City of Satsuma, Alabama

Stormwater Management Program Plan (SWPP)

For Phase II MS4

December 31, 2016

Permit Number: **AL040046**

Developed by the City of Satsuma

PO Box 517

Satsuma, Alabama 36572

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1. CERTIFICATION

City of Satsuma, Alabama

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Base 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 fine and imprisonment for knowing violations.

Tom Briand, Building Inspector

Thomas Williams, Mayor

ATTEST:

Vicki Miller, City Clerk

2. Introduction
    a. Program Overview - This document presents the City of Satsuma's Stormwater Management Programs Plan (SWMPP) as required by the Alabama Department of Environmental Management's (ADEM) National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Separate Storm Sewer System (MS4) Permit. This permit covers stormwater discharges from regulated small municipalities. The overall goal of the program is to protect water quality through efforts to reduce the discharge of pollutants in stormwater to the maximum extent practicable.

    b. Regulatory Background - In 1990, the Environmental Protection Agency (EPA) promulgated regulations establishing Phase I of the NPDES stormwater program. The Phase I program for municipal separate storm sewer systems (MS4s) requires operators of "medium" and "large" MS4s that generally serve populations of 100,000 or greater to implement a stormwater management program as a means to control polluted discharges from certain municipal, industrial and construction activities into the MS4.

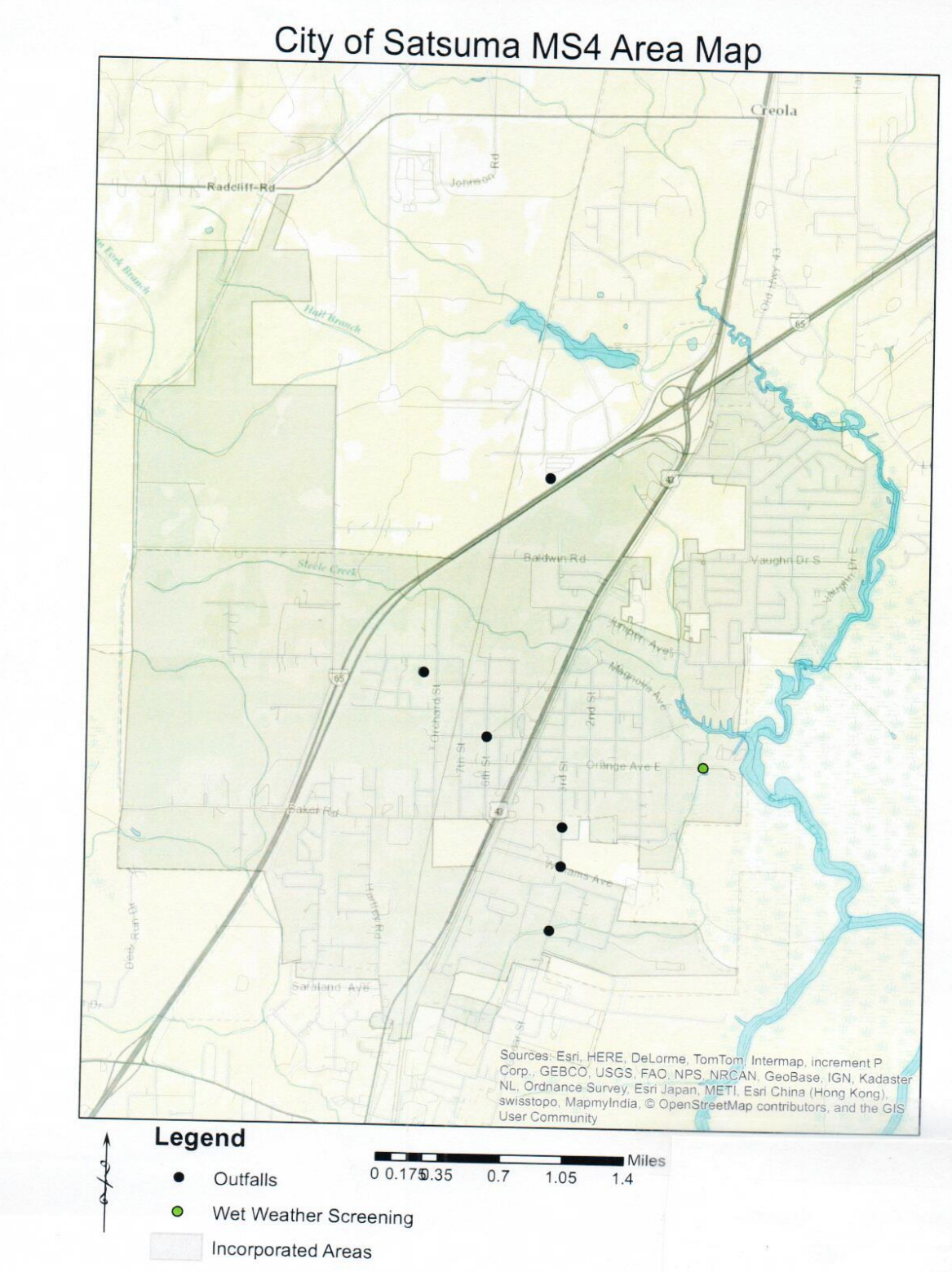
        In 1999, EPA promulgated regulations establishing Phase II of the NPDES storm program. The Phase II program extends coverage of the NPDES stormwater program to regulated "small" MS4s. A regulated small MS4 is located within an "urbanized area" as defined by the Census Bureau or as designated by the NPDES permitting authority.

        The Alabama Department of Environmental Management presently has primary jurisdiction over permitting and enforcement of the stormwater program for Alabama. On September 6, 2016, ADEM issued MS4 Phase II General Permit – NPDES Permit Number ALR04006 – for stormwater discharges associated with small MS4s.

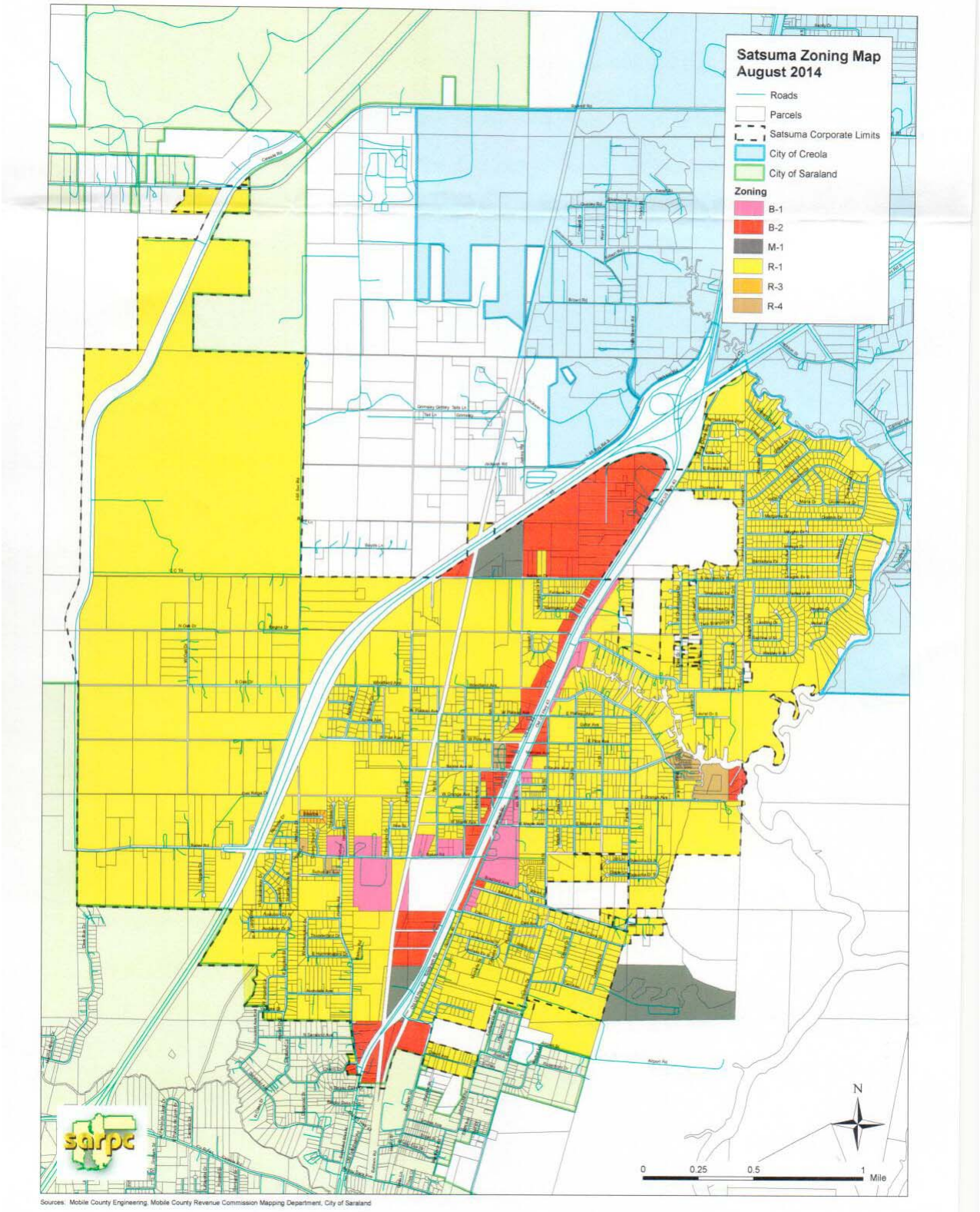
    c. Regulated Area - The Phase II MS4 general permit applies to operators of regulated small MS4s that discharge stormwater to waters of the State. The City of Satsuma is located just south of the I-65 and Highway 43 intersection in Mobile County, Alabama. Established in 1959, the community now serves as a suburb for the City of Mobile. Though Satsuma is geographically small (6.5 sq. miles), its population has experienced significant growth in recent years. The current population, according to the 2010 census, is 6,168.

        There are 4 main drainage ways in the City of Satsuma including Gunnison Creek, Steele Creek, Tidewater Branch, and Bayou Sara. The City of Satsuma is located in the Mobile-Tensaw Hydrologic Unit Code (03160204). Most of the land use of the city is residential. There are several large parcels of forested wetlands, not suitable for future development.

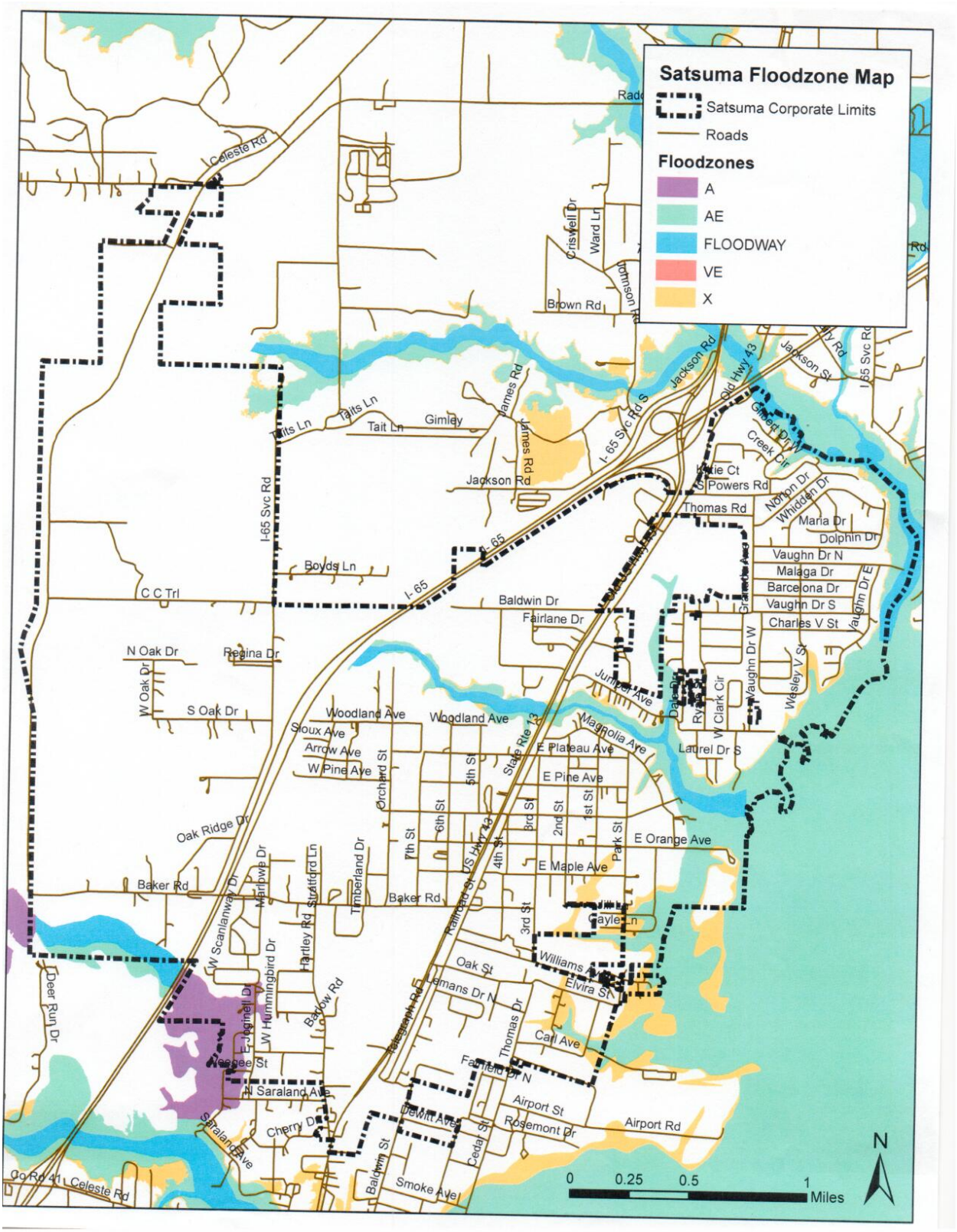
Map 1. City of Satsuma MS4 Area



Map 2. City of Satsuma Zoning Map



Map 3. City of Satsuma Flood Zones



d. Legal Authority - The City's storm water program is managed by several City Departments and by community activities, which involve volunteer work. The City does not have the financial resources to dedicate personnel solely to storm water, water quality. Therefore these responsibilities are shared by employees and considered part of the efforts. The following individuals may be contacted to address questions or concerns regarding the City of Satsuma's MS4 program:

The Honorable Thomas Williams
Mayor, City of Satsuma
5464 Old Highway 43
P. O. Box 517
Satsuma, Alabama 36572
(251) 675-1440

Tom Briand
Building Inspector/Code Enforcer, City of Satsuma
5464 Old Highway 43
Satsuma, Alabama 36572
(251) 675-1440
tbriand@cityofsatsuma.com

The City of Satsuma was officially incorporated in 1959. Ala. Code §11-52-2 (a) states that "any municipality is hereby authorized and empowered to make, adopt, amend, extend, add to, or carry out a municipal plan as provided in this article and to create by ordinance a planning commission with the powers and duties herein set forth". Satsuma's Planning Board and Board of Adjustments continue to advise the City Council on current and future development within the City and Planning Jurisdiction of the City. The Building Inspector is responsible for protecting the health, safety, and welfare of the City and its residents through enforcement of the City's Subdivision Regulations, Building Codes, and Ordinances. Appendix A includes the most current Subdivision Regulations. Appendix B includes the most current Zoning Regulations.

Storm Water Ordinance Number 509 addresses runoff from construction sites, requirements for storm water management, BMP plans for construction projects, and the City's review and approval process. The City required that construction projects have an approved erosion and sediment control plan to obtain approval for a City building permit. This document is located in Appendix C of this document.

Flood Ordinance 413 allows the City to implement regulations should any new developments negatively impact drainage capacity or downstream property. Potential drainage issues are addressed before the approval of any development plans. This document is located in Appendix D of this document.

The City of Satsuma also enforces a Nuisance Ordinance – which make manages any lot or tract of land in the City of Satsuma that is unsightly or dangerous causing

material annoyance, inconvenience, discomfort or hurt to anyone in the general public. This ordinance is included in Appendix E.

The General Permit requires, at a minimum, that permittees develop, revise, implement, maintain and enforce a stormwater management program (SWMP) which shall include controls necessary to reduce the discharge of pollutants from its MS4 consistent with Section 402(p)(3)(B) of the Clean Water Act and 40 CFR Parts 122.30-122.37. These requirements shall be met by the development and implementation of a stormwater management program plan (SWMPP) which addresses the best management practices (BMPs), control techniques and systems, design and engineering methods, public participation and education, monitoring, and other appropriate provisions designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP). The Permittee is required to provide and maintain adequate finance, staff, equipment, and support capabilities necessary to implement the SWMPP and comply with the requirements of the permit. Once the initial SWMPP is acknowledged by ADEM, activities and associated schedules outlined by the SWMPP or updates to the SWMPP are conditions of the permit. Full implementation of BMPs, using all known, available, and reasonable methods of prevention, control and treatment to prevent and control stormwater pollution from entering waters of the State of Alabama is considered an acceptable effort to reduce pollutants from the municipal storm drain system to the maximum extent practicable.

SWMPP Implementation Responsibilities

Although the Building Inspector is the lead manager of the SWMPP, no single department within the City is responsible for all of the necessary activities; therefore, multiple departments and agencies have a role in program management.

Satsuma City Council and Planning Commission

- The Planning Commission is responsible for reviewing resolutions and ordinances in the development phase, as well as passing, reviewing and amending the Subdivision Regulations.
- The City Council is responsible for the promulgation of all City resolutions and ordinances and the approval of budgetary expenditures related to the implementation of the Stormwater Management Program and maintenance of stormwater infrastructure

Public Safety Departments

Satsuma Police Department

- The Police Department will assist with enforcement of environmental regulations and identification and reporting of illicit discharges and hazardous materials spills.

Satsuma Fire Rescue Department

- The Fire Rescue Department will be responsible for hazardous chemical spill response and illicit discharge detection and elimination.

  The Police and Fire Rescue Departments provide a support role through hazardous waste spill reporting and cleaning techniques. The responsibilities include public education, illicit discharge detection and elimination and pollution prevention and good housekeeping.

Mayor's Office

The Office of the Mayor is responsible for overall oversight of the program, and for maintaining communication with the City Council.

- Building Official
  The Building Official will provide support in Illicit Discharge Detection and Elimination, primarily through construction site BMP inspections.

- City Clerk
  The City Clerk will oversee the day-to-day duties of implementing the SWMPP.

- Public Works Department
  The Public Works Department will ensure all city-owned stormwater facilities are inspected and maintained on a regular basis. Department staff will also assist in Illicit Discharge Detection and Elimination.

SWMPP Revisions and Updates

As part of the annual review of the SWMPP in conjunction with the preparation of the annual report, all revisions and updates that are required by ADEM or necessary to maintain permit compliance will be submitted to the Department for review. Upon approval of the revisions and updates, the modified SWMPP plan will become effective.

3. Program Elements

A. Public Education and Public Involvement on Stormwater Elements - The City strives to develop and implement a public education and outreach program to inform the community about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff to the maximum extent practicable. It is the City's goal to continuously implement this program in the areas served by the MS4, and must also comply, at a minimum, with applicable state and local public notice requirements when implementing a public involvement/participation program. The primary sources of water pollution in Satsuma include sedimentation and litter resulting from construction sites, erosion and sedimentation caused by extensive land use changes, roadside litter and illegal dumping, as well as household and light commercial pollution sources. The City of Satsuma will reach out to target audiences to reduce these pollutants to the maximum extent practicable. The goals listed below detail the methods the City will use to educate and involve various groups and individuals about the impacts of major pollution sources in its MS4 jurisdiction.

Measurable Goals

Newsletters -

i. The City notifies all citizens through a newsletter and notifications on the water bills of the garbage collection times during the holiday period. These newsletters include information regarding debris removal and leaf disposal , illicit discharge identification, the impacts of stormwater pollution, and ways to report.
   - AUDIENCE: General Public
   - RESPONSIBILITY: City Clerk
   - TIMELINE: Years 1 – 5

ii. Attend at least one (1) Mobile Bay National Estuary Program Community Action Committee (CAC) meeting per permit year to discuss public education and involvement
   - AUDIENCE General Public
   - RESPONSIBILITY Building Inspector/ Mayor
   - TIMELINE Years 1 – 5

iii. Attend at least one (1) Coastal Alabama Clean Water Partnership meeting per permit year to discuss public education and involvement opportunities.
   - AUDIENCE General Public
   - RESPONSIBILITY Building Inspector
   - TIMELINE Years 1 – 5
   -

Construction Site Runoff

i. Provide Construction Best Management Practices pamphlets, copies of the Field Guide for Erosion and Sediment Control on Construction Sites in Alabama, and other informational material in the Building Department and on the City's website.
    - AUDIENCE Engineers, Contractors, Developers, Review Staff, & Planners
    - RESPONSIBILITY Building Inspector
    - TIMELINE Years 1 – 5

ii. Provide information about Construction Best Management Practices, including a link to the Alabama Handbook, on the City's Environmental Outreach and Building Department web pages.
    - AUDIENCE Engineers, Contractors, Developers, Review Staff, & Planners
    - RESPONSIBILITY Building Inspector
    - TIMELINE Years 1 – 5

iii. Continue to monitor and investigate all complaints submitted via a digital form on the City's website to solicit comments in regards to erosion and sediment control requirements
    - AUDIENCE Engineers, Contractors, Developers, Review Staff, & Planners
    - RESPONSIBILITY Building Inspector
    - TIMELINE Years 1 – 5

II. Land Use Impacts

i. Utilize materials provided by the Create a Clean Water Future Campaign to educate the general public about the impacts of increased stormwater flows from impervious surfaces into receiving water bodies.
    - AUDIENCE General Public, Engineers, Contractors, Developers, Review Staff, & Planners
    - RESPONSIBILITY Building Inspector
    - TIMELINE By Year 5

ii. Provide educational materials regarding runoff reduction techniques, including Low Impact Development (LID), site design, forest retention, and stormwater pond maintenance.
    - AUDIENCE Property Owners, Engineers, Contractors, Developers & Planners
    - RESPONSIBILITY Building Inspector
    - TIMELINE Years 1 – 5

III. Roadside Litter and Illegal Dumping

i. Continue to enforce city ordinances that address city ordinances that address litter and illegal dumping into the City's MS4 area.
   - AUDIENCE General Public
   - RESPONSIBILITY Building Inspector
   - TIMELINE Years 1 – 5

ii. Work with the Alabama Department of Transportation (ALDOT) and the to create watershed signage which meets MUTCD standards to install along major corridors throughout the MS4.
   - AUDIENCE General Public
   - RESPONSIBILITY Building Inspector
   - TIMELINE Years 1 – 5

iii. Work with the Mobile Bay National Estuary Program (MBNEP), the Alabama Department of Conservation and Natural Resources (ADCNR), the Alabama People Against a Littered State (PALS), and/or the Create a Clean Water Future Campaign to organize an annual cleanup.
   - AUDIENCE General Public
   - RESPONSIBILITY Building Inspector
   - TIMELINE Years 2 – 5

IV. Household and Commercial Pollution

i. Utilize materials provided by the Create a Clean Water Future Campaign addressing yard care techniques that protect water quality, including but not limited to: pet waste disposal, the use, storage and disposal of pesticides and fertilizers, landscaping, and rain water reuse.
   - AUDIENCE Homeowners, Landscapers, Property Managers & General Public
   - RESPONSIBILITY Building Inspector
   - TIMELINE Years 1 – 5

ii. Utilize materials provided by the Create a Clean Water Future Campaign addressing Best Management Practices for carpet cleaning and auto repair and maintenance, as well as the use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials.
   - AUDIENCE Homeowners, Property Managers, Businesses
   - RESPONSIBILITY Building Inspector
   - TIMELINE Years 1 – 5

iii. Utilize materials provided by the Create a Clean Water Future Campaign addressing the maintenance of detention ponds and other drainage facilities.
   - AUDIENCE Homeowners, Property Managers, Businesses
   - RESPONSIBILITY Building Inspector
   - TIMELINE Years 1 – 5

iv. Continue to promote the proper disposal of non - hazardous household and commercial waste.
    - AUDIENCE General Public
    - RESPONSIBILITY Building Inspector
    - TIMELINE Years 1 – 5

v. Coordinate with local municipalities to sponsor a hazardous waste "amnesty day" once per permit year.
    - AUDIENCE General Public
    - RESPONSIBILITY Building Inspector
    - TIMELINE Years 1 – 5

V. MS4 Phase II

i. Seek input on the development, revision, and implementation of the SWMPP via the City's web page.
    - AUDIENCE General Public
    - RESPONSIBILITY Building Inspector
    - TIMELINE Years 2 – 5

ii. Seek input on the development, revision, and implementation of the SWMPP via the City's web page.
    - AUDIENCE General Public
    - RESPONSIBILITY Building Inspector
    - TIMELINE Years 1 – 5

iii. Provide educational materials regarding Phase II MS4 requirements.
    - AUDIENCE General Public
    - RESPONSIBILITY Building Inspector
    - TIMELINE Years 1 – 5

iv. Participate in at least one (1) conference and/or meeting concerning MS4 Phase II compliance each permit year.
    - AUDIENCE General Public
    - RESPONSIBILITY Building Inspector
    - TIMELINE Years 1 – 5

v. Assess the effectiveness of the goals listed above by calculating the number of people reached via social media posts, website clicks and print materials, as well as the number of those participating in events involving environmental stewardship. This assessment will be provided to ADEM annually.
    - AUDIENCE General Public
    - RESPONSIBILITY Building Inspector
    - TIMELINE Years 1 – 5

B. Illicit Discharge Detection and Elimination (IDDE) Overview - 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. Illicit discharges can enter a storm drain system directly via "point sources", typically discharged from pipes, or indirectly via "nonpoint sources" such as construction site erosion, litter, pet waste and other overland runoff sources. As a result, untreated waste containing high levels of pollutants enters stormwater and makes its way to creeks, rivers, and waterbodies. To curb the introduction of pollutants into these waterways, the City is required 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. Major elements of this program include:

- Identifying the location of all known outfalls within the regulated MS4, and providing the latitude and longitude, names of all waters of the State that receive discharges from the outfalls, and any structural BMPs owned, operated, or maintained by the City;
- An ordinance that effectively prohibits non-stormwater discharges to the MS4, which shall include escalating enforcement procedures and require the removal of illicit discharges and the immediate cessation of improper disposal practices upon identification of responsible parties;
- A dry-weather screening program designed to detect and address non-stormwater (illicit) discharges to the MS4; and
- Procedures for identifying, tracing and eliminating illicit discharges.

Exceptions

The NPDES permit authorizes the following non-stormwater discharges, provided they do not cause or contribute to a violation of water quality standards, and that they have been determined not to be substantial contributors of pollutants to a particular small MS4:

- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensate
- Irrigation water (not consisting of wastewater)
- Rising ground water
- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering runoff
- Individual residential car washing, to include charitable car washes
- Residual street wash water

- Discharge or flows from firefighting activities, including fire hydrant flushing
- Flows from riparian habitats and wetlands
- Dechlorinated swimming pool discharges, and
- Discharges authorized and in compliance with a separate NPDES permit.

Illicit Discharge Identification - The General Permit requires the City to provide a mechanism for the public to report illicit discharges. The City currently provides a link to the Building Inspector's email address and direct phone number on the Environmental Outreach web page. Additionally, members of the Public Works staff are educated in the detection of illicit discharges and instructed to report all stormwater issues to the Building Inspector.

Dry Weather Screening and Source Tracing - The EPA considers dry weather screening an effective method for identifying illicit discharges and connections; the General Permit requires the City to develop a Standard Operating Procedure for dry weather screening and source tracing. As a result, City staff will be required to conduct dry weather screening of no less than 15% of all major outfalls each year. Any major outfall observed to be flowing at least 72 hours after the most recent rain event is investigated as a potential illicit discharge. Any dry weather flow that is confirmed as an illicit discharge via field screening and/or analytical analyses shall be traced to the source of the discharge in accordance with the Dry Weather Screening and Source Tracing Standard Operating Procedure.

Enforcement of Illicit Discharges

The General Permit requires the City to develop an ordinance or other regulatory mechanism that effectively prohibits non-stormwater discharges to the MS4. The ordinance must include escalating enforcement procedures and actions and require the removal of illicit discharges as expeditiously as practicable as well as the immediate cessation of improper disposal practices upon identification of responsible parties.
Satsuma's Planning Board and Board of Adjustments continue to advise the City Council on current and future development within the City and Planning Jurisdiction of the City. The Building Inspector is responsible for protecting the health, safety, and welfare of the City and its residents through enforcement of the City's Subdivision Regulations, Building Codes, and Ordinances

Measurable Goals

The goals listed below detail the methods the City will use to detect and eliminate illicit discharges from the regulated

MS4:

a. Outfall Mapping

   i. Locate, inspect, and record GPS coordinates and attributes of all known outfalls in Gunnison Creek, Steele Creek and Bayou Sara. Attributes shall

include the names of all waters of the State that receive discharges from the outfall and an indication of whether or not the outfall is owned, operated, or maintained by the City.
- RESPONSIBILITY Building Inspector
- TIMELINE Year 1

ii. Following the dry weather screening procedure, inspect at least fifteen percent (15%) of all outfalls within the MS4 no less than once per year with all (100%) screened at least once per five (5) years. Provide a summary of screenings to ADEM on an annual basis.
- RESPONSIBILITY Building Inspector
- TIMELINE Years 1 – 5

b. Illicit Discharge Investigations, Documentation, Mitigation and Reports

i. Keep record of all illicit discharge investigations in accordance with the Dry Weather Screening and Source Tracing Standard Operating Procedure.
- RESPONSIBILITY Building Inspector
- TIMELINE Years 1 – 5

ii. Evaluate Dry Weather Screening and Source Tracing Standard Operating Procedure on an annual basis and report any needed changes in the Annual Report.
- RESPONSIBILITY Building Inspector
- TIMELINE Years 1 – 5

iii. Provide information about how to report an illicit discharge on the City's social media account(s) and Environmental Outreach website.
- REPONSIBILITY Building Inspector
- TIMELINE Years 1 – 5

iv. Develop a program to train new and existing employees about illicit discharge identification and reporting.
- RESPONSIBILITY Building Inspector
- TIMELINE Years 1 – 5

v. Attend at least one (1) Mobile Bay National Estuary Program Project Implementation Committee (PIC) meeting per permit year to discuss ongoing watershed restoration projects and other MS4-related topics.
- RESPONSIBILITY Building Inspector
- TIMELINE Years 1 – 5

vi. Provide ADEM with an annual summary of erosion mitigation and watershed restoration projects commenced during each permit year, including funding sources, partners, and timelines.
- RESPONSIBILITY Building Inspector
- TIMELINE Years 1 – 5

C. Construction Site Stormwater Runoff Control. The Construction Site Stormwater Runoff Control Minimum Control Measure requires the City to develop/revise, implement and enforce an ongoing program to reduce, to the maximum extent practicable, the pollutants in any stormwater runoff to the MS4 from qualifying construction sites.

Pre-Construction Review Requirements and Procedures - The permit requires specific procedures for construction site plan review and approval to include an evaluation of plan completeness and overall BMP effectiveness. While the City does not currently issue a Land Disturbance Permit, the Zoning Ordinance and Subdivision Regulations require an Erosion and Sediment Control Plan be submitted with all site plans and major subdivision applications to the Planning Commission, as well as a copy of the Notice of Intent (NOI) and Construction Best Management Practices Plan (CBMPP) that has been submitted to the Alabama Department of Environmental Management for all qualifying construction sites, as well as Jurisdictional Determination from the Army Corps of Engineers for any on-site wetlands. Any application lacking an Erosion and Sediment Control Plan, Notice of Intent and CBMPP (if applicable), or Jurisdictional Determination (if applicable) is rejected by staff and is not placed on the Planning Commission agenda.

Complete applications are reviewed by the Building Inspector and the City Engineer for conformance with regulations. A field inspection is conducted following the plan review and comments are compiled for return to the applicant. Plans are returned and reviewed by staff once again to ensure all comments have been addressed. The Building Inspector makes a recommendation to the Planning Commission based, in part, on the effectiveness of erosion and sediment control measures outlined in the plan. In the event the Planning Commission approves a plan against staff recommendation, based in whole or in part on environmental concerns, staff will contact ADEM to discuss the plan and its deficiencies. A Building Permit may be withheld until the Erosion and Sediment Control Plan is determined to be acceptable; however, this does not prevent an applicant from disturbing a site.

Construction Site Inspections

Construction sites that lack adequate stormwater controls can contribute a significant amount of sediment to nearby bodies of water. NPDES Permit Number ALR040046 requires the City to develop procedures for the periodic inspection of qualifying construction sites to verify the use of appropriate erosion and sediment control practices
that are consistent with the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas ("Alabama Handbook") published by the Alabama Soil and Water Conservation Committee, including the frequency and prioritization of inspection activities.

Reliance on ADEM for Setting of Standards and Enforcement

As provided by 40 CFR Part 122.35(b), the City of Satsuma has elected to rely on ADEM for the setting of standards for appropriate erosion controls and sediment controls for qualifying construction sites and for enforcement of such controls until the appropriate regulatory mechanisms have been passed in accordance with the

goals stated herein. The City remains responsible for notifying ADEM of non-compliant qualifying construction sites within its regulated MS4 area.

Measurable Goals

a. Clean Water Ordinance

   i. Require all Site Plan applicants to include a copy of the Notice of Intent (NOI) and Construction Best Management Practices Plan (CBMPP) submitted to ADEM, where applicable.
   - RESPONSIBILITY Building Inspector
   - TIMELINE Years 1 – 5

   ii. Require all construction site operators to implement appropriate erosion and sediment control BMPs consistent with the "Alabama Handbook".
   - RESPONSIBILITY Building Inspector
   - TIMELINE Years 1 – 5

   iii. Require all construction site operators, contractors and sub-contractors to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.
   - RESPONSIBILITY Building Inspector
   - TIMELINE Years 1 – 5

   iv. Provide an adequate enforcement mechanism in coordination with the IDDE Enforcement Standard Operating Procedure to ensure compliance with the NPDES General Permit.

   - RESPONSIBILITY Building Inspector
   - TIMELINE Years 1 – 5

b. Staff Training

   i. Provide ADEM with annual verification of all Qualified Credentialed Inspector (QCI) certified employees.
   - RESPONSIBILITY Building Inspector
   - TIMELINE Years 1 – 5

c. Construction Site Inspections

   i. Include an affidavit confirming the applicant's understanding of design standards, maintenance responsibilities, and enforcement procedures in regards to erosion and sediment control best management practices with all land use, subdivision, and building permit applications.
   - RESPONSIBILITY Building Inspector
   - TIMELINE Year 1

   ii. Provide ADEM with an annual summary of construction site inspections in accordance with the Construction Site Inspection Standard Operating Procedure (SOP), including the total number of inspections, the rate of

compliance, and an evaluation of the SOP and any changes that should be made to the procedure.
- RESPONSIBILITY Building Inspector
- TIMELINE Years 1 – 5

iii. Provide ADEM with an annual summary of all construction site enforcement proceedings in accordance with the Construction Site Inspection SOP and IDDE Enforcement SOP, including the number of non-compliant construction site referrals, enforcement actions, a description of the violations, an evaluation of the SOP and any changes that should be made to the procedure.
- RESPONSIBILITY Building Inspector
- TIMELINE Years 1 – 5

iv. Provide ADEM with an annual summary of all construction site runoff complaints received and any actions taken to address the complaints.
- RESPONSIBILITY Building Inspector
- TIMELINE Years 1 – 5

D. Post-Construction Stormwater Management - A description of any completed or planned revisions to the ordinance or regulatory mechanism and the most recent copy or link to the ordinance; and list of all active construction sites within the MS4 to include the following summary:

- Number of construction site inspections;
- Number of non-compliant construction site referrals and/or enforcement actions and description of violations;
- Number of construction site runoff complaints received; and
- Number of MS4 staff/inspectors trained.
- A description of any completed or planned revisions to the ordinance or regulatory mechanism and the most recent copy or link to the ordinance; and
- List of all active construction sites within the MS4 to include the following summary:
- Number of construction site inspections;
- Number of non-compliant construction site referrals and/or enforcement actions and description of violations;
- Number of construction site runoff complaints received; and
- Number of MS4 staff/inspectors trained.
- A description of any completed or planned revisions to the ordinance or regulatory mechanism and the most recent copy or link to the ordinance; and
- List of all active construction sites within the MS4 to include the following summary:

  i. Number of construction site inspections;
  ii. Number of non-compliant construction site referrals and/or enforcement actions and description of violations;
  iii. Number of construction site runoff complaints received; and
  iv. Number of MS4 staff/inspectors trained.

Overview - Post-construction stormwater management refers to the activities that take place after construction occurs, and includes structural and non-structural controls including low-impact development and green infrastructure practices to obtain permanent stormwater management over the life of the property's use. The Post-Construction Stormwater Management in New Development and Redevelopment Minimum Control Measure requires the City to develop, implement, and enforce a program to address stormwater runoff from qualifying new development and redevelopment projects, to the maximum extent practicable.

Performance Requirements - The General Permit requires the City to develop and implement strategies which may include a combination of structural and/or non-structural BMP's designed to ensure, to the maximum extent practicable, that the volume and velocity of pre-construction stormwater runoff is not significantly exceeded; a design rainfall event with an intensity up to that of a 2 year – 24 hour storm event must be the basis for the design and implementation of post-construction BMPs. To accomplish this, the City is required to develop and institute the use of an ordinance or other regulatory mechanism to address post-construction runoff from qualifying new development and redevelopment projects.

Approval Process - Proper post-construction stormwater management necessitates adequate planning and approval procedures. The General Permit requires the City to develop and outline procedures for the site-plan review and approval process and a required re-approval process when changes to post-construction controls are required. The permit also requires the City to detail procedures for post-construction processes to demonstrate and document that post-construction stormwater measures have been installed per design specifications, which includes enforceable procedures for bringing noncompliant projects into compliance.

The City's Subdivision Regulations and Zoning Ordinance outline procedures for staff review of subdivision and site plan applications. Plans are approved by the Planning Commission as-is and any changes, no matter how minor, must be re-submitted for approval. Simply put, any improvements – specifically stormwater structures – not built according to plans approved by the Planning Commission must be brought into compliance prior to the issuance of a Certificate of Occupancy or Final Subdivision Plat approval.

Inspection and Maintenance Requirements

The NPDES General Permit requires the City to perform or require the performance of post-construction inspections to confirm that BMP's are functioning as designed. It also requires the City to maintain records or require the developer, owner or operator to maintain records of post-construction inspections and maintenance activities to be made available to ADEM upon request, and require corrective actions to poorly-functioning or inadequately- maintained post-construction BMP's. To accomplish this, the City must require adequate long-term operation and maintenance of stormwater facilities, including one or more of the following as applicable:

1. The developer's signed statement accepting responsibility for maintenance until the maintenance responsibility is legally transferred to another party; and/or

2. Written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance; and/or
3. Written conditions in project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to a home owner's association, or other appropriate group, for maintenance of structural and treatment control management practices; and/or
4. Any other legally enforceable agreement that assigns permanent responsibility for maintenance of structural or treatment control management practices.

Low Impact Development

The NPDES General Permit requires the city to 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.

Measurable Goals

a. Development Requirements

   i. Amend Zoning Ordinance to require post-construction BMPs be designed to the same standards outlined in the Subdivision Regulations.
      • RESPONSIBILITY City Council & Building Inspector
      • TIMELINE Year 3

   ii. Require an affidavit confirming the applicant's understanding of design standards, maintenance responsibilities, and enforcement procedures in regards to post-construction stormwater facilities with all land use and subdivision applications.
      • RESPONSIBILITY Building Inspector
      • TIMELINE Year 1

b. Evaluation

   i. Review and evaluate policies and ordinance 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.
      • RESPONSIBILITY Building Inspector
      • TIMELINE Years 1 – 5

E. Pollution Prevention & Good Housekeeping for Municipal Operations requires the City to develop and implement a program for pollution prevention and good housekeeping at municipal operations. It also requires the development and implementation of an employee training program designed to prevent and reduce stormwater pollutants, to the maximum extent practicable, in areas such as park maintenance, fleet and building maintenance, new construction and land disturbances, stormwater system maintenance, and all other applicable municipal operations.

The program must list all municipal operations and industrial activities that are impacted by this operation and maintenance program. The training program shall be coordinated with the public outreach programs for stormwater pollution and illicit discharges. The program shall include maintenance activities, schedules and long-term inspection procedures for controls to reduce floatables and other pollutants to the MS4, and must also address controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, recycling collection centers, fleet or maintenance shops with outdoor storage areas and fill dirt storage areas. Procedures must be outlined 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. There will also be procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices.

Municipal Facility Inventory

The NPDES General Permit requires the City to list all municipal facilities and any potential pollutants which may be discharged from such facilities via stormwater runoff. Below is a list of all facilities and properties owned by the City of Satsuma and any potential pollutants which may be discharged into the MS4.

Satsuma Community Center – There is as a large parking lot which drains to a detention pond in the rear. No heavy equipment is stored on site. Potential pollutants include oils and greases resulting from vehicular leaks and trash/floatables.
Location –368 Juniper Avenue

Description – The Public Works facility houses several riding lawn mowers, weed eaters, trucks and some large equipment, as well as fuel and oil and pesticides. Potential pollutants include pesticides, oils and greases resulting from equipment leaks and/or fuel spills, and trash/floatables.
Location – 5668 2nd Street

Recycling Bins
Description – The City hosts two bins for non-hazardous material and one metal recycling bins at the trash ramps near the Public Works Sanitation site.. Potential pollutants include trash/floatables due to improper disposal of recyclables.
Location – Catherine Drive

City Parks
Description – The City has several park areas. They include tennis courts, playground, picnic tables, five ball fields, and concession stands. Potential pollutants include oils and greases resulting from vehicular leaks and trash/floatables due to improper waste disposal.
Location – Several

Steele Creek Lodge and Park- There is a large parking lot which drains to Steele Creek. There are several trash receptacles located on site. Potential pollutants include oils and greases resulting from vehicular leaks and trash/floatables.

Detention Pond On Baker Road
Description – the detention pond located on Baker Road was constructed to alleviate the stormwater runoff velocity leaving the Satsuma Elementary School (owned by Satsuma City Schools)and Baker Road. Potential pollutants include sediment leaving the parking lot and trash flow due to improper waste disposal and along Baker Road.
Location –Baker Road at Orchard Street

Measurable Goals

A. Strategies for Solid Waste Reduction & Removal

i. Develop strategies for the implementation of BMPs at municipal facilities to reduce litter, floatables and debris from entering the MS4.
- RESPONSIBILITY Building Inspector
- TIMELINE Years 1 – 2

ii. Continue to remove litter, floatable and debris material from the MS4, including proper disposal of waste removed from the system.
- RESPONSIBILITY Building Inspector, Public Works Department
- TIMELINE Years 1 – 2

iii. Provide ADEM a summary and evaluation of strategies developed, implemented, or modified within each permit year.
- RESPONSIBILITY Building Inspector
- TIMELINE Years 1 – 5

B. Standard Operating Procedures

i. Develop Standard Operating Procedures for inspecting municipal facilities for good housekeeping practices, including BMPs. The S.O.P. shall include checklists and procedures for correcting noted deficiencies. Revise the SWMPP to include the inspection plan and schedule, included checklists and any other materials upon adoption.
- RESPONSIBILITY Building Inspector, Public Works Department
- TIMELINE Year 1

ii. Develop Standard Operating Procedures for the maintenance of municipal roads, including but not limited to: paving; street sweeping; vegetation control; and cutting, removal and disposal of clippings.
- RESPONSIBILITY Building Inspector, Public Works Department
- TIMELINE Year 2

iii. Develop Standard Operating Procedures for the maintenance of vehicle fleets, including but not limited to: equipment maintenance, repair and washing.
- RESPONSIBILITY Public Works Department, Public Safety Departments
- TIMELINE Years 2 – 3

iv. Develop Standard Operating Procedures for storage facilities and the storage and disposal of chemicals and waste materials.
• RESPONSIBILITY Public Works Department, Public Safety Departments
• TIMELINE Year 2

v. Develop Standard Operating Procedures for the external maintenance of municipal facilities, including landscaping and power washing.
• RESPONSIBILITY Building Inspector, Public Works Department
• TIMELINE Year 2

C. Staff Training

i. Develop a training program for municipal facility staff in good housekeeping practices as outlined in the S.O.P.s developed under MCM 5.B. Report a description of the training program and training schedule to ADEM annually.
• RESPONSIBILITY Building Inspector
• TIMELINE Years 1 – 5

5. Water Quality Monitoring and Reporting

Program Overview

The City of Satsuma does not include any §303(d) listed waterbodies. If a waterbody with the City's MS4 jurisdiction is listed on the latest final §303(d) list, or otherwise designated impaired by ADEM, or for which a Total Maximum Daily Load (TMDL) is approved or established by the EPA, during this permit cycle, the NPDES General Permit mandates the City to implement a monitoring program, within 6 months, to include monitoring that addresses the impairment or TMDL. A monitoring plan must be included within this SWMPP and any revisions to the monitoring program must be documented in the SWMPP and the Annual Report.

The monitoring program must include any proposed monitoring locations and monitoring frequency, as well as any parameters attributed with the latest §303(d) list. Actual monitoring locations must be described in the Annual Report. An analysis and collection of samples must be done in accordance with the methods specified at 40 CFR Part 136. Monitoring results must be reported with the subsequent Annual Report and shall include the following monitoring information:

- The date, latitude/longitude of location and time of sampling;
- The name(s) of the individual(s) who performed the sampling;
- The date(s) analysis were performed;
- The name(s) of individuals who performed the analysis;
- The analytical techniques or methods used; and
- The results of such analysis.

If the City is unable to collect samples due to adverse conditions, the City must submit a description of why samples could not be collected, including available documentation of the event.

Compliance

The following is a list of field screening locations and major outfall sites. Individual sampling sites are indicated on maps included in Appendix A.

One (1) major outfall at Orange Avenue at Tidewater Branch

6 field screening locations:

1. Intersection of Williams Street and Third Street
2. Highway 43 and 1-65, Detention pond at Truck Stop
3. Intersection of Sixth Street and Bayou Avenue
4. Orchard Street, next to Lift Station
5. Tidewater Branch at the intersection of Cedar Street and Carl Street
6. Holcomb Ditch at 3rd Street

Wet Weather Data

The City scheduled the field screening using EnviroChem for wet weather data.

Dry Weather Data

Dry weather field screenings are performed continuously by the Public Works Department. Documentation of the Public Works Department's maintenance activities are located in the timesheets provided in Appendix E of this report. All sites appeared to be in operable condition. There were no illicit discharges at the time of inspections. due to siltation caused by construction activity and severe erosion caused by land use changes.

6. Record Keeping and Annual Reporting Requirements

The City is required to submit to ADEM an Annual Report on March 31st of each year, detailing its Stormwater Management Programs between April 1st and March 31st of the previous permit year. The annual report must include the following information, at a minimum:

1. A list of contacts and responsible parties who had input to and are responsible for the preparation of the annual report.

2. Overall evaluation of the stormwater management program developments and progress for the following:

    - Major accomplishments;
    - Overall program strengths/weaknesses;
    - Future direction of the program;
    - Overall determination of the effectiveness of the SWMPP taking into account water quality/watershed improvements;
    - Measurable goals that were not performed and reasons why the goals were not accomplished;

    - If monitoring is required, evaluation of the monitoring data.
    - Narrative report of all minimum stormwater control measures referenced in Chapter 3 of this SWMPP. The activities shall be discussed as follows:
    - Minimum control measures completed and in progress;
    - Assessment of the controls; and
    - Discussion of proposed BMP revisions or any identified measurable goals that apply to the minimum stormwater control measures.
    - Summary table of the stormwater controls that are planned/scheduled for the next reporting cycle;
    - Results of information collected and analyzed, if any, during the reporting period, including any monitoring data used to assess the success of the program at reducing the discharge of pollutants to the maximum extent practicable.
    - Notice of reliance on another entity to satisfy some of the permit obligations.

The monitoring results shall be submitted in a format acceptable to the Department. The Building Inspector is responsible for assembling information from the various City departments to author the annual reports. Forms for use in recordkeeping by involved departments will be developed to facilitate collection of the information required for the annual reports. The reports must be certified by the governing body or an official designated by the governing board.

The City will keep records required by the permit for at least five years, or the duration of the permit. The records used to document compliance with the SWMP will be available to the public during regular business hours from the various implementing departments. The SWMP and related documents may be viewed in the Building Department

The annual report will also include the following items:

- A description of the activities used to involve groups and/or individuals in the development and implementation of the SWMPP;
- A description of the individuals and groups targeted and how many groups and/or individuals participated in the groups;
- A description of the activities used to address the reduction of litter, floatables and debris from entering the MS4 as required in Part III.B.1.b.iii of the General Permit;
- A description of the communication mechanisms or advertisements used to inform the public and the quantity that were distributed (i.e. number of printed brochures, copies of newspapers, workshops, public service announcements, etc.); and

- Results of the evaluation of the public education and public involvement program as required in Part III.B.1.b.vi of the General Permit.
    - Public Participation/Involvement
    - Illicit Discharges Detection & Elimination
    - Construction Site Stormwater Runoff Control Program
    - Post Construction Stormwater Management
    - Pollution Prevention for Municipal Operations
- A description of any completed or planned revisions to the ordinance or regulatory mechanism and the most recent copy or link to the ordinance; and
- List of all active construction sites within the MS4 to include the following summary:
- Number of construction site inspections;
- Number of non-compliant construction site referrals and/or enforcement actions and description of violations;
- Number of construction site runoff complaints received; and
- Number of MS4 staff/inspectors trained.
- Copies of, or link to, the ordinance or other regulatory mechanism;
- A list of the post-construction structural controls installed and inspected during the permit year;
- Updated inventory of post-construction structural controls including those operated by the City;
- Number of inspections performed on post-construction structural controls; and,
- Summary of enforcement actions.
- Any updates to the municipal facility inventory;
- An estimated amount of floatable material collected from the MS4;
- Any updates to the inspection plan;
- The number of inspections conducted;
- Any updates to the SOP of good housekeeping practices;
- Records of inspections and corrective actions, if any; and
- Training records including the dates of each training activities and names of personnel in attendance.

1. Appendices

   Appendix A – Subdivision Regulations
   Appendix B – Zoning Regulations
   Appendix C – Stormwater Ordinance
   Appendix D – Flood Ordinance
   Appendix E – Nuisance Ordinance