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

2023
(April 1, 2023– March 31, 2024)

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

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

_____
Name and Title (type or print)

_____ _____
Sherry Sullivan, Mayor (Signature) Date

1.2 List of Contacts

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

Contact Person: Mrs. Kim Burmeister
Code Enforcement Officer
555 South Section Street
Fairhope, AL 36532
(251) 928-8003

Planning and Zoning staff paddling Fly Creek for the annual shoreline assessment, November 2022

1.3 General Introduction

The City of Fairhope is situated on the eastern shore of Mobile Bay in Baldwin County, in southwest Alabama. The 2020 US Census determined the City's population estimate to be 22,477. The annexed limits, which are also the MS4 area limits, comprises about 15 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 2021, there are (3) 303(d) impaired streams listed by ADEM.

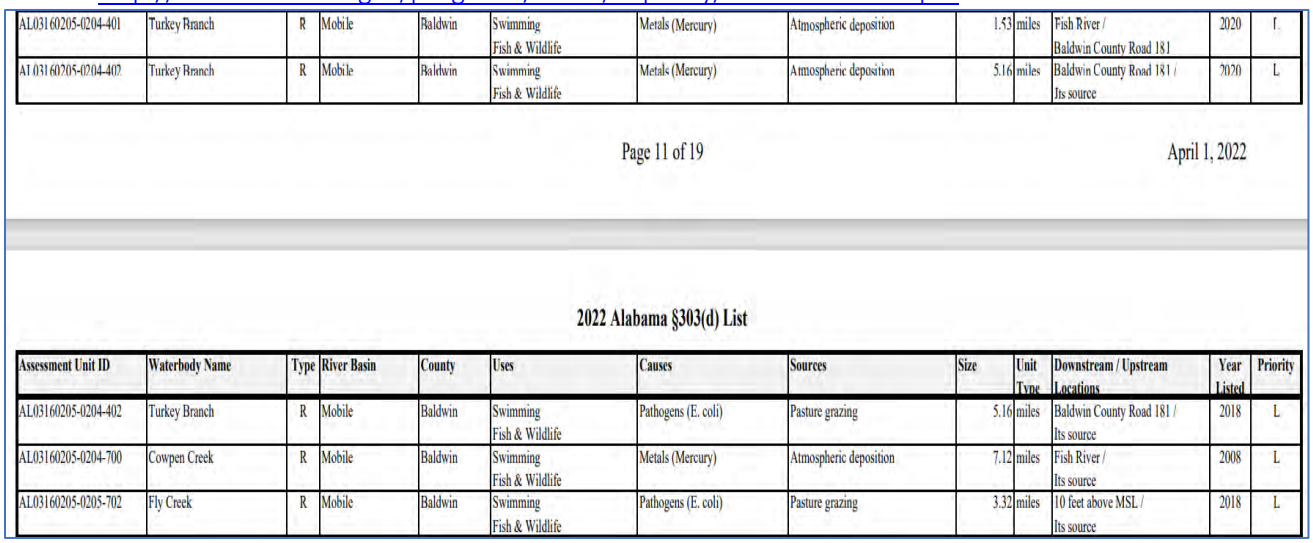
a. Cowpen Creek is identified as a 303 (d) stream due to the presence of atmospheric mercury deposition. It is not anticipated that the land uses in the City of Fairhope MS4 watersheds are contributors to the atmospheric deposition of mercury.

b. Fly Creek is identified as a 303 (d) stream due to presence of pathogens likely from cattle grazing.

c. Turkey Branch is identified as a 303 (d) stream due to the presence of pathogens, likely from cattle grazing and atmospheric deposition of mercury.

It is not anticipated that the City of Fairhope MS4 area is a contributor to any of these impairments. There are no known cattle grazing activities in the Fly Creek watershed or Turkey Branch watershed in the city limits. There are no known activities which might contribute to atmospheric mercury deposition.

http://adem.alabama.gov/programs/water/wquality/2020AL303dList.pdf



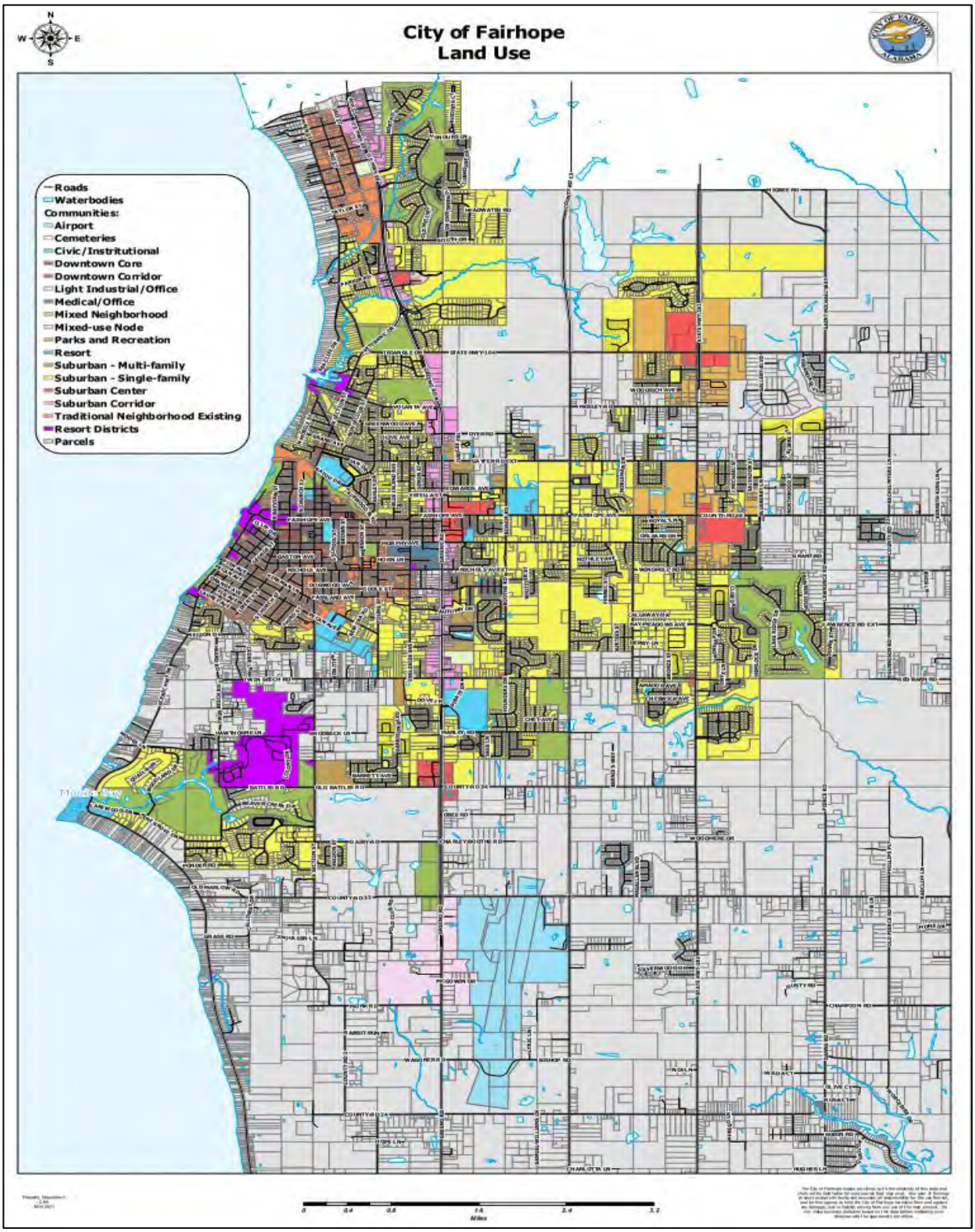
AL03160205-0204-401	Turkey Branch	R	Mobile	Baldwin	Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	1.53	miles	Fish River / Baldwin County Road 181	2020	L
AL03160205-0204-402	Turkey Branch	R	Mobile	Baldwin	Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition	5.16	miles	Baldwin County Road 181 / Its source	2020	L

Page 11 of 19 April 1, 2022

2022 Alabama §303(d) List

Assessment Unit ID	Waterbody Name	Type	River Basin	County	Uses	Causes	Sources	Size	Unit Type	Downstream / Upstream Locations	Year Listed	Priority
AL03160205-0204-402	Turkey Branch	R	Mobile	Baldwin	Swimming Fish & Wildlife	Pathogens (E. coli)	Pasture grazing	5.16	miles	Baldwin County Road 181 / Its source	2018	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

ADEM 303d List 2022


City of Fairhope
Land Use
Roads
Waterbodies
Communities:
Airport
Cemeteries
Civic/Institutional
Downtown Core
Downtown Corridor
Light Industrial/Office
Medical/Office
Mixed Neighborhood
Mixed-use Node
Parks and Recreation
Resort
Suburban - Multi-family
Suburban - Single-family
Suburban Center
Suburban Corridor
Traditional Neighborhood Existing
Resort Districts
Parcels

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 STORMWATER MANAGEMENT PROGRAM PLAN (SWMPP) REQUIREMENTS

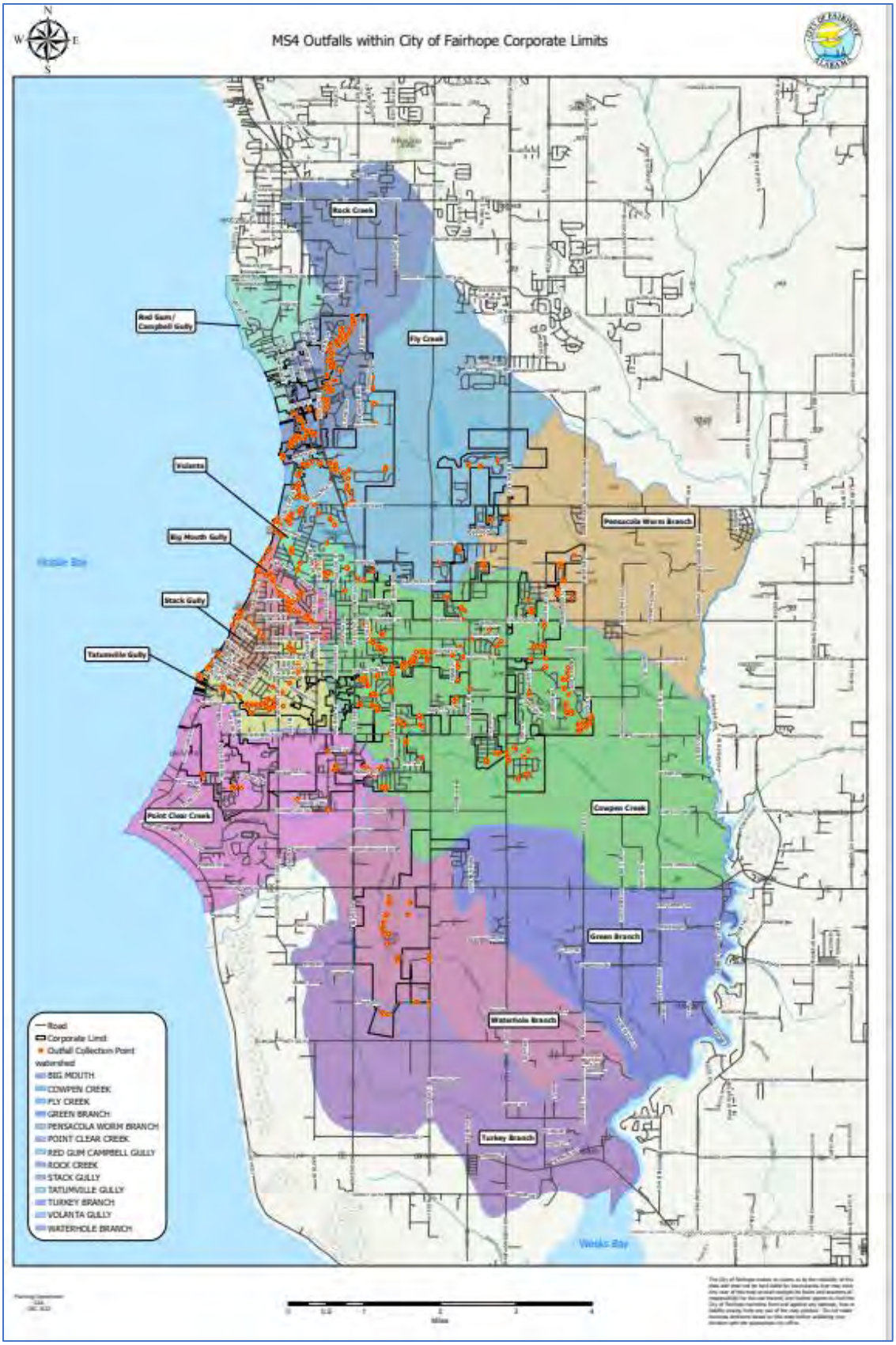
2.1 Listed Requirements

According to the general permit for Fairhope (the "Permittee"):

1. *The Permittee is required to develop, revise, implement, maintain 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 BMPs, control techniques and systems, design and engineering methods, public participation and education, monitoring, and other appropriate provisions designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP).*
2. *The Permittee shall provide and maintain adequate finance, staff, equipment, and support capabilities necessary to implement the SWMPP and comply with the requirements of this permit.*
3. *The SWMPP must address the minimum storm water control measures referenced in Part III.B. to include the following:*
    a. *A map of the Permittee's MS4 urbanized areas.*
    b. *The BMPs that will be implemented for each control measure. Low impact development/green infrastructure shall be considered and actively encouraged where feasible. Information on LID/Green Infrastructure is available on the following websites: http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf and https://epa.gov/nps/urban-runoff-low-impact-development;*
    c. *The measurable goals for each of the minimum controls outlined in Part III.B.;*
    d. *The proposed schedule—including interim milestones, as appropriate, inspections, and the frequency of actions needed to fully implement each minimum control; and e. The person and/or persons responsible for implementing or coordination the BMPs for each separate minimum control measure.*
4. *Unless otherwise specified in this permit, the Permittee shall be in compliance with the conditions of this permit by the effective date of coverage*.

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



Outfall Map, Updated December 2022

Outfall Inventory Provided by Planning and Zoning GIS (CA): December 16, 2022:

Big Mouth Gully	BMG-62119-C	-87.89784294	30.52869404
Big Mouth Gully	BMG-62119-D	-87.89872004	30.52786037
Big Mouth Gully	BMG-62119-E	-87.89911306	30.52814954
Big Mouth Gully	BMG-1706-D	-87.90170136	30.52856884
Big Mouth Gully	BMG-1729-E	-87.9019542	30.52866295
Big Mouth Gully	BMG-62119-A	-87.8979336	30.52869602
Big Mouth Gully	BMG-62119-B	-87.89812263	30.52854236
Big Mouth Gully	BMG-1729-A	-87.90197111	30.52867398
Big Mouth Gully	BMG-1729-B	-87.90270069	30.52965146
Big Mouth Gully	BMG-12785-A	-87.90219408	30.52822055
Big Mouth Gully	BMG-12785-B	-87.90107342	30.52710913
Big Mouth Gully	BMG-77830-A	-87.90072213	30.52626287
Big Mouth Gully	BMG-15415-A	-87.89959533	30.52538901
Big Mouth Gully	BMG-202833-A	-87.8967742	30.52450123
Big Mouth Gully	BMG-78860-A	-87.89719177	30.52403363
Big Mouth Gully	BMG-78860-B	-87.89718091	30.52402268
Big Mouth Gully	BMG-15020-A	-87.90091328	30.52533798
Big Mouth Gully	BMG-12785-C	-87.90205241	30.52871992
Big Mouth Gully	BMG-1729-C	-87.90207593	30.52889974
Big Mouth Gully	BMG-77830-B	-87.90085703	30.52585247
Big Mouth Gully	BMG-77830-C	-87.9007829	30.52574547
Big Mouth Gully	BMG-12785-D	-87.90005618	30.52689068
Big Mouth Gully	BMG-202833-B	-87.89683673	30.52452128
Big Mouth Gully	BMG-12785-E	-87.89677162	30.52436516
Big Mouth Gully	BMG-15026-A	-87.89851388	30.52495798
Big Mouth Gully	BMG-12785-F	-87.90277528	30.52870697
Big Mouth Gully	BMG-77828-A	-87.89425348	30.5219164
Big Mouth Gully	BMG-77557-A	-87.89448055	30.52207364

Big Mouth Gully	BMG-77557-B	-87.89450705	30.5220508
Big Mouth Gully	BMG-78875-A	-87.89266635	30.52017638
Big Mouth Gully	BMG-77557-C	-87.89446457	30.52201741
Big Mouth Gully	BMG-27699-A	-87.90502298	30.53702913
Big Mouth Gully	BMG-100289-A	-87.90595381	30.53216236
Big Mouth Gully	BMG-38875-A	-87.9050415	30.53232188
Big Mouth Gully	BMG-69651-A	-87.90555232	30.53231082
Big Mouth Gully	BMG-40542-A	-87.90581907	30.53204744
Big Mouth Gully	BMG-40542-B	-87.90580124	30.53204137
Big Mouth Gully	BMG-38430-A	-87.9040711	30.53129795
Big Mouth Gully	BMG-1706-A	-87.90076668	30.52832542
Big Mouth Gully	BMG-1706-B	-87.90065982	30.52803377
Big Mouth Gully	BMG-1706-C	-87.89961027	30.52753017
Big Mouth Gully	BMG-30256-A	-87.89921638	30.52753831
Big Mouth Gully	BMG-30256-B	-87.89919454	30.52752109
Big Mouth Gully	BMG-12785-G	-87.89597086	30.52367911
Big Mouth Gully	BMG-12785-H	-87.8959559	30.52364079
Big Mouth Gully	BMG-12785-I	-87.89588022	30.52348766
Big Mouth Gully	BMG-64365-A	-87.89550565	30.52328588
Big Mouth Gully	BMG-38430-B	-87.90427486	30.5313125
Big Mouth Gully	BMG-10618-A	-87.90435225	30.53122931
Big Mouth Gully	BMG-64359-A	-87.90318308	30.52966072
Big Mouth Gully	BMG-64359-B	-87.90313402	30.52970114
Big Mouth Gully	BMG-64359-C	-87.90330675	30.52990632
Big Mouth Gully	BMG-64360-A	-87.9072851	30.53001581
Big Mouth Gully	BMG-64360-B	-87.90886302	30.52932088
Big Mouth Gully	BMG-27699-B	-87.90514374	30.53705852
Big Mouth Gully	BMG-69776-A	-87.90548598	30.53667112
Big Mouth Gully	BMG-72494-A	-87.90469594	30.53488684

Big Mouth Gully	BMG-6515-A	-87.90645669	30.53529516
Big Mouth Gully	BMG-10058-A	-87.90717599	30.5342367
Big Mouth Gully	BMG-40542-C	-87.90785894	30.53290695
Big Mouth Gully	BMG-40542-D	-87.90729757	30.5326753
Big Mouth Gully	BMG-30256-C	-87.89935806	30.52748051
Big Mouth Gully	BMG-12785-J	-87.89577932	30.52345578
Big Mouth Gully	BMG-64359-D	-87.90442307	30.53112651
Big Mouth Gully	BMG-64359-E	-87.90322374	30.52964492
Big Mouth Gully	BMG-64359-F	-87.90331398	30.52989756
Big Mouth Gully	BMG-64359-G	-87.90416227	30.53102819
Big Mouth Gully	BMG-64360-C	-87.90842029	30.53086939
Cowpen Creek	CC-294195-A	-87.83915881	30.51354892
Cowpen Creek	CC-238485-A	-87.88211681	30.53292161
Cowpen Creek	CC-50796-A	-87.88309658	30.53440252
Cowpen Creek	CC-5613-A	-87.88416458	30.53108198
Cowpen Creek	CC-17291-A	-87.88216079	30.50929076
Cowpen Creek	CC-206958-A	-87.88186778	30.5092323
Cowpen Creek	CC-206963-A	-87.88110509	30.50635641
Cowpen Creek	CC-206963-B	-87.88127828	30.50695082
Cowpen Creek	CC-119223-A	-87.87816936	30.50984413
Cowpen Creek	CC-237577-A	-87.87784087	30.51393486
Cowpen Creek	CC-237577-B	-87.87782568	30.51444889
Cowpen Creek	CC-206851-A	-87.88107697	30.51301654
Cowpen Creek	CC-29098-A	-87.88379796	30.51246544
Cowpen Creek	CC-29098-B	-87.88381688	30.51233352
Cowpen Creek	CC-29098-C	-87.88380839	30.51214189
Cowpen Creek	CC-74451-A	-87.88375635	30.5118918
Cowpen Creek	CC-17292-A	-87.88395645	30.51392626

Cowpen Creek	CC-17291-B	-87.88252938	30.50932623
Cowpen Creek	CC-222826-A	-87.88218112	30.50732361
Cowpen Creek	CC-222826-B	-87.88217478	30.50733367
Cowpen Creek	CC-235362-A	-87.87696042	30.50390463
Cowpen Creek	CC-206958-B	-87.8816847	30.50935332
Cowpen Creek	CC-206958-C	-87.88166142	30.50935803
Cowpen Creek	CC-119199-A	-87.87782548	30.51034962
Cowpen Creek	CC-23648-A	-87.87762238	30.51334148
Cowpen Creek	CC-206851-B	-87.88125759	30.5127692
Cowpen Creek	CC-17291-C	-87.88321441	30.51106985
Cowpen Creek	CC-74451-B	-87.88375204	30.51182543
Cowpen Creek	CC-218178-A	-87.88475104	30.51227389
Cowpen Creek	CC-29098-D	-87.88386659	30.51378705
Cowpen Creek	CC-298869-A	-87.87631474	30.50425778
Cowpen Creek	CC-235662-B	-87.87689853	30.5043059
Cowpen Creek	CC-235352-A	-87.87702688	30.50441248
Cowpen Creek	CC-235352-B	-87.87758595	30.50441017
Cowpen Creek	CC-235360-A	-87.87535232	30.50394403
Cowpen Creek	CC-219976-A	-87.87517117	30.50351302
Cowpen Creek	CC-219959-A	-87.87175806	30.50356684
Cowpen Creek	CC-202709-A	-87.84424374	30.52286466
Cowpen Creek	CC-202710-A	-87.84426735	30.52283761
Cowpen Creek	CC-240793-A	-87.84533769	30.51849461
Cowpen Creek	CC-229486-A	-87.84653957	30.518489
Cowpen Creek	CC-33239-A	-87.84722458	30.51630823
Cowpen Creek	CC-202710-B	-87.84424082	30.52265861
Cowpen Creek	CC-202735-A	-87.84460006	30.51895013
Cowpen Creek	CC-202735-B	-87.84413928	30.5186002

Cowpen Creek	CC-240797-A	-87.84410006	30.51635892
Cowpen Creek	CC-214912-A	-87.87157484	30.50493843
Cowpen Creek	CC-214912-B	-87.87178824	30.50507357
Cowpen Creek	CC-214919-A	-87.87129179	30.50338068
Cowpen Creek	CC-214912-C	-87.87180599	30.50536313
Cowpen Creek	CC-279571-A	-87.87119999	30.49719143
Cowpen Creek	CC-279571-B	-87.87121925	30.49720149
Cowpen Creek	CC-279712-A	-87.85209265	30.49696464
Cowpen Creek	CC-279712-B	-87.85203778	30.49675817
Cowpen Creek	CC-279712-D	-87.85244788	30.497518
Cowpen Creek	CC-279808-A	-87.84871635	30.49750301
Cowpen Creek	CC-279808-C	-87.8476051	30.49872042
Cowpen Creek	CC-279773-A	-87.84774582	30.49428417
Cowpen Creek	CC-279774-A	-87.84835469	30.49421682
Cowpen Creek	CC-327274-A	-87.85094815	30.499321
Cowpen Creek	CC-327273-A	-87.85250705	30.49839942
Cowpen Creek	CC-277045-A	-87.85699502	30.49678541
Cowpen Creek	CC-277045-B	-87.85686558	30.49648921
Cowpen Creek	CC-243423-A	-87.85496467	30.49818576
Cowpen Creek	CC-243423-B	-87.85416741	30.4981994
Cowpen Creek	CC-279712-C	-87.85221041	30.49691607
Cowpen Creek	CC-279808-B	-87.84766111	30.49857722
Cowpen Creek	CC-327274-B	-87.85048144	30.49901503
Cowpen Creek	CC-227043-A	-87.87800538	30.50153433
Cowpen Creek	CC-268723-A	-87.8747749	30.50047894
Cowpen Creek	CC-268727-A	-87.87479214	30.50010089
Cowpen Creek	CC-278344-B	-87.86371926	30.50858313
Cowpen Creek	CC-214601-A	-87.87782015	30.4998552

Cowpen Creek	CC-214601-B	-87.87781902	30.49960698
Cowpen Creek	CC-279132-C	-87.87507832	30.51476108
Cowpen Creek	CC-279132-D	-87.8753154	30.51456791
Cowpen Creek	CC-279132-E	-87.87539191	30.51443688
Cowpen Creek	CC-279170-A	-87.87403104	30.51543936
Cowpen Creek	CC-299959-A	-87.87566093	30.51509952
Cowpen Creek	CC-279079-D	-87.87969609	30.51785795
Cowpen Creek	CC-279079-C	-87.87968289	30.51788909
Cowpen Creek	CC-14821-E	-87.88095834	30.51835003
Cowpen Creek	CC-14821-B	-87.88095756	30.51856814
Cowpen Creek	CC-14821-C	-87.88092121	30.51849098
Cowpen Creek	CC-279079-A	-87.88056354	30.51846255
Cowpen Creek	CC-279054-C	-87.88203532	30.5192482
Cowpen Creek	CC-279054-B	-87.88223447	30.51927412
Cowpen Creek	CC-12769-C	-87.8832863	30.52036621
Cowpen Creek	CC-237655-A	-87.88299317	30.52203997
Cowpen Creek	CC-202707-A	-87.88394502	30.52292285
Cowpen Creek	CC-64946-A	-87.88402758	30.52262009
Cowpen Creek	CC-222199-A	-87.88279735	30.52199535
Cowpen Creek	CC-84755-B	-87.88002718	30.52084604
Cowpen Creek	CC-77695-A	-87.87311693	30.51651576
Cowpen Creek	CC-77693-A	-87.87243152	30.51753791
Cowpen Creek	CC-78277-B	-87.87073097	30.51752957
Cowpen Creek	CC-104762-B	-87.86352365	30.51522462
Cowpen Creek	CC-104762-A	-87.86322822	30.51463912
Cowpen Creek	CC-207066-A	-87.86059508	30.51057038
Cowpen Creek	CC-261947-A	-87.85615685	30.51655346
Cowpen Creek	CC-248388-A	-87.85425586	30.51913045

Cowpen Creek	CC-310693-A	-87.85382107	30.51961826
Cowpen Creek	CC-254840-A	-87.85649737	30.52177183
Cowpen Creek	CC-237634-A	-87.86012738	30.52005912
Cowpen Creek	CC-98967-C	-87.84387758	30.51474715
Cowpen Creek	CC-98967-D	-87.83985583	30.51235474
Cowpen Creek	CC-990-A	-87.87833252	30.50182656
Cowpen Creek	CC-278344-A	-87.8643127	30.50801279
Cowpen Creek	CC-279132-A	-87.87516539	30.51480871
Cowpen Creek	CC-279171-A	-87.87404551	30.51542801
Cowpen Creek	CC-279132-A	-87.87550036	30.51495816
Cowpen Creek	CC-14821-A	-87.88100427	30.518554
Cowpen Creek	CC-14821-D	-87.8810359	30.5183845
Cowpen Creek	CC-279079-A	-87.88073529	30.5184234
Cowpen Creek	CC-279054-A	-87.88229022	30.51945614
Cowpen Creek	CC-279052-A	-87.88273471	30.51993872
Cowpen Creek	CC-12769-D	-87.88326252	30.52011123
Cowpen Creek	CC-12769-B	-87.88322832	30.52088241
Cowpen Creek	CC-12769-A	-87.88278937	30.52179648
Cowpen Creek	CC-84755-A	-87.88018451	30.52091031
Cowpen Creek	CC-80794-A	-87.87281962	30.51635352
Cowpen Creek	CC-78277-A	-87.87147008	30.51751568
Cowpen Creek	CC-81238-A	-87.87332111	30.51576323
Cowpen Creek	CC-81239-A	-87.8731409	30.51559617
Cowpen Creek	CC-59963-A	-87.87001796	30.51581417
Cowpen Creek	CC-77707-A	-87.87025591	30.51649074
Cowpen Creek	CC-14603-B	-87.86933212	30.51757584
Cowpen Creek	CC-14603-A	-87.86927428	30.51743889
Cowpen Creek	CC-284332-A	-87.86503732	30.5177638
Cowpen Creek	CC-104546-A	-87.86453854	30.51686555

Cowpen Creek	CC-109756-A	-87.86282161	30.51847963
Cowpen Creek	CC-109763-A	-87.86224198	30.516617
Cowpen Creek	CC-98967-B	-87.84420934	30.51460299
Cowpen Creek	CC-98967-A	-87.84023317	30.51239102
Cowpen Creek	CC-84289-C	-87.83977034	30.51066465
Cowpen Creek	CC-84289-B	-87.83979384	30.51066739
Cowpen Creek	CC-84289-A	-87.83986636	30.51065743
Cowpen Creek	CC-294193-A	-87.83896619	30.51463269
Cowpen Creek	CC-294198-A	-87.83909762	30.51229952
Cowpen Creek	CC-110859-A	-87.83394289	30.50533956
Cowpen Creek	CC-327803-A	-87.83502913	30.5032316
Cowpen Creek	CC-84289-D	-87.83559294	30.50413766
Cowpen Creek	CC-84289-E	-87.83688641	30.50373833
Cowpen Creek	CC-84289-F	-87.83883498	30.50944834
Cowpen Creek	CC-84289-Q	-87.83677748	30.50266406
Cowpen Creek	CC-84289-R	-87.83622303	30.50265492
Cowpen Creek	CC-84289-G	-87.83916996	30.5059978
Cowpen Creek	CC-84289-H	-87.83802587	30.50589848
Cowpen Creek	CC-84289-I	-87.83820891	30.50630928
Cowpen Creek	CC-84289-J	-87.83925482	30.50604347
Cowpen Creek	CC-84289-K	-87.83941905	30.50727033
Cowpen Creek	CC-84289-L	-87.8394867	30.50703194
Cowpen Creek	CC-84289-M	-87.83944876	30.50772523
Cowpen Creek	CC-14695-B	-87.86192827	30.52540759
Cowpen Creek	CC-14695-C	-87.86258552	30.52604355
Cowpen Creek	CC-283515-A	-87.8346776	30.50555775
Cowpen Creek	CC-110859-B	-87.83382896	30.50535581
Cowpen Creek	CC-84289-N	-87.8355944	30.50338915
Cowpen Creek	CC-84289-O	-87.83671903	30.50387485

Cowpen Creek	CC-305037-A	-87.83412682	30.5043592
Cowpen Creek	CC-327801-A	-87.83421821	30.50383437
Cowpen Creek	CC-84289-P	-87.83829284	30.50577691
Cowpen Creek	CC-229560-A	-87.84776128	30.50947979
Cowpen Creek	CC-268925-A	-87.84753487	30.52536558
Cowpen Creek	CC-268925-B	-87.84689242	30.52516381
Cowpen Creek	CC-248110-A	-87.84705591	30.52589811
Cowpen Creek	CC-248110-B	-87.84718712	30.52584601
Cowpen Creek	CC-279482-A	-87.84781265	30.52767504
Cowpen Creek	CC-261658-A	-87.84041599	30.52374205
Cowpen Creek	CC-261675-A	-87.84022004	30.52374407
Cowpen Creek	CC-338513-A	-87.86591999	30.52792536
Cowpen Creek	CC-338513-B	-87.86562006	30.52808337
Cowpen Creek	CC-14695-B	-87.86249999	30.52384422
cowpen_creek	cc_214601_b	-87.87780957	30.4997009
cowpen_creek	cc_279132_e	-87.87526435	30.5149281
cowpen_creek	cc_279132_d	-87.87534678	30.51453403
cowpen_creek	cc_279132_a	-87.87531591	30.51460727
cowpen_creek	cc_279132_c	-87.8751331	30.51478884
cowpen_creek	cc_279132_b	-87.87512473	30.51481814
cowpen_creek	cc_119199_a	-87.87829129	30.51013995
cowpen_creek	cc_119223_a	-87.87825118	30.50994183
cowpen_creek	cc_17291_a	-87.88160489	30.50940035
cowpen_creek	cc_206958_b	-87.88169945	30.50940525
cowpen_creek	cc_206958_c	-87.88171547	30.50937246
cowpen_creek	cc_237577_b	-87.87787221	30.51332504

cowpen_creek	cc_237577_a	-87.87785739	30.51393311
cowpen_creek	cc_206851_b	-87.88116979	30.5128337
cowpen_creek	cc_206851_a	-87.88107672	30.51293121
cowpen_creek	cc_17291_c	-87.88321718	30.51103961
cowpen_creek	cc_222826_b	-87.88456952	30.50732273
cowpen_creek	cc_222826_a	-87.88218022	30.50731691
cowpen_creek	cc_17292_a	-87.88495754	30.50763694
cowpen_creek	CC_326096	-87.84987902	30.49317801
cowpen_creek	cc_248388_a	-87.85479398	30.51864655
cowpen_creek	cc_240797_a	-87.84389108	30.51637569
cowpen_creek	cc_229486_a	-87.84655811	30.51854816
cowpen_creek	cc_240793_a	-87.84655495	30.51852527
cowpen_creek	cc_202735_a	-87.84461713	30.51905531
cowpen_creek	cc_229560_a	-87.84748065	30.50986696
cowpen_creek	cc_277045_a	-87.85706275	30.49686737
cowpen_creek	cc_235662_b	-87.87703201	30.5041621
cowpen_creek	cc_218178_a	-87.88486289	30.51227816
cowpen_creek	cc_206958_a	-87.88201963	30.50948002
cowpen_creek	cc_104762_b	-87.86325762	30.51220623
cowpen_creek	cc_279170_a	-87.87407785	30.51526143
cowpen_creek	cc_206963_a	-87.88090367	30.50647521
cowpen_creek	cc_206963_b	-87.88095967	30.5065086
cowpen_creek	cc_206851_a	-87.91104545	30.51711544
cowpen_creek	cc_237577_a	-87.9110161	30.51710648

cowpen_creek	cc_237577_b	-87.91104393	30.51714599
cowpen_creek	cc_59963_a	-87.87003488	30.51582278
cowpen_creek	cc_77693_a	-87.87254254	30.51750386
cowpen_creek	cc_77695_a	-87.87310908	30.51655529
cowpen_creek	cc_81238_a	-87.87357798	30.51581331
cowpen_creek	cc_81239_a	-87.87309993	30.51559253
cowpen_creek	cc_78277_b	-87.8714103	30.51756951
cowpen_creek	cc_78277_a	-87.87073588	30.51754724
cowpen_creek	cc_77707_a	-87.8702877	30.51649909
cowpen_creek	cc_80794_a	-87.87283553	30.51636892
cowpen_creek	cc_104762_a	-87.86387226	30.51543876
cowpen_creek	cc_279132_a	-87.87513401	30.51479779
cowpen_creek	cc_279132_b	-87.87556886	30.51495941
cowpen_creek	cc_299959_a	-87.87507896	30.51480584
cowpen_creek	cc_279132_c	-87.87507106	30.51480917
cowpen_creek	cc_279132_e	-87.87541851	30.51449441
cowpen_creek	cc_279132_d	-87.87537345	30.51461557
cowpen_creek	cc_279171_a	-87.87410327	30.51542873
cowpen_creek	cc_279170_a	-87.87401952	30.51547863
cowpen_creek	cc_299959_a	-87.87553639	30.51520362
cowpen_creek	cc_279054_c	-87.88209523	30.51927224
cowpen_creek	cc_279079_b	-87.88084225	30.51843022
cowpen_creek	cc_279079_a	-87.88059537	30.5184035
cowpen_creek	cc_279079_c	-87.87967983	30.5179183
cowpen_creek	cc_279079_d	-87.87938753	30.51787996

cowpen_creek	cc_279571_a	-87.8712627	30.49725729
cowpen_creek	cc_279571_b	-87.8712726	30.49727075
cowpen_creek	cc_84289_c	-87.8397986	30.51072341
cowpen_creek	cc_84289_b	-87.83981841	30.5106965
cowpen_creek	cc_84289_a	-87.83980622	30.51067475
Fly Creek	FC-269191-A	-87.88188057	30.5610827
Fly Creek	FC-8625-A	-87.88234728	30.56806575
Fly Creek	FC-8625-B	-87.88239572	30.56984394
Fly Creek	FC-113559-A	-87.88775876	30.55058821
Fly Creek	FC-113559-B	-87.88778771	30.55055798
Fly Creek	FC-113559-C	-87.8877058	30.55066449
Fly Creek	FC-48571-A	-87.88780482	30.54856383
Fly Creek	FC-223698-A	-87.88808842	30.54901097
Fly Creek	FC-113563-A	-87.88799976	30.54928266
Fly Creek	FC-237528-A	-87.88681217	30.54630292
Fly Creek	FC-237527-A	-87.8868844	30.54566027
Fly Creek	FC-237533-A	-87.88712947	30.54782038
Fly Creek	FC-113588-A	-87.88788007	30.54577952
Fly Creek	FC-10142-A	-87.89567158	30.55373837
Fly Creek	FC-91042-A	-87.89698035	30.55334535
Fly Creek	FC-91043-A	-87.89692409	30.55319983
Fly Creek	FC-38191-A	-87.89763427	30.55326932
Fly Creek	FC-47480-A	-87.89855367	30.55167126
Fly Creek	FC-47480-B	-87.89839796	30.5519023
Fly Creek	FC-269191-B	-87.8819684	30.56105088
Fly Creek	FC-269191-C	-87.88197118	30.56105121
Fly Creek	FC-269191-D	-87.88184418	30.56096411
Fly Creek	FC-242626-A	-87.88222131	30.56492155
Fly Creek	FC-242626-B	-87.8818311	30.56491719
Fly Creek	FC-242626-C	-87.88198061	30.56485703

Fly Creek	FC-229241-A	-87.88261178	30.56797323
Fly Creek	FC-229235-A	-87.88279662	30.56985778
Fly Creek	FC-91043-B	-87.89683196	30.55297534
Fly Creek	FC-38191-B	-87.89781379	30.55324629
Fly Creek	FC-47480-C	-87.89853809	30.55161672
Fly Creek	FC-18248-A	-87.89852452	30.54426275
Fly Creek	FC-18248-B	-87.89853348	30.54426584
Fly Creek	FC-14019-A	-87.89832627	30.54420156
Fly Creek	FC-63534-A	-87.90048349	30.54307074
Fly Creek	FC-21903-A	-87.9007186	30.54284623
Fly Creek	FC-12698-A	-87.90103006	30.54281777
Fly Creek	FC-63530-A	-87.89796849	30.54492923
Fly Creek	FC-14019-B	-87.89843753	30.54423263
Fly Creek	FC-18248-C	-87.89851851	30.54425367
Fly Creek	FC-34430-A	-87.90032673	30.54306875
Fly Creek	FC-21903-B	-87.90079816	30.54284477
Fly Creek	FC-12698-B	-87.90108538	30.54247949
Fly Creek	FC-35038-A	-87.90063073	30.541986
Fly Creek	FC-304612-A	-87.8905876	30.55312876
Fly Creek	FC-20833-A	-87.89184934	30.55346343
Fly Creek	FC-296900-A	-87.89376371	30.55354164
Fly Creek	FC-296900-B	-87.89418574	30.55348669
Fly Creek	FC-245015-A	-87.87943203	30.55275532
Fly Creek	FC-113574-A	-87.88740169	30.55223376
Fly Creek	FC-113556-B	-87.88864331	30.55153587
Fly Creek	FC-113552-A	-87.89014487	30.55245366
Fly Creek	FC-113552-B	-87.8906529	30.55235769
Fly Creek	FC-296793-A	-87.85857226	30.55295585
Fly Creek	FC-261870-A	-87.85629013	30.5428786

Fly Creek	FC-270303-A	-87.86351314	30.53745627
Fly Creek	FC-234578-A	-87.86755324	30.53461267
Fly Creek	FC-304612-B	-87.89054023	30.55342139
Fly Creek	FC-304612-C	-87.89058156	30.55312471
Fly Creek	FC-216451-A	-87.89179423	30.55363408
Fly Creek	FC-296900-C	-87.89376975	30.55354313
Fly Creek	FC-245015-B	-87.87948835	30.55232236
Fly Creek	FC-113574-B	-87.8876138	30.55231243
Fly Creek	FC-113556-A	-87.88885423	30.55176704
Fly Creek	FC-113552-C	-87.89059137	30.55225313
Fly Creek	FC-113552-D	-87.89133243	30.55235283
Fly Creek	FC-296793-C	-87.86115106	30.55315626
Fly Creek	FC-296793-B	-87.85849816	30.55310107
Fly Creek	FC-296792-A	-87.85468627	30.55415678
Fly Creek	FC-261881-A	-87.85591911	30.54286245
Fly Creek	FC-261870-B	-87.85648497	30.54291088
Fly Creek	FC-261847-A	-87.85277934	30.54278133
Fly Creek	FC-270297-A	-87.86321106	30.53691459
Fly Creek	FC-39503-A	-87.90022166	30.54391583
Fly Creek	FC-44555-A	-87.89902831	30.54710029
Fly Creek	FC-23625-A	-87.89938757	30.54882386
Fly Creek	FC-43233-A	-87.89884528	30.55119773
Fly Creek	FC-64357-A	-87.90145982	30.54300394
Fly Creek	FC-64357-B	-87.90157379	30.54284406
Fly Creek	FC-205197-A	-87.90325478	30.54295432
Fly Creek	FC-205197-B	-87.90343554	30.5427647
Fly Creek	FC-64357-C	-87.90106665	30.54328737
Fly Creek	FC-3113-A	-87.89177548	30.54300058

Fly Creek	FC-3113-B	-87.89177548	30.54300058
Fly Creek	FC-36082-A	-87.89528823	30.54570407
Fly Creek	FC-36082-C	-87.89575386	30.546146
Fly Creek	FC-8609-A	-87.89843064	30.54738816
Fly Creek	FC-98872-A	-87.89873291	30.54831262
Fly Creek	FC-325843-A	-87.89875706	30.54912984
Fly Creek	FC-170039-A	-87.89855198	30.5495214
Fly Creek	FC-210005-A	-87.89871455	30.5497014
Fly Creek	FC-2362-A	-87.89421348	30.54392987
Fly Creek	FC-3113-A	-87.89158591	30.54284124
Fly Creek	FC-12789-B	-87.89073198	30.54185735
Fly Creek	FC-36082-B	-87.89528262	30.54570948
Fly Creek	FC-11759-A	-87.89595445	30.5462495
Fly Creek	FC-210063-A	-87.89682483	30.54667631
Fly Creek	FC-210063-B	-87.89711428	30.54679641
Fly Creek	FC-117888-A	-87.89741849	30.54702364
Fly Creek	FC-12789-A	-87.89070742	30.54175973
fly_creek	113552_c	-87.89045704	30.55229731
fly_creek	113552_b	-87.89056923	30.55228434
fly_creek	113552_a	-87.89061918	30.55238329
Pensacola Worm Branch	PWB-261846-A	-87.85253954	30.54283572
Pensacola Worm Branch	PWB-270376-A	-87.85845118	30.54009873
Pensacola Worm Branch	PWB-281003-A	-87.85769456	30.53434639
Pensacola Worm Branch	PWB-281003-B	-87.85770027	30.53405999
Pensacola Worm Branch	PWB-14734-A	-87.84121615	30.53435986
Pensacola Worm Branch	PWB-293927-A	-87.83986346	30.53121716
Pensacola Worm Branch	PWB-14734-B	-87.84081665	30.53444236

Pensacola Worm Branch	PWB-293901-A	-87.84002848	30.53146635
Pensacola Worm Branch	PWB-269693-A	-87.84134019	30.52885349
Pensacola Worm Branch	PWB-269693-B	-87.84132674	30.52893026
Pensacola Worm Branch	PWB-269693-C	-87.84113128	30.52953375
Pensacola Worm Branch	PWB-280514-A	-87.83803657	30.52802537
Pensacola Worm Branch	PWB-261672-A	-87.8404601	30.52664829
pensacola_worm_branch	pwb_293927_a	-87.84989261	30.4934102
pensacola_worm_branch	pwb_293901_a	-87.83992297	30.53123703
pensacola_worm_branch	pwb_tracery	-87.83774004	30.53607109
pensacola_worm_branch	pwb_14734_a	-87.8405672	30.53395738
pensacola_worm_branch	pwb_14734_b	-87.84117637	30.53430226
pensacola_worm_branch	pwb_281003_b	-87.85758094	30.53397412
pensacola_worm_branch	pwb_281003_a	-87.85758508	30.5339672
pensacola_worm_branch	pwb_280514_a	-87.83808915	30.52795162
pensacola_worm_branch	pwb_269693_a	-87.84120864	30.52868117
pensacola_worm_branch	pwb_269693_b	-87.84138919	30.52872459
pensacola_worm_branch	pwb_269693_c	-87.84130824	30.5289377
pensacola_worm_branch	pwb_261672_a	-87.8402776	30.52668204
pensacola_worm_branch	pwb_270376_a	-87.85881009	30.54058889
pensacola_worm_branch	pwb_261846_a	-87.85236684	30.54296027
Point Clear Creek	PCC-106166-A	-87.88310124	30.49501019
Point Clear Creek	PCC-106166-B	-87.88397603	30.49536789
Point Clear Creek	PCC-106166-C	-87.88014795	30.49545752
Point Clear Creek	PCC-106166-D	-87.88090969	30.49495652
Point Clear Creek	PCC-106166-E	-87.88218557	30.49473086
Point Clear Creek	PCC-106166-F	-87.88310604	30.49498396
Point Clear Creek	PCC-106166-G	-87.88354992	30.49518024

Point Clear Creek	PCC-243166-A	-87.88190282	30.49421433
Point Clear Creek	PCC-243166-B	-87.88178112	30.49424651
Point Clear Creek	PCC-267180-B	-87.89020244	30.49536842
Point Clear Creek	PCC-267180-D	-87.8906836	30.49483531
Point Clear Creek	PCC-327698-A	-87.89199027	30.48728718
Point Clear Creek	PCC-327698-B	-87.89198063	30.48730541
Point Clear Creek	PCC-327695-A	-87.89868631	30.48919886
Point Clear Creek	PCC-327695-B	-87.89852639	30.48926277
Point Clear Creek	PCC-327695-C	-87.89871043	30.48933373
Point Clear Creek	PCC-29244-A	-87.91291538	30.49179765
Point Clear Creek	PCC-6614-A	-87.91107323	30.49139956
Point Clear Creek	PCC-288984-A	-87.8919185	30.498534
Point Clear Creek	PCC-267180-C	-87.89006562	30.49529095
Point Clear Creek	PCC-267180-A	-87.89034048	30.49573623
Point Clear Creek	PCC-29244-C	-87.91247608	30.49128843
Point Clear Creek	PCC-29244-B	-87.91309214	30.49141104
Point Clear Creek	PCC-288984-B	-87.89207747	30.49840353
Point Clear Creek	PCC-202853-A	-87.91959081	30.49379972
Point Clear Creek	PCC-2432-A	-87.91963494	30.50755029
Point Clear Creek	PCC-202853-B	-87.91989232	30.49417029
point_clear_creek	pcc_243166_b	-87.8817111	30.49434889
point_clear_creek	pcc_243166_a	-87.88205459	30.49408016
point_clear_creek	pcc_106166_a_	-87.88309646	30.49507355
point_clear_creek	PCC-106166-F	-87.88303989	30.49496235
point_clear_creek	pcc_106166_g	-87.88347959	30.4954379
point_clear_creek	pcc_106166_b_	-87.88397669	30.49538156
point_clear_creek	pcc_106166_e_	-87.88220437	30.49466035
point_clear_creek	pcc_106166_d_	-87.88099554	30.49497694

point_clear_creek	pcc_106166_c_	-87.88010865	30.49543053
Rock Creek	RC-235588-A	-87.88462374	30.58178297
Rock Creek	RC-114829-A	-87.88925901	30.57126367
Rock Creek	RC-114849-B	-87.89267376	30.56757298
Rock Creek	RC-304654-A	-87.8935118	30.56331267
Rock Creek	RC-304654-B	-87.89357513	30.5634963
Rock Creek	RC-114850-A	-87.89260844	30.56439692
Rock Creek	RC-114850-B	-87.89262258	30.56438949
Rock Creek	RC-114850-C	-87.89261947	30.56441553
Rock Creek	RC-114850-D	-87.89265915	30.56538398
Rock Creek	RC-114850-E	-87.8925768	30.56550913
Rock Creek	RC-114850-F	-87.89237571	30.56560955
Rock Creek	RC-114850-G	-87.89184318	30.56729552
Rock Creek	RC-114850-H	-87.89146315	30.56727875
Rock Creek	RC-114850-I	-87.89138075	30.5674515
Rock Creek	RC-59675-A	-87.89442178	30.56325723
Rock Creek	RC-254914-A	-87.89686358	30.55960686
Rock Creek	RC-254917-A	-87.89552306	30.55932302
Rock Creek	RC-254917-B	-87.89572647	30.55950622
Rock Creek	RC-24141-A	-87.89720934	30.55854283
Rock Creek	RC-43907-A	-87.89840745	30.5583085
Rock Creek	RC-43907-B	-87.89861377	30.55834879
Rock Creek	RC-29304-A	-87.89868915	30.55850295
Rock Creek	RC-21509-A	-87.89957922	30.55761955
Rock Creek	RC-21509-B	-87.89959352	30.55768635
Rock Creek	RC-56434-A	-87.89778749	30.56019779
Rock Creek	RC-29305-A	-87.89920943	30.55882361
Rock Creek	RC-5604-A	-87.89783266	30.56141331

Rock Creek	RC-43715-A	-87.89988277	30.56303584
Rock Creek	RC-121260-A	-87.90036497	30.55783922
Rock Creek	RC-121260-B	-87.90019805	30.55802911
Rock Creek	RC-59793-A	-87.90224915	30.55446622
Rock Creek	RC-114850-J	-87.8932875	30.56580637
Rock Creek	RC-304654-D	-87.89366945	30.56341769
Rock Creek	RC-304654-C	-87.89365736	30.56355484
Rock Creek	RC-114850-K	-87.89219355	30.56414163
Rock Creek	RC-59675-B	-87.8945161	30.56338001
Rock Creek	RC-59675-C	-87.89452026	30.56324748
Rock Creek	RC-59675-E	-87.89431533	30.56258631
Rock Creek	RC-59675-D	-87.89438581	30.56270613
Rock Creek	RC-254914-B	-87.89688306	30.55960734
Rock Creek	RC-254914-C	-87.89505407	30.5589647
Rock Creek	RC-37689-A	-87.89966631	30.5577253
Rock Creek	RC-56434-B	-87.89779044	30.56018962
Rock Creek	RC-29305-B	-87.89893944	30.55842335
Rock Creek	RC-75978-A	-87.89819588	30.56166839
Rock Creek	RC-75978-B	-87.89850223	30.56191189
Rock Creek	RC-75978-C	-87.89886608	30.56237226
Rock Creek	RC-13134-A	-87.9006927	30.5567338
Rock Creek	RC-44352-A	-87.8998225	30.55797906
Rock Creek	RC-77980-A	-87.90235402	30.55516564
Rock Creek	RC-60020-A	-87.90043832	30.55680141
Rock Creek	RC-60022-A	-87.90025962	30.55734525
Rock Creek	RC-82582-A	-87.89254811	30.57313193
Rock Creek	RC-56089-A	-87.89171617	30.5740003
Rock Creek	RC-206177-A	-87.89190639	30.57487008
Rock Creek	RC-72773-A	-87.89259265	30.5703413

Rock Creek	RC-114684-A	-87.89105913	30.56937042
Rock Creek	RC-114856-A	-87.8910483	30.57196416
Rock Creek	RC-114801-A	-87.89110366	30.57266517
Rock Creek	RC-114859-A	-87.89136026	30.57455116
Rock Creek	RC-206067-A	-87.88892708	30.57956679
Rock Creek	RC-206128-A	-87.88921627	30.57852496
Rock Creek	RC-206128-B	-87.8897296	30.57767029
Rock Creek	RC-206147-A	-87.89047768	30.5768852
Rock Creek	RC-206165-A	-87.89170369	30.57614328
Rock Creek	RC-206172-A	-87.89225998	30.57574283
Rock Creek	RC-206172-B	-87.89226034	30.57574353
Rock Creek	RC-114872-A	-87.88992192	30.57599085
Rock Creek	RC-114872-B	-87.89031645	30.5762847
Rock Creek	RC-114872-C	-87.88860683	30.57704835
Rock Creek	RC-114872-D	-87.88876312	30.57702409
Rock Creek	RC-114872-E	-87.88888733	30.5769832
Rock Creek	RC-114872-F	-87.88835368	30.57733379
Rock Creek	RC-114872-G	-87.88829292	30.57799298
Rock Creek	RC-114872-H	-87.88749947	30.5790898
Rock Creek	RC-114872-I	-87.88661234	30.58000854
Rock Creek	RC-114872-J	-87.88659126	30.58072604
Rock Creek	RC-114860-A	-87.89202764	30.56817506
Rock Creek	RC-114849-C	-87.89255963	30.5680767
Rock Creek	RC-114849-E	-87.89258812	30.56818436
Rock Creek	RC-114852-A	-87.89255578	30.56861615
Rock Creek	RC-82582-B	-87.89180324	30.57314109
Rock Creek	RC-64117-A	-87.89163174	30.57187269
Rock Creek	RC-64116-A	-87.89166992	30.5721832

Rock Creek	RC-114855-A	-87.89236514	30.57030618
Rock Creek	RC-114856-B	-87.89072122	30.56942042
Rock Creek	RC-114856-C	-87.89093766	30.57181265
Rock Creek	RC-114859-B	-87.89127382	30.57466964
Rock Creek	RC-114859-C	-87.89146174	30.57459133
Rock Creek	RC-114859-D	-87.89153137	30.57459261
Rock Creek	RC-114859-E	-87.89157984	30.57456936
Rock Creek	RC-114872-L	-87.88701445	30.58166045
Rock Creek	RC-206128-C	-87.88952373	30.57904753
Rock Creek	RC-206148-A	-87.89045497	30.576831
Rock Creek	RC-114872-M	-87.89015295	30.57618039
Rock Creek	RC-114872-N	-87.88750114	30.57859272
Rock Creek	RC-114872-O	-87.88750012	30.57861975
Rock Creek	RC-114872-P	-87.88680855	30.58005849
Rock Creek	RC-114872-K	-87.88668655	30.58075165
Rock Creek	RC-114860-B	-87.89207943	30.56810247
Rock Creek	RC-114849-D	-87.89258953	30.56810861
Rock Creek	RC-114852-B	-87.89261804	30.56855719
rock_creek	RC-224588	-87.89642492	30.56384608
Stack Gully	SG-64356-A	-87.90876259	30.52176671
Stack Gully	SG-64356-B	-87.90919055	30.52233205
Stack Gully	SG-64356-C	-87.90946355	30.52273976
Stack Gully	SG-64356-D	-87.9098412	30.52279627
Stack Gully	SG-1728-A	-87.90762603	30.52099722
Stack Gully	SG-12773-A	-87.90653874	30.52034349
Stack Gully	SG-19592-A	-87.90769878	30.52154622
Stack Gully	SG-64356-H	-87.90859821	30.52175373
Stack Gully	SG-64356-I	-87.90871207	30.5217297

Stack Gully	SG-64356-J	-87.90899017	30.52269977
Stack Gully	SG-64362-A	-87.91153767	30.52371865
Stack Gully	SG-64362-B	-87.91142221	30.52362086
Stack Gully	SG-64356-G	-87.91112178	30.52330738
Stack Gully	SG-64356-F	-87.91111736	30.52331944
Stack Gully	SG-64356-E	-87.91111029	30.52332784
Stack Gully	SG-12795-A	-87.91609907	30.51702308
Stack Gully	SG-12795-B	-87.91624632	30.51696356
Stack Gully	SG-12795-C	-87.91738926	30.51579258
Stack Gully	SG-64364-A	-87.91812855	30.51494895
Stack Gully	SG-64362-E	-87.91271149	30.52379706
Stack Gully	SG-64362-D	-87.91173054	30.52472675
Stack Gully	SG-64362-C	-87.91142701	30.5251701
Stack Gully	SG-12788-A	-87.9132312	30.52251582
Tatumville Gully	TG-61465-A	-87.92048678	30.51297475
Tatumville Gully	TG-61465-B	-87.9207969	30.51238049
Tatumville Gully	TG-64364-A	-87.91874408	30.51421774
Tatumville Gully	TG-11940-A	-87.91866388	30.51385003
Tatumville Gully	TG-61465-C	-87.92014169	30.51242489
Tatumville Gully	TG-34924-A	-87.91508034	30.51130575
Tatumville Gully	TG-34924-B	-87.91503904	30.51110737
Tatumville Gully	TG-43367-A	-87.91488084	30.51042022
Tatumville Gully	TG-31610-A	-87.9138535	30.50975637
Tatumville Gully	TG-31610-B	-87.91378268	30.50974914
Tatumville Gully	TG-4684-A	-87.91144747	30.5089877
Tatumville Gully	TG-83795-A	-87.9098797	30.50728557
Tatumville Gully	TG-83795-A	-87.9098797	30.50728557
Tatumville Gully	TG-83795-A	-87.9098797	30.50728557
Tatumville Gully	TG-211224-A	-87.90887233	30.50728764
Tatumville Gully	TG-83783-A	-87.90897627	30.50582147

Tatumville Gully	TG-50454-A	-87.90804873	30.50741002
Tatumville Gully	TG-67694-A	-87.90691787	30.50729463
Tatumville Gully	TG-59896-A	-87.90593174	30.50770803
Tatumville Gully	TG-17404-A	-87.90528219	30.50816613
Tatumville Gully	TG-26854-A	-87.90313446	30.50873043
Tatumville Gully	TG-26854-D	-87.90312851	30.50873482
Tatumville Gully	TG-34683-A	-87.90243245	30.5096114
Tatumville Gully	TG-77805-A	-87.90047666	30.51149026
Tatumville Gully	TG-77821-A	-87.89903743	30.5125143
Tatumville Gully	TG-77821-B	-87.89897277	30.51257671
Tatumville Gully	TG-29902-A	-87.89899475	30.51270826
Tatumville Gully	TG-34957-A	-87.89872193	30.51378179
Tatumville Gully	TG-37896-A	-87.89871686	30.51618272
Tatumville Gully	TG-37896-B	-87.8986946	30.51619589
Tatumville Gully	TG-6961-A	-87.90031504	30.51806556
Tatumville Gully	TG-6961-B	-87.90051398	30.51826975
Tatumville Gully	TG-211224-B	-87.91158206	30.50890548
Tatumville Gully	TG-211224-D	-87.90991672	30.50744859
Tatumville Gully	TG-211224-C	-87.90891563	30.50743683
Tatumville Gully	TG-211224-E	-87.9072794	30.50711761
Tatumville Gully	TG-59896-B	-87.90568537	30.50783102
Tatumville Gully	TG-26854-C	-87.9039213	30.50815418
Tatumville Gully	TG-26854-B	-87.90325496	30.50865251
Tatumville Gully	TG-34683-B	-87.9024141	30.50966738
Tatumville Gully	TG-26139-A	-87.90225395	30.50989487
Tatumville Gully	TG-77819-A	-87.89922036	30.51244357
Tatumville Gully	TG-34957-B	-87.89874186	30.51292261
Tatumville Gully	TG-317177-A	-87.898512	30.51384098
Tatumville Gully	TG-317177-B	-87.89848122	30.51393725

Tatumville Gully	TG-317172-A	-87.89870908	30.51485298
Tatumville Gully	TG-37896-C	-87.89875254	30.51617076
Tatumville Gully	TG-28507-A	-87.89959558	30.51754249
Tatumville Gully	TG-63035-A	-87.90073216	30.51845504
Tatumville Gully	TG-281646-A	-87.90316529	30.5069011
Tatumville Gully	TG-281645-A	-87.90370313	30.50682579
Tatumville Gully	TG-281646-B	-87.90317705	30.50688889
Tatumville Gully	TG-56190-A	-87.90476573	30.50673845
Tatumville Gully	TG-69539-A	-87.91662592	30.5075705
tatumville	tg_64370	-87.90196398	30.50705647
tatumville	tg_64370	-87.90196398	30.50705647
tatumville	tg_281646_b	-87.90317789	30.50684126
tatumville	tg_281646_a	-87.90318813	30.50690157
tatumville	tg_26139_a	-87.90223455	30.50960467
tatumville	tg_34683_a	-87.90225964	30.5097416
tatumville	tg_34683_b	-87.90249134	30.50957974
tatumville	tg_11940_a	-87.91856834	30.51380876
tatumville	tg_64364_a	-87.91855129	30.51406822
tatumville	tg_26854_b	-87.90328866	30.5086888
tatumville	tg_17404_a	-87.90515641	30.50846615
tatumville	tg_26854_c	-87.90341218	30.50857951
tatumville	tg_50454_a	-87.90787118	30.50729819
tatumville	tg_56190_a	-87.90494674	30.50641054
tatumville	tg_37896_a	-87.89878579	30.51616255
tatumville	tg_211224_a	-87.90494062	30.5063857

tatumville	tg_37896_b	-87.89876318	30.51614304
tatumville	tg_211224_c	-87.9088694	30.50722551
tatumville	tg_37896_c	-87.89864618	30.51619809
tatumville	tg_211224_d	-87.90993741	30.50745301
tatumville	tg_83795_a	-87.90995704	30.50737585
tatumville	tg_83783_a	-87.90887617	30.50580996
tatumville	tg_211224_b	-87.91163133	30.50893705
tatumville	tg_281645_a	-87.90385857	30.50690388
tatumville	tg_61465_b	-87.92081728	30.51244548
tatumville	tg_61465_c	-87.92008974	30.51244024
tatumville	tg_83795_a	-87.90981718	30.50728578
tatumville	tg_61465_a	-87.92058043	30.51291803
tatumville	tg_83795_a	-87.90899708	30.50582125
tatumville	tg_77819_a	-87.8989535	30.51264568
tatumville	tg_77821_a	-87.89896949	30.51267632
tatumville	tg_77821_b	-87.89898456	30.51267841
tatumville	tg_4684_a	-87.91102108	30.50952436
tatumville	tg_317177_a	-87.8987171	30.51412127
tatumville	tg_317177_b	-87.89872362	30.51407878
tatumville	tg_43367_a	-87.9154273	30.51043503
tatumville	tg_34924_a	-87.91515487	30.51126972
tatumville	tg_34924_b	-87.91508762	30.51109369
tatumville	tg_77805_a	-87.90045916	30.51149262
tatumville	tg_21124_e	-87.91182713	30.51137823
tatumville	tg_63035_a	-87.90069275	30.51849626

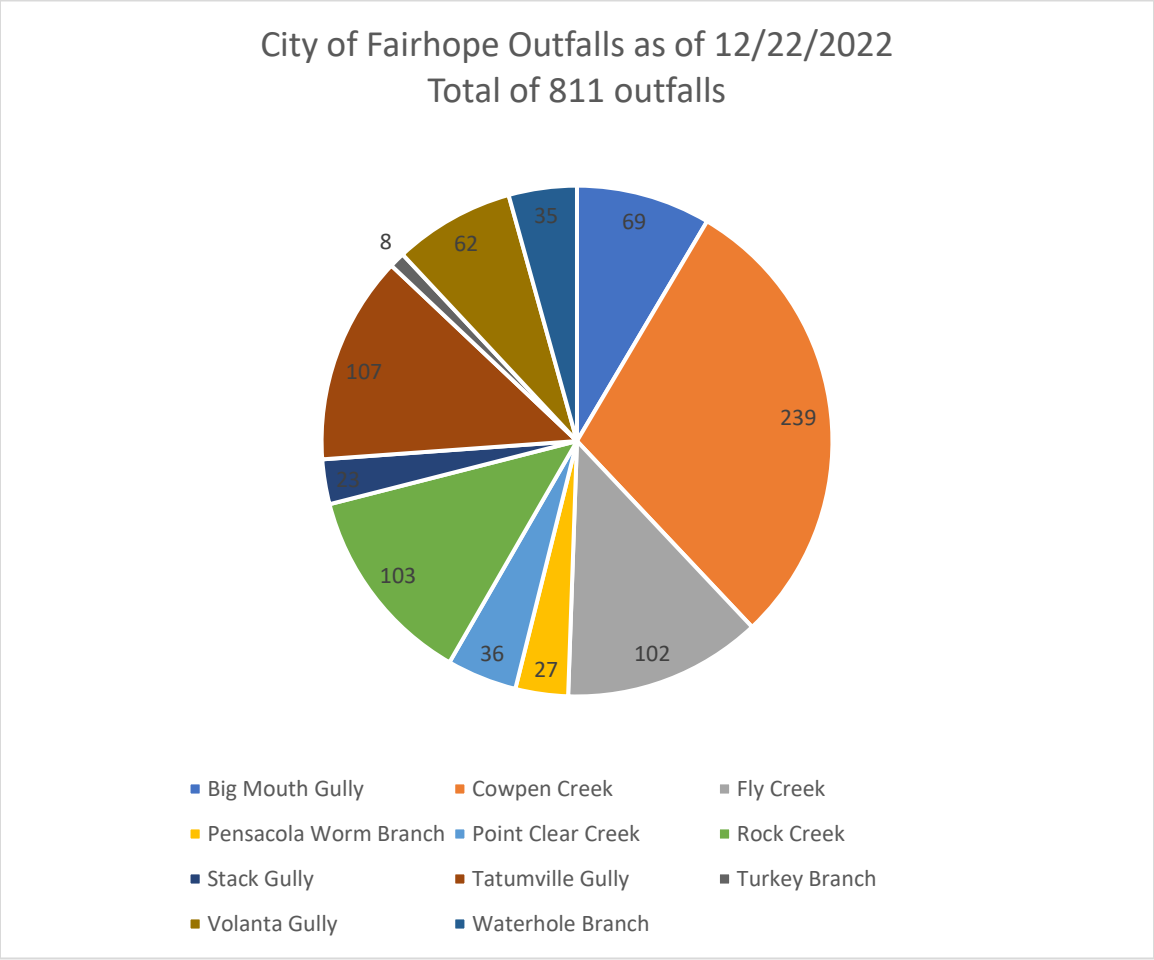
tatumville	tg_5896_a	-87.90572478	30.50700577
tatumville	tg_59896_b	-87.90569913	30.50783674
tatumville	tg_67694_a	-87.90579869	30.50708835
tatumville	tg_28507_a	-87.8997095	30.51773472
tatumville	tg_6961_b	-87.90047746	30.51809117
tatumville	tg_29902_a	-87.89979808	30.51265617
tatumville	tg_26854_a	-87.90328237	30.50874631
tatumville	tg_77181	-87.9041793	30.51071135
tatumville	tg_6961_a	-87.90052299	30.51811039
tatumville	tg34957_a	-87.89873365	30.5141141
tatumville	tg_34957_b	-87.89873414	30.51412541
tatumville	tg_317172_a	-87.89879256	30.51483406
Turkey Branch	TB-309518-B	-87.86939816	30.45039734
Turkey Branch	TB-309518-A	-87.87250228	30.45043863
Turkey Branch	TB-257064-B	-87.87853485	30.44822069
Turkey Branch	TB-257064-A	-87.87978572	30.44839715
turkey_branch	tb_257064_a	-87.87988671	30.44856425
turkey_branch	tb_257064_b	-87.87953727	30.44829203
turkey_branch	tb_309518_a	-87.87213768	30.45057609
turkey_branch	tb_309518_b	-87.8694873	30.45045723
Volanta	VL-43887-A	-87.90407056	30.5407491
Volanta	VL-5613-B	-87.88562694	30.53153564
Volanta	VL-34073-A	-87.89246111	30.5320931
Volanta	VL-34073-B	-87.89052683	30.53208586
Volanta	VL-34073-C	-87.89211345	30.53248088
Volanta	VL-34073-D	-87.89208849	30.53244425
Volanta	VL-34073-E	-87.89296662	30.53273822

Volanta	VL-36204-A	-87.89368655	30.53444499
Volanta	VL-43433-A	-87.89412565	30.53428272
Volanta	VL-56704-A	-87.89399377	30.53292764
Volanta	VL-73246-A	-87.8951219	30.53411739
Volanta	VL-72822-A	-87.89539605	30.53421227
Volanta	VL-73246-B	-87.8947763	30.53424407
Volanta	VL-110128-A	-87.89879355	30.53312367
Volanta	VL-89431-A	-87.89831714	30.53433482
Volanta	VL-4651-A	-87.90003222	30.53675354
Volanta	VL-4651-B	-87.90006841	30.53663946
Volanta	VL-47625-A	-87.90023925	30.53676981
Volanta	VL-47625-B	-87.90027899	30.53680353
Volanta	VL-47625-C	-87.90028354	30.53680369
Volanta	VL-56062-A	-87.88773103	30.53357524
Volanta	VL-56062-B	-87.88798019	30.53342195
Volanta	VL-36204-B	-87.89369845	30.53454426
Volanta	VL-33279-A	-87.89355855	30.53456725
Volanta	VL-47625-D	-87.90026887	30.53710145
Volanta	VL-102308-A	-87.9034262	30.54207968
Volanta	VL-102308-B	-87.90264616	30.54163337
Volanta	VL-18772-A	-87.90227191	30.53957452
Volanta	VL-43889-A	-87.90286911	30.54010123
Volanta	VL-102308-C	-87.90395658	30.54142186
Volanta	VL-102308-D	-87.90393763	30.54158716
Volanta	VL-102308-E	-87.90379069	30.54206564
Volanta	VL-18772-B	-87.90199413	30.5398526
Volanta	VL-18772-C	-87.90214244	30.5401916
Volanta	VL-43889-C	-87.90274854	30.54026842
Volanta	VL-43889-B	-87.90313341	30.54059484

volanta_gully	vl_47625_d	-87.90029772	30.53710599
volanta_gully	vl_47625_c	-87.90022712	30.53681539
volanta_gully	vl_47625_b	-87.90029146	30.53679526
volanta_gully	vl_47625_a	-87.9002966	30.5367938
volanta_gully	vl_4651_b	-87.9001327	30.53662272
volanta_gully	vl_4651_a	-87.90004047	30.5367956
volanta_gully	vl_110128_a	-87.89887345	30.53319322
volanta_gully	vl_89431_a	-87.89833754	30.53440165
volanta_gully	vl_12789_	-87.89240536	30.53829612
volanta_gully	vl_5613_a	-87.88564332	30.53158144
volanta_gully	VL-371532	-87.88837045	30.52916865
volanta_gully	vl_18772_a	-87.90214632	30.54000918
volanta_gully	vl_18772_b	-87.90202082	30.53981972
volanta_gully	vl_18772_c	-87.90203805	30.53989767
volanta_gully	vl_43887_a	-87.90387385	30.54073894
volanta_gully	vl_43889_b	-87.90312577	30.54058492
volanta_gully	vl_43889_a	-87.90286809	30.54012245
volanta_gully	vl_43889_c	-87.90272111	30.54029013
volanta_gully	VL_102308_C	-87.90378872	30.54142649
volanta_gully	VL_102308_D	-87.90393617	30.54154605
volanta_gully	VL_102308_E	-87.90375149	30.54216588
volanta_gully	vl_34073_a	-87.89250524	30.53190106
volanta_gully	vl_34073_d	-87.89208002	30.53243175
volanta_gully	vl_34073_e	-87.89299734	30.5326608
volanta_gully	vl_34073_c	-87.89214152	30.53249193

volanta_gully	vl_43433_a	-87.8941324	30.53423853
Waterhole Branch	WB-243149-A	-87.87919323	30.49120107
Waterhole Branch	WB-243146-A	-87.87924011	30.49169991
Waterhole Branch	WB-2496-A	-87.86932298	30.45957315
Waterhole Branch	WB-12786-A	-87.87918057	30.46358372
Waterhole Branch	WB-226622-A	-87.87859646	30.46353095
Waterhole Branch	WB-226623-A	-87.87604274	30.4593468
Waterhole Branch	WB-251558-A	-87.87378936	30.46952375
Waterhole Branch	WB-251558-B	-87.87423152	30.46723398
Waterhole Branch	WB-226623-C	-87.87657267	30.45853009
Waterhole Branch	WB-226620-A	-87.87833874	30.46958469
Waterhole Branch	WB-226621-A	-87.87983888	30.46495186
Waterhole Branch	WB-226621-B	-87.87988315	30.46434996
Waterhole Branch	WB-226620-C	-87.87834179	30.46940152
Waterhole Branch	WB-226620-B	-87.87833577	30.46941492
Waterhole Branch	WB-226620-D	-87.87917646	30.46718018
Waterhole Branch	WB-226620-E	-87.8796175	30.46583318
Waterhole Branch	WB-226623-B	-87.87645097	30.45904816
waterhole_branch	wb_28448	-87.87840831	30.47073115
waterhole_branch	wb_243149_a	-87.87931113	30.49128451
waterhole_branch	wb_243146_a	-87.88007917	30.49179696
waterhole_branch	wb_2496_a	-87.86953531	30.45893251
waterhole_branch	wb_226620_e	-87.87885841	30.46741559
waterhole_branch	wb_226620_c	-87.8782819	30.46934718
waterhole_branch	wb_226620_d	-87.87829105	30.46934595
waterhole_branch	wb_226620_a	-87.87821151	30.46992422
waterhole_branch	wb_226620_b	-87.87833881	30.46937849
waterhole_branch	wb_12786_a	-87.8791883	30.46364812

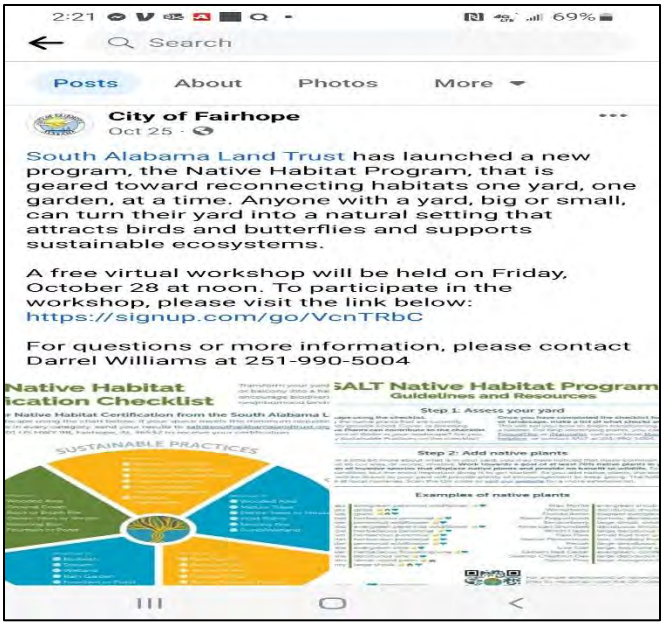
waterhole_branch	wb_226622_a	-87.87849491	30.46362399
waterhole_branch	wb_251558_b	-87.8788368	30.46168328
waterhole_branch	wb_226623_c	-87.87654408	30.45856314
waterhole_branch	wb_226623_b	-87.87653745	30.45890599
waterhole_branch	wb_226623_a	-87.87602625	30.4593651
waterhole_branch	wb_251558_a_	-87.87373713	30.46965021
waterhole_branch	wb_226621_b	-87.87973213	30.46425176
waterhole_branch	wb_226621_a	-87.87968349	30.46493684



There are no known city outfalls in Red Gully or Green Branch watersheds

The Minimum Control Measures with Measurable Goals for 2023:

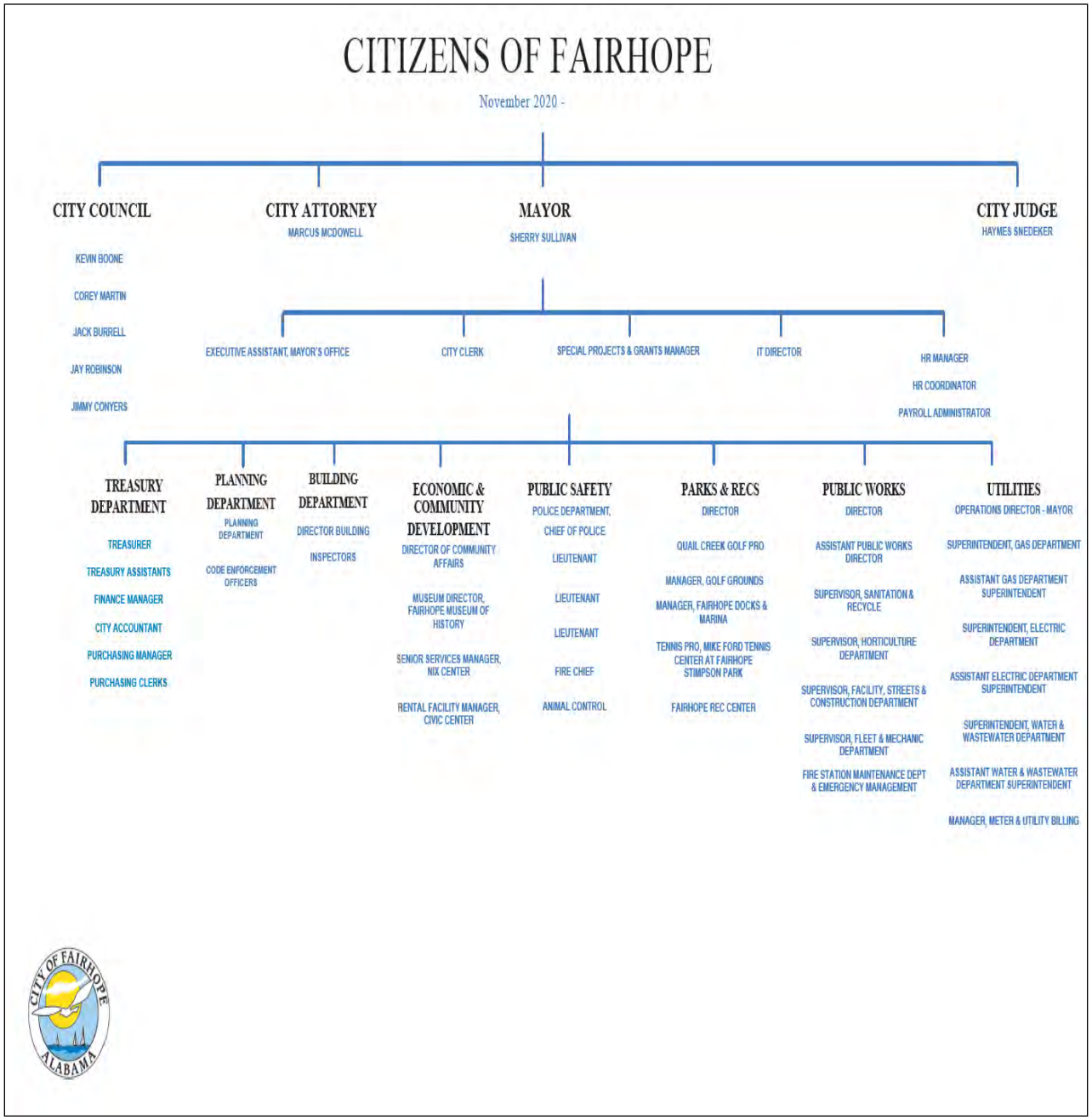
1. Public Education and Public Involvement on Storm Water Impacts (4)
    a. Stormwater Education / Seminar for Planning and Zoning Dept.
    b. Stormwater Article on social media
    c. Public Educational / Input Meeting for Stormwater Issues
    d. SWMPP Public Review
2. Illicit Discharge Detection 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 Officers (2) (Planning & Zoning)
    b. QCI Recertification for Building Dept. Inspectors (5) (Building Department)
    c. Annual BMP Workshop for City Staff
4. Post Construction Storm Water Management in New Development and Redevelopment (3)
    a. Community Hands-on Event for Stormwater Education (examples: Earth Day, Masters Environmental Educator Program participation)
    b. Creek/Shoreline Assessment of MS4 area via Kayak
    c. Post Construction Stormwater Facility Maintenance Support for HOA's
5. Pollution Prevention / Good Housekeeping for Municipal Operations (2)
    a. Good Housekeeping / Pollution Prevention Memo to all departments
    b. Dry Weather Screening of Public Works Facility



City of Fairhope uses social media, such as Facebook, to promote environmental outreach, such as South Alabama Land Trust's native yard certification program

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; Fairhope Docks, Quail Creek Golf Course Management and Community Development. A general contact number for everyone is: 251-928-8003.



Management Flow Chart as of Nov. 1, 2022

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 13 watersheds, and approximately 15 square miles.

City of Fairhope MS4 area limit, as of April 2022:

a.	Red Gulley	63
b.	Rock Creek	748
c.	Fly Creek	1670
d.	Volanta	390
e.	Big Mouth Gulley	522
f.	Stack Gulley	394
g.	Tatumville Gulley	618
h.	Point Clear Creek	770
i.	Turkey Branch*	91
j.	Waterhole Branch*	752
k.	Cowpen Creek *	3651
l.	Pensacola Branch/Worm Branch*	152
m.	Green Branch*	16

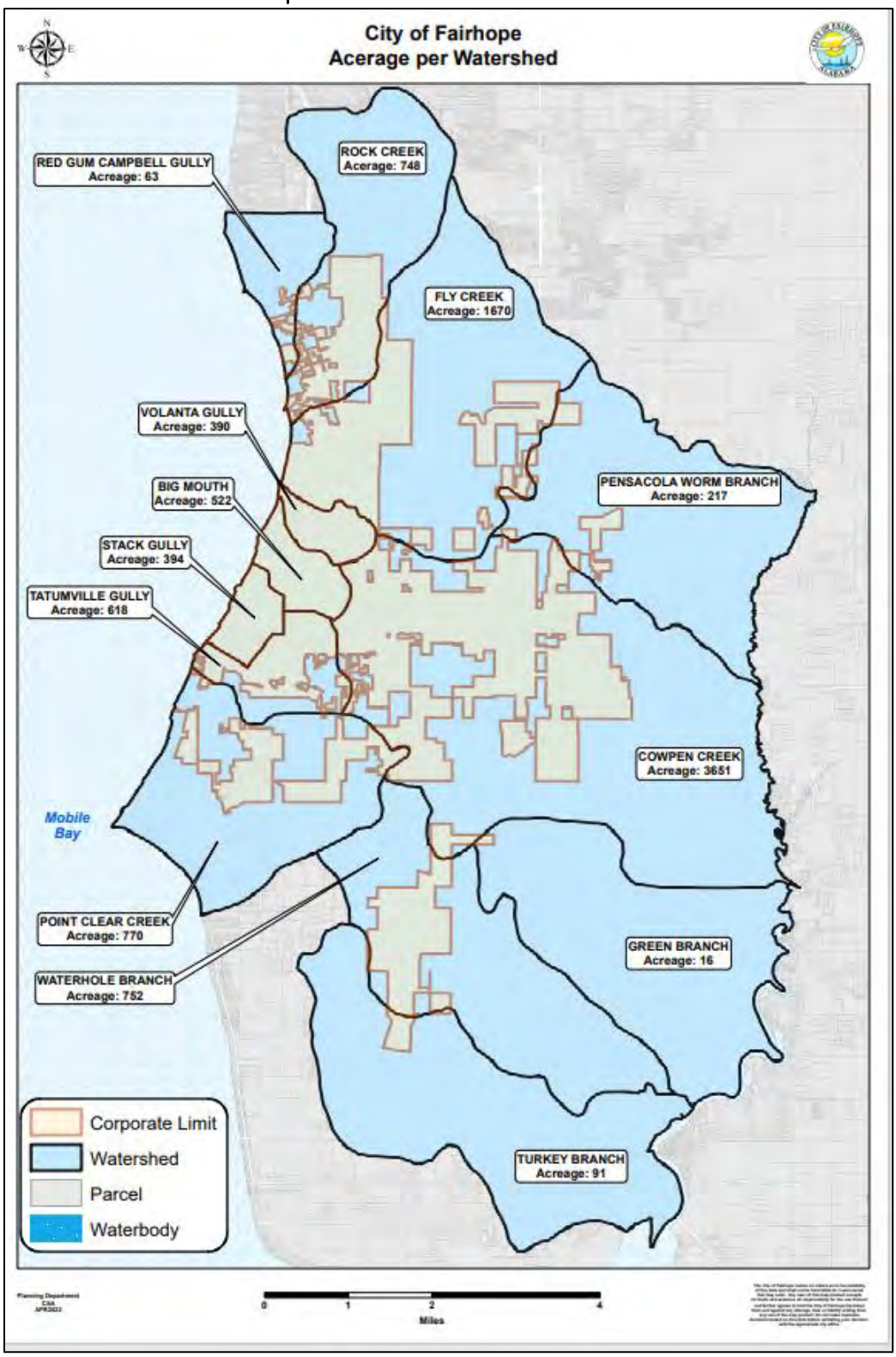
TOTAL APPROXIMATE ACREAGE: 9,837 acres (15 SQUARE MILES)
Source: Planning and Zoning Department GIS / Planning Tech (CA) April 2022

*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: Green Branch, 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.

Tatumville Gully behind Echo Lane, December 2022

2.4 MS4 Area: Corporate Limits



Watershed Map with Corporate Limits Acreage (MS4 area) as of April 2022

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

- **Requirements:** According to the general permit, Fairhope the "Permittee" shall develop and implement a public education and outreach program to inform the public 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 MEP. The Permittee shall continuously implement this program in the areas served by the MS4 (City Limits). Fairhope shall also comply, at a minimum, with applicable State and local public notice requirements when implementing a public involvement/participation program. Each year, Fairhope shall implement a minimum of four BMPs, with two BMPs emphasizing public education and two BMPs emphasizing public involvement.

  The Permittee shall include within the SWMPP the following information:

  A. Annually, seek and consider public input in the development, revision, and implementation of the SWMPP, that may include, but is not limited to publishing in local newspaper, posting on the Permittee's website, etc.
  B. Address in its public education program, the targeted pollutant sources to include, at a minimum the land development community (i.e., construction contractors/developers).
  C. Specifically address the reduction of litter, floatable and debris from entering the MS4, that may include, but is not limited to: NPDES General Permit Number ALR040000 Part III: Storm Water Pollution Prevention and Management Program Page 7 (1) Establishing a program to support volunteer groups for labeling storm drain inlets and catch basins with "no dumping" message; post and (2) Posting signs referencing local codes that prohibit littering and illegal dumping at selected designated public access points to open channels, creeks, and other relevant waterbodies;
  D. Inform and involve individuals and households about the steps they can take to reduce storm water pollution.
  E. Plans to inform and involve individuals and groups on how to participate in the storm water program (with activities that may include, but not limited to, local stream and lake restoration activities, storm water stenciling, advisory councils, watershed associations, committees, participation on rate structures, stewardship programs and environmental related activities, outreach on LID/GI). The target audiences and subject areas for the education program that are likely to have significant storm water impacts should include, but is not limited to, the following:

     (1) General Public

     (a) General impacts litter has on water bodies, how trash is delivered to streams via the MS4 and ways to reduce the litter.

     (b) General impacts of storm water flows into surface water from impervious surface; and

     (c) Source control BMPs in areas of pet waste, vehicle maintenance, landscaping, and rainwater reuse.

     (2) General Public, Businesses, Including Home-Based and Mobile Businesses

     (a) BMPs for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials; and

     (b) Impacts of illicit discharges and how to report them.

(3) Homeowners, Landscapers, and Property Managers

(a) Yard care techniques that protect water quality.

(b) BMPs for use and storage of pesticides and fertilizers.

(c) BMPs for carpet cleaning and auto repair and maintenance.

(d) Runoff reduction techniques, which may include but not limited to site design, pervious paving, retention of forests, mature trees, and maintenance required for LID/GI; and

(e) Storm water pond maintenance.

(4) Engineers, Contractors, Developers, Review Staff and Land Use Planners

(a) Technical standards for construction site sediment and erosion control.

(b) Storm water treatment and flow control BMPs.

(c) Impacts of increased storm water flows into receiving water bodies; and

(d) Run-off reduction techniques and low impact development (LID)/green infrastructure (GI) practices that may include, but not limited to, site design, pervious pavement, alternative parking lot design, retention of forests and mature trees to assist in storm water treatment and flow control BMPS, and maintenance required for LID/GI.

F. Evaluate the effectiveness of the public education and public involvement program. If the Permittee determines any portion of the program (including BMPs) to be ineffective, then the Permittee shall update the SWMPP to address the ineffectiveness.

The Permittee shall make their SWMPP available to the public when requested. The current SWMPP and the latest annual report should be posted on the Permittee's website within 30 days of submittal to the ADEM.

- Responsible Persons: Planning and Zoning Manager; Building Department; Public Works Director; Special Projects and Grants Manager; Director of Community Affairs

Orange Street pier at Mobile Bay, Tatumville Gully watershed

- **Rationale Statement:** The City of Fairhope supports the Fairhope Environmental Advisory Board (FEAB), which currently has nine members as of 11/1/2022. 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 also shares stormwater alliances / partnerships with:
    a. The Eastern Shore Watershed Management Plan (ESWMP) Steering Committee. Planning and Zoning Department represents for this meeting. The ESWMP is a Mobile Bay NEP initiative with Thompson Engineering as key coordinator.
    b. Create a Clean Water Future partners
    c. SALT (South Alabama Land Trust) – Steering committee for outreach of Native Habitat program
    d. Eastern Shore MS4 partners with Daphne, Spanish Fort, Baldwin County and AL-DOT
    e. Joint Environmental Advisory Board between Baldwin County, Fairhope, Daphne and Spanish Fort. City of Fairhope Planning and Zoning staff attends quarterly meetings.
    f. Clear Water Alabama / Alabama Soil & Water– Industry Education

  The City of Fairhope sponsors several community environmental education events each year:

    1. Coastal Clean Up (Public Works)
    2. Mobile Area Earth Day (Public Works, Planning and Zoning)
    3. Arbor Day (Public Works)
    4. America Recycles Day (Public Works)

  The City of Fairhope supports our local schools by providing staff as volunteers for:

  1. Master Environmental Educator Program (Planning and Zoning Dept.)
  2. Fairhope High School Marine Life Club / Environmental Group – partnering with this group for monofilament line recycling

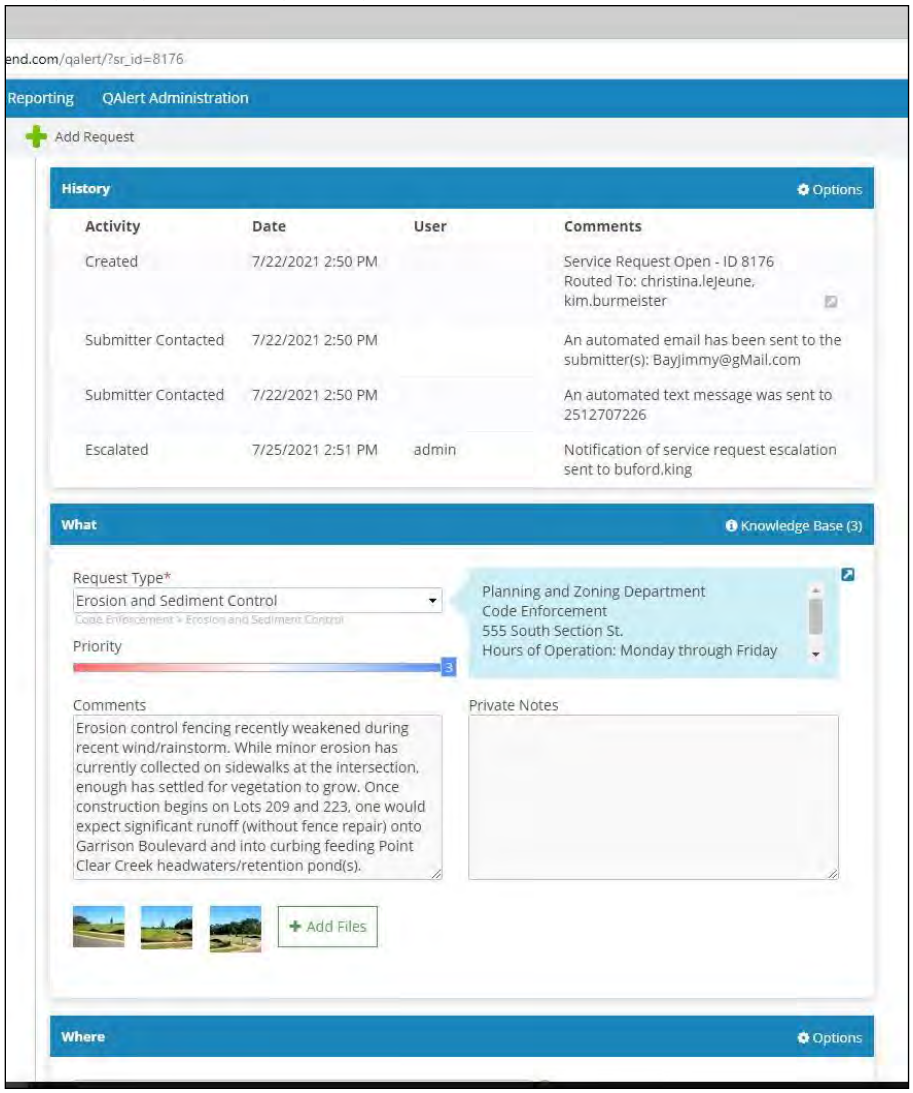
  The City of Fairhope supports public access to volunteer water testing results by posting a link to Alabama Water Watch on the City website.
  ADEM's water quality testing (prompting swim advisories) is posted at areas of swimming activity.

Outdoor education in Fairhope is centered around water quality and Mobile Bay.

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 provides the annual forum for the SWMPP. The Planning and Zoning Department is responsible for coordination of these efforts

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 and is directed to the Police Department after hours. Additionally, citizens can enter and track complaints ("service requests") on-line:



Qscend Reporting System on-line for complaints

Target audience for the City educational mechanisms are:

1. Citizens
2. Contractors
3. Landscapers
4. Business owners / managers
5. Property owners
6. Developers
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 Public Education
    1. Brochures / publications/media
    2. City Website
    3. Existing Demonstration Project with signage – Wetland Pond
    4. Employee Certifications and Training
    5. Create a Clean Water Future Campaign
    6. Stormwater Alliances

- BMPs/Mechanisms used for Public Involvement:
    1. Public Educational Meetings
    2. Community Events
    3. Pet waste bags available in City Parks
    4. Notifications for Public Meetings
    5. Subdivision Property Owners Associations Contact List
    6. City of Fairhope Planning Commission hearings
    7. City of Fairhope Environmental Advisory Board meetings
    8. Sanitary Sewer Overflow Signage

Flocculant demonstration at Clear Water Future Field Day 2022, hosted in part by the City of Fairhope

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, cont.

Public Education:

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 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 5-minute 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:
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)

Storm Drain Medallions

ONLY RAIN GOES IN THE DRAIN!

It's easy to be un-greasy! Recycle cooking oil

Soapy wash and rinse water should not flow into street or storm drain

Keep organic material out of storm drains too!

1. Do not pile, blow or discard organic waste such as leaves or grass clippings on or around storm drains (or into streets). Start a compost pile instead!
2. Keep pet waste out of storm drains: Dispose of pet waste in the garbage if mixed with cat litter. Flushing (into toilet not storm drain) is acceptable if there is no litter waste.
3. Stabilize bare areas/ground in the yard immediately (sow seed, add sod or mulch with pine straw for example). Sediment and sediment-stained (turbid/discolored) water are pollutants.
4. Wash cars at the car wash or in your grass. Don't allow dirty/sudsy rinse water to enter streets and storm drains.
5. Apply pesticides and fertilizers according to label instructions. More is not necessarily better!
6. Recycle paints, used motor oil, cooking oil and other materials. For more information on Fairhope's Waste Management programs, including recycling and household hazardous waste, call Public Works Waste Management (251) 990-0192 or visit: www.fairhopeal.gov/departments/public-works/waste-management

For more information :

Storm Drain Medallion Project Contact:

Richard Johnson, Public Works Director

(251) 928-8003

Richard.johnson@fairhopeal.gov

Check out local Storm Water Projects and Programs @ :

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

- *City of Fairhope MS4 Program (Annual Report and SWMPP)
- *Storm Sewer Inventory & Mapping
- *Fairhope Gullies
- *Fairhope Natural Resource Inventory
- *Homeowner Guide to Detention Pond Maintenance
- *Create a Clean Water Future Program

Funding for this project is provided in part by the Alabama Department of Conservation and Natural Resources, State Lands Division, Coastal Section and NOAA's National Coastal Zone Management Program.

www.fairhopeal.gov

STORM DRAIN MEDALLION PROJECT

www.cleanwaterfuture.com

About the Fairhope Storm Drain Medallion Project

In 2017, the City of Fairhope acquired a grant which included implementation of a program to promote increased awareness of local stormwater standards. Fairhope storm drains are the gateway to our watersheds. Keeping "only rain" in our storm drains leads to watershed protection. Since all of our watersheds empty into Mobile Bay, storm drain protection is of value to us all! As part of this outreach program, storm drain medallions are being installed throughout Fairhope, as a reminder to keep it clean! If you wouldn't drink it, a fish shouldn't either!

What is a Watershed?

A watershed is the land area that drains to a stream, lake, river or bay.

In Fairhope, all watersheds flow into Mobile Bay.

Rainy day storm drain

Rain (stormwater) in Mobile Bay

Fairhope Storm Drains

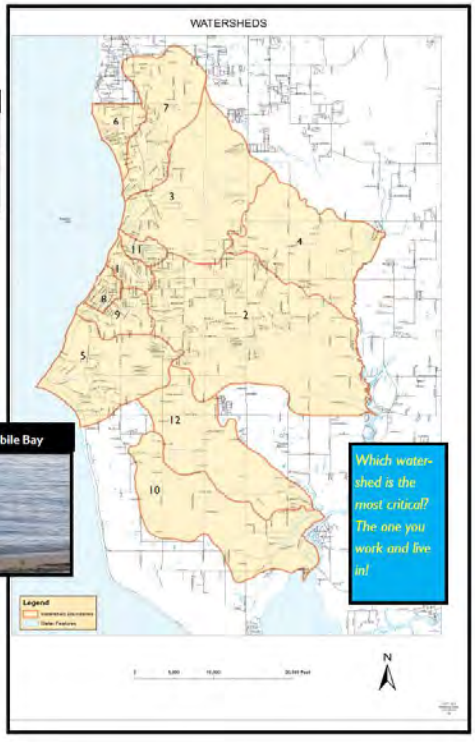
- A storm drain is an opening in a curb or a grated drain intended to capture and release rain water from City streets and parking lots.
- Stormwater flows through storm drains and other conveyance systems. A stormwater conveyance system can be any means for stormwater transportation such as a road side ditch, a natural gully, stream, creek, pipe or detention / retention pond.
- Stormwater is not filtered or treated through the City of Fairhope waste water treatment plant like municipal sewage and grey water is.
- Stormwater has the potential to carry with it pollutants such as sediment, chemical and fertilizer residue and organic waste (grass and leaf clippings can clog drains and pet waste can contaminate downstream areas).
- The City of Fairhope has about 1200 storm drains in the City limits. These flow into over 600 delineated outfall areas (including 13 major Mobile Bay outfalls) around the City.
- Stormwater in Fairhope is regulated by the Alabama Department of Environmental Management (MS4 Program).

The Watersheds of Fairhope

There are 12 watersheds in the City limits of Fairhope. All ultimately release into Mobile Bay.

1. Big Mouth Gully (500 acres)
2. Cowpen Creek (3,056 acres)
3. Fly Creek (1,310 acres)
4. Pensacola Worm Branch (91 acres)
5. Point Clear Creek (1,173 acres)
6. Red Gum / Campbell Gully (54 acres)
7. Rock Creek (678 acres)
8. Stack Gully (397 acres)
9. Tatumville Gully (617 acres)
10. Turkey Branch (88 acres)
11. Volanta Gully (389 acres)
12. Waterhole Branch (600 acres)

Water quality inspector @ Mobile Bay



Storm Drain Medallion Brochure

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, cont.

BMP # 2: 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. Waste Management
5. MS4 Annual Report and SWMPP
6. Zoning Ordinance / Subdivision Regulations
7. "Understanding Your Storm Water Management Program" 5-minute video shared with permission of the Mobile Bay NEP.
8. Municipal Code of Ordinances (www.fairhopeal.gov/departments/building/building-codes)
    a. Erosion and Sediment Control Ordinance (#1398; #1603)
    b. Red Soils Ordinance (# 1423)
    c. Wetlands Ordinance (#1370)
    d. Construction Site Waste Ordinance (#958)
    e. Illicit Discharge Ordinance (#1516)
9. Watershed Management Reports:
    a. Fly Creek Watershed Restoration Project (2013)
    b. Volanta Gully Watershed Management Plan (2012)
    c. Tatumville Watershed (partial study – July 2019)
10. Sewer Capacity Study 2017 (Water and Sewer)

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

BMP # 3: Existing Demonstration projects provide educational signage:

1. 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.
   Responsible Person(s) for Existing Demonstration Project: Public Works (Director)

Simulated Wetland Pond at North Beach Park, signage

BMP #4: Employee Certifications:

1. The City of Fairhope currently has (2) licensed Commercial Pesticide Applicators, who are licensed by the State of Alabama Department of Agriculture and Industries Pesticides Applicators Certification program. This includes two employees in Public Works, and one supervisor over the Parks and Recreation Department as well as the Golf Course. This 3-year certification aids in pollution prevention by guiding applicators on correct application techniques, which discourages overuse or misuse of pesticides/herbicides (Responsible Person: Public Works Director)

a. Landscape Supervisor, Certification #2000246
b. Parks and Recreation / Golf Course Grounds Supervisor, Certification #2004867

2. Qualified Credentialed Inspector (QCI) program educates inspectors on correct erosion and sediment control applications and installation techniques. Any new inspectors hired will acquire QCI training within 12 months: -QCI Yearly recertification required: Responsible Person: Building Official; Planning and Zoning Code Enforcement Officer/ Building Official

a. P&Z Code Enforcement Officer (Burmeister), Certification # 25712 Exp. 10/3/2023
b. P&Z Code Enforcement Officer (LeJeune), Certification # 81295 Exp. 3/2023
c. Building Inspector #1 (Nixon): #T6435 Exp. 02/23
d. Building Inspector #3 (Nelson): #68815 Exp. 3/2023
e. Building Inspector #4 (Taylor): #76249 Exp. 3/2023
f. Building Inspector #5 (Bradley): T6889 Exp. 4/2023
g. Building Inspector/Right of Way Inspector (Thomas): #T5330 Exp. 3/2023

BMP# 5: 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 #6: Stormwater Alliance

a. The Eastern Shore Watershed Management Plan (ESWMP) Steering Committee. Planning and Zoning Department represents for this meeting. The ESWMP is a Mobile Bay NEP initiative with Thompson Engineering as key coordinator.
b. Create a Clean Water Future partners: Resources / videos are utilized for training (www.cleanwaterfuture.com)
c. SALT (South Alabama Land Trust) – Steering committee for outreach of Native Habitat program
d. Eastern Shore MS4 partners with Daphne, Spanish Fort, Baldwin County and AL-DOT- meet yearly to compare MS4 programs, sharing of information on how goals are achieved.
e. Joint Environmental Advisory Board between Baldwin County, Fairhope, Daphne and Spanish Fort. City of Fairhope Planning and Zoning staff attends quarterly meetings. Main goal is to help establish similar stormwater language and buffers across jurisdictional lines.
f. Clear Water Alabama / Alabama Soil & Water: Industry Education; City of Fairhope staff helps plan seminar and field day (Planning and Zoning ; Public Works)

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, cont.

Public Involvement:

BMP #1: Public Educational Meetings:

1. Master Environmental Educator (MEE) – Planning and Zoning Department has (1) staff person (Code Enforcement Officer) was trained to participate in this program.
   Responsible Person: Planning and Zoning Department Code Enforcement Officer
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 in April. The Planning and Zoning Department hosts an informational booth here to showcase local watershed / stormwater 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).
   Responsible Persons: Public Works Dept. Sanitation Officer / Planning and Zoning Dept. Code Enforcement Officers

BMP #2: Community Events:

1. Mobile Area Earth Day (South Beach Park in Fairhope). Public Works offers e-waste recycling at this event which is held in April.
2. Coastal Clean Up (beachfront parks) is held annually in September. City of Fairhope coordinates garbage pickup and recycling of recovered materials.
3. Arbor Day (Coastal Community College) – City gives away 1,000 seedlings every year at this event
4. America Recycles Day – free amnesty day for recycling, paper shredding and e-waste recycling. City hosts this event at Public Works annually on or around November 15th.
   Responsible Person(s) for Community Events: Public Works (Director); Special Projects and Grants Manager; Planning and Zoning Department (Water Festival)

Coastal Clean Up feed on Fairhope's Facebook page, September 2022

BMP # 3: 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 #4: 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); City Clerk

BMP #5: 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)

BMP #6: 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 City Hall and is open to the public. The objective and purpose of the Fairhope Planning 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 a component of the development review process. 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 #7: 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 advisory committee currently has nine (9) 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 stormwater management.
Responsible Person: Planning and Zoning Department (Code Enforcement Officer)

BMP# 8: Sanitary Sewer Overflow On-Site Signage

Signs are added as soon as a spill is discovered.
Responsible Person: Water and Sewer Director

PUBLIC EDUCATION AND INVOLVEMENT ON STORM WATER IMPACTS, cont.

- Measurable Goals

  One Year Goals:

  1. Storm Water Education / Seminar

     Responsible Department: Planning and Zoning Department (Director)

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

     Due: December 2023

  2. Storm Water Article on Social Media (Facebook)

     Responsible Department: Planning and Zoning Department (Code Enforcement) Community Development (Director)

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

     Due: December 2023

  3. 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 2023

  4. SWMPP Review

     Responsible Department: Planning and Zoning Department (Director)

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

     Due: December 2023

Facebook feed on the litter boom project at the central detention area owned by the City of Fairhope, Cowpen Creek watershed, November 2022

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

- **Requirements:** According to the general permit, Fairhope, the "Permittee", must:
  Implement an ongoing program to detect and eliminate illicit discharges into the MS4, to the maximum extent practicable. The program shall include, at a minimum, the following:

  A. An initial map shall be provided in the SWMPP with updates, if any, provided each year in the annual report. The map shall include, at a minimum:

  (1) The latitude/longitude of all known outfalls.

  (2) The names of all waters of the State that receive discharges from these outfalls; and,

  (3) Structural BMPs owned, operated, or maintained by the Permittee, if applicable.

  B. Provide, to the extent allowable under State law, an ordinance or other regulatory mechanism that effectively prohibits non-storm water discharges to the MS4. The ordinance or other regulatory mechanism shall be reviewed annually and updated as necessary and shall:

  (1) Include escalating enforcement procedures and actions; and

  (2) Require the removal of illicit discharges and the immediate cessation of improper disposal practices upon identification of responsible parties. Where the removal of illicit discharge within ten (10) working days is not possible, the ordinance shall require an expeditious schedule for removal of the discharge. In the interim, the ordinance shall require the operator of the illicit discharge to take all reasonable and prudent measures to minimize the discharge of pollutants to the MS4.

  C. Include a dry weather screening program designed to detect and address non-storm water discharges to the MS4. This program must address, at a minimum, dry weather screening of fifteen percent (15%) of the outfalls once per year with all (100 percent) screened at least once per five years. Priority areas, as described by the Permittee in the SWMPP, will be dry weather screened on a more frequent schedule as outlined in the SWMPP. If any indication of a suspected illicit discharge, from an unidentified source, is observed during the dry weather screening, then the Permittee shall follow the screening protocol as outlined in the SWMPP.NPDES General Permit Number ALR040000 Part III: Storm Water Pollution Prevention and Management Program Page 9 iv.

  D. Include procedures for tracing the source of a suspect illicit discharge as outlined in the SWMPP. At a minimum, these procedures will be followed to investigate portions of the MS4 that, based on the results of the field screening or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-storm water.

  E. Procedures for eliminating an illicit discharge as outlined in the SWMPP.

  F. Procedures to notify ADEM of a suspect illicit discharge entering the Permittee's MS4 from an adjacent MS4 as outlined in the SWMPP.

  G. Provide a mechanism for the public to report illicit discharges discovered within the Permittee's MS4 and procedures for appropriate investigation of such reports.

  H. Provide a training program for appropriate personnel to be trained on identification, reporting, and corrective action of illicit discharges, at a minimum of at least once per five years.

  I. Address the following categories of non-storm discharges or flows (i.e., illicit discharges) only if the Permittee or the Department identifies them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (infiltration is defined as water other than wastewater that enters a sewer system, including foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is

distinguished from, inflow), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering run-off, individual residential car washing, flows from riparian habitats and wetlands, discharge or flows from firefighting activities (to include fire hydrant flushing); dechlorinated swimming pool discharges, and residual street wash water, discharge authorized by and in compliance with a separate NPDES permit; and

J. Develop a list of other similar occasional incidental non- storm water discharges (e.g. non-commercial or charity car washes, etc.) that will not be addressed as illicit discharges. These non-storm water discharges must not be reasonably expected (based on information available to the Permittees) to be significant sources of pollutants to the municipal separate storm sewer system, because of either the nature of the discharges or conditions you have established for allowing these discharges to your MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to impaired waterbodies, BMPs on the wash water, etc.). You must document in your SWMPP any local controls or conditions placed on the discharges. The Permittee must include a provision prohibiting any individual non- storm water discharge that is determined to be contributing significant amounts of pollutants to your MS4.

K. Include in the Annual Report the following information:

1. List of outfalls observed in the annual reporting year to demonstrate that 100% of outfalls are screened at least once per five years during the dry weather screening.

2. Updated MS4 map(s) as required by Part III.B.2.a.i. unless there are no changes to the map that was previously submitted. When there are no changes to the map, the annual report must state this.

3. Copies of, or a link to, the IDDE ordinance or other regulatory mechanism as required by Part III.B.2.a. ii of the general permit. When there are no changes to the ordinance or other regulatory mechanism, the annual report should state this.

4. Date(s) of training conducted for appropriate personnel; and

5. The number of illicit discharges investigated, the screening results, and the summary of corrective actions taken to include dates and timeframe of response.

- Responsible Persons: Planning and Zoning Department; Public Works; Building Department; Water and Sewer Department, Volunteer Fire Department, Public Works Department; Water and Sewer Director; 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.

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)

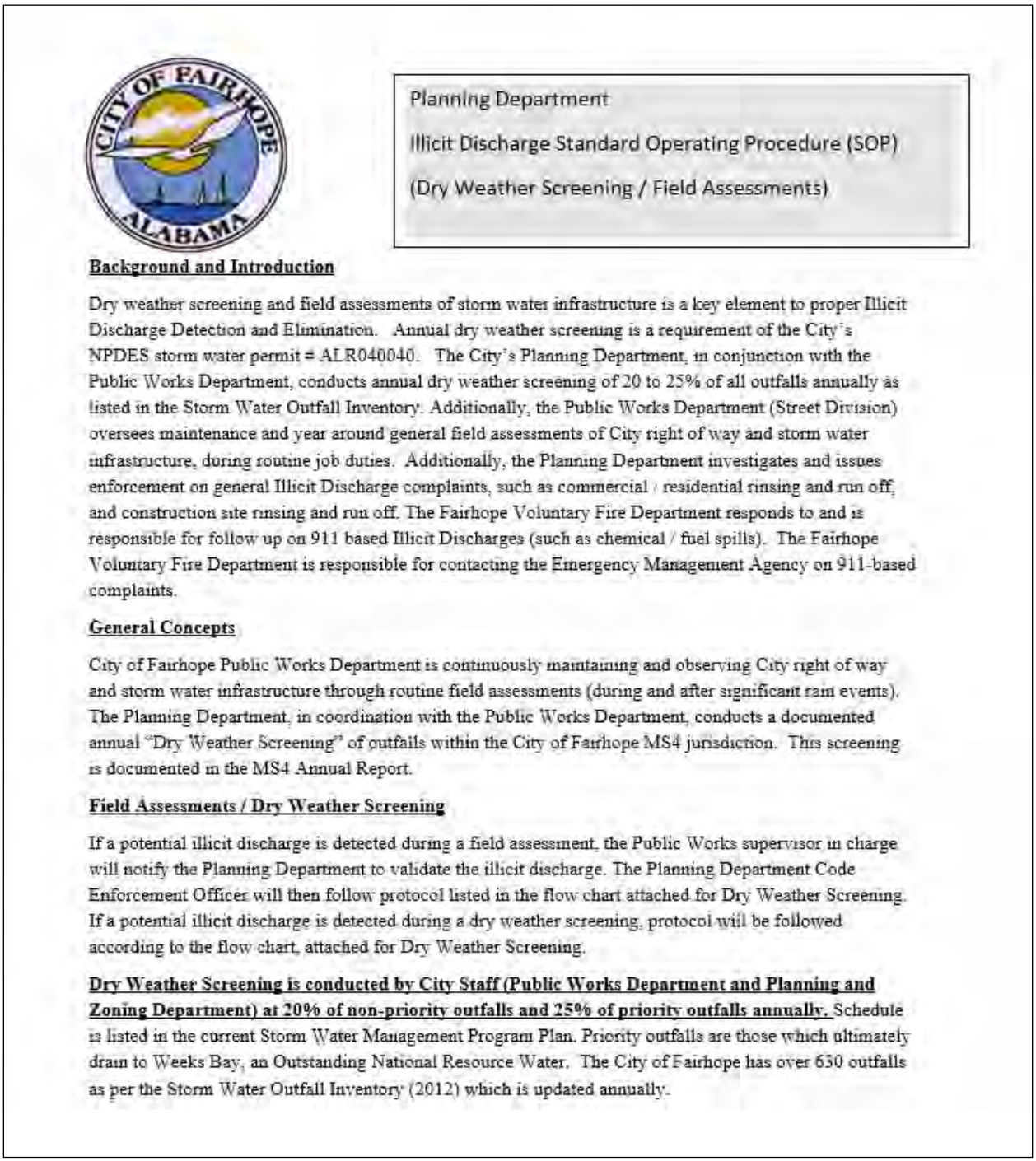
All costs incurred by the city in association with the ceasing of a potentially harmful discharge will be reimbursed by the property owner of the discharging property, structure, or facility. The city may charge the cost against the subject land as a municipal lien, charges to be recovered in a suit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

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' 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 infrastructure 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, an Outstanding National Resource Water. The City of Fairhope has over 630 outfalls as per the Storm Water Outfall Inventory (2012) which is updated annually.

SOP for Illicit Discharges, 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

Upon a complaint or suspected illicit discharge, the Planning Department Code Enforcement Officers perform site inspections 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

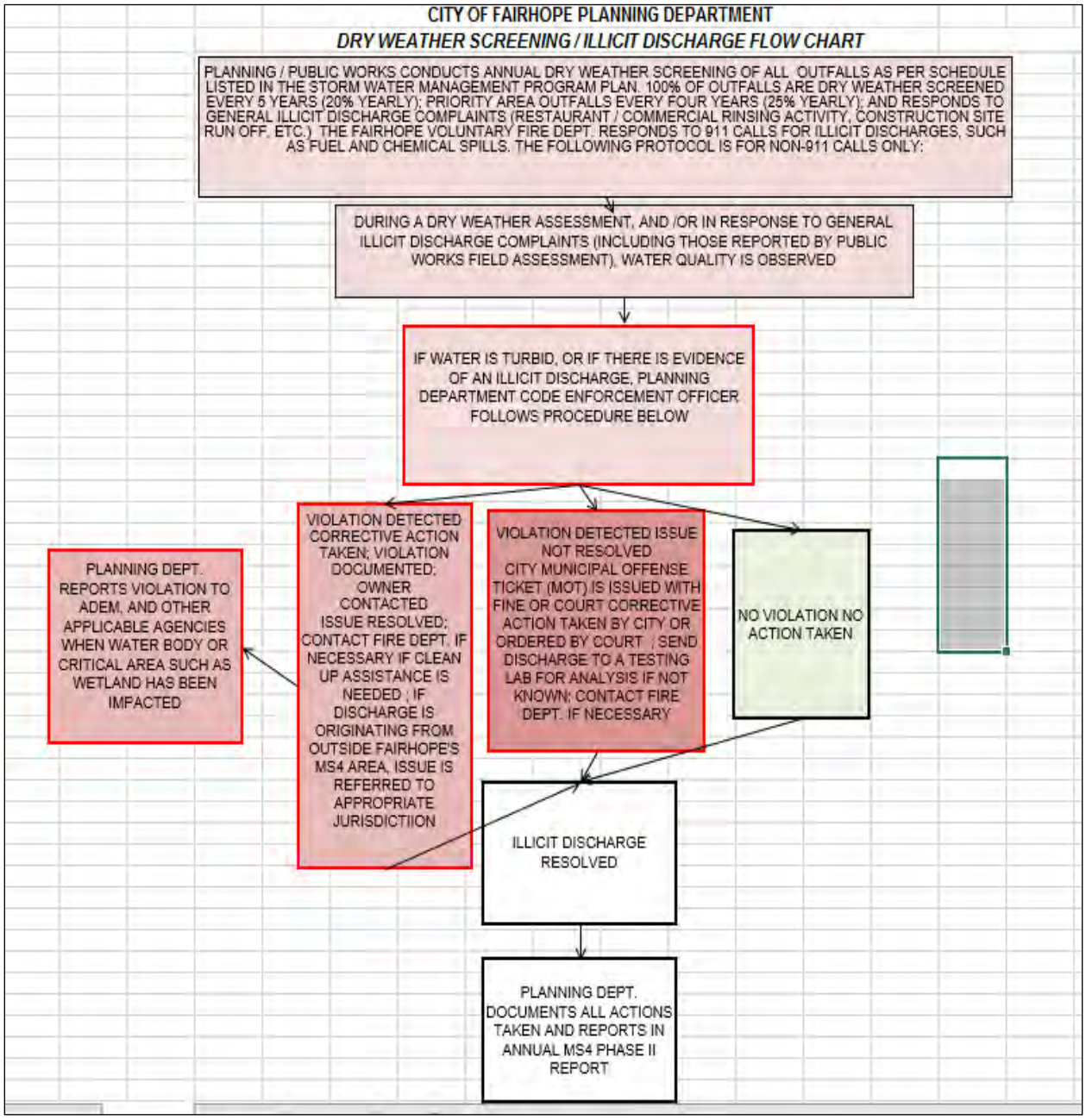
If a general illicit discharge is observed, and the nature of the discharge is not known, the City of Fairhope Planning Department will engage a testing laboratory to perform testing.

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.



SOP Flow Chart for Illicit Discharges

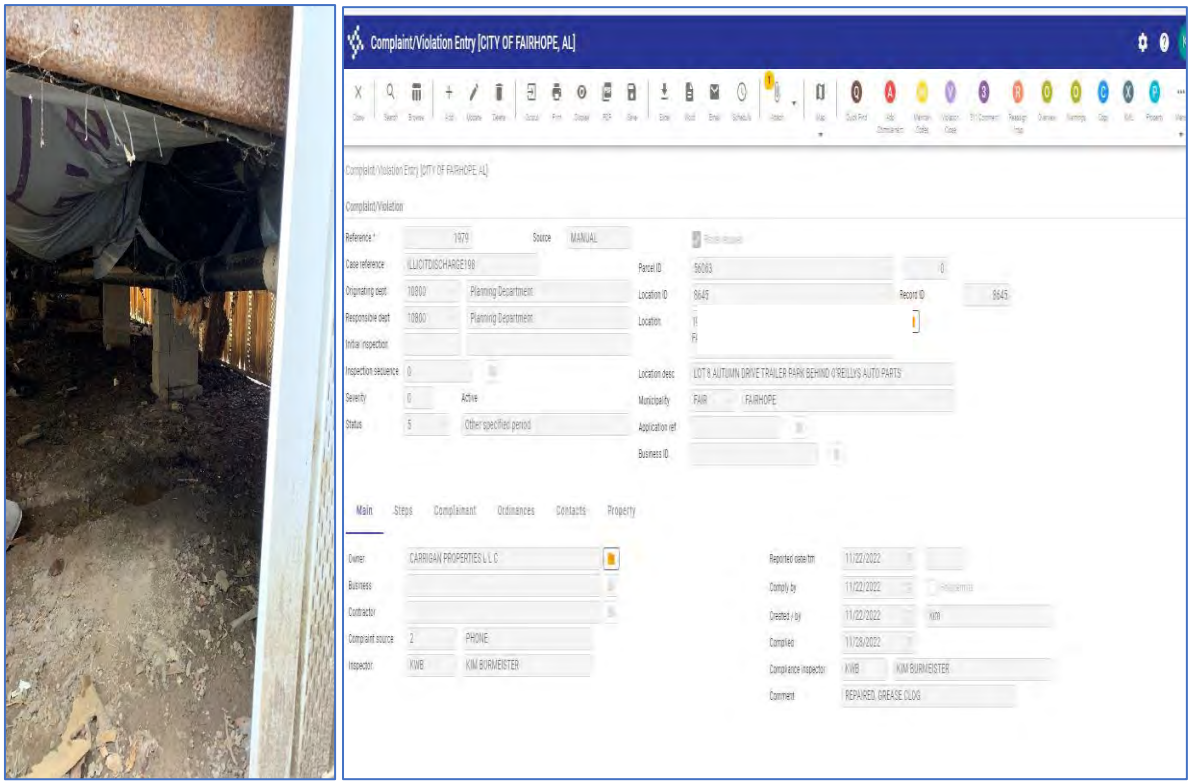
ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONT.

The Planning and Zoning Department Code Enforcement Officer uses a monthly complaint log to track complaints and corrective action procedures taken. Tracking is done through Munis software. 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 an important area for IDDE monitoring. The general location of M-1 zoned areas:

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



Leaking sewer connection reported by Water Department staff, example of illicit discharge violation and report tracking through Munis

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 (2023-2027) monitoring schedule is in the Measurable Goals section below.

City of Fairhope

MS4 Outfall Assessment Schedule 2023-2027

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

Watershed	Number of outfalls inventoried	MS4 Monitoring Requirement / 5 yr. Monitoring Schedule (2022-2026)
Big Mouth	69 *(includes one Major Outfall @ Mobile Bay)*	2023 Frequency: every 5 years
Cowpen Creek*	239	**2025: Pg. 1-100** 2026: Pg. 100- end Frequency: every 4 years
Fly Creek*	*102 (includes 1 Major Outfall @ Mobile Bay)*	2023 Frequency: every 4 years
Pensacola Worm Branch*	27	2026 Frequency: every 4 years
Point Clear Creek	36	2027 Frequency: every 5 years
Rock Creek	103 *(includes one Major Outfall @ Mobile Bay)*	2024 Frequency: every 5 years
Stack Gully	23 *(includes six Major Outfalls @ Mobile Bay)*	2023 Frequency: every 5 years
Tatumville Gully	107 *(includes three Major Outfalls @ Mobile Bay)*	2025 Frequency: every 5 years
Turkey Branch*	8	2024 Frequency: every 4 years
Volanta	62 *(Includes one Major Outfall @ Mobile Bay)*	2027 Frequency: every 5 years
Waterhole Branch*	35	2026 Frequency: every 4 years
Red Gum and Green Branch	NO CITY OUTFALLS	N/A
TOTAL	**811 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.

This is a MS4 requirement (Measurable Goal / IDDE section). We must visually inspect non-priority drains once every 5 years (priority area drains once every 4 years).

Outfall Assessment 5-year Schedule for 2023

- **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. Pamphlets online*: Greener by the Yard*; *Storm Drain Medallion project*
    7. Staff Meetings (Public Works)
    8. City of Fairhope Watershed Map
    9. Storm Water Outfall Inventory updates & mapping
    10. Volunteer Fire Department (Spill response)
    11. Create a Clean Water Future Campaign
    12. Dry Weather Screening – outfall assessments
    13. Sewer Capacity Study
    14. No feeding of ducks/geese ordinance #1598, signage in North Beach Park
    15. Video of Sewer Lines to detect leaks
    16. Survey 1-2-3 Application for Outfall Assessment

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)
The City of Fairhope employs two full time (2) Code Enforcement Officers, in part, to investigate and issue corrective action on illicit discharge issues. Standard Operating Procedures (SOPs) for enforcement and tracking were developed in 2014 and is updated yearly if necessary.

BMP # 3: Sanitation Officer (Public Works Department)
Fairhope employs a full time Sanitation Officer full time to manage the City 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 waste 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 materials dropped off, including electronic waste. On average, the City of Fairhope recycles about 1,700 gallons of household hazardous waste yearly (based on the 2018 recap from Public Works).
Responsible Person: Public Works Department (Director)

BMP # 6: Pamphlets on-line:

a. *Greener by the Yard*
This pamphlet includes information on pollution prevention, good housekeeping and 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.

b. Storm Drain Medallion Project
This pamphlet highlights the importance of allowing only rain in the drain. Artwork of the medallions provided by the Fairhope High School Art Class. Over a hundred City of Fairhope drains still have medallions on them and continue to serve as education on stormwater pollution.

Responsible Department: Planning and Zoning Department

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 Department: Public Works

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.
Responsible Department: Planning and Zoning

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. As of November 20, 2020, the City of Fairhope Stormwater Outfall Inventory reflects 650 outfalls. The Planning and Zoning / GIS Department is working to update the map showing all outfalls and major outfalls, including outfalls added since 2012.
Responsible Department: Planning and Zoning

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 Department: 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.
Responsible Department: Planning and Zoning

BMP #12: Dry Weather Screening; outfall assessments
The City of Fairhope has staff visually inspect 15-20% of outfalls annually. The outfall assessment is done by watershed, with priority area watersheds inspected at least every 4 years and all outfalls inspected at least every 5 years. Currently there are 656 outfalls delineated in the inventory. The original 2012 outfall inventory is available online. The complete up to date outfall inventory is available on GIS mapping, and in hard copy (Planning Department). There is outfall data sheet for each specific outfall.

BMP #13: Sewer Capacity Study
The City of Fairhope Water and Sewer Department continues to implement measures listed in the 2017 study, which outlined areas of improvement to help prevent sewer overflows.
Responsible Department: Water and Sewer Department

BMP #14: No feeding of ducks/geese, ordinance # 1598; Signage in North Beach Parks
City of Fairhope has signage to prevent feeding of ducks and geese in City Park areas, such as North Beach Parks. Ducks and geese are a likely source for fecal contamination.

BMP #15: Alabama Water Watch sampling for pathogens
The City of Fairhope has two members of staff certified for pathogen testing. Three areas of Fly Creek are sampled monthly; results are uploaded to the Alabama Water Watch site.
Responsible Department: Planning and Zoning

BMP #15: Video of Sewer Lines
Water and Sewer Department staff have the capability to perform video inspections of sewer lines to locate potential sources of sewer leaks. The Water and Sewer Department own a camera which can inspect sewer pipes and storm drains up to 500' long.
Responsible Department: Water and Sewer

BMP #16: Survey 1-2-3 Application for Outfall Assessment-Field Collection
In 2020, the Planning and Zoning Department initiated digitizing the outfall inventory by creating an on-line tool for field assessment. Planning and Zoning GIS staff customized the Survey 1-2-3 application for field collection of outfall data. The customized tool uses a general stormwater facility monitoring sheet but in digital form and data is collected via smart phone. Upon each individual outfall assessment, the location of the outfall is immediately pinned and placed on an ESRI-based map which will updated through dry screen outfall inspections annually.
Responsible Department: Planning and Zoning, GIS

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE), CONT.

- 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 routine corrections. *(Planning and Zoning Manager)*

   Due: December 2023

2. Video of Sewer Lines

   Responsible Department: Water Department

   Goal: Conduct video test on priority sewer lines annually to detect sewer leaks or illegal connections. Document findings and corrective action taken *(Water and Sewer Director)*

   Due: December 2023

3. Public Works Illicit Discharge Detection Meeting

   Responsible Department: Public Works

   Goal: Alert and advise 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 2023

4. Dry Weather Screening of Outfalls

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

Goal: a. NON-PRIORITY OUTFALLS (do not drain to Weeks Bay): Assess at least once every 5 years per 5-year schedule. Use MS4 Stormwater Outfall Inventory (data sheets, map) to reference outfalls. Document outfalls assessed; date; conditions and maintenance requirements (and when complete). This will satisfy the 5-year requirement for 100% of all outfalls every five years. Planning and Zoning Department and Public Works Department will conduct and record these assessments annually. Deficient outfalls are reported to the property owner.

Due: December 31, 2023

Goal: b. PRIORITY OUTFALLS (DRAINS TO WEEKS BAY): Assess at least once every 4 years per 5-year schedule. Non-priority outfalls: once every 5 years. Planning and Zoning Department and Public Works Department will conduct these assessments annually.

For 2023, 186 outfalls are scheduled to be assessed:

Big Mouth Gully Watershed: 71 *non-priority watershed

Stack Gully Watershed: 23 *non-priority watershed

Fly Creek Watershed: 92 *priority outfall area

Due: December 2023

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

- **Requirements:** According to the general permit, Fairhope the "Permittee" must: Develop/revise, implement and enforce an ongoing program to reduce, to the maximum extent practicable, the pollutants in any storm water runoff to the MS4 from qualifying construction sites. The program shall include the following at a minimum:
  A. Specific procedures for construction site plan (including erosion prevention and sediment controls) review and approval: The MS4 procedures must include an evaluation of plan completeness and overall BMP effectiveness.
  B. To the extent allowable under State law, an ordinance or other regulatory mechanism to require erosion and sediment controls, sanctions to ensure compliance, and to provide all other authorities needed to implement the requirements of Part III.B.3 of this permit. The ordinance or other regulatory mechanism shall be reviewed annually and updated as necessary.
  C. A training program for MS4 site inspection staff in the identification of appropriate construction BMPs (example: QCI training in accordance with ADEM Admin Code. R. 335-6-12 or the Alabama Construction Site General Permit). Applicable MS4 site inspection staff shall be trained at least once per year.
  D. Within 365 days of the effective date of the permit, develop and implement a construction site inspection form to include at least the items listed in Parts III.B.3.d.i.
  E. Within 365 days of the effective date of the permit, maintain an inventory of qualifying construction sites containing relevant contact information for each construction site (i.e., tracking number and construction site contact name, address, phone number, etc.), the size of the construction site, whether the construction site has submitted for permit coverage under ADEM's Construction General Permit ALR100000, and the date the MS4 Permittee approved the site construction plan. The MS4 Permittee must make the inventory available upon the Department's request.
  F. Procedures for the inspection of qualifying construction sites to verify the use of appropriate erosion and sediment control practices that are consistent with the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas published by the Alabama Soil and Water Conservation Committee (hereinafter the "Alabama Handbook"). The frequency and prioritization of inspection activities shall be documented in the SWMPP. Inspection of construction sites to verify use and proper maintenance of appropriate BMPs shall be performed in accordance with the frequency specified in the table below: Site Inspection Frequency Priority Construction Sites (defined in Part VII.W.) Other sites determined by the Permittee or Permitting Authority to be a significant threat

to water quality. * At a minimum, inspections must occur monthly. All qualifying construction sites not meeting the criteria specified above. At a minimum, inspections must occur every three months. *In evaluating the threat to water quality, the following factors must be considered, if applicable: • Soil erosion potential; • Site slope; • Project size and type; • Sensitivity of receiving waterbodies including 303d or TMDL status; • Proximity to receiving waterbodies; • Non-storm water discharges; • Past record of non-compliance by the operators of the construction site; and • Other factors deemed relevant to the MS4.NPDES General Permit Number ALR040000 Part III: Storm Water Pollution Prevention and Management Program Page 11

G. For sites determined to have ineffective BMPs, a follow-up inspection shall be conducted and appropriately documented as outlined in Part III.B.3.d.i.
H. Procedures, as outlined in the SWMPP, to notify ADEM of construction sites that do not have a NPDES permit or ineffective BMPs that are discovered during the 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; and
I. A mechanism for the public to report complaints regarding discharges from qualifying construction sites.

- ADEM implements a State-wide NPDES construction storm water regulatory program. As provided by 40 CFR Part 122.35(b), the Permittee may rely on ADEM for the setting of standards for appropriate erosion controls and sediment controls for qualifying construction sites and for enforcement of such controls and must document this in its SWMPP. If the Permittee elects not to rely on ADEM's program, then the Permittee must include the following, at a minimum, in its SWMPP:

A. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs consistent with the Alabama Handbook for Erosion Control, Sediment Control, And Stormwater Management on Construction Sites and Urban Areas published by the Alabama Soil and Water Conservation Committee (hereinafter the "Alabama Handbook");
B. Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.
C. Development and implementation of an enforcement strategy that includes escalating enforcement remedies to respond to issues of non-compliance.
D. An enforcement tracking system designed to record instances of non-compliance and the MS4's responding actions. The enforcement case documentation should include:
    1. Name of owner/operator
    2. Location of construction project or industrial facility

3. Description of violations
4. Required schedule for returning to compliance
5. Description of enforcement response used, including escalated responses if repeat violation occurs or violations are not resolved in a timely manner.
6. Accompanying documentation of enforcement response (e.g., notices of noncompliance, notices of violation, etc.);
7. Any referrals to different departments or agencies; and
8. Date violation was resolved

E. The Permittee must keep records of all inspections (i.e. inspection reports) and employee training required by Part III.B.3.a.

- The Permittee shall include within the SWMPP the following information:
  - A. Procedures for site plan reviews as required by Part III.B.3.a.i;
  - B. A copy or link of the ordinance or other regulatory mechanism required by Part III.B.3.a.ii.;
  - C. Plans for the training of MS4 site inspection staff as required by Part III.B.3.a.iii; and
  - D. A copy of the construction site inspection form meeting the requirements of Part III.B.3.a.
- The Permittee shall maintain the following information and make it available upon request:

  A. Documentation of all inspections conducted of qualifying construction sites as required by Part III.B.3.a.vi. The inspection documentation shall include, at a minimum, the following:
  (1) Facility type.
  (2) Inspection date.
  (3) Name and signature of inspector.
  (4) Location of construction project.
  (5) Owner/operator information (name, address, phone number, email);
  (6) Description of the storm water BMP condition that may include, but not limited to, the quality of vegetation and soils, inlet and outlet channels and structures, embankments, slopes and safety benches, spillways, weirs, and other control structures; and sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures; and (7) Photographic documentation of any issues and/or concerns.

  B. Documentation of referrals of noncompliant construction sites and/or enforcement actions taken at construction sites to include, at a minimum, the following:
  (1) Name of owner/operator
  (2) Location of construction project.
  (3) Description of violation.
  (4) Required schedule for returning to compliance.

(5) Description of enforcement response used, including escalated responses if repeat violations occur; and
(6) Accompanying documentation of enforcement responses (e.g. notices of non-compliance, notices of violations, etc.).
C. Records of public complaints including:
(1) Date, time and description of the complaint.
(2) Location of subject construction sites; and
(3) Identification of any actions taken (e.g. inspections, enforcement, corrections). Identifying information must be sufficient to cross-reference inspection and enforcement records.

- The Permittee shall report each year in the annual report the following information:
  A. A description of any completed or planned revisions to the ordinance or regulatory mechanism required by Part III.B.3.a. ii. and the most recent copy, or a link to the ordinance; and
  B. List of all active construction sites within the MS4 to include the following summary:
     1. Number of construction site inspections.
     2. Number of non-compliant construction site referrals and/or enforcement actions and description of violations.
     3. Number of construction site runoff complaints received; and
     4. Number of MS4 staff/inspectors trained. Include copies of certifications or attendance records for those MS4 staff/inspectors

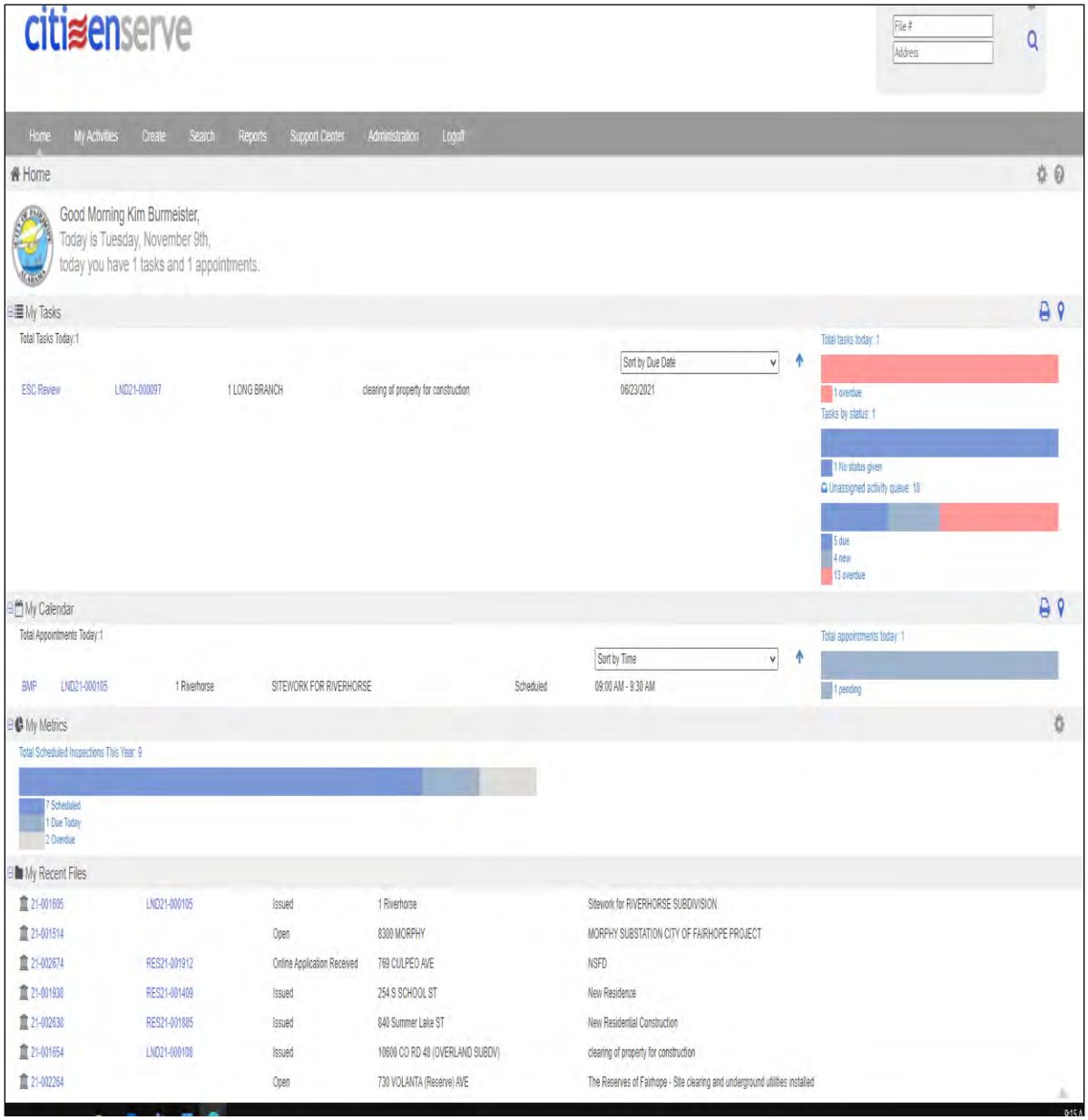
- Responsible Persons: Planning and Zoning Department; Building Department; Public Works Department; Water and Sewer Director

- **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 to development activities over an acre. This program includes project review, BMP inspections and enforcement of construction related ordinances for environmental protection. City employees (i.e. utility workers) 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 review development applications and conduct BMP and construction inspections. The City of Fairhope has a total of (7) QCI certified inspection staff employees: The Planning and Zoning Department has two (2) and the Building Department has five (5). Crew leaders and city staff 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 / BMP Workshop) by the City of Fairhope Planning and Zoning Department, Building Dept. and the Public Works Department. The City of Fairhope has a written Standard Operating Procedure (SOP) for non-compliant construction sites which outlines enforcement procedures.

The City of Fairhope Erosion and Sediment Control Ordinance 1398 and 1603 is enforced through BMP, right of way inspections and building department inspections. The ESC was revised in 2017 to include:

1. Requirements for stabilization of silviculture (forestry) activities
2. Third party review clarification (paid for by applicant)
3. Restrictions on clearing of vegetation: may not exceed more than 30' past the footprint of the proposed structure for single family; 50' for all others; 40' past curb and gutter for right of way projects and no more than the designed width of any drainage or utility easement that contains drainage conveyances and building utilities.
4. Slopes greater than 3:1 or adjacent to critical areas will be subject to additional requirements as determined by the City of Fairhope and/or the third-party consultant
5. Multiple buildings require individual erosion and sediment control (BMP) plans
6. Development sites (such as multi-occupancy / apartment projects) require a paved or fully stabilized road prior to building construction.
7. Open channels may receive rip rap or gabion stone stabilization materials if specified by a professional engineer.
8. Applicants must provide copies of QCI or other inspection reports to the city, upon request by the City.

- **BMPs / Mechanisms** used for Construction Site Storm Water Runoff Control
    1. Design Review / Pre-Construction Meetings
    2. BMP Inspections (entered through Citizen Serve “Inspections” portal)
    3. Code Enforcement / Procedures for non-compliant sites
    4. City ordinances
    5. Educational material available in the Building Dept. and on-line
    6. QCI certification of inspection staff (Code Enforcement, Building Inspectors)
    7. City Annual Erosion and Sediment Control Workshop



Citizen Serve program used for BMP and inspection tracking as of 2021. Munis is also still being used for tracking other complaints such as illicit discharge violations.

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 but 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 (if applicable)
7. Site Plan Review (considered by Planning Commission), if the development meets the following qualifications:
   - -Has a gross floor area of 10,000sf or greater; or,
   - -More that 30% of the lot (excluding the building) is impervious; or
   - -All applications for zoning map amendments to any of the Village Districts
   - -All mixed-use projects electing to build to 35 feet high with 33% residential.

All preliminary and final subdivision submittals require a public hearing through the Planning Commission. Notification requirements are as required by State law, 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:

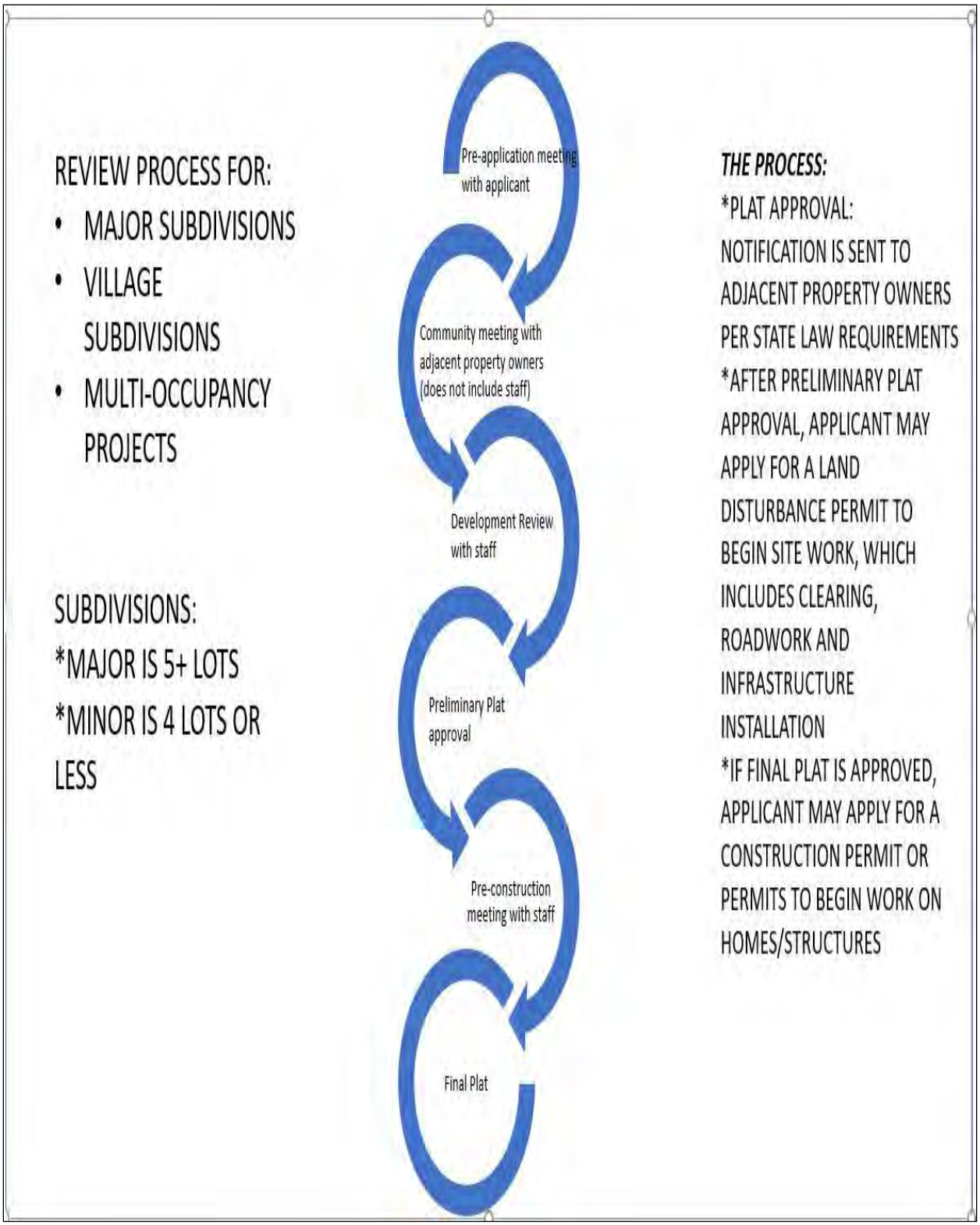
Staff conducts a review of all submittals and applicants are encouraged to meet with staff (City Planner or Planning Technician) before submission for development (informal review with applicant). For subdivision applications, storm water drainage is reviewed for submittal requirements in the City of 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 Public Works Department has a Professional Engineer on staff, the applicant's engineer is the person ultimately responsible for drainage compliance with the City's regulations. The Code Enforcement Officer reviews the Erosion Control Plan of submitted plans to ensure minimum BMP standards are met. Drainage and structural BMPs are reviewed by the Building Department and the Public Works Department. 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 1. after Preliminary Plat approval/prior to land disturbance/site work permitting and 2. before submittal of a Final Plat application / prior to building permit issuance. During the pre-construction meetings, City staff meets with the applicant's engineer of record to address specific issues such as stream / wetland buffer signage and protection, on-site erosion controls, and drainage concerns.

Critical area (wetland and stream buffer) signage is verified to be installed prior to construction activity

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.



City of Fairhope Review Process for Subdivisions

CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

BMP # 2: BMP Inspections-City of Fairhope Planning and Zoning Department has two full time Code Enforcement Officers to perform code enforcement inspections, including BMP inspections. The Code Enforcement Officers track BMP inspections and non-compliant sites (including corrective actions taken) through inspections in Munis and Citizen Serve programs. 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 one acre. Other single-family home construction sites are inspected initially and with follow up inspections to ensure continued compliance. Construction sites within Priority Construction Areas (those draining to Weeks Bay and Fly Creek) are inspected at least monthly, as per ADEM's requirement for the Priority Construction Area. Other qualifying sites (non-priority construction area but more than an acre -including subdivisions) are inspected at least every three months as per ADEM requirements. 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 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.

BMP Inspections are conducted by Planning and Zoning Code Enforcement staff initially and as a follow up to ensure BMP minimum requirements are installed and remain installed and effective.

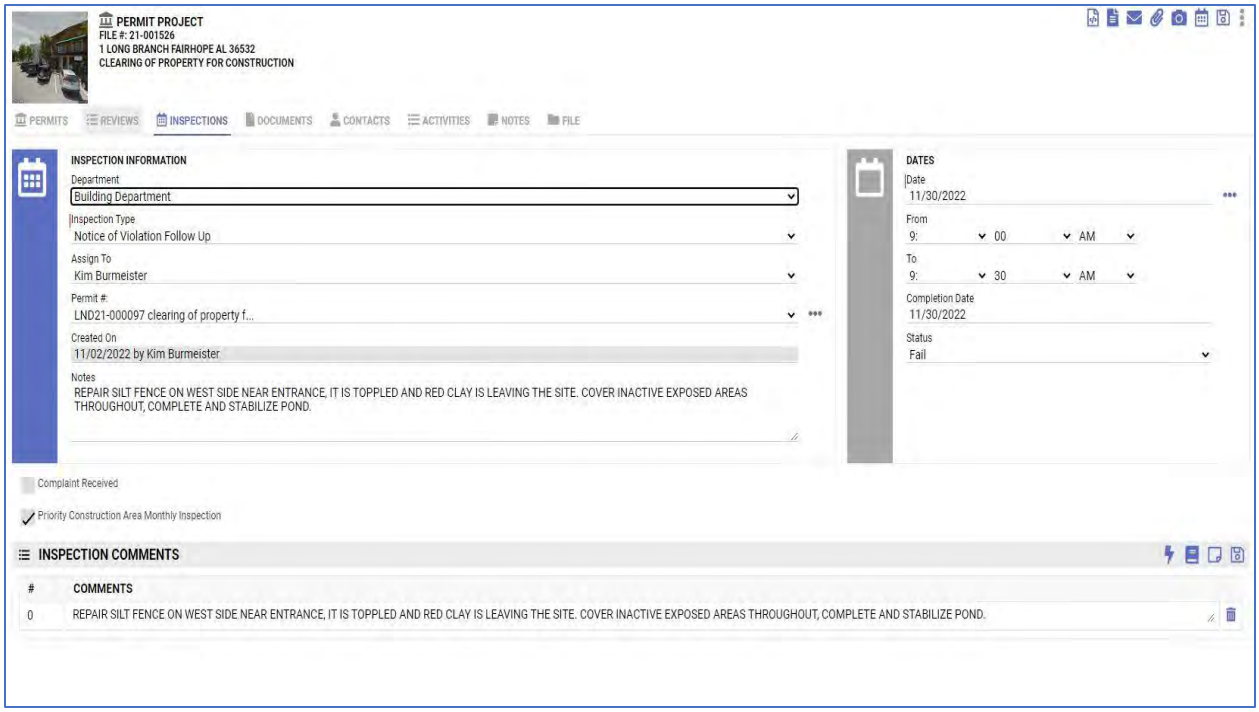
BMP inspections include:

a. Initial and at least every three months
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 is reviewed annually with SWMPP renewal and is updated as needed. Escalation of enforcement is outlined in the SOP.

Silt fence maintenance is one of the common comments on a Notice of Violation



Example of BMP and Notice of Violation form used. Citizen Serve has all information including project files and contact information, as well as inspection tracking.

Planning Department / Building Department

Non-compliant Construction Site Protocol

Standard Operating Procedures (SOP)

Background and Introduction

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

General Concepts

The City of Fairhope is authorized via Code of Ordinance 1398, "Erosion and Sediment Control" to issue Stop Work Orders, Municipal Offense Tickets/Court Summons, suspend construction /building inspections, dispatch City Street Sweeper for minimum charge and/or issue Notice of Violations to violaters 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)

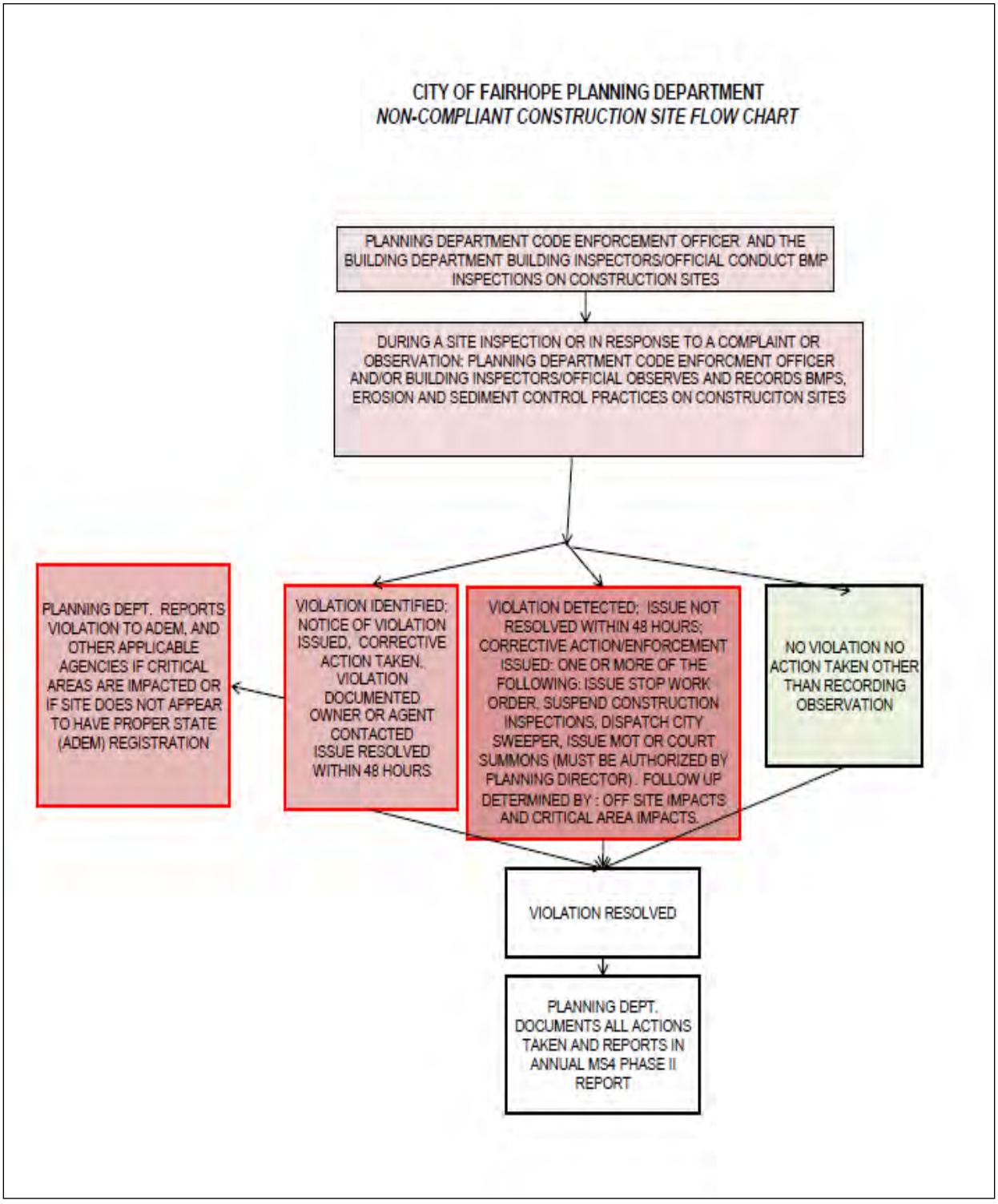
Environmental Agency Notification

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.

SOP for non-compliant construction sites



SOP Flow Chart for non-compliant construction sites

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

BMP #6: QCI (Qualified Credentialed Inspector) for inspection staff

Planning and Zoning Code Enforcement and Building Inspectors are QCI certified within 12 months of hire date. Currently Thompson Engineering and HBAA are the QCI Training sources used.

BMP #7: Employee Erosion and Sedimentation Workshop / Training

The City of Fairhope Planning and Zoning Department hosts an employee Erosion and Sedimentation Workshop annually at City facilities and/or trains key employees in each department through QCI certification. Target departments:

a. Electric Department
b. Water and Sewer Department
c. Gas Department
d. Public Works Department (Landscape/Streets)
e. Parks and Recreation
f. Golf Course (Quail Creek)

The purpose of training is to oversee utility and earth moving activities so that employees will be aware of State, Federal and local best management practices to prevent and reduce erosion and sedimentation. Emphasis is placed on right of way and utility work.

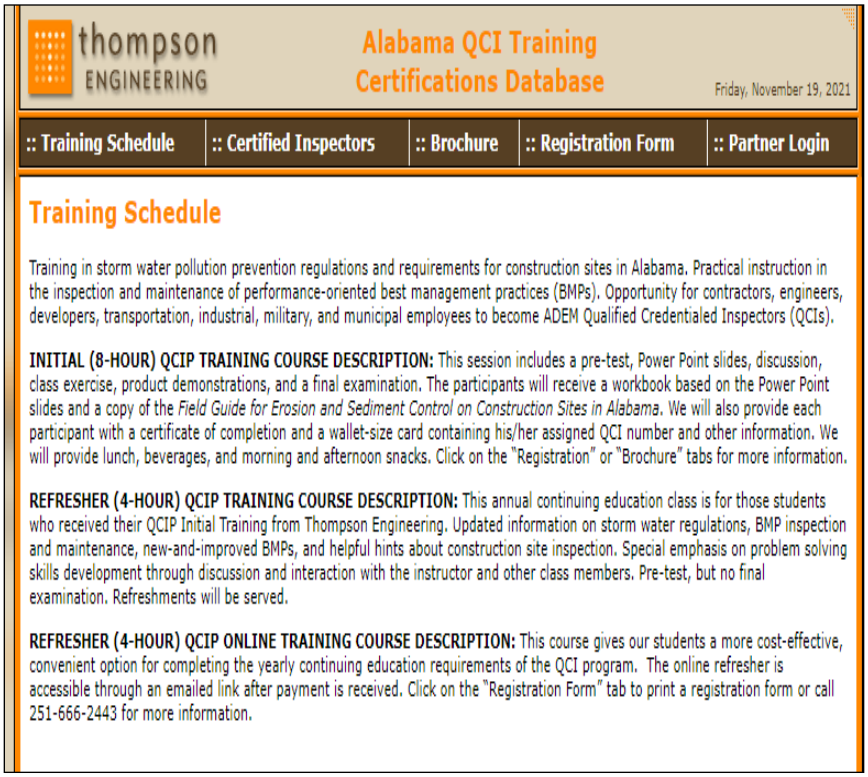
Responsible Person(s) for the Employee Erosion and Sediment Control Workshop / QCI Training Coordination: Planning and Zoning Department (Code Enforcement Officer); Public Works Department (Director); Building Department (Building Official)

BMP Workshop Agenda, November 2022

- Measurable Goals:

One Year Goal:

1. QCI Re-certification for Planning and Zoning Code Enforcement Officers (2)
   Responsible Department: Planning and Zoning Department
   Goal: Recertify QCI Re-certification *(Code Enforcement Officer)*
   Due: December 2023
2. QCI Re-certification for Building Department (5 Building Inspectors)
   Responsible Department*:* Building Department
   Goal*:* Recertify (5) Building Inspectors with QCI training
   Due: December 2023



QCI information from Thompson Engineering

3. Erosion and Sediment Control (BMP) Employee Workshop and/or QCI training for key employees in target departments
   Responsible Department: Planning and Zoning Department (Code Enforcement)
   Goal: Planning and Zoning along with the Building Department and Public Works Dept. will host a 1 hour workshop for City employees, or coordinate QCI certification for key employee or employees in target department. Target departments: Electric, Water/Sewer, Gas, Public Works, Parks/Rec, Golf Course. BMP techniques and recent storm water projects are discussed as well as City, State and Federal regulatory information
   Due: December 2023

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

- **Requirement:** Post-construction storm water management refers to the activities that take place after construction occurs and includes structural and non-structural controls including low-impact development and green infrastructure practices to obtain permanent storm water management over the life of the property's use. These post construction controls should be considered during the initial site development planning phase. According to the general permit, Fairhope, the "Permittee" shall:

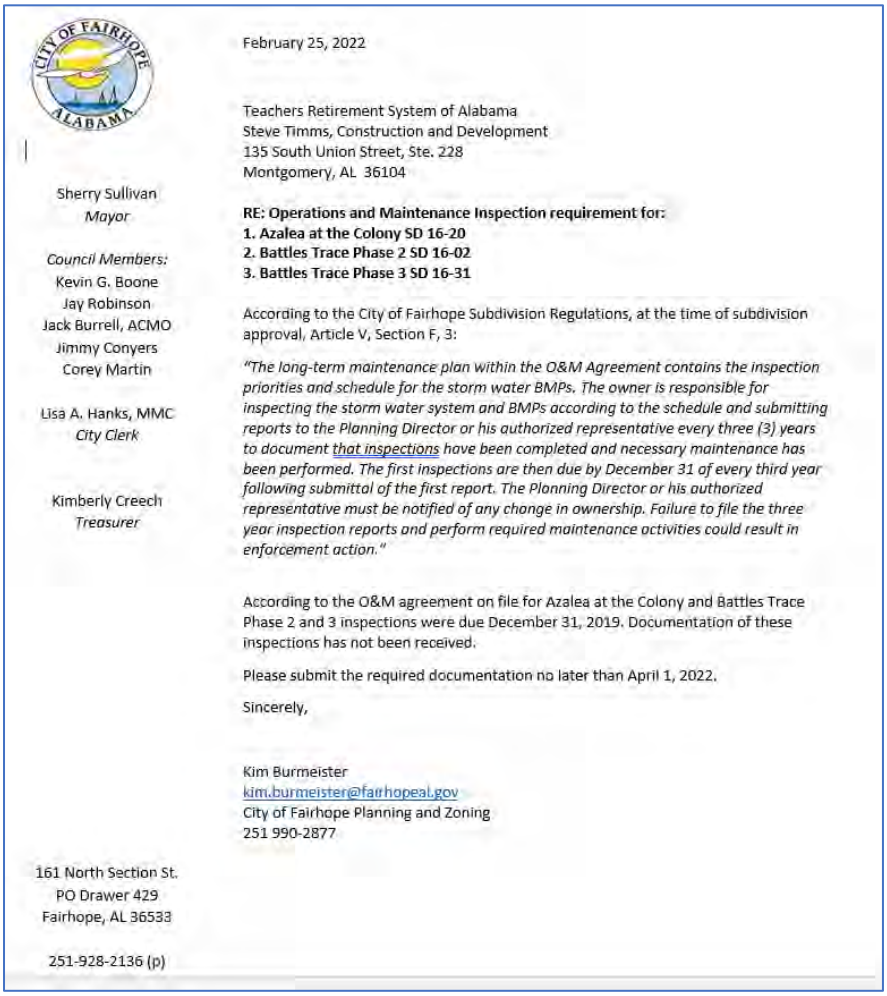
  A. The Permittee must develop/revise, implement, and enforce a program to address storm water runoff from qualifying new development and redevelopment projects, to the maximum extent practicable. This program shall ensure that controls are in place to prevent or minimize water quality impacts. Specifically, the Permittee shall:
  (1) Develop/revise and outline in the SWMPP procedures for the site-plan review and approval process and a required re-approval process when changes to post-construction controls are required; and
  (2) Develop/revise and outline in the SWMPP procedures for a post-construction process to demonstrate and document that post-construction storm water measures have been installed per design specifications, which includes enforceable procedures for bringing noncompliant projects into compliance.
  B. The Permittee 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 post construction runoff mimics pre-construction hydrology. A design rainfall event with an intensity up to that of a 2yr-24hr storm event shall be the basis for the design and implementation of post- construction BMPs
  C. Encourage and educate landowners and developers to incorporate the use of low impact development (LID)/green infrastructure where feasible. Information on low impact development (LID)/green infrastructure is available on the following websites:
  http://www.adem.alabama.gov/programs/water/waterforms/LIDHandbook.pdf; http://epa.gov/nps/lid. The Permittee shall include a narrative description in the SWMPP as to the means that will be taken to implement the requirement to encourage landowners and developers to incorporate the use of low impact development (LID)/green infrastructure.
  D. To the extent allowable under State law, the Permittee must develop and institute the use of an ordinance or other regulatory mechanism to address post-construction runoff from qualifying new development and redevelopment projects. The ordinance or other regulatory mechanism shall be reviewed annually and updated as necessary.
  E. The Permittee must require adequate long-term operation and maintenance of BMPs. One or more of the following as applicable:
  (1) The developer's signed statement accepting responsibility for maintenance until the maintenance responsibility is legally transferred to another party; and/or
  (2) Written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance; and/or

(3) Written conditions in project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to a homeowner's association, or other appropriate group, for maintenance of structural and treatment control management practices; and/or
(4) Any other legally enforceable agreement that assigns permanent responsibility for maintenance of structural or treatment control management practices.
F. The Permittee shall perform or require the performance of post-construction inspections, at a minimum of once per year, to confirm that post-construction BMP's are functioning as designed. The Permittee shall include an inspection schedule, to include inspection frequency, within the SWMPP. The Permittee shall document or require documentation of the post-construction inspection. Such documentation shall include, at a minimum:
(1) Facility type
(2) Inspection date
(3) Name and signature of inspector
(4) Site location
(5) Owner information (name, address, phone number, fax, and email)
(6) Description of the storm water BMP condition that may include the quality of: vegetation and soils, inlet and outlet channels and structures, embankments, slopes, and safety benches; spillways, weirs, and other control structures; and sediment and debris accumulation in storage and forebay areas as well as in and around inlet and outlet structures;
(7) Photographic documentation of all critical storm water BMP components.
(8) Specific maintenance items or violations that need to be corrected by the owner/operator of the storm water control or BMP; and
(9) Maintenance agreements for long-term BMP operation and maintenance.
G. The Permittee shall maintain or require the developer/owner/operator to keep records of postconstruction inspections, maintenance activities and make them available to the Department upon request and require corrective actions to poorly functioning or inadequately maintained postconstruction BMP's.

- The Permittee shall report each year in the annual report the following information:
  A. Copies of, or link to, the ordinance or other regulatory mechanism required by Part III.B.4.a.iv.
  B. A list of the post-construction structural controls installed and inspected during the permit year. The list shall include which post-construction structural controls installed are considered low impact development (LID)/green infrastructure, if applicable; iii. Updated inventory of post-construction structural controls including those owned by the Permittee.
  C. Number of inspections performed on post-construction structural controls; and,
  D. Summary of enforcement actions, if applicable.

- **Rationale Statement:** The Fairhope Zoning Board of Adjustments and Appeals meets monthly if there are cases to be heard. The Planning Commission and the Board of Adjustments and Appeals are committees with appointments by the Mayor and Council, and work with the Planning and Zoning 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 stormwater inspection report requirement and a long-term stormwater plan (Operation and Maintenance requirement). An O&M Plan is submitted with final subdivision plat. The Subdivision Regulations Low Impact Development (LID) requirements include "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."



February 25, 2022

Teachers Retirement System of Alabama
Steve Timms, Construction and Development
135 South Union Street, Ste. 228
Montgomery, AL 36104

RE: Operations and Maintenance Inspection requirement for:
1. Azalea at the Colony SD 16-20
2. Battles Trace Phase 2 SD 16-02
3. Battles Trace Phase 3 SD 16-31

According to the City of Fairhope Subdivision Regulations, at the time of subdivision approval, Article V, Section F, 3:

"The long-term maintenance plan within the O&M Agreement contains the inspection priorities and schedule for the storm water BMPs. The owner is responsible for inspecting the storm water system and BMPs according to the schedule and submitting reports to the Planning Director or his authorized representative every three (3) years to document that inspections have been completed and necessary maintenance has been performed. The first inspections are then due by December 31 of every third year following submittal of the first report. The Planning Director or his authorized representative must be notified of any change in ownership. Failure to file the three year inspection reports and perform required maintenance activities could result in enforcement action."

According to the O&M agreement on file for Azalea at the Colony and Battles Trace Phase 2 and 3 inspections were due December 31, 2019. Documentation of these inspections has not been received.

Please submit the required documentation no later than April 1, 2022.

Sincerely,

Kim Burmeister
kim.burmeister@fairhopeal.gov
City of Fairhope Planning and Zoning
251 990-2877

Sherry Sullivan
Mayor

Council Members:
Kevin G. Boone
Jay Robinson
Jack Burrell, ACMO
Jimmy Conyers
Corey Martin

Lisa A. Hanks, MMC
City Clerk

Kimberly Creech
Treasurer

161 North Section St.
PO Drawer 429
Fairhope, AL 36533

251-928-2136 (p)

Example of O&M letter sent to property owner of overdue O&M inspection

The Planning and Zoning Department Code Enforcement Officers address runoff issues from sites within the City of Fairhope (including post construction residential and commercial areas). The Building Department Right of Way inspector oversees construction and development activities on the City right of way areas. These issues are tracked via a monthly Notice of Violation log in Citizen Serve or Munis. 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; Water and Sewer Director

GMC

Goodwyn Mills Cawood

11 North Water Street
Suite 15290
Mobile, AL 36602

T (251) 460-6086
F (251) 460-6423

www.gmcnetwork.com

Kim Burmeister
City of Fairhope
161 North Section St.
Fairhope, Alabama 36532

August 23, 2022

RE: Operations and Maintenance Inspection
Battles Trace (The Colony)
Baldwin County, Alabama

Dear Ms. Burmeister:

This letter will serve as confirmation that an Operations and Maintenance Inspection was completed by GMC personnel in accordance with the City of Fairhope Subdivision Regulations on 07/26/2022 for Battles Trace Phase 4 SD 17-22.

At the time of inspection, all stormwater systems throughout the site were working efficiently and were clear of debris. No maintenance is recommended for Battles Trace Phase 4 subdivision stormwater systems.

Photos of stormwater systems located on site are attached to this letter.

Please let us know if you have any questions.

Sincerely:
GOODWYN MILLS CAWOOD, LLC

Brandon Smith,
Environmental Scientist

Enclosure

Building Communities

P-3

General view of a natural area located along the northern portion of Phase 4. Pin Number: 376131

P-4

General view of a grassy swale located within Phase 4. Pin Number: 376131

Example of 2022 O&M Inspection Report received, August 2022

POST CONSTRUCTION STORM WATER MANAGEMENT, CONT.

- **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)
  2. Zoning Ordinance
     a. Stormwater Management (Article IV, Section F)
     b. Pervious Paving (Article IV, Section F)
     c. Low Impact Development Techniques (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. Creek / Shoreline Assessment by kayak
  6. Standard Courtesy Letter for Property Owners of non-compliant storm water facilities
  7. Annual Email to POA/HOA groups: "HOA Stormwater Guide"

Example of LID used in Hilltop Subdivision, Point Clear Creek watershed. November 2022

POST CONSTRUCTION STORM WATER MANAGEMENT, CONT.

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 Manager

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 regarding 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).
Responsible Department: Planning and Zoning Manager

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 revised in 2018*

Fairhope Sub Regs:

Required Use of Low Impact Development (LID) Techniques - a. The use of the LID techniques is required and is to be determined from an entire site development perspective by the engineer of record for the project. The design and integration of LID techniques shall promote the health, safety, and general welfare of the community and shall be designed to work in a complimentary fashion with the drainage plan for the proposed development. The LID techniques are required within the municipal limits of the City of Fairhope and the planning jurisdiction of the City of Fairhope based on the rain events experienced in the area, geology, slopes, and other natural features. The design engineer is encouraged to submit additional LID based techniques to be utilized in the proposed development. b. The use of LID techniques is required in any and all proposed developments where the stormwater regulations apply. The design engineer shall rely on verifiable professional engineering judgment on which LID techniques to deploy in each proposed development based on the particular characteristics of the subject property. The intent of the requirements for the use of LID techniques is that the development shall implement 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. c. If a project, due to the natural characteristics of the property, cannot successfully implement any of the LID techniques the applicant may submit a waiver request for Article V Section F. Planning Design

Standards Storm Water Standards. The waiver request shall be submitted at the time of the application and provide verifiable engineering documentation that LID techniques cannot be used. The City shall have the right, but not the obligation, to engage such third party engineers, consultants and other professionals as necessary and appropriate to advise the City as to whether a particular application complies with and is otherwise in concert with this subsection 10 (a "Third Party Professional"). In the event the City engages a Third Party Professional in connection with a particular application, the City will forward all application materials to the Third Party Professional along with a request for a cost estimate from the Third Party Professional for his/her role in the review of such application. Upon presentation by the Third Party Professional of a cost estimate to the City, the City shall provide same to the applicant, and the applicant shall deposit with the City a cash sum equal in amount to the cost estimate of the Third Party Professional (the "Cash Deposit"). Upon completion of all work by the Third Party Professional relative to such application and payment by the City of all fees and expenses of the Third Party Professional from the Cash Deposit, if any portion of the Cash Deposit remains, the City shall refund it to the applicant. If the Cash Deposit is insufficient to pay the fees and costs of the Third Party Professional, the applicant shall immediately remit to the City such funds as are necessary to make up any shortfall. d. The Third Party Professional shall submit a finding report to the City Planning Department. The City Planning Department shall forward a copy of the finding to the applicant or the applicant's agent. The City Planning Department shall include, as part of the application materials to the Planning Commission a recommendation regarding the waiver. e. The Planning Commission shall consider the waiver, the applicant's documentation, and Third Part Professional finding and City Planning Department recommendation and make a final determination as to the waiver request. f. The following LID techniques are available for use by applicants given the particular circumstances and characteristics of the proposed subdivision: (1.) Wet Basins: The City finds the potential benefits of wet basins are, among other items, allowing sedimentation to fall out of stormwater, attenuating flows, assisting in evapotranspiration, and improving the stormwater quality. Special design considerations are: groundwater elevations, large surface areas are encouraged, special attention should be given in pervious soil, surface area of the basin should take into account nutrient loading from lawns for example in order to treat and improve stormwater quality to the maximum extent possible, ensuring that an adequate base flow is provided to maintain water levels, they are not recommended to be constructed in an inline facility, utilize low slopes, the use of forbays are recommended, upstream and downstream areas shall be considered in the design in accordance with Fairhope standards. Recommended characteristics are: The approach slopes should be 4:1 or less around the perimeter, side slopes 3:1 or less (below the water level, beyond the safety bench), safety bench just below water elevation (4' wide, 6"-12" deep), energy is dissipated prior to entering the basin, can be excavated below the ground surface. (2.) Rain Gardens: The City finds the potential benefits of rain gardens are, among other items, small scale flow attenuation, infiltration, limited evapotranspiration, allowing sediments to be trapped, and water quality treatment. Special design considerations are: Typically smaller areas and drainage areas are used for rain garden design, special attention should be given in pervious soils, recommended for use in hydrologic soil groups A and B, not recommended in high swell soils. Recommended characteristics are: Small scale and frequent use in drainage areas, the choice of landscaping materials, soil mix, and other characteristics are crucial to the success of a rain garden. Rain gardens can be highly visible and utilized as a visual amenity in a proposed development. (3.) Permeable Pavement Systems: The City finds the potential benefits of

permeable pavement systems are, among other items, flow attenuation, infiltration, and filtration of stormwater. There are many products and strategies that can be utilized and the City is open to the use of varied products in accordance with manufacture recommendations. Consultation with the city prior to design of the product to be utilized is suggested. Special design consideration are: Use in areas with hydrologic soil groups A and B, special attention should be given in pervious conditions, not recommended in areas with high swell soils, ground water tables should not impact the ability of water to infiltrate, the technique works best in low slopes. (4.) Sand Filter: The City finds that the potential benefits of sand filters are, among other items, flow attenuation, infiltration, reducing sedimentation, and providing filtration of storm water. Special design considerations are: Best used in small drainage areas, special attention should be given in pervious soils, recommended use in areas with soils with good permeability in hydrological soil groups A and B, not recommended in high swell soils. (5.) Grass Swales: The City finds that the potential benefits of grass swales are, among other items, in straining stormwater, providing limited quality treatments, while providing some moderate flow attenuation. Special design considerations are: Typically work best in smaller drainage areas where volumes are reduced, special consideration should be given in pervious soils, not recommended with high swell soils, should have low slopes, adjacent areas and layout should be considered in the design. Suggested characteristics where topography, soils, and slope permit vegetated open channels and spaces should be considered as a significant or a primary means of stormwater conveyance. (6.) Grass Buffers: The City finds that the potential benefits of grass buffers are, among other items, in straining stormwater, providing limited quality treatments, while providing some moderate flow attenuation. Special design considerations are: Typically work best in smaller drainage areas where volumes are reduced, special consideration should be given in pervious soils, not recommended with high swell soils, should have low slopes, adjacent areas and layout should be considered in the design. Suggested characteristics where topography, soils, and slope permit vegetated open channels and spaces should be considered as a significant or a primary means of stormwater conveyance. (7.) Constructed wetland channels or wetlands: The City finds that the potential benefits of constructed wetland channels or wetlands are, among other items, flow attenuation, buffering of flooding events, evapotranspiration, sedimentation, and treatment of stormwater quality. Special design considerations are: Not recommended in high swell soils, low slope, forebay is recommended, primary benefit of pollutant removal, not volume reduction, adjacent areas should be considered in the design. (8.) Step Pool Stormwater Conveyance Structures: The City finds that a step pool stormwater conveyance structure may attenuate stormwater flows, provides evapotranspiration, reduce sediment transport, and water quality treatment. Special design considerations are: Not recommended in high swell soils. Adjacent areas should be taken into consideration in order to ensure long term viability of step pool structures and adjacent erosion. (9.) In-line stormwater storage: The City finds that in-line storage may provide for attenuation and limits sedimentation. Special design considerations are: Designed to be self-cleaning where possible or suitable clean out access is provided and designed into the system, designed to surcharge non-sensitive areas with no flooding in parking lots, structures, or other typically occupied spaces. (10.)Site design for habitat, wetland, and water body conservation: The City finds that site design that incorporates the natural features of the property can help to minimize erosion and reduce stress on natural water conveyance and attenuation systems by preserving a natural vegetated state of native plants, water courses, and flood prone areas. Suggested characteristics are: The technique may be used in conjunction with the City's planned unit development or village

subdivision processes to propose alternative street layouts and design so that impervious areas and other improvements are sited with due regard to the natural elements of the property. Special design considerations: To consider adjacent areas in the design since important natural features that utilize this LID technique often extends past property lines or the phases of proposed development. (11.)Restoration of Habitat or Wetlands and Water Bodies: The city finds that the restoration of habitat or wetland and water bodies can be productive to improve the environment by minimizing erosion and reducing stress on natural water conveyance and attenuation systems by preserving a natural vegetated state of native plants, water courses, and flood prone areas. Suggested characteristics are: This technique may be used in conjunction with the City's planned unit development or village subdivision processes to propose alternative street layouts and design so that impervious areas and other improvements are sited with due regard to the natural elements of the property. Use only native plants in the development process and take special consideration to restore portions of the site to predevelopment native ecological communities, water bodies or wetlands with more than 10% of the development footprint. Special design considerations: To consider adjacent areas in the design since important natural features that utilize this LID technique often extend past property lines or the phases of proposed development (12.)Greenways: The City finds that greenways provide for beneficial use of LID for potentially active and passive recreation opportunities and wildlife corridors. This technique allows for the creative integration into a development proposal that is frequently linked with other natural or recreation systems that extend past the property lines of the proposed development. Suggested characteristics: Typically greenways are easier to integrate into a development proposal on larger acreages. They are frequently utilized as linear parks and often include sensitive wetland areas, steep slopes, gullies or other natural land forms, creeks, and unique wildlife habitat for protected species. (13.)Restoring Channel Morphology and Natural Function: The City finds that restoring channel morphology and natural function provides for flow attenuation, infiltration, and reduces sedimentation. Special considerations are: Typically works most effectively in larger development proposals where a substantial linear footage of channel can be restored. It is important to consider the upstream and downstream current and future characteristics so conversation of land use in accounted for in the design. (14.)Bio-Retention: The City finds that bio-retention provides for flow attenuation, infiltration, limited evapotranspiration, reduced sedimentation, and stormwater quality treatment. Suggested characteristics are: To be used as both a stormwater and aesthetic feature frequently throughout developments. Special attention should be given to plant and ground cover considerations given the volume and duration of the designed stormwater. Special design considerations are: Typically work best in small drainage areas with frequent use and distribution, special attention is required in pervious soils and should be used in areas with high permeable soils (hydrologic soils groups A and B), not recommended in high swell soils. (15.)Level Spreader: The City finds that level spreaders can be an effective tool to evenly distribute flows and return volumes and velocity to a predevelopment distribution pattern. There are limited stormwater straining and water quality improvements. Suggested characteristics are: Level spreaders are intended to work in a complimentary fashion with other LID techniques such as, but not limited to, sand filters and grass buffers. Special design considerations are: Typically level spreaders are used downstream of an outfall and have a low slope with stabilized and vegetated buffers both up and downstream. They typically are installed a suitable distance from the property line (30'-35' is suggested) so that flow energy is dissipated, and predevelopment sheet flow characteristics are generated. Special consideration should be given in areas with highly erodible soils. (16.)Additional

information regarding LID techniques is included in the document Planning For Stormwater, Developing a Low Impact Solution, a publication of the Alabama Cooperative Extension Service. This document is available for download from the Alabama Cooperative Extension Service website.

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:
Fairhope Zoning Ordinance, Article IV, Section F:
Stormwater Management 1. Intent The intent of this section is to provide for stormwater management in site design. The primary management strategy should be infiltration of all runoff created by development through natural systems and constructed natural systems. Should infiltration not address stormwater management for the site adequately, retention and detention of run-off will be required. This section also seeks to incorporate any stormwater management system into the design of the site as a natural or aesthetic amenity. 2. General Requirements All site plans shall be designed with surface drainage provisions in accordance with the Fairhope Subdivision Regulations, construction, building, or grading permits, and any other City ordinance regarding the effects of stormwater. Developers shall take steps necessary to prevent run-off, which may have the potential for causing flood damage to neighboring property. The building inspector shall, in consultation with the city engineer, determine that reasonable provisions for properly handling surface drainage have been made in the applicant's design, and will report these findings for the Fairhope Planning Commission's consideration in acting on building applications. If reasonable provisions are not made in the applicant's design, the Fairhope Planning Commission shall make the remedies available to the applicant a condition of the approval, or deny the application. "Dry wells," biofilters, or other constructed infiltration systems may be required of sufficient capacity to receive up to four inches per hour rainfall on the paved area or areas required for off-street parking and loading. Rainfall intensity to be calculated on storm frequency determined by the commission and/or its consultants. 3. Design Standards Storm water detention shall be screened from direct view from all abutting properties by installation and maintenance of living plants at least 36 inches in height at time of planting, and achieve a height of not less than six feet in three years after planting. Outer slopes of detention ponds shall not be steeper than four feet horizontal to one-foot vertical. Where water depth and time of detention is sufficient to require safety fencing, such fencing shall be installed behind required screening, on the pond side. 4. Alternative Designs Standards of this ordinance and any standard of this ordinance that relates to the City of Fairhope Subdivision Regulations may be waived to provide for an alternative stormwater design system provided that: a. The alternative stormwater design provides for an infiltration system that incorporates at least 80% of the runoff from impervious surfaces into the groundwater on the site and results in an overall reduction in impacts on streams in the watershed. b. The alternative stormwater design addresses stormwater on an area-wide or watershed basis making stormwater management on individual lots within the site unnecessary.

c. Natural elements on the site are incorporated into a natural storm drain infrastructure minimizing or eliminating the need for detention ponds and other constructed storm drainage. Constructed elements of the natural drainage system shall be limited to artificial wetlands, bio-filters, and dry swales. To the extent that it does not damage the function of the natural drainage system, natural elements should serve additional community purposes such as trails or greenways, parks, or aesthetic screens. d. Any waiver of standard to accommodate the alternative stormwater design proposes an equal or better alternative for meeting the intent of the waived standard. e. The alternative stormwater design is accompanied by a plan produced by a registered engineer testifying to its accuracy and sustainability. f. The alternative stormwater design plan included provisions for long-term maintenance and operation of the alternative design, including easements, covenants, restrictions, and an acceptable legal entity to oversee long-term maintenance. g. The alternative stormwater design plan shall accompany a site plan for the entire development. The plan and any waivers to the standards of this ordinance shall be approved according to the procedures and standards for the site plan.

b. Pervious Paving: For projects requiring more than 8 parking spaces, a 25% minimum pervious paving material requirement is required.

c. LID Component:

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

	90°angle	60°angle	45°angle
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 that 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 sheer 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, CONT.

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 stormwater 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; Water and Sewer Director

City of Fairhope Stormwater Project: Big Mouth Gully bluff restoration project by the City of Fairhope, September 2022

POST CONSTRUCTION STORM WATER MANAGEMENT, CONT.

BMP # 5: 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)

Planning and Zoning staff removing monofilament line from pier on Fly Creek during the 2022 shoreline assessment, November 2022

BMP #6: Standard Courtesy Letter to Property Owners: The Planning / Zoning Department, in conjunction with the Public Works Department, has developed a standard letter which is 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 3 or 5 year O & M plan requirement). After outfall 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 #7: 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*" annually as a reminder of this requirement. This brochure was drafted 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. 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

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

HOA Stormwater Guide Page 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)			

EXAMPLE

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

HOA Stormwater Guide Page 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"

www.weeksbay.org

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

HOA Stormwater Guide Page 4

- 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 and/or Master Environmental Educator presentations in classrooms)
   Due: December 2023

Planning and Zoning Staff with watershed information, Earth Day 2022

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 2023

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

- **Requirements:** As per the general permit, the City of Fairhope ("Permittee") shall develop, implement, and maintain a program that will prevent or reduce the discharge of pollutants in storm water run-off from municipal operations to the maximum extent practicable. The program elements shall include, at a minimum, the following:
  - **A.** An inventory (to include name and location) of all municipal facilities. Evaluate and determine which municipal facilities have the potential to discharge pollutants via storm water runoff.
  - **B.** Strategies for the implementation of BMPs to reduce litter, floatable and debris from entering the MS4 and evaluate those BMPs annually to determine their effectiveness. If a BMP is determined to be ineffective or infeasible, then an alternate BMP must be implemented. The Permittee shall also develop a plan to remove litter, floatable and debris material from the MS4, including proper disposal of waste removed from the system.
  - **C.** Standard Operating Procedures (SOPs) detailing good housekeeping practices to be employed at municipal facilities (that have the potential to discharge pollutants via stormwater runoff) and during municipal operations that may include, but not limited to, the following:
    (1) Equipment washing.
    (2) Street sweeping.
    (3) Maintenance of municipal roads including public streets, roads, and highways, including but not limited to unpaved roads, owned, operated, or under the responsibility of the Permittee.
    (4) Storage, use, and disposal of chemicals, Pesticide, Herbicide and Fertilizers (PHFs) and waste materials.
    (5) Vegetation control, cutting, removal, and disposal of the cuttings.
    (6) Vehicle fleets/equipment maintenance and repair.
    (7) External Building maintenance; and
    (8) Materials storage facilities and storage yards
  - **D.** A program for inspecting municipal facilities for good housekeeping practices, including BMPs. The program shall include checklists and procedures for correcting noted deficiencies.
  - **E.** A training program for municipal facility staff in good housekeeping practices as outlined in the SOP developed pursuant to Part III.B.5.a.iii.
  - **F.** The Permittee shall include within the SWMPP the following information:
    1. The inventory of municipal facilities required by Part III.B.5.a.i;
    2. Evaluate and include a discussion of how effectiveness is measured for Part III.B.5.a. ii.
    3. Schedule for developing the SOP of good housekeeping practices required by Part III.B.5.a.iii.
    4. An inspection plan and schedule to include inspection frequency, checklists, and any other materials needed to comply with Part III.B.5.a.iv; and

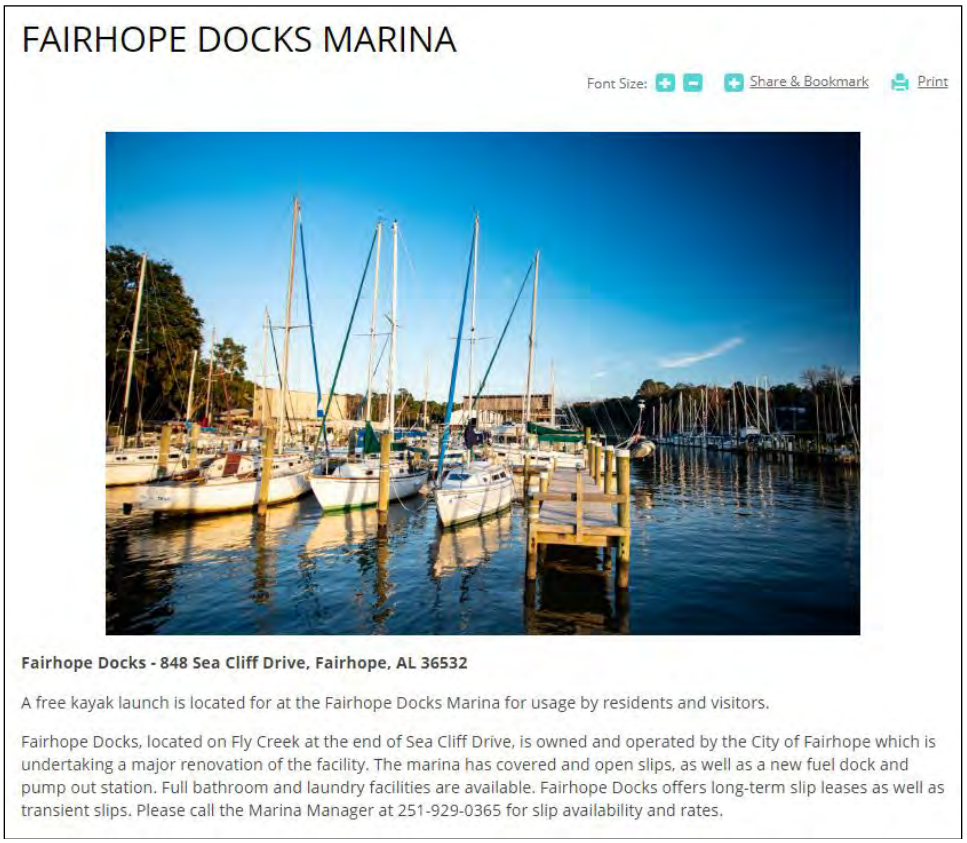
5. A description of the training program and training schedule to include training frequency required by Part III.B.5.a.v. c.

POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

G. The Permittee shall report each year in the annual report the following information:
   1. Any updates to the municipal facility inventory.
   2. An estimated amount of floatable material collected from the MS4 as required by Part III.B.5.a. ii.
   3. Any updates to the inspection plan
   4. The number of inspections conducted; and
   5. Any updates to the SOP of good housekeeping practices.

H. The Permittee shall maintain the following and make it available upon request:
   1. Records of inspections and corrective actions, if any; and
   2. Training records including the dates of each training activities and names of personnel in attendance.

- 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; Water and Sewer Director; Community Development; Special Projects Manager



Fairhope Docks provides clean water stewardship by offering marine pump outs

- Rationale Statement: The City of Fairhope has many departments within its own authority. All have some potential to impact stormwater. Those operated by Public Works are noted, City facilities include:
    - Mechanic Shop (AL0000324764)-Public Works- South Section Street
    - Wastewater Treatment Plant (AL0020842)-Water & Sewer Dept. – North Section Street
    - C & D Landfill (Permit #02-07)-Public Works- South Section Street
    - Quail Creek Golf Course-QC Management-State Highway 181
    - Recreation Department – Parks and Recreation Manager
        - Founders Park / Maintenance Shop-Founders Drive
        - Fairhope Soccer Complex / Maintenance Shop-Manley Road @ CR 13
        - Volanta Sports Complex / Maintenance Shop-Volanta Avenue, North Greeno Road
        - Stimpson Field-Morphy, Mershon & Young Street
    - Gas Department-South Section Street @ Public Works Building
    - Water and Sewer Department-South Section Street @ Public Works Building
    - Electric Department-South Section Street @ Public Works Building
    - Public Works / Recycle Facility / Transfer Station-South Section Street @ Public Works Building
    - Pecan Street building (offices / parking)-Pecan Street East
    - Greenhouse-Public Works-Nichols Avenue
    - Police Department-North Section Street
    - Volunteer Fire Department
        - Station #1- 198 S. Ingleside Drive
        - Station #2- 19875 Thompson Hall Road
        - Station #3- 8600 Highway 32 (Airport)
        - Station #4 – 7752 Parker Road
    - City Hall / Civic Center-161 North Section Street
    - The Haven (Animal Shelter)-559 South Section Street
    - City Marinas:
        - Fairhope Docks @ Sea Cliff Drive
        - Municipal Pier

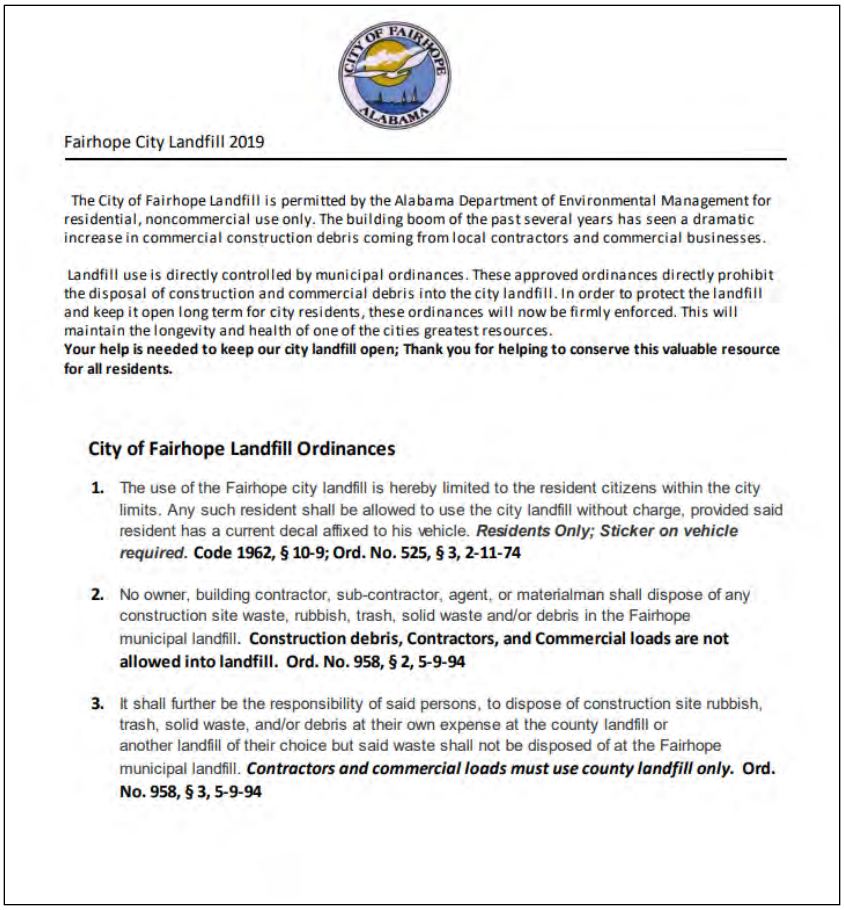
  All department heads / directors are responsible for pollution prevention / good housekeeping in each respective department. Department heads are also responsible for periodic checks of their facility to ensure MS4 compliance. Compliance is also implemented through weekly or monthly staff meetings and training. The annual BMP Workshop is another venue used for staff education to encourage good municipal stormwater practices. 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 a restaurant, and the lessee manages the marina. Both facilities offer boat slips. Both areas have sewage pump out facilities available. Fairhope Docks is following Clean Marina guidelines 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 the following ADEM Permits:

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



Fairhope City Landfill 2019

The City of Fairhope Landfill is permitted by the Alabama Department of Environmental Management for residential, noncommercial use only. The building boom of the past several years has seen a dramatic increase in commercial construction debris coming from local contractors and commercial businesses.

Landfill use is directly controlled by municipal ordinances. These approved ordinances directly prohibit the disposal of construction and commercial debris into the city landfill. In order to protect the landfill and keep it open long term for city residents, these ordinances will now be firmly enforced. This will maintain the longevity and health of one of the cities greatest resources.
Your help is needed to keep our city landfill open; Thank you for helping to conserve this valuable resource for all residents.

City of Fairhope Landfill Ordinances

1. The use of the Fairhope city landfill is hereby limited to the resident citizens within the city limits. Any such resident shall be allowed to use the city landfill without charge, provided said resident has a current decal affixed to his vehicle. ***Residents Only; Sticker on vehicle required.*** **Code 1962, § 10-9; Ord. No. 525, § 3, 2-11-74**

2. No owner, building contractor, sub-contractor, agent, or materialman shall dispose of any construction site waste, rubbish, trash, solid waste and/or debris in the Fairhope municipal landfill. **Construction debris, Contractors, and Commercial loads are not allowed into landfill. Ord. No. 958, § 2, 5-9-94**

3. It shall further be the responsibility of said persons, to dispose of construction site rubbish, trash, solid waste, and/or debris at their own expense at the county landfill or another landfill of their choice but said waste shall not be disposed of at the Fairhope municipal landfill. ***Contractors and commercial loads must use county landfill only.*** **Ord. No. 958, § 3, 5-9-94**

City C&D Landfill is monitored by Public Works staff for compliance

- BMPs / Mechanisms for compliance of pollution prevention / good housekeeping:
    1. Employee Meetings
    2. Environmentally Sensitive Pest Management
    3. Waste Management Program (Garbage, Trash, Recycling, HHW)
    4. Street Cleaning with 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

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. Annually, staff holds a BMP workshop which mentions illicit discharge reporting and encourages good stormwater practices.

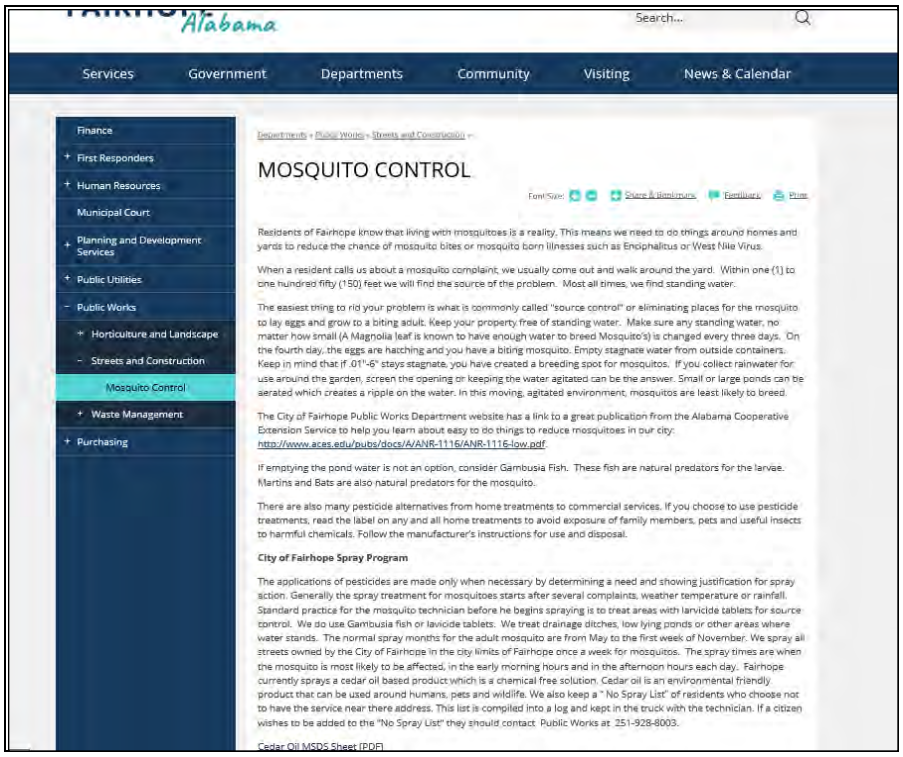
BMP # 2: Pest Management:
a. Certified Pesticide Applicators: Pesticide, herbicide and fertilizer application is overseen by certified applicators, in the Public Works and Golf Course. Two employees

within the City of Fairhope are currently certified and will maintain certification 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 (JR) Permit# 2000246 Exp. 10/28/2023
b. Parks & Recreation / Golf Course Grounds Supervisor (PW)
   Permit # 2004867 Exp. 10/28/2023

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

POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS, CONTINUED:



Mosquito control information from City of Fairhope website

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 Baldwin County sanitary Magnolia 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 roadways, 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*). The Right of Way Inspector hired in 2020 monitors and enforces erosion and sediment control on city right of way projects as well as other utility projects on the right of way. 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.

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.

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 eight (8) 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), at the Police Department (107 N. Section Street) and at each of the four fire stations. 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" station (open grate drain) for the rinsing of mud and sediment from bulldozer tracks and equipment tires. This grate drain has a sediment removal basin, which is 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.

BMP # 8: SOP For Municipal Activities:
In 2016, Public Works created a Standard Operating Procedure for their activities (revised in 2022):

City of Fairhope, Alabama

Date: 11/28/2022 (last revision)

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.

I 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.
    g. The designated wash rack at Public Works is used for vehicle and equipment washing. This includes vehicles and equipment from all departments within Public Works and utilities.

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.

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.

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 2023

  2. Recertify Commercial Pesticide Applicators Certification:
     a. Landscape Supervisor **Due**: 10/28/2023
     b. Parks and Recreation / Golf Course Supervisor **Due:** 10/28/2023

  3. 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 2023

Aerial of Public Works Warehouse and Facility, 555 South Section Street