



TUSCALOOSA COUNTY PUBLIC WORKS DEPARTMENT

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March 29, 2016

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

RE: 2015-2016 Annual Report
Tuscaloosa County Municipal Separate Storm Sewer System (MS4)
NPDES Permit Number ALR040001

Ms. Smith,

Please find the enclosed 2015-2016 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 – Scott Anders (email)
Assistant County Engineer - Allan Springer (email)
Assistant County Engineer – Tracy Criss (email)
Engineering Coordinator - Mike Henderson (email)
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File

Tuscaloosa County

STORMWATER MANAGEMENT PLAN

2015- 2016 Annual
Report, March 31, 2016



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 accessed through the Tuscaloosa County Website, www.tuscco.com with the path: Government Departments/ Public Works/Environmental/ 2010 Urbanized Area Reference Map, Tuscaloosa, AL

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. Tuscaloosa County applied for third-term coverage on October 15, 2015.

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.

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

The revised brochure was printed on April 27, 2015 and subsequently placed in display racks at the currently used locations.

See appendix A

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

See 2016

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.

Brochure distribution was expanded in February 2016 to include Lake Lurleen State Park and Tannehill Ironworks Historical State Park.

Brochures were also provided to the U.S. Corps of Engineers for distribution at Rocky Branch Recreational Area, Deerlick Recreational and Campground, 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

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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. 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

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.

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

Brochures were given to the Tuscaloosa Parks and Recreation Authority (PARA) in March, 2016. The brochures will be distributed at 8 of their facilities.

Public school outreach Education took place at Water Fest in 2015. The attending schools were the Magnet, Holy Spirit, and Walker Elementary schools.

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 was made with 3 elementary schools in the Tuscaloosa County System. One of the schools, Buhl Elementary, accepted the offer of this outreach program. The presentation is awaiting to be incorporated into the teaching schedule.

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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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.

Spring 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.

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 late spring 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. Camp Directors are considering this offer of instruction.

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

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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.

Tuscaloosa County participated in a Teacher's Workshop on May 5, 2015 by displaying and distributing informational materials as well as making a short presentation at the event.

See Appendix B.

Tuscaloosa County Commission helped sponsor the TV program, *North River, Lake Tuscaloosa* with a contribution of \$20,000.

On June 25, 2015, Scott Anders, County Engineer, met Doug Phillips and the TV production crew on North River. Scott, was interviewed along with other local government officials for a segment of the program.

The show first aired in October, 2016.

Responsible Party – Public Education Outreach – Discovering Alabama

Bob Cunningham

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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.

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.

A community group from the Fosters area of the county conducted a cleanup on April 4, 2015.

See Appendix C.

No events have occurred in first 3 months of 2016

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

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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 provided to the citizens 10 manned drop off points for the disposal of unwanted items.

2016

During the month of April the Tuscaloosa County Commission will provide to the citizens 10 manned drop off points for the disposal of items. This opportunity to dispose of unwanted items is afforded to the citizens at no charge.

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.

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.

The Tuscaloosa County Commission has announced that on April 23, 2016 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 Spidey Valley Road.

The event has been advertised on our Facebook page and The Tuscaloosa newspaper.

See Appendix D

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

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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 Water fest. 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 sponsored and participated in the two North River- Lake Tuscaloosa Watershed events. On April 10, 2015 a display was set up at the Water Fest event held at the Phelps Activity Center. A drone demonstration was done as well as educational materials distributed to three participating 4th grade classes.

A county employee participated in the Lake Clean-up held on April 11, 2015

See Appendix E

2016

Tuscaloosa County will be a sponsor and participant in the two scheduled North River-Lake Tuscaloosa Watershed events. A display will be arranged on April 8, 2016 at the Phelps Activity Center where a drone demonstration will be offered as well as educational materials distributed. The following day, on the 9th, Tuscaloosa County will assist with sponsorship of the Annual Clean Our Lake Day with logistical support and volunteer participants.

We have advertised the Water Fest and Lake Clean-up on our Face book page.

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

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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.

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.

See Spring 2016

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.

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.

Additional points have been added to the list of structural BMP's.

See Appendix F

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.

2016

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

A training program has been developed to educate employees in the identification and reporting of illicit discharges.

A training session was conducted for Camp Coker, Camp Cedar Cove and the Bridge Yard on March 22 for illicit discharge detection and also Pollution Prevention and Good Housekeeping.

See Appendix G

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.

2016

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

See Appendix H

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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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 plan or corrective action has not been taken, then the violation is reported to ADEM for enforcement.

During 2015- 2016, 89 subdivision plats have been reviewed by Tuscaloosa County, with the review process including an examination of the proper management of storm water by the developer.

During this time there has been one inspection of a subdivision for acceptance for maintenance, of which a section is the management of stormwater. This inspection noted that there were no issues with stormwater.

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 17 potential violations discovered in the county. A summary of these reports and the status of each is presented in **Appendix H.**

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 initial 8 hour QCI training class in spring of 2015 through Thompson Engineering.

See Appendix I

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.

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

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

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 2016, 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 H 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 on 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 address 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.

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.

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

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.

A spill containment kit was delivered to the Camp Coker Road Maintenance Facility, the Cedar Cove Road Maintenance Facility, the County Shop and the 7th Street Fuel Station.

See Appendix J

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.

A presentation was made on March 16, 2016.

See Appendix K

Issue a spill containment kit to the bridge maintenance camp by June 2015

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, giving a presentation to the Kiwanis club on January 5, 2016.

See Appendix "L" for supporting documentation

Tuscaloosa County 2015-2016 Annual Report

Appendix A

New educational brochure and packing slip

COMMON STORMWATER POLLUTANTS

POLLUTANT IMPACT

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

For More Information
Or
To Report A Problem
Visit Our Website At:
www.townstormwater.com

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



TUSCALOOSA COUNTY
Bob Cunningham - 345-6600



CITY of NORTHPORT
John Powell Webb - 339-7000



UNIVERSITY of ALABAMA
Hal Barrett - 348-5905

Proud Partners of:



*Water Quality Equals
Quality of Life*



TUSCALOOSA AREA
STORMWATER
MANAGEMENT GUIDE

Always remember....

“ONLY RAIN DOWN THE DRAIN”

WHAT IS STORMWATER POLLUTION?

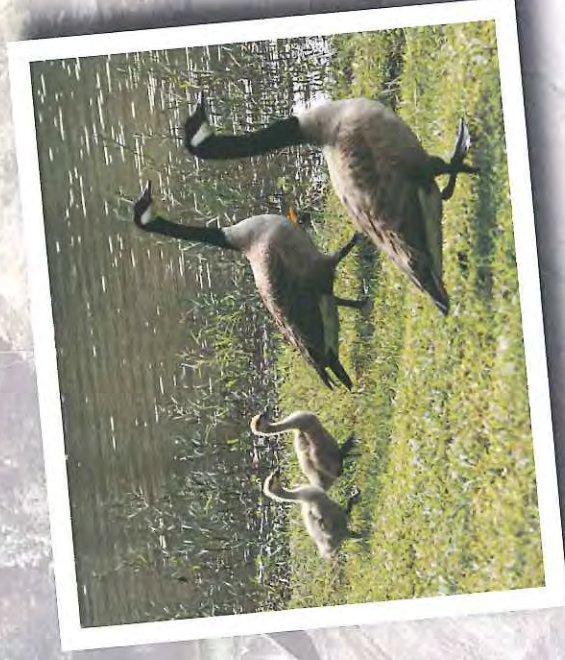
Think of a single rain drop falling from the sky. It lands on your roof, flows down into the gutter, across your lawn and down your driveway. Along the way it picks up pesticides, fertilizer, oil and grease, pet waste, and many other chemicals and trash.

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

SOLD TO Tulsa County - Public Works Dept



Route SW

1020 21st AVENUE
TUSCALOOSA, ALABAMA 35401
PHONE 345-5573

Bob Cunningham

TERMS: NET 10th EOM, NO DISCOUNT.

A 15% RE-STOCKING CHARGE WILL BE MADE ON STOCK ITEMS RETURNED AFTER 30 DAYS. SPECIAL ORDER ITEMS ARE RETURNABLE ONLY AT FACTORY OPTION, SUBJECT TO THEIR RE-STOCKING CHARGE AND ALL TRANSPORTATION CHARGES.

1. ACCOUNTS NOT PAID IN FULL BY THE 25TH OF THE MONTH FOLLOWING PURCHASE AUTOMATICALLY BECOME SUBJECT TO A FINANCE CHARGE.
2. THE FINANCE CHARGE IS AT THE MONTHLY PERIODIC RATE OF $1\frac{1}{2}\%$, (ANNUAL PERCENTAGE RATE OF 18%) AND IS CHARGED ON THOSE ACCOUNTS THAT HAVE AN UNPAID BALANCE ON THE 25TH OF THE MONTH FOLLOWING PURCHASE. MINIMUM CHARGE: 50 CENTS.
3. SUBJECT TO ADDITIONAL CONDITIONS PRINTED ON REVERSE SIDE OF FORM.

RECEIVED

Pz Baring

DATE _____

SUB-TOTAL

TAX

TOTAL

Tuscaloosa County 2015-2016 Annual Report

Appendix B

Discovering Alabama Teachers Workshop

- Description and attendees from County
- photo



THE UNIVERSITY OF ALABAMA

Discovering Alabama

30 YEARS OF NATURAL WONDER



EMMY® Award Winning Television Series

Alabama Water Resources Education

A Partnership with *Discovering Alabama*, Alabama Public Television

Alabama Department of Environmental Management

Tuscaloosa County Commission & Tuscaloosa Public Works

Tuscaloosa City Schools

Tuscaloosa County Schools

Workshop Agenda for Tuscaloosa County Teachers

Tuesday, May 5, 2015

Discovering Alabama: Connecting with Alabama's Natural Diversity & Water Resources To Enhance Learning Across the Curriculum

Motivate your students to achieve at higher levels by making course content more locally relevant and personally meaningful. *Discovering Alabama*, the Emmy® Award-winning documentary TV series focusing on Alabama's natural environment, is highly regarded throughout the state as an outstanding resource for teachers and students. Each episode features a different aspect of Alabama's natural diversity presented in a manner to support ACOS requirements for multiple subjects while also promoting environmental conservation and stewardship. With almost 100 programs completed to date, the series is now expanding to offer eBooks, virtual field trips, and other opportunities for curriculum enrichment. Attendees will enjoy previews of documentaries and will receive related *Discovering Alabama* DVDs, Teacher Guides, and more surprises in this hands-on, minds-on workshop.

Session 1 - Dr. Doug Phillips

Setting the Tone: Motivating, Thinking, Leadership

Dr. Doug, Mike McCracken, Pam Sloan

Discovering Alabama Resources: DVDs, Teacher Guides, Ask the Expert,

Virtual Field Trips, Model School, Standards,

Alabama Museum of Natural History

Session 3 – Recognition of Partner Resources

Alabama Public Television <http://www.aptv.org>, ADEM <http://www.adem.state.al.us>

Tuscaloosa County Commission & Tuscaloosa Public Works

<http://www.tuscco.com/government/departments/public-works/environmental/>

Alabama Clean Water Partnership - <http://cleanwaterpartnership.org/>

Attended By: Scott Andes Tuscaloosa County
Jamoy Beasley
Bob Cunningham



Tuscaloosa County 2015-2016 Annual Report

Appendix C

Trash Clean-Up in Fosters -Photo



Tuscaloosa County Public Works Department added 2 new photos.
April 21 ·

Here are a few pictures made last weekend during the Fosters community clean-up. The Engineering Department furnished the trash bags, gloves & safety vest for the clean-up.



Like Comment

Tammy Oswalt, Andrea Austin and Sherry Gaddy like this.

1 share

Tuscaloosa County 2015-2016 Annual Report

Appendix D

2016 Spring Clean-up Flier

Tuscaloosa County

Spring Clean-up

Saturday, April 23, 2016

8:00 am – 4:00 pm

Clean out your closets, attic, garage, store room, basement, or whatever, and bring your “throwaway” items to any one of our 10 drop-off locations around the county. There will be manned locations in each County Commission District with large collection containers provided by Waste Management, Inc. for you to deposit your items. There will be no charge for this service. Please no contractors, household/kitchen garbage, or tires. Questions ??? Call 464-8216 or 464-8225.

Collection Container Locations:

Commission District 1:

- Camp Coker
- Camp Samantha
- Yellow Creek VFD

Commission District 3:

- N. Rosser Rd/Old Greensboro Rd
- Hargrove Rd East/Oak View Lane

Commission District 2:

- Hwy 216/Woodland lake Rd
- Hwy 216/Keenes Mill Rd
- Holt Elementary

Commission District 4:

- Foster's Grocery Store Parking Lot
- Hwy 140/Sipse Valley Rd at Old L A Gro.

Sponsored by the Tuscaloosa County Commission and Waste Management, Inc.

Tuscaloosa County 2015-2016 Annual Report

Appendix E

Water Fest and Lake Tuscaloosa Cleanup
-Registration, Invoice and Photos

Lake Tuscaloosa Watershed Festival 2015

Information Fair Registration Form

Watershed Festival: Friday, April 10 from 9 am to 1:30 pm (arrive at 8 am and take down by 2 pm)

Lake Clean-up: Saturday, April 11 from 8 am to noon

Organization Name: Tuscaloosa County Commission

Contact Person: Bob Cunningham

Mailing Address: 2810 35th St. Tuscaloosa, AL 35401

E-mail Address: bcunningham@tusccc.com

Phone Number: 345-6600 , Extension 225

What would you like your audience to know after visiting your information table or activity?

Question: Who can I contact with Tuscaloosa with questions

Answer: Bob Cunningham or concerns?

Each organization will be provided with a table and two chairs for their display (electricity is available).

Lunch will be provided during the Watershed Festival on Friday and after the clean-up on Saturday.

Please complete this form and send it to:

Fax: Attention – Todd Hester
(205) 348-9292

E-mail: mthester@ua.edu



File

City Of Tuscaloosa
Water & Sewer Department
Lakes Division

3650 Lake Nicol Road Tuscaloosa Alabama 35403
Phone Number (205) 349-0279 Fax Number (205) 759-9880
Ensuring the Resource That Serves Us All



INVOICE

Remit to:

City of Tuscaloosa
Lake Division
3650 Lake Nicol Rd.
Tuscaloosa, Al. 35406

Bill To:

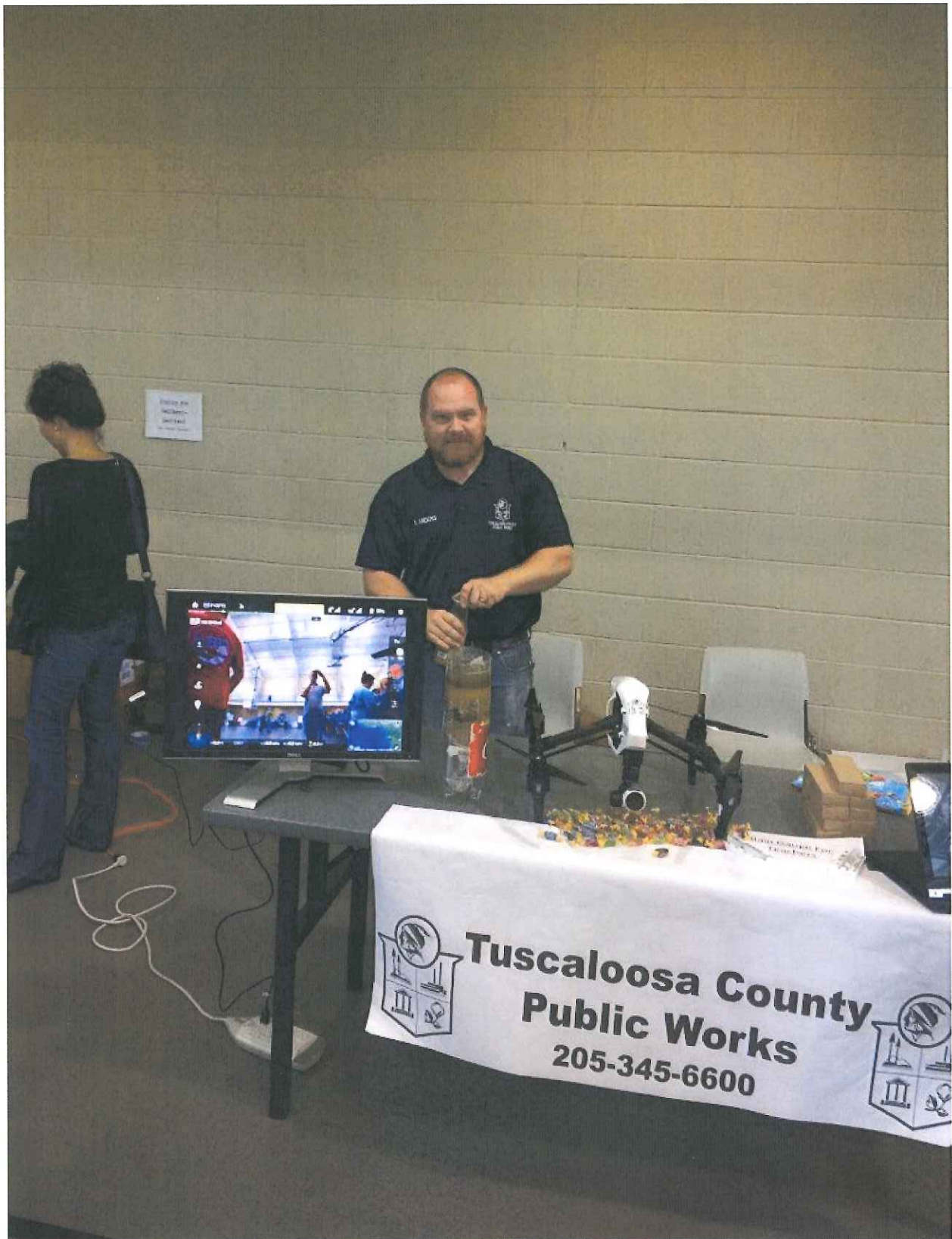
Tuscaloosa County Commission
c/o Bob Cunningham
2810 35th Street
Tuscaloosa, Al. 35401

Description:

2015 Lake Tuscaloosa/Northriver Water Fest Sponsorship

\$250.00

Total Due: \$250.00







**Water & Sewer Department
Lakes Division**

3650 Lake Nicol Road Tuscaloosa Alabama 35403
Phone Number (205) 349-0279 Fax Number (205) 759-9880
Ensuring the Resources That Serve Us All



Lake Tuscaloosa – North River Watershed

April 11, 2015

Name: Katherine Cross Male ☐ Female ☒ Age [redacted]
Address: [redacted]
City Ralph State AL Zip 35480
Phone: 205-345-6600 Group / Affiliation: Tuscaloosa County
Emergency Contact: [redacted] Phone: [redacted]

Please Note: Adult supervision is NOT provided by the City of Tuscaloosa at this event. All volunteers under the age of 18 must be accompanied by a participating adult.
Thank you.

I, Katherine Cross individually (or as a parent or guardian of a minor child under the age of 18 participating) state that I (or my minor child) requests to participate in the Lake Tuscaloosa-North River Waterfest and,

In consideration of the City of Tuscaloosa permitting the undersigned or his/her minor child to engage in the aforesaid activity, the undersigned does, for himself/herself, his/her heirs, assigns, executors and administrators, remise, release and forever discharge the City of Tuscaloosa, a Municipal Corporation, its officers, agents, and/or employees, event sponsors, its officers, agents and/or employees and event volunteers (from here to referenced as Waterfest Administration) of and from all manner of action and actions, suits, and sums of money, dues, claims, or demands, whatsoever, which arise out of or in any manner grow out of, property damage sustained by the undersigned or his/her minor child or injuries or death sustained by the undersigned or his /her minor child, including injuries known or unknown, by reason of being permitted to participate in the aforesaid activity in the City of Tuscaloosa. To the maximum extent permitted by law, the undersigned shall hold harmless, indemnify The Waterfest Administration from and against any and all claims and losses, cost, expense or liability including attorney's fees and litigation costs caused by, arising out of, resulting from, or occurring in connection with participation in the "Lake Tuscaloosa-North River Waterfest", regardless of the fault or negligence of the Waterfest Administration excepting only such claims or losses that have been adjudicated to have been caused solely by the negligence of the Waterfest Administration.

In consideration of this event, the undersigned also does permit and authorize the Waterfest Administration who are acting on behalf of Lake Tuscaloosa-North River Waterfest to use my photograph or other likeness for purpose related to the educational mission of the event, including publicity, marketing, and promotion of this event and its various programs. I understand my photograph or likeness may be copied and distributed by means of various media, including video presentations, television, news bulletins, mail outs, billboards or signs, brochures, placement on City of Tuscaloosa websites, affiliated websites, Twitter, Facebook, or newspapers. I understand that, although the City, its officers, agents, employees, and/or event volunteers will endeavor to use my photograph or likeness in accordance with standards of good judgement, the Waterfest Administration cannot warranty or guarantee that any further dissemination of my photograph or likeness will be subject to Waterfest Administration supervision or control. Accordingly, I release the Waterfest Administration from any and all liability related to dissemination of my photograph or likeness.

THE UNDERSIGNED has read this Release and fully understands the same.

Katherine Cross
(Signature Participant or Parent/Legal Guardian)

4/11/15
(Date)

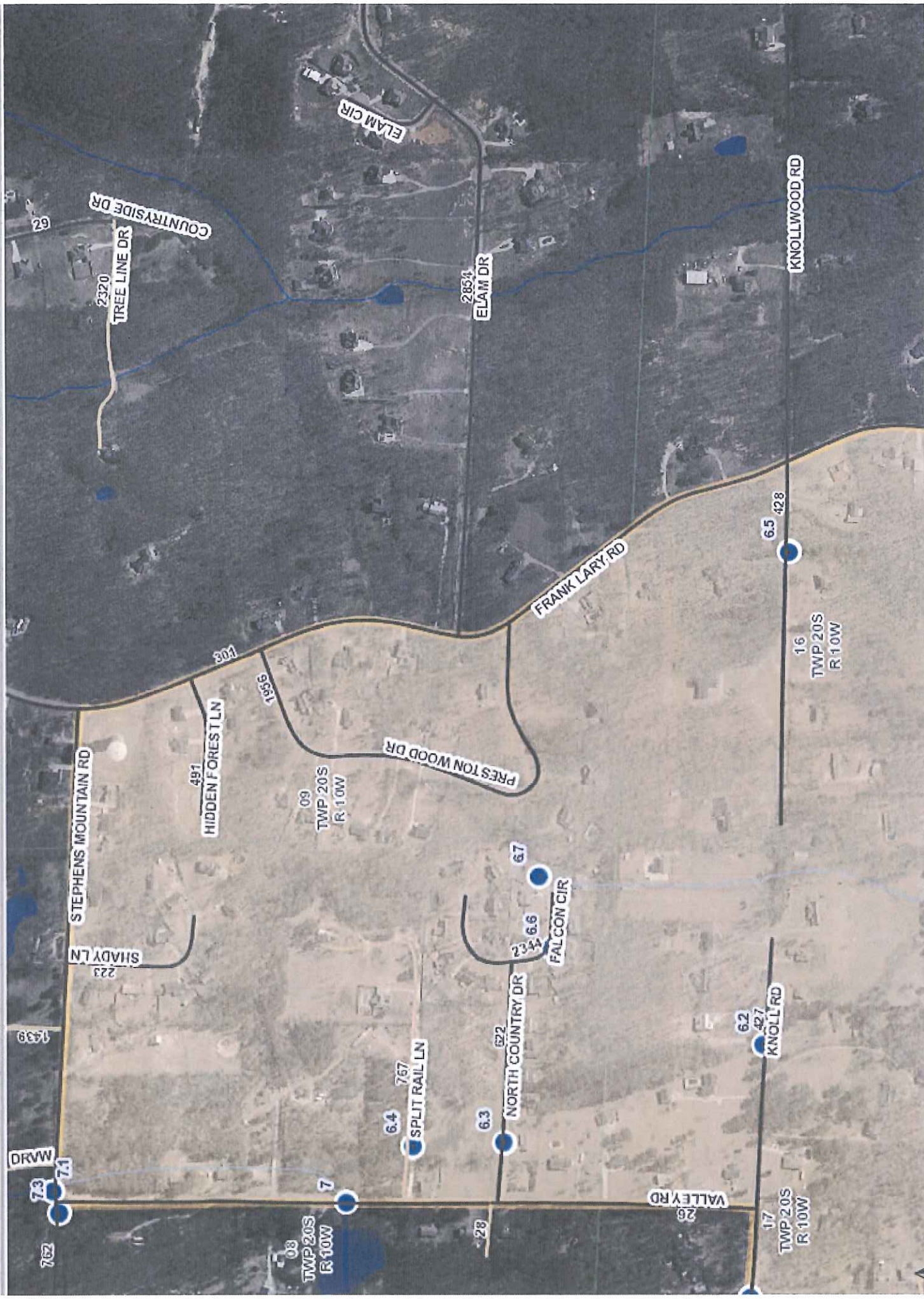


Tuscaloosa County 2015-2016 Annual Report

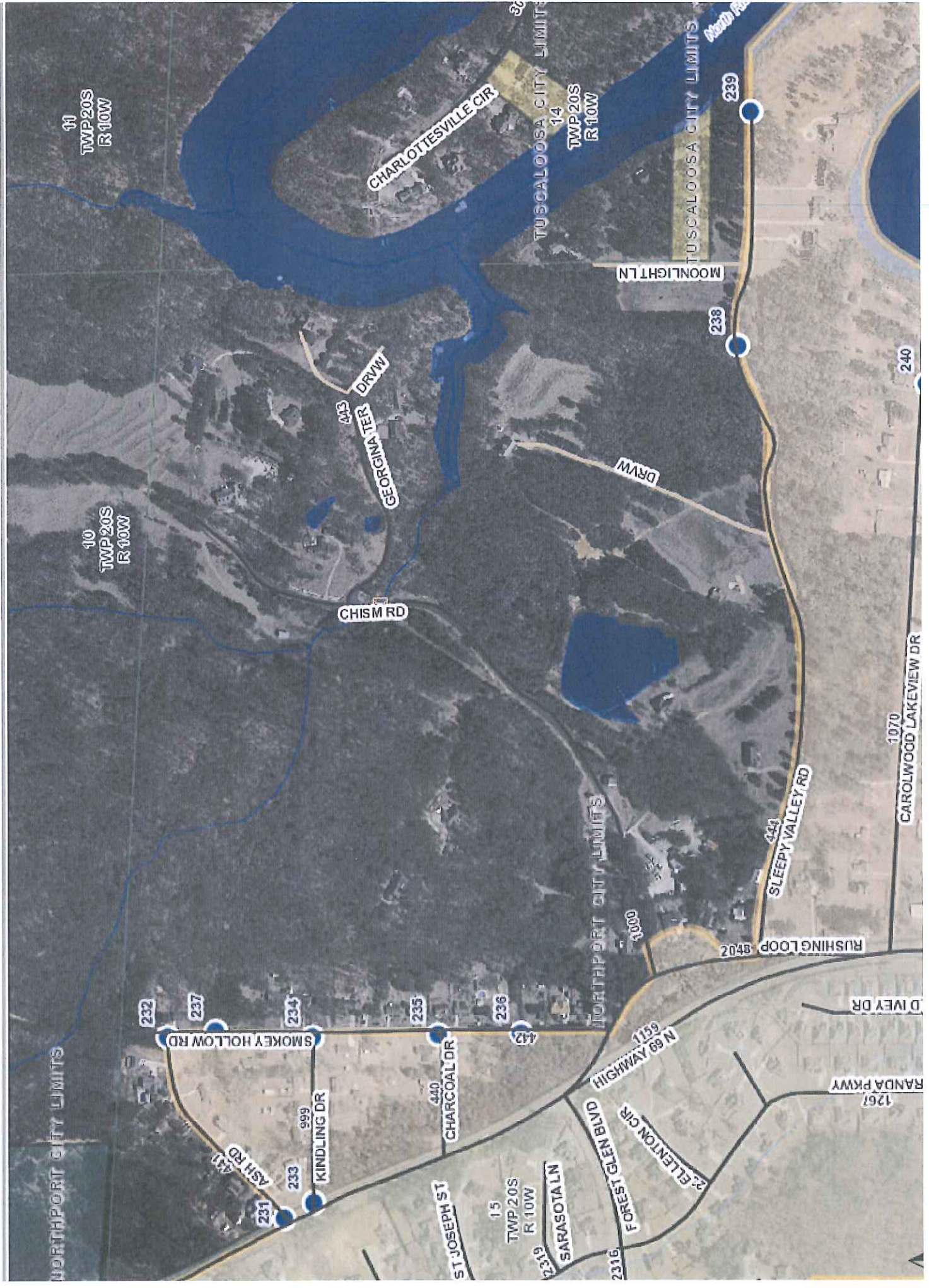
Appendix F

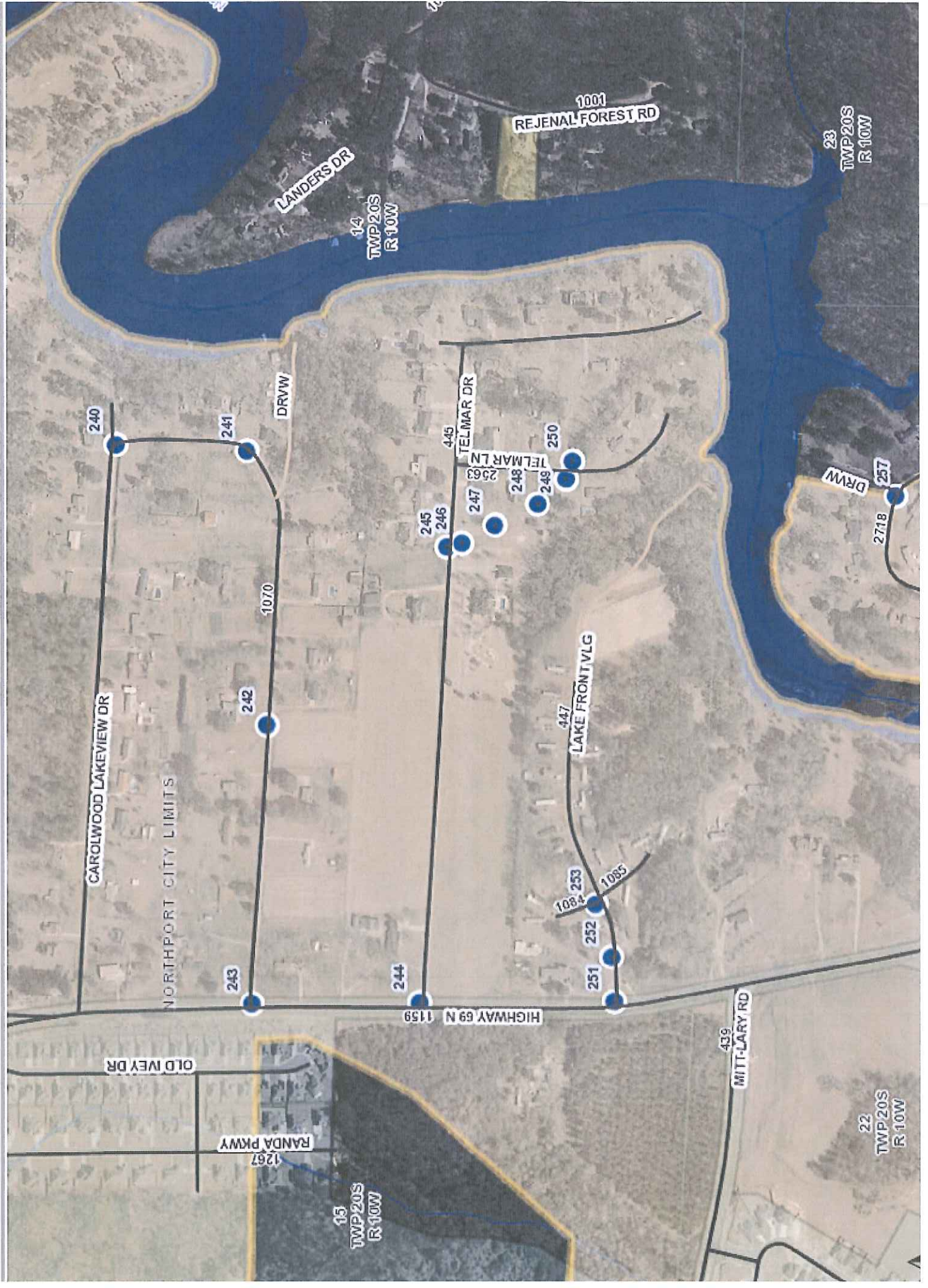
Storm Sewer Outfall Points
-Spreadsheets and Maps

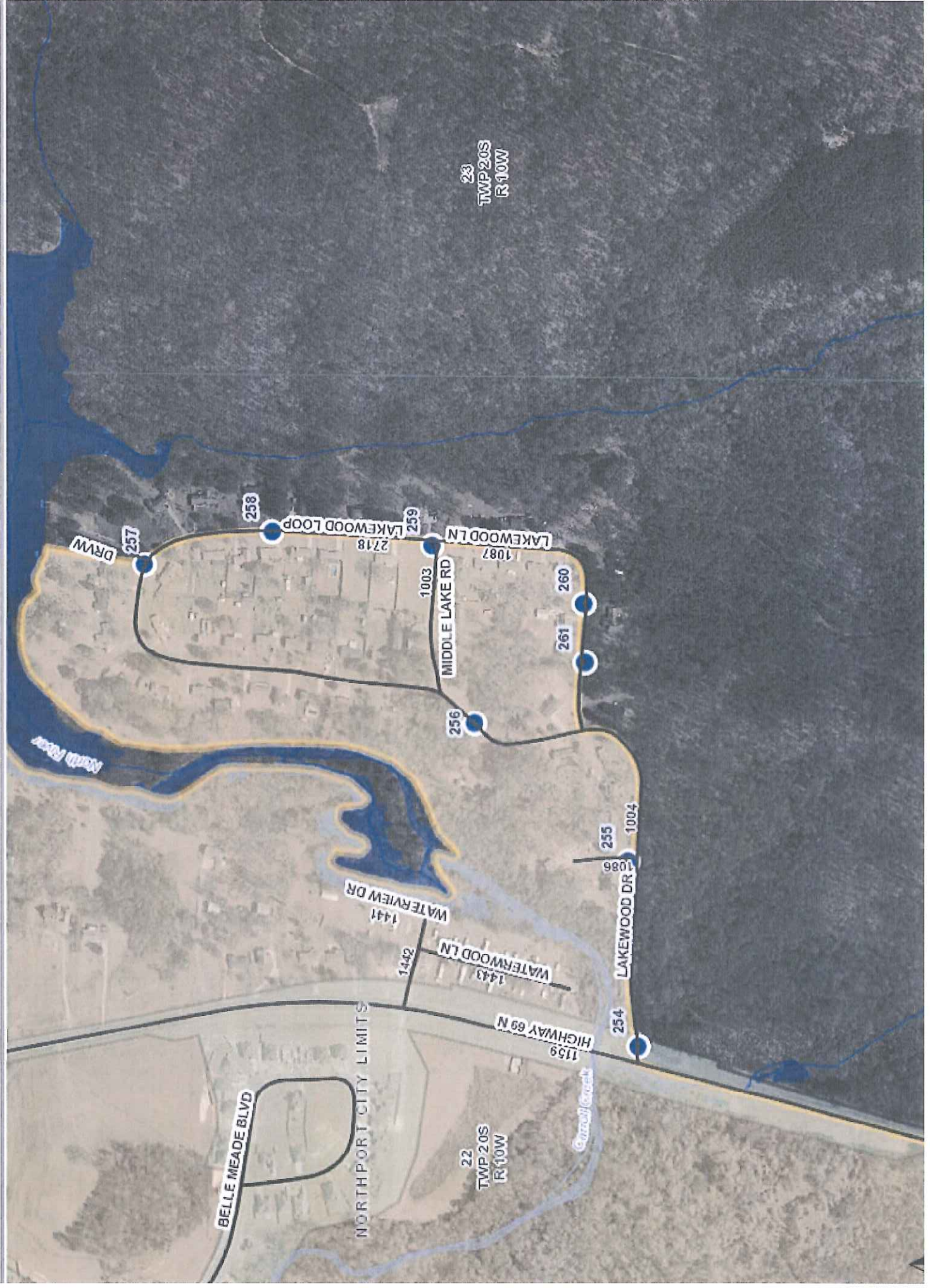
Map No. 1

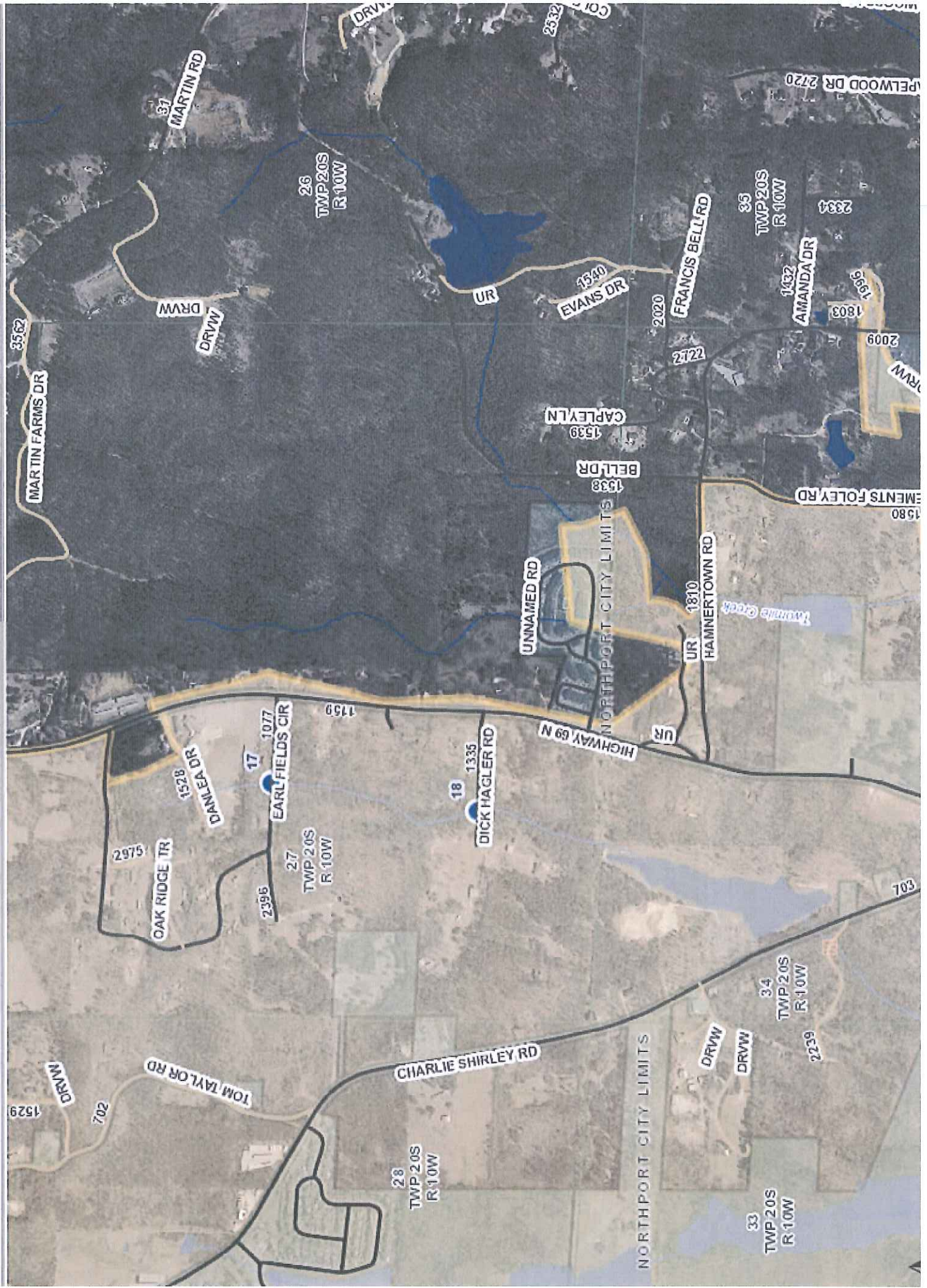










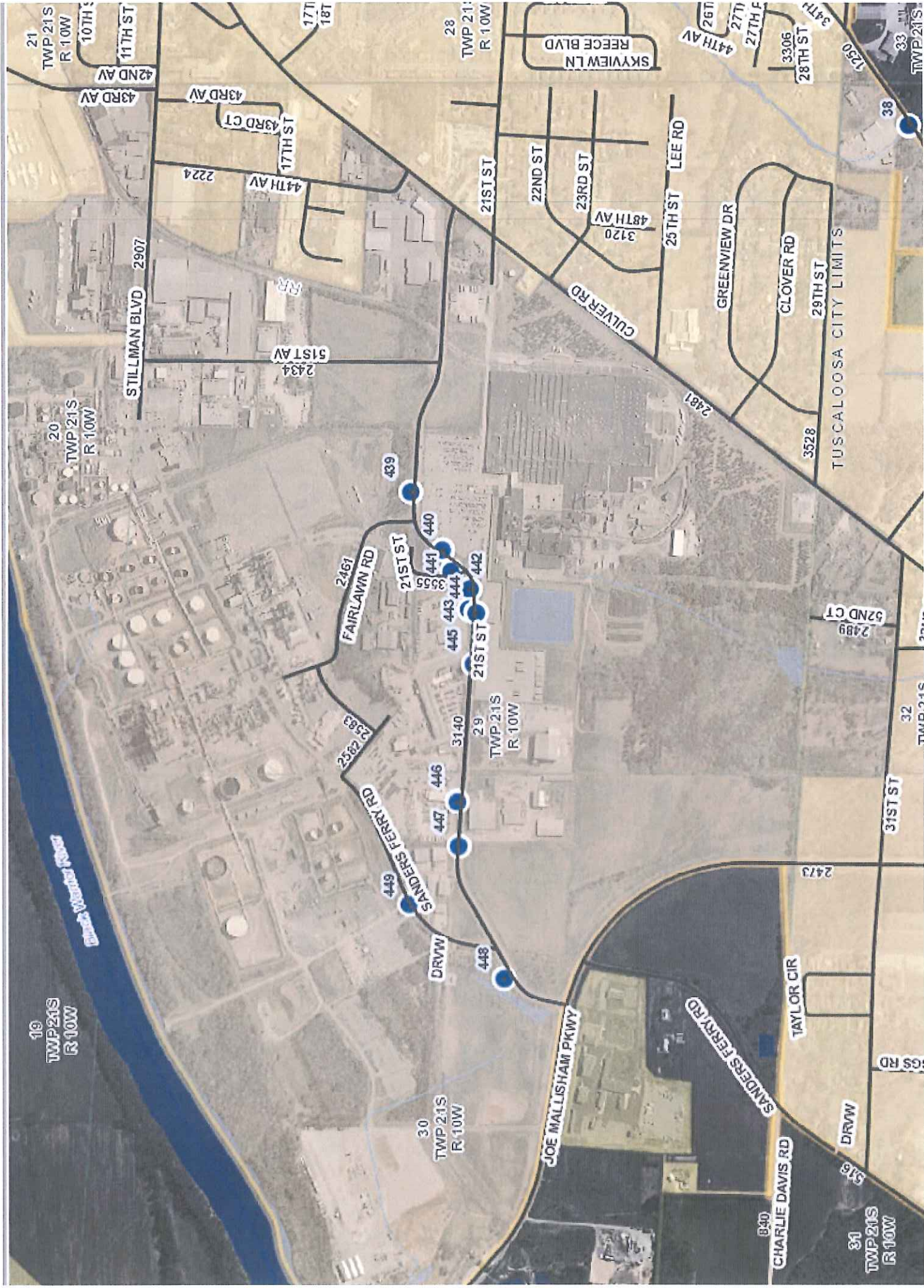


Tuscaloosa County Storm Sewer Outfall Points Map No. 7



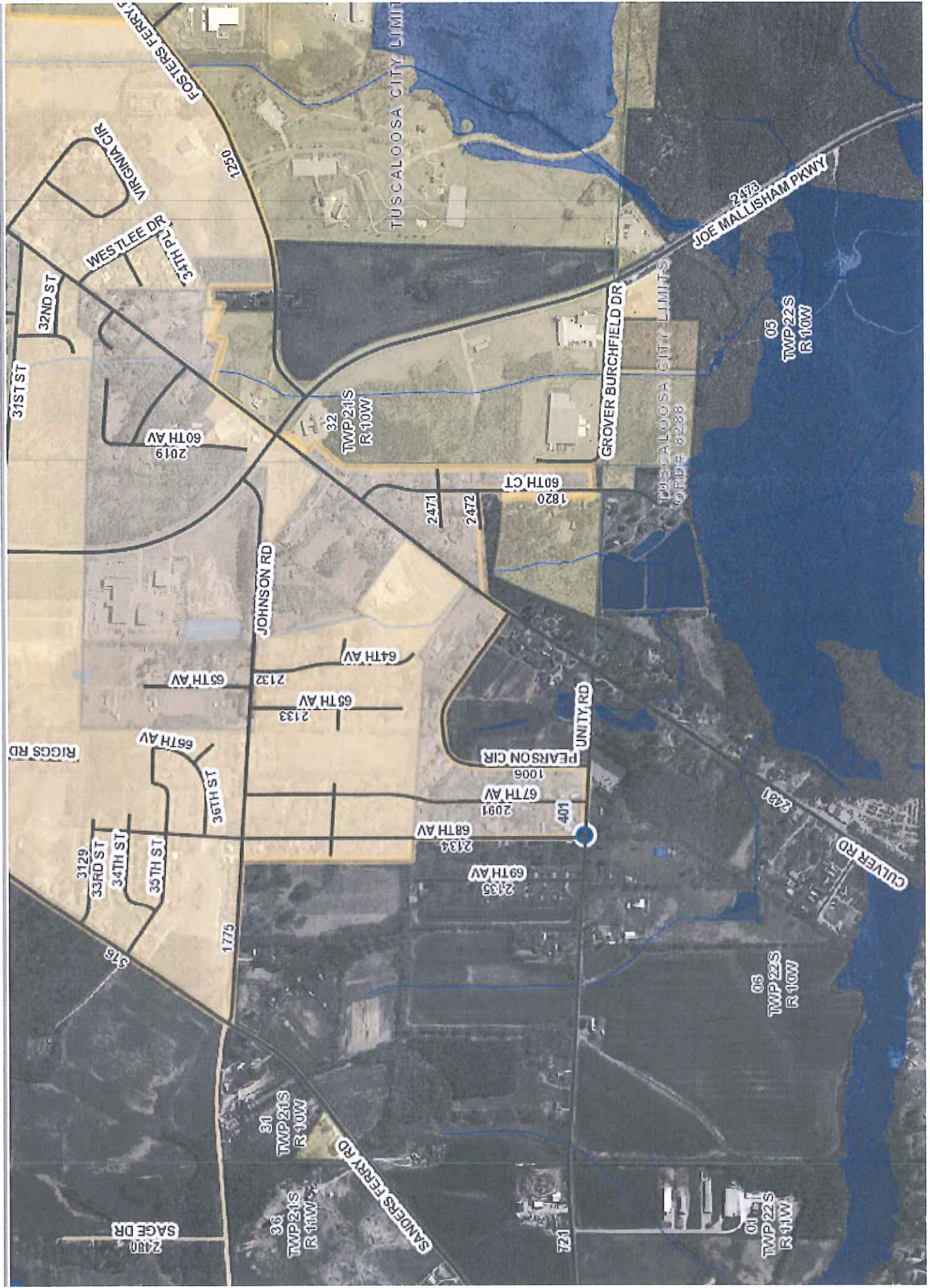
Tuscaloosa County Storm Sewer Outfall Points

Tuscaloosa County Storm Sewer Outfall Points



Tuscaloosa County Storm Sewer Outfall Points

Map No. 10



Tuscaloosa County Storm Sewer Outfall Points

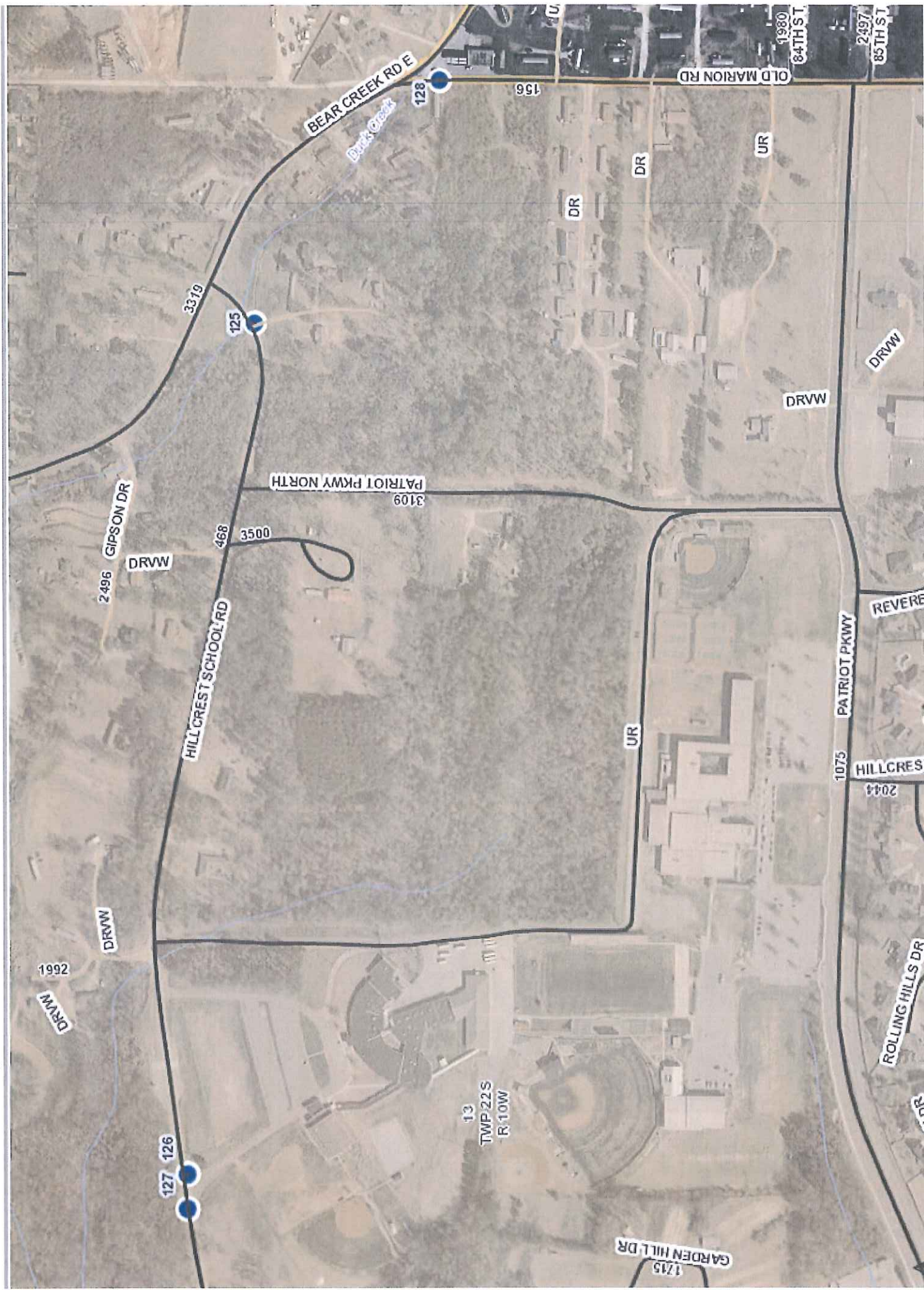
Tuscaloosa County Storm Sewer Outfall Points



Tuscaloosa County Storm Sewer Outfall Points

Map No. 12



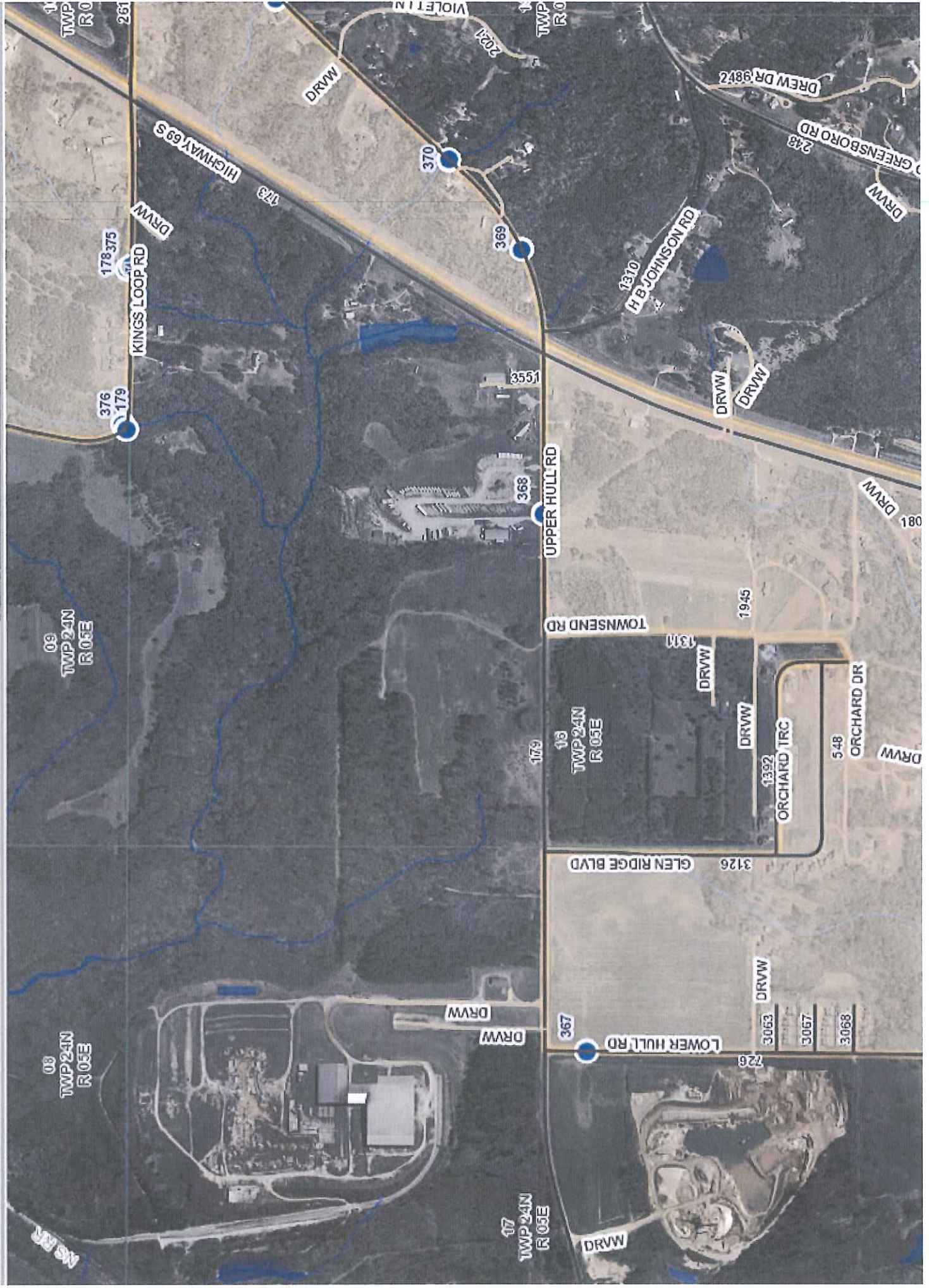






Map No. 16





Tuscaloosa County Storm Sewer Outfall Points Map No. 17

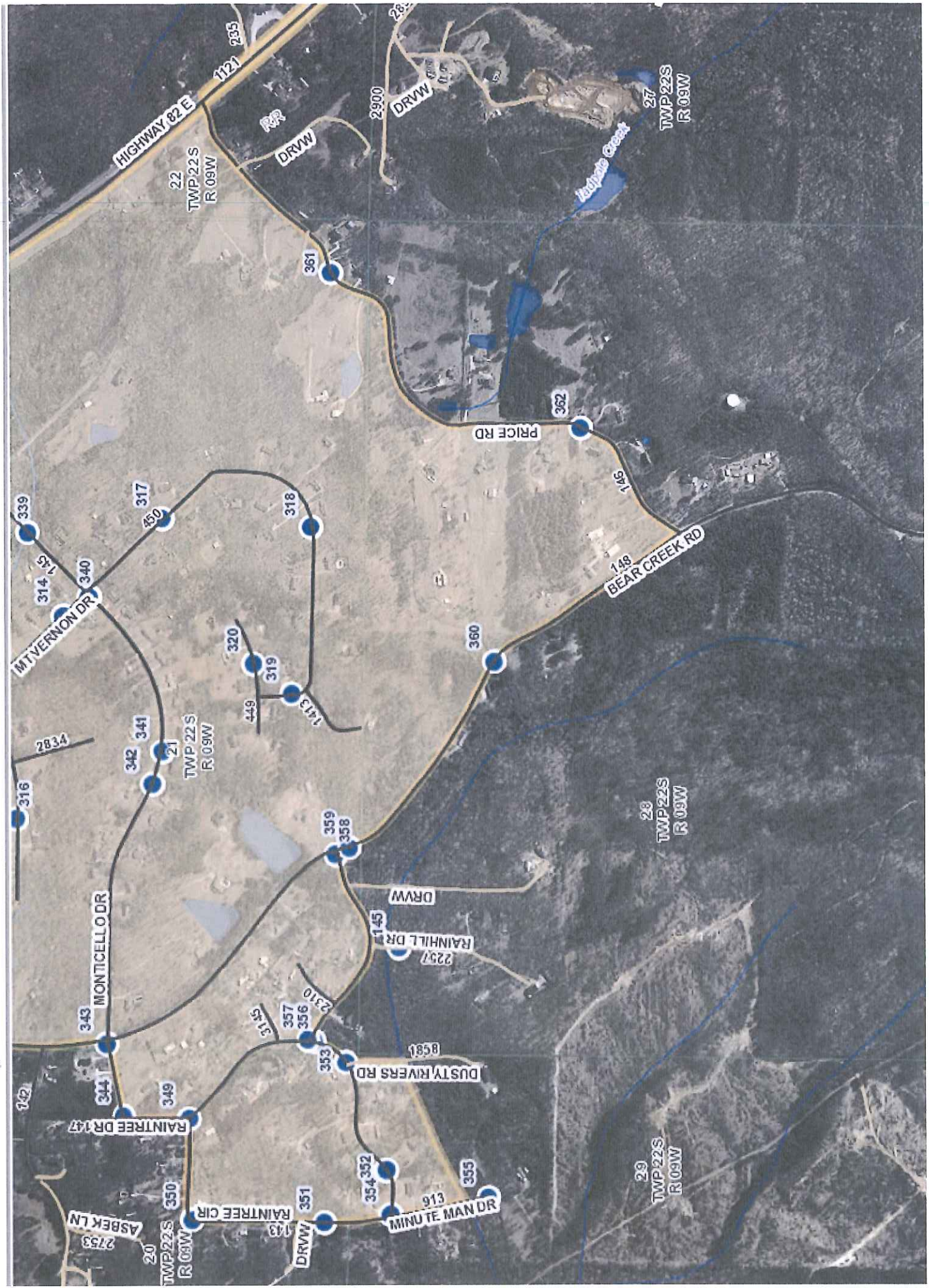


Map No. 18



Tuscaloosa County Storm Sewer Outfall Points

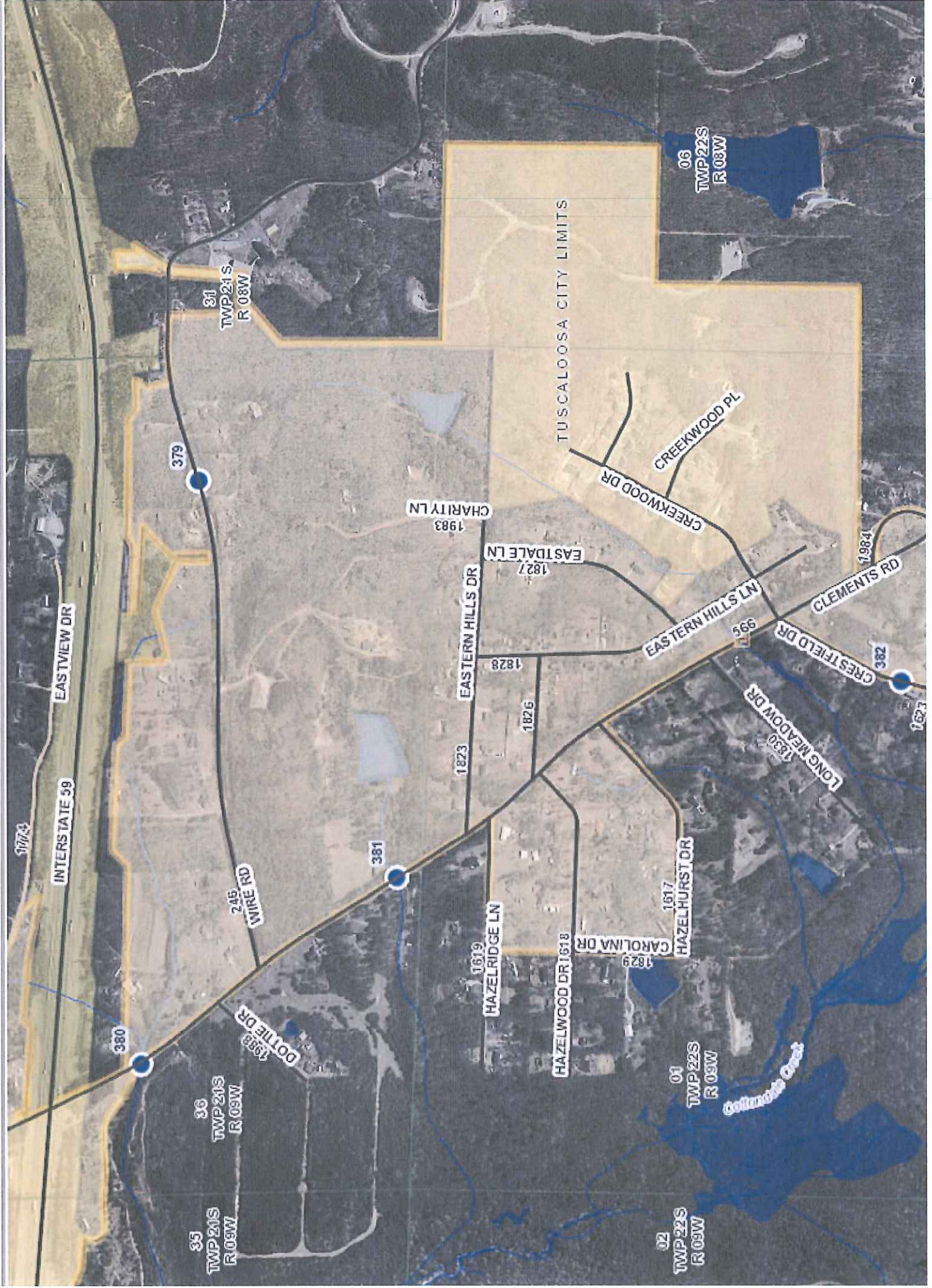
Map No. 19



Tuscaloosa County Storm Sewer Outfall Points

Map No. 20





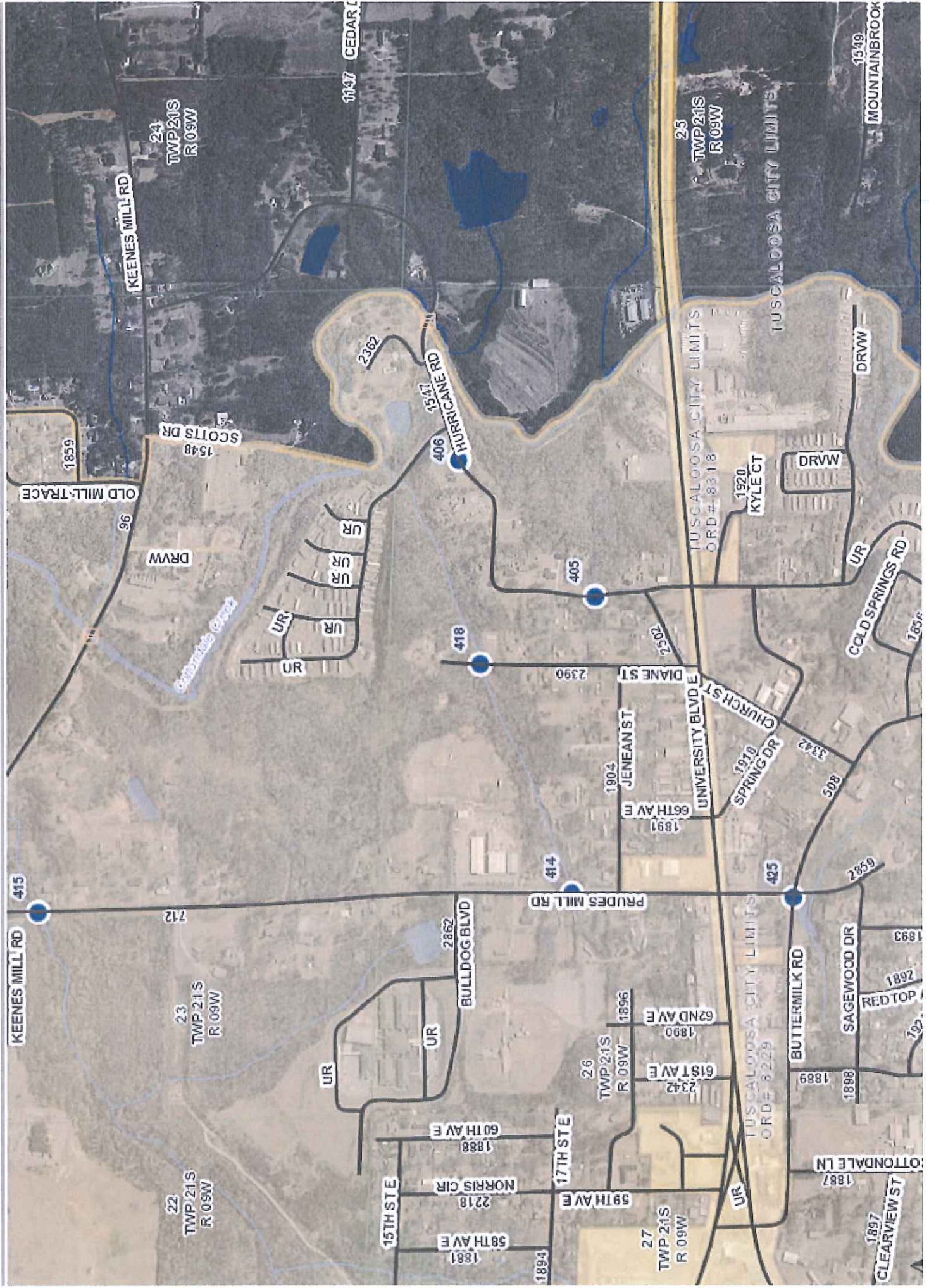
Tuscaloosa County Storm Sewer Outfall Points

Map No. 22



Tuscaloosa County Storm Sewer Outfall Points

Map No. 23









Date	By	Pt	Road Name	Road ID	Latitude	Longitude	Diameter	Length	Dimensions
11/7/2011		124.0	Meadow Ridge Dr		33.13623	-87.53412			
11/7/2011		128.0	Bear Creek Rd		33.13220	-87.53007	18	36	
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	24	80	
8/29/2014	CTO	448.0	Uniroyal-Goodrich Blvd		33.19400	-87.61716	48	186	
4/16/2013	CTO	005.0	Graceland Rd	0011	33.31193	-87.59486	60	65	
4/16/2013	CTO	005.3	Graceland Rd	0011	33.31224	-87.60059	18	40	
4/16/2013	CTO	005.2	Graceland Rd	0011	33.31216	-87.59901	18	48	
4/16/2013	CTO	005.1	Graceland Rd	0011	33.31202	-87.59240	18	48	
4/23/2013	CTO	007.0	Valley Rd	0026	33.32016	-87.59953	24	48	
8/14/2014	CTO	421.0	Keenes Mill Rd	0096	33.19604	-87.41219	60	42	
6/26/2013	CTO	349.0	Raintree Cir	0143	33.11183	-87.49347	18	40	
6/26/2013	CTO	350.0	Raintree Cir	0143	33.11178	-87.49554	18	36	
6/26/2013	CTO	351.0	Raintree Cir	0143	33.10943	-87.49561	18	40	
6/26/2013	CTO	352.0	Raintree Cir	0143	33.10835	-87.49454	18	40	
6/26/2013	CTO	353.0	Raintree Cir	0143	33.10905	-87.49230	18	33	
6/26/2013	CTO	354.0	Raintree Cir	0143	33.10827	-87.49545	12	98	
6/26/2013	CTO	356.0	Raintree Cir	0143	33.10960	-87.49187	24	40	
6/24/2013	CTO	341.0	Monticello Dr	0145	33.11226	-87.48587	24	52	
6/24/2013	CTO	342.0	Monticello Dr	0145	33.11243	-87.48654	24	80	
6/24/2013	CTO	339.0	Monticello Dr	0145	33.11458	-87.48133	48	48	
6/24/2013	CTO	338.0	Monticello Dr	0145	33.11543	-87.48027	24	80	
6/24/2013	CTO	340.0	Monticello Dr	0145	33.11352	-87.48267	30	185	

Material	Condition	No Struc	Notes	MS4 Yes/No
Concrete	Good	2	Drop Inlets	
Metal	Good	2		
Concrete	Good	1	Curb Outlet on Right side	
Concrete	Good	1	Drop Inlet on Left side	
Concrete	Good	1	Drop Inlet on right Side	
Concrete	Good	1	Drop Inlet on Right Side	
Concrete	Good	1	Curb Outlet with Flume - on Right Side	
Concrete	Good	1	Drop Inlet on Left Side	
Concrete	Good	1	Drop Inlet on Left Side	
Concrete	Good	1	Drop Inlet on Right Side	
Concrete	Good	1	Concrete Pipe with Flared Ends	
Concrete	Good	1	Concrete Flume Built on Both Ends	
Metal	Good		Struts are good - some light drift	
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good	2		
Concrete	Poor		Pipe is broke off on inlet end	
Concrete	Good			
Concrete	Poor		50 percent stopped up with silt and sand	
Concrete	Good			
Concrete	Poor	2	Inlet ends are both cracked and busted u	
Concrete	Good		Approx 58 feet of 24 inch metal pipe has	
Concrete	Good			
Metal	Poor		Rusted out on both ends	
Metal	Poor		Bent on inlet end - rusted out on both en	
Metal	Poor		Rusted out	
Metal	Poor		Rusted out	
Metal	Good		Pipe runs from inlet box to inlet box	

Date	By	Pt	Road Name	Road ID	Latitude	Longitude	Diameter	Length	Dimensions
6/24/2013	CTO	343.0	Monticello Dr	0145	33.11324	-87.49191	18	40	
6/24/2013	CTO	344.0	Monticello Dr	0145	33.11295	-87.49341	18	53	
6/28/2013	CTO	361.0	Price Rd	0146	33.10926	-87.47596	18	36	
6/28/2013	CTO	362.0	Price Rd	0146	33.10490	-87.47920	12	31	
6/26/2013	CTO	357.0	Raintree Dr	0147	33.10971	-87.49185	24	40	
6/26/2013	CTO	358.0	Raintree Dr	0147	33.10921	-87.48801	24	40	
6/26/2013	CTO	359.0	Bear Creek Rd	0148	33.10897	-87.48786	18	40	
6/26/2013	CTO	360.0	Bear Creek Rd	0148	33.10643	-87.48402	36	38	
6/19/2013	CTO	310.0	Skelton Rd	0149	33.10484	-87.46713	18	32	
6/19/2013	CTO	311.0	Skelton Rd	0149	33.10357	-87.46664	15	32	
6/19/2013	CTO	312.0	Skelton Rd	0149	33.09866	-87.46486	24	40	
6/19/2013	CTO	313.0	Skelton Rd	0149	33.09283	-87.45944	15	48	
5/22/2013	CTO	279.0	Butterfly Dr	0150	33.10883	-87.46525	18	40	
5/22/2013	CTO	280.0	Butterfly Dr	0150	33.10932	-87.46548	30	32	
5/22/2013	CTO	283.0	Butterfly Dr	0150	33.11050	-87.46597	16	71	
5/23/2013	CTO	299.0	Butterfly Dr	0150	33.10600	-87.45895	30	48	
5/23/2013	CTO	300.0	Butterfly Dr	0150	33.10603	-87.46050	18	32	
5/24/2013	CTO	305.0	Butterfly Dr	0150	33.10765	-87.46477	18	32	
5/10/2012		182.0	Longbow Dr	0172	33.07809	-87.55818	24	40	
7/1/2013	CTO	368.0	Upper Hull Rd	0179	33.05516	-87.58335	24	48	
7/2/2013	CTO	369.0	Upper Hull Rd	0179	33.05552	-87.57786	24	45	
7/2/2013	CTO	370.0	Upper Hull Rd	0179	33.05680	-87.57600	42	74	
7/2/2013	CTO	371.0	Upper Hull Rd	0179	33.05984	-87.57268	42	70	
5/22/2013	CTO	285.0	Park Forest Trace	0235	33.11172	-87.46812	18	62	
5/22/2013	CTO	286.0	Park Forest Trace	0235	33.11277	-87.46440	30	60	
5/22/2013	CTO	287.0	Park Forest Trace	0235	33.11290	-87.46268	36	44	
5/23/2013	CTO	290.0	Park Forest Trace	0235	33.11303	-87.45867	36	48	
5/22/2013	CTO	281.0	Overland Rd	0237	33.11036	-87.46632	15	24	
5/22/2013	CTO	282.0	Overland Rd	0237	33.10964	-87.64837	16	120	
5/22/2013	CTO	284.0	Overland Rd	0237	33.11071	-87.46449	15	32	

Material	Condition	No Struc	Notes	MS4 Yes/No
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good	2		
Concrete	Poor		End Joint is Falling away leaning into the	
Concrete	Poor		Inlet end is broke off a little	
Concrete	Good			
Concrete	Good		Near speed table	
Concrete	Poor		Broken on both ends	
Metal	Poor		Outlet end bent almost shut	
Concrete	Good			
Metal	Good		Has steel grate on uphill side of road	
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good		Outlet end has a small crack	
Metal	Good			
Metal	Poor		Pipe is bent up bad on both ends.	
Metal	Good			
Metal	Good			
Concrete	Good			
Concrete	Good	3		
Concrete	Poor	3	30% stopped up	
Concrete	Poor		Inlet end has slight damage - exposed ste	
Metal	Good		Could not find outlet end - length based	
Concrete	Good			

Date	By	Pt	Road Name	Road ID	Latitude	Longitude	Diameter	Length	Dimensions
5/23/2013	CTO	293.0	Overland Rd	0237	33.11129	-87.45721	60	83	
4/21/2014	CTO	379.0	Wire Rd	0246	33.16960	-87.42410	24	100	
7/10/2013	CTO	374.0	Old Greensboro Rd	0248	33.07099	-87.56271		48	
3/6/2012		076.0	Old Greensboro Rd	0248	33.14054	-87.54874	30	90	
7/31/2013	CTO	375.0	Kings Loop Rd	0261	33.06237	-87.57821	72	90	
7/31/2013	CTO	376.0	Kings Loop Rd	0261	33.06247	-87.58160	21	37	
7/31/2013	CTO	377.0	Kings Loop Rd	0261	33.06866	-87.58019	30	29	
12/14/201		178.0	Kings Loop Rd	0261	33.06244	-87.57827	72	70	
12/14/201		179.0	Kings Loop Rd	0261	33.06253	-87.58149	24	36	
12/14/201		180.0	Kings Loop Rd	0261	33.06868	-87.58013	36	35	
6/24/2013	CTO	158.1	Constitution Dr	0274	33.11767	-87.48833	18	48	0
6/24/2013	CTO	158.0	Constitution Dr	0274	33.11648	-87.49117	42	42	
4/23/2013	CTO	006.1	Knoll Rd	0427	33.31593	-87.60070	18	40	
4/23/2013	CTO	006.2	Knoll Rd	0427	33.31578	-87.59758	24	40	
4/24/2013	CTO	006.5	Knollwood Rd	0428	33.31549	-87.59145	36	48	
4/25/2013	CTO	218.0	Elderberry Lane	0430	33.30734	-87.59718	24	48	
4/25/2013	CTO	219.0	Elderberry Lane	0430	33.30762	-87.59808	24	40	
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			
4/25/2013	CTO	217.0	Cranberry Dr	0432	33.30494	-87.59734	30	48	
4/25/2013	CTO	220.0	Beech Street	0433	33.30886	-87.59479	24	40	
5/14/2013	CTO	235.0	Charcoal Dr	0440	33.31285	-87.57006	18	32	
5/14/2013	CTO	231.0	Ash Rd	0441	33.31449	-87.57236	18	40	
5/14/2013	CTO	232.0	Ash Rd	0441	33.31572	-87.57009	18	40	
5/14/2013	CTO	237.0	Smokey Hollow Rd	0442	33.31521	-87.57001	24	40	
5/14/2013	CTO	236.0	Smokey Hollow Rd	0442	33.31196	-87.57004	24	32	
5/14/2013	CTO	238.0	Sleepy Valley Rd	0444	33.30965	-87.56141	24	64	

Material	Condition	No Struc	Notes	MS4 Yes/No
Concrete	Good	2	Inlet end has some blockage but is still fl	
Concrete	Good	1	Has a concrete flume at the end to direct	
Concrete	Good		Box Culvert	
Concrete	Good			
Concrete	Good	2	End Joint On inlet end has broke loose a	
Concrete	Good		Pipe is old and weathered	
Metal	Poor		Inlet end is bent up real bad, outlet end g	
Concrete	Good	2		
Concrete	Good			
Metal	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Metal	Poor		Landowner installed this pipe on private	
Concrete	Good			
Concrete	Poor		Pipe Is almost copleately Covered up on b	
Concrete	Good		Pipe is old and weathered but still struct	
Concrete	Good		Concrete box inlet approx 30' Apart	
Concrete	Good		Concrete Box inlet approx 30' apart	
Concrete	Good		Concrete Box Inlet (off road)	
Steel	Good		Steel Grate (off road)	
Concrete	Good		Concrete Box Inlet Approx 28' Apart	
Concrete	Poor		Broke off on one end	
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Poor		Pipe is broken on outlet end	
Concrete	Good			
Concrete	Good			

Date	By	Pt	Road Name	Road ID	Latitude	Longitude	Diameter	Length	Dimensions
5/14/2013	CTO	239.0	Sleepy Valley Rd	0444	33.30950	-87.55846			
5/15/2013	CTO	244.0	Telmar Dr	0445	33.30445	-87.56888	18	40	
5/15/2013	CTO	245.0	Telmar Dr	0445	33.30416	-87.56318	24	66	
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	251.0	Lakefront Village	0447	33.30239	-87.56887	18	40	
5/15/2013	CTO	252.0	Lakefront Village	0447	33.30242	-87.56831	36	50	
6/21/2013	CTO	320.0	Old Dominion Dr	0449	33.11067	-87.48406	18	32	
6/21/2013	CTO	314.0	Mt. Vernon Dr	0450	33.11396	-87.48306	24	68	
6/21/2013	CTO	315.0	Mt. Vernon Dr	0450	33.11543	-87.48470	18	54	
6/21/2013	CTO	317.0	Mt. Vernon Dr	0450	33.11225	-87.48106	24	32	
6/21/2013	CTO	318.0	Mt. Vernon Dr	0450	33.10963	-87.48124	18	70	
6/21/2013	CTO	319.0	Mt. Vernon Dr	0450	33.10999	-87.48468	30	40	
6/21/2013	CTO	316.0	Lexington Dr	0452	33.11479	-87.48725	18	40	
2/9/2012	BC	142.0	Lexington Dr	0452	33.11625	-87.48404	24	50	
6/19/2013	CTO	308.0	Rangeline Rd	0457	33.09981	-87.46383	18	32	
6/19/2013	CTO	309.0	Rangeline Rd	0457	33.09980	-87.46421	18	32	
11/7/2011		125.0	Hillcrest School Rd	0468	33.13383	-87.53258	36	60	
11/7/2011		126.0	Hillcrest School Rd	0468	33.13443	-87.54137	24	45	
3/20/2013	CTO	057.0	Jaybird Rd	0497	33.18253	-87.45531	18	36	
3/20/2013	CTO	058.0	Jaybird Rd	0497	33.18241	-87.45557	42	45	
3/20/2013	CTO	057.1	Jaybird Rd	0497	33.18237	-87.45569	48	37	
3/20/2013	CTO	057.2	Jaybird Rd	0497	33.18115	-87.45889	16	32	
3/20/2013	CTO	057.3	Jaybird Rd	0497	33.18125	-87.00000	36	52	
3/22/2013	CTO	057.4	Jaybird Rd	0497	33.18138	-87.46452	24	29	
8/18/2014	CTO	425.0	Buttermilk Rd	0508	33.18831	-87.45176	30	50	
8/29/2014	CTO	449.0	Sanders Ferry Rd	0516	33.19599	-87.61530	18	24	
5/6/2014	CTO	391.0	Beulah Lake Rd	0554	33.17207	-87.37724	18	40	

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Date	By	Pt	Road Name	Road ID	Latitude	Longitude	Diameter	Length	Dimensions
4/26/2013	CTO	225.0	Blueberry Dr	0559	33.30485	-87.59575	18	41	
8/12/2014	CTO	419.0	Canyon Lake Rd	0565	33.19411	-87.42557		68	
8/26/2014	CTO	432.0	Canyon Lake Rd	0565	33.19421	-87.42220	15	32	
8/26/2014	CTO	433.0	Canyon Lake Rd	0565	33.19427	-87.42113	18	40	
8/26/2014	CTO	434.0	Canyon Lake Rd	0565	33.19419	-87.42030	18	40	
8/26/2014	CTO	435.0	Canyon Lake Rd	0565	33.19098	-87.41805			5 x 6
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	24	68	
5/23/2013	CTO	288.0	Lullaby Lane	0569	33.11304	-87.46116	24	48	
5/24/2013	CTO	301.0	Lullaby Lane	0569	33.10833	-87.46073	30	48	
4/24/2013	CTO	006.3	North Country Drive	0622	33.31850	-87.59880	18	26	
8/11/2014	CTO	415.0	Prudes Mill Rd	0712	33.20148	-87.45206	84	80	
8/11/2014	CTO	414.0	Prudes Mill Rd	0712	33.19217	-87.45168	48	50	
5/23/2014	CTO	398.0	South Davis Rd	0717	33.17125	-87.38570	72	34	
8/4/2014	CTO	401.0	Unity Rd	0721	33.17372	-87.62141	18	30	
7/1/2013	CTO	363.0	Lower Hull Rd	0726	33.04125	-87.58689	24	48	
7/1/2013	CTO	364.0	Lower Hull Rd	0726	33.04332	-87.59190		40	5 x 10
7/1/2013	CTO	365.0	Lower Hull Rd	0726	33.04442	-87.59325	36	48	
7/1/2013	CTO	366.0	Lower Hull Rd	0726	33.04731	-87.59454		48	5 x 7
7/1/2013	CTO	367.0	Lower Hull Rd	0726	33.05441	-87.59445	24	46	
1/6/2012	BC	007.1	Stephens Mountain Rd	0762	33.32325	-87.59939	36	43	
4/24/2013	CTO	007.3	Stephens Mountain Rd	0762	33.32318	-87.59966	24	66	
4/24/2013	CTO	006.4	Split Rail Lane (N)	0767	33.31947	-87.59884		22	
3/29/2013	CTO	199.0	Applewood Dr	0820	33.26073	-87.60939	18	56	
4/4/2013	CTO	200.0	Applewood Dr	0820	33.26088	-87.61160	15	33	
3/29/2013	CTO	199.0	Applewood Dr	0820	33.26073	-87.60939	18	31	
6/26/2013	CTO	355.0	Minuteman Drive	0913	33.10656	-87.49510	72	30	
5/23/2013	CTO	296.0	Hummingbird Lane	0915	33.10933	-87.45840	30	40	
5/23/2013	CTO	297.0	Hummingbird Lane	0915	33.10778	-87.45841	18	40	
5/14/2013	CTO	234.0	Kindling Dr	0999	33.31418	-87.57009	18	32	

Material	Condition	No Struc	Notes	MS4 Yes/No
Concrete	Good		Pipe is good but ditch needs to be dug o	
Concrete	Good	2	Dam is right beside 2 span bridge - spillw	
Concrete	Good	1		
Concrete	Good	1		
Concrete	Good	1		
Concrete	Good	1	2 Span Concrete Bridge at Lower Lake	
Concrete	Good	2	48 inch metal pipe added to end goes ou	
Concrete	Good	1		
Concrete	Good			
Concrete	Good			
	Poor		Concrete inlet on one end - corr metal pi	
Metal	Poor	2	Bent real bad and nearly stopped up on i	
Concrete	Good	2	Steel Grate Inlet - Drops to Concrete Pip	
Metal	Good	1		
Concrete	Good	1		
Concrete	Good		Box Culvert 5' Tall 10' Wide	
Concrete	Good		Box Culvert 5' Tall 7' Wide	
Concrete	Poor		Broke off on the inlet end	
Concrete	Good			
Metal	Poor		Bent on the end	
	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Metal	Good			
Concrete	Poor		Pipe is completely buried and filled in wit	
Concrete	Good			
Concrete	Poor		Pipe is broken on outlet end	

Date	By	Pt	Road Name	Road ID	Latitude	Longitude	Diameter	Length	Dimensions
5/14/2013	CTO	233.0	Kindling Dr	0999	33.31417	-87.57216	18	40	
5/16/2013	CTO	259.0	Middle Lake Rd	1003	33.29636	-87.56229	12	36	
5/16/2013	CTO	254.0	Lakewood Dr	1004	33.29419	-87.56855	24	92	
5/15/2013	CTO	256.0	Lakewood Dr	1004	33.29591	-87.56451	24	133	
5/14/2013	CTO	240.0	Carolwood-Lakeview Dr	1070	33.30766	-87.56189	18	48	
5/14/2013	CTO	241.0	Carolwood-Lakeview Dr	1070	33.30628	-87.56197	18	32	
5/14/2013	CTO	242.0	Carolwood-Lakeview Dr	1070	33.30607	-87.56541	24	40	
5/14/2013	CTO	243.0	Carolwood-Lakeview Dr	1070	33.30623	-87.56890	18	38	
3/7/2012	BC	017.0	Earl Fields Cir	1077	33.27977	-87.57174	30	45	
5/15/2013	CTO	253.0	Paddleboat Landing	1084	33.30258	-87.56765	15	32	
5/15/2013	CTO	255.0	Brookview Cir	1086	33.29430	-87.56623	12	40	
5/16/2013	CTO	260.0	Lakewood Lane	1087	33.29476	-87.56302	18	42	
5/16/2013	CTO	261.0	Lakewood Lane	1087	33.29475	-87.56375	24	141	
5/6/2014	CTO	392.0	East Manor Dr	1136	33.16980	-87.37588	18	42	
5/6/2014	CTO	393.0	East Manor Dr	1136	33.16832	-87.37586	18	42	
5/6/2014	CTO	394.0	East Manor Dr	1136	33.16691	-87.37584	18	52	
8/26/2014	CTO	436.0	Upper Lake Dr	1149	33.19129	-87.41681			
4/25/2013	CTO	221.0	Apple Lane	1187	33.30783	-87.59328	30	40	
4/25/2013	CTO	222.0	Apple Lane	1187	33.30783	-87.59328	30	64	
4/26/2013	CTO	223.0	Apple Lane	1187	33.30597	-87.59332	15	32	
4/26/2013	CTO	224.0	Apple Lane	1187	33.30479	-87.59382	18	57	
5/23/2014	CTO	397.0	Washington Estates	1204	33.16918	-87.39274	16	30	
5/23/2014	CTO	396.0	Mallard Dr	1205	33.16917	-87.39420	72	87	
3/9/2012	BC	038.0	Fosters Ferry Rd	1250	33.18537	-87.59578		42	
3/7/2012	BC	018.0	Dick Hagler Rd	1335	33.27542	-87.57246	24	42	
4/23/2014	CTO	388.0	Diamond Dr	1339	33.17208	-87.37900	24	44	
4/23/2014	CTO	385.0	Melrose Ln	1341	33.17270	-87.38178	72	60	
4/23/2014	CTO	386.0	Melrose Ln	1341	33.17270	-87.38185	24	40	
5/6/2014	CTO	395.0	West Manor Dr	1342	33.16653	-87.37807			
5/6/2014	CTO	389.0	Beulah Lake Ln	1402	33.17421	-87.37434	24	40	

Material	Condition	No Struc	Notes	MS4 Yes/No
Concrete	Good			
Concrete	Good		Steel grate at outlet end connecting this	
Concrete	Poor		Steel grate on inlet end - flare concrete o	
Concrete	Poor		Trees are laying across exposed pipe bro	
Concrete	Good			
Concrete	Poor		Broken on inlet end	
Concrete	Good			
Concrete	Poor		Stopped up 50%	
	Good			no
Concrete	Good			
Metal	Good			
Concrete	Poor		Stopped up 75 % on outlet end	
Concrete	Good		Property owner added 24" plastic pipe t	
Concrete	Good	1	Pipe is under water	
Concrete	Good	1		
Concrete	Good	1	At big Curve	
Concrete	Good	1	Concrete Spillway and Wooden Bridge fo	
Concrete	Good			
Concrete	Good		Pipes discharge into a catch basin then in	
Concrete	Good			
Concrete	Poor		Pipe looks fairly new but it is broke off o	
Metal	Good	1		
Metal	Good	1		
Concrete	Good	2		
	Good			no
Metal	Good	2	Up the street from this there is an artesi	
Metal	Good	5		
Concrete	Good	3	The original pipe crossing road has pipes No structure here - water comes down h	
Concrete	Good	1	Near Address 10392 Beulah Lake Ln	

Date	By	Pt	Road Name	Road ID	Latitude	Longitude	Diameter	Length	Dimensions
5/6/2014	CTO	390.0	Beulah Lake Ln	1402	33.17188	-87.37413	18	50	
6/26/2013	CTO	345.0	South Ridge Rd	1461	33.12542	-87.48408	18	37	
6/26/2013	CTO	346.0	South Ridge Rd	1461	33.12467	-87.48410	12	27	
6/26/2013	CTO	347.0	South Ridge Rd	1461	33.12172	-87.49068	18	24	
6/26/2013	CTO	348.0	South Ridge Rd	1461	33.12098	-87.49097	18	24	
5/24/2013	CTO	306.0	Dallie Dr	1463	33.10691	-87.46447	18	48	
5/24/2013	CTO	307.0	Dallie Dr	1463	33.10668	-87.46505	24	40	
4/5/2013	CTO	205.0	Smith Jackson Rd	1532	33.27119	-87.60476	24	40	
4/5/2013	CTO	206.0	Smith Jackson Rd	1532	33.27151	-87.60471	18	40	
4/5/2013	CTO	207.0	Smith Jackson Rd	1532	33.27256	-87.60447	18	48	
4/5/2013	CTO	208.0	Smith Jackson Rd	1532	33.27459	-87.60398	18	40	
8/5/2014	CTO	405.0	Hurricane Rd	1547	33.19176	-87.44556	18	32	
8/8/2014	CTO	406.0	Hurricane Rd	1547	33.19413	-87.44274	15	28	
2/29/2016	BC	459.0	Maxwell Loop	157	33.07930	-87.55690		30	
4/22/2014	CTO	382.0	Crestfield Dr	1622	33.15733	-87.42823	15	27	
4/23/2014	CTO	383.0	Whispering Lane	1624	33.15506	-87.42885	24	40	
4/23/2014	CTO	384.0	Whispering Lane	1624	33.15502	-87.42867	12	74	
3/6/2012		068.0	Plantation Rd	1625	33.14703	-87.55602	36	50	
3/6/2012		069.0	Plantation Rd	1625	33.14447	-87.55602	48	75	
11/22/201		114.0	Country Oaks Dr	1664	33.13792	-87.54410	18	57	
11/22/201		115.0	Countrywood Dr	1665	33.13944	-87.54028	48	39	
8/18/2014	CTO	426.0	Golden Acres Dr	1801	33.14675	-87.46146	24	33	
4/4/2013	CTO	201.0	Brookwood Dr	1834	33.25963	-87.60958	18	27	
4/1/2013	CTO	193.0	Pinedale Dr	1835	33.26181	-87.60870	18	40	
4/1/2013	CTO	195.0	Pinedale Dr	1835	33.26317	-87.60985	18	32	
4/1/2013	CTO	196.0	Pinedale Dr	1835	33.26341	-87.61212	15	41	
4/1/2013	CTO	197.0	Pinedale Dr	1835	33.26302	-87.60714	24	32	
4/1/2013	CTO	198.0	Cypress View Lane	1837	33.26177	-87.60877	18	40	
3/29/2013	CTO	202.0	Candle Lane	1907	33.25914	-87.60889	18	32	
3/29/2013	CTO	203.0	Candle Lane	1907	33.25838	-87.60954	15	28	

Material	Condition	No Struc	Notes	MS4 Yes/No
Concrete	Poor	1	Broken on outlet end - Pipe is 300' from	
Concrete	Good		Right in front of Nichols Garage	
Concrete	Good			
Metal	Good		Some sand in pipe, but not too bad at thi	
Metal	Good			
Metal	Good		Bent up a little on the inlet end.	
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good	1		
Concrete	Good	1		
Concrete	okay	2	Double Barrel Culvert	
Concrete	Good	1		
Concrete	Good	1		
Concrete	Good	1		
Concrete	Good			
Concrete	Good			
Concrete	Good			
Metal	Good			
Concrete	Good	1		
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			
Concrete	Good			

Date	By	Pt	Road Name	Road ID	Latitude	Longitude	Diameter	Length	Dimensions
3/29/2013	CTO	204.0	Candle Lane	1907	33.25864	-87.61112	18	32	
4/12/2013	CTO	211.0	Chesnutt Hills Dr	1971	33.27497	-87.60301	18	40	
8/18/2014	CTO	424.0	49th AVE E	1981	33.21592	-87.47321			
8/12/2014	CTO	420.0	Twin Springs Cir	2144	33.19363	-87.42832	24	32	
3/15/2013	CTO	160.0	Jordan Mcgee Rd	2154	33.17472	-87.46460		34	
4/5/2013	CTO	209.0	Oak Hill Dr	2184	33.27377	-87.60420	12	38	
4/5/2013	CTO	210.0	Oak Hill Dr	2184	33.27375	-87.60399	18	58	
4/15/2013	CTO	212.0	Oak Hill Dr	2184	33.27392	-87.60641	18	30	
4/15/2013	CTO	213.0	Oak Grove Lane	2185	33.27389	-87.60709	18	34	
4/15/2013	CTO	214.0	Oak Grove Lane	2185	33.27303	-87.60713	18	141	
4/15/2013	CTO	215.0	Oak Grove Lane	2185	33.27263	-87.60712	24	34	
4/15/2013	CTO	216.0	River Oak Dr	2186	33.27124	-87.60264	18	32	
2/9/2012		145.0	Rainhill Dr	2257	33.10812	-87.48994	24	36	
4/24/2013	CTO	006.6	Falcon Cir	2344	33.31800	-87.59638			
4/24/2013	CTO	006.7	Falcon Cir	2344	33.31813	-87.59549			
11/22/201		116.0	Oakleaf Circle	2361	33.13839	-87.54265	18	30	
4/23/2014	CTO	387.0	Ruby Dr	2370	33.17210	-87.37902	24	36	
8/11/2014	CTO	418.0	Diane St	2390	33.19377	-87.44695	48	60	
2/29/2016	BC	461.0	Old Greensboro Road	248	33.07840	-87.55610		40	
8/18/2014	CTO	422.0	1st ST NE	2494	33.21638	-87.46806			
11/7/2011		127.0	Gipson Dr	2496	33.13443	-87.54173	18	65	
5/15/2013	CTO	250.0	Telmar Lane	2563	33.30282	-87.56210	36	68	
8/18/2014	CTO	423.0	51st AVE E	2636	33.21676	-87.46956			
5/16/2013	CTO	257.0	Lakewood Loop	2718	33.29940	-87.56253	18	34	
5/16/2013	CTO	258.0	Lakewood Loop	2718	33.29806	-87.56212	18	40	
2/29/2016	BC	460.0	Harrison Drive	2841	33.10720	-87.56180		35	
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			

Date	By	Pt	Road Name	Road ID	Latitude	Longitude	Diameter	Length	Dimensions
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			
2/29/2016	BC	458.0	Maxwell Circle	3243	33.11410	-87.55690		35	

Material	Condition	No Struc	Notes	MS4 Yes/No
Concrete	Good	1 Left		
Concrete	Good	1 Right		
Concrete	Good	1 Left		
Concrete	Good	1 Right		
Concrete	Good	1 Drop Inlet on South Side		

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Appendix G

Camp and Bridge Yard Illicit Discharge detection
and Pollution Prevention and Good
Housekeeping Training

-List of Attendees

Tuscaloosa County

March 22, 2016

**Camp Coker, Camp Cedar Cove and the Bridge Yard Environmental Hazardous Waste and
Stormwater Training**

Attendees

Mike Henderson

Bob Cunningham

Tony Green

Jared Kimbrell

Jimmy Falls

David Ponder

James Huff

Randy Anderson

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Appendix H

Spreadsheet summarizing reported or
discovered potential violations of stormwater
regulations

2015-2016 Tracking of Potential Stormwater Violations				
Property Location	Property Owner	Date of Letter	Status	Comments
Eastern Valley Road, Parcel 27-01-12-0-000-038-001	John Lee	4/17/2015	un-resolved	Disturbed acreage is over one-acre, 7-Day Letter sent. Returned. Unclaimed and unable to forward.
Thomas Road, Parcel 43-01-02-0-000-16-001	Shelley D. Andoe	4/17/2015	Resolved	BMP's Installed but not maintained. Turned over to ADEM for inspection and possible enforcement.
13562 Johns Road, Parcel 24-04-18-0-001-015-003	Michael Bradley Seagle	8/4/2015	un-resolved	No BMP's installed. Lot appears Returned . Not deliverable as addressed
Malone Creek Road, Parcel 33-09-30-0-000-006-001	Roebuck Holdings LLC	12/7/2015	Resolved	Sediment leaving site into County Ditch. Property Owner installed BMP's
14175 Paul Howell Road, Parcel 20-03-08-001-022-012	Destination Homes LLC	12/18/2016	Resolved	Property owner installed silt fence and seeds
11216 Indian Creek Road, Parcel 42-04-18-0-000-009-008	David Ball	1.29.16	Resolved	Disturbed acre was over one acre. 7-Day Letter sent. On-Site meeting held. Property owner seeded lot
18769 Gorgas Rd., Forest Industries	Mike Jones	1.22.16	Resolved	Tracking mud onto County Road. 7-Day letter sent. No resolution. Turned over to ADEM for inspection and possible enforcement.
Hidden Forest Lane, Parcels 20-02-09-0-001-027-006,007,008,009,015, and6	Frameworks Construction	N/A	Resolved	Sediment getting into the street and inlets April 2 and 3 Phone calls. Lot seeded.
Hidden Forest Lane, Parcels 20-02-09-0-001-027-006,007,008,009,015, and6	Frameworks Construction	N/A	Resolved	Sediment into street. Phone call December 16. Contractor installed a Stone Construction Exit Pad
14184 Southland Drive	Chad Barnette	N/A	Resolved	Drainage Issue 12.9.15: Referred erosion issue to Jack McGuire, engineer of record for River Oaks
Waterford Circle	Next lot from 2028	N/A	Resolved	Sediment leaving site into neighbors yard. Discussed with Contractor. Silt Fence installed
Wesley Chapel Road	Buckley	N/A	Resolved	Site disturbed area over one acre . 8.10.16: Site fine-graded and seeded.
2127 Inverness Parkway, Parcel 36-05-15-0-001-006-059	Hassan Sameh	2.23.16	Pending	No grass cover on front or back yard. Significant erosion causing sediment to go across the street and down a cul-de-sac. Certified letter returned labelled " Unclaimed and unable to forward
Old Greensboro Road, Parcel # 43-01-02-0-000-005-002	Ebenezer Baptist Church	1.25.16	Unresolved	Erosion on Slope. Potential impacton County ROW.Returned . Unclaimed
Highway 43, South of Od Fayette Rd.	-----	N/A	Resolved	2.2. 16: Significant mud on paved shoulder due to activity on private land. Informed AIDOT.

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Appendix I

QCI Initial Training Certificates

QCI Training Program Certificate of Completion

is hereby granted to:

Jimmy Falls
Tuscaloosa County Public Works

for satisfactory completion of 8 instructional hours



Initial Training

April 30, 2015

John Carlton, Joel Seawell

Instructors

thompson
ENGINEERING

QCI NO: T2134

Expires: 4/30/2016

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:

Jeff Beams

Tuscaloosa County Public Works

for satisfactory completion of 8 instructional hours



Initial Training

June 25, 2015

John Carlton, Joel Seawell

Instructors



QCI NO: T4265

Expires: 6/25/2016

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:

Brent Lollar

Tuscaloosa County Public Works

for satisfactory completion of 8 instructional hours



Initial Training

June 25, 2015

John Carlton, Joel Seawell

Instructors

thompson
ENGINEERING

QCI NO: T4266

Expires: 6/25/2016

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.

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Appendix J

Spill Kits
-Packing List

Packing List

Page:

1

AIRE Industrial: 800-247-3846 ~ AIRE Whitewater: 800-247-3432 ~ Outcast Sporting Gear: 800-966-0976

Argonaut Inflatable Research &
Engineering, Inc.
2021 E Wilson Lane
Meridian, ID 83642-4092
(208) 888-1772

Shipping Number: 0137662

Ship Date: 6/3/2015

Order Number: 0126577

Order Date: 5/27/2015

Salesperson: 0032

Customer Number: 30-2TUSCALOOSAPW

Sold To:

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

Confirm To:

Ship To:

Tuscaloosa County Public Works
2810 35th Street
Tuscaloosa, AL 35401

Number of Packages:

5

Customer P. O.	Ship VIA	F. O. B.	Terms		
3155	Most Economical Method		Net 30		
Item Number		Unit	Ordered	Shipped	Backordered
942-006500	55 Gal Blue Drum-Oil	EA	3.000	3.000	0.000
750-000300	Zip-Ty 5.9" Nat., Panduit	EA	30.000	30.000	0.000
941-008890	1655MB- 55 Gal Drum OH Taper	EA	3.000	3.000	0.000
944-000101	30127 -15"x18" 3LayerMedOI 100	BALE	1.500	1.500	0.000
944-000220	SPS31200-3"x120"AbsorbentSk 15	BOX	0.999	1.000	0.000
944-000320	P1818O -18"x18"Pillow OIL 10	BOX	2.400	2.400	0.000
945-021100	A610S Chem Splash Goggle w/Cle	EA	6.000	6.000	0.000
945-021105	2013 Emergency Response Book	EA	3.000	3.000	0.000
945-021110	Disposable Nitrile Gloves- Lg	EA	6.000	6.000	0.000
945-021115	Hazmat Disposal Bags - Yellow	EA	15.000	15.000	0.000
942-006468	20 Gal Overpack/Spill Kit-OIL	EA	2.000	2.000	0.000
750-000300	Zip-Ty 5.9" Nat., Panduit	EA	12.000	12.000	0.000
941-008700	1650 -20Gal Screw On Lab Pack	EA	2.000	2.000	0.000
944-000101	30127 -15"x18" 3LayerMedOI 100	BALE	0.600	0.600	0.000
944-000201	SPS3480 -3"x48"AbsorbentSk40/b	BOX	0.250	0.250	0.000
944-000301	P1010O -10"x10"Pillow OIL 40	BOX	0.200	0.200	0.000
945-021100	A610S Chem Splash Goggle w/Cle	EA	2.000	2.000	0.000
945-021110	Disposable Nitrile Gloves- Lg	EA	4.000	4.000	0.000
945-021115	Hazmat Disposal Bags - Yellow	EA	6.000	6.000	0.000
945-021170	Tamperproof Seal Labels	EA	6.000	6.000	0.000

For returns or exchanges, please call the AIRE Inc. division noted in the header.

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Appendix K

County Shop Pollution Prevention Training

- Sign- in sheet
- Photo

Ray Hillard

Roger Dray

~~Andy~~

Steve Savage

Billy Taylor

Mike

Richard Beckford

Wayne Balm

Phil

Tim Crighton

Ray Fols

Ray Fols

Jeff Hunt

Katherine Holloway

SHOP

3-18-16

Pollution Prevention Training



Tuscaloosa County 2015-2016 Annual Report

Appendix L

Documents for Meetings Attended

LANCE R. LEFLEUR
DIRECTOR



ROBERT J. BENTLEY
GOVERNOR

*Attended by
Katherine Holloway*

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

January 20, 2016

MEMORANDUM

To: Conference Attendees

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

Re: Continuing Education Credits
Alabama Nonpoint Source Conference

This memo serves to verify that you attended the Alabama Nonpoint Source Conference that was hosted by the Alabama Department of Environmental Management on January 20, 2016. The event included technical presentations related to nonpoint source pollution.

Your participation in this event could result in 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.

Birmingham Branch
110 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)

Bob Cunningham

From: Scott Anders
Sent: Monday, January 25, 2016 2:37 PM
To: Mike Henderson
Cc: Bob Cunningham
Subject: Re: ADEM and Kiwanis

Thanks for volunteering to do the presentation.

On Jan 25, 2016, at 2:31 PM, Mike Henderson <Mhenderson@tuscco.com> wrote:

Bob

Today I gave a talk at the Tuscaloosa **Kiwanis Club** meeting on the status of the county road and bridge network. At Scott's suggestion, I spent time on environmental issues and responsible roadwork.

The discussion involved public education, as a summary of our educational outreach program was review. Mention was made of trying to educate young people in being responsible when ground is disturbed. The outreach program to Boy Scouts was brought up as well as the challenges we face educating our own employees to the new ways of BMP installation and maintenance.

There were 47 people present for the 30 minute presentation.

Mike



NORTH RIVER PROJECT COMMITTEE – LOWER SUB-BASIN MINUTES

March 16, 2015 1pm – 3pm

NOAA National Water Center

205 Hackberry Lane, Tuscaloosa, AL 35401

Attended by Bob Cunningham Tuscaloosa County
Mike Henderson " "

WELCOME

- Welcome and Introductions
 - Kellie Johnston, Black Warrior CWP Facilitator
 - Cdr. Nathan Hancock, NOAA National Water Center

PRESENTATIONS

The purpose of the meeting was two-fold; 1) to show the presentations given at the Alabama Water Resource Conference (2014) for a local audience, and 2) to bring new partners aboard.

- *From the Headwaters Down and Kindergarten Up – Every Partner in the Watershed Counts*, Mary Wallace Pitts, Coordinator - North River Watershed
- *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 Geologics in Tuscaloosa, AL
- *The Role Played by Local Government – A Case Study from the North River Watershed*, Scott Sanderford, City of Tuscaloosa Lakes Division
- *The City of Tuscaloosa Stormwater Management Program – A Partnering Case Study from the North River Watershed*, Josh Yates, Office of the City Engineer, City of Tuscaloosa
- *How the North River Project Complements the Development of Alabama's Water Policy*, Bennett Bearden, Water Policy and Law Institute-University of Alabama

OPPORTUNITIES FOR FUTURE COLLABORATION

- Funding of \$300 is needed to cover travel to bring the Water Wheel to WaterFest. Water Wheels is a mobile lab developed to train students, homeowners, community leaders, volunteers, educators and state leaders about water conservation and how we as citizens can help. Activities included

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Bob Cunningham

From: warriorcwp Facilitator <warriorcwp@hotmail.com>
Sent: Wednesday, March 11, 2015 3:04 PM
To: Bob Cunningham
Subject: Re: MEETING REMINDER: Lower Sub-basin/North River

Look forward to seeing you and Mike there.

Sent from my iPhone

On Mar 11, 2015, at 2:06 PM, Bob Cunningham <bcunningham@tuscco.com> wrote:

Kellie,

Mike Henderson and myself will be attending from our office.

Sincerely,

Bob Cunningham, P.E., CFM
Project Engineer/Assistant Floodplain Administrator/ADEM Permitting
TUSCALOOSA COUNTY PUBLIC WORKS DEPARTMENT
2810 35th Street
Tuscaloosa, AL 35401
(205) 345-6600, Ext. 225
bcunningham@tuscco.com

From: warriorcwp Facilitator [<mailto:warriorcwp@hotmail.com>]
Sent: Wednesday, March 11, 2015 10:08 AM
To: warriorcwp Facilitator
Subject: MEETING REMINDER: Lower Sub-basin/North River

SPECIAL NOTE #1: WE WILL NOT BE MEETING AT THE HEALTH DEPARTMENT

SPECIAL NOTE #2: DUE TO LIMITED SEATING - RSVP IS STRONGLY REQUESTED

YOU ARE INVITED TO A SPECIAL MEETING OF: *RSVP!!*

**The North River Watershed Management
Project (AGENDA ATTACHED)**

DATE: March 16, 2015 **TIME:** 1pm – 3pm
LOCATION: NOAA National Water Center, University of Alabama Campus
PLEASE RSVP as space is limited: Kellie Johnston, Black Warrior CWP Facilitator
Phone: 205-623-0147 Email: warriorcwp@hotmail.com

FIELD TRIP:

Visit the state of the art recycling plant on Kauloosa Avenue, and see how the City of Tuscaloosa is making recycling work in our community. Watch the entire recycling process from the observation deck. Learn the true benefits of waste reduction and how recycling in Tuscaloosa helps West Alabama's economy.

Kellie Johnston

Black Warrior Clean Water Partnership-Facilitator

Email: warriorcwp@hotmail.com

Phone: (205) 623-0147

Bob Cunningham

From: warriorcwp Facilitator <warriorcwp@hotmail.com>
Sent: Monday, April 13, 2015 10:50 AM
To: warriorcwp Facilitator
Subject: FIELD TOUR: Hulls Road Wastewater Wetland
Attachments: North River WaterFest 2015.pdf

April has been a busy month for the Black Warrior Clean Water Partnership partners! The City of Tuscaloosa hosted the North River WaterFest on April 10th with the participation from many of the North River partners. The Lake Tuscaloosa clean up was held the following day.

A great time was had by all ! Attached are some pictures of the Expo from the event.

For the April 20th Lower Sub-basin meeting, John Stevens with Sentell Engineering has arranged for a field tour of the Hulls Road Wastewater Wetland. Here are the particulars :-)

DATE/TIME: April 20th, 1pm - 3pm (meet at 12:45pm)

MEET AT: Big Sandy Gas Station, 15239 Hwy 69 S, Mounville, AL 35474

ATTIRE: Field clothes

Attended By: Bob Cunningham Tuscaloosa County

NEXT MEETING: May 18th

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



NORTH RIVER PROJECT COMMITTEE – LOWER SUB-BASIN MINUTES

May 18, 2015 1pm – 3pm

Alabama Department of Public Health

2350 Hargrove Road East, Tuscaloosa, AL 35405

ATTENDEES

Stuart McGregor-GSA

Sandi Stanley-GSA

Rebecca Bearden-GSA

Bennett Bearden-UA Water Policy & Law

Edward Patton-Patton Geologics

Mary W. Pitts-North River Watershed

Coordinator

Carmen Yelle-ADEM

Pat O'Neil-GSA

Abner Patton (Chair)-Patton Geologics

John Powell Webb-City of Northport

Anne Wynn-GSA

Adam Aderholt-Tutt Land

Amanda Espy-Brown-Univ of Alabama

Kevin Turner-City of Tuscaloosa

Josh Yates-City of Tuscaloosa

Katherine Cross-Tuscaloosa County

Bob Cunningham-Tuscaloosa County

OLD BUSINESS

☐ No minutes to review

Abner Patton, Chair

PROJECT UPDATES

☐ North River Watershed Implementation Plan Update (Attached)

☐ Facilitator Update

- o Steering Committee, May 19, 2015
- o North River Booklet currently in print.

NEW BUSINESS/PRESENTATION

UA Watershed Management Plan Development Course Presentation (GY370)

Students of the University of Alabama Department of Geography presented their experience and findings while participating in the course "Watershed Management Plan Development" (GY370). This course is designed to be primarily an experiential course and addresses development and implementation of a Watershed Management Plan.

The North River Watershed Management Plan is used as a working model with students reviewing theory before carrying out experiential learning in the field. At the conclusion of the course students will prepare a watershed management plan for Binion Creek, a sub-watershed of the North River Watershed.

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NORTH RIVER PROJECT COMMITTEE – LOWER SUB-BASIN AGENDA

June 15, 2015 1pm – 3pm

Alabama Department of Public Health

2350 Hargrove Road East, Tuscaloosa, AL 35405

Attendees

Jim Jeter – AFC
Bennett Bearden – UA
John Powell Webb – City of Northport
Scott Stephens – City of Northport
Talbert Essary – ALDOT
Bobby Huffstutler – Ala Power

Kevin Turner – City of Tuscaloosa
Mary W. Pitts – NR Coordinator
Dee Rowe – ALDOT
Josh Yates – City of Tuscaloosa
Bob Cunningham – Tuscaloosa County

Old Business

- ☐ Draft Minutes-May 18, 2015: Approved (Bearden/Yates) with the following change:
UA Watershed Management Plan Development Course (GY370) to (GY385)

Project Updates

- ☐ North River Watershed Implementation Plan Update
 - Coordinator Report (Pitts)
 - Attached
 - BMP Update (Pitts)
 - 5 BMPs to be installed by Patton Geologics
 - USDA/NRCS Tree Planting BMPs
 - Fayette County – 71 acres (pine and hardwoods)
 - Tuscaloosa County – 80 acres (pine and hardwoods)
 - Data Collection & Interpretation (Johnston on behalf of Patti Hurley, ADEM): ADEM is currently working on a North River delisting document and 319 success story.
 - Education & Outreach: (Johnston) The North River Booklet is complete and printed. Copies of the booklet were provided to attendees.
 - *Discovering Alabama: North River Watershed* Update: (Johnston) Episode should be complete by Fall 2015.
- ☐ Facilitator Update: (Johnston) Currently working on the following projects:
 - Brindley Creek WMP and STEPL model in support of the Cullman S&WCD 319 proposal
 - Ryan Creek WMP (advising) in support of the Top of Alabama Regional Council of Governments 604(b) project.
 - Village Creek Watershed Management Technical Support Committee (advising)
 - Turkey Creek SHU: Exploring the benefits of developing watershed group to address darter habitat.

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Bob Cunningham

From: warriorcwp Facilitator <warriorcwp@hotmail.com>
Sent: Thursday, July 16, 2015 1:12 PM
To: warriorcwp Facilitator
Subject: RE: Meeting Reminder: Lower Sub Meeting & Field Trip
Attachments: 20150720-Agenda.docx; 20150615-Minutes.docx

Just a reminder that the Lower Sub-basin will be meeting at the Richard A. Curry Environmental Services Complex (see below).

We will have time before the field tour for usual business and partner updates.

Attached for your consideration are the draft minutes from the June 15th meeting and agenda.

Look forward to seeing you there !!

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

From: warriorcwp@hotmail.com
To: warriorcwp@hotmail.com
Subject: Meeting Reminder: Lower Sub Meeting & Field Trip
Date: Wed, 8 Jul 2015 13:45:18 -0500

The next Lower Sub-basin/North River meeting will be a meeting/field trip combination.

LOCATION:

Richard A. Curry Environmental Services Complex
3440 Kauloosa Ave
Tuscaloosa, AL 35401

Parking is limited (15-20 spaces) but guests are welcome to park along the sidewalk.

DATE: July 20, 2015

TIME: 1pm - 3pm

MEETING AGENDA: North River update and other shared information

Attended By: Bob Cunningham Tuscaloosa County
Katherine Holloway " "
Brent Lollar " "



NORTH RIVER PROJECT COMMITTEE – LOWER SUB-BASIN MINUTES

August 17, 2015 1pm – 3pm
Alabama Department of Public Health
2350 Hargrove Road East, Tuscaloosa, AL 35405

Attendees

John Powell Webb – City of Northport
Kevin Turner – City of Tuscaloosa
Mary W. Pitts – NR Coordinator
Josh Yates – City of Tuscaloosa
Bob Cunningham – Tuscaloosa County
Len Simmons-Alabama Power
Barry Ambrose- ADPH

Edward Patton-Patton Geologics
Abner Patton-Patton Geologics
Patti Hurley – ADEM
Jim Jeter – Ala Forestry Commission
Brad Lang – Ala Forestry Commission
Bennett Bearden – UA Water Polity Institute
Susan Canaday – AL DOT

Old Business

- ☐ No minutes to be approved

Project Updates

- ☐ North River Watershed Implementation Plan Update (Attached)
☐ Facilitator Update: (Johnston) Currently working on the following projects:
- ☐ Cottonwood Creek WMP
 - ☐ Turkey Creek SHU Group
 - ☐ Village Creek WMP

New Business/Presentation

No new business

Partner Reports

- ☐ Webb: MS4 Partnership. New Northport planning engineer.
☐ Jeter: AFC partnering with USFWS on SHU initiatives. Continue to decipher new Waters of the US regulations. Promoting awareness that healthy forests = clean water.
☐ Yates: Clear Water Alabama Workshop. Working to update ordinance to include post-inspection of LIDs.

UPCOMING EVENTS

UPCOMING LOWER SUB-BASIN MEETINGS 2015:
November 16, 2015

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NORTH RIVER PROJECT COMMITTEE – LOWER SUB-BASIN MINUTES

October 19, 2015 1pm – 3pm

Alabama Department of Public Health

2350 Hargrove Road East, Tuscaloosa, AL 35405

Attendees

Kevin Turner – City of Tuscaloosa

Mary W. Pitts – NR Coordinator

Josh Yates – City of Tuscaloosa

Bob Cunningham – Tuscaloosa County

Barry Ambrose- ADPH

Edward Patton-Patton Geologics

Abner Patton-Patton Geologics

Katherine Holloway, Tuscaloosa County

Lance McCray, Westervelt

Larry Hardy, USDA/NRCS

Pat O'Neil, Geological Survey of Alabama

Stuart McGregor, Geological Survey of Alabama

Bernard Cassity, City of Tuscaloosa

Stephen Daly, City of Tuscaloosa

Anne Wynn, Geological Survey of Alabama

Todd Hester, UA Museum of Natural History

Allie Sorlie, UA Museum of Natural History

Old Business

- ☐ Review of August 17, 2015 Minutes: Motion to approve-O'Neil, 2nd McCray

Project Updates

- ☐ North River Watershed Implementation Plan Update (Attached)
- ☐ Facilitator Update: (Johnston) Currently working on the following projects:
- o Cottonwood Creek WMP
 - o Turkey Creek SHU Group
 - o Village Creek WMP

New Business/Presentation

PRESENTATION: USDA/NRCS BMPs in the North River Watershed, Larry Hardy, USDA/NRCS.

Larry Hardy provided an overview of two reforestation BMPs in the North River Watershed. Forest cover provides water quality benefits by reducing erosion-causing runoff.

Ecosystem Service Case Study: How the North River Watershed Benefits Local Communities: The US Fish & Wildlife Service has initiated a study, performed by Abt Associates. Project goals of the study include:

- Estimate the economic value of ecosystem services provided by the North River Watershed to improve understanding of how the watershed benefits local communities.
- Estimate changes in the value of ecosystem services provided by the North River Watershed resulting from:
 - o Water quality improvements
 - o Ecological improvements

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NORTH RIVER PROJECT COMMITTEE – LOWER SUB-BASIN MINUTES

November 16, 2015 1pm – 3pm

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

Attendees

Kevin Turner – City of Tuscaloosa

Mary W. Pitts – NR Coordinator

Josh Yates – City of Tuscaloosa

Bob Cunningham – Tuscaloosa County

Barry Ambrose- ADPH

Katherine Holloway, Tuscaloosa County

Anne Wynn, Geological Survey of Alabama

Allie Sorlie, UA Museum of Natural History

Len Simmons, Alabama Power

Jim Jeter, Alabama Forestry Commission

John Powell Webb-City of Northport

Scott Stephens-City of Northport

Carmen Yelle – ADEM

Sonny Richardson-Alabama Homebuilders Assoc

Cory Johnson-West Alabama Regional Comm

Mark Elliott – UA Environmental Engineering

Old Business

- ☐ Review of October 19, 2015 Minutes: Motion to approve-Simmons, 2nd Ambrose

Project Updates

- ☐ North River Watershed Implementation Plan Update (Attached)
- ☐ Facilitator Update: (Johnston)
 - o Currently working on the following projects: Cottonwood Creek WMP, Turkey Creek SHU Group, Village Creek WMP
 - o ACWP Conference – December 9, 2015. Register online at www.cleanwaterpartnership.org
 - o ADEM Nonpoint Source Conference – January 20, 2016 www.adem.state.al.us

December and January Lower Sub-basin meetings are cancelled to encourage stakeholders to attend the ACWP and ADEM Conferences.

- ☐ Ecosystem Services Study: Anne Wynn thanked stakeholders for their submittal of information for the ecosystem services study currently being performed by ABT Consultants. Still need information on water users for the City of Northport and Tuscaloosa. Jim Jeter pointed out that this information can be used to support sustainability and water quality requirements for economic development and to promote renewable resources.

New Business/Presentation

PRESENTATION: Dr. Mark Elliott, University of Alabama, presented *Investigating the Impacts of Household Wastewater Management in the Lower Black Warrior River Watershed*, an EPA-Gulf of Mexico funded study.

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Alabama Clean Water Partnership Watershed Conference
Wednesday, December 9th, 2015 ~ 9:00 a.m. – 3:30 p.m.
Alabama Wildlife Federation's NaturePlex at Lanark
3050 Lanark Rd, Millbrook, AL 36054

*Attended by Katherine Holloway
Tuscaloosa County*

AGENDA

Registration/Networking/MS4 Exhibits		9:00
Welcome	Mike Godfrey, ACWP Chairman Tim Gothard, Alabama Wildlife Federation	10:00
Planning for the ACWP's Future	Allison Jenkins, Executive Director	10:10
"Out of the Box" - Effective Partnering to Meet Municipal Stormwater Permit Goals:		
Alabama River Basin: Pet Waste Stations & School Environmental Clubs	Ashley Henderson, Basin Facilitator Susan Carmichael, City of Montgomery	10:30
Tallapoosa River Basin: Alexander City & The Middle Tallapoosa	Sabrina Wood, Basin Facilitator Don McClellan, Lake Martin Econ. Dev. Alliance	11:00
Coastal-Escatawpa River Basin: <i>Create A Clean Water Future</i>	Christian Miller, Basin Facilitator Ashley Campbell, City of Daphne & Leslie Gahagan, City of Fairhope	11:30
Lunch/Networking	All	12:00
Presentation of 2015 Limited Edition Print	Allison Jenkins Keith Smith, Artist	1:00
MS4 Update	Marla Smith, ADEM Water Division	1:15
MS4 Responsibilities & Private Property Issues	Joel Gilbert Balch & Bingham LLP	1:30
Forestry Practices and T&E Species in MS4s	Jim Jeter, Alabama Forestry Commission Jeff Powell, US Fish & Wildlife Service	2:00
Wild Hog Water Quality Impacts & Eradication	Rod Pinkston, Jager Pro Hog Control Systems	2:45
Conference Adjourns		3:30

Special Thanks to our Conference Sponsors:

*ACME Brick ~ Alabama Department of Environmental Management
Alabama Farmers Federation ~ Alabama Forestry Association-Sustainable Forestry Initiative
Alabama Power Company ~ Alabama Wildlife Federation ~ City of Gadsden
Georgia-Pacific (Brewton) ~ Jim 'N Nicks Bar-B-Q ~ S&ME, Inc.
Tri-Rivers Waterway Development Association*

Thanks to all of our partners for your support of The Alabama Clean Water Partnership.
BECAUSE OF YOUR INVOLVEMENT WE ARE MAKING A DIFFERENCE!

1-20-2016 Attended by Katherine Holloway, Tusc. County Public Works

CONFERENCE AGENDA

8:00 - 9:00

Registration

9:00 - 9:05

Opening Comments; M. Lynn Battle, Chief, ADEM Office of External Affairs

9:05 - 9:20

Welcome and Introduction; Lance LeFleur, Director, ADEM

PROGRAMS AND RESOURCES

9:20 - 9:40

Long-term Vision for the CWA 303(d) Program and National Section 319 Program Goals
Christopher B. Thomas, Chief, Sustainable Communities & Watershed Branch, EPA Region 4

9:40 - 10:00

Coastal Projects and Watershed Management Plans
Roberta Swann, Director, Mobile Bay National Estuary Program

10:00 - 10:20

Alabama's Construction Stormwater Regulatory Update
Jennifer Passineau, Chief, ADEM Construction Permits Section

10:20 - 10:50

Break

TOOLS AND TECHNOLOGY

10:50 - 11:10

USGS Web and GIS-Based Water Resources Planning and Management Tools in Alabama
Athena Clark, Deputy Director, Hydrologic Data Programs for the USGS Lower Mississippi-Gulf Water Science Center

11:10 - 11:30

Clean Water Future Program; Ashley Campbell, City of Daphne; Leslie Gahagan, City of Foley

LUNCHEON AND SPEAKER

11:30 - 1:00

Climate, Policy, and Water Availability: The Future of Irrigation in Alabama
Marlon Cook, Director, Groundwater Assessment Program, Geological Survey of Alabama

INNOVATIVE BMPS AND TECHNIQUES

1:00 - 1:30

99% Sediment Yield Reduction in Two Easy Steps - A Case Study
Barry Fagan, Environmental Program Engineer, Alabama Department of Transportation

1:30 - 2:00

Low Impact Development (LID) in Section 319 Urban Projects
Eve Brantley, Water Resources Specialist, Alabama Cooperative Extension System

2:00 - 2:30

Break

ALABAMA SECTION 319 PROJECT SUCCESSES

2:30 - 3:00

The Crowdabout Creek Success Story
Brad Bole, Watershed Coordinator, Flint Creek Water Conservancy District

3:00 - 3:30

Pathogen Reduction Projects in North Alabama: French Mill, Piney Creek, and Hurricane Creek
Sam Sandlin, Watershed Coordinator, Limestone/Madison Counties Soil & Water Conservation District

3:30

Closing Comments

Attended by Bob Cunningham



Black Warrior River
Clean Water Partnership

NORTH RIVER PROJECT COMMITTEE – LOWER SUB-BASIN AGENDA

March 21, 2016 1pm – 3pm

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

Welcome and Introductions

Old Business

☐ Draft Minutes-November 16, 2015

Abner Patton, Chair

Project Updates

☐ North River Watershed Implementation Plan Update

o Coordinator Report

o BMP Update 60

o Education & Outreach Update

o Data Collection & Interpretation

Mary Wallace-Pitts, Coordinator

Abner Patton

UA Museum of Natural History

Geological Survey of Alabama

☐ US F&WS Ecosystems Service Study

Anne Wynn, Geological Survey of Alabama

☐ Facilitator Update

2016 Draft

Cottundale Creek listed for
E coli, Pathogens

BMP's
All filled up
from December's rain

ADEM is
not funding
CWP, only BMP
projects can
be in scope
of work

New Business/Presentation

Update: ADEM Funding of ACWP 2016

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

o City of Northport

o City of Tuscaloosa

o Tuscaloosa County

☐ Tombigbee RC&D

☐ USDA/NRCS

☐ Other Partners

New Report
from Non-Point Source
Carmen

north river watershed@hotmail.
com

Walker Elementary
Magnet School

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TUSCALOOSA COUNTY PUBLIC WORKS DEPARTMENT

2810 35th Street
Tuscaloosa, Alabama 35401
(205) 345-6600
FAX (205) 345-6600



Allan D. Springer, Sr.
Assistant County Engineer

Scott F. Anders, P.E.
County Engineer

Tracy M. Criss, P.E.
Assistant County Engineer

August 20, 2015

Certified Mail 7009 1680 0000 0877 6744

To: Mr. Earl Norton
Soil & Water Conservation Society- Alabama Chapter

From: Bob Cunningham

Re: 2015 Clear Water Alabama Seminar and Field Day
Tuscaloosa, Alabama
September 2-3

CONTENTS:

- Check, \$1,895.00
- Registration forms for:
 - Allan Springer
 - Mike Henderson
 - Tracy Criss
 - Beau Yeager
 - Scott Thomas
 - Katherine Parris Holloway
 - Jamey Beasley
 - Robert Cunningham
 - Tim Nix

TUSCALOOSA COUNTY COMMISSION
PO BOX 20113
TUSCALOOSA, AL 35402-0113

ACCOUNTS PAYABLE

VENDOR NAME		VENDOR NO	REFERENCE NO.	CLAIM DATE	CHECK DATE	CHECK NO
SOIL & WATER CONSERVATION SOCIE		23824			08/20/15	8145
INVOICE NO.	INVOICE DATE	PO NO.	DESCRIPTION			AMOUNT
SEP2-SEP3	08/18/15		112-53150-2650-000 9 REGISTRATIONS			\$1,895.00
RETAIN THIS PART FOR REFERENCE					TOTAL	\$1,895.00



TUSCALOOSA COUNTY COMMISSION
PO BOX 20113
TUSCALOOSA, AL 35402-0113
Road & Bridge FNB

FIRST NATIONAL BANK
OF CENTRAL ALABAMA

61-170
622

CHECK NO.
8145

DATE	AMOUNT
08/20/15	\$1,895.00

PAY \$*****1,895 DOLLARS AND 00 CENTS

TO THE SOIL & WATER CONSERVATION SOCIETY-AL
ORDER
OF

W. H. Lundy
W. M. Lamb

⑈008145⑈ ⑆062201449⑆ 06 504 228⑈

September 2 - Seminar

7:30 - 8:30 Registration & Exhibits
8:30 - 4:00 Seminar Topics

Regulations
Applications
Innovations
Research

September 3 - Field Day

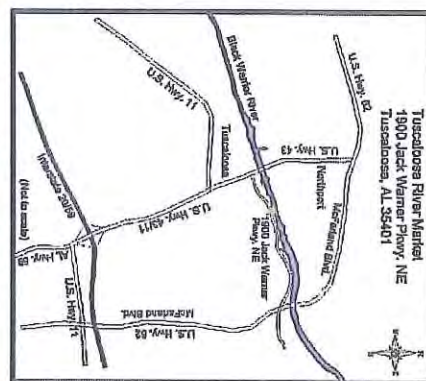
7:30 - 9:00 Registration & Exhibits
8:00 - 9:00 QCI Training (HBAA only)*
9:00 - 4:00 Field Day Sites Visits

All Field Day participants will be required to sign a waiver of liability.

*See footnote in the registration form for more detail about the QCI training.

Lunch and Certificates of Training will be provided each day. Contact hours will be included on the Certificates of Training to reflect the potential continuing education units.

Map



A limited number of rooms have been blocked nearby at the Tuscaloosa Fairfield Inn

[Click here for more information.](#)

REGISTRATION FORM

Early Bird Registration September 2-3 (cutoff August 26) \$200 ☒

I will attend September 2-3 ☒

I will attend Seminar only ☐

I will attend Field Day only ☐

Additional fee for QCI training* w/September 3rd Field Day \$95 ☐

Late Registration Seminar and Field Day (August 27 or later) \$250 ☐

Total Registration

\$200.00

Student Scholarships available—Professors call Earl Norton (334) 728-4107

*QCI training is applicable only to QCIs Certified by HBAA and requires an additional fee of \$95. The September 3rd classroom training and the 9:00- 4:00 field day activities complete the mandatory 4-hour continuing education requirements."

For more information on QCI Training contact Kory Boling 800 745-4222 koryboling@HBAA.org.

Select the registration options then go online to register

www.aces.edu/natural-resources/water-resources/training.php#cwa2015

Or mail check and Registration Form to: Soil &Water Conservation Society-AL Chapter
PO Box 116
Auburn, AL, 36831

Name Allan Springer

Agency/Company Tuscaloosa County Public Works Dept-

Address 2810 35th St.

City Tuscaloosa State AL Zip code 35401

Work Phone (205) 345-6600 Mobile

Email Address aspringer@tuscco.com

September 2 - Seminar

7:30 - 8:30 Registration & Exhibits
8:30 - 4:00 Seminar Topics

Regulations
Applications
Innovations
Research

September 3 - Field Day

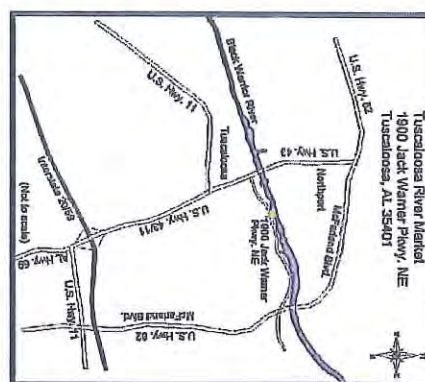
7:30 - 9:00 Registration & Exhibits
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9:00 - 4:00 Field Day Sites Visits

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Lunch and Certificates of Training will be provided each day. Contact hours will be included on the Certificates of Training to reflect the potential continuing education units.

Map



A limited number of rooms have been blocked nearby at the Tuscaloosa Fairfield Inn

[Click here for more information.](#)

REGISTRATION FORM

Early Bird Registration September 2-3 (cutoff August 26)

\$200 ☒

I will attend September 2-3 ☒

I will attend Seminar only ☐

I will attend Field Day only ☐

Additional fee for QCI training* w/September 3rd Field Day \$95

Late Registration Seminar and Field Day (August 27 or later) \$250

Total Registration

\$ 200.00

Student Scholarships available—Professors call Earl Norton (334) 728-4107

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Select the registration options then go online to register

www.aces.edu/natural-resources/water-resources/training.php#cwa20

Or mail check and Registration Form to: Soil & Water Conservation Society-AL Chapter

PO Box 116
Auburn, AL, 36831

Name Mike Henderson
Agency/Company Tuscaloosa County Public Works Dept.
Address 2810 35th St.
City Tuscaloosa State AL Zip code 35401
Work Phone (205) 345-6600 Mobile _____
Email Address mhenderson@tusc.co.com

Map

7:30 - 8:30 Registration & Exhibits
8:30 - 4:00 Seminar Topics

Regulations
Applications
Innovations
Research

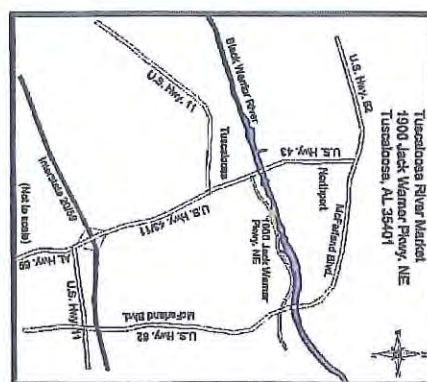
September 3 - Field Day

7:30 - 9:00 Registration & Exhibits
8:00 - 9:00 QCI Training (HBAA only)*
9:00 - 4:00 Field Day Sites Visits

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REGISTRATION FORM

Early Bird Registration September 2-3 (cutoff August 26) \$200 ☒

I will attend September 2-3 ✓

I will attend Seminar only _____

I will attend Field Day only _____

Additional fee for OCI training* w/September 3rd Field Day \$95 _____

Late Registration Seminar and Field Day (August 27 or later) \$250 _____

Total Registration 200.00

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www.aces.edu/natural-resources/water-resources/training.php#cwa2015

Or mail check and Registration Form to: Soil & Water Conservation Society-AI Chapter

PO Box 116
Auburn, AL, 36831

Name Tracy Criss
Agency/Company Tuscaloosa County Public Works Dept.
Address 2810 35th St.
City Tuscaloosa State AL Zip code 35401
Work Phone (205) 345-6600 Mobile _____
Email Address tcrist@tuscoco.com

September 2 - Seminar

7:30 - 8:30 Registration & Exhibits
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Regulations
Applications
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Research

September 3 - Field Day

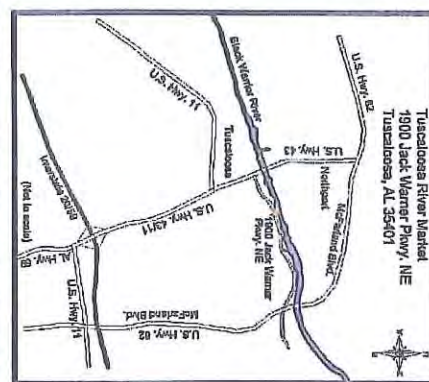
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Total Registration **\$200.00**

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Or mail check and Registration Form to: Soil & Water Conservation Society-AL Chapter
PO Box 116
Auburn, AL, 36831

Name Beau Yeager
Agency/Company Tuscaloosa County Public Works Dept.
Address 2810 35th St.
City Tuscaloosa State AL Zip code 35401
Work Phone (205) 345-6600 Mobile
Email Address b.yeager@tuscco.com

September 2 - Seminar

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September 3 - Field Day

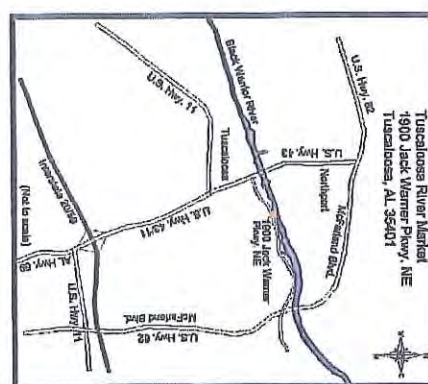
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\$250

Total Registration

\$2,000.00

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Or mail check and Registration Form to: Soil & Water Conservation Society-AL Chapter

PO Box 116
Auburn, AL, 36831

Name Scott Thomas

Agency/Company Tuscaloosa County Public Works Dept.

Address 2810 35th St.

City Tuscaloosa State AL Zip code 35401

Work Phone (205) 345-6600 Mobile

Email Address stthomas@tuscco.com



September 2 - Seminar

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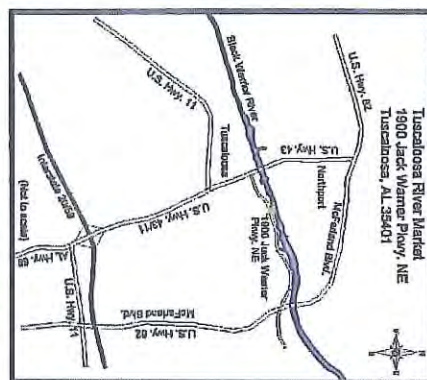
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www.aces.edu/natural-resources/water-resources/training.php#cwa2015

Or mail check and Registration Form to: Soil & Water Conservation Society-Al Chapter

PO Box 116
Auburn, AL, 36831

Name Katherine Parris Holloway

Agency/Company Tuscaloosa County Public Works Dept.

Address 2810 35th St

City Tuscaloosa State AL Zip code 35401

Work Phone (205) 345-6600 Mobile

Email Address kholloway@tuscco.com



September 2 - Seminar

7:30 - 8:30 Registration & Exhibits
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September 3 - Field Day

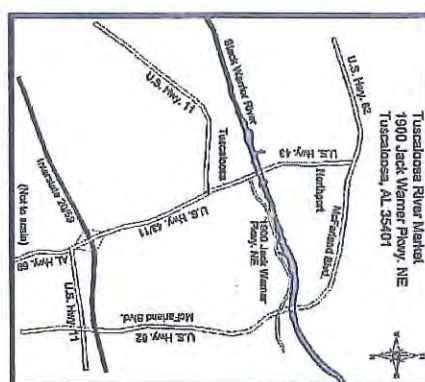
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www.aces.edu/natural-resources/water-resources/training.php#cwa2015

Or mail check and Registration Form to: Soil & Water Conservation Society-AL Chapter

PO Box 116
Auburn, AL, 36831

Name

Lamey Beasley

Agency/Company

Tuscaloosa County Public Works Dept.

Address

2810 35th St.

City

Tuscaloosa

State

AL

Zip code

35401

Work Phone

(205) 345-6600

Mobile

Email Address

lbeasley@tuscca.com

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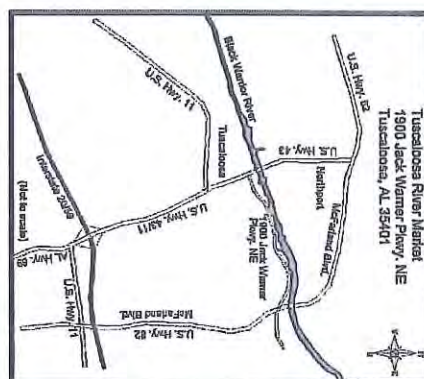
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Or mail check and Registration Form to: Soil & Water Conservation Society-AI Chapter
PO Box 116
Auburn, AL, 36831

Name Robert Cunningham
Agency/Company Tuscaloosa County Public Works Dept.
Address 2810 35th St.
City Tuscaloosa State AL Zip code 35401
Work Phone (205) 345-6600 Mobile _____
Email Address bcunningham@tuscco.com

September 2 - Seminar

7:30 - 8:30 Registration & Exhibits
8:30 - 4:00 Seminar Topics

Regulations
Applications
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September 3 - Field Day

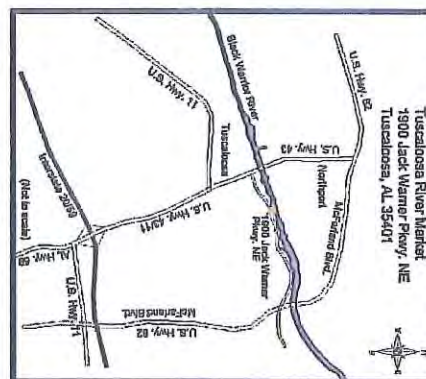
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Total Registration

\$295.00

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Or mail check and Registration Form to: Soil & Water Conservation Society-AI Chapter

PO Box 116
Auburn, AL, 36831

Name

Tim Nix

Agency/Company

Tuscaloosa County Public Works Dept.

Address

2810 35th St.

City

Tuscaloosa

State

AL

Zip code

35401

Work Phone

(205) 345-6600

Mobile

Email Address

tnix@tuscco.com

Clear Water Alabama 2015

September 2, 2015

Seminar Agenda

Tuscaloosa River Market

7:30 – 8:30 a.m.

Registration and Exhibits

8:30 a.m.

Welcome

James Norris - AL SWCC

8:35 a.m.

On the Receiving End of Stormwater - the Black Warrior River

**Nelson Brooke,
Black Warrior Riverkeeper**

9:00 a.m.

Regulatory Update

Jeff Kitchens – ADEM

9:30 a.m.

MS4 Activities

(representative) City of Tuscaloosa

10:00 a.m. - Break and Exhibits

10:30 a.m.

New Basin Research and More

Rich McLaughlin - North Carolina State University

12:00 noon - Lunch and Exhibit

12:45 p.m.

Significant Pollutant Studies

Bob Pitt – University of AL Civil Engineering Dept.

1:15 p.m.

North River Watershed Keys to Success

Mary Wallace Pitts - University of AL Geography Dept.

1:45 p.m.

Erosion & Sediment Control Research

Wes Zech or Wesley Donald - Auburn University

2:15 p.m. Break and Exhibits

2:45 p.m.

Moving Forward with Low Impact Development

Eve Brantley - Auburn University

3:15 p.m.

Application of the First Two Pillars – A Case Study

Barry Fagan - ALDOT

3:45 p.m.

Q/A with speakers, Summary and Close-out

James Norris - AL SWCC

4:00 Pick Up Certificates

Draft updated June 19, 2015

Earl Norton earl_norton@yahoo.com

334.728.4107

Seminar and Field Day Sponsors

State-wide Steering Committee

Alabama Soil and Water Conservation Committee
Alabama Chapter of the Soil and Water Conservation Society
Alabama Association of Conservation Districts
Alabama Associated General Contractors
Alabama Department of Environmental Management
Alabama Department of Transportation
Auburn University and Alabama Cooperative Extension System
Home Builders Association of Alabama
Natural Resources Conservation Service

Industry Sponsors (State-wide)

Alabama Power Company
American Excelsior Company
Erosion Pros
Hanes Geo Components
Sunshine Supplies, Inc.
Thompson Engineering

Local Sponsors

City of Tuscaloosa
City of Northport
Tuscaloosa County Public Works Department
Tuscaloosa County Soil & Water Conservation District
S. T. Bunn Construction
D. R. Horton

..... Field Day Presenters and Group Leaders

Presenters : Scott Anders, Tuscaloosa County; Andy Brannum, D. R. Horton, Tuscaloosa; Ken Edwards and Rodney Barnes, ALDOT, Tuscaloosa; Terry Bunn, S. T. Bunn, III, Judsen Jones, and Don Presley, S. T. Bunn Construction; Tim Goff and Roger Singleton, Silt Saver, Conyers, GA; Darren Jones, Hanes Geo Components, Bessemer; Randy Matheny, American Excelsior, Macon, GA; Andy McCartney and Bradley Porter, Walker Associates, Tuscaloosa; Earl Norton, AL Soil & Water Conservation Committee, Auburn; Perry Oakes, Consultant, Auburn; Mike Perez, Auburn University, Auburn; Skip Ragsdale, Sunshine Supplies, Birmingham; Joel Seawell, Erosion Pros, Auburn; Lee Williams, Ryan Shirley, Inc. Tuscaloosa; John Powell Webb, City of Northport; Josh Yates and Kevin Turner, City of Tuscaloosa.

Group Leaders Kevin Turner and Josh Yates, City of Tuscaloosa; John Powell Webb, City of Northport.

Clear Water Alabama 201 Field Day Tuscaloosa River Market, Tuscaloosa, AL September 3, 2015



Schedule of Activities

7:30 – 8:45	Registration - Exhibits open
7:55 – 8:55	Qualified Credentialed Inspector Training
8:55	Welcome – Earl Norton, Erosion and Sediment Control Program Coordinator, Alabama Soil and Water Conservation Committee
9:00	Load Buses
9:15 – 12:45	Visit Field Day sites to review erosion control, sediment control, and stormwater management practices
	Lunch, Tuscaloosa River Market
12:45 – 4:00	Continue Field Day site visits
4:00	End Field Day site visits and pick up <i>Certificates of Training</i> at Tuscaloosa River Market



Thanks for attending today's event!

waterfall subdivision (Protecting Lake Tuscaloosa)

City of Tuscaloosa Expectations – Josh Yates or Kevin Turner

BMP's – Andy McCartney

Temporary Cover using perennial grasses

Ribbon curb, Filter Strips and Buffer Zone

Sediment Barriers, Inlet Protection

Street Sweeping, Stream Protection

Alberta School of Performing Arts and Alberta Parkway

Introduction to the project – Josh Yates or Kevin Turner

BMPs – Bradley Porter

Permeable pavers, Storm sewer inlets with storm drain snout

Curb cuts to median

Swale with underground drain

ALDOT Widening Project, I10/59 and Buttermilk Road

Introduction to the project – Ken Edwards

BMPs

Sediment Basin Technology – Ken Edwards and Perry Oakes

Land Grading and daily cover – Ken Edwards and Rodney Barnes

Measures between Exit 77 and Exit 79 – Ken Edwards

Rosewood Subdivision (intensive erosion and sediment control)

City of Northport Expectations – John Powell Webb

Overview of D R Horton commitment to ESC – Andy Brannum

BMPs

Construction Exit – Skip Ragsdale

Inlet Protection and devices – Skip Ragsdale & Roger Singleton

Erosion control blankets – Randy Matheny

Seeding, Mulching & Sodding – Joel Seawell & Earl Norton

Housekeeping – Concrete washout bags, street sweeping, portable toilets, sand delivered and stored in bags, dumpsters on-site vs on roadways – Andy Brannum

S. T. Bunn Asphalt Plant (a new modern plant to support our roads)

Overview of plant operation – Terry Bunn

Overview of environmental permitting and BMPs – Don Presley

Temporary and permanent seeding and Grass Swale

Other BMPs

Inlet Protection, Spill Prevention Control and Countermeasures – S. T. Bunn, Ill and Judsen Jones

Drone Technology – Mike Perez and Scott Anders

Tuscaloosa County

Site Visit Times

Bus 1

9:15 – 10:00 AM
Waterfall Subdivision

10:15 – 11:00 AM
Alberta School of Fine Arts and Alberta Parkway

11:15 – 12:00 Noon
I20/59, ALDOT Widening

12:15 AM – 1:00 PM
Lunch

1:15 – 2:15 PM
Rosewood Subdivision

2:30 – 3:45 45 PM
S. T. Bunn Asphalt Plant

4:00 (approximately)
Return to Tuscaloosa River Market - participants pick up Certificates of Training

Bus 2

9:15 – 10:00 AM
Alberta School of Fine Arts and Alberta Parkway

10:15 – 11:00 AM
I20/59 ALDOT Widening Project

11:20 – 12:00 Noon
Waterfall Subdivision

12:15 – 1:00 PM
Lunch

1:20 – 2:20 PM
S. T. Bunn Asphalt Plant

2:35 – 3:35 PM
Rosewood Subdivision

4:00 (approximately)
Return to Tuscaloosa River Market - participants pick up Certificates of Training

Bus 3

9:15 – 10:15 AM
Rosewood Subdivision

10:30 – 11:30 AM
S. T. Bunn Asphalt Plant

11:50 AM – 12:45 PM
Lunch

1:00 1:45 PM
Alberta School of Fine Arts and Alberta Parkway

2:00 – 2:45 PM
I20/59 ALDOT Widening Project

3:05 – 3:45 PM
Waterfall Subdivision

4:00 (approximately)

Thanks to
EnviroCert International, Inc.
for
Today's Snacks and Drinks











