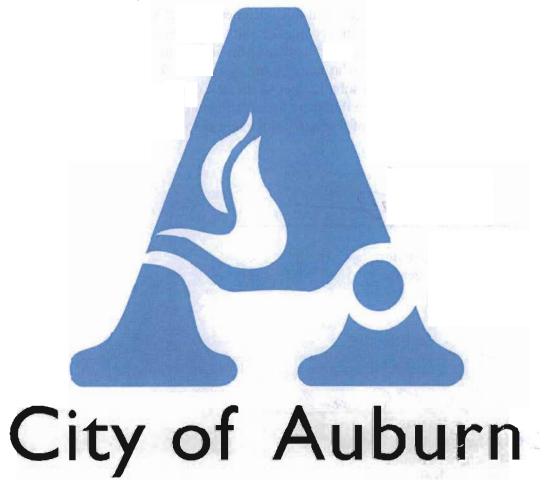
STORM WATER MANAGEMENT PROGRAM ANNUAL REPORT



PERMIT YEAR FIVE

March 10, 2007 - March 10, 2008

CITY OF AUBURN

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEMS (NPDES)
PERMIT NUMBER ALR040003
MUNICIPAL STORM WATER PROGRAM ANNUAL REPORT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly fathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for fathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

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Date

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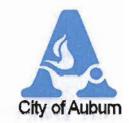
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STORM WATER MANAGEMENT PROGRAM ANNUAL REPORT



PERMIT YEAR FIVE

March 2007 - March 2008

I. INTRODUCTION

In response to the National Pollutant Discharge Elimination System (NPDES) Phase II Storm Water Regulations, the City of Auburn applied for and received an NPDES permit for storm water discharges.

This report is being submitted to the Alabama Department of Environmental Management (ADEM) pursuant to Part V paragraph C of NPDES Permit ALR 040003 issued on May 14, 2003.

This annual report is the fifth, and last, report for the current permit period and covers the reporting period from March 2007 through March 2008. The program for the current permit period outlined in this report is patterned after the program submitted to and approved by ADEM in March 2003 in the City of Auburn's Alabama Notice of Intent (ALNOI) (Appendix A). The five year permit is expected to expire in March 2008. The City reapplied for its NPDES permit in August 2007, with the renewed permit anticipated to be issued in March 2008.

II. SITE DESCRIPTION

The City of Auburn is situated in East Central Alabama. A map of the City of Auburn is provided in Appendix B. The City limits encompass an area of approximately 50 square miles (32,307 acres) as of January 2008. This area calculation does not include Auburn University property or the City of Opelika. This acreage is slightly less than in 2006-2007 due to the deannexation of approximately 200 acres from the City Limits. The population of Auburn is approximately 50,000. There are approximately 72 miles of creeks and streams flowing through Auburn. This is an increase from the 56 miles reported in the 2005-2006 report. This stream mileage was determined using the new FEMA Flood Map Modernization Project data. In the 2003-2004 reporting year the storm drainage system contained approximately 86 miles of storm pipe with 4,500 inlets and 3,000 storm water manholes/junction boxes. The storm water inventory for the 2007-2008 reporting year has not been updated, as the City is currently evaluating options for a system-wide comprehensive update of the City's storm water system. This update was originally

STORM WATER MANAGEMENT PROGRAM ANNUAL REPORT



PERMIT YEAR FIVE

March 2007 - March 2008

scheduled to be completed in 2006 but, due to project difficulties, the City is reevaluating all options for the comprehensive update. The City approved forty (40) residential/commercial plats in 2007 as compared to forty-seven (47) plats in 2006.

III. KNOWN OR SUSPECTED WATER QUALITY PROBLEMS

The City of Auburn's storm sewer system discharges into streams located in four primary watersheds, including Moore's Mill Creek (Southeast), Saugahatchee Creek (North), Chewacla Creek (South) and Parkerson's Mill Creek (Southwest).

Moores Mill Creek was placed on the draft 303(d) list in 1998 and was listed on the final 2002, 2004 and 2006 303(d) listing. Known water quality concerns within the jurisdictional area were identified as stream siltation resulting from sedimentation deriving from development.

The Saugahatchee Embayment where Saugahatchee Creek discharges into Yates Lake was placed on the State's final 303(d) list in 1996, 1998, 2000, 2002, 2004 and 2006. The embayment was listed on the 303(d) list primarily for nutrient enrichment. It is also suspected that sedimentation should be a water quality concern near the embayment. ADEM and the USEPA issued a draft Total Maximum Daily Load (TMDL) for nutrients and organic enrichment/dissolved oxygen for Pepperell Branch and the Saugahatchee Embayment on January 4, 2008. It is anticipated that this TMDL will be finalized in 2008.

IV. RESPONSIBLE PARTY

The City of Aubum's storm water management program (SWMP) is composed of several programs operating under various departments within the City's organization. Components of the SWMP are as follows:

- Environmental Services Department Operates recycling and composting program;
- Public Works Department Performs maintenance of storm water infrastructure and assists with inspections of residential and commercial construction;
- Public Safety Department Monitors residential and commercial construction;
- Water Resource Management Department Monitors residential and commercial construction and manages public education and outreach program.

When the City of Auburn began its Phase II program, coordination and implementation of the individual SWMP was the responsibility of the City's Public Works Department. In October 2005, management of the City's storm water program was moved from the Public Works Department to the City's Water Resource Management Department, under a newly created Watershed Division. The intent of the move was to manage water supply operations, wastewater operations, and storm water operations from a watershed perspective for all components that impact water quality.

The person responsible for the coordination and implementation of the individual SWMP components is as follows:

Matt R. Dunn, P.E., Watershed Division Manager Water Resource Management Department City of Auburn
1501 West Samford Avenue
Auburn, AL 36832
(334) 501-3060
mdunn@auburnalabama.org

V. STORM WATER MANAGEMENT PROGRAM COMPONENTS

The Phase II storm water regulations require operators of small municipal separate storm sewer systems (MS4s) in urbanized areas to develop and implement storm water management programs employing best management practices (BMPs) to adequately address the six minimum control measures. The control measures include:

- Public Education and Outreach
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination
- Construction Site Storm Runoff Control
- Post-Construction Storm Water Management
- Pollution Prevention/Good Housekeeping for Municipal Operations

In March 2003, the City of Auburn submitted to ADEM a notice of intent (NOI) to implement a storm water management program under the Phase II storm water regulations. The goals of the individual components of the program and implementation dates were outlined in this document. At the end of permit year five, all program components outlined in the NOI have been implemented.

VI. PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS

A. Articles in the City News Letter "Open Line":

Open Line is the City's monthly newsletter mailed to Auburn citizens through their utility bill. Articles and messages contained in the newsletter reach a large and diverse group of citizens. The goal for articles in the City newsletter was to produce two (2) articles per year. During the fifth permit year a total of eight (8) articles were published in which storm water issues were highlighted or affected:



- Household Hazardous Waste Day March 2007
- Earth Week 2007 April 2007
- Auburn CityFest 2007 April 2007
- What You Can Do to Help Keep Auburn Beautiful April 2007
- Trash Amnesty Week May 2007
- Recycling in Auburn July 2007
- Water Quality Information Available Online October 2007
- Auburn Recycling Day November 2007

B. Brochure Publications:

Pamphlets and brochures are an effective way to present and explain storm water issues. Unlike other communication vehicles, pamphlets and brochures can be distributed in many locations without requiring staffing and the location of distribution can specifically target the audience you are trying to reach. The goal outlined in the City's NOI was to produce two (2) brochures per year. During the fifth permit year, two (2) brochures were published with a total of seven (7) brochures distributed by the City. Brochures provided by the City over the past year include:

Brochures Published by Auburn, Lee County, Opelika and Auburn University (ALOA) Citizen Advisory Group:

- Low Impact Development
- Materials Handling



Additional Brochures Distributed:

- Washing Car (ALCWP)
- Changing Oil (ALCWP)
- Pets (ALCWP)
- Fertilizing (ALCWP)
- Moore's Mill Creek Stream Restoration (Acer Environmental)



C. AWEA Publication:



In 2007, the City of Auburn was approached by Alabama's Water Environment Association (AWEA) to be the feature article in AWEA's fall quarterly member publication, The Wave. AWEA is the state membership organization for the Water Environment Federation, which is one of the largest professional organizations in the world devoted to water resources, wastewater management and storm water management. The feature article, written by the City of Auburn, was titled City of Auburn's Comprehensive Stormwater Management Program: Protecting Local Water Resources During Times of Rapid Growth and Development. This article focused on the City's Storm Water Program and many of

the programs the City has implemented in an effort to protect local water resources.

D. Website:



Citizens often go to the City's website to obtain information on items of local interest. The web page is accessible 24 hours per day and can serve citizens that do not have the time or the ability to physically meet with staff during normal working hours.

In the NOI submitted to ADEM, the goal was to develop a Phase II Storm Water section on the existing website in 2003 and post that web page in 2004. This goal was met a year early when the Phase II Storm Water web page was posted in March 2003. City storm water policies,

ordinances, design manuals and links to related sites (ADEM and EPA) have been posted and are available to the public.

The City's Storm Water website was moved from the City's Public Works Department home page to the City's Water Resource Management Department home page in 2005. The Storm Water website was updated in 2006, and again in 2007, to include additional links, resources, and new photographs.

For more information on the website please visit:

http://www.auburnalabama.org/wrm/stormwater.asp

E. Video Presentations/Webcasts:

Periodically, the City obtains relevant storm water information in video/internet format. The videos are presented to local interest groups and also made available for loan upon request. Videos are typically provided by ADEM, LEGACY, and other non-profit organizations. Webcasts based on storm water related topics are often hosted by the City. Video/internet media provided by the City over the past year include:

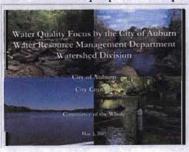
• Conducting Illicit Discharge Detection and Elimination Investigations, U.S. Environmental Protection Agency, July 2007

F. Public Presentations:

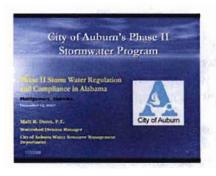
The City provides staff and/or resources to develop presentation materials for public meetings. Typically presentations are offered in PowerPoint format and the topics are chosen by the organization requesting the information.

Seven presentations were made during the fifth permit year. Presentations were given at various workshops and to various groups, including Auburn City Council, the Lower Tallapoosa Clean Water Partnership, the Rotary Club, local contractors, developers and engineers.

Presentations prepared and provided by City staff over the past year include:



- Water Quality Focus by the City of Auburn Water Resource Management Department, Auburn City Council (May 2007)
- Saugahatchee Streambank Stabilization Project,
 Saugahatchee Watershed Management Plan
 Group, Auburn, AL (August 2007)



- Saugahatchee Streambank Stabilization Project, Lower Tallapoosa Clean Water Partnership, Montgomery, AL (August 2007)
- Changes to Erosion and Sediment Control Policy, Local Development Community, Auburn, AL (September 2007)
- Site Development Review Tool Workshop, Local Engineers, Auburn, AL (October 2007)
- Town Creek Park Stream Restoration Project, Auburn Rotary Club (November 2007)
- City of Auburn's Phase II Stormwater Program, "Phase II Stormwater Regulations and Compliance in Alabama" Workshop, Montgomery, AL (December 2007)

G. Workshops Hosted:

In an effort to educate contractors, developers, engineers, and staff, the City initiated a series of workshops. The content of the workshops focused on local storm water issues of concern. Workshops hosted by the City over the past year include:

Erosion and Sediment Control Workshop (December 2007) - The City of Auburn hosted its sixth annual Erosion and Sediment Control Workshop on December 6, 2007. The purpose of the Workshop is to educate and interact with local engineers, developers and contractors who are governed by the City's Erosion and Sediment Control Ordinance, the Alabama Department of Environmental Management's (ADEM) stormwater regulations, and the United States Army Corps of Engineers (COE) regulations. A representative from the ADEM presentation on permitting and current ADEM stormwater regulations related to construction Erosion Pros, LLC. gave a activities.





presentation on the proper design, applications and installation of flocculants such as polyacrylamide. Southeast Erosion Control and Volvo Rents provided exhibits of proper BMP installation practices as well as new technologies in the erosion and sediment control industry. Over 80 developers, contractors, and engineers attended the workshop.

- Site Development Review Tool Workshop (October 2007) The City of Auburn hosted a workshop on October 31, 2007 to unveil the City's new Site Development Review Tool. The workshop targeted local engineers and gave a brief overview of the Tool and its intended use. This Tool will be described in detail later in the report.
- Materials Handling/Spill Prevention Workshop (January 2008) The City of Auburn's Water Resource Management Department sponsored a Materials Handling and Spill Prevention workshop in January 2008. This workshop targeted City employees who deal with fuels and chemicals on a daily basis and provided basic information on the proper management, handling and disposal of potentially hazardous chemicals. This workshop will be described in more detail later in the report.

H. Composting & Recycling Center/Compost Demonstration Site

The City of Auburn has been operating a curbside recycling program since 1987. In addition to curbside recycling, the City maintains a drop-off center for recyclables. The Recycle Auburn drop-off center is located across from the Fleet Services Complex at 365-A North Donahue Drive. These operations allow citizens of Auburn to recycle their waste instead of disposing of it in

In addition, the City maintains a Compost Demonstration Site that serves as an example of how homeowners can easily incorporate a home composting operation into a normal backyard setting. The site features six backyard compost units. The units range from a simple pile to a concrete bin.

The exhibits take the public through the process of how to compost and recycle materials for garden use and encourage these practices. For more information on recycling of waste, please visit:

http://www.aubumalabama.org/es/

the landfill.

I. Streamside Class Room Initiative:

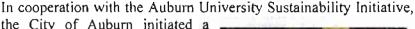
In an effort to educate and raise awareness in our community about the need to protect local streams, the City of Auburn, ALOA (citizen storm water advisory committee), Save Our Saugahatchee (S.O.S.), and Auburn City Schools have joined together to provide streamside classroom activities.



Students from local middle schools combine classroom instruction with hands on field activities to conduct water chemistry and biological assessment of a local stream. The program, geared to sixth graders, focuses on providing the students with a background in the type of habitat expected to sustain a healthy stream. The students conduct a chemical analysis of the stream and compare the results

with that of a biological assessment of the same stream.

J. Storm Drain Marking Project:





the City of Auburn initiated a storm drain marking project in 2007. School children within the City of Auburn were asked to submit designs for the markers

that were to be placed in the Saugahatchee Creek, Town Creek and Moores Mill Creek watersheds. A number of the students' designs were selected for use. To maximize the educational opportunity



presented when asking students to design the markers, classroom activities were conducted by the Sustainability Initiative. The lessons taught focused on the importance of not dumping waste into storm drains and how materials dumped into storm drains eventually end up in area rivers and streams. The City's initial storm drain marking day resulted in nearly 200 markers and door hangers being installed in Auburn by approximately 30 volunteers. The City plans to hold additional storm drain marking projects throughout the year.

VII. PUBLIC INVOLVEMENT/PARTICIPATION

A. Citizens Advisory Committee:

Both the EPA and ADEM recommend that the public be included in developing, implementing, and reviewing storm water management programs through the establishment of a citizens' advisory committee. Communities that allow citizens representing diverse backgrounds and interests to participate in such a committee are far more likely to gain community support through implementation.



ALOA CITIZENS STORM WATER ADVISORY COMMITTEE (2001-present) - ALOA is a Citizens' Advisory Committee that serves Auburn, Lee County, Opelika, and Auburn University. It meets on a quarterly basis to review and provide public input on current policies, brochure content, educational material, and proposed ordinances.

In 2007, the ALOA citizens' advisory committee produced two brochures. The two brochures produced were titled *Low Impact Development* and *Materials Handling*. These brochures are available to the citizens of Auburn and can be obtained at City Hall, the Bailey-Alexander Water and Sewer Complex or by contacting the Watershed Division of the Water Resource Management Department at (334) 501-3077.

B. Watershed Organizations:

Regional watershed organizations bring together representatives from utilities, private industry, environmental awareness groups, farmers and branches of government to coordinate individual efforts, share information and plan for water resource and aquatic life protection. The regional approach allows participating entities to coordinate individual efforts in order to maximize limited resources.

LOWER TALLAPOOSA RIVER BASIN/CLEAN WATER PARTNERSHIP (2001-present) - The City of Auburn actively participates in the Lower Tallapoosa Clean Water Partnership and on technical sub-committees to assist and guide the development and implementation of a watershed management plan. The organization meets on a quarterly



basis. In 2007, as a member of the Clean Water Partnership, the City of Auburn participated in the development of watershed newspaper inserts, in addition to several

other activities. These newspaper inserts will highlight regional watershed activities and will be published in 2008.

SAUGAHATCHEE WATERSHED MANAGEMENT PLAN GROUP (SWAMP) - (February 2004 - present) Over the course of the past year, the City of Auburn has actively participated in the SWaMP group along with other stakeholders in the Saugahatchee Creek watershed to begin implementation of a watershed management plan for the watershed that encompasses parts of Lee, Macon and Tallapoosa Counties. The stakeholder group is made up of representatives from the Cities of Auburn and Opelika, WestPoint Stevens, Inc., MeadWestvaco, Inc., Save Our Saugahatchee (S.O.S.), the Natural Resources Conservation Service (NRCS), the Alabama Cooperative Extension Service (ACES), the Lower Tallapoosa Clean Water Partnership (LTCWP) and Auburn University. The plan was finalized and submitted to the ADEM in March 2005. The SWaMP group received implementation funding from the ADEM in 2007. SWaMP has provided funding for one stream restoration project on Saugahatchee Creek and has several additional projects under consideration at this time. Potential projects include construction of a stormwater wetland, a rain barrel reuse project and workshops aimed at lawn care and dirt road maintenance.

C. City of Auburn Earth Week 2007:

Earth Day is a week-long event in the City of Auburn. Over the last several years, City departments have worked to create and implement a week of environmental activities and events aimed at educating citizens of all ages of the importance of protecting our environment. Earth Week 2007 began with activities and story times for local Auburn City School children at the City's public library. The City also hosted its 5th Annual Household Hazardous Waste Collection Day in 2007. This annual event is a favorite among Auburn residents. Each year, the City allows its



customers to drop off hazardous household chemicals at a collection site, free of charge. The items are then disposed of in a safe manner, eliminating the possibility of these items being improperly dumped in local creeks and streams. Earth Week activities included:

- Preschool Story Time at the Public Library
- Children Creation of Journals Using Natural and Recycled Materials
- Auburn Junior High Jazz Band Concert
- Recycling and Animal Care Workshop

• Educational Activities for 2nd Graders (NRCS-Enviroscape model, Auburn Water Board flocculation experiment, Auburn Animal Control-equipment exhibit, etc.).

D. Website Hot Line:

In an effort to provide the general public with an additional means of reporting potential erosion control violations, the City launched the "On-Line Hot Line" in March 2003. Citizens now have the ability to log on to the website 24 hours a day and provide information on suspected violations. The information is forwarded to the Water Resource Management Department and an investigation is initiated. The website hot line has proven to be a valuable tool over the course of the past five years by assisting City personnel in responding to citizens



concerns. The Water Resource Management Department is currently working on a similar online form for reporting potential illicit discharges.

E. Arbor Day Tree Give Away:

The planting of trees improves water quality by reducing storm water runoff and erosion, while facilitating nutrient removal from the storm water runoff. In celebration of Alabama's Arbor Day and to encourage the reforestation of the City's urban landscape, the City's Tree Commission sponsors a tree giveaway. The Commission gave away 1,000 live oaks and 2,500 various other seedlings at the annual Arbor Day Tree Giveaway.

F. City of Auburn Citizen Survey:

The citizen survey is an annual survey of a statistical cross section of randomly

selected members of the community. The survey asks questions on issues of governmental performance and community priorities and is a means of encouraging citizens to participate in local government. In 2007, the survey contained several questions that directly impacted storm water quality issues. The questions covered issues such as storm drainage system efficiencies, storm water quality, trash collection, yard waste disposal, recycling, natural resource protection, green space initiatives and



future growth planning. As it relates to storm water management, approximately 14% of those surveyed were very satisfied, and 44% were satisfied with the City's quality of performance in this area.

To view the Citizen survey, please visit: http://www.auburnalabama.org/survey.

G. Newspaper Articles:

Newspaper articles covering local storm water/environmental issues are a means for disseminating information to a large and diverse group of residents most directly impacted by these issues. Informative articles provide the reader with an independent point of view. The reader is not forced to rely on information generated by a single source (i.e. City through the newsletter *Open Line* or brochures).

The City of Auburn is fortunate to have a daily publication. The Opelika-Auburn News is a regional daily newspaper that covers local events and is widely read by residents of Lee County. A new weekly newspaper publication, the Auburn Villager, began circulation in 2007. Approximately thirty (30) articles and editorials were published in the last year that directly dealt with storm water/environmental issues. A listing of articles and publication dates is included in Appendix C of this report.

H. Greenspace/Greenway Master Plan

The Auburn Greenspace Advisory Board (GAB) was created by a City Council resolution in 2002. Its objective was to identify potential areas for future property acquisitions for parks, recreation facility projects, and greenways. Once identified, these properties could be purchased and/or protected from development.

In 2003, the GAB recommended a Greenspace/Greenway Master Plan for the City of Auburn. It was adopted in December 2003 by the City Council and has been utilized by the Planning Commission in connection with approval of projects. The GAB recently revised the initial Plan to include a vast expansion of the proposed greenspace/greenway areas. This first addition to the Greenspace/Greenway Master Plan was adopted by the City Council in October 2004.

This plan has resulted in the acquisition of several hundred acres of property located in environmentally sensitive areas. The City is currently working on obtaining easements along Saugahatchee Creek for a proposed greenway project. The greenspace/greenway areas include proposed bikeways and trails along existing and new roads and along waterways in the City of Auburn's growth boundary. Areas along waterways may be improved with natural trails and will be preserved by the dedication of conservation easements in developments or the acquisition of property by the City of Auburn. The properties have been set aside for future uses by the City, as recommended by the GAB. A copy of the current Greenspace/Greenway Master Plan is included in Appendix D of this report.

I. Future Land Use Plan

Due to the pace of development and increase in population within the City of Auburn, City personnel and Auburn citizens have developed a Land Use Plan for future development and growth within the City. This Plan focuses on the concept that natural resource conservation is critical to our quality of life as a part of community planning and development. The plan emphasizes open greenspace that will be linked and tied in to the system of trails and greenspace areas created by the City's Greenspace/Greenway Master Plan.

The Plan places a strong emphasis on maintaining and enhancing natural resources within the City of Auburn such as streams, greenspaces, and parks. The Plan establishes the idea that development should be strategically placed away from our most critical resources. The City began developing new ordinances based on the Land Use Plan in 2005. In addition, the City, through its Planning Department, is contracting with a firm to develop a Growth Model in 2007-2008 that the City will be able to utilize in making planning decisions within Auburn. This model will be constructed so that it can be updated annually. Detailed inventories will be conducted for current development such as housing unit by type, population by age groups, retail space by gross area, etc. A demographic forecasting model will be developed as well as models for other uses that will provide guidance for future land use allocations. Finally, the Auburn Interactive Growth Model (AIGM) will be developed that forecasts the spatial distribution of the population over time and the apportionment of land uses necessary to meet the needs of the population.

J. Lee County Water Festival

On May 10th-11th, 2007, the fourth annual Lee County Water Festival was held on the

campus of Auburn University. Approximately 1,500 fourth graders from schools in the Lee County area attended the two-day event. The primary purpose of the event is to educate young people on the importance of our water resources and the role each of us plays in conserving our water. During the event, students learned about water filtration, aquifers, and the water cycle



through hands-on activities such as building an edible aquifer, making a water cycle bracelet, and building a mini-filtration unit. Volunteers from the City of Auburn, the Auburn Water Works Board, the City of Opelika, and other local groups helped make last year's event a huge success. Planning is currently underway for the 2008 Water Festival, to be held at Auburn University on May 15 - 16, 2008.

VIII. <u>ILLICIT DISCHARGE DETECTION AND ELIMINATION</u>

A. Storm Sewer Map:

The City of Auburn completed the initial mapping of its storm sewer system in 2003. The mapping is maintained in a Geographical Information Systems Database (GIS).

The drainage area was divided into quarter section maps with a scale of 1"=100'. Detailed information on pipe size, pipe material, direction of flow, inlets, manholes, bridges, box culverts, detention ponds, and headwalls are provided on the maps. The City is currently evaluating options for a system-wide comprehensive update of the storm water system asset data. This update was originally scheduled to be completed in 2006 but, due to project difficulties, the City is reevaluating all options to complete this effort.



Note: GIS files are updated on a regular basis as new work is added or as old work is modified to current standards. The latest revisions to maps can be obtained through the Public Works Department located at 171 North Ross Street.

B. Micht Discharge Ordinance:

The Environmental Protection Agency (EPA) recommends municipalities implement an ordinance that provides the means to identify and enforce correction of illicit discharges. In the City's NOI, submitted to ADEM in March 2003, the stated goal was to develop and implement an Illicit Discharge Ordinance by December 2005. This goal was met two years ahead of schedule.

A draft copy of the Illicit Discharge Ordinance was reviewed by the ALOA Citizens Advisory Committee in November of 2003. A revised draft was forwarded to the

City Attorney and Municipal Judge for review in December 2003. The Auburn City Council adopted the Illicit Discharge Ordinance on January 20, 2004.

The City of Auburn has responded to several cases of illicit discharges over the past year. These cases involved illicit discharges of diesel fuel, concrete washout water, sanitary sewer overflows, and grease/oil dumping from



restaurants. In each instance, the illicit discharge was traced back to its source and the violator was given a warning and notified of the City's Illicit Discharge Ordinance. The proper regulatory agencies were notified of the issue and proper clean-up was conducted.

C. Illicit Discharge Hotline & Reporting Form:

The City of Auburn Water Resource Management Department is currently developing an illicit discharge reporting form that residents will be able to download, complete and email back to the Department upon discovering a potential illicit discharge. This document will be placed on a newly-created Illicit Discharge Website, giving residents instant and 24-hour access to the form. This form will assist the Department in tracking and responding to illicit discharges. The form is currently being finalized and will be made available in 2008.



D. Public Education on Illicit Discharges & Improper Disposal:

The Alabama Clean Water Partnership, in association with ADEM and other environmental groups, has produced a series of public service announcements featuring the "Nerdy Man". The City of Auburn has obtained materials for distribution from the Clean Water Partnership and provides them free to the public through its information centers located at City Hall, the Bailey-Alexander Water and Sewer Complex and the Development Services Building. These materials can also be obtained by contacting the City's Watershed Division at (334) 501-3074. The City also routinely places articles in the City newsletter, *Open Line*, to educate citizens on illicit discharges.

E. Inspection of Drainage System:

The City Public Works Department conducts an annual inspection of its drainage system in order to maintain free flowing conditions. During this process, key stream sections, bridges, and culverts are inspected and routine maintenance is conducted. As areas are identified for maintenance, the work is listed on the maintenance schedule and a crew is assigned to perform the task.

F. Hazardous Waste Emergency Response Team:

The City of Auburn has entered into an agreement with the City of Opelika to share some of the cost of operating an emergency response vehicle equipped to handle hazardous waste spills. The agreement provides the City of Auburn with the ability

to properly identify and address hazardous or potentially hazardous spills (see NOI submittal Appendix B).

G. Water Sampling Program:

In 2004, the City of Auburn began a water-sampling program in an effort to analyze

the effectiveness of storm water BMPs on active construction sites within the City. This program has been expanded over the past 3 years to include more in-depth water quality monitoring.

The City conducts weekly, monthly, and quarterly sampling for a wide variety of parameters that includes turbidity, dissolved oxygen, temperature, specific conductivity, total dissolved solids, pH, fecal coliform and salinity. Routine physical, physiochemical and bacteriological monitoring is conducted to document critical water quality trends within our surrounding watersheds and also to located potential sources of unauthorized pollution and contamination. Excessive pollutant loading can lead to loss of fish and wildlife habitat, loss of recreational use, human health hazards and even higher water treatment costs. Both grab samples and real-time monitoring via a





Hach Hydrolab multi-parameter probe have been incorporated into the sampling program. The City has developed a water quality website where residents and other interested parties can view reports of recent water quality data. The website address to view these reports is http://www.auburnalabama.org/wrm/waterquality.asp.

IX. CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

A. Erosion and Sediment Control Ordinance

The City of Auburn, in conjunction with the City of Opelika and Auburn University, adopted the Erosion and Sediment Control Policy recommended by the Citizens Advisory Committee (ALOA). The policy provides for a regional set of rules that can be applied to contractors, developers and engineers in the area.

The Auburn City Council approved additions to the City's Erosion and Sediment Control Ordinance in 2005 to establish protocol for enforcement of the Ordinance and to enable City personnel to issue citations to developers/contractors in violation of the Ordinance. The enforcement mechanisms have proven to be a valuable tool in ensuring compliance with the Ordinance.

B. Erosion Control Checklist:

The City of Auburn, in an effort to patrol the management of erosion and sediment control measures on active construction sites, initiated a construction site inspection program in 2003. The inspection program is designed to identify deficiencies in erosion control and initiate corrective action. Approximately 600 site inspections were performed from March 2007 through March 2008. The City of Auburn revised its Erosion Control Checklist form in December 2004. In 2005, the City's GIS Department, with input from the Watershed Division and Public Works Department, created a Construction Site database where information from each inspection is entered. The database is integrated with the



City's GIS system. Information such as the location of construction sites, permit information and historical inspection data can be obtained from the database. The City's Water Resource Management Department maintains copies of the inspection reports.

C. Erosion Control Residential:

The City of Auburn Public Safety Department Codes Enforcement Division conducts an initial site inspection for all building construction in Auburn. Lots requesting the initial inspection must have a construction entrance and other necessary best management practices in place prior to authorizing foundation construction. Deficiencies noted during the initial inspection are relayed to the building permit applicant for correction.

The City of Auburn Public Safety Department Codes Enforcement Division maintains a database of complaints received in association with erosion resulting from residential construction. The complaints are routed to enforcement officers who investigate the complaint and pursue corrective actions with the responsible parties.

D. Added Elements to Erosion and Sediment Control:

In an effort to utilize the latest in erosion and sediment control technology, the City of Auburn has begun recommending that engineers consider the use of polyacrylamide (PAM) and other flocculants on certain developments within the City. PAM is essentially a soil stabilization BMP. Flocculants work to settle solids from turbid water and aid in stabilizing soils to support grass seed so that a suitable vegetative buffer may be established. Flocculants can be applied through a hydraseeding application or in storm drains (i.e. floc blocks).

E. Sediment Basin Design Worksheet & Standard Detail Changes:

In an effort to create a uniform set of design criteria for sediment basins, the City of Auburn created a Sediment Basin Design Worksheet in 2007. This worksheet is based on requirements in the Alabama Handbook and can be utilized by engineers for the design of developments within the City of Auburn. Engineers must submit a copy of the completed worksheet to the City of Auburn for review during the plan submittal and review process.

The City of Auburn revised its standard erosion and sediment control details in 2007 to include a more detailed sediment basin design, as well as additional details for erosion control blanket installations,



wattle installation and alternative inlet protection measures. Erosion control blankets are required by the City of Auburn on any slope steeper than 3:1. Wattles are coirfilled socks utilized in check dam applications as an alternative to rip rap.

F. Rainfall Data Collection:

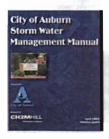
In 2005, the City began maintaining historical rainfall data records. The data is obtained through a subscription to the Agricultural Weather Information System (AWIS) website. AWIS records daily weather data from the NOAA weather station at the Auburn-Opelika airport. The City collects the data on a routine basis and enters it into an Excel spreadsheet, enabling the City to analyze rainfall patterns and trends. The City has AWIS data dating back to 1976. The Auburn Water Works Board also has rain gauges located at Lake Ogletree and the



James Estes Water Treatment Plant that provide daily rainfall records.

X. Post-Construction Storm Water Management In New Development and Redevelopment

A. Storm Water Management Manual:



In April 2003, the City of Auburn published a Storm Water Design Manual that effectively addresses storm water runoff controls required for sites greater than one acre. The manual identifies project requirements and specifications for new infrastructure and also addresses the requirement for storm water system sizing and storm water runoff control/detention. During its first five years of implementation, the manual has proven to be a very successful tool for the City and developers. The Water

Resource Management Department has contracted with its engineering consultant to develop an Engineering Design Manual in 2008 that will include engineering design criteria for sewer and water infrastructure, as well as storm water best management practices for water quality protection such as rain gardens and storm water wetlands.

B. Stream Buffer Regulations:

As part of the Erosion and Sediment Control Ordinance adopted by the City Council in July 2002, a minimum 25-foot non-disturbed vegetative buffer zone was required for new developments on "blue line" streams and creeks identified on USGS 7.5 minute topographic



maps. In May 2006, the City Council adopted new Stream Buffer regulations. The new buffer regulations are based on a managed-use type buffer rather than a strict non-disturbed buffer approach. The new regulations implement a 3-zoned buffer (streamside zone, managed use zone and upland zone) with the width of the buffer being based on the drainage area of the stream. A copy of the new regulations can be found under Article IV in the City's Zoning Ordinance on the City's website.

Drainage Area (Watershed) Designation	Streamside Zone	Managed Use Zone	Upland Zone	Total Buffer Width on each side of Stream
< 100 acres	25 feet	None	10 feet	35 feet
≥ 100 acres	25 feet	None	20 feet	45 feet
≥ 300 acres	25 feet	20 feet	10 feet	55 feet
≥ 640 acres	25 feet	50 feet	25 feet	100 feet

C. Detention Pond Inspections:

Existing detention ponds need periodic inspections to evaluate the maintenance and operation of these vital components of the City's drainage system. Because vast quantities of storm water are collected and passed through these detention ponds every year, inspections of these facilities can identify potential problems and illicit discharges.



The Public Works Department and Water Resource

Management Department conduct annual inspections of all detention ponds (public and private) listed in the storm water inventory. Upon inspection, the owner of the pond is notified of any corrective action needed. Enforcement measures are taken if the owner does not address the items listed in the report. Approximately two hundred (200) detention ponds are currently being inspected (January 2008-March 2008).

D. Conservation Subdivision Regulations:

In 2006, staff members from the City's Planning Department, Water Resource Management Department, Public Works Department, and Parks and Recreation Department began developing conservation subdivision regulations that will aid in the protection of our local water resources. These regulations were approved by the Auburn City Council in 2007. The ordinance and subdivision regulations promote the use of low impact design concepts to protect natural resources in the Auburn area.

E. Town Creek Park Stream Restoration Project:

In November of 2006 a joint venture effort was begun by the City of Auburn Water Resource Management Department and the Auburn University branch of the Alabama Cooperative Extension Service (ACES) to produce the first "Priority 1" stream

restoration project in Lee County. "Priority 1" stream restoration involves the abandonment of a degraded stream channel and the simultaneous construction of an entirely new stream channel to restore basic morphological, biological and hydraulic functions. With funding provided through an ADEM 319 non-point source grant and additional partners such as the North Carolina State University Extension Service (NCSU), the Alabama



Department of Environmental Management (ADEM), Stantec and a local landowner, it was also possible to conduct a series of four educational, hands-on workshops in

which students from around the southeast were introduced to stream restoration assessment, natural channel design, stream construction and riparian vegetation. Collectively, this project serves to enhance a local valuable natural resource, provides for increased aesthetic value in Town Creek Park and provides for education on natural channel design alternatives.

F. Saugahatchee Streambank Stabilization Project:

In October of 2006, Water Resource Management staff identified an area of concern in which excessive streambank erosion in Saugahatchee Creek was potentially

endangering the structural stability of the City's Northside Sanitary Sewer Interceptor Line. It was estimated that 30 +/- lateral feet of streambank had been lost in the last 15 years (estimated at 1,500 + cubic yards of soil). Water Resource Management used this as an opportunity to evaluate the costs and benefits of both traditional "hard armor" techniques and natural channel design alternatives to both replace the streambank to the maximum extent



practical and to stabilize the streambank to prevent further encroachment upon the easement. With cost estimates of both alternatives nearly equal, Water Resource Management chose a natural channel design approach to be used as a demonstration site for how this approach can be used in the protection of critical infrastructure. Additionally, seeing this project as both an educational opportunity and its potential for reducing nutrient loading in Saugahatchee Creek, the Saugahatchee Watershed Management Plan (SWaMP) group awarded Water Resource Management with a \$15,000 grant to supplement the costs of the project.

G. Site Development Review Tool:

In 2006, the City of Auburn Water Resource Management Department contracted

with its engineering consultant, CH2M Hill, to develop a Site Development Review Tool (Tool) that could be utilized by local engineers when designing storm water best management practices (BMPs) on developments within the City of Auburn. This Tool was modeled on a similar tool created by CH2M Hill for Gwinnett County, Georgia.



The Tool was developed using a Microsoft Excel platform and can be used by engineers and developers to design and incorporate structural storm water BMPs for developments within Auburn's planning jurisdiction boundaries and to maximize the efficiency of runoff pollutant management following

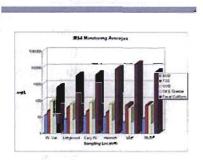
construction of developments. This Tool can also be used to meet the target pollutant removal efficiencies outlined in the City's Conservation Subdivision Regulations.

The Tool provides pollutant removal estimates for site specific conditions based on removal efficiencies for a variety of storm water BMPs including: detention ponds, bioretention areas (i.e. rain gardens), and storm water wetlands. This Tool analyzes a variety of storm water pollutants including nutrients (phosphorus and nitrogen) and total suspended solids. City staff plan to use the Tool during the plan review process to analyze development impacts on water quality within its water supply protection area (Lake Ogletree watershed), as well as in other watersheds within Auburn.

H. MS4 Outfall Water Quality Monitoring:

In 2007, the Water Resource Management Department initiated a program to evaluate

and compare post-construction runoff water quality from various types of development. The types of development being analyzed include low, medium and high density residential, commercial and industrial. Samples are collected each quarter during rainfall events and then delivered to a local lab to be analyzed for a variety of pollutants such as fecal coliform, suspended solids, and oils and grease. Staff attempt to collect "first flush" samples in an effort to collect the most representative runoff



samples. This data will be used by Water Resource Management staff to develop trends, document illicit discharges and to make future decisions regarding post-construction stormwater BMPs.

XI. POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

A. Construction Site Management Training:

The City of Auburn continues to develop a training program that provides the Water Resource Management Department and other City departments with information on the proper methods for implementing site control measures on all municipal projects (see Public Education and Outreach on Storm Water Impacts). City personnel also attend a variety of storm water/water quality related workshops and seminars annually.

Training opportunities included:

- Alabama's Water Environment Association Annual Conference (April 2007) This 4-day conference sponsored by the Alabama's Water Environment Association, state membership association of the Water Environment Federation, focuses on storm water, water quality, and wastewater treatment issues. Four (4) City personnel attended the 2007 conference, attending technical sessions related to storm water and watershed management as well as vendor exhibits.
- Second Annual State of Our Watershed Conference (April 2007) This 2day workshop at Camp ASCCA focused on the current state of the Tallapoosa River Basin watershed, of which the City of Auburn is a stakeholder. Presentations were given on the current water quality status in the watershed as well as ongoing efforts to protect water quality in the watershed. One (1) City personnel attended the conference.
- American Water Works Association (AWWA) Annual Conference and Exposition (June 2007) – This 4-day annual conference, sponsored by the AWWA, is one of the premier conferences in the world for water treatment and water quality issues. The 2007 conference was held in Toronto, Canada. City personnel attended technical sessions related to water quality and water treatment. One (1) City personnel attended this conference.
- Conducting Illicit Discharge Detection and Elimination Investigations (July 2007) This 2-hour webcast, sponsored by the U.S. Environmental Protection Agency, gave an overview of current methods and technologies for identifying and detecting illicit discharges within the MS4. Three (3) City personnel attended this webcast.

- WEFTEC 2007 (October 2007) This 4-day conference, sponsored by the
 Water Environment Federation, is one of the premier water quality
 conferences in the world. The 2007 conference was held in San Diego,
 California. City personnel attended technical sessions related to watershed
 protection, water quality, storm water BMPs and wastewater treatment. Three
 (3) City personnel attended the conference.
- Erosion and Sediment Control Workshop (December 2007) The City of Auburn hosted a workshop for developers, contractors, and engineers to discuss the City's Erosion and Sediment Control Program. Over eighty (80) developers, contractors, engineers, and City personnel attended the workshop.

B. Spill Response and Prevention Training:

As outlined in the NOI, the City of Auburn has developed an in-house spill response training program. The Water Resource Management Department sponsored a Materials Handling and Spill Prevention Workshop in January 2008. This workshop targeted City employees who deal with fuels and chemicals on a daily basis and provided basic information on the proper management, handling and disposal of potentially hazardous chemicals. The Water Resource Management Department is planning to have this training on an annual basis. In addition, the ALOA group developed a brochure in 2007 focusing on materials handling and safety.

C. Risk Management Manual:

The City of Auburn Human Resources Department has developed a manual outlining specific requirements/policies for dealing with hazardous chemicals. Topic 12 (titled Hazard Communication Program) of the City's Risk Management Manual specifically requires City personnel to inventory, label and receive training on hazardous chemicals identified. Material Safety Data Sheets (MSDS) identifying personal protective equipment, permissible exposure limits (PEL) and Threshold Limit Values (TLV) are required for all hazardous chemicals identified during the inventory process. The Hazard Communication Program was adopted as part of the Risk Management Manual.

D. Municipal Operations Recycling:

It has been standard policy to encourage individual Departments to participate in the City's recycling program. Recyclable waste generated through City activities is collected and processed through the City's recycling center located on Donahue Drive.

E. Street Sweeping:

The City of Auburn operates a street sweeping program designed to keep trash from entering the storm drainage system. The streets in the City are divided into four (4) grids that are swept on a weekly basis, with the entire route completed at the end of a 4 week period. Local streets or streets with low traffic volumes are swept as needed.

F. Alabama Certified Pesticides Applicator:

The City's Parks and Recreation Department maintains trained and certified personnel in the application of pesticides, including restricted-use pesticides. Although qualified to do so, the Parks and Recreation Department has not used any restricted-use pesticides in the previous decade. In order to maintain certification with the State of Alabama, the staff must document and complete 30 continuing education units (CEUs) over a three-year period. CEUs are earned at various conferences and workshops such as the Alabama Turfgrass Conference, Alabama Highway Department workshops, Sports Turf Short Course and the Alabama Urban Forestry Association's Annual Conference. The CEUs cover not only the application of pesticides, they also provide information on the proper use of fertilizers and other chemicals typically used to maintain athletic fields.

XII. STORM WATER INFRASTRUCTURE IMPROVEMENTS

In 2007, the City of Auburn's Public Works Department continued to make considerable progress toward completing a priority listing of storm water improvement projects outlined in the City's Storm Water Master Plan.

A. Storm Water Infrastructure Projects Completed:

Projects completed in permit year five include:

- Country Circle Drainage Improvements Project Project consisted of the installation of 751 linear feet (LF) of 24-inch reinforced concrete storm drain pipe (RCP), along with 8 inlets and junction boxes to alleviate local residential flooding.
- South Donahue Drainage Improvements Project Project included the installation of 88 LF of 36-inch RCP, 2 headwalls and 1 junction box to prevent potential local residential flooding.
- Burton Street Drainage Improvements Project Project consisted of the installation of 173 LF of 30-inch RCP, 3 inlets and 1 junction box to upgrade existing undersized infrastructure.
- Heartstrings Drainage Improvements Project This was an Industrial Development Board (IDB) project to pipe an existing ditch for the future expansion of the tenant on site. Project consisted of the installation of 210 LF of 24-inch RCP, 2 grate inlets and 1 headwall. Local wetland mitigation was used for U.S. Army Corps of Engineers permitting purposes.
- PSA Drainage Improvements Project This was an IDB project to pipe an
 existing ditch for the future expansion of the tenant on site. Project consisted
 of the installation of 14 LF of 24-inch RCP, 366 LF of 30-inch RCP, 218 LF
 of 36-inch RCP, 303 LF of 42-inch RCP, 6 area inlets and 1 headwall.

B. Storm Water Infrastructure Projects Under Design and Consideration:

- 802 Slaughter Avenue Drainage Improvements This is a Community Development Block Grant (CDBG) project to minimize local erosion. Design includes piping a ditch with 123 LF of 24-inch RCP, 1 junction box and 1 headwall.
- Cured-In-Place Pipe (CIPP) Lining Project This project will involve CIPP lining of several deteriorated storm drain lines in the City.

XIII. PROGRAM EVALUATION

Now in its fifth permit year, the City of Auburn's Storm Water Management Program continues to have a positive impact on storm water management in the City. The goals outlined in the City's Notice of Intent have been achieved at the end of this first 5-year permit cycle.

The City of Auburn has strengthened requirements of its construction storm water management program by empowering staff to issue citations and/or stop work orders in cases where Best Management Practices (BMPs) are not implemented or if BMPs are deemed deficient. The City has implemented a water sampling program so that the effectiveness of storm water BMPs on active construction sites may be analyzed. This program also allows staff to examine local streams from a water quality perspective. The City has recently purchased two Water Quality Probes that will allow City staff to conduct more in-depth water quality analyses of local watersheds by monitoring certain water quality parameters. The City has recently implemented a Storm Water Outfall Monitoring program to evaluate trends of post-construction storm water runoff from various types of development. The City continues to strengthen its Illicit Discharge Detection and Elimination Program through the use of these water quality sampling programs. The City continues to invest staff time and money into the continuing education, outreach and public involvement associated with the Storm Water Management Program. The City has met or exceeded its goals for this year.

The overall evaluation of the fifth permit year has revealed several strengths and goals for the upcoming year.

A. Strengths

Identified strengths of the program include the commitment and support of Auburn's City Council in protecting local natural resources as demonstrated in the formation of the Watershed Division to manage the City's storm water program, increased enforcement of erosion and sediment control requirements, and increased efforts to evaluate water quality. The City of Auburn also actively engages local environmental groups, concerned citizens and the local development community to evaluate programs and develop new standards. Other strengths include:

 The Water Resource Management Department coordinates all of the City's water quality programs (water treatment and distribution, wastewater collection and treatment, and storm water management).

- Teamwork of the City's Water Resource Management Department Watershed Division, Public Works Department Inspection Division and Public Safety Department Codes Enforcement Division in the City's construction storm water management program.
- A well established and growing water quality sampling program to evaluate stream conditions, storm water outfalls and to detect and eliminate illicit discharges.
- Community awareness and stakeholder involvement
- Proactive evaluation and rapid response to water quality-related issues
- Increased public education and awareness through the creation of a water quality website where residents and other interested parties can view data reports associated with the City's water quality sampling program.

B. Goals for the Upcoming Year

The City of Auburn takes pride in its Storm Water Management Program and feels as though the efforts that have been made over the past five years have created a strong, viable and long-lasting program for the City that will have positive impacts on the City's natural resources. As the City strives to make its program even better, several program goals have been identified for the upcoming year by City personnel. These goals include:

- Increased public education and awareness on illicit discharges through the creation of an online illicit discharge reporting form, as well as through additional storm drain marking activities.
- Increased education and awareness of the community on the City's roles and responsibilities with the Storm Water Management Program
- Increased focus on our water sampling program
- Increased education of homebuilders on proper BMPs during construction

APPENDIX A

ALABAMA NOTICE OF INTENT (ALNOI)

City of Auburn

Alabama Notice of Intent (ALNOI)

General permit for Phase II Small Municipal Separate Storm Sewer Systems (MS4)

March 2003

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STATE OF ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

ALABAMA NOTICE OF INTENT (ALNOI)

General Permit for Phase II Small Municipal Separate Storm Sewer Systems (MS4)

I.	Ge	neral	Infor	mation:
----	----	-------	-------	---------

- A. Ownership Status (Please check one):
 - X Small Municipal Separate Storm Sewer System

Federal Facility

State Facility

- B. Name of Small MS4: The City of Auburn
- C. Name of Responsible Official: Bill Ham, Jr.

Title: **Mayor**

Mailing Address: 144 Tichenor Avenue

City: Auburn State: AL Zip Code: 36832

Telephone Number: (334) 501 - 7260

D. Designated storm water management program contact:

Name: Tim Logiotatos

Title: Assistant City Engineer/Environmental

Mailing Address: 171 North Ross Street

City: Auburn State: AL Zip Code: 36832

Telephone Number: (334) 501 - 3000

Email Address: tlogiotatos@auburnalabama.org

II. <u>Location/Boundaries</u>:

- A. Location:
 - 1. Name of Urbanized Area or municipality where your MS4 is located:

Auburn, AL

2. Name of your

Organization: The City of Auburn

3. The latitude and longitude of the approximate center of your MS4:

Latitude **764440.25**

Longitude **766458.96**

Note: Approximate center of MS4 is the intersection of Magnolia Avenue and College Street. Latitude and Longitude are in State Plane Coordinate System.

 All entities except counties must include a location map showing city, town, or district boundaries, and urbanized area (UA) boundaries, if part(s) of the MS4 is within a UA.

See Appendix G

 Counties must include a map showing county boundaries, unincorporated area boundaries within the county, and urbanized (UA) boundaries.

III. Known or Suspected Water Quality Problems:

A. The names(s) of the receiving water to which your MS4 discharges (attach a separate list if necessary):

The City of Auburn discharges into Sogauhatchee Creek (North), Moores Mill Creek (south East), Chewacla Creek (south) and Parkersons Mill Creek (South West).

B. Indicate any receiving water stream segments to which your MS4 discharges, which are included on the 303(d) list:

Moores Mill Creek was placed on the draft 303(d) list in 1998 and was listed on the final 2002 303(d) list.

C. Describe any known or suspected water quality concerns within your jurisdictional area (e.g. stream siltation, 303(d) listed streams, habitat degradation, elevated levels of pollutants, etc.), including location (attach additional page(s) if necessary):

Stream siltation and sedimentation derived from development are the known water quality concerns within the jurisdictional area.

IV. Sharing Responsibility

A. Has another entity agreed to implement a control measure on your behalf?

Yes X No (if no, Skip to Part III)

Control Measure #1: Illicit Discharge Detection and Elimination

- 1. Name of entity: The City of Opelika
- 2. Control measure or component of control measure to be implemented by entity on your behalf:

The City of Auburn has entered into an agreement with the City of Opelika to share some of the cost of operating an emergency response vehicle equipped to handle hazardous waste spills. The agreement provides the City of Auburn with the ability to properly

identify and address hazardous or potentially hazardous spills (see Appendix H).

B. Attach an additional page if necessary to list additional shared responsibilities.

It is mandatory that you submit a copy of a written agreement between your MS4 and the other entity demonstrating written acceptance of responsibility.

V. <u>Minimum Control Measures</u>:

- **A.** Public Education and Outreach (complete Appendix A)
- **B.** Public Involvement/Participation (complete Appendix B)
- **C.** Illicit Discharge Detection and Elimination (complete Appendix C)
- **D.** Construction Site Storm Water Runoff Control (refer to Appendix D)
- **E.** Post-construction Storm Water Management in New Development and Redevelopment (complete Appendix E)
- **F.** Pollution Prevention/Good Housekeeping (complete Appendix F)

VI. Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name:	Date	
Signature:	Title	

Appendix A

Public Education and Outreach on Storm Water Impacts

40 CFR Part 122.34(b)(1) Requirement: You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

A. <u>Best Management Practice (BMP) # 1</u>: Messages/Articles in City News Letter "Open Line"

- Known or suspected problem/existing pollutant source to be addressed by BMP: Storm Water Runoff
- 2. Target audience: Citizens
- Description of BMP: Messages/Articles in the City News Letter "Open Line"
- 4. Measurable Goal(s): **Two Messages/Articles per year for duration of permit period**
- Schedule:
 - a. Interim Milestone Dates (if applicable)
 - b. Implementation Date: **2003**
 - c. Frequency of actions: Bi-annual
 - d. Month/Year of each action (if applicable)
- 6. Person (position) responsible for overall management and implementation of the BMP: *Tim Logiotatos/Public Works Department*
- 7. Rational for selecting this BMP:

"Open Line" is the City's news letter that is sent out through the utility bill. No other publication is as widely read within the City Limits and an article or message in this document will reach the most diverse group of citizens.

B. Best Management Practice (BMP) # 2: Pamphlets/Brochures

- Known or suspected problem/existing pollutant source to be addressed by BMP: Storm Water Runoff/Quality
- 2. Target audience: Citizens, Contractors, Developers, and Engineers
- 3. Description of BMP: Pamphlets and Brochures
- 4. Measurable Goal(s): **Develop, Produce, and Distribute two Pamphlets/Brochures per year for duration of Permit Period**
- Schedule:
 - a. Interim Milestone Dates (if applicable)
 - b. Implementation Date: 2003
 - c. Frequency of actions: Bi-annual
 - d. Month/Year of each action (if applicable)
- 6. Person (position) responsible for overall management and implementation of the BMP: *Tim Logiotatos/Public Works Department*
- Rational for selecting this BMP:

Pamphlets and brochures are an effective way to present and explain a storm water message. Unlike other communication vehicles, pamphlets and brochures can be distributed in many places without requiring staffing and the location of distribution can specifically target the audience you are trying to reach (i.e. Development Services Building/Office of Codes and Enforcement).

C. Best Management Practice (BMP) # 3: Internet Web Page

- 1. Known or suspected problem/existing pollutant source to be addressed by BMP: **Storm Water Construction Runoff/Storm Water Quality**
- 2. Target audience: Community
- 3. Description of BMP: Municipal Web Page
- 4. Measurable Goal(s): **Develop and post web page containing storm** water information and links.
- 5. Schedule:
 - a. Interim Milestone Dates: Develop Web Page 2003
 - b. Implementation Date: **Post Web Page 2004**
 - c. Frequency of actions: (if applicable)
 - d. Month/Year of each action (if applicable)
- 6. Person (position) responsible for overall management and implementation of the BMP: *Tim Logiotatos/Public Works Department*
- Rational for selecting this BMP:

The City's web page is a place where citizens often go to obtain information on local events. A section of the web page can be modified to target various audiences (contractors, engineers, local interest groups, etc.). It also allows the City to link to existing web sites (i.e. ADEM and EPA) for the latest educational information provided by these agencies for our use.

Note: The MS4 is not limited to implementing only 2 BMPs for each minimum control measure. If additional BMPs are chosen, then you should attach additional sheets as needed.

Appendix B

Public Involvement/Participation

40 CFR Part 122.34(b)(2) Requirement: You must, at a minimum, comply with State, Tribal, and local public notice requirements when implementing a public involvement/participation program.

A. <u>Best Management Practice (BMP) # 1:</u> Formation of a Citizens Advisory Committee

- 1. Known or suspected problem/existing pollutant source to be addressed by BMP: **Storm Water Runoff/Quality**
- 2. Target audience: Community
- 3. Description of BMP: Formation of a Citizens Advisory Committee
- 4. Measurable Goal(s): Organize a regional Citizens Advisory
 Committee representing various segments of the community to offer
 recommendations to facilitate implementation of the Strom Water
 Management Program. Regional representatives include members
 City of Auburn, Lee County, City of Opelika, and Auburn University.
- Schedule:
 - a. Interim Milestone Dates (if applicable)
 - b. Implementation Date: The ALOA Citizens Advisory Committee was organized in 2001. It is comprised of various segments of the community including local environmental interest groups.
 - c. Frequency of actions: *The ALOA Citizens Advisory Committee meets on a quarterly basis*.
 - d. Month/Year of each action: The ALOA Citizens Advisory
 Committee is scheduled to meet on a quarterly basis for the
 duration of the permit period (5 years).
- 6. Person (position) responsible for overall management and implementation of the BMP: All members of ALOA (City of Auburn, Lee County, City of Opelika, and Auburn University) are committed to fostering and maintaining the organization.
- 7. Rational for selecting this BMP:

 EPA and ADEM recommend that the public be included in developing, implementing, and reviewing storm water management

programs. This committee allows individuals to participate in the discussions regarding program implementation. The committee also has direct input into policy implementation for regional storm water issues.

- B. <u>Best Management Practice (BMP) # 2</u>: Watershed Organization "Lower Tallapoosa River Basin/Clean Water Partnership"
 - Known or suspected problem/existing pollutant source to be addressed by BMP: Storm Water Runoff/ Quality
 - 2. Target audience: Community
 - 3. Description of BMP: The partnership is part of a state-wide river basin management initiative to link local basin management efforts in order to maximize resources, to develop comprehensive management plans, and to involve citizens in watershed protection.
 - 4. Measurable Goal(s): Coordinate with the Clean Water Partnership to develop a watershed management plan. Work with the Clean Water Partnership's and ADEM's Education/Outreach initiative to improve awareness of water quality issues.
 - Schedule:
 - a. Interim Milestone Dates (if applicable)
 - b. Implementation Date: The City of Auburn is currently a participant on the Lower Tallapoosa Technical Committee.
 - c. Frequency of actions: **Meetings are held on a quarterly basis**.
 - d. Month/Year of each action (if applicable)
 - 6. Person (position) responsible for overall management and implementation of the BMP: *Tim Logiotatos/Public Works Department*
 - 7. Rational for selecting this BMP:

The Partnership brings together representatives from utilities, private industries, environmental groups, farmers, and branches of government to coordinate their individual efforts, share information, and plan for water resource and aquatic life protection. This organization allows for the group to maximize resources available and to involve the public in protecting the environment.

Note: The MS4 is not limited to implementing only 2 BMPs for each minimum control measure. If additional BMPs are chosen, then you should attach additional sheets as needed.

Appendix C

Illicit Discharge Detection and Elimination

40 CFR Part 122.34(b)(3) Requirement: You must develop, implement and enforce a program to detect and eliminate illicit discharges into you small MS4. You must:

- A). Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the state that receive discharges from those outfalls;
- B). Effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions;
- C). Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system; and
- D). Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

A. Storm Sewer Map

- Does the MS4 have a completed storm sewer map showing the location of all outfalls and the names and locations of all waters of the State that receive discharges from those outfalls? Yes <u>X</u>No ___
- 2. If yes submit storm sewer system map as an addendum to this form.

The City of Auburn has mapped its storm water system in a Geographical Information Systems Database (GIS). The attached 27" x 36" drainage map is a hard copy depiction of the entire system and its outfalls. Detail information on pipe size, pipe material, direction of flow, inlets, manholes, bridges, box culverts, detention ponds, and headwalls are provided on quarter section maps. Quarter section maps (1"=100' scale) allow the space necessary to illustrate these details without clutter. In Attachment I please find: a hard copy (27" x 36") Master Drainage Map, an example of one of the 36" x 36" quarter section maps, and the electronic files for the Master Drainage Map and all of the approximately 120 quarter section detail maps for your review.

Note: GIS files are updated on a daily basis as new work is added or as old work is modified to current standards. Latest revision to Maps can be obtained through the Public Works Department located at 171 North Ross Street.

	3.	If the storm sewer system map must for completion (e.g. 30% of system	
		<u>Task</u>	Interim Date
		Final completion date/ date for subr December 9, 2006):	nittal to ADEM (No later than
В.	<u>Oı</u>	rdinance/Regulatory Mechanism E	valuation:
	1.	Does the MS4 have an ordinance of effectively prohibits illicit discharges	
		If yes, submit a copy as an addende	um to this form.
	2.	If an evaluation of the ordinance/reg completed, or the MS4 is aware tha mechanism will require revision, the the document should be provided:	t the ordinance/regulatory
		<u>Task</u>	Interim Date
		Review Ordinance Material Draft Ordinance Adopt Ordinance	Dec 9 2003 Dec 9 2004 Dec 9 2005
		Final completion date/ date for subr December 9, 2006):	mittal to ADEM (No later than —

C. <u>Best Management Practice (BMP) # 1</u>: Public Education on Illicit Discharges & Improper Disposal

- Known or suspected problem/existing pollutant source to be addressed by BMP: Storm Water Discharges
- Target audience: Citizens
- 3. Description of BMP: The Clean Water Partnership in association with ADEM and other environmental groups have produced a series of public service announcements featuring the "Nerdy Man". These spots inform the public of the do's and don'ts of proper disposal.
- 4. Measurable Goal(s): Coordinate with Clean Water Partnership to obtain public service announcements and videos (e.g. "The Nerdy Man" videos) for public use locally.
- 5. Schedule:
 - a. Interim Milestone Dates (if applicable)
 - b. Implementation Date: Dec 9 2003
 - c. Frequency of actions: **Provide public access to** information and materials year round
 - d. Month/Year of each action (if applicable)
- 6. Person (position) responsible for overall management and implementation of the BMP: *Tim Logiotatos/ Public Works Department*
- 7. Rational for selecting this BMP:

The Clean Water Partnership provides the videos and training materials in an effort to educate the public. Use of the videos and other materials allows the city to provide education that could prevent an illicit discharge (like proper disposal of oil). The materials have been produced through the assistance of various environmental agencies and are geared toward the general public.

D. <u>Best Management Practice (BMP) # 2</u>: Inspection of Drainage System

- Known or suspected problem/existing pollutant source to be addressed by BMP: Storm Water Runoff/Quality
- 2. Target audience: Public Works
- 3. Description of BMP: Inspect drainage system and outfalls
- 4. Measurable Goal(s): Inspect drainage system and outfalls prior to start of rainy season. Document illicit discharges uncovered during inspections and schedule for remediation.
- 5. Schedule:
 - a. Interim Milestone Dates (if applicable)
 - b. Implementation Date: **Dec 5 2001**
 - c. Frequency of actions: **Annually**
 - d. Month/Year of each action: **November February**
- 6. Person (position) responsible for overall management and implementation of the BMP: **Robert Smith/Assistant Public Works Director**
- 7. Rational for selecting this BMP:

Annual inspections of the City's drainage system are conducted in order to maintain free flowing conditions. During this process, key stream sections, bridges, and culverts are inspected and routine maintenance is conducted. Routine maintenance includes repair of the structure and/or removing litter and debris that has accumulated over the preceding year. The removal and inspection of debris from these catch points can provide the City with valuable information locating, premeditating, and eliminating illicit discharges.

Note: The MS4 is not limited to implementing only 2 BMPs for each minimum control measure. If additional BMPs are chosen, then you should attach additional sheets as needed.

Appendix D

Construction Site Storm Water Runoff Control

ADEM Admin. Code Ch. 335-6-12 implements a State-wide construction storm water regulatory program consistent with NPDES requirements for construction activities. As provided by 40 CFR Part 122.35(b), this NOI does not require an MS4 to implement a local construction storm water control program.

The City of Auburn in conjunction with the City of Opelika and Auburn University has adopted the Erosion and Sediment Control recommended to it by the Citizens Advisory Committee (ALOA). The implementation of this regional Policy began in July 2002 (See Appendix J).

Appendix E

<u>Post-construction Storm Water Management in</u> <u>New Development and Redevelopment</u>

40 CFR Part 122.34(b)(5) Requirement: You must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. You must:

- A). Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for you community.
- B). Use an ordinance or other regulatory mechanism to address post construction runoff from new development or redevelopment projects; and
- C). Ensure adequate long-term operation and maintenance of BMPs.

A. Ordinance Evaluation

1.	Does the MS4 have an ordinance that effectively controls runoff from new development or redevelopment construction site?
	Yes <u>X</u> No
	If yes, submit a copy as an addendum to this form.
	The City of Auburn has developed an Engineering Design Manual that effectively addresses storm water runoff controls required for sites greater than one acre. The manual specifically addresses the requirement for storm water system sizing and storm water runoff control/detention (see Attachment K).
2.	If an evaluation of the ordinance must be completed, or the MS4 is aware that the ordinance will require revision, then a schedule for development of the document should be provided:
	<u>Task</u> <u>Interim Date</u>
	
	Final completion date/ date for submittal to ADEM (No later than December 9, 2006):

B. <u>Best Management Practice (BMP) #1</u>: Buffer Zone

- Known or suspected problem/existing pollutant source to be addressed by BMP: Storm Water Runoff/Quality
- 2. Target audience: Citizens
- 3. Description of BMP: **25 foot minimum vegetative buffer zones**
- 4. Measurable Goal(s): Require new developments to provide buffer zones to protect "blue line" streams and creeks identified on USGS 7.5 minute topographic maps.
- 5. Schedule:
 - a. Interim Milestone Dates (if applicable)
 - b. Implementation Date: July 2002
 - c. Frequency of actions (if applicable)
 - d. Month/Year of each action (if applicable)
- 6. Person (position) responsible for overall management and implementation of the BMP: *City of Auburn Planning Commission*
- 7. Rational for selecting this BMP:

Buffer zones provide for stream bank protection by restricting the type of land disturbance in and around streams. They also allow a location for stream bank vegetation to grow providing shade and habitat for aquatic life.

C. Best Management Practice (BMP) # 2: Detention Pond Inspection

- Known or suspected problem/existing pollutant source to be addressed by BMP: Storm Water Runoff/Quality
- 2. Target audience: Private and Public Detention Pond Owners
- Description of BMP: Annual inspections of exiting detention ponds.
- 4. Measurable Goal(s): Inspect private and public storm water detention ponds (on record with Public Works) annually
- Schedule:
 - a. Interim Milestone Dates (if applicable)
 - b. Implementation Date: **1997**
 - c. Frequency of actions: **Annually**
 - d. Month/Year of each action: (if applicable)
- 6. Person (position) responsible for overall management and implementation of the BMP: *Tim Logiotatos/Public Works*
- 7. Rational for selecting this BMP:

Existing detention ponds need periodic inspections to maintain proper operation. Upon inspection, the owner of the pond is notified of corrective action needed. Because vast quantities of storm water are passed through these detention ponds every year, regular inspections identify potential problems before they create major environmental damage.

Appendix F

Pollution Prevention/Good Housekeeping for Municipal Operations

40 CFR Part 122.34(b)(6) Requirement: You must develop and implement an operation and maintenance program that includes training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

A. <u>Best Management Practice (BMP) # 1</u>: Construction Site Management Training

- Known or suspected problem/existing pollutant source to be addressed by BMP: Storm Water Runoff/Quality
- 2. Target audience: Public Works Employees
- 3. Description of BMP: Construction Site Management Training
- 4. Measurable Goal(s): **Develop and implement training that provides**the Public Works department the guidance on how to implement site
 control measures on all municipal projects.
- 5. Schedule:
 - a. Interim Milestone Dates (if applicable)
 - b. Implementation Date: **2003**
 - c. Frequency of actions: Annual
 - d. Month/Year of each action (if applicable)
- 6. Person (position) responsible for overall management and implementation of the BMP: *Tim Logiotatos/Public Works Department*
- 7. Rational for selecting this BMP:

Providing training to employees will allow the City to better control runoff from municipal construction project sites. Training of construction design personnel will help to develop the skills necessary to choose and implement the most effective Best Management Practices (BMPs).

B. <u>Best Management Practice (BMP) # 2</u>: Spill Response and Prevention Training

- Known or suspected problem/existing pollutant source to be addressed by BMP: Storm Water Runoff/Quality
- 2. Target audience: **Public Works Employees**
- 3. Description of BMP: **Provide training to public works employees for spill response and prevention**
- 4. Measurable Goal(s): **Develop and implement training program** targeted at spill response and prevention
- Schedule:
 - a. Interim Milestone Dates (if applicable)
 - b. Implementation Date: **Develop program 2003**
 - c. Frequency of actions: **Annual training starting in 2004**
 - d. Month/Year of each action: January March
- 6. Person (position) responsible for overall management and implementation of the BMP: *Tim Logiotatos/Public Works*
- 7. Rational for selecting this BMP:

Spill prevention training is targeted at public works employees. It will have the most impact when it comes to preventing and controlling spills of non-hazardous materials since the first responders to a spill are typically Public Works work crews. Hazardous materials will be addressed through our agreement with the Opelika Fire Department.

Notes:

For the BMP used to describe the required training component of the O&M program, you should provide the name of the target audience(s). One targeted audience must be the MS4 employees.

The MS4 is not limited to implementing only 2 BMPs for each minimum control measure. If additional BMPs are chosen, then you should attach additional sheets as needed.

Appendix G City of Auburn Location Map

Appendix I

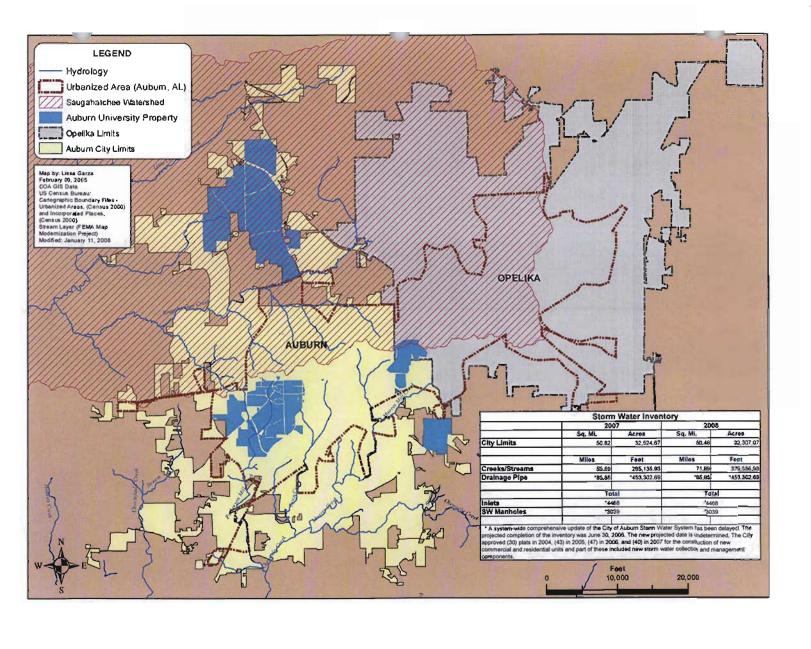
Master Drainage Map & Quarter Section Map Example

Appendix K

City of Auburn Storm Water Management Manual

APPENDIX B

URBANIZED AREA MAP



APPENDIX C

NEWSPAPER PUBLICATIONS LISTING

News Paper Publications

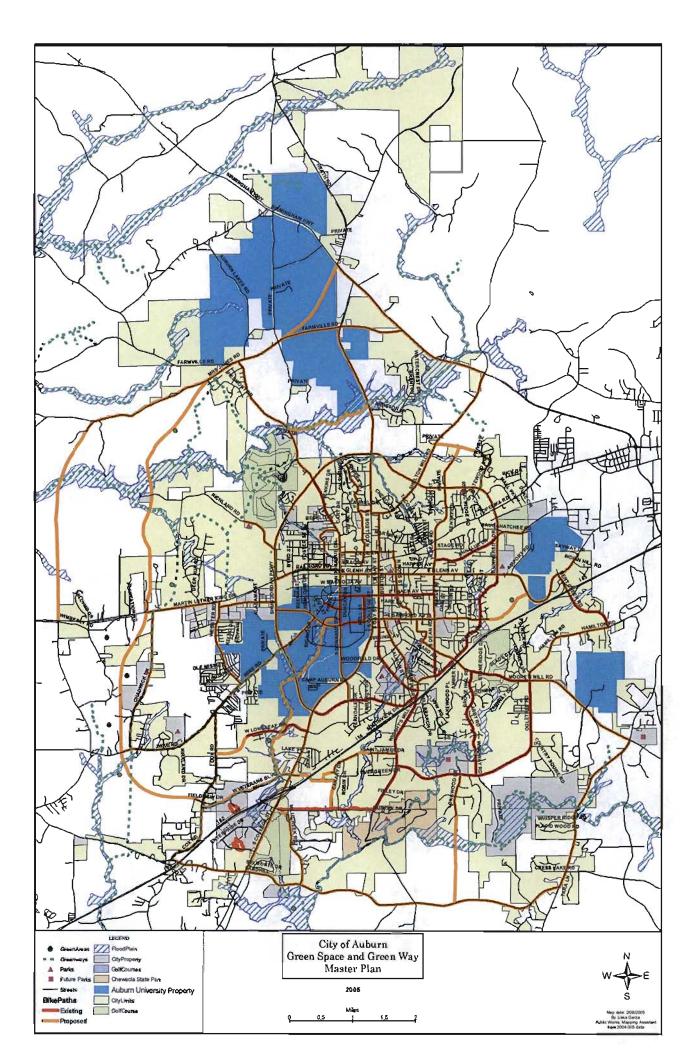
Publication Date by Month	Publication Date	Title	Editorial	Publication Source
	12/1/2006	STORMWATER RUNOFF		OPEN LINE
	12/5/2006	AUBURN TO ADDRESS WATERSHED ISSUE		Opelika-Auburn News
	12/19/2006	E.coli found in Saugahatchee		Opelika-Auburn News
	12/20/2006	WATERSHEDS SHOULD BE TESTED MORE OFTEN	V	Opelika-Auburn News
January 2007				
	1/9/2007	WAITING FOR ANSWERS: ADEM Delays E.coli Testing on Saugahatchee Creek		Opelika-Auburn News
	1/23/2007	ADEM TESTS ON SAUGAHATCHEE UNDERWAY	· 🗆	Opelika-Auburn News
February 2007				
Control of the Contro	2/1/2007	COUNTDOWN TO CITYFEST 2007		Opelika-Auburn News
	2/9/2007	AUBURN CITY COUNCIL DESERVES KUDOS FOR HELPING STREAMS	\checkmark	Opelika-Aubum News
	2/16/2007	ADEM AWAITS LAB WORK ON CREEK'S E.COLI		Opelíka-Aubum News
	2/16/2007	WATER QUALITY MONITORING CLASS OFFERED SATURDAY		Opelika-Auburn News
March 2007				
	3/30/2007	Household Hazardous Waste Collection Day Set fo Saturday	or 🗀	Opelika-Auburn News
April 2007				
	4/1/2007	Auburn CityFest 2007		Open Line
	4/1/2007	Auburn City Employees Collect Hazardous Waste		OPELIKA-AUBURN NEW
	4/1/2007	Earth Week 2007		Open Line
	4/8/2007	Celebration for Earth Set		Opelika-Auburn News
	4/8/2007	Environmental Groups Join Together to Clean Area Creeks		Opelika-Auburn News
May 2007				

Publication Date by Month	Publication Date	Title	Editorial	Publication Source
	5/2/2007	What You Can Do to Help Keep Auburn Beautiful		Open Line
	5/4/2007	ADEM Confirms Bacterial Presence in Creeks		Opelika-Aubum News
	5/23/2007	A Combined Effort		Opelika-Auburn News
	5/24/2007	AU Looks for Niche in Water Research		Opelika-Aubum News
	5/24/2007	AU to Hold Conference on Water Usage		Opelika-Aubum News
	5/31/2007	Dam Removed from Part of Moores Mill Creek		Opelika-Aubum News
June 2007				
	6/1/2007	Running Dry		Opelika-Aubum News
	6/6/2007	East Central Alabama Gets Rain		Opelika-Aubum News
August 2007				
	8/20/2007	DROUGHT CONDITIONS CONTINUE STATEWIDE		Opelika-Auburn News
	8/26/2007	DROUGHT		Opelika-Aubum News
	8/26/2007	WHAT ABOUT GEORGIA?		Opelika-Aubum News
	8/28/2007	ADEM RETURNS TO IDENTIFY E.COLI SOURCE IN LEE COUNTY WATERWAYS		Opelika-Aubum News
	8/31/2007	ADEM SUSPENDS WATER TESTING AFTER BEING INFORMED OF BROKEN SEWER LINE		Opelika-Auburn News
September 2007				
	9/19/2007	3 CREEKS LISTED AS IMPAIRED		Opelika-Auburn News
	9/27/2007	ADEM FINDS VIOLATIONS IN COUNTY FLYOVER	₹ 🗍	Opelika-Auburn News
October 2007				
	10/4/2007	ADEM FLYOVER SHOWS ONLY ONE AUBURN VIOLATION		Auburn Villager
November 2007				
Wednesday, Februar	ry 27, 2008			Page 15 of 1

Publication Date by Month	Publication Date	Title	Editorial	Publication Source
	11/1/2007	AUBURN RECYCLES DAY: CELEBRATING 20 YEARS OF RECYCLING IN THE CITY OF AUBURN		Open Line
	11/20/2007	STATE CITES RETIREE FOR DIRT PIT		Opelika-Auburn News
January 2008				
	1/4/2008	Rain raises levels in some state lakes		Opelika-Aubum News
	1/4/2008	Christmas Rains Were Beautiful Stocking Stuffers	. 🔽	Opelika-Auburn News
	1/14/2008	Ex-Stream Makeover		Opelika-Auburn News

APPENDIX D

GREEN SPACE AND GREEN WAY MASTER PLAN



APPENDIX E

FUTURE LAND USE PLAN

