STORM WATER MANAGEMENT PROGRAM

JANUARY 1, 2017

Gadsden, Alabama Urbanized Area
Phase II Small MS4 NPDES General Permit

Gadsden-Etowah MS4 Entities
City of Attalla - ALR040052
City of Gadsden - ALR040053
City of Glencoe - ALR040054
City of Hokes Bluff - ALR040055
City of Rainbow City - ALR040056
City of Southside - ALR040057
Etowah County - ALR040009

Prepared By:

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S&ME Project No. 4482-15-028

S&ME

January 1, 2017

Attention: Gadsden-Etowah MS4 Steering Committee

Reference: **Storm Water Management Program Plan (SWMPP)**
Gadsden-Etowah MS4 Entities
Gadsden, Etowah County, Alabama
S&ME Project No. 4482-14-028

Dear Gadsden-Etowah MS4 Steering Committee:

S&ME, Inc. has prepared the attached Storm Water Management Program (SWMPP) for the Gadsden-Etowah Phase II Small Municipal Separate Storm Sewer System in accordance with S&ME Proposal No. 44-16000420 REV 2, dated October 18, 2016.

S&ME, Inc. appreciates the opportunity to provide our services to the City of Gadsden, Rainbow City, City of Hokes Buff, City of Southside, City of Glencoe, City of Attalla, and Etowah County. If you should have questions concerning this report, or if additional information is required, please contact us.

Sincerely,

S&ME, Inc.

Christa C. Lyons
Project Manager

Charles R. Oligee, P.E.
Senior Engineer

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1.0 Introduction

S&ME, Inc. has prepared this Storm Water Management Program Plan (SWMPP) for the Gadsden – Etowah MS4 Entities that comprise the *Gadsden, Alabama Urbanized Area* Phase II Small Municipal Separate Storm Sewer System in accordance with S&ME Proposal No. 44-15-217, dated June 30, 2015 and Proposal No. 44-1600450, dated October 7, 2016. The urbanized area consists of the following entities (jurisdictions): The City of Gadsden, City of Rainbow City, City of Southside, City of Glencoe, City of Hokes Bluff, City of Attalla, and portions of unincorporated Etowah County.

Authorization date and responsible official for each entity are provided in Table 1.1.

Table 1-1: Responsible Officials and Authorization Dates

Entity	Name	Date
City of Attalla	Larry Means, Mayor	August 5, 2015
City of Gadsden	Sherman Guyton, Mayor	July 29, 2015
City of Glencoe	Charles C. Gilchrist, Mayor	July 14, 2015
City of Hokes Bluff	Jeff Cheatwood, Mayor	August 14, 2015
City of Rainbow City	Terry John Calhoun, Mayor	October 27, 2016
City of Southside	Wally Burns, Mayor	July 9, 2015
Etowah County	Larry Payne, President	July 21, 2015

The SWMPP is required by Part III of the Alabama Department of Environmental Management (ADEM) National Pollutant Discharge Elimination System (NPDES) General Permit ALR040000 for discharges from regulated small municipal separate storm sewer systems (MS4) with an effective date of October 1, 2016. Permit numbers for each entity are provided in Table. 1.2.

Table 1-2: Permit Numbers for MS4 Entities

Entity	ADEM Permit Number
City of Attalla	ALR0400052
City of Gadsden	ALR0400053
City of Glencoe	ALR0400054
City of Hokes Bluff	ALR0400055
City of Rainbow City	ALR0400056
City of Southside	ALR0400057
Etowah County	ALR0400009

1.1 Permit History

The Storm Water Phase II Final Rule issued by the United States Environmental Protection Agency (USEPA) in 1999 requires nationwide coverage of all operators of small MS4s located within the boundaries of an "urbanized area" as defined by the latest decennial Census. Based on the results of the 2010 census, the Bureau of the Census designated the *Gadsden, Alabama Urbanized Area* to include the City of Attalla, the City of Gadsden, the City of Glencoe, the City of Hokes Bluff, City of Rainbow City, the City of Southside, and portions of unincorporated Etowah County. A map outlining the approximate boundary of the *Gadsden, Alabama Urbanized Area* is included in **Appendix A, Figure 1**.

The *Gadsden, Alabama Urbanized Area* initially applied for and received a NPDES MS4 Phase II General Permit from the ADEM in 2003. The five-year permit expired on March 9, 2008. A Notice of Intent for renewal of the permit was submitted 180 days prior to expiration and permit coverage was extended through re-issuance of the MS4 Phase II General Permit ALR04-0009 with an effective date of February 1, 2011. This permit expired on February 1, 2016 and was administratively continued. A Notice of Intent for renewal of the permit was submitted by each entity 180 days prior to expiration; therefore the permit coverage was extended until the Alabama Department of Environmental Management (ADEM) issued a separate permit for each entity with an effective date of October 1, 2016. Maps outlining the approximate urbanized area and city limits for each entity are included in their corresponding appendix.

A copy of the NPDES General Permit is included in **Appendix B**.

1.2 Storm Sewer System

A Municipal Separate Storm Sewer System (MS4) is defined by 40 CFR Part 122.26(b)(8) to be a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is:

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
(ii) Designed or used for collecting or conveying storm water;
(iii) Not a combined sewer; and,
(iv) Not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

1.3 Area and Population Description

The *Gadsden, Alabama Urbanized Area* is located in northeast Alabama and encompasses approximately 38,223 acres. Populations of each entity covered by the referenced NPDES General Permits are shown in the following table.

Table 1-3: Populations from 2000 and 2010 Census

Entity	2000 Census Population	2010 Census Population
City of Attalla	6,592	6,048
City of Gadsden	38,978	36,856
City of Glencoe	5,152	5,160
City of Hokes Bluff	4,149	4,286
City of Rainbow City	8,428	9,602
City of Southside	7,036	8,412

* Total for the county, including municipalities

1.4 Hydrologic Units in the Urbanized Area

Neely Henry Lake (Coosa River) is the primary receiving water for the Gadsden-Etowah MS4. Hydrologic Hierarchy, Watersheds, and Subwatersheds are provided in the tables below.

Table 1-4: Hydrologic Hierarchy

REGION	03	South Atlantic-Gulf
SUBREGION	0315	Alabama River Basin
BASIN	031501	Coosa-Tallapoosa: Above the confluence of and including the Coosa and Tallapoosa River Basins
SUBBASIN	03150106	Middle Coosa

Table 1-5: Watersheds in the Urbanized Area

Watershed	HUC
Coosa River-Black Creek	03150106-01
Big Wills Creek	03150106-02
Coosa River-Big Canoe Creek	03150106-03

Table 1-6: Subwatersheds in the Urbanized Area

SUBWATERSHED	HUC	TOTAL AREA (ACRES)
Little Wills Creek	03150106-01-06	18,121
Black Creek	03150106-01-07	40,879
Horton Creek	03150106-01-08	16,902
Dry Creek	03150106-02-02	9,778
Big Cove Creek	03150106-02-03	18,028

Turkey Town Creek	03150106-02-04	57,474
Little Canoe Creek - Lake Sumatanga	03150106-03-04	20,260
Lower Big Canoe Creek	03150106-03-06	33,299
Coosa River - H. Neely Henry Lake	03150106-03-09	46,439
Lower Ohatchee Creek	03150106-04-05	19,980

1.5 Water Quality Concerns

Section 303(d) of the Clean Water Act (CWA), as amended by the Water Quality Act of 1987, and EPA's Water Quality Planning and Management Regulations (40CFR130) require states to identify waterbodies not in compliance with the water quality standards applicable to their designated use classifications. The identified waters are prioritized based on severity of the pollution. Section 303(d) then requires that total maximum daily loads (TMDLs) be determined for all pollutants causing violation of applicable water quality standards in each identified segment. The TMDL process establishes the allowable loading of pollutants, or other quantifiable parameters for a waterbody, based on the relationship between pollution sources and in-stream water quality conditions.

As mentioned in Section 1.3, Neely Henry Lake is the primary receiving water for the Gadsden-Etowah MS4. In 1996, the ADEM identified five of the six reservoirs on the Coosa River within the State of Alabama's borders as being impaired, including Neely Henry Lake. The following table summarizes the impaired segments of Neely Henry Lake.

Table 1-7: Impaired Waterbody Segments in the Urbanized Area

ASSESSMENT UNIT ID	WATERBODY NAME	USES	CAUSES	SOURCES
AL03150106-0309-101	Coosa River (Neely Henry Lake)	Swimming Fish & Wildlife	Nutrients pH Organic Enrichment (CBOD, NBOD)	Industrial Municipal Flow regulation/modification Upstream sources
AL03150106-0309-102	Coosa River (Neely Henry Lake)	Fish & Wildlife	Nutrients pH Organic Enrichment (CBOD, NBOD)	Industrial Municipal Flow regulation/modification Upstream sources
AL03150106-0104-101	Coosa River (Neely Henry Lake)	Fish & Wildlife	Nutrients pH Organic Enrichment (CBOD, NBOD) Priority Organics (PCBs)	Industrial Municipal Flow regulation/modification Upstream sources Contaminated sediments
AL03150106-0104-102	Coosa River (Neely Henry Lake)	Public Water Supply Fish & Wildlife	Nutrients pH Organic Enrichment (CBOD, NBOD)	Industrial Municipal Flow regulation/modification

Table 1-7: Impaired Waterbody Segments in the Urbanized Area

ASSESSMENT UNIT ID	WATERBODY NAME	USES	CAUSES	SOURCES
			Priority Organics (PCBs)	Upstream sources Contaminated sediments

Sources of nutrient and organic enrichment from non-point sources within the Coosa River watershed include:

- Runoff from pastures
- Runoff from animal operations
- Direct discharge to streams due to cattle
- Improper land application of animal waste
- Failing septic systems
- Urban runoff

Point source contributors of storm water pollution within the Coosa River watershed include:

- Discharge from wastewater treatment plants
- Discharge from industrial operations

In 2008 the EPA approved TMDLs for Neely Henry Lake related to Nutrients (Total Phosphorous), pH, and Dissolved Oxygen. The Gadsden-Etowah MS4 is required to achieve a **30% reduction in Total Phosphorus discharge loading**.

Part IV.D of the NPDES General Permit requires that the SWMPP include BMPs and control measures specifically targeted to achieve the waste load allocations prescribed in the TMDL. The SWMPP must also include monitoring provisions to document that the waste load allocations prescribed in the TMDL are being achieved.

1.6 Coordination Between Entities

Each of the eight entities will provide at least one member to the Gadsden-Etowah Storm Water Steering Committee. Each entity will be responsible for providing the required annual updates and monitoring data to the Steering Committee.

Coordination between departments and individuals internal to each of the eight entities is established in each section of the Plan specific to the individual entities.

In March 2014, the Gadsden-Etowah Storm Water Steering Committee developed an Illicit Discharge Detection and Elimination (IDDE) Program for the entities to collectively use as a guidance. The IDDE Program is included in **Appendix C.**

1.7 Responsible Party

Each entity is responsible for the coordination and implementation of their entity's Storm Water Management Plan. Each entity provides a presentative to participate on the Storm Water Steering Committee for the urbanized area. The Storm Water Steering Committee is responsible for the implementation of the monitoring plan. Current membership of the Storm Water Steering Committee is as follows:

Table 1-8: MS4 Storm Water Steering Committee

ENTITY	CONTACT	PHONE NO.	EMAIL
City of Gadsden	Jeramy Ward	256-549-4527	jward@cityofgadsden.com
City of Gadsden	Heath Williamson	256-549-4520	hwilliamson@cityofgadsden.com
City of Attalla	Jason Nicholson	256-441-9200	j.nicholson@attallacity.com
City of Rainbow City	Kevin Ashley	256-413-1240	kashley@rbcalabama.com
City of Southside	Jimmy Whittemore	256-442-9775 Ext. 103	jwhittemore@cityofsouthside.com
City of Glencoe	Brian Bramblett	256-492-1424	brianbramblett@cityofglencoe.net
City of Hokes Bluff	Lisa Johnson	256-492-2414	hbcity@cityofhokesbluff.net
Etowah County	Tim Graves	256-549-5358	tgraves@etowahcounty.org
Etowah County	Robert Nail	256-549-5358	Rnail@etowahcounty.org

1.8 Annual Review

The Storm Water Management Plan will be reviewed annually by the each entity in preparation for the annual report required by Part V of the NPDES General Permit. The Storm Water Steering Committee will review the monitoring plan annually.

An annual report will be prepared by each entity for submittal to ADEM.

1.9 Updates to the SWMPP

The SWMPP may be updated following the procedures laid out in Part IV.B.2 of the NPDES General Permit. Changes to the SWMPP adding components, controls, or requirements may be made at any time, provided the ADEM is notified in writing. The changes must also be documented in the annual report.

Permission to make changes to the SWMPP to remove or replace components, controls, or requirements must be requested from the ADEM a minimum of 60 days prior to making the change. If the request is denied, the ADEM will provide a written response giving the reason for the decision.

1.10 SWMPP Components

Part III.B of the NPDES General Permit requires that the Permittee develop and implement a storm water management program that includes the following five minimum control measures:

1. Public Education and Public Involvement on Storm Water Impacts
2. Illicit Discharge Detection and Elimination (IDDE)
3. Construction Site Storm Water Runoff Control
4. Post-Construction Storm Water Management in New Development and Redevelopment
5. Pollution Prevention/Good Housekeeping for Municipal Operations

Program details pertaining to each entity within the urbanized area are outlined in the following

2.0 Storm Water Monitoring

2.1 Rationale Statement

As discussed in Section 1.4, the Gadsden-Etowah MS4 currently discharges to an impaired waterbody. Part IV.D.1(c) of the NPDES General Permit requires that the SWMPP include a monitoring plan to assess the effectiveness of the BMPs in achieving the waste load reductions/allocations outlined in the TMDL.

The intent of the proposed monitoring program is to evaluate the effectiveness of the City's BMPs in achieving the required reduction as established in the TMDL and to generally evaluate overall water quality. Where deviations are documented and/or expected, the collected monitoring data will be used to determine the extent and cause of the pollutant of concern.

2.2 Monitoring Parameters

The Gadsden-Etowah MS4 is required to achieve a **30% reduction in Total Phosphorus discharge loading**. To demonstrate the MS4's compliance with the established waste load reduction, the MS4 will conduct monitoring along the Coosa River throughout the *Gadsden, Alabama Urbanized Area* using grab sampling and manual field and laboratory analyses.

Both point and non-point sources of particulate and dissolved phosphorous are linked to runoff.

Particulate phosphorous moves primarily by soil erosion. Dissolved phosphorous may result from leaking septic systems, animal wastes, or the over-application of fertilizer. The greatest opportunity for excess phosphorous loading into the Coosa River from the Gadsden-Etowah MS4 is likely to occur during runoff events; therefore, **monitoring will be conducted within 72 hours of a qualifying rain event of 0.75 inch**.

Monitoring parameters were selected to indicate the effectiveness of the BMPs outlined in the *Gadsden, Alabama Urbanized Area* Storm Water Management Program. In additional to total phosphorous, parameters related to soil erosion (sedimentation) and eutrophication (nutrient enrichment) were also selected for monitoring.

Monitoring will be conducted **quarterly** at the designated outfalls to Neely Henry Lake for the following parameters:

- Total Suspended Solids (TSS)
- Total Phosphorous
- Orthophosphate
- Nitrate-Nitrite
- Total Kjeldahl Nitrogen (TKN)

The following parameters will also be measured in the field at the time of sample collection:

- Turbidity
- pH

- Dissolved Oxygen (DO)
- Temperature

2.3 Field Documentation

The following observations were documented in the field at each monitoring location:

- Monitoring point ID
- Date and time
- Person conducting the sampling
- Equipment used
- Depth of sample collection
- Weather conditions
- Waterbody conditions
- Field parameters (turbidity, pH, DO, temperature)

2.4 Sampling Procedures

Samples collected on land will be obtained from approximately the mid-channel of each stream using a stainless steel 1-quart bucket attached to either a 30-foot telescoping fiberglass pole or nylon rope. S&ME personnel will extend the sampling bucket to mid-channel at each location and collect a sample at mid-depth or two (2) feet below the water surface, whichever was shallower. The sample will then be poured into a 6-quart stainless steel bucket. Four to five quarts will be collected and mixed in the 6-quart bucket prior to analysis. The stainless steel buckets will be decontaminated prior to use and between samples.

Samples collected from the boat will be obtained using a horizontal Van Dorn sampler. S&ME personnel will insert the sampler into the water upstream of the boat, lower it to a depth of five (5) feet below the water surface then trigger the seals. The collected sample will be discharged from a valve in the sampler. A total of two, 2-liter samples will be collected from each location then mixed in a 6-quart stainless steel bucket. The Van Dorn sampler will be decontaminated prior to use and in between samples.

2.5 Monitoring Locations

A series of primary monitoring locations have been identified along the river and in contributing tributaries at points determined to be representative of the typical land uses in the sub-watersheds.

The primary monitoring locations selected for determining compliance of the Gadsden-Etowah MS4 with the 2008 phosphorous TMDL are identified on the map in **Appendix A, Figure 2**. Coordinates for each point are listed in the table below. Secondary monitoring locations will be selected in the event monitoring of the primary points indicates a need for further assessment of a tributary to the Coosa River.

Table 2-1: Monitoring Point Coordinates

OUTFALL ID	LATITUDE	LONGITUDE	ACCESS	WATERBODY EVALUATED
AT 5	34.006446°	-86.069061°	LAND	Big Wills Creek / Little Wills Creek
GD 8	33.999535°	-86.024463°	LAND	Black Creek

OUTFALL ID	LATITUDE	LONGITUDE	ACCESS	WATERBODY EVALUATED
RC 2	33.967683°	-86.039476°	LAND	Horton Creek
SS 13	33.891352°	-86.049229°	LAND	Neely Henry Lake
SS 14	33.885921°	-86.030683°	LAND	U.T. to Neely Henry Lake
GD 12	33.952567°	-86.003495°	LAND	U.T. to Neely Henry Lake
CO 14	33.940904°	-85.967704°	LAND	U.T. to Neely Henry Lake
SME 2	34.002461°	-86.001571°	LAND	U.T. to Coosa River
GD 6	34.015350°	-85.995617°	LAND	Town Creek
CO 15	33.972280°	-85.965354°	LAND	U.T. to Neely Henry Lake
RC 14	33.905786°	-86.111656°	BOAT	Rook Creek / Dry Creek
SS 5	33.941329°	-86.021569°	BOAT	U.T. to Coosa River
SME 1	33.990184°	-86.004048°	BOAT	Big Wills Creek / Black Creek
GD 9	33.989718°	-85.998472°	BOAT	U.T. to Coosa River (East Gadsden)
GD 7	34.008361°	-85.999777°	BOAT	Storm sewer outfall to Coosa River
GD 5	34.014324°	-85.924013°	BOAT	Big Cove Creek / Little Cove Creek
GD 3	34.012380°	-85.953651°	BOAT	U.T. to Neely Henry Lake
SME 3	34.009698°	-85.956230°	BOAT	Coal Creek
HB 3	34.002129°	-85.882808°	BOAT	U.T. to Neely Henry Lake

2.6 Quality Assurance / Quality Control

Quality Assurance (QA) and Quality Control (QC) activities are designed to achieve the specific data quality goals associated with the sampling program and will follow EPA and ADEM guidance.

2.6.1 Sample Containers and Preservation

All samples will be collected in new laboratory-provided containers containing analyte-appropriate preservatives as listed below:

Table 2-2 Sample Containers and Preservation

PARAMETER	CONTAINER	PRESERVATIVE	HOLD TIME
Total Suspended Solids (TSS)	HDPE - 1 L	NONE	7 days
Total Phosphorous	HDPE - 250 mL	H_2SO_4	48 hours
Orthophosphate	HDPE - 250 mL	NONE	48 hours
Nitrate-Nitrite	HDPE - 250 mL	H_2SO_4	28 days
Total Kjeldahl Nitrogen (TKN)	HDPE - 250 mL	H_2SO_4	28 days

2.6.2 Quality Assurance

A minimum of one duplicate for every 10 samples will be submitted to the laboratory.

2.6.3 *Equipment Decontamination*

All reusable sampling equipment will be decontaminated prior to use and in-between samples using the following procedure:

- Rinse with tap water.
- Wash with non-phosphatic detergent solution.
- Rinse with deionized water.
- Allow equipment to air dry.
- Containerize all rinsate for disposal.

2.6.4 *Sample Identification*

Sample containers will be labeled with the following information in waterproof ink:

- Project number
- Sample location
- Collection date and time
- Preservative
- Analysis to be performed

2.6.5 *Chain of Custody*

Chain of custody documents will originate in the field and will accompany the samples to the laboratory. Copies of the chain of custody documents will be included with the laboratory reports in the annual report.

2.6.6 *Sample Shipment*

The samples will be shipped overnight to the laboratory in sealed coolers containing ice.

2.7 Analytical Results

Field observations and analytical results will be recorded at the time of sampling. The resulting field notes and laboratory analytical reports will be retained by each entity for a minimum of 3 years.

A report consolidating the results from each quarterly monitoring event will be submitted by the entity/company performing the monitoring to the representatives of the City of Attalla, the City of Gadsden, the City of Glencoe, the City of Hokes Bluff, the City of Southside, City of Rainbow City, and Etowah County. Each quarterly monitoring report will be incorporated into the Annual Update of the SWMPP. Monitoring reports will be retained by each entity for a minimum of 3 years.

2.8 Evaluation of Results

Results from each sampling event will be evaluated annually.

3.0 Reporting and Record-Keeping

Part V.A of NPDES General Permit ALR040000 issued to each entity of the Gadsden-Etowah MS4 that comprises the *Gadsden, Alabama Urbanized Area* outlines the monitoring, recordkeeping, and reporting requirements.

3.1 Annual Reports

Annual reports are due to the ADEM by May 31 of each year. The annual report will cover the period from April 1 through March 31 of the year prior to the submittal date and will include:

1. List of contacts/responsible parties for the preparation of the Annual Report
2. Evaluation of SWMPP and discussion of the following:
    a. Major accomplishments
    b. Overall program strengths/weaknesses
    c. Future direction of the program
    d. Evaluation of the effectiveness of the SWMPP in achieving water quality/watershed improvements
    e. Measureable goals that were not performed and reasons why
    f. Evaluation of monitoring data
3. Measurable goals for each of the five minimum control measures
4. Proposed changes to the SWMPP, including changes to BMPs or measurable goals
5. An assessment of whether or not the existing BMPs are appropriate
6. Summary of storm water activities planned for the upcoming year
7. Progress toward reducing the discharge of pollutants to the maximum extent practicable

3.2 Recordkeeping

The following records must be maintained by each entity and will be made available for examination. Records will be retained for a minimum period of at least three (3) years from the data of the sample, measurement, report, or application for the term of the NPDES General Permit, whichever is longer.

The following is a list of records to be retained:

- Copies of all reports required by the permit
- Copies of monitoring reports
- Copy of the NPDES General Permit
- Copy of the Notice of Intent

9.0 City of Southside

The City of Southside encompasses approximately 13.4% of the Urbanized Area and accounts for 10% of the population. A map depicting the City of Southside's urbanized area and city limits is located in **Appendix I-1, Figure 1**.

The following sections detail the rationale statement, targeted audiences, planned activities, evaluation criteria, and the responsible party regarding the referenced control measure.

9.1 Public Education and Public Involvement on Storm Water Impacts

9.1.1 Rationale Statement

The City's goal is to have a comprehensive and effective public education and public involvement program, the intent of which is to:

1. Generate awareness of storm water pollution prevention by educating people about the storm water system and its relationship to the health of local waterways;
2. Modify behavior patterns through education and encouragement of active participation in water pollution prevention;
3. Educate the public of steps they can take to reduce pollutants in storm water runoff; and
4. Involve the general public by providing activities and opportunities for public participation in the storm water management program.

9.1.2 Target Audiences

The primary target audiences within the City are as follows:

- **General Public** (homeowners and citizens)
  - Potential contributors of storm water pollution through litter, yard waste, vehicle washing, illicit discharges on and off impervious surfaces, and the application of pesticides, herbicides, and fertilizers.
- **Local Businesses**
  - Potential contributors of storm water pollution through illicit discharges, litter, waste handling procedures.
- **Landscape Companies**
  - Potential contributors of storm water pollution through the application of pesticides, herbicides, and fertilizers and illicit discharges on impervious surfaces.
- **Engineers, Developers, and Contractors**
  - Potential contributors of storm water pollution through off-site sedimentation from development and construction.

9.1.3 Planned Activities

The City plans to implement the following activities as part of their Public Education and Public Involvement Program during each reporting period. To evaluate the success of the program and aid in preparing the required Annual Report, evaluation criteria have been established for each strategy.

A table identifying each Public Education and Public Involvement activity planned for each reporting period is provided in **Appendix I-2**. This table may aide in completion of the annual report.

Activity 1. **Distribute Storm Water Educational Material**

The City will use available resources obtained through networking or online resources, such as those provided by EPA, to prepare storm water education material to increase awareness of the public on storm water topics. The City will distribute these materials to approximately 2,800 households and businesses through inclusion in water and garbage collection bills or provided as an advertisement in the Gadsden Times.

Topics might include the following:

- Introduce the MS4 to the general public and discuss the storm water cycle and how common contaminants enter the storm water system.
- Educate households and businesses about proper and improper use, storage, and disposal of common household chemicals such as herbicides, pesticides, and fertilizers.
- Make the public aware of how the improper use of these chemicals can impact storm water quality.
- Discuss storm water impacts specifically related to litter, floatables, and debris
- Discuss how the cumulative effect of these contaminants impact the Coosa River and what individual households and businesses can to do to reduce storm water pollutants.
- Provide information on how to identify and report illicit discharges.
- Provide information on additional resources pertaining to storm water, storm water pollution, and Neely Henry Lake TMDLs.
- Provide information on storm water contacts within the City of Southside and information on reporting potential storm water violations.

Evaluation Criteria: The City will report the number of households who receive the mail-out during the reporting period. This information will indicate the number of people who received educational materials.

Activity 2. **Maintain the Storm Water Webpage**

The City provides information on the City's MS4 Program and permit on the Storm Water Management webpage within the City of Southside's website. The City will maintain this webpage and provide additional educational materials each reporting period.

Participation will be tracked though the number of "hits" on the webpage. The webpage will continue to be updated periodically to:

- Include general information on the MS4 permit and SWMPP;
- Discuss the storm water cycle and how common contaminants enter the storm water system;
- Provide educational materials about proper and improper use, storage, and disposal of common household chemicals;
- Provide educational materials on storm water impacts specifically related to litter, floatables, and debris
- Provide links to related storm water resources;
- Provide information on how to identify and report illicit discharges; and,
- Provide a calendar of upcoming community events related to storm water outreach.

The webpage can be viewed at the link provided below:
http://www.cityofsouthside.com/Default.asp?ID=277&pg=Storm+Water+Management

Evaluation Criteria: The City will report what information was added to the webpage and the number of "hits" on the webpage. This information will indicate the number of people who view the webpage and the associated educational materials.

Activity 3. **Annual Report and SWMPP Availability**

The City will provide the SWMPP and the current Annual Report available for public viewing on the City's website.

The webpage can be viewed at the link provided below:
http://www.cityofsouthside.com/Default.asp?ID=277&pg=Storm+Water+Management

Evaluation Criteria: The City will report number of "hits" on the webpage. This information will indicate the number of people who view the webpage and the associated SWMPP and Annual Report.

Activity 4. **Maintain Facebook Page**

The City maintains a City of Southside Storm Water Management Facebook page to promote upcoming events and provide links to educational information to the public. The City will update the Facebook page when necessary.

Evaluation Criteria: The City will report what information was added to the Facebook page and the number of "followers". This information will indicate the number of people who view the Facebook page and the associated educational materials.

Activity 5. **Staff a Display at City Fest**

The City will provide storm water outreach material and/or staff a display during the annual City Fest event scheduled in July. Pre-printed outreach material and/or displays may include:

- Introduction to the MS4 and the General Permit requirements
- Discussion of the storm water cycle and how common contaminants enter the storm water system
- Information on proper and improper use, storage, and disposal of common household chemicals
- Information regarding the Neely Henry Lake TMDLs
- Storm water contacts within the City of Southside and information on reporting potential storm water violations.

Evaluation Criteria: The City will report the number of educational material distributed at the event and the estimated number of people that stopped by the booth. This information will indicate the number of people who received educational materials.

Activity 6. **Partnerships in Educational and Public Involvement Events**

The City will partner with Keep Etowah Beautiful, Clean Water Partnership of Alabama, and/or Alabama Power to distribute storm water educational material on storm water impacts specifically related to litter, floatables, and debris. The City will assist in promoting events such as *Renew Our Rivers*, *Message in a Bottle*, and/or community cleanup days. The events will be advertised and promoted by the City. Event details may be posted at the City Hall, the Public Library, and other businesses. Promotion methods may include co-sponsoring radio, television, and/or print advertisement with co-permittees and other stakeholders. City personnel will participate in the events.

Evaluation Criteria: The City will report number of participants who received educational materials during the events and the ways in which the City promoted and/or advertised the events. The City will report the number of City employees/representatives that participated in each event. This information will indicate the number of people who received educational materials and will help measure the public awareness of the events and degree of public participation.

Activity 7. **Promote Water Quality Awareness Week**

The City will promote an annual *Water Quality Awareness Week* through City resources including co-sponsoring radio, television, and print advertisement with co-permittees and other stakeholders.

Evaluation Criteria: The City will report activities associated with this event and the ways in which the City promoted *Water Quality Awareness Week*. This information will help measure the public awareness of the event and degree of public and City participation.

Activity 8. **Promote and Participate in the Etowah County Water Festival**

The *Etowah County Water Festival* is an annual event for fourth grade students from public schools in Etowah County, Alabama. The festival provides hands-on activities that teach students the importance of surface and groundwater, its role in the environment and its effect on human, animal and plant life. The City will promote and participate in the annual *Etowah County Water Festival* through City resources. Promotion methods may include co-sponsoring radio, television, and/or print advertisement with co-permittees and other stakeholders. City personnel will participate in the festival.

Evaluation Criteria: The City will report number of City volunteers at the event and the ways in which the City promoted and/or advertised the event. This information will indicate the City's participation and will help measure the public awareness of the event and degree of public and City participation.

Activity 9. **Gadsden - Etowah MS4 Steering Committee Meetings**

The City will coordinate and/or participate in meetings of the Storm Water Steering Committee for entity updates, networking, and coordination of activities and BMP strategies.

Evaluation Criteria: The City will provide meeting agendas and attendance records during the reporting period. The City will report who attended each meeting. This information will indicate the participation of the steering committee and their interest in networking and coordination of activities.

Activity 10. **Provide Information on Construction Site Storm Water Impacts**

The City will provide pre-printed educational information on how construction site runoff can impact storm water quality to individuals requesting plan review and building/development permits.

Evaluation Criteria: The City will report the number of permits issued during the reporting period. This information will indicate the number of people who received educational materials.

Activity 11. **Provide Information on Low Impact / Green Development**

The City will provide pre-printed educational information on green development to individuals requesting plan review and building/development permits. Information may include references to additional resources such as the Green Building Alliance, Low Impact Development Center, and U.S. Department of Housing and Urban Development.

The City will encourage developers and engineers to consider green infrastructure alternatives during the plan review process.

Evaluation Criteria: The City will report the number of permits issued and number of projects that incorporate these techniques during the reporting period. This information will indicate the number of people who received educational materials.

Activity 12. Public Reporting and Tracking System

The City provides a contact number on the City's Storm Water Management webpage for the public to provide input on the development, revision, and implementation of the SWMPP. Additionally the public can report non-compliant construction sites, illicit discharges (including spills or illegal dumping), impaired waterways, and violations of ordinances relating to storm water pollution. The public may contact the City's Storm Water Management Department to make reports. The City utilizes a form to track the reports and follow-up with investigations where necessary.

Records of public reports, comment, or complaints will include:

- Date, time, and description of the report
- Location of subject construction sites
- Identification of any actions taken (inspections, enforcement, corrections, etc.) that are sufficient to cross-reference inspection and enforcement records

The City will continue to publicize the reporting number on the City's website and track received reports and the City's responses to the received reports. The City will evaluate the current public reporting and tracking methods.

Evaluation Criteria: The City will report the total number of inquiries received, the number of complaints addressed, and the number of complaints resolved during the reporting period. The City will also report whether or not the received reports contain the required information to find and address the suspected problem. The City will provide a summary of at least one complaint received during the reporting period. This information will help evaluate the effectiveness of the tracking and reporting system, as well as the public awareness and concern of storm water issues.

Activity 13. No Dumping/No Littering Signs

The City has placed "No Dumping" or "No Littering" signs in problem areas throughout the City. The City will maintain these signs and place additional signs if necessary.

Evaluation Criteria: The City will report the amount of materials (in total tons) collected in these areas. This information will help measure the effectiveness of the signs in reducing the amount of materials dumped in problem areas.

9.1.4 *Responsible Party*

The City of Southside Mayor's office and Building Department are responsible for overseeing, developing, and coordinating the Public Education and Public Involvement efforts.

9.2 Illicit Discharge Detection and Elimination

9.2.1 *Rationale Statement*

The City of Southside Illicit Discharge Detection and Elimination (IDDE) program is designed to locate, identify, and correct illicit discharges to the MS4. Program emphasis will be placed on identifying and correcting pollutant discharges which could influence compliance with the Neely Henry Lake TMDLs and the Gadsden-Etowah monitoring program.

9.2.2 *Target Audiences*

The primary target audiences within the City for the IDDE program are:

- **Municipal Employees**
  - Primarily responsible for identifying and reporting illicit discharges
- **General Public** (homeowners and citizens)
  - Potential contributors of illicit discharges from activities such as dumping paint, motor oil, or other chemicals into a storm drain.
- **Local Businesses**
  - Potential contributors of illicit discharges through inadequate management practices and/or unpermitted facilities

9.2.3 *Outreach Strategies*

The City developed an IDDE Program in March 2014, a copy of which is provided in **Appendix C.** The City will continue to review and modify the program as necessary.

The City plans to implement the activities described in their IDDE Program during each reporting period. The IDDE Program has been simplified for the purposes of this section of the SWMPP to describe required activities. To evaluate the success of the program and aid in preparing the required Annual Report, evaluation criteria have been established for each strategy.

A map depicting all known outfalls, waters of the State that receive discharges from these outfalls, and structural BMPS owned, operated or maintained by the City is located in **Appendix I-2, Figure 2**. A table that provides latitude/longitude is located on **Figure 2** in **Appendix II**.

A table identifying each Illicit Discharge Detection and Elimination activity planned for each reporting period is provided in **Appendix I-2**. This table may aide in completion of the annual report.

Identifying Priority Areas

The City has delineated seven drainage basins within the urbanized area (see **Appendix I, Figure 3**).

Activity 1. **Identify Priority Areas**

The City will identify which drainage basins are considered Priority Areas for each reporting period using the illicit discharge potential (IDP) calculation procedures detailed in Section 3 of the IDDE Program. The City will maintain records of the IDP calculations for each drainage basin.

Evaluation Criteria: The City will report the total IDP score for each drainage basin and will provide an updated map showing the identified Priority Areas. The City will report drainage basins that are newly listed or de-listed from the previous reporting year's calculations.

Field Assessment Activities

Based on Section 4 of the IDDE Program, the City will walk approximately 20% of their total stream length within the regulated MS4 each reporting period. Based on the stream lengths obtained from the national hydrography dataset, the City has 18.65 miles of total stream length (inventory) to walk. The stream-walking programs will target Priority Areas first. The anticipated date of completion for the initial mapping is **March 31, 2019**.

The City has identified 16 outfalls within the MS4 Boundary.

Activity 2. **Outfall Identification**

The City has implemented a stream-walking program designed to identify previously unknown outfalls to the MS4 as well as verify and re-evaluate known outfalls. The City plans to complete an average of 4-5 miles of stream inventory each reporting period. The implementation process is detailed in Section 4 of the IDDE Program.

Evaluation Criteria: The City will maintain records of field observations. The City will report the number of outfalls identified and the stream length walked during the reporting period. The City will provide updated tables and maps that include the outfalls identified by the stream-walking program.

Activity 3. **Probable Outfall Verification**

Probable outfalls may be identified during field and/or mapping activities, during review of proposed development plans, or through illicit discharge reports. When a probable outfall is identified, it will be added to the Storm Sewer System Map and labeled as unverified.

The City will verify probable outfalls through field observation within 18 months of their addition to the Storm Sewer System Map. The implementation process is detailed in Section 4 of the IDDE Program.

Evaluation Criteria: The City will report the number of probable outfalls that were identified and the number of outfalls that were verified during the reporting period. The City will provide updated tables and maps that include the verified outfalls, as well as probable outfalls that are planned to be verified in the following reporting period. The City will maintain records of field observations.

Activity 4. **Outfall Reconnaissance Inventory (ORI) Dry Weather**

As required by the permit, 15% of all known outfalls will be inspected during each reporting period and all outfalls will be inspected in the 5 year permit cycle. Additionally, the City or subcontracted crews will conduct dry weather monitoring of major outfalls in Priority Areas at a frequency of 20% each reporting period. The implementation process is detailed in Section 7 of the IDDE Program. Dry weather monitoring activities may be combined with outfall verification as described in Activity 3.

Evaluation Criteria: The City will maintain records of field observations. The City will report the number of outfalls inspected during the reporting period. The City will also provide a summary of the results of outfall reconnaissance inventory activities conducted during the reporting period that will include a list of outfalls observed during each reporting period.

Activity 5. **Suspect Discharge Sampling**

If a dry weather flow has a severity index of 3 on one or more indicators in Section 4 of the Outfall Reconnaissance Inventory Field Sheet, or if field screening indicates a suspect discharge, field crews will collect samples for further analysis. The implementation process is detailed in Section 7 of the IDDE Program.

Evaluation Criteria: The City will report the number of identified dry weather flows, suspect discharges, and samples collected during the reporting period. The City will report the analysis results for the collected samples. The City will report if the suspect discharge was confirmed to be an illicit discharge and, if known, the type of illicit discharge.

IDDE Investigation

Activity 6. **Outfall Ranking**

During field activities, data from each Outfall Reconnaissance Inventory Field Sheet will be analyzed to characterize the observed outfall as having obvious, suspect, possible, or unlikely discharge potential. This characterization will prioritize the outfall investigation

during field activities as well as reported discharges. The implementation process is detailed in Section 7 of the IDDE Program.

Evaluation Criteria: The City will report the ranking of each outfall inspected during the reporting period. The City will report the number of outfalls that required further investigation.

Activity 7. Discharge Investigation

Illicit discharge investigations will be performed to determine the source of a discharge problem and the responsible party. When the source is not known for an obvious illicit discharges, an investigation will be performed to determine the source within 10 days. When a suspect illicit discharges, an investigation will be performed to determine the source within 30 days. Potential illicit discharges will be investigated within 60 days. Within 10 days of the identification of the source of a discharge and responsible party, the discharge shall be eliminated. Where this is not possible, the discharge shall be minimized until it can be eliminated. The implementation process is detailed in Section 7, 8, and 9 of the IDDE Program.

Evaluation Criteria: The City will report the number of illicit discharge investigations performed during the reporting period. The City will also report the number of confirmed illicit discharges, if a source was determined, and if the discharge was eliminated.

Corrective Action Record Keeping

Activity 8. Corrective Action Record Keeping

When a suspect illicit discharge or illicit connection is identified, a case log detailing pertinent information will be created. Throughout the corrective action process, all information related to the resolution of the illicit discharge will be documented in the case log.

Evaluation Criteria: The City will maintain records of the correction actions. The City will report the number of confirmed illicit discharges and the number of illicit discharges corrected or eliminated during the reporting period. The City will also report the number of confirmed illicit discharges where corrective action is pending.

Storm Water System Mapping

As stated in Section 4.2, the City has created a Storm Water System map depicting all known outfalls, waters of the State that receive discharges from these outfalls, and structural BMPS owned, operated or maintained by the City. A copy of the map is located in **Appendix I-1, Figure 2**. A table that provides latitude/longitude is provided on **Figure 2** in **Appendix III**.

Activity 9. **Update Storm Water System Map – Existing Features**

The City will update the Map as new outfalls are located and new structural BMPs are identified or added to the MS4. The implementation process is further discussed in Section 5 of the IDDE Program.

Evaluation Criteria: The City will provide an updated Storm Water System Map showing the features added during the reporting period.

Activity 10. **Update Storm Water System Map – Future Additions**

Proposed additions within the City, including new storm sewer and drainage conveyances, will be mapped based on the civil plans provided to the City by developers. Outfalls from proposed development will be verified after construction is complete, as part of Activity 3. The implementation process is further discussed in Section 5 of the IDDE Program.

Evaluation Criteria: The City will report the number of civil plans provided to the City and the number of verified new features or outfalls during the reporting period. The City will provide an updated Storm Water System Map showing the features added during the reporting period.

Illicit Discharge Ordinance

Activity 11. **Evaluate IDDE Ordinance**

Ordinance O-10-12 Section VIII dated December 10, 2012 defines illicit discharges and responsibility of the public as well as procedures for escalating enforcement and removal actions. This is also further discussed in Section 6 of the IDDE Program. The City will evaluate the effectiveness of the ordinance each reporting period. If updates are required, the City will amend the existing ordinance or prepare a new ordinance. The ordinance is included in **Appendix I-3** and can be downloaded from the City Webpage at the link provided below:

http://www.cityofsouthside.com/Default.asp?ID=278&pg=Storm+Water+Managment+Ordinance

Evaluation Criteria: The ordinance will be evaluated on its effectiveness in addressing identified illicit discharges and preventing repeat offenders. The City will report the number of complaints received, number of illicit discharges identified during the reporting period, the number of resolved violations, the number of repeat offenders, and the number of enforcement actions taken.

IDDE Public Education

Activity 12. Distribute Storm Water Educational Material

The City will provide educational materials highlighting identification and reporting of potential illicit discharges on the City's storm water webpage and/or place educational materials at City owned locations such as the City Hall, the Public Library, and/or Building Department.

Evaluation Criteria: The City will report the number of hits to the webpage and/or the number of materials placed at the City owned locations and how often the materials were replaced during the reporting period. This information will indicate the number of people who received educational materials.

Activity 13. Public Reporting and Tracking System

The City provides a contact number on the City's Storm Water Management webpage for the public to report non-compliant construction sites, illicit discharges (including spills or illegal dumping), impaired waterways, and violations of ordinances relating to storm water pollution. The public may contact the City's Storm Water Management Department to make reports. The City utilizes a form to track the reports and follow-up with investigations where necessary.

Records of public complaints will include:

- Date, time, and description of the complaint
- Location of subject of the subject complaint
- Identification of any actions taken (inspections, enforcement, corrections, etc.) that are sufficient to cross-reference inspection and enforcement records

The City will continue to publicize the reporting number on the City's website and track received complaints and the City's responses to the received complaints. The City will evaluate the current public reporting and tracking methods.

Evaluation Criteria: The City will track the total number of reports received, the number of complaints addressed, and the number of complaints resolved during the reporting period. The City will also report whether or not the received reports contain the required information to find and address the suspected problem. The City will provide a summary of at least one complaint received during the reporting period. This information will help evaluate the effectiveness of the tracking and reporting system, as well as the public awareness and concern of storm water issues.

Activity 14. Municipal Training

Municipal workers will be trained in the identification of illicit discharges as well as the prevention of storm water pollution at municipal facilities or related to municipal activities. Specific municipal operations such as fueling, vehicle maintenance, vehicle

washing, paint and paint waste storage and disposal, and used oil disposal may be addressed. The training session will be conducted annually during each reporting period.

Municipal workers will be notified of the procedures for reporting suspected illicit discharges to the City Engineer and/or the City IDDE Program Manager, including the preferred method of contact (email) and the information to be included in the report (e.g., location, date, time, observations).

Evaluation Criteria: The City will provide details on the training topics presented to the municipal workers. The City will maintain attendance records and report the number of municipal workers trained during the reporting period. This information will help evaluate the municipal workers awareness of illicit discharges and storm water issues.

Storm Water Monitoring

Activity 15. Storm Water Monitoring Locations

Storm water monitoring locations were identified in Table 2.1, Section 2.5 and those within the City's MS4 boundaries are depicted on the City's Storm Water System Map. If additional monitoring locations are recommended as a result of the analysis of the monitoring data, the City will update the map with the revised or additional locations.

Evaluation Criteria: If additional locations are added, the City will provide an updated Storm Water System Map showing the features added during the reporting period.

Activity 16. Evaluation of Monitoring Data

In conjunction with the monitoring provisions of Section 2.2 of the SWMP, the City will evaluate the collected monitoring data for indicators of potential illicit discharges within the City and to assess the effectiveness of the BMPs in achieving the reductions outlined in the 2008 TMDL.

Evaluation Criteria: The City will report which monitoring points appear to have relatively higher pollutant levels. The City will make recommendations to the Gadsden-Etowah MS4 Storm Water Steering Committee to add and/or modify monitoring points to better characterize discharges from the MS4.

NPDES Industrial Permitting

Activity 17. NPDES Industrial Permitting

As authorized by the Clean Water Act, the NPDES Permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Title 40, Part 122 of the Code of Federal Regulations (40CFR122) specifies that discharges associated with certain industrial activities must obtain an NPDES permit. The ADEM currently provides for individual and general NPDES permitting.

Information pertaining to permitted facilities will be obtained from available public sources such as MYWATERS Mapping, EPA ECHO Database, and/or ADEM E-file and incorporated into the Storm Water System Map. This information will be used in conjunction with the storm water system mapping and monitoring data to evaluate potential sources of storm water pollution and to identify unpermitted facilities.

Unpermitted facilities that require an NPDES permit will be reported to the Industrial Section of the ADEM in Montgomery, Alabama by phone and/or email. The City of Southside continues to rely on the ADEM for industrial NPDES permitting and enforcement.

Evaluation Criteria: The City will provide the number of unpermitted facilities reported to ADEM during the reporting period, if any. This information will help measure the effectiveness of the reporting and identification of unpermitted facilities.

9.2.4 Responsible Party

The City of Southside Mayor's office and Building Department are responsible for overseeing, developing, and coordinating the IDDE program in the City of Southside regulated MS4 area.

9.3 Construction Site Storm Water Runoff

9.3.1 Rationale Statement

The City's construction site storm water runoff control program is primarily designed to address storm water pollution due to off-site sedimentation from qualifying construction sites to the maximum extent practicable.

9.3.2 Target Audiences

The primary target audiences within the City are:

- **Developers, Contractors, and Homebuilders**
  - Potential contributors of storm water pollution through development and construction activities.
- **Engineers**
  - Responsible for designing effective best management practices to minimize off-site sedimentation from construction activities.

9.3.3 Outreach Strategies

The City plans to implement the following activities as part of their Construction Site Storm Water Runoff Program during each reporting period. To evaluate the success of the program and aid in preparing the required Annual Report, evaluation criteria have been established for each strategy.

A table identifying each Construction Site Storm Water Runoff strategy planned for each reporting period is provided in **Appendix I-2**. This table may aide in completion of the annual report.

Activity 1. **Erosion and Sediment Control Ordinance**

The City's Ordinance O-10-12 dated December 15, 2012 regulates storm water management within the City. Section III of the ordinance requires that construction sites obtain a land disturbance permit from the City if the total disturbed area is greater than one acre or if the site is located within the waterfront property or within a defined floodway. The ordinance also requires the submittal of a Sediment and Erosion Control Plan and a Storm Water Management Plan to the City with the permit application. Approval of each land disturbance permit application and associated plans is provided by the City in writing. Section IX of the ordinance provides for enforcement of the City storm water regulations. Section X provides for penalties between $50.00 and $500.00 per day per violation.

Section 5 states the *Alabama Handbook for Erosion Control, Sediment Control, and Storm Water Management on Construction Sites and Urban Areas* as the City's standard for BMP design.

The ordinance is included in **Appendix I-3** and can be downloaded from the City Webpage at the link provided below:

http://www.cityofsouthside.com/Default.asp?ID=278&pg=Storm+Water+Managment+Ordinance

The City will evaluate the effectiveness of the Ordinance O-10-12 during each reporting period. If changes are warranted, a new or revised ordinance will be approved and implemented.

Evaluation Criteria: The ordinance will be evaluated on its effectiveness in addressing erosion and sediment control. The City will report the number of non-compliant construction sites identified by the City, the number of enforcement actions taken, the number of non-compliant sites reported to the ADEM, and whether the individuals or businesses responsible for identified non-compliant construction sites are repeat offenders.

Activity 2. **Construction Site Inspection Program**

Designated City personnel will inspect all qualifying construction sites within 60 days of initial disturbance, at periodic intervals during construction, and following stabilization. At a minimum an inspection will be conducted once a month for each priority construction site as defined by the ADEM based on the most recent 303(d) list. The Building Department Inspectors perform the necessary inspections and implement work orders for subsequent inspections and potential enforcement when sites are non-compliant.

The City will maintain inspection documentation for review upon request. Records will include at a minimum:

- Facility type
- Inspection date
- Name and signature of inspector
- Location of construction project
- Owner/operator information (name, address, phone number, email)
- Description of storm water BMP condition
- Photographic documentation of storm water BMP components (at the discretion of the Permittee)

The City will evaluate the effectiveness of the construction site inspection program during each reporting period.

Evaluation Criteria: The City will report the number of inspections completed, the number of non-compliant construction sites identified by the City, the number of enforcement actions taken, the number of non-compliant sites reported to the ADEM, and whether the individuals or business responsible for identified non-compliant construction sites are repeat offenders. The City will also provide a summary of at least one inspection conducted during the reporting period that resulted in enforcement actions.

Activity 3. **Sediment and Erosion Control Plan Review**

Section III (4)(b) of Ordinance No. O-10-2012 requires that each application for a Land Disturbance Permit be accompanied by a Sediment and Erosion Control Plan and a Storm Water Management Plan providing for storm water management during the land disturbing activity and after the activity has been completed. Prior to approval or denial of a land disturbance permit application, the City will review the provided plans. Ordinance No. O-10-2012 provides the plan review process and requirements.

Plan review will ensure proposed projects adequately address the City's erosion, sediment, and pollution control requirements. Plan review will also take into consideration what potential impacts to water quality the project may have.

Evaluation Criteria: The City will report the total number of plans reviewed, the number of plans approved or rejected during the reporting period, and number of plans that meet the requirements the Alabama Construction General Permit.

Activity 4. **BMP Training Program**

City personnel tasked with plan review and/or conducting BMP inspections will undergo annual training on proper design, installation, inspection, and maintenance of on-site control measures and on new technology and practices. All inspectors will complete initial storm water awareness training and attend annual refreshers. Currently the City has three

trained employees, should additional plan reviewers or inspectors be needed, they will be trained accordingly.

Jimmy Whittemore (QCI #64503), Daryl Sanders (QCI #64496), and Jeff Wise (QCI#64505) were certified as a Qualified Credentialed Inspectors (QCI). QCI certification will be maintained through the approved annual refresher courses.

Evaluation Criteria: The City will provide a copy of the QCI certificates and records of awareness training received during the reporting period.

Activity 5. **Public Reporting and Tracking System**

The City provides a contact number on the City's Storm Water Management webpage for the public to report non-compliant construction sites, illicit discharges (including spills or illegal dumping), impaired waterways, and violations of ordinances relating to storm water pollution. The public may contact the City's Storm Water Management Department to make reports. The City utilizes a form to track the reports and follow-up with investigations where necessary.

Records of public complaints will include:

- Date, time, and description of the complaint
- Location of subject construction sites
- Identification of any actions taken (inspections, enforcement, corrections, etc.) that are sufficient to cross-reference inspection and enforcement records

The City will continue to publicize the reporting number on the City's website and track received complaints and the City's responses to the received complaints. The City will evaluate the current public reporting and tracking methods.

Evaluation Criteria: The City will report the total number of complaints received, the number of complaints addressed, and the number of complaints resolved during the reporting period. The City will also report whether or not the received reports contain the required information to find and address the suspected problem. The City will provide a summary of at least one complaint received during the reporting period. This information will help evaluate the effectiveness of the tracking and reporting system, as well as the public awareness and level of concern of storm water issues.

Activity 6. **Enforcement of Non-Compliant Sites**

The City is relying on ADEM to establish the standards for appropriate erosion and sediment controls for qualifying construction sites. The City will notify the ADEM of any construction sites where a possible violation of the Clean Water Act has occurred such as lack of NPDES permit or ineffective BMPs following an inspection by the City.

Ordinance O-10-2012, included in **Appendix E-3**, describes the enforcement process. The process is summarized below.

1. In the event a deficiency is noted, the city shall notify in writing the party responsible for maintenance.
2. Upon receipt of the notice, the responsible party has 14 days to correct the deficiency.
3. In the event that corrective action is not undertaken within that time, the City may take necessary corrective action.

The City will rely on the ADEM for construction NPDES enforcement when a permit is required but has not been obtained or of situations where the City's enforcement actions have not resulted in compliance. These non-compliant sites will be reported to the Construction Section of the Stormwater Management Division of ADEM in Birmingham, Alabama by phone and/or email.

The City will maintain records of non-compliant sites that will include:

- Name of the owner/operator
- Location of construction project
- Description of violation
- Required schedule for returning to compliance
- Description of enforcement response used, including escalated responses if repeat violations occur
- Accompanying documentation of enforcement responses (notices of non-compliance, notices of violations, etc.)

Evaluation Criteria: The City will report the total number of non-compliant construction sites reported to ADEM during the reporting period.

9.3.4 Responsible Party

The City of Southside Mayor's office and Building Department are responsible for implementing and tracking the construction site storm water provisions of the ordinance as well as other Construction Site Storm Water Runoff strategies.

9.4 Post-Construction Storm Water Management in New Development and Redevelopment

9.4.1 Rationale Statement

Post-construction runoff can significantly impact a water body by increasing the type and quantity of pollutants in storm water runoff and by increasing the volume of water delivered to the water body during storms. As runoff flows over areas altered by development, it collects sediment and chemicals such as oil, grease, pesticides, heavy metals, and nutrients. Instead of infiltrating, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff are delivered to the nearest receiving water. Both impacts can be mitigated by proper post-construction planning.

9.4.2 *Target Audiences*

The primary target audiences within the City are:

- **Developers, Contractors, and Homebuilders**
  - Responsible for development and construction activities that can impact post-construction storm water management.
- **Engineers**
  - Responsible for designing post-construction storm water management plans

9.4.3 *Outreach Strategies*

The City plans to implement the following activities as part of their Post-Construction Storm Water Management Program during each reporting period. To evaluate the success of the program and aid in preparing the required Annual Report, evaluation criteria have been established for each strategy.

A table identifying each Post-Construction Storm Water Management strategy planned for each reporting period is provided in **Appendix I-2**. This table may aide in completion of the annual report.

Activity 1. **Reducing Post-Construction Runoff Volume**

Ordinance No. O-10-2012, Section VI provides for post-construction storm water management measures to reduce runoff volume. Specifically, all sites are required to have at least 10% vegetated area, and re-vegetated areas are required to have a minimum 75% survival of the cover crop for one year.

Ordinance No. O-10-2012, Section V and VI for post-construction storm water management measures to reduce runoff volume. Designs should control the peak flow rates of storm water discharge associated with storms and reduce the generation of post construction storm water runoff to preconstruction levels. Specifically, all sites are required to have at least 10% vegetated area, and re-vegetated areas are required to have a minimum 75% survival of the cover crop for one year. Design should be intended to maintain or restore quality and volume of storm water runoff to pre-development levels.

The ordinance is included in **Appendix I-3** and can be downloaded from the City Webpage at the link provided below:

http://www.cityofsouthside.com/Default.asp?ID=278&pg=Storm+Water+Managment+Ordinance

The ordinance will be evaluated each reporting period. If changes are warranted, a new or revised ordinance will be approved and implemented.

Evaluation Criteria: The ordinance will be evaluated on its effectiveness in reducing runoff from new development or redevelopment. The City will report the number of

submitted plans that include measures to reduce runoff volume. The City will report how many submitted plans meet or exceed the 10% green area rule, the number of enforcement actions taken, and an assessment of whether 75% survival of cover crops is achieved at constructions sites across the City during the reporting period. The evaluation may also examine which control measures are typically utilized and if additional examples should be added to the ordinance.

Activity 2. **Reducing Pollutants from Development**

Ordinance No. O-10-2012 requires that storm water runoff be controlled to prevent pollution of local waters and provides a list of possible control measures.

Ordinance No. O-10-2012, Section VII requires that storm water runoff be controlled to prevent pollution of local waters and provides a list of possible control measures. Section V states that designs should *"seek to utilize pervious areas for storm water treatment and to infiltrate storm water runoff from driveways, sidewalks, rooftops, parking lots, and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity"*.

The ordinance will be evaluated each reporting period. If changes are warranted, a new or revised ordinance will be approved and implemented.

Evaluation Criteria: The ordinance will be evaluated on its effectiveness in reducing runoff from new development or redevelopment. The evaluation may also examine which control measures are typically utilized and if examples of appropriate control measures should be added to the ordinance. The City will report the number of developments where treatment of storm water runoff is required and the criteria for requiring treatment of storm water runoff.

Activity 3. **Long-Term Maintenance of Storm Water Controls**

Ordinance No. O-10-2012 requires long-term maintenance of storm water control structures and provides for the City to require inspection, funding, and planning for permanent storm water management structures. The ordinance also requires that the design and planning of all storm water management facilities include detailed maintenance and repair procedures.

Ordinance No. O-10-2012, Section V and VI requires long-term maintenance of storm water control structures and provides for the City to require inspection, funding, and planning for permanent storm water management structures. The design and planning of all storm water management facilities should include detailed maintenance and repair procedures. The plans should identify the parts or components that need to be maintained and the necessary equipment. This Section also requires the owner of the property must execute an inspection and maintenance agreement that shall operate as a

deed restriction binding on the current property owner and all subsequent property owners.

The ordinance will be evaluated each reporting period. If changes are warranted, a new or revised ordinance will be approved and implemented.

Evaluation Criteria: The ordinance will be evaluated on its effectiveness in addressing long-term maintenance of storm water controls. The City will report the number of submitted plans that include detailed maintenance procedures, the number of maintenance agreements reviewed, the number of maintenance provisions approved or denied, and the number of enforcement actions taken.

Activity 4. **Evaluate Obstacles to Low Impact/Green Development**

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

Evaluation Criteria: The City will report if obstacles are identified and provide a brief summary on how the conflicts will be resolved.

Activity 5. **Plan Review**

The City will review Sediment and Erosion Control Plans and Storm Water Management Plans for all new construction, prior to the approval or denial of a land disturbance permit application. If changes to post-construction controls are required, the City requires the plans to be resubmitted and the changes approved. The plans must provide a means of documenting that post-construction storm water measures meet the criteria of Ordinance No. O-10-2012. Ordinance No. O-10-2012 provides the plan review process and requirements.

Plan review will ensure proposed projects adequately address the City's erosion, sediment, and pollution control requirements. Plan review will also take into consideration what potential impacts to water quality the project may have.

Evaluation Criteria: The City will report the total number of plans reviewed, the number of plans approved or rejected during the reporting period, and the number of post-construction designs approved or rejected.

Activity 6. **Construction Site Inspection Program**

Designated City personnel will perform post-construction inspections for all post-construction controls within written notice that stabilization is complete to confirm post-construction storm water measures/structures have been installed according to the submitted plan. At a minimum an inspection will be conducted annually for each site to confirm post-construction BMPs are functioning as designed.

The City will maintain inspection documentation for review upon request. Records will include at a minimum:

- Facility type
- Inspection date
- Name and signature of inspector
- Location of construction project
- Owner/operator information (name, address, phone number, email)
- Description of storm water BMP condition
- Photographic documentation of storm water BMP components (at the discretion of the Permittee)

The City will evaluate the effectiveness of the construction site inspection program during each reporting period.

Evaluation Criteria: The City will report the number of inspections completed and the number of projects that were completed as per the submitted plans, the number of projects that were not constructed in accordance to the plans, and the resolution of those projects that were not. The City will also provide a summary of at least one inspection conducted during the reporting period that resulted in enforcement actions.

Activity 7. **Post-construction Structural Controls Inventory**

The City will compile an inventory of post-construction structural controls including those owned by the City. The list will be updated annually.

Evaluation Criteria: The City will a table of the post-construction structural controls with the owner/operator. The City will identify the newly added controls during the reporting period.

9.4.4 Responsible Party

The City of Southside Mayor's office and Building Department are responsible for implementing the provisions of the ordinance pertaining to post construction storm water management as well as other Post - Construction Site Storm Water Runoff strategies.

9.5 Pollution Prevention and Good Housekeeping for Municipal Operations

9.5.1 Rationale Statement

The City of Southside will develop and utilize BMPs designed to minimize pollution related to municipal operations and maintenance. These BMPs are intended to address storm water pollution from nutrients, sediments, petroleum products, and other common pollutants.

9.5.2 *Target Audiences*

The primary target audiences within the City are:

- **Municipal Employees**
  - Primarily responsible for identifying and reporting illicit discharges
  - Potential contributors to storm water impacts through municipal operations

9.5.3 *Outreach Strategies*

The City will implement the following activities as part of their Pollution Prevention and Good Housekeeping for Municipal Operations Program during each reporting period. To evaluate the success of the program and aid in preparing the required Annual Report, evaluation criteria have been established for each strategy.

A table identifying each Pollution Prevention and Good Housekeeping for Municipal Operations strategy planned for each reporting period is provided in **Appendix I-2**. This table may aide in completion of the annual report.

Activity 1. **Municipal Facilities**

The City has 3 municipal facilities that have the potential to discharge pollutants through storm water runoff. A list of facilities and addresses are provided in **Appendix I-2**. Standard Operating Procedures (SOP) will be established detailing good housekeeping practices to be employed at each facility, where appropriate. SOPs will be developed by **May 31, 2017** and provided in the 2016-2017 Annual Report.

The City will inspect each facility for good housekeeping practices on a quarterly basis. A checklist will be established by **May 31, 2017** (and provided in the 2016-2017 Annual Report) to be used during inspections and to track noted deficiencies.

Evaluation Criteria: The City will provide a list of municipal facilities, the number of inspections performed at each facility, and the number of noted deficiencies. This information will help measure the municipal workers awareness of storm water issues.

Activity 2. **Employee Training**

The City will develop and implement a training program for municipal employees that focus on pollution prevention, good housekeeping measures, identification of potential illicit discharges, and other potential threats to storm water quality. Training materials will focus on vehicle maintenance and identification and reporting of potential illicit discharges.

A training session will be conducted each reporting period.

Evaluation Criteria: The City will provide details on the training topics presented to municipal workers during the reporting period. The City will keep attendance records and

report the number of municipal workers trained during the reporting period. This information will help measure the municipal workers awareness of storm water issues.

Activity 3. **Vehicle Maintenance Program**

The City of Southside owns and operates a variety of vehicles and equipment used in municipal operations and maintenance. These vehicles include passenger cars, trucks, vans, and equipment. The City will continue to conduct routine maintenance of owned vehicles and will inspect vehicles for the presence of fluid leaks during routine maintenance using the vehicle inspection log. The City will promptly repair vehicles determined to have leaks. The City will log all repairs with an inspection checklist.

Evaluation Criteria: The City will provide a completed inspection log for at least one vehicle used during the reporting period. The City will report the frequency of inspections and the number of vehicle or equipment leaks identified during the reporting period as a result of the inspection program. This information will help measure the effectiveness of the vehicle inspection and maintenance program.

Activity 4. **Vehicle Wash Area**

Vehicle washing will be performed only in designated areas. Each location will be reviewed, inspected, and modified as needed throughout the year. During the annual BMP training, the City will notify all employees of the locations of the designated wash areas.

The City will prohibit the use of phosphate-containing soaps for vehicle washing (unless washing takes place at an NPDES-permitted facility).

Evaluation Criteria: The City will report the number of designated municipal vehicle washing areas. The City will also keep attendance records and report the number of municipal workers trained during the reporting period. This information will help measure the municipal workers awareness of storm water issues.

Activity 5. **Pesticide Application**

Pesticide application in City Right of Ways is performed by an outside contractor. Prior to entering into or renewing any additional contracts the City will require the contractor to provide all necessary certifications and licensing during the bid process.

The City does not have a Mosquito Control Program. However, should the City begin spraying for mosquitoes, the City will obtain an NPDES permit from ADEM for application practices if application thresholds are met. The City will follow ADEM regulations regarding mosquito pesticide application.

To reduce potential impact to waterways, the City will review all areas where pesticides are to be used. Areas where pesticides are determine to post a threat to water quality

should be noted on the storm water map and identified in the annual report.

The City will comply with pesticide application and disposal regulations.

Evaluation Criteria: The City will maintain a copy of the current certification. The City will report the number of areas where it was determined pesticides impacted waterways during the reporting period, if any, and how the impact was resolved. A Storm Water System Map showing the location of these areas will be provided in the Annual Report. This information will help measure the effectiveness of the City's review.

Activity 6. **Litter Ordinance**

Ordinance No. 006-2008 states, "*An accumulation or storage of debris, refuse, rubbish, brush used building materials, parts of buildings, remains from building demolition, parts of untenable or uninhabitable structures, used machinery, used tires, used vehicles, parts of vehicles, abandoned vehicles, or any other materials which may provide a breeding place for mosquitos, harmful insects, rodents or snakes, or is so unsightly as to be offensive of the surrounding area is a nuisance in violation of this ordinance.*".

The ordinance is included in **Appendix I-3**.

Evaluation Criteria: The City will report the number of enforcements during the reporting period. This information will help measure the effectiveness of the ordinance.

Activity 7. **Litter, Floatables, and Debris – Large Item Pickup**

The City performs brush pickup throughout the year on an as needed basis. Citizens can request a work order from the City for pickup and disposal of large items. The City will continue to implement a large item program.

Evaluation Criteria: The City will describe how roads are prioritized. The City will also report the number of scheduled pickups and pounds of debris collected from pickups during the reporting period. This information will help measure the effectiveness of the brush and leaf pickup program.

Activity 8. **Litter, Floatables, and Debris – Recycling Program**

The City manages a recycling program for aluminum cans and scrap metal. Aluminum cans are collected from the break room in the City Hall. The City collects metal to recycle from City projects.

Evaluation Criteria: The City will report the amount of materials (in total tons) collected. This information will help measure the public awareness of the events and degree of public participation.

9.5.4 Responsible Party

The City of Southside Mayor's office and Building Department are responsible for implementing and tracking Pollution Prevention and Good Housekeeping strategies within municipal operations.

9.6 Agency Certification

I certify under penalty of law that this document and all attachments pertaining to the City of Southside 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 on 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 or imprisonment for knowing violations.

Wally Burns, Mayor
City of Southside, Alabama

12/21/16
Date