



City of Fairhope, Alabama

MS4 Program

Phase II General Permit # ALR040040

2017 Annual Report

(April 1, 2017 – March 31, 2018)



Report Prepared By:
City of Fairhope
Planning Department
555 South Section Street
Fairhope, AL 36532

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Pictured: Mobile Bay @ Fairhope Pier

1.0 CONTACT LIST AND INTRODUCTION

1.1 Certification

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

Name and Title (type or print)

Karin Wilson, Mayor (Signature)

Date

1.2 List of Contacts

Address: City of Fairhope
Post Office Drawer 429
Fairhope, AL 36533
Phone: (251) 928-2136

Contact Person: Mrs. Kim Burmeister
Code Enforcement Officer
City of Fairhope
Planning Department
Post Office Box 429
Fairhope, AL 36533
Phone: (251) 990-2877

1.3 General Introduction

The City of Fairhope operates under the MS4 Phase II General Permit ALR040040. The MS4 2017 Annual Report reporting dates are April 1, 2017 through March 31, 2018. An updated Stormwater Management Program Plan (SWMPP) is submitted to ADEM yearly, most recently in December 2017 (SWMPP 2018). The Storm Sewer Outfall Inventory and Mapping project, a permit requirement, was completed in 2012 and is being updated in hard copy form yearly by the Planning Department as new stormwater facilities are added. A hard copy of this inventory (organized by watershed) is available in the Planning and Zoning Department.

There are three main receiving streams within the City of Fairhope MS4 area limits, which are also the City limits. The main receiving streams are Fly Creek, Rock Creek and Cowpen Creek. Cowpen Creek has been identified as a 303 (d) stream due to the presence of atmospheric mercury deposition. It is not anticipated that the land uses in the City of Fairhope MS4 watersheds are contributors to the atmospheric deposition of mercury.

1.4 Background

The City of Fairhope is situated on the eastern shore of Mobile Bay in Baldwin County, in southwest Alabama. Fairhope's rainfall averages more than 77" inches per year, according to a 5 year average as reported by the Waste Water Treatment Plant on N. Church Street. The 2016 US Census projects the City's population to be 19,421. The annexed limits, which are also the MS4 area limits, comprises roughly 14 square miles. It is part of the Eastern Shore area with Daphne, Montrose and Spanish Fort to the North.

Sustainable development continues to be a priority in preserving Fairhope's natural resources. Of primary concern is stormwater quality, and ultimately the protection of the aquatic resources in Fairhope. The proper utilization of Best Management Practices (BMP's), including phasing of development and minimal land clearing, is a key component to our overall plan for sustainable development.

The aquatic resources of the Fairhope Region, including Mobile Bay, Cowpen Creek, Fly Creek and Rock Creek, are essential to the area's economy and the attractiveness of the community to both residents and visitors. Preserving these resources and keeping them healthy is of primary interest to the community and to area leaders.

1.5 Program Management

Several departments within the City of Fairhope have a role in Fairhope’s MS4 program. The City of Fairhope Planning Department serves as the lead coordinator of the MS4 program, including the Stormwater Management Program Plan. The Public Works Department is also a key player in the MS4 program. The Public Works Department includes several sub-departments: Horticulture/Landscape, Waste Management and Streets/Construction. The City of Fairhope now employs two engineers (Director of Operations and Public Works Director). The Director of Operations oversees utilities (including Water and Sewer, Gas, and Electrical utility work). A general contact number for everyone is: (251) 928-8003.

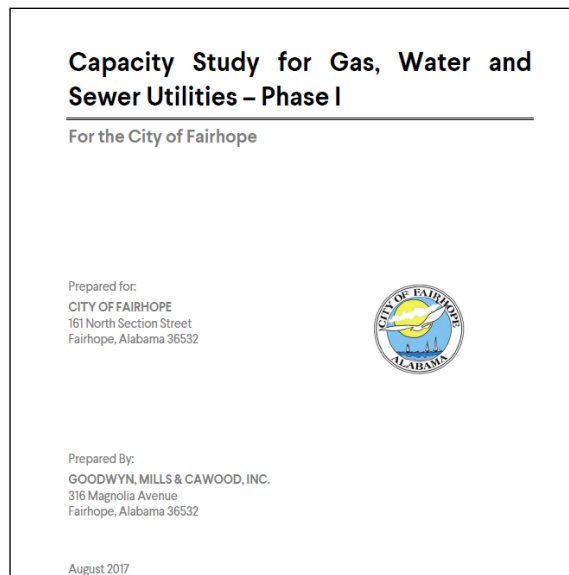
The City of Fairhope reduces the discharge of pollutants on construction sites by requiring structural and non-structural controls, as set forth in plan reviews, stormwater standards (within the Subdivision Regulations), *BMP Minimum Requirements*, and BMP inspections. In the 2017 permit period, the City of Fairhope Planning Department conducted over 48 significant site reviews (which include site plan / preliminary /final reviews of major and minor subdivision projects, multi-occupancy projects and utility reviews), plus over 750 new construction/site work permits (City limits and permitting jurisdiction). Effective land use planning (through the Subdivision Regulation, Zoning Regulations and town hall meetings to engage the community) aids in stormwater management.



Pictured: Town Hall meeting, Centennial Hall, Coastal Community College, May 2017: Community Development Director, Planning and Zoning Director and Director of Operations discuss smart growth and their roles with protecting the environment as well as the community.

Crucial 2017 stormwater initiatives include:

1. **Moratorium on development:** The moratorium on new development (December 2016-Oct. 2017) allowed staff time to review and/or amend stormwater standards including the Subdivision Regulations, the Wetlands Ordinance and the Erosion and Sediment Control Ordinance. The Moratorium Report can be viewed: www.cofairhope.com/home/showdocument?id=15377
2. **Community Outreach:** 6 stormwater related Town Hall meetings were held in the 2017 MS4 period. The events were live streamed as well. Topics of discussion included growth/development, infrastructure, construction standards, and proposed amendments to stormwater standards (including our LID ordinance).
3. **Capacity Study for Gas, Water and Sewer Utilities** (Aug. 2017) – in part this study addressed infrastructure needs and sanitary sewer overflows. Report can be viewed: www.cofairhope.com/home/showdocument?id=15025
As of March 31, 2018, two action plans (plus a water sampling plan) have been put in place as per the Capacity Study:
 - a. *Two (2) Transmission Capacity Upgrades* to the waste water system have been proposed to City Council with RFQ's for consultants to oversee this work have been received
 - b. *Three (3) infrastructure rehabilitation projects* have been proposed to the City Council with RFQ's for consultants to oversee this work has been received
 - c. *Water Quality Sampling with Mobile Bay Keepers:* Beginning in November 2017, Fairhope partnered with Mobile Bay Keepers for weekly water quality sampling of Fly Creek. This is on-going as of March 2018 and is tracking hot spots for fecal contamination. There are 12 sampling locations.



4. **Grant Funds Awarded:**

a. **GOMA grant** funds were acquired for upcoming stormwater projects:

1. Tatumville Gully Watershed Study (2018)
2. Outfall Assessments (2018)
3. Storm Drain Medallion Project (underway)– In Feb. 2018, the City of Fairhope partnered with the Eastern Shore Art Center, Fairhope High School and the Weeks Bay Foundation to create art work for the upcoming storm drain medallion project. This project is an extension of our existing litter control program and partnership with the Create a Clean Water Future program.



Pictured: Drain medallion artwork created by FHS students, Feb. 2018

b. **Restore Act Funds;** Fairhope was approved for 18M in grant money (March 2018) to include these upcoming projects:

1. Comprehensive Land Use Plan
2. Sewer Overflow Program for the Eastern Shore
3. Infrastructure Upgrades
4. Working waterfronts (bluff stabilization, bulkhead repair, shoreline mitigation)

City of Fairhope’s Stormwater Management Program Plan (SWMPP) is available for public review on the City of Fairhope website, as is the current MS4 Annual Report:

www.cofairhope.com/departments/planning-and-zoning/publications-and-forms

The SWMPP is reviewed annually in a public forum, most recently in December 2017, at the City of Fairhope Planning Commission Meeting at City Hall.

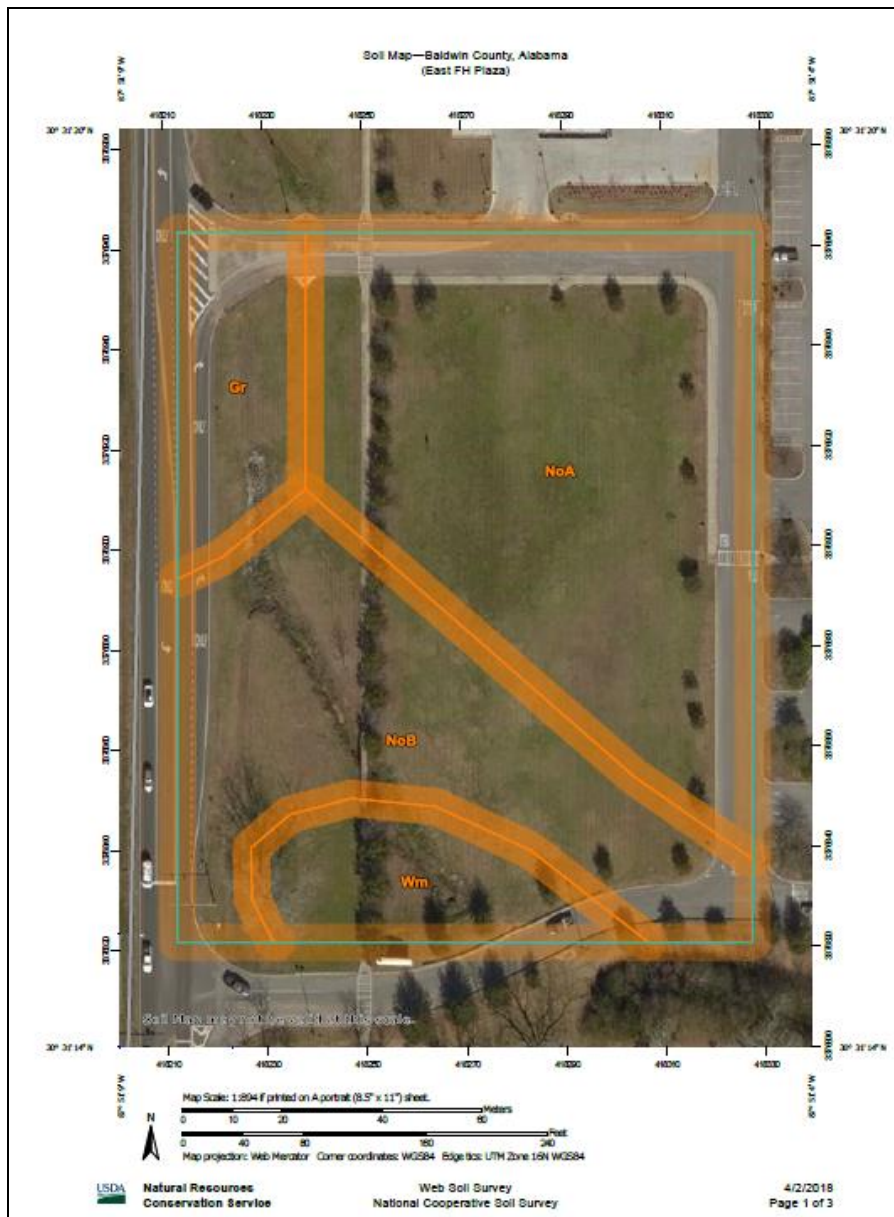
The City GIS database (using ESRI ArcMap 10.0) continues to be used as an important planning tool and is extremely useful in making future land use decisions. Specific applications relative to stormwater include but are not limited to calculating acreage for watersheds, data collation and entry, mapping, etc. The Planning Department initially coordinated with GIS to create the Storm Sewer Inventory.

1.0 Contact List and Introduction

The City of Fairhope Natural Resource Inventory, compiled in 2003, is one planning tool frequently used as reference, and is available for public review on the City of Fairhope website

www.cofairhope.com/departments/planning-and-zoning/publications-and-forms

Critical areas (wetlands and flood zones) are researched prior to permit issuance, to further determine the need for special planning and building directives. Another on-line resource frequently used is Web Soil Survey: www.websoilsurvey.nrcs.usda.gov Web Soil Survey is an on-line soil survey resource used to indicate approximate locations and boundaries of hydric soils and streams. This is used, in part, to determine if a wetland delineation will be required (hydric soils are one indication of wetlands).

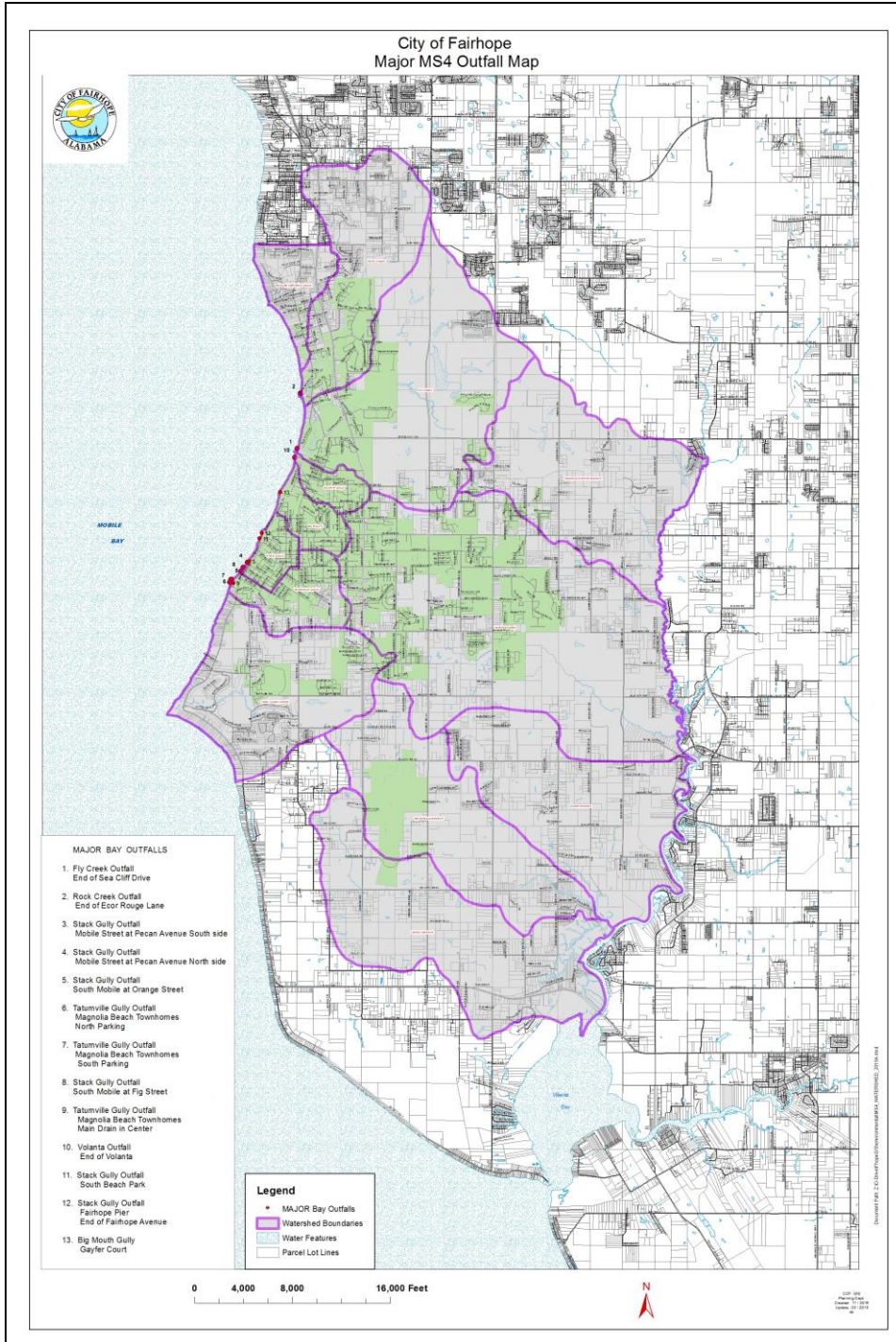


Pictured: Soil map created by Web Soil Survey

2.0 PROGRAM EVALUATION

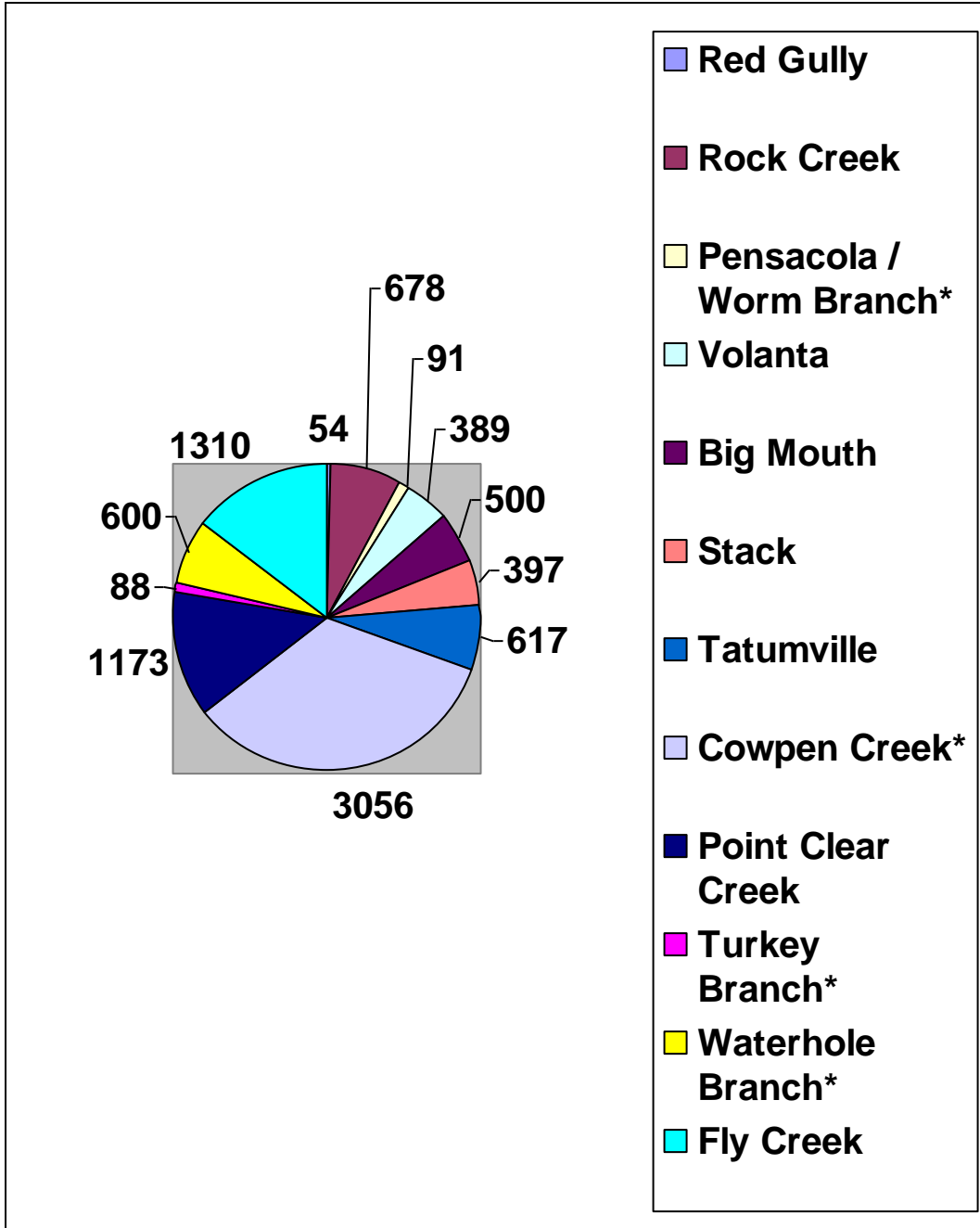
2.1 Overview of MS4 Program Area

The City of Fairhope uses a watershed-based approach to stormwater management. The MS4 area limits (also the annexed City limits) encompass 12 watersheds, and roughly 14 square miles. This map was last updated in March 2018.



Watershed Acreage of the City of Fairhope MS4 Area Limits
 Total approximate acreage: 8,953 (14 square miles)

*Priority Construction Area Watersheds (Drains to Weeks Bay, an "Outstanding National Resource Water" - ONRW)



While all of these watersheds ultimately drain to Mobile Bay, the watersheds located on the East side of U. S. Highway 98 drain to Fish River (and then Weeks Bay) before final

discharge into Mobile Bay. The watersheds that drain into Fish River (Weeks Bay) first are: Turkey Branch, Waterhole Branch, Cowpen Creek and Pensacola/Worm Branch.

2.2 Reporting Requirements: Compliance with MS4 Requirements

Compliance mechanisms and goals regarding the five minimum control requirements are listed in Section 3.0, 4.0, 5.0, 6.0 and 7.0 of this document. Non-compliance issues, as addressed in Section 4.0 (Illicit Discharge Detection and Elimination) and Section 5.0 (Construction Site Stormwater Runoff Control) were addressed. Over 300 stormwater enforcement actions (Stop Work Orders, Notice of Violations and Street Sweeper charges) were issued from the Planning Department in the report period for non-compliant BMPs on job sites. Eight (8) illicit discharge complaints were received by the Planning Department in the report period, and all were addressed. The City of Fairhope effectively reduces, to the maximum extent practicable, the discharge of pollutants, including sediment on construction sites, by requiring structural and non-structural controls, as set forth in plan and design reviews, BMP Inspections, enforcement of the Erosion and Sediment Control Ordinance, *BMP Minimum Requirements*, and the stormwater standards (within the Subdivision Regulations). Over 475 BMP inspections (initial and follow-up) were conducted by the Planning Department in the reporting period, averaging 39 per month.

2.3 Reporting Requirement: Monitoring – Water Sampling

The City of Fairhope's Phase II General Permit does not have monitoring requirements; therefore, water sampling data was not collected for 2017 (except for water sampling of Fly Creek by Mobile Bay Keepers mentioned in Section 1.5). The City is conducting yearly visual screenings (observing effluent water quality, condition of outfall structure, etc.) as required by the MS4 permit. There are currently 631 outfalls identified including thirteen major outfalls (2012 Storm Sewer Inventory). The major outfalls are:

1. Fly Creek
2. Rock Creek
3. Pecan Street Pier (south)
4. Pecan Street Pier (north)
5. South Mobile at Orange
6. Magnolia Beach Condos (north)
7. Magnolia Beach Condos (south)
8. South Mobile at Fig
9. Magnolia Beach Condos (center flume)
10. Volanta Avenue tributary
11. South Beach Park
12. Fairhope Pier
13. Gayfer Court tributary

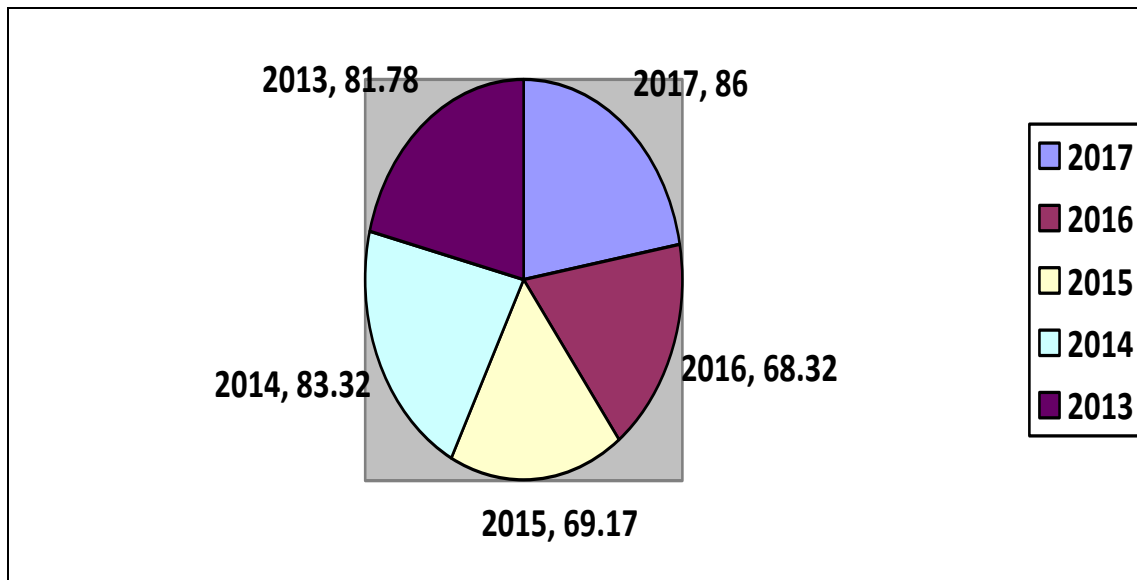
City of Fairhope MS4 Outfalls, by watershed:

Watershed	Number of outfalls inventoried
Big Mouth	69 <i>(includes one Major Outfall @ Mobile Bay)</i>
Cowpen Creek*	178
Fly Creek	104 <i>(includes one Major Outfall @ Mobile Bay)</i>
Pensacola Worm Branch	13
Point Clear Creek	35
Red Gum	0
Rock Creek	103 <i>(includes one Major Outfall @ Mobile Bay)</i>
Stack Gully	23 <i>(includes six Major Outfalls @ Mobile Bay)</i>
Tatumville Gully	52 <i>(includes three Major Outfalls @ Mobile Bay)</i>
Turkey Branch*	4
Volanta	33 <i>(Includes one Major Outfall @ Mobile Bay)</i>
Waterhole Branch*	17
TOTAL	631 OUTFALLS (INCLUDES 13 MAJOR OUTFALLS)

*Priority Construction Area (Drains to Weeks Bay, an ONRW: Outstanding National Resource Water)

NOTE: HARD COPY DATA SHEET AVAILABLE IN BUILDING DEPARTMENT OF COMPLETE STORM SEWER INVENTORY FOR EACH OUTFALL LISTED

Cowpen Creek, located within Fairhope’s MS4 program, is an impaired stream, according to ADEM’s classification for 303 (d) streams. The impairment is “atmospheric mercury deposition”. According to land use data, the City of Fairhope MS4 area is not a contributor to this impairment, therefore the City is not conducting monitoring.



Pictured: 5 Year Fairhope rainfall data in inches, courtesy of Fairhope Waste Water Treatment Plant

2.4 Reporting Requirement: Stormwater Activities

In the 2017 reporting period, the City of Fairhope received 86" of rainfall. There are nine (9) stormwater projects reported for this period. The Public Works Department performs general maintenance, installation and repair on infrastructure. During the reporting period PW performed 8 significant stormwater projects. One additional project (bulk head repair) was contracted out and overseen by the Director of Operations. The major stormwater projects are in four different watersheds: Point Clear Creek, Stack Gully, Volanta Gully, and Fly Creek. The major projects are listed below (by watershed):

Point Clear Creek:

1. Installed bio retention to eliminate standing water on curb at 205 Atwater in Old Battles Village. Grade was not correct on curbing and roadway which caused standing water in curb. To prevent failure of asphalt from standing water we installed a small bio retention on the back side of the curb then cut the curb for water to drain into bio retention. April 2018
2. Installed a new drain inlet at the intersection of Silversmith and Bartlett in Old Battles Village. The problem was standing water in the curb causing erosion behind the curb. Installed a new drain and piped to existing drain. July 2017

Stack Gully:

1. Installed bio retention on the south side of White at the intersection of White and Church. The problem was standing water where ditch should be located. Because of grade issues we could not drain standing water nor establish ditch line. Installed two bio-retention areas to eliminate standing water. October 2017



Pictured: Bioretention, White & Church

2. Completed beach re-nourishment Magnolia Beach project. Replaced 700 tons of beach sand. November 2017

Volanta Gully:

1. Installed weir on west side of North Section to slow down the flow of water into drain crossing Section St. near 855 North Section street. The problem was water flowing freely in pipe and discharging into property owner's backyard causing erosion in their yard. We also established on the discharge side a bowl lined with rip rap designed for overflow and dispersion of the water. March 2018

2.0 Program Evaluation

2. Installed a new pipe and inlet near the Rec. Center on the north east side of the drive in Volanta Park. Also reworked and upgraded drain pipe under the drive tying to Hwy 98 drainage. May 2017

3. Installed bioretention on the north east side of Volanta park. The problem was water backing up into neighbor's yard. Dug a small swale running from east to west behind neighbor's yard and inserted bioretention into the flow pattern. July 2017

Fly Creek:

1. Installed two new drain inlets and pipe on Cuscowilla Ln. in Sandy Ford Subdivision to reduce water flow on street. January 2018

2. Installed new bulkhead at the Fairhope Docks marina (Sea Cliff Drive). Private contractor was hired to do the work; Director of Operations oversaw the project. August 2017



Pictured: New bulkhead at Fairhope Docks (Fly Creek) August 2017

2018 Proposed Stormwater Projects

1. Big Mouth Gully Watershed: Church street drainage project- Replace current drainage from Magnolia to Oak street. Engineering should be completed in 2018. Project will carry over into 2019. Public Works will oversee and perform work on this project.

2. Fly Creek Watershed: Additional bulkhead work will be done in 2018 to the Fairhope Docks, fuel dock area. This work will be overseen by the Facility Maintenance Dept.

2.5 SWMP: Changes for 2018

The City of Fairhope Stormwater Management Program Plan 2018 reflects the following changes from last year (approved at Planning Commission in December 4, 2017):

1. 1.3 General Introduction: Updated census information (2016)
2. 2.2 SWMPP Management: Removed Organizational Chart
3. 3.0 Public Education / Public Input
 - a. Responsible Persons: Added Community Development Director

- b. Rationale Statement: Replaced Auburn University Marine Extension and Research Center with Mobile Bay National Estuary Program as provider of Rain Barrel Workshop
 - c. BMP #1: Brochures/Publications/Media: Replaced *City Sketches* with Facebook as media for advertising for events, policies and procedures
 - d. BMP #6: Employee Certifications: Removed "Horticulturist" from Certified Pesticide Applicators list; added new Building Inspector under Qualified Credentialed Inspector (QCI) list
 - e. BMP #8: Pet Waste Bags: Revised Animal Control Officer Dept. (from Public Works to Police Dept.)
4. 4.0 Illicit Discharge Detection and Elimination (IDDE)
- a. Requirements / Measurable Goals: Revised Dry Weather Screening from 15% per year to 20 – 25% per year and added schedule (so that all outfalls will be assessed every 5 years, or every 4 years if in a priority watershed area, as per MS4 requirements).
 - b. Revised Illicit Discharge SOP to reflect 20-25% per year instead of 15% per year
 - c. BMPs/Mechanisms: Added Sewer Capacity Study as BMP #12
5. 5.0 Construction Site Stormwater Runoff Control
- a. Rationale Statement: Added information on additional QCI's obtained: Gas Dept. and Planning and Zoning Dept.
 - b. BMP #1: Design Review: Added explanation that City now has an engineer on staff
 - c. Measurable Goal: Removed Measurable Goal to have new building inspector QCI certified (all are now QCI certified and only require yearly re-certification).
6. 6.0 Post Construction Stormwater Management
- a. Responsible Persons: Added Community Development Director and Director of Operations, throughout
 - b. Rationale Statement: Added that LID ordinance is being reviewed and revised
 - c. BMPs/Mechanisms: Added BMP #9: Annual Post Construction BMP Inspection (and list of applicable subdivision BMPs/post 2013)
7. 7.0 Good Housekeeping/Pollution Prevention:
- a. Responsible Persons: Added Community Development Director and Director of Operations, throughout
 - b. Rationale Statement: Added "City Marinas" to the City facilities list
 - c. BMP #2: Certified Pesticide Applicators: Remove Horticulturist from the list

2.6 Reporting Requirement: Government Entity Alliances (City, County, etc.)

While the City of Fairhope is under an individual Phase II general permit separate from any other municipality or county entity, education and data will frequently be shared with Daphne, Spanish Fort, Baldwin County and AL-DOT (our MS4 neighboring partners). Mobile Bay National Estuary Program is an area alliance which plays a critical role in stormwater management in Fairhope. Fairhope in turn supports the MBNEP. \$5,000 in funds were submitted to the MBNEP in the 2017 program period (6/13/2017). According to the MBNEP report below, the City of Fairhope has appropriated over \$55,000 in funds to the MBNEP since 1998. The City of Fairhope attended and offered input on the Weeks Bay Watershed Management Plan which was finalized in 2017. The Weeks Bay watershed represents nearly half of the city limits in Fairhope. The City of Fairhope is also partnered with the Coastal Alabama Stormwater Team (CAST), and the Create a Clean Water Future campaign. As a collective community, we will rely on information being shared on a regular basis.



Mobile Bay National Estuary Program

City of Fairhope 2017-2018

In 1972, the Clean Water Act was passed to restore and maintain the chemical and biological integrity of the Nation's Waters so that they can support the protection and propagation of fish, shellfish, wildlife and recreation in and on the water. 1987 amendments to this act created the National Estuary Program to:

- Assess trends in water quality, natural resources, and uses of nationally significant estuaries;
- Identify causes of environmental problems;
- Develop relationships between pollutant loadings and potential uses and quality of these estuaries;
- Develop a collective plan for restoring and maintaining the chemical, physical, and biological integrity of these estuaries;
- Coordinate collective implementation of that plan; and
- Monitor effectiveness of implementation actions taken.

The Mobile Bay watershed covers 2/3 of Alabama, and portions of Mississippi, Georgia, and Tennessee. It is the 6th largest in area (43,000 square miles) and the 4th largest in North America by volume (62,000 cubic feet of water per second flow into Mobile Bay). This represents 15-20% of nation's fresh water flow. In 1996, the Mobile Bay Watershed was identified as one of 28 nationally significant estuaries and the **Mobile Bay National Estuary Program (MBNEP)** was established to promote the wise stewardship of the water quality and living resources of Mobile Bay and the Tensaw Delta. Program goals are to:



- Champion protection and restoration efforts of the Mobile Bay watershed through cultivation of partnerships
- Lead watershed protection by coordinating collective actions to measurably improve water quality, habitat and living resource management
- Establish a community of committed environmental stewards

The MBNEP is funded by a partnership between U. S. EPA, the State of Alabama, and local governments and private interests to coordinate the development and implementation of watershed management and conservation plans, including its Comprehensive Conservation and Management Plan (CCMP), recently updated with input from over one thousand coastal residents. This master environmental management plan is based on what people value most about living on the Alabama coast: Access to water and open spaces; Healthy beaches and shorelines; Abundant fish and wildlife; Environmental health

and community resilience; Preserving heritage and culture; and protection of our water quality.

MBNEP focuses its activities in four areas:

- ❖ **Ecosystem Status and Trends**
 - Research
 - Assessment and Monitoring
 - Environmental Reporting
- ❖ **Technical Assistance and Capacity Building**
 - Tools
 - Training
 - Direct Assistance
- ❖ **Ecosystem Restoration and Protection**
 - Water Quality
 - Living Resources
 - Habitats
 - Healthy Communities
- ❖ **Program Implementation & Reporting**
 - Outreach & Public Involvement
 - Activity Tracking
 - Planning and Administration
 - Financing



MBNEP and the City of Fairhope

Stormwater In 2005, members of a Fairhope Blue Water Commission asked MBNEP to lead an effort to create a regional authority with an ability to create an alternative revenue source for funding stormwater management activities. In 2006, MBNEP led the effort to conduct a county-wide stormwater feasibility study to determine best alternatives for managing stormwater across geopolitical boundaries. The Program amassed financial and staff participation of all 13 municipalities and the County, as well as funding of its own and from Alabama Coastal Foundation and Weeks Bay Reserve to support this effort, leading to the passage of enabling legislation from the State and a local referendum for creating a stormwater corporation and instituting a user fee to generate revenues for stormwater control activities. Though referendum passage failed, the intensive educational effort was a resounding success, as evidenced by the County's current Fish River Basin Pilot project to design a program based on projected development and regional detention.

Fairhope Gullies Brochure When the Fairhope Environmental Advisory Board asked MBNEP to prepare an outreach publication describing the historic significance and ecosystem services of and major threats to the Fairhope gullies in 2008, staff time with an in-kind value of \$2,500 was devoted to the preparation of this quality community outreach piece, printed with funding by the Single Tax Colony.

Fish River Basin Pilot Study The County Commission has funded development of a Fish River Basin Pilot Study to guide planning for management of stormwater and development of subdivision regulations based upon projected development and regional detention.

Volanta Gully/Fly Creek Watershed Project In 2012, MBNEP funded development of a watershed management plan for and implementation of two prescribed projects in the Volanta Gully sub-watershed by City Public Works staff. MBNEP will incorporate that plan into development of an EPA-approved Watershed Management Plan for the greater Fly Creek Watershed, making it (and the City of Fairhope) eligible for subsequent Section 319 funding to address non-point source management.

Shoreline and Pathogen Source Assessments for upper Fish River MBNEP has funded studies to assess shoreline conditions and identify pathogen sources for the upper Fish River, 303(d)-listed for mercury (unknown sources) and pathogen impairment caused by pasture grazing.

Outreach and Public Involvement Efforts MBNEP has provided continuous sponsorships of the John L. Borum Alabama Coastal Birdfest and the Mobile Bay Oyster Gardening Program and regularly participates in environmentally themed activities such as Birdfest and Earth Day in Fairhope.

The City of Fairhope and the MBNEP

Year	City of Fairhope	MBNEP Funded Activities	Fairhope Specific Activities Supported
1997			
1998	\$2,750.00		
1999	\$2,750.00		
2000		\$800.00	
2001	\$2,750.00		
2002	\$3,000.00		
2003			
2004		\$4,561.92	
2005	\$3,000.00		
2006	\$3,000.00		
2007			
2008		\$4,500.00	
2009	\$3,000.00	\$26,950.00	Shoreline Assessment of Fish River Fly Creek Sedimentation Study
2010		\$22,000.00	Pathogen Contamination Study of Upper Fish River
2011		\$50,000.00	Volanta Watershed Management Plan, Storm Water Management
2012	\$5,000.00	\$105,850.00	Clean Water Future Campaign
2013	\$5,000.00		
2014	\$5,000.00		
2015	\$5,000.00		
2016	\$5,000.00		
2017	\$5,000.00		
Subtotal	\$50,250.00	\$214,661.92	
2018	\$5,000.00		
Grand Total	\$55,250.00	\$214,661.92	\$3.89 ROI

The MBNEP received funding from the U. S. EPA each year with a requirement that the program must match the dollars received one-for-one. MBNEP raises this non-federal share match through State support, an additional agreement with the Alabama Department of Conservation and Natural Resources, and funding from the two counties, municipalities, and in-kind services.

Historically, the City of Fairhope has contributed to the program's matching obligation 13 times between 1997 and 2017 with three annual investments of \$2,750, four of \$3,000, and six of \$5,000. Conversely, MBNEP has

supported \$214,661.92 in projects directly benefitting the City for a return on investment of \$3.89 for every one dollar invested.

The Request

Mobile Bay National Estuary Program respectfully requests that the City of Fairhope agree to support the activities of the Program in the amount of \$5,000 for Fiscal Year 2017-2018. This funding will be considered non-federal match to the U. S. EPA annual allocation for the implementation of the Comprehensive Conservation Management Plan.

Thank you.

Source: Mobile Bay National Estuary Program

2.7 Reporting Requirement: Five Minimum Control Measures

The SWMPP addresses the five Minimum Control Measure (MCM) requirements:

- a. Public Education and Involvement on Stormwater Impacts
- b. Illicit Discharge Detection and Elimination (IDDE)
- c. Construction Site Run Off Control
- d. Post Construction Stormwater Management in New Development and Re-development
- e. Pollution Prevention / Good Housekeeping for Municipal Operations

The City of Fairhope has reached substantial compliance with the 2017 MCM through BMPs (Best Management Practices) and “Measurable Goals”. The Measurable Goals (and status of each) for 2017 are listed below:

Public Education and Involvement on Stormwater Impacts

1. Stormwater Workshop/Conference by Planning Dept. staff
Status: Complete
Continue for 2018? Yes
2. Stormwater Article on Facebook/Social Media
Status: Complete
Continue for 2018? Yes
3. Erosion & Sediment Control Workshop for City Employees
Status: Complete
Continue for 2018? Yes
4. **Public Educational / Input Meeting for Stormwater Issues***
Status: Complete
Continue for 2018? Yes (Mandatory)
5. **Public Review of SWMP***
Status: Complete
Continue for 2018? Yes (Mandatory)

Illicit Discharge Detection and Elimination

1. **Update Storm Sewer Outfall Inventory**
Status: Complete *Hard copy update
Continue for 2018? Yes (Mandatory)
2. Smoke Test by Water Department
Status: Complete
Continue for 2018? Yes
3. Public Works Dept. Meeting to address Waste Management Crews on Illicit Discharge Detection
Status: Complete
Continue for 2018? Yes
4. **Dry Weather Screening of 15% of outfalls**
Status: Complete
Continue for 2018? Yes (Mandatory)

Construction Site Stormwater Runoff Control

1. QCI Recertification by Planning Dept.: (1) Code Enforcement Officer
Status: Complete
Continue for 2018? Yes
2. QCI Recertification of Building Dept. (3) Building Inspectors
Status: Complete
Continue for 2018? Yes
3. QCI Certification for new Building Inspector (2)
Status: Complete
Continue for 2018? Yes

Post-Construction Stormwater Management in New Development and Redevelopment

1. Rain Barrel Workshop *City of Foley hosted this event and we advertised as co-sponsor.
Status: Complete
Continue for 2018? Yes
2. Creek / Shoreline Assessment
Status: Complete
Continue for 2018? Yes

Pollution Prevention/Good Housekeeping for Municipal Operations

1. Memo to all departments reminding employees of good housekeeping practices
Status: Complete
Continue for 2018? Yes
2. **Dry weather screening of Public Works facility**
Status: Complete
Continue for 2018? Yes (Mandatory)
3. Commercial Pesticide Applicators License for Parks and Recreation:
Status: Complete
Continue for 2018? Yes

More details on “Measurable Goals”, as well as BMPs, can be found within each MCM Section.

A summary of each of the five (5) Minimum Control Measures follows (formerly 6 MCMs: Public Education and Public Involvement are now combined):

3.0 MINIMUM CONTROL MEASURE # 1: PUBLIC EDUCATION AND INVOLVEMENT ON STORMWATER IMPACTS

- **Requirements:** The City of Fairhope must 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. The City of Fairhope shall also comply, at a minimum, with applicable State and local public notice requirements when implementing a public involvement/participation program. SWMPP must include public input method for SWMPP review and must list target pollutants and target audiences; SWMPP must address the reduction of litter, floatables and debris from the MS4 area; SWMPP must show methodology for informing and involving individuals, land use planners, engineers, businesses and property managers in stormwater pollution prevention. More information on this requirement can be found in the general permit.
- **Responsible Persons:** Planning Department; Building Department; Public Works Department; Community Development Director; Special Events Director; Director of Operations
- **Rationale Statement:** In 2017, the City of Fairhope supported public education through community events and through monthly meetings such as the Fairhope Environmental Advisory Board (FEAB) and the Fairhope Planning Commission. FEAB, which currently has 10 members (as of March 31, 2018), is an environmental advisory board which is scheduled to meet monthly (the second Friday of every month at City Hall). In the 2017 reporting period, FEAB met with quorum ten (10) times (every month except July 2017 and October 2017).

The Planning Commission is a formal public forum which meets monthly offering the community an opportunity to learn more about upcoming development projects. The City of Fairhope Planning Department provides notifications and postings for these public meetings, which are held monthly.

Minutes of the Planning Commission and the FEAB, once approved, are posted online at:

<http://www.cofairhope.com/city-government/city-council-committee-minutes>.

Fairhope also collaborates with area partners for stormwater planning, since stormwater does not recognize jurisdictional lines. The Weeks Bay watershed is represented in Fairhope as about 42% of city limits. The City of Fairhope participated and offered input in the Weeks Bay Watershed Management Plan (finalized in 2017) and is still involved in 2018 in Planning Forum meetings for this ongoing project. The MS4 Eastern Shore partners, including Fairhope Planning Department staff, met in October of 2017 to discuss continued efforts of unifying

3.0 Public Education and Involvement on Stormwater Impacts

stormwater management on the Eastern Shore. The Mobile Bay National Estuary Program is very involved in stormwater initiatives on the Eastern Shore. MBNEP is also the sponsor of the Create a Clean Water Future Program. Fairhope staff met with MBNEP and other area partners on January 25, 2018 to discuss further development of the Create a Clean Water Future program.

The City of Fairhope initiated the Storm Drain Medallion program in February of 2018. This program will supplement the Create a Clean Water Future program, which Fairhope partners with. Both of these campaigns address litter and stormwater pollution. The storm drain medallions (accented with bay-theme art work by the Fairhope High School students) will be placed on storm drains around Fairhope in 2018, as a constant reminder that storm drains are our gateway to our beautiful Mobile Bay. The Create a Clean Water Future program is a public service campaign spearheaded by the Mobile Bay National Estuary Program. The City of Fairhope has added “Create a Clean Water Future” stickers to many City vehicles and is using the logo and link on the City of Fairhope website, business cards and on City publications and supports the NEP efforts.

Citizen Complaints / Comments: The City of Fairhope receives complaints and comments, including stormwater issues, from citizens by having a “General Contact” number listed on the City of Fairhope website. The number (251) 928-8003 is available 24/7 (directed to the Police Department after hours). Citizens can also enter a “Service Request” complaint on line, which is directed to the appropriate department



Public Outreach: The City of Fairhope takes part in several environmental themed community events each year, such as Coastal Clean Up, Mobile Area Earth Day and Arbor Day. These events collectively reach over 1,000 residents. Public Works coordinates these efforts. In January 2018, a City Planner became certified as a Master Environmental Educator. Through this program, Fairhope is partnering with area schools to help educate students about environmental stewardship. Fairhope also works with local schools yearly through an anti-litter campaign (students submit litter-prevention art).

3.0 Public Education and Involvement on Stormwater Impacts

The City of Fairhope supports public access to volunteer water testing results by posting a link to Alabama Water Watch on the City website. The Alabama Water Watch program provides volunteer water testing at three locations within the City limits monthly. Testing parameters include turbidity, dissolved oxygen, ph, temperature, and e coli.

Target audience for the City educational mechanisms are developers, contractors, landscapers, business owners, land owners, home owners and City employees. Pollutants of concern are sediment, oil residue from parking lots, pesticides, herbicides, fertilizers and pathogens.

Target pollutants for this reporting period are:

- a. Sediment
- b. Pathogens
- c. Oil residue from parking lots
- d. Pesticides, herbicides, fertilizers

Sediment deposition is a major concern in Fairhope, since it is a terrain bordered by many gully systems, tributaries and three major creeks (Fly Creek, Rock Creek and Cowpen Creek). Rainfall in Fairhope averages more than 77"/year (based on data from the last five years). 86" of rain was received in the reporting period for 2017. With the issuance of over 700 earth-disturbing permits (not including right of way permits) issued in the permitting jurisdiction, construction standards are reviewed yearly. The Fairhope Planning Department is continually working to balance the rights of property owners with watershed and natural resource protection.

Pathogens are a high priority stormwater pollutant concern. The Baldwin County Health Department monitors swimming area water quality, and issues swimming advisories accordingly. Signage is currently placed at North Beach Park entrance, Orange Street Pier and Volanta Avenue @ Mobile Bay. Water Quality signage alerts residents of any Baldwin County Health Department swimming advisories. The ADEM Beach Monitoring link has been added to the City website to inform residents of most recent pathogen levels tested for the three locations listed above. In 2017, City of Fairhope partnered with Mobile Bay Keepers to do additional water sampling in Fly Creek as a result of the Capacity Study.

The City of Fairhope places signage along water bodies and ditches impacted by sanitary sewer overflows which adds an extra layer of immediate notification to citizens.

3.0 Public Education and Involvement on Stormwater Impacts



Pictured: Tatumville Gully notification of SSO (Middle Street @ Valley Street)

Oil residue from parking lots: Current use and assessment of City of Fairhope LID ordinances (Zoning and Subdivision Regulations) works towards improved effluent water standards. Also, the Zoning Ordinance pervious paving requirement (for projects with 8 or more parking spaces) aids in cleaner stormwater runoff from parking areas.

Pesticides, herbicides, fertilizers: As a result of an action item from the Weeks Bay Watershed Management Plan, Weeks Bay Foundation and the Weeks Bay National Estuarine Research Reserve worked with Fairhope staff to provide a brochure “*A Homeowner Guide to Stormwater Detention Pond Maintenance*”. This brochure is available on line and is also used as a hard copy attachment for drainage/stormwater facility notifications to property owners from the Public Works Department and the Planning and Zoning Department. This brochure has guidance information about limiting the use of pesticides and fertilizers. The City of Fairhope also uses the “Greener by the Yard” publication (hard copy in lobbies and link available on line) which offers advice on green lawn care practices.

3.0 Public Education and Involvement on Stormwater Impacts

A HOMEOWNER GUIDE TO STORMWATER DETENTION POND MAINTENANCE



IF YOU HAVE SOMETHING LIKE THIS ON YOUR PROPERTY, OR IN YOUR SUBDIVISION, THIS GUIDE IS FOR YOU!

Stormwater detention areas are built to safely hold stormwater that runs off from impervious surfaces during heavy rain events. This reduces the flow into rivers and streams during storms, and decreases flooding. Unfortunately, if these structures are not inspected, maintained, and managed correctly, they can actually increase flooding, cause a safety hazard, and negatively affect property values. As a homeowner or member of a Home Owners Association you have a responsibility to keep your pond in good working condition. This guide and checklist will help you to ensure that your stormwater structure is able to handle our rainy Gulf Coast seasons.

INDEX OF DEFINITIONS

Storm Water: any water that runs over the surface before it reaches a waterway. This can be runoff from parking lots, streets, roofs, and other impervious surfaces.

Impervious surface: any material that does not allow rain to enter into the soil.

Wet detention pond: a pond designed to have a permanent pool of water during normal conditions. The pond only releases water during heavy rainfall events.

Dry detention pond: a pond that will normally not have standing water, except for a short time after a large storm event.

Inlet: the mechanism that allows water into the stormwater basin or pond. Usually a pipe, ditch, or swale.

Outlet: the structure that controls the rate of release from the pond and the water depth and storage volume in the pond.

Outfall: the point where collected stormwater reenters a natural waterway.

Rip rap: Rock material typically used to stabilize conveyance channels.

Emergency spillway: discharges excess stormwater during substantial runoff events.

O&M: Operations and Maintenance.

WHY SHOULD YOU BOTHER TO MAINTAIN YOUR POND?

- When rainfall runs over impervious surfaces it does not have time to soak into the ground, so it ends up entering our waterways in large quantities. This often results in increased flooding that can damage homes, businesses, and roads.
- Stormwater runoff is a big source of water pollution in our area. Everything that sits on our roads and parking lots, eventually runs into our streams and rivers with rainfall. Stormwater ponds allow some of these pollutants to settle out and filter through the ground.
- Well maintained ponds can actually be an aesthetically pleasing addition to a neighborhood. In addition, they can provide habitat for native species of birds, reptiles, and amphibians.
- There can be legal consequences of not properly maintaining your stormwater detention facility.

Provided by the Weeks Bay Foundation and the Weeks Bay National Estuarine Research Reserve
Through collaboration with the Coastal Training Program and local municipalities

A HOMEOWNER GUIDE TO STORMWATER DETENTION POND MAINTENANCE

ROUTINE MAINTENANCE

Inspections: Periodic scheduled inspections with the attached checklist, and inspections after major rainfall events, to check for damage & to remove debris/ trash.

Vegetation Management: Mowing on a regular basis to prevent erosion or aesthetic problems. Trees and shrubs should not be allowed to grow in the pond basin. Limit use of fertilizers and pesticides in and around the ponds to minimize leaching into pond and subsequent downstream waters.

Erosion: Appropriate mowing equipment and machinery should be used on pond structure to avoid erosion.

Trash, debris and litter removal: Removal of any debris causing obstructions and especially after every runoff producing rainfall event. General pickup of debris in and around the pond during all inspections.

Mechanical Equipment check: Inspection of any valves, pumps, fence gates, locks or mechanical components during periodic inspections. Plans for appropriate replacement/repair should be made at the time of documentation.

Structural Component check: Inspection of the inlet, outlet, and other structural features on a regular basis for additions to the annual Non-Routine Maintenance list.

NON-ROUTINE MAINTENANCE


Bank erosion/stabilization: It is critical to keep effective ground cover on the exposed pond areas to ensure that loose sediment does not fill up the pond. In addition, vegetation increases infiltration of runoff, and effectively filters pollutants. All areas not vegetated should be re-vegetated and stabilized immediately.

Sediment removal: The sediment accumulation should be monitored and the pond depths checked at several points. If the depth of the accumulated sediment is greater than 15% of the original design depth, sediment should be removed.

Structural Repair/Replacement: Over time, even excellent stormwater structures get damaged and need repair and replacement. Plan for expenses related to general wear and tear at yearly intervals.

SO HOW DO YOU PAY FOR ALL THIS WORK?

The property owner or the HOA should consider establishing an O&M fund and assess annual fees for maintenance. After several years of operation with these set fees, it may be necessary to re-evaluate maintenance costs for the actual operation of the pond. The fund should also contain funds for emergency repairs related to hurricanes or other storm events. **Remember!** Functioning stormwater systems benefit everyone in the community with improved water quality, better aesthetics, and decreased flooding and pollution.



Provided by the Weeks Bay Foundation and the Weeks Bay National Estuarine Research Reserve
Through collaboration with the Coastal Training Program and local municipalities

Pictured: HOA Guide for stormwater ponds

3.0 Public Education and Involvement on Stormwater Impacts

Citizen Stormwater Awareness: An inventory of the City of Fairhope's storm sewer infrastructure (including private/subdivision stormwater facilities) was conducted in 2012 and is updated in hard copy yearly. In 2017, City staff (Planning and Zoning and the Public Works Department) assessed 20-25% of the individual outfalls in this inventory (instead of the 13 major outfalls at the bay). As a result of this outfall field assessment, the Public Works Department sent out thirty (30) letters in January 2018 to stormwater facility owners to address maintenance concerns. Outfalls assessed were in these watersheds: Cowpen Creek, Point Clear Creek, Volanta Gully and Waterhole Branch. The letter requested stormwater facility assessment and maintenance, to ensure the stormwater facility is still functioning as designed. A stormwater pond maintenance guideline brochure (pictured below) developed by the Weeks Bay Reserve Foundation was attached. This project serves as an outreach effort by the Planning Department / Public Works Department to correct or assess deficient stormwater facilities, so that downstream properties (including water bodies) are better protected from flooding and runoff. The City receives feedback and requests additional information as a part of this effort. Usually, the notified property owner is a subdivision Property Owner Associations (POA).

Copy of notification letter:

January 15, 2018]

Fairhope Subdivision

RE: Subdivision / Subject Property: _____

Dear Fairhope Subdivision:

The City of Fairhope operates under a storm water permit (MS4) from the Alabama Department of Environmental Management (ADEM). This permit requires the City of Fairhope to report known storm water infrastructure maintenance needs to property owners, including Homeowner and Property Owner Associations.

A recent assessment of a storm water facility (pond located at _____) owned by your respective subdivision revealed (general / significant) maintenance concerns. Maintenance issues identified were:

- General Overgrowth and/or invasive species present (popcorn trees, Chinese privet, etc.)
- Significant cracks or damage to infrastructure (add caulk, etc.)
- Rip rap needs maintenance (add more rip rap and/or reposition rip rap)
- Scouring of embankment or outfall area (exposed soil, etc.)
- Other: _____
- Picture attached

The City has no obligation to maintain storm water improvements or facilities located on private property and in private utility and drainage easements. The City does not have the duty to construct or maintain drainage improvements to protect private property owners within the city from damage caused by flooding or surface water runoff.

The City's Subdivision Regulations place the burden on a developer to create a mechanism for maintaining drainage improvements in private easements and on private property. The upkeep of these facilities is the responsibility of the property owner or Property Owners Association.

A guideline brochure is attached for your convenience. General maintenance will help to ensure that the storm water facility does not negatively impact surrounding properties and/or bodies of water/watersheds, including your property. Significant maintenance / repairs may warrant an engineered assessment of your storm water facility to verify that it is operating as designed. All repairs and maintenance should take place within a reasonable time frame. Significant

Please note that earth disturbing activities or structural maintenance may require a permit from the City of Fairhope and/or from State or Federal agencies. For more information on permitting, please contact the City of Fairhope Building Department at 928-8003.

Should you need any further information, please feel free to contact me at (251) 928-8003.

Respectfully,

Richard Johnson, Director of Public Works
251 928-8003

CC: Planning and Zoning Department

- **BMP** methods used for educational outreach:
 1. Brochures
 2. Public Educational Meetings & Community Events
 3. City Website (www.cofairhope.com)

3.0 Public Education and Involvement on Stormwater Impacts

4. Existing Demonstration projects (Rain Garden, Wetland Ponds)
5. Employee Certifications and Training
6. Employee Erosion and Sediment Control (BMP) Workshop
7. Pet Waste Bags in Parks
8. All One Ocean Litter Bag Stations
9. Ads in Newspapers for Public Notices
10. Subdivision Property Owners Associations Contact List
11. City of Fairhope Planning Commission
12. City of Fairhope Environmental Advisory Board (FEAB)
13. City of Fairhope Recycling Committee
14. Sanitary Sewer Overflow On-Site Signage
15. Create a Clean Water Future (www.cleanwaterfuture.com)
(Litter / Stormwater Pollution program)

BMP # 1: Brochures promoting green space and stormwater management, available at City offices (and/or on-line):

- a) *Greener by the Yard*, Weeks Bay Watershed Project
- b) *Fairhope Gullies*, joint effort of Mobile Bay National Estuary Program, Fairhope Single Tax, and the City of Fairhope
- c) *Parks of Fairhope*, joint effort of the FEAB and the City of Fairhope
- d) *Stormwater Management*, by EcoSolutions, created for the City of Fairhope
- e) *Field Guide for Erosion and Sediment Control on Construction Sites in Alabama*, by Alabama Soil and Water Conservation Committee
- f) *City Sketches*, quarterly newsletter for Fairhope residents. City Sketches will have at least one article yearly to focus on stormwater related topics (including litter control). Also available on City website
- g) *What is a Phase II Small MS4?* Brochure compiled by the Eastern Shore MS4 Stormwater Education Outreach Team, available at the City of Fairhope Planning Department and Public Works building.
- h) *Understanding Your Stormwater Management Program*; this 5minute video, produced by the Mobile Bay National Estuary Program, is an informational source for elected officials, and the general public. It briefly explains the importance and requirements of our local MS4 program and is used during SWMPP review for the Planning Commission. Available on the City of Fairhope website: www.cofairhope.com/departments/planning-and-building/publications-and-forms
- i) *Homeowner Guide to Stormwater Detention Pond Maintenance*
Developed in 2017 by the Weeks Bay Foundation and the Weeks Bay Estuarine Research Reserve to help Fairhope guide citizens and property owners toward correct stormwater pond maintenance.
www.cofairhope.com/home/showdocument?id=17819

BMP #2: Public Educational Meetings & Community Events:

- *Town Hall Meetings (6) *stormwater related
- *Earth Day (April 2017)

3.0 Public Education and Involvement on Stormwater Impacts

- *Arbor Day (February 2018)
- *Coastal Clean Up (September 2017)
- *America Recycles Day (November 2017)
- *Environmental Outreach with Baldwin County Schools
- *Environmental Outreach Support with other communities

a. Town Hall Meetings –

Responsible Person: Community Development Director

1. *South Fairhope Community Assessment Meeting @ Rotary Youth Club*
April 4, 2017. Discussions on stormwater issues in Tatumville Gully.
2. *Town Hall meeting @ Centennial Hall*
May 9, 2017. Discussions on Fairhope, all topics including smart growth
3. *Construction Industry Professionals Meeting @ Council Chambers*
July 12, 2017. Held by Building Official; engaged construction professionals in our construction standards and regulations.
4. *Responsible Growth Town Hall Meeting @ Fairhope Public Library*
July 18, 2017. Asked residents to come share ideas about smart growth management.
5. *Public Works Director's Community Meeting @ Fairhope Public Library*
March 13, 2018. Public Works Director discussed drainage standards as well as other Public Works issues with citizens. Figure 1.
6. *Community Engagement Meeting @ Fairhope Public Library*
March 14, 2018. P&Z Director, Director of Operations and Public Works Director discussed stormwater standard / subdivision regulation proposed changes (including LID), as well as infrastructure upgrades.



Pictured: Richard Johnson, Public Works Director, at 3/13/2018 Town Hall event

b. Earth Day – April 22nd, 2017 @ Fairhope South Beach Park (10 a.m. to 6 p.m.)

Responsible Person: Public Works Department: Public Works Director; Planning Dept. Code Enforcement Officer; Community Development Director; Special Events Coordinator

Earth Day Mobile Bay 2017 was held at Fairhope's South Beach Park. The festival attracted an estimated five thousand people from communities in Mobile and Baldwin

3.0 Public Education and Involvement on Stormwater Impacts

Counties. For 28 years, Earth Day Mobile Bay has demonstrated community support and involvement. It is a free event celebrating the Earth and the environment. In addition to providing the event location, the City of Fairhope provided recycling and waste management for the event, including e-waste recycling. The Planning and Zoning Department shared a tent with “Fairhope Recycles” and offered watershed information. Create a Clean Water Future water bottles and CWF frisbees were given away at the event. Public Works Department sponsored an electronic recycling event.



Pictured: Public Works employee assisting citizen with e-waste at Earth Day 2017

c. **Arbor Day** February 17, 2018

Responsible Person: Public Works Department: Public Works Director

Calendar Month View

Font Size: + - Share & Bookmark Feedback Print

City of Fairhope Arbor Day Celebration
Date: 02/17/2018 10:00 AM - 12:00 PM

Add to my Calendar

Celebrate Arbor Day with the City of Fairhope! Fairhope's Arbor Day event is set for 10 a.m. to noon Feb. 17 on the campus of Coastal Alabama Community College.

Set to be honored as part of the celebration are Arbor Day poster contest winners as well as 2018 individual and business beautification award winners.

A tree seeding giveaway follows the main program and will last until noon or until all supplies are exhausted. Seedlings available this year include red buckeye, chinquapin, redbud, blackgum, pond cypress, bald cypress, Sweetbay magnolia, Shagbark hickory, Shumard oak, American snowbell and willow oak. A fruit tree raffle will also take place.

Residents are also encouraged to celebrate Arbor Day by hitting one of the Fairhope Tree Trails. Fairhope trails consist of the Beach Park trail at the Fairhope Municipal Pier and park and the Marietta Johnson tree trail on Faulkner's campus. Fairhope also has several state champions along these trails.

For more information, call 251-929-1466.

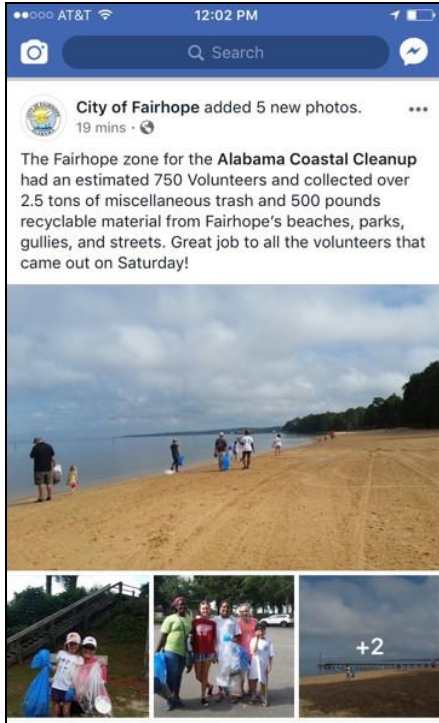
[Return to full list >>](#)

Source: Calendar of Events, www.fairhopeal.gov

d. **Coastal Clean Up** – September 17, 2017

Responsible Person: Public Works Department: Public Works Director; Community Development Director; Special Events Coordinator

3.0 Public Education and Involvement on Stormwater Impacts



e. **America Recycles Day**, November 15, 2017

Responsible Person: Public Works Department: Public Works Director; Community Development Director; Special Events Coordinator



Source: Facebook, City of Fairhope

Environmental Outreach Support with other communities

f. **Rain Barrel Workshop** – April 22, 2017 Graham Creek, Foley, AL
 Outreach with other communities

Responsible Person: (for promoting event in Fairhope): Planning Dept. Code Enforcement Officer

Hosted by City of Foley. City of Fairhope was one of the sponsors. Four participants. City of Fairhope helped advertise the event by sending out email notifications (City of Fairhope Subdivision contact list, 50+ subdivisions), including the event on the City calendar on line and providing hard copies of the brochure in City lobbies. 2nd rain barrel event was advertised for and scheduled to be held on 9/23/2017 at the City of Daphne but was cancelled due to no participation.

Responsible Person: Planning Department Code Enforcement

Rain Barrel Program Teaches Coastal Residents How to Reduce Stormwater Impacts

*Alabama Current Connection Newsletter, Summer 2017
 Vol. XI, Issue 1
 By Christian Miller, Watershed Management Coordinator,
 Mobile Bay National Estuary Program*

Coastal Alabama receives more than five feet of rain per year. In urban areas, most of this water washes across hard, or impervious, surfaces, picking up and carrying pollutants into our waterways. The U.S. Environmental Protection Agency considers stormwater runoff to be the greatest threat to water quality in the United States. As more people continue to move to coastal areas, impervious surfaces and, therefore, volume and velocities of stormwater runoff continue to increase.

Rainwater harvesting, the practice of collecting and storing stormwater runoff from roofs and other hard surfaces for future use, is one practical way to reduce impacts associated with residential stormwater runoff. An inch of rain falling on a typical 1,000-square-foot roof yields over 800 gallons of water. Installing a rain barrel at your home is an inexpensive way to capture and store some of this water for later use. With a rain barrel, you'll not only help reduce stormwater runoff, but you'll also have a supply of free, non-chlorinated, soft water for washing your car, watering plants, and many other household uses.

Although rain barrels can be purchased through many retail outlets, they are generally expensive and don't offer much in the way of education for the consumer. Through an ongoing series of workshops, residents of Mobile and Baldwin counties have been learning how to construct and set up low-cost rain catchment systems at their home, along with other ways to conserve water and protect water quality along the coast. These workshops are continuously scheduled throughout the year, in coordination with partners in both coastal Alabama counties, and last approximately two hours.

The success of the program has been due in large part to the partnerships that have been formed. Local municipalities, including the cities of Daphne, Fairhope, Foley, and Mobile and the Town of Dauphin Island have all hosted rain barrel workshops. "These workshops have been a great help to us on the local level," said Ashley Campbell, Environmental Programs Manager with the City of Daphne. "They provide an opportunity to inform the public of the issues we are facing related to stormwater management on the coast."

The Prichard Drainage Study, funded by the MBNEP for Mobile County, and hydrologic modeling by Latif Kalin and Enis Baltaci at Auburn University's School of Forestry and Wildlife Sciences analyzed conditions in the Toulmins Spring Branch Watershed, a subwatershed of the greater Three Mile Creek Watershed, and examined impacts of stormwater runoff in the Bessemer community of Prichard. These studies recommend the installation of Low Impact Development features, including strategically located rain barrels, as a means of alleviating chronic urban flooding in the area. Follow-up outreach in the community also indicated a strong willingness to receive and use rain barrels at home. Currently, plans are underway to work with partners and homeowners on a pilot project to install approximately 30 rain barrels at homes and local residences around Toulmins Spring Branch. If successful, this project could be expanded throughout the community to significantly reduce the impacts of localized flooding throughout the subwatershed.

Source: www.mobilebaynep.com

3.0 Public Education and Involvement on Stormwater Impacts

Educational outreach with schools:

g. Master Environmental Education Training in Schools

Outreach with Baldwin County Schools

Responsible Person: Planning Dept. City Planner

City Planner became certified in Jan. 2018 as a Master Environmental Educator and has begun training students in Baldwin County (environmental stewardship). Topics taught so far include:

1. Groundwater (Delta Elementary) 2/8/2018
2. Invasive Species (Bay Minette) 3/19/2018
2. Backyard Habitat (Loxley Elementary) 3/23/2018

h. *Water Festival @ Fairhope Intermediate School (Alabama Coastal Foundation Event)*

Outreach with Baldwin County Schools

Responsible Person: Planning Dept. Code Enforcement Officer

Friday, May 15th, 2017: Planning and Zoning Department Code Enforcement Officer Assisted with the “Model Watershed” event, a 2-hour event engaging elementary students in stormwater modeling.

Model Watershed

Thank you for taking the time to serve as a volunteer for the 2017 Water Festival. The purpose of the festival is to provide fourth grade students an opportunity to have fun while learning about the importance of water management, conservation, and protecting our environment. Through hands-on activities such as building a watershed, examining water pollutants, and learning about water management, students will gain a better appreciation of water quality and will learn about the effects of human actions on aquatic ecology. This event, including bus transportation, is free to the schools and students due to the financial support of the Alabama Coastal Foundation and the Gulf Coast Resource Conservation and Development Council. The success of today's event is dependent on the willingness of volunteers like you to share your time. Thank you!

Learning Objectives:

Students will:

- Understand watershed concept.
- Understand about land cover and land use.
- Understand how changes in land cover and land use impact the health of waterways.
- Understand the concept of nonpoint source pollution, pollutants transported from a widespread source and transported by rainwater/storm water runoff.
- Understand that different land uses introduce different pollutants into our waterways through runoff.
- Understand impermeable surfaces and how they increase runoff volume and energy.

Overview: Everyone lives in a watershed, but may not realize that what happens anywhere in that watershed will eventually have an impact on the lowest point in the watershed, a lake, a river, or a stream. The concept of a watershed can be explained using the bathtub analogy and how the tub drains to a common point, the drain, because that is the lowest point in the tub. The sides of the tub represent the elevation limits. Everything outside of the tub will drain to another point. A watershed is more than just the stream or river, but also the land up to the highest elevation surrounding the waterways. The Mobile Bay Watershed includes 2/3 of AL and parts of TN, GA and MS. Everything that is done on the ground in this watershed could potentially impact the health of local waterways.

Source: ACF Handout regarding the Model Watershed activity



Pictured: FHS student volunteers at the Water Festival

3.0 Public Education and Involvement on Stormwater Impacts

i. Anti-Litter Campaign with schools – April 12, 2017

Outreach with Baldwin County Schools

Fairhope partners with schools yearly to promote litter prevention.

Responsible Person: Community Development Director; Special Events Coordinator

Every year, in conjunction with Earth Day Mobile Bay the City of Fairhope holds a design contest for an Anti-Litter Campaign. We challenge 5th grade students to come up with a slogan and design for the campaign. The design is placed on t-shirts that will be given to any student who signs our Anti-Litter pledge.



Source: Facebook

3.0 Public Education and Involvement on Stormwater Impacts

BMP # 3: City Website (www.cofairhope.com) has informative links for:

- a) Alabama Water Watch (“Visiting”)
- b) ADEM Water Quality Testing
www.cofairhope.com/living/water-quality-report
- c) Create a Clean Water Future
www.cofairhope.com/departments/planning-and-zoning/publications-and-forms
- d) City Rain Garden (“Planning Department”)
- e) Waste Management (“Public Works”)
- f) MS4 Annual Report / Stormwater Management Program Plan (“Planning Dept.”)
- g) Zoning Ordinance / Subdivision Regulations (“Planning Department”)—includes LID Component in each.
www.cofairhope.com/departments/planning-and-zoning/publications-and-forms
- h) *Understanding Your Stormwater Management Program*; 5 minute video produced and shared with the permission of the Mobile Bay National Estuary Program. It is an informational source for elected officials and the general public. This media clip briefly explains the importance and requirements of our local MS4 program. Available on the Planning Department page.
- i) Municipal Code of Ordinances (“Planning Department”)
 - a) Erosion and Sediment Control Ord. (#1398/#1603)
 - b) Red Soils Ordinance (# 1423)
 - c) Wetlands Ordinance (#1370)
 - d) Construction Site Waste Ordinance (#958)
 - e) Illicit Discharge Ordinance (#1516)
- j) Fly Creek Watershed Restoration Project (2013)
www.cofairhope.com/departments/planning-and-zoning/publications-and-forms
- k) Sewer Capacity Study:
www.cofairhope.com/home/showdocument?id=15025
- l) Moratorium Report: www.cofairhope.com/home/showdocument?id=15377
Responsible Person for website postings: Community Development Director

BMP # 4: Demonstration projects continue to provide educational signage:

(Responsible Department: Public Works)

- a. Wetland Pond @ North Beach Park – this simulated Wetland Pond was created in 2001 to reduce pathogens entering Mobile Bay, from duck pond water run-off. The pond features native plants and is a joint project from the MBNEP and City of Fairhope. Public Works maintains this pond on an as-needed basis.
- b. Rain Garden @ City Hall – 480 square foot rain garden was installed by City employees in 2003 to treat run off from 2,600 square feet of asphalt from the City Hall parking lot. Funded in part by Gulf Coast Resource Conservation and Development, this pond is maintained monthly by Public Works. Details of this project: and the benefits of rain gardens (www.cofairhope.com).

3.0 Public Education and Involvement on Stormwater Impacts

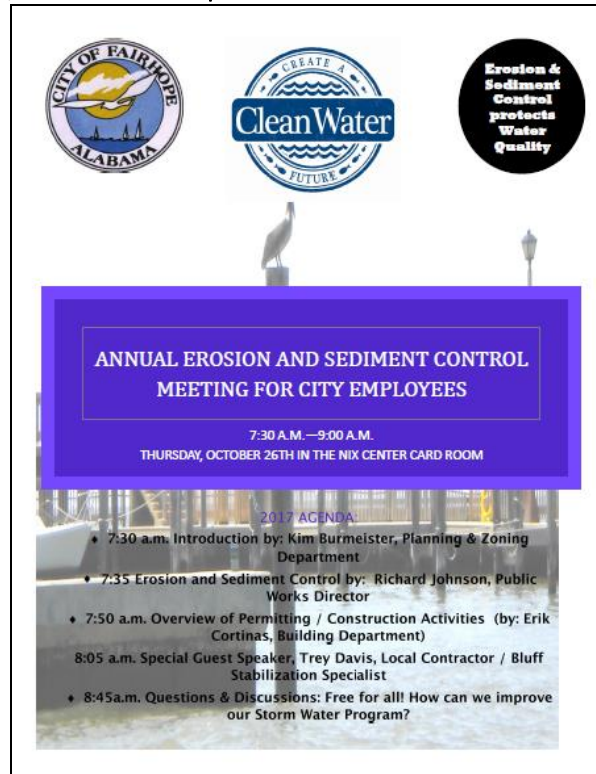
BMP # 5: Employee Certifications / Training, 2017:

- a) The City of Fairhope has staff certified for the proper application of pesticides and herbicides. This certification by the State of Alabama Department of Agriculture and Industries encourages proper application and use, which contributes to less pesticide and herbicide run off into area waters. Public Works, Golf Course staff and the Recreation and Parks Director have current certifications.
- State of Alabama Department of Agriculture and Industries Pesticide Applicators Certification (3 year certification):
- a. Public Works: Landscape Sup., #13571, (Exp.: 01/08/2019)
 - b. Golf Course Grounds Supervisor, # 13550 (Exp.: 12/28/2018)
 - c. Parks and Recreation Supervisor, #13268 (Exp. 7/28/2019)
- b) The City of Fairhope has (8) employees QCI certified (Stormwater Management / BMP training):
- Planning Dept;
- a. Code Enforcement Officer (QCI # 25712-Expires 10/3/2018)
 - b. City Planner (QCI # T5248-Expires 6/15/2018)
- Building Department
- a. QCI# 65045-Expires 10/24/2018
 - QCI#72718-Expires 09/23/2018
 - QCI#68815-Expires 3/2018
 - QCI#76249-Expires 3/23/2018
 - QCI# T5330-Expires 8/17/2018
- Gas Department
- QCI: # T5206 – Expires 6/15/2018



Pictured: New building inspector acquires QCI certification

BMP #6: Employee Erosion and Sedimentation / BMP Workshop



Forty-seven (47) City of Fairhope employees attended this 1.5 hour event in October 2017, which reminded utility crews of the City of Fairhope (and State/Federal) rules and regulations for construction activity, in regards to stormwater (erosion and sediment control).

Employees represented these departments:

Public Works, Gas Dept., Water and Sewer Department, Electric Department, Planning and Zoning Department, Building Department.

Responsible Person: Planning Department Code Enforcement Officer

BMP # 7: Pet Waste Bags in City Parks

Pet waste bag dispensers are available in City parks, including the Dog Park and Stimpson Field. Pet waste bags are available free to the public and encourage removal of pet waste from public areas. The Animal Control Officer (under the Public Works Department) is responsible for keeping pet waste bag dispensers full, and for enforcement of City Ordinance #988, which requires owners to clean up after their pets on public property. This helps keep pet waste (and therefore pathogens) out of storm drains and area waters. In the 2017 reporting period, the City of Fairhope purchased 94,500 pet waste bags.

Responsible Person(s): Public Works Department (Animal Control Officer)

BMP #8: All One Ocean Litter Bag Stations

In 2016, the City of Fairhope partnered with the Marietta Johnson Organic School to install litter bag stations at (6) City park locations, to address beach litter. These stations are still in place and operational in City parks. Volunteers from the Organic School maintain the stations and keep the litter bags filled.

3.0 Public Education and Involvement on Stormwater Impacts

Responsible Person(s): Public Works Department (Public Works Director)

BMP #9 Advertisement for Public Notices – notices are posted at City Hall for Public Meetings and in the newspaper as required by State Law.

Responsible Person(s): Planning and Zoning Department (Administrative Assistant)

BMP #10: Subdivision Property Owners Subdivision Contact List; This list is used internally only; it is a way for the Planning and Building Department to reach homeowner groups such as Property Owner and Home Owner Associations via email. As of March 2018, there are 69 subdivisions/contacts listed (City limits). Uses in 2017 included monthly notifications of Planning Commission agendas and rain barrel event notifications.

Responsible Person(s): Planning and Zoning Department (Administrative Assistant)

BMP # 11: City of Fairhope Planning Commission: this group of appointed volunteers meet monthly. Stormwater and new or improved development is a key topic as new projects are reviewed in a public form.

Responsible Department: Planning and Zoning Department: Director

BMP #12: City of Fairhope Environmental Advisory Board (FEAB): as of March 2018, there are 10 members in attendance. In the 2017 reporting period, the FEAB met ten times with quorum. Planning Department facilitates this meeting with a liaison to take minutes for the meeting.

Responsible Department: Planning and Zoning Department (Code Enforcement Officer)

BMP #13: City of Fairhope Recycling Committee: this group of volunteers is scheduled to meet monthly with the Public Works Department staff serving as a liaison. In the 2017 reporting period, the group did not meet with quorum. Currently there are 8 members. The Recycle Committee offers recycling education to the public at Earth Day by sponsoring a “Fairhope Recycles” booth and helps the Public Works Department with community recycling news throughout the year. In 2017, members of the Recycling Committee assisted with recycling events at Earth Day 2017.

Responsible Department: Public Works Department: Environmental Officer

BMP #14: Sanitary Sewer Overflow Signage

Signs are added to areas of SSO as soon as spill is discovered.

Responsible Person: Director of Operations

BMP #15: Create a Clean Water Future Campaign

The City of Fairhope adopted the CWF program in July 2014. This logo is used on the City of Fairhope website and publications. It is also on over 60 City of Fairhope vehicles. The website (www.cleanwaterfuture.com) contains valuable resources for our community. Promotional materials were purchased (water bottles, frisbees and stickers) to get the word out about this campaign. These materials are given away at Earth Day. The City of Fairhope handed out CWF frisbees and water bottles at Earth Day 2017.

3.0 Public Education and Involvement on Stormwater Impacts

Responsible Person: Planning Dept. Code Enforcement



Pictured: Clean Water Future water bottles



Pictured; Dogwood Trail Maids show off Create a Clean Water Future frisbees at Earth Day 2017

➤ Public Education and Involvement on Stormwater: Measurable Goals:

Measurable Goals – Recap For 2017

1. Stormwater Related Workshop, Seminar for Planning Department Staff

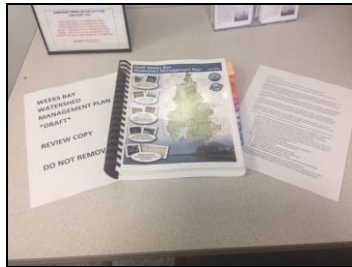
Status: Complete

Comments: Staff attended eight (8) stormwater conferences/seminars
(April 1, 2017 – March 31, 2018)

- a. April 5th, 2017; 8:30 a.m. – 10:30 a.m. @ BC Central Annex
Weeks Bay Stakeholder Work Group
Discussions on the Weeks Bay Watershed Management Plan
Planning and Zoning Department Code Enforcement Officer attended

3.0 Public Education and Involvement on Stormwater Impacts

- b. June 15th, 2017; 8 hour training @ Thompson Engineering, Mobile, AL
QCI Training Program
Planning and Zoning Department City Planner (King) attended
- c. July 12, 2017; 9 a.m. to 11 a.m.; Spanish Fort Community Center
Smart Growth and Watershed Protection
Planning Department City Planner (Milford) and Code Enforcement Officer attended
- d. July 25, 2017; 8:30 a.m. – 10:30 a.m. @ BC Central Annex
Weeks Bay Stakeholder Work Group
Discussions on the Weeks Bay Watershed Management Plan
Planning and Zoning Department Code Enforcement Officer attended
- e. August 16, 2017; 8:30 a.m. – 10:30 a.m. @ BC Central Annex
Weeks Bay Stakeholder Work Group
Discussions on the Weeks Bay Watershed Management Plan
Planning and Zoning Department Code Enforcement Officer attended
- f. October 12, 2017; 1:30 p.m. – 3:30 p.m. @ Daphne City Hall
Eastern Shore Phase II MS4 Annual Meeting
Planning and Zoning Department Code Enforcement Officer attended
- g. January 11, 2018, 7 a.m. to 12:30 p.m. @ Baldwin County Ext. Office
Master Environmental Educators Class (see below)
Planning and Zoning Dept. Planner (Milford) attended
- h. January 26th, 2018; 8:30 a.m. – 1 p.m. @ USA (Mobile) Student Center
2018 Sustainability Summit
Planning and Zoning Department Code Enforcement Officer attended



Pictured: Weeks Bay Watershed Plan Draft in Public Works lobby

2. Stormwater Article on Social Media (such as *Facebook*)

Status: Complete (Feb. 2018)

Comments: Arbor Day article on Facebook included information on the importance of trees to help prevent runoff.

Responsible Person: Planning Department Code Enforcement Officer

3.0 Public Education and Involvement on Stormwater Impacts



Source: Facebook "City of Fairhope" 2/18/2018

3. Erosion and Sediment Control (BMP) Workshop for City Employees

Status: Complete (October 2017)

Comments: City of Fairhope Planning and Zoning / Building Department hosted this 1.5 hour event, which educated City staff (mostly utility workers) on stormwater rules and regulations in our area. Local bluff stabilization contractor and the Public Works Director were key speakers at this event. This event was attended by over 40 city employees. Responsible Person: Planning Department Code Enforcement Officer; Building Official; Public Works Director

4. Public Educational / Input Meeting for Stormwater Issues

Responsible Department: Planning Department

Status: Complete

Comments: Planning Commission met monthly and FEAB met ten (10) times with quorum during the 2017 reporting period.

5. SWMPP Public Review

Responsible Department: Planning Department

Status: Complete (December 4, 2017)

Comment: Staff reviewed the SWMPP 2018 in Planning Commission including related Illicit Discharge Ordinance. Create a Clean Water Future "Understanding your stormwater program" 5 minute video was shown.

Public Education and Involvement on Stormwater Impacts: Measurable Goals For 2018:

1. Stormwater Education / Seminar

Responsible Department: Planning Department

3.0 Public Education and Involvement on Stormwater Impacts

Goal: Staff shall attend one stormwater related workshop, conference or seminar annually

Due: December 2018

2. Stormwater Article on Social Media (FB)

Responsible Department: Public Works

Goal: Ensure there is at least one stormwater related article on social media such as Facebook, per year

Due: December 2018

3. Erosion and Sediment Control Workshop for City Employees

Responsible Department: Planning Department

Goal: Host workshop for City employees to demonstrate BMP techniques, minimum standards for stormwater compliance.

Due: December 2018

4. SWMPP Review

Responsible Department: Planning Department

Goal: Review the Stormwater Management Program Plan and related ordinances in a public forum such as the Planning Commission meeting.

Due: December 2018

5. Public Educational / Input Meeting for Stormwater Issues

Responsible Department: Planning Department

Goal: Facilitate at least one educational meeting per year (such as FEAB, Town Hall meeting and/or Planning Commission). This meeting will allow the public to offer input on the City of Fairhope's stormwater plans and policies (new and improved development).

Due: December 2018

4.0 MINIMUM CONTROL MEASURE # 2: ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

- **Requirements:** Develop, implement and enforce a program to detect and eliminate illicit discharges into the regulated MS4; Develop a storm sewer map and update annually (to include locations of outfalls and structural BMPs); Effectively prohibit to the maximum extent practical under State or local law, through ordinance, or other regulatory mechanism, non-stormwater discharges into the MS4 and implement appropriate enforcement procedures and actions; Develop and implement a plan to detect and address non-stormwater discharges, including illegal dumping, to the system; develop and list in SWMPP ordinances to effectively prohibit non-stormwater discharges to the MS4; implement a dry weather screening program designed to detect and address non-stormwater discharges to the MS4 (100% of the outfalls every 5 years, priority areas as outlined in the SWMPP), listing outfalls screened; procedures for tracing source of suspect illicit discharges; procedures for eliminating an illicit discharge; procedures for notifying ADEM of illicit discharges; mechanism for the public to report illicit discharges; training program for staff; update MS4 map annually; document illicit discharge complaints and action taken. More information on these requirements can be found in the general permit.
- **Responsible Persons:** Planning Department; Building Department, Water and Sewer Department, Volunteer Fire Department, Public Works Department; Community Development Director; Director of Operations
- **Rationale Statement:** Illicit discharges include any discharge into a storm drain system that is not composed entirely of stormwater (or tap water). The City's IDDE program is based on enforcement of our Illicit Discharge Ordinance (Ordinance # 1516). Fairhope performed dry weather screening (outfall assessments) on 175 of 631 delineated outfalls. In 2017, the Planning Department responded eight (8) illicit discharge complaints. These complaints included (all have been resolved):
 - Utility company discharging sludge material into ditch/drain (4/2017)
 - Fire Hall vat cleaning contractor discharging greasy water into storm drain (9/2017)
 - Hydraulic leak from garbage truck (10/2017)
 - Restaurant sewer lateral leaking (11/2017)
 - Restaurant waste water hook up discharging into storm drain (1/2018)
 - Restaurant grease recycling vat overflowing into storm drain (2/2018)
 - Mortar residue rinsed into drain by resident (2/2018)
 - Shop sink discharging to parking lot area (not plumbed in) (2/18)

The City of Fairhope Illicit Discharge ordinance states:

(a)

It shall be unlawful for any person, firm, or corporation to discharge a pollutant into the City of Fairhope's Municipal Separate Storm Sewer System (stormwater system) in the City of Fairhope Police Jurisdiction that will have a deleterious impact on the environment. Any

4.0 Illicit Discharge Detection and Elimination (IDDE)

pollutant, associated with an industrial or commercial activity that is covered by the National Pollutant Discharge Elimination System as dictated by 40 CFR 122.26, can be discharged to the city stormwater system only if the discharge is covered by, an NPDES permit for stormwater.

(b)

Where an illicit discharge is reasonably believed by the city to be originating from private or public property, structure, or other facility, it shall be the right of the city to designate employees, bearing proper credentials and identification, to enter property or facility grounds for the purpose of inspection, observation, measurement, sampling and testing in accordance with this article.

(c)

Authority is hereby granted to the city by and through its duly designated enforcement officers to halt any discharge from private or public property, structure, or other facility that is reasonably believed by the city to be potentially harmful to human health or the environment.

(d)

All costs incurred by the city in association with the ceasing of a potentially harmful discharge will be reimbursed by the property owner of the discharging property, structure, or facility. The city may charge the cost against the subject land as a municipal lien, charges to be recovered in a suit at law against the owner.

(e)

The penalty for violation of any provision of this ordinance shall be as specified for general penalty in [section 1-8](#) of the Code of Ordinances of the City of Fairhope.

Procedures for tracing and removing the source of the illicit discharge are written into the ordinance, as well as the City of Fairhope Standard Operation Procedure for Illicit Discharge:



Planning Department

Illicit Discharge Standard Operating Procedure (SOP)
(Dry Weather Screening / Field Assessments)

Background and Introduction

Dry weather screening and field assessments of storm water infra-structure is a key element to proper Illicit Discharge Detection and Elimination. Annual dry weather screening is a requirement of the City's NPDES storm water permit # ALR040040. The City's Planning Department conducts annual dry weather screening of the 13 major outfalls, as determined by the Storm Sewer Inventory of 2012. Additionally, the Public Works Department (Street Division) oversees maintenance and year around general field assessments of City right of way and storm water infrastructure, during routine job duties. Additionally, the Planning Department investigates and issues enforcement on general Illicit Discharge complaints, such as commercial / residential rinsing and run off, and construction site rinsing and run off. The Fairhope Voluntary Fire Department responds to and is responsible for follow up on 911 based Illicit Discharges (such as chemical / fuel spills). The Fairhope Voluntary Fire Department is responsible for contacting the Emergency Management Agency on 911-based complaints.

General Concepts

City of Fairhope Public Works Department is continuously maintaining and observing City right of way and storm water infrastructure through routine field assessments (during and after significant rain events). The Planning Department conducts a documented annual "Dry Weather Screening" of 13 major outfalls within the City of Fairhope MS4 jurisdiction. This screening is documented in the MS4 Annual Report.

Field Assessments / Dry Weather Screening

If a potential illicit discharge is detected during a field assessment, the Public Works supervisor in charge will notify the Planning Department to validate the illicit discharge. The Planning Department Code Enforcement Officer will then follow protocol listed in the flow chart attached for Dry Weather Screening. If a potential illicit discharge is detected during a dry weather screening, protocol will be followed according to the flow chart, attached for Dry Weather Screening.

Annual Dry Weather Screening is conducted at the following locations (Major Outfalls):

1. Fly Creek @ Sea Cliff Drive;
2. Rock Creek @ Ecor Rouge Drive;
3. Pecan Street Pier (North);
4. Pecan Street Pier (South);
5. Fig Street flume;
6. Magnolia Beach Condos (North);
7. Magnolia Beach Condos (South);
8. Orange Street Pier;
9. Magnolia Beach Condos (Central flume);
10. Volanta Avenue end tributary;
11. South Beach Park (South end)
12. Fairhope Pier (South side);
13. Gayfer Court tributary

Reporting

The Planning Department Code Enforcement Officer will ensure proper notification of other City Departments and environmental agencies (by email, telephone or mail). Non-compliant sites will be handled according to the SOP for Non-compliant Site Reporting Procedures. All enforcement action such as Municipal Offense Tickets and Court Summons are authorized by the Planning Director before issuance.

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONT.

Site Inspection

The Planning Department Code Enforcement Officer performs a Site Inspection to validate or dismiss the potential illicit discharge. If it is necessary to look up into a storm drain pipe, the City of Fairhope Water and Sewer Department will be called upon to assist. The Water and Sewer Department owns a sewer camera which is used to look up into pipes, up to 200'. Beyond 200', the City of Fairhope contracts out a local company having the capability of videoing up to 500' of storm pipe or sewer line. If necessary, Fire Department would be dispatched to provide haz-mat preparation and facilitate clean-up, which would initiate a 911-based response. Otherwise, the Planning Department reports any water body or critical area impact to the appropriate State/Federal agency (ADEM/ USCOE).

Sampling

If a general illicit discharge is observed, and the nature of the discharge is not known, the City of Fairhope Planning Department will sample the discharge to determine what it is. Test America is one company (out of Mobile, AL) the City has used in the past for storm water analysis.

Enforcement & Follow-up

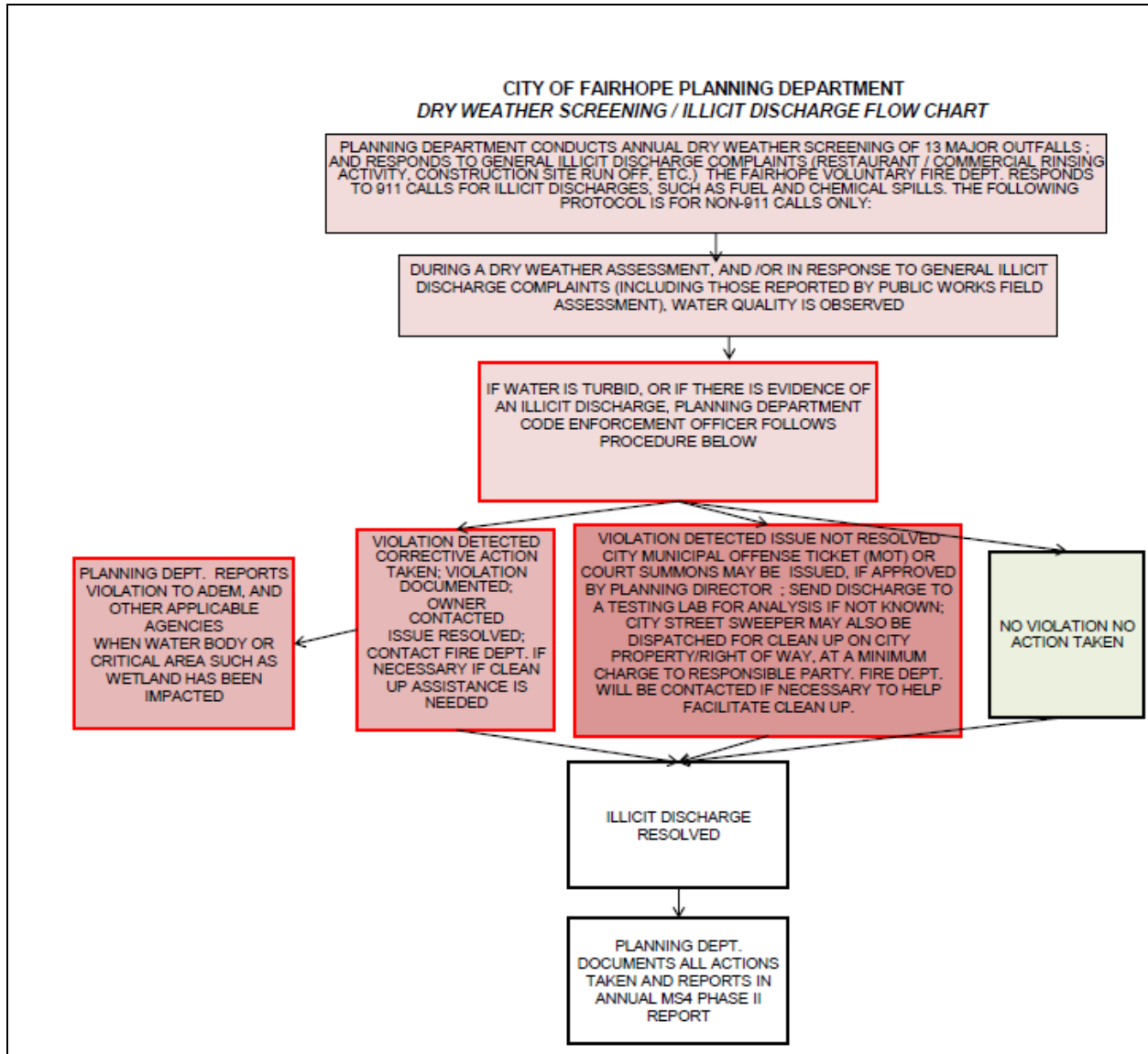
If the report is validated, the Planning Department Code Enforcement Officer will contact the responsible party and take all necessary steps (approved by Planning Director) needed to stop the illicit discharge which may include any and all actions documented in the City's Illicit Discharge Ordinance. Corrective action may also include dispatch of the City of Fairhope Street Sweeper for clean up on City property and right of way, at a \$300 minimum charge to the responsible party. Enforcement action such as Municipal Offense Tickets and/or Court Summons must be authorized by the Planning Director.

Documentation

All observations and actions will be documented in a report which will be tracked in the Planning Department Code Enforcement Officer's database and reported to ADEM in the City's Annual MS4 Phase II Report.

4.0 Illicit Discharge Detection and Elimination (IDDE)

ILLCIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONT.



4.0 Illicit Discharge Detection and Elimination (IDDE)

Since there is no industry within Fairhope, monitoring emphasis is placed on municipal activities, restaurants, automobile repair shops, and those areas zoned M-1 (Light Industrial). Non-compliance issues are documented and followed up on with appropriate enforcement action, as per the Illicit Discharge SOP, which is included below.

➤ **BMPs** used for IDDE program compliance:

1. BMP#1: Illicit Discharge Ordinance #1516
2. BMP#2: Code Enforcement Officer (Planning Department; Building Department)
3. BMP#3: Sanitation Fleet Supervisor (Public Works Department)
4. BMP#4: Residential Curbside Cooking Oil Recycling Program
5. BMP#5: Household Hazardous Waste drop off site for residents
6. BMP#6: *Greener by the Yard* pamphlet
7. BMP#7: Staff Meetings
8. BMP#8: City of Fairhope Watershed Map
9. BMP#9: City of Fairhope Storm Sewer Inventory Map/GIS Data / Storm Sewer Inventory Booklet
10. BMP#10: Volunteer Fire Department
11. BMP #11: Create a Clean Water Future Campaign
12. BMP # 12: Dry Weather Screening of outfalls

BMP # 1: Illicit Discharge Ordinance # 1516 prohibits anything other than rain water from entering City drains. Penalty for non-compliance: \$500.

Responsible Person(s) for Illicit Discharge Ordinance: Planning Department (Code Enforcement Officer); Public Works Department (Environmental Officer); Building Department (Building Official)

BMP # 2 Code Enforcement Officer (Planning Department)

The City of Fairhope employs a Code Enforcement Officer full time, in part, to investigate and issue corrective action on illicit discharge issues, as per Standard Operating Procedures (SOPs)

BMP #3: Sanitation Fleet Supervisor (Public Works)

The City of Fairhope employs an Environmental Officer (Sanitation Fleet Supervisor) full time, in part to manage the waste management operations, and to enforce waste management laws of the City.

BMP # 4: Cooking Oil Recycling: Sanitation and recycling crews are trained in Public Works staff meetings to report illegal dumping / rinsing activities, including inappropriate disposal of cooking oil. The City of Fairhope has a curbside cooking oil recycling program for residents. In 2017, approximately 804 gallons of cooking oil were reclaimed. Containers for cooking oil collection are available free upon request to residents. The collection container for used cooking oil is stored at the Transfer Station of Public Works. Restaurants are not allowed to dispose of oil within the City of Fairhope garbage stream. This program is overseen by the Public Works Environmental Officer.

4.0 Illicit Discharge Detection and Elimination (IDDE)

Responsible Person: Public Works Sanitation Fleet Supervisor

BMP # 5: Household Hazardous Waste: The City of Fairhope Public Works Department manages a household hazardous waste (HHW) drop off site for Residents, free of charge. Overall, over 2,100 gallons of hazardous materials (paints, thinners, motor oil and anti-freeze) were recycled. The HHW drums are kept secured and closed when not in use. A new bermed/contained area for HHW storage area (located at the Recycle Center) was constructed in 2014. HHW drums are still stored at the Transfer Station as well (which drains to the Waste Water Treatment Plant). The HHW encourages the correct disposal of paints, motor oil and other chemicals.

Responsible Person: Public Works Sanitation Fleet Supervisor

The City mechanic shop operates under its own ADEM permit number. This shop manages hazardous waste (mineral spirits, motor oil, anti-freeze) from its daily operation. All containers are kept closed, secured and covered at all times (and drums are placed on convex spill proof pallets or other secondary containment measures).

BMP # 6: Greener by the Yard Pamphlet

This is a publication by the Weeks Bay Watershed Project, and it is available on-line:

www.cofairhope.com/home/showdocument?id=306

Responsible Person: Planning and Zoning Department Code Enforcement Officer

BMP # 7: Staff Meetings

Planning Department and/or Building Department hold a meeting with staff monthly. Public Works Department holds a meeting with staff weekly. These departments are instrumental in implementing the MS4 / stormwater program.

Responsible Persons: Planning and Zoning Director; Building Official; Public Works Director

BMP # 8: City of Fairhope Watershed Map

This watershed map, available for public viewing in the Planning Department and the Public Works Department, is used for staff assessments on drainage and development, over and above on-site evaluations. The watershed map was last updated in March 2018 and is featured in Section 2.1.

Responsible Person: Planning and Zoning Department GIS Technician

BMP # 9: Stormwater Map / Outfall Inventory: The City of Fairhope hired a local engineering firm to locate and collect data at outfalls and structural BMPs (including privately owned stormwater facilities) in 2012. Over 600 data points were shot. The City of Fairhope Storm Sewer Inventory consists of:

- a. Mapping of the major outfalls
- b. Mapping of 600+ minor outfalls / stormwater facilities from 2012 (these include gully outfalls, detention ponds, retention ponds, etc.)
- c. Data sheet on each outfall, including new stormwater facilities

4.0 Illicit Discharge Detection and Elimination (IDDE)

- d. Storm Sewer Inventory Booklet (which contains a hard copy sheet of each data sheet for each point of interest).



The Planning Department updated the Storm Sewer Inventory in March 2018, to include (14) new (or revised) data sheets for development projects with stormwater facilities in the City limits:

1. Woodlawn Phase 2 *revised
2. Woodlawn Phase 3
3. Airport pond off CR 13
4. Firethorne Greenbriar Phase 1A (x4) *revised 2, added 2
5. Fox Hollow
6. Soccer Field @ Manley & CR 13
7. Saddlewood *revised
8. Nature's Trail *revised
9. Stone Creek Villas (x2) *revised 2
10. Old Battles Village Phase 2

*Source: City of Fairhope "Access": Subdivision Case Index

Responsible Person: Planning and Zoning Department Code Enforcement Officer

Example of outfall inventory data sheet:

<p style="text-align: center;">City of Fairhope Storm Sewer Inventory Cowpen Creek Watershed Data File Name: CC-104762</p>  	<p style="text-align: center;">Fox Hollow Wet Pond</p> <p>Address of storm water facility: Hollow Haven</p> <p>Property PIN# 104762</p> <p>Material:</p> <p>Type: Open Drainage (OD)</p> <p>Category: Private (subdivision)</p> <p>Comment:</p> <p>Outfall: Wetlands / Cowpen Creek</p> <p><i>This information was added to GIS/Storm Sewer Inventory on: 12/6/2017 *hard copy*</i></p>
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4.0 Illicit Discharge Detection and Elimination (IDDE)

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONT.

BMP #10: Volunteer Fire Department; Fuel Spills:

The Fire Department (Chief) reported two fuel spills during the 2017 program period.

1. Fairhope Docks in cabin of a boat – approximately 5 gallons. Fire Dept. left absorbent material with boat owner. No fuel entered water (Fly Creek).
2. 355 S. Greeno Road – less than 2 gallons spilled; employees recovered and contained material.

BMP #11: Create a Clean Water Future Campaign

www.cleanwaterfuture.com

(See “Public Education” BMP# 9 for more details on this campaign)

BMP #12: Dry Screening of outfalls yearly

Thirteen major outfalls (into Mobile Bay) and 631 total outfalls are indicated in the Storm Sewer Inventory. The Planning Department in coordination with the Public Works Department conducts dry weather screening of 20% of all outfalls annually as per the assessment schedule (25% of outfalls in the priority construction areas which drain to Weeks Bay). Outfall assessment field sheet used is below:

Stormwater Pond Inspections and Maintenance Checklist				
Site Name: _____		Owner change since last inspection? <input type="checkbox"/> Y <input type="checkbox"/> N		
Location: _____				
Owner Name: _____				
Address: _____		Phone Number: _____		
Site Status: _____				
Date: _____		Time: _____		Site conditions: _____
Stormwater Pond Type: Wet Pond <input type="checkbox"/> Wet ED Pond <input type="checkbox"/> Micropool Pond <input type="checkbox"/>				
Multiple Pond System <input type="checkbox"/> Dry Pond <input type="checkbox"/>				
<small>Inspection Frequency Key: A=annual; M=monthly; Q=quarterly; S=for major storms</small>				
Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Embankment				
Vegetation healthy?	A/S			
Erosion on embankment?	A/S			
Animal burrows in embankment?	A/S			
Cracking, sliding, bulging of dam?	A/S			
Drains entering pond blocked or not functioning?	A/S			
Leaks or seeps on embankment?	A/S			
Slope protection failure functional?	A/S			
Other (describe)	A/S			
Outfall Structure Box				
Low-flow orifice functional?	A/S			
Concrete/masonry condition (Cracks or displacement? Spalling?)	A			
Outfall pipe in good condition?	A			
Rip Rap Filter Berm in good condition?	A			
Outfall inspected and working?	Q			

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Outfall channels function, not eroding?	A			
Rip Rap at the end of the outfall pipe in good condition (No signs of erosion).	A			
Other (describe)	A			
Hazards				
Have there been complaints from residents?	M			
Public hazards noted?	M			
Inspector Comments:				

Overall Condition of Facility: <input type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable				
If any of the inspection items above are checked "yes" for "maintenance needed," list maintenance actions and the completion dates below:				
Maintenance Action Needed				Due Date
_____				_____
_____				_____
_____				_____
The next routine inspection is scheduled for approximately: _____ (date)				
Inspected by: (signature) _____				
Inspected by: (printed) _____				

Measurable Goals - Recap For 2017:

1. Storm Sewer Outfall Inventory & Mapping Update

4.0 Illicit Discharge Detection and Elimination (IDDE)

Status: Complete (December 2017)

Comments: Code Enforcement updated the Major Outfall Map (December 2017) to include newly annexed areas and revise existing sheets. Planning Dept. updated the data inventory sheets to include (14) new or revised stormwater facilities. New developments added are those receiving final plat approval prior to 12/6/2017.

2. Smoke Test on Sewer Lines

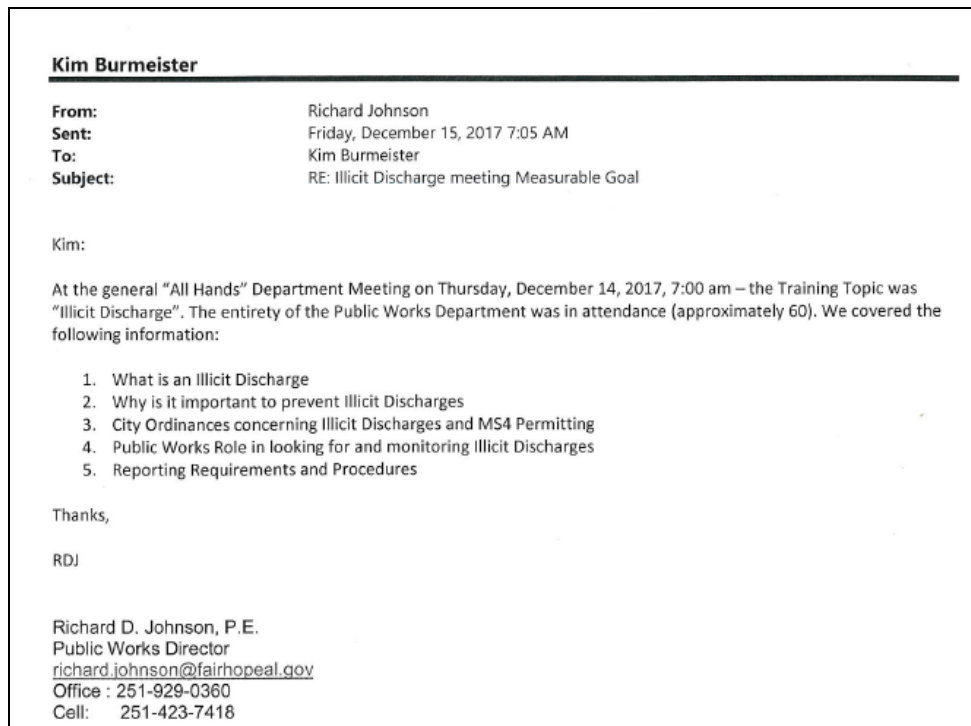
Status: Complete (October 2017)

Comments: City of Fairhope Water and Sewer Department conducted one (1) smoke test during 2017. According to the Water and Sewer Superintendent: On 10/16/2017, the Water and Sewer Dept. tested the sewer lines In Paddock Estates subdivision (off South Mobile Street, Tatumville Gully watershed). One clean out cap was discovered broken and resident was notified for repair.

3. Public Works Employee Educational Meetings on Illicit Discharge

Status: Complete (December 2017)

Comments: Public Works Director conducted a meeting on December 15, 2017, addressing illicit discharge issues:



4. Dry Weather Screening of Major Outfalls

Status: Complete (December 2017)

4.0 Illicit Discharge Detection and Elimination (IDDE)

Comments: Planning Department visually inspected the 13 major outfalls in Sept. 2017 and March 2018 (Stack Gully, Tatumville, Fly Creek, Rock Creek, Volanta Gully and Big Mouth Gully Watershed). Planning Department and Public Works Department conducted visual assessment of an additional 175 of the 631 outfalls (Waterhole Branch, Point Clear Creek, Volanta Gully and partially Cowpen Creek watershed). Results of inspections are kept on a spreadsheet. Public Works Director sends property owner a letter if deficiencies are found. Thirty (30) property owner notifications were sent out in January 2018 as a result of the assessment. 5 year schedule is below:

City of Fairhope		
List of MS4 Outfalls (Storm Sewer Inventory)		
This list includes original inventory from 2012, plus yearly updates (as of 3/30/2017)		
Watershed	Number of outfalls inventoried	MS4 Monitoring Requirement / 5 yr. Monitoring Schedule (2017 – 2021)
Big Mouth Monitoring Responsibility: P&Z	69 (includes one Major Outfall @ Mobile Bay)	1/5 yr. (Check: 2018)
Cowpen Creek* Monitoring Responsibility: PW	178	*Priority* Check from Inventory: 2017: Pg. 1-90 2018: Pg. 91-120 2019: Pg. 121-150 2020: Pg. 151-END 2021: Pg. 1-90
Fly Creek Monitoring Responsibility: P&Z	104 (includes one Major Outfall @ Mobile Bay)	1/5 yr. (Check: 2019)
Pensacola Worm Branch* Monitoring Responsibility: PW	13	*Priority (Check: 2020)
Point Clear Creek Monitoring Responsibility: P&Z	35	1/5 yr. (Check: 2017)
Red Gum Monitoring Responsibility: N/A	0	n/a
Rock Creek Monitoring Responsibility: P&Z	103 (includes one Major Outfall @ Mobile Bay)	1/5 yr. (Check: 2021)
Stack Gully Monitoring Responsibility: P&Z	23 (includes six Major Outfalls @ Mobile Bay)	1/5 yr. (Check: 2018)
Tatumville Gully Monitoring Responsibility: P&Z	52 (includes three Major Outfalls @ Mobile Bay)	1/5 yr. (Check: 2020)
Turkey Branch* Monitoring Responsibility: PW	4	*Priority (Check: 2018)
Volanta Monitoring Responsibility: P&Z	33 (Includes one Major Outfall @ Mobile Bay)	1/5 yr. (Check: 2017)
Waterhole Branch* Monitoring Responsibility: PW	17	*Priority (Check: 2017)
TOTAL	631 OUTFALLS (INCLUDES 13 MAJOR OUTFALLS ALONG BAY)	

*Priority Construction Area (Drains to Weeks Bay, an ONRW: Outstanding National Resource Water)

Public Works (PW) is proposed to monitor priority construction area City outfalls

Planning and Zoning (P&Z) is proposed to monitor non-priority construction area drains

4.0 Illicit Discharge Detection and Elimination (IDDE)

IDDE Measurable Goals For 2018:

1. Storm Sewer and Outfall Inventory Update

Responsible Department: Planning Department

Goal: Update hard copy inventory annually, to include new development, redevelopment and corrections. Update Major Outfall map (GIS) if there are changes (to legend or outfalls). (*Planning Dept.*)

Due: December 2018

2. Smoke Test on Sewer Lines

Responsible Department: Water Department

Goal: Conduct smoke test on priority sewer lines annually to detect leaking sewer pipes or illegal connections. Document findings and corrective action taken (*Water and Sewer Superintendent*)

Due: December 2018

3. Public Works Illicit Discharge Detection Meeting

Responsible Department: Public Works

Goal: Alert and remind waste management crews to look for illicit discharge indicators such as sheen in or near storm drains, leaking dumpsters, etc. (*Public Works Director*)

Due: December 2018

4. Dry Weather Screening of 20% of Outfalls (25% of priority construction area)

Responsible Department: Planning Department / Public Works Dept.

Goal: Assess 20-25% of outfalls as per schedule

*Must assess 100% of outfalls every 5 years (4 years for priority area outfalls)

Due: December 2018

5.0 MINIMUM CONTROL MEASURE # 3: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

- **Requirements:** Develop, implement, and enforce a program to reduce pollutants in stormwater runoff from qualifying construction activities. The program shall include specific procedures for construction site plan (including Erosion and Sediment Control) review and approval; Erosion and Sediment Control ordinances with sanctions to ensure compliance; training program (including schedule) for MS4 site inspection staff in the identification of appropriate construction best management practices; procedures for periodic inspection of qualifying construction sites, including priority construction sites (those draining to Weeks Bay) at a minimum frequency of once per month for the priority construction sites; procedures outlined in the SWMPP to notify ADEM of non-compliant construction sites, including those without NPDES permits; procedures for site plan reviews outlined in the SWMPP; copies or links to regulatory ordinances; documentation of all inspections, complaints and enforcement actions taken; list of all active construction sites in the MS4 area. More details on these requirements can be found in the general permit.

- **Responsible Persons:** Planning Department; Building Department

- **Rationale Statement:**

The City of Fairhope has an extensive Construction Site Stormwater Runoff Control program (which includes land disturbance ordinances, project review and BMP inspections). The City of Fairhope does not rely entirely on ADEM for enforcement. The City of Fairhope recognizes ADEM’s “priority construction area” (those draining to Weeks Bay), and conducts (at minimum) monthly inspections on construction sites within this area, as well as initial and follow up BMP inspections on all permitted land disturbances. In addition to (5) building inspectors and the Planning and Zoning Dept. Code Enforcement Officer, a City Planner and a Gas Dept. employee acquired/recertified QCI certification in 2017. The City of Fairhope currently has (7) QCI certified personnel on staff. In 2017, the City of Fairhope amended the Erosion and Sediment Control ordinance to include greater stabilization requirement (and reduce exposed areas).

- **BMPs used for Construction Site Stormwater Runoff Control**
 1. BMP#1: Design Review
 2. BMP#2: BMP Inspections
 3. BMP#3: Procedures for non-compliant sites (code enforcement)—
Standard Operation Procedures (SOP)
 4. BMP#4: City ordinances
 5. BMP#5: Educational material available in Building Dept.



Planning Department / Building Department
Non-compliant Construction Site Protocol
Standard Operating Procedures (SOP)

Background and Introduction

As per the City of Fairhope NPDES Permit # ALR040040, the City is required to have written protocol for ADEM notification of non-complaint sites as required in Part III B.4 (b)(v) of the permit: "Procedures to notify ADEM of non-compliant construction sites discovered during periodic inspections. The notification must provide, at a minimum, the specific location of the construction project, the name and contact information from the owner or operator, and a summary of the site deficiencies."

General Concepts

The City of Fairhope is authorized via Code of Ordinance 1398, "Erosion and Sediment Control" to issue Stop Work Orders, Municipal Offense Tickets/Court Summons, suspend construction /building inspections, dispatch City Street Sweeper for minimum charge and/or issue Notice of Violations to violators of this ordinance. The Erosion and Sediment Control Ordinance #1398 is enforced by the City of Fairhope Planning Department (Code Enforcement Officer) and the Building Department (Building Inspectors and Building Official). The Planning Department Code Enforcement Officer handles the bulk of the enforcement. The Planning Director must authorize issuance of a Municipal Offense Ticket (MOT) or Court Summons.

Enforcement

Where a construction site is found to be in violation of the City of Fairhope Erosion and Sediment Control Ordinance, the enforcement officer will elect to issue one or more of the following, depending on the severity of the violation:

1. Notice of Violation (48 hour notice)-written, verbal, or email
2. Stop Work Order (on all activity except that which is necessary to stabilize the site and install appropriate BMPs)
3. Suspend construction / building inspections until resolved.
4. Dispatch City Street Sweeper for a minimum \$300 charge. Certificate of Occupancy not issued until this is paid.
5. Issue a MOT or Court Summons (with approval of the Planning Director)

Environmental Agency Notification

When a construction site or other non-compliant site has been found to have impacted critical areas such as wetlands and bodies of water, the City will notify the appropriate agencies within 48 hours (written, email or verbal) of the identified non-compliance issues.

Documentation

All observations and actions will be documented in a report which will be tracked in the Planning Department Code Enforcement Officer's database and reported to ADEM in the City's Annual MS4 Phase II Report.

MINIMUM CONTROL MEASURE # 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL, CONT.

- **BMP # 1: Design Review:** In the 2017 reporting period, according to the Subdivision Case Index files, the City of Fairhope issued approval (through design review and Planning Commission) for ten (10) major (5+ lot) subdivisions (or new phases of existing major subdivisions), four (4) minor subdivisions and two (2) multi-occupancy project for construction within the MS4 area (City limits). Six (6) of these “major” subdivisions are within the priority construction area* of Cowpen Creek (designation by ADEM), draining ultimately to Weeks Bay.
- Subdivisions (or new phases) and Multi-Occupancy Projects accepted for development in the 2017 program period are listed below:

MAJOR:

- a. Fairfield Unit VI Lot 19 (Cowpen Creek)*
- b. Old Battles Village Phase 2 (Point Clear Creek)
- c. Old Battles Village Phase 3 (Point Clear Creek)
- d. Van Antwerp Park (Volanta Gully)
- e. Battles Trace Phase 4 (Point Clear Creek)
- f. Battles Trace Phase 5 (Point Clear Creek)
- g. Fox Hollow Phase 1 (Cowpen Creek)*
- h. Fox Hollow Phase 2 (Cowpen Creek)*
- i. Silverleaf at Firethorne Phase 2 (Cowpen Creek)*
- j. Greenbriar at Firethorne Phase 3 (Cowpen Creek)*

MINOR:

- a. Kendrick Place (Stack Gully)
- b. Montrose Preserve (Rock Creek)
- c. Kirkman Lane Subdivision (Stack Gully)
- d. Lyons Subdivision (Cowpen Creek)*

MULTI-OCCUPANCY:

- a. Bancroft & Pine Street Mixed Use (Big Mouth Gully)
- b. The Retreat at Fairhope Village (Fly Creek)

5.0 Construction Site Stormwater Runoff Control

The City of Fairhope Planning Department design review (and pre-construction meeting) process includes:

- a. Preliminary Plats for Subdivision
- b. Pre-construction meeting – on site with engineer of record
- c. Final Plats for Subdivision
- d. Multi-occupancy projects
- e. Zoning Applications
- f. Site Plans, if they meet the following qualifications
 - Has a gross floor area of 10,000sf or greater; or,
 - More that 30% of the lot (excluding the building) is impervious; or
 - All applications for zoning map amendments to any of the Village Districts
 - All mixed-use projects electing to build to 35 feet high with 33% residential.

All preliminary and final subdivision submittals require a public hearing through the Planning Commission. Notification requirements are as required by State law and the City of Fairhope Subdivision Regulations, and also via Subdivision POA contact list (email). The City of Fairhope Building Department coordinates plan reviews of residential and commercial submittals for permit issuance.

Staff Review Procedures for Stormwater:

All planning submittals are reviewed for compliance with the City's Zoning Ordinance and/or Subdivision regulations, including municipal stormwater drainage requirements. When applications are received, a monthly design review meeting is scheduled. Department supervisors attend the meeting and provide their review comments to the application. The City of Fairhope Public Works and Building Departments conduct an internal review to see if the application makes sense from a municipal building code and maintenance standpoint. The Code Enforcement officer reviews the application for BMP compliance of the Erosion and Sediment Control Ordinance. All City of Fairhope design review comments are incorporated into a Planning Department comment letter sent to the applicant. The applicant makes any necessary corrections to the submittal and provides a response letter, along with revised plans, back to the City of Fairhope Planning Staff. This is also the time the applicant can submit any rebuttal to staff's comments, if they disagree with staff's interpretation. The City of Fairhope Planning Staff prepares a staff report on each application to be heard by the City of Fairhope Planning Commission at the monthly Planning Commission meetings.

Ultimately, responsibility for stormwater design rests with the applicant's registered professional design engineer. However, the City of Fairhope Public Works Director, a professional engineer, reviews submitted drainage plans.

Pre-Construction meetings are held with the applicant after the Preliminary Plat approval and before the issuance of a land disturbance permit. During the pre-construction meetings, City staff meets (typically on-site) with the applicant's engineer of record to address specific issues such as wetland buffer protection, on-site erosion controls, and drainage concerns.

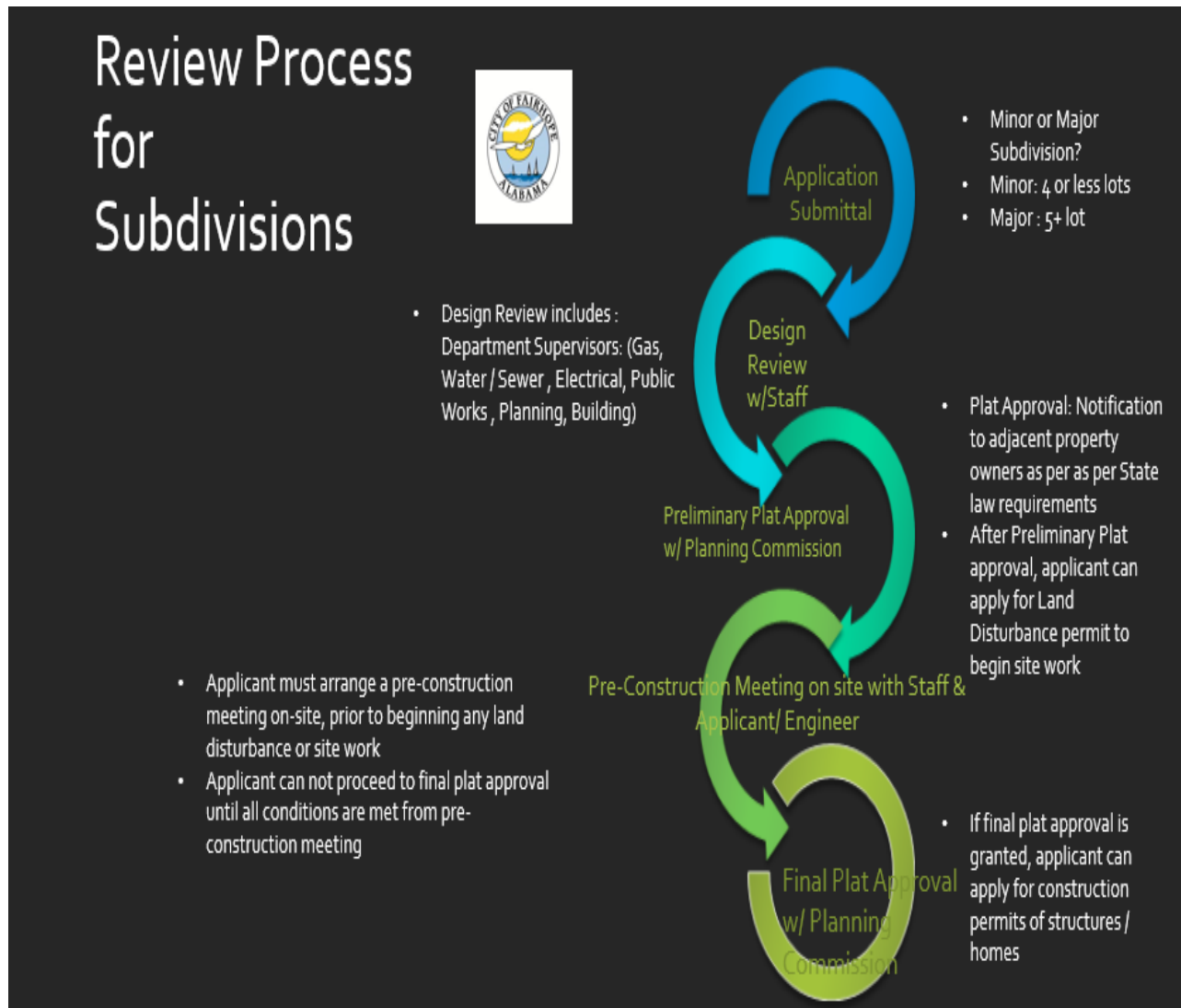
5.0 Construction Site Stormwater Runoff Control



Pictured: Pre-construction meeting in March 2018 for The Retreat at Fairhope Village

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

Multi-Occupancy reviews are conducted on all projects with three occupied units or more, within the City of Fairhope Planning Jurisdiction. A multi-occupancy project is processed as a "multi-occupancy" subdivision request, but staff's main review focus includes traffic, drainage, setbacks and height. These applications include simultaneous preliminary and final plan approval of the multi-occupancy.



In the 2017 program period, Planning and/or Building Department staff reviewed: *(MS4 area/ City limits only unless otherwise noted)*

- Approximately 330 single family residential sites*
- Approximately 140 “other” structures, including multi-family, commercial and detached buildings*
- Land disturbances/Site Work: Approximately 260 *
- Multi-occupancy: 2**
- Twenty-one (21) minor/major subdivisions: 14 were approved; seven were either tabled, withdrawn or denied. **
- Three (3) Site plan reviews***
- (6) Utility Reviews - *Source: Planning Commission agendas*

**Source: Building Department, Permits Issued Analysis Report, 3/12/2018; City limits and Permitting jurisdiction*

***Source: Access Subdivision Case Index (City Limits only entries)*

****Source: Access Site Plan Review Index (City Limits)*

CONSTRUCTION SITE STORMWATER RUNOFF CONTROL, CONT.

At time of permit issuance, permittees are given a copy of the *BMP Minimum Requirements* (a one page document created in-house to give builders a quick reference tool for BMP requirements). The *Field Guide for Erosion and Sediment Control on Construction sites in Alabama* is also available upon request.

BMP # 2: BMP Inspections: City of Fairhope Planning Department employees a full time Code Enforcement Officer who conducts BMP inspections, as well as other code enforcement inspections. The initial BMP inspection is performed prior to other construction inspections. The Building Inspectors assist with BMP inspections by ensuring compliance with each construction inspection. The Building Inspectors usually perform the closure BMP inspection as part of the final inspection on the site. Certificate of occupancy is not issued unless site is stable and compliant. The City of Fairhope Erosion and Sediment Control ordinance is strictly enforced. This ordinance was amended in 2017 to include:

- Stabilization requirement for silviculture activities
- Third party review costs are now stated to be paid for by applicant
- Restriction on clearing activity on sites: 30' maximum clearing for s/f residential; 40' past curb for right of way and utility work; 50' for other sites
- Option for City to impose additional requirements on sites with critical slopes (3:1 or greater) and/or sites adjacent to critical areas.
- Individual BMP site plan requirements for multi-occupancy project units (each unit must have BMPs in addition to perimeter controls for the complete site)
- Additional BMP requirement for "development" sites including multi-occupancy projects: roads must be paved or fully stabilized with aggregate during land disturbance activity -- prior to construction permitting.
- Option for applicant to install rip rap or gabion stone instead of vegetation in open channels (If professional engineer prescribes it).
- Requirement of applicant to submit inspection reports (such as monthly and rain event QCI reports) to the City, upon request.

It is successful at minimizing sedimentation and erosion to the maximum extent practicable. However maximum fines are \$500 per incident so a greater arm of enforcement commonly used is a Stop Work Order and declined construction inspections. Construction sites with high impact potential and subdivisions under construction are inspected frequently. Construction sites with high impact potential include multi-family, non-residential, those near critical areas or those disturbing more than an acre. Other single family home construction sites are inspected initially and with follow up inspections to ensure continued compliance. Standard Operating Procedures (SOP) for non-compliant sites were developed in 2014 and are being used for guidance in 2017. According to the Waste Water Treatment Plant, Fairhope received 86" of rain in the reporting period. Significant rain events (those greater than .75" in a 24-hour period, ADEMs standard for rain event inspections) trigger random inspections on subdivisions and high impact potential

5.0 Construction Site Stormwater Runoff Control

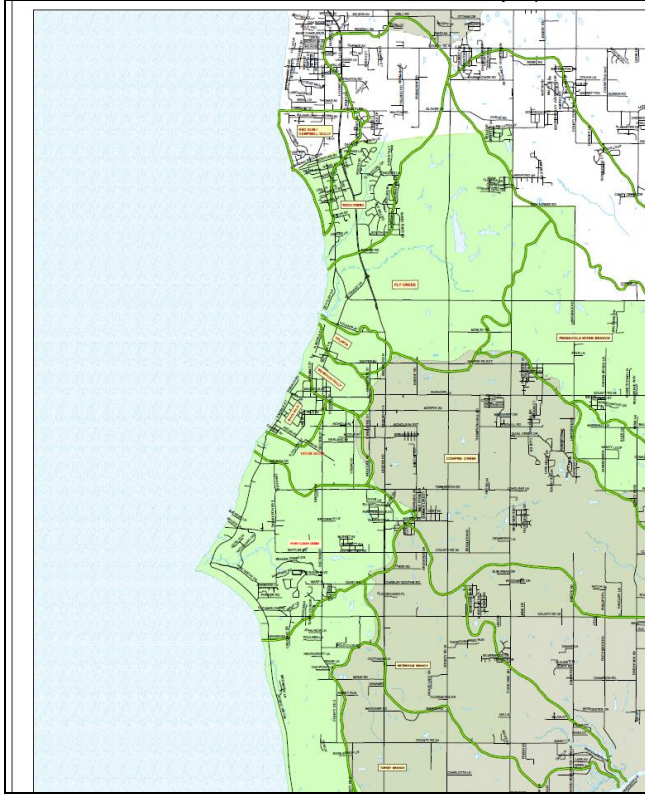
sites under constructions. In the 2017 reporting period, there were twenty-nine (29) significant rain events reported by the City of Fairhope Waste Water Treatment Plant on North Church Street. Eight (8) of those were greater than 3" in 24 hours, including the Hurricane Nate event October 7th. Sites with BMP maintenance issues are issued verbal or written Notice of Violations.


The City of Fairhope Code Enforcement Officer conducted "priority construction area" (drains to Weeks Bay) BMP inspections monthly, as per ADEM's requirement, in twenty (20) subdivisions or newly developed areas (Cowpen Creek watershed):

- Airport Runway Project
- Fairfield
- Firethorne
- Fox Hollow
- Hawthorne Glenn
- Nature's Trail
- Quail Creek
- Saddlewood
- Sedgefield
- Soccer Field (City)
- Song Grove
- Stone Creek
- Stone Creek Villas
- Summer Lake
- Woodlawn
- Medical Park on Hwy. 44
- Colony Park
- ABC Store Baldwin Square
- Gas Station @ CR 13 & Fairhope Avenue
- Airport Runway Project

CONSTRUCTION SITE STORMWATER RUNOFF CONTROL, CONT.

Rough outline of Fairhope's Priority Construction Area (drains to Weeks Bay) in gray. Not all of this area is in the City of Fairhope MS4 Jurisdiction:



	City of Fairhope www.cofairhope.com	
Printed by Kim Burmeister		INSPECTION FIELD SHEET
		01/14/16 12:48:19
INSPECTION: 11925	BMP	PERMIT: STATUS: APPLICATION: 1501669 ASSIGNED TO: ICC RESIDE
LOC: 623 CAROLINA COURT FAIRHOPE		
PROPERTY ID: 356313 LOT/SUBDIV: 13		
VILLAS AT POINT CLEAR PUD		
OWNER: 		
CONTRACTOR: _____		
REQUEST BY: _____		
PROJ DESC: SF RES BUILDING INSPECTOR SIGNATURE ELECTRICAL INSPECTOR SIGNATUR FINISHED FLOOR ELEVATION HOOD SYSTEM FLOOD ZONE FLOOD MAP PANEL		
		X 01003C0756L
WORK ORDER:		
INSPECTOR: KWB		
REQUESTED: 01/18/16		RESULT: APPROVED
SCHEDULED: 01/18/16		PRIORITY:
UNPAID FEES: .00		COMPLETED: 01/13/16 Date Time
MILEAGE: .00		TIME: TRAVEL ONSITE
COMMENTS: CONSTRUCTION ENTRANCE AND SILT FENCE ARE INSTALLED Created from inspection 9711 on 01/12/2016 by kim		

Example of BMP inspection report

CONSTRUCTION SITE STORMWATER RUNOFF CONTROL, CONT.

BMP inspections include:

- a. Initial
- b. Phasing (if applicable)
- c. Closure (certificate of occupancy is not issued unless site is stable)
- d. Priority construction area—monthly

In the 2017 reporting period, Code Enforcement (in MS4 area):

- a. Conducted over 475 BMP inspections (initial, follow up, priority construction area)
- b. Issued over 275 Notice of Violations
- c. Issued 15 stop work orders
- d. Issued five (5) street sweeper charge @ \$300
- e. On average, 2 construction inspections are withheld monthly for BMP failures or site deficiencies

BMP # 3: Procedures for non-compliant sites (Code Enforcement), as per Erosion and Sediment Control Ordinance:

- a. Notice of Violation (written or verbal)
- b. Withheld Construction Inspections
- c. Stop Work Orders
- d. Authorize Street Sweeper at \$300 minimum charge
- e. Municipal Offense Ticket
- f. ADEM notification if water quality impact has occurred
- g. Standard Operating Procedures (SOP)

BMP # 4: Municipal ordinances utilized for erosion, sediment and waste control on construction sites:

- a. Erosion and Sediment Control (#1398 and #1603) Ordinance 1603 is an amendment/addition to #1398, added in 2017
- b. Red Soil & Clay Ordinance (#1423)
- c. Construction Site Waste (#958)

BMP # 5: Educational Material available to contractors/developers (Building Department):

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

➤ **Construction Site Stormwater Runoff Control Measurable Goals Recap For 2017:**

5.0 Construction Site Stormwater Runoff Control

1. QCI Recertification - Building Inspectors (3) Acquired QCI Recertification

Status: Complete

Comments: QCI# 65045-Renewed Jan. 2018; Expires 10/24/2018
QCI#72718-Renewed Sept. 2017; Expires 09/23/2018
QCI#68815-Renewed March 2018; expires 3/9/2019

2. QCI Recertification – Planning Department (1) to acquire QCI Recertification

Status: Complete

Comments: Code Enforcement Officer recertified through the QCI program QCI# 25712; Renewed Sept. 2018; Expires 10/18

3. QCI Recertification – New Building Inspector (Taylor) to obtain QCI certification

Status: Complete

Comments: QCI#76249-Renewed 3/29/2018; additional building inspector
Obtained QCI certification: # T5330; expires 8/17/2018

Measurable Goals For 2018:

1. QCI Re-certification for Building Inspectors (5)

Responsible Department: Building Department

Goal: Recertify QCI certifications for (5) Building Inspectors

Due: March 31, 2019

2. QCI Re-certification for Code Enforcement Officer

Responsible Department: Planning Department

Goal: Recertify QCI certification for Code Enforcement Officer

Due: March 31, 2019

6.0 MINIMUM CONTROL MEASURE # 4: POST CONSTRUCTION STORMWATER MANAGEMENT

- **Requirement:** Develop/revise, implement and enforce a program to address stormwater run-off from qualifying new development and redevelopment projects, to the maximum extent practicable. This program shall ensure that controls are in place to prevent or minimize water quality impacts. The City of Fairhope shall have procedures, outlined in the SWMPP, for site plan review and the approval process when changes to post-construction controls are required; outline procedures in the SWMPP to demonstrate and document that post-construction stormwater measures have been installed per design specifications, which includes enforceable procedures for bring non-compliant projects into compliance. The City of Fairhope must develop and implement strategies which may include a combination of structural and/or non-structural BMPs designed to ensure, to the maximum extent practicable, that the volume and velocity of pre-construction stormwater run-off is not significantly exceeded, using a design rainfall event with an intensity up to that of a 2 year-24 hour storm event for the basis; develop and use ordinances or other regulatory mechanisms to address post-construction run-off from qualifying new development/redevelopment projects; require long-term operation and maintenance of BMPs; perform or require the performance of post-construction inspections, at a minimum once per year, to confirm post-construction BMPs are functioning as designed. The City of Fairhope shall include an inspection schedule, to include inspection frequency, within the SWMPP; maintain or require the developer/owner/operator to keep records of post construction inspections, maintenance activities and make them available to ADEM upon request and require corrective actions to poorly functioning or inadequately maintained post-construction BMPs; 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 install of green infrastructure and low impact development techniques. More details on these requirements can be found in the general permit.
- **Responsible Persons:** Planning Department; Building Department; Public Works Department; Director of Operations
- **Rationale Statement:** The Planning Department works closely with the Fairhope Planning Commission (which meets monthly) and the Fairhope Zoning Board of Adjustments and Appeals (which also meets monthly, if there are cases to be heard). These are public meetings. Both of these committees are appointed by the Mayor and Council, and work with the Planning Department with design and review procedures, as set forth in the Zoning Ordinance and Subdivision Regulations. The Subdivision Regulations include a 3 year stormwater inspection report requirement (Section F) and a long term stormwater plan (Operation and Maintenance Plan, or O & M plan). An O&M Plan is submitted with every final subdivision plat which requires stormwater facilities. Furthermore, the Planning Department Code Enforcement Officer addresses runoff issues from all sites (regardless of size) within the City of Fairhope (including post construction residential,

6.0 Post Construction Stormwater Management

commercial and right of way areas). These issues are tracked via a monthly Notice of Violation log. This log tracks complaints, follow up, and corrective action taken.

- **Post Construction Stormwater Facility Complaints and Inspections:** In 2017, the Planning Department responded to four (4) post construction stormwater facility complaints. Four (4) letters and/or emails were sent out (to subdivision POAs or property owners) requesting assessment of potentially failing stormwater facilities (Point Clear Creek, Fly Creek, and Cowpen Creek Watersheds) in the 2017 period. A new measurable goal has now been added to ensure compliance with ADEM’s requirement for “Post Construction BMP inspections” annually, (over and above the O&M 3 year requirement). As of December 2017, there are seventeen (17) facilities which will be inspected annually. The list for post construction facilities installed after 2013 will be updated annually.

City of Fairhope				
Post Construction BMPs 2013 – to date				
*Subdivision ponds / storm water facilities				
2017 Inspection Sheet: Due by: December 31, 2017 (Planning Dept. or Public Works)				
Subdivision	PIN# / Watershed	Subdivision Case #	Inspected by / Date	Corrective action needed** y/n
Saddlewood	353010 (Cowpen Creek)	SD 14.01	KB 1/11/18	Yes
Woodlawn Phase 2	364392 (Cowpen Creek)	SD 15.30	KB 1/11/18	No *Stilling basin holding water – reported to RJ
Woodlawn Phase 3			2/13/2017*	Letter on file
Villas @ Point Clear	356308 (Point Clear Court)	SD 14.05	KB 11/9/17	No
Stone Creek Villas Pond 1	360370 (Cowpen Creek)	SD 15.07	8/28/2017*	Letter on file
Stone Creek Villas Pond 2	360379	SD 15.07	8/28/2017*	Letter on file
Azalea @ the Colony	369302 (Cowpen Creek)	SD 16.20	KB 11/17/17	No
Firethorne (Narrowleaf)	362566 (Cowpen Creek)	SD 15.21	KB 1/11/18	*Under reconstruction for new phase
Firethorne (Onyx & Fortune Dr.)	362595 (Cowpen Creek)	SD 15.21	KB 1/11/18	No
Firethorne Phase 3		SD 16.26	4/9/2017*	Letter on file
Fox Hollow			5/15/2017*	Letter on file
Pointe Place II	366790 (Point Clear Creek)	SD 15.13	KB 11/9/17	No
Nature's Trail	357640 (Cowpen Creek)	SD 14.16		
Old Battles Village Phase 2			2/22/2017*	Letter on file
South Town Pointe			KB 1/11/18	No
Soccer Field / Manley Rd.			KB 1/11/18	*Scouring on embankment reported to RJ
Airport Pond off CR 13			7/10/2017*	No

Letter from Engineer of Record on file stating pond is operating as designed*If Corrective Action was needed, see check list for specific information

- **Low Impact Design:** In 2015, the City of Fairhope adopted an LID provision in the Zoning Ordinance, as well as LID language in the Subdivision Regulations. In the 2017 program, the LID regulations in the Subdivision Regulations came under review for potential amendments. However as of March 31, 2017, no changes have been made:
 - LID: Subdivision Regulations: Adopted July 6, 2015
www.cofairhope.com/home/showdocument?id=11034
 - LID: Zoning Ordinance Amendment: Adopted October 12, 2015
www.cofairhope.com/home/showdocument?id=11036
- **BMPs for Post Construction Stormwater Management**
 1. Subdivision Regulations
 - a. Stormwater Standards (Article V, Section F)
 - b. Stormwater Facility Inspection Requirement (Article V, Section F) “O&M”: Operations and Maintenance plan

6.0 Post Construction Stormwater Management

- c. Flood Control Structures (definition)
- d. LID standards (Article V, Section F)
2. Zoning Ordinance
 - a. Stormwater Management (Article IV, Section F)
 - b. Pervious Paving (Article IV, Section F)
 - c. LID (Article IV, Section F-Ordinance 1550)
3. Pervious Paving in City projects, where applicable (Police Department, City parks, Library, etc.)
4. Stormwater Projects
5. Rain Barrel Workshop, annually, for the community
6. Creek / Shoreline Assessment by kayak
7. Standard Courtesy Letter for Property Owners of non-compliant stormwater facilities

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

- a. **Stormwater Standards:**www.cofairhope.com/departments/planning-and-building/publications-and-forms
- b. **Stormwater Facility Inspection Requirement:**

As per the Operation and Maintenance (O & M) plan within the Subdivision Regulations, the City of Fairhope Planning Department notifies property owners in regard to the three year stormwater inspection requirement for respective stormwater facilities. This requirement is for subdivision stormwater facilities, installed, effective in 2007. For more information, refer to City of Fairhope Subdivision Regulations, Article V, Section F, 3.(a)(3). In the 2017 reporting period, the Planning Department received six (6) stormwater “Operating as designed” statements from engineers on stormwater facilities as part of the O&M 3 year requirement:

 1. Watershed (Point Clear Creek) December 2017
 2. Palladian (Cowpen Creek) December 2017
 3. Country Place (Cowpen Creek) December 2017
 4. North Village @ Stone Creek (Cowpen Creek Watershed) Feb. 2018
 5. Battles Trace Phase 1 (Point Clear Creek) Feb. 2018
 6. The Shoppes at Fairhope Village (Fly Creek) March 2018
- c. **Flood Control Structures** definition: *“Those physical structural works for which funds have been authorized, appropriated and expended and which have been constructed specifically to modify flooding in order to reduce the extent of areas within the city subject to a “special flood hazard” and water depths associated with flooding. Flood control structures typically include: hurricane tidal barriers, dam, reservoirs, levees or dikes. Typically flood control structures are located perpendicular to a stream and within the stream buffer.”*

d. ***LID Standards:***

The use of the below LID techniques is required and is to be determined from an entire site development perspective by the engineer of record for the project. The design and integration of the below LID techniques shall promote the health, safety, and general welfare of the community and shall be designed to work in a complimentary fashion with the drainage plan for the proposed development. The LID techniques are required within the municipal limits of the City of Fairhope and the planning jurisdiction of the City of Fairhope based on the rain events experienced in the area, geology, slopes, and other natural features. The design engineer is encouraged to submit additional LID based techniques to be utilized in the proposed development.

At a minimum the use of 10 (ten) of the below LID techniques is required in any and all proposed developments where the stormwater regulations apply. The design engineer shall rely on verifiable professional engineering judgment on which LID techniques to deploy in each proposed development based on the particular characteristics of the subject property. A proposed development may use more than 10 (ten) LID techniques as appropriate.

If a project, due to the natural characteristics of the property, cannot successfully implement 10 (ten) of the LID techniques below the applicant may submit a waiver request for consideration. The waiver request shall be submitted at the time of the application and provide verifiable engineering documentation that 10 (ten) LID techniques cannot be used. The City shall have the right, but not the obligation, to engage such third party engineers, consultants and other professionals as necessary and appropriate to advise the City as to whether a particular application complies with and is otherwise in concert with this subsection 10 (a "Third Party Professional"). In the event the City engages a Third Party Professional in connection with a particular application, the City will forward all application materials to the Third Party Professional along with a request for a cost estimate from the Third Party Professional for his/her role in the review of such application. Upon presentation by the Third Party Professional of a cost estimate to the City, the City shall provide same to the applicant, and the applicant shall deposit with the City a cash sum equal in amount to the cost estimate of the Third Party Professional (the "Cash Deposit"). Upon completion of all work by the Third Party Professional relative to such application and payment by the City of all fees and expenses of the Third Party Professional from the Cash Deposit, if any portion of the Cash Deposit remains, the City shall refund it to the applicant. If the Cash Deposit is insufficient to pay the fees and costs of the Third Party Professional, the applicant shall immediately remit to the City such funds as are necessary to make up any shortfall.

The Third Party Professional shall submit a finding report to the City Planning Department. The City Planning Department shall forward a copy of the finding to the applicant or the applicant's agent. The City Planning Department shall include, as

6.0 Post Construction Stormwater Management

part of the application materials to the Planning Commission a recommendation regarding the waiver.

The Planning Commission shall consider the waiver, the applicant's documentation, and Third Part Professional finding and City Planning Department recommendation and make a final determination as to the waiver request.

The following LID techniques are available for use by applicants given the particular circumstances and characteristics of the proposed subdivision:

- (1.) Wet Basins: The City finds the potential benefits of wet basins are, among other items, allowing sedimentation to fall out stormwater, attenuating flows, assisting in evapotranspiration, and improving the stormwater quality.

Special design considerations are: groundwater elevations, large surface areas are encouraged, special attention should be given in pervious soil, surface area of the basin should take into account nutrient loading from lawns for example in order to treat and improve stormwater quality to the maximum extent possible, ensuring that an adequate base flow is provided to maintain water levels, they are not recommended to be constructed in an in-line facility, utilize low slopes, the use of forbays are recommended, upstream and downstream areas shall be considered in the design in accordance with Fairhope standards.

Recommended characteristics are: The approach slopes should be 4:1 or less around the perimeter, side slopes 3:1 or less (below the water level, beyond the safety bench), safety bench just below water elevation (4' wide, 6"-12" deep), energy is dissipated prior to entering the basin, can be excavated below the ground surface.

- (2.) Rain Gardens: The City finds the potential benefits of rain gardens are, among other items, small scale flow attenuation, infiltration, limited evapotranspiration, allowing sediments to be trapped, and water quality treatment.

Special design considerations are: Typically smaller areas and drainage areas are used for rain garden design, special attention should be given in pervious soils, recommended for use in hydrologic soil groups A and B, not recommended in high swell soils.

Recommended characteristics are: Small scale and frequent use in drainage areas, the choice of landscaping materials, soil mix, and other characteristics are crucial to the success of a rain garden. Rain gardens can be highly visible and utilized as a visual amenity in a proposed development.

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- (3.) Permeable Pavement Systems: The City finds the potential benefits of permeable pavement systems are, among other items, flow attenuation, infiltration, and filtration of stormwater. There are many products and strategies that can be utilized and the City is open to the use of varied products in accordance with manufacture recommendations. Consultation with the city prior to design of the product to be utilized is suggested.

Special design consideration are: Use in areas with hydrologic soil groups A and B, special attention should be given in pervious conditions, not recommended in areas with high swell soils, ground water tables should not impact the ability of water to infiltrate, the technique works best in low slopes.

- (4.) Sand Filter: The City finds that the potential benefits of sand filters are, among other items, flow attenuation, infiltration, reducing sedimentation, and providing filtration of stormwater.

Special design considerations are: Best used in small drainage areas, special attention should be given in pervious soils, recommended use in areas with soils with good permeability in hydrological soil groups A and B, not recommended in high swell soils.

- (5.) Grass Swales: The City finds that the potential benefits of grass swales are, among other items, in straining stormwater, providing limited quality treatments, while providing some moderate flow attenuation.

Special design considerations are: Typically work best in smaller drainage areas where volumes are reduced, special consideration should be given in pervious soils, not recommended with high swell soils, should have low slopes, adjacent areas and layout should be considered in the design.

Suggested characteristics where topography, soils, and slope permit vegetated open channels and spaces should be considered a significant or a primary means of stormwater conveyance.

- (6.) Grass Buffers: The City finds that the potential benefits of grass buffers are, among other items, in straining stormwater, providing limited quality treatments, while providing some moderate flow attenuation.

Special design considerations are: Typically work best in smaller drainage areas where volumes are reduced, special consideration should be given in pervious soils, not recommended with high swell soils, should have low slopes, adjacent areas and layout should be considered in the design.

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Suggested characteristics where topography, soils, and slope permit vegetated open channels and spaces should be considered a significant or a primary means of stormwater conveyance.

- (7.) Constructed wetland channels or wetlands: The City finds that the potential benefits of constructed wetland channels or wetlands are, among other items, flow attenuation, buffering of flooding events, evapotranspiration, sedimentation, and treatment of stormwater quality.

Special design considerations are: Not recommended in high swell soils, low slope, forebay is recommended, primary benefit of pollutant removal, not volume reduction, adjacent areas should be considered in the design.

- (8.) Step Pool Stormwater Conveyance Structures: The City finds that a step pool stormwater conveyance structure may attenuate stormwater flows, provides evapotranspiration, reduce sediment transport, and water quality treatment.

Special design considerations are: Not recommended in high swell soils. Adjacent areas should be taken into consideration in order to ensure long term viability of step pool structures and adjacent erosion.

- (9.) In-line stormwater storage: The City finds that in-line storage may provide for attenuation and limits sedimentation.

Special design considerations are: Designed to be self-cleaning where possible or suitable clean out access is provided and designed into the system, designed to surcharge non-sensitive areas with no flooding in parking lots, structures, or other typically occupied spaces.

- (10.) Site design for habitat, wetland, and water body conservation: The City finds that site design that incorporates the natural features of the property can help to minimize erosion and reduce stress on natural water conveyance and attenuation systems by preserving a natural vegetated state of native plants, water courses, and flood prone areas.

Suggested characteristics are: The technique may be used in conjunction with the City's planned unit development or village subdivision processes to propose alternative street layouts and design so that impervious areas and other improvements are sited with due regard to the natural elements of the property.

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Special design considerations: To consider adjacent areas in the design since important natural features that utilize this LID technique often extend past property lines or the phases of proposed development.

- (11.) Restoration of Habitat or Wetlands and Water Bodies: The city finds that the restoration of habitat or wetland and water bodies can be productive to improve the environment by minimizing erosion and reducing stress on natural water conveyance and attenuation systems by preserving a natural vegetated state of native plants, water courses, and flood prone areas.

Suggested characteristics are: This technique may be used in conjunction with the City's planned unit development or village subdivision processes to propose alternative street layouts and design so that impervious areas and other improvements are sited with due regard to the natural elements of the property. Use only native plants in the development process and take special consideration to restore portions of the site to predevelopment native ecological communities, water bodies or wetlands with more than 10% of the development footprint.

Special design considerations: To consider adjacent areas in the design since important natural features that utilize this LID technique often extend past property lines or the phases of proposed development.

- (12.) Greenways: The City finds that greenways provide for beneficial use of LID for potentially active and passive recreation opportunities and wildlife corridors. This technique allows for the creative integration into a development proposal that is frequently linked with other natural or recreation systems that extend past the property lines of the proposed development.

Suggested characteristics: Typically greenways are easier to integrate into a development proposal on larger acreages. They are frequently utilized as linear parks and often include sensitive wetland areas, steep slopes, gullies or other natural land forms, creeks, and unique wildlife habitat for protected species.

- (13.) Restoring Channel Morphology and Natural Function: The City finds that restoring channel morphology and natural function provides for flow attenuation, infiltration, and reduces sedimentation.

Special considerations are: Typically works most effectively in larger development proposals where a substantial linear footage of channel can be restored. It is important to consider the upstream and downstream current and future characteristics so conversation of land use in accounted for in the design.

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- (14.) Bio-Retention: The City finds that bio-retention provides for flow attenuation, infiltration, limited evapotranspiration, reduced sedimentation, and stormwater quality treatment.

Suggested characteristics are: To be used as both a stormwater and aesthetic feature frequently throughout developments. Special attention should be given to plant and ground cover considerations given the volume and duration of the designed stormwater.

Special design considerations are: Typically work best in small drainage areas with frequent use and distribution, special attention is required in pervious soils and should be used in areas with high permeable soils (hydrologic soils groups A and B), not recommended in high swell soils.

- (15.) Level Spreader: The City finds that level spreaders can be an effective tool to evenly distribute flows and return volumes and velocity to a predevelopment distribution pattern. There are limited stormwater straining and water quality improvements.

Suggested characteristics are: Level spreaders are intended to work in a complimentary fashion with other LID techniques such as, but not limited to, sand filters and grass buffers.

Special design considerations are: Typically level spreaders are used downstream of an outfall and have a low slope with stabilized and vegetated buffers both up and downstream. They typically are installed a suitable distance from the property line (30'-35' is suggested) so that flow energy is dissipated, and predevelopment sheet flow characteristics are generated. Special consideration should be given in areas with highly erodible soils.

Should any section, paragraph, sentence, clause or phrase of this Resolution, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this ordinance be pre-empted by state or federal law or regulation, such decision or pre-exemption shall not affect the validity of the remaining portions of this ordinance or its application to other persons or circumstances.

BMP # 2: Zoning Ordinance: available on line for the public to view. Construction, development and re-development standards for stormwater are listed here.

a. Stormwater Management Standards:

www.cofairhope.com/departments/planning-and-building/publications-and-forms

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- b. **Pervious Paving:** For projects requiring more than 8 parking spaces, a 25% minimum pervious paving material requirement is written into the Zoning Ordinance (January 2012)
- c. **LID Component:** *This language was added in October 2015:*
Compact Car Parking Requirement:
Compact car parking spaces shall be a minimum of 30% of the required parking spaces and no more than a maximum of 40% of the required parking spaces. Compact car spaces shall be grouped together to the greatest extent possible. Compact car spaces shall be designated by paint at the entrance of the parking stall.

Parking Dimension and Size:

- 1) Standard parking lot dimensions
- 2) Compact car parking dimensions

	<u>90°angle</u>	<u>60°angle</u>	<u>45°angle</u>
width	8'	8'	8'
depth	15'	16.8'	16.5'

Low Impact Development (LID) Parking Requirements

Landscaping is required for all parking lots. The interior parking lot landscaping requirements shall use LID techniques and be designed by an Alabama licensed Professional Engineer and an Alabama licensed Landscape Architect or designer. The following LID techniques shall be used in the interior of all parking lots containing 12 or more parking spaces. The LID parking requirement landscape plan will be reviewed in accordance with the Tree Ordinance. Any landscaping plan submitted in accordance with this subsection shall include technique 5 below and at least one of the other following techniques:

- 1) First Flush Treatment: The LID landscaping design shall be sized appropriately to treat the first one inch of runoff into the receiving parking lot LID area.
- 2) Bio-retention.
- 3) Rain Garden.
- 4) Vegetated Swale.
- 5) Permeable Pavement Systems: Permeable pavement systems are a required LID technique. 100% of parking provided over and above the minimum parking requirements shall be permeable pavement systems. Typical systems are brick pavers, pervious asphalt, and pervious concrete. Other systems may be approved if the design engineer provides adequate documentation that demonstrates the proposed technique is equally or more effective than the typical permeable systems listed. Approval of a proposed technique is at the sole discretion of the City during the permitting process.
- 6) Tree and Ground Cover Plantings: When trees are required in a parking lot by the Tree Ordinance they shall be included and integrated into the LID design. Species shall be as approved by the City Horticulturist and must be suggested by the landscape architect or designer. There shall be no bare ground exposed and all ground cover proposed shall be integral to the success of LID techniques. All ground cover shall be as approved by the

6.0 Post Construction Stormwater Management

City Horticulturist and must be suggested by the landscape architect or designer.

Bioretention: This technique removes pollutants in stormwater runoff through adsorption, filtration, sedimentation, volatilization, ion exchange, and biological decomposition. A Bioretention Cell (BRC) is a depression in the landscape that captures and stores runoff for a short time, while providing habitat for native vegetation that is both flood and drought tolerant. BRCs are stormwater control measures (SCMs) that are similar to the homeowner practice, of installing rain gardens, with the exception that BRCs have an underlying specialized soil media and are designed to meet a desired stormwater quantity treatment storage volume. Peak runoff rates and runoff volumes can be reduced and groundwater can be recharged when bioretention is located in an area with the appropriate soil conditions to provide infiltration. Bioretention is normally designed for the water quality or “first flush” event, typically the first 1”-1.5” of rainfall, to treat stormwater pollutants.

Vegetated Swale: is a shallow, open-channel stabilized with grass or other herbaceous vegetation designed to filter pollutants and convey stormwater. Swales are applicable along roadsides, in parking lots, residential subdivisions, commercial developments, and are well suited to single-family residential and campus type developments. Water quality swales are designed to meet shear stress targets for the design storm, may be characterized as wet or dry swales, may contain amended soils to infiltrate stormwater runoff, and are generally planted with turf grass or other herbaceous vegetation.

First Flush: This is the given volume of water generated in the drainage area from the first 1” to 1.5” of rainfall.

Rain Garden: a shallow depression in a landscape that captures water and holds it for a short period of time to allow for infiltration, filtration of pollutants, habitat for native plants, and effective stormwater treatment for small-scale residential or commercial drainage areas. Rain gardens use native plants, mulch, and soil to clean up runoff.

BMP # 3: Pervious Paving material is used in City projects where applicable. Past projects include sidewalks at Boothe Road Extension, Fairhope Police Station, Bancroft Avenue, Volanta Avenue, Knoll Park, Quail Creek and Faulkner Community College Campus. In March of 2017, City of Fairhope removed one ton of asphalt on S. Section Street. This was replaced with gravel and permeable pavers (Lutheran Church project).

BMP # 4: Stormwater Projects: The City of Fairhope Public Works Department completes several stormwater projects annually. In 2017, Public Works completed eight (8) projects which included bioretention, weir installations, beach re-nourishment and new pipes/inlets. Watersheds worked in are Point Clear Creek, Stack Gully, Volanta Gully and Fly Creek. These projects are discussed in Section 2.4.

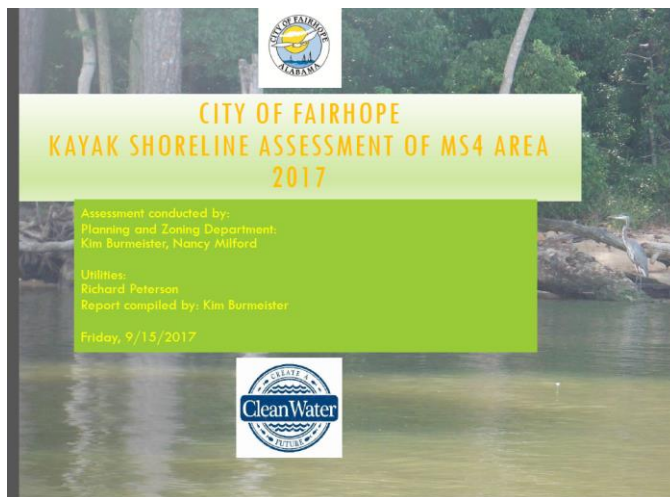
BMP # 5: Rain Barrel Workshop: The City of Fairhope, in conjunction with the Mobile Bay National Estuary Program and other municipalities, hosts or co-sponsors a rain barrel workshop annually. The workshop usually accommodates up to 24 people. The minimum

6.0 Post Construction Stormwater Management

charge to participants, collected by MBNEP, covers the cost of the materials used. Education focuses on how to capture and reuse rain on your property, and how this action reduces erosion of property, while providing a valuable resource. Each participant leaves with a completed and ready-to-use rain

Barrel. The City of Fairhope advertised for the City of Foley Rain Barrel event scheduled for April 22, 2017.

BMP # 6: Creek / Shoreline Assessment by Kayak: The Planning Department staff conducts creek or shoreline assessment (by kayak) of a priority area, annually. Target items are negative impacts of drainage, erosion and sedimentation (manmade or otherwise), and drain pipes dumping into the body of water (privately owned and city owned pipes/conveyance systems). Shoreline Assessment Report from September 2017 is below:



ASSESSMENT CRITERIA USED

Launch Site: End of Volanta access

Assessment from: Sea Cliff Drive to South Mobile Street @ Fig Street (Major Outfall # 5)

When: Friday, Sept. 15, 2017 @ 8:15 a.m. – 11:15 a.m.

Equipment used:

- (2) one-person kayaks
- (1) canoe
- Nikon camera

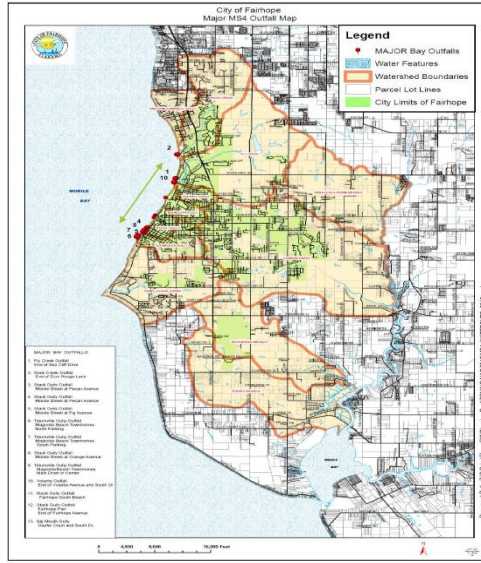
What did we look at? Mobile Bay bluffs along Sea Cliff Drive and North Mobile Street, Major outfalls # 3, 4, 5, 8, 11 and 12 (Stack Gully) and major outfall # 13 (Big Mouth Gully). These major bay outfalls were chosen for assessment because all outfalls (major and non-major) in Stack Gully and Big Mouth Gully are due for assessment in 2017. Non-major outfalls are located on land and will be assessed in October/November.

Why the kayak shoreline assessment? The kayak shoreline assessment is one of the City of Fairhope's annual measurable goals within the MS4 permit Storm Water Management Plan (under the Post Construction Storm Water Management minimum control measure). This goal allows us perspective of our shoreline areas from Mobile Bay. The bay is the receiving water for all storm water in Fairhope. Planning Department chooses which areas and/or outfalls to look at each year but according to our MS4 permit, at least 20% (and in some areas 25%) of all outfalls must be checked yearly. This shoreline assessment accomplished (7) of the roughly 200 outfall screenings that are scheduled for 2017.

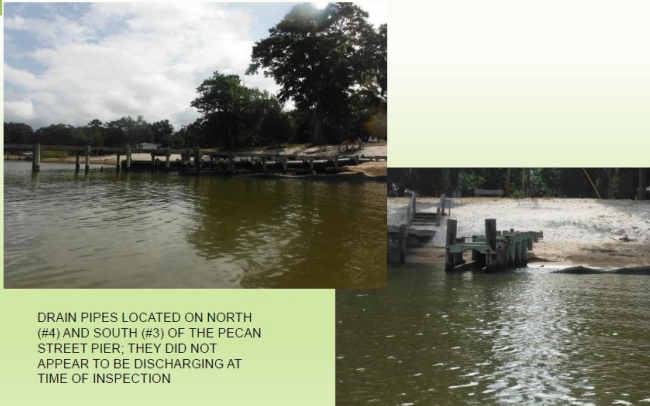


Launching at end of Volanta Avenue

We kayaked about 2 miles (from Sea Cliff Drive to Fig Street @ South Mobile Street)



STACK GULLY: MAJOR OUTFALL #3 & 4: MOBILE STREET @ PECAN STREET



DRAIN PIPES LOCATED ON NORTH (#4) AND SOUTH (#3) OF THE PECAN STREET PIER; THEY DID NOT APPEAR TO BE DISCHARGING AT TIME OF INSPECTION

STACK GULLY: MAJOR OUTFALL #5: SOUTH MOBILE AT FIG STREET



CONCRETE FLUME DISCHARGES TO THE BEACH ; DID NOT APPEAR TO BE DISCHARGING AT TIME OF INSPECTION; APPEARED TO BE BROKEN IN PLACES, REPORTED TO PUBLIC WORKS (BOSARGE) ON 9/19/2017

STACK GULLY: MAJOR OUTFALL #8: SOUTH MOBILE AT ORANGE STREET PIER



Drain pipe on North side of Orange Street pier did not appear to be discharging at time of inspection

STACK GULLY: MOBILE BAY MAJOR OUTFALL # 11 @ SOUTH BEACH PARK

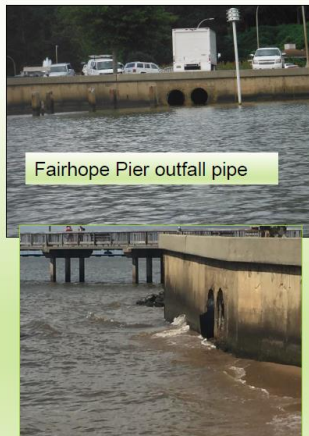
There is a large concrete discharge pipe at the south end of South Beach park. It is listed as #11 on the MS4 Major Outfall map. It did not appear to be discharging at time of inspection.



South Beach Park outfall

STACK GULLY: MOBILE BAY MAJOR OUTFALL #12 AT FAIRHOPE PIER

Two (2) large discharge pipes on the south side of Fairhope Pier are MS4 major outfall # 12. They did not appear to be discharging at time of inspection. We noticed that one of the pipes is protruding from the sea wall and is partially degraded. This has been reported to Public Works (Bosarge) on 9/19/2017.



BIG MOUTH GULLY: MOBILE BAY MAJOR OUTFALL #13

We looked at the Big Mouth Gully outfall area (tributary) at the end of Gayfer Court which is one of our MS4 Major Bay Outfalls (listed as #13 on our Major Bay outfall map). The tributary discharge water was cool and clear at time of inspection. The sewer man hole visible along the bank is an inactive sewer man hole according to Water and Sewer Supt. McCrory, 2016



Big Mouth Gully outfall @ Mobile Bay

BLUFF STABILIZATION ON SEA CLIFF DRIVE



Bamboo is being used for bluff stabilization (Sea Cliff Drive; address unknown)



905 Sea Cliff Drive, recent bluff stabilization project appeared to be holding up well

SEA CLIFF DRIVE



Drain pipe from residential yard: not subject to permitting per Building Official (Sea Cliff Drive, address unknown)



Erosion and undermining of embankment/trees, between two sea walls (Sea Cliff Drive, address unknown but possibly near 917 Sea Cliff Drive)

IN CONCLUSION:

We left @ 8:15 a.m. and got back to the launch site at 11:15 a.m.

We assessed about 2 miles of Mobile Bay to include:
MS4 Major Outfalls (7) total:

#3 South Mobile @ Pecan (pipe)

#4 South Mobile @ Pecan (pipe)

#5 South Mobile @ Fig (flume)

#8 S. Mobile @ Orange St (pipe)

#11 South Beach Park (pipe)

#12 Fairhope Pier (pipe)

#13 Gayfer Court (tributary) *note that a portion of this tributary was also assessed by foot from the shoreline up. Cool, clear water per Richard.

Sea Cliff Drive & North Mobile Street bluffs



We were able to verify that 7 of our major outfalls appear to be functioning as designed. Two were reported for further review (#5 and #8) to Public Works (PW maintains city drainage infrastructure).

Thoughts for next year: Use phone app which shows position on the water and relative street address: IT has suggested this app: "Where Am I? GPS Location & Address Finder". We'll use this next year.



BMP #7: Standard Courtesy Letter to Property Owners: In 2012, the Planning Department, in conjunction with the Public Works Department, developed a standard letter to be sent to property owners (including Property Owners Associations) of potentially non-compliant or failing stormwater facilities (detention ponds, etc.). This has proven to be an effective means of notifying property owners of downstream impacts, and potential liability issues, especially with subdivisions built prior to 2007 (which are exempt from the O & M plan requirement). The City (Planning Department / Public Works Dept.) sent out four courtesy letters (and/or emails) triggered by citizen complaints in 2017, plus 30 notification letters as a result of the outfall assessments in Cowpen Creek, Waterhole Branch, Volanta Gully and Point Clear Creek. The brochure "A Homeowner Guide to Stormwater Detention Pond Maintenance" is also attached to notification letter.

➤ Post Construction Stormwater Measurable Goals:

Measurable Goals – Recap For 2017:

1. Rain Barrel Workshop

Status: Complete (April 22, 2017)

Comments: City of Fairhope advertised for event in Foley, as co-sponsor

2. Creek/Shoreline Assessment by Kayak

Status: Complete (September 26, 2017)

6.0 Post Construction Stormwater Management

Comments: Planning Department staff (Planner and Code Enforcement Officer) conducted a kayak assessment of the City of Fairhope MS4 area along the Mobile Bay shoreline (about 2 miles) and also assessed (7) of the 13 major outfalls while we were on the water.

Measurable Goals For 2018:

1. Rain Barrel Workshop

Responsible Department: Planning Department

Goal: Facilitate community event by sponsoring, assisting with and/or advertising for an event: hands on workshop related to post-construction stormwater education (such as a Rain Barrel Workshop)

(Planning Director)

Due: December 2018

2. Creek/Shoreline Assessment by Kayak

Responsible Department: Planning Department

Goal: Conduct creek or shoreline assessment via kayak to look for pipes discharging into the creek, obstructions in the creek, and man made erosion along the creek banks

(Planning Director)

Due: December 2018

3. ADDED 4/11/2018

Post Construction BMP Inspection

Responsible Department: Planning Department / Public Works Dept.

Goal: Update 2013 Post Construction BMP inspection list and verify annual inspection of storm water facilities.

Due: December 2018

7.0 MINIMUM CONTROL MEASURE # 5: POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

- **Requirements:** Develop and implement an operations and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations; Using training materials that are available from EPA, the State, or other organizations, include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet building maintenance, new construction and land disturbances, and stormwater system maintenance.

- **Responsible Persons:** Planning Department; Building Department; Public Works Department; Golf Course; Recreation Department; Director of Operations; Gas Department; Water and Sewer Department; Electric Department; Police Department; Volunteer Fire Department; Mechanic Shop; City Hall; Fairhope Docks Manager

- **Rationale Statement:** The City of Fairhope has many departments within its own authority. City facilities include (and separate State or County permit number, if applicable):
 - Mechanic Shop (ADEM Permit # AL0000324764)
 - Waste Water Treatment Plant (ADEM Permit #AL0020842)
 - Golf Course (Quail Creek)
 - Recreation Department
 - Gas Department
 - Water and Sewer Department
 - Electric Department
 - Public Works Department
 - C & D Landfill (ADEM Permit # 02-07)
 - Transfer Station (Health Dept. Permit # 05-TS-002)
 - Recycle Center
 - Greenhouses (Nichols Avenue; City Warehouse)
 - Mosquito Control Operations: ADEM Reg. # ALG870037
 - Planning Department
 - Building Department
 - Greenhouse
 - Police Department
 - Volunteer Fire Department (4 fire stations)
 - City Hall / Civic Center
 - The Haven (Animal Shelter)
 - City Marinas (Fairhope Docks @ Sea Cliff Drive & Fairhope Pier)

7.0 Pollution Prevention / Good Housekeeping for Municipal Operations

POLLUTION PREVENTION / GOOD HOUSEKEEPING, CONTINUED:

All department supervisors are responsible for pollution prevention / good housekeeping in each respective department, and have been given assessment guidelines for their facility, regarding stormwater compliance. A Standard Operating Procedure (SOP) for municipal activities was created in 2016.

The City of Fairhope continues to use the “Create a Clean Water Future” campaign as an aid in our litter campaign. In March, Planning Department staff attended a Create a Clean Water Future meeting at the Mobile Bay NEP office to brain storm with other partners on expansion of the program. Media associated with this campaign (“Understanding your MS4 Program”) was used in the January 2017 Planning Commission meeting to familiarize residents and the Planning Commission on the municipal stormwater program. Create a Clean Water Future stickers are on many of the City fleet and supervisor vehicles.

The Code Enforcement Officer and the Environmental Officer monitor shop areas, to ensure compliance with the City of Fairhope IDDE program. The City of Fairhope provides garbage, trash and recycling pickup weekly (garbage twice weekly), and this aids in keeping our storm drains clean.

The City of Fairhope Mosquito Control program is a seasonal spray program using a Cedar Oil based spray dispensed road side from a City pick-up truck. The City of Fairhope Public Works Department sprays areas in the city limits weekly during mosquito season. The City of Fairhope Public Works Department maintains a “no spray” list for those residents who prefer not to have their respective right of way areas sprayed. In 2017, the City of Fairhope Public Works Department (mosquito control) gave away or applied about 300 larvicide tables as needed and upon request. Source control is encouraged.

The City of Fairhope owns two marina areas: Fairhope Docks at the end of Sea Cliff Drive on Fly Creek and the Fairhope Municipal Pier. The Fairhope Docks marina is now owned and operated by the City of Fairhope. The Fairhope Municipal Pier marina is leased, together with the building housing Shux restaurant, and this lessee manages the marina. Both facilities offer boat slips. Both areas have sewage pump out facilities available; however, the pump out at Fairhope Docks was not in operation in 2017 while under lease to Eastern Shore Marine. A new pump out system has been ordered and will be installed before the end of May. Fairhope Docks will be selling fuel by the end of April. Fairhope Docks is keeping Clean Marina guidelines in mind while undertaking necessary repairs and renovation work. It is a status the marina will actively seek. At this time there are no industrial or boat maintenance/repair activities listed for either marina. The City plans to lease out the boat yard facility at Fairhope Docks once the travel lift cell is repaired. The lessee will be responsible for getting ADEM permitting.

7.0 Pollution Prevention / Good Housekeeping for Municipal Operations



Picture courtesy of Google Earth

➤ **BMPs for compliance of pollution prevention / good housekeeping:**

1. BMP#1: Employee Meetings
2. BMP#2: Certified Pesticide Applicators
3. BMP#3: Waste Management Program (Garbage, Trash, Recycling, Household Hazardous Waste)
4. BMP#4: Street Sweeper
5. BMP#5: Project work by City Employees
6. BMP#6: *Field Guide for Erosion and Sediment Control on Construction Sites in Alabama*, by Alabama Soil and Water Conservation Committee and Partners
7. BMP#7: Dedicated Wash Racks for Vehicles
8. BMP #8: SOP for Municipal Activities

BMP # 1: Employee Meetings: Employee meetings are held throughout the year in the utility and Public Works department, and housekeeping items are commonly addressed.

BMP # 2: Certified Applicators: Pesticide, herbicide and fertilizer application is overseen by certified applicators, in the Public Works, Parks and Recreation and Golf Course. Three employees within the City of Fairhope are certified as pesticide applicators through the State of Alabama Department of Agriculture and Industries. This includes staff in Public Works, Parks and Recreation and at the city-owned golf course (Quail Creek). This specialized training ensures that pesticide, herbicide and fertilizer application on City property is done in accordance with manufacturer's recommendations in the most environmentally friendly method possible. Applicator license (3 year) certifications include:

- a. Public Works, Landscape Supervisor: #13571 Exp. 1/8/2019
- b. Golf Course Grounds Supervisor: #13550 Exp. 12/28/2018
- c. Parks & Recreation Director – #13268 Exp. 7/28/2019

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BMP # 3: Waste Management Program:

Garbage, Trash and Recycling Pickup: Recycling is picked up weekly, curbside for residents and commercial businesses. In FY 2017:

- a. 1,843 tons of recyclable materials (paper, cardboard, glass, plastic, metals and e-waste) which equivalates to a 17% recycling rate of materials out of the Fairhope waste stream. (Breakdown: Paper-770; single stream/mixed-597; Scraps and electronics-197; Glass 279)
- b. 8,228 tons of yard waste and other bulk trash was removed from City right of ways. This is a weekly service for Fairhope residents, contributing to keeping the storm drains clean. The City has a yard waste pile (at 555 South Section Street) for mulching, grinding or land reclamation efforts.
- c. 9,222 tons of garbage were removed from residential and commercial locations in Fairhope. This service is offered by the City at 2 times per week for residents, and up to five times per week for commercial businesses. Garbage is disposed of in Magnolia Springs landfill. There is a drop off site at the Public Works facility for garbage, trash, HHW and recycling.
- d. 605 gallons of HHW were collected and reclaimed through the HHW drop off site at Public Works
- e. 1,500 gallons of motor oil was recycled
- f. 804 gallons of cooking oil were recycled
- g. 900 scrap tires were recycled

Recycling Facility / HHW: The Sanitation Fleet Supervisor (Public Works) is responsible for overseeing these areas are kept clean, and ensures there is no illicit discharge from these activities. The Public Works Department is also responsible for hazardous waste management, including storage (HHW drop off and at the Mechanic Shop). Tires, HHW chemicals, motor oils, electronics and anything that could contribute to an illicit discharge is kept covered and contained, to the maximum extent practical. Residents and businesses are encouraged to recycle. Mechanisms for waste management education include:

- a) Mobile Area Earth Day; E-waste recycling event (April 2017)
- b) America Recycles Day; E-waste recycling event (November 2017)
- c) City website (www.cofairhope.com), "Public Works" page

BMP # 4: Street Sweeper: The City of Fairhope Public Works Department owns two street sweepers. Streets are swept daily in the downtown area, removing sediment and debris from the road ways, and storm drains. Other main streets in the City of Fairhope are swept weekly. Periodically, the street sweeper is used to clean vehicle tracking from streets, when contractors are not responsive (in a timely manner) to warnings issued. Contractors are charged a minimal fee of \$300 per hour for this service. In 2017, the Public Works street sweeper was dispatched (5) times as enforcement action for street clean up (billed to contractor).

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BMP # 5: Project work by City Employees: City departments are required to pull City of Fairhope construction / land disturbance permits (as well as any necessary State and Federal permits) for planned projects; City projects are held to the same standards as other projects. The Code Enforcement Officer (Planning Department) and the Building Inspectors (Building Department) ensure that erosion and sediment control on construction projects are done in accordance with City of Fairhope BMP standards (which follow the *Alabama Handbook*). City of Fairhope crew leaders of right of way and utility work are given the *Field Guide for Erosion and Sediment Control on Construction Sites in Alabama* as a reference tool. In 2017, the Public Works Department completed or facilitated eight (8) stormwater projects within the City limits and one project was overseen by the Utility Dept. These projects are detailed in Section 2.4 “Reporting Requirements”.

BMP # 6: *Field Guide For Erosion and Sediment Control on Construction Sites in Alabama*, by the Alabama Soil and Water Conservation Committee and Partners, is a pocket size pamphlet available to contractors and other permittees on request. Available in the Building Department.





Pictured: City Street Sweeper

BMP # 7: Vehicle / Equipment Washing: Employees in all departments within the City are instructed to wash vehicles and equipment only in designated areas, which are connected to the City of Fairhope Waste Water Treatment plant. The City currently has seven (7) designated wash rack facilities, which discharge into the Waste Water Treatment plant, within its operation. Wash rack facilities include the main wash rack at Public Works (555 South Section Street), the Transfer Station at Public Works, Founders Park Maintenance Barn (Founders Park, Hwy. 44), and car wash facilities at the Police Department (107 North Section Street) and Fire Stations. Fire Station addresses are: Station #1- 198 S. Ingleside Drive; Station #2- 19875 Thompson Hall Road; Station #3- 8600 Highway 32 (Airport); and Fire Station #4- 7752 Parker Road. **Director or department head of each department is responsible for overseeing the proper washing of vehicles and equipment in each department.** The Public Works Department also has a “Tire Rinse” only station (open grate drain) for the rinsing of mud and sediment from bulldozer tracks and equipment tires. This grate drain has a sediment removal basin, which is

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cleaned out annually by the Public Works Department. There is signage at this basin stating, "Tire Rinsing Only". Vehicles are not allowed to be washed off here, since this drains directly to Tatumville Gully.

BMP# 8: SOP for Municipal Activities. Public Works Department



City of Fairhope, Alabama

Date: 10/18/16

Public Works Department
General employee expectations:
All public works employees attend annual training seminars on our MS4 program, the goals set forth in the program, and the process in place to control sediment runoff. Our employees are the 'eyes' of the city and we greatly rely on them to bring items to the attention of the supervisor or environmental protection officer.

Landfill Operations / Sanitation Services

1. Equipment Washing:
 - a. All Garbage trucks are washed or rinsed after each days use.
 - b. Sanitation Wash Rack is maintained by the city for all city vehicles.
 - c. Hot water pressure wash provided through a gas heating element and pump is utilized.
 - d. Wash rack drains through a grated filter which is tied into the city sewer system.
 - e. Wash rack and grated filter is cleaned daily to remove any particulate debris. A secondary mud wash is located in the landfill yard. It features a fire hose for rinsing mud off of vehicles and drains through a filter which contains the dirt and particulates.
 - f. Mud filter is checked weekly and cleaned as needed.

2. Landfill Household Hazardous Waste Handling and Storage:
 - a. Household Hazardous Waste (HHW) is accepted at the city landfill.
 - b. City residents can bring in items for disposal and must be screened at the guard shack by the gate attendant before proceeding to the drop off area. The gate attendant is trained to review all items to ensure that no prohibited items such as gasoline or propane cylinders are deposited.
 - c. All HHW is contained and stored up on the transfer station. Items include paint, (oil based and latex), paint thinners and varnishes, motor oils, cooking oil, household insecticides, bleach, fluorescent bulbs, batteries, and electronics.
 - d. Items are dropped off and then re poured into empty 55 gallon drums by classification. These drums are sealed and stored inside the covered transfer station on the concrete slab prior to pick up which occurs quarterly or as needed.
 - e. Any spillage is contained by plastic liners under the drums, and any overflow would be captured by the built in drainage system which is fully captured by the city sewage system.

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3. Tires:

- Residents are allowed to bring in tires and are charged a nominal fee.
- Tires are stored in a covered shed before being loaded into container boxes or box vans and hauled off to a certified processing facility.

4. Landfill Housekeeping:

- Litter control is maintained daily and weekly by walk through inspections by the certified landfill operator(s).
- Litter collection is maintained by work parties (inmates) collecting misplaced debris and litter weekly.
- All Public Works employees are tasked with the general responsibility to pick up and collect any litter seen in or around the landfill itself.

II Public Works Streets

Street sweeping constitutes the major thrust toward keeping solid debris from entering the City's storm water drainage system, along with solid waste collection during trash pick-up times. To help keep our streets clean and reduce the amount of polluted storm water runoff from entering our waterways, the City operates two street sweepers. The sweepers have a fixed route and schedule.

1. Public Works sweeping plan:

- Downtown and beach areas are swept three times a week; Monday, Wednesday and Friday
- All subdivision and streets built since 1995 are swept once a year between May and October or as needed. They should stay on this schedule until street trees reach a height of twenty foot.
- When street trees planted closer than 70 foot apart and or reach a height of twenty foot or larger, streets inside subdivisions shall be swept every six weeks between November and April. The same streets shall be swept once between April and November or as needed.
- In the Fruit and nut, North Mobile area, Bon Secour area, Colonial acres, Dogwood, Azalea, Wisteria, Sea Cliff, City owned right of way in Montrose, and other heavily forested areas; streets are swept every two weeks between Mid-February and Mid-April or during the Live Oak leaf season drop. These areas are swept monthly in November, December and January and once between November and April or as needed.
- The sweeper dumps litter after sweeping on the city of Fairhope solid waste transfer station for disposal into a solid waste landfill.

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2. Public Works Street Materials:

Public Works designed a storm water management plan for the laydown yard. The site has a split drainage plan over the top, creating water flow that is channeled behind the city greenhouses to the North. The Northern channel is captured in underground storage pipes behind the greenhouses. The southern watershed is diverted to the retention pond East of the city warehouse.

- Fairhope Public Works maintains the following materials in the Public Works yard: Street rock is maintained in piles in different areas of the Public Works yard. The materials are left openly accessible for vehicles to load and unload. The materials are placed in such a way as not to wash out during heavy rain storms. Due to the nature of the materials it is not considered a potential contaminant for storm water.
- Concrete pipe, brick and masonry block are stored in different locations and are not considered hazardous to storm water.
- Streets and Construction: During Public Works streets and construction projects along right of way, personnel use BMP plans that call for wattles, hay bales and silt fencing. The plan may be submitted for approval by the building department on large projects. When this plan is submitted, it triggers regular inspections from the environmental officer. After any right of way project is complete, sod or hay mat is installed to prevent erosion. The supervisor for the project is responsible for compliance.

III. Landscape Operations

1. Debris Removal:

- Generation of organic landscape debris is handled according to city policy:
 - Crews stack debris to facilitate pick up by city trash trucks or by landscape trailers.
 - Stumps are ground down and picked up the same as regular debris.
 - All debris from trimming and pruning are hauled off daily to city mulch field.
 - City mulch field is area located on the landfill grounds where vegetative debris are deposited, pushed and spread out, covered with dirt and compacted.
 - Only organic vegetative debris is allowed to be placed here.
- Roadside litter is collected 5 days per week on the same schedule as mowing, bush hogging, and arm mowing. Dedicated employee rides along the routes and collects any litter present before the area is mowed.

2. Applications of Pesticides and Fertilizers follow the State of Alabama rules and regulations:

- All pesticides and chemical fertilizers are stored in original marked containers.
- All chemical containers are kept in a locked storage area.
- Use is monitored by trained and certified employees for approved application procedures.
- All empty containers are triple rinsed when empty.
- Disposal of all washed and emptied containers is in the city c&d landfill.
- Any spillage or overages are contained and submitted into the city hazardous household waste facility, stored in 55 gallon drums, and turned over to an industrial chemical disposal company for destruction.

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➤ Pollution Prevention / Good Housekeeping for Municipal Operations: Measurable Goals

Measurable Goals – Recap For 2017:

1. Department meetings for Pollution Prevention / Good Housekeeping

Status: Complete: November 9, 2017

Comment: The Planning Department sent out a memo to all Department Supervisors on November 9, 2017 with copy of SOP for municipal activities.

Kim Burmeister

From: Kim Burmeister
Sent: Thursday, November 9, 2017 3:54 PM
To: Robert Rohm; Terry Holman; Dan McCrory; Jay Whitman; Joe Wolchina; Jeremy Morgan; Tom Kuhl; Bobby Hall; Richard Johnson; Arthur Bosarge; Dale Linder; George Iadd; Paul Merchant; Richard Peterson; Erik Cortinas; Murray Authement; Adam Thomas; Richard Taylor; Doug DeGraf; Sandy Garber
Cc: Wayne Dyess; Nancy Milford; Buford King; Sherry-Lea Bloodworth Botop; Mayor Karin Wilson; Lynn Donnelly Maser
Subject: Good Housekeeping Annual Pollution Prevention memo (internal-MS4 requirement)

Our MS4 program requires us to send out a good housekeeping memo annually.

Did you know that our grate drains here at the Public Works warehouse discharge directly to Tatumville Gully (and then Mobile Bay)?

All of us can help keep our warehouse parking area clean. Please encourage your employees to be good stewards of our watershed. Make sure to check the bed of your trucks before you head out each day, removing blowable litter. Use designated wash racks for vehicles and equipment and put litter in its place (garbage can or recycling container). Wash only tires / tracks in the "Tire Wash" area; do not wash entire vehicles.

<http://www.cleanwaterfuture.com/blog/dont-sweep-it-under-the-rug/>

Kim Burmeister
Planning and Zoning Department
251.990.2877

Source: COF email

The screenshot shows a webpage from Clean Water Future News. The article is titled "Don't Sweep It Under the Rug! The Importance of Parking Lot Cleaning" and is dated August 02, 2016. The article text discusses the importance of parking lot cleaning, mentioning that particles like oil, brake dust, and tires can be washed into stormwater runoff. It also mentions that a good vacuum sweeper can help remove these particles from the ground. The article is attributed to Cheryl Morris from Green Matters, Inc. There are three small images at the bottom of the article showing a parking lot with a vacuum sweeper in operation. The webpage also features a navigation menu at the top with links for Home, Clean Water Tips, Pollution Prevention, About Us, News Resources, Contact, and Become a Partner. There are also sections for Categories, Select Month, and Recent Posts.

Source: www.cleanwaterfuture.com


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2. Dry Weather Screening of Public Works Facility

Status: Complete: February 2017

Comments: The Public Works Department Environmental Officer conducted a screening/assessment of the Public Works Facility on 1/10/2018 to ensure materials are being kept covered, and areas are clean.

Report is listed below:



Sanitation Department Review

Date: 01/10/18

To: Kim Burmeister
From: Dale Linder

Subject: Public Works Facility Inspection on 12/27/17
555 South Section Street

1. Transfer Station: All running water and transfer station fluids safely drained and properly contained into sewer pump drainage. No off flow noted into storm water drainage.
2. Tire Storage: Tires under cover of lean to shed on lower side of transfer station. Tires require bulk pick up: slated quarterly in 2018.
3. Chemical Storage: All chemical drums stored off ground on wooden pallets on the transfer Station before shipping. Covered and protected from rainfall. Drums sent out quarterly or semiannually to licensed chemical destruction company.
4. Aluminum Can Storage: 2018 storage into Pecan St annex building; covered from weather.
5. Glass Storage Bins: Correctly drained and positioned to utilize approved drainage culverts. Glass loaded and removed quarterly as needed to authorized glass recycling company.
6. Vehicle Parking: On rock covered parking grids; all vehicles stored as required and no drainage observed from any vehicle fluids.
7. Wash Rack: Correctly drained into sewer sump and culverts with adequate wash water to correctly flow as planned.
8. Recycle Center Bailing Facility: All water sourced correctly contained and adequate storm water drainage into correctly placed culverts and storm drains.
9. Scrap Metal Dumpsters: Properly stored on concrete and dirt foundations with minimal storm water drainage.
10. Electronic Recycling Drop off Dumpster: Properly stored on concrete and dirt foundations with minimal storm water drainage.
11. Mud Wash Station: Ensure that no Public Works equipment or vehicles are commonly washed off into storm drains, grate drains. Mud rinse for work vehicles only w/ sediment trap in place. Done / Passed
12. Ensure recycling areas are free from discharges into drains. Check for litter daily to ensure no contamination of storm water drainage. Done / Passed after reinspection and implemented daily litter checks.
13. Cooking oil and HHW facility; ensure that these are free from discharges into storm drains, grate drains. Ensure that rinsing is done into designated drains such as at Transfer Station. Done / Passed

3. Recertify Commercial Pesticide Applicator's License (Recreation)

Status: Complete

Comments: Parks and Recreation Director recertified in 2017; expires July 28, 2019 (#13268)

7.0 Pollution Prevention / Good Housekeeping for Municipal Operations

Measurable Goals For 2018:

1. Good Housekeeping / Pollution Prevention memo for all departments

Responsible Department: Planning Department

Goal: Create and send out a memo to all departments, reminding employees of good housekeeping or pollution control practices (*Director*)

Due: December 2018

2. Dry Weather Screening of Public Works Facility

Responsible Department: Public Works

Goal: Conduct dry weather screening of the facility at 555 South Section Street, to ensure rinsing activities are in designated areas; recycle and drop off materials are properly managed and covered; and to ensure Public Works activities are not contributing to illicit discharges (*Environmental Officer*)

Due: December 2018

3. Recertify Pesticide Applicator's License @ Public Works & Golf Course

Responsible Department: Public Works Department / Golf Course / Recreation Department

a. Goal: Public Works recertify Landscape Supervisor #13571 (Exp. Jan. '19)

Due: January 2019

b. Goal: Golf Course recertify Grounds Supervisor #13550 (Exp. Dec. '18)

Due: December 28, 2018

Two to Five Year Measurable Goals:

Recertify Pesticide Applicator's License Parks and Recreation Dept.

Responsible Department: Parks & Recreation Director

Goal: Parks and Recreation Director # 13268

Due: July 28, 2019



Pictured: Public Works Landscape Supervisor (Certified Pesticide Applicator) applies pesticide to floral baskets at the City greenhouse on Nichols Avenue.