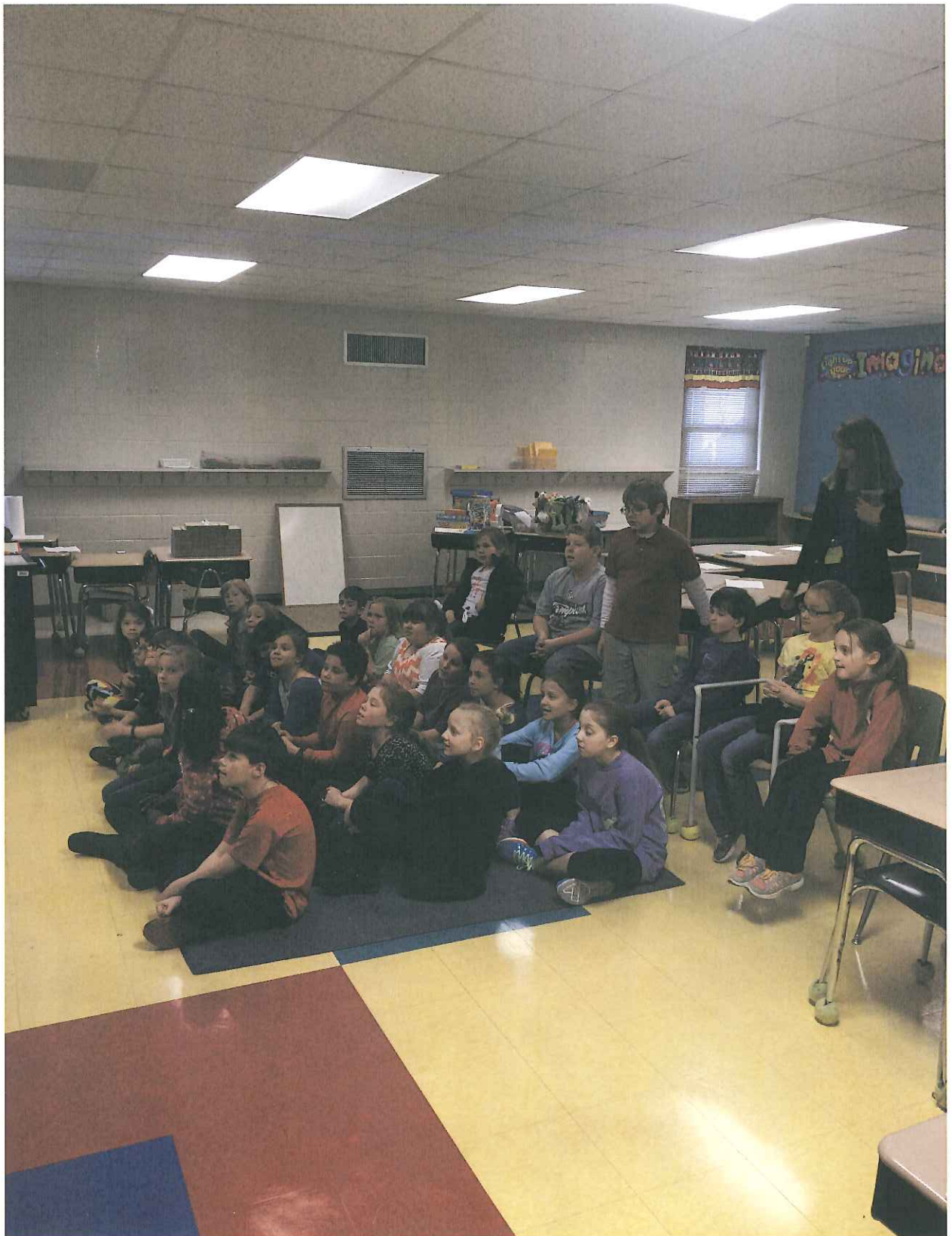
### Public Education in schools: Photos

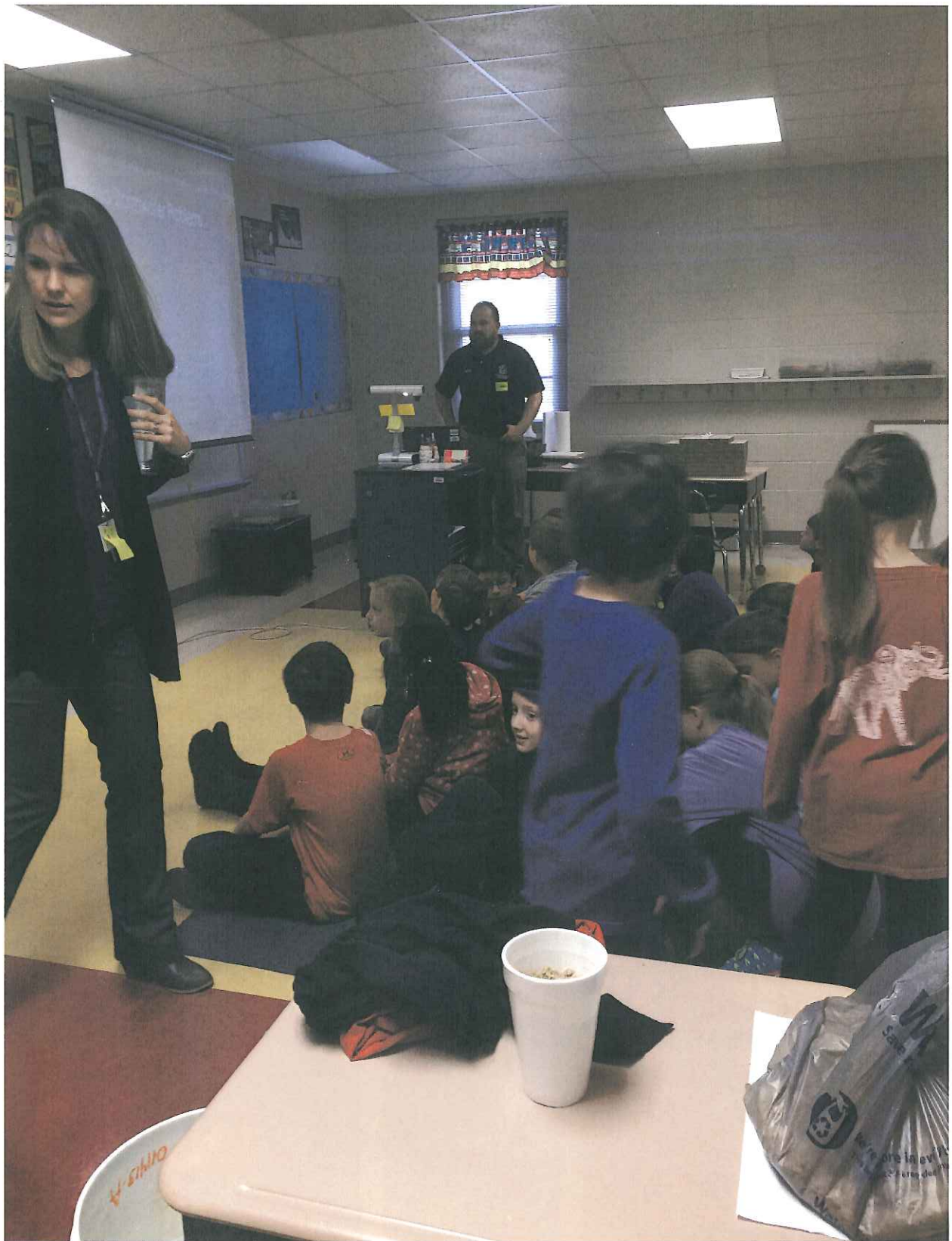




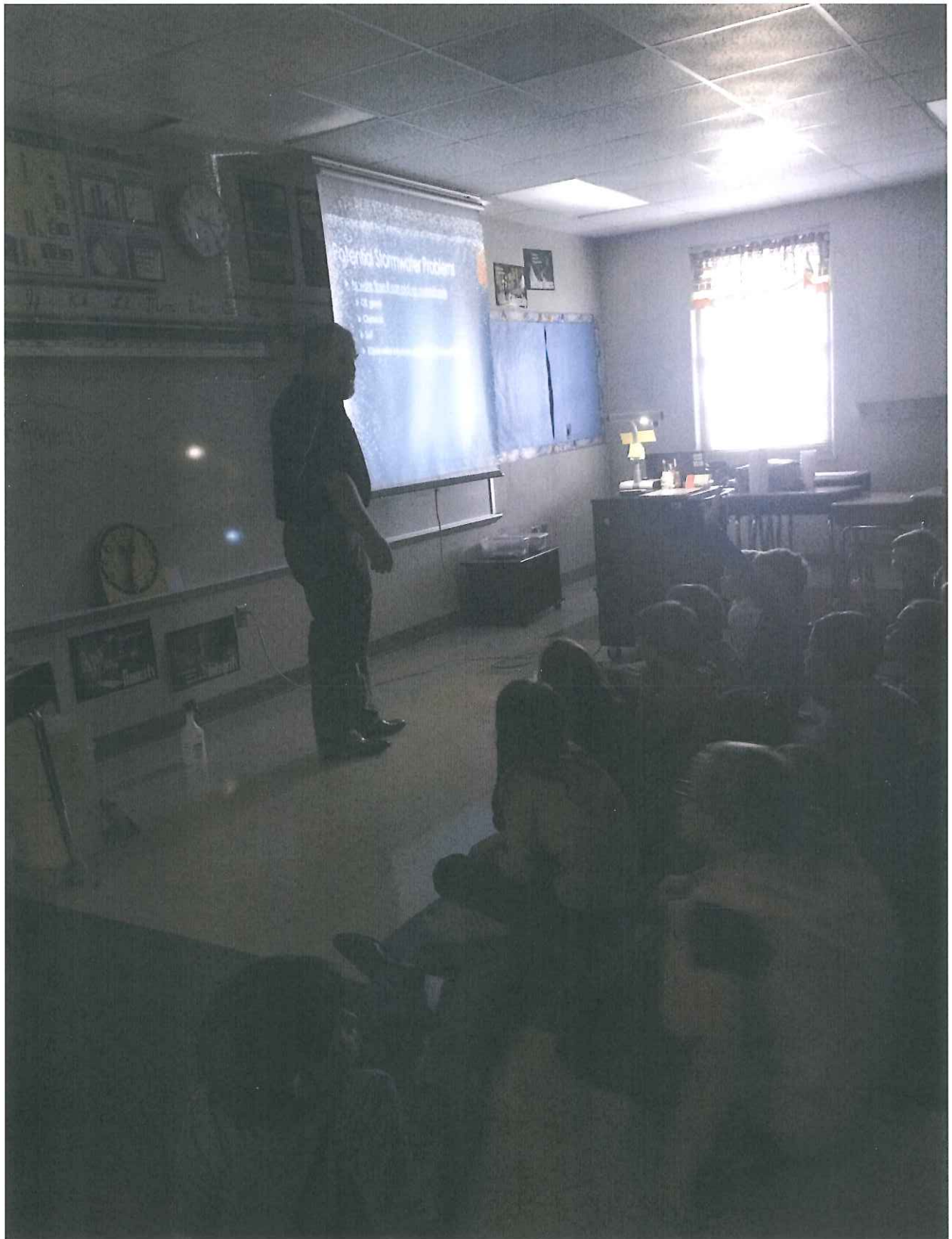




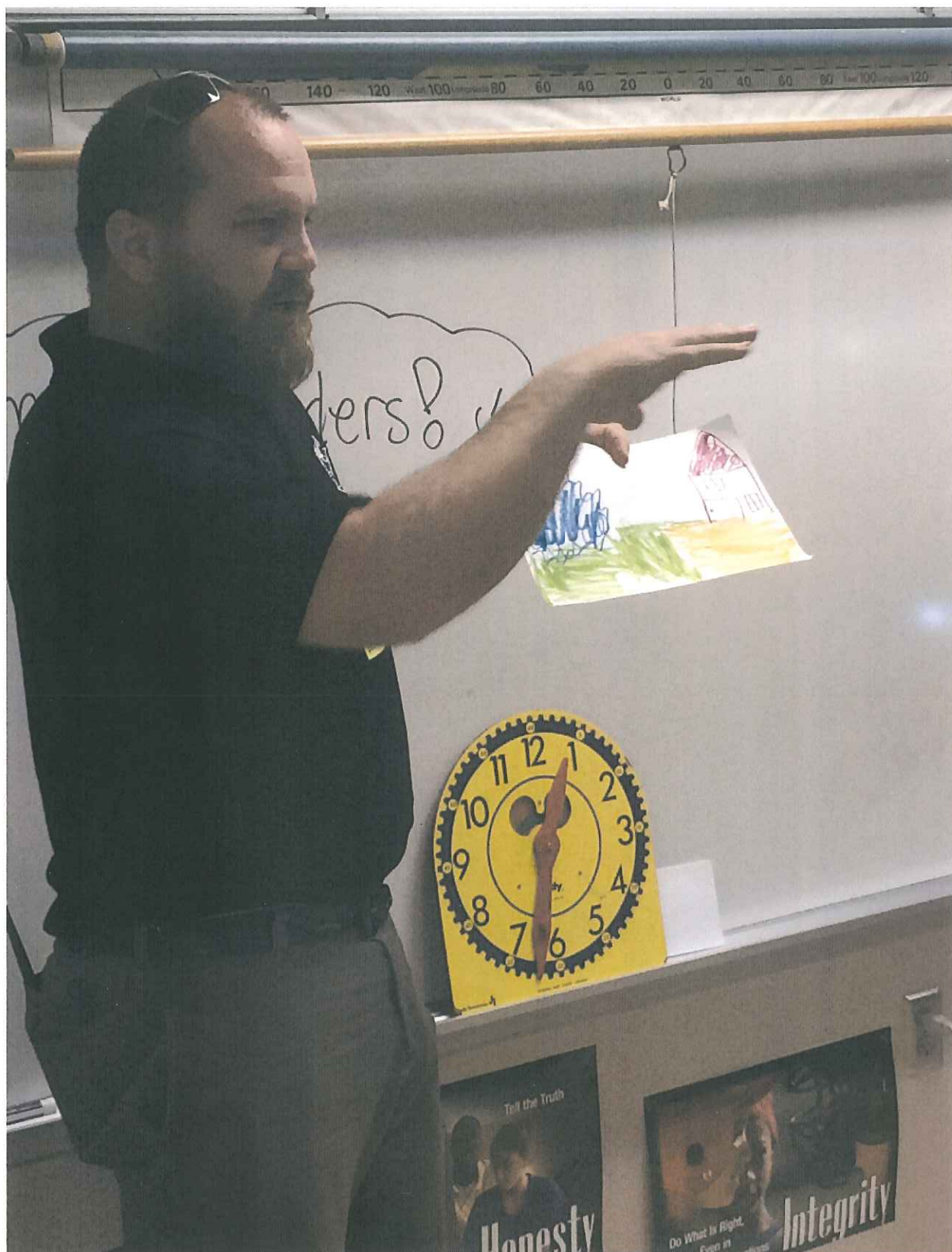


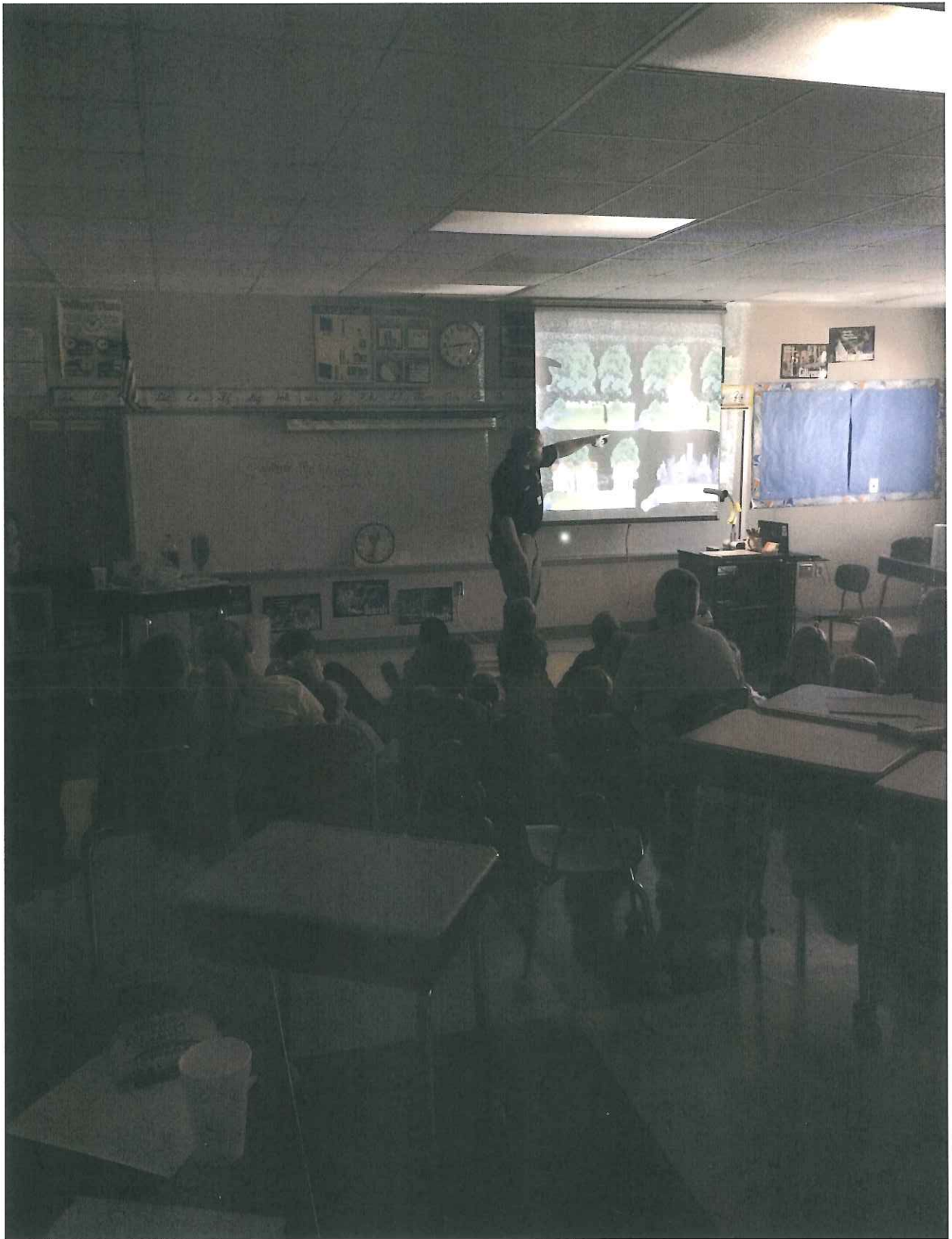




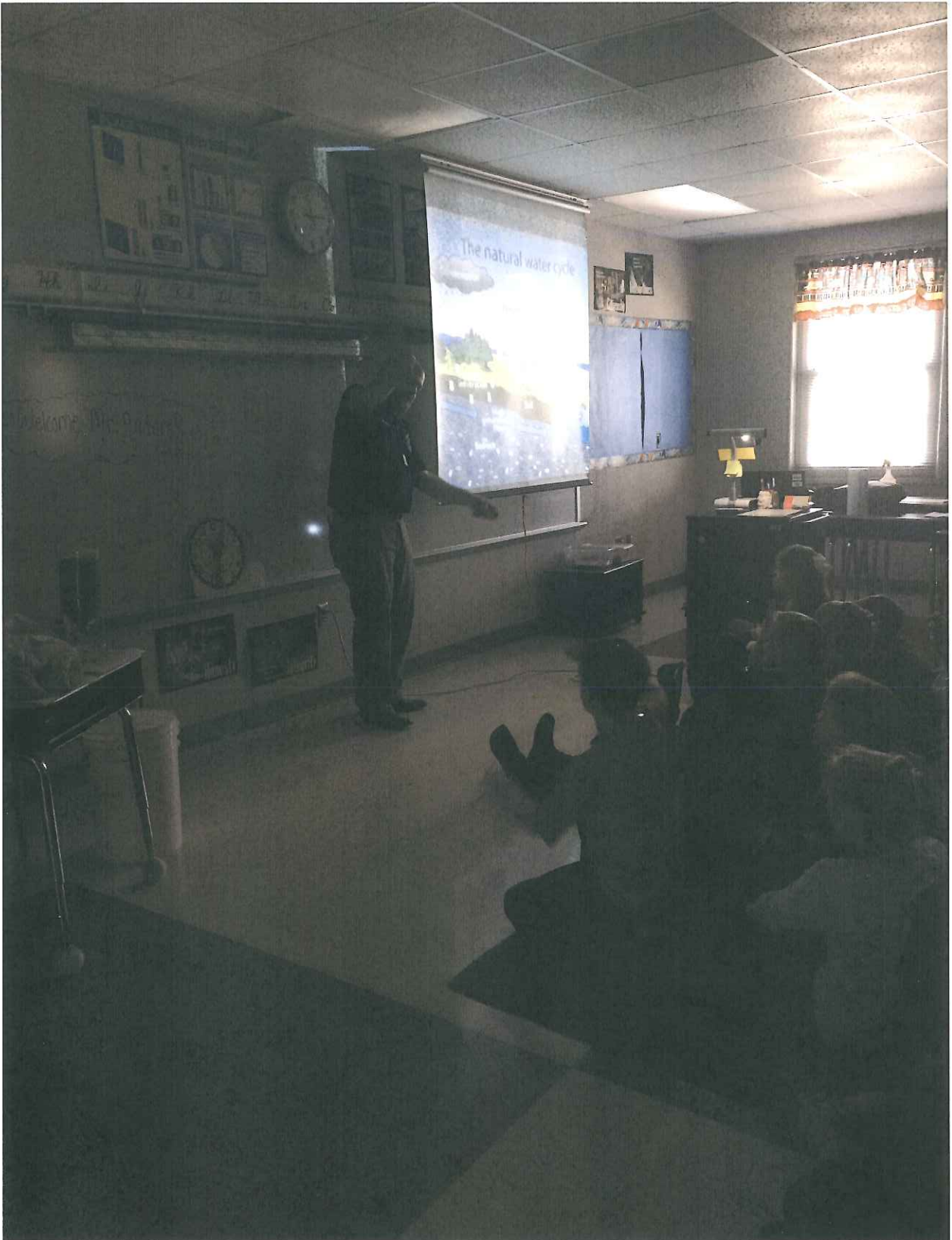


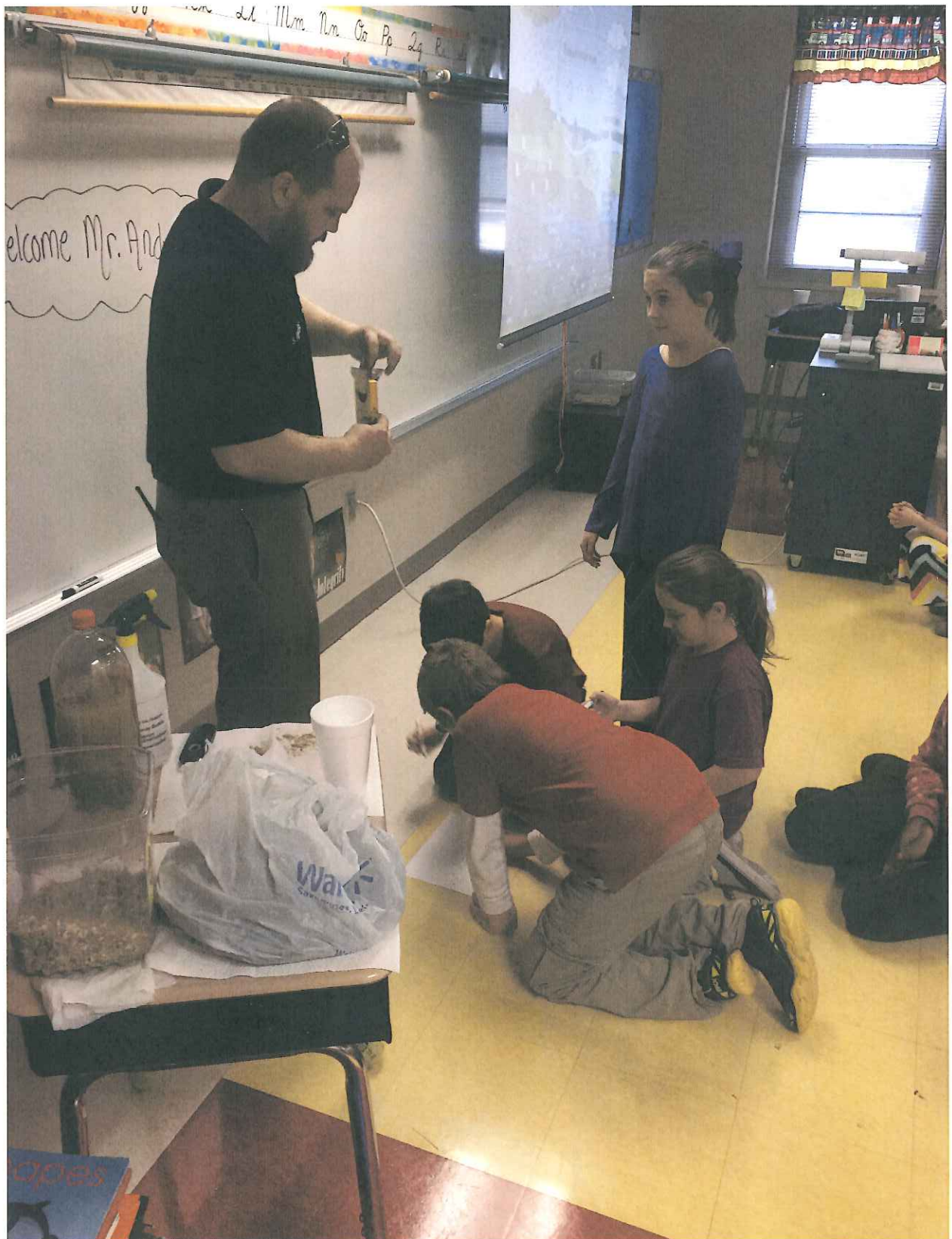




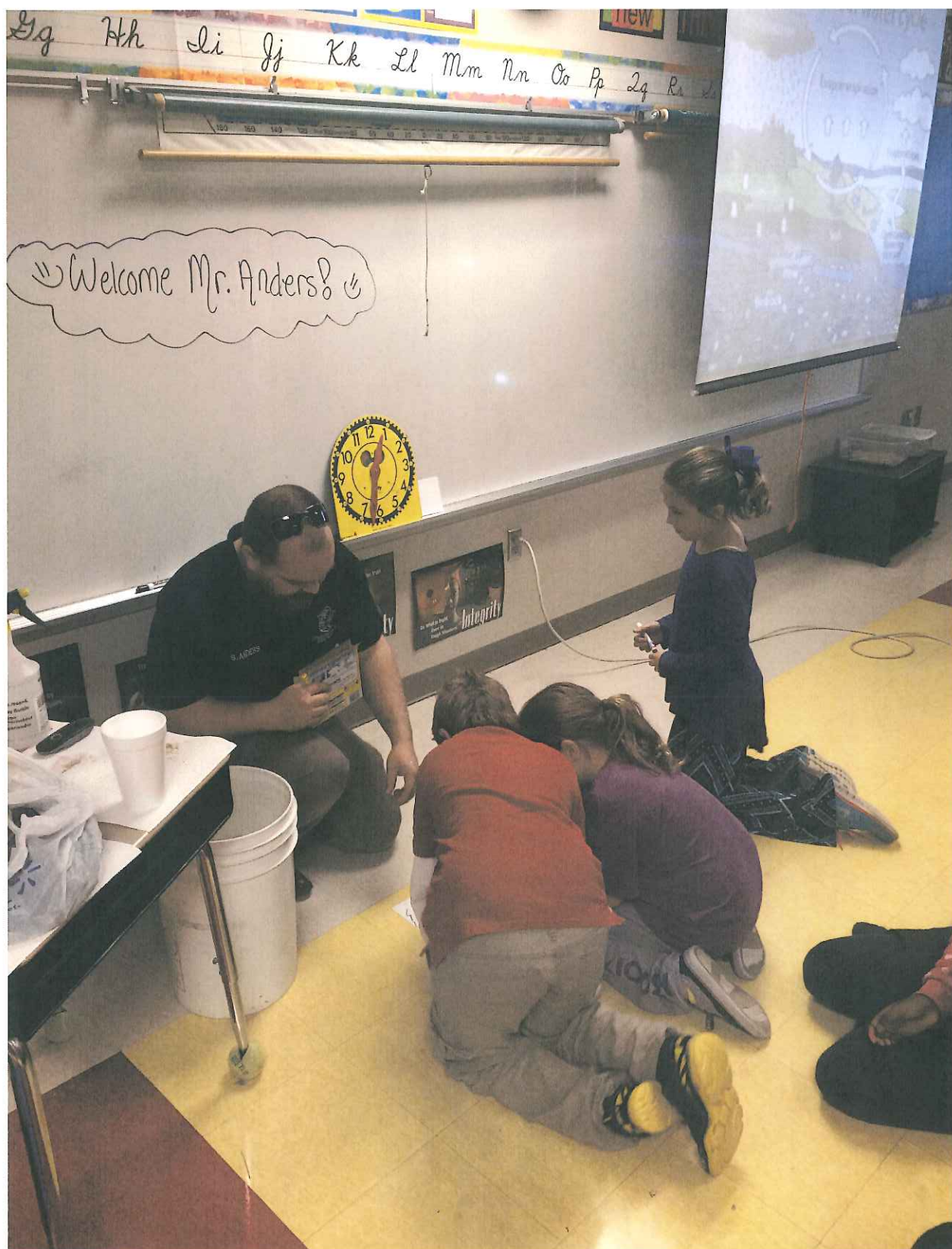


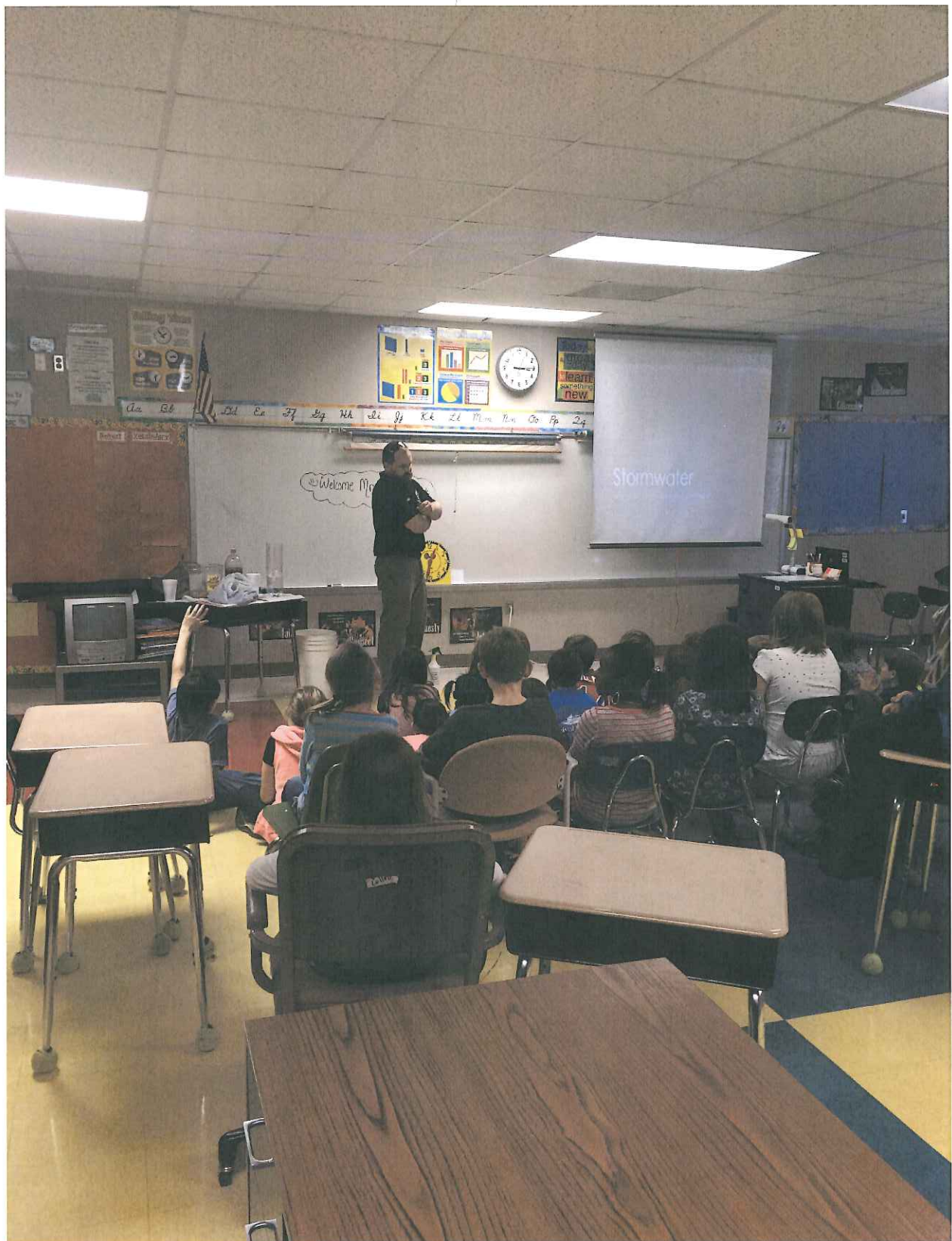




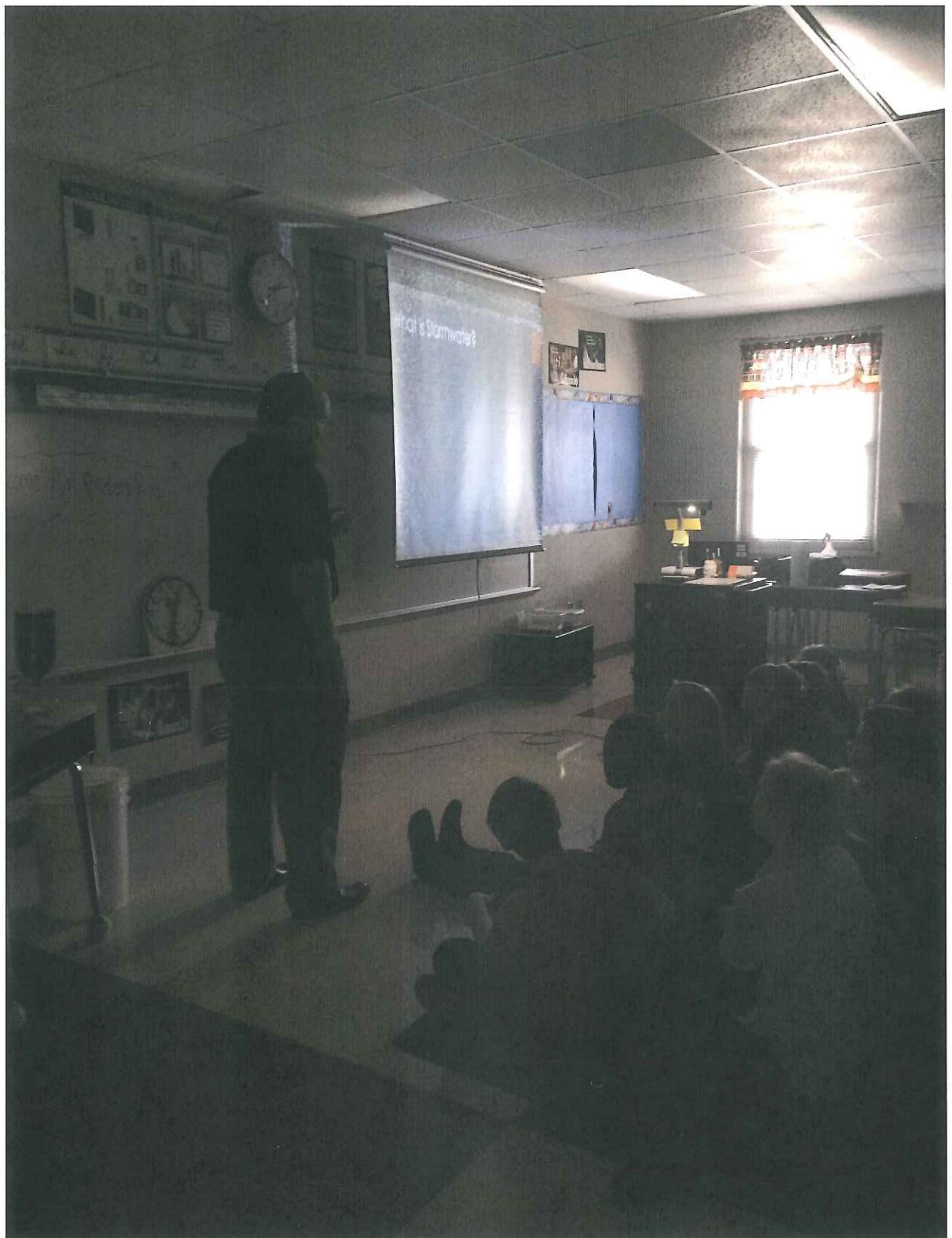


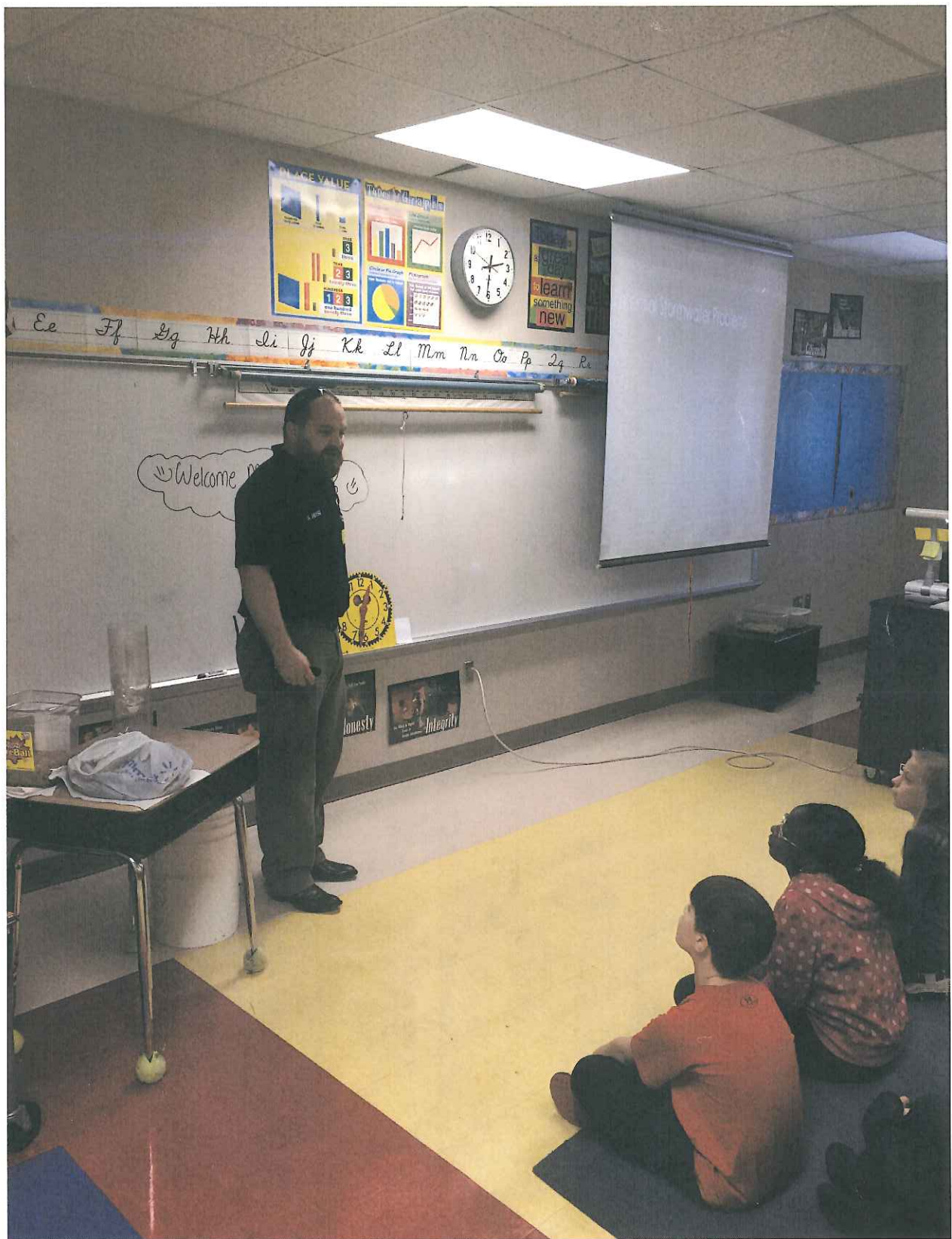














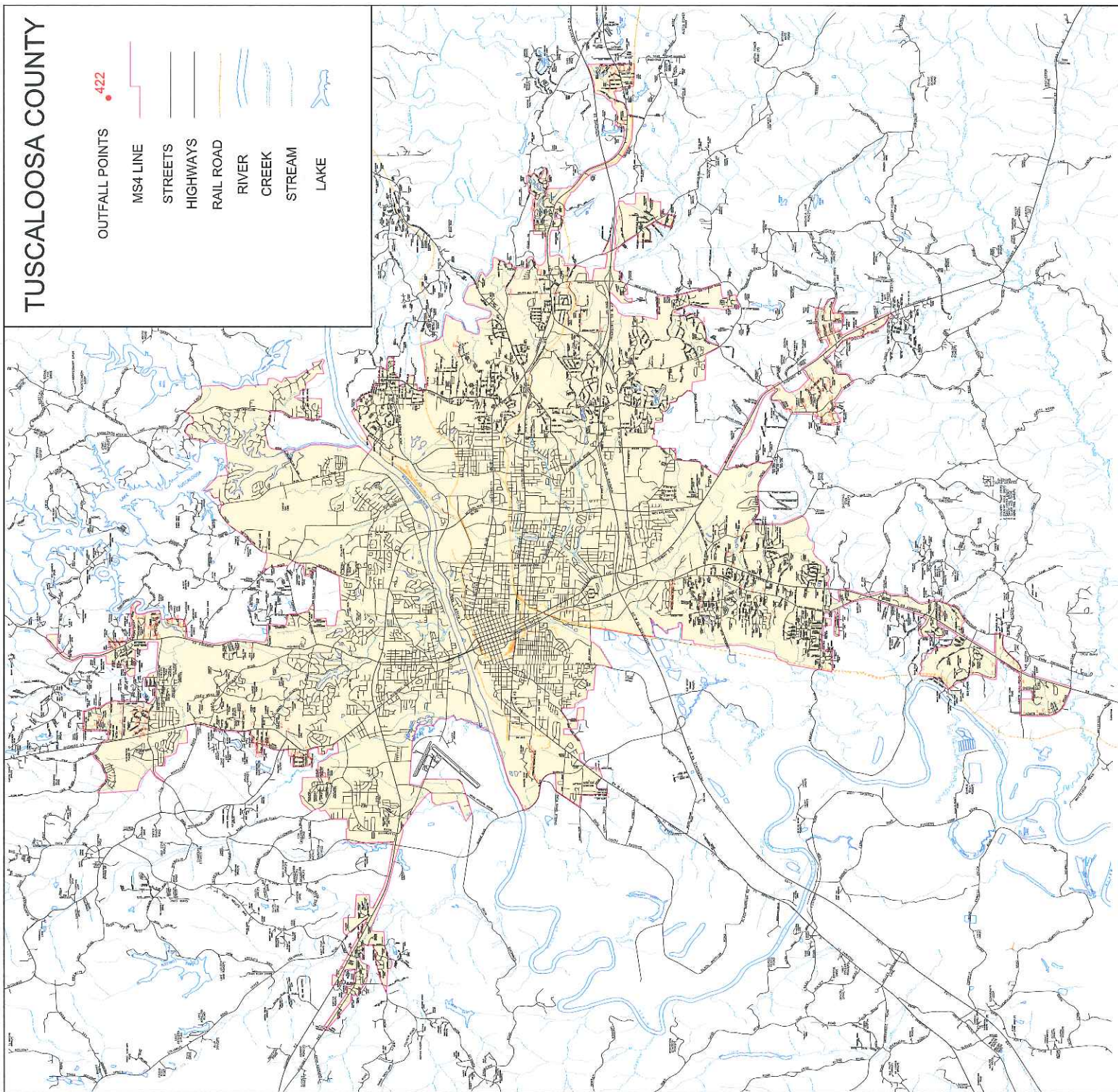
# Tuscaloosa County 2014-2015 Annual Report

## **Appendix C**

### Storm Sewer Outfall Points

# TUSCALOOSA COUNTY

- OUTFALL POINTS 422
- MS4 LINE
- STREETS
- HIGHWAYS
- RAIL ROAD
- RIVER
- CREEK
- STREAM
- LAKE





Page 1

[illegible]



Notes	MS4 Yes/No
Struts are good - some light drift	
Landowner installed this pipe on private section of road - bent up on one end. Concrete inlet on one end - corr metal pipe on the other end	
Curb Inlet on South end Block/brick box with steel grate off road on South end	
On the dead end part - bent up on one end - seems to be flowing ok. Bent on the end	
Curb and gutter Curb and gutter	



Date	By	Pt	Road Name	Road ID	Latitude	Longitude
2/1/2013		013.1			33.33245	-87.57791
		015.0	Danlea Dr (p)	1528		
		016.0				
3/7/2012	BC	017.0	Earl Fields Cir	1077	33.27977	-87.57174
	BC	018.0	Dick Hagler Rd	1335	33.27542	-87.57246
	BC	019.0	Upper Columbus Rd	0502	33.26575	-87.67909
		020.0	Elbert Taylor Dr	1915		
		021.0	Nubbin Rd	0681		
12/12/2011		022.0	Romulus Rd	0090	33.23484	-87.69237
12/12/2011		023.0	Jays Creek Lane	0982	33.30806	-87.23364
12/12/2011		024.0	Bill George Rd	0386	33.23653	-87.67203
12/12/2011		024.1	Libby Rd	1027	33.23635	-87.67173
12/12/2011		025.0	Sam Sutton Rd	0370	33.23691	-87.70243
12/15/2011	BC	027.0	Summit Dr		33.25222	-87.61760
		028.0	Summit Dr			
		029.0	Harper Rd	0472		
		030.0				
12/15/2011	BC	032.0	Pennybrook Lane		33.26556	-87.60028
12/15/2011		032.1			33.26553	-87.60022
		033.0				
		034.0	Tuscoba Loop Rd	1531		
		035.0	Boone Blvd	1817		
		036.0	Boone Blvd	1817		
3/9/2012	BC	037.0	Charlie Davis Rd	0840	33.18855	-87.62759
3/9/2012	BC	038.0	Fosters Ferry Rd	1250	33.18537	-87.59578
		039.0	HamnerTown Rd	1810		
		040.0	Armond Dr	2334		
		041.0	Old Woods Lane	2721		
		042.0	Stormy Lane	2329		
		043.0	Dollar Road	2414		
		044.0	Forest Oak Lane	2459		
3/7/2012	BC	045.0	Holt Peterson Rd	1123	33.22951	-87.46209
		046.0	Clinker Drive	0396	33.22488	-87.46124
12/1/2011		047.0	Keenes Mill Rd	0096	33.20244	-87.45023
		048.0	Keenes Mill Rd	0096	33.20056	-87.44630
		049.0	Keenes Mill Rd	0096	33.19973	-87.44331
		055.0	Copper Lane	2859		
		056.0	Clements Rd	0566	33.18274	-87.44245
3/20/2013	CTO	057.0	Jaybird Rd	0497	33.18253	-87.45531
3/20/2013	CTO	057.1	Jaybird Rd	0497	33.18237	-87.45569
3/20/2013	CTO	057.2	Jaybird Rd	0497	33.18115	-87.45889
3/20/2013	CTO	057.3	Jaybird Rd	0497	33.18125	-87.00000

Diameter	Length	Dimension:	Material	Condition	No Structu
24	50		Concrete		
30	45			Good	
	42			Good	
				Good	
			Concrete	Good	
48	115		Concrete	Good	
			Concrete	Good	3
48			Steel	Good	
12	27		Concrete	Good	
	42		Concrete	Good	2
30	45			Good	
	42			Good	
24	65		Concrete	Good	
18	36		Concrete		
48	37		Concrete		
16	32		Metal	Poor	
36	52		Concrete		







Date	By	Pt	Road Name	Road ID	Latitude	Longitude
3/22/2013	CTO	057.4	Jaybird Rd	0497	33.18138	-87.46452
3/20/2013	CTO	058.0	Jaybird Rd	0497	33.18241	-87.45557
3/6/2012		059.0	17th St E		33.19257	-87.45945
3/6/2012		060.0	15th St E		33.19524	-87.45955
		061.0	Keenes Mills Rd	0096		
		062.0	Keenes Mill Rd	0096		
		063.0	Keenes Mill Rd	0096		
		064.0	Canyon Lake Rd	0565		
3/6/2012		068.0	Plantation Rd	1625	33.14703	-87.55602
3/6/2012		069.0	Plantation Rd	1625	33.14447	-87.55602
		070.0	Ozier Dr	2509	33.14779	-87.55684
		071.0	Laurelwood Dr	0344		
		072.0	Laurelwood Dr	0344		
		074.0	Honey Locust Dr	1771		
		075.0	Crabtree Rd	0506		
3/6/2012		076.0	Old Greensboro Rd	0248	33.14054	-87.54874
		077.0	Crabtree Rd	0506		
		078.0	Crabtree Rd	0506		
5/17/2012		079.0	Mallard Cir	1782	33.14010	-87.55523
5/17/2012		080.0	Mallard Cir	1782	33.13916	-87.55694
		081.0	Mallard Cir	1782		
		082.0	Mallard Cir	1782		
		083.0	Hunters Run	1813		
		084.0	Hunters Run	1813		
		085.0	Crabtree Rd	0506		
		086.0	Crabtree Cir	2332		
3/6/2012		087.0	Crabtree Rd	0506	33.14108	-87.56224
		088.0	Crabtree Rd	0506		
		089.0	Crabtree Rd	0506		
3/6/2012		090.0	Old Greensboro Rd	0248	33.13488	-87.55172
3/6/2012		091.0	Manora Estates Dr	1750	33.13410	-87.55495
		092.0	Woodlawn Cir	1651		
3/6/2012		093.0	Old Greensboro Rd	0248	33.13058	-87.55307
3/6/2012		094.0	Inverness Pkwy	2513	33.12848	-87.55293
3/6/2012		095.0	Inverness Pkwy	2513	33.12856	-87.56533
3/6/2012		096.0	Inverness Pkwy	2513	33.12859	-87.56386
3/6/2012		097.0	Waterford Lane	2871	33.12549	-87.56021
		098.0	Timber Dr			
		099.0	Englewood Dr	0463		
		100.0	Stardust Dr	2727		
		101.0	Maxwell Loop Rd			
		102.0	Maxwell Loop Rd			

Diameter	Length	Dimension	Material	Condition	No Structure
24	29		Concrete		
42	45		Concrete		
			Concrete		
36	50		Concrete	Good	
48	75		Concrete	Good	
	35				
30	90			Good	
			Steel	Poor	
	30				
	60		Concrete	Good	
	35				
	45				
	90				





Date	By	Pt	Road Name	Road ID	Latitude	Longitude
		103.0	Collier Way	2842		
		104.0	Harrison Dr	2841		
		105.0	Harrison Dr	2841		
		106.0	Harrison Dr	2841		
		107.0				
		108.0	Pine Lane	0159		
		109.0	Old Greensboro Rd	0248		
		110.0	Old Greensboro Rd	0248		
		111.0	Old Greensboro Rd	0248		
		112.0	Woodbank Pkwy	0166		
		113.0	Woodbank Pkwy	0166		
11/22/2011		114.0	Country Oaks Dr	1664	33.13792	-87.54410
11/22/2011		115.0	Countrywood Dr	16665	33.13944	-87.54028
11/22/2011		116.0	Oakleaf Circle	2361	33.13839	-87.54265
		117.0	Highway 69 South	0173		
		118.0	Highway 69 South	0173		
11/22/2011	BC	119.0	Patriot Pkwy		33.12706	-87.54667
11/22/2011		119.1	Patriot Pkwy		33.12720	-87.54433
11/22/2011		119.2	Patriot Pkwy		33.12786	-87.54249
11/22/2011		119.3	Patriot Pkwy		33.12857	-87.54026
11/22/2011		119.4	Patriot Pkwy		33.12859	-87.53841
11/22/2011		119.5	Patriot Pkwy		33.12854	-87.53715
11/22/2011		119.6	Patriot Pkwy		33.12846	-87.53600
11/22/2011		119.7	Patriot Pkwy		33.12843	-87.53527
11/22/2011		119.8	Patriot Pkwy		33.12862	-87.53320
11/22/2011		119.9	Patriot Pkwy		33.12850	-87.53086
		120.0	Greenwood Dr	1769		
		121.0	Fieldwood Dr	1768		
		122.0	Old Jug Factory Rd	0470		
		123.0	Old Jug Factory Rd	0470		
11/7/2011		124.0	Meadow Ridge Dr		33.13623	-87.53412
11/7/2011		125.0	Hillcrest School Rd	0468	33.13383	-87.53258
		126.0	Hillcrest School Rd	0468	33.13443	-87.54137
		127.0	Gipson Dr	2496	33.13443	-87.54173
		128.0	Bear Creek Rd		33.13220	-87.53007
		129.0	Old Marion Rd	0156	33.12360	-87.53020
2/28/2013	CTO	131.0	Taylorwood Cir	1748	33.12944	-87.52195
3/12/2013	CTO	132.0	Taylorwood Cir	1748	33.12646	-87.52441
3/12/2013	CTO	133.0	Taylorwood Cir	1748	33.12496	-87.52447
2/28/2013	CTO	134.0	Taylorwood Cir	1748	33.12145	-87.52442
3/18/2013	CTO	135.0	Taylorwood Cir	1748	33.12017	-87.52447
2/28/2013	CTO	135.1	Taylorwood Cir	1748	33.11926	-87.52419

Diameter	Length	Dimension	Material	Condition	No Structu
18	57		Concrete		
48	39		Metal	Good	
	30				
	100				
	100				
	100				
	100				
	105				
	100				
	100				
	115				
	105				
	112		Concrete		
	60				
36	60		Metal	Poor	
24	45		Concrete	Good	
18	65		Metal	Good	
18	36		Metal	Good	2
	50				
36	58		Metal		
36	44		Concrete		
24	32		Concrete		
24	40		Concrete		
15	40		Concrete		
48	40		Concrete		





Date	By	Pt	Road Name	Road ID	Latitude	Longitude
2/28/2013	CTO	135.2	Taylorwood Cir	1748	33.11889	-87.52158
2/28/2013	CTO	135.3	Taylorwood Cir	1748	33.11898	-87.51944
3/18/2013	CTO	135.4	Taylorwood Dr	0471	33.12430	-87.52167
3/18/2013	CTO	135.5	Taylorwood Cir	1748	33.12568	-87.51887
3/18/2013	CTO	135.6	Taylorwood Cir	1748	33.12652	-87.52019
3/18/2013	CTO	135.7	Taylorwood Cir	1748	33.12876	-87.51882
		136.0	Rosser Estates	1911		
		137.0	Wuthering Heights Lane	1125		
		138.0	Sherwood Forest	2145		
		139.0				
		140.0				
		141.0				
2/9/2012	BC	142.0	Lexington Dr	0452	33.11625	-87.48404
		144.0	Raintree Dr	0147		
2/9/2012		145.0	Rainhill Dr	2257	33.10812	-87.48994
2/9/2012		146.0	Raintree Cir	0143	33.10791	-87.49224
2/9/2012		147.0	Raintree Cir	0143	33.10661	-87.49509
		148.0				
2/9/2012		149.0	Propst Rd	0142	33.11193	-87.49981
2/9/2012		149.1			33.11353	-87.49903
		150.0	Rutherford Cir	2742		
		151.0	Swindle Rd	0083		
2/9/2012		156.0	Bear Creek Cir			
2/9/2012		157.0	Bear Creek Cir		33.11905	-87.49181
6/24/2013	CTO	158.0	Constitution Dr	0274	33.11648	-87.49117
6/24/2013	CTO	158.1	Constitution Dr	0274	33.11767	-87.48833
		159.0	Jug Factory Rd	2153		
3/15/2013	CTO	160.0	Jordan Mcgee Rd	2154	33.17472	-87.46460
		161.0				
		162.0				
		163.0				
		164.0	Live Oak Dr	0465		
		165.0	White Oak Dr	1110		
		166.0				
5/10/2012		167.0	Thomas Rd	0661	33.07992	-87.55457
5/10/2012		168.0	Old Greensboro Rd	0248	33.07851	-87.55595
		169.0	private dr			
5/10/2012		170.0	Kitchens Rd	0177	33.07442	-87.55473
5/10/2012		171.0	Old Greensboro Rd	0248		
		172.0	private dr			
		173.0	Old Greensboro Rd	0248		
12/14/2011		174.0	Hillcrest Villa Dr	2474	33.06185	-87.56367



Diameter	Length	Dimension	Material	Condition	No Structure
24	34		Concrete		2
48	48		Concrete		
16	32		Concrete		
36	40		Concrete		
18	32		Concrete		
24	32		Concrete		
24	50		Concrete	Good	2
24	36		Metal	Good	3
72	36		Steel	Good	
72	32		Metal	Good	
18	42		Concrete	Good	
24	65		Concrete	Good	
	42		Concrete	Good	
42	42		Concrete	Good	
18	48	0	Concrete	Good	
	34		Concrete	Good	
18	60		Concrete	Good	
			Steel		
60	75		Concrete	Good	2





Date	By	Pt	Road Name	Road ID	Latitude	Longitude
		177.0	Upper Hull Rd	0179		
12/14/2011		178.0	Kings Loop Rd	0261	33.06244	-87.57827
12/14/2011		179.0	Kings Loop Rd	0261	33.06253	-87.58149
12/14/2011		180.0	Kings Loop Rd	0261	33.06868	-87.58013
		181.0	Arrowhead Loop	0087		
		182.0	Longbow Dr	0172	33.07809	-87.55818
		184.0				
3/20/2013	CTO	190.0	Buttermilk Rd	0508	33.18438	-87.44980
3/20/2013	CTO	190.1	Buttermilk Rd	0508	33.16565	-87.44928
3/20/2013	CTO	190.2	Buttermilk Rd	0508	33.16165	-87.45084
3/29/2013	CTO	191.0	Pinedale Dr	1835	33.26345	-87.61238
4/1/2013	CTO	192.0	Pinedale Dr	1835	33.26322	-87.60948
4/1/2013	CTO	193.0	Pinedale Dr	1835	33.26181	-87.60870
4/1/2013	CTO	194.0	Pinedale Dr	1835	33.26323	-87.61159
4/1/2013	CTO	195.0	Pinedale Dr	1835	33.26317	-87.60985
4/1/2013	CTO	196.0	Pinedale Dr	1835	33.26341	-87.61212
4/1/2013	CTO	197.0	Pinedale Dr	1835	33.26302	-87.60714
4/1/2013	CTO	198.0	Cypress View Lane	1837	33.26177	-87.60877
3/29/2013	CTO	199.0	Applewood Dr	0820	33.26073	-87.60939
3/29/2013	CTO	199.0	Applewood Dr	0820	33.26073	-87.60939
4/4/2013	CTO	200.0	Applewood Dr	0820	33.26088	-87.61160
4/4/2013	CTO	201.0	Brookwood Dr	1834	33.25963	-87.60958
3/29/2013	CTO	202.0	Candle Lane	1907	33.25914	-87.60889
3/29/2013	CTO	203.0	Candle Lane	1907	33.25838	-87.60954
3/29/2013	CTO	204.0	Candle Lane	1907	33.25864	-87.61112
4/5/2013	CTO	205.0	Smith Jackson Rd	1532	33.27119	-87.60476
4/5/2013	CTO	206.0	Smith Jackson Rd	1532	33.27151	-87.60471
4/5/2013	CTO	207.0	Smith Jackson Rd	1532	33.27256	-87.60447
4/5/2013	CTO	208.0	Smith Jackson Rd	1532	33.27459	-87.60398
4/5/2013	CTO	209.0	Oak Hill DR	2184	33.27377	-87.60420
4/5/2013	CTO	210.0	Oak Hill Dr	2184	33.27375	-87.60399
4/12/2013	CTO	211.0	Chesnutt Hills Dr	1971	33.27497	-87.60301
4/15/2013	CTO	212.0	Oak Hill Dr	2184	33.27392	-87.60641
4/15/2013	CTO	213.0	Oak Grove Lane	2185	33.27389	-87.60709
4/15/2013	CTO	214.0	Oak Grove Lane	2185	33.27303	-87.60713
4/15/2013	CTO	215.0	Oak Grove Lane	2185	33.27263	-87.60712
4/15/2013	CTO	216.0	River Oak Dr	2186	33.27124	-87.60264
4/25/2013	CTO	217.0	Cranberry Dr	0432	33.30494	-87.59734
4/25/2013	CTO	218.0	Elderberry Lane	0430	33.30734	-87.59718
4/25/2013	CTO	219.0	Elderberry Lane	0430	33.30762	-87.59808
4/25/2013	CTO	220.0	Beech Street	0433	33.30886	-87.59479
4/25/2013	CTO	221.0	Apple Lane	1187	33.30783	-87.59328



Diameter	Length	Dimension	Material	Condition	No Structure
72	70		Concrete	Good	2
24	36		Concrete	Good	
36	35		Metal	Good	
24	40		Concrete	Good	
	137	5 x 6	Concrete	Good	
	130	5 x 6	Concrete	Good	
	150	6 x 6	Concrete	Good	
48	30		Metal	Good	
18	32		Concrete	Good	
18	40		Concrete	Good	
15	37		Concrete	Good	
18	32		Concrete	Good	
15	41		Concrete	Good	
24	32		Concrete	Good	
18	40		Concrete	Good	
18	56		Concrete	Good	
18	31		Concrete	Good	
15	33		Concrete	Good	
18	27		Concrete	Good	
18	32		Concrete	Good	
15	28		Concrete	Good	
18	32		Concrete	Good	
24	40		Concrete	Good	
18	40		Concrete	Good	
18	48		Concrete	Good	
18	40		Concrete	Good	
12	38		Concrete	Good	
18	58		Concrete	Good	
18	40		Concrete	Good	
18	30		Concrete	Good	
18	34		Concrete	Good	
18	141		Concrete	Good	
24	34		Concrete	Good	
18	32		Concrete	Good	
30	48		Concrete	Poor	
24	48		Concrete	Poor	
24	40		Concrete	Good	
24	40		Concrete	Good	
30	40		Concrete	Good	

[illegible]



Date	By	Pt	Road Name	Road ID	Latitude	Longitude
4/25/2013	CTO	222.0	Apple Lane	1187	33.30783	-87.59328
4/26/2013	CTO	223.0	Apple Lane	1187	33.30597	-87.59332
4/26/2013	CTO	224.0	Apple Lane	1187	33.30479	-87.59382
4/26/2013	CTO	225.0	Blueberry Dr	0559	33.30485	-87.59575
4/26/2013	CTO	226.0	Date St	0431	33.30869	-87.60121
4/26/2013	CTO	227.0	Date St	0431	33.30687	-87.59979
4/26/2013	CTO	228.0	Date St	0431	33.30643	-87.60009
4/26/2013	CTO	229.0	Date St	0431	33.30673	-87.60035
4/26/2013	CTO	230.0	Date St	0431	33.30517	-87.59936
5/14/2013	CTO	231.0	Ash Rd	0441	33.31449	-87.57236
5/14/2013	CTO	232.0	Ash Rd	0441	33.31572	-87.57009
5/14/2013	CTO	233.0	Kindling Dr	0999	33.31417	-87.57216
5/14/2013	CTO	234.0	Kindling Dr	0999	33.31418	-87.57009
5/14/2013	CTO	235.0	Charcoal Dr	0440	33.31285	-87.57006
5/14/2013	CTO	236.0	Smokey Hollow Rd	0442	33.31196	-87.57004
5/14/2013	CTO	237.0	Smokey Hollow Rd	0442	33.31521	-87.57001
5/14/2013	CTO	238.0	Sleepy Valley Rd	0444	33.30965	-87.56141
5/14/2013	CTO	239.0	Sleepy Valley Rd	0444	33.30950	-87.55846
5/14/2013	CTO	240.0	Carolwood-Lakeview Dr	1070	33.30766	-87.56189
5/14/2013	CTO	241.0	Carolwood-Lakeview Dr	1070	33.30628	-87.56197
5/14/2013	CTO	242.0	Carolwood-Lakeview Dr	1070	33.30607	-87.56541
5/14/2013	CTO	243.0	Carolwood-Lakeview Dr	1070	33.30623	-87.56890
5/15/2013	CTO	244.0	Telmar Dr	0445	33.30445	-87.56888
5/15/2013	CTO	245.0	Telmar Dr	0445	33.30416	-87.56318
5/15/2013	CTO	246.0	Telmar Dr	0445	33.30400	-87.56313
5/15/2013	CTO	247.0	Telmar Dr	0445	33.30365	-87.56290
5/15/2013	CTO	248.0	Telmar Dr	0445	33.30320	-87.56264
5/15/2013	CTO	249.0	Telmar Dr	0445	33.30289	-87.56233
5/15/2013	CTO	250.0	Telmar Lane	2563	33.30282	-87.56210
5/15/2013	CTO	251.0	Lakefront Village	0447	33.30239	-87.56887
5/15/2013	CTO	252.0	Lakefront Village	0447	33.30242	-87.56831
5/15/2013	CTO	253.0	Paddleboat Landing	1084	33.30258	-87.56765
5/16/2013	CTO	254.0	Lakewood Dr	1004	33.29419	-87.56855
5/15/2013	CTO	255.0	Brookview Cir	1086	33.29430	-87.56623
5/15/2013	CTO	256.0	Lakewood Dr	1004	33.29591	-87.56451
5/16/2013	CTO	257.0	Lakewood Loop	2718	33.29940	-87.56253
5/16/2013	CTO	258.0	Lakewood Loop	2718	33.29806	-87.56212
5/16/2013	CTO	259.0	Middle Lake Rd	1003	33.29636	-87.56229
5/16/2013	CTO	260.0	Lakewood Lane	1087	33.29476	-87.56302
5/16/2013	CTO	261.0	Lakewood Lane	1087	33.29475	-87.56375
	CTO	262.0				
	CTO	263.0				



Diameter	Length	Dimension:	Material	Condition	No Structu
30	64		Concrete	Good	
15	32		Concrete	Good	
18	57		Concrete	Poor	
18	41		Concrete	Good	
			Concrete	Good	
			Concrete	Good	
			Concrete	Good	
			Steel	Good	
			Concrete	Good	
18	40		Concrete	Good	
18	40		Concrete	Good	
18	40		Concrete	Good	
18	32		Concrete	Poor	
18	32		Concrete	Good	
24	32		Concrete	Good	
24	40		Concrete	Poor	
24	64		Concrete	Good	
18	48		Concrete	Good	
18	32		Concrete	Poor	
24	40		Concrete	Good	
18	38		Concrete	Poor	
18	40		Metal	Good	
24	66		Concrete	Good	
			Concrete	Good	
			Concrete	Good	
			Concrete	Good	
			Steel	Good	
36	68		Metal	Good	
18	40		Metal	Poor	
36	50		Concrete	Poor	
15	32		Concrete	Good	
24	92		Concrete	Poor	
12	40		Metal	Good	
24	133		Concrete	Poor	
18	34		Concrete	Good	
18	40		Concrete	Poor	
12	36		Concrete	Good	
18	42		Concrete	Poor	
24	141		Concrete	Good	

Notes	MS4 Yes/No
Pipes discharge into a catch basin then into a small lake	
Pipe looks fairly new but it is broke off on one end	
Pipe is good but ditch needs to be dug out on one end	
Concrete box inlet approx 30' Apart	
Concrete Box inlet approx 30' apart	
Concrete Box Inlet (off road)	
Steel Grate (off road)	
Concrete Box Inlet Approx 28' Apart	
Pipe is broken on outlet end	
Pipe is broken on outlet end	
Open ditch at end of road	
Broken on inlet end	
Stopped up 50%	
At intersection with Hwy 69	
Runs from open ditch to junction box	
48 x 48 Concrete Junction Box	
48 x 48 Concrete Junction Box	
32 x 48 Concrete Junction Box	
36 x 30 Steel Grate	
Runs From Junction box to open ditch	
Rusted and bent on the ends	
Stopped up 75% on outlet end	
Steel grate on inlet end - flare concrete outlet end stopped up 40 %	
Trees are laying across exposed pipe broken in several places	
Stopped up 40% on outlet end - Near address 13411	
Steel grate at outlet end connecting this pipe to another pipe in vacant lot	
Stopped up 75 % on outlet end	
Property owner added 24" plastic pipe to existing pipe - total length 141'	



Date	By	Pt	Road Name	Road ID	Latitude	Longitude
	CTO	264.0				
	CTO	265.0				
	CTO	266.0				
	CTO	267.0				
	CTO	268.0				
	CTO	269.0				
	CTO	270.0				
	CTO	271.0				
	CTO	272.0				
	CTO	273.0				
	CTO	274.0				
	CTO	275.0				
	CTO	276.0				
	CTO	277.0				
	CTO	278.0				
5/22/2013	CTO	279.0	Butterfly Dr	0150	33.10883	-87.46525
5/22/2013	CTO	280.0	Butterfly Dr	0150	33.10932	-87.46548
5/22/2013	CTO	281.0	Overland Rd	0237	33.11036	-87.46632
5/22/2013	CTO	282.0	Overland Rd	0237	33.10964	-87.64837
5/22/2013	CTO	283.0	Butterfly Dr	0150	33.11050	-87.46597
5/22/2013	CTO	284.0	Overland Rd	0237	33.11071	-87.46449
5/22/2013	CTO	285.0	Park Forest Trace	0235	33.11172	-87.46812
5/22/2013	CTO	286.0	Park Forest Trace	0235	33.11277	-87.46440
5/22/2013	CTO	287.0	Park Forest Trace	0235	33.11290	-87.46268
5/23/2013	CTO	288.0	Lullaby Lane	0569	33.11304	-87.46116
5/23/2013	CTO	289.0	Lullaby Lane	0569	33.11393	-87.46119
5/23/2013	CTO	290.0	Park Forest Trace	0235	33.11303	-87.45867
5/23/2013	CTO	291.0	Park Forest Trace	0235	33.11285	-87.45666
5/23/2013	CTO	292.0	Park Forest Trace	0235	33.11220	-87.45386
5/23/2013	CTO	293.0	Overland Rd	0237	33.11129	-87.45721
5/23/2013	CTO	294.0	Overland Rd	0237	33.11086	-87.45545
5/23/2013	CTO	295.0	Overland Rd	0237	33.10831	-87.45305
5/23/2013	CTO	296.0	Hummingbird Lane	0915	33.10933	-87.45840
5/23/2013	CTO	297.0	Hummingbird Lane	0915	33.10778	-87.45841
5/23/2013	CTO	298.0	Hummingbird Lane	0915	33.10406	-87.45853
5/23/2013	CTO	299.0	Butterfly Dr	0150	33.10600	-87.45895
5/23/2013	CTO	300.0	Butterfly Dr	0150	33.10603	-87.46050
5/24/2013	CTO	301.0	Lullaby Lane	0569	33.10833	-87.46073
5/24/2013	CTO	302.0	Butterfly Dr	0150	33.10606	-87.46273
5/24/2013	CTO	303.0	Butterfly Dr	0150	33.10626	-87.46379
5/24/2013	CTO	304.0	Butterfly Dr	0150	33.10672	-87.46439
5/24/2013	CTO	305.0	Butterfly Dr	0150	33.10765	-87.46477

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Notes	MS4 Yes/No
Outlet end bent almost shut	
Inlet end has slight damage - exposed steel reinforcement	
Could not find outlet end - length based on contours	
Has steel grate on uphill side of road	
Outlet end is buried under leaves in the edge of the woods	
30% stopped up	
Inlet end has some blockage but is still flowing good.	
Pipe is completely buried and filled in with dirt	



Date	By	Pt	Road Name	Road ID	Latitude	Longitude
5/24/2013	CTO	306.0	Dallie Dr	1463	33.10691	-87.46447
5/24/2013	CTO	307.0	Dallie Dr	1463	33.10668	-87.46505
6/19/2013	CTO	308.0	Rangeline Rd	0457	33.09981	-87.46383
6/19/2013	CTO	309.0	Rangeline Rd	0457	33.09980	-87.46421
6/19/2013	CTO	310.0	Skelton Rd	0149	33.10484	-87.46713
6/19/2013	CTO	311.0	Skelton Rd	0149	33.10357	-87.46664
6/19/2013	CTO	312.0	Skelton Rd	0149	33.09866	-87.46486
6/19/2013	CTO	313.0	Skelton Rd	0149	33.09283	-87.45944
6/21/2013	CTO	314.0	Mt. Vernon Dr	0450	33.11396	-87.48306
6/21/2013	CTO	315.0	Mt. Vernon Dr	0450	33.11543	-87.48470
6/21/2013	CTO	316.0	Lexington Dr	0452	33.11479	-87.48725
6/21/2013	CTO	317.0	Mt. Vernon Dr	0450	33.11225	-87.48106
6/21/2013	CTO	318.0	Mt. Vernon Dr	0450	33.10963	-87.48124
6/21/2013	CTO	319.0	Mt. Vernon Dr	0450	33.10999	-87.48468
6/21/2013	CTO	320.0	Old Dominion Dr	0449	33.11067	-87.48406
6/24/2013	CTO	338.0	Monticello Dr	0145	33.11543	-87.48027
6/24/2013	CTO	339.0	Monticello Dr	0145	33.11458	-87.48133
6/24/2013	CTO	340.0	Monticello Dr	0145	33.11352	-87.48267
6/24/2013	CTO	341.0	Monticello Dr	0145	33.11226	-87.48587
6/24/2013	CTO	342.0	Monticello Dr	0145	33.11243	-87.48654
6/24/2013	CTO	343.0	Monticello Dr	0145	33.11324	-87.49191
6/24/2013	CTO	344.0	Monticello Dr	0145	33.11295	-87.49341
6/26/2013	CTO	345.0	South Ridge Rd	1461	33.12542	-87.48408
6/26/2013	CTO	346.0	South Ridge Rd	1461	33.12467	-87.48410
6/26/2013	CTO	347.0	South Ridge Rd	1461	33.12172	-87.49068
6/26/2013	CTO	348.0	South Ridge Rd	1461	33.12098	-87.49097
6/26/2013	CTO	349.0	Raintree Cir	0143	33.11183	-87.49347
6/26/2013	CTO	350.0	Raintree Cir	0143	33.11178	-87.49554
6/26/2013	CTO	351.0	Raintree Cir	0143	33.10943	-87.49561
6/26/2013	CTO	352.0	Raintree Cir	0143	33.10835	-87.49454
6/26/2013	CTO	353.0	Raintree Cir	0143	33.10905	-87.49230
6/26/2013	CTO	354.0	Raintree Cir	0143	33.10827	-87.49545
6/26/2013	CTO	355.0	Minuteman Drive	0913	33.10656	-87.49510
6/26/2013	CTO	356.0	Raintree Cir	0143	33.10960	-87.49187
6/26/2013	CTO	357.0	Raintree Dr	0147	33.10971	-87.49185
6/26/2013	CTO	358.0	Raintree Dr	0147	33.10921	-87.48801
6/26/2013	CTO	359.0	Bear Creek Rd	0148	33.10897	-87.48786
6/26/2013	CTO	360.0	Bear Creek Rd	0148	33.10643	-87.48402
6/28/2013	CTO	361.0	Price Rd	0146	33.10926	-87.47596
6/28/2013	CTO	362.0	Price Rd	0146	33.10490	-87.47920
7/1/2013	CTO	363.0	Lower Hull Rd	0726	33.04125	-87.58689
7/1/2013	CTO	364.0	Lower Hull Rd	0726	33.04332	-87.59190



Diameter	Length	Dimension	Material	Condition	No Structure
18	48		Metal	Good	
24	40		Concrete	Good	
18	32		Concrete	Good	
18	32		Concrete	Good	
18	32		Concrete	Poor	
15	32		Concrete	Good	
24	40		Concrete	Good	
15	48		Concrete	Poor	
24	68		Concrete	Poor	
18	54		Metal	Poor	
18	40		Metal	Poor	2
24	32		Metal	Good	
18	70		Metal	Poor	
30	40		Metal	Poor	
18	32		Metal	Good	
24	80		Metal	Poor	
48	48		Metal	Poor	
30	185		Metal	Good	
24	52		Metal	Poor	
24	80		Metal	Poor	
18	40		Concrete	Good	
18	53		Concrete	Good	
18	37		Concrete	Good	
12	27		Concrete	Good	
18	24		Metal	Good	
18	24		Metal	Good	
18	40		Concrete	Poor	
18	36		Concrete	Good	
18	40		Concrete	Poor	
18	40		Concrete	Good	
18	33		Concrete	Poor	2
12	98		Concrete	Good	
72	30		Metal	Good	
24	40		Concrete	Good	
24	40		Concrete	Good	
24	40		Concrete	Good	
18	40		Concrete	Good	2
36	38		Concrete	Poor	
18	36		Concrete	Good	
12	31		Concrete	Good	
24	48		Concrete	Good	
	40	5 x 10	Concrete	Good	



Notes	MS4 Yes/No
Bent up a little on the inlet end.	
Inlet end is broke off a little	
Near speed table	
Broken on both ends	
Pipe is cracked on outlet end, runs from outlet box	
Rusted out on both ends	
Flume - on both sides of road	
Rusted out on both ends	
Rusted out on both ends	
Rusted out	
Rusted out	
Pipe runs from inlet box to inlet box	
Rusted out on both ends	
Bent on inlet end - rusted out on both ends	
Right in front of Nichols Garage	
Some sand in pipe, but not too bad at this time	
Pipe is broke off on inlet end	
50 percent stopped up with silt and sand	
Inlet ends are both cracked and busted up a little bit	
Approx 58 feet of 24 inch metal pipe has been added to the original	
End Joint is Falling away leaning into the ditch on SW side of the Rd	
Box Culvert 5' Tall 10' Wide	

Date	By	Pt	Road Name	Road ID	Latitude	Longitude
7/1/2013	CTO	365.0	Lower Hull Rd	0726	33.04442	-87.59325
7/1/2013	CTO	366.0	Lower Hull Rd	0726	33.04731	-87.59454
7/1/2013	CTO	367.0	Lower Hull Rd	0726	33.05441	-87.59445
7/1/2013	CTO	368.0	Upper Hull Rd	0179	33.05516	-87.58335
7/2/2013	CTO	369.0	Upper Hull Rd	0179	33.05552	-87.57786
7/2/2013	CTO	370.0	Upper Hull Rd	0179	33.05680	-87.57600
7/2/2013	CTO	371.0	Upper Hull Rd	0179	33.05984	-87.57268
7/9/2013	CTO	372.0	Hillcrest Villa Dr	2474	33.06202	-87.56574
7/10/2013	CTO	373.0	Old Greensboro Rd	0248	33.06434	-87.56716
7/10/2013	CTO	374.0	Old Greensboro Rd	0248	33.07099	-87.56271
7/31/2013	CTO	375.0	Kings Loop Rd	0261	33.06237	-87.57821
7/31/2013	CTO	376.0	Kings Loop Rd	0261	33.06247	-87.58160
7/31/2013	CTO	377.0	Kings Loop Rd	0261	33.06866	-87.58019
4/21/2014	CTO	378.0	Wire Rd	0246	33.17007	-87.41949
4/21/2014	CTO	379.0	Wire Rd	0246	33.16960	-87.42410
4/21/2014	CTO	380.0	Clements Rd	0566	33.17062	-87.43612
4/22/2014	CTO	381.0	Clements Rd	0566	33.16613	-87.43227
4/22/2014	CTO	382.0	Crestfield Dr	1622	33.15733	-87.42823
4/23/2014	CTO	383.0	Whispering Lane	1624	33.15506	-87.42885
4/23/2014	CTO	384.0	Whispering Lane	1624	33.15502	-87.42867
4/23/2014	CTO	385.0	Melrose Ln	1341	33.17270	-87.38178
4/23/2014	CTO	386.0	Melrose Ln	1341	33.17270	-87.38185
4/23/2014	CTO	387.0	Ruby Dr	2370	33.17210	-87.37902
4/23/2014	CTO	388.0	Diamond Dr	1339	33.17208	-87.37900
5/6/2014	CTO	389.0	Beulah Lake Ln	1402	33.17421	-87.37434
5/6/2014	CTO	390.0	Beulah Lake Ln	1402	33.17188	-87.37413
5/6/2014	CTO	391.0	Beulah Lake Rd	0554	33.17207	-87.37724
5/6/2014	CTO	392.0	East Manor Dr	1136	33.16980	-87.37588
5/6/2014	CTO	393.0	East Manor Dr	1136	33.16832	-87.37586
5/6/2014	CTO	394.0	East Manor Dr	1136	33.16691	-87.37584
5/6/2014	CTO	395.0	West Manor Dr	1342	33.16653	-87.37807
5/23/2014	CTO	396.0	Mallard Dr	1205	33.16917	-87.39420
5/23/2014	CTO	397.0	Washington Estates	1204	33.16918	-87.39274
5/23/2014	CTO	398.0	South Davis Rd	0717	33.17125	-87.38570
8/4/2014	CTO	400.0	Unity Rd	0721	33.17357	-87.61826
8/4/2014	CTO	401.0	Unity Rd	0721	33.17372	-87.62141
8/4/2014	CTO	402.0	Unity Rd	0721	33.17388	-87.62511
8/4/2014	CTO	403.0	Unity Rd	0721	33.17409	-87.62935
8/5/2014	CTO	404.0	Cedar Dr	1147	33.19582	-87.43109
8/5/2014	CTO	405.0	Hurricane Rd	1547	33.19176	-87.44556
8/8/2014	CTO	406.0	Hurricane Rd	1547	33.19413	-87.44274
8/8/2014	CTO	407.0	Hurricane Rd	1547	33.19452	-87.43934



Diameter	Length	Dimension	Material	Condition	No Structure
36	48	5 x 7	Concrete	Good	
	48		Concrete	Good	
24	46		Concrete	Poor	
24	48		Concrete	Good	
24	45		Metal	Good	
42	74		Metal	Poor	
42	70		Metal	Good	
21	160		Steel	Good	2
	48	5 x 6	Concrete	Good	
	48		Concrete	Good	
72	90		Concrete	Good	2
21	37		Concrete	Good	
30	29		Metal	Poor	
24	100		Concrete	Good	1
		5 x 6	Concrete	Good	2
24	68		Concrete	Good	1
15	27		Concrete	Good	1
24	40		Concrete	Good	1
12	74		Concrete	Good	1
72	60		Metal	Good	5
24	40		Concrete	Good	3
24	36		Concrete	Good	2
24	44		Metal	Good	2
24	40		Concrete	Good	1
18	50		Concrete	Poor	1
18	40		Concrete	Good	1
18	42		Concrete	Good	1
18	42		Concrete	Good	1
18	52		Concrete	Good	1
72	87		Metal	Good	1
16	30		Metal	Good	1
72	34		Metal	Good	1
24	34		Concrete	Good	2
18	30		Concrete	Good	1
18	26		Concrete	Good	1
24	33		Concrete	Poor	1
24	40		Concrete	Good	1
18	32		Concrete	Good	1
15	28		Concrete	Good	1
24	37		Concrete	Poor	1

Notes	MS4 Yes/No
Box Culvert 5' Tall 7' Wide	
Broke off on the inlet end	
Outlet end has a small crack	
Pipe is bent up bad on both ends.	
Box Culvert 5' Tall 6' Wide	
Box Culvert	
End Joint On inlet end has broke loose and shifted	
Pipe is old and weathered	
Inlet end is bent up real bad, outlet end goes to concrete junction box	
Ditch turnout (no structure)	
Has a concrete flume at the end to direct the flow down the hill	
48 inch metal pipe added to end goes out 100' and dumps off our ROW	
The original pipe crossing road has pipes added on to get water out of yards	
Has garbage pile in outlet end	
Up the street from this there is an artesian well that seems to run all the time - w	
Near Address 10392 Beulah Lake Ln	
Broken on outlet end - Pipe is 300' from Hwy 11	
Near Address 10408 Beulah Lake Rd	
Pipe is under water	
At big Curve	
No structure here - water comes down hill and dumps out in low lying area at cul-	
About half stopped up	
water running through pipe even in very dry weather	
75% stopped up on outlet end	



Date	By	Pt	Road Name	Road ID	Latitude	Longitude
8/8/2014	CTO	408.0	Hurricane Rd	1547	33.19661	-87.43745
8/8/2014	CTO	409.0	Hurricane Rd	1547	33.19717	-87.43818
8/8/2014	CTO	410.0	Hurricane Rd	1547	33.19854	-87.43930
8/8/2014	CTO	411.0	Cedar Dr	1147	33.19583	-87.43278
8/8/2014	CTO	412.0	Cedar Dr	1147	33.19572	-87.43057
8/8/2014	CTO	413.0	Cedar Dr	1147	33.19556	-87.43050
8/11/2014	CTO	414.0	Prudes Mill Rd	0712	33.19217	-87.45168
8/11/2014	CTO	415.0	Prudes Mill Rd	0712	33.20148	-87.45206
8/11/2014	CTO	418.0	Diane St	2390	33.19377	-87.44695
8/12/2014	CTO	419.0	Canyon Lake Rd	0565	33.19411	-87.42557
8/12/2014	CTO	420.0	Twin Springs Cir	2144	33.19363	-87.42832
8/14/2014	CTO	421.0	Keenes Mill Rd	0096	33.19604	-87.41219
8/18/2014	CTO	422.0	1st ST NE	2494	33.21638	-87.46806
8/18/2014	CTO	423.0	51st AVE E	2636	33.21676	-87.46956
8/18/2014	CTO	424.0	49th AVE E	1981	33.21592	-87.47321
8/18/2014	CTO	425.0	Buttermilk Rd	0508	33.18831	-87.45176
8/18/2014	CTO	426.0	Golden Acres Dr	1801	33.14675	-87.46146
		427.0				
		428.0				
		429.0				
		430.0				
		431.0				
8/26/2014	CTO	432.0	Canyon Lake Rd	0565	33.19421	-87.42220
8/26/2014	CTO	433.0	Canyon Lake Rd	0565	33.19427	-87.42113
8/26/2014	CTO	434.0	Canyon Lake Rd	0565	33.19419	-87.42030
8/26/2014	CTO	435.0	Canyon Lake Rd	0565	33.19098	-87.41805
8/26/2014	CTO	436.0	Upper Lake Dr	1149	33.19129	-87.41681
8/29/2014	CTO	439.0	Uniroyal-Goodrich Blvd		33.19595	-87.60500
8/29/2014	CTO	440.0	Uniroyal-Goodrich Blvd		33.19528	-87.60645
8/29/2014	CTO	441.0	Uniroyal-Goodrich Blvd		33.19509	-87.60698
8/29/2014	CTO	442.0	Uniroyal-Goodrich Blvd		33.19471	-87.60743
8/29/2014	CTO	443.0	Uniroyal-Goodrich Blvd		33.19472	-87.60795
8/29/2014	CTO	444.0	Uniroyal-Goodrich Blvd		33.19458	-87.60802
8/29/2014	CTO	445.0	Uniroyal-Goodrich Blvd		33.19463	-87.60931
8/29/2014	CTO	446.0	Uniroyal-Goodrich Blvd		33.19498	-87.61273
8/29/2014	CTO	447.0	Uniroyal-Goodrich Blvd		33.19494	-87.61385
8/29/2014	CTO	448.0	Uniroyal-Goodrich Blvd		33.19400	-87.61716
8/29/2014	CTO	449.0	Sanders Ferry Rd	0516	33.19599	-87.61530
9/9/2014	CTO	450.0	Mimosa Park Rd	3161	33.15485	-87.54998
9/9/2014	CTO	451.0	Mimosa Park Rd	3161	33.15498	-87.55023
9/9/2014	CTO	452.0	Mimosa Park Rd	3161	33.15488	-87.55025
9/9/2014	CTO	453.0	Mimosa Park Rd	3161	33.15499	-87.55124



Diameter	Length	Dimension:	Material	Condition	No Structu
18	36		Concrete	Good	1
15	30		Concrete	Good	1
24	34		Concrete	Good	1
30	73		Concrete	Good	1
36	80		Metal	Poor	1
21	42		Concrete	Good	1
48	50		Concrete	Good	1
84	80		Metal	Poor	2
48	60		Concrete	Good	1
	68		Concrete	Good	2
24	32		Concrete	Good	1
60	42		Concrete	Good	2
30	50		Concrete	Good	1
24	33		Concrete	Good	1
15	32		Concrete	Good	1
18	40		Concrete	Good	1
18	40		Concrete	Good	1
			Concrete	Good	1
			Concrete	Good	1
			Concrete	Good	1
			Concrete	Good	1
			Concrete	Good	1
			Concrete	Good	1
			Concrete	Good	1
			Concrete	Good	1
			Concrete	Good	1
24	80		Concrete	Good	1
48	186		Concrete	Good	1
18	24		Metal	Good	1
			Concrete	Good	1
			Concrete	Good	1
			Concrete	Good	1
			Concrete	Good	1

Notes	MS4 Yes/No
only 150 ft from creek	
Pipe is bent and cut up	
Prop owner added short plastic pipe on end beside driveway	
Drop inlet with steel grate beside road	
Bent real bad and nearly stopped up on inlet end	
Dam is right beside 2 span bridge - spillway runs underneath	
No structure - at end of road water flows downhill to creek	
No structure - at end of road water flows downhill to creek	
No structure - at end of road water flows downhill to creek	
2 Span Concrete Bridge at Lower Lake	
Concrete Spillway and Wooden Bridge for Upper Lake	
Curb Outlet on Right side	
Drop Inlet on Left side	
Drop Inlet on right Side	
Drop Inlet on Right Side	
Curb Outlet with Flume - on Right Side	
Drop Inlet on Left Side	
Drop Inlet on Left Side	
Drop Inlet on Right Side	
Concrete Pipe with Flared Ends	
Concrete Flume Built on Both Ends	
Last outfall point in this area before water heads to river	
Left	
Right	
Left	
Right	

Date	By	Pt	Road Name	Road ID	Latitude	Longitude
9/9/2014	CTO	454.0	Mimosa Park Rd	3161	33.15495	-87.55123
9/9/2014	CTO	455.0	Mimosa Park Rd	3161	33.15504	-87.55193
9/9/2014	CTO	456.0	Mimosa Park Rd	3161	33.15493	-87.55202
9/9/2014	CTO	457.0	Mimosa Park Rd	3161	33.15507	-87.55283



Diameter	Length	Dimension:	Material	Condition	No Structu
			Concrete	Good	1
			Concrete	Good	1
			Concrete	Good	1
			Concrete	Good	1

Notes	MS4 Yes/No
Left	
Right	
Left	
Right	



# Tuscaloosa County 2014-2015 Annual Report

## **Appendix D**

Spread sheet summarizing  
reported or discovered  
potential violations of  
stormwater regulations

## 2014-2015 Tracking of Potential Stormwater Violations

Property Location	Property Owner	Date of Letter	Status	Comments
Hargrove Road E., Parcel 37-02-04-1-005-008-000	Bryant Bank	3/24/2014	Resolved	Source of Sedimentation in Lake determined to be from construction site across street. BMP's installed.
Jackson Trace Road, Parcel 16-09-32-0-000-002-005	Adam Wayne Lee	4/2/2014	Resolved	Sediment leaving private drive into stream. Property owner installed BMP's to solve problem
Romulus Road, Parcel 32-05-16-0-0-000-004-000	Terry Cochrane	4/16/2014	Resolved	Sediment into Birch Court from road being used by loggers. Loggers pulled off and road repaired and stone aggregate placed
Highway 140, Parcel 18-09-32-0-000-011-003	Gryska Natural Resources LL	4/21/2014	Resolved	Sediment leaving site into County Ditch. Property Owner installed BMP's
Jackson Trace Road, Parcel 16-09-32-0-000-004-000	David Neal Gann	5/12/2014	Resolved	Sediment leaving site. The county sized and installed a pipe paid for by the property owner.
Jackson Trace Road, Parcel 16-09-29-0-000-017-000	Davis Neal Gann	5/12/2014	Resolved	Sediment leaving site. BMP's installed.
Fondren Road and William Kelly Road, Parcel 06-06-14-0-001-001-007	Robert Nuckols	6/19/2014	Resolved	Turned over to ADEM for enforcement
Graceland Acres, Lots 1 and 2	Trax Development LLC	9/30/2014	Resolved	Phone call to property owner. BMP's put in and a Notice of intent for ADEM permit filed out.
Murphy Place, Phase III, Hud Lane, Lot 55	MB Development LLC	Not needed	Resolved	Sediment leaving site. Phone call to property owner. Stone Construction Exit Pad Installed.
Timbertop Lane, Parcels 45-06-23-0-000-013-024/025	Builders Group of West Alabama	1/16/2015	Resolved	Sediment leaving site. Silt fence installed.
Hidden Forest Lane, Parcel 20-02-09-0-001-027-014	First United Security Bank	2/6/2015	Resolved	Silt leaving site and manhole blocked. Property owner installed silt fence



# Tuscaloosa County 2014-2015 Annual Report

## Appendix E

### Further Visits to incomplete Subdivisions

# **Waterford**

Located in the City of Tuscaloosa P.J. The developer is bankrupt.

## **Follow up actions:**

A claim has been made on the insurance bond. Once collected and accepted by vote, the county will complete repairs.



# Tuscaloosa County 2014-2015 Annual Report

## Appendix F

### Documents for Meetings Attended

# Stakeholder Symposium on Water Planning in Alabama

September 26, 2014

University of Alabama Bryant Conference Center  
240 Paul W Bryant Drive  
Tuscaloosa, Alabama 35487

Presented by The Alabama Chapter of the Sierra Club  
And  
The Alabama Rivers Alliance

Register today at <http://www.alabamarivers.org/events/alabama-water-policy-symposia/tuscaloosa>

9:00 Registration and Networking

9:30 Welcome. Mayor Walter Maddox, Mayor of Tuscaloosa, Alabama

9:50 Keynote. Senator Gerald Allen, Alabama Senate District 21

10:00 The University of Alabama's Water Centers of Excellence.

U.S. National Water Center - Commander Nathan H. Hancock, Executive Officer  
U of A Center for Freshwater Studies - Dr. Amy Ward, Director  
U of A Water Policy and Law Institute - Dr. Bennett Bearden, Director

10:20 Symposium Overview. Mitch Reid, Alabama Rivers Alliance

10:30 Alabama Water Agencies Working Group's Mapping the Future of Alabama's Water Resources Management: Policy Options and Recommendations. Pat O'Neil, Geologic Survey of Alabama

11:30 Questions and Answers with Alabama Water Agencies Working Group members.

Noon LUNCH (provided)

12:45 A Stakeholder Perspective - Southern Environmental Law Center's review of the Alabama Water Agencies Working Group's Report.

1:15 Feedback from other stakeholders to the AWAAG on the report: Open Discussion.

2:00 Follow up: Where do we go from here? Open discussion around three topics.

- 1) Process recommended by report
- 2) Focus panels – who, how?
- 3) General publicity/transparency – how, what?

3:00 Adjourn.



**Twenty-Sixth Annual  
Nonpoint Source Conference**  
Renaissance Hotel & Spa at the Convention Center  
Montgomery, Alabama  
January 15, 2015



***NONPOINT SOURCE POLLUTION***  
***The Great Confluence: Water, Issues, and People Coming Together***

TIME	PRESENTATION	SPEAKER
9:00 -- 9:30	Welcome & Opening Comments	Lance LeFleur, Director ADEM
<b><u>9:30 -- 10:30</u></b>	<b><u>Nonpoint Source Projects &amp; Improving Water Quality</u></b>	
9:30 -- 10:00	North River Project	Abner Patton, Patton Geologics, Inc. Mary Wallace Pitts, University of Alabama
10:00 -- 10:30	A Stream Runs Through It: Parkerson Mill Creek's Journey	Eve Brantley, Alabama Cooperative Extension System
10:30 -- 11:00	<b><u>BREAK</u></b>	
<b><u>11:00 -- 12:00</u></b>	<b><u>Successes</u></b>	
11:00 -- 11:20	Black Branch Success Story	Kellie Johnston, CAWACO RC&D Taylor Griswell, ADEM Water Quality
11:20 -- 11:40	Dry Creek Watershed Project	Mark Butler, Blount Co. SWCD James Mooney, ADEM Water Quality
11:40 -- 12:00	Weiss Lake Septic Tank Program	Lem Burrell, Alabama Department of Public Health
12:00 -- 1:30	<b>Luncheon &amp; Speaker</b> EPA Trash Free Waters	Adam Saslow, SRA International
<b><u>1:30 -- 2:10</u></b>	<b><u>Partners</u></b>	
1:30 -- 1:50	Alabama Water Watch – citizen monitors working for cleaner water in our communities	Eric Reutebuch, Alabama Water Watch

1:50 -- 2:10	Class V Permitting Requirements	Sonja Massey, ADEM
2:10 -- 2:40	<b><u>BREAK</u></b>	
<b><u>2:40 -- 3:30</u></b>	<b><u>Monitoring Strategies / Conservation Incentives</u></b>	
2:40 -- 3:00	Conservation Incentives to Improve Water Quality	Shannon Weaver, NRCS Diane Guthrie, NRCS
3:00 -- 3:30	ADEM's 2015 Statewide Water Quality Monitoring Strategy	Lisa Huff, ADEM



*MISSION ----- Assure for all citizens of the state a safe, healthful and productive environment*

**LANCE R. LEFLEUR**  
DIRECTOR



Alabama Department of Environmental Management  
adem.alabama.gov


1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463  
Montgomery, Alabama 36130-1463  
(334) 271-7700 ■ FAX (334) 271-7950

**ROBERT J. BENTLEY**  
GOVERNOR

January 15, 2015

MEMORANDUM

To: Conference Attendees

From: M. Lynn Battle, Chief  
Office of External Affairs 

Re: Continuing Education Credits  
Nonpoint Source Pollution Conference

This memo serves to verify that you attended the Nonpoint Source Pollution Conference that was hosted by the Alabama Department of Environmental Management on January 15, 2015. The event included technical presentations related to nonpoint source pollution.

Your participation in this event could result in you being eligible for Continuing Education Units (CEUs) from your accrediting organization/association. You may submit this Memorandum, along with a copy of today's agenda, to your accrediting organization/association to apply for your CEUs.

MLB

**Birmingham Branch**  
300 Vulcan Road  
Birmingham, AL 35209-4702  
(205) 942-6168  
(205) 941-1603 (FAX)

**Decatur Branch**  
2715 Sandlin Road, S.W.  
Decatur, AL 35603-1333  
(256) 353-1713  
(256) 340-9359 (FAX)



**Mobile Branch**  
2204 Perimeter Road  
Mobile, AL 36615-1131  
(251) 450-3400  
(251) 479-2593 (FAX)

**Mobile-Coastal**  
3664 Dauphin Street, Suite B  
Mobile, AL 36608  
(251) 304-1176  
(251) 304-1189 (FAX)





# Innovative Erosion & Sediment Control Research & Field Day

## Seminar Schedule and Topics

Thursday, May 29<sup>th</sup> 2014

The Hotel at Auburn University and Dixon Conference Center  
241 South College Street, Auburn, AL 36830

- 
- 8:30 – 8:35 *Welcome and Introduction*
  - 8:35 – 9:15 ***The NPDES Stormwater Program, Issues, Updates, and Watersheds***  
CAPT Paul Gagliano, PE, US Public Health Service Commissioned Corps Officer, USEPA, Region 4  
Mike Mitchell, Environmental Scientist, USEPA Region 4, Water Permits Division
  - 9:15 – 9:45 ***IECA University Partner Program: "One Big Bang"***  
Jimmy Eanes, CPESC, CESSWI, CMP, IECA Education Director
  - 9:45 – 10:00 ***BREAK (SPONSORED BY HANES GEO COMPONENTS)***
  - 10:00 – 10:30 ***The Art of Managing Construction Stormwater***  
Barry Fagan, PE/PLS, CPESC, ALDOT Environmental Program Engineering
  - 10:30 – 11:30 ***University Partners Research Presentations – North Carolina State University***  
***Mulches and Polyacrylamide for Erosion Control: Results of >10 Years of Testing***  
Dr. Rich McLaughlin, Professor and Extension Specialist, Department of Soil Science  
***Title: Remediation to Improve Infiltration of Post Construction Soil***  
Ms. Fatemeh Mohammad Shirazi, Graduate Student, Department of Soil Science
  - 11:30 – 12:00 ***University Partners Research Presentation – Auburn University***  
***Stream Enhancement and Restoration***  
Dr. Eve Brantley, Assistant Professor, Dept. of Crop, Soil and Environmental Sciences
  - 12:00 – 1:00 ***LUNCH (SPONSORED BY FLEXAMAT AND SUNSHINE SUPPLIES)***
  - 1:00 – 2:00 ***University Partners Research Presentations – University of Georgia***  
***Field Research at UGA Related to Using Compost & Mulch for Erosion Control & Stormwater Mgmt.***  
Dr. Mark Risse, Georgia Power Professor of Water Policy & Director of the Marine Extension Service  
***Urban Water at UGA: Focus on Rain Gardens***  
Ms. Laura Keys, Graduate Student, UGA Odum School of Ecology
  - 2:00 – 2:30 ***University Partners Research Presentations – Auburn University***  
***Inlet Protection Practice Evaluations and Improvements***  
Mr. Michael Perez, Graduate Student, Dept. of Civil Engineering  
***Revolutionizing Site Inspections: War Eagle 007***  
Mr. Michael Perez, Graduate Student, Dept. of Civil Engineering
  - 2:30 – 2:45 ***BREAK (SPONSORED BY THOMPSON ENGINEERING)***
  - 2:45 – 3:15 ***University Partners Research Presentation – Auburn University***  
***Evaluation of Ditch Checks: Installation & Performance Comparisons***  
Dr. Wesley Donald, Post-Doctoral Fellow, Dept. of Civil Engineering
  - 3:15 – 3:45 ***University Partners Research Presentation – Auburn University***  
***Assessing the Performance of Sediment Basins***  
Dr. Wesley Zech, Brasfield & Gorrie Associate Professor of Const. Engrg. & Mgmt., Dept. of Civil Engrg.
  - 3:45 – 4:00 ***Closing Remarks and Day 2 Overview – Dr. Wesley Zech***



AUBURN UNIVERSITY

SAMUEL GINN  
COLLEGE OF ENGINEERING

# ENGINEERING CONTINUING EDUCATION

*Certificate of Participation*

## Robert Cunningham

### Innovative Erosion & Sediment Control Research & Field Day

May 29-30, 2014

1.20 Continuing Education Credits

12.00 Course Hours

*presented by*

Alabama Technology Transfer Center

Richard G. Ruff

Director, Engineering Outreach and Continuing Education

Chris Roberts

Dean, Samuel Ginn College of Engineering



AT AUBURN UNIVERSITY

Cawaco Resource Conservation and Development Council

# Invoice

2112 11th Avenue South  
Suite 541  
Birmingham, AL 35205

Phone # 205-623-0457  
Fax # 205-325-1540

grantfunds@live.com  
www.cawaco.org

DATE	INVOICE #
12/3/2014	INV15-017

DUE DATE
12/3/2014

## BILL TO

Tuscaloosa County Commission  
P.O. Box 20113  
Tuscaloosa, AL 35402

## DESCRIPTION

## AMOUNT

Sponsorship of Low Impact Development Workshop: December 15, 2014

250.00

*ADS*  
Total (PO#0862) \$250.00



# LOW IMPACT DEVELOPMENT: THE NEXUS OF ON-THE-GROUND IMPLEMENTATION AND STORMWATER COMPLIANCE

DECEMBER 1<sup>st</sup>, 2015 8:00am—4:30pm

NORTHPORT CIVIC CENTER 3500 McFarland Boulevard Northport, AL 35476

## Who should attend?

- ♦ Public works employees tasked with managing, enforcing or implementing NPDES Stormwater regulations.
- ♦ Design and engineer professionals, landscaping professionals and local, state, and federal government agency representatives.

## What will I learn?

- ☒ Why managing stormwater is important to economic development.
- ☒ Introduction to the recently published *Alabama's Low Impact Development Handbook*
- ☒ Current bioretention design, maintenance, and vegetation for successful implementation of low impact development stormwater control practices. Workshop will include design calculations.
- ☒ How other Alabama cities are complying with stormwater regulations.

## PROGRAM PARTNERS

- ✿ Black Warrior Clean Water Partnership
- ✿ Alabama Cooperative Extension System
- ✿ City of Northport Stormwater Management
- ✿ City of Tuscaloosa Stormwater Management
- ✿ Tuscaloosa County Stormwater Management
- ✿ Geological Survey of Alabama
- ✿ Zink Environmental PLLC

### CEU CREDITS

- X.XX American Institute of Architects
- X.XX American Society of Landscape Architects
- X.XX Geological CEUs
- X.XX Engineering CEUs

08:00am	Registration	
08:30am	Welcome & Introductions	
	<b>Workshop Context</b>	
08:45am	Alabama's Natural Resources	Kellie Johnston
09:00am	Future of Water – Why It's Important	Dr. Pat O'Neil
09:15am	Alabama's Stormwater Regulations	ADEM
09:45am	Alabama's Low Impact Development Handbook	Dr. Eve Brantley
10:15am	B R E A K	
	<b>Workshop Content</b>	
10:30am	Mitigating the effects of Stormwater Using Low Impact Development	Dr. Jason Zink
12:00pm	L U N C H	
12:45pm	What We are Doing Locally	Josh Yates, City of Tuscaloosa Chad Scroggins, Shelby County Tom Miller, City of Birmingham
01:45pm	BMP Site Selection/Suitability; Intro to Group Activity	Dr. Jason Zink
02:15pm	Group Activity	All
03:00pm	Group Presentations and Discussion	All
03:30pm	Design Considerations for Stormwater Treatment Practices	Dr. Jason Zink
04:30pm	Resources, Future Trainings, Adjourn	

## REGISTRATION INFORMATION

**\$25.00** Includes registration and lunch.

Register Online at <http://lowimpactdevelopment.eventbrite.com>

## INSTRUCTOR

As a professional engineer with 10+ years of experience, Jason Zink specializes in assessment, engineering design, and monitoring of ecological restoration projects, including stream restoration and innovative stormwater management. He has previously worked as an educator and researcher at North Carolina State University, and is now the Principal at Zink Environmental, PLLC. Jason has been the instructor for several Alabama workshops hosted by the [Alabama Cooperative Extension System](#).



*This project was funded or partially funded by the Alabama Department of Environmental Management through a Clean Water Act Section 319(h) nonpoint source grant provided by the U.S. Environmental Protection Agency – Region 4.*

# CERTIFICATE OF PARTICIPATION



is presented to

**Tracy Criss**

**FOR COMPLETION OF:**

**Low Impact Development: The Nexus of  
On-The-Ground Implementation and Stormwater Compliance**

Hosted by the Black Warrior Clean  
Water Partnership in support of the  
North River Watershed Management  
Plan Implementation Project. This  
project was funded the Alabama  
Department of Environmental  
Management through a Clean Water  
Act Section 319(h) nonpoint source  
grant provided by the U.S.  
Environmental Protection Agency –  
Region 4.

**December 15, 2014**

**Dr. Jason Zink P.E.**

(7 hrs)



# CERTIFICATE OF PARTICIPATION



is presented to

**Scott Anders**

**FOR COMPLETION OF:**

**Low Impact Development: The Nexus of  
On-The-Ground Implementation and Stormwater Compliance**

Hosted by the Black Warrior Clean  
Water Partnership in support of the  
North River Watershed Management  
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Act Section 319(h) nonpoint source  
grant provided by the U.S.  
Environmental Protection Agency –  
Region 4.

**December 15, 2014**

**Dr. Jason Zink P.E.**

# CERTIFICATE OF PARTICIPATION



is presented to

**Scott Thomas**

**FOR COMPLETION OF:**

**Low Impact Development: The Nexus of  
On-The-Ground Implementation and Stormwater Compliance**

Hosted by the Black Warrior Clean  
Water Partnership in support of the  
North River Watershed Management  
Plan Implementation Project. This  
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Act Section 319(h) nonpoint source  
grant provided by the U.S.  
Environmental Protection Agency –  
Region 4.

**December 15, 2014**

*7 hrs*

**Dr. Jason Zink P.E.**



# CERTIFICATE OF PARTICIPATION



is presented to

**Katherine Cross**

**FOR COMPLETION OF:**

**Low Impact Development: The Nexus of  
On-The-Ground Implementation and Stormwater Compliance**

Hosted by the Black Warrior Clean  
Water Partnership in support of the  
North River Watershed Management  
Plan Implementation Project. This  
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Department of Environmental  
Management through a Clean Water  
Act Section 319(h) nonpoint source  
grant provided by the U.S.  
Environmental Protection Agency –  
Region 4.

**December 15, 2014**

---

**Dr. Jason Zink P.E.**

# CERTIFICATE OF PARTICIPATION



is presented to

**Bob Cunningham**

**FOR COMPLETION OF:**

**Low Impact Development: The Nexus of  
On-The-Ground Implementation and Stormwater Compliance**

Hosted by the Black Warrior Clean  
Water Partnership in support of the  
North River Watershed Management  
Plan Implementation Project. This  
project was funded the Alabama  
Department of Environmental  
Management through a Clean Water  
Act Section 319(h) nonpoint source  
grant provided by the U.S.  
Environmental Protection Agency –  
Region 4.

**December 15, 2014**

**Dr. Jason Zink P.E.**



**Bob Cunningham**

File

**From:** warriorcwp Facilitator <warriorcwp@hotmail.com>  
**Sent:** Monday, January 12, 2015 2:51 PM  
**To:** Bob Cunningham  
**Subject:** LID Workshop

Mr. Cunningham,

Thank you again arranging for Tuscaloosa County's sponsorship of the *Low Impact Development Workshop*. We received many positive comments from the participants and the County's support contributed greatly to the success of the workshop.

Attached you will find text and pictures, that can be inserted into a report or press release. It is short, but covers the main points.

Please do not hesitate to call if we can be of any assistance in the future.

Kellie Johnston  
Cawaco RC&D-Executive Director  
Black Warrior Clean Water Partnership-Facilitator  
Email: [warriorcwp@hotmail.com](mailto:warriorcwp@hotmail.com)  
Phone: (205) 623-0147



Dr Zink.jpg



LID Workshop -  
Text for report...



2014-12-15  
10.35.28.jpg



Case Study Bham  
Cunningham.jp...



Case Study Zink  
and Johnston.j...



Kellie  
speaking.jpg



Pat O'Neil  
speaking.jpg

## NORTHPORT PROVIDES CRITICAL SUPPORT FOR LOW IMPACT DEVELOPMENT WORKSHOP

On December 15, 2014, the City of Northport sponsored the workshop "*Low Impact Development: The Nexus on On-The-Ground Implementation and Stormwater Compliance*". 71 attendees from a broad cross-section of development interests ( e.g. municipal, regulatory, consulting, federal and state agencies) received training on successful implementation of LID design and maintenance. The workshop also included an introduction to the recently completed *Alabama's Low Impact Development Handbook*.

The City understands that properly managing storm water runoff is an important economic driver for communities and is complementary to preserving and improving current environmental conditions. The workshop was a collaborative effort with other regional NPDES stormwater communities and coordinated by partners of the Black Warrior Clean Water Partnership. Network opportunities allowed Northport, and other regulated municipalities, to share information to better each's program in service to area citizens.

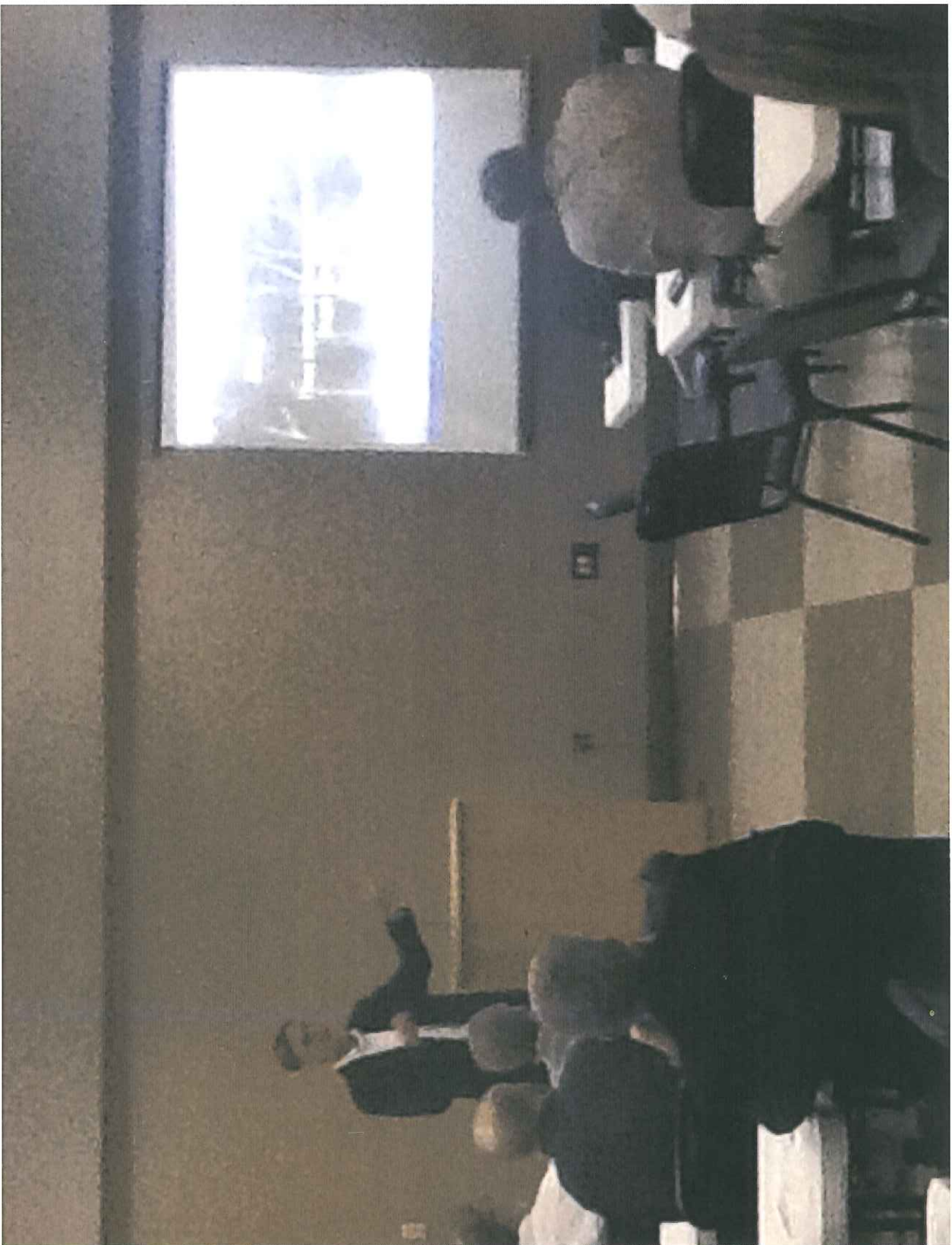






















## NORTH RIVER PROJECT COMMITTEE – LOWER SUB-BASIN AGENDA

April 21, 2014 1pm – 3pm

Alabama Department of Public Health

2350 Hargrove Road East, Tuscaloosa, AL 35405

### Welcome and Introductions

### Old Business

---

- ☐ Review of Meeting Summary: March 17, 2014 Abner Patton, Chair

### Project Updates

---

- ☐ North River Watershed Implementation Plan Update
  - Coordinator Report Mary Wallace-Pitts, Coordinator
  - BMP Update Abner Patton
  - Education & Outreach Update UA Museum of Natural History
  - Data Collection & Interpretation Geological Survey of Alabama
- ☐ Facilitator Update

### New Business/Presentation

---

- WaterFest (April 4) Reports & Analysis
- Lake Clean Up (April 5)

### Partner Reports

---

- ☐ Alabama Department of Environmental Management
- ☐ Alabama Department of Health
- ☐ Alabama Department of Transportation
- ☐ Alabama Forestry Commission
- ☐ Fayette County
- ☐ Geological Survey of Alabama
- ☐ Stormwater Programs
  - City of Northport
  - City of Tuscaloosa
  - Tuscaloosa County
- ☐ Tombigbee RC&D
- ☐ University of Alabama Center for Water Policy & Law
- ☐ USDA/NRCS
- ☐ Other Partners

*The Black Warrior Clean Water Partnership is a part of the Alabama Clean Water Partnership. The Clean Water Partnership is a neutral forum to share information among stakeholders and has adopted a non-advocacy policy. This project was funded or partially funded by the Alabama Department of Environmental Management through a Clean Water Act Section 319(h) nonpoint source grant provided by the U.S. Environmental Protection Agency – Region 4.*



Black Warrior cwp Monthly Mtg

Monday April 21, 2014

Attendees

Mary W Pitts

northriverwatershedchdr

Les Simmons

APC

LSimmons@Southernco.com

Bobby Huffstatter

APC

bhuffst@southernco.com

Patti Norley

APC

p.norley@state.al.us

Susan Wesson

Tombigbee RCD

John Powell Webb

City of Northport

jwebb@cityofnorthport.org

Josh Yates

City of Tuscaloosa

Scott Sandeford

City of Tuscaloosa

BENNETT L. BEARDEN

UA WATER POLICY AND LAW INSTITUTE

Kevin Turner

City of Tuscaloosa

Bob Cunningham

Tuscaloosa, Ala



**Black Warrior Clean Water Partnership  
North River Project Committee (Lower Sub Basin)  
Draft Minutes: March 17, 2014  
Alabama Dept of Public Health  
2350 Hargrove Road East, Tuscaloosa, AL 35405**

No County Rep.

**Attendees**

Mary Pitts- NR Coordinator	Len Simmons – Alabama Power
Bobby Huffstutler – Alabama Power	Abner Patton – Patton Geologics
Brad Lang – Alabama Forestry Commission	Jim Jeter – Ala Forestry Comm
John Powell Webb-City of Northport	Scott Sanderford-City of Tuscaloosa
Todd Hester – Ala Museum of Natural History	Barry Ambrose – Ala Dept of Health
Randy Mecredy – Ala Museum of Natural History	Kevin Turner – City of Tuscaloosa
Anne Wynn-GSA	Josh Yates – City of Tuscaloosa
Lance McCray-Westervelt Co	Jeff Hirschy– Ala Museum of Natural History
Allie Sorlie – Ala Museum of Natural History	

**Meeting Package**

- ❖ Draft Minutes: November 18, 2013
- ❖ Coordinator Report: March 17, 2014
- ❖ UA Service Learning Announcement: WaterFest-April 4, 2014
- ❖ UA Service Learning Announcement: Lake Tuscaloosa Spring Clean Up-April 5, 2014
- ❖ Exhibitor Registration Form: Watershed Festival
- ❖ Patton Geologics Measured Sediment Load Reduction

**Open**

Len Simmons called the meeting to order.  
Motion to accept November 18, 2013 minutes (Jeter/Bearden)

**North River Update**

- Coordinator report attached
- Education:
  - WaterFest (Mecredy) 9 activities planned. 6 schools comprising 13 classes registered. Approximately 250 children expected to attend. 12 exhibitors have registered for the information fair.
  - Lake Tuscaloosa Clean Up (Sanderford)
    - 8am – 1pm Binion Creek boat landing (Hwy 43).
    - 6<sup>th</sup> year of clean up. 700 volunteers/70 tons of trash removed
  - North River Booklet: (Johnston) In draft form. A final draft will be distributed to the committee for comments before publication.
- Data: (Wynn)
  - North River Road Crossing report in progress.
  - Clear creek monitoring data has been collected for 4 years. The data is used to calculate sediment loadings.
  - Strategic Habitat meeting held in Marion (February). Attended by State and Federal agencies and nonprofits. The North River project was discussed and how it translates to other SHUs. The group is working to develop a method to warehouse and share data between agencies.
  - A website has been created for the Alabama Rivers and Streams Network.
- BMPs: (Patton) Currently identifying additional sites for Phase II. 575 measured tons of sediment captured in existing BMPs.

**Facilitator Report**

- Steering Committee meeting March 25, 2014.
- Attended AL DOT Northern Beltline Stakeholder meeting (March 13, 2014)

**Black Warrior Clean Water Partnership North River Project Committee (Lower Sub Basin)**

**Draft Minutes: June 16, 2014**

**Alabama Dept of Public Health 2350 Hargrove Road East, Tuscaloosa, AL 35405**

**Attendees:**

Mary Pitts - Coordinator	Scott Sanderford-City of Tuscaloosa
Barry Ambrose – Ala Dept of Health	Jim Jeter – Ala Forestry Commission
Scott Hughes – ADEM	Archie Creech, Jr. – UA Intern
Patti Hurley - ADEM	Josh Yates – City of Tuscaloosa
Anne Wynn – GSA	Abner Patton (Chair) – Patton Geologics
Robert Cunningham – Tuscaloosa County	Shawn Carter – UA
Pat O'Neil – GSA	Larry Hardy – USDA/NRCS Fayette Co

**Meeting Package:**

Draft Minutes: May 19, 2014

Coordinator Report: June 16, 2014

Article: *Preserving a Vital Resource* – UA Service Learning Magazine

**Open:**

Abner Patton called the meeting to order.

Minutes of the May 19, 2014 meeting were reviewed. No corrections noted.

**North River Update:**

- Coordinator report attached (Pitts)
- BMP Update: Abner Patton reported that, with data provided by the City of Berry, costs of chemicals for water treatment have decreased by 46% since installation of the BMPs. *It was recommended that Patton submit an abstract for presentation at the Alabama Water Resource Conference.*
- Data Collection: Pat O'Neil reported that the North River Road Crossing report is in draft form and is pending peer review.

**Facilitator Report:**

- The Alabama Association of RC&D's hosted the National RC&D Conference in Mobile, AL June 1-4, 2014. 350 RC&D employees and board members throughout the nation attended the Conference.
- Reviewing the potential of submitting a USDA/NRCS Regional Cooperation Partnership grant.
- Warrior Steering Committee will meet in July. Date and time TBD.
- The facilitator was contacted by the West Alabama Regional Commission to assist with an ADEM 604(b) proposal. ADEM suggested two options for a watershed management plan: Bogue Chitto (Pickens) and East Luxapallila (Fayette/Marion).

**Presentation:**

- *USDA/NRCS Conservation Programs.* Larry Hardy, USDA/NRCS District Conservationist, Fayette County.
  - Conservation Technical Assistance
  - Grassland Reserve Program (GRP)
  - Wetland Reserve Program (WRP)
  - Farm and Ranch Protection Program (FRPP)
  - Conservation Reserve Program (CRP)
  - Environmental Quality Incentives Program (EQIP)
  - Long Leaf Pine Initiative (LLPI)
  - Conservation Stewardship Program (CSP)



### Reports:

ADEM: (Hurley) *Clear Water Alabama* will be held in Baldwin County for 2014. CWA is planning on hosting the workshop in the Tuscaloosa area in 2015.

Alabama Department of Health: Berry Ambrose received an award for his environmental projects from the Alabama Department of Public Health.

Alabama Forestry Commission: Jim Jeter reported:

- New State Forrester, Greg Pate (from North Carolina, originally from Alabama)
- New farm bill has items that affect silviculture. 50+ farming and silviculture activity has exemptions. It also has a far-reaching definition of *wetlands* and *waters of the State*.
- Senate Bill #411 proposes to place AFC under the Alabama Department of Agriculture and Industries.

Geological Survey of Alabama: Pat O'Neal reported:

- Completed statewide water assessment pilot study.
- Governor Bentley has asked GSA to report on oil sands.
- SHU:
  - Completed habitat assessment draft for Big Canoe Creek.
  - Next actions: Terrapin Creek and Sipsey Rivers
- Activities in Bear Creek are being led by TVA.
- Working on a 3 year crayfish survey.

City of Tuscaloosa: Josh Yates reported:

- Kevin Turner received training to become a flood plain manager.
- Completed training for Certified Stormwater Inspector.

Tuscaloosa County: Bob Cunningham reported that Tuscaloosa County's Stormwater Program is currently being audited by ADEM.

## **North River Watershed Management Plan Coordinator Report - June 16, 2014**

### **Patton Geologics - BMPs in Fayette County and Tuscaloosa County**

- Total of 831 tons of sediments colledged to date
- BMP #105 installed on Fowler Road, Boles Creek in the Bays Lake sub-watershed
- 2 additional BMPs to be installed in the Bays Lake watershed

### **City of Berry and Bays Lake**

- City of Berry Water Treatment reported a 46% decrease in chemical treatment supplies from 2010 to 2013. Although, a direct correlation with the BMPs cannot be substantiated, the decrease in supplies began at the same time the BMPs were installed. A recent increase in turbidity was reported. It was speculated that this may be that the BMPs now require maintenance.
- The City of Berry Water Treatment is considering taking the responsibility of maintenance for the BMPs.
- Abner Patton calculated that the sediment captured preserved 14,0000 of water holding capacity in Bays Lake.

### **Fayette County**

- Patton Geologics rebuilding washed out installations.

### **Internship Update:**

- Archie Creech, UA Intern Fall 2014
- Previous intern, Shawn Carter is now in the Masters of Geography program. Thesis: *Surface Modeling for Sediment Load Based on Land Use/Land Cover Change*.

#### **Other Outreach**

- UA Watershed Class May 5-23 completed
- Source Water Protection Plan for Luxapallila was drafted
- UA Service Learning Magazine publication ate July 2014 includes article about Watershed Class (Handout)

#### **Future Plans/Outreach**

- Partnering with Eve Brantley for an LID Workshop Fall 2014
- Meeting planned for Summer/Fall 2014 with USFW and ALDOT
- Field trip June 17 with USFW and COE
- Abner Patton is planning to do a presentation of Berry's waste water treatment experience

#### **Reporting**

- Next report due September 30, 2014



ROUTE 445-BRSD

6/16/14

NAME

DISTRICT

Darryl Ambrose

AF45

Tim Carter

AFL

Patti Kinney

ADEM

Scott Hughes

ADEM

Mary Wallace Pitts

NRW

Archie Creech, Jr.

NRW

Scott Sandstead

City of Tigard

Gene Wynn

GSA

Robert Cunningham

Tussock County

Robert Patton

Patton Geologic

Sharon Carter





## NORTH RIVER PROJECT COMMITTEE – LOWER SUB-BASIN AGENDA

August 18, 2014 1pm – 3pm

Alabama Department of Public Health

2350 Hargrove Road East, Tuscaloosa, AL 35405

### Welcome and Introductions

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#### Attendees:

Jim Jeter – Alabama Forestry Commission

Bob Tolbert – Tuscaloosa County Stormwater Program

Len Simmons – Alabama Power

Mary W. Pitts – North River Coordinator

Scott Sanderford – City of Tuscaloosa Lakes Manager

Abner Patton (Chair) – Patton Geologics

Stuart Blackwell – Goodwyn Mills & Cawood

John Powell Webb – City of Northport

Josh Yates – City of Tuscaloosa Stormwater

Kevin Turner – City of Tuscaloosa Stormwater

#### Old Business

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- ☐ Review of Meeting Summary: No meeting summary. Meeting held July 21, 2014 was a field trip to the Alabama Aquatics Biodiversity Center. The mission of AABC is to promote the conservation and restoration of rare freshwater species in Alabama waters and in turn, restore cleaner water in Alabama's waterways.

#### Project Updates

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- ☐ North River Watershed Implementation Plan Update
  - Coordinator Report (Attached) Mary Wallace-Pitts, Coordinator
  - BMP Update Abner Patton
    - Installed one new BMP on Fowler Road near headwaters
  - Education & Outreach Update UA Museum of Natural History
    - Setting up field trips to North River this fall
    - Randy Mecredy retiring
- ☐ Facilitator Update
  - City of Blountsville: Looking for funding for stream restoration project
  - Assisted Blount County Soil & Water Conservation District in developing a 319 grant for Graves Creek.
  - Unmet Needs Review: EPA representatives met with the facilitator to encourage the development and submission of 319 projects. The facilitator provided EPA with the 303(d) analysis presented to the Steering Committee at the March 25th meeting which documents efforts to date for the stream segments listed. It was explained that specific solutions for specific problems have been exhausted. The facilitator then provided EPA with a list of known unmet needs.

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- **Future Plans**

- Session confirmed at the Alabama Water Resource Conference Thursday September 4 at 10:00am. MWP will serve as session chair.
  - From the Headwaters Down and Kindergarten Up – Every Partner in the Watershed Counts - Mary Wallace Pitts
  - An Evaluation of the North River SHU to Determine the Sedimentation Risk posed to Streams on Selected Unpaved and Paved Road Crossings – Anne Wynn
  - Sediment Pollution Control Provided by Best Management Practices Installation - Abner Patton
  - The Role Played by Local Government – A Case Study from the North River Watershed; Scott Sanderford
  - The City of Tuscaloosa Stormwater Management Program – A Partnering Case Study from the North River Watershed. Josh Yates
  - Evaluating Educational Effectiveness of North River Watershed Festivals 2012 to 2014 – Amanda Espy-Brown /Allie Sorlie
  - Beyond Your Normal Comfort Zone - A Forester's Take on Partners in the North River Watershed – Jim Jeter
- North River Exhibit will be also be displayed at the conference.
- Partnering with Eve Brantley LID Workshop – December 15  
The Workshop will focus on providing cost-effective LID methods utilizing the recently developed LID Handbook – Partner input requested
- Possible partnering with City of Tuscaloosa regarding Neighborhood meetings.

- **Reporting**

- Next report due September 30, 2014

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## Bob Cunningham

---

**From:** warriorcwp Facilitator <warriorcwp@hotmail.com>  
**Sent:** Saturday, August 30, 2014 10:04 AM  
**To:** warriorcwp Facilitator  
**Subject:** Meeting Cancelled

Black Warrior CWP - Lower Sub-basin Meeting  
September 15, 2014 1-3 pm

The above meeting has been cancelled for Committee members to attend the Alabama Water Resource Conference. One whole session will be devoted to North River. Below is a list of presentations, made by North River partners, for this session.

- ***From the Headwaters Down and Kindergarten Up*** – Every Partner in the Watershed Counts, Mary Wallace Pitts, Watershed Coordinator
- ***An Evaluation of the North River SHU to Determine the Sedimentation Risk posed to Streams on Selected Unpaved and Paved Road Crossings*** – Anne Wynn, Geological Survey of Alabama
- ***Sediment Pollution Control Provided by Best Management Practices Installation*** - Abner Patton, Patton Geologies
- ***The Role Played by Local Government – A Case Study from the North River Watershed*** - Scott Sanderford, City of Tuscaloosa
- ***The City of Tuscaloosa Stormwater Management Program*** – A Partnering Case Study from the North River Watershed - Josh Yates, City of Tuscaloosa
- ***Evaluating Educational Effectiveness of North River Watershed Festivals 2012 to 2014*** – Amanda Espy-Brown and Allie Sorlie, Alabama Museum of Natural History
- ***Beyond Your Normal Comfort Zone*** - A Forester's Take on Partners in the North River Watershed– Jim Jeter, Alabama Forestry Commission

The next Lower Sub-basin/North River meeting will be held October 20, 1-3pm at the Alabama Dept of Public Health (Hargrove Road).

For meeting information, minutes and agendas, visit the Alabama Clean Water Partnership website at <http://www.cleanwaterpartnership.org/pages/?pageID=20>

Kellie Johnston  
Cawaco RC&D-Executive Director  
Black Warrior Clean Water Partnership-Facilitator  
Email: [warriorcwp@hotmail.com](mailto:warriorcwp@hotmail.com)  
Phone: (205) 623-0147



## NORTH RIVER PROJECT COMMITTEE – LOWER SUB-BASIN

### AGENDA 20

October 14 1pm – 3pm

Alabama Department of Public Health

2350 Hargrove Road East, Tuscaloosa, AL 35405

Welcome and Introductions

Old Business

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- ☐ Review of Meeting Summary: August 18, 2014      Abner Patton, Chair

Project Updates

---

- ☐ North River Watershed Implementation Plan Update
- ☐ Coordinator Report      Mary Wallace-Pitts, Coordinator
  - ☐ BMP Update      Abner Patton
  - ☐ Education & Outreach Update      UA Museum of Natural History
  - ☐ Data Collection & Interpretation      Geological Survey of Alabama
- ☐ Facilitator Update

New Business/Presentation

---

Review and discussion of North River Publication.

- Edits
- Distribution
- Sponsorship

Partner Reports

---

- ☐ University of Alabama Center for Water Policy & Law
- ☐ Alabama Department of Environmental Management
- ☐ Alabama Department of Health
- ☐ Alabama Department of Transportation
- ☐ Alabama Forestry Commission
- ☐ Fayette County
- ☐ Geological Survey of Alabama
- ☐ Stormwater Programs
- ☐ City of Northport
  - ☐ City of Tuscaloosa
  - ☐ Tuscaloosa County
- ☐ Tombigbee RC&D
- ☐ USDA/NRCS
- ☐ Other Partners

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HOUSE - 10/20/14

SEN - 10/20/14

10/20/14

BENNETT BERRIDGE

Boarding U.S. City

Barry Anderson

Barry Anderson City of Tucson

Bob Cunningham

Tucson County

Allen Soble

Arizona

Jeff Aesch

Arizona

Karen Kuntz

City of Tucson

Josh Yates

City of Tucson

South San Diego

John Powell Hall

City of Milledgeville





## NORTH RIVER PROJECT COMMITTEE – LOWER SUB-BASIN AGENDA

**November 17, 2014 1pm – 3pm**

Alabama Department of Public Health  
2350 Hargrove Road East, Tuscaloosa, AL 35405

### Welcome and Introductions

### Old Business

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- ☐ Review of Meeting Summary: October 14, 2014 Abner Patton, Chair

### Project Updates

---

- ☐ North River Watershed Implementation Plan Update
- ☐ Coordinator Report Mary Wallace-Pitts, Coordinator
  - ☐ BMP Update Abner Patton
  - ☐ Education & Outreach Update UA Museum of Natural History
  - ☐ Data Collection & Interpretation Geological Survey of Alabama
- ☐ Facilitator Update

### New Business/Presentation

---

- LID Workshop Preparation– December 15, 2014

### Partner Reports

---

- ☐ University of Alabama Center for Water Policy & Law
- ☐ Alabama Department of Environmental Management
- ☐ Alabama Department of Health
- ☐ Alabama Department of Transportation
- ☐ Alabama Forestry Commission
- ☐ Fayette County
- ☐ Geological Survey of Alabama
- ☐ Stormwater Programs
  - ☐ City of Northport
  - ☐ City of Tuscaloosa
  - ☐ Tuscaloosa County
- ☐ Tombigbee RC&D
- ☐ USDA/NRCS
- ☐ Other Partners

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# Lower SUB-BASIN

11/17/14

## NAME

## EMAIL

LEN Simmons

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PAT O'NEIL

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Ramy Ambrose

ramy.ambrose@adph.state.nj.us

John Powell Webb

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BENNETT BEARDON

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Mary W. Pitt

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Abigail Patton

Edward Patton

Allie Sorlie

Karin Turner

Kturner@tuscakasa.com

Josh Yates

JYATES@TUSCALOOSA.COM

Bob Cunningham





## NORTH RIVER PROJECT COMMITTEE – LOWER SUB-BASIN MINUTES

October 20 1pm – 3pm

Alabama Department of Public Health

2350 Hargrove Road East, Tuscaloosa, AL 35405

### ATTENDEES:

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Bennett Bearden – University of Alabama

Barry Ambrose – Alabama Dept of Public Health

Bob Cunningham – Tuscaloosa County

Allie Sorlie – Alabama Museum of Natural History

Jeff Hirsch - Alabama Museum of Natural History

Kevin Turner – City of Tuscaloosa

Josh Yates - City of Tuscaloosa

Scott Sanderford - City of Tuscaloosa

John Powell-Webb – City of Northport

### Old Business

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- ☐ Review of Meeting Summary: August 18, 2014: Motion to approve (Bennett); 2<sup>nd</sup> (Ambrose)

### Project Updates

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- ☐ North River Watershed Implementation Plan Update
  - o Many of the current North River Stakeholders are participating in a US F&WS Strategic Habitat meeting in Columbiana. Updates will be given at the next meeting.
  - o Low Impact Development workshop will be held December 15, 2014 at the Northport Civic Center.
- ☐ Facilitator Update
  - o The facilitator thanked the Committee for the review of last month's presentation: *Planning for Alabama's Natural Resources*. Feedback was utilized to update the presentation for the Your Town Alabama Workshop held September 8-10, 2014 at Camp McDowell, Nauvoo, AL. The presentation was well received and feedback from attendees was positive.
  - o The facilitator referred the Committee to the ACWP Statewide update for September 2014. Of particular note of interest is that ACWP received an EPA Environmental Education Grant. The grant will provide interactive kiosks utilizing material from the *Waters to the Sea: Discovering Alabama* curriculum. ACWP will place touch screen kiosks at informal environmental centers in each of the major river basins draining to Mobile Bay. More information will be available at a later date.

### New Business/Presentation

---

- ☐ Review and discussion of North River Publication.
  - o The Committee was charged with reviewing the North River publication and encouraged to provide edits by November 1<sup>st</sup>. The publication will be mailed, along with the SHU folders, to large landowners, City and County officials, and Soil & Water Boards. Any remaining publications will be available to Committee members to distribute.

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- Scott Sanderford reported that he used the draft publication to brief the Mayor of Tuscaloosa for his opening of a water policy meeting on September 26.

#### Partner Reports

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- ☐ University of Alabama Center for Water Policy & Law
  - Bennett Bearden that the North River Project is being used as a water policy demonstration. The AWAG met again on October 9<sup>th</sup>. The Governor has requested that the AWAG form focus panels and provide recommendations by December. The next AWAG meeting will be held November 13<sup>th</sup>.
- ☐ Alabama Forestry Commission: At SHU Meeting
- ☐ Geological Survey of Alabama: At SHU Meeting
- ☐ Stormwater Programs
  - City of Northport: No report
  - City of Tuscaloosa
    - Kevin Turner has been asked to participate on the Southeast Stormwater panel.
    - The City of Tuscaloosa will be the 2015 host site for *Alabama Clean Water Erosion Control Workshop*.
  - Tuscaloosa County
    - The new stormwater management plan for Tuscaloosa is available on the County's website.
    - Tuscaloosa County is partnering with Discovering Alabama for NPDES stormwater education and outreach requirements.

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# Tuscaloosa County 2014-2015 Annual Report

## **Appendix G**

### QCI Certificates

This certifies that **Randy Anderson**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T2507**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Jamey Beasley**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T1085**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Jimmy Falls**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T2134**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Mike Frazier**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T0094**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Tony Green**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T1191**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Marvin Henry**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T0092**  
Expires **11/27/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **James Huff**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T3530**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **James Leach**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T0093**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Tim Nix**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **31547**  
Expires **11/27/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Clifford Oswalt**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **31548**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI



This certifies that **David Ponder**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T1090**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Earl Rice**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T1091**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Ross Strickland**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T3531**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Bob Tolbert**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T0090**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Beau Yeager**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T1094**  
Expires **12/17/14**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI



This certifies that **Randy Anderson**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T2507**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Jamey Beasley**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T1085**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Jimmy Falls**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T2134**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Mike Frazier**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T0094**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Tony Green**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T1191**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Marvin Henry**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T0092**  
Expires **11/27/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **James Huff**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T3530**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **James Leach**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T0093**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Tim Nix**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **31547**  
Expires **11/27/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Clifford Oswalt**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **31548**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI



This certifies that **David Ponder**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T1090**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Earl Rice**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T1091**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Ross Strickland**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T3531**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Bob Tolbert**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T0090**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Beau Yeager**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Classroom Session**



QCI# **T1094**  
Expires **12/17/14**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

# QCI Training Program Certificate of Completion

*is hereby granted to:*

***Mike Henderson***

***Tuscaloosa County Public Works***

*for satisfactory completion of 8 instructional hours*



***Initial Training***

***February 27, 2015***

***John Carlton, Joe Stroud***

*Instructors*

thompson  
ENGINEERING

**QCI NO: T1088**

**Expires: 2/27/2016**

This certificate confers eight (8.0) professional development hours (PDHs) to students who require credits for licenses or certifications. Such PDHs are subject to the qualifying requirements of the licensing or certifying organization.



# QCI Training Program Certificate of Completion

is hereby granted to:

**Jarrod Rice**

*Tuscaloosa County Public Works*

*for satisfactory completion of 8 instructional hours*



*Initial Training*

*February 27, 2015*

*John Carlton, Joe Stroud*

*Instructors*

thompson  
ENGINEERING

QCI NO: T4035

Expires: 2/27/2016

This certificate confers eight (8.0) professional development hours (PDHs) to students who require credits for licenses or certifications. Such PDHs are subject to the qualifying requirements of the licensing or certifying organization.



This certifies that **KaTara Paige**  
of **Perry Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T3312**  
Expires **6/17/2015**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **James Huff**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T3530**  
Expires **6/17/2015**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **James Leach**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T0093**  
Expires **6/17/2015**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

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of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI



This certifies that **Marvin Henry**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T0092**  
Expires **5/27/2015**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Tim Nix**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **31547**  
Expires **5/27/2015**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Ross Strickland**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T3531**  
Expires **6/17/2015**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

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of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

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of successfully completed the  
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**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI



This certifies that **Barrett Webb**  
of **Lamar Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **31558**  
Expires **6/17/2015**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Davie Heard**  
of **Perry Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **39763**  
Expires **6/17/2015**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Jamey Beasley**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T1085**  
Expires **6/17/2015**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Mike Frazier**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T0094**  
Expires **6/17/2015**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **David Ponder**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T1090**  
Expires **6/17/2015**

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

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of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

Tracy A. Stegmaier, P.E.

ALDOT QCI



This certifies that **Clifford Long**  
of **Sumter Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **31560**  
Expires **6/27/2015**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **James Anderson**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T2507**  
Expires **6/17/2015**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Tony Green**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T1191**  
Expires **6/17/2015**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Clifford Oswalt**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **31548**  
Expires **6/17/2015**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Earl Rice**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T1091**  
Expires **6/17/2015**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Jarrod Rice**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T4035**  
Expires **5/23/2015**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Bob Tolbert**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T0090**  
Expires **6/17/2015**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that **Beau Yeager**  
of **Tuscaloosa Co.** successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI# **T1094**  
Expires **6/17/2015**

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI

This certifies that  
of successfully completed the  
**ALDOT Annual QCI Refresher Training**  
**2-hour Field Session**



QCI#  
Expires

ALDOT QCI Trainer

*Tracy A. Stegmaier*  
Tracy A. Stegmaier, P.E.

ALDOT QCI