



**City of Dothan, Alabama
Annual Report 2015
Small Municipal Separate Storm Sewer System (MS4)
General NPDES Permit
Permit Number ALR040007**

March 2016

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Certification

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information 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 fines and imprisonment for knowing violations.

Mike Schmitz, Mayor _____
Name and Title (type or print)

Mike Schmitz, Mayor (Signature)

Date

Introduction

The City of Dothan is located in Southeast Alabama, primarily in Houston County, but lies in parts of Dale and Henry County, as well. There are approximately 89 square miles in the City limits. The GIS map of the MS4 is constantly being updated.

The City of Dothan (City) filed the initial Notice of Intent (NOI) for the Small Municipal Separate Storm Sewer System (MS4) General Permit in March of 2003. Small MS4's are defined as municipalities with a population less than 100,000 and located in urbanized areas. The City has a population of 65,496 according to the 2010 U.S. Census Bureau's estimates.

SWMP Requirements

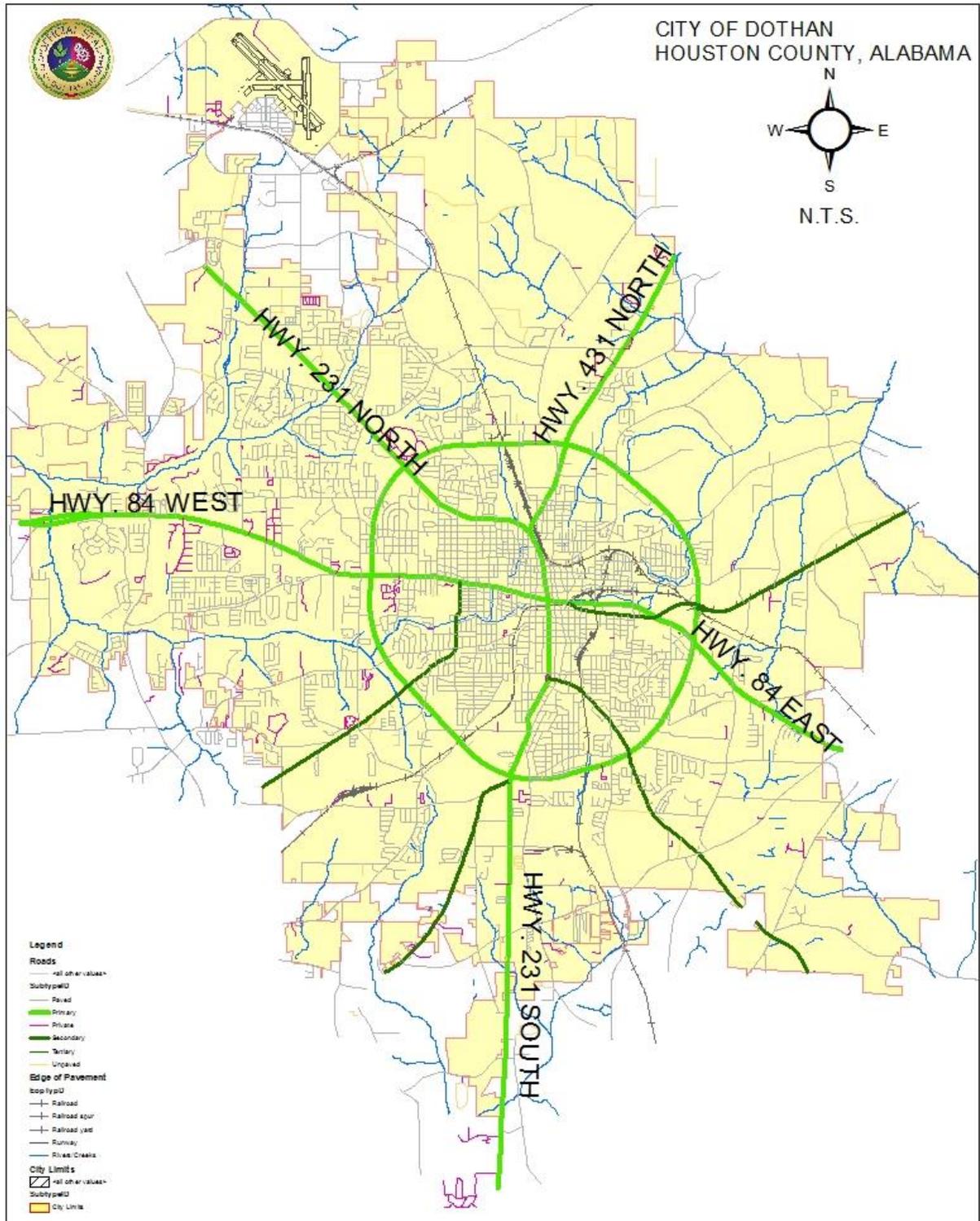
As part of the MS4 Phase II requirements, the City of Dothan must develop, implement and enforce a SWMP designed to reduce the discharge of pollutants from its MS4 to the maximum extent practicable (MEP) to protect water quality and satisfy the appropriate water quality requirements of the Clean Water Act. The City of Dothan shall use all known, available, and reasonable methods of prevention, control and treatment (Best Management Practices or BMPs) to prevent and control storm water pollution from entering waters of the State of Alabama. The SWMP shall include:

- a. Management Practices
- b. Control techniques and system design, and engineering methods
- c. BMPs
- d. Coordination among entities
- e. Measurable goals for each of the BMPs
- f. Person or persons responsible for implementing and coordinating BMPs

Furthermore, the SWMP must address the six minimum control measures, which are:

- a. Public Education and Outreach on Storm Water Impacts
- b. Public Involvement / Participation
- c. Illicit Discharge Detection and Elimination (IDDE)
- d. Construction Site Storm Water Runoff Control
- e. Post Construction Storm Water Management in New Development and Redevelopment
- f. Pollution Prevention / Good Housekeeping for Municipal Operations

City Map



Responsible Party

The City's Stormwater Management Program (SWMP) is composed of several programs, activities, and functions operating under multiple Departments and Divisions within the City's organization to achieve the six Minimum Control Measures (MCM). The key Departments are as follows:

- City of Dothan Commission – The City Commission is the legislative body for the City and is responsible for adopting resolutions, ordinances and budgets related to the implementation of the SWMP.
- Mayor's Office - The Mayor is the executive for the City and is responsible for the overall oversight of the program and for maintaining communication between the Commission and the Departments.
- Public Works Department – Manages overall compliance with Phase II Stormwater Permit. Performs maintenance of stormwater infrastructure and assists with inspections of residential and commercial construction; Performs annual detention pond inspections; Operates and manages the street sweeping program; Monitors residential and commercial construction and conducts erosion and sediment control inspections; Operates the landfill, trash and garbage collection, and recycling program; Manages public education and outreach program.
- Planning and Development Department (Includes Building Permits and Inspections) – Monitors residential and commercial construction; Building Code Enforcement; Oversees Planning Commission
- Police Department – Enforces Illicit Discharge Ordinance.
- Leisure Services – Performs maintenance of City parks
- Information Technology Department – Website Maintenance
- Dothan Utilities – Groundwater Education Day; Manages water quality sampling program
- General Services – Arbor Day Tree Giveaway, City Building and Grounds Maintenance, and some ROW mowing

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

Jerry W. Corbin, P.E., Public Works Director
Public Works Department
City of Dothan
P.O. Box 2128
Dothan, AL 36302
(334) 615-4400

Purpose

The Small Municipal Separate Storm Sewer System General National Pollutant Discharge Elimination System (NPDES) Permit requires the permit holder to develop, implement, and enforce a Storm Water Management Program (SWMP) designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP) to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act. The SWMP will include management practices, control techniques and systems, and design and engineering methods for the control of pollutants.

Each of these control measures and BMP's will have measurable goals, where applicable. Measurable goals will allow the City to assess the effectiveness of stormwater control measures and BMP's.

Actions in 2015

On November 09, 2015 the two Public Works Inspectors and two Building Inspectors renewed their QCI certification.

In addition, the City entered into an AOC with EPA in 2012 with the main goal to reduce and eliminate Sanitary Sewer Overflows (SSO's). Reducing the number and frequency of SSO's will also help with the overall water quality of the MS4. The City has invested millions of dollars at this point, and is committed to millions more to establish and maintain programs that will reduce SSO's city-wide and ensure that the City's sanitary sewer collection and treatment systems will be able to protect the MS4.

The City plans to review, revise, and submit the SWMP annually and will resubmit it to ADEM in September.

Public Education and Outreach on Storm Water Impacts

Permit Requirements: The Public Education and Outreach (MCM 1) requires the City to implement and evaluate a public education and outreach program that distributes educational materials to the community or conducts equivalent outreach activities about the impacts of polluted discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff to the maximum extent practical.

Rationale Statement: The City's goal is to have an aggressive, innovative and fiscally responsible public education and outreach program that aims to inform all target audiences within the City on the steps that they can take to reduce stormwater pollution in their daily routine. In addition to this informative stormwater pollution prevention strategy, the City will work to educate these target audiences on how to become involved in the City's stormwater program through the best management practices (BMP) detailed below.

1. The primary target audiences within the City and the rationale for selecting these audiences are listed below:
 - a. General Public (homeowners and citizens) – Potential contributors of stormwater pollution through activities such as illicit discharges and over-fertilization of lawns. The primary pollutants potentially contributed by this target audience are nutrients and pathogens.
 - b. Engineers, Developers and Contractors – Potential contributors of stormwater pollution through development and construction activities as well as engineering design of stormwater pollution prevention best management practices. The primary pollutants potentially contributed by this target audience are sediment and nutrients.
 - c. Landscape Companies – Potential contributors of stormwater pollution primarily through lawn maintenance activities. The primary pollutants potentially contributed by this target audience are excess nutrients.
 - d. Local Businesses – Potential contributors of stormwater pollution through activities such as illicit discharges and daily business activities. The primary pollutants contributed by this target audience are excess nutrients and pathogens.

The City's public education and outreach program is designed to address all stormwater pollutants of concern, but generally focuses on the pollutants for which waterbodies within the City are currently listed as impaired. These specific pollutants include:

- Nutrients (primarily Total Phosphorus)
- Sediment
- Pathogens

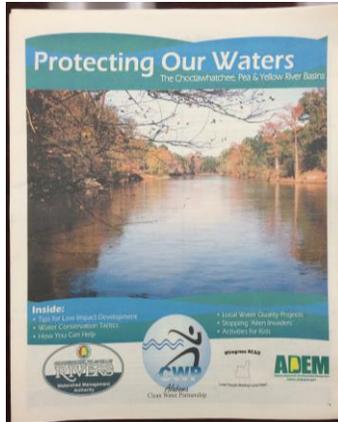
The Public education and outreach strategy for each target audience will vary depending on the type of audience, type of pollutant, contribution, potential risk and impact of pollutant contribution and current level of education of each target audience on the City's stormwater management program.

2. Overall management and implementation of the City's stormwater education and outreach program is as follows:
 - a. Public Works Department – Manages overall SWMP and compliance with Phase II Stormwater Permit; Monitors residential and commercial development construction and conducts erosion and sediment control inspections; Manages public education and outreach program; Performs maintenance of stormwater infrastructure and assists with inspections of residential and commercial construction; Performs annual detention pond inspections; Operates and manages the recycling programs; Operates and manages the street sweeping program.
 - b. Leisure Services Department – Provides pet waste bags in City parks.
 - c. Planning and Development Department – Monitors residential and commercial building construction and conducts erosion and sediment control inspections at residential building sites.
3. Overall success of our public education and outreach program will ultimately be gauged by the level of awareness in the community regarding their role in the City's stormwater management program.

Specific components and measurable goals within our public education and outreach program will consist of, but not be limited to, the following best management practices (BMPs):

BMP #1: Brochure/Publications: Promoting green space and stormwater management. Available at City offices or on-line.

- a. "Field Guide for Erosion and Sediment Control on Construction Sites in Alabama", booklet, by Alabama Soil and Water Conservation Committee.
- b. EPA.GOV/NPDES/MENUOFBMPS, Website, by US EPA.
- c. "Protecting Our Waters, the Choctawhatchee, Pea and Yellow Riverbasins", brochure available at City offices.



Measurable Goals: The items are available. There has not been a high demand for them at this time. We are continuing to look for better ways to distribute them.

BMP #2: Demonstration Project:

- a. Installed a rain garden at Ramsey Park to treat runoff from a 1.3 acre City park.



- b. Aunt Katie's Community Garden is a resurgence of the Victory Garden of the past. A local vacant lot is converted into a group of individual vegetable gardens that neighborhood people work and reap the benefits of fresh vegetables.

Aunt Katie's Garden is one of 1900 areas in the U. S. that are "peoples' gardens". This distinction comes by 1) helping the needy, 2) being sustainable and 3) being considered a pocket park.

Aunt Katie's Community Garden held a workshop on tunnel houses in February. In December Auburn University recognized them as a strategic partner with the nutrition education program.

The link below is to Aunt Katie's facebook page.

<https://www.facebook.com/AuntKatiesCommunityGarden>



Measurable Goals: The garden beds are rented to families, churches and individuals. The produce is donated (to families and restaurants) and sold to the public. The outreach is to families, churches and children. Aunt Katie's Garden currently has over 540 likes on its Facebook page.

BMP #3: City Website (www.dothan.org) has Informative Links for:

- a. Code of Ordinances – City of Dothan
 - 1. Subdivisions
 - 2. Zoning
 - 3. Illicit Discharge Ordinance/Stormwater Management

https://www.municode.com/library/al/dothan/codes/code_of_ordinances

- b. Public Works
 - 1. Engineering Services – Stormwater Management
 - 2. Recycling

<http://www.dothan.org/index.aspx?nid=305>

Measurable Goals: iRecycling had 1,172 hits
Stormwater had 151 hits
ADEM link had 6 hits
EPA link had 1 hit
Illicit Discharge 21 hits
Erosion Control link 4 downloads
Clean Water had 0 hits

BMP #4: Community Events (Annual)

- a. Arbor Day (February) – The City gives away trees each year at this event.
- b. Touch-A-Truck (May) – City Public Works Department provides a truck (garbage or recycling) for interaction with school age children at Landmark Park.



Touch-A-Truck

Measurable Goals:

- a) Approximately 5,600 trees were given away on Arbor Day.
- b) Over 1,500 attended Touch-A-Truck, which was an increase from 2014 attendance.

BMP #5: Employee Certifications:

- a. Commercial Pesticide Applicators license aid in pollution prevention by guiding applicators on correct application techniques, which discourages overuse or misuse of pesticides/herbicides – State of Alabama Department of Agriculture and Industries Pesticide Applicators Certification (3 year certification):
 1. Public Works Foreman
 2. General Services Horticulturists
 3. Leisure Services Supervisor
- b. Qualified Credentialed Inspector (QCI) program educates inspectors on correct erosion and sediment control applications and installation techniques – QCI (yearly recertification):
 1. Engineering Assistant (new employee will be QCI certified in 2016)
 2. Public Works Inspector (x2)
 3. Permits and Inspections (x2)

Measurable Goals: Maintain certifications. All certifications have been maintained. Renewal will be in 2016.

BMP #6: Employee Erosion and Sedimentation Classes: The City of Dothan Public Works Department will encourage employees to attend Erosion and Sedimentation workshops, classes and/or conferences. The purpose of this BMP is to remind existing employees (and inform new employees) of the Construction Site Stormwater Runoff Control standards. Each department within the City is expected to send employees such as crew leaders, assistant supervisors and/or supervisors to these types of workshops, classes, and/or conferences.

Responsible Person(s) for the Employee Erosion and Sediment Control Classes: Department Head and/or Supervisors.

Measurable Goals: Report attendance in annual report.

BMP #7: Pet Waste Bags in City Parks: Pet waste bag dispensers are available in City parks. Pet waste bags are available free to the public and encourage removal of pet waste from public areas. The park staff is responsible for keeping pet waste bag dispensers full. This helps keep pet waste out of storm drains and area waters.

Responsible Person(s): Leisure Services (Park Staff)

Measurable Goals: There were approximately 4,000 waste bags used in 2015 at the various City Parks.

BMP #8: Watershed Signage and Environmental Awareness Signage on Thoroughfares: Watersheds are a logical way to think about the connection between the land and water quality. How we manage and treat the land has a direct impact on the ability of water to support a number of important public uses like swimming, fishing, aquatic species habitat and clean drinking water supply. This will raise awareness of the individual watersheds within the City and the names and locations of the streams.

Measurable Goals: There are four (4) stream systems (Omussee Creek, Little Choctawhatchee River, Beaver Creek and Cypress Creek) within Dothan.

Potential Sign locations have been identified on City collector streets. No signs have been installed to date. The making of the signs will be worked into the schedule between making roadway signs in the City sign shop. The City is also asking the respective agencies if the signs can be displayed on roadways in the city limits that are maintained by Houston County and ALDOT.

Public Involvement/Participation

Permit Requirements: Public Participation/Involvement (MCM 2) requires the City to develop, implement and evaluate a public participation program centered on the SWMP and the annual report. The ongoing activities for public involvement may include public input through classes, workshops, public forums, web page information, stewardship programs and other environmental related activities.

Rationale Statement: The City intends to involve the general public by soliciting public input and by providing activities and opportunities to engage the general public in our stormwater program.

The primary target audiences for the City's public involvement/participation program and the rationale for selecting these audiences are listed below:

- a. General Public (homeowners and citizens) – Potential contributors of stormwater pollution through activities such as illicit discharges and over-fertilization of lawns. The primary pollutants potentially contributed by this target audience are nutrients and pathogens.
- b. Engineers, Developers and Contractors – Potential contributors of stormwater pollution through development and construction activities. Engineers can provide water resource protection; through the engineering design of proper stormwater potentially contributed by this target audience are sediment and nutrients.
- c. Landscape Companies – Potential contributors of stormwater pollution primarily through lawn maintenance activities. The primary pollutants potentially contributed by this target audience are excess nutrients.
- d. Local Businesses – Potential contributors of stormwater pollution through activities such as illicit discharges and daily business activities. The primary pollutants contributed by this target audience are excess nutrients and pathogens.

The City's public involvement/participation program is designed to address all stormwater pollutants of concern, but also focuses on the pollutants for which water bodies within the City of Dothan are currently listed as impaired. These specific pollutants include:

- Nutrients (primarily Total Phosphorus)
- Sediment
- Pathogens

The public involvement/participation strategy for each target audience will vary depending on the type of audience, type of pollutant contribution, potential risk and impact of pollutant contribution and current level of education and involvement of each target audience in the City's stormwater management program.

Overall success of the public involvement/participation program will ultimately be gauged by the public's support for the City's stormwater management program, the level of community involvement in the City's stormwater management program and the level of awareness in the community regarding their role in the City's stormwater management program.

Specific components and measureable goals within the public involvement/participation program will consist of the following best management practices (BMPs):

BMP #1: City Web Page: The internet provides a very accessible means for allowing public participation by making information and data available to citizens for upcoming future stormwater related activities.

Potential Targeted Audience: General Public

Measurable Goals: Information is on the City website for Illicit Discharge including the definition of an Illicit Discharge on the Stormwater sub-page of Public Works, a link to the City's Ordinance, and a link to report potential Illicit Discharges.

<http://www.dothan.org/index.aspx?NID=493>

Illicit Discharge website had 21 hits
Stormwater website had 151 hits

Responsible Departments: I.T. and Public Works

BMP #2: Groundwater Education Day: Groundwater Education Day is an effort to educate fourth grade students about all aspects of the water cycle and other related natural resources. These efforts also instill in the students a general environmental awareness and stewardship specific protection strategies. It is an all-day event centered around hands on learning about watersheds and the importance of water. The City has participated actively in the event. These efforts of participation will continue in the future.

Measurable Goal: Approximately 350 students from 7 schools participated in this event in April 2015. Not all schools were able to attend the event due to testing; later classes were held for an additional 425 students at their schools. The attendance was down from the previous year. However, there was still a large response for this program.

Responsible Department: Dothan Utilities



BMP #3: Curbside Recycling: Since recycling programs reduce a potential pollutant source by reducing, recycling and reusing, they are a benefit to stormwater management. The City of Dothan started its city wide curbside recycling pick-up program in June of 2013 and continues today.

Potential Targeted Audience: Homeowners, renters and schools.

Measurable Goals: The curbside recycling program collected 1,286.15 tons in 2015. This was an increase in the tonnage from the previous year.

Responsible Department: Public Works

BMP #4: Arbor Day Tree Give Away: Increasing the native urban tree canopy in Dothan provides many benefits to water quality and habitat. Trees reduce stormwater

runoff by absorption (infiltration) and their roots help prevent erosion. Therefore, the City is excited each year to celebrate Arbor Day by giving away trees. The City will track the number of trees given away and report the data in the annual report.

Measurable Goals: Approximately 5,600 trees were distributed to the public in 2015.

Responsible Department: General Services

BMP #5: Coordination with other Agencies and Groups on Environmental Efforts:

The Choctawhatchee, Pea and Yellow River Watershed Management Authority – The City of Dothan is a member of this authority to promote awareness of the environmental aspect of the watershed. City staff attends the meetings.

On July 30, 2015 Jonathan Lucas attended the Choctawhatchee-Pea-Yellow Rivers Clean Water Partnership and Chattahoochee-Chipola Rivers Clean Water Partnership joint meeting in Abbeville, Alabama. During this meeting Allison Jenkins gave statewide updates for the Clean Water Partnership and local directors gave updates for their watersheds.

On December 9, 2015 Tyler Reeder and Jonathan Lucas attended the ACWP Annual Conference at the Nature Place at Lanark, in Millbrook, Alabama. This meeting was focused on MS4's. This meeting was very beneficial because there we heard from and about other MS4 in the state and what they were doing with their MS4.

Measurable Goal: Staff will attend more of these types of conferences to learn better ways to implement and update the City of Dothan's MS4.

Responsible Departments: Public Works

Additional Effort: The City had a meeting with ALDOT staff on September 24, 2015 to discuss their efforts within the City's MS4. This was a good meeting and we will continue these efforts in 2016.

BMP #6 Alabama 811: Alabama 811 shall be notified, by law, prior to any excavation and/or demolition activities. Alabama 811 is a one call center, which will contact all utilities in a specific area and have them locate their underground facilities. Damage to underground facilities can lead to illicit discharges to the City's water ways. The City of Dothan has been a member of Alabama 811 since December 2011.

Measurable Goal: In 2015, the City received 4,631 locate requests.

Responsible Departments: Dothan Utilities and Public Works

BMP #7: Storm Drain Marking Program: The City of Dothan will begin a program whereby the existing storm drain inlets within the City will be marked with a notice that

whatever material enters the inlet will flow to the open waters (streams, creeks, rivers) of Alabama.

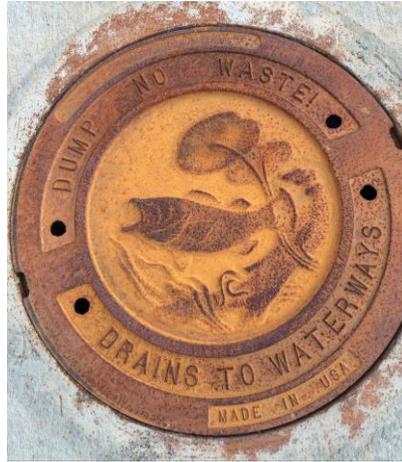
Potential Targeted Audience: The program may be utilized by Boy Scout troops, student organizations, environmental groups and private citizens. The program engages the general public, local schools, and local civic and environmental stakeholder groups.



The City staff began a pilot stenciling project in the first and second quarter of 2014. Staff tried different materials and application techniques on our many different types of storm inlets. We found that only the newest, smooth concrete finish inlet tops were conducive to this style of marking. Due to the limited amount of inlets the stenciling would work on the city is exploring new options for this BMP. We have collected some samples of different types of storm inlet markers and are looking into the costs and viability to be able to continue this BMP.



In 2015, the City began requiring all stormwater manhole lids to state “No Dumping Drains to Waterways” for all new construction projects. This is being done to give notice to the public that whatever enters the stormwater system will “Drain to Waterways”.



Measurable Goal: Continue to require “No Dumping” lids and continue research on feasible ways to convert existing lids.

Responsible Department: Public Works

BMP #8: Public Input: The City holds a public participation class for citizen’s information and input called Dothan 101. Citizens are encouraged to participate with ideas, suggestions and ask questions about stormwater management and other topics.

Potential Targeted Audience: General Public

Measurable Goals: The Public Works Department held a class on May 12, 2015.

Responsible Department: Public Works

Additional Effort: Bart Barefoot, Engineering Services Manager, spoke with students at Headland Elementary on May 8, 2015 and Abbeville Elementary, on May 20, 2015, about Civil Engineering. During each of these events Mr. Barefoot spoke about stormwater and erosion control and its effects on local waterways.

Illicit Discharge Detection and Elimination Program

Illicit discharges into a storm drain system are defined by EPA as "...any discharge to a MS4 that is not composed entirely of stormwater...". Some exceptions include but are not limited to permitted industrial sources and discharges from firefighting activities. Some examples of illicit discharges include: sanitary wastewater, car wash, laundry wastewaters, etc. These illicit discharges can enter a storm drain system either through a direct connection or indirectly by spills, dumped materials and cracks in pipes. As a result, inadequately treated waste containing high levels of pollutants enter stormwater.

1. Permit Requirement: The Illicit Discharge Detection and Elimination (MCM 3) requires the City to develop, implement, enforce and evaluate a program to detect and eliminate illicit discharges and improper disposal, including spills not under the purview of another responding authority, into the City's regulated MS4 area, to the maximum extent practicable. The program must include the following:
 - a. Annually update the stormwater infrastructure inventory map, showing the 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 within the boundaries of the City's MS4 area.
 - b. To the extent allowable under State or local law, effectively prohibit; through ordinance, or other regulatory mechanism, non-stormwater discharges into the MS4 and implement appropriate enforcement procedures and actions. The ordinance may be updated when necessary.
 - c. Locate and address non-stormwater discharges, including illegal dumping, to the system that are not authorized by a separate NPDES permit.
 - d. Inform public employees, businesses and the general public of the hazards that are generally associated with illegal discharges and improper disposal of waste.

2. Exclusions: The Illicit Discharge Detection and Elimination MCM will include measures to control illicit discharges and improper disposal of wastes into stormwater. In the execution of this element, the City of Dothan will exclude the following categories of non-stormwater discharges that are not required to be addressed by the State:
 - a. Water line flushing (including fire hydrant testing)
 - b. Landscape irrigation
 - c. Diverted stream flows
 - d. Rising ground waters
 - e. Uncontaminated ground water infiltration (infiltration is defined as water other than wastewater that enters a sewer system, including sewer service connection and foundation drains, from the ground through such means as defective pipes, sewer service connections, or manholes. Infiltration does not include, and is distinguished from, inflow)
 - f. Uncontaminated pumped ground water
 - g. Discharges from potable water sources

- h. Uncontaminated groundwater from under drains (French drains or tile drains)
 - i. Air conditioning condensation
 - j. Irrigation water
 - k. Springs
 - l. Water from crawl space pumps
 - m. Foundation or footing drains
 - n. Lawn watering
 - o. Individual residential car washing
 - p. Flows from riparian habitats and wetlands
 - q. Swimming pool discharges (if dechlorinated - typically less than one part per million chlorine)
 - r. Street wash water
 - s. Discharges or flows from fire fighting activities
3. Target Pollutants and Sources: Non-point pollutants found in stormwater will be targeted by MCM 3. These pollutants include, but are not limited to: sediment, paints, fertilizers, pesticides, swimming pool discharges, pathogens, oils and greases. The sources that are targeted include, but are not limited to: illegal dumping, failing septic systems and/or illicit connections, swimming pool illicit connections, un-permitted construction site discharges, improper disposal of fertilizers, pesticides, herbicides, paints, etc.
4. Strategies, Goals and Timelines: The City will employ a variety of strategies for MCM 3 from enforcement of ordinances to education outreach. The City's goal is to reduce illicit discharge to its MS4 to the maximum extent practicable. Each strategy will be detailed below along with its goal and department responsible for implementation of measure.

BMP #1: Illicit Discharge Ordinance: Chapter 83, Stormwater Ordinance was adopted by the City Commission in March of 2012. Article I is specific to Illicit Discharge.

“This article is enacted to preserve, protect and promote the health, safety and welfare of the citizens of Dothan, Alabama, through the reduction, control and prevention of the discharge of pollutants to the city municipal separate storm sewer system (MS4). It is the expressed intent of this document to provide for and promote compliance by the city with federal and state laws governing the discharge of pollutants from the MS4 and to provide for and promote compliance with an NPDES permit issued to the city for such discharge. The city does not intend for this article to conflict with any existing federal or state law. The objectives of this ordinance are:

- 1. To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user;
- 2. To prohibit Illicit Connections and Discharges to the municipal separate storm sewer system;

3. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance”

Penalty for non-compliance: Up to \$500

Responsible Departments for Illicit Discharge Ordinance: Planning and Development (Code Enforcement Officer), Police (Environmental Compliance Officers) and Public Works Department (Civil Engineer and Inspectors)

BMP #2: Compiling and Organizing Existing City Stormwater Infrastructure Data:

This element of MCM 3 will involve staff locating all existing stormwater infrastructure data in GIS format and updating maps. Currently, the City has a map showing the location of existing stormwater outfalls that discharge to state waters. The map is included in the annual report.

Measurable Goal: The City continually updates the current stormwater map showing all known City stormwater outfalls that discharge directly to State waters. An updated map is included in the annual report (both printed and electronic copies).

Responsible Departments: Public Works

BMP #3: Perform Field Assessments and Site Inspections: To reduce the amount of pollutants in runoff, City crews regularly perform maintenance and cleaning on roadways, ditches, culverts, grounds, parks and creek channels.

Field assessments are observations made during the daily duties of the City programs. Currently, if a potential illicit discharge is discovered during a field assessment, depending on severity of the discharge, either the Fire Department is notified and/or Environmental Services. The potential discharge is investigated as a site inspection.

A site inspection is a field visit outside of an employee’s normal duties in response to reports of potential non-compliance, or as a result of program directives. The inspection is recorded in a database maintained by the Public Works Department.

A process will be established for each department’s designated field personnel to report non-stormwater discharges that are potentially in violation to the appropriate City staff. Designated City personnel will be trained in general stormwater quality practices. Any changes will be updated in the City’s SWMP and included in the City’s SWMP Annual report.

Measurable Goals: The City will:

1. Designate responsible personnel within department for field assessments and site inspections – Public Works Engineering

- Services staff are responsible for this, along with the Police Department's Environmental Compliance Officer(s).
2. Develop a process for reporting/inspection and enforcement for IDDE.
 3. Initiate basic field assessments to establish priority areas and major outfalls for the more focused inspections. Screen major outfalls.
 4. Respond per established procedures to all identified and reported potential illicit discharges and connections.
 5. Collect and review data regarding enforcement activities, as part of the annual report, to identify the principle pollutants and areas of concern throughout the City.

Responsible Departments: Dothan Utilities, Fire Department, Public Works, and Planning and Development

BMP #4: Hazardous Materials Response Program: The stormwater program will be coordinated with the existing hazardous materials response program offered by the City's Fire Department. The Public Works Department and other entities that respond to spills will also be involved in this effort.

Measurable Goals: The Dothan Fire Department responded to a total of 67 hazmat calls in 2015. These are primarily car crash spills.

The City established a section on the City's Web Page for public inquires about IDDE and a section which will allow for reporting of potential illicit discharges.

<http://www.dothan.org/index.aspx?NID=493>

Responsible Departments: Fire, Police and Public Works

BMP #5: Training: The goal of this element is to assure the City staff understand stormwater issues and are appropriately trained to recognize and report illicit discharges and connections while performing their normal duties in the field. Training will be provided to hazardous and non-hazardous materials response teams, public works and other employees. These training sessions may be offered in conjunction with other training elements of the program.

Measureable Goals: Provide one IDDE training session annually for new employees with program responsibilities;

Responsible Departments: Public Works and Fire Department

Evaluation: The City has seen minimal intentional illicit discharge events. Illicit discharges are primarily caused by traffic crashes and are handled by emergency services.

BMP #6: Fats, Oils, and Grease Control: On December 15, 2015 the City of Dothan approved a Fats, Oils, and Grease Control ordinance. This ordinance sets for requirements to aid in the prevention of sanitary sewer blockages, obstructions, and overflows due to the contribution and accumulations of fats, oils, and grease (FOG) into the City sewer system from commercial, industrial, religious, and institutional food service establishments. The objective is to eliminate FOG related sanitary sewer overflows and sewer line blockages to protect the area streams, prevent residential and commercial property damage, decrease sewer line maintenance costs, and to improve environmental quality.

http://www.dothaneagle.com/what-is-the-best-way-to-dispose-of-household-grease/article_863b92e8-2c2d-11e5-ad28-b7452914a913.html

http://www.dothaneagle.com/news/government/dothan-will-begin-regulating-grease-entering-sewer-system/article_061bb8fe-a383-11e5-aa39-87f19a339f75.html

Measureable Goals: Reduce SSOs within the MS4

Responsible Departments: Planning and Development

Construction Site Storm Water Runoff Control

Requirements: Enforce a program to reduce pollutants in stormwater runoff from construction activities. The program shall include requirements for construction site operators to control waste; procedures for site plan review; procedures for receipt and consideration of information submitted by the public; and procedures for site inspection and enforcement of control measures (i.e. BMP inspections).

Responsible Departments: Public Works Department and Planning and Development Department.

Rationale Statement: The City of Dothan has a Construction Site Stormwater Runoff Control program (MCM 4) to control erosion and sedimentation. This program is applicable to all construction and land disturbance sites, and is not limited by the size of the site (sites under an acre, as well as over an acre, are included in the program). This program includes project review, BMP inspections and enforcement of construction related ordinances for environmental protection. City employees and departments are held to the same standards as property owners, contractors and developers. The Public Works Department and the Planning and Development Department have QCI trained staff to conduct BMP inspections. Furthermore, City crew leaders in each department are offered an overview of the Construction Site Stormwater Runoff Control program (including stormwater standards at local and state levels) through a workshop periodically held by the Home Builders Association.

BMPs / Mechanisms: Used for Construction Site Stormwater Runoff Control

1. Design Review
2. BMP Inspections and Code Enforcement / Procedures for Non-Compliant Sites
3. City Ordinances
4. Educational Material Available in the Public Works Department

BMP #1: Design Review: The City of Dothan Public Works and Planning and Development Department review process includes:

- a. Preliminary Plats for Subdivision
- b. Building Permits
- c. Grading Permits
- d. Pre-Construction Meetings – off site with engineer of record
- e. Construction Plans
- f. Final Plats for Subdivision

All preliminary subdivision plat submittals with more than 5 lots require a public hearing through the Planning Commission. Notification requirements are as required by State law and the City of Dothan Subdivision Regulations. The City of Dothan Planning and Development Department coordinates plan reviews of commercial submittals for permit

issuance. The City of Dothan Public Works Department coordinates plan reviews of residential subdivision for permit issuance.

General Procedure of Submittal Review:

For the commercial submittals, stormwater drainage is reviewed for compliance with the City of Dothan Stormwater Ordinance in the Construction Plans review. Design review is performed independently by various City of Dothan Department representatives. The Public Works Department is the representative for Stormwater reviews. However, the applicant's engineer is the person ultimately responsible for drainage compliance with the City's regulations. The Public Works Department is responsible to ensure the development has an NPDES permit. The comments generated during design review are sent to the applicant. The applicant addresses the comments and resubmits plans. The City of Dothan then approves the construction plans or provides additional comments to be addressed.

For the residential and commercial subdivision applications, stormwater drainage is reviewed for compliance with the City of Dothan Subdivision Regulations in the Construction Plans review. A design review meeting may be held and attended by the various City of Dothan Department representatives, design engineers, utility owners or other involved parties. The Public Works Department is the representative for Stormwater reviews. However, the applicant's engineer is the person ultimately responsible for drainage compliance with the City's regulations. The Public Works Department is responsible to ensure the development has an NPDES permit. The comments generated during and after the design review meeting are compiled in a review letter which is sent to the applicant. The applicant provides a response letter. The City of Dothan then approves the construction plans or provides additional comments to be addressed.

Pre-Design meetings may be held with the applicant after Preliminary Plat approval and before submittal of construction plans. During the pre-design meetings, City staff meets (typically off site) with the applicant's engineer of record to address specific issues such as wetland buffer protection, on-site erosion controls, drainage concerns, potential utility conflicts and design issues.

The Final Plat approval phase is after the final inspection of installed subdivision infrastructure takes place and a final punch list is generated. A site inspection takes place and any deficient items are addressed during this inspection process. The site inspection is conducted by the same Department Supervisors/Representatives who perform the preliminary design review.

Responsible Departments: Public Works Department, Dothan Utilities and Planning and Development Department.

Measurable Goals: Total number of plans reviewed in 2015:
19 – Rezoning Plans

32 – Subdivision Plans (Final & Preliminary)
59 – Development Plans
Total number of permits issued – 5,916

BMP #2: BMP Inspections / Code Enforcement: City of Dothan Public Works and Planning and Development Departments have certified QCI Inspectors to conduct BMP inspections, as well as other inspections.

The initial BMP inspection is performed prior to other construction inspections. The Building Inspectors assist with BMP inspections by ensuring compliance with each building inspection. The QCP Inspectors usually perform the closure BMP inspection, as part of the final inspection on the site. The City of Dothan Stormwater ordinance is successful at minimizing sedimentation and erosion to the maximum extent practical. Construction sites with high impact potential and subdivisions under construction are inspected frequently. Construction sites with high impact potential include multi-family, non-residential, those near critical areas or those disturbing more than an acre. Other single family home construction sites are inspected initially and with follow up inspections by building inspectors to ensure continued compliance.

Significant rain events (those greater than $\frac{3}{4}$ "') trigger random inspections on subdivisions and commercial sites under construction. BMP inspections include:

- a. Initial
- b. Phasing (if applicable)
- c. Closure (certificate of occupancy is not issued unless site is stable)

Procedures for non-compliant sites:

- a. Notice of Violation (written or verbal)
- b. Withheld Construction Inspections
- c. Stop Work Orders
- d. ADEM notification if water quality impact has occurred or compliance not achieved

Responsible Departments for BMP Inspections / Code Enforcement: Public Works Department, Dothan Utilities and Planning and Development Department.

Measurable Goals: On November 09, 2015 the two Public Works Inspectors and two Building Inspectors renewed their QCI certification.

BMP #3: Municipal Ordinance: Utilized for stormwater and stormwater management on construction sites:

- a. Chapter 83 – Stormwater and Stormwater Management Construction Best Management Practices Plan (Sec. 83-24)

b. Chapter 90 – Subdivisions

Responsible Departments for municipal ordinances: Public Works Department, Dothan Utilities and Planning and Development Department.

Measurable Goals: Staff feels that the Stormwater Ordinance is effective. The Subdivision code is under review and revision by the Planning and Public Works staff.

BMP #4: Educational Material: Brochures/booklets available to contractors/developers:

- a. *Field Guide for Erosion and Sediment Control on Construction Sites in Alabama* by Alabama Soil and Water Conservation Committee Partners
- b. *BMP Minimum Requirements*, City of Dothan handout
- c. *Stormwater Management*, by Ecosolutions

Measurable Goals: There hasn't been a demand from the general public for these items. The City is continuing to look at other methods of distribution.

Post-Construction Storm Water Management in New Development and Redevelopment (MCM 5)

Requirements: Enforce a program to address stormwater runoff from new development projects that disturb greater than or equal to one acre by insuring that controls are in place that would prevent or minimize water quality impact. Develop and implement strategies, which include a combination of structural and/or non-structural BMPs appropriate for the community. Use an ordinance or other regulatory mechanism to address post construction runoff from new development and redevelopment projects to the extent allowable under State or local law. Ensure adequate long-term operation and maintenance of BMPs.

Responsible Departments: Public Works Department, Dothan Utilities and Planning and Development Department.

Rationale Statement: The Planning and Development Department works closely with the City of Dothan Planning Commission (which meets monthly). This committee is appointed by the Mayor and City Commission, and works with the Planning and Development Department, Dothan Utilities and the Public Works Department with design and review procedures, as set forth in the Subdivision Regulations. The Planning Commission reviews amendments to the Subdivision Regulations. A post-construction strategies plan is submitted with either the construction plans or final plat for new development and redevelopment. The Public Works Department and Dothan Utilities addresses runoff issues from all sites within the City of Dothan (including post construction residential, commercial and right-of-way/easement areas). The Public Works Department inspects and addresses any issues with stormwater detention areas on an annual basis. The Public Works Department oversees maintenance of city-owned stormwater infrastructure.

BMPs / Mechanisms for Post-Construction Stormwater Management

1. Subdivision Regulations: Link on-line:
[www.dothan.org](http://www.dothan.org/planning/land%20development/subdivision%20regulations) (planning/land development/subdivision regulations)
Stormwater Ordinance: Link on-line:
[www.dothan.org](http://www.dothan.org/public%20works/engineering%20services/stormwater%20management) (public works/engineering services/stormwater management)
Storm sewers and drainage within Subdivision Regulations (Section 90-222(b))
2. Stormwater Projects
3. Stormwater Detention Pond Inspection Requirements
4. City Public Works employees for maintenance of stormwater structures
5. Groundwater Education Day

BMP #1: Subdivision Regulations and the Stormwater Ordinance: Available on-line for the public to view. Construction, development and re-development standards for stormwater are listed here.

Measurable Goals: The Stormwater Ordinance is still fairly new and staff feels that it is effective. The Subdivision code is under review and revision by the Planning and Public Works staff.

BMP #2: Stormwater Projects: The City of Dothan performs multiple stormwater projects each year. These will be detailed in the Annual Report. These projects address watershed management, ditch stabilization, and erosion and sediment control.

Measurable Goals: A list of potential projects is maintained by Engineering Services and also a five year Unfunded Capital Requests list is kept by each Department in the City which includes stormwater projects.

Other projects completed in 2015 include installing and/or replacing approximately 932 L.F. of storm water drainage pipe in various projects throughout the City. The pipe sizes in these projects range from 18” to 54”.

BMP #3: Stormwater Detention Pond Inspection Requirement: In 2015, the City of Dothan Public Works Department inspected all stormwater detention ponds.

Measurable Goals: Conduct on-site inspections to look for collapsed pipes along the pond, obstructions, erosion around the outlet structures and overgrown vegetation around the pond. All ponds were inspected.

BMP #4: Groundwater Education Day: The City of Dothan, in conjunction with the Houston County Extension Office, hosted Groundwater Education Day in April of 2015.

Measurable Goals: Approximately 350 students from 7 schools participated in this event in April 2015. Not all schools were able to attend the event due to testing; later classes were held for an additional 425 students at their schools. The attendance was down from the previous year. However, there was still a large response for this program.

Pollution Prevention/Good Housekeeping for Municipal Operations

Permit Requirements: Pollution Prevention/Good Housekeeping for Municipal Operations (MCM 6) requires the City to maintain a system for pollution prevention and good housekeeping at municipal operations. It also requires employee training designed to prevent and reduce stormwater pollutants, to the maximum extent practicable, in areas such as parks maintenance, fleet and building maintenance, new construction and land disturbances, stormwater system maintenance, and all other applicable municipal operations.

Procedures shall be known for the proper disposal of waste removed from the MS4 and municipal operations, including materials such as dredge spoil, accumulated sediments, floatables and other debris.

All department heads/directors are responsible for pollution prevention/good housekeeping in each respective department. This is implemented through weekly or monthly staff meetings and training. The Public Works Department and the Planning and Development Department Code Enforcement Officer periodically monitor the Public Works facility and maintenance/shop areas, to ensure compliance with the City of Dothan IDDE program. Any inefficiencies are reported to the Department Director. If not resolved within a timely manner, inefficiencies are reported to the Mayor for resolution.

Targeted Pollutants and Sources: MCM 6 will target non-point source pollutants found in stormwater. These pollutants include, but are not limited to, sediment, trash, fertilizers, pesticides, pathogens, oils and greases. The targeted sources are municipal operations and facilities and publicly owned properties and right-of-ways.

Strategies, Goals and Timelines: Pollution prevention includes measures that involve rights-of-way, including bridges, stormwater management systems and roadways. Good housekeeping includes measures that involve City owned facilities.

BMP #1: Bridge Inspections: Dothan currently inspects its bridges for structural integrity and erosion and stream degradation.

Measurable Goals: Minor scour has been noted to exist on some bridges. Corrective actions may be performed by the City Street Division if conditions warrant.

Responsible Department: Public Works

BMP #2: Street Sweeping Operations: The City of Dothan Public Works Department owns 4 street sweepers. Streets are swept daily, removing sediment and debris from the roadways and storm drains.

Measurable Goals: The City's Street Sweeping Program removed an estimated 3,000 tons of debris during 2015 from City streets.

Responsible Department: Public Works

BMP #3: City Recycling Program: Since recycling programs reduce a potential pollutant source by reducing, recycling and reusing, they are a benefit to stormwater management. The City of Dothan started its city wide curbside recycling pick-up program in June of 2013.

Designated drop off points are:

1. Dothan Utilities Complex
200 Kilgore Drive
Dothan, AL 36303
2. Eastside Fire Station #5
668 Ross Clark Circle
Dothan, AL 36303
3. Former Air National Guard Armory
597 Westgate Parkway
Dothan, AL 36303
4. Houston County Farm Center
Cottonwood Highway Entrance
Dothan, AL 36303
5. North Cherry Street
Monument Street Entrance
Dothan, AL 36303
6. Redmond Road
Flynn Road Intersection
Dothan, AL 36303

Measurable Goals: There were a total of 2,066.69 tons of recyclables collected in 2015.

Responsible Department: Public Works

BMP #4: Stormwater Management System Maintenance: The stormwater management system for the City contains grassed and concrete swales, culverts, inlets, pipes and detention structures. Currently structures are maintained on an as-needed basis by determination of the Public Works Department. Areas are also maintained when valid complaints of drainage problems are filed with the City and as found during inspections.

Measurable Goals: The City removes an average of 120 truckloads of debris from the storm system annually.

Responsible Departments: Public Works and Dothan Utilities

BMP #5: Litterbugs: The City contracts with the Wiregrass Rehab Center to collect roadside trash and also clean up after certain events. This “Litterbugs” program has been ongoing for several years.

Measurable Goals: The City's Litterbugs program patrolled areas that are known to need continuous attention (such as the major Federal, State, and County routes, as well as major City collector routes). They also can be called out to an area of concern anywhere in the City. They collected 123.70 tons of trash and debris in 2015.

Responsible Department: Public Works

BMP #6: Capital Stormwater Projects: Each new fiscal year, the City determines a list of unfunded capital improvement projects. The Public Works Department is the lead in this effort. These projects are proposed to the City Commission and Mayor for approval. Some capital projects may be emergency repairs due to natural disasters. Emergency repair projects are funded and completed as soon as practicable for the safety of the public.

Measurable Goals: There were no Capital projects funded in 2015

Responsible Departments: City Commission, Mayor and Public Works.

BMP #7: City Owned Facilities: The City operates and maintains its facilities in a manner to minimize stormwater pollutant discharge to local waters.

Measurable Goals:

- a. **Inventory of Facilities:** The City has assembled a list of all City owned buildings including their addresses. Some of the buildings are grouped together on individual campuses to be addressed as a site.
- b. **Conduct dry weather screening of the Public Works and Dothan Utilities Complex** to ensure rinsing activities are in designated areas; recycle and drop off materials are properly managed and covered; ensure Public Works activities are not contributing to illicit discharges.

BMP #8: Employee Meetings: Employee meetings are held in each department and housekeeping items are addressed throughout the year.

Measureable Goals: City departments will continue to hold employee meetings to keep their department updated on pollution prevention and good housekeeping programs.

Responsible Departments: Public Works, Dothan Utilities, Leisure Services and General Services

BMP #9: Certified Pesticide Applicators: Pesticide, herbicide and fertilizer application is overseen by certified applicators in Public Works, Leisure Services and General Services. Three employees within the City of Dothan are certified through the State of Alabama Department of Agriculture and Industries as certified pesticide applicators. This specialized training ensures that pesticide, herbicide and fertilizer application on City property is done in accordance with manufacturer's recommendations

in the most environmentally friendly method possible. Applicator license (3 year) certifications include:

- a. General Services – Horticulturist
- b. Leisure Services – Supervisor
- c. Public Works – Foreman

Measureable Goals: All certifications have been maintained.

BMP #10: Dedicated Wash Racks for Vehicles: Employees in all departments within the City are instructed to wash vehicles and equipment only in designated areas which are connected to a proper treatment system.

All new car washes proposed within the City’s MS4 area are required to wash vehicles over a sand trap which must be tied to the sanitary sewer system.

Measureable Goals: City departments will continue using only dedicated wash racks for proper washing of vehicles and equipment. The Engineering Services maintains a list of all car washes with sand traps that are tied to the sanitary sewer system.

Responsible Departments: Director or department head of each department.

BMP #11: Training: Training is essential for all City employees regarding pollution prevention and good housekeeping. The City will provide training for the purpose of educating employees regarding stormwater runoff and pollution prevention. This training may be a part of other MCM training.

Measurable Goals: The City will:

- a. Provide training for new hires on Storm Water Pollution Prevention and Good Housekeeping; and,
- b. Provide training for new employees with IDDE program responsibilities.

Responsible Departments: All City Departments.

Discharge to Impaired Waters

The City's MS4 discharges into three 303 (d) listed waters:

- 1.) Cypress Creek from its source to Limestone Creek and
- 2.) Beaver Creek from the Beaver Creek Wastewater Treatment Plant to Newton Creek.
- 3.) Cedar Creek is impaired by atmospheric mercury. There is no monitoring or BMPs for this creek.

Causes listed for both are Nutrients and Organic Enrichment (CBOD and NBOD).

Monitoring began in these streams in March 2012 to establish a baseline of readings.

The plan is to continue monitoring the CBOD, NBOD and TKN in these two streams on a monthly basis.

Results: There have been no out of normal parameter readings in 2015.

There is no EPA set TMDL for either stream. That is not to be determined until 2020 according to the 2014 303 (d) list.