

City of Spanish Fort

Stormwater Management Programs

2021 - 2022 Annual Report

Alabama Department of Environmental Management
National Pollutant Discharge Elimination System Permit

Municipal Separate Storm Sewer System
Phase II General Permit No: ALR040041

Prepared for:

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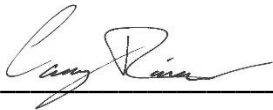
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May 31, 2022

Contacts List and Introduction

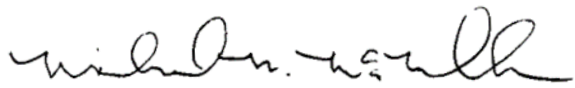
Certification Page

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 ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



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Following is contact information for individuals who had input and are responsible for this 2021-2022 Annual Report document:

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General Introduction

On December 21, 2011, the City of Spanish Fort was granted coverage under the MS4 Phase II General Permit ALR040041, replacing the Phase I General Permit ALS00002. As part of the Phase II Permit Requirements, a stormwater management plan was developed with the cities of Daphne and Fairhope and was submitted in June 2012. A new stormwater management plan was written in January 2015 and revised in May 2015. The most recent and currently adopted stormwater management plan became effective on October 1, 2021 and will expire on September 30, 2026 in accordance with the current MS4 permit Phase II General Permit ALR040041 effective and expiring on the same dates.

General Permit Number ALR040041, which was issued in 2016, expired on September 30, 2021. The City was issued a new permit on September 27, 2021 to become effective on October 1, 2021. Spanish Fort is committed to effecting controls necessary to prohibit the discharge of non-stormwater into its MS4 and reduce the discharge of pollutants from the MS4.

Overview and Summary

The City of Spanish Fort was established in 1993 and is currently estimated to be populated by more than 10,000 people. The city's corporate boundaries encompass roughly 35 square miles. This area includes about six miles of the Causeway (Battleship Parkway), a high-speed traffic connector between Mobile and Baldwin County containing US 90/98, as well as a portion of the Interstate 10 Bay Way over Mobile Bay. As a result of the manner in which individual properties are routinely annexed, the city's boundary is very irregular. Roughly described, the city stretches from the southern border of the City of Bay Minette near US 31 at its northeastern most point to the Tensaw River at Battleship Parkway to the southwest. The City is bounded by US Highway 31 on its eastern edge, Interstate 10 to the south, and Bay Minette Creek to the west. From a drainage perspective, Spanish Fort may be viewed as having six primary drainage areas:

- D'Olive Creek
 - Areas generally south of US 31, west of AL 181, and north of I 10 are part of the D'Olive Watershed, a previously impaired waterway on the ADEM 303(d) list for siltation and habitat alteration. Major land uses within this watershed include the Spanish Fort Town Center development, including big box stores such as Bass Pro Shops, Kohl's and JC Penny's, as well as strip mall and residential development centered primarily around Joe's Branch. The watershed comprises about 1.69 square miles, or 1081 acres

within Spanish Fort's jurisdiction. The Joe's Branch tributary has been a primary focus of restoration efforts between the Cities of Spanish Fort and Daphne, and the Mobile Bay National Estuary Program.

- Tensaw River – Apalachee River
 - Land along and south of a general line from Southern Way to Blakeley Way and north of US 31 drains to the Tensaw-Apalachee Rivers via the Spanish Fort Branch. The Causeway is also part of the Tensaw-Apalachee River watershed. This watershed comprises about 2.76 miles, or 1765 acres within Spanish Fort's jurisdiction, primarily made up of residential and strip mall development in the highlands near the old Spanish and Confederate forts, and small-scale restaurants and mixed uses along the Causeway.
- Upper Fish River
 - Lands east of AL 181 and south of US 31 – primarily the Eastern Shore Regional Shopping Center – contribute to the headwaters of the Upper Fish River watershed. This area is relatively small, draining only 0.83 square miles, or about 530 acres within the City, however, there are large areas of impervious rooftops and pavement, as well as increased residential development within the City's Extraterritorial Jurisdiction that bear attention moving forward.
- Lower Bay Minette Creek
 - The bulk of Spanish Fort drains into Bay Minette Creek. In general, properties between US 31 and Bromley Road are part of the Lower Bay Minette Creek watershed. Approximately 10.7 square miles (6909 acres) of Spanish Fort's jurisdiction drains the Lower Bay Minette Creek watershed. Much of this watershed is part of a Large Scale Planned Unit Development which encompasses more than 11,000 acres north of US 31. While parts of Bay Minette Creek are protected by a "greenway" enforced by the "Highlands of Spanish Fort" design standards, smaller tributaries are not included. Lower Bay Minette Creek is perhaps the most threatened watershed in Spanish Fort due to land use changes, particularly Sibley Creek.

- Upper Bay Minette Creek
 - Generally, properties north of Bromley Road and west of US 31 are part of the Upper Bay Minette Creek watershed. Although land in the Upper Bay Minette Creek watershed is largely undeveloped, it will most likely be impacted by residential development within the next two decades. In total, 13.5 square miles (8547 acres) of Spanish Fort’s jurisdiction drains the Upper Bay Minette Creek watershed. The bulk of the “Highlands of Spanish Fort” protected greenway is within this watershed.

- Whitehouse Creek
 - Properties near AL 225 north of Bromley Road (approximately 1.4 square miles or 917 acres) are part of the Whitehouse Creek watershed, which ultimately joins Bay Minette Creek south of Bromley Road. While the area within the City of Spanish Fort is completely undeveloped, parcels immediately adjacent to the City and Whitehouse Creek are under increasing threat of development, with several residential developments currently underway along Bromley Road and AL 225.

Spanish Fort is primarily a residential community growing in population at a rate of about 5% per year. Residential development is occurring rapidly throughout the City, particularly along US 31, AL 225, and Jimmy Falkner Drive. There are two elementary schools in the city with approximately 600 students each, a middle school with approximately 875 students, and one high school with approximately 900 students.

There are three moderately-sized strip shopping centers in the city: two located at the intersection at US 31 and US 98, and a third at US 31 and AL 225. There are two Regional Shopping Centers located at the intersections of Interstate 10 and US 90/98 and Interstate 10 and AL 181. Several small commercial business, churches and professional offices exist along US 31 and US 98. There is a small Commercial Business Park in Spanish Fort called the I-10 Commerce Center that is home to three small, low impact industrial companies. None have been found to have any illicit discharges.

Older residential areas and some commercial establishments within Spanish Fort are served by septic tanks. With the exception of the latest addition to Wakefield Subdivision in 2000, all developments inside the corporate limits of Spanish Fort since 1993 have been connected to the sanitary sewer collection system owned and operated by Daphne Utilities. Newer residential areas in the northern part of the city are connected to sanitary sewer service operated by Baldwin County Sewer Service. The part of the Causeway immediately east of the Tensaw River is served with sanitary sewer owned and operated by the Mobile Area Water and Sewer System. With no exceptions, commercial establishments west of Chocolatta Bay are connected to this sewer. The remaining Causeway area, from Chocolatta Bay east to Spanish Fort Bluff, has been connected to Baldwin County Sewer Service. No package plants

remain in use on the Causeway. The eastern end of the Causeway contains a mix of residential and commercial development.

All of the city's streets are paved. Newer subdivision streets have been built with curb and gutter, closed stormwater systems and stormwater detention facilities. Older streets, built before the city was incorporated, are mostly constructed with side ditches and occasionally with asphalt wing gutters.

The city's Subdivision Regulations and Zoning Ordinance require approval of engineered drawings based on actual site conditions. All new building construction must conform to the 2012 International Building Code. The city has a full-time Building Official to enforce this code.

It is important to note that, like Daphne and Fairhope, Spanish Fort does have extra-territorial planning jurisdiction in a limited area outside of its corporate limits. Therefore, Spanish Fort's legal authority for planning control is limited to within its corporate boundaries and the small area under extraterritorial jurisdiction. Code enforcement within the ETJ is limited to subdivision regulation.

Spanish Fort has participated with other Baldwin County permittees, Baldwin County, the City of Daphne, and the City of Fairhope in the development and execution of its Stormwater Management Plan (updated in 2021) to avoid creating duplicate program elements. Additionally, the City has a full-time Environmental Manager on staff to carry out the day-to-day duties of the Phase II MS4 Permit.

As a permittee, the city is responsible for:

- Compliance with the permit conditions relating to discharges from its Municipal Separate Storm Sewer System (MS4);
- Stormwater management program implementation;
- Annual Reporting;
- A plan of action to resume responsibility for implementation of stormwater management and monitoring programs within its MS4; and
- Joint responsibility with other permittees for permit compliance.

Compliance with the Five (5) Minimum Control Measures

The following details the status of each goal to which the City of Spanish Fort committed through Year 1 of its Stormwater Management Plan effective October 1, 2021. This report includes compliance as of March 31, 2022.

MCM 1
PUBLIC EDUCATION AND PUBLIC INVOLVEMENT ON STORMWATER IMPACTS

Reference	Stated Goal	Audience	Goal Timeline	Year 1	Year 2	Year 3	Year 4	Year 5	Comments
A.i	Utilize digital and print materials regarding illicit discharge identification, the impacts of stormwater pollution, and ways to report.	General Public	Years 1 - 5	Achieved					
A.ii	Attend at least one (1) meeting per permit year to discuss public education and involvement opportunities.	General Public	Years 1 - 5	Achieved					
A.iii	Attend at least one (1) stormwater partnership meeting per permit year to discuss public education and involvement opportunities.	General Public	Years 1 - 5	Achieved					
B.i	Provide Construction Best Management Practices pamphlets, copies of the <i>Field Guide for Erosion and Sediment Control on Construction Sites in Alabama</i> , and other informational material on the City's website (cityofspanishfort.com) and available upon request at the Building Department.	Engineers, Contractors, Developers, Review Staff & Planners	Years 1 - 5	Achieved					
B.ii	Provide information about Construction Best Management Practices, including a link to the <i>Alabama Handbook</i> , on the City's Environmental Outreach and Building Department web pages.	Engineers, Contractors, Developers, Review Staff & Planners	Years 1 - 5	Achieved					
B.iii	Establish a digital form on the City's website to solicit comments in regards to erosion and sediment control requirements of the "Clean Water Ordinance".	Engineers, Contractors, Developers, Review Staff & Planners	By Year 4						
B.iv	Sponsor at least two (2) interactive workshops focusing on stormwater impacts.	Engineers, Contractors, Developers, Review Staff & Planners	During Permit Cycle						
C.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.	General Public, Engineers, Contractors, Developers, Review Staff & Planners	Years 1 - 5	Achieved					
C.ii	Provide educational materials regarding runoff reduction techniques, including Low Impact Development (LID), site design, forest retention, and stormwater pond maintenance.	Property Owners, Engineers, Contractors, Developers & Planners	Years 1 - 5	Achieved					
D.i	Continue to place ads in the Spanish Fort High School football program in coordination with the Create a Clean Water Future Campaign to address litter and its transmission via the MS4 into waters of the State.	General Public	Years 1 - 5	Achieved					
D.ii	Pursue volunteers to continue the work of placing storm drain labels on inlets and catch basins.	General Public	Years 1 - 5	Achieved					
D.iii	Place signage referencing local litter laws at dumping hot spots and public access points to waterways.	General Public	By Year 5	Achieved					
D.iv	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 of Joe's Branch.	General Public	Years 1 - 5	Achieved					
E.i	Utilize materials 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.	Homeowners, Landscapers, Property Managers & General Public	Years 1 - 5	Achieved					
E.ii	Utilize materials 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.	Homeowners, Property Managers, Businesses	Years 1 - 5	Achieved					
E.iii	Utilize materials addressing the maintenance of detention ponds and other drainage facilities.	HOAs, Homeowners, Property Managers, Businesses	Years 1 - 5	Achieved					

MCM 1
PUBLIC EDUCATION AND PUBLIC INVOLVEMENT ON STORMWATER IMPACTS

Reference	Stated Goal	Audience	Goal Timeline	Year 1	Year 2	Year 3	Year 4	Year 5	Comments
HOUSE	E.IV	General Public	Years 1 - 5	Achieved					
	E.V	General Public	Years 1 - 5	Achieved					
	F.I	General Public	Years 1 - 5	Not Met					This was omitted as an oversight in the Year 1 reporting period and will be corrected during the Year 2 reporting period moving forward.
	F.II	General Public	Years 1 - 5	Achieved					
MS4 PHASE II	F.III		By year 5						
	F.IV		Years 1 - 5	Achieved					

MCM 2
ILLICIT DISCHARGE DETECTION AND ELIMINATION

Reference	Stated Goal	Goal Timeline	Year 1	Year 2	Year 3	Year 4	Year 5	Comments
A.i	Review the current "Clean Water Ordinance" and evaluate its effectiveness along with any needed changes. If needed changes/updates are identified, review, amend and forward a positive recommendation to the City Council.	Years 1 - 5	Achieved					
A.ii		Years 1 - 5	N/A					
A.iii	Solicit public input on the "Clean Water Ordinance" and provide comments to the City Council for consideration.	Years 1 - 5	Not Met					This was omitted as an oversight in the Year 1 reporting period and will be corrected during the Year 2 reporting period moving forward.
A.iv	Evaluate and amend the "Clean Water Ordinance" based on staff response and citizen input as needed.	Years 1 - 5	N/A					
B.i	Following the dry weather screening procedure, inspect at least fifteen percent (15%) of all outfalls over thirty-six inches 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.	Years 1 - 5	Not Met					Due to complications arising from a combination of COVID-19, staffing shortages, cost increases and budget constraints, this objective was not completed for the Year 1 reporting period. In order to correct this, additional positions have been created with the City and assuming those are able to be filled, staff expects to be able to identify and screen at least 30-40% of all outfalls over 36" during the Year 2 reporting period to compensate for the initial 15% that was planned for screening in Year 1.
C.i	Keep record of all illicit discharge investigations in accordance with the Dry Weather Screening and Source Tracing Standard Operating Procedure.	Years 1 - 5	Achieved					
C.ii	Evaluate Dry Weather Screening and Source Tracing Standard Operating Procedure on an annual basis and report any needed changes in the Annual Report.	Years 1 - 5	Achieved					
C.iii	Provide information about how to report an illicit discharge on the City's Environmental Outreach website.	Years 1 - 5	Achieved					
C.iv	Develop a program to train new and existing employees about illicit discharge identification and reporting.	By Year 5						
C.v	Attend at least one (1) Project Implementation Committee (PIC) meeting per permit year to discuss ongoing watershed restoration projects and other MS4-related topics.	Years 1 - 5	Achieved					
C.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.	Years 1 - 5	Achieved					

MCM 3
CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Reference	Stated Goal	Goal Timeline	Year 1	Year 2	Year 3	Year 4	Year 5	Comments
A.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.	Years 1 - 5	Achieved					
A.ii	Require all construction site operators to implement appropriate erosion and sediment control BMPs consistent with the "Alabama Handbook".	Years 1 - 5	Achieved					
A.iii	Require all construction site operators, contractors and subcontractors 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.	Years 1 - 5	Achieved					
A.iv	Provide an adequate enforcement mechanism in coordination with the IDDE Enforcement Standard Operating Procedure to ensure compliance with the NPDES General Permit.	Years 1 - 5	Achieved					
B.i	Provide ADEM with annual verification of all Qualified Credenitiated Inspector (QC) certified employees.	Years 1 - 5	Not Met					Due to complications arising from a combination of COVID-19, staffing shortages, cost increases and budget constraints, this objective was not completed for the Year 1 reporting period. In order to correct this, additional positions have been created with the City and assuming those are able to be filled, staff expects to have at least 1 member of staff obtain certification, if not more.
B.j	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.	Years 1 - 5	Achieved					
C.i	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.	Years 1 - 5	Achieved					
C.ii	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.	Years 1 - 5	Achieved					
C.iii	Provide ADEM with an annual summary of all construction site runoff complaints received and any actions taken to address the complaints.	Years 1 - 5	Achieved					
C.iv								

MCM 4
POST-CONSTRUCTION STORMWATER MANAGEMENT

Reference	Stated Goal	Goal Timeline	Year 1	Year 2	Year 3	Year 4	Year 5	Comments
A.i	Require the developer, owner or operator of post-construction stormwater BMPs to carry out inspections on a regularly-scheduled basis.	Years 1 - 5	Achieved					
A.ii	Require the developer, owner or operator of post-construction stormwater BMPs to maintain records of inspections and maintenance activities to be made available to the City or ADEM on an annual basis.	Years 1 - 5	Achieved					
A.iii	Require the developer, owner or operator to improve and correct poorly functioning or inadequately maintained post-construction BMPs.	Years 1 - 5	Achieved					
A.iv	Implement enforceable procedures for bringing noncompliant post-construction BMPs into compliance as needed.	Years 1 - 5	Achieved					
B.i	Amend Zoning Ordinance to require post-construction BMPs be designed to the same standards outlined in the Subdivision Regulations.	By Year 5						
B.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.	Years 1 - 5	Achieved					
C.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.	Years 1 - 5	Achieved					

MCM 5
POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Reference	Stated Goal	Goal Timeline	Year 1	Year 2	Year 3	Year 4	Year 5	Comments
A.i	Develop strategies for the implementation of BMPs at municipal facilities to reduce litter, floatables and debris from entering the MS4.	Years 4 - 5						
A.ii	Develop a plan to remove litter, floatable and debris material from the MS4, including proper disposal of waste removed from the system.	Years 4 - 5						
A.iii	Provide ADEM a summary and evaluation of strategies developed, implemented, or modified within each permit year.	Years 4 - 5						
B.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.	By Year 5						
B.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.	By Year 5						
B.iii	Develop Standard Operating Procedures for the maintenance of vehicle fleets, including but not limited to: equipment maintenance, repair and washing.	By Year 5						
B.iv	Develop Standard Operating Procedures for storage facilities and the storage and disposal of chemicals and waste materials.	By Year 5						
B.v	Develop/Evaluate Standard Operating Procedures for the external maintenance of municipal facilities, including landscaping and power washing.	By Year 5						
C.i	Develop/Evaluate 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.	By Year 5						