



**City of Fairhope, Alabama
Storm Water Management Program Plan
Phase II General Permit # ALR040040**

**2019
(April 1, 2019 – March 31, 2020)**



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

Table of Contents

1.0 CONTACT LIST AND INTRODUCTION

1.1 CERTIFICATION

1.2 LIST OF CONTACTS

1.3 GENERAL INTRODUCTION

2.0 STORM WATER MANAGEMENT PROGRAM PLAN REQUIREMENTS

2.1 LISTED REQUIREMENTS

2.2 MANAGEMENT

2.3 WATERSHEDS OF FAIRHOPE

2.4 MS4 AREA MAP

3.0 MINIMUM CONTROL MEASURE # 1: PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS

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

5.0 MINIMUM CONTROL MEASURE # 3: CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

6.0 MINIMUM CONTROL MEASURE # 4: POST CONSTRUCTION STORM WATER MANAGEMENT

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

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.

KARIN Wilson, Mayor
Name and Title (type or print)

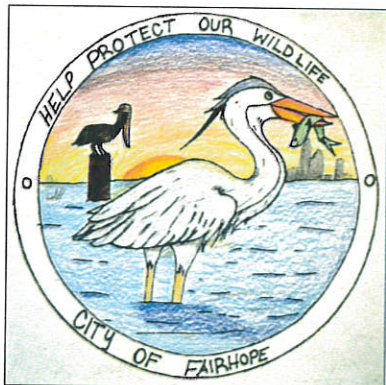
Karin Wilson
Karin Wilson, Mayor (Signature)

1/16/19
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 and Zoning Department
Post Office Box 429
Fairhope, AL 36533
Phone: (251) 990-2877



Pictured: Storm Drain Medallion Artwork

1.3 General Introduction

The City of Fairhope is situated on the eastern shore of Mobile Bay in Baldwin County, in southwest Alabama. The 2017 US Census determined the City's population estimate to be 20,935. The annexed limits, which are also the MS4 area limits, comprises about 14 square miles. It is part of the Eastern Shore area with Daphne, Montrose and Spanish Fort to the North.

There are three main receiving streams within these area limits (Fly Creek, Rock Creek and Cowpen Creek). As of November 2018, there are (2) 303(d) impaired streams listed by ADEM.

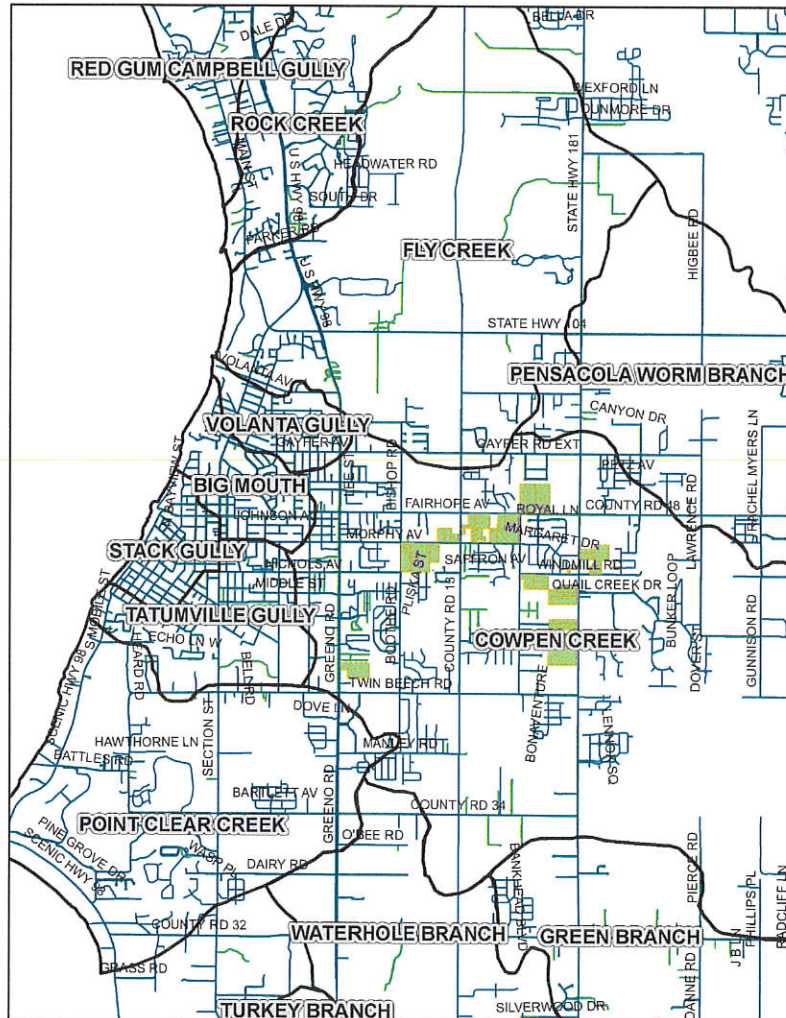
a. Cowpen Creek is identified as a 303 (d) stream due to the presence of atmospheric mercury deposition. It is not anticipated that the land uses in the City of Fairhope MS4 watersheds are contributors to the atmospheric deposition of mercury.

b. Fly Creek is identified as a 303 (d) stream due to presence of pathogens from "pasture grazing". It is not anticipated that the land uses in the City of Fairhope are contributors to this impairment since the Fly Creek watershed has no listed "agriculture" uses in the City limits.

2018 Alabama §303(d) List

Assessment Unit ID	Waterbody Name	Type	River Basin	County	Uses	Causes	Sources	Size	Unit Type	Downstream / Upstream Location	Year Listed	Priority
AL03160204-0202-200	Middle River	R	Mobile	Baldwin	Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	9.72	miles	Tensaw River (RM 20.6) / Tensaw River (RM 37.7)	2014	L
AL03160204-0202-300	Mifflin Lake	E	Mobile	Baldwin	Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	0.73	square miles	Tensaw River / its source	2014	L
AL03160205-0203-110	Magnolia River	R	Mobile	Baldwin	Outstanding Alabama Water Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	12.41	miles	Weeels Bay / its source	2014	L
AL03160205-0204-402	Turley Branch	R	Mobile	Baldwin	Swimming Fish & Wildlife	Pathogens (E. coli)	Pasture grazing	5.16	miles	Baldwin CR 181 / its source	2018	L
AL03160205-0300-102	Mobile Bay	E	Mobile	Mobile	Shellfish Harvesting Fish & Wildlife	Pathogens (Enterococcus)	Urban runoff/storm sewers	168.29	square miles	Mobile Bay south of a line extending east from East Fowl River to lighted beacon FL2 and then to lighted beacon FLG-4 and then northeast to Daphne, except out 1000 feet offshore from Mullet Point to Ragged Point	1998	L
AL03160205-0300-202	Bon Secour Bay	E	Mobile	Baldwin	Shellfish Harvesting Swimming Fish & Wildlife	Pathogens (Enterococcus)	On-site wastewater systems Urban runoff/storm sewers	102.96	square miles	Bon Secour Bay east and south of a line from Mullet Point to Engineers Point, except out 1000 feet offshore from Fish River Point to Mullet Point	1998	L
AL03160205-0102-110	Halls Mill Creek	R	Mobile	Mobile	Fish & Wildlife	Siltation	Land development	11.30	miles	Dog River / its source	2012	L
AL03160205-0105-100	Deer River	R	Mobile	Mobile	Fish & Wildlife	Organic enrichment (BOD)	Collection system failure Urban runoff/storm sewers	1.02	miles	Mobile Bay / its source	2006	L
AL03160205-0105-300	Middle Fork Deer River	R	Mobile	Mobile	Fish & Wildlife	Organic enrichment (BOD)	Collection system failure Urban runoff/storm sewers	2.47	miles	Deer River / its source	2006	L
AL03160205-0104-110	Fowl River	R	Mobile	Mobile	Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	20.56	miles	Mobile Bay / its source	2000	L
AL03160205-0202-210	Polcat Creek	R	Mobile	Baldwin	Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	7.89	miles	Fish River / its source	2006	L
AL03160205-0202-510	Baker Branch	R	Mobile	Baldwin	Swimming Fish & Wildlife	Organic enrichment (BOD)	Pasture grazing	6.15	miles	Polcat Creek / its source	2006	L
AL03160205-0204-112	Fish River	R	Mobile	Baldwin	Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	30.01	miles	Weeels Bay / its source	1998	L
AL03160205-0204-700	Cowpen Creek	R	Mobile	Baldwin	Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	7.12	miles	Fish River / its source	2008	L
AL03160205-0205-702	Fly Creek	R	Mobile	Baldwin	Swimming Fish & Wildlife	Pathogens (E. coli)	Pasture grazing	3.32	miles	10 feet above MSL / its source	2018	L
AL03160205-0206-101	Bon Secour River	R	Mobile	Baldwin	Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	9.12	miles	Bon Secour Bay / One mile upstream from first bridge above its mouth	2006	L
AL03160205-0206-102	Bon Secour River	R	Mobile	Baldwin	Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	4.38	miles	One mile upstream from first bridge above its mouth / its source	2006	L
AL03160205-0206-102	Bon Secour River	R	Mobile	Baldwin	Swimming Fish & Wildlife	Pathogens (E. coli)	Pasture grazing	4.38	miles	One mile upstream from first bridge above its mouth / its source	2018	L
AL03160205-0208-100	Oyster Bay	E	Mobile	Baldwin	Shellfish Harvesting Fish & Wildlife	Pathogens (Enterococcus)	Unknown source	0.95	square miles	Oyster Bay	2006	L
AL-Gulf-of-Mexico-1	Gulf of Mexico	E	Mobile	Baldwin Mobile	Shellfish Harvesting Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	205.77	square miles	Mississippi / Florida	1998	L
AL-Gulf-of-Mexico-2	Pelican Bay	E	Mobile	Mobile	Shellfish Harvesting Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	0.50	square miles	out to 1000 feet offshore from Dauphin Beach / out to 1000 feet offshore of Pelican Point	1998	L
AL-Gulf-of-Mexico-2	Pelican Bay	E	Mobile	Mobile	Shellfish Harvesting Swimming Fish & Wildlife	Pathogens (Enterococcus)	Unknown source	0.50	square miles	out to 1000 feet offshore from Dauphin Beach / out to 1000 feet offshore of Pelican Point	2018	L

**Residential/Agriculture Districts
MS4/City Limits**



Note: Agricultural activity in the Fairhope city limits is only found in the Cowpen Creek watershed.

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.

2.0 STORM WATER MANAGEMENT PROGRAM PLAN (SWMPP) REQUIREMENTS

2.1 Listed Requirements

As part of the MS4 Phase II requirements, the City of Fairhope must develop, implement and enforce a SWMPP which shall include controls necessary to reduce the discharge of pollutants from its MS4 consistent with Section 402(p)(3)(B) of the Clean Water Act and 40 CFR Parts 122.30-122.37. These requirements shall be met by the development and implementation of a SWMPP which addresses the best management practices (BMPs), control techniques and systems, design and engineering methods, public participation and education, monitoring and other appropriate provisions designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable.

The SWMPP shall include:

1. Map of the City of Fairhope MS4 program area and outfalls
2. BMPs that will be implemented for each minimum control measure, as listed below, and shall consider LID/ Green Infrastructure where feasible
3. Measurable Goals for each minimum control measure
4. Proposed schedule to implement minimum control measures
5. List of person / persons responsible for coordination of each BMP / measurable goals

The SWMPP shall address these Minimum Control Measures:

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



Pictured: Green median in Fairhope on North Section Street

The Minimum Control Measures with Measurable Goals for 2019:

1. Public Education and Public Involvement on Storm Water Impacts (5)
 - a. Stormwater Education / Seminar for Planning and Zoning Dept.
 - b. Stormwater Article on Social Media
 - c. BMP Workshop for City Employees
 - d. Public Educational / Input Meeting for Stormwater Issues
 - e. SWMPP Public Review
2. Illicit Discharge Detection and Elimination (IDDE) (4)
 - a. Stormwater Outfall Inventory Update
 - b. Video of Sewer Lines
 - c. Public Works Illicit Discharge Detection Meeting
 - d. Dry Weather Screening of Outfalls / Outfall Assessment
3. Construction Site Storm Water Runoff Control (3)
 - a. QCI Recertification of Code Enforcement Officer (Planning & Zoning)
 - b. QCI Certification for new/2nd Code Enforcement Officer (Planning and Zoning)
 - c. QCI Recertification for Building Inspectors (5)
4. Post Construction Storm Water Management in New Development and Redevelopment (2)
 - a. Community Hands-on Event for Stormwater Education (Earth Day Watershed Booth)
 - b. Creek/Shoreline Assessment of MS4 area via Kayak
5. Pollution Prevention / Good Housekeeping for Municipal Operations (5)
 - a. Good Housekeeping / Pollution Prevention Memo to all departments
 - b. Dry Weather Screening of Public Works Facility
 - c. Recertification of Commercial Pesticide Applicators (3)



Pictured: Video shot by Water and Sewer Department of a sewer line showing conduit puncturing sewer line.

2.2 SWMPP Management

The City of Fairhope Planning and Zoning Department will serve as the lead coordinator of the MS4 Storm Water Management Plan. Several departments within the City will have a role in Fairhope's MS4 SWMPP: Planning and Zoning; Building; Public Works; Utilities (Gas/Water & Sewer/Electric); Recreation and Parks; and Community Development. A general contact number for everyone is: 251-928-8003.

2.3 SWMPP – Watersheds of Fairhope

The City of Fairhope uses a watershed-based approach to storm water management. The MS4 area limits (also the annexed City limits) encompasses 12 watersheds, and approximately 14 square miles.

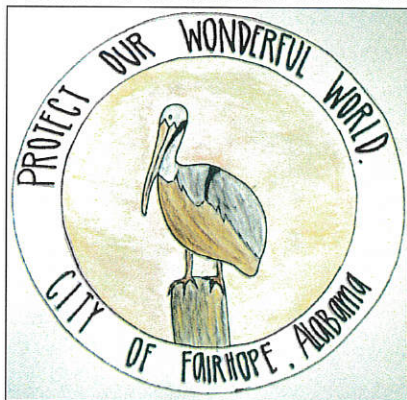
City of Fairhope MS4 area limit watersheds (on attached map) are:

a. Red Gulley	54 acres (+/-)
b. Rock Creek	678 acres (+/-)
c. Fly Creek	1,310 acres (+/-)
d. Volanta	389 acres (+/-)
e. Big Mouth Gulley	500 acres (+/-)
f. Stacks Gulley	397 acres (+/-)
g. Tatumville Gulley	617 acres (+/-)
h. Point Clear Creek	1,199 acres (+/-)
i. Turkey Branch*	88 acres (+/-)
j. Waterhole Branch*	600 acres (+/-)
k. Cowpen Creek *	3,070 acres (+/-)
l. Pensacola Branch/Worm Branch*	118 acres (+/-)

TOTAL APPROXIMATE ACREAGE: 9,020 acres (14 SQUARE MILES)

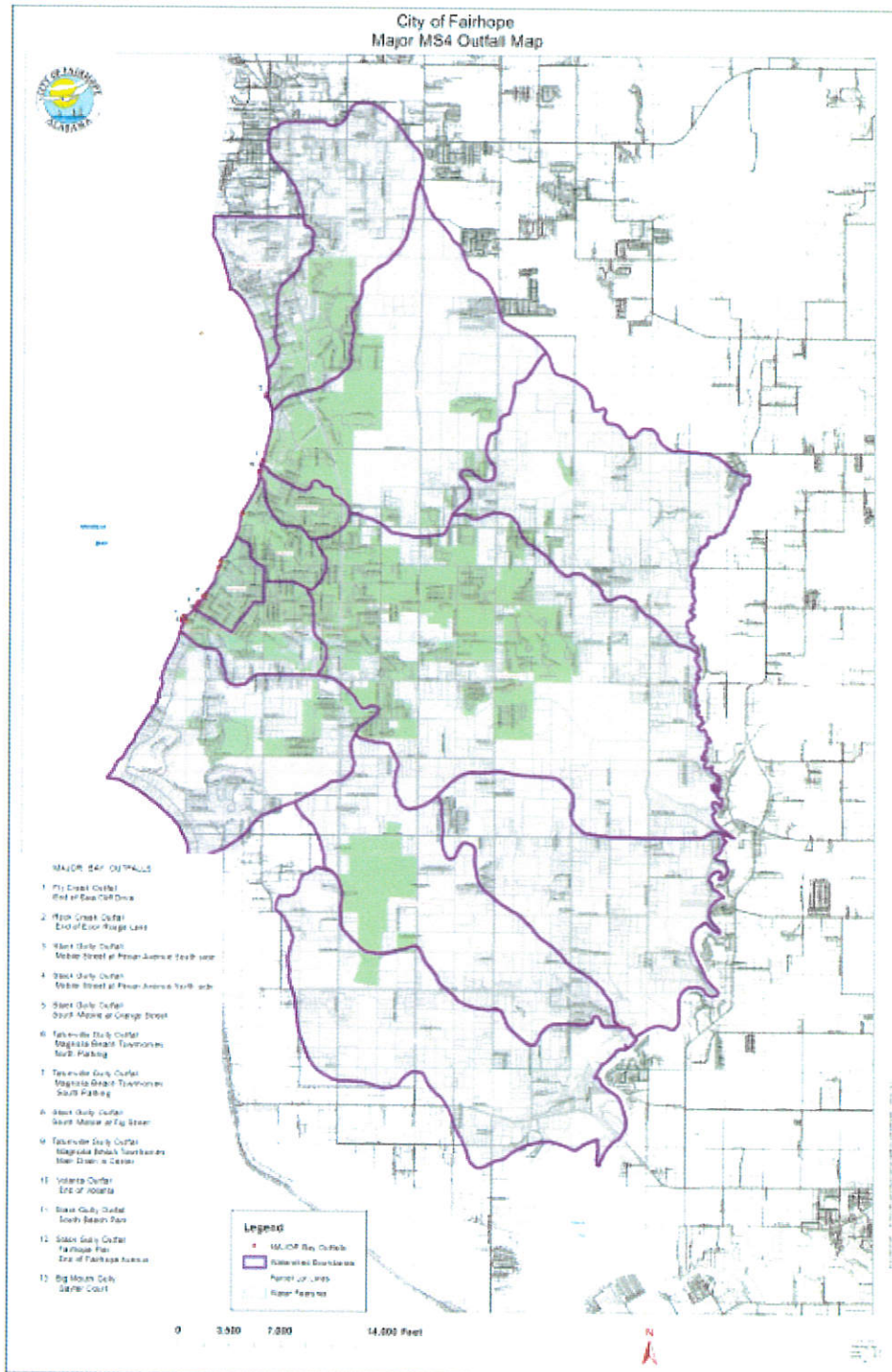
*These watersheds drain to Fish River and ultimately, Weeks Bay, an Outstanding National Resource Water (ONRW).

While all of these watersheds ultimately drain to Mobile Bay, the watersheds located on the East side of U. S. Highway 98 generally drain to Fish River before final discharge into Mobile Bay. The watersheds that drain into Fish River are: Turkey Branch, Waterhole Branch, Cowpen Creek and Pensacola/Worm Branch. The watersheds draining east to Fish River are considered Priority Construction Site areas, because of the ultimate outfall into Weeks Bay, an Outstanding National Resource Water.



Pictured: Storm Drain Medallion Artwork

2.4 MS4 Area Map ("City Limits" represent MS4 area) *Updated: 11/2018



**Note: Changes in 2018 vs. 2017 map include updated acreage in the Cowpen Creek, Point Clear Creek, and Pensacola Branch watersheds. Total updated acreage is 67 acres added to the MS4 area watershed, per GIS Technician*

**3.0 MINIMUM CONTROL MEASURE#1:
PUBLIC EDUCATION AND PUBLIC INVOLVEMENT ON STORM WATER IMPACTS**

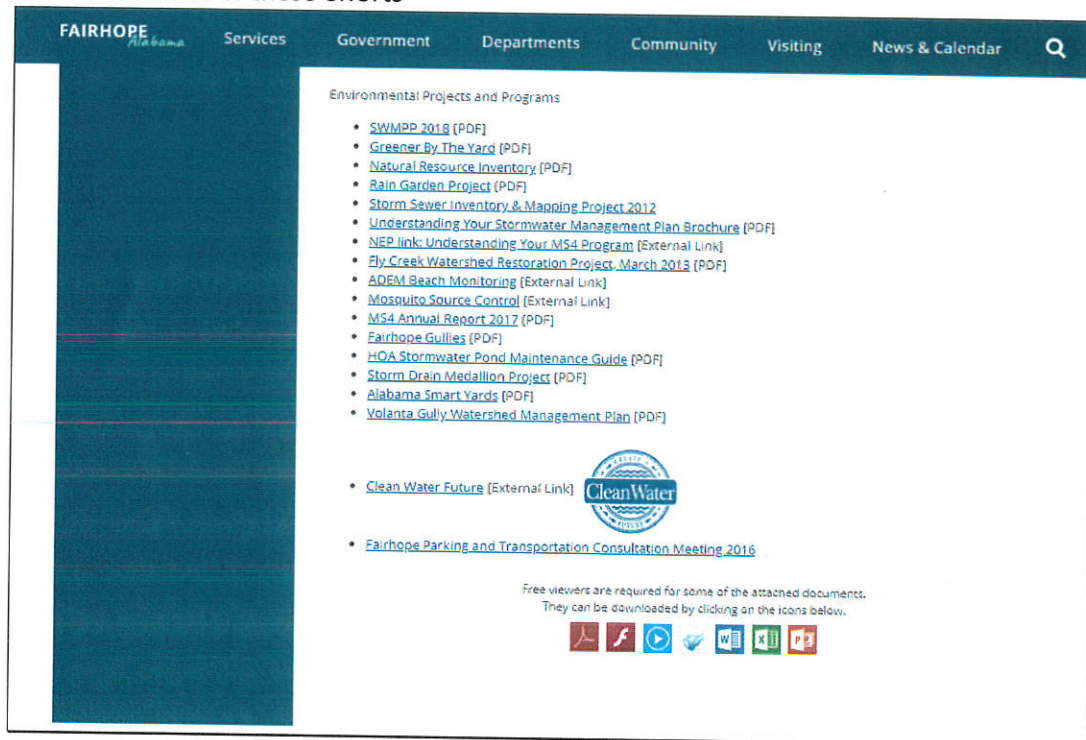
- **Requirements:** The City of Fairhope must develop and implement a public education and outreach program to inform the community about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff to the maximum extent practicable. 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 storm water pollution prevention. More information on this requirement can be found in the general permit.
- **Responsible Persons:** Planning and Zoning Department; Building Department; Public Works Department; Special Events Coordinator; Community Development Director
- **Rationale Statement:** The City of Fairhope supports the Fairhope Environmental Advisory Board (FEAB), which currently has ten (10) active members. This Advisory Board provides a public forum for local environmental discussions and educational outreach, with storm water being a major topic of interest. The City of Fairhope also works collectively with neighboring municipalities (City of Daphne and City of Spanish Fort), Baldwin County, AL-DOT and non-profit agencies to create and provide educational materials to the public on storm water issues. Additionally, hands-on events as Earth Day (in Fairhope) show our communities how to recognize stormwater as a resource and not (always) a liability.

The City of Fairhope sponsors several community events each year, such as Coastal Clean Up, Mobile Area Earth Day, America Recycles Day, water festivals at area schools and Arbor Day. These events collectively reach over 1,000 residents. The Public Works Department coordinates these efforts.

The City of Fairhope supports public access to volunteer water testing results by posting a link to Alabama Water Watch on the City website. Alabama Water Watch is a volunteer water testing program, overseen by Weeks Bay National Estuary Research Reserve. The Alabama Water Watch program currently provides volunteer water testing at three locations within Fairhope monthly. Testing parameters include turbidity, dissolved oxygen, ph, temperature, and E. coli. ADEM's water quality testing (prompting swim advisories) is also posted.

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, continued

The City of Fairhope offers opportunities for public review, involvement and participation in the City of Fairhope Storm Water Management Program (SWMPP). The current SWMPP and the MS4 Annual Report are posted on the City website: www.fairhopeal.gov/departments/planning-and-zoning/publications-and-forms. The Planning Commission, a group of appointed volunteers who offer insight and approval on Planning and Zoning Department procedures and policies, meets monthly at City Hall. The meeting is open to the public. The Planning Commission is used annually as a review board for the SWMPP. The Planning and Zoning Department is responsible for coordination of these efforts



Pictured: Planning and Zoning "Publications and Forms" environmental documents viewable on line, including the most current MS4 Annual Report and the SWMPP

The City of Fairhope adheres to State and local public notice requirements for public meetings.

Citizen Complaints / Comments: The City of Fairhope receives complaints and comments from citizens by having a General Contact number listed on the City of Fairhope website. This includes storm water, illicit discharge and construction site violation complaints. The number (251) 928-8003 is available 24 hours per day (directed to the Police Department after hours).

Target audience for the City educational mechanisms are:

1. Developers
2. Contractors
3. Landscapers
4. Business owners / managers
5. Property owners
6. Residents
7. Subdivision Property Owner Associations
8. Environmental Groups
9. Educational Groups
10. City employees

Pollutants of concern:

1. Sediment
2. Oil residue from parking lots
3. Pesticides, herbicides, fertilizers
4. Pathogens

➤ **BMPs / Mechanisms** used for educational outreach and Public Involvement:

1. Brochures / publications / media
2. Public Educational Meetings / Town Hall Meetings
3. City Website (www.fairhopeal.gov)
4. Existing Demonstration projects (Rain Garden, Wetland Pond)
5. Community Events
6. Employee Certifications and Training
7. City Erosion and Sediment Control Workshop
8. Pet waste bags available in City Parks
9. Create a Clean Water Future Campaign
10. Notifications for Public Meetings
11. Subdivision Property Owners Associations Contact List
12. City of Fairhope Planning Commission hearings
13. City of Fairhope Environmental Advisory Board meetings



Pictured: Planning and Zoning Department Code Enforcement Officer working as a volunteer at the Baldwin County Water Festival (2018)

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, continued

BMP # 1: Brochures / Publications / Media promoting green space and storm water management, available at City offices and/or on-line:

1. *Greener by the Yard*, pamphlet, Weeks Bay Watershed Project
2. *Fairhope Gullies*, brochure, joint effort of Mobile Bay National Estuary Program, Fairhope Single Tax Corporation, and the City of Fairhope
3. *Parks of Fairhope*, brochure, joint effort of the Fairhope Environmental Advisory Board and the City of Fairhope
4. *Storm Water Management*, brochure, by Ecosolutions, created for the City of Fairhope
5. *Field Guide for Erosion and Sediment Control on Construction Sites in Alabama*, booklet, by Alabama Soil and Water Conservation Committee
6. *Facebook*: City of Fairhope frequently uses Facebook to advertise events as well as new policies and procedures
7. *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 and Zoning Department and Public Works
8. *Understanding Your Stormwater Management Program*; this 5minute video, produced by and shared with the permission of 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. Available on the City of Fairhope website:
<https://www.fairhopeal.gov/departments/planning-and-zoning/publications-and-forms>
9. *Storm Drain Medallion Project* brochure developed in 2018. Available in hard copy and on line.

Responsible Person(s) for brochures / publication / media placement: Planning and Zoning Department (Code Enforcement Officer); Public Works Department (Director); Community Development (Director)




Pictured: Facebook post from 2018: "Coastal Clean Up"

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, continued

BMP # 2: Public Educational Meetings:

1. Master Environmental Educator – Planning and Zoning Department has (1) staff person certified to participate in this program, which works with students 2nd through 12th grade. (City Planner)
2. Mobile Area Earth Day – City of Fairhope is a sponsor of this event yearly and it is held at South Beach Park in Fairhope. The Planning and Zoning Department hosts an informational booth here to showcase local watershed / storm water information. The City of Fairhope Recycling Committee also has a booth. Additionally, Public Works hosts a recycling event here (usually e-waste or Household Hazardous Waste). (Public Works Dept. / Planning and Zoning Dept.)

Responsible Person(s) for Public Educational Meetings: Planning and Zoning Department (Code Enforcement Officer); Planning and Zoning Department (Planner); Public Works Department (Sanitation Officer)




Baldwin County Extension Office • 302A Byrne Street, Bay Minette, Alabama 36507 • 937-7176 / 661-6061 / 620-3002 ext. 2222 • September 2017

MASTER ENVIRONMENTAL EDUCATION

Environmental Lessons Available

Volunteer Instructors travel throughout Baldwin County to public and private schools to present environmental lessons for 2nd through 12th grades.



Aquatic Nuisance Species: (6th-12th grade) Through the use of photos, the students will discuss the origin and impact of aquatic nuisance species. Students will identify actions to reduce the spread of nuisance species.

Backyard Wildlife Habitat: (2nd-5th grade) Students will discuss why the population of animals and their habitats are declining and why we should be concerned. Students will identify three things that are essential to a backyard wildlife habitat.

Energy: (6th-12th grade) Students will discover why it is important to use renewable energy sources instead of nonrenewable energy sources. Students will discuss ways to conserve energy.

Groundwater Pollution: (3rd-12th grade) By observing a groundwater model, students will see how water moves through an underground aquifer. The use of colored dyes allows students to visualize the effects of pollutants on groundwater.

Invasive Plant Species: (6th-12th grade) Students will identify the impacts of invasive plants, describe ways to prevent their spread and differentiate between native and invasive plants.

Nonpoint Source Pollution: (6th-12th grade) Through the use of a nonpoint source model, students will observe the effects of polluted run-off on water quality. Students will discuss sources of run-off pollution, the effects of run-off on our local waters and preventative actions.

Recycling: (3rd-12th grade) Students learn about solid waste disposal in the county as well as the importance of recycling and composting to reduce the amount of waste in landfills. They discuss concepts like packaging, decomposition and renewable resources.

The Water Cycle: (2nd-3rd grade) Students will see a "rainstorm" in the classroom. After seeing the demonstration, they will be able to identify the three forms of water (solid, liquid, and gas) and the relationship between surface water and groundwater.

Programs offered October through May

www.aces.edu/free

Request a Program

- Visit our website at <http://www.aces.edu/mee/>
- Call 937-7176 or 661-6061/620-3002 ext. 2222
- Email bannick@aces.edu

Our Goals

The goals of the Master Environmental Education program are to educate the residents of Baldwin County to:

- gain an appreciation of our environment
- become good environmental stewards
- protect our coastal environment

Our Lessons

- 45 minute lessons
- First come, first served scheduling

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, continued

BMP # 3: City Website (www.fairhopeal.gov) has informative links for:

1. Alabama Water Watch
2. ADEM Water Quality Testing
3. Create a Clean Water Future link
4. City Rain Garden
5. Waste Management
6. MS4 Annual Report and SWMPP
7. Zoning Ordinance / Subdivision Regulations
8. "Understanding Your Storm Water Management Program" 5 minute video shared with permission of the Mobile Bay NEP.
9. Municipal Code of Ordinances
(www.fairhopeal.gov/departments/building/building-codes)
 1. Erosion and Sediment Control Ordinance (#1398; #1603)
 2. Red Soils Ordinance (# 1423)
 3. Wetlands Ordinance (#1370)
 4. Construction Site Waste Ordinance (#958)
 5. Illicit Discharge Ordinance (#1516)
10. Watershed Management Reports:
 1. Fly Creek Watershed Restoration Project (2013)
 2. Volanta Gully Watershed Management Plan (2012)

Responsible Person(s) for City website informative links: Planning and Zoning Department (Code Enforcement Officer); Community Development (Director)

BMP # 4: Existing Demonstration projects provide educational signage:

1. Storm Drain Medallions – City of Fairhope has added about 100 storm drain medallions to City storm drains to date. These medallions educate the community on the importance of keeping only "Rain in the Drain".
2. Wetland Pond @ North Beach Park – this simulated Wetland Pond was created in 2002, to reduce pathogens entering Mobile Bay, from duck pond water runoff. The pond features native plants and is a joint project from the MBNEP and City of Fairhope.
3. Rain Garden @ City Hall – this 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. It is maintained monthly. Details of this project are available on the City of Fairhope website (www.fairhopeal.gov)

Responsible Person(s) for Existing Demonstration Projects: Public Works (Director)

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, continued

BMP # 5: Community Events:

1. Mobile Area Earth Day (South Beach Park in Fairhope). Public Works offers E-waste recycling at this event in April.
2. Coastal Clean Up (beachfront parks). This event, held in September, is advertised and recapped on Facebook and other media sources. City provides garbage pickup for this event.
3. Arbor Day (Coastal Community College) - City gives away approximately 1,000 trees yearly each February at this event, hosted by the City of Fairhope.
4. America Recycles Day – Free Amnesty Day recycling drop off of electronics and paper shredding at Public Works, on or about on November 15th, annually. Also prescription drug drop off is accepted on the same day (drop off at the Police Department).
5. Water Festivals – City of Fairhope supports area schools by offering staff volunteers at water festivals, such as the Baldwin County Water Festival (October 2018 @ Robertsdale).

Responsible Person(s) for Community Events: Public Works (Director); Special Events Coordinator



Pictured: Earth Day 2018 participant showing off her reusable "Love Where You Live" anti-litter theme bag, one of the giveaways at the City of Fairhope booth. The City of Fairhope booth traditionally displays information on recycling and local watershed information.

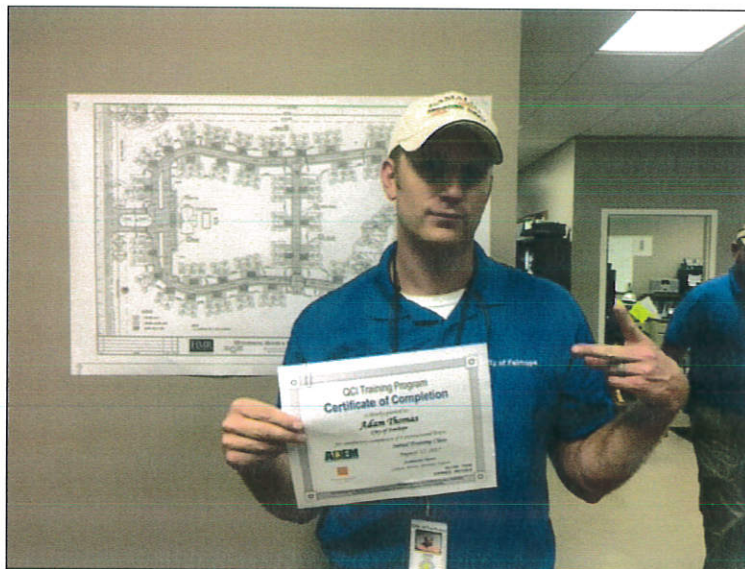
PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, continued

BMP # 6: Employee Certifications:

1. The City of Fairhope currently has (3) licensed Commercial Pesticide Applicators, who are licensed by the State of Alabama Department of Agriculture and Industries Pesticides Applicators Certification program. This 3 year certification aids in pollution prevention by guiding applicators on correct application techniques, which discourages overuse or misuse of pesticides/herbicides:
 - a. Landscape Supervisor, Certification # 57285
 - b. Golf Course Grounds Supervisor, Certification # 13550
 - c. Recreation Director, Certification # 13268

2. Qualified Credentialed Inspector (QCI) program educates inspectors on correct erosion and sediment control applications and installation techniques:
-QCI (Yearly recertification required)
 - a. Planning & Zoning Code Enforcement Officer, Certification # 25712
 - b. Building Inspector #1 (Nixon): # 79666
 - c. Building Inspector # 2 (DeGraff): # 72718
 - d. Building Inspector #3 (Nelson): #68815
 - e. Building Inspector #4 (Taylor): #76249
 - f. Building Inspector #5 (Thomas): #T5330

Responsible Person(s) for Employee Certifications: Public Works (Director); Planning and Zoning Department (Code Enforcement Officer); Building Department (Building Official); Golf Course (Grounds Supervisor)



Pictured: Building Inspector with QCI Training Certificate

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, continued

BMP #7: Employee Erosion and Sedimentation Workshop

The City of Fairhope Planning and Zoning Department hosts an employee Erosion and Sedimentation Workshop annually at City facilities. The purpose of this 1.5 hour workshop is to train existing employees (and inform new employees) of the Construction Site Storm Water Runoff Control standards required by the City of Fairhope. State and Federal regulations are also reviewed. Emphasis is placed on right of way and utility work, as well as other planned and emergency projects, as they may be applicable to the different City of Fairhope departments. City staff reviews City of Fairhope regulations and ordinances regarding storm water standards, which apply to contractors, developers, land owners and City projects. Each department within the City sends employees such as crew leaders, assistant supervisors and/or supervisors.

Responsible Person(s) for the Employee Erosion and Sediment Control Workshop: Planning and Zoning Department (Code Enforcement Officer); Public Works Department (Director); Building Department (Building Official)



Pictured: Annual Erosion and Sediment Control Workshop 2018

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, continued

BMP # 8: Pet Waste Bags in City Parks

Pet waste bag dispensers are available in City parks (along the Bay and at the Dog Park). Pet waste bags are available free to the public, and encourage removal of pet waste from public areas. The Animal Control Officer 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 out of storm drains and area waters.

Responsible Person(s): Police Department (Animal Control Officer)

BMP# 9: Create a Clean Water Future Campaign



The City of Fairhope adopted a resolution to accept this campaign in August 2014. This logo is being used on the City of Fairhope website and publications, as well as on over 100 City of Fairhope vehicles. The website (www.cleanwaterfuture.com) contains valuable resources for City employees, residents and educators to use in our community.

Responsible Person: Planning and Zoning Department (Code Enforcement)

BMP #10: Notices for public meetings are:

1. Posted at City Hall-and other City Offices
2. Posted on the City of Fairhope website and on social media
3. Emailed to subdivision groups (POAs/HOAs) and the media

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

BMP #11: Subdivision Property Owners Associations Contact List

A current list of subdivision and property owner associations is kept updated to include email / phone number contact information. This list is used as one form of notification for public meetings, including Planning Commission meetings

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

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, continued

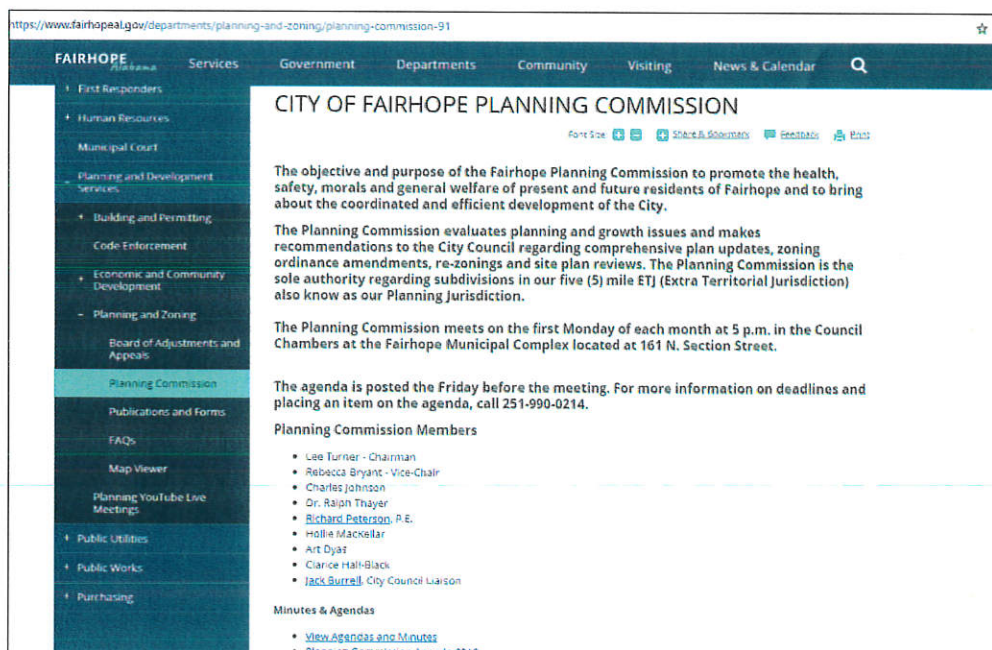
BMP #12: City of Fairhope Planning Commission

The Fairhope Planning Commission meeting is a monthly meeting (first Monday of each month at 5 p.m.). It is held at the Fairhope Civic Center and is open to the public. The objective and purpose of the Fairhope Planning Commission (a volunteer-based commission) is to promote the health, safety, morals and general welfare of present and future residents of Fairhope and to bring about the coordinated and efficient development of the City. The Planning Commission evaluates planning and growth issues and makes recommendations to the City Council regarding comprehensive plan updates, zoning ordinance amendments, re-zonings and site plan reviews. Storm water standards are frequently part of the discussion. The Planning Commission also serves as the annual review board for the Fairhope Storm Water Management Plan (SWMPP). Responsible Person(s): Planning and Zoning Department (Director)

BMP #13: Fairhope Environmental Advisory Board (FEAB)

The City of Fairhope (via Planning and Zoning Department support) facilitates and takes minutes at this monthly volunteer meetings, which focuses on environmental issues. This volunteer based advisory committee currently has ten (10) active members. The FEAB makes recommendations to City leaders, and offers a third party evaluation of City procedures and regulations. A frequent topic of the meeting is storm water management.

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



The screenshot displays the City of Fairhope website's Planning Commission page. The URL is <https://www.fairhopeal.gov/departments/planning-and-zoning/planning-commission-91>. The page features a navigation menu on the left with categories like 'Services', 'Government', 'Departments', 'Community', 'Visiting', and 'News & Calendar'. The main content area is titled 'CITY OF FAIRHOPE PLANNING COMMISSION' and includes the following text:

The objective and purpose of the Fairhope Planning Commission to promote the health, safety, morals and general welfare of present and future residents of Fairhope and to bring about the coordinated and efficient development of the City.

The Planning Commission evaluates planning and growth issues and makes recommendations to the City Council regarding comprehensive plan updates, zoning ordinance amendments, re-zonings and site plan reviews. The Planning Commission is the sole authority regarding subdivisions in our five (5) mile ETJ (Extra Territorial Jurisdiction) also know as our Planning Jurisdiction.

The Planning Commission meets on the first Monday of each month at 5 p.m. in the Council Chambers at the Fairhope Municipal Complex located at 161 N. Section Street.

The agenda is posted the Friday before the meeting. For more information on deadlines and placing an item on the agenda, call 251-990-0214.

Planning Commission Members

- Lee Turner - Chairman
- Rebecca Bryant - Vice-Chair
- Charles Johnson
- Dr. Rajon Thayer
- Richard Peterson, P.E.
- Hollie Mackellar
- Art Dyat
- Candee Hall-Black
- Jack Burrell - City Council Liaison

Minutes & Agendas

- [View Agendas and Minutes](#)
- [Planning Commission Agenda 2019](#)

Pictured: City of Fairhope website information on Planning Commission

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, continued

➤ Measurable Goals

One Year Goals:

1. Storm Water Education / Seminar

Responsible Department: Planning and Zoning Department (Director)

Goal: At least one staff shall member shall attend one storm water related workshop, conference or seminar annually

Due: December 2019

2. Storm Water Article on Social Media (Facebook)

Responsible Department:

Community Development (Director)

Goal: Ensure there is at least one storm water related article on Facebook per year

Due: December 2019

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

Responsible Department: Planning and Zoning Department (Code Enforcement)

Goal: Planning and Zoning along with the Building Department and Public Works Dept. hosts a 1.5 workshop for City employees. BMP techniques and recent storm water projects are discussed as well as regulatory information (City, State and Federal).

4. Public Educational / Input Meeting for Storm water Issues

Responsible Department: Planning and Zoning Department (Planning and Zoning Department / Director)

Goal: Facilitate at least one educational meeting per year (such as through FEAB and/or Planning Commission). This meeting will allow the public to offer input on the City of Fairhope's storm water plans and policies.

Due: December 2019

5. SWMPP Review

Responsible Department: Planning and Zoning Department (Director)

Goal: Facilitate review of storm water management plan yearly, through public forum such as Planning Commission and/or City Council. Send out notices accordingly.

Due: December 2019



Pictured: Storm Drain Medallion Artwork

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 practicable under State or local law, through ordinance, or other regulatory mechanism, non-storm water discharges into the MS4 and implement appropriate enforcement procedures and actions; Develop and implement a plan to detect and address nonstorm water discharges, including illegal dumping, to the system; develop and list in SWMPP ordinances to effectively prohibit non-storm water discharges to the MS4; implement a dry weather screening program designed to detect and address non-storm water discharges to the MS4 –100% of all outfalls every 5 years or about 20% per year; priority areas as outlined in the SWMPP (currently set at about 25% per year since this must be “more frequent” than non-priority outfalls), 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 and Zoning Department; Public Works; Building Department; Water and Sewer Department, Volunteer Fire Department, Public Works Department; Utilities Director of Operations; Community Development Director
- **Rationale Statement:** Illicit discharges are generally any discharge into a storm drain system that is not composed entirely of storm water. The City of Fairhope has an IDDE program, which is based on enforcement of our Illicit Discharge Ordinance (Ordinance # 1516). The Illicit Discharge ordinance was amended in 2014 to emphasize regulation and enforcement on all property owners, not just “facilities”. A written Standard Operating Procedure (SOP) has been developed for illicit discharge detection and elimination.



Pictured: Dry wall rinse water, potential illicit discharge, October 2018 reported by Public Works staff

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONTINUED

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 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.

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONTINUED

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. This SOP was updated in November 2018 to reflect the Water and Sewer Department capability to video up to 500' (instead of 200') of sewer line.



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, in conjunction with the Public Works Department, conducts annual dry weather screening of 20 to 25% of all outfalls annually as listed in the Storm Water Outfall Inventory. 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, in coordination with the Public Works Department, conducts a documented annual "Dry Weather Screening" of 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.

Dry Weather Screening is conducted by City Staff (Public Works Department and Planning and Zoning Department) at 20% of non-priority outfalls and 25% of priority outfalls annually. Schedule is listed in the current Storm Water Management Program Plan. Priority outfalls are those which ultimately drain to Weeks Bay, a Outstanding National Resource Water. City of Fairhope has over 630 outfalls as per the Storm Water Outfall Inventory (2012) which is updated annually.

Pictured: SOP for Illicit Discharge pg. 1

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.

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 500'. Beyond 500', the City of Fairhope can use an outside contractor for videoing beyond 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

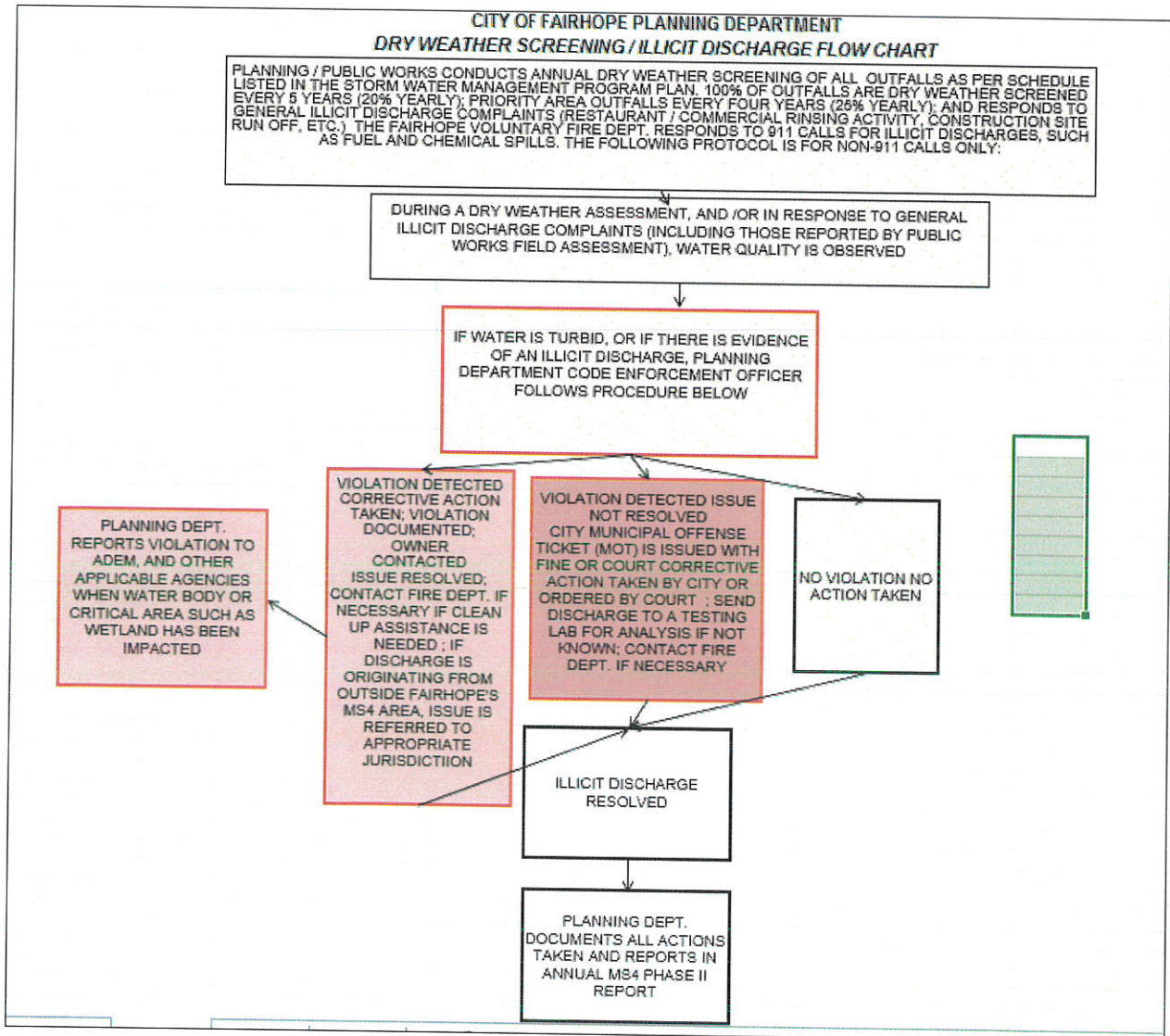
If the report is validated, the Planning Department Code Enforcement Officer will contact the responsible party and take all necessary steps (approved by Planning Director) needed to stop the illicit discharge which may include any and all actions documented in the City's Illicit Discharge Ordinance. 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. Discharges originating from other areas (outside the City of Fairhope MS4) will be reported to that jurisdictional authority.

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.

Pictured: SOP for Illicit Discharge pg. 2

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONTINUED



ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONTINUED

The Planning and Zoning Department Code Enforcement Officer uses a monthly complaint log to track complaints and corrective action procedures taken. Smoke tests/video inspections are periodically performed throughout the year by the Water and Sewer Department, to help detect infiltration from faulty sewer lines.

Building Inspectors ensure new development and redevelopment activities are compliant upon each construction inspection.

Areas zoned "M-1" (Light Industrial District) are considered a important area for IDDE monitoring. The general location of M-1 zoned areas are:

- a. Airport (CR 32)
- b. Nichols Avenue/Middle Street @ S. Greeno Road
- c. South Section Street @ Pecan (City of Fairhope Public Works facility)

All City outfalls identified in the Storm Water Outfall Inventory are assessed at least once every 5 years. Priority construction area (drains to Weeks Bay) outfalls are monitored more frequently (every 4 years). This means about 20% of non-priority outfalls and about 25% of priority outfalls are assessed yearly. The 5 year (2017-2021) monitoring schedule is in the Measurable Goals section below.

- **BMPs / Mechanisms** used for IDDE program compliance:
1. Illicit Discharge Ordinance #1516
 2. Code Enforcement Officers (2) (Planning and Zoning Department)
 3. Sanitation Officer (Public Works Department)
 4. Residential Curbside Cooking Oil Recycling Program
 5. Household Hazardous Waste drop off site for residents
 6. *Greener by the Yard* pamphlet
 7. Staff Meetings (Public Works)
 8. City of Fairhope Watershed Map
 9. Storm Water Outfall Inventory & Mapping
 10. Volunteer Fire Department (Spills)
 11. Create a Clean Water Future Campaign
 12. Sewer Capacity Study

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONTINUED

BMP # 1: Illicit Discharge Ordinance – states *“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.”*.

Penalty for non-compliance: Up to \$500

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

BMP # 2: Code Enforcement Officer (Planning and Zoning Department)

As of September, 2018, the City of Fairhope employs two (2) Code Enforcement Officer full time, in part, to investigate and issue corrective action on illicit discharge issues. Standard Operating Procedures (SOPs) were developed in 2014 and is updated yearly if necessary.

BMP # 3: Sanitation Officer (Public Works Department)

Fairhope employs Sanitation Officer full time to manage the waste management operations, and to enforce waste management laws of the City.

BMP # 4: Cooking Oil Recycling: The City of Fairhope has a used cooking oil recycling program for residents. Containers for cooking oil collection are available free upon request to residents. Residents may bring in used cooking oil for recycling or may place the containers on the right of way for curbside pickup. Restaurants are not allowed to dispose of oil within the City of Fairhope garbage stream and must set up a cooking oil recycling program. Sanitation and recycling crews (Public Works Department) are trained to report illegal dumping / rinsing activities, including inappropriate disposal of cooking oil. Responsible Person(s): Public Works Department (Sanitation Officer)

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. The HHW drop off site is located at 555 South Section Street. This site encourages the correct disposal of paints, motor oil and other chemicals, as well as electronic waste, automobile batteries and tires. There is a minimum recycling fee for tires (based on industry standards). There is no charge for other household hazardous waste drop off, including electronic waste. On average, the City of Fairhope recycles about 20 tons of household hazardous waste yearly (which includes electronic waste).

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

BMP # 6: Greener by the Yard

This pamphlet includes information in regards to what residents can do to prevent illicit discharges. It was created and published by the Weeks Bay Watershed Project, and is available in hard copy (Planning and Zoning Department) and on the City website.

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONTINUED

BMP # 7: Staff Meetings – Public Works employees are trained throughout the year in weekly staff meetings to report illegal dumping / rinsing activities, including inappropriate disposal of cooking oil, rinsing of paints and chemicals into storm drains, etc. The Public Works Department is the largest City Department, encompassing waste management, landscaping, streets and construction (about 50 full time employees). Responsible Person(s): Public Works Department (Director)

BMP # 8: Watershed Map

City of Fairhope has a watershed map which is used as a planning and construction tool. It is available on line (“Natural Resource Inventory”) and in the Planning and Zoning Department and in Public Works. Planning and Zoning Department (GIS) is responsible for updating, printing and providing this map.

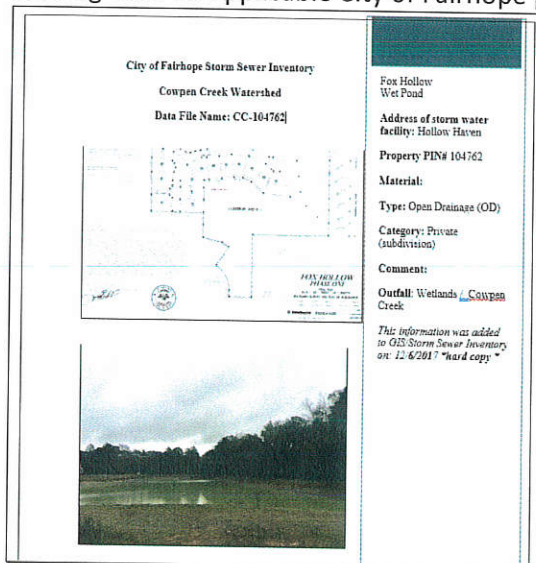
BMP # 9: Storm Water Outfall Inventory & Mapping

The City of Fairhope Planning and Zoning Department completed a survey of the City outfalls and infrastructure in 2012. This information was provided through GIS, and a map has been produced, including designation of 13 major (Bay) outfalls. New storm water outfall information is updated annually in hard copy form to include new development.

BMP # 10: Volunteer Fire Department / Fuel Spills: The Fairhope Volunteer Fire Department is responsible for responding to and facilitating removal of fuel / chemical spills. Responsible Person(s): Volunteer Fire Department (Chief)

BMP #11: Create a Clean Water Future Campaign

The City of Fairhope adopted a resolution to accept this campaign in August 2014. This is mentioned in MCM#1 under “Public Education”. This campaign addresses storm water pollution, including IDDE. Create a Clean Water Future logo is being used on applicable City of Fairhope publications and business cards.



Pictured: Outfall sheet

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONTINUED

BMP #12: Sewer Capacity Study

The Utility Department has conducted a capacity study on utility infrastructure. This study included sewer lines (in part addressing sanitary sewer overflows) and this will be used to determine current upgrade needs as well as growth demands.

www.fairhopeal.gov/home/showdocument?id=15025

Capacity Study for Gas, Water and Sewer Utilities – Phase I

For the City of Fairhope

Prepared for:

CITY OF FAIRHOPE
161 North Section Street
Fairhope, Alabama 36532



Prepared By:

GOODWYN, MILLS & CAWOOD, INC.
316 Magnolia Avenue
Fairhope, Alabama 36532

August 2017

GMC

ILLCIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONTINUED

➤ Measurable Goals

One Year Goals:

1. Storm Water Outfall Inventory Update

Responsible Department: Planning and Zoning Department

Goal: Update hard copy inventory annually, to include new development, redevelopment and corrections. (*Planning and Zoning Director*)

Due: December 2019

2. Video of Sewer Lines

Responsible Department: Water Department

Goal: Conduct video test on priority sewer lines annually to detect leaking sewer pipes or illegal connections. Document findings and corrective action taken (*Utilities Director of Operations*)

Due: December 2019

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 2019

4. Dry Weather Screening of Outfalls: As indicated on schedule listed below.

Two - Five Year Goals:

1. Dry Weather Screening of Outfalls

Responsible Department: Planning and Zoning Department / Public Works / Utility Director of Operations

Goal: a. NON-PRIORITY OUTFALLS: Assess 20% of non-priority outfalls yearly as per 5 year schedule. Use MS4 Storm Water Outfall Inventory (data sheets, map, etc.) as referenced to outfalls. Document outfalls assessed; date; conditions and maintenance requirements (and when complete), etc. This will satisfy the 5 year requirement for 100% of all outfalls every five years. Planning and Zoning Department and Public Works Department will be in the field conducting these assessments yearly. 2019: Fly Creek (104 outfalls)

Goal: b. PRIORITY OUTFALLS (DRAINS TO WEEKS BAY): Assess 25% of priority area (drains to Weeks Bay) outfalls as per 5 year schedule. Planning and Zoning Department and Public Works Department will be in the field conducting these assessments yearly. 2019: Cowpen Creek pg. 121 – 150 (29 outfalls)

Due: December 2019

City of Fairhope

MS4 Outfall Assessment Schedule

As per 2012 Storm Sewer (outfall) Inventory (including yearly updates)

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	186	*Priority* 1 / 4 years 2017: Pg. 1-90 2018: Pg. 91-120 (or pg. 91 through pg. 181 if Mott MacDonald conducts assessment) 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 1 / 4 years (Check: 2020)
Point Clear Creek Monitoring Responsibility: P&Z	33	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	53 (includes three Major Outfalls @ Mobile Bay)	1/5 yr. (Check: 2020)
Turkey Branch* Monitoring Responsibility: PW	4	*Priority (Check: 2020)
Volanta Monitoring Responsibility: P&Z	33 (Includes one Major Outfall @ Mobile Bay)	1/5 yr. (Check 2017)
Waterhole Branch* Monitoring Responsibility: PW	18	*Priority (Check: 2017)
TOTAL	639 OUTFALLS (INCLUDES 13 MAJOR OUTFALLS ALONG BAY)	

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

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

Priority watersheds : every 4 years
Non-priority watersheds : every 5 years

5.0 MINIMUM CONTROL REQUIREMENT #3:

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

- **Requirements:** Develop, implement, and enforce a program to reduce pollutants in storm water 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 and Zoning Department; Building Department; Public Works Department; Utilities Director of Operations
- **Rationale Statement:** The City of Fairhope has a Construction Site Storm Water Runoff Control program to control erosion and sedimentation. This program is applicable to all construction and land disturbance sites and is not limited by the size of the site (sites under an acre as well as over an acre are included in the program). This program includes project review, BMP inspections and enforcement of construction related ordinances for environmental protection. City employees (i.e. utility work) are held to the same standards as property owners, contractors and developers. The Planning and Zoning Department and the Building Department have QCI (Qualified Credentialed Inspector) trained staff to conduct BMP and construction inspections. The City of Fairhope currently has a total of (8) QCI certified employees on staff and six (6) of these are listed in the measurable goal section for mandatory renewal every year. As of November 2018, the Planning and Zoning Department has three (3) QCI certified staff members and the Building Department has five (5). In addition to a second Code Enforcement Officer, Planning and Zoning Department staff has been upgraded to include two (2) City Planners and (1) Planning Technician. All assist with design review. City crew leaders in each department are offered an overview of the Construction Site Storm Water Runoff Control program (including storm water standards at local and state levels) through a workshop held annually (Erosion and Sediment Control Workshop) by the City of Fairhope Planning and Zoning Department and the Building Dept. The City of Fairhope has a written Standard Operating Procedure (SOP) for non-compliant construction sites and this is available in the Building Department.

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL, CONTINUED

BMP # 1: Design Review: The City of Fairhope Planning and Zoning Department design review (and pre-construction meeting) process includes:

1. Informal review with applicant (encouraged not required)
2. Development Review with Staff (internal)
3. Preliminary Plats for Subdivision
4. Pre-construction meeting – with engineer of record
5. Final Plats for Subdivision
6. Zoning Applications
7. Site Plans (considered by Planning Commission), if they meet the following qualifications:

- Has a gross floor area of 10,000sf or greater; or,
- More than 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, 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.

General procedure of submittal review:

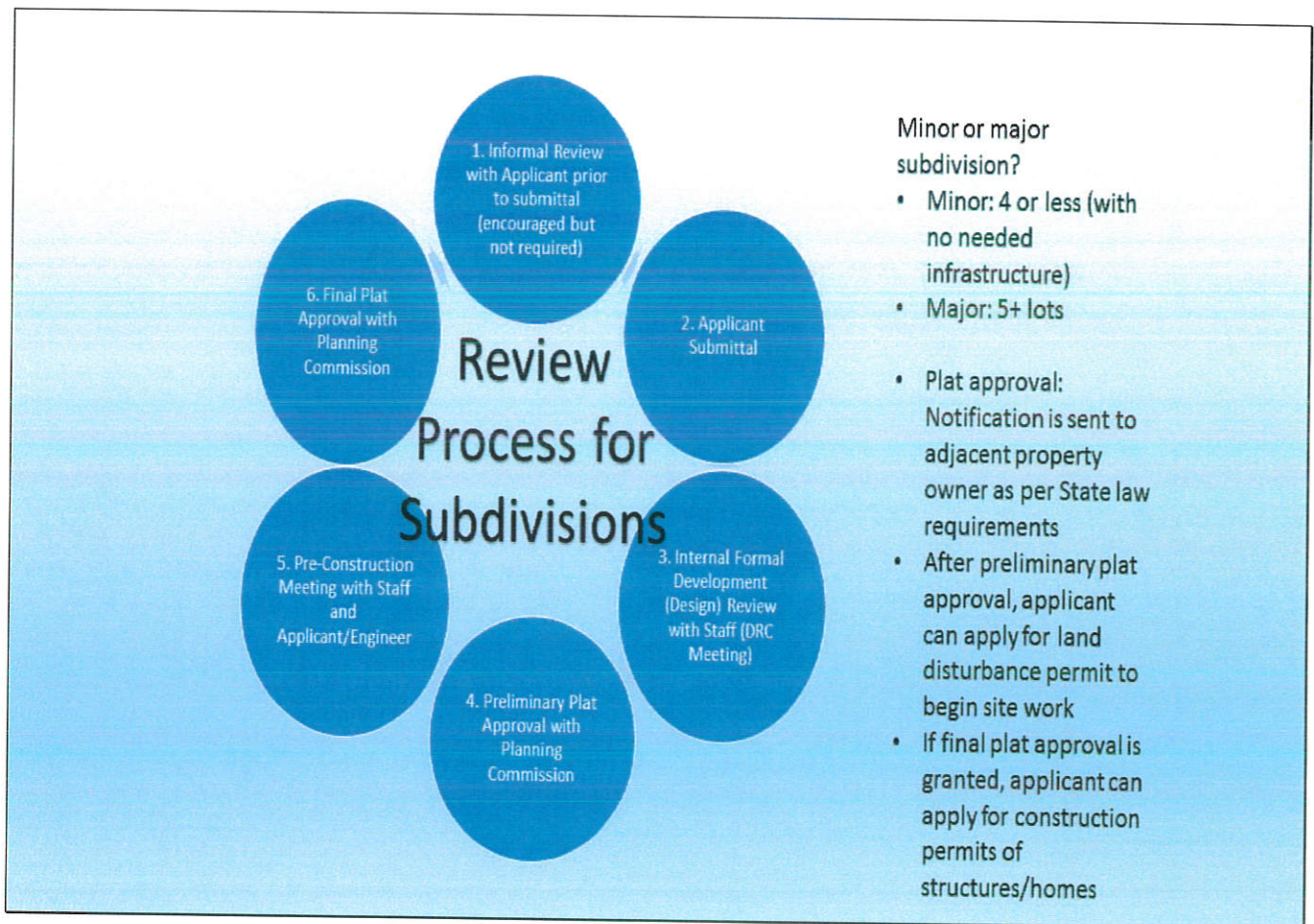
Staff conducts a review of all submittals and applicants are encouraged to meet with staff (City Planner or Planning Technician) before submission for development (informal review with applicant). For the subdivision applications, storm water drainage is reviewed for submittal requirements with the City of Fairhope Subdivision Regulations in the Preliminary Plat review. A design review meeting is held and attended by the various City of Fairhope Superintendents or Department representatives. The Public Works Department, Planning and Zoning Department and Building Department are the most instrumental representatives for Storm Water reviews. Although the City of Fairhope now has (2) two Professional Engineers on staff, the applicant's engineer is the person ultimately responsible for drainage compliance with the City's regulations. The Code Enforcement Officer is responsible for the Erosion Control compliance review of submitted plans. The comments generated during the design review meeting are compiled in a review letter which is sent to the applicant. The applicant provides a response letter. The City of Fairhope staff prepares a staff report for the Planning Commission members prior to the Planning Commission meeting.

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

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL, CONTINUED

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.

The City of Fairhope requires a 2-year maintenance bond for the infrastructure to be accepted by the City.



CONSTRUCTION SITE STORM WATER RUNOFF CONTROL, CONTINUED

BMP # 2: BMP Inspections-City of Fairhope Planning and Zoning Department has two full time Code Enforcement Officers (one recently hired in Sept. 2018) to perform code enforcement inspections, including BMP inspections. The Code Enforcement Officers track BMP inspections and non-compliant sites (including corrective actions taken) via a monthly log. The initial BMP inspection is performed prior to other 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. Construction sites within the Priority Construction Area (those draining to Weeks Bay) are inspected monthly, as per ADEM's requirement for the Priority Construction Area. Map of "priority construction area" is available in the Planning and Zoning Department Code Enforcement Office. The Building Inspectors assist with BMP inspections by ensuring compliance with each construction inspection (essentially, a BMP inspection is performed with each construction inspection). The Building Inspectors usually perform the closure BMP inspection, as part of the final inspection on the site. A Certificate of occupancy is not issued unless site is stable and compliant.



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

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL, CONTINUED

BMP inspections include:

- a. Initial
- b. Phasing (if applicable)
- c. Closure (certificate of occupancy is not issued unless site is stable)
- d. Additionally, monthly inspections are conducted and documented by the Planning and Zoning Department Code Enforcement Officer for "priority construction sites", or those draining to ONRW Weeks Bay.

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

BMP #3: Code Enforcement / Non-compliant Sites: The City of Fairhope enforces the Erosion and Sediment Control ordinance (#1398 and #1603) through Notice of Violations, Stop Work Orders, suspended construction inspections, City street sweeper charges and/or municipal offense tickets. These efforts minimize sedimentation and erosion to the maximum extent practicable. Water quality impacts are referred to state and/or federal authorities as well. A written Standard Operating Procedure (SOP) for non-compliant construction sites was developed in 2014 and is updated as needed:



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-compliant 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 maximum 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)

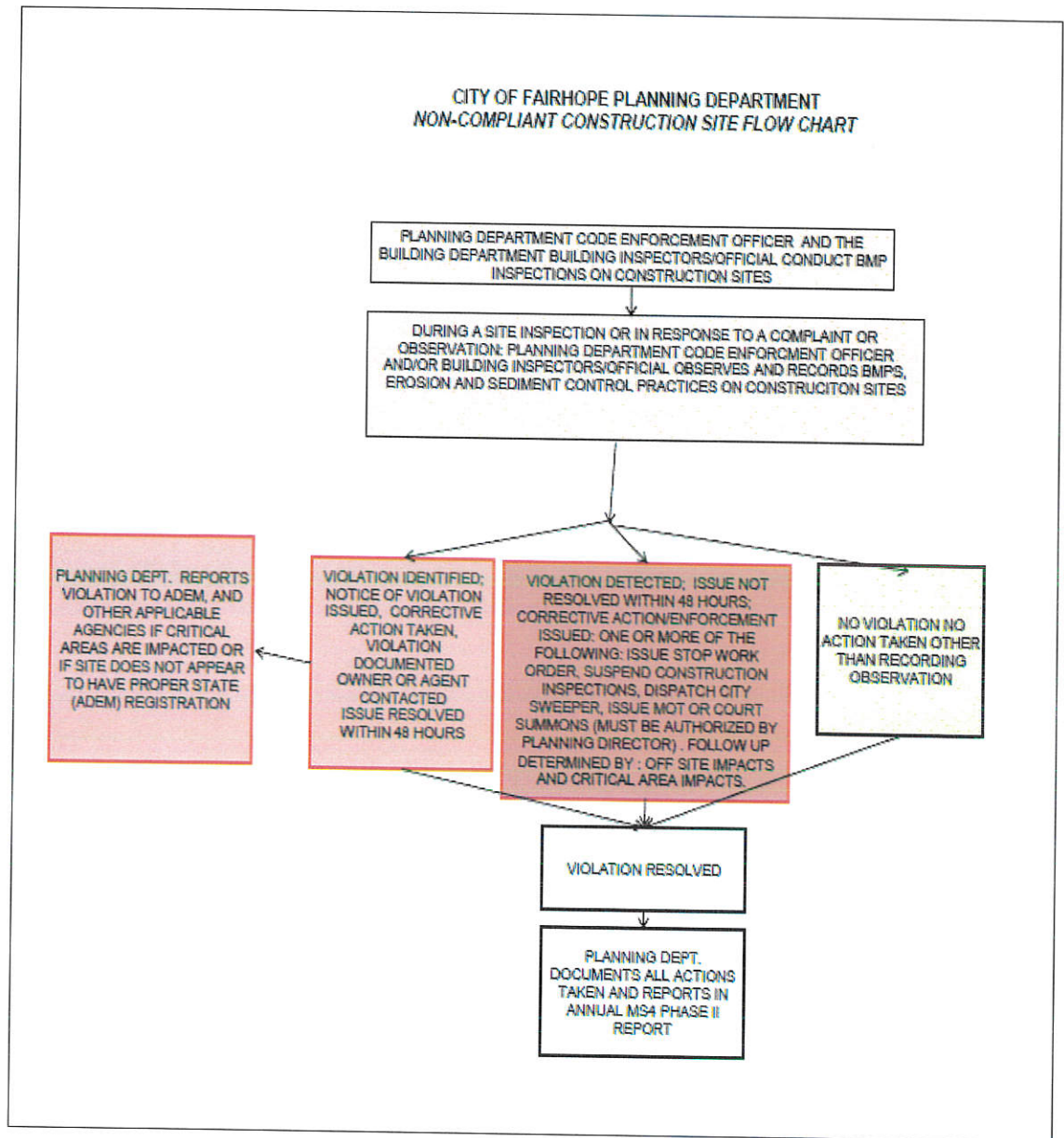
Environmental Agency Notification

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.

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL, CONTINUED



CONSTRUCTION SITE STORM WATER RUNOFF CONTROL, CONTINUED

Procedures for non-compliant sites:

1. Notice of Violation (written or verbal)
2. Suspended Construction Inspections
3. Stop Work Orders
4. Authorize Street Sweeper at \$300 minimum charge to violator
5. Municipal Offense Ticket
6. ADEM notification if water quality impact has occurred

Responsible Person(s) for BMP inspections / Code Enforcement: Planning and Zoning Department (Code Enforcement); Building Department (Building Official)

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

1. Erosion and Sediment Control (#1398 and #1603), outline procedures for BMP requirements (including inspections), and corrective action.
2. Red Soil Ordinance (#1423) prohibits red soil and clay in or near critical areas
3. Construction Site Waste (#958) requires construction sites to contain waste

Responsible Person(s) for municipal ordinances: Planning and Zoning Department; Building Department

BMP # 5: Educational Material, brochures/booklets available to contractors/developers:

1. *Field Guide for Erosion and Sediment Control on Construction Sites in Alabama* by Alabama Soil and Water Conservation Committee Partners
2. *BMP Minimum Requirements*, City of Fairhope handout
3. *Storm Water Management*, by EcoSolutions



Pictured: Example of Fairhope's minimum BMP requirements on development projects: silt fence and construction entrance

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL, CONTINUED

➤ Measurable Goals:

One Year Goal:

1. QCI Re-certification for Code Enforcement Officer #1

Responsible Department: Planning and Zoning Department

Goal: Recertify QCI Re-certification (*Code Enforcement Officer*)

Due: December 2019

2. QCI Certification for Code Enforcement Officer #2

Responsible Department: Planning and Zoning Department

Goal: Certify new Code Enforcement Officer

Due: December 2019

3. QCI Re-certification for Building Department (5 Building Inspectors)

Responsible Department: Building Department

Goal: Recertify (5) Building Inspectors with QCI training

Due: December 2019

Note: all Building Inspectors including new building inspectors have received initial QCI training and certification and will maintain this yearly. Planning and Zoning Department Code Enforcement Officers will also obtain and maintain this certification.

Why become a Qualified Credentialed Inspector?

- Better understand the ADEM general NPDES permit program and local programs to help achieve & maintain compliance.
- Understand the importance of the Construction Best Management Practices plan & recognize proper BMP installations.
- Perform *self-inspections*, recognize BMP problems and coordinate timely maintenance as required by the general permit.
- Be able to log & keep records & improve communications with the operator - reduce compliance liability.
- Avoid or reduce risk of successful citizen lawsuits.
- Recognize the need to address environmental issues *early* in the project planning & throughout the construction period.

Pictured: Information on the QCI certification program (Source: HBAA website)

6.0 MINIMUM CONTROL MEASURE # 4: POST CONSTRUCTION STORM WATER MANAGEMENT

- **Requirement:** Develop/revise, implement and enforce a program to address storm water 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 storm water 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 storm water 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.



Pictured: Google Earth image of existing subdivisions surrounding new subdivision underway (Firethorne) in Fairhope's largest watershed, Cowpen Creek.

POST CONSTRUCTION STORM WATER MANAGEMENT, CONTINUED

- **Rationale Statement:** The Planning and Zoning 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). Both of these committees are appointed by the Mayor and Council, and work with the Planning and Zoning Department and the Building Department with design and review procedures, as set forth in the Zoning Ordinance and Subdivision Regulations. The Planning Commission reviews amendments to the Zoning Ordinance and the Subdivision Regulations.

The Subdivision Regulations “Storm Water Standards” Article V Section F include a 5 year storm water inspection report requirement (changed from 3 to 5 years in 2018) and a long term storm water plan (Operation and Maintenance requirement). An O&M Plan is submitted with final subdivision plat which requires a stormwater structure. A LID component was added to the Subdivision Regulations and to the Zoning Ordinance in 2015. The Subdivision Regulations LID Ordinance has been revised in 2018 to remove the required ten (10) LID components and instead require “as many LID techniques as practical and appropriate for the development. Plans and calculations shall show the efficacy of each LID technique and include a quantitative analysis of their performance. Plans shall clearly identify each LID technique on a Grading and Drainage Plan with appropriate details and cross references to the drainage calculations.”

The Planning and Zoning Department Code Enforcement Officers address runoff issues from sites within the City of Fairhope (including post construction residential, 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. The Public Works Department oversees maintenance of city-owned storm water infrastructure.

- **Responsible Persons:** Planning and Zoning Department; Building Department; Public Works Department; Utilities Director of Operations; Community Development Director

POST CONSTRUCTION STORM WATER MANAGEMENT, CONTINUED

- **BMPs / Mechanisms for Post Construction Storm Water Management**
1. Subdivision Regulations
 - a. Storm Water Standards (Article V, Section F)
 - b. Stormwater Facility Inspection Requirement (Article V, Section F)
 - c. Flood Control Structures (definition)
 - d. LID standards (Article V, Section F) *Revised 2018*
 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. Storm Water Projects by the City
 5. Storm Water Facility Inspection Requirement / 3 year (Subdivision Regs)
 6. Creek / Shoreline Assessment by kayak
 7. Standard Courtesy Letter for Property Owners of non-compliant storm water facilities
 8. Annual Email to POA/HOA groups: "HOA Stormwater Guide"

ASSESSMENT CRITERIA

Launch Site: End of Volanta access

Assessment area: Fly Creek north to Rock Creek and then south to South Beach Park

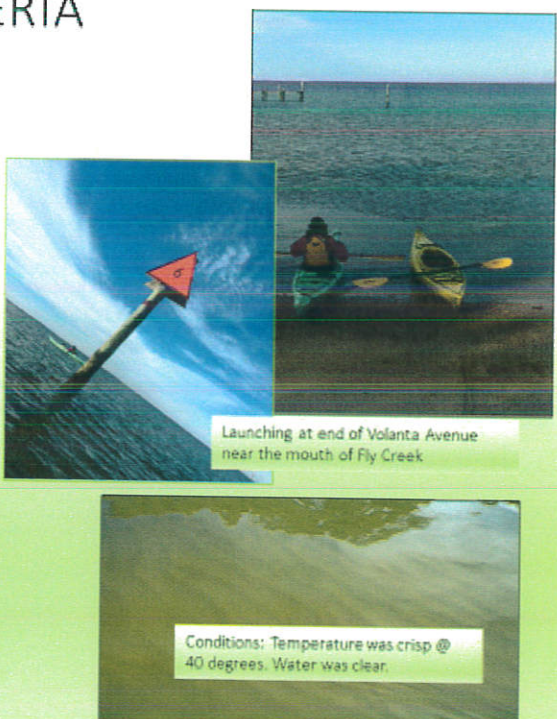
When: Thursday, December 6, 2018 8:30 a.m. – 11:30 a.m.

Equipment used:

- (2) one-person kayaks
- Sony camera
- I-phone
- Dive knife

What did we look at ?

1. City bluffs
2. City infrastructure including:
City of Fairhope MS4 major outfalls: 6 of 13:
*Major outfall #1 Fly Creek
*Major outfall #2 Rock Creek
*Major outfall #10 Volanta Gully outfall
*Major outfall #11 South Beach Park – Stack Gully
*Major outfall #12 End of Fairhope Avenue (south of municipal pier) – Stack Gully
*Major outfall #13 Gayfer Court (Big Mouth)



Launching at end of Volanta Avenue near the mouth of Fly Creek

Conditions: Temperature was crisp @ 40 degrees. Water was clear.

Pictured: Shoreline assessment criteria for 2018

POST CONSTRUCTION STORM WATER MANAGEMENT, CONTINUED

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

Responsible Department: Planning and Zoning Department (Director)

- a. **Stormwater Standards:**
<https://www.fairhopeal.gov/home/showdocument?id=20823>
- b. **Storm Water Facility Inspection Requirement:** As per the Operation and Maintenance (O & M) plan within the Subdivision Regulations, the City of Fairhope Planning and Zoning Department has specific regulations for property owners in regards to the five year storm water inspection requirement for respective storm water facilities. This requirement is for subdivision storm water facilities, installed, effective in 2007. For more information, refer to the City of Fairhope Subdivision Regulations, Article V, Section F, 3. (a) (3).
- 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: Article V, Section F**



Pictured: LID stormwater facility in Pointe Place II

POST CONSTRUCTION STORM WATER MANAGEMENT, CONTINUED

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

Responsible Department: Planning and Zoning Department (Director)

a. Stormwater Management Standards:

www.fairhopeal.gov/departments/planning-and-zoning/publications-and-forms

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 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.

POST CONSTRUCTION STORM WATER MANAGEMENT, CONTINUED

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 sidewalk, the Volanta sidewalk, Knoll Park, and Coastal Alabama College Campus.

Responsible Department: Public Works (Director)

BMP # 4: City Storm Water Projects: The City of Fairhope Public Works Department completes several storm water projects annually. Projects include bioretention and storm water facility installation and maintenance (on City property), pervious sidewalk installation (on City right of way), bluff stabilization and repair (on City property) and drainage improvements on City right of way.

Responsible Department: Public Works (Director); Utilities Director of Operations



Pictured: City stormwater project - bulkhead at Fly Creek (Fairhope Docks marina)

BMP # 5: Storm Water Facility Inspection Requirement

As per the Operation and Maintenance (O & M) plan within the Subdivision Regulations, the City of Fairhope Planning and Zoning Department property owners are required to conform to the five year storm water inspection requirement for respective storm water facilities. This requirement is for subdivision storm water facilities, installed, effective in 2007. For more information, refer to City of Fairhope Subdivision Regulations, Article V, Section F, 3.(a)(3).

Responsible Department: Planning and Zoning Department (City Planner)

POST CONSTRUCTION STORM WATER MANAGEMENT, CONTINUED

BMP # 6: Creek / Shoreline Assessment by Kayak: The Planning and Zoning Department staff conducts a creek or shoreline assessment (by kayak) annually, of a portion of the City of Fairhope MS4 area. Assessed shoreline area will change every year according to suspected projects, outfalls due for assessment and/or other considerations. 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/outfalls).

Responsible Department: Planning and Zoning Department (Code Enforcement)

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 storm water 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). After outfalls assessments are conducted (annually), those found with significant deficiencies receive a letter from the Public Works Director stating the deficiency found and requesting maintenance and/or repair of facility.

Responsible Department: Public Works Department (Director)

BMP #8: Annual Email to POA / HOA Groups: HOA Stormwater Guide

According to the Storm Water Standards written into the City of Fairhope Subdivision Regulations, Section F. (7) regarding detention and retention ponds: *“Such facilities shall be owned, operated and maintained by the development entities and shall not be accepted for inspection or maintenance by the City of Fairhope”*. Therefore, the City emails the POA / HOA presidents or contact persons an electronic copy of the brochure titled *“A Homeowner Guide to Detention Pond Maintenance”*. This is a brochure drafted in May 2018 by the Weeks Bay Foundation and Weeks Bay National Estuarine Research Reserve for the City of Fairhope to use as outreach and MS4 compliance. This is used by the City to educate property owners of stormwater facilities of their responsibility for maintenance of their subdivision pond or ponds. This in turn helps the City achieve compliance with the MS4 permit requirement which states that 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”*. The City of Fairhope Planning and Zoning Department maintains a *“Subdivision Contact List”*.

Responsible Department: Planning and Zoning Department (Code Enforcement); Public Works Department (Director)

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

Pictured: HOA Stormwater Guide Pg. 1

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 25% 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 Stormwater Guide Pg. 2

A HOMEOWNER GUIDE TO STORMWATER DETENTION POND MAINTENANCE

INSPECTION CHECKLIST

Checklist used should be specific to your site, such as the one provided in your subdivision's Operation and Maintenance Plan

Date: _____ Detention Facility: _____ Inspected by: _____ Phone: _____

Type of Facility: Dry Pond Wet Pond Outfall Type of Inspection: Routine Post – Storm

ISSUE	PROBLEM NOTED? YES or NO	STEPS TO BE TAKEN	DATE OF COMPLETION
Are all structural components working properly?			
Is water flowing out of the outflow pipe?			
Are there any cracks or damaged areas on inlet/outflow pipes? Spillway? Weir?			
Does the grass need to be cut?			
Has unwanted vegetation grown over the outflow or inlet pipes?			
Overgrowth of algae noted?			
Invasive plants noted?			
Areas that need to be reseeded/replanted?			
Are there signs of erosion?			
Is there noticeable sedimentation in the basin? In the inlet/outflow?			
Signs of pollution? (Oily sheen, foam, etc.)			
Signs of vandalism?			
Signs of pests? (Burrowing, nesting, fire ant hills)			

Other Comments/Observations:

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 Stormwater Guide Pg. 3

A HOMEOWNER GUIDE TO STORMWATER DETENTION POND MAINTENANCE

FAIRHOPE RESOURCES FOR STORMWATER QUESTIONS

Fairhope

Richard Johnson
Richard.johnson@fairhopeal.gov
(251) 928-8003



Online

EPA Stormwater Program
<https://www.epa.gov/npdes/npdes-stormwater-program>

ADEM Stormwater
<http://www.adem.state.al.us/programs/water/default.cnt>

NOAA
<http://www.noaa.gov/resource-collections/watersheds-flooding-pollution>

Portions of the content of this document are based on existing information from other stormwater programs. Special thanks goes to the following:

Canon City Stormwater Program "Maintaining Detention Ponds"

Oregon Department of Transportation, "Maintenance Requirements for Water Quality Features"

City of Portland Oregon, "Stormwater Management Facilities Operation and Maintenance for Private Property Owners"



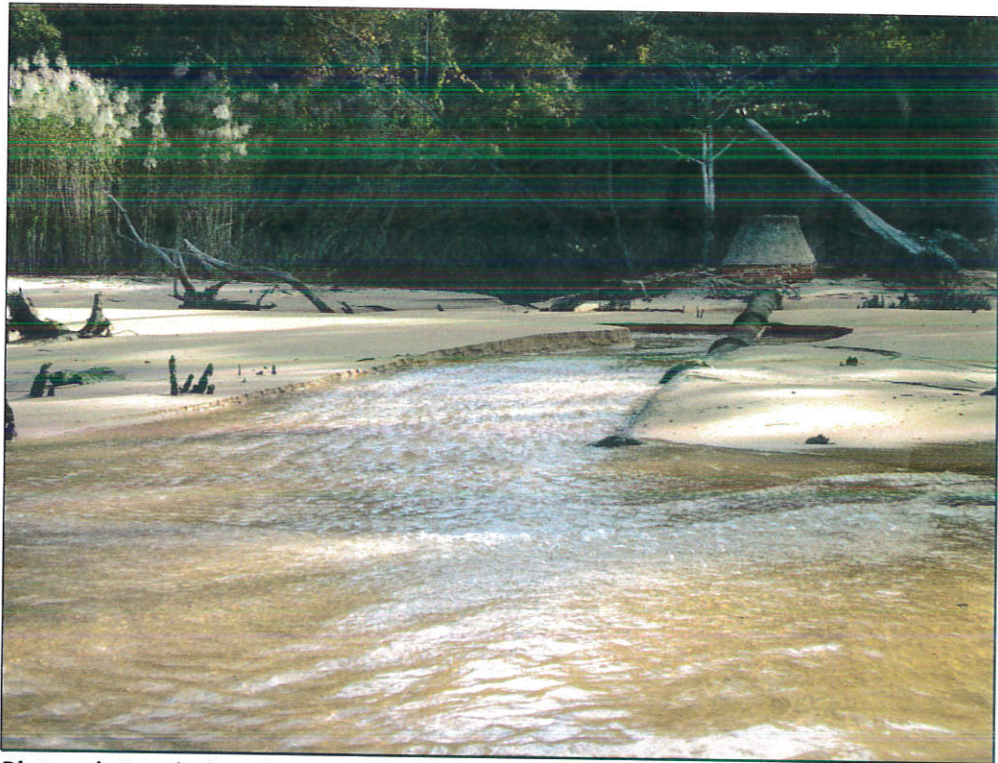
Provided by the Weeks Bay Foundation and the Weeks Bay National Estuarine Research Reserve
Through collaboration with the Coastal Training Program and local municipalities

Pictured: HOA Stormwater Guide Pg. 4

POST CONSTRUCTION STORM WATER MANAGEMENT, CONTINUED

➤ Measurable Goals:

- 1. One Year Goal: Community Event for Stormwater Education**
Responsible Department: Planning and Zoning Department
Goal: Facilitate or support community event: hands on event related to post-construction storm water education (such as Earth Day watershed exhibit)
Due: December 2019
- 2. One Year Goal: Creek/Shoreline Assessment by Kayak**
Responsible Department: Planning and Zoning Department
Goal: Conduct creek or shoreline assessment via kayak to look for pipes, pollutants or sediment discharging into the creek or shoreline, and obstructions in the creek or shoreline.
Due: December 2019



Pictured: Kayak shoreline assessment, Big Mouth Gully outfall, December 2018

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

- **Requirements:** Develop and implement a program that will prevent or reduce the discharge of pollutants in storm water run-off from municipal activities to the maximum extent practicable. The program elements shall include, at a minimum, the follow: An inventory of all municipal facilities that have the potential to discharge pollutants via storm water run-off. ; Strategies for implementation of BMPs to reduce litter, floatables and debris from entering the MS4 and evaluation of those BMPs annually (including a plan to remove litter, floatable and debris material from the MS4); SOP for municipal activities; program for inspecting municipal facilities for good housekeeping practices; a training program for municipal staff. More details on these requirements can be found in the general permit.

- **Responsible Persons:** Planning and Zoning Department; Building Department; Public Works Department; Golf Course; Recreation Department; Gas Department; Water and Sewer Department; Electric Department; Police Department; Fire Department; Mechanic Shop; City Hall; Utilities Director of Operations; Community Development; Special Projects Manager

- **Rationale Statement:** The City of Fairhope has many departments within its own authority. Those operated by Public Works are noted, City facilities include:
 - Mechanic Shop (AL0000324764)
 - Waste Water Treatment Plant (AL0020842)
 - C & D Landfill (02-07) *Public Works
 - Quail Creek Golf Course
 - Recreation Department
 - Gas Department
 - Water and Sewer Department
 - Electric Department
 - Public Works Department *Public Works
 - Recycle Facility *Public Works
 - Greenhouse (Nichols Avenue) *Public Works
 - Police Department
 - Volunteer Fire Department
 - City Hall / Civic Center
 - The Haven (Animal Shelter)
 - City Marinas: Sea Cliff Drive and Pier

POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS, CONTINUED

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

The City of Fairhope provides garbage, trash and recycling pickup weekly (garbage twice weekly), and this aids in keeping our storm drains clean. Daily street sweeping operations also remove debris from streets and storm drains.

The City of Fairhope owns two marinas: Fairhope Docks at the end of Sea Cliff Drive on Fly Creek and the Fairhope Municipal Pier. The Fairhope Docks marina is owned and operated by the City of Fairhope. The Fairhope Municipal Pier marina is leased, together with the building housing Shux restaurant, and lessee manages the marina. Both facilities offer boat slips. Both areas have sewage pump out facilities available. Fairhope Docks is keeping Clean Marina guidelines in mind while undertaking necessary repairs and renovation work. At this time there are no industrial or boat maintenance/repair activities listed for either marina. The City is considering providing dry storage and/or a boatyard. In the case of the boatyard, the lessee will be responsible for acquiring ADEM permitting.

These City facilities operate under a separate ADEM Permit:

1. Mechanic Shop, 560 South Section Street (AL0000324764)
2. Waste Water Treatment Plant, 300 N. Church Street (AL0020842)
3. C & D Landfill, 555 South Section Street (AL 02-07)

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

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

POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS, CONTINUED

BMP # 1: Employee Meetings: Employee meetings are held in most departments monthly (and in some cases weekly), and housekeeping items are addressed throughout the year.

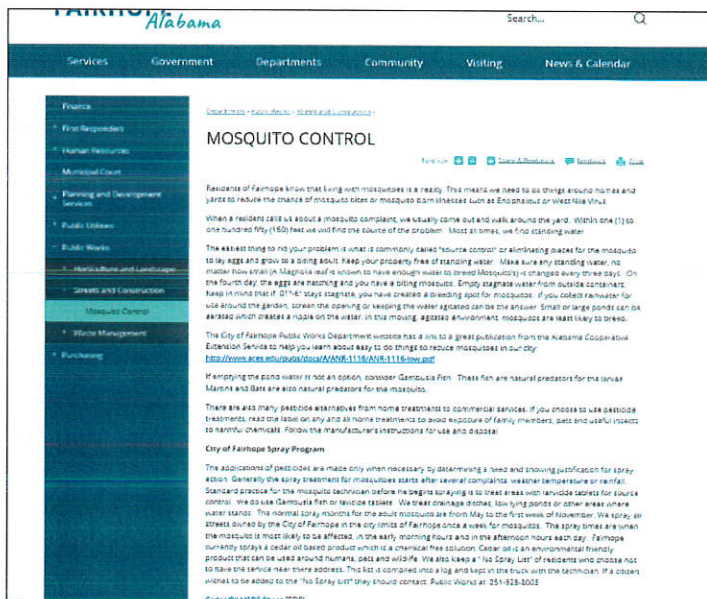
BMP # 2: Pest Management:

a. Certified Pesticide Applicators: Pesticide, herbicide and fertilizer application is overseen by certified applicators, in the Public Works and Golf Course. Three employees within the City of Fairhope are certified through the State of Alabama Department of Agriculture and Industries as certified pesticide applicators. This specialized training ensures that pesticide, herbicide and fertilizer application on City property is done in accordance with manufacturer's recommendations in the most environmentally friendly method possible. Applicator license (3 year) certifications include:

- a. Public Works, Landscape Supervisor
- b. Parks and Recreation Director
- c. Golf Course Grounds Supervisor

b. Mosquito Control Program / Source Control: 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 MSDS for the cedar oil spray is available on the City website. 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. Source control is encouraged.

<https://www.fairhopeal.gov/departments/public-works/streets-and-construction/mosquito-control>



Pictured: Mosquito and source control informaton on the City of Fairhope website

POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS, CONTINUED

BMP # 3: Waste Management Program:

Garbage, Trash and Recycling Pickup: Recycling is picked up weekly, curbside for residents and commercial businesses. Based on recent years averages, about 1,500 tons of material are recycled annually (paper, cardboard, glass, plastic, and metals). Yard waste is picked weekly from residents, and placed in the City yard waste pile (at 555 South Section Street) for mulching, grinding or land reclamation efforts. Based on recent years' averages, about 30,000 cubic yards of yard waste (organic) material are removed annually from residential right of ways, contributing to keeping the storm drains clear from debris. Garbage pickup is offered two times per week for residents, and up to five times per week for commercial businesses. Based on recent years' averages, about 9,000 tons of garbage are removed and disposed of in the Magnolia Springs landfill. There is a drop off site at the Public Works facility for trash, HHW and recycling. There is also a Transfer Station for garbage. **Recycling Facility / HHW:** The Sanitation Officer (Public Works) is responsible for overseeing these areas are kept clean and ensures there is no illicit discharge from these activities. Tires, HHW chemicals, motor oils, electronics and anything that could contribute to an illicit discharge is kept covered, to the maximum extent practical.

Residents and businesses are encouraged to recycle. Mechanisms for education include:

1. Mobile Area Earth Day; E-waste recycling event (April)
2. America Recycles Day; E-waste recycling event (November)
3. City website (www.fairhopeal.gov)

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.

BMP # 5: Project work by City Employees: City departments are required to obtain 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 and Zoning 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.

POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS, CONTINUED:

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 in the Building Department.





Pictured: Pocket "Field Guide"

BMP # 7: Dedicated Wash Racks: 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; and Station #3- 8600 Highway 32 (Airport). **Director or department head of each department is responsible for overseeing the proper washing of vehicles and equipment in his / her respective department.** The Public Works Department has a "Tire Rinse" only station (open grate drain) for the rinsing of mud and sediment from bull dozer tracks and equipment tires. This grate drain has a sediment removal basin, which is cleaned out annually by the Public Works Department. There is signage at this basin stating this is for "Tire Rinsing Only". Vehicles are not allowed to be washed off here, since this drains directly to Tatumville Gully.

POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS, CONTINUED

BMP # 8: SOP For Municipal Activities:

In 2016, Public Works created a Standard Operating Procedure for their activities (revised in 2018):



City of Fairhope, Alabama

Date: 11/26/2018

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 day's 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 vehicle tracks and tires 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.

SOP PG. 1

3. Tires:
 - a. Residents may bring in tires and are charged a nominal fee.
 - b. 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:
 - a. Litter control is maintained daily and weekly by walk through inspections by the certified landfill operator(s).
 - b. Litter collection is maintained by work parties (inmates) collecting misplaced debris and litter weekly.
 - c. 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:
 - a. Downtown and beach areas are swept three times a week; Monday, Wednesday and Friday
 - b. 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.
 - c. 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.
 - d. 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.
 - e. The sweeper dumps litter after sweeping on the city of Fairhope solid waste transfer station for disposal into a solid waste landfill.

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.

- a. 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.
- b. Concrete pipe, brick and masonry block are stored in different locations and are not considered hazardous to storm water.
- c. 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:

- A. 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.
- B. 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:

- A. All pesticides and chemical fertilizers are stored in original marked containers.
- B. All chemical containers are kept in a locked storage area.
- C. Use is monitored by trained and certified employees for approved application procedures.
- D. All empty containers are triple rinsed when empty.
- E. Disposal of containers will go into the Transfer Station for disposal in Magnolia Springs Landfill (containers, including washed and empty containers. Containers not allowed in the City C&D landfill).
- F. Any spillage or overages are contained and submitted into the city hazardous household waste facility, stored in 55gallon drums, and turned over to an industrial chemical disposal company for destruction.

SOP PG. 3

POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS, CONTINUED:

➤ **Measurable Goals**

One Year Goals:

1. Good Housekeeping / Pollution Prevention memo for all departments

Responsible Department: Planning and Zoning Department

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

Due: December 2019

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. (*Public Works Dept. Sanitation Officer*)

Due: December 2019

3. Recertify Commercial Pesticide Applicators License #13268

Responsible Party: Parks and Recreation Director

Goal: Renew Commercial applicator's license

Due: November 2019

Two to Five Year Goal:

1. Recertify Pesticide Applicator's License #2002077

Responsible Party: Golf Course Supervisor

Goal: Renew Commercial Applicator's License

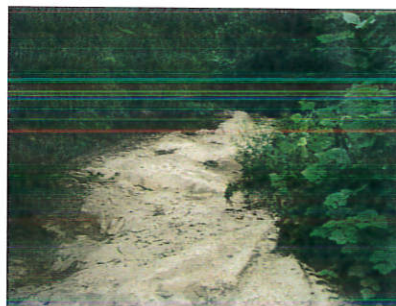
Due: December 28, 2021

2. Recertify Pesticide Applicator's License #2002057

Responsible Party: Public Works Landscape Supervisor

Goal: Renew Commercial Applicator's License

Due: December 28, 2021



Pictured: Tatumville Gully

