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

2022
(April 1, 2022– March 31, 2023)

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

Figure 1 Heron in simulated wetlands at North Beach Park

1.3 General Introduction

The City of Fairhope is situated on the eastern shore of Mobile Bay in Baldwin County, in southwest Alabama. The 2018 US Census determined the City's population estimate to be 22,085. 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
AL03160205-0204-402	Turkey Branch	R	Mobile	Baldwin	Swimming Fish & Wildlife	Pathogens (E. coli)	Pasture grazing
AL03160205-0204-402	Turkey Branch	R	Mobile	Baldwin	Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition
AL03160205-0204-700	Cowpen Creek	R	Mobile	Baldwin	Swimming Fish & Wildlife	Metals (Mercury)	Atmospheric deposition
AL03160205-0205-702	Fly Creek	R	Mobile	Baldwin	Swimming Fish & Wildlife	Pathogens (E. coli)	Pasture grazing

Figure 2 ADEM 303d list 2020

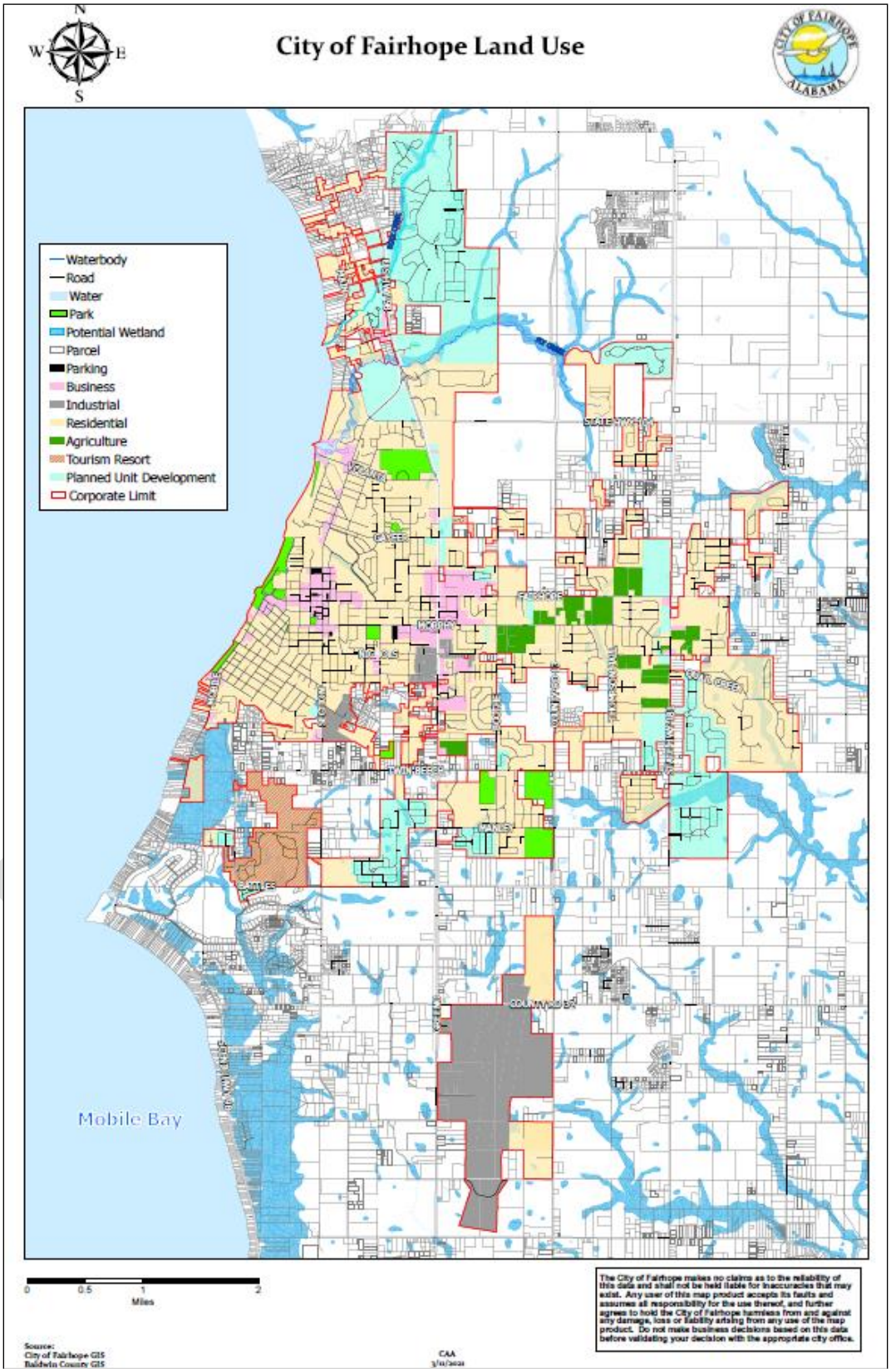


Figure 3 Fairhope Land Use Map with Agricultural districts listed (January 2021)

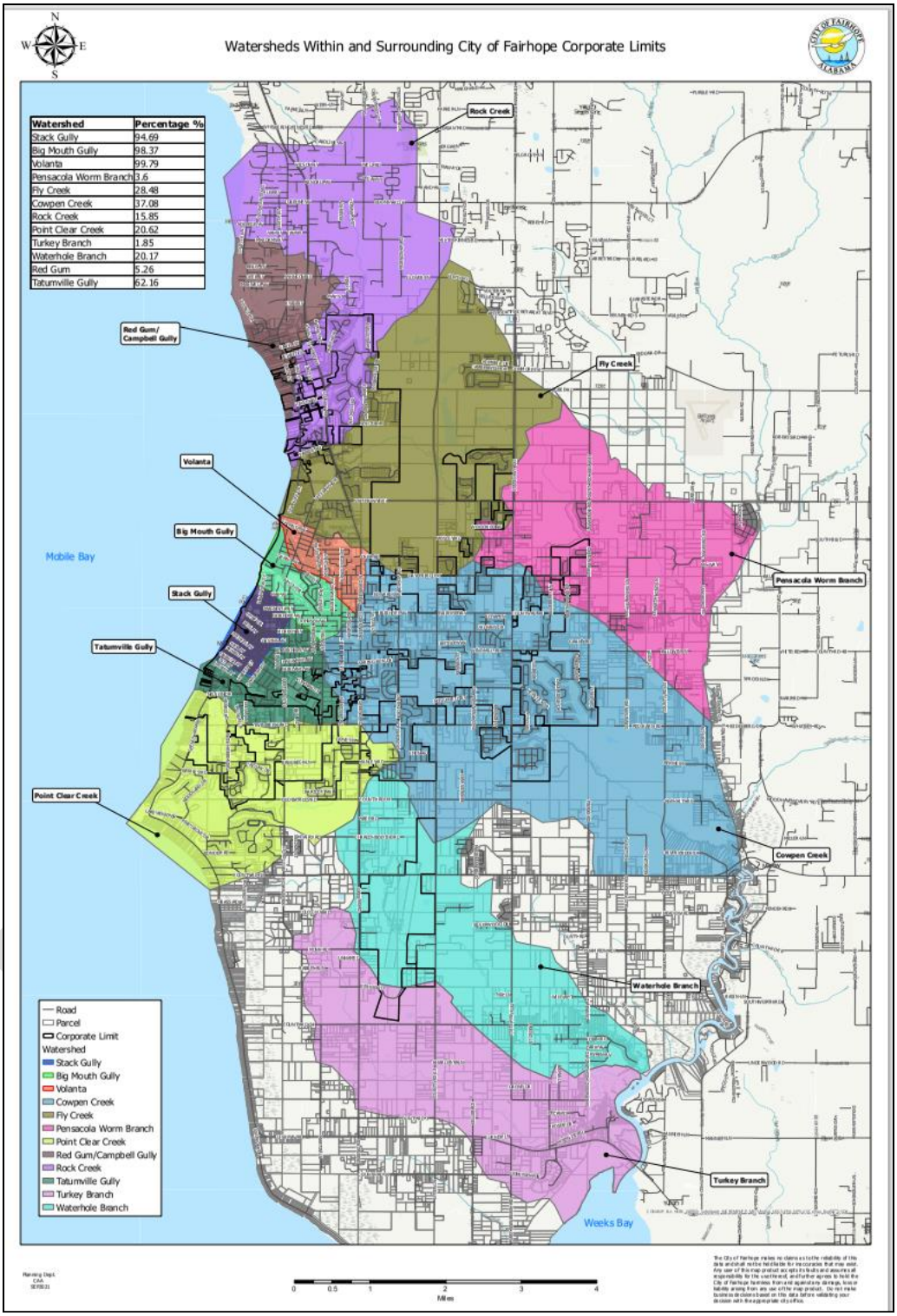


Figure 4 Fairhope Watershed Map, Updated September 2021

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

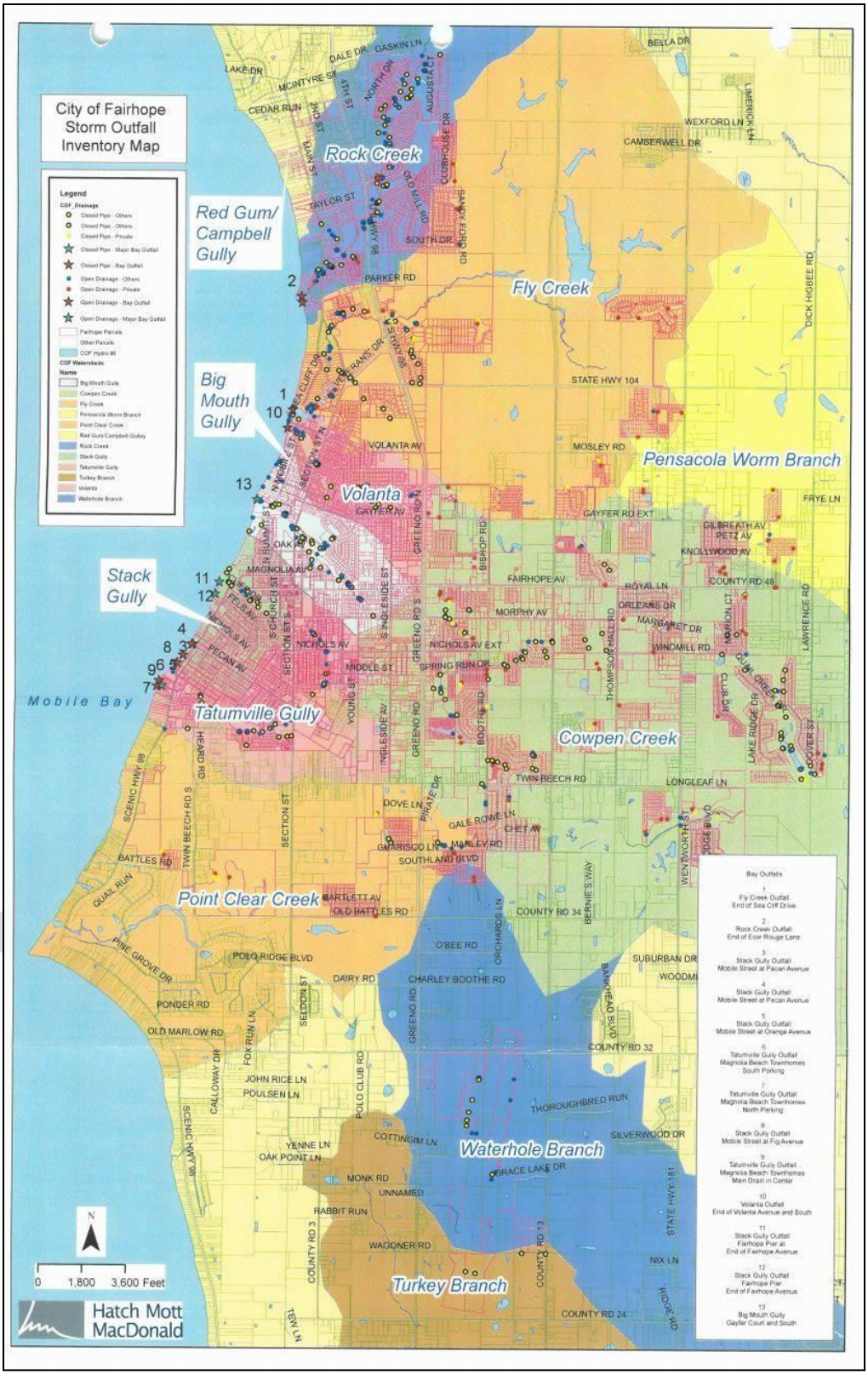


Figure 5: City of Fairhope Outfall Locations, City and privately owned: 2012
** This map will be updated for the MS4 Annual Report 2021 to include post 2012 outfalls*

Lat Long Coordinates of all outfalls from 2012 Inventory: City and privately owned*:*

**This list will be updated for inclusion in Annual Report 2021*

COF_MS4_ID	Watershed	Latitude	Longitude
BMG-1729-E	Big Mouth Gully	30.528663	-87.901954
BMG-1729-D	Big Mouth Gully	30.528763	-87.902047
BMG-62119-C	Big Mouth Gully	30.528694	-87.897843
BMG-62119-D	Big Mouth Gully	30.52786	-87.89872
BMG-62119-E	Big Mouth Gully	30.52815	-87.899113
BMG-1706-D	Big Mouth Gully	30.528569	-87.901701
BMG-1729-E	Big Mouth Gully	30.528663	-87.901954
BMG-62119-A	Big Mouth Gully	30.528696	-87.897934
BMG-62119-B	Big Mouth Gully	30.528542	-87.898123
BMG-1729-A	Big Mouth Gully	30.528674	-87.901971
BMG-1729-B	Big Mouth Gully	30.529651	-87.902701
BMG-12785-A	Big Mouth Gully	30.528221	-87.902194
BMG-12785-B	Big Mouth Gully	30.527109	-87.901073
BMG-77830-A	Big Mouth Gully	30.526263	-87.900722
BMG-15415-A	Big Mouth Gully	30.525389	-87.899595
BMG-202833-A	Big Mouth Gully	30.524501	-87.896774
BMG-78860-A	Big Mouth Gully	30.524034	-87.897192
BMG-78860-B	Big Mouth Gully	30.524023	-87.897181
BMG-15020-A	Big Mouth Gully	30.525338	-87.900913
BMG-12785-C	Big Mouth Gully	30.52872	-87.902052
BMG-1729-C	Big Mouth Gully	30.5289	-87.902076
BMG-77830-B	Big Mouth Gully	30.525852	-87.900857
BMG-77830-C	Big Mouth Gully	30.525745	-87.900783
BMG-12785-D	Big Mouth Gully	30.526891	-87.900056
BMG-202833-B	Big Mouth Gully	30.524521	-87.896837
BMG-12785-E	Big Mouth Gully	30.524365	-87.896772
BMG-15026-A	Big Mouth Gully	30.524958	-87.898514
BMG-12785-F	Big Mouth Gully	30.528707	-87.902775
BMG-77828-A	Big Mouth Gully	30.521916	-87.894253
BMG-77557-A	Big Mouth Gully	30.522074	-87.894481
BMG-77557-B	Big Mouth Gully	30.522051	-87.894507
BMG-78875-A	Big Mouth Gully	30.520176	-87.892666
BMG-77557-C	Big Mouth Gully	30.522017	-87.894465
BMG-27699-A	Big Mouth Gully	30.537029	-87.905023
BMG-100289-A	Big Mouth Gully	30.532162	-87.905954
BMG-38875-A	Big Mouth Gully	30.532322	-87.905042
BMG-69651-A	Big Mouth Gully	30.532311	-87.905552
BMG-40542-A	Big Mouth Gully	30.532047	-87.905819

COF_MS4_ID	Watershed	Latitude	Longitude
BMG-40542-B	Big Mouth Gully	30.532041	-87.905801
BMG-38430-A	Big Mouth Gully	30.531298	-87.904071
BMG-1706-A	Big Mouth Gully	30.528325	-87.900767
BMG-1706-B	Big Mouth Gully	30.528034	-87.90066
BMG-1706-C	Big Mouth Gully	30.52753	-87.89961
BMG-30256-A	Big Mouth Gully	30.527538	-87.899216
BMG-30256-B	Big Mouth Gully	30.527521	-87.899195
BMG-12785-G	Big Mouth Gully	30.523679	-87.895971
BMG-12785-H	Big Mouth Gully	30.523641	-87.895956
BMG-12785-I	Big Mouth Gully	30.523488	-87.89588
BMG-64365-A	Big Mouth Gully	30.523286	-87.895506
BMG-38430-B	Big Mouth Gully	30.531312	-87.904275
BMG-10618-A	Big Mouth Gully	30.531229	-87.904352
BMG-64359-A	Big Mouth Gully	30.529661	-87.903183
BMG-64359-B	Big Mouth Gully	30.529701	-87.903134
BMG-64359-C	Big Mouth Gully	30.529906	-87.903307
BMG-64360-A	Big Mouth Gully	30.530016	-87.907285
BMG-64360-B	Big Mouth Gully	30.529321	-87.908863
BMG-27699-B	Big Mouth Gully	30.537059	-87.905144
BMG-69776-A	Big Mouth Gully	30.536671	-87.905486
BMG-72494-A	Big Mouth Gully	30.534887	-87.904696
BMG-6515-A	Big Mouth Gully	30.535295	-87.906457
BMG-10058-A	Big Mouth Gully	30.534237	-87.907176
BMG-40542-C	Big Mouth Gully	30.532907	-87.907859
BMG-40542-D	Big Mouth Gully	30.532675	-87.907298
BMG-30256-C	Big Mouth Gully	30.527481	-87.899358
BMG-12785-J	Big Mouth Gully	30.523456	-87.895779
BMG-64359-D	Big Mouth Gully	30.531127	-87.904423
BMG-64359-E	Big Mouth Gully	30.529645	-87.903224
BMG-64359-F	Big Mouth Gully	30.529898	-87.903314
BMG-64359-G	Big Mouth Gully	30.531028	-87.904162
BMG-64360-C	Big Mouth Gully	30.530869	-87.90842
CC-294195-A	Cowpen Creek	30.513549	-87.839159
CC-238485-A	Cowpen Creek	30.532922	-87.882117
CC-50796-A	Cowpen Creek	30.534403	-87.883097
CC-5613-A	Cowpen Creek	30.531082	-87.884165
CC-98967-D	Cowpen Creek	30.512355	-87.839856
CC-990-A	Cowpen Creek	30.501827	-87.878333
CC-284332-A	Cowpen Creek	30.517764	-87.865037
CC-283515-A	Cowpen Creek	30.505558	-87.834678
CC-17291-A	Cowpen Creek	30.509291	-87.882161

COF_MS4_ID	Watershed	Latitude	Longitude
CC-206958-A	Cowpen Creek	30.509232	-87.881868
CC-206963-A	Cowpen Creek	30.506356	-87.881105
CC-206963-B	Cowpen Creek	30.506951	-87.881278
CC-119223-A	Cowpen Creek	30.509844	-87.878169
CC-237577-A	Cowpen Creek	30.513935	-87.877841
CC-237577-B	Cowpen Creek	30.514449	-87.877826
CC-206851-A	Cowpen Creek	30.513017	-87.881077
CC-29098-A	Cowpen Creek	30.512465	-87.883798
CC-29098-B	Cowpen Creek	30.512334	-87.883817
CC-29098-C	Cowpen Creek	30.512142	-87.883808
CC-74451-A	Cowpen Creek	30.511892	-87.883756
CC-17292-A	Cowpen Creek	30.513926	-87.883956
CC-17291-B	Cowpen Creek	30.509326	-87.882529
CC-222826-A	Cowpen Creek	30.507324	-87.882181
CC-222826-B	Cowpen Creek	30.507334	-87.882175
CC-235362-A	Cowpen Creek	30.503905	-87.87696
CC-206958-B	Cowpen Creek	30.509353	-87.881685
CC-206958-C	Cowpen Creek	30.509358	-87.881661
CC-119199-A	Cowpen Creek	30.51035	-87.877825
CC-23648-A	Cowpen Creek	30.513341	-87.877622
CC-206851-B	Cowpen Creek	30.512769	-87.881258
CC-17291-C	Cowpen Creek	30.51107	-87.883214
CC-74451-B	Cowpen Creek	30.511825	-87.883752
CC-218178-A	Cowpen Creek	30.512274	-87.884751
CC-29098-D	Cowpen Creek	30.513787	-87.883867
CC-298869-A	Cowpen Creek	30.504258	-87.876315
CC-235662-B	Cowpen Creek	30.504306	-87.876899
CC-235352-A	Cowpen Creek	30.504412	-87.877027
CC-235352-B	Cowpen Creek	30.50441	-87.877586
CC-235360-A	Cowpen Creek	30.503944	-87.875352
CC-219976-A	Cowpen Creek	30.503513	-87.875171
CC-219959-A	Cowpen Creek	30.503567	-87.871758
CC-202709-A	Cowpen Creek	30.522865	-87.844244
CC-202710-A	Cowpen Creek	30.522838	-87.844267
CC-240793-A	Cowpen Creek	30.518495	-87.845338
CC-229486-A	Cowpen Creek	30.518489	-87.84654
CC-33239-A	Cowpen Creek	30.516308	-87.847225
CC-202710-B	Cowpen Creek	30.522659	-87.844241
CC-202735-A	Cowpen Creek	30.51895	-87.8446
CC-202735-B	Cowpen Creek	30.5186	-87.844139

COF_MS4_ID	Watershed	Latitude	Longitude
CC-240797-A	Cowpen Creek	30.516359	-87.8441
CC-214912-A	Cowpen Creek	30.504938	-87.871575
CC-214912-B	Cowpen Creek	30.505074	-87.871788
CC-214919-A	Cowpen Creek	30.503381	-87.871292
CC-214912-C	Cowpen Creek	30.505363	-87.871806
CC-279571-A	Cowpen Creek	30.497191	-87.8712
CC-279571-B	Cowpen Creek	30.497201	-87.871219
CC-279712-A	Cowpen Creek	30.496965	-87.852093
CC-279712-B	Cowpen Creek	30.496758	-87.852038
CC-279712-D	Cowpen Creek	30.497518	-87.852448
CC-279808-A	Cowpen Creek	30.497503	-87.848716
CC-279808-C	Cowpen Creek	30.49872	-87.847605
CC-279773-A	Cowpen Creek	30.494284	-87.847746
CC-279774-A	Cowpen Creek	30.494217	-87.848355
CC-327274-A	Cowpen Creek	30.499321	-87.850948
CC-327273-A	Cowpen Creek	30.498399	-87.852507
CC-277045-A	Cowpen Creek	30.496785	-87.856995
CC-277045-B	Cowpen Creek	30.496489	-87.856866
CC-243423-A	Cowpen Creek	30.498186	-87.854965
CC-243423-B	Cowpen Creek	30.498199	-87.854167
CC-279712-C	Cowpen Creek	30.496916	-87.85221
CC-279808-B	Cowpen Creek	30.498577	-87.847661
CC-327274-B	Cowpen Creek	30.499015	-87.850481
CC-227043-A	Cowpen Creek	30.501534	-87.878005
CC-268723-A	Cowpen Creek	30.500479	-87.874775
CC-268727-A	Cowpen Creek	30.500101	-87.874792
CC-278344-B	Cowpen Creek	30.508583	-87.863719
CC-214601-A	Cowpen Creek	30.499855	-87.87782
CC-214601-B	Cowpen Creek	30.499607	-87.877819
CC-279132-C	Cowpen Creek	30.514761	-87.875078
CC-279132-D	Cowpen Creek	30.514568	-87.875315
CC-279132-E	Cowpen Creek	30.514437	-87.875392
CC-279170-A	Cowpen Creek	30.515439	-87.874031
CC-299959-A	Cowpen Creek	30.5151	-87.875661
CC-279079-D	Cowpen Creek	30.517858	-87.879696
CC-279079-C	Cowpen Creek	30.517889	-87.879683
CC-14821-E	Cowpen Creek	30.51835	-87.880958
CC-14821-B	Cowpen Creek	30.518568	-87.880958
CC-14821-C	Cowpen Creek	30.518491	-87.880921
CC-279079-A	Cowpen Creek	30.518463	-87.880564
CC-279054-C	Cowpen Creek	30.519248	-87.882035

COF_MS4_ID	Watershed	Latitude	Longitude
CC-279054-B	Cowpen Creek	30.519274	-87.882234
CC-12769-C	Cowpen Creek	30.520366	-87.883286
CC-237655-A	Cowpen Creek	30.52204	-87.882993
CC-202707-A	Cowpen Creek	30.522923	-87.883945
CC-64946-A	Cowpen Creek	30.52262	-87.884028
CC-222199-A	Cowpen Creek	30.521995	-87.882797
CC-84755-B	Cowpen Creek	30.520846	-87.880027
CC-77695-A	Cowpen Creek	30.516516	-87.873117
CC-77693-A	Cowpen Creek	30.517538	-87.872432
CC-78277-B	Cowpen Creek	30.51753	-87.870731
CC-104762-B	Cowpen Creek	30.515225	-87.863524
CC-104762-A	Cowpen Creek	30.514639	-87.863228
CC-207066-A	Cowpen Creek	30.51057	-87.860595
CC-261947-A	Cowpen Creek	30.516553	-87.856157
CC-248388-A	Cowpen Creek	30.51913	-87.854256
CC-310693-A	Cowpen Creek	30.519618	-87.853821
CC-254840-A	Cowpen Creek	30.521772	-87.856497
CC-237634-A	Cowpen Creek	30.520059	-87.860127
CC-98967-C	Cowpen Creek	30.514747	-87.843878
CC-98967-D	Cowpen Creek	30.512355	-87.839856
CC-990-A	Cowpen Creek	30.501827	-87.878333
CC-278344-A	Cowpen Creek	30.508013	-87.864313
CC-279132-A	Cowpen Creek	30.514809	-87.875165
CC-279171-A	Cowpen Creek	30.515428	-87.874046
CC-279132-A	Cowpen Creek	30.514958	-87.8755
CC-14821-A	Cowpen Creek	30.518554	-87.881004
CC-14821-D	Cowpen Creek	30.518384	-87.881036
CC-279079-A	Cowpen Creek	30.518423	-87.880735
CC-279054-A	Cowpen Creek	30.519456	-87.88229
CC-279052-A	Cowpen Creek	30.519939	-87.882735
CC-12769-D	Cowpen Creek	30.520111	-87.883263
CC-12769-B	Cowpen Creek	30.520882	-87.883228
CC-12769-A	Cowpen Creek	30.521796	-87.882789
CC-84755-A	Cowpen Creek	30.52091	-87.880185
CC-80794-A	Cowpen Creek	30.516354	-87.87282
CC-78277-A	Cowpen Creek	30.517516	-87.87147
CC-81238-A	Cowpen Creek	30.515763	-87.873321
CC-81239-A	Cowpen Creek	30.515596	-87.873141
CC-59963-A	Cowpen Creek	30.515814	-87.870018
CC-77707-A	Cowpen Creek	30.516491	-87.870256

COF_MS4_ID	Watershed	Latitude	Longitude
CC-14603-B	Cowpen Creek	30.517576	-87.869332
CC-14603-A	Cowpen Creek	30.517439	-87.869274
CC-284332-A	Cowpen Creek	30.517764	-87.865037
CC-104546-A	Cowpen Creek	30.516866	-87.864539
CC-109756-A	Cowpen Creek	30.51848	-87.862822
CC-109763-A	Cowpen Creek	30.516617	-87.862242
CC-98967-B	Cowpen Creek	30.514603	-87.844209
CC-98967-A	Cowpen Creek	30.512391	-87.840233
CC-84289-C	Cowpen Creek	30.510665	-87.83977
CC-84289-B	Cowpen Creek	30.510667	-87.839794
CC-84289-A	Cowpen Creek	30.510657	-87.839866
CC-294193-A	Cowpen Creek	30.514633	-87.838966
CC-294198-A	Cowpen Creek	30.5123	-87.839098
CC-110859-A	Cowpen Creek	30.50534	-87.833943
CC-327803-A	Cowpen Creek	30.503232	-87.835029
CC-84289-D	Cowpen Creek	30.504138	-87.835593
CC-84289-E	Cowpen Creek	30.503738	-87.836886
CC-84289-F	Cowpen Creek	30.509448	-87.838835
CC-84289-Q	Cowpen Creek	30.502664	-87.836777
CC-84289-R	Cowpen Creek	30.502655	-87.836223
CC-84289-G	Cowpen Creek	30.505998	-87.83917
CC-84289-H	Cowpen Creek	30.505898	-87.838026
CC-84289-I	Cowpen Creek	30.506309	-87.838209
CC-84289-J	Cowpen Creek	30.506043	-87.839255
CC-84289-K	Cowpen Creek	30.50727	-87.839419
CC-84289-L	Cowpen Creek	30.507032	-87.839487
CC-84289-M	Cowpen Creek	30.507725	-87.839449
CC-14695-B	Cowpen Creek	30.525408	-87.861928
CC-14695-C	Cowpen Creek	30.526044	-87.862586
CC-283515-A	Cowpen Creek	30.505558	-87.834678
CC-110859-B	Cowpen Creek	30.505356	-87.833829
CC-84289-N	Cowpen Creek	30.503389	-87.835594
CC-84289-O	Cowpen Creek	30.503875	-87.836719
CC-305037-A	Cowpen Creek	30.504359	-87.834127
CC-327801-A	Cowpen Creek	30.503834	-87.834218
CC-84289-P	Cowpen Creek	30.505777	-87.838293
CC-229560-A	Cowpen Creek	30.50948	-87.847761
CC-268925-A	Cowpen Creek	30.525366	-87.847535
CC-268925-B	Cowpen Creek	30.525164	-87.846892
CC-248110-A	Cowpen Creek	30.525898	-87.847056
CC-248110-B	Cowpen Creek	30.525846	-87.847187

COF_MS4_ID	Watershed	Latitude	Longitude
CC-279482-A	Cowpen Creek	30.527675	-87.847813
CC-261658-A	Cowpen Creek	30.523742	-87.840416
CC-261675-A	Cowpen Creek	30.523744	-87.84022
CC-338513-A	Cowpen Creek	30.527925	-87.86592
CC-338513-B	Cowpen Creek	30.528083	-87.86562
CC-14695-B	Cowpen Creek	30.523844	-87.8625
FC-3113-B FC-3113-A	Fly Creek	30.543001	-87.891775
FC-325843-A	Fly Creek	30.54913	-87.898757
FC-170039-A	Fly Creek	30.549521	-87.898552
FC-210005-A	Fly Creek	30.549701	-87.898715
FC-269191-A	Fly Creek	30.561083	-87.881881
FC-8625-A	Fly Creek	30.568066	-87.882347
FC-8625-B	Fly Creek	30.569844	-87.882396
FC-113559-A	Fly Creek	30.550588	-87.887759
FC-113559-B	Fly Creek	30.550558	-87.887788
FC-113559-C	Fly Creek	30.550664	-87.887706
FC-48571-A	Fly Creek	30.548564	-87.887805
FC-223698-A	Fly Creek	30.549011	-87.888088
FC-113563-A	Fly Creek	30.549283	-87.888
FC-237528-A	Fly Creek	30.546303	-87.886812
FC-237527-A	Fly Creek	30.54566	-87.886884
FC-237533-A	Fly Creek	30.54782	-87.887129
FC-113588-A	Fly Creek	30.54578	-87.88788
FC-10142-A	Fly Creek	30.553738	-87.895672
FC-91042-A	Fly Creek	30.553345	-87.89698
FC-91043-A	Fly Creek	30.5532	-87.896924
FC-38191-A	Fly Creek	30.553269	-87.897634
FC-47480-A	Fly Creek	30.551671	-87.898554
FC-47480-B	Fly Creek	30.551902	-87.898398
FC-269191-B	Fly Creek	30.561051	-87.881968
FC-269191-C	Fly Creek	30.561051	-87.881971
FC-269191-D	Fly Creek	30.560964	-87.881844
FC-242626-A	Fly Creek	30.564922	-87.882221
FC-242626-D	Fly Creek	30.564917	-87.881831
FC-242626-C	Fly Creek	30.564857	-87.881981
FC-229241-A	Fly Creek	30.567973	-87.882612
FC-229235-A	Fly Creek	30.569858	-87.882797
FC-91043-B	Fly Creek	30.552975	-87.896832
FC-38191-B	Fly Creek	30.553246	-87.897814
FC-47480-C	Fly Creek	30.551617	-87.898538

COF_MS4_ID	Watershed	Latitude	Longitude
FC-18248-A	Fly Creek	30.544263	-87.898525
FC-18248-B	Fly Creek	30.544266	-87.898533
FC-14019-A	Fly Creek	30.544202	-87.898326
FC-63534-A	Fly Creek	30.543071	-87.900483
FC-21903-A	Fly Creek	30.542846	-87.900719
FC-12698-A	Fly Creek	30.542818	-87.90103
FC-63530-A	Fly Creek	30.544929	-87.897968
FC-14019-B	Fly Creek	30.544233	-87.898438
FC-18248-C	Fly Creek	30.544254	-87.898519
FC-34430-A	Fly Creek	30.543069	-87.900327
FC-21903-B	Fly Creek	30.542845	-87.900798
FC-12698-B	Fly Creek	30.542479	-87.901085
FC-35038-A	Fly Creek	30.541986	-87.900631
FC-304612-A	Fly Creek	30.553129	-87.890588
FC-20833-A	Fly Creek	30.553463	-87.891849
FC-296900-A	Fly Creek	30.553542	-87.893764
FC-296900-B	Fly Creek	30.553487	-87.894186
FC-245015-A	Fly Creek	30.552755	-87.879432
FC-113574-A	Fly Creek	30.552234	-87.887402
FC-113556-B	Fly Creek	30.551536	-87.888643
FC-113552-A	Fly Creek	30.552454	-87.890145
FC-113552-B	Fly Creek	30.552358	-87.890653
FC-296793-A	Fly Creek	30.552956	-87.858572
FC-261870-A	Fly Creek	30.542879	-87.85629
FC-270303-A	Fly Creek	30.537456	-87.863513
FC-234578-A	Fly Creek	30.534613	-87.867553
FC-304612-B	Fly Creek	30.553421	-87.89054
FC-304612-C	Fly Creek	30.553125	-87.890582
FC-216451-A	Fly Creek	30.553634	-87.891794
FC-296900-C	Fly Creek	30.553543	-87.89377
FC-245015-B	Fly Creek	30.552322	-87.879488
FC-113574-B	Fly Creek	30.552312	-87.887614
FC-113556-A	Fly Creek	30.551767	-87.888854
FC-113552-C	Fly Creek	30.552253	-87.890591
FC-113552-D	Fly Creek	30.552353	-87.891332
FC-296793-C	Fly Creek	30.553156	-87.861151
FC-296793-B	Fly Creek	30.553101	-87.858498
FC-296792-A	Fly Creek	30.554157	-87.854686
FC-261881-A	Fly Creek	30.542862	-87.855919
FC-261870-B	Fly Creek	30.542911	-87.856485
FC-261847-A	Fly Creek	30.542781	-87.852779

COF_MS4_ID	Watershed	Latitude	Longitude
FC-270297-A	Fly Creek	30.536915	-87.863211
FC-39503-A	Fly Creek	30.543916	-87.900222
FC-44555-A	Fly Creek	30.5471	-87.899028
FC-23625-A	Fly Creek	30.548824	-87.899388
FC-43233-A	Fly Creek	30.551198	-87.898845
FC-64357-A	Fly Creek	30.543004	-87.90146
FC-64357-B	Fly Creek	30.542844	-87.901574
FC-205197-A	Fly Creek	30.542954	-87.903255
FC-205197-B	Fly Creek	30.542765	-87.903436
FC-64357-C	Fly Creek	30.543287	-87.901067
FC-3113-B FC-3113-A	Fly Creek	30.543001	-87.891775
FC-36082-A	Fly Creek	30.545704	-87.895288
FC-36082-C	Fly Creek	30.546146	-87.895754
FC-8609-A	Fly Creek	30.547388	-87.898431
FC-98872-A	Fly Creek	30.548313	-87.898733
FC-325843-A	Fly Creek	30.54913	-87.898757
FC-170039-A	Fly Creek	30.549521	-87.898552
FC-210005-A	Fly Creek	30.549701	-87.898715
FC-2362-A	Fly Creek	30.54393	-87.894213
FC-3113-A	Fly Creek	30.542841	-87.891586
FC-12789-B	Fly Creek	30.541857	-87.890732
FC-36082-B	Fly Creek	30.545709	-87.895283
FC-11759-A	Fly Creek	30.54625	-87.895954
FC-210063-A	Fly Creek	30.546676	-87.896825
FC-210063-B	Fly Creek	30.546796	-87.897114
FC-117888-A	Fly Creek	30.547024	-87.897418
FC-12789-A	Fly Creek Fly Creek	30.54176	-87.890707
PWB-293901-A	Pensacola Worm Branch	30.531466	-87.840028
PWB-261846-A	Pensacola Worm Branch	30.542836	-87.85254
PWB-270376-A	Pensacola Worm Branch	30.540099	-87.858451
PWB-281003-A	Pensacola Worm Branch	30.534346	-87.857695
PWB-281003-B	Pensacola Worm Branch	30.53406	-87.8577
PWB-14734-A	Pensacola Worm Branch	30.53436	-87.841216
PWB-293927-A	Pensacola Worm Branch	30.531217	-87.839863
PWB-14734-B	Pensacola Worm Branch	30.534442	-87.840817

COF_MS4_ID	Watershed	Latitude	Longitude
PWB-293901-A	Pensacola Worm Branch	30.531466	-87.840028
PWB-269693-A	Pensacola Worm Branch	30.528853	-87.84134
PWB-269693-B	Pensacola Worm Branch	30.52893	-87.841327
PWB-269693-C	Pensacola Worm Branch	30.529534	-87.841131
PWB-280514-A	Pensacola Worm Branch	30.528025	-87.838037
PWB-261672-A	Pensacola Worm Branch	30.526648	-87.84046
PCC-106166-A	Point Clear Creek	30.49501	-87.883101
PCC-106166-B	Point Clear Creek	30.495368	-87.883976
PCC-106166-C	Point Clear Creek	30.495458	-87.880148
PCC-106166-D	Point Clear Creek	30.494957	-87.88091
PCC-106166-E	Point Clear Creek	30.494731	-87.882186
PCC-106166-F	Point Clear Creek	30.494984	-87.883106
PCC-106166-G	Point Clear Creek	30.49518	-87.88355
PCC-243166-A	Point Clear Creek	30.494214	-87.881903
PCC-243166-B	Point Clear Creek	30.494247	-87.881781
PCC-267180-B	Point Clear Creek	30.495368	-87.890202
PCC-267180-D	Point Clear Creek	30.494835	-87.890684
PCC-327698-A	Point Clear Creek	30.487287	-87.89199
PCC-327698-B	Point Clear Creek	30.487305	-87.891981
PCC-327695-A	Point Clear Creek	30.489199	-87.898686
PCC-327695-B	Point Clear Creek	30.489263	-87.898526
PCC-327695-C	Point Clear Creek	30.489334	-87.89871
PCC-29244-A	Point Clear Creek	30.491798	-87.912915
PCC-6614-A	Point Clear Creek	30.4914	-87.911073
PCC-288984-A	Point Clear Creek	30.498534	-87.891919
PCC-267180-C	Point Clear Creek	30.495291	-87.890066
PCC-267180-A	Point Clear Creek	30.495736	-87.89034
PCC-29244-C	Point Clear Creek	30.491288	-87.912476
PCC-29244-B	Point Clear Creek	30.491411	-87.913092
PCC-288984-B	Point Clear Creek	30.498404	-87.892077
PCC-202853-A	Point Clear Creek	30.4938	-87.919591
PCC-2432-A	Point Clear Creek	30.50755	-87.919635
PCC-202853-B	Point Clear Creek	30.49417	-87.919892
RC-72773-A	Rock Creek	30.570341	-87.892593
RC-114684-A	Rock Creek	30.56937	-87.891059
RC-114856-A	Rock Creek	30.571964	-87.891048
RC-114859-A	Rock Creek	30.574551	-87.89136
RC-206128-A	Rock Creek	30.578525	-87.889216

COF_MS4_ID	Watershed	Latitude	Longitude
RC-206172-B	Rock Creek	30.575744	-87.89226
RC-114860-A	Rock Creek	30.568175	-87.892028
RC-114872-L	Rock Creek	30.58166	-87.887014
RC-114872-M	Rock Creek	30.57618	-87.890153
RC-114849-D	Rock Creek	30.568109	-87.89259
RC-235588-A	Rock Creek	30.581783	-87.884624
RC-114829-A	Rock Creek	30.571264	-87.889259
RC-114849-B	Rock Creek	30.567573	-87.892674
RC-304654-A	Rock Creek	30.563313	-87.893512
RC-304654-B	Rock Creek	30.563496	-87.893575
RC-114850-A	Rock Creek	30.564397	-87.892608
RC-114850-B	Rock Creek	30.564389	-87.892623
RC-114850-C	Rock Creek	30.564416	-87.892619
RC-114850-D	Rock Creek	30.565384	-87.892659
RC-114850-E	Rock Creek	30.565509	-87.892577
RC-114850-F	Rock Creek	30.56561	-87.892376
RC-114850-G	Rock Creek	30.567296	-87.891843
RC-114850-H	Rock Creek	30.567279	-87.891463
RC-114850-I	Rock Creek	30.567451	-87.891381
RC-59675-A	Rock Creek	30.563257	-87.894422
RC-254914-A	Rock Creek	30.559607	-87.896864
RC-254917-A	Rock Creek	30.559323	-87.895523
RC-254917-B	Rock Creek	30.559506	-87.895726
RC-24141-A	Rock Creek	30.558543	-87.897209
RC-43907-A	Rock Creek	30.558308	-87.898407
RC-43907-B	Rock Creek	30.558349	-87.898614
RC-29304-A	Rock Creek	30.558503	-87.898689
RC-21509-A	Rock Creek	30.55762	-87.899579
RC-21509-B	Rock Creek	30.557686	-87.899594
RC-56434-A	Rock Creek	30.560198	-87.897787
RC-29305-A	Rock Creek	30.558824	-87.899209
RC-5604-A	Rock Creek	30.561413	-87.897833
RC-43715-A	Rock Creek	30.563036	-87.899883
RC-121260-A	Rock Creek	30.557839	-87.900365
RC-121260-B	Rock Creek	30.558029	-87.900198
RC-59793-A	Rock Creek	30.554466	-87.902249
RC-114850-J	Rock Creek	30.565806	-87.893287
RC-304654-D	Rock Creek	30.563418	-87.893669
RC-304654-C	Rock Creek	30.563555	-87.893657
RC-114850-K	Rock Creek	30.564142	-87.892194

COF_MS4_ID	Watershed	Latitude	Longitude
RC-59675-B	Rock Creek	30.56338	-87.894516
RC-59675-C	Rock Creek	30.563247	-87.89452
RC-59675-E	Rock Creek	30.562586	-87.894315
RC-59675-D	Rock Creek	30.562706	-87.894386
RC-254914-B	Rock Creek	30.559607	-87.896883
RC-254914-C	Rock Creek	30.558965	-87.895054
RC-37689-A	Rock Creek	30.557725	-87.899666
RC-56434-B	Rock Creek	30.56019	-87.89779
RC-29305-B	Rock Creek	30.558423	-87.898939
RC-75978-A	Rock Creek	30.561668	-87.898196
RC-75978-B	Rock Creek	30.561912	-87.898502
RC-75978-C	Rock Creek	30.562372	-87.898866
RC-13134-A	Rock Creek	30.556734	-87.900693
RC-44352-A	Rock Creek	30.557979	-87.899822
RC-77980-A	Rock Creek	30.555166	-87.902354
RC-60020-A	Rock Creek	30.556801	-87.900438
RC-60022-A	Rock Creek	30.557345	-87.90026
RC-82582-A	Rock Creek	30.573132	-87.892548
RC-56089-A	Rock Creek	30.574	-87.891716
RC-206177-A	Rock Creek	30.57487	-87.891906
RC-72773-A	Rock Creek	30.570341	-87.892593
RC-114684-A	Rock Creek	30.56937	-87.891059
RC-114856-A	Rock Creek	30.571964	-87.891048
RC-114801-A	Rock Creek	30.572665	-87.891104
RC-114859-A	Rock Creek	30.574551	-87.89136
RC-206067-A	Rock Creek	30.579567	-87.888927
RC-206128-A	Rock Creek	30.578525	-87.889216
RC-206128-B	Rock Creek	30.57767	-87.88973
RC-206147-A	Rock Creek	30.576885	-87.890478
RC-206165-A	Rock Creek	30.576143	-87.891704
RC-206172-A	Rock Creek	30.575743	-87.89226
RC-206172-B	Rock Creek	30.575744	-87.89226
RC-114872-A	Rock Creek	30.575991	-87.889922
RC-114872-B	Rock Creek	30.576285	-87.890316
RC-114872-C	Rock Creek	30.577048	-87.888607
RC-114872-D	Rock Creek	30.577024	-87.888763
RC-114872-E	Rock Creek	30.576983	-87.888887
RC-114872-F	Rock Creek	30.577334	-87.888354
RC-114872-G	Rock Creek	30.577993	-87.888293
RC-114872-H	Rock Creek	30.57909	-87.887499
RC-114872-I	Rock Creek	30.580009	-87.886612

COF_MS4_ID	Watershed	Latitude	Longitude
RC-114872-J	Rock Creek	30.580726	-87.886591
RC-114860-A	Rock Creek	30.568175	-87.892028
RC-114849-C	Rock Creek	30.568077	-87.89256
RC-114849-E	Rock Creek	30.568184	-87.892588
RC-114852-A	Rock Creek	30.568616	-87.892556
RC-82582-B	Rock Creek	30.573141	-87.891803
RC-64117-A	Rock Creek	30.571873	-87.891632
RC-64116-A	Rock Creek	30.572183	-87.89167
RC-114855-A	Rock Creek	30.570306	-87.892365
RC-114856-B	Rock Creek	30.56942	-87.890721
RC-114856-C	Rock Creek	30.571813	-87.890938
RC-114859-B	Rock Creek	30.57467	-87.891274
RC-114859-C	Rock Creek	30.574591	-87.891462
RC-114859-D	Rock Creek	30.574593	-87.891531
RC-114859-E	Rock Creek	30.574569	-87.89158
RC-114872-L	Rock Creek	30.58166	-87.887014
RC-206128-C	Rock Creek	30.579048	-87.889524
RC-206148-A	Rock Creek	30.576831	-87.890455
RC-114872-M	Rock Creek	30.57618	-87.890153
RC-114872-N	Rock Creek	30.578593	-87.887501
RC-114872-O	Rock Creek	30.57862	-87.8875
RC-114872-P	Rock Creek	30.580058	-87.886809
RC-114872-K	Rock Creek	30.580752	-87.886687
RC-114860-B	Rock Creek	30.568102	-87.892079
RC-114849-D	Rock Creek	30.568109	-87.89259
RC-114852-B	Rock Creek	30.568557	-87.892618
SG-64356-A	Stack Gully	30.521767	-87.908763
SG-64356-B	Stack Gully	30.522332	-87.909191
SG-64356-C	Stack Gully	30.52274	-87.909464
SG-64356-D	Stack Gully	30.522796	-87.909841
SG-1728-A	Stack Gully	30.520997	-87.907626
SG-12773-A	Stack Gully	30.520343	-87.906539
SG-19592-A	Stack Gully	30.521546	-87.907699
SG-64356-H	Stack Gully	30.521754	-87.908598
SG-64356-I	Stack Gully	30.52173	-87.908712
SG-64356-J	Stack Gully	30.5227	-87.90899
SG-64362-A	Stack Gully	30.523719	-87.911538
SG-64362-B	Stack Gully	30.523621	-87.911422
SG-64356-G	Stack Gully	30.523307	-87.911122
SG-64356-F	Stack Gully	30.523319	-87.911117

COF_MS4_ID	Watershed	Latitude	Longitude
SG-64356-E	Stack Gully	30.523328	-87.91111
SG-12795-A	Stack Gully	30.517023	-87.916099
SG-12795-B	Stack Gully	30.516964	-87.916246
SG-12795-C	Stack Gully	30.515793	-87.917389
SG-64364-A	Stack Gully	30.514949	-87.918129
SG-64362-E	Stack Gully	30.523797	-87.912711
SG-64362-D	Stack Gully	30.524727	-87.911731
SG-64362-C	Stack Gully	30.52517	-87.911427
SG-12788-A	Stack Gully	30.522516	-87.913231
TG-67694-A	Tatumville Gully	30.507295	-87.906918
TG-59896-A	Tatumville Gully	30.507708	-87.905932
TG-26854-D	Tatumville Gully	30.508735	-87.903129
TG-34957-A	Tatumville Gully	30.513782	-87.898722
TG-211224-E	Tatumville Gully	30.507118	-87.907279
TG-61465-A	Tatumville Gully	30.512975	-87.920487
TG-61465-B	Tatumville Gully	30.51238	-87.920797
TG-64364-A	Tatumville Gully	30.514218	-87.918744
TG-11940-A	Tatumville Gully	30.51385	-87.918664
TG-61465-C	Tatumville Gully	30.512425	-87.920142
TG-34924-A	Tatumville Gully	30.511306	-87.91508
TG-34924-B	Tatumville Gully	30.511107	-87.915039
TG-43367-A	Tatumville Gully	30.51042	-87.914881
TG-31610-A	Tatumville Gully	30.509756	-87.913854
TG-31610-B	Tatumville Gully	30.509749	-87.913783
TG-4684-A	Tatumville Gully	30.508988	-87.911447
TG-83795-A	Tatumville Gully	30.507286	-87.90988
TG-211224-A	Tatumville Gully	30.507288	-87.908872
TG-83783-A	Tatumville Gully	30.505821	-87.908976
TG-50454-A	Tatumville Gully	30.50741	-87.908049
TG-67694-A	Tatumville Gully	30.507295	-87.906918
TG-59896-A	Tatumville Gully	30.507708	-87.905932
TG-17404-A	Tatumville Gully	30.508166	-87.905282
TG-26854-A	Tatumville Gully	30.50873	-87.903134
TG-26854-D	Tatumville Gully	30.508735	-87.903129
TG-34683-A	Tatumville Gully	30.509611	-87.902432
TG-77805-A	Tatumville Gully	30.51149	-87.900477
TG-77821-A	Tatumville Gully	30.512514	-87.899037
TG-77821-B	Tatumville Gully	30.512577	-87.898973
TG-29902-A	Tatumville Gully	30.512708	-87.898995
TG-34957-A	Tatumville Gully	30.513782	-87.898722
TG-37896-A	Tatumville Gully	30.516183	-87.898717

COF_MS4_ID	Watershed	Latitude	Longitude
TG-37896-B	Tatumville Gully	30.516196	-87.898695
TG-6961-A	Tatumville Gully	30.518066	-87.900315
TG-6961-B	Tatumville Gully	30.51827	-87.900514
TG-211224-B	Tatumville Gully	30.508905	-87.911582
TG-211224-D	Tatumville Gully	30.507449	-87.909917
TG-211224-C	Tatumville Gully	30.507437	-87.908916
TG-211224-E	Tatumville Gully	30.507118	-87.907279
TG-59896-B	Tatumville Gully	30.507831	-87.905685
TG-26854-C	Tatumville Gully	30.508154	-87.903921
TG-26854-B	Tatumville Gully	30.508653	-87.903255
TG-34683-B	Tatumville Gully	30.509667	-87.902414
TG-26139-A	Tatumville Gully	30.509895	-87.902254
TG-77819-A	Tatumville Gully	30.512444	-87.89922
TG-34957-B	Tatumville Gully	30.512923	-87.898742
TG-317177-A	Tatumville Gully	30.513841	-87.898512
TG-317177-B	Tatumville Gully	30.513937	-87.898481
TG-317172-A	Tatumville Gully	30.514853	-87.898709
TG-37896-C	Tatumville Gully	30.516171	-87.898753
TG-28507-A	Tatumville Gully	30.517542	-87.899596
TG-63035-A	Tatumville Gully	30.518455	-87.900732
TG-281646-A	Tatumville Gully	30.506901	-87.903165
TG-281645-A	Tatumville Gully	30.506826	-87.903703
TG-281646-B	Tatumville Gully	30.506889	-87.903177
TG-56190-A	Tatumville Gully	30.506738	-87.904766
TG-69539-A	Tatumville Gully	30.50757	-87.916626
TB-309518-B	Turkey Branch	30.450397	-87.869398
TB-309518-A	Turkey Branch	30.450439	-87.872502
TB-257064-B	Turkey Branch	30.448221	-87.878535
TB-257064-A	Turkey Branch	30.448397	-87.879786
VL-5613-B	Volanta	30.531536	-87.885627
VL-43887-A	Volanta	30.540749	-87.904071
VL-5613-B	Volanta	30.531536	-87.885627
VL-34073-A	Volanta	30.532093	-87.892461
VL-34073-B	Volanta	30.532086	-87.890527
VL-34073-C	Volanta	30.532481	-87.892113
VL-34073-D	Volanta	30.532444	-87.892088
VL-34073-E	Volanta	30.532738	-87.892967
VL-36204-A	Volanta	30.534445	-87.893687
VL-43433-A	Volanta	30.534283	-87.894126
VL-56704-A	Volanta	30.532928	-87.893994

COF_MS4_ID	Watershed	Latitude	Longitude
VL-73246-A	Volanta	30.534117	-87.895122
VL-72822-A	Volanta	30.534212	-87.895396
VL-73246-B	Volanta	30.534244	-87.894776
VL-110128-A	Volanta	30.533124	-87.898794
VL-89431-A	Volanta	30.534335	-87.898317
VL-4651-A	Volanta	30.536754	-87.900032
VL-4651-B	Volanta	30.536639	-87.900068
VL-47625-A	Volanta	30.53677	-87.900239
VL-47625-B	Volanta	30.536804	-87.900279
VL-47625-C	Volanta	30.536804	-87.900284
VL-56062-A	Volanta	30.533575	-87.887731
VL-56062-B	Volanta	30.533422	-87.88798
VL-36204-B	Volanta	30.534544	-87.893698
VL-33279-A	Volanta	30.534567	-87.893559
VL-47625-D	Volanta	30.537101	-87.900269
VL-102308-A	Volanta	30.54208	-87.903426
VL-102308-B	Volanta	30.541633	-87.902646
VL-18772-A	Volanta	30.539575	-87.902272
VL-43889-A	Volanta	30.540101	-87.902869
VL-102308-C	Volanta	30.541422	-87.903957
VL-102308-D	Volanta	30.541587	-87.903938
VL-102308-E	Volanta	30.542066	-87.903791
VL-18772-B	Volanta	30.539853	-87.901994
VL-18772-C	Volanta	30.540192	-87.902142
VL-43889-C	Volanta	30.540268	-87.902749
VL-43889-B	Volanta	30.540595	-87.903133
WB-243149-A	Waterhole Branch	30.491201	-87.879193
WB-243146-A	Waterhole Branch	30.4917	-87.87924
WB-2496-A	Waterhole Branch	30.459573	-87.869323
WB-12786-A	Waterhole Branch	30.463584	-87.879181
WB-226622-A	Waterhole Branch	30.463531	-87.878596
WB-226623-A	Waterhole Branch	30.459347	-87.876043
WB-251558-A	Waterhole Branch	30.469524	-87.873789
WB-251558-B	Waterhole Branch	30.467234	-87.874232
WB-226623-C	Waterhole Branch	30.45853	-87.876573
WB-226620-A	Waterhole Branch	30.469585	-87.878339
WB-226621-A	Waterhole Branch	30.464952	-87.879839
WB-226621-B	Waterhole Branch	30.46435	-87.879883
WB-226620-C	Waterhole Branch	30.469402	-87.878342
WB-226620-B	Waterhole Branch	30.469415	-87.878336
WB-226620-D	Waterhole Branch	30.46718	-87.879176

COF_MS4_ID	Watershed	Latitude	Longitude
WB-226620-E	Waterhole Branch	30.465833	-87.879618
WB-226623-B	Waterhole Branch	30.459048	-87.876451

The Minimum Control Measures with Measurable Goals for 2022:

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

Figure 6 Fly Creek at Mobile Bay: Fairhope Yacht Club on left; Fly Creek Marina on right.

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.

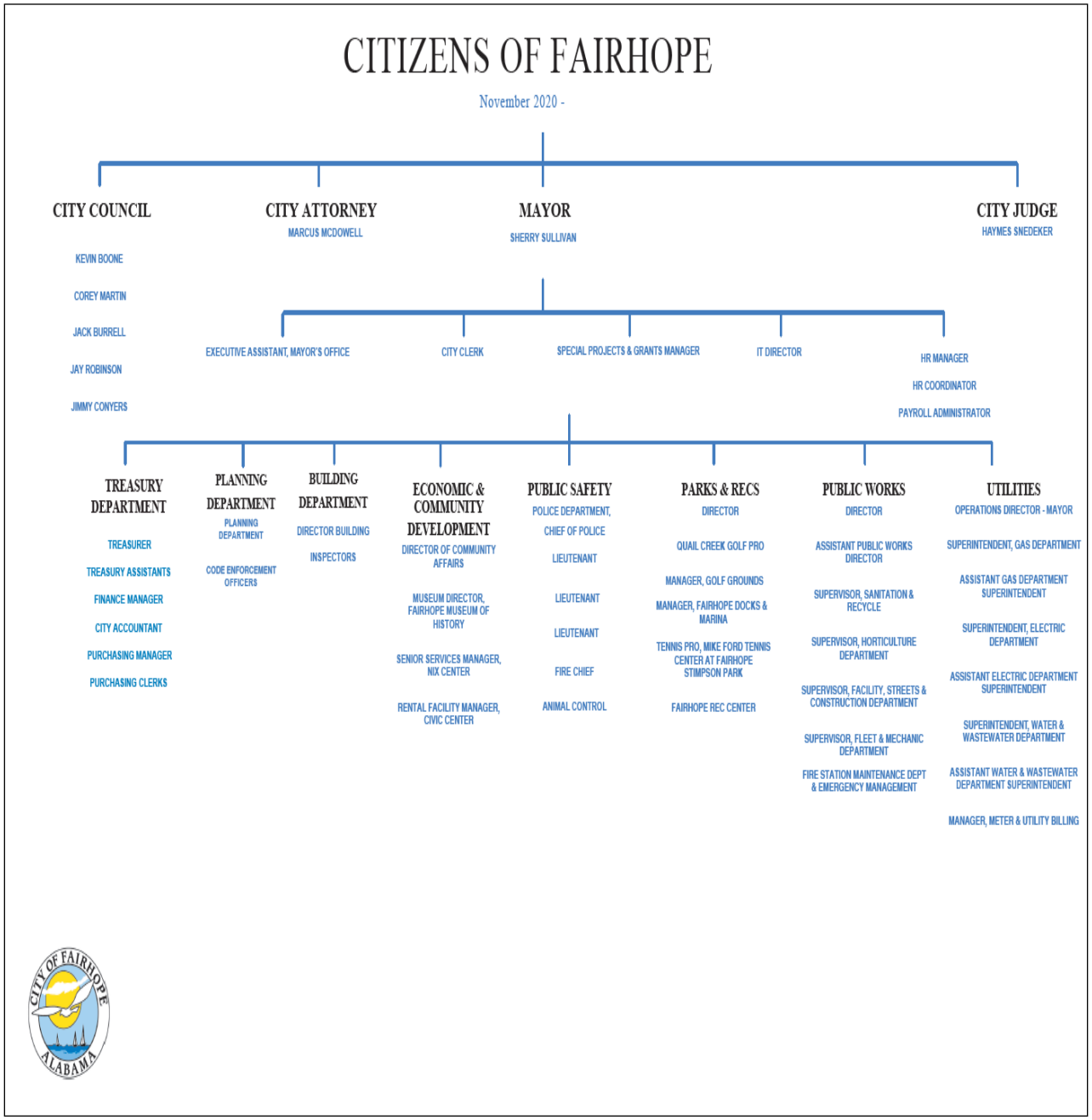


Figure 7 Management Flow Chart as of Nov. 1, 2021

2.3 SWMPP – Watersheds of Fairhope

The City of Fairhope uses a watershed-based approach to storm water management. The MS4 area limits (also the annexed City limits) encompasses 12 watersheds, and approximately 15 square miles.

City of Fairhope MS4 area limit, as of November 22, 2021

a.	Red Gulley	62.94
b.	Rock Creek	748.29
c.	Fly Creek	1510.77
d.	Volanta	390.41
e.	Big Mouth Gulley	521.96
f.	Stack Gulley	394.07
g.	Tatumville Gulley	617.80
h.	Point Clear Creek	743.56
i.	Turkey Branch*	91.49
j.	Waterhole Branch*	751.59
k.	Cowpen Creek *	3628.63
l.	Pensacola Branch/Worm Branch*	151.80

TOTAL APPROXIMATE ACREAGE: 9,613 acres (15 SQUARE MILES)
Source: Planning and Zoning Department GIS / Planning Tech (CA) 11/22/2021

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

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

Figure 8 Fishing the jetties at the mouth of Fly Creek, September 2021

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

- Rationale Statement: The City of Fairhope supports the Fairhope Environmental Advisory Board (FEAB), which currently has nine members as of 11/1/2021. 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. Weeks Bay Watershed Implementation Team (WBWIT) which meets virtually online quarterly. Planning and Zoning Department represents for this meeting.
    c. Create a Clean Water Future partners
    d. Eastern Shore MS4 partners with Daphne, Spanish Fort, Baldwin County and AL-DOT

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. Alabama Water Watch is a volunteer water testing program, overseen by Weeks Bay National Estuary Research Reserve. The Alabama Water Watch program currently provides volunteer water testing at three locations within Fairhope monthly.

In support of the AWW program and local water testing, the Planning and Zoning Department has spearheaded water monitoring by certifying staff (two city employees) to conduct bacterial water testing beginning in 2021. Target areas 2021-2022 include three sampling sites on Fly Creek. Results are posted on the AWW site:
Alabama Water Watch (auburn.edu)
Bacterial (pathogen) testing is for E. coli which is an indicator for the presence of pathogens (human sewer or animal waste). ADEM's water quality testing (prompting swim advisories) is posted at areas of swimming activity.

Figure 9: Public Works staff installed monofilament line recycling bins on the Fairhope Pier. Fairhope High School environmental clubs oversee collecting materials weekly.

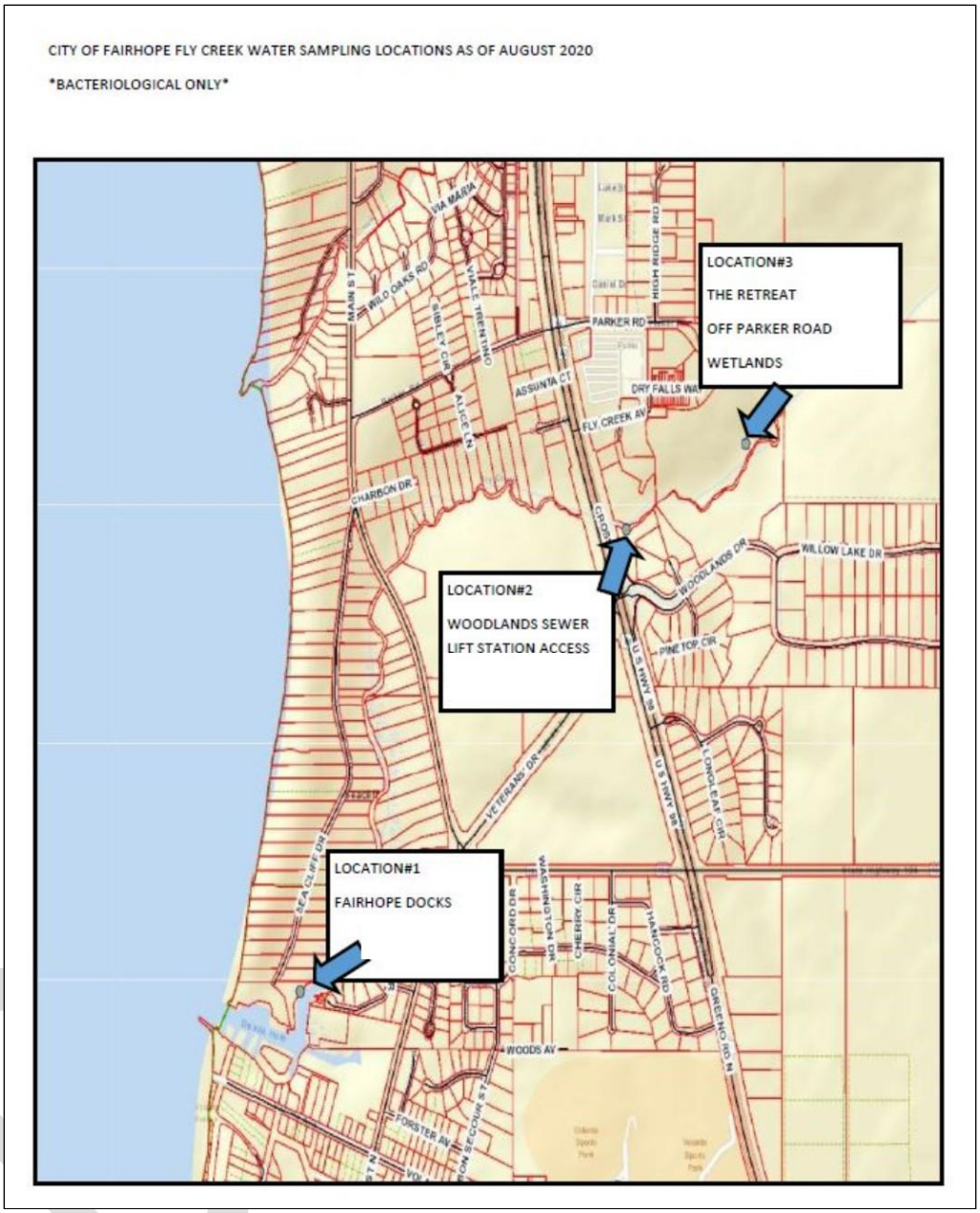


Figure 10 Fairhope Bacterial Water Sampling Locations as of November 1, 2021

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:

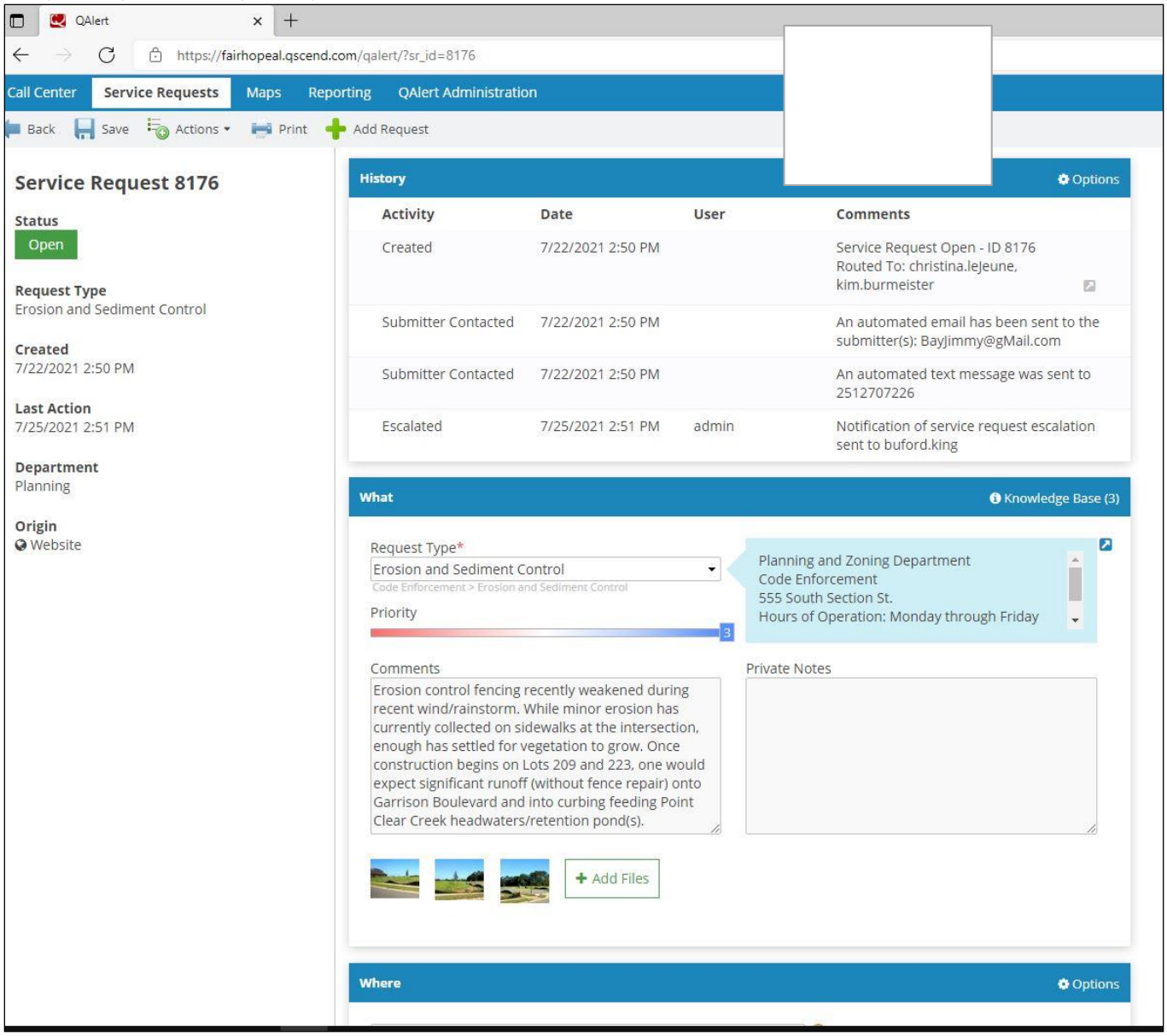


Figure 11 Qscend Reporting System on-line for complaints

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

- BMPs/Mechanisms used for Public Involvement:
    6. Public Educational Meetings
    7. City of Fairhope stormwater alliances
    8. Community Events
    9. Pet waste bags available in City Parks
    10. Notifications for Public Meetings
    11. Subdivision Property Owners Associations Contact List
    12. City of Fairhope Planning Commission hearings
    13. City of Fairhope Environmental Advisory Board meetings
    14. Sanitary Sewer Overflow Signage

PUBLIC EDUCATION AND INVOLVMENT ON STORM WATER IMPACTS, cont.

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)

Figure 12 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

Figure 13 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)

Figure 14 Simulated Wetland Pond at North Beach Park, signage

BMP #4: Employee Certifications:

1. The City of Fairhope currently has (4) 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, the Recreation and Parks Director and the Golf Course Supervisor. 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. Landscape Staff, Certification #2004627
b. Golf Course Grounds Supervisor, Certification #2002077
c. Parks and Recreation Director, 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
b. P&Z Code Enforcement Officer (LeJeune), Certification # 81295
c. Building Inspector #1 (Nixon): #T6435
d. Building Inspector #3 (Nelson): #68815
e. Building Inspector #4 (Taylor): #76249
f. Building Inspector #5 (Bradley): T6889
g. Building Inspector/Right of Way Inspector (Thomas): #T5330

3.Alabama Water Watch Volunteer Water Quality Monitoring certification for bacterial testing. City staff became certified in November 2019 and is testing three locations in Fly Creek monthly:
Responsible Person: Fairhope Docks Manager; Planning and Zoning Code Enforcement Officer:

a. Planning and Zoning Department (Code Enforcement Officer) with Fairhope Docks Manager": Target areas @ Fly Creek:
    1. Woodlands Lift Station
    2. Retreat Apartments, wetlands
    3. Fairhope Docks
    4. Target area: Fly Creek @ Woodlands Lift Station; Fly Creek @ Retreat Apts.

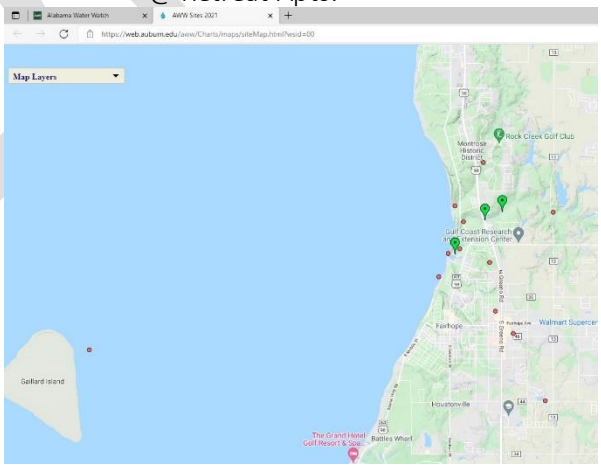


Figure 15 Alabama Water Watch Fairhope active testing sites as of November 1, 2021

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: Public Educational Meetings:

1. Master Environmental Educator (MEE) – Planning and Zoning Department has (1) staff person (Code Enforcement Officer) was trained and participated in this program. City of Fairhope has participated in this program since 2017.
   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. 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). Earth Day was cancelled in 2020-2021 due to COVID but is expected to resume in 2022.
   Responsible Persons: Public Works Dept. Sanitation Officer / Planning and Zoning Dept. Code Enforcement Officers

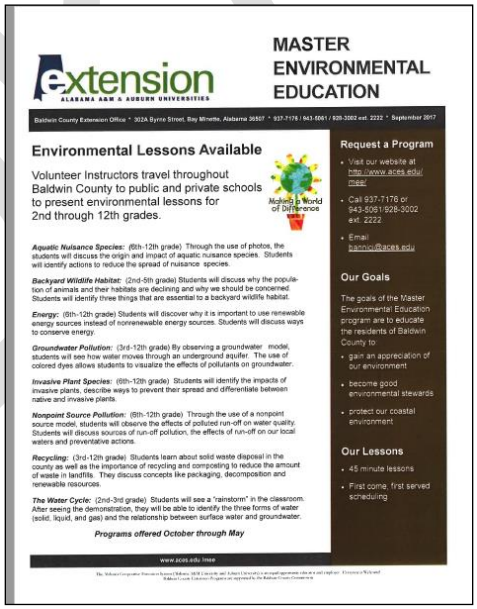


Figure 16 MEE informational brochure

BMP #7: Stormwater alliances:

1. Eastern Shore Watershed Management Plan – Steering Committee. Quarterly meeting: Planning Department represents for the City of Fairhope
2. Weeks Bay Watershed Implementation Team (WBWIT) – quarterly virtual meeting hosted by Weeks Bay Watershed Coordinator; Responsible Person: Planning and Zoning Department Code Enforcement Officer
3. Eastern Shore MS4 Partners with Daphne, Spanish Fort, Baldwin County, AL-Dot; Responsible Person: Planning and Zoning Department Code Enforcement Officer
4. Mobile Bay National Estuary Program / Clean Water Future program partnership; Responsible Person: Planning and Zoning Department Code Enforcement Officer

BMP #8: 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)

Figure 16 Coastal Clean Up at South Beach Park, September 2021

BMP # 9: 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 #10: Notices for public meetings are:
1. Posted at City Hall-and other City Offices
2. Posted on the City of Fairhope website and on social media
3. Emailed to subdivision groups (POAs/HOAs) and the media
Responsible Person(s): Planning and Zoning Department (Administrative Assistant); City Clerk

BMP #11: Subdivision Property Owners Associations Contact List
A current list of subdivision and property owner associations is kept updated to include email / phone number contact information. This list is used as one form of notification for public meetings, including Planning Commission meetings Responsible Person(s): Planning and Zoning Department (Administrative Assistant)

BMP #12: City of Fairhope Planning Commission
The Fairhope Planning Commission meeting is a monthly meeting (first Monday of each month at 5 p.m.). It is held at the Fairhope 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 #13: Fairhope Environmental Advisory Board (FEAB)
The City of Fairhope (via Planning and Zoning Department support) facilitates and takes minutes at this monthly volunteer meetings, which focuses on environmental issues. This 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# 14: Sanitary Sewer Overflow On-Site Signage
Signs are added as soon as a spill is discovered.
Responsible Person: Water and Sewer Director

Figure 17 Signage is used to notify the public of areas of sewer overflows (Tatumville Gully)

PUBLIC EDUCATION AND INVOLVMENT 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 shall member attend one storm water related workshop, conference or seminar annually

     Due: December 2022

  2. Storm Water Article on Social Media (Facebook)

     Responsible Department:

     Community Development (Director)

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

     Due: December 2022

  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 2022

  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 2022

Figure 18 Facebook article on fishing line recycling, September 2021

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.

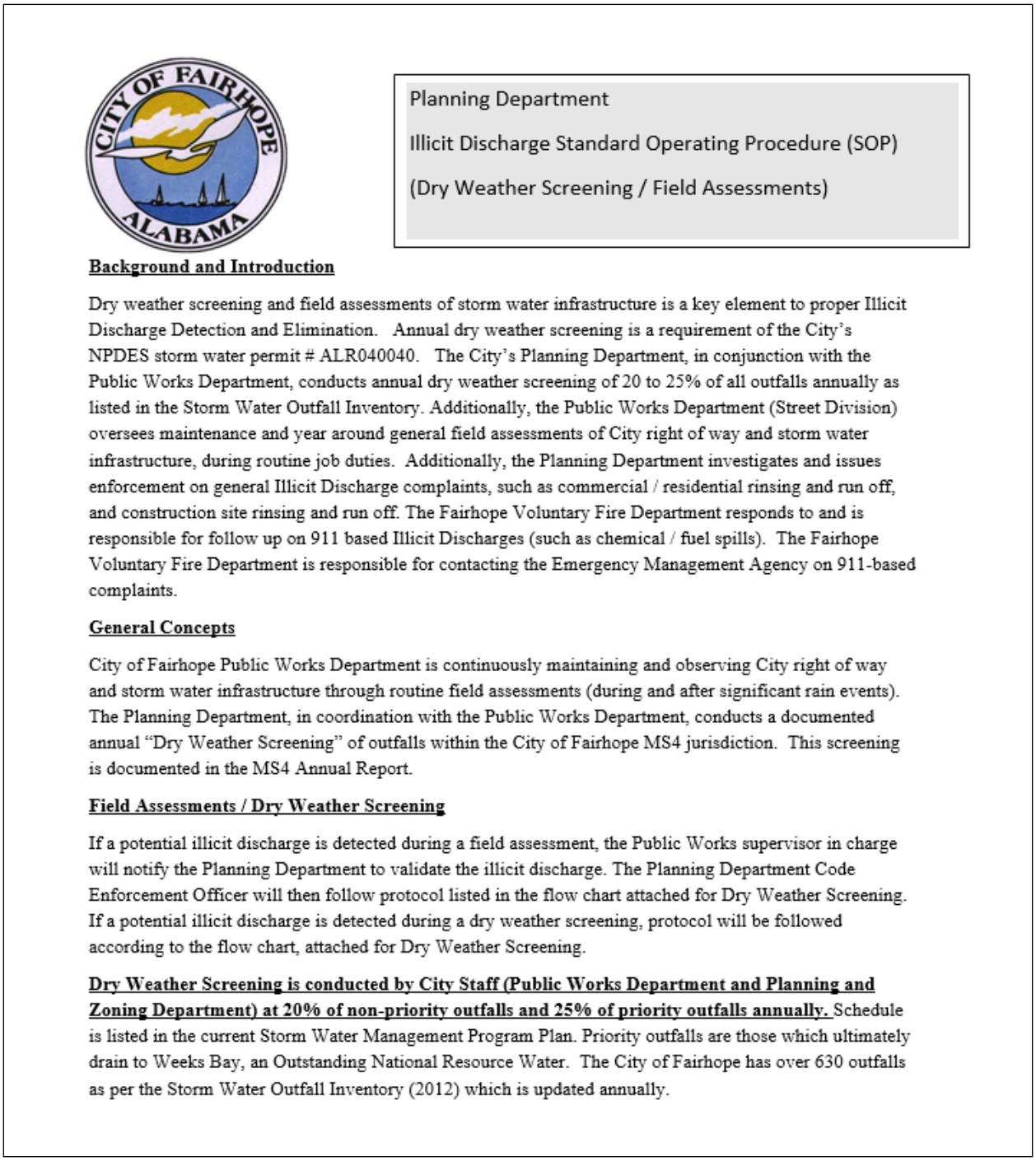
(e)

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.

Figure 19 Song Grove contractor discharging sudsy rinse water into a city outfall at Cowpen Creek, October 2021

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.

Figure 20 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.

Figure 21 SOP for Illicit Discharges Pg. 2

Figure 3 SOP for Illicit Discharges, pg. 2

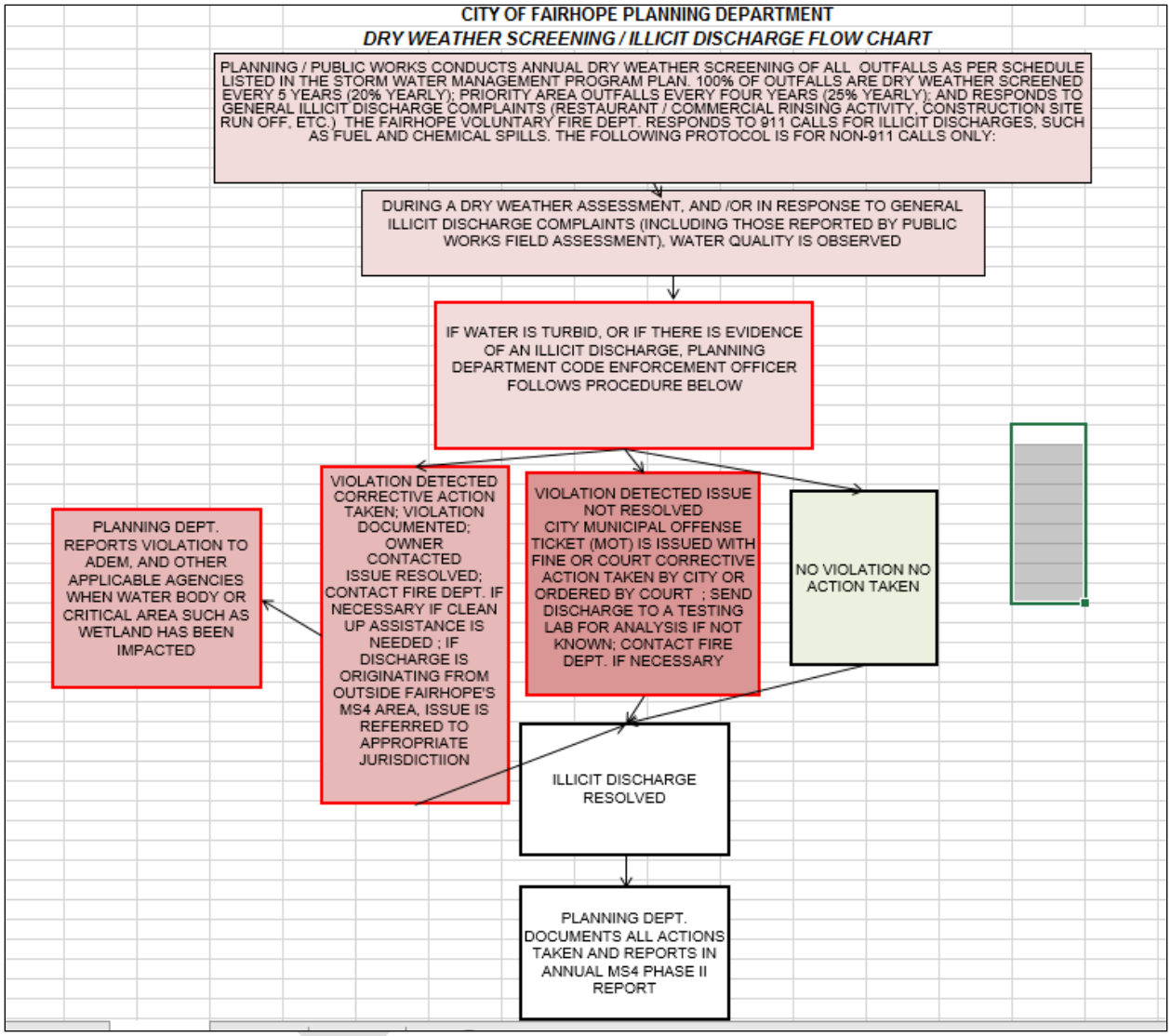


Figure 23 SOP Flow Chart for Illicit Discharges

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)

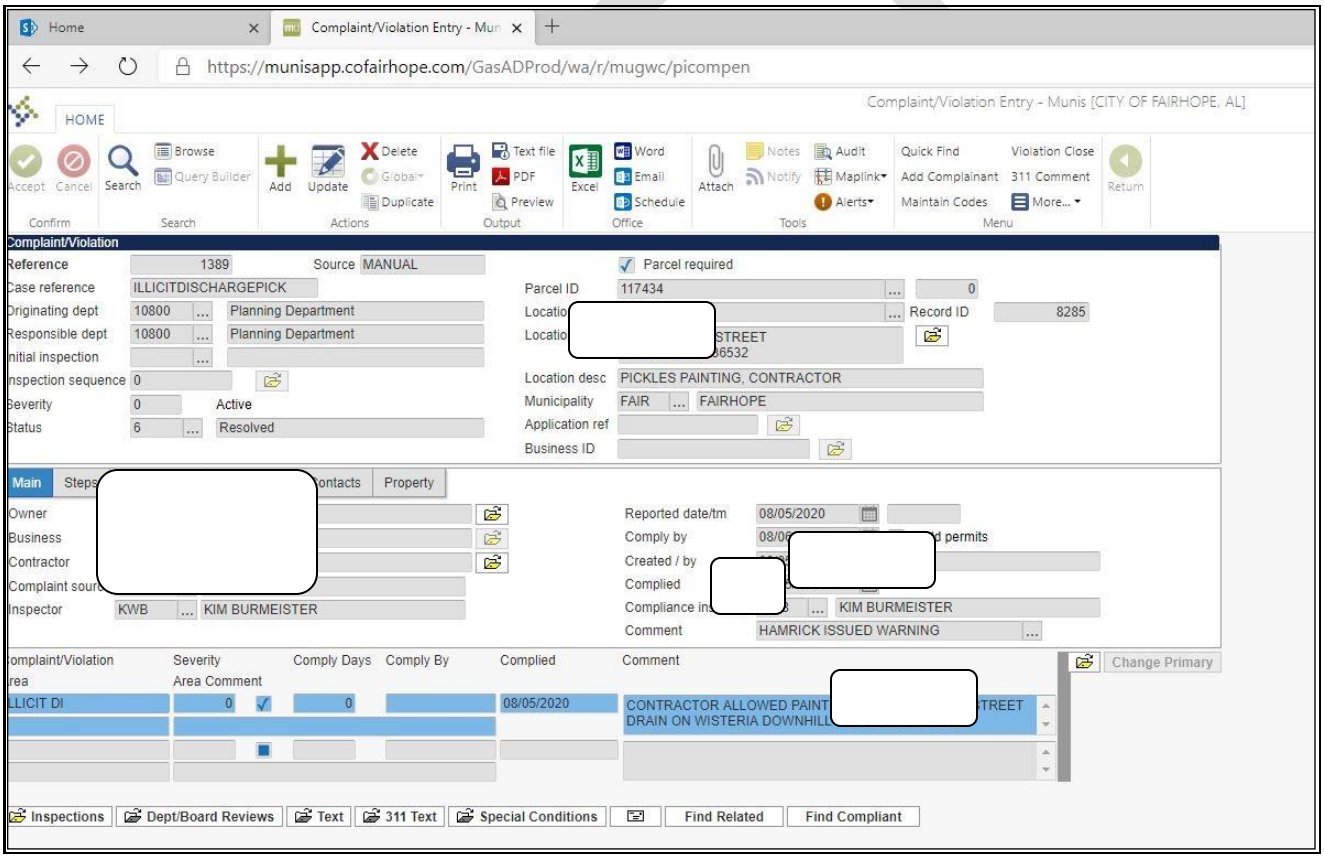


Figure 24 Munis complaint record example

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 (2022-2026) monitoring schedule is in the Measurable Goals section below.

City of Fairhope

MS4 Outfall Assessment Schedule 2022-2026

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

Watershed	Number of outfalls inventoried	MS4 Monitoring Requirement / 5 yr. Monitoring Schedule (2020-2024)
Big Mouth	70 *(includes one Major Outfall @ Mobile Bay)*	2023 Frequency: every 5 years
Cowpen Creek*	191	2025: Pg. 1-90 2022: Pg. 91-191 Frequency: every 4 years
Fly Creek*	106 *(includes one Major Outfall @ Mobile Bay)*	2023 Frequency: every 4 years
Pensacola Worm Branch*	14	2026 Frequency: every 4 years
Point Clear Creek	36	2022 Frequency: every 5 years
Red Gum	0	n/a
Rock Creek	104 *(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	54 *(includes three Major Outfalls @ Mobile Bay)*	2025 Frequency: every 5 years
Turkey Branch*	4	2024 Frequency: every 4 years
Volanta	36 *(Includes one Major Outfall @ Mobile Bay)*	2022 Frequency: every 5 years
Waterhole Branch*	18	2026 Frequency: every 4 years
TOTAL	**656 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). This is what we have stated in the SWMPP 2021.

The program shall include at a minimum, the following:

....

iii. 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%) 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.*

Figure 25 Outfall Assessment 5-year Schedule for 2022

- **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:

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

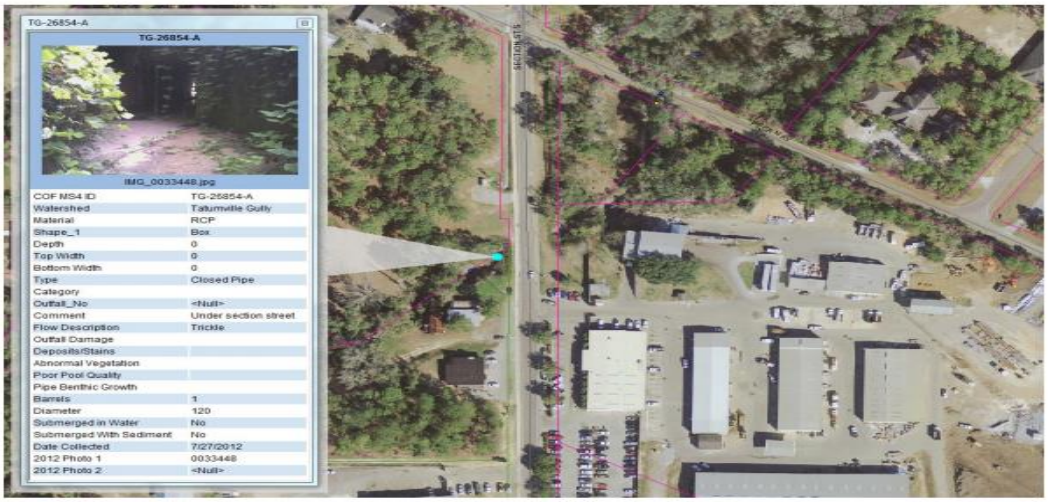
BMP #16: Survey 1-2-3 Application for Outfall Assessment-Field Collection

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

Figure 4 Planning and Zoning staff conducting outfall assessment of Tatumville Gulley drain 2020

City of Fairhope – Outfall Inventory
Tatumville Gully Watershed



Hatch Mott MacDonald

Page | 9

Figure 26 Tatumville outfall assessment and corresponding outfall data sheet

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 2022

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 2022

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 2022

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 these assessments annually. Seventy-two (72) scheduled to be assessed in 2022: Point Clear Creek (36); Volanta Gulley (36)

Due: December 31, 2022

Goal: b. PRIORITY OUTFALLS (DRAINS TO WEEKS BAY): Assess at least once every 4 years per 5-year schedule. Planning and Zoning Department and Public Works Department will conduct these assessments annually. One hundred scheduled to be assessed in 2022; Cowpen Creek outfall inventory pages 101-191.

Due: December 2022

NOTE: TOTAL OF 162 OUTFALLS SCHEDULED FOR ASSESSMENT IN 2022

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
    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

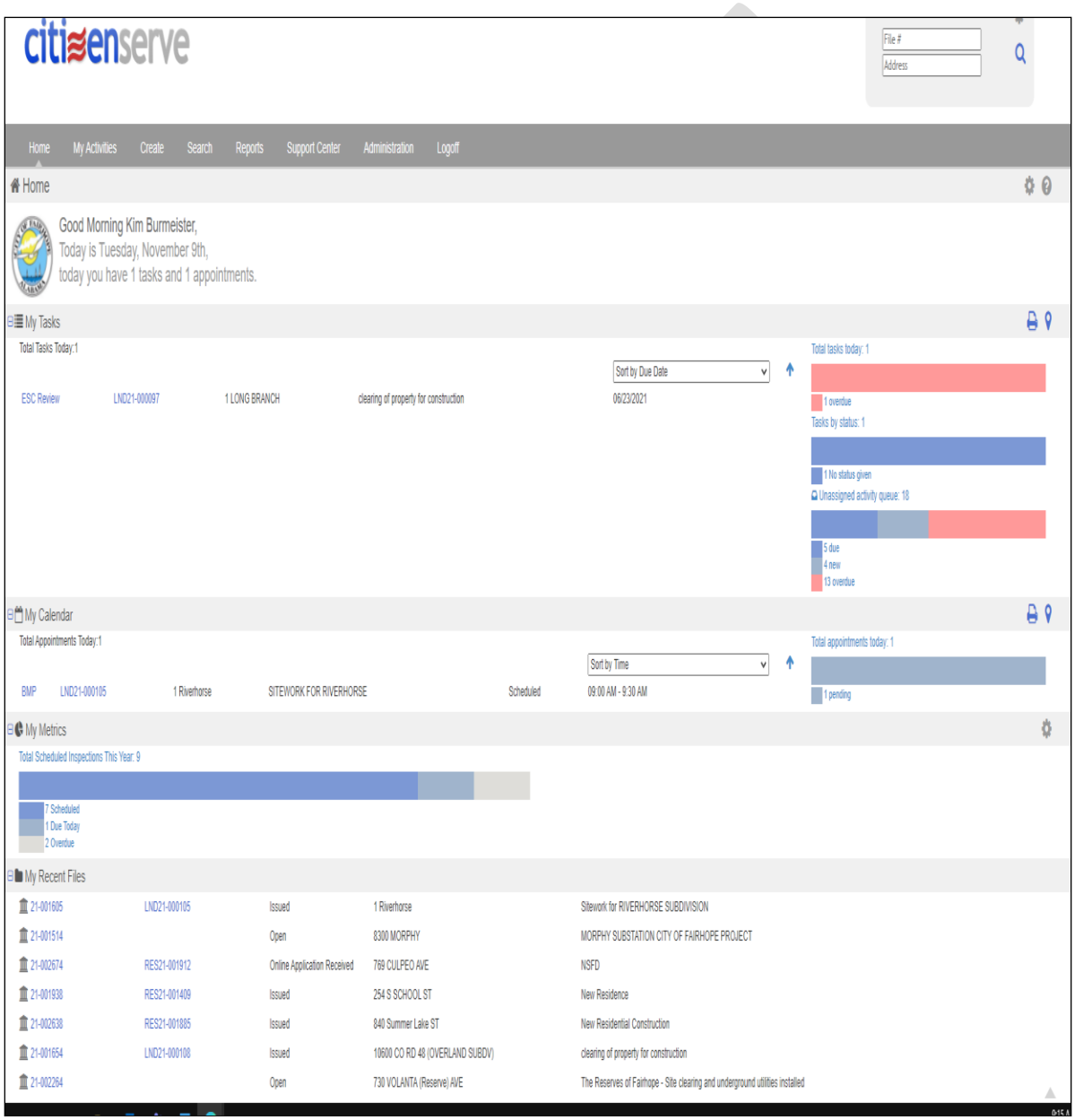


Figure 27 Citizen Serve program used for BMP and inspection tracking as of 2021. Munis is also still being used for projects permitted prior to 2021.

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 wetland buffer protection, on-site erosion controls, and drainage concerns.

Figure 28 Pre-construction meeting on site with contractor and city staff to review construction procedures, including erosion and sediment control (Fox Hollow Phase 3, 2021)

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.

Figure 29: Final Plat Approval walk through inspection Hermitage Court subdivision, Big Mouth Gully Watershed

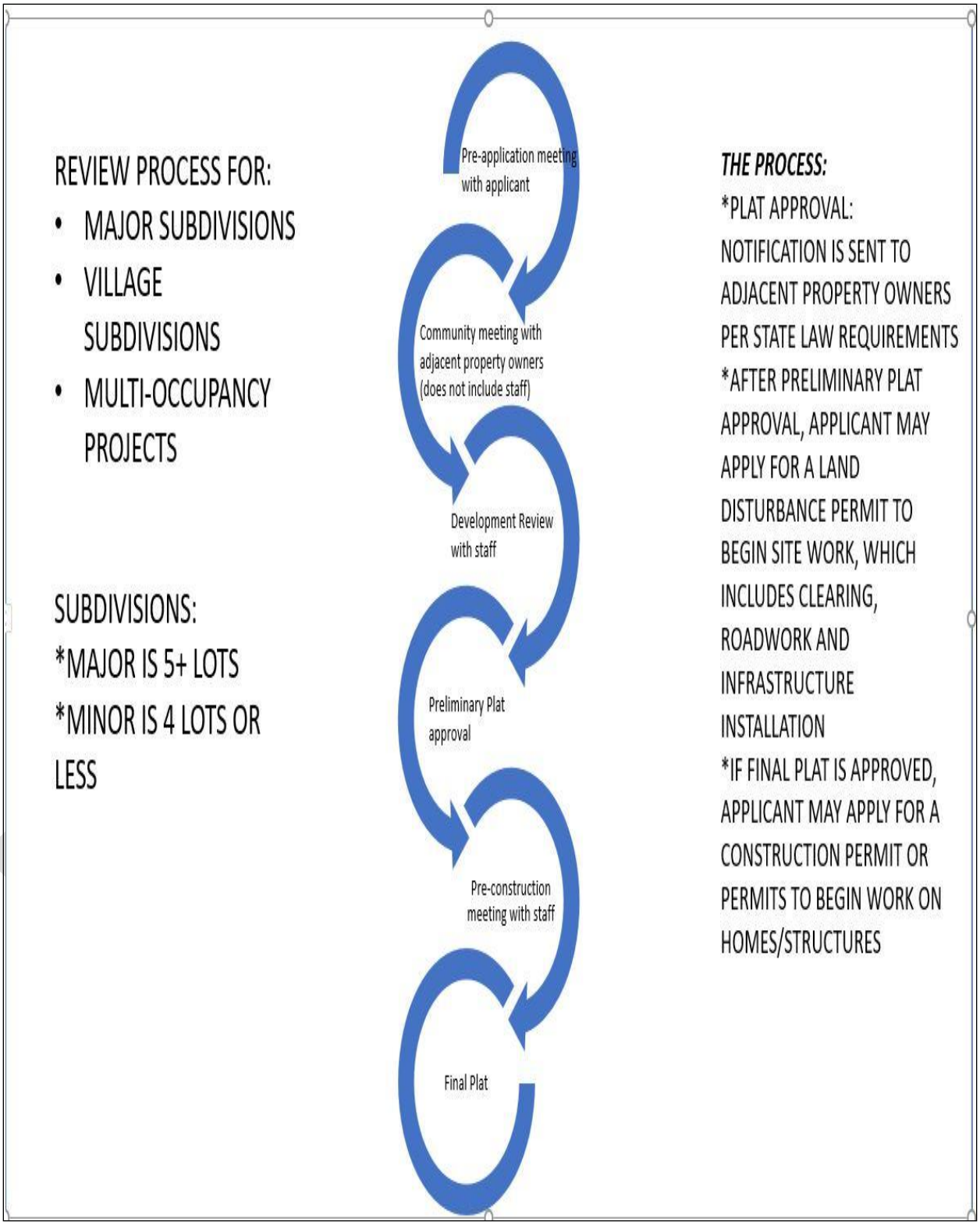


Figure 30: City of Fairhope Review Process for Subdivisions

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.

Figure 31 BMP inspection verifying construction entrance and silt fence placement (Substation project, Morphy Avenue, September 2021)

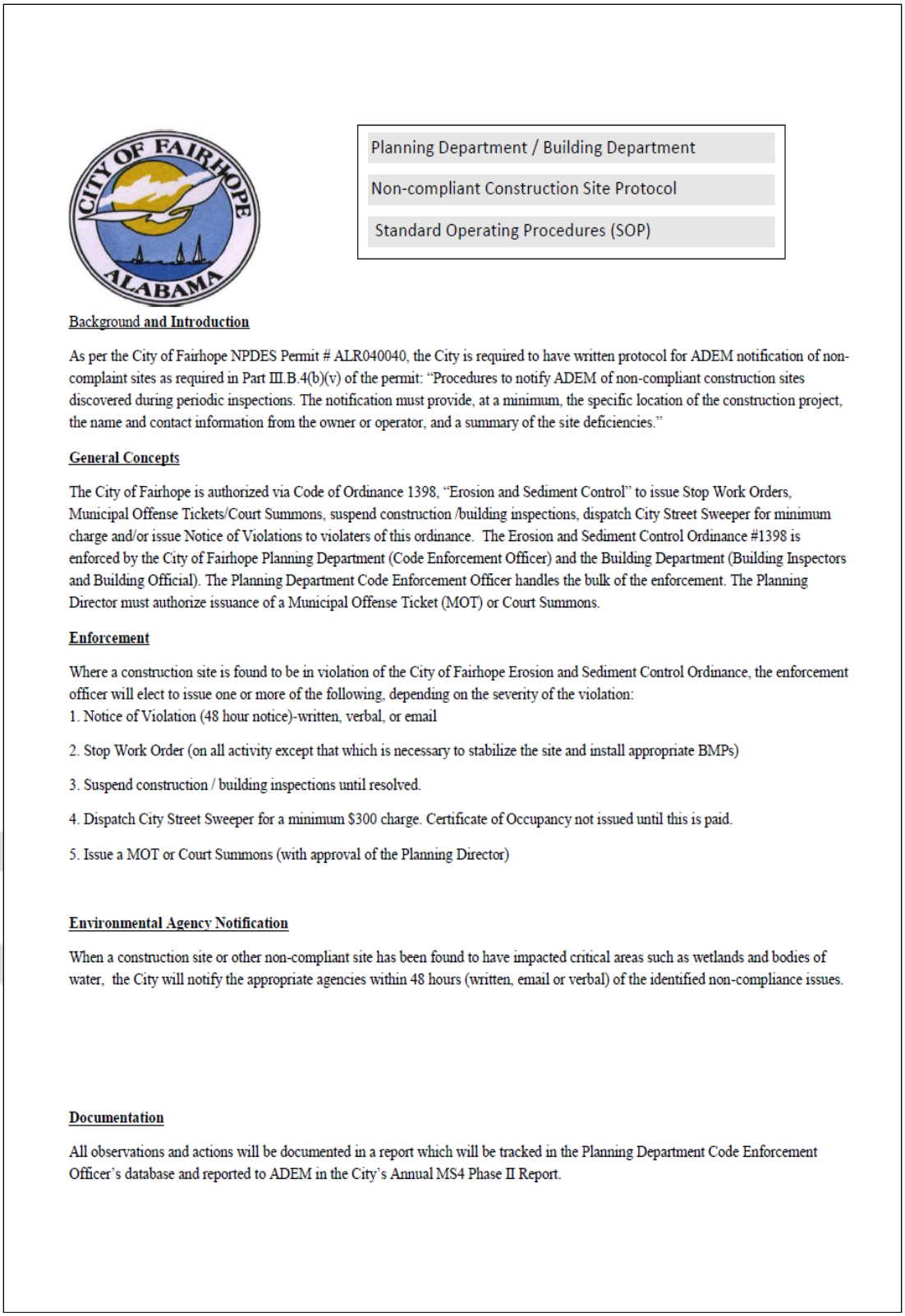
BMP inspections include:

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.

Figure 32 Stop Work Order placement on site work without a permit, Pensacola Worm Branch watershed, September 2021



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.

Figure 33 SOP for non-compliant construction sites

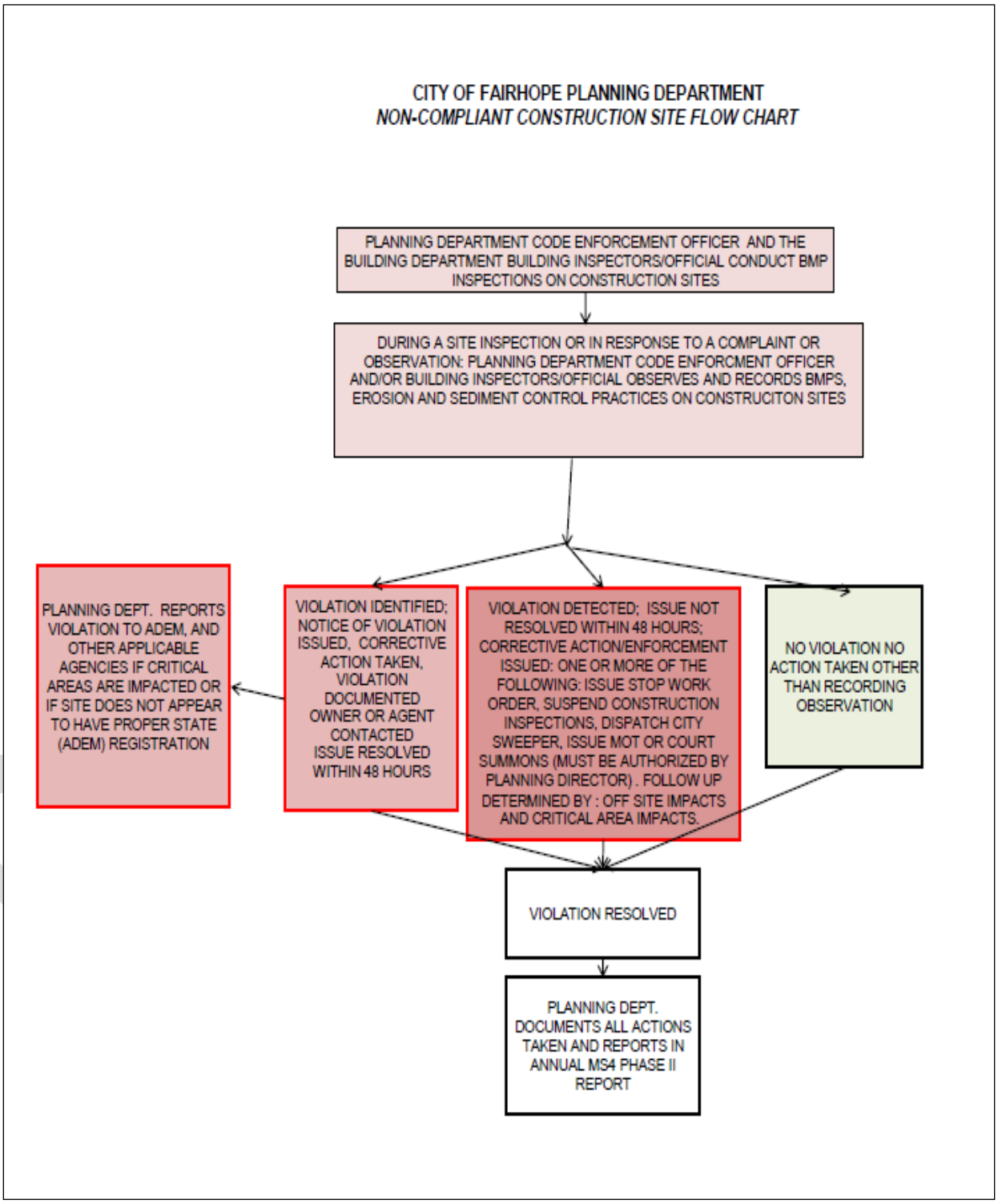


Figure 34 SOP Flow Chart for non-compliant construction sites

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)

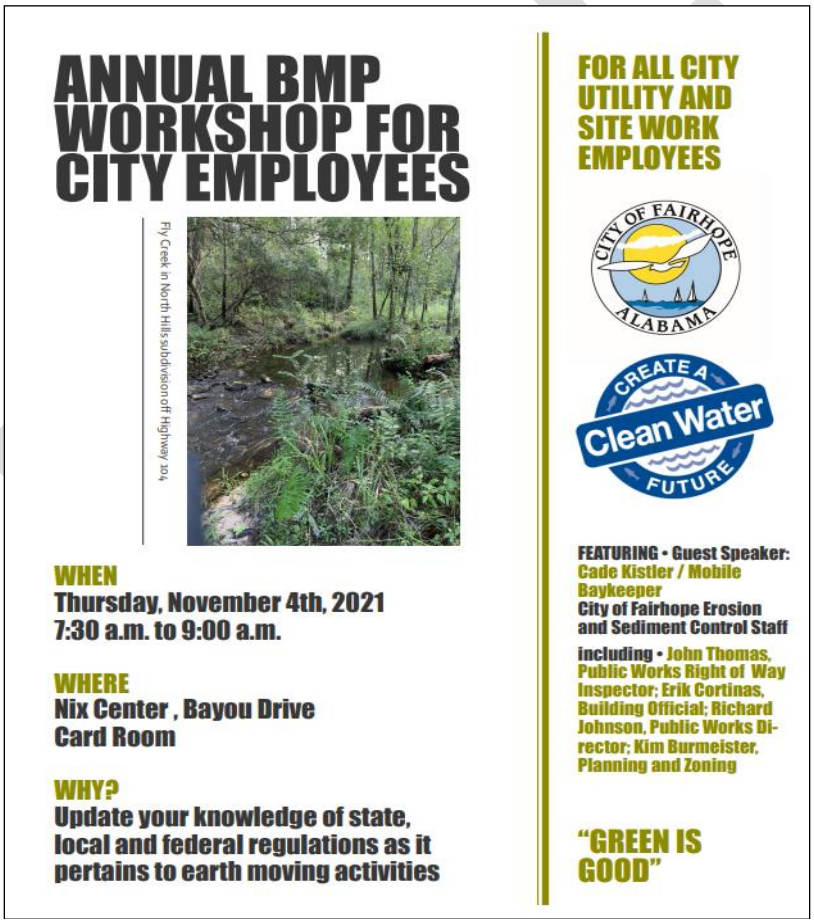


Figure 35 BMP Workshop Agenda, November 2021

- 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 2022
2. QCI Re-certification for Building Department (5 Building Inspectors)
   Responsible Department*:* Building Department
   Goal*:* Recertify (5) Building Inspectors with QCI training
   Due: December 2022

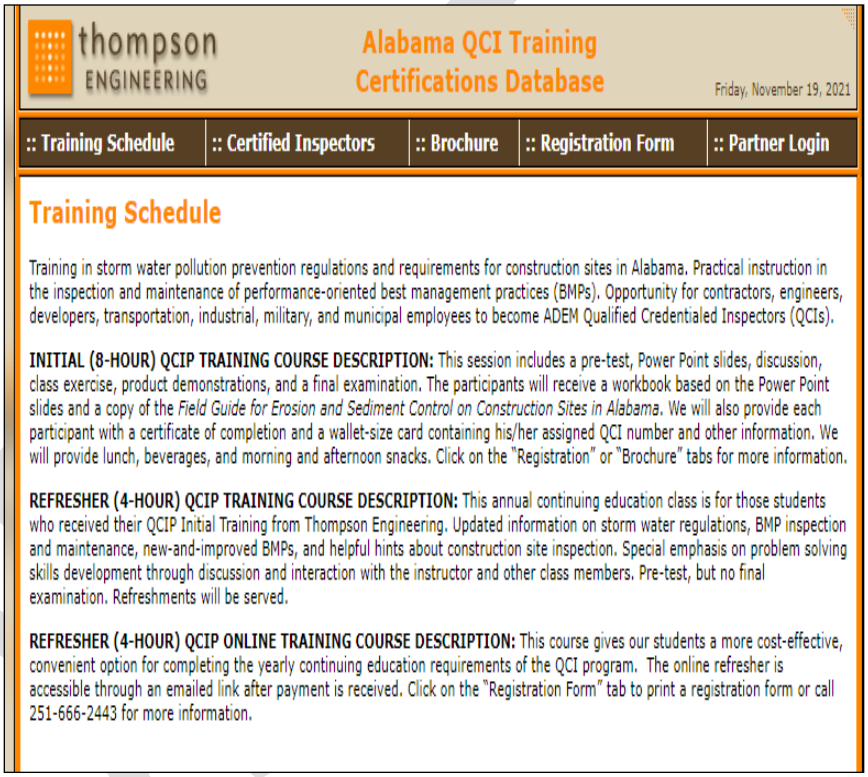


Figure 36 QCI information from Thompson Engineering

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 2022

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."

  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

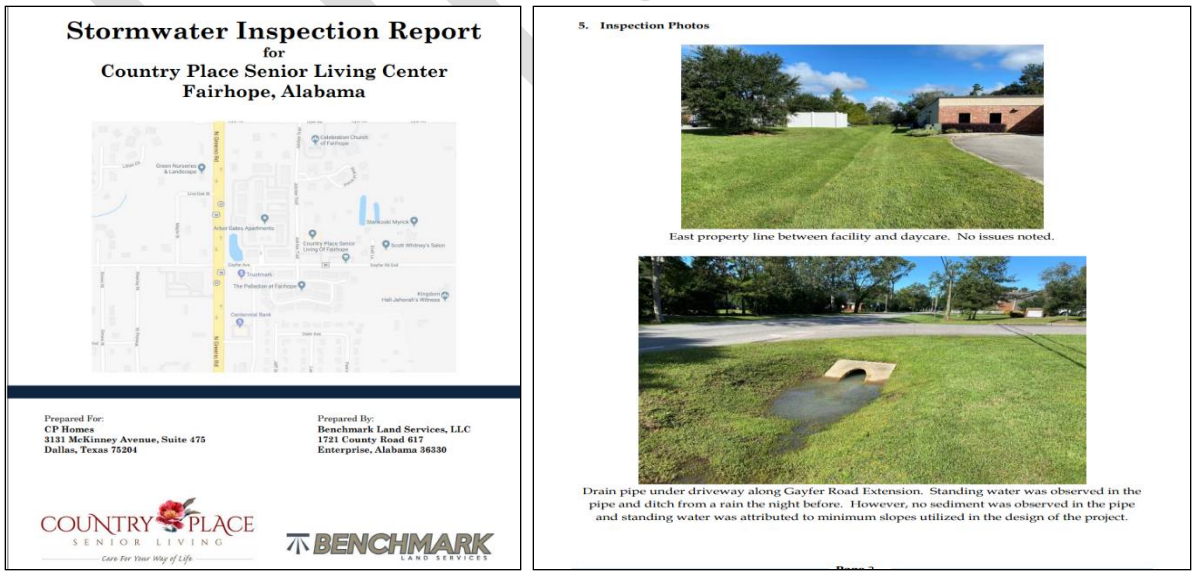


Figure 37 Example of 2021 O&M Inspection Report received, November 2021

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"

Figure 38 Pine tree corridor along Mobile Bay, Big Mouth Gulley Watershed. Picture taken during staff kayak assessment, Sept. 2021

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.

Figure 39 Stilling basins serve as a LID feature recently used in a development project "Hermitage Court", Big Mouth Gulley watershed. Stilling basins also function as level spreaders per Public Works Director. November 2021

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.

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

Figure 40: City of Fairhope drainage improvement project at Quail Creek Golf Course, Cowpen Creek Watershed, November 2021

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)

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

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.

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.

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

Figure 41 HOA Stormwater Guide Page 1

A HOMEOWNER GUIDE TO STORMWATER DETENTION POND MAINTENANCE

ROUTINE MAINTENANCE

Inspections: Periodic scheduled inspections with the attached checklist, and inspections after major rainfall events, to check for damage & to remove debris/ trash.
Vegetation Management: Mowing on a regular basis to prevent erosion or aesthetic problems. Trees and shrubs should not be allowed to grow in the pond basin. Limit use of fertilizers and pesticides in and around the ponds to minimize leaching into pond and subsequent downstream waters.
Erosion: Appropriate mowing equipment and machinery should be used on pond structure to avoid erosion.
Trash, debris and litter removal: Removal of any debris causing obstructions and especially after every runoff producing rainfall event. General pickup of debris in and around the pond during all inspections.
Mechanical Equipment check: Inspection of any valves, pumps, fence gates, locks or mechanical components during periodic inspections. Plans for appropriate replacement/repair should be made at the time of documentation.
Structural Component check: Inspection of the inlet, outlet, and other structural features on a regular basis for additions to the annual Non-Routine Maintenance list.

NON-ROUTINE MAINTENANCE

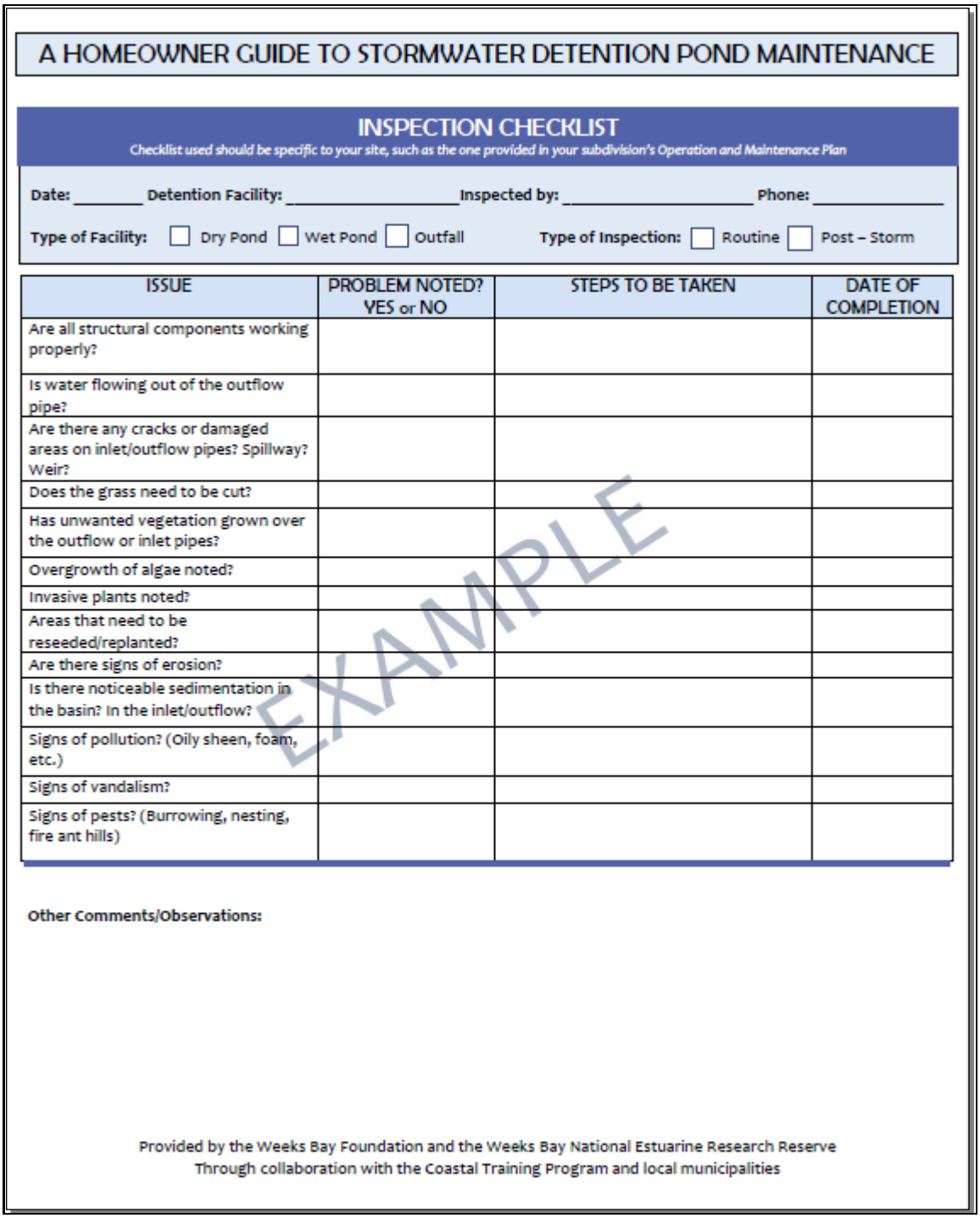
Bank erosion/stabilization: It is critical to keep effective ground cover on the exposed pond areas to ensure that loose sediment does not fill up the pond. In addition, vegetation increases infiltration of runoff, and effectively filters pollutants. All areas not vegetated should be re-vegetated and stabilized immediately
Sediment removal: The sediment accumulation should be monitored and the pond depths checked at several points. If the depth of the accumulated sediment is greater than 25% of the original design depth, sediment should be removed.
Structural Repair/Replacement: Over time, even excellent stormwater structures get damaged and need repair and replacement. Plan for expenses related to general wear and tear at yearly intervals.

SO HOW DO YOU PAY FOR ALL THIS WORK?

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

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

Figure 42 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

Figure 43 HOA Stormwater Guide Page 3

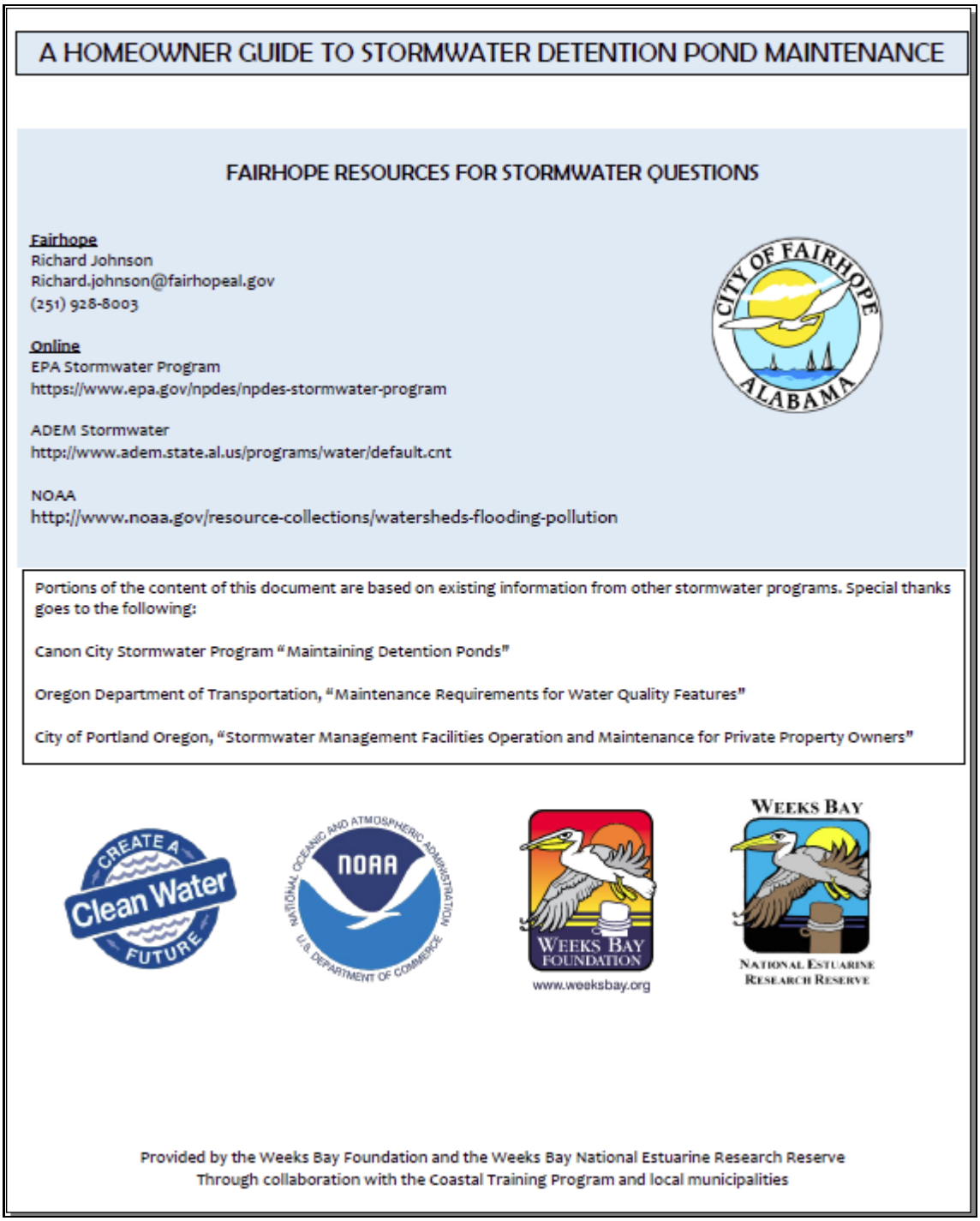


Figure 44 HOA Stormwater Guide Page 4

POST CONSTRUCTION STORM WATER MANAGEMENT, CONT.

- 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 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 2022

Figure 45 Planning and Zoning Staff preparing to launch from Fairhope Docks for the 2021 kayak shoreline assessment, September 2021

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.

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

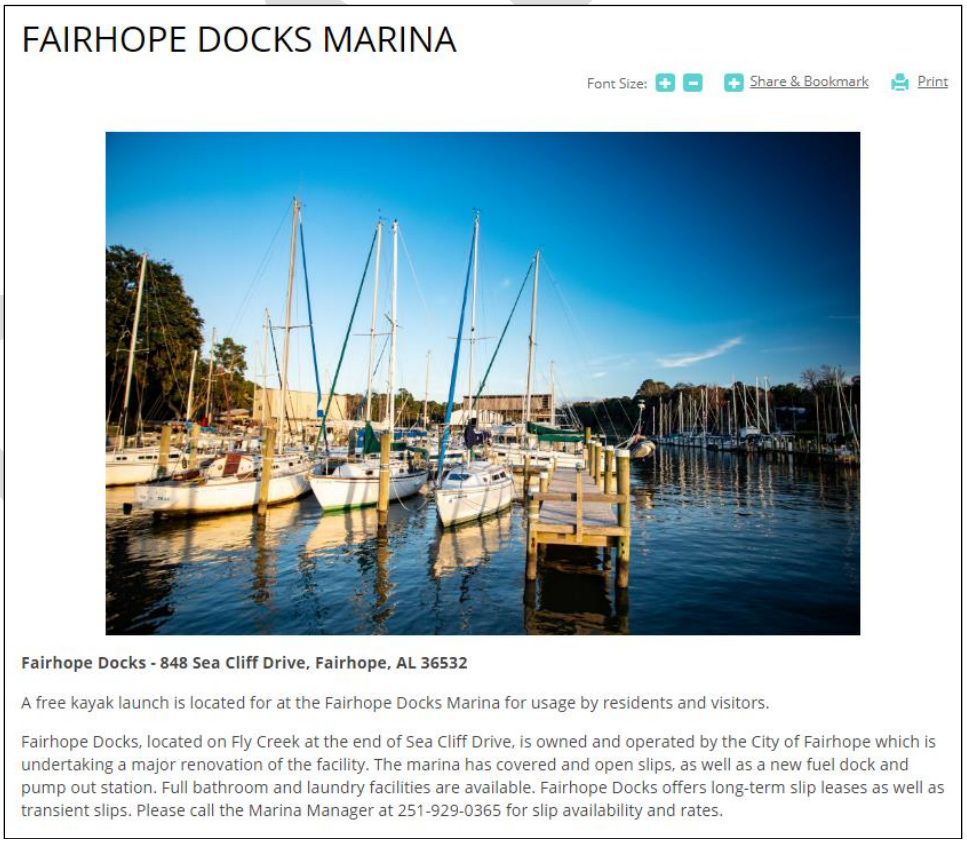


Figure 46 Fairhope Docks provides clean water stewardship by offering marine pump outs

- **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)-South Section Street
    - City Marinas:
        - Fairhope Docks @ Sea Cliff Drive
        - Municipal Pier

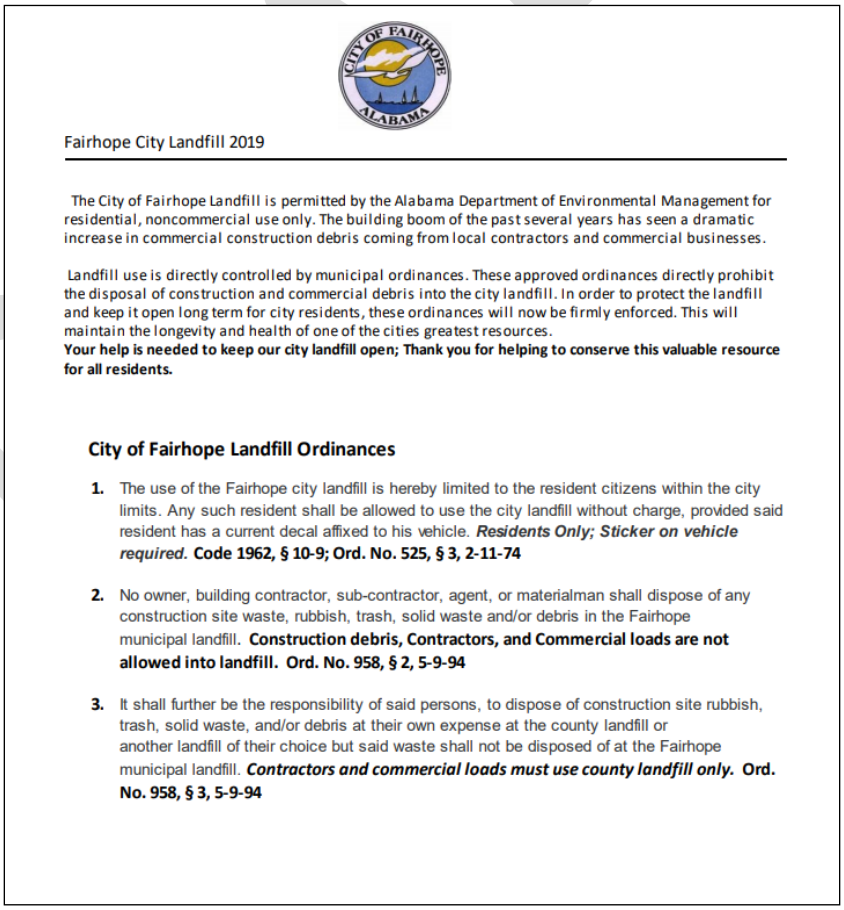
  All department heads / directors are responsible for pollution prevention / good housekeeping in each respective department. Department heads are also responsible for periodic checks of their facility to ensure MS4 compliance. Compliance is also implemented through weekly or monthly staff meetings and 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**

Figure 47 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. Three 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
b. Golf Course Grounds Supervisor
c. Parks and Recreation Director

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

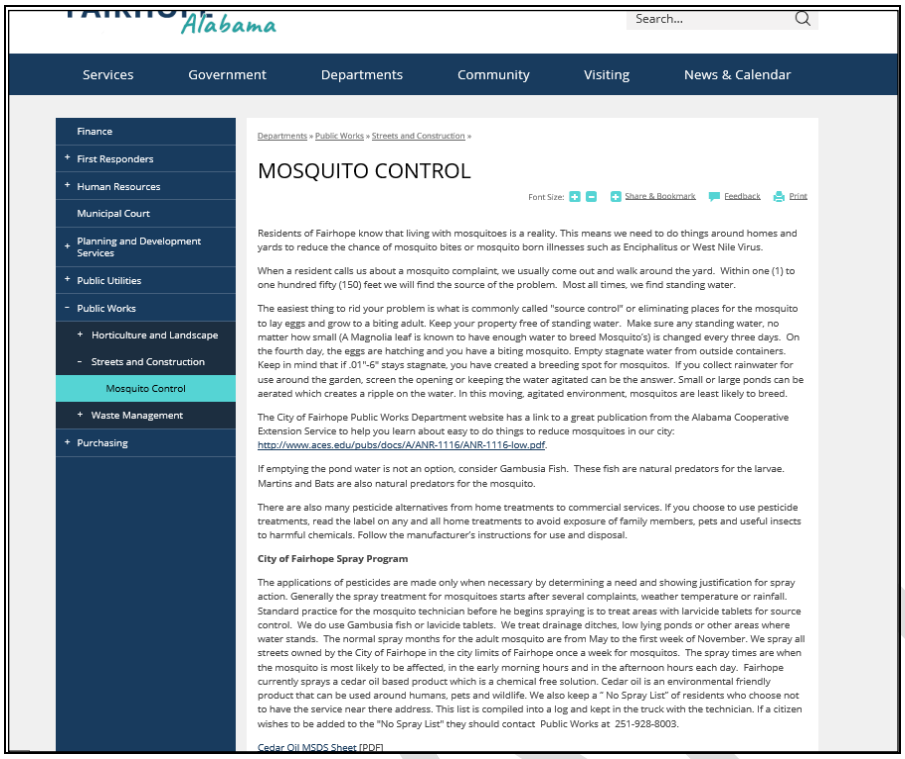


Figure 48 Mosquito control information from City of Fairhope website

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 2018):

City of Fairhope, Alabama

Date: 11/26/2018

Public Works Department

General employee expectations:

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

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.

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.

Figure 49 SOP for Municipal Activities Page 1

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

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

II Public Works Streets

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

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

Figure 50 SOP for Municipal Activities Page 2

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.

Figure 51 SOP for Municipal Activities Page 3

POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS, CONTINUED:

- Measurable Goals

  One Year Goals:

  1. Good Housekeeping / Pollution Prevention memo for all departments

     Responsible Department: Planning and Zoning Department

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

     Due*:* December 2022

  2. Dry Weather Screening of Public Works Facility

     Responsible Department: Public Works

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

     Due: December 2022

Figure 52 Aerial of Public Works Warehouse and Facility, 555 South Section Street